imageRUNNER

2224N / 2224

User's Guide

USRMA-7993-01 2023-03 en

Copyright CANON INC. 2023

Contents

About the Machine 2

Supported Functions and Options 3

Platen Cover Type X 5

DADF-AY 6

Duplex Unit-E 7

Cassette Feeding Module-AK 8

System Options 9

Registering License 10

System Manager ID and PIN 12

Measures to Prevent Unauthorized Access 13

Names of Parts and Their Functions 15

Front Side 16

Interior 19

Control Panel 21

Feeder 25

Multi-purpose Tray 27

Paper Drawer 28

Usable Paper 29

Precautions When Handling Paper 33

Specifications 34

Basic Specifications 35

Feeder Specifications 38

Print Specifications 39

Scan Specifications 41

Network Specifications (imageRUNNER 2224N) 43

Security and Management Function Specifications (imageRUNNER 2224N) 44

Supported Environment (imageRUNNER 2224N) 47

Recommended Functions 48

Digitizing Documents 49

Cost Savings 50

Making Operations More Efficient 51

Setting Up 53

Configuring the Default Settings (Setup Guide)(imageRUNNER 2224N) 54

Configuring the Default Settings (Setup Guide) (imageRUNNER 2224) 57

Setting Up the Network 59

Selecting Wired or Wireless LAN 61

Connecting to a Wired LAN 62

Connecting to a Wireless LAN 63

Connecting to a Wireless LAN by Using the Router Button (Push Button Mode) 66

Connecting to a Wireless LAN by Entering a PIN Code (WPS PIN Code Mode) 67

Connecting to a Wireless LAN by Searching for a Router (Access Point Setup Method) ... 69
Connecting to a Wireless LAN by Setting the Details (Manual Setup Method) ... 71
Setting IPv4 Addresses ... 74
Setting IPv6 Addresses ... 76
Configuring Your Machine for Your Network Environment ... 78
Manually Configuring the Ethernet Settings ... 79
Configuring DNS ... 80
Configuring SMB ... 83
Configuring WINS ... 85
Registering LDAP Servers ... 86
Configuring SNMP ... 90
Configuring SNTP ... 93
Configuring SLP Communication ... 95
Checking the Network Status and Settings ... 97
Installing Software and Drivers to the Computer ... 100

Basic Operations ... 103

Turning ON and OFF the Machine ... 104
Turning ON the Machine ... 105
Turning OFF the Machine ... 106
Restarting the Machine ... 107
Reducing Power Consumption (Sleep Mode) ... 108
Using the Control Panel ... 110
Screens Displayed on the Control Panel ... 111
[Home] Screen ... 113
[Status Monitor] Screen ... 115
How to Operate the Control Panel ... 117
Entering Characters ... 120
Customizing the [Home] Screen ... 122
Logging In to the Machine ... 124
Placing Originals ... 127
Loading Paper ... 130
Loading Paper in the Paper Drawer ... 131
Loading Paper in the Multi-purpose Tray ... 135
Preparations and Orientation for Loading Envelopes ... 137
Orientation for Loading Paper with a Logo ... 139
Specifying the Paper Size and Type ... 144
Setting the Paper Size and Type for the Paper Drawer ... 145
Setting the Paper Size and Type for the Multi-purpose Tray ... 147
Registering a Frequently Used Paper Size and Type for the Multi-purpose Tray ... 149
Registering Non-standard Size Paper (Custom Paper) ... 151
Hiding Unused Paper Sizes ... 153
Using the Appropriate Paper Source for Each Function ... 154
Registering Destinations (Address Book) ... 156
Address Book Function ... 157
Registering Destinations to the Address Book (Control Panel) ... 159

Registering Groups to the Address Book (Control Panel) ... 162
Editing and Deleting Destinations in the Address Book (Control Panel) ... 164
Registering Destinations to the Address Book (Remote UI) ... 165
Registering Groups to the Address Book (Remote UI) ... 168
Specifying Destinations ... 170
Specifying Destinations (Address Book) ... 171
Specifying Destinations (Direct Input) ... 175
Specifying Destinations (LDAP Server) ... 176
Specifying Destinations (Address Book on a Mobile Device) ... 177
Specifying Destinations (TX Job Log) ... 178
Registering Frequently Used Settings ... 179
Registering and Calling Up Favorite Copy Settings ... 180
Changing the Default Settings ... 182
Adjusting the Sound Volume ... 184
Adjusting the Volume ... 185
[Volume Settings] Screen ... 186

Printing ... 188

Printing Preparations ... 189
Preparing to Print from a Computer ... 190
Configuring a Printer Port (Windows) ... 193
Setting Up a Print Server ... 196
Preparations for Using Universal Print ... 199
Registering the Machine to Cloud Service ... 200
Registering the Machine to the Computer ... 203
Printing from a Computer ... 204
Registering Non-standard Size Paper to the Computer (Custom Size) ... 207
Printing a Document Secured with a PIN (Secure Print) ... 209
Changing the Time Period That Print Data with a PIN (Secure Data) Is Saved ... 212
Enabling Secure Print in a Printer Driver (macOS) ... 213
Printing with Universal Print ... 214
Canceling Printing ... 215
Viewing the Print Job Status and Log ... 217

Scanning ... 219

Preparations for Scanning ... 221
Preparing to Save Scanned Data to a Computer ... 222
Registering the Machine as a WSD Scanner with a Computer (Windows) ... 224
Preparing to Send Scanned Data by E-mail ... 225
Configuring the Basic Settings for Sending E-mail (Send Function Setting Tool) ... 226
Using the Downloaded Send Function Setting Tool ... 228
Configuring Detailed Information of the E-mail Server (Remote UI) ... 229
Preparing to Save Scanned Data to a Shared Folder ... 231
Registering a Shared Folder to the Address Book (Send Function Setting Tool) ... 232
Scanning (Saving to a Computer) ... 234

Scanning (Sending by E-mail) ... 236
Scanning (Saving to a Shared Folder) ... 239
Scanning from a Computer (Saving to a Computer) ... 241
Starting MF Scan Utility ... 245
Scan Settings ... 246
Canceling Scanning ... 250
Checking the Send and Save Status and Log of Scanned Data ... 251

Copying ... 254

Copy Operations ... 255
Additional Copying Features ... 257
Copying Both Sides of ID Cards onto One Sheet ... 263
Copying Multiple Passports onto One Sheet ... 265
Canceling Copy Operations ... 268
Checking the Copy Status and Log ... 269

Linking with Mobile Devices ... 271

Preparations for Linking with Mobile Devices ... 273
Preparations for Direct Connection ... 274
Preparations for Using AirPrint ... 276
Connecting a Mobile Device to the Machine ... 279
Connecting a Mobile Device via Wireless LAN Router (LAN Connection) ... 280
Connecting a Mobile Device Directly to the Machine (Direct Connection) ... 281
Using a Dedicated Application to Print and Scan (Canon PRINT Business) ... 283
Using AirPrint Application to Print and Scan Data ... 284
Printing from an Android Device ... 287
Printing from Chromebook or Other Device with Chrome OS ... 289

Security ... 292

Setting the Department ID and PIN for the Administrator ... 293
Authenticating Users and Managing Groups ... 295
Authenticating Users and Managing Groups with Department ID (Department ID Management) ... 296
Registering a Department ID and PIN ... 298
Enabling Department ID Management ... 300
Setting the Department ID and PIN on a Computer ... 301
Confirming Usage by Department ID ... 304
Performing User Authentication with an LDAP Server When Sending or Saving Data ... 305
Protecting the Network ... 308
Setting the Firewall ... 309
Changing the Port Number ... 312
Using a Proxy ... 313
Using TLS ... 315
Using IPSec ... 317
Using IEEE 802.1X ... 321

Managing and Verifying a Key and Certificate ... 323
Generating a Key and Certificate ... 324
Generating a Key and Certificate Signing Request (CSR) and Obtaining and Registering a Certificate ... 326
Generating a Key and Obtaining and Registering a Certificate from an SCEP Server ... 329
If an Error Is Displayed in the Certificate Issuance Request Status ... 334
Registering a Key and Certificate or CA Certificate Obtained from an Issuing Authority ... 336
Verifying a Received Certificate with OCSP ... 338
Preventing Sending Data by Mistake and Leaking Information ... 339
Limiting Available Destinations ... 340
Confirming the Destination before Sending ... 342
Restricting Use from a Mobile Device ... 344
Restricting Printing ... 345
Restricting Printing from a Computer to Secure Print ... 346
Preventing Unauthorized Use ... 347
Restricting Address Book Registration and Editing ... 348
Restricting Use of Remote UI ... 350
Preventing Connection to Computer via USB Port ... 352
Configuring LPD, RAW, or WSD ... 354
Disabling HTTP Communication ... 356
Applying a Security Policy ... 357
Security Policy Items ... 359

Managing the Machine ... 364

Setting the Date and Time ... 365
Managing the Machine from a Computer (Remote UI) ... 368
Starting Remote UI ... 369
Portal Page of Remote UI ... 372
Checking Usage and Logs with Remote UI ... 374
Monitoring the Usage ... 376
Checking the Number of Printed Pages (Check Counter) ... 377
Printing and Viewing Reports and Lists ... 378
Changing the Report and List Print Settings ... 380
Clearing the Mail Box ... 381
Importing and Exporting the Address Book and Settings ... 382
Updating the Firmware ... 385
Initializing the Settings and Data ... 388

Settings Menu Items ... 393

[Preferences] ... 394
[Display Settings] ... 396
[Timer/Energy Settings] ... 399
[Network] ... 402
[Wireless LAN Settings] ... 407
[TCP/IP Settings] ... 409
[External Interface] ... 416

[Accessibility] ... 417
[Volume Settings] ... 419
[Adjustment/Maintenance] ... 421
[Adjust Image Quality] ... 422
[Special Processing] ... 424
[Maintenance] ... 427
[Function Settings] ... 428
[Common] ... 430
[Paper Feed Settings] ... 431
[Print Settings] ... 433
[Scan Settings] ... 434
[Generate File] ... 435
[Copy] ... 436
[Printer] ... 439
[Printer Settings] ... 440
[PDL Selection (Plug and Play)] ... 450
[Send] ... 451
[Common Settings] ... 452
[Scan and Send Settings] ... 454
[Set Destination] ... 459
[Management Settings] ... 460
[User Management] ... 462
[Device Management] ... 463
[License/Other] or [Update Firmware] ... 465
[Remote UI Settings] ... 466
[Data Management] ... 467
[Security Settings] ... 468
[Authentication/Password Settings] ... 469
Settings that Can Be Imported and Exported (imageRUNNER 2224N) ... 470
[Preferences] ... 471
[Adjustment/Maintenance] ... 475
[Function Settings] ... 476
[Set Destination] ... 479
[Management Settings] ... 480

Maintenance ... 483
Cleaning the Machine ... 485
Cleaning the Surface of the Machine ... 486
Cleaning the Platen Glass ... 487
Cleaning the Feeder ... 488
Cleaning the Transfer Roller ... 492
Cleaning the Fixing Assembly ... 493
Cleaning the Drum ... 494
Replacing Consumables ... 495
Replacing the Toner Cartridges ... 496

Checking the Remaining Amount of Consumables ... 499
List of Consumables ... 500
Adjusting the Print Quality ... 502
Adjusting the Reproducibility of Near Black Color Text ... 503

Troubleshooting ... 507

Paper Jams ... 508
Paper Jams inside the Machine and in a Paper Source ... 510
Paper Jams in the Feeder ... 515
Paper Jams That Occur Repeatedly ... 519
Problems with Printing Results ... 521
The Printed Image is Displaced or Skewed ... 522
Images Are Uneven or Faint ... 523
Printouts Appear Dirty or Smudged ... 524
Black Streaks Appear ... 525
Bleedthrough Occurs ... 526
Images Are Not Printed on the Intended Side of the Paper ... 527
Images Are Not Printed in the Intended Size ... 528
The Orientation Does Not Match on Both Sides of the Paper When Using 2-Sided Printing ... 529
Paper and Paper Feeding Problems ... 530
Paper Creases ... 531
Paper Curls ... 533
Paper Is Not Fed or Two or More Sheets Are Fed Together ... 534
Setting Up ... 535
The Machine Connected via WSD Port Is Not Displayed During Driver Installation ... 536
Cannot Connect to Wireless LAN ... 537
Network ... 538
Cannot Switch to Wireless LAN ... 539
Cannot Find the Print Server to Connect to ... 540
Cannot Connect to a Shared Printer ... 541
Cannot Find the IP Address of the Machine ... 542
AirPrint Does Not Work ... 543
Printing and Copying ... 544
Cannot Print or Copy ... 545
Cannot Print (Wireless LAN) ... 546
Cannot Print (Wired LAN) ... 548
Cannot Print (USB Connection) ... 549
Cannot Print (via Print Server) ... 550
Printing Is Slow ... 551
Scanning ... 552
Cannot Save Scanned Data to a Computer ... 553
Cannot Save Scanned Data to a Shared Folder ... 555
Management Functions and Environment Settings ... 557
Cannot Access Remote UI or Send Function Setting Tool ... 558

Changing the Volume of the Confirmation Sound and Warning Tone 559
Changing the Time Until Sleep Mode 560
Lost Department ID or PIN for the Administrator 561
Checking the Items That Can Be Configured on the Machine and Their Settings 562
A Message Appears 563
An Error Code Is Displayed 578

Appendix 587
Manuals of the Machine 588
Using the User's Guide 589
Operation Examples When Using a Computer 592
Environmental Information, Regulations, and Standards 602
Notice 603
Trademarks and Copyrights 604
Third-party Software 606

About the Machine

About the Machine 2
Supported Functions and Options 3
Platen Cover Type X 5
DADF-AY 6
Duplex Unit-E 7
Cassette Feeding Module-AK 8
System Options 9
Registering License 10
System Manager ID and PIN 12
Measures to Prevent Unauthorized Access 13
Names of Parts and Their Functions 15
Front Side 16
Interior 19
Control Panel 21
Feeder 25
Multi-purpose Tray 27
Paper Drawer 28
Usable Paper 29
Precautions When Handling Paper 33
Specifications 34
Basic Specifications 35
Feeder Specifications 38
Print Specifications 39
Scan Specifications 41
Network Specifications (imageRUNNER 2224N) 43
Security and Management Function Specifications (imageRUNNER 2224N) 44
Supported Environment (imageRUNNER 2224N) 47
Recommended Functions 48
Digitizing Documents 49
Cost Savings 50
Making Operations More Efficient 51

About the Machine

958J-000

Before using the machine, check the basic information of the machine such as the supported functions and options, names of each part, and specifications of the functions. Also consider the management system of the machine and measures against security risks.

Basic Information

The supported functions and options vary depending on the model. Check the list for details.
You can also check the specifications of the options.
Supported Functions and Options(P. 3)

Check the names of parts, usable paper, and specifications of functions, as needed.
Names of Parts and Their Functions(P. 15)
Usable Paper(P. 29)
Specifications(P. 34)

Information Required for Management Functions

When using the management functions, use the System Manager ID and PIN to log in.
System Manager ID and PIN(P. 12)

When using the machine in a network environment, check the examples of measures to prevent unauthorized access, and consider implementing these.
Measures to Prevent Unauthorized Access(P. 13)

Useful Tips

Introduces recommended functions useful for digitizing documents, reducing costs, and making operations more efficient.
Recommended Functions(P. 48)

Supported Functions and Options

958J-001

User's Guide (this manual) describes all functions of the model series including the machine. Some of the functions listed in User's Guide may not be available depending on your model. Use the table below to see which functions and options are supported by your model.

Supported Functions(P. 3)
Supported Options(P. 4)

Supported Functions

✔ : Supported — : Not supported

Function	imageRUNNER 2224N	imageRUNNER 2224
Print	✔	✔
Scan	✔	✔
Copy	✔	✔
2-sided Printing	✔ (option)	—
Secure Print	✔	—
Send scanned data (e-Mail/SMB)	✔	—
WSD	✔	—
Address Book	✔	—
Wired LAN connection	✔	—
Wireless LAN connection	✔	—
USB connection	✔	✔
Remote UI	✔	—
Keys and certificates	✔	—
Linking with mobile devices	✔	—
LDAP Server Authentication	✔	—

Function	imageRUNNER 2224N	imageRUNNER 2224
Security Policy	✓	—
Display	Touch Panel Model	Touch Panel Model
Volume Settings	✓	—
Feeder (2-sided scanning)	✓ (option)	—
Default System Manager ID	7654321	7654321
Default System Manager PIN	7654321	7654321
Department ID Management	✓	—

NOTE

- For details about the types of available drivers, see the Canon website for your country or region, or see the supplied User Software CD-ROM/DVD-ROM.
  https://global.canon/en/support/

Supported Options

The following optional production is available.

- Securing an original placed on the platen glass **Platen Cover Type X(P. 5)**
- Scanning a document automatically **DADF-AY(P. 6)**
- 2-sided printing / 2-sided copying **Duplex Unit-E(P. 7)**
- Adding a paper drawer **Cassette Feeding Module-AK(P. 8)**
- Using the machine as a PCL printer **PCL Printer Kit(P. 9)**

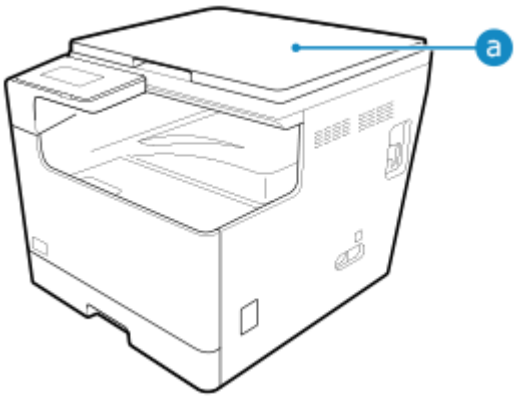
✓ : Supported — : Not supported

Option	imageRUNNER 2224N	imageRUNNER 2224
Platen Cover Type X	✓	—
DADF-AY	✓	—
Duplex Unit-E	✓	—
Cassette Feeding Module-AK	✓	—
PCL Printer Kit	✓	—

Platen Cover Type X

958J-0HC

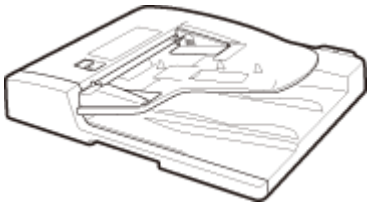
Close the platen cover(a) to secure originals that have been placed on the platen glass.



DADF-AY

958J-002

Several sheets of original or 2-sided originals can be scanned continuously.



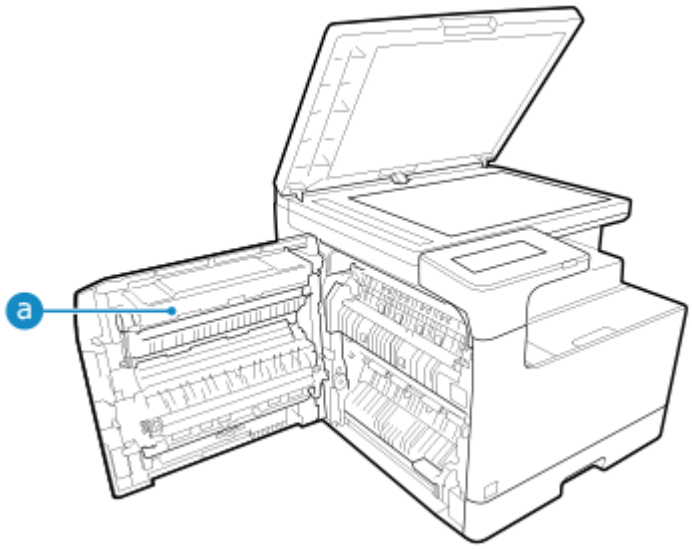
■ Specifications

For the specifications of the DADF-AY, see **Feeder Specifications(P. 38)** .

Duplex Unit-E

958J-0HE

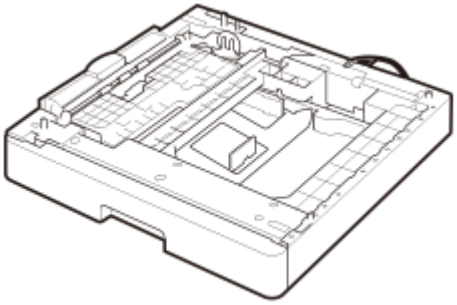
The Duplex Unit-E (a) enables you to use the 2-sided mode for copying or printing.



Cassette Feeding Module-AK

958J-003

When frequently using paper of varying sizes or types or when loading large quantities of paper at a time, install the optional Cassette Feeding Module-AK. This option reduces the work of loading paper.
For how to install Cassette Feeding Module-AK, see "Setup Guide." **Manuals of the Machine(P. 588)**



■ Specifications

Paper size	**Usable Paper(P. 29)**
Paper basis weight	**Usable Paper(P. 29)**
Number of paper sources and paper capacity *1	Paper drawer x 1 300 sheets (64 g/m²) 260 sheets (75 g/m²) 250 sheets (80 g/m²) 120 sheets (90 g/m²)
Dimensions (W x D x H)	581 mm x 575 mm x 92 mm
Weight	Approx. 5.8 kg

*1 Varies depending on the installation environment and paper to be used.

System Options

958J-005

By installing the system options, you can boost performance of the machine.

PCL Printer Kit(P. 9)

PCL Printer Kit

This option supports PCL emulation printing solutions. It supports PCL6 emulation printing solutions.

Registering License

958J-006

Depending on the system option, you may have to obtain a license key and register it to the machine to start the system option.

Step 1: Obtaining a License Key(P. 10)
Step 2: Registering the License Key(P. 10)

Step 1: Obtaining a License Key

From a Web browser on a computer, access the following URL and follow the procedure on the screen to obtain a license key.
http://www.canon.com/lms/license/

To obtain the license key, you must have the License Access Number and serial number of the machine. Prepare that information in advance.

Checking the License Access Number
Check the number in the License Access Number Certificate that is supplied with the package of the option.

How to Look Up the Serial Number

Press on the control panel ▶ [Device Status] ▶ [Serial Number]

- You can also check this information using Remote UI from a computer. **Managing the Machine from a Computer (Remote UI)(P. 368)**

Step 2: Registering the License Key

Use the control panel to register the license key. You cannot register the license key using Remote UI from a computer. Administrator privileges are required.

1 On the control panel, press [Menu] in the [Home] screen. [Home] Screen(P. 113)

2 Press [Management Settings] ▶ [License/Other] ▶ [Register License].

If the login screen appears, enter the System Manager ID and PIN, and then press ID. **System Manager ID and PIN(P. 12)**

3 Confirm the message, and press [OK].

4 Enter the license key, and press [Register].

➡ Registration starts. When registration is completed, the message [Installed. Effective after main power is turned OFF and ON.] is displayed.

5 Press [Close].

6 Restart the machine. Restarting the Machine(P. 107)

➠ The license is registered.

System Manager ID and PIN

958J-007

The machine has a System Manager Mode for viewing and changing important settings.
When System Manager ID and System Manager PIN are set, only those users who know this information are able to log into System Manager Mode.

The System Manager ID and System Manager PIN are set in advance as follows.

System Manager ID	7654321
System Manager PIN	7654321

- When the System Manager Mode login screen appears, enter the above ID and PIN to log in if the default settings have not been changed. To log in to Remote UI in System Manager Mode, you must change the System Manager PIN from the default setting.
- Change the default settings to protect the information, and allow only certain administrators to know this information.

For details about how to change and set the System Manager ID and System Manager PIN, see the following:
Setting the Department ID and PIN for the Administrator(P. 293)

Measures to Prevent Unauthorized Access

958J-008

Be sure to read this section before using the machine in a network environment.

Printers and multifunction machines can provide various useful functions when connected to a network. However, because this also creates risks of unauthorized access and eavesdropping over the network, measures against security risks are essential.
This section provides examples of measures against unauthorized access that you can implement during setup when using the machine in a network environment.

Using a Private IP Address(P. 13)
Using a PIN to Protect Information(P. 13)
Precautions When Using Remote UI(P. 14)

NOTE

- There are additional measures against security risks you can implement on the machine, such as restricting communication with a firewall and using TLS encrypted communication to prevent eavesdropping and tampering. Take the necessary measures according to your usage environment. **Security(P. 292)**

Using a Private IP Address

There are two types of IP addresses: a global IP address, which is used for connecting to the Internet, and a private IP address, which is used in a local area network such as a company LAN.

If a global IP address is assigned to the machine, the machine can be accessed by users on the Internet. Thus, the risk of information leakage due to unauthorized access from external network increases.
On the other hand, if a private IP address is assigned to the machine, access to the machine is restricted to only users on your local area network. Therefore, it reduces the risk of unauthorized access compared to an assigned global IP address.

Basically, assign a private IP address to the machine.
A private IP address is used in one of the following ranges.

Ranges for Private IP Addresses

- From 10.0.0.0 to 10.255.255.255
- From 172.16.0.0 to 172.31.255.255
- From 192.168.0.0 to 192.168.255.255

For details about how to assign and confirm the IP address, see the following:
Setting IPv4 Addresses(P. 74)
Setting IPv6 Addresses(P. 76)

If you want to assign a global IP address to the machine, you can create an environment to prevent outside access, such as by using a firewall, to reduce the risk of unauthorized access. Contact your network administrator about how to implement network security.

Using a PIN to Protect Information

By setting up a PIN to protect the information stored in the machine, you can reduce the risk of information leakage or unauthorized use if a malicious third party attempts to gain unauthorized access.
You can set a PIN to the functions indicated below. Only users who know the PIN can use these functions and access the information on the machine.

Remote UI

You can require the user to enter the Remote UI Access PIN when using Remote UI.
Setting the PIN to Use for Remote UI(P. 350)

System Manager ID
You can require the user to enter the System Manager ID and System Manager PIN, when changing any important settings.
Setting the Department ID and PIN for the Administrator(P. 293)

Address Book
You can require the user to enter the Address Book PIN when adding new entries and editing existing ones.
Restricting Address Book Registration and Editing by Setting a PIN(P. 348)

Precautions When Using Remote UI

- Do not access other websites when using Remote UI.
- After using Remote UI, be sure to log out and close your browser.

Names of Parts and Their Functions

958J-009

Front Side

Check these parts on the front when operating the machine.

Front Side(P. 16)

- Use the control panel to operate the machine and configure the settings.
  Control Panel(P. 21)
- Place the original on the platen glass or in the feeder when scanning or copying.
  Feeder(P. 25)
- Load printing and copying paper into the following paper sources:
  Multi-purpose Tray(P. 27)
  Paper Drawer(P. 28)

Interior

Open the covers and access the interior to replace a toner cartridge or to remove jammed paper.

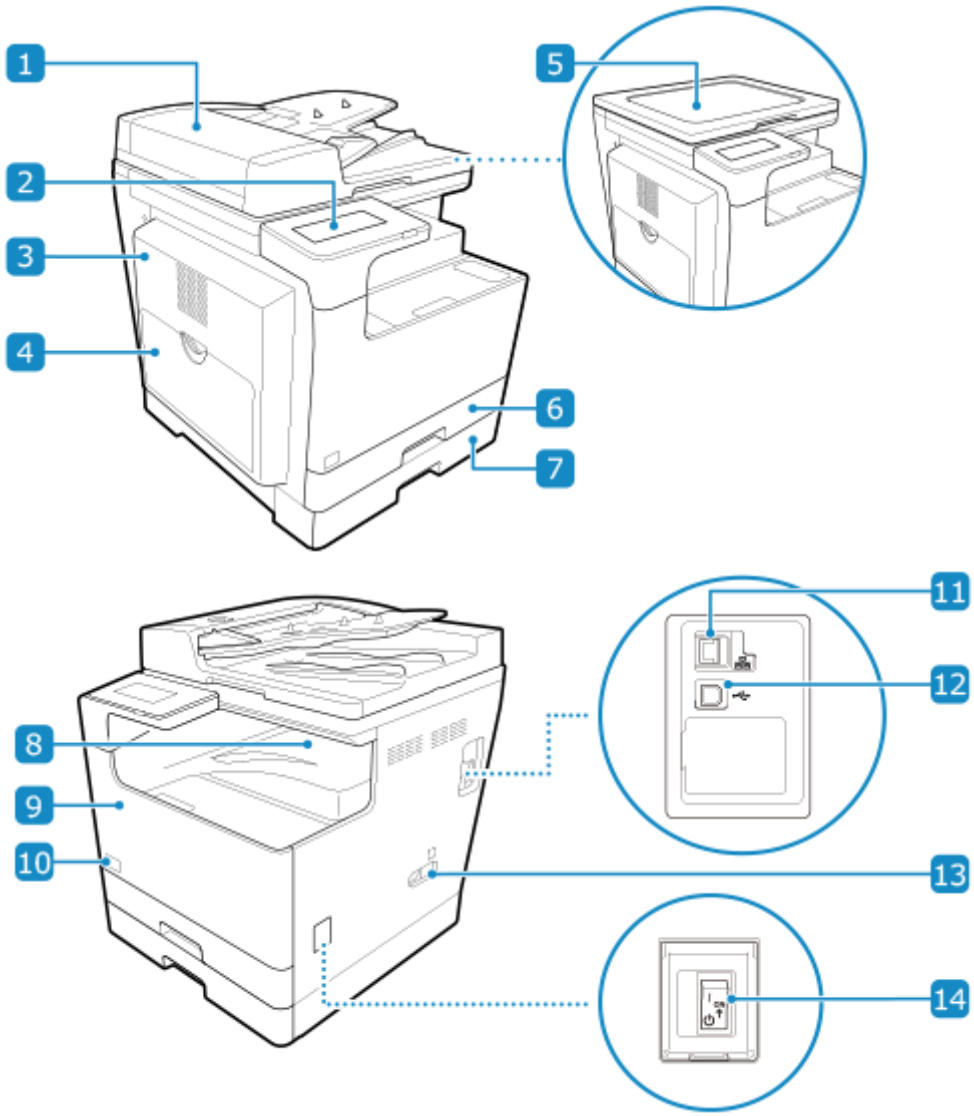
Interior(P. 19)

Front Side

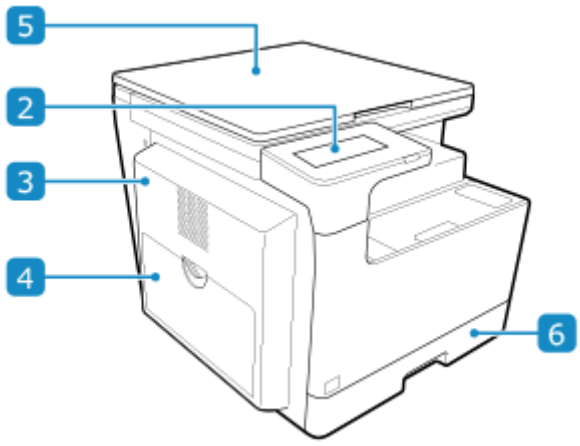
958J-00A

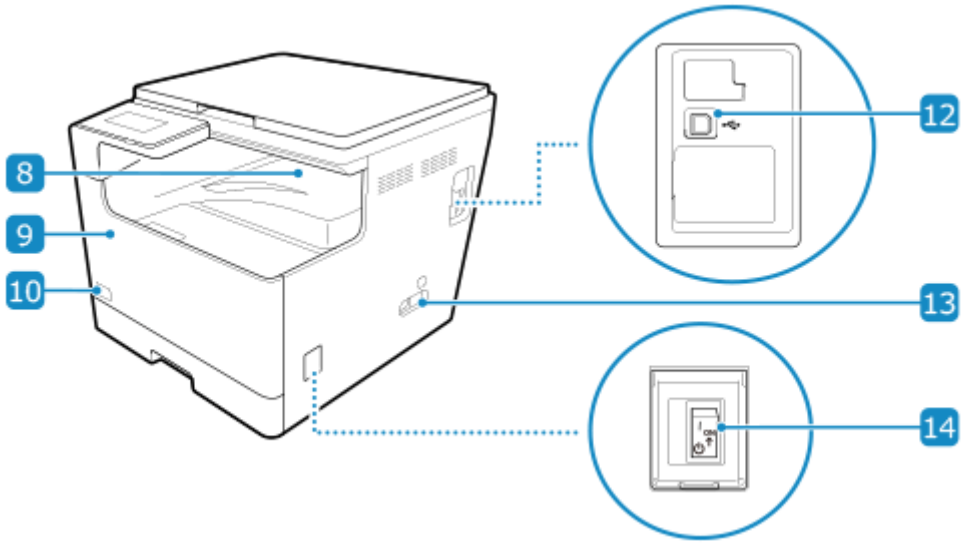
imageRUNNER 2224N

When the DADF-AY and Cassette Feeding Module-AK are attached:



imageRUNNER 2224





1 Feeder

You can place two or more sheets of originals in the feeder. The placed originals are fed and scanned one by one automatically. **Feeder(P. 25)**

2 Control panel

Use the display and keys to operate the machine and confirm the operations and status. **Control Panel(P. 21)**

3 Cover on the left side of the main unit

Open this cover when clearing a paper jam inside the machine. **Paper Jams inside the Machine and in a Paper Source(P. 510)**

4 Multi-purpose tray

To temporarily use paper not loaded in the paper drawer, load it in the multi-purpose tray. **Multi-purpose Tray(P. 27)**

5 Platen cover

Secures the originals placed on the platen glass.

6 Paper drawer 1

Load paper you usually use into the paper drawer. **Paper Drawer(P. 28)**

7 Paper drawer 2

Load paper you usually use into the paper drawer. **Paper Drawer(P. 28)**

8 Output tray

Printed and copied paper is ejected to the output tray.

9 Front cover

Open the front cover when replacing toner cartridges.

10 Toner Code

This code indicates the type of genuine toner that can be used with the machine. Use toner with a code that includes the same letters as the code on the front cover of the machine.

11 LAN port

You can connect the machine to a wired LAN using a commercial Ethernet cable connected to the LAN port.

12 USB port (for computer connection)

You can connect a computer to the USB port using a commercial USB cable.

13 Power socket

Connect the power cord to the power socket.

14 Power switch

Turns the power of the machine ON and OFF. **Turning ON and OFF the Machine(P. 104)**

NOTE

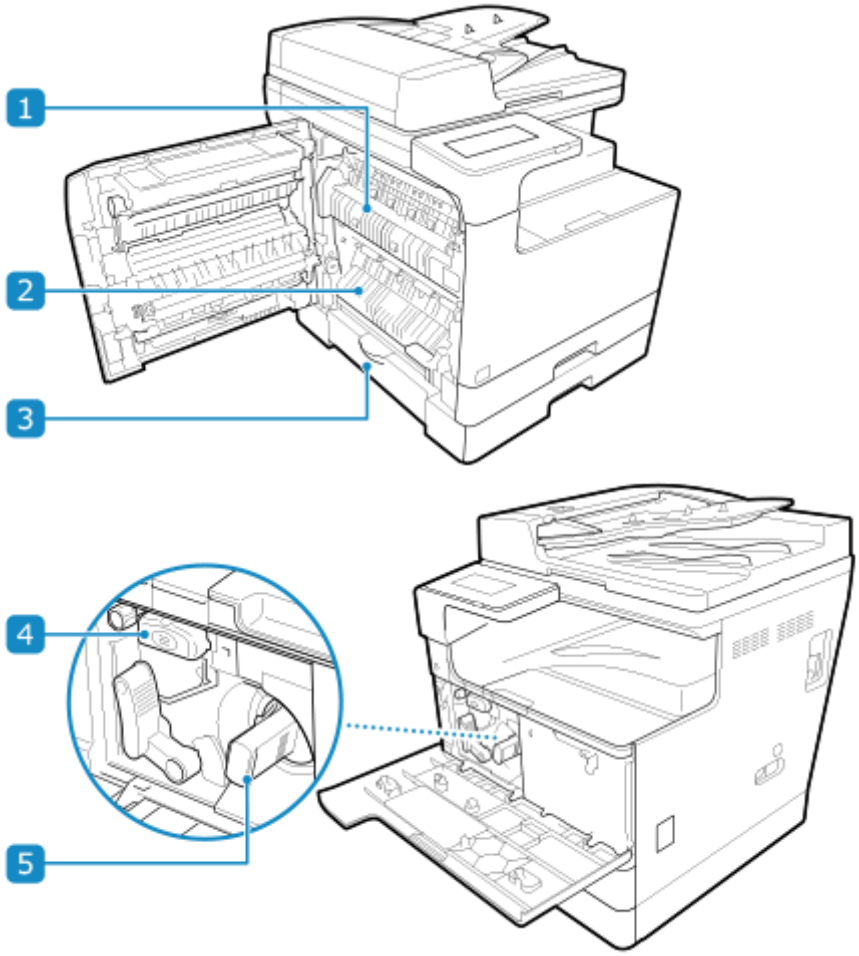
- To ensure efficient use of the machine, regularly clean the surface and platen glass.
  Cleaning the Surface of the Machine(P. 486)
  Cleaning the Platen Glass(P. 487)
- If the following symptoms occur when using the feeder, clean the feeder: **Cleaning the Feeder(P. 488)**
  - Originals become dirty
  - Originals frequently jam
  - Printouts appear smudged after scanning or copying

Interior

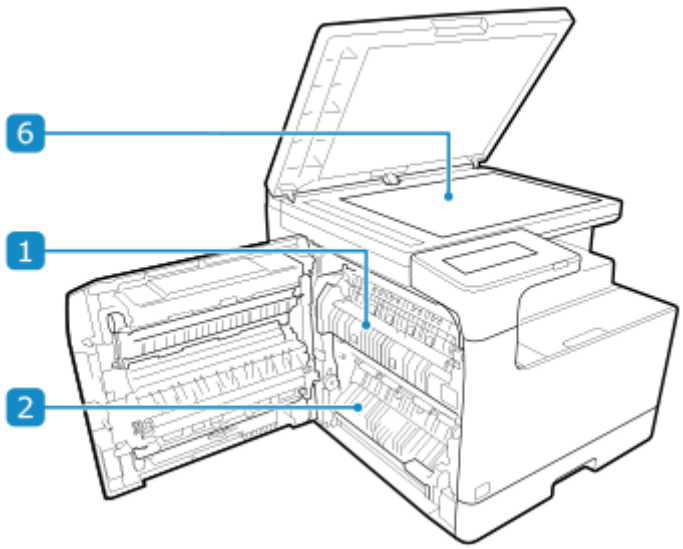
958J-00C

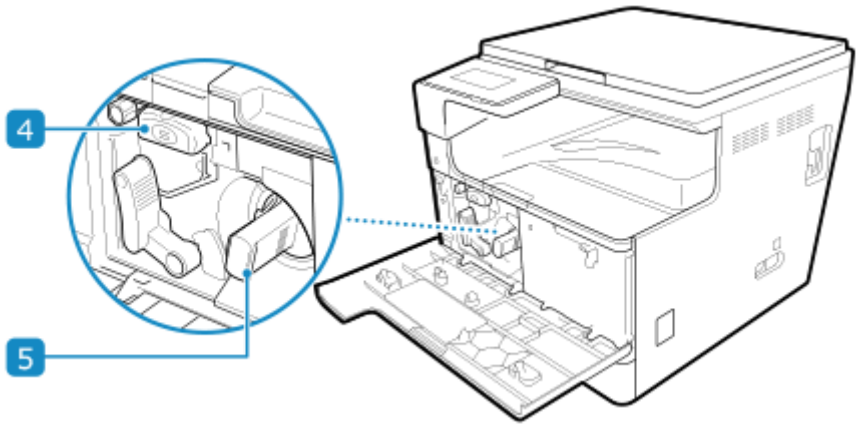
imageRUNNER 2224N

When the DADF-AY and Cassette Feeding Module-AK are attached:



imageRUNNER 2224





1 Fixing assembly

When a paper jam occurs around the fixing assembly, clear the paper jam from here. **Paper Jams inside the Machine and in a Paper Source(P. 510)**

2 Cover on the left side of Paper Drawer 1

Open this cover when clearing a paper jam in paper drawer 1. **Paper Jams inside the Machine and in a Paper Source(P. 510)**

3 Cover on the left side of Paper Drawer 2

Open this cover when clearing a paper jam in paper drawer 2. **Paper Jams inside the Machine and in a Paper Source(P. 510)**

4 Drum unit

Replace the drum unit before the usage period expires.

5 Toner cartridge

Replace the toner cartridge when the toner runs out. **Replacing the Toner Cartridges(P. 496)**

6 Platen glass

Place originals. The placed originals are scanned in a fixed position. **Placing Originals(P. 127)**

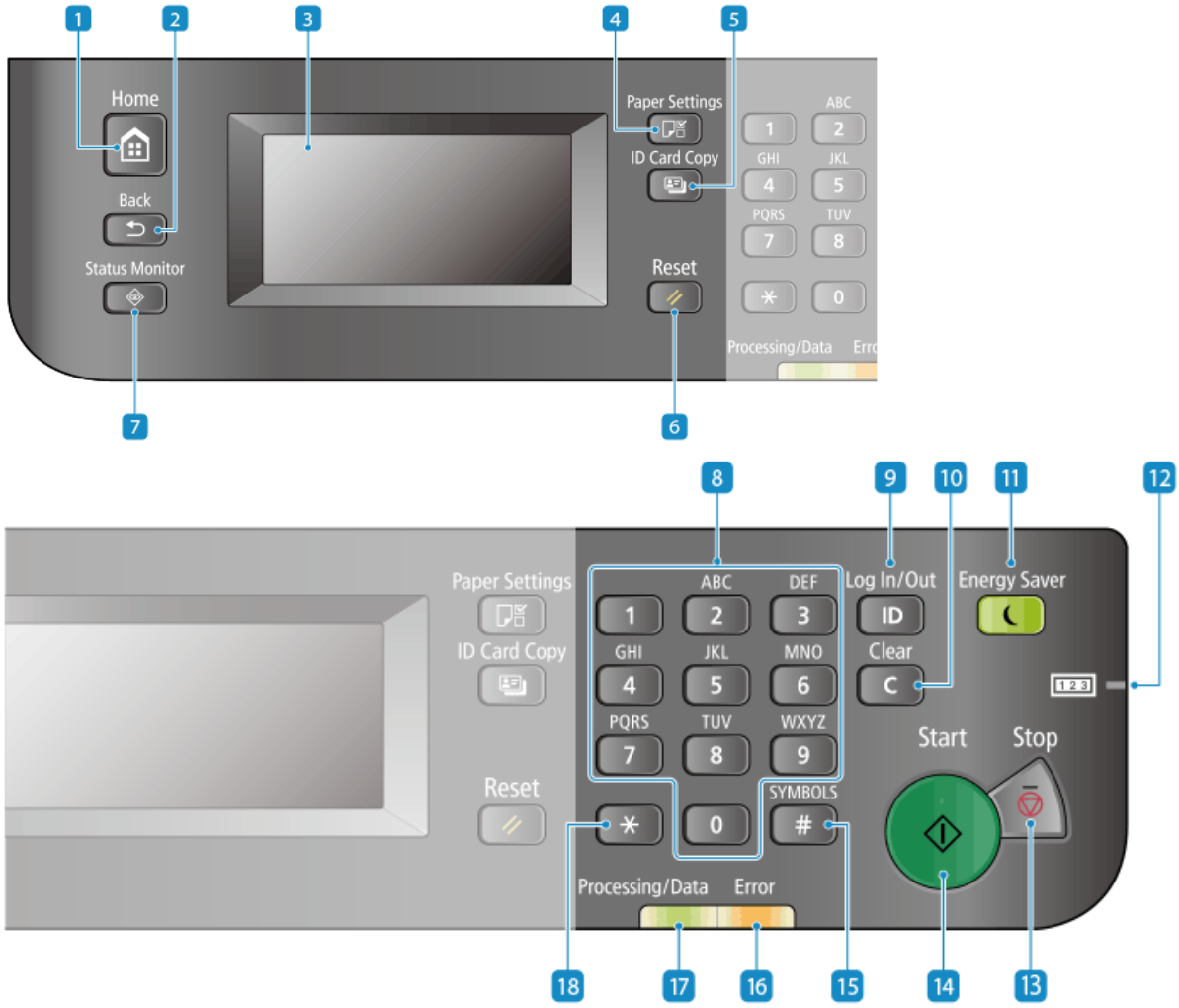
Control Panel

958J-00E

Use the control panel to operate the machine and configure the settings.

imageRUNNER 2224N(P. 21)
imageRUNNER 2224(P. 23)

imageRUNNER 2224N



1 Home key ( )

Displays the [Home] screen. **[Home] Screen(P. 113)**

2 Back key ( )

Returns you to the previous screen.

3 Display

Displays the screens for operating the functions, usage, messages, and other information. This touch panel can be operated by directly touching the screen with your finger. **Using the Control Panel(P. 110)**

4 Paper Settings key ( )

Press to select a paper source, such as a paper drawer or multi-purpose tray, and register paper size and type. **Specifying the Paper Size and Type(P. 144)**

5 ID Card Copy key ( )

Press to copy both sides of an ID card onto the same side of paper. **Copying Both Sides of ID Cards onto One Sheet(P. 263)**

6 Reset key ( )

Press to cancel the settings and restore the previously specified settings.

7 Status Monitor key ( )

Check the information of the machine, usage and logs, network settings, and error information. **[Status Monitor] Screen(P. 115)**

8 Numeric keys (0 - 9)

Press to enter numbers and text. **Entering Characters(P. 120)**

9 ID key ( )

Press after entering the ID and PIN to log in when Department ID Management and the System Manager ID is enabled. After you finish using the machine, press this key again to log out. **Logging In to the Machine(P. 124)**

10 Clear key ( )

Press to delete the entered numbers and text.

11 Energy Saver key ( )

Puts the machine into sleep mode to reduce power consumption. In the sleep mode, lights up yellow-green. **Reducing Power Consumption (Sleep Mode)(P. 108)**

12 Counter Check key ( )

Press to display the total number of pages used for operations such as copying or printing on the touch panel display. You can also check the serial number of the machine (three letters and five numbers).

13 Stop key ( )

Cancels printing and other operations.

14 Start key ( )

Press to scan originals.

15 Symbol key ( )

Enter symbols. **Entering Characters(P. 120)**

16 Error indicator

Blinks or lights up when an error such as a paper jam occurs.

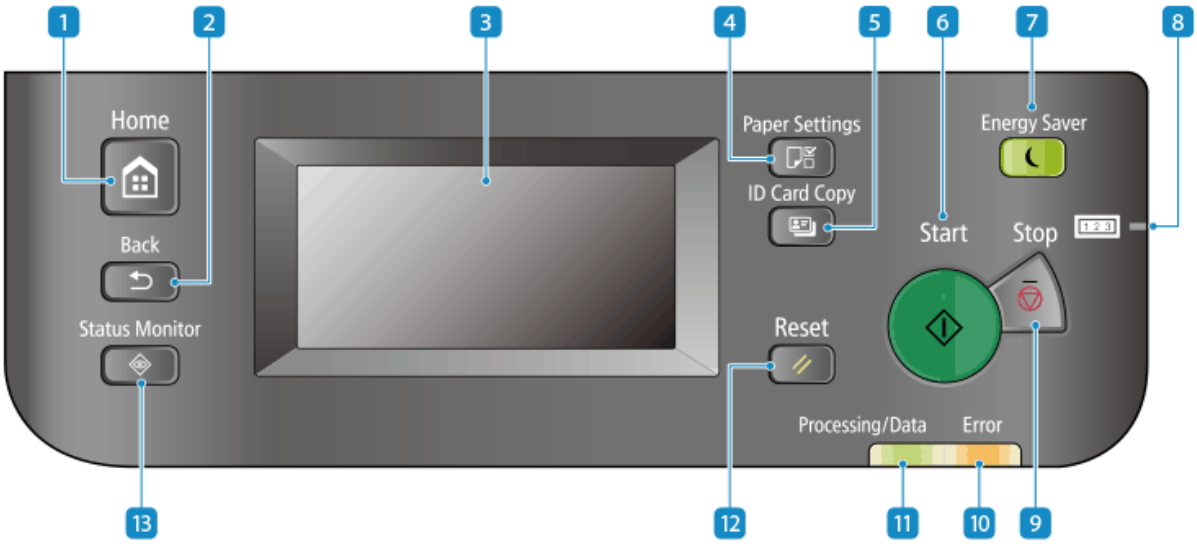
17 Processing/Data indicator

Blinks when an operation is being performed, such as during printing, and lights up when data is waiting to be processed.

18 Uppercase/lowercase/numeric key ( )

Changes the character type.

imageRUNNER 2224



1 Home key ( )

Displays the [Home] screen. **[Home] Screen(P. 113)**

2 Back key ( )

Returns you to the previous screen.

3 Display

Displays the screens for operating the functions, usage, messages, and other information. This touch panel can be operated by directly touching the screen with your finger. **Using the Control Panel(P. 110)**

4 Paper Settings key ( )

Press to select a paper source, such as a paper drawer or multi-purpose tray, and register paper size and type. **Specifying the Paper Size and Type(P. 144)**

5 ID Card Copy key ( )

Press to copy both sides of an ID card onto the same side of paper. **Copying Both Sides of ID Cards onto One Sheet(P. 263)**

6 Start key ( )

Press to scan originals.

7 Energy Saver key ( )

Puts the machine into sleep mode to reduce power consumption. In the sleep mode, lights up yellow-green. **Reducing Power Consumption (Sleep Mode)(P. 108)**

8 Counter Check key ( )

Press to display the total number of pages used for operations such as copying or printing on the touch panel display. You can also check the serial number of the machine (three letters and five numbers).

9 Stop key ( )

Cancels printing and other operations.

10 Error indicator

Blinks or lights up when an error such as a paper jam occurs.

11 Processing/Data indicator

Blinks when an operation is being performed, such as during printing, and lights up when data is waiting to be processed.

12 Reset key ( )

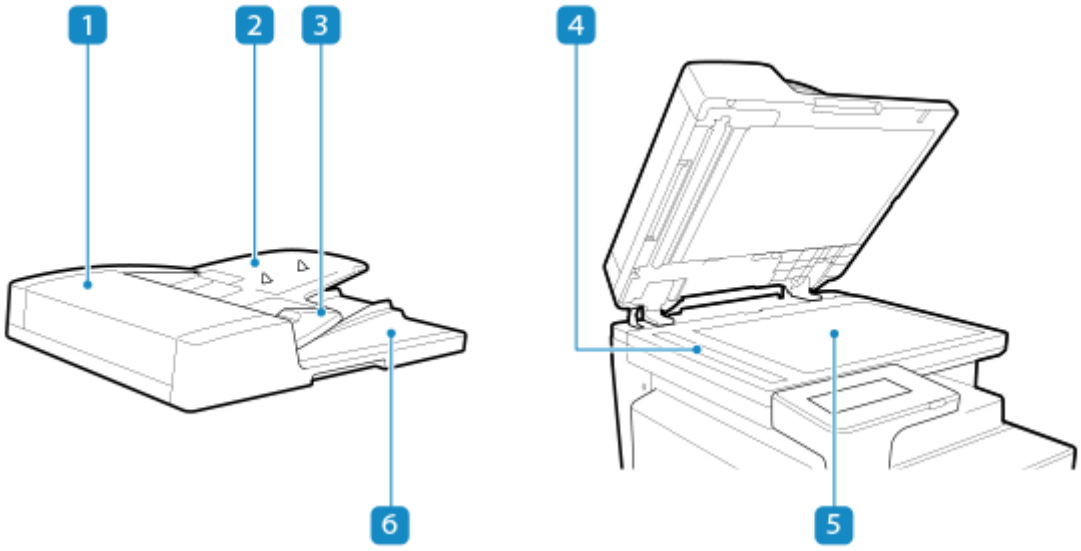
Press to cancel the settings and restore the previously specified settings.

13 Status Monitor key ( )

Check the information of the machine, usage and logs, and error information. **[Status Monitor] Screen(P. 115)**

Feeder

958J-00F



1 Feeder cover

Open the feeder cover when cleaning the inside of the feeder or clearing a paper jam inside the feeder. **Paper Jams in the Feeder(P. 515)**

2 Original supply tray

You can place two or more sheets of originals in the original supply tray. **Placing Originals(P. 127)**

3 Slide guides

Align the slide guides against the edges of the originals to properly place the original.

4 Original scanning area

Originals placed on the feeder are scanned.

5 Platen glass

Place books, thick paper, thin paper, and other originals that cannot be placed in the feeder on the platen glass to copy or scan. The placed originals are scanned in a fixed position. **Placing Originals(P. 127)**

6 Original output tray

Scanned originals are output to the original output tray.

IMPORTANT

- Do not place objects on the original output tray. This can damage the originals.

NOTE

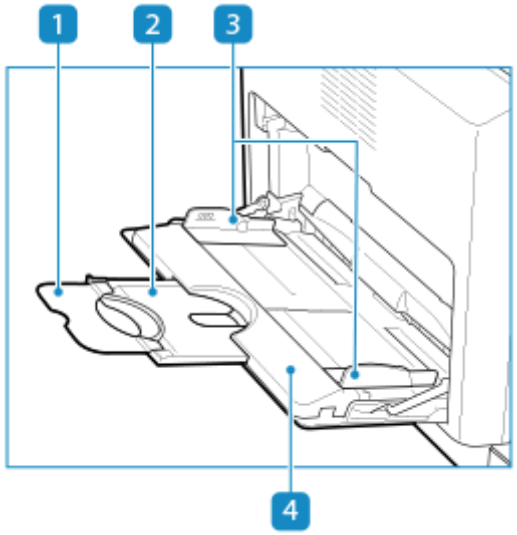
- If the following symptoms occur when using the feeder, clean the feeder: **Cleaning the Feeder(P. 488)**

- Originals become dirty
- Originals frequently jam
- Printouts appear smudged after scanning or copying

Multi-purpose Tray

958J-00H

Load paper that you will temporarily use in the multi-purpose tray. **Loading Paper in the Multi-purpose Tray(P. 135)**



1 Tray extension

Pull out the tray extension when loading large-sized paper.

2 Auxiliary tray

Pull out the auxiliary tray when loading large-sized paper.

3 Paper guides

Align the paper guides against the edges of the paper to properly place the paper.

4 Paper tray

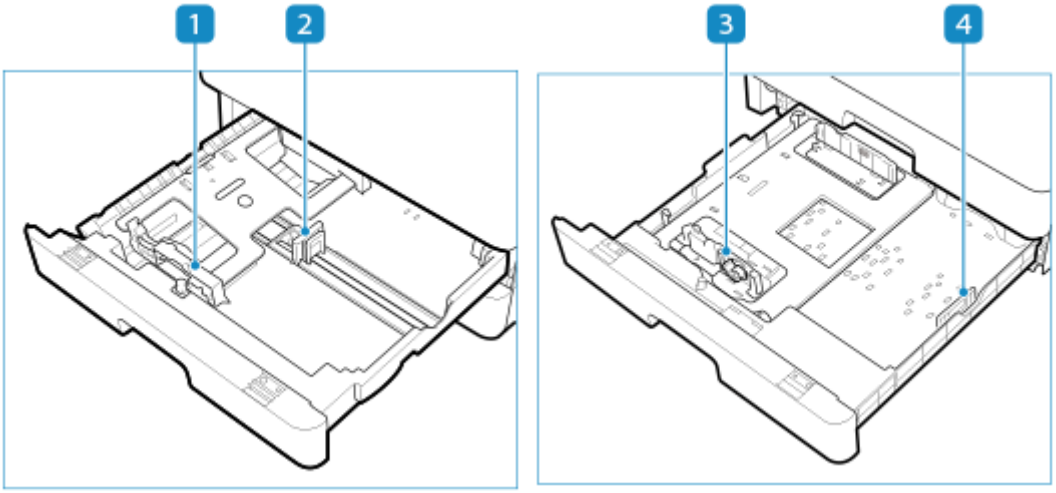
Open the paper tray when loading paper.

Paper Drawer

958J-00J

Paper drawer 2 is the optional Cassette Feeding Module-AK. **Loading Paper in the Paper Drawer(P. 131)**

Paper drawer 1 **Paper drawer 2**



1 Paper guide (Front guide)

Press the top part of the front guide and slide it.

2 Paper guide (Right guide)

Press the top part of the right guide and slide it.

3 Paper guide (Front guide)

Release the lock lever, and slide the front guide to align it with the size of the paper to load.

4 Paper guide (Right guide)

Attach the right guide according to the size of the paper to load.

Usable Paper

958J-00K

The sizes and types of paper that can be used on the machine are shown below.

Usable Paper Sizes(P. 29)
Usable Paper Types(P. 31)
Unusable Paper(P. 31)

NOTE

- Precautions must be taken when handling and storing paper. **Precautions When Handling Paper(P. 33)**

Usable Paper Sizes

✓: Usable —: Not usable

Paper Size	Paper Drawer 1	Paper Drawer 2 *1	Multi-purpose Tray	Automatic 2-sided Printing *2
A4 *3	✓	✓	✓	✓
A4R	✓	✓	✓	✓
A3	✓	✓	✓	✓
A5	—	✓	✓	—
A5R	✓	—	✓	✓
A6R	—	—	✓	—
B4	✓	✓	✓	✓
B5	✓	✓	✓	✓
B5R	✓	✓	✓	✓
Letter (LTR) *3	✓	✓	✓	✓
LetterR (LTR)	✓	✓	✓	✓
Legal (LGL)	✓	✓	✓	✓
11x17	✓	✓	✓	✓
Statement (STMT)	—	✓	✓	—

Paper Size	Paper Drawer 1	Paper Drawer 2 *1	Multi-purpose Tray	Automatic 2-sided Printing *2
StatementR (STMTR)	✓	—	✓	✓
Executive (EXEC)	—	—	✓	✓
Foolscap/Folio	✓	—	✓	✓
Oficio	✓	—	✓	✓
Oficio (Brazil)	✓	—	✓	✓
Oficio (Mexico)	✓	—	✓	✓
Oficio (Ecuador)	✓	—	✓	✓
Oficio (Argentina)	✓	—	✓	✓
Letter (Government)	✓	—	✓	✓
LetterR (Government)	✓	—	✓	✓
Letter (Argentina)	✓	—	✓	✓
LetterR (Argentina)	✓	—	✓	✓
Legal (Government)	✓	—	✓	✓
Legal (India)	✓	—	✓	✓
Foolscap (Australia)	✓	—	✓	✓
F4A	✓	—	✓	✓
Envelope No.10 (COM10)	—	—	✓	—
Envelope C5	—	—	✓	—
Envelope DL	—	—	✓	—
Envelope Monarch	—	—	✓	—
Custom Paper Size	—	—	✓ *4	—

*1 The optional Cassette Feeding Module-AK

*2 If the optional Duplex Unit-E is installed, automatically prints on both sides without having to reload the paper.

*3 Enables printing of reports and lists.

*4 You can use a custom size from 95.0 mm x 140.0 mm to 297.0 mm x 431.0 mm.

Usable Paper Types

You can use non-chlorine paper.

✔: Usable —: Not usable

Paper Type	Paper Weight	Paper Drawer 1	Paper Drawer 2 *1	Multi-purpose Tray	Automatic 2-sided Printing *2
Thin 1	60 g/m² to 63 g/m²	—	—	✔	—
Plain 1 *3	64 g/m² to 75 g/m²	✔	✔	✔	✔
Plain 2 *3	76 g/m² to 90 g/m²	✔	✔	✔	✔
Color *3	64 g/m² to 80 g/m²	✔	✔	✔	✔
Recycled *3	64 g/m² to 80 g/m²	✔	✔	✔	✔
Heavy 1	91 g/m² to 105 g/m²	—	—	✔	—
Heavy 2	106 g/m² to 128 g/m²	—	—	✔	—
Heavy 3	129 g/m² to 157 g/m²	—	—	✔	—
Labels	—	—	—	✔	—
Bond	—	—	—	✔	—
Pre-Punched *3	—	✔	✔	✔	✔
Envelope	—	—	—	✔	—

*1 The optional Cassette Feeding Module-AK

*2 If the optional Duplex Unit-E is installed, automatically prints on both sides without having to reload the paper.

*3 Enables printing of reports and lists.

Unusable Paper

Before printing, check whether the paper to use is suitable. Do not use the following types of paper, as they can cause paper jams or printing errors:

- Wrinkled, creased, curled, torn, or damp paper*1
- Thin straw paper, very thin paper, coarse paper, glossy paper

- Paper with glue or other adhesive sticking out or label paper whose back side can be easily peeled off
- Paper printed by a thermal transfer printer, back side of paper printed by a thermal transfer printer

*1 Printing on damp paper may cause steam to be emitted from the output area or water droplets to adhere to the output part, but this does not indicate a malfunction. This is because the water contained in the paper evaporates due to the heat generated when the toner fixes to the paper. This is more likely to occur when the room temperature is low.

Precautions When Handling Paper

958J-00L

To prevent paper jams and other errors and ensure beautiful printing, you must take precautions when handling and storing paper.
To maintain the quality of printed paper, pay attention when storing and gluing paper.

■ Handling and Storing Paper

Before printing, check whether the paper to use is suitable. Do not use the following types of paper, as they can cause paper jams or printing errors:

- Wrinkled, creased, curled, torn, or damp paper*1
- Thin straw paper, very thin paper, coarse paper, glossy paper
- Paper printed by a thermal transfer printer, back side of paper printed by a thermal transfer printer

*1 Printing on damp paper may cause steam to be emitted from the output area or water droplets to adhere to the output part, but this does not indicate a malfunction. This is because the water contained in the paper evaporates due to the heat generated when the toner fixes to the paper. This is more likely to occur when the room temperature is low.

Acclimating the Paper to the Usage Environment

Before using the paper in the machine, be sure to fully acclimate the paper to the environment where the machine is located. Immediately using paper stored in a location with a different temperature or humidity can cause paper jams or printing errors.

Storing Paper Before Use

- It is recommended that you use paper as soon as possible after opening the package. Any remaining paper should be wrapped in the original package and stored on a flat surface.
- To protect the paper from moisture or dryness, keep the paper wrapped in its package until use.
- Do not store the paper so that it curls or folds.
- Do not store the paper vertically, and do not stack too much paper.
- Do not store the paper in direct sunlight, or in a place with high humidity, dryness, or a drastically different temperature or humidity compared to the usage environment.

■ Storing and Gluing Printed Paper

Storing Paper

- Store the paper on a flat surface.
- Do not store the paper together with items made of polyvinyl chloride (PVC) such as a clear folder. The toner may melt, causing the paper to stick to the PVC material.
- Do not store the paper folded or creased. Toner may peel off.
- Do not store the paper in a place with high temperature.
- When storing the paper for a long period of time (two years or longer), store in a binder or similar item.
- Storing the paper for a long period of time can cause a discoloration of the paper, resulting in a discoloration of printed images.

Precautions When Gluing Printed Paper

- Always use insoluble adhesives.
- Before applying adhesive, perform a test using an unneeded printout.
- Allow glued paper to fully dry before stacking.

Specifications

958J-00R

Specifications are subject to change for product improvement, and the contents may be updated depending on products released in the future. For details about product information, see the Canon website.
https://global.canon/

Specifications of Main Unit
- **Basic Specifications(P. 35)**
- **Feeder Specifications(P. 38)**

Specifications of Functions
- **Print Specifications(P. 39)**
- **Scan Specifications(P. 41)**
- **Network Specifications (imageRUNNER 2224N)(P. 43)**
- **Security and Management Function Specifications (imageRUNNER 2224N)(P. 44)**

Operating Environment and Supported Software and Servers
- **Supported Environment (imageRUNNER 2224N)(P. 47)**

■ See Also

Specifications of Options
You can check the compatibility of options and their specifications.
- **Supported Options(P. 4)**

Basic Specifications

958J-00S

Name	Canon imageRUNNER 2224N / 2224
Type	Desktop
Resolution for Reading	**Full Color** 300 dpi x 600 dpi 300 dpi x 300 dpi **Black and White** 600 dpi x 600 dpi 600 dpi x 300 dpi
Resolution for Writing	600 dpi x 600 dpi
Number of Tones	256
Acceptable Originals	**Sizes of Original** Up to 297.0 mm x 431.8 mm **Types of Original** Sheet and book
Copy Size/Copy Paper	**Paper Sizes** **Usable Paper(P. 29)** **Margin** • **Top**: 3.0 mm • **Left**: 3.0 mm • **Right**: 3.0 mm • **Bottom**: 3.0 mm **Paper Weight** • **Paper Drawer**: 64 g/m² to 90 g/m² • **Multi-Purpose Tray**: 60 g/m² to 157 g/m²
Paper Type	**Usable Paper(P. 29)**
Warm-up time *1	**After powering ON** 13 seconds or less **Returning from the Sleep mode** 4.3 seconds or less
First Copy Time	7.4 seconds
Copy Speed *2	24 sheets/minute

(Plain A4, 100 %)	
Magnification	**Regular Paper Size** 400 %, 200 %, 141.4 %, 122.4 %, 115.4 %, 100 %, 86.5 %, 81.6 %, 70.7 %, 61 %, 50 %, 25 % **Magnification error of Direct (100%)** Vertical / Horizontal: ±1.0 % or less*3 **Zoom** 25 % to 400 % (in 1 % increments)
Paper Feeding System/Capacity	**Paper drawer** 300 sheets (64 g/m²) / 260 sheets (75 g/m²) / 250 sheets (80 g/m²) / 120 sheets (90 g/m²) x 1 **Multi-purpose Tray** • **A4, B5, LTR, A4R, B5R, LTRR, A5, A5R, STMT, STMTR** 100 sheets (60 g/m² / 64 g/m² / 75 g/m²/ 80 g/m²) x 1 • **A6R** 100 sheets (60 g/m²) x 1 • **A3, B4, 11x17, LGL** 50 sheets (60 g/m² / 64 g/m² / 75 g/m²/ 80 g/m²) x 1 • **All size**: 50 sheets (105 g/m²) x 1 • **Envelope**: 10 sheets x 1 • **Labels**: 1 sheet x 1
Multiple Copies	999 sheets
Power Source	220 V - 240 V AC, 50/60 Hz, 2.8 A
Power Consumption	**Maximum Power Consumption** 1,500 W **When the machine is in the Sleep mode** 0.9 W **When the main power switch is turned OFF** 0.4 W or less
Dimensions (W x D x H)	**When the Feeder (DADF-AY) is attached** 627 mm x 607 mm x 606 mm **When the Platen Cover (Platen Cover Type X) is attached** 627 mm x 589 mm x 502 mm
Weight (Toner cartridge excluded)	**When the Feeder (DADF-AY) is attached** Approx. 37.2 kg **When the Platen Cover (Platen Cover Type X) is attached** Approx. 31.6 kg

Installation Space (W x D)	1,065 mm x 1,284 mm (when the multi-purpose tray is extended) * Provide a space of 100 mm or more around the machine.
Memory Capacity	**RAM**: 1 GB **eMMC**: 2 GB
Inner Tray Output Capacity	**1-Sided Printing** • **A4, B5, LTR**: 250 sheets (64 g/m² to 80 g/m²) • **Other paper sizes**: 100 sheets (64 g/m² to 80 g/m²)

*1 Activation time may vary, depending on the environment and conditions under which the machine is being used.

*2 The copy speed on A4 size plain paper on one-side printing is measured during continuous copying. Copy speeds vary depending on the output resolution, the paper type and size, and the paper feeding direction. Copy speeds on smaller paper sizes may be slower. Plus, the machine may experience downtime or decrease the copy speed in the middle of a continuous copy run to adjust the temperature inside the machine or maintain the optimal print quality.

*3 -1.5 % to 1.0 % for A5 / B5 / EXEC

Feeder Specifications

958J-00U

The "DADF-AY" is an optional.

Original Feeding Mechanism	Automatic 2-sided Document Feeder
Original Size/Type	**Size of Originals** **Maximum**: 297.0 mm x 432.0 mm*1 **Minimum**: 148.0 mm x 128.0 mm **Weight of Originals** **Continuously scanning** • **1-Sided Originals / 2-Sided Originals**: 52 to 105 g/m² **Scanning a single original** • **1-Sided Originals**: 37 to 52 g/m² • **1-Sided Originals / 2-Sided Originals**: 105 to 128 g/m² **Automatically Detectable Sizes of Original** A3, A4, A4R, A5, A5R, B4R, B5, B5R **The combinations of document sizes that you can copy/scan** *2 **Documents with the same width**: A3 and A4, B4 and B5, A4R and A5
Original Tray Capacity	• **A4, A4R, B5, B5R, A5, A5R**: 50 sheets (64 g/m² / 75 g/m² / 80 g/m²) • **A3, B4R**: 25 sheets (64 g/m² / 75 g/m² / 80 g/m²)
Original Scanning Speed (A4)	**1-sided Scanning** **Scanning (300 dpi x 300 dpi)** *3 • **Full Color**: 25 pages/minute • **Black and White**: 35 pages/minute **Copying (600 dpi x 600 dpi)** • **Black and White**: 25 pages/minute **2-sided Scanning** **Scanning (300 dpi x 300 dpi)** *3 • **Full Color**: 8 pages/minute • **Black and White**: 12 pages/minute **Copying (600 dpi x 600 dpi)** • **Black and White**: 8 pages/minute

*1 1-sided originals: Originals of up to 630 mm long can be scanned.

*2 Copying/scanning with a combination other than described above may cause damage to the documents or paper jams.

*3 The scanning speed may vary, depending on the scanning mode and original type.

Print Specifications

958J-00W

UFR II Printer Function(P. 39)
PCL Printer Function (imageRUNNER 2224N)(P. 40)

UFR II Printer Function

Type	Internal
Print Size	**Usable Paper(P. 29)**
Continuous Print Speed	Same as "Copy Speed" for main unit **Basic Specifications(P. 35)**
Resolution	**Data Processing** 1,200 dpi x 1,200 dpi, 600 dpi x 600 dpi
Page Description Language (PDL)	UFR II
Protocol Supported	**imageRUNNER 2224N** TCP/IP: LPD, Port9100, IPP, IPPS, WSD
Compatible OS	Windows 8.1 Windows 10 Windows 11 Windows Server 2012 Windows Server 2012 R2 Windows Server 2016 Windows Server 2019 Windows Server 2022 macOS (10.12 or later)
Resident Fonts	None
Interface	**USB** USB 2.0 Hi-Speed **Wired LAN** *1 10Base-T, 100Base-TX (IEEE 802.3 compliant) **Wireless LAN** *1 IEEE 802.11b, IEEE 802.11g, IEEE 802.11n

*1 imageRUNNER 2224N Only

PCL Printer Function (imageRUNNER 2224N)

Type	Internal
Print Size	**Usable Paper(P. 29)**
Continuous Print Speed	Same as "Copy Speed" for main unit **Basic Specifications(P. 35)**
Resolution	**Data Processing** 1,200 dpi x 1,200 dpi, 600 dpi x 600 dpi
Page Description Language (PDL)	PCL6, PCL5
Protocol Supported	TCP/IP: LPD, Port9100, IPP, IPPS, WSD
Compatible OS	Windows 8.1 Windows 10 Windows 11 Windows Server 2012 Windows Server 2012 R2 Windows Server 2016 Windows Server 2019 Windows Server 2022
Resident Fonts	45 Roman, 10 Bitmap fonts
Interface	**USB** USB 2.0 Hi-Speed **Wired LAN** 10Base-T, 100Base-TX (IEEE 802.3 compliant) **Wireless LAN** IEEE 802.11b, IEEE 802.11g, IEEE 802.11n

Scan Specifications

958J-00X

■ Push Scan (imageRUNNER 2224N)

Type	Color Scanner
Max. Original Scanning Size	Depends on copy specifications
Resolution for Scan	300 dpi x 300 dpi
Scanning Speed	**Feeder Specifications(P. 38)**
Interface	**USB** USB 2.0 Hi-Speed **Wired LAN** 10BASE-T, 100BASE-TX **Wireless LAN** IEEE 802.11b, IEEE 802.11g, IEEE 802.11n
Protocol Supported	File: SMB (TCP/IP) E-mail: SMTP (send)
Output Format	TIFF (MMR), JPEG*1, PDF (Compact)

*1 Single-Page only.

■ Pull Scan

Max. Original Scanning Size	Depends on copy specifications
Color mode	Color, Black and White, Grayscale
Resolution for Scan	50 dpi x 50 dpi, 75 dpi x 75 dpi, 150 dpi x 150 dpi, 200 dpi x 200 dpi, 300 dpi x 300 dpi, 400 dpi x 400 dpi, 600 dpi x 600 dpi (Users can set resolution by 1 dpi between 25 to 9600 dpi)
Compatible OS	Windows 8.1 Windows 10 Windows 11 macOS 10.12 or later
Interface	**USB** USB 2.0 Hi-Speed **Wired LAN** *1 10BASE-T, 100BASE-TX **Wireless LAN** *1 IEEE 802.11b, IEEE 802.11g, IEEE 802.11n

Protocol Supported	TCP/IP[*1], USB
Driver	TWAIN compliant, WIA Compliant

[*1] imageRUNNER 2224N Only

Network Specifications (imageRUNNER 2224N)

958J-010

■ Wired LAN Specifications

Interface	10Base-T/100Base-TX
Protocol Supported	**TCP/IP** • **Frame type**: Ethernet II • **Print applications**: LPD/Raw/IPP/IPPS/WSD/Mopria/AirPrint/Windows10 Mobile Print/ Windows11 Mobile Print

■ Wireless LAN Specifications

Standard	IEEE 802.11b, IEEE 802.11g, IEEE 802.11n
Transmission Scheme	• IEEE 802.11b (Modulation system: DS-SS) • IEEE 802.11g (Modulation system: OFDM method) • IEEE 802.11n (Modulation system: OFDM method)
Security (encryption method)	**Infrastructure Mode** • 128 (104)/64 (40) bit WEP • WPA-PSK (TKIP/AES-CCMP) • WPA2-PSK (TKIP/AES-CCMP) • WPA-EAP (AES-CCMP) • WPA2-EAP (AES-CCMP) **Access Point Mode** WPA2-PSK (AES-CCMP)
Connection Method	WPS (Wi-Fi Protected Setup), Manual setup

Security and Management Function Specifications (imageRUNNER 2224N)

958J-011

■ Firewall Settings

- When specifying IP addresses in firewall settings, up to 16 IP addresses (or ranges of IP addresses) can be specified for both IPv4 and IPv6.
- When specifying MAC addresses in firewall settings, up to 32 MAC addresses can be specified.

■ Registration of Certificates (User Signature Keys/Certificates, CA Certificates, S/MIME Certificates)

- The algorithms and formats of keys and certificates that can be registered are as follows.

RSA signature algorithm:	SHA-256/SHA-384*1/SHA-512*1
RSA public-key algorithm (key length):	RSA (512 bits/1024 bits/2048 bits/4096 bits)
ECDSA signature algorithm:	SHA-256/SHA-384/SHA-512
ECDSA public-key algorithm (key length):	ECDSA (P256/P384/P521)
Certificate format:	**User Signature Keys/Certificates**: PKCS#12*2 **CA Certificates, S/MIME Certificates**: X.509 DER/PEM
File extension:	**User Signature Keys/Certificates**: p12/pfx **CA Certificates, S/MIME Certificates**: cer/pem
Maximum number of registerable certificates:	**Keys, Certificates**: 5 **CA Certificates**: 88

*1 Available only when the key algorithm is 1024 bits or more.

*2 Available only when installed by using the Remote UI. A certificate contained in a key must comply with the operating conditions for a CA certificate. A certificate cannot be registered if the file size exceeds 2 MB.

■ Definition of "Weak Encryption"

When [Prohibit Use of Weak Encryption] in [Encryption Settings] is set to [On], the use of the following algorithms is prohibited. **[Encryption Settings](P. 468)**

Hash:	MD4, MD5, SHA-1
HMAC:	HMAC-MD5

Common key cryptosystem:	RC2, RC4, DES
Public key cryptosystem:	RSA encryption (512 bits/1024 bits), RSA signature (512 bits/1024 bits), DSA (512 bits/1024 bits), DH (512 bits/1024 bits)

NOTE

- Even when [Prohibit Key/Cert. with Weak Encryption] in [Encryption Settings] is set to [On], the hash algorithm SHA-1, which is used for signing a root certificate, can be used.

■Log Management

- The following types of logs can be managed on the machine. Collected logs can be exported in the CSV file format.

Log Type	Log Type	Number Indicated as "Log Type" in the CSV File	Description
Job Log	**Job Log**	128	Scan logs are not supported. There are three types of logs: Copy Job History, Print History, and Communication History.
Transmission Log	**Transmission Log**	128	The log contains information related to transmissions.

■Import/Export of the Setting Data

See **Settings that Can Be Imported and Exported (imageRUNNER 2224N)(P. 470)** .

■Max. Destinations Registered to Address Book

See **Address Book Function(P. 157)** .

■TLS

The following combinations of the TLS version and algorithm are usable:

✔ : Usable — : Not usable

Algorithm	TLS Version			
	TLS 1.3	TLS 1.2	TLS 1.1	TLS 1.0
Encryption Algorithm				
AES-CBC (256bit)	—	✔	✔	✔
AES-CBC (128bit)	—	✔	✔	✔

Algorithm	TLS Version			
	TLS 1.3	TLS 1.2	TLS 1.1	TLS 1.0
AES-GCM (256bit)	✓	✓	—	—
AES-GCM (128bit)	✓	✓	—	—
3DES-CBC	—	✓	✓	✓
CHACHA20-POLY1305	✓	—	—	—
Key Exchange Algorithm				
RSA	—	✓	✓	✓
ECDHE	✓	✓	✓	✓
X25519	✓	—	—	—
Signature Algorithm				
RSA	✓	✓	✓	✓
ECDSA	✓	✓	✓	✓
HMAC Algorithm				
SHA1	—	✓	✓	✓
SHA256	✓	✓	—	—
SHA384	✓	✓	—	—

Supported Environment (imageRUNNER 2224N)

958J-012

WSD Scan	• Windows 8.1 • Windows 10 • Windows 11
Operating Conditions of Send Function Setting Tool	• Internet Explorer 11 • Microsoft Edge • Google Chrome
System requirements for the Remote UI *1	**Windows** • Internet Explorer 11 • Microsoft Edge • Google Chrome **macOS** • Safari 11 • Google Chrome **Android** • Google Chrome • UC Browser **iOS** • Safari 11 • UC Browser
File servers available as destinations for file transmission	**Windows (SMB)** • Windows 8.1 • Windows 10 • Windows 11 • Windows Server 2012 / Windows Server 2012 R2 • Windows Server 2016 • Windows Server 2019 • Windows Server 2022 • macOS 10.15 / 11.0 / 12.0 • CentStream8
Types of LDAP servers	• Windows Server 2012 with Active Directory • Windows Server 2012 R2 with Active Directory • Windows Server 2016 with Active Directory • Windows Server 2019 with Active Directory • Windows Server 2022 with Active Directory

*1 Before changing the settings of the machine, set your Web browser to enable all cookies and use JavaScript.

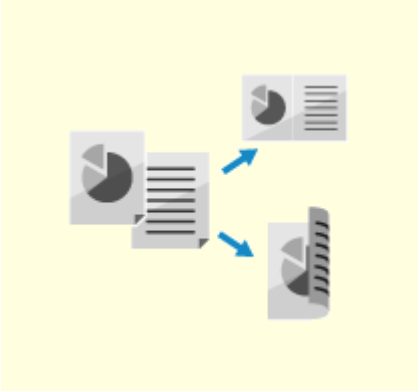
Recommended Functions

958J-013

This section introduces recommended functions that can be useful for your purpose and help you solve problems, such as to simplify document management and sharing, save paper and power, and improve operations.



Digitizing Documents(P. 49)



Cost Savings(P. 50)



Making Operations More Efficient(P. 51)

Digitizing Documents

958J-014

By digitizing paper documents, you do not have to worry about storage space and documents deteriorating, and you can view and use these documents on a computer or mobile device.

Scanning Paper Documents

You can use the scan function to scan documents and photos into data that can be saved and sent.

Scanning(P. 219)



Use the scan settings to convert these into data according to your purpose. You can reduce the data size, or divide and save the data into pages and save the data into pages.

Scan Settings(P. 246)
Scanning from a Computer (Saving to a Computer)(P. 241)

Cost Savings

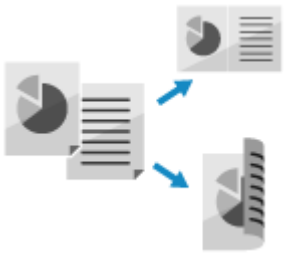
958J-015

This machine can help you save costs on paper and power.

Saving Paper

Saving Paper When Printing

You can print on both sides of the paper, and print multiple pages on one sheet of paper.
Printing from a Computer(P. 204)



Saving Paper When Copying

You can copy on both sides of the paper, and copy multiple originals or the front and back of a card on a sheet of paper.
Additional Copying Features(P. 257)
Copying Both Sides of ID Cards onto One Sheet(P. 263)

Restricting and Managing the Number of Sheets of Paper

You can allocate a Department ID to each user or group to manage the number of pages printed and copied per Department ID.
Authenticating Users and Managing Groups with Department ID (Department ID Management)(P. 296)

Saving Energy

You can configure the machine to enter sleep mode when not in use to save energy. The power of the machine does not turn OFF, so it can quickly resume operations.
Reducing Power Consumption (Sleep Mode)(P. 108)

Making Operations More Efficient

958J-016

You can print and share data even in an environment where a computer cannot be used. In addition, you can use the job logs and customize the control panel to make operations more efficient and reduce the amount of time using the machine.

Printing and Sharing Data Without Using a Computer

Printing Data from a Smartphone or Tablet



You can print data from a mobile device connected to the machine while using an application. The machine supports direct connection for easy connection setup without having to use a wireless LAN router.

Linking with Mobile Devices(P. 271)

Saving and Sharing Paper Documents as Data

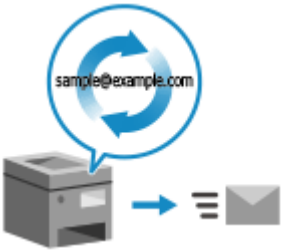


You can scan a document, send the data by e-mail, and save it to a shared folder. By just operating the machine, you can save and share data with a computer.

Scanning (Sending by E-mail)(P. 236)
Scanning (Saving to a Shared Folder)(P. 239)

Easy Touch Panel Operations

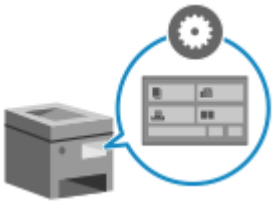
Using the Job Log to Send Data



You can send scanned data to destinations specified in the past by calling up the TX Job Log for scan jobs. In addition to calling up the destination, you can also call up the past settings to save the trouble of having to configure the settings again.

Specifying Destinations (TX Job Log)(P. 178)

Customizing the Control Panel for Greater Usability



You can rearrange the buttons on the [Home] screen for greater usability.

Customizing the [Home] Screen(P. 122)

You can register your favorite settings in the copy functions for faster operations and change the default settings that are treated as standard when you use a function.

Registering and Calling Up Favorite Copy Settings(P. 180)
Changing the Default Settings(P. 182)

Setting Up

Setting Up 53
Configuring the Default Settings (Setup Guide)(imageRUNNER 2224N) 54
Configuring the Default Settings (Setup Guide) (imageRUNNER 2224) 57
Setting Up the Network 59
Selecting Wired or Wireless LAN 61
Connecting to a Wired LAN 62
Connecting to a Wireless LAN 63
Connecting to a Wireless LAN by Using the Router Button (Push Button Mode) 66
Connecting to a Wireless LAN by Entering a PIN Code (WPS PIN Code Mode) 67
Connecting to a Wireless LAN by Searching for a Router (Access Point Setup Method) 69
Connecting to a Wireless LAN by Setting the Details (Manual Setup Method) 71
Setting IPv4 Addresses 74
Setting IPv6 Addresses 76
Configuring Your Machine for Your Network Environment 78
Manually Configuring the Ethernet Settings 79
Configuring DNS 80
Configuring SMB 83
Configuring WINS 85
Registering LDAP Servers 86
Configuring SNMP 90
Configuring SNTP 93
Configuring SLP Communication 95
Checking the Network Status and Settings 97
Installing Software and Drivers to the Computer 100

Setting Up

958J-017

After installing the machine, configure the required settings to enable use of the functions by performing the following steps.
Steps 1 to 2 are the machine settings.
Step 3 is the setting for using the machine from a computer. Configure this setting for each computer using the machine.

Step 1	When you turn ON the machine for the first time, the screen (Setup Guide) for setting the items required for using the machine is displayed. Configure the settings by following the instructions on the screen. **Configuring the Default Settings (Setup Guide)(imageRUNNER 2224N)(P. 54)** **Configuring the Default Settings (Setup Guide) (imageRUNNER 2224)(P. 57)**
Step 2	Configure the network settings not included in the Setup Guide. If you did not connect to the network using the Setup Guide, do that during this step. **Setting Up the Network(P. 59)**
Step 3	Install the software required to use the machine and any printer on your computer. **Installing Software and Drivers to the Computer(P. 100)**

■ See Also

Implementing Measures to Prevent Unauthorized Access
It is important to provide measures against security risks when using the machine in a network environment. Check examples of measures that you can take with the machine.
Measures to Prevent Unauthorized Access(P. 13)

Checking Available Functions
The functions available on the machine vary depending on the model. Check the functions that are available on your model.
Supported Functions and Options(P. 3)

Configuring the Settings Required to Use the Functions of the Machine
Additional settings may be required depending on your model. For details about the settings required for each function, see the following:
Printing Preparations(P. 189)
Preparations for Scanning(P. 221)
Preparations for Linking with Mobile Devices(P. 273)

Importing Settings Data from Another Machine
You can share settings data with other machines to save time on registering and configuring the settings. You can export data from another machine of the same model to a computer and import that data to the machine so as to share the settings.
Importing and Exporting the Address Book and Settings(P. 382)

Configuring the Default Settings (Setup Guide) (imageRUNNER 2224N)

958J-018

When you turn ON the machine for the first time, the screen (Setup Guide) for setting the items required for using the machine is displayed. Configure the settings using the procedure below by following the instructions on the screen.

Step 1: Setting the Display Language and Country or Region(P. 54)
Step 2: Setting the Date and Time(P. 54)
Step 3: Setting Remote UI(P. 55)
Step 4: Connecting to a Wireless LAN(P. 55)

NOTE

- These settings can only be configured one time using the Setup Guide when starting the machine for the first time. To change the settings configured with the Setup Guide at a later time, set the items in Steps 1 to 4 individually. For the details of each setting, see the following.
  [Language](P. 397)
  Setting the Date and Time(P. 365)
  Setting the Department ID and PIN for the Administrator(P. 293)
  Setting the PIN to Use for Remote UI(P. 350)
  Connecting to a Wireless LAN(P. 63)

Step 1: Setting the Display Language and Country or Region

Set the language displayed on the control panel screen and reports to be printed. Next, set the country or region where the machine is used.

1 On the [Language] screen, select the display language.

2 Press [Yes].

➡ The display language is set, and the [Select Country/Region] screen is displayed.
Depending on the country or region, the [Select Country/Region] screen is not displayed and the [Time Zone] screen is displayed. When the [Time Zone] screen is displayed, proceed to "Step 2: Setting the Date and Time." **Step 2: Setting the Date and Time(P. 54)**

3 On the [Select Country/Region] screen, select the country or region.

➡ The country or region is set, and the [Time Zone] screen is displayed.

Step 2: Setting the Date and Time

The date and time are used as the reference for the functions using date and time information, and therefore, they need to be set accurately.

1 On the [Time Zone] screen, select your time zone.

Set the time zone (UTC*1) and Daylight Saving Time according to the region where this machine is installed.
*1 The UTC (Coordinated Universal Time) is a coordinated universal time that is standard for all parts of the world. Internet-based communication relies on the UTC being set correctly.

2 On the [Current Time Set.] screen, enter the date and time, and press [Apply].

➡ The time and date are set, and the Remote UI confirmation screen is displayed.

Step 3: Setting Remote UI

With Remote UI, you can use a Web browser on a computer to check the operation status of the machine, change the settings, and perform other operations.
Set the System Manager ID and Remote UI Access PIN to prevent unauthorized access to the machine.

1 On the Remote UI confirmation screen, press [Yes].

To use System Manager Mode to view and change important settings, set the System Manager ID. **System Manager ID and PIN(P. 12)**

To set the System Manager ID at a later time, press [No] and proceed to 2.

■When Setting the System Manager ID

On the Configure System Manager Mode screen, press [Yes], and set the System Manager ID and PIN by following the instructions on the screen.

- Set the System Manager ID and PIN by specifying any number. You cannot set an ID or PIN consisting of all zeros, such as "00" or "0000000."
- Specify any number other than "7654321" for the System Manager PIN. You cannot set a PIN consisting of all zeros, such as "00" or "0000000."

2 On the Configure General User Mode screen, press [Yes].

Restrict the use of Remote UI to only those users who know the Remote UI Access PIN.

To set the Remote UI Access PIN at a later time, select [No] and proceed to "Step 4: Connecting to a Wireless LAN." **Step 4: Connecting to a Wireless LAN(P. 55)**

3 Enter the Remote UI Access PIN, and press [Apply].

Specify any number. You cannot set a PIN consisting of all zeros, such as "00" or "0000000."

4 Enter the PIN again, and press [Apply].

➡ After the message [Settings applied.] appears, the screen for confirming the wireless LAN connection is displayed.

Step 4: Connecting to a Wireless LAN

Connect to the network using wireless local area network (LAN).

1 On the screen for confirming the wireless LAN connection, press [Yes].

- If the machine is not connected to a wireless LAN, press [No].
- When connecting to a wired LAN, configure the wired LAN connection settings after exiting the Setup Guide. **Selecting Wired or Wireless LAN(P. 61)**

2 Select the Wireless LAN connection type, and connect to the Wireless LAN.

➡ When the connection to the wireless LAN is completed, the settings configured in the Setup Guide are applied.
When you exit the Setup Guide, the [Home] screen is displayed. **[Home] Screen(P. 113)**

Depending on your wireless LAN router, the connection type and security standards may vary. Check for a connection type and security standard that are supported by both the wireless LAN router and the machine, and then establish a connection according to the connection type. For the standards and procedure, see the following:
Connecting to a Wireless LAN(P. 63)

Configuring the Default Settings (Setup Guide) (imageRUNNER 2224)

958J-0HF

When you turn ON the machine for the first time, the screen (Setup Guide) for setting the items required for using the machine is displayed. Configure the settings using the procedure below by following the instructions on the screen.

Step 1: Setting the Display Language and Country or Region(P. 57)
Step 2: Setting the Date and Time(P. 57)

NOTE

- These settings can only be configured one time using the Setup Guide when starting the machine for the first time. To change the settings configured with the Setup Guide at a later time, set the items in Steps 1 to 2 individually. For the details of each setting, see the following.
  [Language](P. 397)
  Setting the Date and Time(P. 365)

Step 1: Setting the Display Language and Country or Region

Set the language displayed on the control panel screen and reports to be printed. Next, set the country or region where the machine is used.

1 On the [Language] screen, select the display language.

2 Press [Yes].

➡ The display language is set, and the [Select Country/Region] screen is displayed.
Depending on the country or region, the [Select Country/Region] screen is not displayed and the [Time Zone] screen is displayed. When the [Time Zone] screen is displayed, proceed to "Step 2: Setting the Date and Time." **Step 2: Setting the Date and Time(P. 54)**

3 On the [Select Country/Region] screen, select the country or region.

➡ The country or region is set, and the [Time Zone] screen is displayed.

Step 2: Setting the Date and Time

The date and time are used as the reference for the functions using date and time information, and therefore, they need to be set accurately.

1 On the [Time Zone] screen, select your time zone.

Set the time zone (UTC*1) and Daylight Saving Time according to the region where this machine is installed.
*1 The UTC (Coordinated Universal Time) is a coordinated universal time that is standard for all parts of the world. Internet-based communication relies on the UTC being set correctly.

2 On the [Current Time Set.] screen, enter the date and time, and press [Apply].

➠ The time and date are set.

The settings configured in the Setup Guide are applied.
When you exit the Setup Guide, the [Home] screen is displayed. **[Home] Screen(P. 113)**

Setting Up the Network

958J-019

To operate the machine from a computer or to connect to a server, you must connect the machine to a network.
Use the procedure below to connect the machine to a network and configure the settings of the machine according to the network environment.

Administrator privileges are required to set up the network.
The System Manager ID and System Manager PIN may be set by default. **System Manager ID and PIN(P. 12)**

IMPORTANT

- Connecting the machine to a network without proper security measures may leak information from the machine to third parties. **Protecting the Network(P. 308)**

■Preparing to Set Up the Network

- Provide an Ethernet cable and router according to the usage environment of the machine.
- Check the information of the network environment used by the machine and the required network settings. For details, contact the network administrator.
- Check that the computer and router to be used in the network are properly connected, and complete the network settings. For details on the connection method, see the manuals of the devices or contact the manufacturer.

■Network Settings Procedure

Step 1	Select whether to use wired or wireless LAN and connect to the network. **To connect to a Wired LAN** **Selecting Wired or Wireless LAN(P. 61)** **Connecting to a Wired LAN(P. 62)** **To connect to a Wireless LAN** **Selecting Wired or Wireless LAN(P. 61)** **Connecting to a Wireless LAN(P. 63)**
Step 2	Set the IP address. - By default, when the machine connects to a wired or wireless LAN, an IP address is obtained automatically and set to the machine. - To use a specific IP address, set this manually. **Setting IPv4 Addresses(P. 74)** **Setting IPv6 Addresses(P. 76)** * When setting an IP address manually, you cannot use the control panel to configure some IPv6 address settings. It is recommended to use the control panel to set the IPv4 address, and then use Remote UI to set the IPv6 address.
Step 3	Configure the settings of the machine according to the network environment, as needed.

Configuring Your Machine for Your Network Environment(P. 78)

* You cannot use the control panel to configure some of the settings. It is recommended that you configure the settings using Remote UI in Step 3

■ Checks after Configuring the Network Settings

Check that the machine is properly connected to the network.
Check the IP address and MAC address of the machine and other information, as needed.
Checking the Network Status and Settings(P. 97)

Selecting Wired or Wireless LAN

958J-01A

Set whether to connect the machine to the network using a wired or wireless LAN.
If you want to switch from wired LAN to wireless LAN, you can make the setting during the procedure for connecting to wireless LAN. **Connecting to a Wireless LAN(P. 63)**
* You cannot connect to a wired LAN and wireless LAN at the same time.

Use the control panel to configure the settings. You cannot configure the settings using Remote UI from a computer.
Administrator privileges are required.

1 On the control panel, press [Menu] in the [Home] screen. **[Home] Screen(P. 113)**

2 Press [Preferences] ▶ [Network] ▶ [Select Wired/Wireless LAN].

➡ The [Select LAN] screen is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then press ID. **Logging In to the Machine(P. 124)**

3 Select [Wired LAN] or [Wireless LAN].

➡ The message [Settings applied.] appears.
Next, connect to the wired or wireless LAN.
Connecting to a Wired LAN(P. 62)
Connecting to a Wireless LAN(P. 63)

IMPORTANT

When Switching between Wired and Wireless LAN

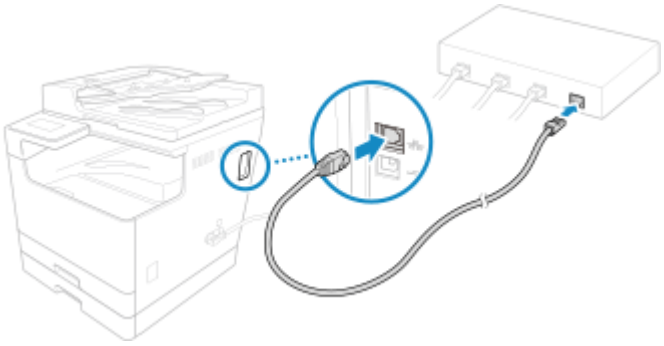
- Any installed drivers must be uninstalled and then reinstalled.
  For details about uninstalling and installing drivers, see the driver manual at the online manual site.
  https://oip.manual.canon/

Connecting to a Wired LAN

958J-01C

Connect a computer to the machine via a router. Use an Ethernet cable to connect the machine to the router.

1 Connect an Ethernet cable to the machine and router.



Insert the connector all the way into the port until it clicks in place.

2 Wait a few minutes.

➡ By default, the IP address is set automatically.
To use a specific IP address, set this manually.
Setting IPv4 Addresses(P. 74)
Setting IPv6 Addresses(P. 76)

Connecting to a Wireless LAN

958J-01E

Connect a computer to the machine via a wireless LAN router (access point).
Depending on your wireless LAN router, the connection type and security standards may vary. Check for a connection type and security standard that are supported by both the wireless LAN router and the machine, and then establish a connection according to the connection type.
Depending on the connection type, you must enter the security information of the wireless LAN router.

Checking the Connection Types and Security Standards Supported by the Machine(P. 63)
Wireless LAN Router Information Required for Connection(P. 64)

IMPORTANT

Connect with a Secure Network Environment

- The radio waves used for wireless communication can reach beyond walls and other obstructions within a certain range. Therefore, connecting the machine to a network without proper security measures may leak personal data and other information to third parties. Connect the machine to a wireless LAN at your own discretion and responsibility. **Protecting the Network(P. 308)**

NOTE

Reducing Power Consumption

- When Power Save Mode is enabled, the machine regularly enters the power save state according to the signal transmitted by the wireless LAN router. **[Power Save Mode](P. 408)**

Checking the Connection Types and Security Standards Supported by the Machine

■ Connection Type

Connect using a type that is supported by your wireless LAN router. To specify the authentication, encryption, or other security method in detail, use the manual setup method to connect.
The following connection types are supported by the machine:

Push Button Mode (WPS)



If the wireless LAN router has the above symbol on the package or the button of the device, you can easily connect by pressing the button.
Connecting to a Wireless LAN by Using the Router Button (Push Button Mode)(P. 66)

WPS PIN Code Mode

If you are using a WPS router that does not support the push button mode, enter the PIN code to connect.
Connecting to a Wireless LAN by Entering a PIN Code (WPS PIN Code Mode)(P. 67)

* If the wireless LAN router is set up to use WEP authentication, you may not be able to connect with WPS. In this case, use the manual setup method to connect.

Access Point Setup Method

Search for the wireless LAN router from the machine, and enter the network key manually to connect.
Connecting to a Wireless LAN by Searching for a Router (Access Point Setup Method)(P. 69)

When you connect with the access point setup method, the following authentication and encryption methods are set:

- WEP authentication method: Open System
- Encryption for WPA/WPA2: AES-CCMP or TKIP is set automatically according to the selected wireless LAN router.

To specify a different authentication or encryption method, use the manual setup method to connect.

Manual Setup Method

In addition to the SSID and network key, manually enter all the wireless LAN settings such as the authentication and encryption methods to connect.
Connecting to a Wireless LAN by Setting the Details (Manual Setup Method)(P. 71)

■ Security Standards

The wireless LAN of the machine supports the security standards below. For details on whether your wireless LAN router supports these standards, see the manual of the wireless LAN router or contact the manufacturer.

- WEP
- WPA-PSK
- WPA2-PSK
- WPA-EAP
- WPA2-EAP

Wireless LAN Router Information Required for Connection

When connecting with the access point setup method or the manual setup method, you must set the information below.
This information is listed on the main unit of the wireless LAN router. For details, see the manual of the wireless LAN router or contact the manufacturer.

SSID
This is the name used to identify the wireless LAN router. This may be listed as the access point name or network name.

Network Key
This is the keyword used for data encryption or the password used for network authentication. This may be listed as the encryption key, WEP key, WPA/WPA2 passphrase, or pre-shared key (PSK).

Security Standards
These are required when connecting with the manual setup method. Check the following information:

Security Standards

- WEP
- WPA-PSK
- WPA2-PSK
- WPA-EAP
- WPA2-EAP

WEP Authentication Method

- Open System

- Shared Key

Encryption for WPA/WPA2

- TKIP
- AES-CCMP
- IEEE 802.1X Authentication

Connecting to a Wireless LAN by Using the Router Button (Push Button Mode)

958J-01F

If your wireless LAN router supports WPS push button mode, you can easily set up a connection simply by using the control panel of the machine and the button on the wireless LAN router.

Administrator privileges are required to connect to a wireless LAN.

1 On the control panel, press [Wireless LAN Set.] in the [Home] screen. [Home] Screen(P. 113)

➡ The [Select Network] screen is displayed.

- If the login screen appears, enter the System Manager ID and PIN, and then press [ID]. **Logging In to the Machine(P. 124)**
- If the message [Enable the wireless LAN?] appears, press [Yes].
- If the message [Cannot find the access point.] appears, press [Close].

2 Press [Other Connections].

3 Press [WPS Push Button Mode].

➡ The machine starts searching for an access point.

4 After the search for an access point starts, press the button on the wireless LAN router within two minutes.

Press the button within two minutes. (Depending on the wireless LAN router, you may have to press and hold the button.)

* For details on how to operate the button, see the manual of your wireless LAN router.

5 When [Connected.] appears on the control panel, wait a few minutes.

➡ When the machine is connected to the wireless LAN, [ ] appears on the [Home] screen and screen of each function.

By default, an IP address is set automatically.

To use a specific IP address, set this manually.

Setting IPv4 Addresses(P. 74)

Setting IPv6 Addresses(P. 76)

NOTE

If an Error Message Appears during Operation and a Connection Cannot Be Established

- Press [Close], and repeat the procedure starting from Step 2.

Connecting to a Wireless LAN by Entering a PIN Code (WPS PIN Code Mode)

958J-01H

When the wireless LAN router supports WPS PIN code mode, you can establish a connection by registering a PIN code generated on the machine to the wireless LAN router. Use a computer to register the PIN code.

Administrator privileges are required to connect to a wireless LAN.

Required Preparations

- Access the wireless LAN router from a computer, and enable registration of a WPS PIN code.
  * For details on how to register a WPS PIN code, see the manual of your wireless LAN router.

1 On the control panel, press [Wireless LAN Set.] in the [Home] screen. [Home] Screen(P. 113)

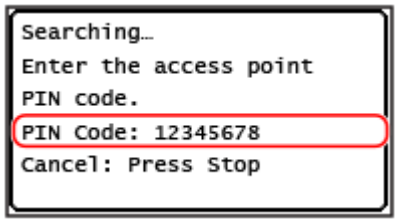
➡ The [Select Network] screen is displayed.

- If the login screen appears, enter the System Manager ID and PIN, and then press [ID]. **Logging In to the Machine(P. 124)**
- If the message [Enable the wireless LAN?] appears, press [Yes].
- If the message [Cannot find the access point.] appears, press [Close].

2 Press [Other Connections].

3 Press [WPS PIN Code Mode].

➡ A PIN code is generated.



Once this screen is displayed, you must register the WPS PIN code to the wireless LAN router within 10 minutes.

4 Access the wireless LAN router from a computer, and register the WPS PIN code to the router.

5 When [Connected.] appears on the control panel, wait a few minutes.

➡ When the machine is connected to the wireless LAN, [ ] appears on the [Home] screen and screen of each function.
By default, an IP address is set automatically.
To use a specific IP address, set this manually.

Setting IPv4 Addresses(P. 74)
Setting IPv6 Addresses(P. 76)

NOTE

If an Error Message Appears during Operation and a Connection Cannot Be Established

- Press [Close], and repeat the procedure starting from Step 2.

Connecting to a Wireless LAN by Searching for a Router (Access Point Setup Method)

958J-01J

Search for a wireless LAN router (access point) to which to connect, and enter the network key.
When you connect with the access point setup method, the following authentication and encryption methods are set:

- WEP authentication method: Open System
- Encryption for WPA/WPA2: AES-CCMP or TKIP is set automatically according to the selected wireless LAN router.

To specify a different authentication or encryption method, use the manual setup method to connect. **Connecting to a Wireless LAN by Setting the Details (Manual Setup Method)(P. 71)**

Administrator privileges are required to connect to a wireless LAN.

Required Preparations

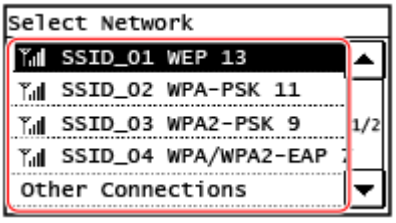
- Prepare the information of the wireless LAN router (SSID or network key) to which you want to connect, and keep it close by. **Wireless LAN Router Information Required for Connection(P. 64)**
- When connecting to a wireless LAN router supporting WPA-EAP or WPA2-EAP for the security standard, set IEEE 802.1X. **Using IEEE 802.1X(P. 321)**

1 On the control panel, press [Wireless LAN Set.] in the [Home] screen. [Home] Screen(P. 113)

➡ The [Select Network] screen is displayed.

- If the login screen appears, enter the System Manager ID and PIN, and then press ID. **Logging In to the Machine(P. 124)**
- If the message [Enable the wireless LAN?] appears, press [Yes].
- If the message [Cannot find the access point.] appears, check that the router is discoverable. **Cannot Connect to Wireless LAN(P. 537)**

2 Select the SSID of the wireless LAN to which you want to connect.



➡ The Network Key input screen is displayed.
When selecting the SSID of the wireless LAN router supporting WPA-EAP or WPA2-EAP for the security standard, the message [IEEE 802.1X Settings values will be applied to connect.] appears. Press [OK], and proceed to Step 4.

If you cannot find the wireless LAN router to which you want to connect, check that the router is discoverable. **Cannot Connect to Wireless LAN(P. 537)**

3 **Enter the network key, and press [Apply].**

4 **Check the message, and press [Yes].**

5 **When [Connected.] is displayed on the control panel, wait a few minutes.**

➡When the machine is connected to the wireless LAN, [ ] appears on the [Home] screen and screen of each function.
By default, an IP address is set automatically.
To use a specific IP address, set this manually.
Setting IPv4 Addresses(P. 74)
Setting IPv6 Addresses(P. 76)

NOTE

If an Error Message Appears during Operation and a Connection Cannot Be Established

- Press [Close], check the information (SSID or network key) of the wireless LAN router to which you want to connect, and repeat the procedure starting from Step 2.

Connecting to a Wireless LAN by Setting the Details (Manual Setup Method)

958J-01K

You can connect to a wireless LAN router by manually entering all information of the router such as the SSID, network key, and security settings.

Administrator privileges are required to connect to a wireless LAN.

Required Preparations

- Prepare the information of the wireless LAN router to which you want to connect, and keep it close by. **Wireless LAN Router Information Required for Connection(P. 64)**
- When connecting to a wireless LAN router supporting WPA-EAP or WPA2-EAP for the security standard, set IEEE 802.1X. **Using IEEE 802.1X(P. 321)**

1 On the control panel, press [Wireless LAN Set.] in the [Home] screen. [Home] Screen(P. 113)

➡ The [Select Network] screen is displayed.

- If the login screen appears, enter the System Manager ID and PIN, and then press ID. **Logging In to the Machine(P. 124)**
- If the message [Enable the wireless LAN?] appears, press [Yes].
- If the message [Cannot find the access point.] appears, press [Close].

2 Press [Other Connections].

3 Press [Manually Enter Network Name].

➡ The SSID input screen is displayed.

4 Enter the SSID, and press [Apply].

➡ The [Security Settings] screen is displayed.

5 Select the security standard, and set the authentication and encryption.

■When using WEP

1 Press [WEP].

➡ The [802.11 Authentication] screen is displayed.

2 Select the authentication method.

[Open System]

Uses open authentication.

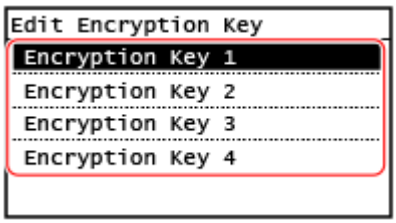
* When you select this authentication method, an authentication error occurs when connected to a wireless LAN router that uses a shared key. The machine setting changes to [Shared Key] at this time, and an attempt to reconnect to the router is made.

[Shared Key]

Uses an encryption key for the password.

3 Press [Edit Encryption Key].

4 Select an encryption key that is not registered.



➠ The encryption key input screen is displayed.

5 Enter the network key, and press [Apply].

➠ The encryption key is registered to the [Encryption Key] screen.

6 Press [Select Encryption Key].

7 Select a registered encryption key.

■ When Using WPA-PSK or WPA2-PSK

1 Press [WPA/WPA2-PSK].

➠ The [WPA/WPA2 Encryption] screen is displayed.

2 Select the encryption method.

➠ The encryption key input screen is displayed.

When you select [Auto], AES-CCMP or TKIP is set automatically according to the wireless LAN router to which you want to connect.

3 Enter the network key, and press [Apply].

■ When Using WPA-EAP or WPA2-EAP

Press [WPA/WPA2-EAP] ▶ [OK].

■ When Not Using a Security Standard

Press [None].

6 Check the message, and press [Yes].

➠ If the machine is correctly connected to the network, [Connected.] appears.

7 Wait a few minutes.

➠ When the machine is connected to the wireless LAN, [ ] appears on the [Home] screen and screen of each function.
By default, an IP address is set automatically.
To use a specific IP address, set this manually.

Setting IPv4 Addresses(P. 74)
Setting IPv6 Addresses(P. 76)

NOTE

If an Error Message Appears during Operation and a Connection Cannot Be Established

- Press [Close], check the information of the wireless LAN router to which you want to connect, and repeat the procedure starting from Step 2.

Setting IPv4 Addresses

958J-01L

The machine's IPv4 address can either be assigned automatically using DHCP or entered manually.
By default, the IPv4 address is set automatically when connected to a wired or wireless LAN, but you can set it or change it manually according to your usage environment and purpose.

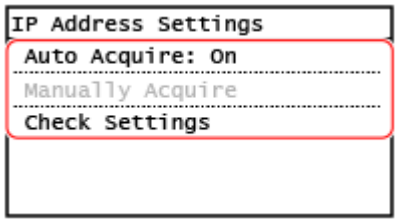
This section describes how to configure the settings using the control panel.
You can also set the IPv4 address using Remote UI from a computer after it has been set on the machine. **Managing the Machine from a Computer (Remote UI)(P. 368)**
Administrator privileges are required. The machine must be restarted to apply the settings.

1 On the control panel, press [Menu] in the [Home] screen. **[Home] Screen(P. 113)**

2 Press [Preferences] ▶ [Network] ▶ [TCP/IP Settings] ▶ [IPv4 Settings] ▶ [IP Address Settings].

If the login screen appears, enter the System Manager ID and PIN, and then press ID. **Logging In to the Machine(P. 124)**

3 Set the IP address.



■ When Manually Setting the IP Address

1. Press [Auto Acquire].
   ➠ The [Auto Acquire] screen is displayed.
2. Set [Select Protocol] to [Off].
3. Set [Auto IP] to [Off].
4. Press [Apply].
   ➠ The [IP Address Settings] screen is displayed.
5. Press [Manually Acquire].
   ➠ The IP address input screen is displayed.
6. Enter the IP address, and press [Apply].
7. Enter the subnet mask, and press [Apply].
8. Enter the gateway address, and press [Apply].

■ When Assigning an IP Address Automatically

1. Press [Auto Acquire].

➡ The [Auto Acquire] screen is displayed.

2 Configure the Auto Acquire setting, as needed.

[Select Protocol]

Normally, set to [DHCP]. However, when [DHCP] is set in an environment where DHCP cannot be used, the machine will continue to confirm Auto Acquire in the network, creating unnecessary communication. When not using DHCP, set this to [Off].

[Auto IP]

Normally, set to [On]. Although priority is given to the IP address allocated with DHCP, if there is no response from DHCP, Auto IP will be used.

3 Press [Apply].

4 Restart the machine. Restarting the Machine(P. 107)

➡ The settings are applied.
Perform a connection test to check whether the IPv4 address is correctly configured. **Checking the Network Status and Settings(P. 97)**

NOTE

Checking the Currently Set IP Address

- On the screen in Step 3, press [Check Settings] to check the current IP address setting. If the IP address is displayed as "0.0.0.0," it is not correctly configured.

If the IP Address Is Changed after Installing the Printer Driver

- In Windows, you must add a new port. **Configuring a Printer Port (Windows)(P. 193)**
  - If you are using an MFNP port, the connection is maintained as long as the machine and computer belong to the same subnet, so no action is required on the computer.
  - If you are using a standard TCP/IP port, you must add a new port. **Adding a Port(P. 193)**

  If you do not know which port is being used, see the following:
  Viewing the Printer Port(P. 599)
- In macOS, you must re-register the machine on the Mac. For details about registering the machine, see the manual of the driver at the online manual site.
  https://oip.manual.canon/

* If you are using DHCP to automatically obtain the IP address of the machine, the IP address may be changed automatically.

Setting IPv6 Addresses

958J-01R

In an IPv6 environment, you can set the following IPv6 addresses and use them at the same time.

- **Link-Local Address**
  An address that can only be used within the same link. It cannot be used to communicate with devices beyond a router.
  A link-local address is automatically set when usage of IPv6 addresses is enabled.
- **Stateless Address**
  An address that is generated automatically using the network prefix provided by the router and the MAC address of the machine.
  This address is discarded when the machine is restarted or turned ON.
- **Manual Address**
  An address that is entered manually by specifying the IP address, prefix length, and default router address.
- **Stateful Address**
  An address obtained from a DHCP server using DHCPv6.

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. You cannot use the control panel to configure some of the settings. **[IPv6 Settings](P. 411)**
Administrator privileges are required. The machine must be restarted to apply the settings.

Required Preparations

- Set an IPv4 address to the machine. **Setting IPv4 Addresses(P. 74)**

IMPORTANT

- In an IPv6 environment, you cannot use the function for scanning originals and saving the data to a computer.

1 **Log in to Remote UI in System Manager Mode.** **Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Settings/Registration].** **Portal Page of Remote UI(P. 372)**

3 **Click [Network Settings] ▶ [IPv6 Settings] ▶ [Edit].**

➡ The [Edit IPv6 Settings] screen is displayed.

4 **In [IP Address Settings], select the [Use IPv6] checkbox.**

5 **Set the IPv6 address to use.**

■When Using a Stateless Address

Select the [Use Stateless Address] checkbox.

■When Using a Manual Address

Select the [Use Manual Address] checkbox, and enter the IP address, prefix length, and default router address.

* You cannot enter a multicast address (address starting with "ff").

■When Using a Stateful Address

Select the [Use DHCPv6] checkbox.

6 Click [OK].

7 Restart the machine. Restarting the Machine(P. 107)

➡ The settings are applied.

Perform a connection test to check whether the IPv6 address is correctly configured. **Checking the Network Status and Settings(P. 97)**

NOTE

If the IP Address Is Changed after Installing the Printer Driver

- You must add a new port. **Adding a Port(P. 193)**

Configuring Your Machine for Your Network Environment

958J-01S

The size and configuration of a network vary depending on the purpose and usage. The machine is equipped with a variety of technologies to support many environments.
Configure the settings of the machine according to your network environment, as needed.

Manually Configuring the Ethernet Settings(P. 79)
Configuring DNS(P. 80)
Configuring SMB(P. 83)
Configuring WINS(P. 85)
Registering LDAP Servers(P. 86)
Configuring SNMP(P. 90)
Configuring SNTP(P. 93)
Configuring SLP Communication(P. 95)

■ See Also

To reduce the threat of unauthorized access and eavesdropping, it is recommended to configure the security settings according to your network environment.
Protecting the Network(P. 308)

NOTE

Using the Machine in a Network with IEEE 802.1X Authentication

- When connecting the machine to a network that uses IEEE 802.1X authentication, you must configure the settings on the machine such as the authentication method managed by the authentication server. **Using IEEE 802.1X(P. 321)**

Manually Configuring the Ethernet Settings

958J-01U

By default, when the machine connects to a wired LAN, the Ethernet communication mode and Ethernet type are detected automatically, and these can be used without changes. Depending on the usage environment, you may have to change the Ethernet settings to suit the settings of peripheral devices.

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. **[Ethernet Driver Settings](P. 404)**
Administrator privileges are required. The machine must be restarted to apply the settings.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Network Settings] ▶ [Ethernet Driver Settings] ▶ [Edit].

➡ The [Edit Ethernet Driver Settings] screen is displayed.

4 Clear the [Auto Detect] checkbox.

5 Select the communication mode.

Normally, select [Full Duplex]. When the network router is set to half duplex communication, select [Half Duplex].

6 Select the Ethernet type, and click [OK].

7 Restart the machine. Restarting the Machine(P. 107)

➡ The settings are applied.

Configuring DNS

958J-01W

When using the machine in an environment with Domain Name System (DNS), configure the DNS server information and DHCP option settings.
In an environment without DNS, you can configure multicast DNS (mDNS) to use the DNS function. mDNS is used by Bonjour and other software.

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. You cannot use the control panel to configure some of the settings. **[TCP/IP Settings](P. 409)**
Administrator privileges are required. Depending on the item to be configured, you may have to restart the machine.

Required Preparations

- When configuring DNS for IPv6, configure the setting to use an IPv6 address. **Setting IPv6 Addresses(P. 76)**

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Network Settings] ▶ [IPv4 Settings] or [IPv6 Settings] ▶ [Edit].

➡ The [Edit IPv4 Settings] screen or [Edit IPv6 Settings] screen is displayed.

4 In [DHCP Option Settings], configure the DHCP option settings.

If you are not configuring the DHCP option settings, proceed to Step 5.

Select the checkboxes of the items to enable.

[Acquire Host Name] (IPv4 only)
Obtains a host name (Option 12) from the DHCP server.

[DNS Dynamic Update] (IPv4 only)
The DHCP server automatically updates the information (Option 81) corresponding to the host name in place of the machine.

[Acquire DNS Server Address]
Obtains a DNS server address (Option 6 for IPv4, Option 23 for IPv6) from the DHCP server.

[Acquire Domain Name]
Obtains a domain name (Option 15 for IPv4, Option 24 for IPv6) from the DHCP server.

[Acquire WINS Server Address] (IPv4 only)
Obtains a WINS server address (Option 44) from the DHCP server.

[Acquire SMTP Server Address] (IPv4 only)
Obtains an SMTP server address (Option 69) from the DHCP server.

[Acquire POP Server Address] (IPv4 only)

Obtains a POP3 server address (Option 70) from the DHCP server.

5 In [DNS Settings], set the DNS server information.

- For details about the setting information, contact your provider or network administrator. You can also refer to the computer settings. **Viewing the Network Connection Information of the Computer(P. 597)**
- If you are not configuring the DNS server information, proceed to Step 6.

[Primary DNS Server Address]
Enter the IP address of the DNS server.
* For IPv6, you cannot enter a multicast address (address starting with "ff").

[Secondary DNS Server Address]
When using a secondary DNS server, enter the IP address of that server.
* For IPv6, you cannot enter a multicast address (address starting with "ff").

[Use Same Host Name/Domain Name as IPv4] (IPv6 only)
Select the checkbox to use the same host and domain names as in IPv4.
To set the IPv6 host name and domain name individually, clear this checkbox, and enter [Host Name] and [Domain Name].

[Host Name]
Enter the host name to register in the DNS server using single-byte alphanumeric characters.

[Domain Name]
Enter the domain name to which the machine belongs using single-byte alphanumeric characters.
Input example:
example.com

[DNS Dynamic Update]
Select the checkbox to automatically update the DNS records when the corresponding information of the host name and IP address is changed in a DHCP environment, for example.

To Specify the Type of Address to Register to the DNS Server (IPv6 only)

Depending on the type of address you want to register, select the [Register Manual Address], [Register Stateful Address], or [Register Stateless Address] checkbox.

To Specify the Interval between Updates

In [DNS Dynamic Update Interval], enter the interval at which to automatically update this information.

6 In [mDNS Settings], configure the mDNS settings.

If you are not configuring the mDNS settings, proceed to Step 7.

For IPv4

To use mDNS, select the [Use mDNS] checkbox, and enter the mDNS name.

For IPv6

To use mDNS, select the [Use mDNS] checkbox, and select whether to use the same mDNS name as IPv4.

- To use the mDNS name set with IPv4 also with IPv6, select the [Use Same mDNS Name as IPv4] checkbox.
- To configure the mDNS name of IPv6 individually, clear the [Use Same mDNS Name as IPv4] checkbox, and enter the mDNS name.

7 **Click [OK].**

8 **Restart the machine.** **Restarting the Machine(P. 107)**

➠ The settings are applied.

Configuring SMB

958J-01X

This machine uses the Server Message Block (SMB) communication protocol to save scanned data to a shared folder, for example. Depending on the network environment, you may have to set the computer name and workgroup name of the machine, and configure the SMB client information when connecting to an SMB server.

Setting the Computer Name and Workgroup Name(P. 83)
Configuring an SMB Client(P. 83)

Setting the Computer Name and Workgroup Name

Set the computer name used to identify the machine in a network and the workgroup name to identify the group that the machine belongs to.

Configure these settings using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required. The machine must be restarted to apply the settings.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Network Settings] ▶ [Computer Name/Workgroup Name Settings] ▶ [Edit].

➡ The [Edit Computer Name/Workgroup Name Settings] screen is displayed.

4 Enter the computer name and workgroup name of the machine, and click [OK].

Enter using single-byte alphanumeric characters.

■In an Environment with WINS

- Select the [Use NetBIOS] checkbox.
- You cannot register names that start with an asterisk (*) to the WINS server.

5 Restart the machine. Restarting the Machine(P. 107)

➡ The settings are applied.

Configuring an SMB Client

Configure the settings when connecting to an SMB server (such as the computer with the shared folder) and the version of SMB to use with the SMB client.

Configure these settings using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required.

1 **Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)**

3 **Click [Network Settings] ▶ [SMB Client Settings] ▶ [Edit].**

➡ The [Edit SMB Client Settings] screen is displayed.

4 **Configure the settings when connecting to an SMB server, and click [OK].**

[Authentication Type]

Select the checkbox according to the authentication protocol of the SMB server.

[Require SMB Signature for Connection]

Select this checkbox to request an SMB packet signature when connecting to the SMB server.

[Require Encryption for Connection]

Select this checkbox to connect only with the SMB server supporting SMB v3.0 encryption communications.

[Timeout]

Enter the wait time until the SMB server responds.

* If the machine times out before saving the scanned data, for example, is completed, lengthen the wait time.

5 **Click [Network Settings] ▶ [Specified SMB Client Versions] ▶ [Edit].**

➡ The [Edit Specified SMB Client Versions] screen is displayed.

6 **Select the checkbox of the version of the SMB server to which the machine will connect.**

If [Require Encryption for Connection] is selected in the setting when connecting to the SMB server, select the [3.0] checkbox.

7 **Click [OK].**

➡ The settings are applied.

8 **Log out from Remote UI.**

Configuring WINS

958J-01Y

When using the machine in a network environment that uses both NetBIOS and TCP/IP, configure Windows Internet Name Service (WINS) to convert the NetBIOS name to an IP address.
To enable WINS, specify the WINS server. WINS cannot be used in an IPv6 environment.

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. **[WINS Settings](P. 412)**
Administrator privileges are required. The machine must be restarted to apply the settings.

Required Preparations

- Set the computer name and workgroup name. **Setting the Computer Name and Workgroup Name(P. 83)**
- Prepare the IPv4 address of the WINS server and keep it close by.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Network Settings] ▶ [WINS Settings] ▶ [Edit].

➡ The [Edit WINS Settings] screen is displayed.

4 Select the [WINS Resolution] checkbox.

5 Enter the IPv4 address of the WINS server, and click [OK].

If the IP address of the WINS server is obtained from a DHCP server, the obtained IP address has priority. **Configuring DNS(P. 80)**

6 Restart the machine. Restarting the Machine(P. 107)

➡ The settings are applied.

Registering LDAP Servers

958J-020

If you are using an LDAP server to search for destinations and perform authentication when sending data, register the LDAP server information to the machine. You can register up to five LDAP servers each for searching and for authentication.

Configure these settings using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required.

Required Preparations

- When specifying an LDAP server with a host name, make sure that a DNS server is available in the network.
- When specifying an LDAP server with an IP address, check whether the DNS server supports forward or reverse lookup.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [LDAP Server Settings].

➡ The [LDAP Server Settings] screen is displayed.

4 Click [Register New Server] in [LDAP Server (For Search)] or [LDAP Server (For Authentication)].

➡ The [Register New LDAP Server (For Search)] screen or [Register New LDAP Server (For Authentication)] screen is displayed.

5 Set the server name and server address.

- In [Server Name], enter a name to identify the LDAP server.
- In [Server Address], enter the IP address or host name of the LDAP Server using single-byte alphanumeric characters.
  Input example: Host name
  ldap.example.com
- Click [Check Connection] to check whether the machine can connect to the LDAP server.

6 Configure the start search position, TLS use, and port number, as needed.

[Position to Start Search]

Specify the start search position in the directory information tree (DIT).

- Add "DC=" to each dot-delimited character string in the Active Directory domain name, and separate the entries with a comma.
  Input example: When the domain name is "john.example.com"

DC=john,DC=example,DC=com

- If left blank, the machine automatically starts search from an arbitrary position.

[Use TLS]

Select this checkbox to encrypt communication with the LDAP server using TLS.

- For an LDAP server for search, this is enabled only when [Use] or [Use (Security Authentication)] is selected in [Login Information] in 8 below.
- For an LDAP server for authentication, this is enabled only when [Use] is selected in [Login Information] in 8 below.

[Port Number]

Enter the port number used to communicate with the LDAP server.

7 Set the time until timeout and attributes, as needed.

■LDAP Server for Search

[Search Timeout]

Enter the time from search start to timeout in seconds.

■LDAP Server for Authentication

[Authentication/Attribute Acquisition Timeout]

Enter the time from start of authentication and attribute acquisition to timeout in seconds.

[User Name Attribute]

Enter the attribute name to be compared with a user name entered during authentication using single-byte alphanumeric characters.

Input example:
sAMAccountName

* This is not required if [Use (Security Authentication)] is selected in [Login Information] in Step 8.

[E-Mail Address Attribute]

Enter the attribute name to be used for obtaining an e-mail address from the authentication server, using single-byte alphanumeric characters.

Input example:
mail

8 Configure the login information of the LDAP server.

■LDAP Server for Search

[Login Information]
Specify whether to use the login Information for LDAP server authentication.

- When [Use] or [Use (Security Authentication)] is selected, set a user name and password.
- To use data obtained with the Kerberos protocol for the authentication password, select [Use (Security Authentication)]. The clock of the machine must be synchronized with that of the LDAP server.
- If you specified an IP address for [Server Address] in 5, select as follows according to the support status of your DNS server:
- If the DNS server supports only forward lookup, select [Do Not Use] or [Use].
- If you select [Use (Security Authentication)], make sure that the DNS server supports reverse lookup.

[Display Authentication Screen When Searching]

Specify whether to display the authentication screen for entering the user name and password when searching.

- To display the authentication screen, select this checkbox.
- To use the user name and password set here for authentication, clear this checkbox.

[Use Same Authentication Information as When Send Operation Started]

Set whether to use the authentication information for searching if authenticated when using the scan function.
This checkbox is selected when the [Display Authentication Screen When Searching] checkbox is selected.

[User Name]

Enter the user name of the machine that is registered to the LDAP server.

- When [Use] is selected for [Login Information], enter the user name in the form "(Windows domain name)\(Windows user name)."
  Input example:
  example\user1
- When [Use (Security Authentication)] is selected for [Login Information], enter the Windows user name.
  Input example:
  user1

[Set/Change Password]

To set a password, select the checkbox, and enter the password using single-byte alphanumeric characters.

[Domain Name]

When [Use (Security Authentication)] is selected for [Login Information], enter the directory tree name in Active Directory using single-byte alphanumeric characters.

Input example:
example.com

■LDAP Server for Authentication

[Login Information]
Select whether to use System Manager ID or data obtained with the Kerberos protocol for authentication implemented by the LDAP server.

- To use System Manager ID, select [Use].
- To use data obtained with the Kerberos protocol for the authentication password, select [Use (Security Authentication)]. The clock of the machine must be synchronized with that of the LDAP server.
- If you specified an IP address for [Server Address] in step 5, select as follows according to the support status of your DNS server:

- If the DNS server supports only forward lookup, select [Use].
- If you selected [Use (Security Authentication)], make sure that the DNS server supports reverse lookup.

[Use System Manager ID]

When [Use] is selected for [Login Information], select whether to use the System Manager ID for authentication.
To use the System Manager ID, select the checkbox and set the user name and password. If you clear the checkbox, logins are anonymous (no user name).

[User Name]

Enter the user name of the machine that is registered to the LDAP server in the form "(Windows domain name)\(Windows user name)."

Input example:
example\user1

[Set/Change Password]

To set a password, select the checkbox, and enter the password using single-byte alphanumeric characters.

[Domain Name]

When [Use (Security Authentication)] is selected for [Login Information], enter the directory tree name in Active Directory using single-byte alphanumeric characters.

Input example:
example.com

9 Select whether to verify the certificate when encrypting communication with the LDAP server using TLS.

- To verify the certificate, select the [Confirm TLS Certificate for LDAP Server Access] checkbox in [Confirm TLS Certificate for LDAP Server Access].
- To add a Common Name (CN) to the verification items, select the [Add CN to Verification Items] checkbox.

10 Click [OK].

➡ The LDAP server is registered.

11 Log out from Remote UI.

NOTE

Editing Registered Server Information

- To edit the registered information, click the server name you want to edit in [Registered LDAP Server] on the [LDAP Server Settings] screen.

Configuring SNMP

958J-021

Simple Network Management Protocol (SNMP) is a protocol for monitoring and controlling communication devices in a network by accessing a Management Information Base (MIB). Configure these settings according to the purpose of use and environment of the machine.
The machine supports SNMPv1 and SNMPv3. You can also use both at the same time. Trap notification is not supported.
When SNMP management software is installed on the network, you can use the software to configure, monitor, and control the machine remotely from a computer. For more information, see the manual of the software you are using.

SNMPv1
SNMPv1 defines the scope of communication using information called a "community name." As the community name is sent to the network in plain text, the security of the network is vulnerable. To ensure network security, disable SNMPv1 and use SNMPv3. When SNMPv1 is disabled, you will not be able to use some functions such as obtaining information from the machine using the printer driver.

SNMPv3
SNMPv3 communicates using user information for SNMPv3. This protocol enables you to configure the authentication and encryption in the user information to monitor and control communication devices on the network with a solid security system.

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. However, the control panel can only be used to enable or disable SNMPv1 and SNMPv3. **[SNMP Settings](P. 403)**
Administrator privileges are required. The machine must be restarted to apply the settings.

Required Preparations

- To configure SNMPv3, you must enable TLS. **Using TLS(P. 315)**

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Network Settings] ▶ [SNMP Settings] ▶ [Edit].

➡ The [Edit SNMP Settings] screen is displayed.

4 In [SNMPv1 Settings], set SNMPv1.

■To Enable SNMPv1

1. Select the [Use SNMPv1] checkbox.
2. Configure the community.
   - You can set MIB Access Permission (permission to read/write to MIB objects) for each community.
   - When using both SNMPv1 and SNMPv3, it is recommended to set MIB Access Permission to [Read Only]. When setting SNMPv1 to [Read/Write] (full-access permission), you can perform nearly all operations, and therefore, you are not able to use the solid security features of SNMPv3.

To Configure the Community Name

Select the [Use Community Name 1] or [Use Community Name 2] checkbox, and configure the community name and MIB Access Permission.
Enter the community name using single-byte alphanumeric characters.

To Configure a Dedicated Community

Dedicated Community is a preset community for Canon Device Management software.
To use Dedicated Community, select the [Use Dedicated Community] checkbox, and configure MIB Access Permission.
* For details, see the manual of the software you are using.

■To Disable SNMPv1

Clear the [Use SNMPv1] checkbox.

5 In [SNMPv3 Settings], configure SNMPv3.

■To Enable SNMPv3

1. Select the [Use SNMPv3] checkbox.
2. In [User Settings 1], [User Settings 2], or [User Settings 3], select the [Enable User] checkbox.
3. Configure the user.

[User Name]

Enter the user name using single-byte alphanumeric characters.

[MIB Access Permission]

Set the read/write permission to MIB objects for each specified user.
To allow both read and write, select [Read/Write].

[Security Settings]

Select whether to enable or disable authentication and encryption.

[Authentication Algorithm]

When [Authentication On/Encryption On] or [Authentication On/Encryption Off] is selected in [Security Settings], select the authentication algorithm according to the usage environment.
To set a password, select the [Set/Change Password] checkbox, and enter the same password in both [Authentication Password] and [Confirm] using single-byte alphanumeric characters.

[Encryption Algorithm]

When [Authentication On/Encryption On] is selected in [Security Settings], select the encryption algorithm according to the usage environment.
To set a password, select the [Set/Change Password] checkbox, and enter the same password in both [Encryption Password] and [Confirm] using single-byte alphanumeric characters.

■To Disable SNMPv3

Clear the [Use SNMPv3] checkbox.

6 In [Printer Management Information Acquisition Settings], select whether to obtain the printer management information.

To regularly obtain printer management information from the machine, such as protocols and ports, select the [Acquire Printer Management Information from Host] checkbox.

7 Click [OK].

8 Restart the machine. Restarting the Machine(P. 107)

➠ The settings are applied.

NOTE

Changing the Port Number

- To change the port number of the SNMP server, see the following: **Changing the Port Number(P. 312)**

Configuring SNTP

958J-022

To obtain time information from the time server on the network, configure Simple Network Time Protocol (SNTP). When SNTP is configured, the time server is checked at specified intervals to adjust the time and maintain the correct time on the machine.
The machine supports both an NTP server (NTPv3) and SNTP server (SNTPv3 and v4).

Configure these settings using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required.

Required Preparations

- The time is adjusted based on the UTC (Coordinated Universal Time), so specify the time zone setting. **Setting the Date and Time(P. 365)**
- Prepare the IP address of the NTP or SNTP server and keep it close by.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Network Settings] ▶ [SNTP Settings] ▶ [Edit].

➡ The [Edit SNTP Settings] screen is displayed.

4 Select the [Use SNTP] checkbox.

5 In [NTP Server Name], enter the IP address of the NTP/SNTP server.

When using a DNS server, you can enter the host name or FQDN instead of the IP address.

Input example:
ntp.example.com

6 In [Polling Interval], enter the interval at which to check the server and adjust the time.

7 Click [OK].

➡ The settings are applied.

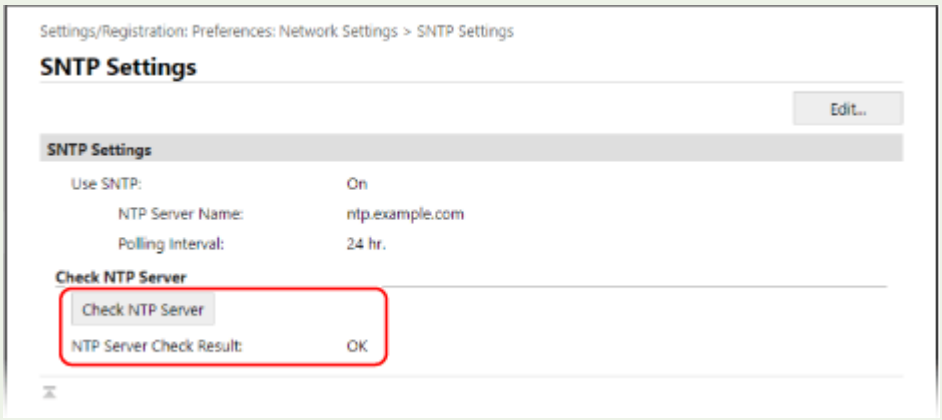
8 Log out from Remote UI.

NOTE

Testing Communication with the NTP or SNTP Server

- Test communication using the following procedure: If the machine is correctly communicating with the server, [OK] appears in [NTP Server Check Result].

> Log in to Remote UI in System Manager Mode ▶ click [Settings/Registration] ▶ [Network Settings] ▶ [SNTP Settings] ▶ [Check NTP Server].



* This tests the communication status and does not adjust the time.

Configuring SLP Communication

958J-023

When using the machine in an environment using a Service Location Protocol (SLP) with software installed to perform communication, configure the SLP communication settings, as needed.
* See the manual of the software to determine the settings that need to be configured.

Configure these settings using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required. The machine must be restarted to apply the settings.

Required Preparations

- Prepare the port number used for SLP communication with the software and keep it close by.
- Check the number of routers the SLP communication packets will traverse.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Network Settings] ▶ [Multicast Discovery Settings] ▶ [Edit].

➡ The [Edit Multicast Discovery Settings] screen is displayed.

4 Select the [Respond to Discovery] checkbox, enter the scope name, and click [OK].

For the scope name, enter the name of the scope to which the machine belongs using single-byte alphanumeric characters.

5 Click [Network Settings] ▶ [Sleep Mode Notification Settings] ▶ [Edit].

➡ The [Edit Sleep Mode Notification Settings] screen is displayed.

6 Select the [Notify] checkbox.

A notification of the power status of the machine is sent to the software. This helps reduce unneeded communication during sleep mode and power consumption.

7 Configuring Sleep Mode Notifications

[Port Number]

Enter the port number used for SLP communication with the software.

[Number of Routers to Traverse]

Enter the maximum number of routers that SLP communication packets can traverse.

[Notification Interval]

Enter the interval at which notifications are sent about the power status of the machine.

8 **Click [OK].**

9 **Restart the machine.** **Restarting the Machine(P. 107)**

➠ The settings are applied.

Checking the Network Status and Settings

958J-024

You can perform a connection test with devices in the network to check whether the machine is correctly connected to the network.
The IP address of the machine and the MAC address information are needed to use Remote UI and configure the firewall settings. Check these current settings.

Checking Whether the Machine Can Connect to Network Devices(P. 97)
Viewing the IP address set to the machine(P. 98)
Viewing the MAC Address of the Wired LAN(P. 98)
Viewing the MAC Address and Connection Information of the Wireless LAN(P. 99)

NOTE

- If the IP address is displayed as "0.0.0.0," it is not correctly configured. Set the IP address again.
  Setting IPv4 Addresses(P. 74)
  Setting IPv6 Addresses(P. 76)
- Connecting the machine to a switching hub, for example, may prevent connection to the network even when the IP address is correctly configured. In this case, set a wait time until machine starts communicating and try connecting again. **[Waiting Time for Connection at Startup](P. 404)**
- You can print the System Manager Data List to view the network settings. **Printing and Viewing Reports and Lists(P. 378)**

Checking Whether the Machine Can Connect to Network Devices

In the Web browser of the computer connected to the network, enter the IPv4 or IPv6 address of the machine. If the Remote UI login screen is displayed, the machine is properly connected to the network. **Starting Remote UI(P. 369)**

When using an IPv4 address, you can use the following procedure to send a ping command from the control panel to check whether the machine can connect to a network device.
Administrator privileges are required.

Required Preparations

- Prepare the IPv4 address of a device in the network to which you want to connect and keep it close by.

1 On the control panel, press [Menu] in the [Home] screen. **[Home] Screen(P. 113)**

2 Press [Preferences] ▶ [Network] ▶ [TCP/IP Settings] ▶ [IPv4 Settings] ▶ [PING Command].
If the login screen appears, enter the System Manager ID and PIN, and then press ID. **Logging In to the Machine(P. 124)**

3 Enter the IPv4 address of a network device, and press [Apply].

➡ If the machine is correctly connected to the network, [Received response from host.] appears.

Viewing the IP address set to the machine

You can view the setting of IP address set to the machine such as the IPv4 address and the IPv6 address.

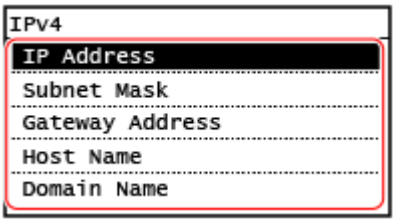
This section describes how to view the IP address using the control panel.
You can also check this information using Remote UI from a computer. **Managing the Machine from a Computer (Remote UI)(P. 368)**

1 Press on the control panel.

➡ The [Status Monitor] screen is displayed.

2 Press [Network Information] ▶ [IPv4] or [IPv6].

3 Select the item you want to view.



➡ The settings of the selected item are displayed.

Viewing the MAC Address of the Wired LAN

You can view the MAC address set to the machine when the machine is connected to the wired LAN.

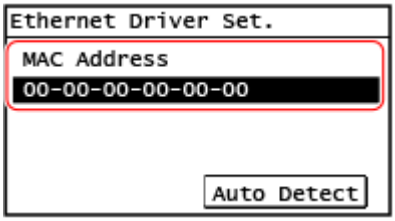
This section describes how to view this information using the control panel.
You can also use Remote UI from a computer to view the MAC address. **Managing the Machine from a Computer (Remote UI)(P. 368)**
Administrator privileges are required.

1 On the control panel, press [Menu] in the [Home] screen. **[Home] Screen(P. 113)**

2 Press [Preferences] ▶ [Network] ▶ [Ethernet Driver Settings].

If the login screen appears, enter the System Manager ID and PIN, and then press ID. **Logging In to the Machine(P. 124)**

3 View the MAC address.



Viewing the MAC Address and Connection Information of the Wireless LAN

In addition to the MAC address and connection information of the wireless LAN when the machine is connected to the wireless LAN, you can also view the security settings.

This section describes how to view this information using the control panel.
You can also check this information using Remote UI from a computer. **Managing the Machine from a Computer (Remote UI)(P. 368)**
Administrator privileges are required.

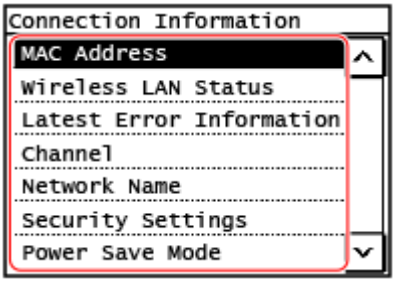
1 On the control panel, press [Wireless LAN Set.] in the [Home] screen. [Home] Screen(P. 113)

➡ The [Select Network] screen is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then press ID. **Logging In to the Machine(P. 124)**

2 Press [Connection Settings] ▶ [Connection Information].

3 Select the item you want to view.



➡ The settings of the selected item are displayed.

NOTE

Viewing Information with the [Status Monitor] Screen

- You can also view the wireless LAN status and error information with the following procedure:

  on the control panel ▶ [Network Information] ▶ [Network Connection Method] ▶ [Conn. Info].

Installing Software and Drivers to the Computer

958J-026

Install the related software and drivers to the computer that will use the functions of the machine, such as printing and remote scanning.
Install any options to the machine before installing the software and drivers.

Installation Procedure

Check the operating environment via the Canon website for your country/region, and download and install the latest software and drivers.
https://global.canon/en/support/

* If the machine is supplied with a CD/DVD-ROM, you can also use this to install the software and drivers.

For details about the installation method, see the manual of the software or driver at the online manual site.
https://oip.manual.canon/

Precautions and Limitations

Operating Environment

- Depending on the operating system, your computer may not support some software or drivers. For the latest information on the supported operating systems, see the Canon website.
  https://global.canon/
- Depending on the model and usage environment, some functions of the software or drivers may not be available.

If the IP Address of the Machine Is Changed after Installing the Printer Driver

- In Windows, the required action depends on the port you are using.
  - If you are using an MFNP port, the connection is maintained as long as the machine and computer belong to the same subnet, so no action is required on the computer.
  - If you are using a standard TCP/IP port, you must add a new port. **Adding a Port(P. 193)**

  If you do not know which port is being used, see the following:

  Viewing the Printer Port(P. 599)
- In macOS, you must re-register the machine on the Mac. For details about registering the machine, see the manual of the driver at the online manual site.
  https://oip.manual.canon/

* If you are using DHCP to automatically obtain the IP address of the machine, the IP address may be changed automatically.

NOTE

Using the Functions of the Machine without Installing Software or Drivers (macOS)

- You can use AirPrint standard equipped in macOS to print and scan data without installing software or drivers. **Using AirPrint Application to Print and Scan Data(P. 284)**

Basic Operations

Basic Operations 103
Turning ON and OFF the Machine 104
Turning ON the Machine 105
Turning OFF the Machine 106
Restarting the Machine 107
Reducing Power Consumption (Sleep Mode) 108
Using the Control Panel 110
Screens Displayed on the Control Panel 111
[Home] Screen 113
[Status Monitor] Screen 115
How to Operate the Control Panel 117
Entering Characters 120
Customizing the [Home] Screen 122
Logging In to the Machine 124
Placing Originals 127
Loading Paper 130
Loading Paper in the Paper Drawer 131
Loading Paper in the Multi-purpose Tray 135
Preparations and Orientation for Loading Envelopes 137
Orientation for Loading Paper with a Logo 139
Specifying the Paper Size and Type 144
Setting the Paper Size and Type for the Paper Drawer 145
Setting the Paper Size and Type for the Multi-purpose Tray 147
Registering a Frequently Used Paper Size and Type for the Multi-purpose Tray 149
Registering Non-standard Size Paper (Custom Paper) 151
Hiding Unused Paper Sizes 153
Using the Appropriate Paper Source for Each Function 154
Registering Destinations (Address Book) 156
Address Book Function 157
Registering Destinations to the Address Book (Control Panel) 159
Registering Groups to the Address Book (Control Panel) 162
Editing and Deleting Destinations in the Address Book (Control Panel) 164
Registering Destinations to the Address Book (Remote UI) 165
Registering Groups to the Address Book (Remote UI) 168
Specifying Destinations 170

Specifying Destinations (Address Book) 171
Specifying Destinations (Direct Input) 175
Specifying Destinations (LDAP Server) 176
Specifying Destinations (Address Book on a Mobile Device) 177
Specifying Destinations (TX Job Log) 178
Registering Frequently Used Settings 179
Registering and Calling Up Favorite Copy Settings 180
Changing the Default Settings 182
Adjusting the Sound Volume 184
Adjusting the Volume 185
[Volume Settings] Screen 186

Basic Operations

958J-027

This chapter describes the basic operations common to all functions of the machine and how to understand the screen layout.

Managing and Saving Power

You can turn OFF the power to conserve energy or when cleaning and restart the machine to apply the settings.
You can use sleep mode to reduce power consumption.

Turning ON and OFF the Machine(P. 104)
Reducing Power Consumption (Sleep Mode)(P. 108)

Using the Control Panel

Use the control panel to scan, copy, and perform other functions and to configure the settings of the machine.

Using the Control Panel(P. 110)

When the login screen is displayed, enter the required login information to continue operations.

Logging In to the Machine(P. 124)

Placing Originals and Loading Paper

Place the original on the platen glass or in the feeder when scanning or copying.
Load printing and copying paper into the paper drawer or multi-purpose tray according to your usage.

Placing Originals(P. 127)
Loading Paper(P. 130)

Registering and Specifying Destinations

Register destinations for sending and saving scanned data to the Address Book of the machine.
In addition to specifying destinations from the Address Book, you can also directly enter them, use the TX Job Log, and use other methods to specify them.

Registering Destinations (Address Book)(P. 156)
Specifying Destinations(P. 170)

Customizing Functions and Settings

You can change frequently used settings for each function, allowing you to use the machine easier and more conveniently.

Registering Frequently Used Settings(P. 179)
Adjusting the Volume(P. 185)

Turning ON and OFF the Machine

958J-028

Be sure to use the power switch to manually turn ON the power of the machine.

Turning ON the Machine(P. 105)
Turning OFF the Machine(P. 106)
Restarting the Machine(P. 107)

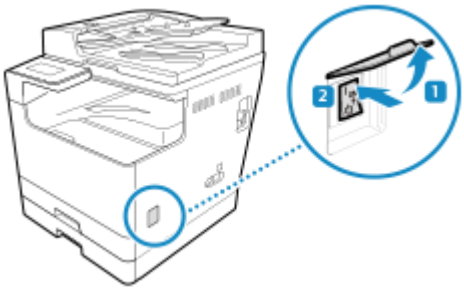
Turning ON the Machine

958J-029

When you want to turn ON the machine, open the switch cover on the right side of the machine and set power switch to " | " side.

1 **Make sure that the power plug is inserted into a power outlet.**

2 **Open the power switch cover and press the power switch toward " | ".**



➡ The start screen is displayed on the control panel.

3 **Close the power switch cover.**

NOTE

Changing the Screen that Appears at Startup

- After the power is turned ON and the start screen is displayed, the [Home] screen is displayed by default. You can configure the setting to display another function screen. **[Default Screen after Startup/ Restoration](P. 396)**

Turning OFF the Machine

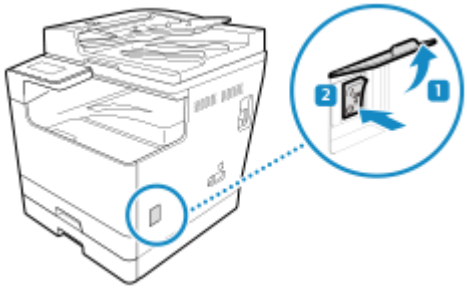
958J-02A

When you want to turn OFF the machine, open the switch cover on the right side of the machine and set power switch to "⏻" side.
When you turn OFF the machine, the data that is waiting to be printed will be erased.

NOTE

- The following data remains stored without being deleted even if the machine is turned OFF:
  - Received data saved in the memory
  - Data waiting to be sent
  - Reports to be printed automatically after data is sent or received

1 Open the power switch cover and press the power switch toward "⏻".



➠ The display turns off, and the power turns OFF.
It may take a few minutes until the power turns OFF. Do not unplug the power cord until the power turns OFF.
Make sure that the power indicator has gone out.

NOTE

Turning ON the Machine Again

- Wait at least 10 seconds after turning OFF the power before turning ON the machine.

Restarting the Machine

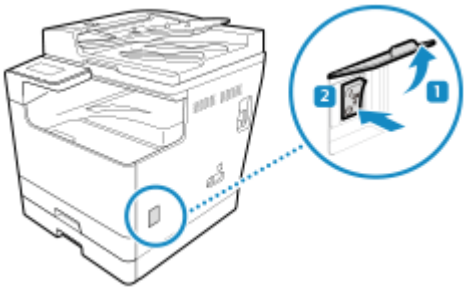
958J-02C

When you make changes to the settings of the machine, you may have to restart the machine to apply the changes depending on the setting.
When you change the settings using either the control panel or Remote UI, you can restart the machine using the power switch.
Restarting the machine deletes any data waiting to be printed.

NOTE

- The following data remains stored without being deleted even if the machine is restarted:
  - Received data saved in the memory
  - Data waiting to be sent
  - Reports to be printed automatically after data is sent or received

1 Open the power switch cover and press the power switch toward "⏻".



➠ The display turns off, and the power turns OFF.
It may take a few minutes until the power turns OFF. Do not unplug the power cord until the power turns OFF.
Make sure that the power indicator has gone out.

2 Wait at least 10 seconds after turning OFF the power before pressing the power switch.

➠ The machine starts up.

Reducing Power Consumption (Sleep Mode)

958J-02E

Sleep mode reduces power consumption by pausing certain operations inside the machine.
On the control panel, press to enter sleep mode. **Control Panel(P. 21)**
When the machine is in sleep mode, lights yellow-green.

■ Exiting Sleep Mode

Perform any of the following operations:

- Press any key on the control panel.
- Tap the display.

■ Configuring Auto Sleep Time

"Auto Sleep" is a function which automatically places the machine into sleep mode after a certain period of idle time.
Auto Sleep Time specifies the duration the idle time.

imageRUNNER 2224N(P. 108)
imageRUNNER 2224(P. 109)

imageRUNNER 2224N

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. **[Timer/Energy Settings](P. 399)**

1 Log in to Remote UI. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Timer Settings] ▶ [Edit].

➡ The [Edit Timer Settings] screen is displayed.

4 Enter the time in [Auto Sleep Time].

* It is recommended to use the default setting to efficiently save power. **[Auto Sleep Time](P. 401)**

5 Click [OK].

➡ The settings are applied.

6 Log out from Remote UI.

imageRUNNER 2224

This section describes how to configure the settings using the control panel.

1 **On the control panel, press [Menu] in the [Home] screen.** **[Home] Screen(P. 113)**

2 **Press [Preferences] ▶ [Timer/Energy Settings] ▶ [Auto Sleep Time].**

➡ The [Auto Sleep Time] screen is displayed.

3 **Enter the time.**

* It is recommended to use the default setting to efficiently save power. **[Auto Sleep Time](P. 401)**

4 **Click [Apply].**

➡ The settings are applied.

IMPORTANT

Press if the machine will not be used for a long period of time, such as overnight

- Put the machine into sleep mode as a safety precaution.

NOTE

- The machine does not enter sleep mode in the following cases:
  - When the Processing/Data indicator on the control panel is lit or blinking **Control Panel(P. 21)**
  - When the [Menu] screen, a paper jam or other error message[*1], or Direct Connection SSID or network key display screen is displayed on the control panel
  - When the machine is performing an adjustment, cleaning, or other operation
  - When the machine is communicating with another computer, such as for importing or exporting data

[*1] The machine may enter sleep mode depending on the message.

Using the Control Panel

958J-02F

Use the control panel to change the settings of the machine and use the scan, copy, and other functions.

Main Instructions
Check how to use the buttons and items displayed on the control panel, how to enter text, and how to display the various screens.
Screens Displayed on the Control Panel(P. 111)
How to Operate the Control Panel(P. 117)
Entering Characters(P. 120)

Making the [Home] Screen Easier to Use
You can change the order of the buttons or insert a space.
Customizing the [Home] Screen(P. 122)

IMPORTANT

Regarding the Handling of the Touch Panel Display

- Do not press the touch panel display too hard. Doing so may break the touch panel display.
- Do not use an object with a sharp end, such as a mechanical pencil or ballpoint pen. Doing so may scratch the surface of the touch panel display or break it.
- Placing objects on the display or wiping the display may cause the touch panel to react and lead to a malfunction.

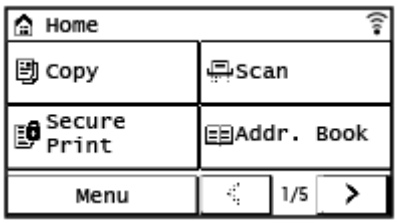
Screens Displayed on the Control Panel

958J-02H

The following are the main screens of the control panel.

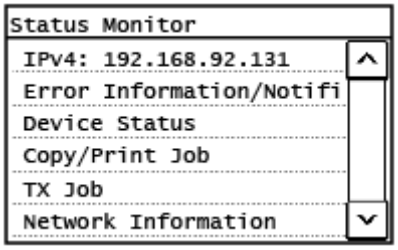
[Home] Screen

This screen is displayed when you press on the control panel. By default, the [Home] screen is displayed after the power is turned ON and immediately after the startup screen closes, and immediately after logging in. **[Home] Screen(P. 113)**



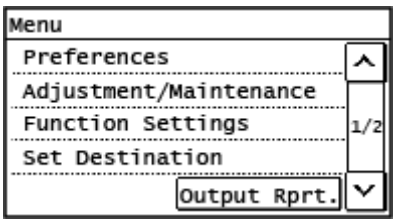
[Status Monitor] Screen

This screen is displayed when you press on the control panel. Use this screen to check the information of the machine, usage and logs, network settings, and error information. **[Status Monitor] Screen(P. 115)**



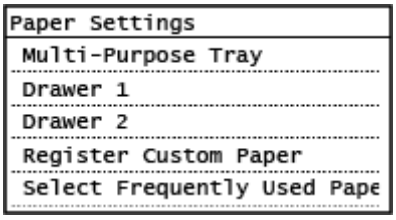
[Menu] Screen

This screen is displayed when you press [Menu] on the [Home] screen. Use this screen to configure the various settings of the machine. **Settings Menu Items(P. 393)**
When the System Manager ID is set, the login screen may be displayed when certain items are selected. Only users who know the System Manager ID and PIN can log in and change the settings.



[Paper Settings] Screen

This screen is displayed when you press [Paper Set.] on the [Home] screen. Use this screen to configure the various settings of the machine.
To ensure quality printing and prevent paper jams, the paper size and type must be set correctly according to the loaded paper. **Specifying the Paper Size and Type(P. 144)**

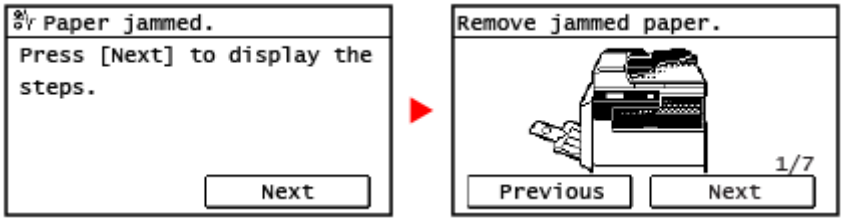


Message Display

Messages are displayed on the screen when errors occur and the machine is out of paper or toner in the toner cartridge.
If a troubleshooting solution is displayed, follow the on-screen instructions to solve the problem.
If a troubleshooting solution is not displayed, check the cause and solution by referring to the message or error code.
A Message Appears(P. 563)
An Error Code Is Displayed(P. 578)

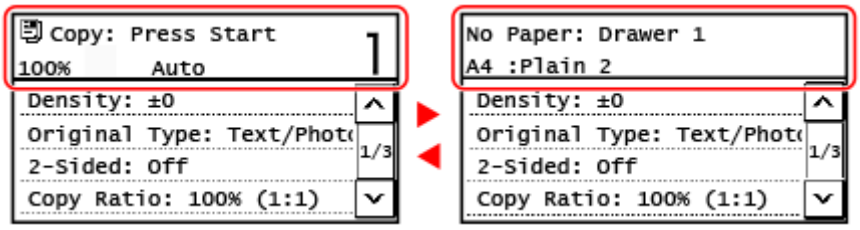
Display example:

- **When an Error Occurs**



- **When a Message Appears at the Bottom of the Screen**

  If the message is too long to display at once, it may be separated into smaller segments and displayed alternately.



  When [ⓘ] is displayed on the top side of the screen, you can press [ⓘ] to display and check the notification.

NOTE

Changing the Screen Display

- You can change the control panel display such as by changing the display language and units, and show or hide messages. **[Display Settings](P. 396)**
- You can invert screen colors and adjust the contrast to make the screen easier to view. **[Accessibility](P. 417)**

Clearing the Settings Automatically

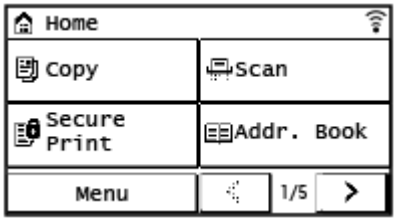
- By default, if no operations are performed after a certain period of time, the settings being configured on the screen are cleared, and the [Home] screen is displayed. You can change the time until the settings are cleared and the screen that is displayed after.
  [Auto Reset Time](P. 400)
  [Function After Auto Reset](P. 400)

[Home] Screen

958J-02J

This screen is displayed when you press on the control panel.

Buttons corresponding to the functions or settings are displayed on the screen. Pressing [ ] or [ ] changes the displayed buttons of functions or settings. By pressing these buttons, you can start the corresponding functions or the settings. You can also change the order of the buttons.



■ Status of the Machine Information

[ ] (imageRUNNER 2224N only)
When connected to a wireless LAN, [ ] is displayed.

[ ] is displayed when there is a notification. Press [ ] to check the notification.

■ Function and Setting Buttons

[Copy]
Copies originals. **Copying(P. 254)**

[Scan]
Scans originals. **Scanning(P. 219)**

[Secure Print] (imageRUNNER 2224N only)
Prints data temporarily saved in the memory of the machine. **Printing a Document Secured with a PIN (Secure Print)(P. 209)**

—

[Home]

Configure the various settings of the machine. **Settings Menu Items(P. 393)**

[Addr. Book] (imageRUNNER 2224N only)

Register destinations when sending and saving scanned data. You can specify destinations from the Address Book, and call up the send function.
Registering Destinations (Address Book)(P. 156)
Specifying Destinations (Address Book)(P. 171)



[Paper Set.]
Set the paper size and type to use, and register frequently used paper. **Specifying the Paper Size and Type(P. 144)**



[ID Card Copy]
Copies the front and back sides of ID cards. **Copying Both Sides of ID Cards onto One Sheet(P. 263)**



[Passport Copy]
Copies multiple passports onto one sheet of paper. **Copying Multiple Passports onto One Sheet(P. 265)**



[Favorite Copy Set.]
Call up copy settings registered as Favorite Settings.



[One-Touch 1] to [One-Touch 4] (imageRUNNER 2224N only)

Register a e-mail destination.
Registering Destinations (Address Book)(P. 156)
Specifying Destinations (Address Book)(P. 171)



[Coded Dial] (imageRUNNER 2224N only)

Coded Dial numbers are three-digit numbers which are assigned to an address when the address is registered in the Address Book. Use the Coded Dial number to perform a corresponding send function.
Registering Destinations (Address Book)(P. 156)



[Mobile Portal] (imageRUNNER 2224N only)
Connect mobile devices to the machine. **Connecting a Mobile Device to the Machine(P. 279)**



[Home Set.]
Allows you to change the order of the displayed buttons on the [Home] Screen or insert a space instead of a button. **Customizing the [Home] Screen(P. 122)**



[Update Firmware] (imageRUNNER 2224N only)
Updates the firmware via the Internet. **Updating the Firmware(P. 385)**

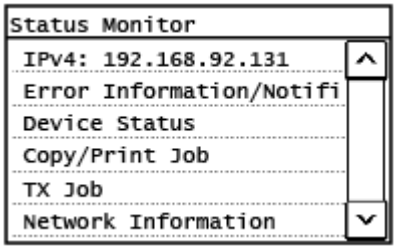


[Wireless LAN Set.] (imageRUNNER 2224N only)
Connects a computer to the machine via a wireless LAN router (access point). **Connecting to a Wireless LAN by Searching for a Router (Access Point Setup Method)(P. 69)**

[Status Monitor] Screen

958J-02K

This screen is displayed when you press on the control panel.
Use this screen to check the information of the machine, usage and logs, network settings, and error information.



[IPv4] (imageRUNNER 2224N only)
Displays the IPv4 address of the machine by default. You can also hide this. **[Display IP Address](P. 398)**

[Error Information/Notification] (imageRUNNER 2224N only)
You can check the information of errors that occur on the machine. Take troubleshooting measures according to the error details.
A Message Appears(P. 563)
An Error Code Is Displayed(P. 578)

[Device Status]

[Paper Information]
Check the remaining amount of paper for each paper source.

[Toner Level]
You can check the remaining amount in the toner cartridge.
Other internal parts may reach the end of their lifetime before the toner runs out.

[Secure Print Memory Usage] (imageRUNNER 2224N only)
Check to see how much memory is used by the Secure Print data temporarily saved to the memory of the machine.

[Version Information]
Displays the firmware version information of the machine.

[Serial Number]
Displays the serial number of the machine.

[Copy/Print Job]
Displays the copy or print processing status and log.
Checking the Copy Status and Log(P. 269)
Viewing the Print Job Status and Log(P. 217)

[TX Job] (imageRUNNER 2224N only)
Displays the status and log of sent and saved scanned data.
Checking the Send and Save Status and Log of Scanned Data(P. 251)

[Network Information] (imageRUNNER 2224N only)

[IPv4]
Check the IPv4 address and other settings. **Setting IPv4 Addresses(P. 74)**

[IPv6]
Check the IPv6 address and other settings. **Setting IPv6 Addresses(P. 76)**

[Network Connection Method]
Check whether the machine has a wired or wireless connection.

Displays the connection status and error information when connected by wireless LAN.

[Direct Connection Information]
Displays the connection status when directly connected to a device.

[IEEE 802.1X Error Information]
Displays the details of errors that occur with IEEE 802.1X authentication.

How to Operate the Control Panel

958J-02L

The control panel uses a touchscreen. Directly touch your finger to the buttons and items displayed on the screen to operate them.

Basic Touchscreen Operations (Tapping and Dragging)(P. 117)
Selecting Items(P. 117)
Scrolling the Screen(P. 118)
Set the value(P. 118)

IMPORTANT

To prevent accidental operations or damage to the control panel, avoid the following:

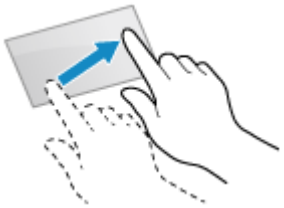
- Pressing too hard with your fingers
- Pressing with a sharp tip, such as a fingernail, ballpoint pen, or pencil
- Operating with wet or dirty hands
- Operating with an object on the display

Basic Touchscreen Operations (Tapping and Dragging)

Tapping
Gently touch the screen with your fingertip and quickly release. Do this when selecting items and performing operations.
In the User's Guide, "press" and "select" refer to the tapping operation.

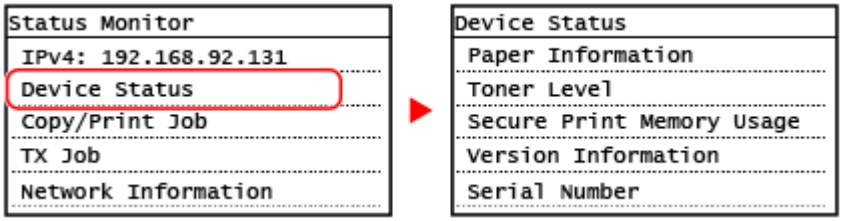


Dragging
Move your fingertip while touching the screen, and release it at the desired position. You can scroll lists and move the area you are touching to a desired position.



Selecting Items

When you tap an item name or button, the item can be selected. The selected screen is displayed, or the selected function is performed.



To Cancel a Selection

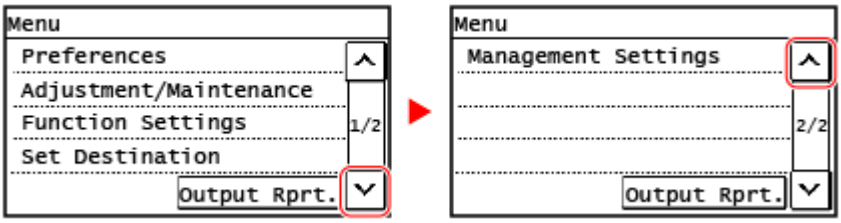
Drag your fingertip touching the screen away from the selected item or button and release it.

To Return to the Previous Screen

Press [↩] on the control panel.

Scrolling the Screen

When a scroll bar is displayed, this means that there are some items or information which are not displayed on the screen. Press [^] or [v] to scroll the screen toward the pressed direction.



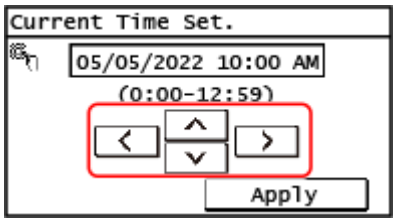
Set the value

■ Set the value [^] / [v] buttons

Tap [^] or [v] to specify a value. You can specify the value directly by using the numeric keys*.

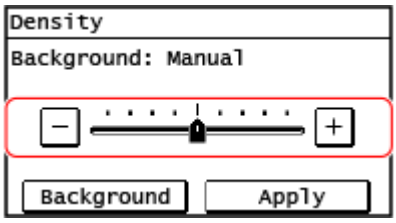
Tap [<] or [>] to move a cursor.

* imageRUNNER 2224N only



■ Set the value using the [+] and [-] buttons or the slider

Tap the [+] and [-] buttons to adjust the value. When the slider is displayed as shown below, you can drag it to the left or right to adjust the value.


Density
Background: Manual
Background
Apply

Entering Characters

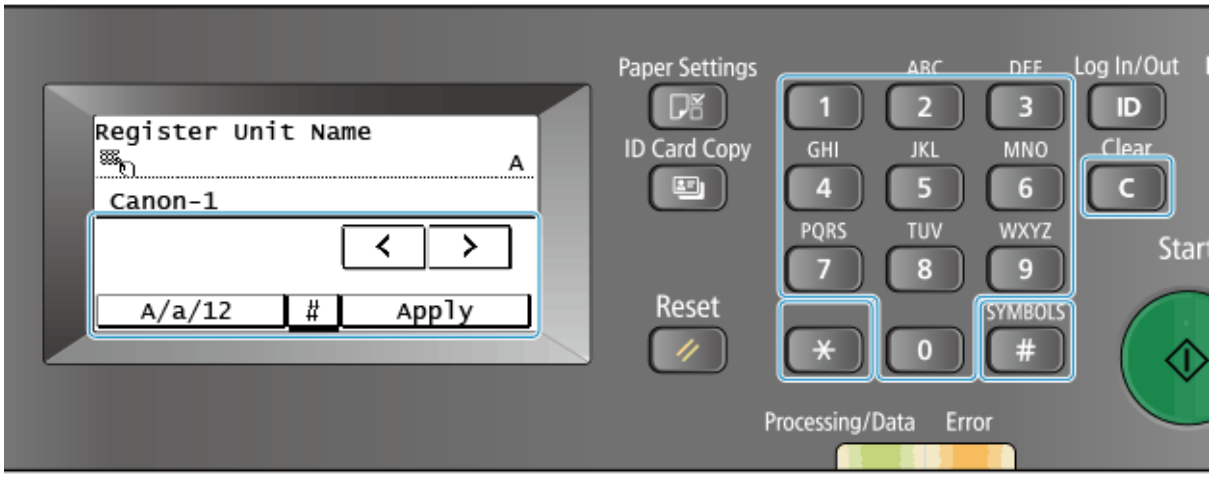
958J-02R

Enter alphanumeric characters using the numeric keys on the control panel.

imageRUNNER 2224N(P. 120)
imageRUNNER 2224(P. 121)

imageRUNNER 2224N

You can enter letters, numbers, and symbols using the control panel.
The type of characters that you can enter may be limited depending on the item.
If the value input range is limited, the value that you can enter is displayed in parentheses ( ) next to the input field.



Changing the Character Type

Press [A/a/12] to switch the type of character that is entered. The currently selected type of character is indicated by the "A", "a", or "12" displayed above and to the right of the text input field.
You can also press * to switch the type of character.

You cannot change the character type for items whose character type is limited.

Entering Characters and Spaces

You can enter characters and symbols by using the numeric keys and by pressing keys displayed on the control panel. The keys to enter characters and the characters you can enter are the following.

When you place a cursor after a character and press > , a space is entered.

When the Enter Mode is set to [a] or [A], a symbol can be entered by pressing # or pressing [#].

Key	A	a	12
1	@ . - _ /		1
2	ABC	abc	2
3	DEF	def	3
4	GHI	ghi	4
5	JKL	jkl	5

Key	A	a	12
6	MNO	mno	6
7	PQRS	pqrs	7
8	TUV	tuv	8
9	WXYZ	wxyz	9
0	(Not available)		0
#	(space) - . * # ! " , ; : ^ ` _ = / | ' ? $ @ % & + \ ~ ( ) [ ] { } < >		(Not available)

Deleting Characters

Press C to delete one character.

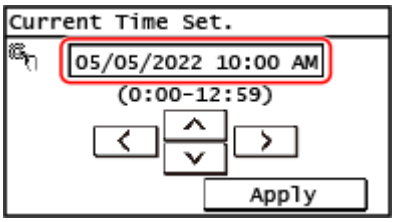
Press and hold C to continuously delete characters.

Moving the Cursor

Press [<] or [>].

Entering Numbers

Entering Numbers Using the Numeric Keys.



NOTE

- When [+] and [-] or a slider appears instead of numeric keys, press or drag these to set the value. **Set the value(P. 118)**

imageRUNNER 2224



Entering Numbers

Entering Numbers Using the Numeric Keys.

Customizing the [Home] Screen

958J-02S

You can quickly select frequently used functions from the [Home] screen of the control panel.

Rearranging the Buttons(P. 122)
Inserting a Blank(P. 122)

Rearranging the Buttons

You can rearrange the buttons on the [Home] screen.

1 On the control panel, press [Home Set.] in the [Home] screen. [Home] Screen(P. 113)

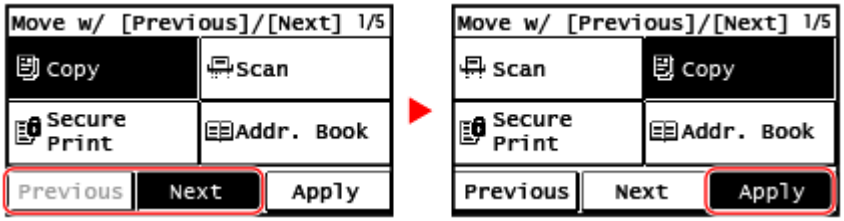
If the login screen appears, enter the System Manager ID and PIN, and then press ID or [Log In]. **Logging In to the Machine(P. 124)**

2 Press [Set Display Order].

3 Select the button to move.

➠ The currently selected item is inverted.

4 Press [Previous] or [Next] to move the button.



5 Press [Apply].

➠ The location of the buttons on the [Home] screen is changed.

Inserting a Blank

You can insert a space between buttons.

1 On the control panel, press [Home Set.] in the [Home] screen. [Home] Screen(P. 113)

If the login screen appears, enter the System Manager ID and PIN, and then press ID or [Log In]. **Logging In to the Machine(P. 124)**

2 Press [Insert and Delete Blank]

3 **Select a button before which you want to insert a space and press [Insert].**

4 **Press [Apply].**

➡ A space is inserted right before the selected button.
When you want to delete the inserted space, select the space and press [Delete] ▶ [Apply].

Logging In to the Machine

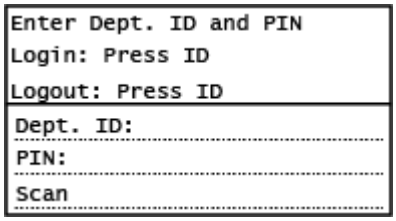
958J-02U

When the login screen is displayed on the control panel, enter the required login information to perform authentication. When authentication is successful, the screen changes, and you can continue operations. Depending on the set authentication function, the displayed login screen varies.

Logging In (Department ID Management, System Manager ID) (imageRUNNER 2224N)(P. 124)
Logging In (Authenticated Sending) (imageRUNNER 2224N)(P. 124)
Logging In (System Manager ID) (imageRUNNER 2224)(P. 125)

Logging In (Department ID Management, System Manager ID) (imageRUNNER 2224N)

When Department ID Management is set up, the following login screen is displayed. Enter the Department ID to log in. If a PIN is set, enter the PIN.
When the System Manager ID is set, the login screen is displayed for operations that require administrator privileges. Enter the System Manager ID and PIN to log in.



1 Enter the Department ID or System Manager ID.

2 Enter the PIN.

If a PIN is not set, you can skip this step. Proceed to Step 3.

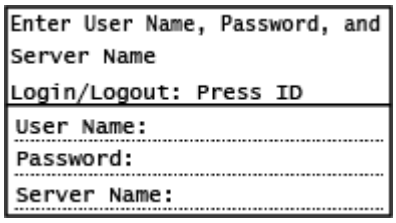
3 Press ID on the control panel. Control Panel(P. 21)

➡ When authentication is successful, the [Home] screen or other screen is displayed.

4 When you have completed your operations, press ID on the control panel.

Logging In (Authenticated Sending) (imageRUNNER 2224N)

When authenticated sending (LDAP Server Authentication) is set, the Login for Authenticated Sending screen is displayed when performing scan operations. Enter the user name and password managed with the LDAP server to log in.



1 **Enter the user name and password.**

2 **In [Server Name], select the LDAP server to perform authentication.**

3 **Press ID on the control panel.** **Control Panel(P. 21)**

➡ When authentication is successful, the scan screen is displayed.

4 **When you have completed your operations, press ID on the control panel.**

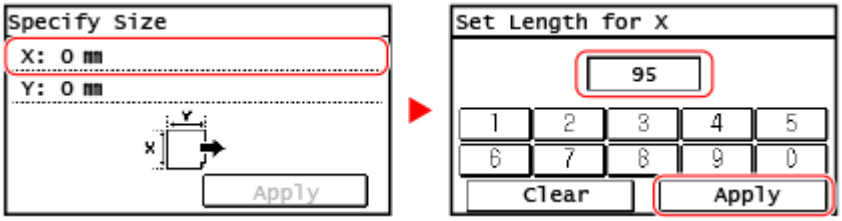
NOTE

When Logging In with Both Authenticated Sending and Department ID Management

- Depending on the LDAP server authentication settings, pressing ID on the control panel may display the screen for selecting the authentication used for logging out. To continue operations after scanning, log out only from authenticated sending. To end all operations, log out from all authentication.

Logging In (System Manager ID) (imageRUNNER 2224)

When the System Manager ID is set, the login screen is displayed for operations that require administrator privileges. Enter the System Manager ID and PIN to log in.



1 **Press [Manager ID].**

➡ [System Manager ID] screen is displayed.

2 **Enter the System Manager ID, and Press [Apply].**

3 **Press [PIN].**

➡ [System Manager PIN] screen is displayed.

If a PIN is not set, you can skip this step. Proceed to Step 5.

4 **Enter the System Manager PIN, and Press [Apply].**

5 **Press [Log In].**

➠ When authentication is successful, the screen changes.

Placing Originals

958J-02W

Place documents, photos, and other printed materials ("originals") to be scanned or copied on the platen glass or in the feeder.
Determine whether to use the platen glass or feeder depending on the document type and usage.

Platen Glass
Scans originals in a fixed position. Originals must be placed one at a time, but this ensures highly accurate scanning.
You can also place the following originals on the platen glass:

- Books, thick paper, thin paper, and other originals that cannot be placed in the feeder
- Tracing paper, transparencies, and other transparent originals

Placing Originals on the Platen Glass(P. 127)

Feeder
You can place two or more sheets of originals in the feeder. The placed originals are scanned automatically one sheet at a time.
Both sides of originals can be scanned at the same time.
Placing Originals in the Feeder(P. 128)

IMPORTANT

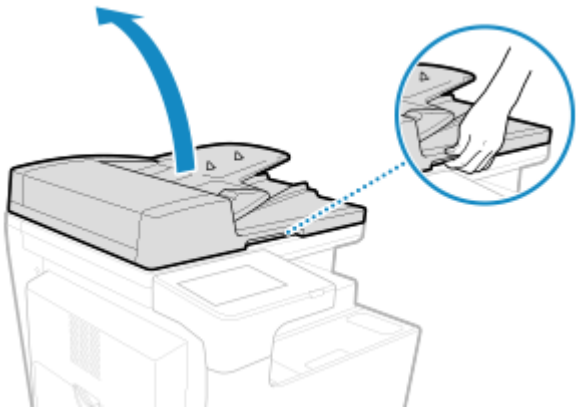
Place Dry Originals

- Before placing originals, make sure that any ink, correction fluid, or glue on them has completely dried.

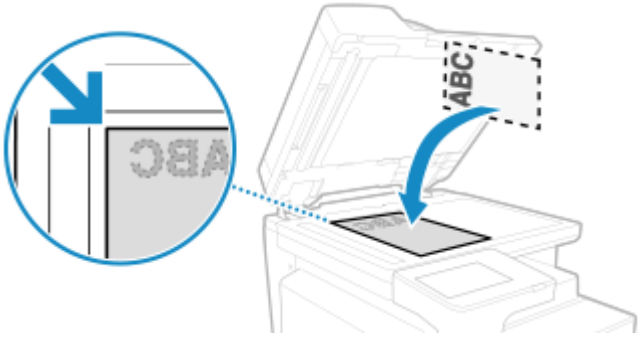
Placing Originals on the Platen Glass

For the size of the originals that can be placed on the platen glass, see the basic specifications of the machine. **Basic Specifications(P. 35)**

1 Open the feeder or platen cover.



2 Place the side of the original to be scanned face down on the platen glass in the portrait orientation while aligning the corner of the original with the top left corner of the platen glass.



When scanning tracing paper, transparencies, and other transparent originals, place a sheet of plain white paper on top.

3 **Gently close the feeder or platen cover.**

4 **When scanning of the original is complete, remove the original from the platen glass.**

Placing Originals in the Feeder

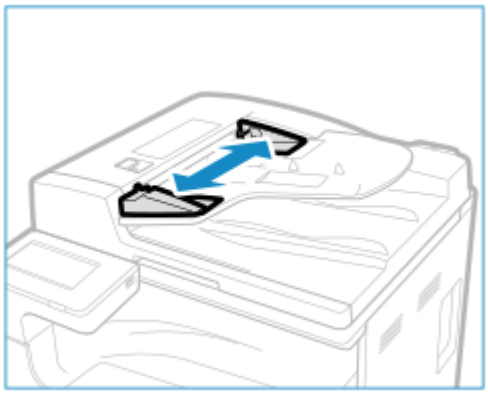
When scanning two or more sheets of originals, place only originals of the same size.
For the size of the originals that can be placed in the feeder, see the specifications of the feeder. **Feeder Specifications(P. 38)**

IMPORTANT

To prevent paper jams inside the feeder, do not place the following originals:

- Wrinkled, creased, curled, rolled, or torn paper
- Carbon paper, coated paper, thin translucent paper, thin paper, or transparencies
- Stapled or clipped paper
- Paper printed by a thermal transfer printer

1 **Align the slide guides to fit the size of your originals.**

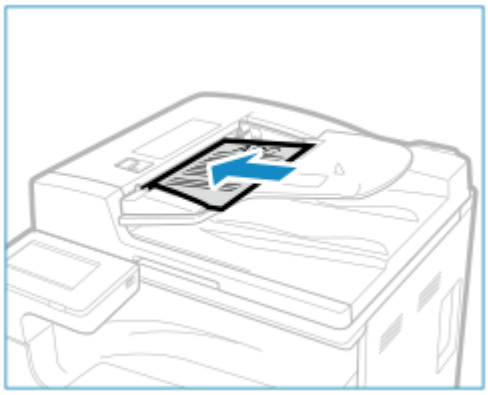


2 **Fan the originals and align the edges.**



Fan the originals in small batches, and align the edges by tapping the originals on a flat surface a few times.

3 Place the originals face up and as far into the feeder as they will go.



Make sure the placed originals do not exceed the load limit line (▼▼▼). If they exceed the load limit line, there may be misfeeds or a paper jam.

4 When scanning of the originals is complete, remove the ejected originals from below the feeder.

- Do not add originals or remove them during scanning.
- Leaving ejected originals below the feeder may cause a paper jam.

Loading Paper

958J-02X

To ensure print quality, confirm the usable paper and how to handle and store paper, and prepare the appropriate paper for use with the machine. **Usable Paper(P. 29)** / **Precautions When Handling Paper(P. 33)**

Load the prepared paper in the machine, and then configure the paper size and type settings.

Loading Paper in the Machine

Load paper you usually use into the paper drawer, which can hold large amounts of paper.
To temporarily use paper not loaded in the paper drawer, load it in the multi-purpose tray.
Loading Paper in the Paper Drawer(P. 131)
Loading Paper in the Multi-purpose Tray(P. 135)

When using envelopes or paper with logos, be careful of the orientation of the loaded paper and which side is face up.
Preparations and Orientation for Loading Envelopes(P. 137)
Orientation for Loading Paper with a Logo(P. 139)

Paper Settings

To ensure quality printing and prevent paper jams, the paper size and type must be set correctly according to the loaded paper.
Specifying the Paper Size and Type(P. 144)

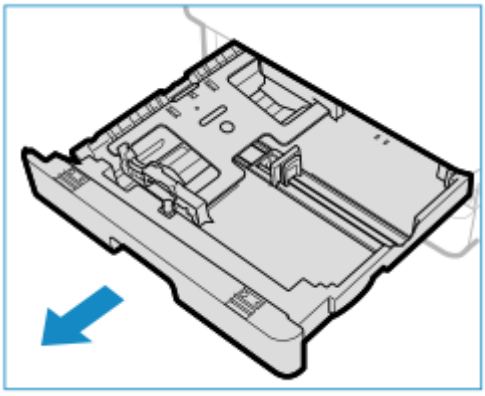
Loading Paper in the Paper Drawer

958J-02Y

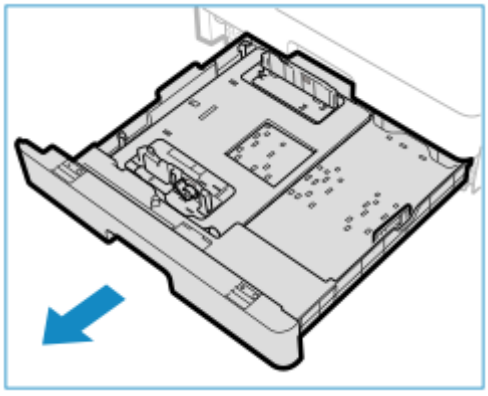
Load paper you usually use into the paper drawer, which can hold large amounts of paper. You can load paper correctly by aligning the paper guides on the paper drawer with the markings.
When using paper with logos, be careful of the orientation of the loaded paper and which side is face up.
Orientation for Loading Paper with a Logo(P. 139)

1 Hold the handle of the paper drawer and pull it out until it stops.

Paper drawer 1

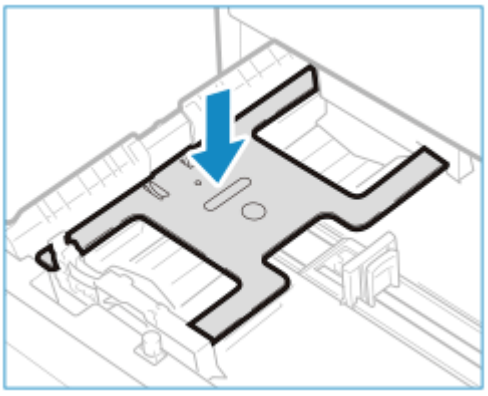


Paper drawer 2

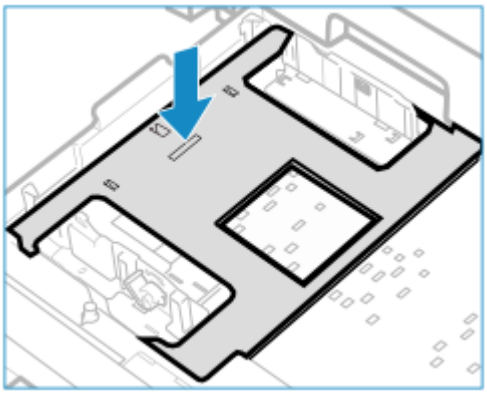


2 Push down the metal plate to lock it.

Paper drawer 1



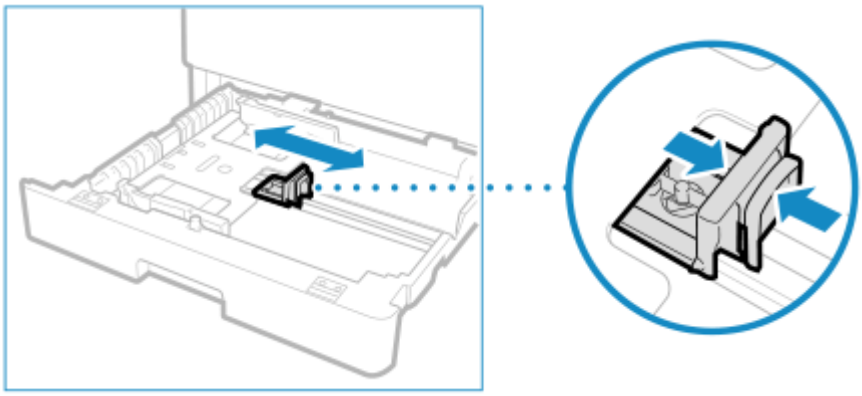
Paper drawer 2



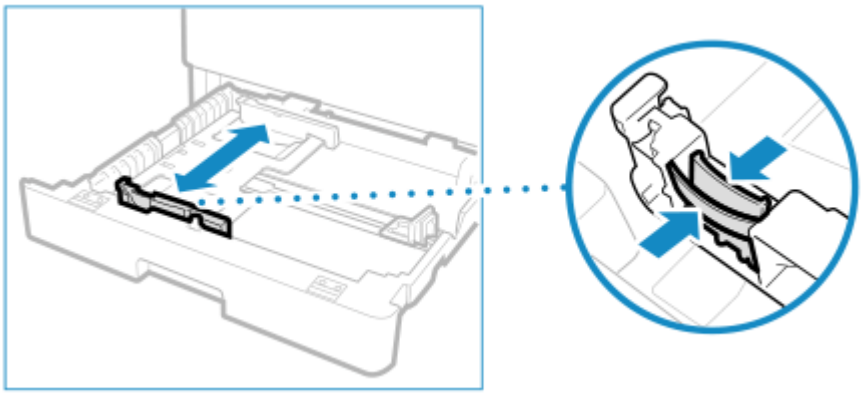
3 Adjust the position of the paper guides.

■When loading paper in the paper drawer 1

1 While squeezing the top part of the right guide, slide it to align with the size indicator for the paper to be loaded.

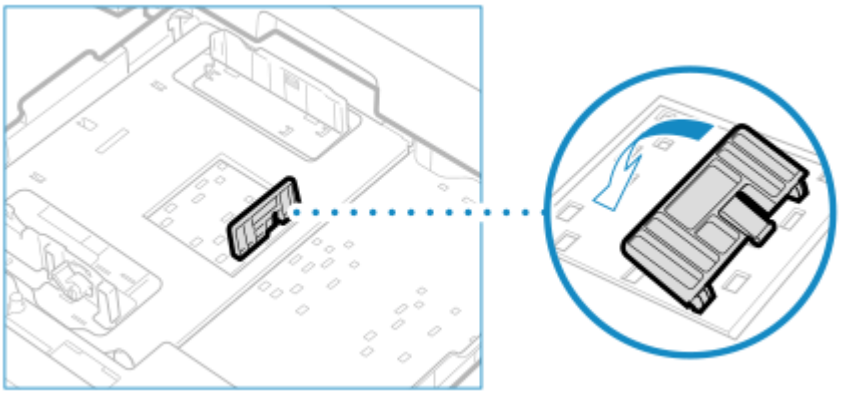


2 While squeezing the top part of the front guide, slide it to align with the size indicator for the paper to be loaded.

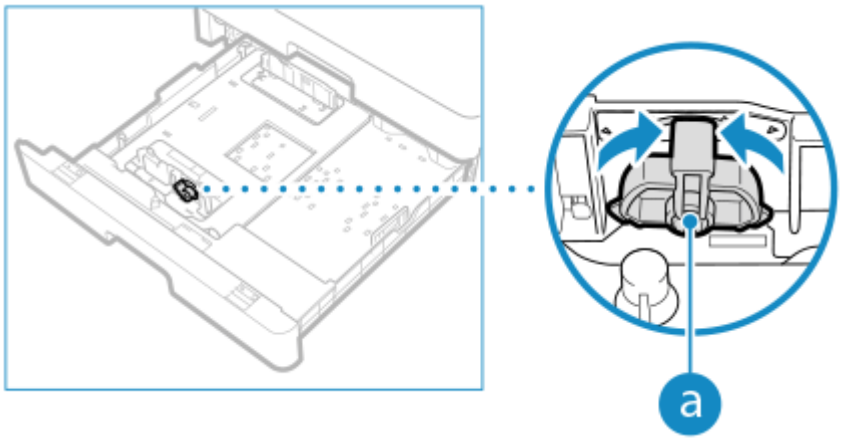


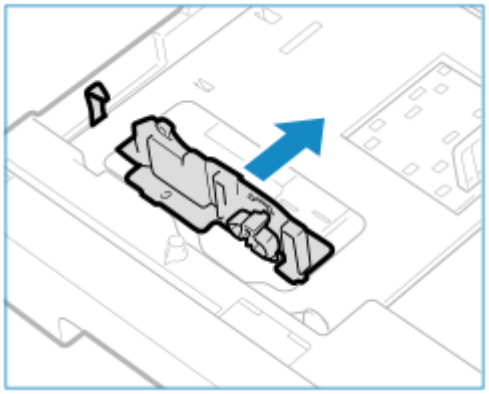
■When loading paper in the paper drawer 2

1 Detach the right guide and reattach it to the slots aligned with the mark indicating the desired paper size.

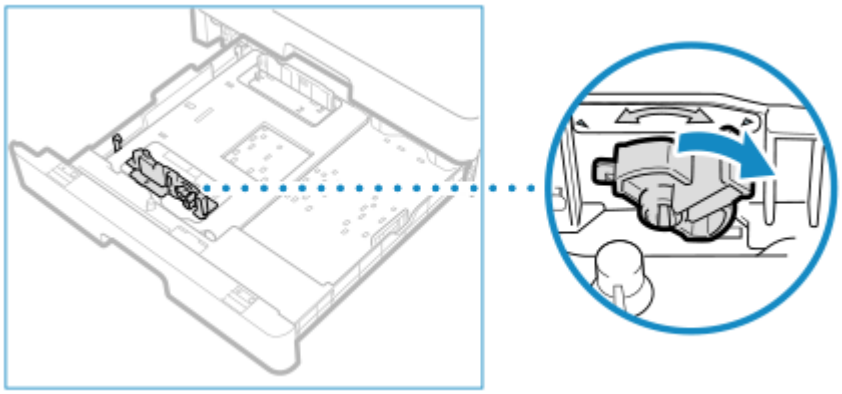


2 Lift up the lock lever (a) on the front guide, and slide it backwards or forwards to align it with the groove marked with the desired paper size.

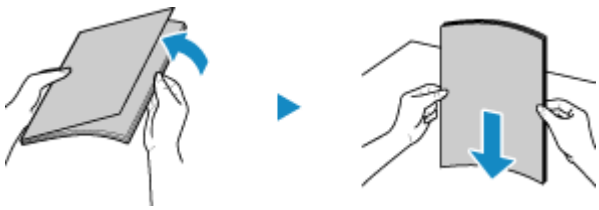




3 Lower the lock lever to lock the front guide into place.



4 Fan the paper and align the edges.

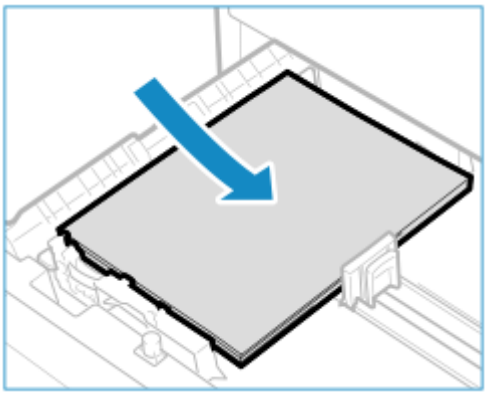


Fan the paper in small batches, and align the edges by tapping the paper on a flat surface a few times.

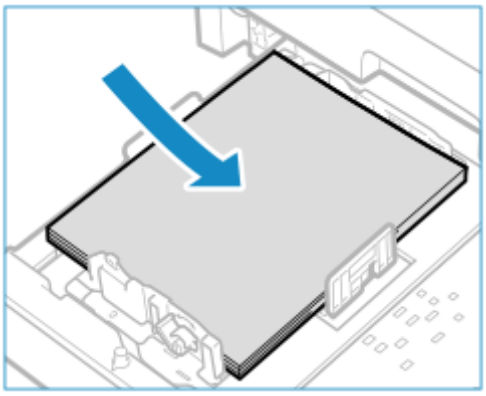
5 Load the paper.

1. Make sure that the paper size setting of the paper drawer matches the size of the paper to load in the paper drawer.
2. Load the paper stack with the print side face up, and against the right guide of the paper drawer.

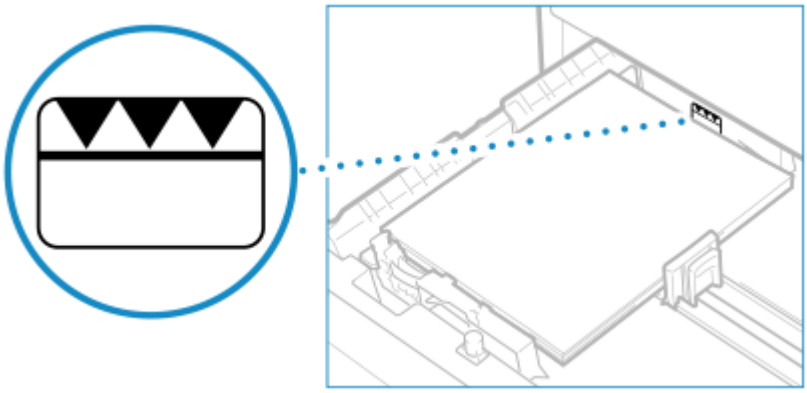
Paper drawer 1



Paper drawer 2



Make sure that the paper stack does not exceed the load limit line (▼▼▼). Loading too much paper can cause paper jams.



■When Printing on the Back Side of Printed Paper (Manual 2-sided Printing)

Flatten the edge of the paper to remove any curls, and load the paper with the back (unprinted) side face down.

- You can use only paper printed with this machine.
- You cannot print on a side that has been previously printed on.
- If the printouts look faded, adjust the image quality. **[Manual Back Side Print (2-Sided Only)](P. 424)**

6 Gently insert the paper drawer into the machine.

➡ By default, the Paper Settings confirmation screen is displayed. **[Notify to Check Paper Settings] (P. 464)**

When you are using legal size paper, the paper drawer is extended from the machine and is not fully housed.

7 Set the paper size and type. Setting the Paper Size and Type for the Paper Drawer(P. 145)

By default, the paper size and type of the paper drawer are set to A4 and Plain 2. When paper of a different size or type is loaded, change the paper settings.

Loading Paper in the Multi-purpose Tray

958J-030

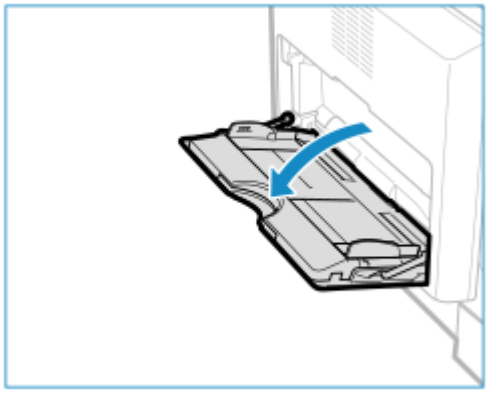
To temporarily use paper not loaded in the paper drawer, load it in the multi-purpose tray.
You can load paper correctly by aligning the paper guides on the multi-purpose tray with the paper.
When using envelopes or paper with logos, be careful of the orientation of the loaded paper and which side is face up.
Preparations and Orientation for Loading Envelopes(P. 137)
Orientation for Loading Paper with a Logo(P. 139)

IMPORTANT

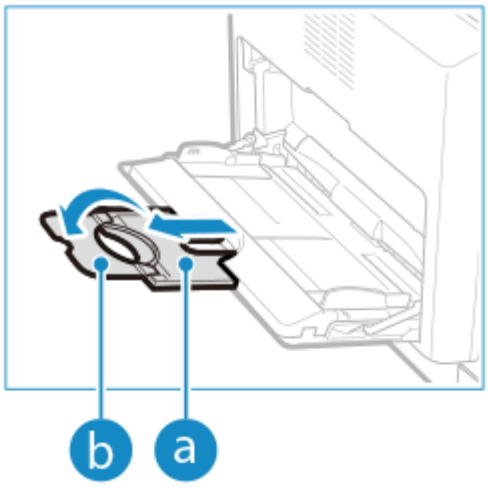
Do Not Remove the Paper Drawer

- If the paper drawer is removed, the machine cannot print even when paper is loaded in the multi-purpose tray. If you try to print with the paper drawer removed, an error message appears.

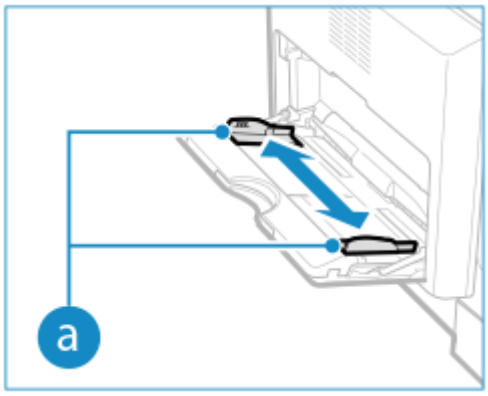
1 Open the multi-purpose tray.



2 Pull out the auxiliary tray (a), and extend the tray extension (b) when loading large-sized paper.



3 Adjust the paper guides (a), to match the size of the paper.

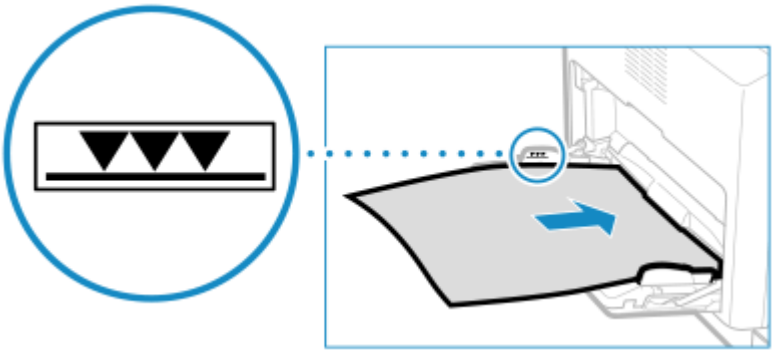


4 Fan the paper and align the edges.



Fan the paper in small batches, and align the edges by tapping the paper on a flat surface a few times.

5 Load the paper with the print side face down.



- Insert the paper until the edge of the paper is against the paper tray.
- Make sure that the paper stack does not exceed the load limit line. Loading too much paper can cause paper jams.

■When Printing on the Back Side of Printed Paper (Manual 2-sided Printing)

Flatten the edge of the paper to remove any curls, and load the paper with the back (unprinted) side face down.

- You can use only paper printed with this machine.
- You cannot print on a side that has been previously printed on.
- You cannot load more than one sheet of paper. Load each sheet separately to print.
- If the printouts look faded, adjust the image quality. **[Manual Back Side Print (2-Sided Only)](P. 424)**

6 Set the paper size and type. Setting the Paper Size and Type for the Multi-purpose Tray(P. 147)

By default, when the machine detects paper loaded in the multi-purpose tray, the screen for setting the paper size and type is displayed on the control panel. Set the paper size and type each time you load paper.

Preparations and Orientation for Loading Envelopes

958J-031

As envelopes have a different shape and thickness from regular paper, preparations must be made before loading envelopes.
Envelopes can be printed only on the front side (non-glued side). When loading envelopes, pay attention to the orientation and which side is face up.

Preparations before Loading Envelopes(P. 137)
Orientation of Envelopes (Multi-purpose Tray)(P. 138)

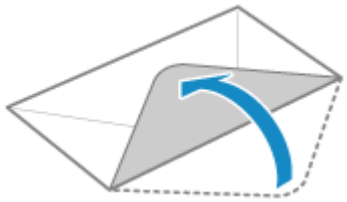
NOTE

- For the general procedure of loading envelopes, see the following:
  When loading in the paper drawer **Loading Paper in the Paper Drawer(P. 131)**
  When loading in the multi-purpose tray **Loading Paper in the Multi-purpose Tray(P. 135)**

Preparations before Loading Envelopes

Align the envelopes regardless of the number of envelopes to be loaded.

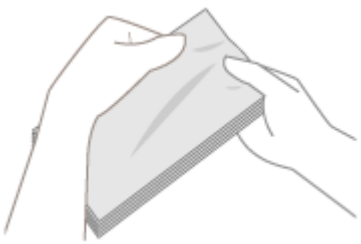
1 **Close the flap of each envelope.**



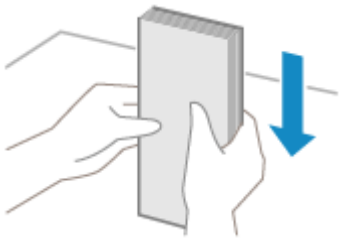
2 **Flatten them to remove any air, and make sure the edges are pressed tightly.**



3 **Loosen any stiff corners of the envelopes, and flatten any curls.**



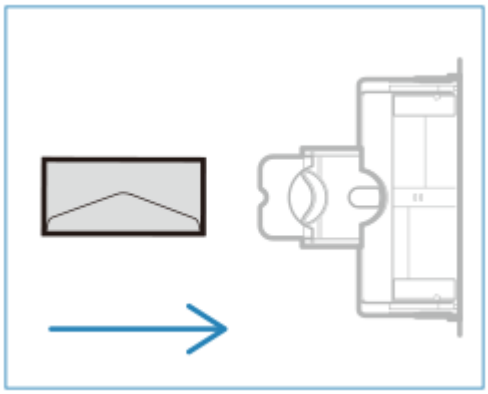
4 **Align the edges of the envelopes on a flat surface.**



➠ The envelopes are ready to be loaded.

Orientation of Envelopes (Multi-purpose Tray)

Insert the envelopes No. 10 (COM10), Monarch, ISO-C5, or DL from the short side with the front side (non-glued side) face up. Insert the envelope with the flap closed and on the right side.



Orientation for Loading Paper with a Logo

958J-032

When loading paper with a logo, pay attention to the orientation of the paper and which side is face up.

Loading Paper with Logos in Portrait Orientation(P. 140)
Loading Paper with Logos in Landscape Orientation(P. 141)

NOTE

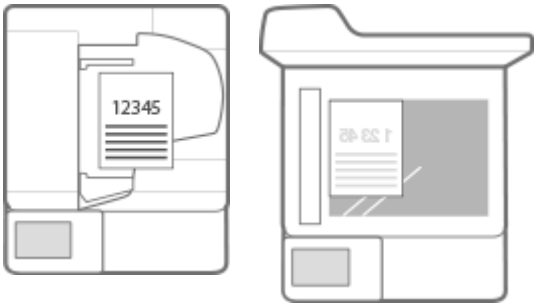
- For the general procedure of loading paper, see the following:
  Loading Paper in the Paper Drawer(P. 131)
  Loading Paper in the Multi-purpose Tray(P. 135)
- You can configure the settings so that the orientation the paper is to be loaded and the side to print on do not change depending on whether you want to print on one or both sides. When this setting is configured, load the paper using the 2-sided printing method. **[Switch Paper Feed Method](P. 432)**

Orientation of the original when copying

When performing a copy operation, pay attention to the orientation of the original to be placed.
Place the original in the feeder with the side to copy face up or on the platen glass with the side to copy face down, as shown in the figure below.

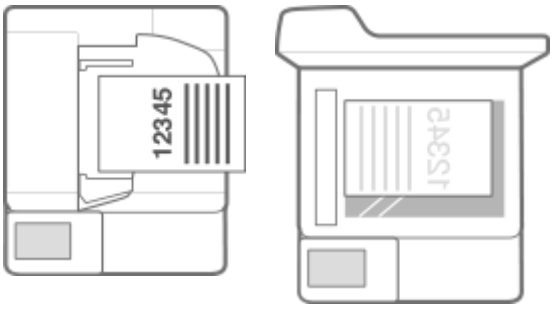
For A4 or A5 portrait layout originals

Feeder Platen glass



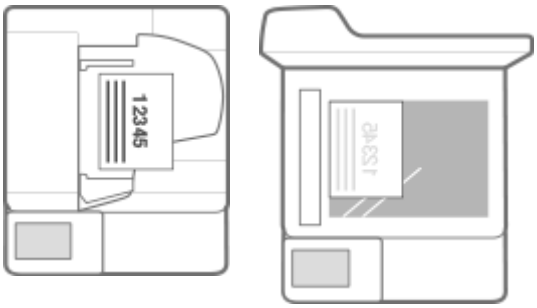
For A3 portrait layout originals

Feeder Platen glass



For A4 or A5 landscape layout originals

Feeder Platen glass



For A3 landscape layout originals

Feeder Platen glass



Loading Paper with Logos in Portrait Orientation

The loading method varies depending on the size of the paper with the logo and the paper source that is used.

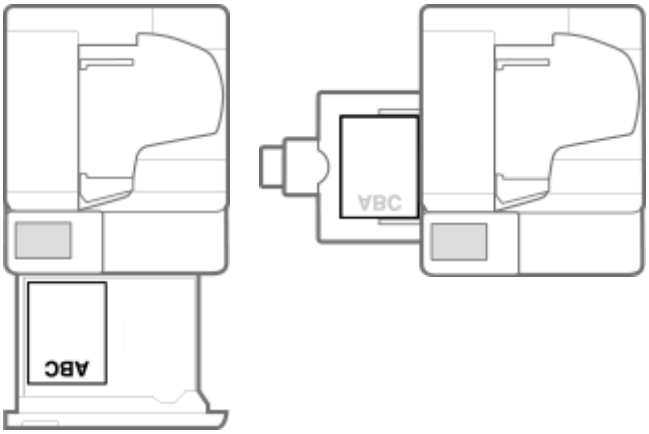


When Loading A4-, A5-size Paper with Logos

Load the paper so that the logo faces up in the paper drawer and faces down in the multi-purpose tray, as shown in the illustrations below.

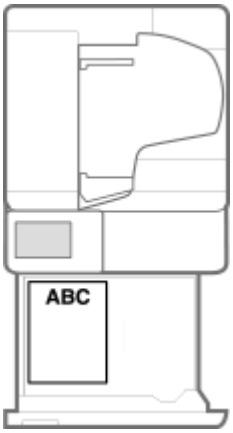
Orientation of the paper when printing

Paper drawer Multi-purpose tray



Orientation of the paper when copying from the feeder

Paper drawer

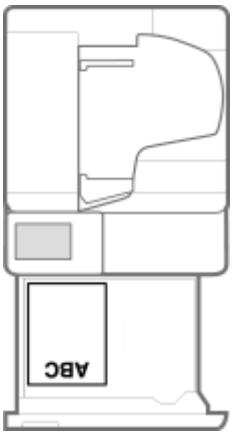


Multi-purpose tray

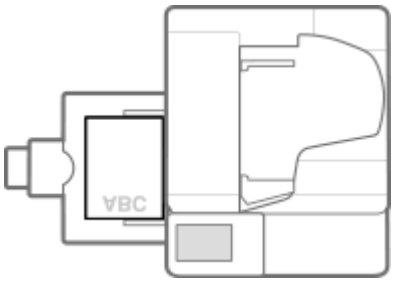


Orientation of the paper when copying from the platen glass

Paper drawer



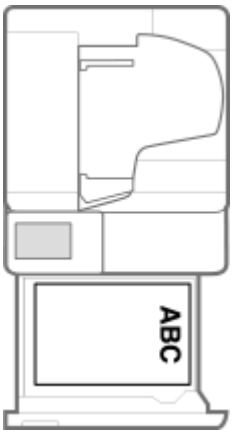
Multi-purpose tray



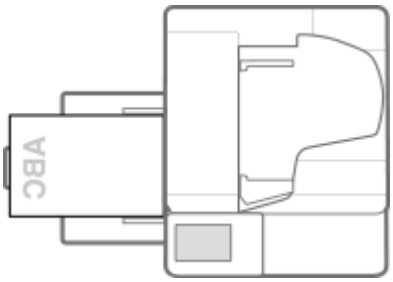
When Loading A3-size Paper with Logos

Load the paper so that the logo faces up in the paper drawer and faces down in the multi-purpose tray, as shown in the illustrations below.

Paper drawer



Multi-purpose tray



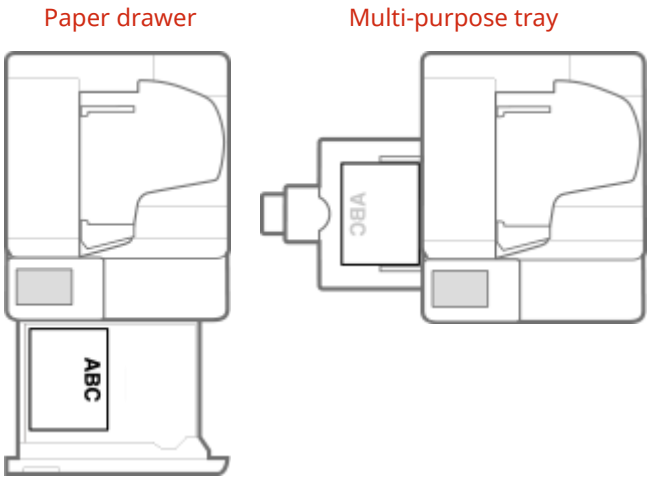
Loading Paper with Logos in Landscape Orientation

The loading method varies depending on the size of the paper with the logo and the paper source that is used.



When Loading A4-, A5-size Paper with Logos

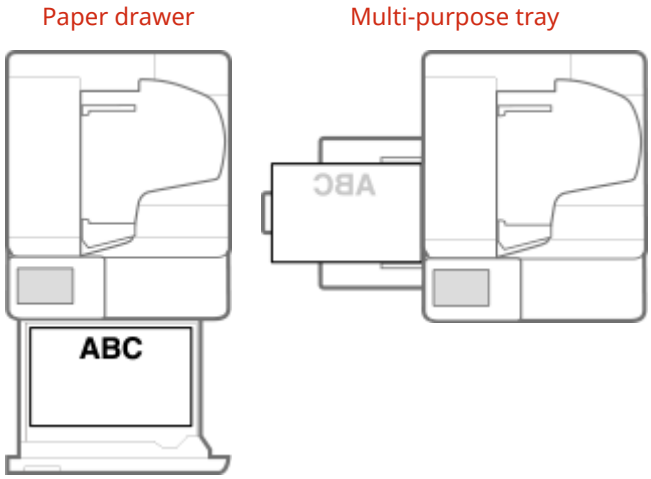
Load the paper so that the logo faces up in the paper drawer and faces down in the multi-purpose tray, as shown in the illustrations below.



When Loading A3-size Paper with Logos

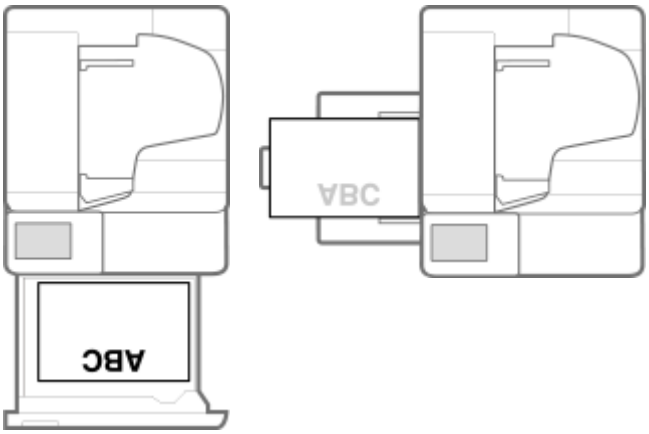
Load the paper so that the logo faces up in the paper drawer and faces down in the multi-purpose tray, as shown in the illustrations below.

Orientation of the paper when printing



Orientation of the paper when copying




ABC
ABC

Specifying the Paper Size and Type

958J-033

To ensure quality printing and prevent paper jams, the paper size and type must be set correctly according to the loaded paper.
You can register frequently used paper settings and hide unneeded paper settings to simplify the paper settings.

Settings Required after Loading the Paper

Set the paper size and type according to the loaded paper.

Setting the Paper Size and Type for the Paper Drawer(P. 145)
Setting the Paper Size and Type for the Multi-purpose Tray(P. 147)

If you always use the same paper in the multi-purpose tray, you can register the paper to use so you do not have to configure the settings each time.

Registering a Frequently Used Paper Size and Type for the Multi-purpose Tray(P. 149)

Simplifying the Paper Settings

You can register and set the paper size for easier settings.

Registering Non-standard Size Paper (Custom Paper)(P. 151)
Hiding Unused Paper Sizes(P. 153)

Using Appropriate Paper

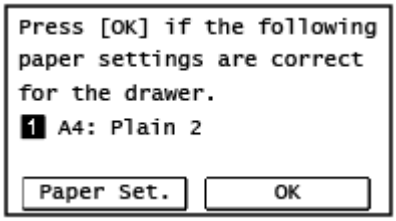
You can configure the settings to automatically select the paper source with the appropriate paper when printing.

Using the Appropriate Paper Source for Each Function(P. 154)

Setting the Paper Size and Type for the Paper Drawer

958J-034

By default, the paper size and type of the paper drawer are set to A4 and Plain 2. When paper of a different size or type is loaded, change the paper settings.

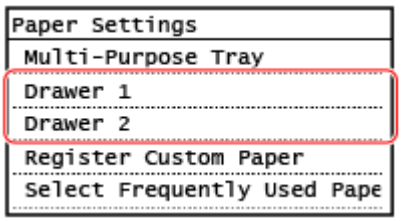


When [Notify to Check Paper Settings] is set to [On], the screen above is displayed. If you want to change the settings, start from [Paper Set.].

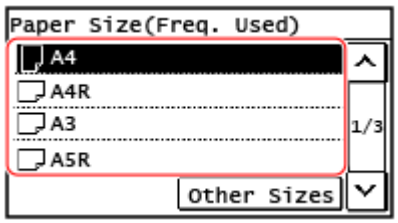
This section describes how to configure the settings using the control panel.
You can also configure the settings using Remote UI from a computer. **Managing the Machine from a Computer (Remote UI)(P. 368)**

1 On the control panel, press [Paper Set.] in the [Home] screen. [Home] Screen(P. 113)

2 Select the paper drawer whose setting you want to change.



3 Select the size of the paper loaded in the paper drawer.

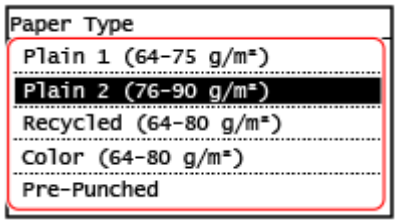


You can scroll the screen to view paper sizes (such as envelopes) not displayed on the screen.

■If a Set Paper Size Is Not Displayed

Press [Other Sizes], and select the paper size from the displayed list.

4 Select the type of the paper loaded in the paper drawer.



➠ The paper size and type are set.

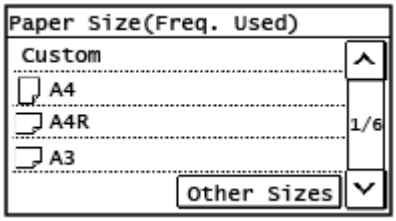
NOTE

- You can change the paper size displayed on the screen in Step 3. **Hiding Unused Paper Sizes(P. 153)**

Setting the Paper Size and Type for the Multi-purpose Tray

958J-035

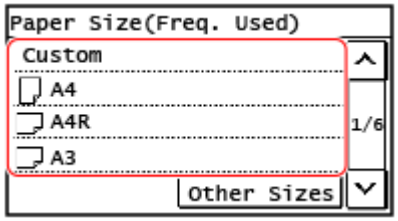
When paper is loaded in the multi-purpose tray, the following screen is displayed on the control panel. Set the paper size and type according to the loaded paper.



* If the paper size and type of the multi-purpose tray have been registered in advance, the above screen is not displayed. **Registering a Frequently Used Paper Size and Type for the Multi-purpose Tray(P. 149)**

This section describes how to configure the settings using the control panel.
You can also configure the settings using Remote UI from a computer. **Managing the Machine from a Computer (Remote UI)(P. 368)**

1 Select the size of the paper loaded in the multi-purpose tray.

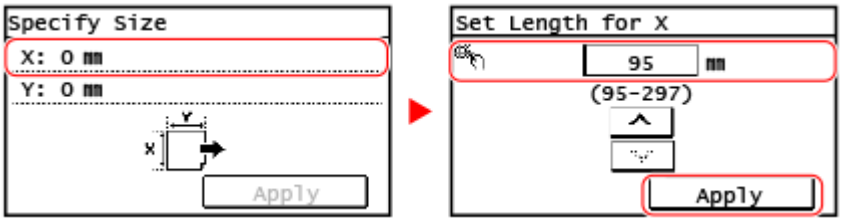


You can scroll the screen to view paper sizes (such as envelopes) not displayed on the screen.

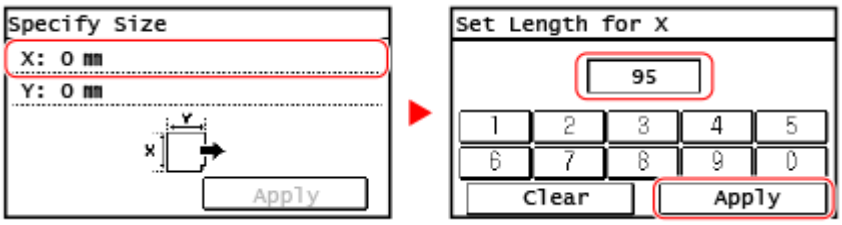
■When Non-standard Size (Custom Size) Paper Is Loaded

1. Press [Custom].
2. Press [X] or [Y] to enter the length and press [Apply].

imageRUNNER 2224N



imageRUNNER 2224



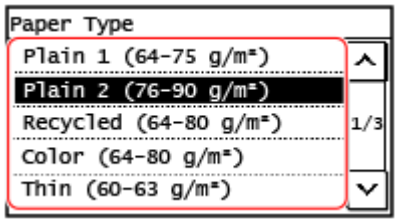
When frequently-used non-standard paper sizes are registered, the registered size is displayed as the paper size. **Registering Non-standard Size Paper (Custom Paper)(P. 151)**

3 Press [Apply].

■If a Set Paper Size Is Not Displayed

Press [Other Sizes], and select the paper size from the displayed list.

2 Select the type of paper loaded in the multi-purpose tray.



➠ The paper size and type are set.

NOTE

- You can change the paper size displayed on the screen in Step 1. **Hiding Unused Paper Sizes(P. 153)**

Registering a Frequently Used Paper Size and Type for the Multi-purpose Tray

958J-036

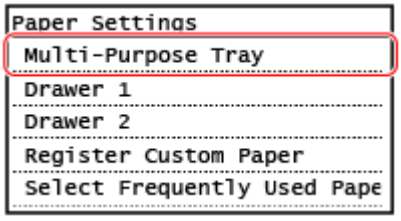
By default, when paper is loaded in the multi-purpose tray, the screen for setting the paper size and type is displayed on the control panel.
If you always use the same paper in the multi-purpose tray, you can register the paper size and type. This prevents the paper settings screen from being displayed, saving you the trouble of configuring the settings.

> **When Using Paper of a Size or Type Different from the Registered Paper**
> After canceling the registration in Step 3, load the paper in the multi-purpose tray. When the screen for setting the paper size and type is displayed on the control panel, configure the settings according to the paper to be used. **Setting the Paper Size and Type for the Multi-purpose Tray(P. 147)**

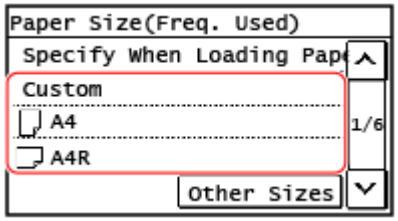
This section describes how to register the settings using the control panel.
You can also register the settings using Remote UI from a computer. **Managing the Machine from a Computer (Remote UI)(P. 368)**

1 On the control panel, press [Paper Set.] in the [Home] screen. [Home] Screen(P. 113)

2 Select [Multi-Purpose Tray].



3 Select the paper size to register.

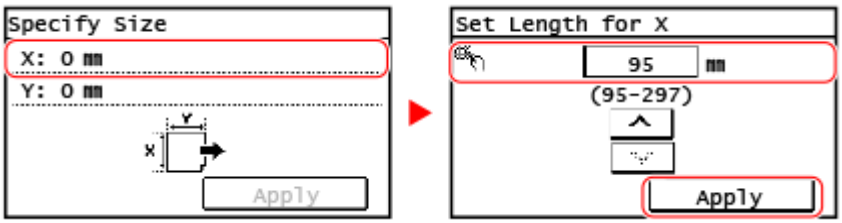


You can scroll the screen to view paper sizes (such as envelopes) not displayed on the screen.

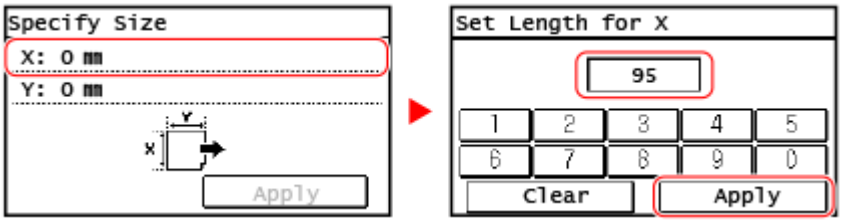
■When Registering Non-standard Size (Custom Size) Paper

1. Press [Custom].
2. Press [X] or [Y] to enter the length and press [Apply].

imageRUNNER 2224N



imageRUNNER 2224



When frequently-used non-standard paper sizes are registered, the registered size is displayed as the paper size. **Registering Non-standard Size Paper (Custom Paper)(P. 151)**

3 Press [Apply].

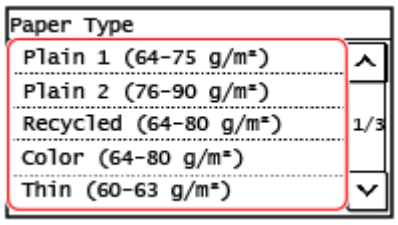
■If the Paper Size to Register Is Not Displayed

Press [Other Sizes], and select the paper size from the displayed list.

■To Cancel the Registered Paper

Press [Specify When Loading Paper]. You do not need to perform Step 4.
When paper is loaded in the multi-purpose tray, the screen for setting the paper size and type is displayed on the control panel.

4 Select the paper type to register.



➠ The paper size and type are registered.

NOTE

- You can change the paper size displayed on the screen in Step 3. **Hiding Unused Paper Sizes(P. 153)**

Registering Non-standard Size Paper (Custom Paper)

958J-037

Custom paper is non-standard size paper whose side lengths can be freely defined within the range supported by the machine.
It is recommended to register a frequently used non-standard paper size. You can call the registered paper size on the paper size selection screen, which saves time to entering the paper size. You can register up to three custom sizes.

This section describes how to register the settings using the control panel.
You can also register the settings using Remote UI from a computer. **Managing the Machine from a Computer (Remote UI)(P. 368)**

1 On the control panel, press [Paper Set.] in the [Home] screen. [Home] Screen(P. 113)

2 Press [Register Custom Paper].

➡ The [Register Custom Paper] screen is displayed.

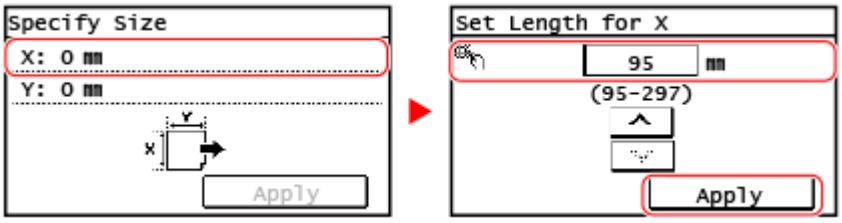
3 Select the registration number.

The size is registered to the selected number.

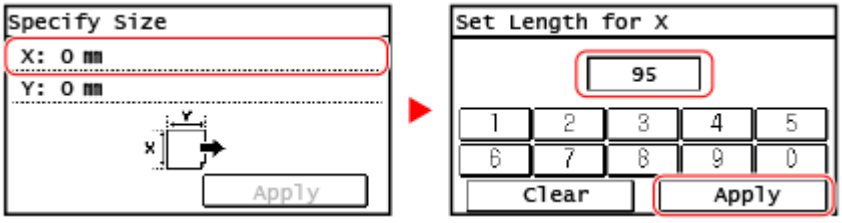
If you have selected the registered number, continue on to press [Edit].

4 Press [X] or [Y] to enter the length and press [Apply].

■imageRUNNER 2224N

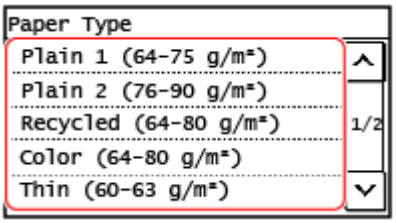


■imageRUNNER 2224



5 Press [Apply].

6 Select the paper type to register.



➠ The custom paper is registered.

Hiding Unused Paper Sizes

958J-038

The paper settings screen displays the registered frequently used paper sizes. If unused paper sizes are displayed, you can hide these for each paper source to make it easier to select a paper size.
To select a hidden paper size, press [Other Sizes] on the paper settings screen.

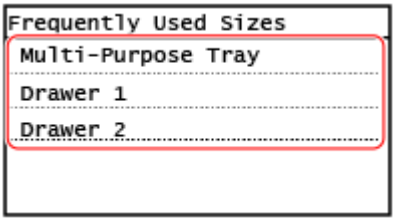
Use the control panel to configure the settings. You cannot configure the settings using Remote UI from a computer.

1 On the control panel, press [Paper Set.] in the [Home] screen. [Home] Screen(P. 113)

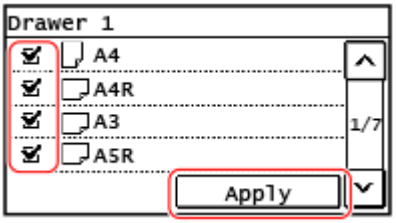
2 Press [Select Frequently Used Paper Sizes].

➡ The [Select Frequently Used Paper Sizes] screen is displayed.

3 Select a paper source.



4 Clear the checkboxes of the paper sizes to hide, and press [Apply].



➡ Paper sizes whose checkboxes are cleared are not displayed on the paper settings screen.

Using the Appropriate Paper Source for Each Function

958J-039

If you print without specifying the paper source, the machine automatically selects the paper source according to the size of the paper to be printed. In addition, if the machine runs out paper while printing, it automatically selects another paper source loaded with the same size paper to continue printing.
You can use the appropriate paper source by setting the paper source that is selected automatically for each function, such as the copy and print functions.

imageRUNNER 2224N(P. 154)
imageRUNNER 2224(P. 154)

imageRUNNER 2224N

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Function Settings] to configure the settings.
[Drawer Auto Selection On/Off](P. 431)

1 **Log in to Remote UI.** **Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Settings/Registration].** **Portal Page of Remote UI(P. 372)**

3 **Click [Common Settings] ▶ [Edit].**

➡ The [Edit Common Settings] screen is displayed.

4 **In [Paper Source Auto Selection], set the paper source to be selected automatically to [On].**

- Configure this setting for each function. For printing reports and lists, set the paper source to [Other] to apply this setting.
- For each function, one of the paper drawers must be set for automatic selection. If the multi-purpose tray only is set for automatic selection, the setting cannot be completed.

5 **Click [OK].**

➡ The settings are applied.

6 **Log out from Remote UI.**

imageRUNNER 2224

This section describes how to configure the settings using the control panel.

1 **On the control panel, press [Menu] in the [Home] screen.** **[Home] Screen(P. 113)**

2 Press [Function Settings] ▶ [Common] ▶ [Paper Feed Settings] ▶ [Drawer Auto Selection On/Off].

➡ The [Drawer Auto Selection] screen is displayed.

3 Select the function to which you want to specify a paper source.

Configure this setting for each function. For printing reports and lists, set the paper source to [Other] to apply this setting.

4 Set the paper source to be selected automatically to [On].

For each function, one of the paper sources must be set for automatic selection. If the multi-purpose tray only is set for automatic selection, the setting cannot be completed.

5 Click [Apply].

➡ The settings are applied.

Registering Destinations (Address Book)

958J-03A

Register destinations for sending and saving scanned data to the Address Book of the machine.

Address Book Function

By registering destinations to the Address Book, you can save the trouble of entering the information of destinations each time you send or save data. The Address Book has a function for easily specifying destinations. Use this function when displaying the Address Book screen or specifying destinations.
Address Book Function(P. 157)

Destinations that Can Be Registered

- E-mail address
- File save locations (shared folder)

How to Register Destinations

You can register a destination by entering a name, e-mail address, and other information, or by using the TX Job Log or user information from the LDAP server.
You can register destinations either with the control panel or Remote UI, but the types of destinations that can be registered and the registration method vary.

Registering Using the Control Panel

Use the control panel to register destinations from the TX Job Log or LDAP server.
You cannot use the control panel to register file save locations (shared folder).
Registering Destinations to the Address Book (Control Panel)(P. 159)

Registering Using Remote UI

Use Remote UI to register file save locations (shared folder).
You cannot use Remote UI to register destinations from the TX Job Log or LDAP server.
Registering Destinations to the Address Book (Remote UI)(P. 165)

■ See Also

Importing and Exporting the Address Book

You can share and back up data in the Address Book.
Importing and Exporting the Address Book and Settings(P. 382)

Preventing Unauthorized Use of the Address Book

To prevent unauthorized adding of new entries to the Address Book and editing of existing entries, you can set a PIN and restrict the method for adding new entries.
Restricting Address Book Registration and Editing(P. 348)

Address Book Function

958J-03C

You can specify destinations registered in the Address Book by calling up the Address Book in the [Home] screen or the scan screen on the control panel.
When registering destinations, select the function to quickly specify the destination.
You can also efficiently specify destinations from the Address Book screen, such as by grouping destinations or displaying them by type.

Function to Quickly Specify a Destination

When registering destinations, select and register either of the following:

- **One-Touch**
  It is very useful to register an especially frequently used destination to a One-Touch button. Any types of destinations can be registered to a One-Touch button. Register a destination to a One-Touch button on the [Home] screen.
  Up to four one-touch buttons are available.
- **Coded Dial**
  Register a 3-digit number for each destination. You can then directly enter that number to specify a destination.
  You can register up to 296 destinations with Coded Dial numbers.

Registering a Group of Multiple Destinations

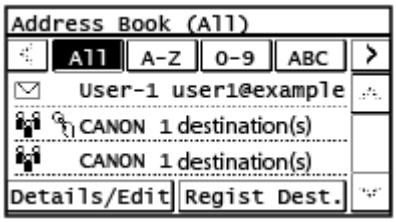
You can register multiple registered e-mail address destinations as a group to One-Touch or Coded Dial. This saves you the trouble of specifying multiple destinations individually when sending data. You can register up to 299 groups.
You can register only the same type of destinations for one group.
Registering Groups to the Address Book (Control Panel)(P. 162)
Registering Groups to the Address Book (Remote UI)(P. 168)

Classifying by Index

You can display the initials of the names and types of destinations (such as e-mail) set at the time of registration by classifying them by index.

■Address Book Screen

When you call the Address Book from the [Home] screen or scan screen, the following screen is displayed.



List of Registered Destinations

The types of destinations are indicated with the following symbols, and the destination information, such as the name and e-mail address, are displayed:

[ ]: E-mail

[ ]: File save location (shared folder)

- [ ] is displayed for group destinations.
- [ ] is displayed next to the destination type symbol for destinations registered to One-Touch.

Index

This is displayed at the top of the screen. You can filter destinations displayed in the list by selecting their type or the initials of a name.

- Press [ ] or [ ] to change the index display.

- To display all destinations registered to the Address Book, select [All].
- When specifying the destinations to be displayed by initials of the name, select [A-Z], [0-9], or [ABC] to [YZ].

Destination Operation Items

These are displayed on the bottom of the screen. Press to register, edit, or delete a destination, or to specify a destination to which to send or save data.

- When you call the Address Book from the [Home] screen and select a destination address, the scan screen is displayed with the selected address specified.

Registering Destinations to the Address Book (Control Panel)

958J-03E

You can register destinations to the Address Book using the control panel.
You can use the following methods to register e-mail addresses:

- Register destinations by directly entering their information.
- Register destinations by searching for user information managed with an LDAP server.

Required Preparations

- If you are using an LDAP server, register the LDAP server to be used for searching for destinations to the machine. **Registering LDAP Servers(P. 86)**

1 On the control panel, press [Addr. Book] in the [Home] screen. [Home] Screen(P. 113)

2 Press [Regist Dest.].

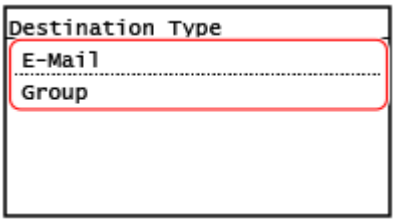
➡ The [Register As] screen is displayed.

If the [Address Book PIN] screen is displayed, enter the PIN, and press [Apply].

3 Press [Coded Dial] or [One-Touch].

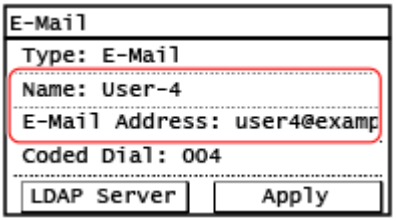
➡ [Destination Type] screen is displayed.

4 Select the destination type.



When registering group destinations, see the following.
Registering Groups to the Address Book (Control Panel)(P. 162)

5 Enter the destination information.

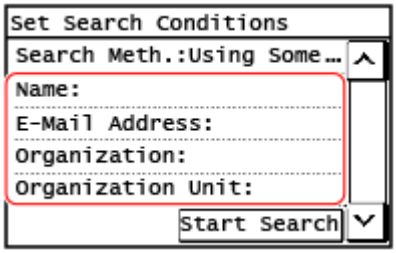


■When Directly Entering the Destination

- Press [Name] and enter the name, and then press [Apply].
- You can register a destination without entering its name, but by entering the name, you can search for it by its initials when specifying the destination.
- For destination information, press [E-Mail Address], enter that information, and then press [Apply].

■When Entering the Destination by Searching an LDAP Server

1. Press [LDAP Server].
2. Select the LDAP server.
3. Select the search item, and specify the search string.



   - Enter the string to search for, and press [Apply].
   - You can specify multiple search items.
4. Select [Search Meth.], and select the search conditions.
   - To search for users who meet all items specified in Step 3, select [Using All Conditions Below].
   - To search for users who meet any of the items specified in Step 3, select [Using Some Conditions Below].
5. Press [Start Search].

   ➠ The users who meet the search conditions are displayed.

   When the authentication screen is displayed, enter the user name and password of the machine that is registered to the LDAP server, and press [Apply].
6. Select the user to register to the Address Book.

   ➠ The name and destination are entered in the registration screen of the Address Book.

6 Press [Apply].

➠ The destination is registered to the Address Book.

When a destination is registered to [One-Touch] in Step 3, the destination is registered to the [One-Touch] button on the [Home] screen. The name which is entered in [Name] when the destination is registered appears as the button name.

NOTE

Registering a Destination from the TX Job Log of a Scan Job

- You can register a destination to the Address Book from the TX Job Log of a scan job with the following steps.

on the control panel ▶ [TX Job] ▶ [Job Log] ▶ select the log you want to call up ▶ [Reg Adr Book].

Checking the Send and Save Status and Log of Scanned Data(P. 251)

Registering Groups to the Address Book (Control Panel)

958J-03F

You can register a group of multiple destinations to the Address Book using the control panel.
You can register only the same type of destinations for a group. You cannot register file save locations (shared folder) to a group.

Required Preparations

- Register the destinations to be added to a group to the Address Book of the machine. **Registering Destinations to the Address Book (Control Panel)(P. 159)**

1 On the control panel, press [Addr. Book] in the [Home] screen. [Home] Screen(P. 113)

2 Press [Regist Dest.].

➡ The [Register As] screen is displayed.

If the [Address Book PIN] screen is displayed, enter the PIN, and press [Apply].

3 Press [Coded Dial] or [One-Touch].

➡ [Destination Type] screen is displayed.

4 Press [Group].

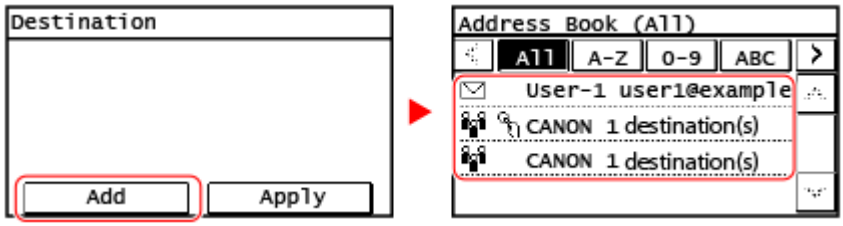
➡ The [Group] screen is displayed.

5 Press [Name] and enter the name, and then press [Apply].

You can register a destination without entering its name, but by entering the name, you can search for it by its initials when specifying the destination.

6 Press [Number of Destinations].

7 Press [Add] and select the address you want to add to the group.



- Select the index at the top of the screen of the Address Book to filter and display the destinations.
- Repeat this operation until you register every address you want to add to the group.

8 Press [Apply].



- Press the added address to check the information of the added address.
- If you want to remove an address from the group, press the address you want to remove and press [Remove].

9 Press [Apply].

➡ The destination is registered to the Address Book.

When a destination is registered to [One-Touch], the destination is registered to the [One-Touch] button on the [Home] screen. The name which is entered in [Name] when the destination is registered appears as the button name.

Editing and Deleting Destinations in the Address Book (Control Panel)

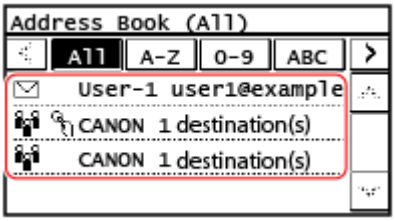
958J-03H

You can edit information of destinations registered in the Address Book or delete unused destinations.

1 On the control panel, press [Addr. Book] in the [Home] screen. [Home] Screen(P. 113)

2 Press [Details/Edit].

3 Press the destination you want to edit or delete.



- Select the index at the top of the screen of the Address Book to filter and display the destinations.

4 Edit or delete the destination.

■ When Editing a Destination

1. Press [Edit].
   If the [Address Book PIN] screen is displayed, enter the PIN, and press [Apply].
2. Select and edit the item you want to edit.
3. Press [Apply].
   ➡ The edited information is applied.

■ When Deleting a Destination

1. Press [Delete].
   If the [Address Book PIN] screen is displayed, enter the PIN, and press [Apply].
2. Press [Yes].
   ➡ The destination is deleted.

Registering Destinations to the Address Book (Remote UI)

958J-03J

You can register destinations to the Address Book using Remote UI from a computer.
Use Remote UI to register file save locations (shared folder).

Administrator privileges are required to register destinations using Remote UI.

Required Preparations

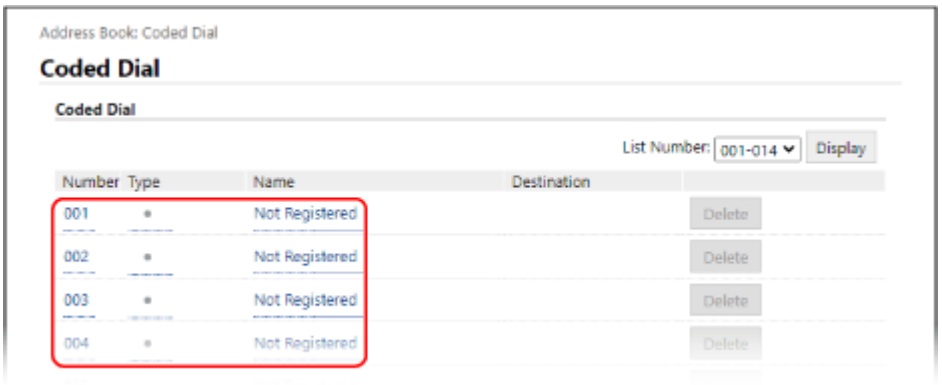
- When registering a shared folder as a destination, prepare the following information and keep it close by:
  - Name or IP address of the computer with the shared folder
    Viewing the System Information of the Computer(P. 595)
    Viewing the Network Connection Information of the Computer(P. 597)
  - Path to the shared folder
  - User name and password used for accessing the shared folder (if Restrict Access is set)

1 **Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Address Book]. Portal Page of Remote UI(P. 372)**

3 **Click [One-Touch] or [Coded Dial].**

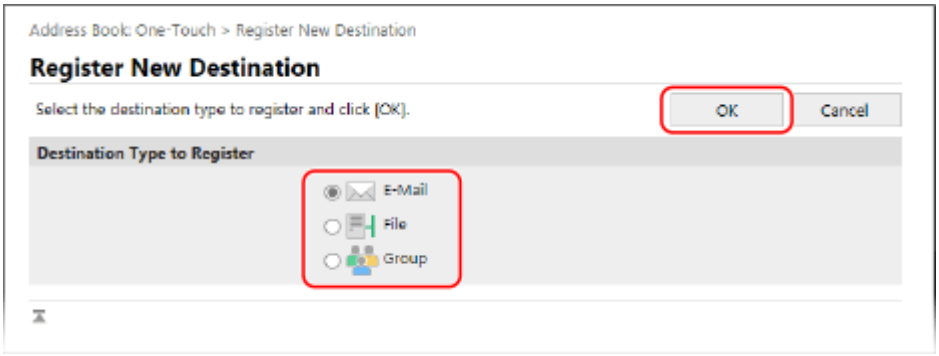
4 **Click an item displayed as [Not Registered].**



➠ The [Register New Destination] screen is displayed.

If the [Enter PIN] screen is displayed, enter the Address Book PIN, and then click [OK].

5 **Select the destination type, and click [OK].**

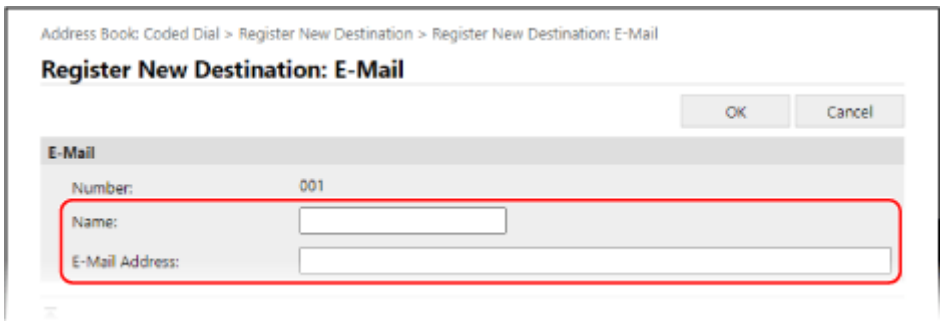


- When registering file save locations (shared folder), select [File].
- When registering group destinations, see the following.
  Registering Groups to the Address Book (Remote UI)(P. 168)

6 Set the destination information.

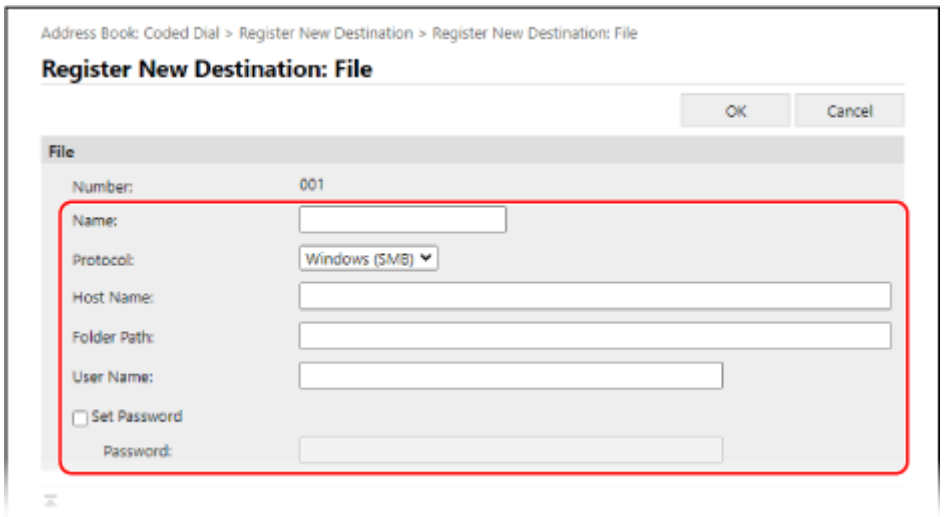
You can register a destination without entering its name, but by entering the name, you can search for it by its initials when specifying the destination.

■When Registering E-Mail Addresses



Enter the name and e-mail address.

■When Registering File Save Locations (Shared Folder)



1 Enter the name.

2 Select [Protocol].
When registering a shared folder, select [Windows (SMB)].

3 In [Host Name], enter the computer name or the IP address of the computer where a shared folder is located.

* When using a DNS server, you can enter the host name or FQDN instead of the computer name or IP address.

4 Enter the path to the folder.

Enter the path to the shared folder. Use "\" as a separator.

Input example: when the shared folder path is C:\users\public\share
users\public\share

If there is no folder at the entered path, a folder with the entered name is created when the file is saved for the first time.

* However, if there is no parent folder, or you do not have write permission to the parent folder, a sending error occurs without a folder being created.

5 Enter the user name and password, as needed.

- If Restrict Access is enabled for the shared folder, enter the user name and password used for accessing the shared folder.
- To enter a password, select the [Set Password] checkbox, and then enter the password.

7 Click [OK].

➡ The destination is registered to the Address Book.

8 Log out from Remote UI.

NOTE

Editing or Deleting Registered Destinations

- If you select a destination and click [Edit] on the screen in Step 4, you can edit the registered information.
- In Step 4, click [Delete] to the right of the destination you want to delete, and the destination will be deleted.

Registering Groups to the Address Book (Remote UI)

958J-03K

You can register a group of multiple destinations to the Address Book using Remote UI from a computer.
You can register only the same type of destinations for a group. You cannot register file save locations (shared folder) to a group.

Administrator privileges are required to register a group using Remote UI.

Required Preparations

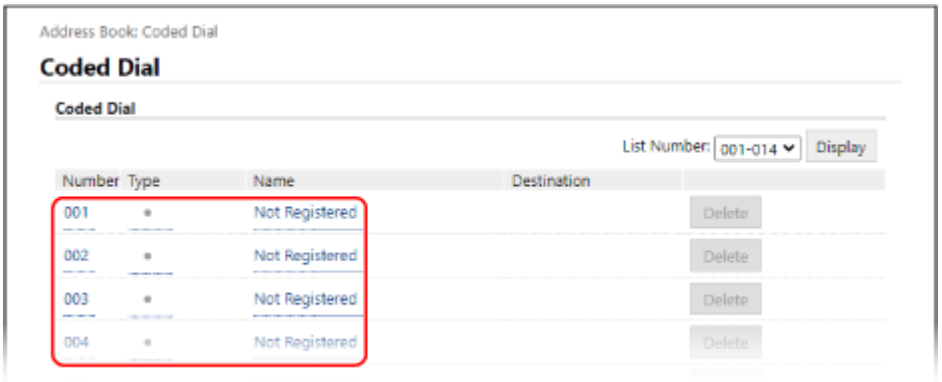
- Register the destinations to be added to a group to the Address Book of the machine. **Registering Destinations to the Address Book (Remote UI)(P. 165)**

1 **Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Address Book]. Portal Page of Remote UI(P. 372)**

3 **Click [One-Touch] or [Coded Dial].**

4 **Click an item displayed as [Not Registered].**



➡ The [Register New Destination] screen is displayed.

If the [Enter PIN] screen is displayed, enter the Address Book PIN, and then click [OK].

5 **Select [Group], and click [OK].**

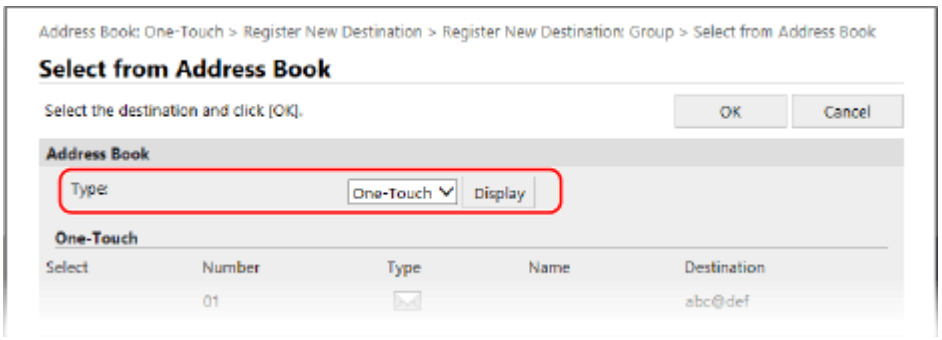
➡ The [Register New Destination: Group] screen is displayed.

6 **In [Group], enter the group name.**

You can register a group without entering its name, but by entering the name, you can search for it by its initials when specifying the destination.

7 **In [Member Settings], click [Select from Address Book].**

8 Change the display of the Address Book, as needed.



In [Type], select [One-Touch] or [Coded Dial], and click [Display] to change the display of the Address Book.

9 Select the checkboxes of the destinations to add to the group, and click [OK].

➠ The destinations are added to [Member List] on the [Register New Destination: Group] screen.

You can select multiple destinations at the same time.

10 Click [OK].

➠ The group is registered to the Address Book.

11 Log out from Remote UI.

Specifying Destinations

958J-03L

When sending or saving scanned data, specify destinations using the method below.
The method of specifying destinations and the number of destinations that can be specified vary depending on the function and destination.

Specifying Destinations

When sending scanned data by e-mail, you can specify destinations for the Cc and Bcc fields only from the Address Book.

Using the Address Book

Specify a destination registered to the Address Book of the machine.
Specifying Destinations (Address Book)(P. 171)

Directly Entering a Destination

Enter the destination using the numeric keys on the control panel.
Specifying Destinations (Direct Input)(P. 175)

Using the LDAP Server

Search for and specify the destination from the user information managed with an LDAP server.
Specifying Destinations (LDAP Server)(P. 176)

Using the Address Book on a Mobile Device

When sending scanned data by e-mail, you can specify a destination registered to the address book on a mobile device.
Specifying Destinations (Address Book on a Mobile Device)(P. 177)

Using the TX Job Log

You can call up the TX Job Log of scan jobs and specify destinations that were specified in the past.
Specifying Destinations (TX Job Log)(P. 178)

Specifying Multiple Destinations

You can specify multiple destinations by repeating the operation of specifying a destination.
However, you cannot specify multiple file save locations (shared folder) as destinations.

When Removing a Specific Destination after Specifying Multiple Destinations

Use the following procedure:

On the scan screen, select [Destination] ▶ [Confirm/Edit] ▶ press the destination or the group you want to remove ▶ [Remove] ▶ [Yes].

If you press [Number of Destinations] after pressing a group, you can check the destinations registered to the group. You cannot individually remove destinations registered to a group.

Confirming Destinations

The screen for confirming whether a specified destination is correct may be displayed depending on the settings of the machine.
In addition, the method for specifying destinations may be restricted, and sending may be restricted to only specific destinations.
Preventing Sending Data by Mistake and Leaking Information(P. 339)

Specifying Destinations (Address Book)

958J-03R

When specifying destinations with the Address Book, use the [Home] screen or the scan screen on the control panel. When specifying destinations by calling up the Address Book from the [Home] screen or the scan screen, use the destination list.
You can specify a destination by entering a three-digit number from [Coded Dial] on the [Home] screen, or you can specify a destination which is predetermined to a [One-Touch] button.

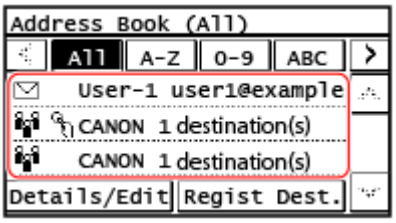
Specifying Destinations from a List(P. 171)
Specifying Destinations with Coded Dial Numbers(P. 172)
Specifying Destinations with the One-Touch Button(P. 173)

Specifying Destinations from a List

■Selecting from the [Home] Screen

1 On the control panel, press [Addr. Book] in the [Home] screen. [Home] Screen(P. 113)

2 Select a destination.



➠ The scan screen is displayed with the specified destinations entered.

Select the index at the top of the screen of the Address Book to filter and display the destinations.

■Selecting from the [Scan] Screen

1 On the control panel, press [Scan] in the [Home] screen. [Home] Screen(P. 113)

2 When you are scanning, press [E-Mail] or [File].

3 Press [Destination] ▶ [Specify from Address Book].

■When the To/Cc/Bcc screen is displayed

Select the type (To, Cc, or Bcc) of destination to be specified.

4 Select the destination.

➡ The destinations are specified.

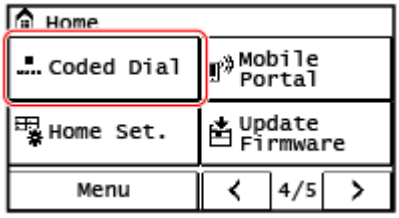
Select the index at the top of the screen of the Address Book to filter and display the destinations.

Specifying Destinations with Coded Dial Numbers

You can enter a three-digit Coded Dial number to specify a destination.

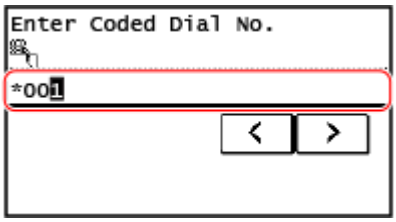
■Selecting from the [Home] Screen

1 On the control panel, press [Coded Dial] in the [Home] screen. [Home] Screen(P. 113)



➡ The [Enter Coded Dial No.] screen is displayed.

2 Enter a three-digit coded dial.

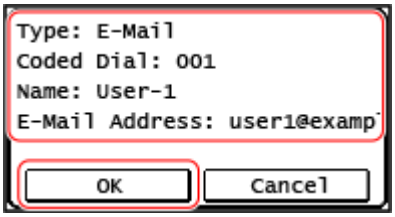


➡ The destinations are specified.

If you entered an incorrect number, press C to clear the numbers.

■When the Confirm Destination Screen Is Displayed

Check that the destination is correct, and then press [OK].



■Selecting from the [Scan] Screen

1 On the control panel, press [Scan] in the [Home] screen. [Home] Screen(P. 113)

2 When you are scanning, press [E-Mail] or [File].

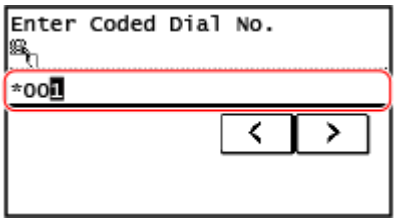
3 Press [Destination] ▶ [Specify from Coded Dial].

➡ The [Enter Coded Dial No.] screen is displayed.

■When the To/Cc/Bcc screen is displayed

Select the type (To, Cc, or Bcc) of destination to be specified.

4 Enter a three-digit Coded Dial number.

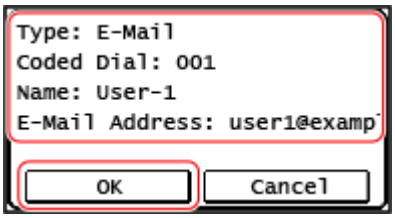


➡ The destination is specified.

If you entered an incorrect number, press C to clear the numbers.

■When the Confirm Destination Screen Is Displayed

Check that the destination is correct, and then press [OK].



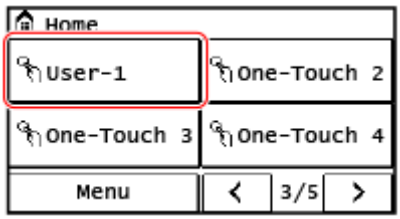
Specifying Destinations with the One-Touch Button

Required Preparations

- Register a destination to a [One-Touch] button. **Registering Destinations (Address Book)(P. 156)**

■Selecting from the [Home] Screen

Press a [One-Touch] button on the [Home] screen.

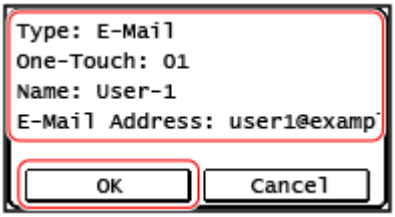


➡ The destinations are specified.
The Scan screen is displayed with the specified destinations entered.

The [ ] icon is assigned to a [One-Touch] button. The name which is entered in [Name] when the destination is registered appears as the button name.

■When the Confirm Destination Screen Is Displayed

Check that the destination is correct, and then press [OK].



■Selecting from the [Scan] Screen

1 On the control panel, press [Scan] in the [Home] screen. [Home] Screen(P. 113)

2 When you are scanning, press [E-Mail] or [File].

3 Press [Destination] ▶ [Specify from One-Touch].

➠ Only destinations registered to a One-Touch button are displayed.

■When the To/Cc/Bcc screen is displayed

Select the type (To, Cc, or Bcc) of destination to be specified.

4 Select the destination.

➠ The destinations are specified.

Specifying Destinations (Direct Input)

958J-03S

To specify a destination not registered to the Address Book or LDAP server, directly enter the destination using the scan screen of the control panel.

1 **On the control panel, press [Scan] in the [Home] screen. [Home] Screen(P. 113)**

2 **Press [E-Mail].**

3 **Enter an e-mail address, and press [Apply]. Entering Characters(P. 120)**

➡ The destination is specified.

- If you entered an incorrect e-mail address, press C to clear the character.
- You cannot directly enter a second address. Select a second destination from [Destination].

Specifying Destinations (LDAP Server)

958J-03U

When user information is managed by an LDAP server, you can search for that information using the scan screen of the control panel and specify a destination.
When you are logged in with authenticated sending (LDAP server authentication), you can also specify the e-mail address of the logged-in user.

Required Preparations

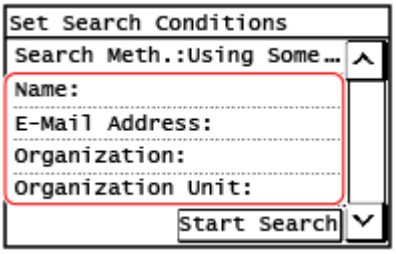
- Register the LDAP server to be used for searching for information to the machine. **Registering LDAP Servers(P. 86)**

1 On the e-mail screen, press [Destination].

When you are logged in with authenticated sending and you want to specify the e-mail address of the logged-in user, press [Specify Myself as Destination]. The operations thereafter are not required.

2 Press [Specify from LDAP Server], and select the LDAP server.

3 Select the search item, and specify the search string.



- Enter the string to search for, and press [Apply].
- You can specify multiple search items.

4 Select [Search Meth.], and select the search conditions.

- To search for users who meet all items specified in Step 3, select [Using All Conditions Below].
- To search for users who meet any of the items specified in Step 3, select [Using Some Conditions Below].

5 Press [Start Search].

➡ The [Search Results(E-Mail)] screen is displayed.

When the authentication screen is displayed, enter the user name and password of the machine that is registered to the LDAP server, and press [Apply].

6 Select the destination you want to specify and press [Apply].

➡ The destinations are specified.

Specifying Destinations (Address Book on a Mobile Device)

958J-03W

When sending scanned data by e-mail, you can specify destinations registered to the Address Book on a mobile device using the scan screen of the control panel.

Required Preparations

- Install Canon PRINT Business to the mobile device. **Using a Dedicated Application to Print and Scan (Canon PRINT Business)(P. 283)**
- Configure the settings to enable the machine to connect to the Address Book on the mobile device. **[Link Mobile Device Address Book](P. 456)**

1 On the control panel, press [Scan] in the [Home] screen. [Home] Screen(P. 113)

2 Press [Destination] ▶ [E-Mail].

3 Press [Specify from Mobile Portal].

4 Connect to the mobile device. Connecting a Mobile Device to the Machine(P. 279)

5 Send the destination information from the mobile device to the machine.

- For details about sending, see the Canon PRINT Business manual at the online manual site.
- You can also send the subject, message, and file name entered on the mobile device to the machine.

6 Confirm the destination information displayed on the screen of the machine, and press [OK].

➠ The destinations are specified.

Specifying Destinations (TX Job Log)

958J-03X

You can specify destinations used in the past by calling up the TX Job Log. The scan settings used when the destination was used are also recalled.
When you call up the TX Job Log, the specified destinations and scan settings are overwritten.

IMPORTANT

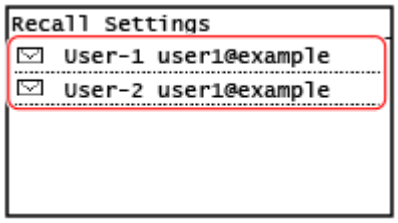
- You cannot use the TX Job Log when sending from the log is restricted. **Prohibiting the Use of Destinations in the Send Log(P. 340)**

1 On the control panel, press [Scan] in the [Home] screen. [Home] Screen(P. 113)

2 When you are scanning, press [E-Mail] or [File].

3 Press [Destination] ▶ [Recall Set.].

4 Select the log you want to call up.



➡ The destinations and scan settings of the selected log are applied.
The Scan screen is displayed with the specified destinations entered.

When there are multiple destinations in the log, only the first destination is displayed, but all of the destinations are applied.

5 Change the destinations and scan settings, as needed.

You can change and send the called up destinations and scan settings.

NOTE

- The TX Job Log is cleared in the following cases:
  - When the power is turned OFF
  - When entry of new destinations is restricted **Sending Only to Registered Destinations(P. 340)**

Registering Frequently Used Settings

958J-03Y

You can register frequently used settings and values for each function by using the method below.

Registering Favorite Settings for Ease of Operation

You can register settings according to your purpose and settings you want to recall for the copy function. You can call up registered settings from the [Favorite Copy Set.] button on the [Home] screen or from the screen of the copy function.
This saves the trouble of having to repeatedly configure the settings and prevents setting errors.
Registering and Calling Up Favorite Copy Settings(P. 180)

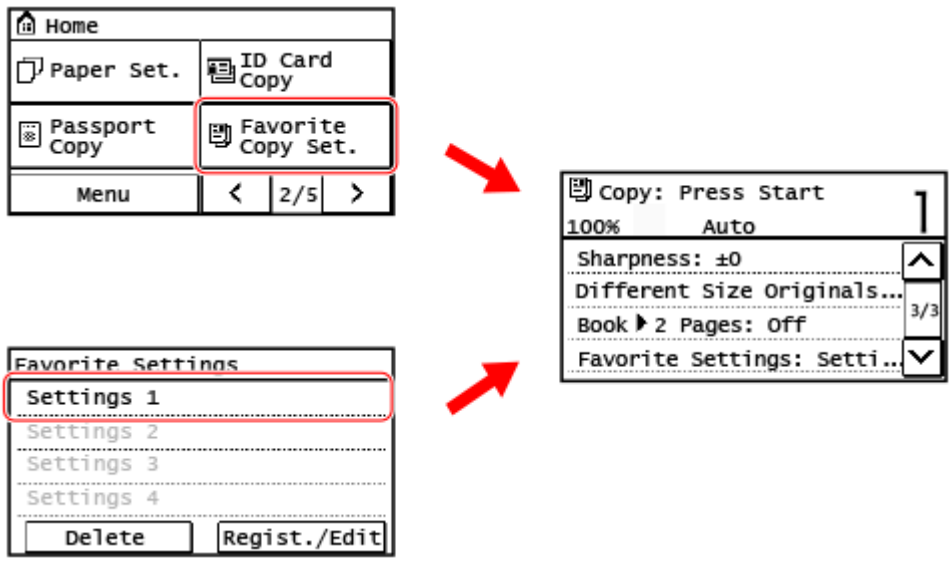
Changing the Default Settings

You can change the default settings for each function. If the settings are not changed, the initial settings will be used.
By configuring the settings as standard or to save paper, for example, you can increase work efficiency and reduce costs.
Changing the Default Settings(P. 182)

Registering and Calling Up Favorite Copy Settings

958J-040

You can register settings according to your purpose and settings you want to recall as "Favorite Settings" for the copy function.
You can label the Favorite Setting so as to provide a description of the setting, who will use it, or other information.
You can call up registered settings for quick operation from the [Favorite Copy Set.] button on the [Home] screen or from the screen of the copy function. You can also change the settings after calling them up, as needed.



Registering Favorite Settings(P. 180)
Calling Up Registered Favorite Settings(P. 181)

Registering Favorite Settings

Use the control panel to register Favorite Settings. You cannot register Favorite Settings using Remote UI from a computer.

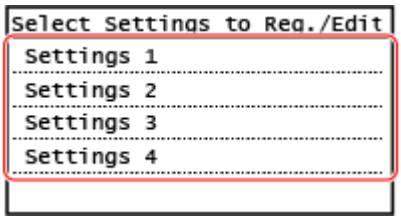
1 On the control panel, press [Copy] in the [Home] screen. [Home] Screen(P. 113)

➡ The copy screen is displayed.

2 Set the details to be registered. Copying(P. 254)

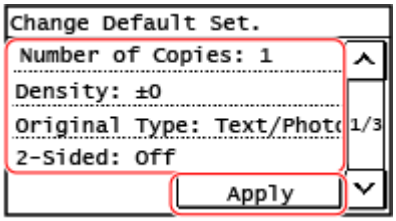
3 Press [Favorite Settings].

4 Press [Regist./Edit] and select an item in which settings are not registered.



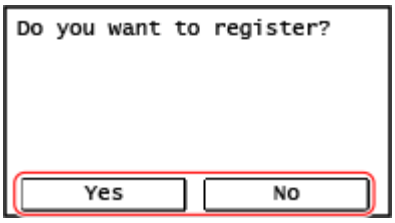
➡ The information set in Step 2 is displayed.

5 Check the settings, and click [Apply].



To change the settings, select the item to change, and change the setting.

6 Select whether to register the settings.



➡ The favorite settings is registered.

Calling Up Registered Favorite Settings

When using the copy function, call up the setting according to your purpose from the registered Favorite Settings.

■ Calling Up Favorite Settings from the [Favorite Copy Set.] button on the [Home] Screen

You can call up the settings by pressing the [Favorite Copy Set.] button on the [Home] screen.

■ Calling Up Favorite Settings from the Copy Screen

Use the following procedure to call up a Favorite Setting.

1 On the control panel, press [Copy] in the [Home] screen. [Home] Screen(P. 113)

➡ The copy screen is displayed.

2 Press [Favorite Settings].

➡ The [Favorite Settings] screen is displayed.

3 Select the setting you want to use.

➡ The setting is called up.
The copy settings are completed, so you can just press on the control panel to copy.

Changing the Default Settings

958J-041

You can change the default settings for scan, copy, and other functions called up using the control panel.
By configuring the settings as standard or to save paper, for example, you can increase work efficiency and reduce costs.

You can also reset the settings to the settings set here by pressing on any function screen.

This section describes how to configure the settings using the control panel.
You can also configure the settings using Remote UI from a computer. **Managing the Machine from a Computer (Remote UI)(P. 368)**

1 On the control panel, press [Menu] in the [Home] screen. [Home] Screen(P. 113)

2 Press [Function Settings].

3 Select the default setting item you want to change.

Select from the following items according to the function you want to change.

Scan (Send E-mail)

[Send] ▶ [Scan and Send Settings] ▶ [E-Mail Settings] ▶ [Change Default Settings]

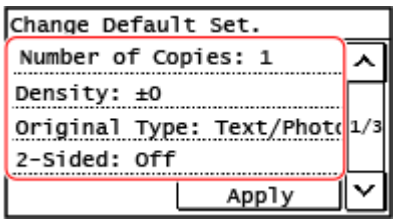
Scan (Save to Shared Folder)

[Send] ▶ [Scan and Send Settings] ▶ [File Settings] ▶ [Change Default Settings]

Copy

[Copy] ▶ [Change Default Settings]

4 Select the setting items to change, and change the default settings.



For details about the setting items of each function, see the following:

- Scan (Send E-Mail) **[Change Default Settings](P. 454)**
- Scan (Save to Shared Folder) **[Change Default Settings](P. 456)**
- Copy **[Change Default Settings](P. 436)**

5 Press [Apply].

➡ The default settings are changed.

NOTE

Restoring Default Settings to the Factory Settings

- You can perform the following operations from the screen in Step 3.
  - **Scan (Send E-Mail)**

    [Send] ▶ [Scan and Send Settings] ▶ [E-Mail Settings] ▶ [Initialize Default Settings] ▶ [Yes]

  - **Scan (Save to Shared Folder)**

    [Send] ▶ [Scan and Send Settings] ▶ [File Settings] ▶ [Initialize Default Settings] ▶ [Yes]

  - **Copy**

    [Copy] ▶ [Initialize Default Settings] ▶ [Yes]

Adjusting the Sound Volume

958J-042

You can adjust the volume of the sounds emitted by the machine and set whether the machine emits sounds notifying you of operations and statuses.

Adjusting the Volume(P. 185)

Adjusting the Volume

958J-044

You can also set whether the machine emits sounds notifying you of operations and statuses, such as when operating the control panel and errors are detected.

This section describes how to configure the settings using the control panel.
You can also configure the settings using Remote UI from a computer. **Managing the Machine from a Computer (Remote UI)(P. 368)**

1 **On the control panel, press [Menu] in the [Home] screen.** **[Home] Screen(P. 113)**

2 **[Preferences] ▶ [Volume Settings].**

➡ The [Volume Settings] screen is displayed.

3 **Set whether notification sounds are emitted.** **[Volume Settings] Screen(P. 186)**

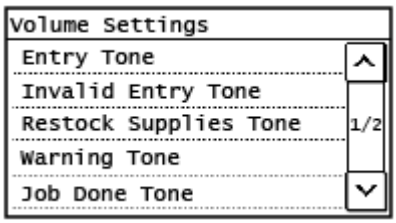
To emit notification sounds, select the item and press [On].

➡ The volume is adjusted.

[Volume Settings] Screen

958J-045

When you press [Menu] ▶ [Preferences] ▶ [Volume Settings] on the [Home] screen of the control panel, the [Volume Settings] screen is displayed.
You can set whether the machine emits sounds notifying you of operations and statuses.



[Entry Tone]
Set whether to emit a sound when you press the keys and buttons on the control panel.

[Invalid Entry Tone]
Set whether to emit a sound when an invalid key is pressed, such as when you enter a value outside the setting range.

[Restock Supplies Tone]
Set whether to emit a sound when the toner cartridges are nearing the end of their lifetime.

[Warning Tone]
Set whether to emit a sound when the machine has a paper jam or other malfunction.

[Job Done Tone]
Set whether to emit a sound when the copy, scan, or other operation on the machine is completed.

[Energy Saver Alert]
Set whether to emit a sound when the machine enters and exits sleep mode.

[Original in Feeder Detection Tone]
Set whether to emit a sound when the machine detects an original that has been placed on the feeder.

Printing

Printing 188
Printing Preparations 189
Preparing to Print from a Computer 190
Configuring a Printer Port (Windows) 193
Setting Up a Print Server 196
Preparations for Using Universal Print 199
Registering the Machine to Cloud Service 200
Registering the Machine to the Computer 203
Printing from a Computer 204
Registering Non-standard Size Paper to the Computer (Custom Size) 207
Printing a Document Secured with a PIN (Secure Print) 209
Changing the Time Period That Print Data with a PIN (Secure Data) Is Saved 212
Enabling Secure Print in a Printer Driver (macOS) 213
Printing with Universal Print 214
Canceling Printing 215
Viewing the Print Job Status and Log 217

Printing

958J-046

You can print documents and photos from a computer.

Printing from a Computer



You can print documents and photos via a printer driver installed on a computer connected to the machine.

Preparing to Print from a Computer(P. 190)
Printing from a Computer(P. 204)

Setting Up a Print Server

By setting up a print server on a network, you can reduce the load on the computer that you print from. In Windows, you can install the printer driver via the print server, which saves you the trouble of downloading the printer driver to each computer on the network or using a CD/DVD-ROM.

Setting Up a Print Server(P. 196)

Printing with a PIN

When printing from a computer, you can send print data to the machine after setting a PIN. Printing is not performed until the PIN is entered on the machine, thereby preventing unattended printed documents and information theft.

Printing a Document Secured with a PIN (Secure Print)(P. 209)

Printing with the Standard Functions of the Operating System and Cloud Service

You can print without having to install a dedicated application or printer driver.

Windows

This machine is compatible with Universal Print, a cloud service by Microsoft. You can print documents from a remote location as long as your computer is connected to the Internet.

Preparations for Using Universal Print(P. 199)
Printing with Universal Print(P. 214)

macOS

You can use AirPrint to print data. **Using AirPrint Application to Print and Scan Data(P. 284)**

Chrome OS

Use the print function that is standard in the operating system. **Printing from Chromebook or Other Device with Chrome OS(P. 289)**

■ See Also

Printing from a Mobile Device

The machine can be operated from a smartphone, tablet, or other mobile device. By using a compatible application or service, you can easily print photos or documents from a mobile device.

Linking with Mobile Devices(P. 271)

When Results Are Not as Expected

Adjust the image quality if the black or nearly black colors of letters are not reproduced.

Adjusting the Print Quality(P. 502)

Printing Preparations

958J-047

To print from the machine, you must make printing preparations according to your printing method and usage environment.

Preparing to Print from a Computer(P. 190)
Setting Up a Print Server(P. 196)
Preparations for Using Universal Print(P. 199)

Preparing to Print from a Computer

958J-048

Make the following preparations for the computer that will be used to print.

Step 1: Installing the Driver to the Computer(P. 190)
Step 2: Using a Driver to Set the Department ID and PIN(P. 190)
Step 3: Configuring the Option Settings of the Machine Using the Driver(P. 190)

Step 1: Installing the Driver to the Computer

Install the printer driver to the computer that will be used to print. **Installing Software and Drivers to the Computer(P. 100)**

Using a Print Server in Windows
Use a print server to install the printer driver.
Double-click the shared printer on the print server, and follow the instructions on the screen to install the printer driver. **Displaying a Shared Printer in the Print Server(P. 594)**

NOTE

Changing the Port Type and Number (Windows)

- If the machine is configured not to use LPD or RAW, or if the port number was changed, the settings on the computer may also have to be changed. **Changing the Port Type and Number(P. 195)**

If the IP Address of the Machine Is Changed after Installing the Printer Driver

- In Windows, the required action depends on the port you are using.
  - If you are using an MFNP port, the connection is maintained as long as the machine and computer belong to the same subnet, so no action is required on the computer.
  - If you are using a standard TCP/IP port, you must add a new port. **Adding a Port(P. 193)**

  If you do not know which port is being used, see the following:
  Viewing the Printer Port(P. 599)
- In macOS, you must re-register the machine on the Mac. For details about registering the machine, see the manual of the driver at the online manual site.
  https://oip.manual.canon/

* If you are using DHCP to automatically obtain the IP address of the machine, the IP address may be changed automatically.

Step 2: Using a Driver to Set the Department ID and PIN

When Department ID Management is enabled on the machine, set the Department ID and PIN by specifying the printer driver. **Setting the Department ID and PIN on a Computer(P. 301)**
* You can skip this step when not using Department ID Management. Proceed to Step 3.

Step 3: Configuring the Option Settings of the Machine Using the Driver

When optional equipment is installed to the machine, you must configure the option settings in the printer driver in advance.
In Windows, normally, the option settings are configured automatically when the printer driver is installed.
Use the following procedure to configure the option settings when the option settings have not been configured at installation, optional equipment has been installed after installation of the printer driver, or when using macOS.

When Using Windows(P. 191)
When Using macOS(P. 191)

■When Using Windows

Administrator privileges are required on each computer.

1 Log on to the computer using an administrator account.

2 Click [ ] (Start) ▶ [ ] (Settings) ▶ [Devices] ▶ [Printers & scanners].

➠ The [Printers & scanners] screen is displayed.

3 Click the printer driver of the machine ▶ [Manage] ▶ [Printer properties].

➠ The printer driver properties screen is displayed.

4 On the [Device Settings] tab, click [ ] in [Device information].

➠ The [Confirmation] screen is displayed.

5 Click [Yes].

➠ The option settings are obtained.

6 Click [OK] ▶ [OK].

➠ The settings are applied.

NOTE

When [Could not get device information.] Appears

- Specify the option settings manually. For more information on how to configure the option settings manually, click [Help] on the [Device Settings] tab to display help.

■When Using macOS

1 Click [ ] ▶ [System Preferences] ▶ [Printers & Scanners].

➠ The [Printers & Scanners] screen is displayed.

2 Select the machine, and click [Options & Supplies].

3 **On the [Utility] tab, click [Open Printer Utility].**

➡ The [Office Printer Utility] screen is displayed.

4 **Click [Printer Information].**

➡ The option information is obtained, and the [Printer Information] screen is displayed.

5 **Click [OK].**

➡ The settings are applied.

NOTE

When the Option Information Cannot Be Obtained

- Specify the option settings manually. For details about configuring the option settings manually, see the manual of the driver at the online manual site.
https://oip.manual.canon/

Configuring a Printer Port (Windows)

958J-049

If the IP address of the machine changed or a printer has been added in Windows, you may not be able to print from a computer. In this case, use the printer driver to add a new port.
In addition, you cannot print from a computer when the port type or port number of the printer driver differ from that of the machine setting. In this case, change the setting on the printer driver to match that of the machine.

Adding a Port(P. 193)
Changing the Port Type and Number(P. 195)

Adding a Port

The machine supports two types of ports: "MFNP Port" and "Standard TCP/IP Port." Select and add the port to use according to your usage environment.

MFNP Port (only for IPv4 environment)
You can only add this port when a printer driver is installed using the installer. The connection is maintained as long as the machine and computer belong to the same subnet, even if the IP address of the machine is changed.

Standard TCP/IP Port
This is a standard Windows port. You must add a new port every time the IP address of the machine is changed. Select this type of port when you cannot add an MFNP port.

Administrator privileges are required on each computer.

Required Preparations

- Prepare the following information and keep it close by. **Checking the Network Status and Settings(P. 97)**
  - When adding an MFNP port: the IP address or MAC address of the machine
  - When adding a standard TCP/IP port: the IP address or DNS name (host name) of the machine

1 Log on to the computer using an administrator account.

2 Click [ ] (Start) ▶ [ ] (Settings) ▶ [Devices] ▶ [Printers & scanners].

➡ The [Printers & scanners] screen is displayed.

3 Click the printer driver of the machine ▶ [Manage] ▶ [Printer properties].

➡ The printer driver properties screen is displayed.

4 On the [Ports] tab, click [Add Port].

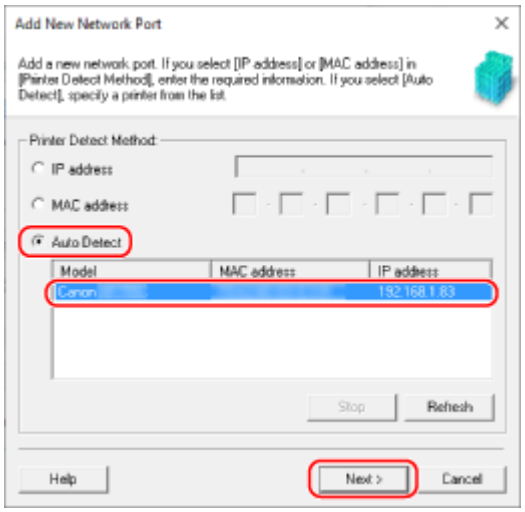
➡ The [Printer Ports] screen is displayed.

5 Add a new port.

■When Adding an MFNP Port

1 Select [Canon MFNP Port], and click [New Port].

2 Select [Auto Detect] and the machine, and click [Next].



If the machine is not displayed, click [Refresh]. If the machine is still not displayed, select [IP address] or [MAC address], enter the IP address or MAC address of the machine, and then click [Next].

3 Click [Add].

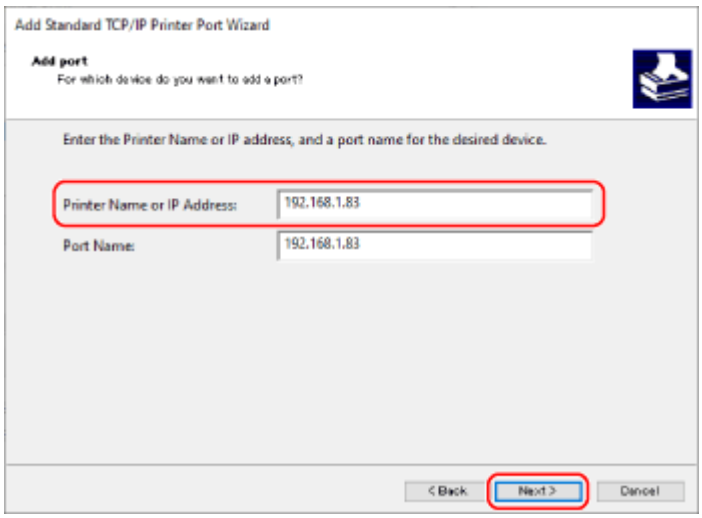
■When Adding a Standard TCP/IP Port

1 Select [Standard TCP/IP Port], and click [New Port].

➠ The [Add Standard TCP/IP Printer Port Wizard] screen is displayed.

2 Click [Next].

3 Enter the IP address or DNS name (host name), and then click [Next].



The port name is entered automatically, so change it, as needed.

When [Additional port information required] Appears

Take action following the instructions on the screen. To set [Device Type], select [Canon Network Printing Device with P9100] in [Standard].

6 Click [Finish].

➡ A new port is added, and the [Printer Ports] screen is displayed.

7 Click [Close] ▶ [Close].

➡ The settings are applied.

Changing the Port Type and Number

If the machine is configured not to use LPD or RAW, you must change the type of port on the computer to a protocol usable on the machine.
If the LPD or RAW port number was changed, the settings on the computer may have to be changed to match the settings on the machine.
* You do not need to change the port type or number on the computer for WSD ports.

Administrator privileges are required on each computer.

1 Log on to the computer using an administrator account.

2 Click [ ] (Start) ▶ [ ] (Settings) ▶ [Devices] ▶ [Printers & scanners].

➡ The [Printers & scanners] screen is displayed.

3 Click the printer driver of the machine ▶ [Manage] ▶ [Printer properties].

➡ The printer driver properties screen is displayed.

4 On the [Ports] tab, click [Configure Port].

➡ The [Configure Port] screen or [Configure Standard TCP/IP Port Monitor] screen is displayed.

5 Set the port type and number.

■For an MFNP Port

In [Protocol Type], select [RAW] or [LPR], and change the port number.

■For a Standard TCP/IP Port

In [Protocol Type], select [Raw] or [LPR].

- When [Raw] is selected, change the port number.
- When [LPR] is selected, enter "Ip" for [Queue Name].

6 Click [OK] ▶ [Close].

➡ The settings are applied.

Setting Up a Print Server

958J-04A

By setting up a print server on the network, you can speed up print operations on a computer, thereby reducing the load on the computer.
In Windows, you can install the printer driver via the print server to save you the trouble of downloading the printer driver to each computer on the network or using a CD/DVD-ROM.

To set up a print server, enable the print server to print from the machine, and then configure the settings for sharing the printer.
To use a print server in a domain environment, consult your network administrator.

Enabling the Print Server to Print from the Machine(P. 196)
Configuring the Settings for Sharing the Printer(P. 196)

Enabling the Print Server to Print from the Machine

Install the printer driver to the computer that will be the print server, and configure the settings according to your usage environment. **Preparing to Print from a Computer(P. 190)**

> **Using a Print Server While Using Department ID Management**
> You must install Canon Driver Information Assist Service when installing the printer driver. For more information, see the manual of the driver at the online manual site.
> **https://oip.manual.canon/**

Configuring the Settings for Sharing the Printer

Configure the printer sharing settings on the computer that will be the print server so that other computers on the network can use the print server.

When Using Windows(P. 196)
When Using macOS(P. 198)

■When Using Windows

Administrator privileges are required on the computer that will be the print server.

Required Preparations

- Check the operating system (32-bit or 64-bit) of the computer that will be the print server and the operating system of the computer that will use the print server (the client). **Viewing the System Information of the Computer(P. 595)**

1 Log on to the computer that will be the print server, using an administrator account.

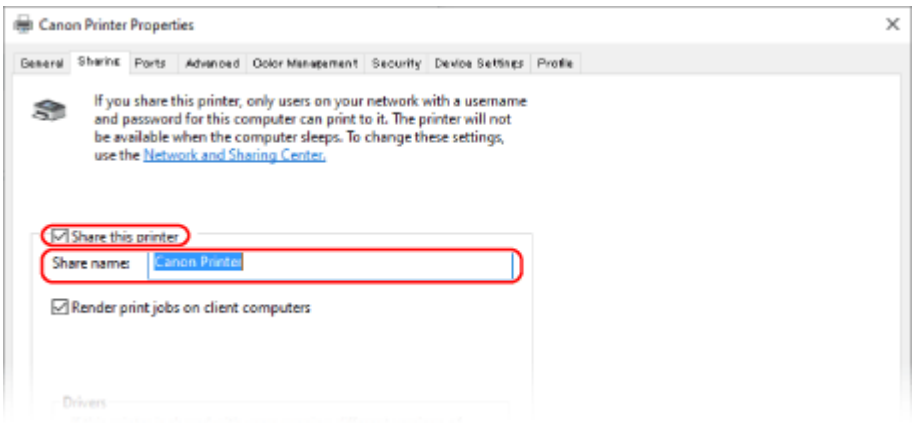
2 Click [ ] (Start) ▶ [ ] (Settings) ▶ [Devices] ▶ [Printers & scanners].

➡ The [Printers & scanners] screen is displayed.

3 Click the printer driver of the machine ▶ [Manage] ▶ [Printer properties].

➡ The printer driver properties screen is displayed.

4 On the [Sharing] tab, select the [Share this printer] checkbox, and enter a shared name.



5 Install an additional driver, as needed.

If the client computer has an operating system (32-bit or 64-bit) that differs from that of the print server, install an additional driver.

1 Click [Additional Drivers].

➡ The [Additional Drivers] screen is displayed.

2 Select the checkbox of the driver to be added, and click [OK].

- If the print server computer has a 32-bit operating system, select the [x64] (driver for 64-bit version) checkbox.
- If the print server computer has a 64-bit operating system, select the [x86] (driver for 32-bit version) checkbox.

3 Click [Browse], specify the folder where the driver is located, and click [OK].

When Specifying the Folder of the Downloaded Driver

- If the print server computer has a 32-bit operating system, specify the [x64] folder with the decompressed driver ▶ [Driver] folder.
- If the print server computer has a 64-bit operating system, specify the [32BIT] folder with the decompressed driver ▶ [Driver] folder.

When Specifying the Folder in the Supplied CD/DVD-ROM

- If the print server computer has a 32-bit operating system, specify [intdrv] in the CD/DVD-ROM ▶ [UFRII] ▶ [x64] ▶ [Driver] folder.
- If the print server computer has a 64-bit operating system, specify [intdrv] in the CD/DVD-ROM ▶ [UFRII] ▶ [32BIT] ▶ [Driver] folder.

4 Install the additional driver while following the instructions on the screen.

6 Click [OK].

➡ The settings are applied.

■When Using macOS

1 **Click [ ] ▶ [System Preferences] ▶ [Sharing].**

➡ The [Sharing] screen is displayed.

2 **Select the [Printer Sharing] checkbox.**

3 **In [Printers], select the checkbox of the machine.**

4 **Restrict the users that can use the print server, as needed.**

By default, all users can use the print server.
To enable specific users to use the print server, click [+] under [Users], and select the users who can use the print server.

5 **Close the [Sharing] screen.**

➡ The settings are applied.

Preparations for Using Universal Print

958J-04C

Configure the machine to be able to use Microsoft's cloud service, Universal Print, and register the machine to each computer that will be used to print.
You must be a registered user of Microsoft 365 and use Azure Active Directory.

Registering the Machine to Cloud Service(P. 200)
Registering the Machine to the Computer(P. 203)

Registering the Machine to Cloud Service

958J-04E

Register the machine to the cloud-based authentication and management service, Azure Active Directory, and set the members or groups that will use the machine.

Step 1: Registering the Machine to Azure Active Directory(P. 200)
Step 2: Specifying the Members and Groups to Use the Machine(P. 202)

Step 1: Registering the Machine to Azure Active Directory

Configure this setting using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Network Settings] ▶ [Universal Print Settings].

➡ The [Universal Print Settings] screen is displayed.

4 Click [Edit] in [Basic Settings].

5 Select the [Use Universal Print] checkbox, and enter the printer name.

- For the printer name, enter a name to identify the machine, using single-byte alphanumeric characters.
- To verify the certificate sent from the server, select the [Verify Server Certificate] checkbox.
  To add a Common Name (CN) to the verification items, select the [Add CN to Verification Items] checkbox as well.

6 Change Application ID and the URL of Azure Active Directory according to usage environment.

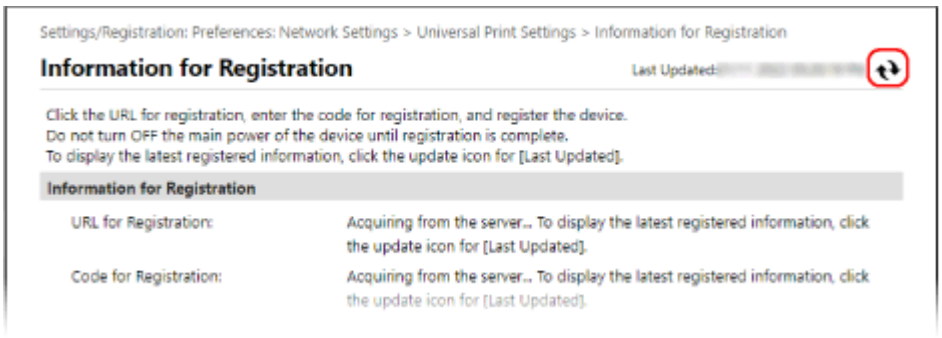
7 Click [OK].

➡ The [Universal Print Settings] screen is displayed.

8 Click [Register] in [Registration Status].

➡ The [Information for Registration] screen is displayed.

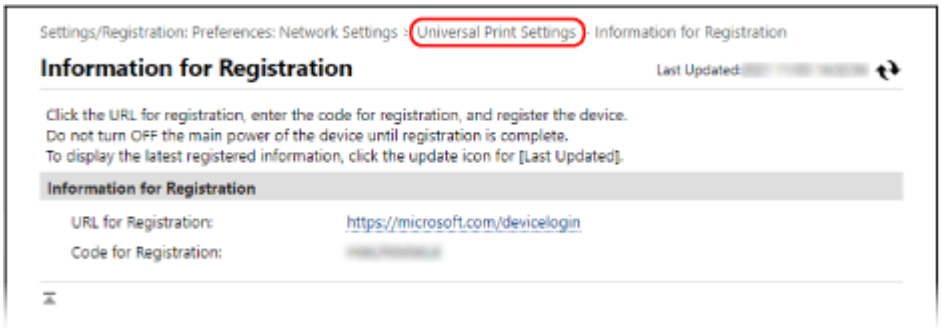
9 **Wait several seconds, and then click [↻].**



10 **Click the link displayed in [URL for Registration].**

11 **Register the machine according to the instructions on the screen.**

12 **Click [Universal Print Settings] at the top of the Remote UI screen.**



➠ The [Universal Print Settings] screen is displayed.

13 **Wait a few minutes, and then click [↻].**

➠ When registration is complete, [Registered] is displayed in [Registration Status].

14 **Log out from Remote UI.**

NOTE

Canceling the Registration

- Click [Unregister] on the [Universal Print Settings] screen ▶ [OK]. On the Azure Active Directory device management screen, select the machine and click [Delete].

Step 2: Specifying the Members and Groups to Use the Machine

1 **Display the Universal Print management screen of Azure Active Directory in a Web browser on a computer.**

2 **Select the machine, and click [Share Printer].**

To change the name of the machine displayed on the computer, change [Printer Share Name].

3 **Click [Members] ▶ [Add].**

4 **From the list, select the members and groups who will use the printer.**

Registering the Machine to the Computer

958J-04F

Register the machine, which is registered to Azure Active Directory, to the computer to be used for Universal Print.

Required Preparations

- Register the machine to Azure Active Directory. **Registering the Machine to Cloud Service(P. 200)**

1 **Click [ ] (Start) ▶ [ ] (Settings) ▶ [Accounts].**

➡ The [Your info] screen is displayed.

2 **Click [Access work or school] ▶ [Connect].**

3 **Follow the on-screen instructions to sign in to your Microsoft 365 account.**

4 **Click [Home] ▶ [Devices] ▶ [Printers & scanners].**

➡ The [Printers & scanners] screen is displayed.

5 **Click [Add a printer or scanner].**

➡ The printer list screen is displayed.

6 **Select the machine and click [Add device].**

➡ The machine is registered to the computer.

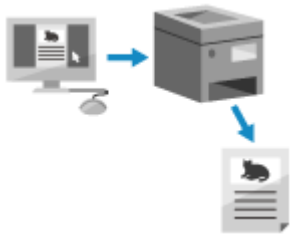
NOTE

When Using a Proxy Server

- To use Universal Print via a proxy server, you must configure the proxy settings on each computer. For details, contact the network administrator.

Printing from a Computer

958J-04H



You can print documents from a computer using a printer driver.
By changing the settings on the printer driver, you can print according to the document and purpose, such as by using 2-sided printing or adjusting the quality.

This section describes the general procedure for this operation. Check the manual of the application you are using for detailed operations on how to use it.

Required Preparations

- Install the printer driver on the computer, and configure the settings according to your usage environment. **Preparing to Print from a Computer(P. 190)**
- If the document or paper to print is a non-standard size, register the size to the printer driver. **Registering Non-standard Size Paper to the Computer (Custom Size)(P. 207)**

When Using Windows(P. 204)
When Using macOS(P. 205)

■When Using Windows

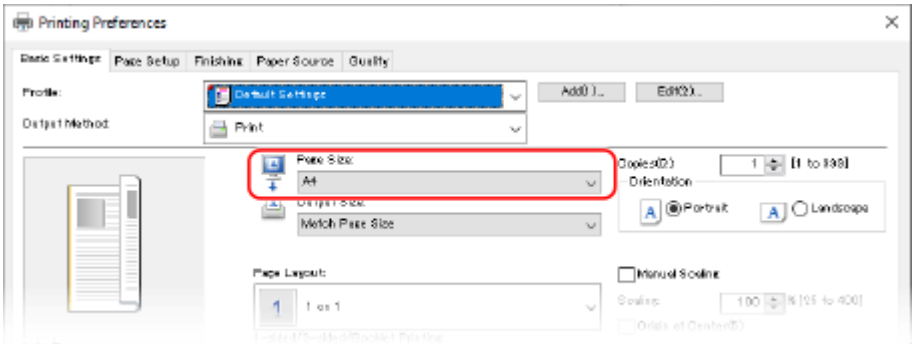
1 On your computer, open the document you want to print.

2 In the application used to open the document, select the command to print.

3 Select the printer driver of the machine, and click [Preferences] or [Properties].

➠ The [Printing preferences] screen of the printer driver is displayed.

4 In [Page Size] on the [Basic Settings] tab, select the paper size of the document.



When Printing on Paper of a Size Different from [Page Size]

In [Output Size], select the paper size to print on. The document is enlarged or reduced to match the paper size in [Output Size].

5 Configure the other print settings, as needed.

Configure 2-sided printing and adjust the image quality and other settings to suit your document and purpose. For more information, click [Help] on the [Printing preferences] screen to display help.

6 Click [OK], and click [Print] or [OK].

➠ Printing starts.

- You can cancel printing on the printing screen or from the printer icon in the Windows notification area. **Canceling Printing from a Computer(P. 215)**
- Use on the control panel to view the print job status and log. **Viewing the Print Job Status and Log(P. 217)**

When Using macOS

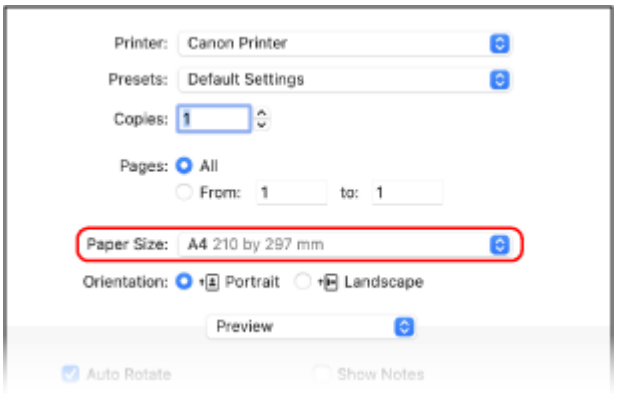
1 On your computer, open the document you want to print.

2 From the menu in the application used to open the document, click [Print].

➠ The printing dialog box appears.

3 In [Printer], select the printer driver of the machine.

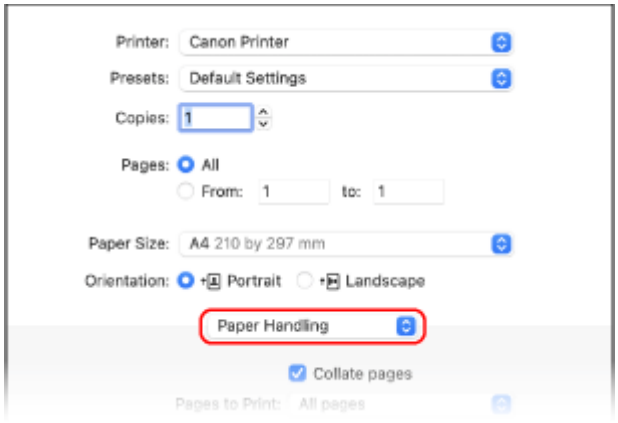
4 In [Paper Size] of the print options, select the paper size of the document.



If print options are not displayed, click [Show Details] in the printing dialog box.

When Printing on Paper of a Size Different from [Paper Size]

1 From the print options pop-up menu, select [Paper Handling].



2 Select the [Scale to fit paper size] checkbox, and in [Destination Paper Size], select the paper size to print on.
The document is enlarged or reduced to match the paper size in [Destination Paper Size].

5 Configure the other print settings, as needed.

Configure 2-sided printing and adjust the image quality and other settings to suit your document and purpose. For more information, click [?] in the printing dialog box to display help.

6 Click [Print].

➠ Printing starts.

- You can cancel printing from the printer icon in the Dock. **Canceling Printing from a Computer(P. 215)**
- Use  on the control panel to view the print job status and log. **Viewing the Print Job Status and Log(P. 217)**

Registering Non-standard Size Paper to the Computer (Custom Size)

958J-04J

Custom size paper is non-standard size paper whose side lengths can be freely defined.
If the document or paper to print is a non-standard size, you must register the size to the printer driver in advance.

When Using Windows(P. 207)
When Using macOS(P. 207)

■When Using Windows

1 Click [ ] (Start) ▶ [ ] (Settings) ▶ [Devices] ▶ [Printers & scanners].

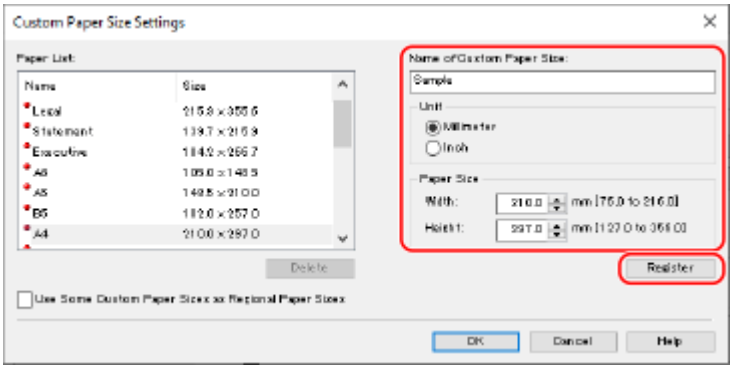
➡ The [Printers & scanners] screen is displayed.

2 Click the printer driver of the machine ▶ [Manage] ▶ [Printing preferences].

➡ The [Printing preferences] screen of the printer driver is displayed.

3 On the [Page Setup] tab, click [Custom Paper Size].

4 Enter the custom size paper name and paper size, and click [Register].



5 Click [OK] ▶ [OK].

➡ The custom size paper is registered.

■When Using macOS

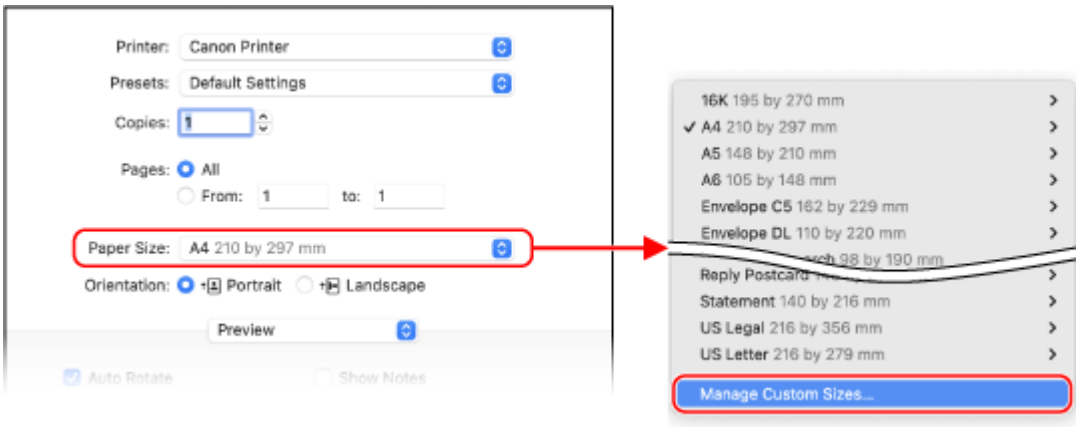
1 On your computer, open the document you want to print.

2 From the menu in the application used to open the document, click [Print].

➠ The printing dialog box appears.

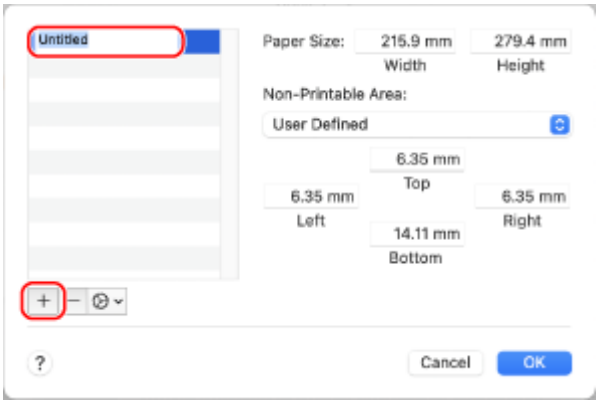
3 In [Printer], select the printer driver of the machine.

4 In [Paper Size] of the print options, select [Manage Custom Sizes].



If print options are not displayed, click [Show Details] in the printing dialog box.

5 Click [+] at the bottom left, double-click [Untitled], and enter the custom size paper name.



6 Enter the paper size, and click [OK].

➠ The custom size paper is registered.

Printing a Document Secured with a PIN (Secure Print)

958J-04K

With Secure Print, you can set a PIN to a document on the computer and send that document to the machine to be printed. Printing is performed after that PIN is entered on the machine.
Secure Print can prevent unattended printed documents and information theft. You can also confirm the print data before printing to prevent unwanted printing.

The print data sent with a PIN (secure data) is temporarily saved in the memory of the machine. If printing is not performed after a set period of time, the secure data is deleted automatically from the memory, and you can no longer print the data.

Step 1: Sending Secure Data from a Computer(P. 209)
Step 2: Printing Secure Data by Entering a PIN or Password(P. 211)

NOTE

- You can change the period of time that the secure data is saved. **Changing the Time Period That Print Data with a PIN (Secure Data) Is Saved(P. 212)**

Step 1: Sending Secure Data from a Computer

You can send secure data from a computer to the machine using a printer driver.

In Windows, you can send encrypted secure data (using Encrypted Secure Print), thereby preventing eavesdropping during communication. Secure data is encrypted with an alphanumeric password instead of a PIN.
For details about sending secure data using the Encrypted Secure Print function, see the manual of the driver at the online manual site.
https://oip.manual.canon/

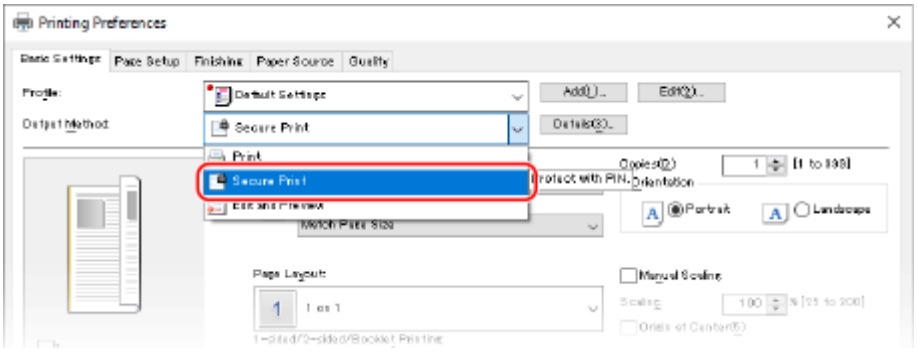
When Using Windows(P. 209)
When Using macOS(P. 210)

When Using Windows

This section describes how to send regular secure data.

1 Display the [Printing preferences] screen of the printer driver. Printing from a Computer(P. 204)

2 In [Output Method], select [Secured Print].



➡ The [Information] screen is displayed.

3 **Click [Yes].**

➡ The [Secured Print Details] screen is displayed.

4 **Enter the user name and PIN, and click [OK].**

➡ The [Printing preferences] screen reappears.

5 **Click [OK], and click [Print] or [OK].**

➡ The secure data is sent to the machine.

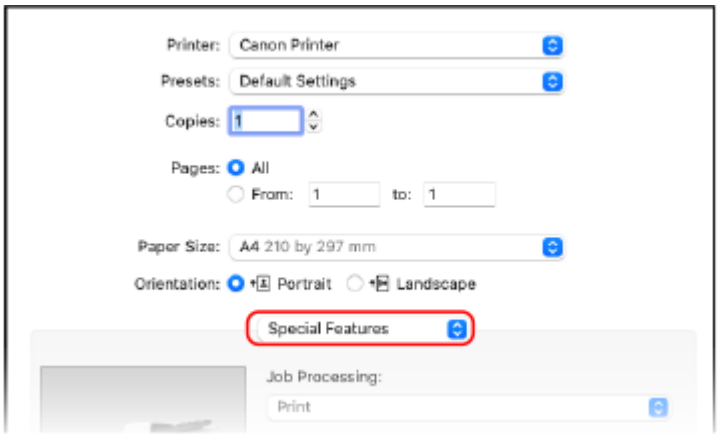
■When Using macOS

Required Preparations

- Enable Secure Print in the settings of the printer registered to the computer. **Enabling Secure Print in a Printer Driver (macOS)(P. 213)**

1 **Display the printing dialog box, and select the printer driver of the machine.** **Printing from a Computer(P. 204)**

2 **From the print options pop-up menu, select [Special Features].**



If print options are not displayed, click [Show Details] in the printing dialog box.

3 **In [Job Processing], select [Secured Print].**

4 **Click [Print].**

➡ The [Secured Print] screen is displayed.

5 **Enter the document name, user name, and PIN, and click [OK].**

➡ The secure data is sent to the machine.

Step 2: Printing Secure Data by Entering a PIN or Password

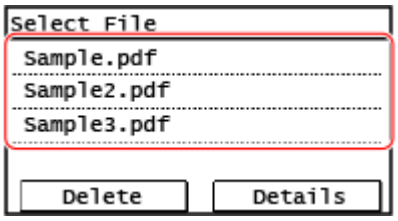
Print the secure data sent to the machine. If the secure data is left without printing, it will remain in the memory of the machine, and you may not be able to print other data. Print the sent secure data as soon as possible.

1 On the control panel, press [Secure Print] in the [Home] screen. [Home] Screen(P. 113)

➡ The Secure Print screen is displayed.

If the screen for selecting the user is displayed, select your user name.

2 Select the secure data to print.



3 Enter the PIN and press [Apply].

➡ Printing starts.

- To cancel printing, use the control panel to cancel printing. **Canceling Printing with the Control panel(P. 216)**
- You can view the print job status and log on the [Status Monitor] screen. **Viewing the Print Job Status and Log(P. 217)**

NOTE

- You can use the following procedure to view the memory usage of saved secure data.

on the control panel ▶ [Device Status] ▶ [Secure Print Memory Usage].

Changing the Time Period That Print Data with a PIN (Secure Data) Is Saved

958J-04L

You can change the period of time until the print data that was sent with a PIN or password (secure data) and is temporarily saved in the memory of the machine is deleted.

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Function Settings] to configure the settings. **[Secure Print](P. 428)**
Administrator privileges are required.

1 **Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)**

3 **Click [Secure Print Settings] [Edit].**

➡ The [Edit Secure Print Settings] screen is displayed.

4 **In [Secure Print Deletion Time], enter the period of time the secure data is saved (until it is deleted), and click [OK].**

➡ The settings are applied.

5 **Log out from Remote UI.**

Enabling Secure Print in a Printer Driver (macOS)

958J-04R

To send secure data from a macOS computer to the machine, you must enable Secure Print in the settings of the printer registered to the computer.

1 Click [ ] ▶ [System Preferences] ▶ [Printers & Scanners].

➡ The [Printers & Scanners] screen is displayed.

2 Select the machine, and click [Options & Supplies].

3 On the [Options] tab, select the [Secured Print] checkbox, and click [OK].

➡ The settings are applied.

Printing with Universal Print

958J-04S

Universal Print is a Microsoft service that enables you to print documents via the cloud. There is no need to install a printer driver to print documents from your computer. You can also print documents from a remote location as long as your computer is connected to the Internet.

To use Universal Print, you must be a registered user of Microsoft 365 and use Azure Active Directory.

Required Preparations

- Register the machine to Azure Active Directory, and set the members or groups that will use the machine. **Registering the Machine to Cloud Service(P. 200)**
- To each computer that will use Universal Print, register the machine that is registered to Azure Active Directory. **Registering the Machine to the Computer(P. 203)**

For details about how to print with Universal Print and the supported operating systems, see the Microsoft website.
https://docs.microsoft.com/

Canceling Printing

958J-04U

You can cancel printing from a computer. To cancel printing after the print data has been sent to the machine, use the control panel or Remote UI.

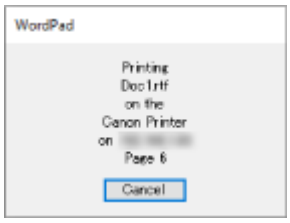
Canceling Printing from a Computer(P. 215)
Canceling Printing with the Control panel(P. 216)
Canceling Printing with Remote UI(P. 216)

Canceling Printing from a Computer

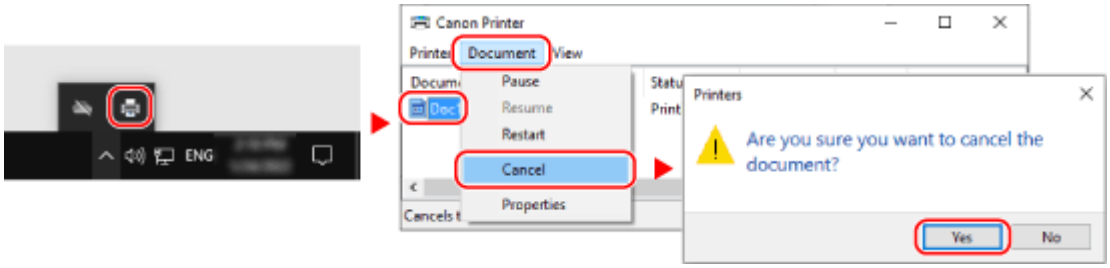
When Using Windows(P. 215)
When Using macOS(P. 215)

■When Using Windows

If the printing screen is displayed, click [Cancel].



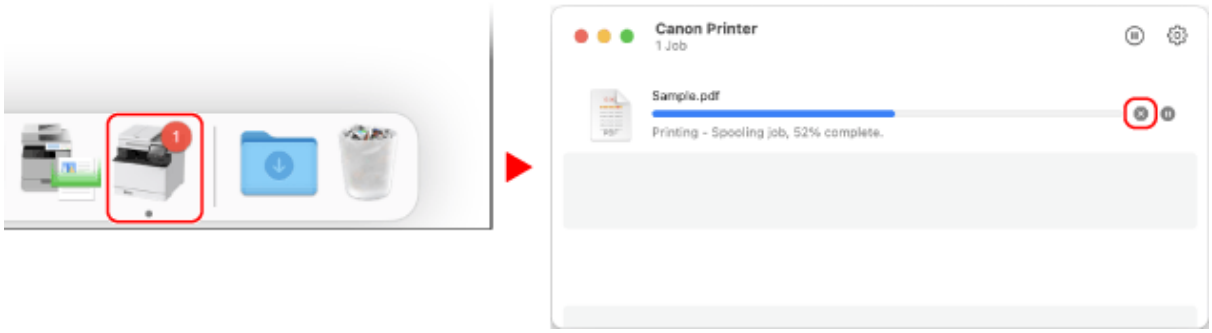
If the above screen is not displayed, double-click the printer icon in the Windows notification area, select the document to cancel, and click [Document] ▶ [Cancel] ▶ [Yes].



If the printer icon is not displayed in the Windows notification area or the document to be canceled is not displayed, the print data is sent to the machine after being processed on the computer.
In this case, cancel printing using the control panel of the machine or Remote UI. **Canceling Printing with the Control panel(P. 216)**

■When Using macOS

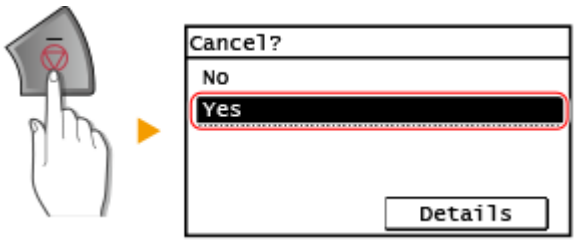
Click the printer icon in the Dock, select the document to cancel, and click [⊗].



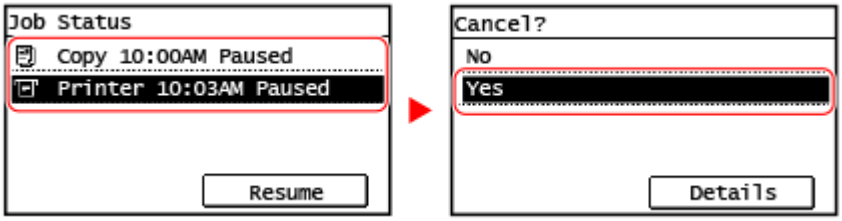
Canceling Printing with the Control panel

You can cancel printing using the procedure below.

On the control panel, press ▶ [Yes].



If the job list screen is displayed, select the job to cancel, and press [Yes].



NOTE

Viewing Information with the [Status Monitor] Screen

- You can check the print job status and cancel a print job with the following procedure.

  on the control panel ▶ [Copy/Print Job] ▶ [Job Status] ▶ select the job to cancel on the [Print Job Status] screen ▶ [Cancel] ▶ [Yes]

Canceling Printing with Remote UI

You can cancel printing with [Status Monitor/Cancel] ▶ [Job Status] screen in [Print] of Remote UI. **Checking Usage and Logs with Remote UI(P. 374)**

Viewing the Print Job Status and Log

958J-04W

Processes handled by the machine, including printing, are managed as jobs. By checking the status and log of jobs, you can determine whether a print job was performed correctly and the cause of errors that occurred.
* If the log is set to not be displayed, you can only check the print job status. **[Display Job Log](P. 464)**

This section describes how to view this information using the control panel.
You can also check this information using Remote UI from a computer. **Checking Usage and Logs with Remote UI(P. 374)**

1 Press on the control panel. Control Panel(P. 21)

➡ The [Status Monitor] screen is displayed.

2 Press [Copy/Print Job].

3 Check the job status or the job log.

■Viewing the Print Job Status

1 Press [Job Status].

➡ A list of jobs being processed or waiting to be processed is displayed.

2 Select a job to view its details.

➡ The job details are displayed.

3 View the file name, user name, and other information.
Depending on the type of characters being used, the file name and user name may not be correctly displayed.

■Viewing the Print Job Log

1 Press [Print Job Log].

➡ A list of jobs being processed or waiting to be processed is displayed.

2 Select a job to view its details.

➡ The job details are displayed.

3 View the file name, user name, and other information.
Depending on the type of characters being used, the file name and user name may not be correctly displayed.

If Print Job Log Displays Error Information

Printing was canceled, or an error occurred.
If a three-digit number starting with "#" (error code) is displayed, you can check the cause and solution using the error code. **An Error Code Is Displayed(P. 578)**

Scanning

Scanning 219
Preparations for Scanning 221
Preparing to Save Scanned Data to a Computer 222
Registering the Machine as a WSD Scanner with a Computer (Windows) 224
Preparing to Send Scanned Data by E-mail 225
Configuring the Basic Settings for Sending E-mail (Send Function Setting Tool) 226
Using the Downloaded Send Function Setting Tool 228
Configuring Detailed Information of the E-mail Server (Remote UI) 229
Preparing to Save Scanned Data to a Shared Folder 231
Registering a Shared Folder to the Address Book (Send Function Setting Tool) 232
Scanning (Saving to a Computer) 234
Scanning (Sending by E-mail) 236
Scanning (Saving to a Shared Folder) 239
Scanning from a Computer (Saving to a Computer) 241
Starting MF Scan Utility 245
Scan Settings 246
Canceling Scanning 250
Checking the Send and Save Status and Log of Scanned Data 251

Scanning

958J-04X

You can scan documents, photos, and other printed material ("originals") and convert them into data. This converted data ("scanned data") can be saved as an image or PDF file and sent using the following methods.

Saving to a Computer

Save scanned data to a computer connected to the machine.
You can configure the scan settings and save scanned data to a computer using the scanner driver and application installed on the computer.

The following three methods are available.

Scanning from the Machine



Scan using the format and save destination preset with the application.
This method saves scanned data to a computer by just operating the machine and is convenient when scanning multiple originals.
Preparing to Save Scanned Data to a Computer(P. 222)
Scanning (Saving to a Computer)(P. 234)

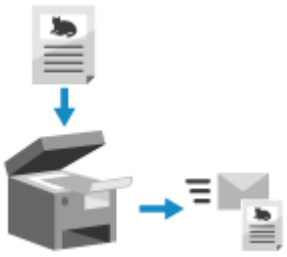
Scanning from a Computer



Scan using the format and save destination specified when scanning.
This method lets you see the scanned data immediately on the computer screen so you can check the image quality and make adjustments.
Preparing to Save Scanned Data to a Computer(P. 222)
Scanning from a Computer (Saving to a Computer)(P. 241)

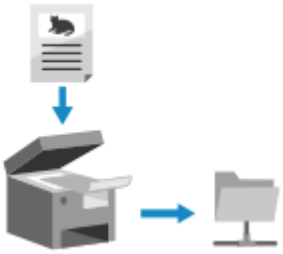
* In macOS, you can use the AirPrint function, which is standard in the OS, to scan data from a computer without having to install a scanner driver or application. **Using AirPrint Application to Print and Scan Data(P. 284)**

Sending by E-mail



You can send scanned data by e-mail as an attachment.
Just like when sending a regular e-mail, you can add a subject and message and specify multiple destinations.
Preparing to Send Scanned Data by E-mail(P. 225)
Scanning (Sending by E-mail)(P. 236)

Saving to a Shared Folder



You can save scanned data to a shared folder on a computer.
This is convenient for sharing the scanned data of a paper document on a network.

Preparing to Save Scanned Data to a Shared Folder(P. 231)
Scanning (Saving to a Shared Folder)(P. 239)

Preparations for Scanning

958J-04Y

You must set the scanned data save destination and sending method before scanning.

Preparing to Save Scanned Data to a Computer(P. 222)
Preparing to Send Scanned Data by E-mail(P. 225)
Preparing to Save Scanned Data to a Shared Folder(P. 231)

Preparing to Save Scanned Data to a Computer

958J-050

Make the following preparations for each computer to which to save scanned data.

Step 1: Installing the Driver and Application to the Computer(P. 222)
Step 2: Registering the Machine with a Computer(P. 222)

NOTE

When Using WSD (Windows)

- Web Services on Devices (WSD) is a protocol for automatic detection of printers and scanners on a network in a Windows environment. You can scan originals using WSD without installing a scanner driver.
- Make the following preparations to scan originals using WSD:
  - Set the machine to enable use of WSD to scan **Configuring LPD, RAW, or WSD(P. 354)**
  - Register the machine with the computer to which to save scanned data **Registering the Machine as a WSD Scanner with a Computer (Windows)(P. 224)**

Step 1: Installing the Driver and Application to the Computer

Install the following driver and application on the computer to which to save scanned data. **Installing Software and Drivers to the Computer(P. 100)**

ScanGear MF
This scanner driver is required to save scanned data to a computer.
When scanning with a computer, you can use this driver to adjust the scan settings while checking the results.

MF Scan Utility
This is the application for scanning.
Use this to easily scan photos and documents from a computer. You can also change the scan settings for when performing scanning operations with the machine.

Step 2: Registering the Machine with a Computer

For both of the following cases, you must register the machine with the computer used as the save destination.

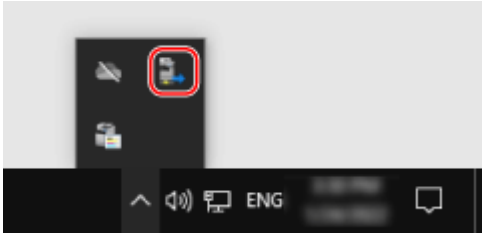
- Performing scanning operations with the machine
- Setting a computer connected to a network as the save destination

You do not have to register the machine when scanning from a computer or saving scanned data to a USB-connected computer.

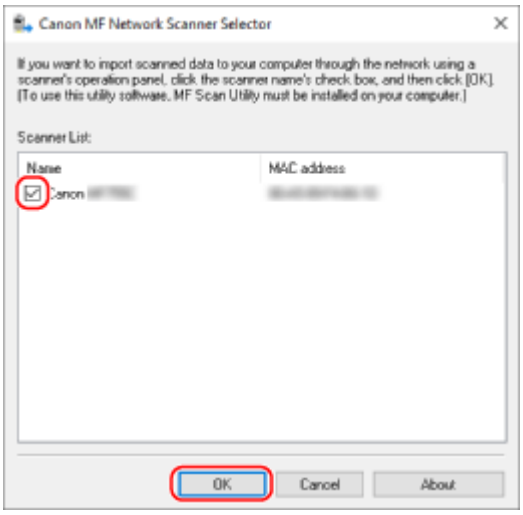
When Using Windows(P. 222)
When Using macOS(P. 223)

■When Using Windows

1 Click [ ] (Canon MF Network Scanner Selector) displayed in the Windows notification area.



2 Select the checkbox for this machine, and click [OK].



■When Using macOS

Use MF Scan Utility to register the machine.

1 From the OS Applications folder, double-click [Canon MF Utilities] ▶ [Canon MF Scan Utility].

➠ MF Scan Utility starts.

2 Click [Canon MF Scan Utility] ▶ [Network Scanner Settings].

3 Click [+] at the bottom left.

4 Add the machine on each tab according to the connection method.

■Connecting with Bonjour

On the [Bonjour] tab, select the Bonjour name, and then click [Add].

■Connecting with TCP/IP

On the [IP] tab, enter the IP address of the machine, and then click [Add].

5 Restart MF Scan Utility.

➠ The added machine is displayed in [Product Name] on the [Canon MF Scan Utility] main dialog box.

Registering the Machine as a WSD Scanner with a Computer (Windows)

958J-051

Register the machine as a WSD scanner with each computer to which to save scanned data.

1 **On the computer, click [ ] (Start) ▶ [ ] (Settings) ▶ [Devices] ▶ [Printers & scanners].**

➡ The [Printers & scanners] screen is displayed.

2 **Click [Add printers & scanners].**

➡ A list of printers is displayed.

3 **Select the machine and click [Add device].**

➡ The machine is registered with the computer.

NOTE

If the Machine Is Not Displayed in the List of Printers

- There may be a problem with the network settings of the computer, such as the firewall settings. For details, contact the network administrator.

Preparing to Send Scanned Data by E-mail

958J-052

Configure the settings of the e-mail server to be used to send e-mail. Depending on the settings, use either of the following methods to configure the settings from a computer. You cannot use the control panel to configure the settings.

Configuring the Basic Settings for Sending E-mail (Windows)

Configure the basic settings of the e-mail server. You can also register destination e-mail addresses to One-Touch in the Address Book. Use Send Function Setting Tool to configure the settings.

Configuring the Basic Settings for Sending E-mail (Send Function Setting Tool)(P. 226)

* One-Touch is a list of destinations that can be recalled with [] in the Address Book or [One-Touch] in the [Home] Screen.

Address Book Function(P. 157)
[Home] Screen(P. 113)

Configuring Detailed Information of the E-mail Server

In addition to the basic information of the e-mail server, you can also configure POP authentication before sending and encryption communication settings. Use Remote UI to configure the settings.

Configuring Detailed Information of the E-mail Server (Remote UI)(P. 229)

* Register destination e-mail addresses to the Address Book as needed. **Registering Destinations to the Address Book (Control Panel)(P. 159)** / **Registering Destinations to the Address Book (Remote UI)(P. 165)**

Configuring the Basic Settings for Sending E-mail (Send Function Setting Tool)

958J-053

From a computer, configure the basic settings of the e-mail server using the Send Function Setting Tool. You can also register destination e-mail addresses to One-Touch in the Address Book.
* One-Touch is a list of destinations that can be recalled with [ ] in the Address Book or [One-Touch] in the [Home] Screen.
Address Book Function(P. 157)
[Home] Screen(P. 113)

Administrator privileges are required. The machine must be restarted to apply the settings.

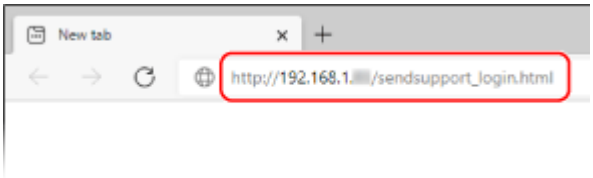
If the SMTP port number of the e-mail server is other than 25, you must change the port number setting. **Changing the Port Number(P. 312)**

Required Preparations

- Connect the computer you are using to configure the settings to the machine over a network.
- Prepare the following information and keep it close by.
  - IP address of the machine **Checking the Network Status and Settings(P. 97)**
  - E-mail address to register as a destination
  - Setting information of the e-mail server (SMTP server name, authentication setting, user name and password to be used for authentication)
    * For details about the setting information, contact your provider or network administrator. Depending on the usage environment, you can also refer to the information set in the computer e-mail software.

1 From a Web browser on a computer, access the following URL.

http://<IP address of this machine>/sendsupport_login.html



➡ The [Start Settings] screen for the Send Function Setting Tool is displayed.

You can also use the downloaded file to start the Send Function Setting Tool. **Using the Downloaded Send Function Setting Tool(P. 228)**

■When the [Start Settings] Screen of Send Function Setting Tool Is Not Displayed

When a message such as [Cannot continue the settings because the function to perform settings for the device is restricted.] is displayed and the [Start Settings] screen is not displayed, see the following:
Cannot Access Remote UI or Send Function Setting Tool(P. 558)

2 Click [Start].

If the login screen appears, enter the System Manager ID and PIN, and then click [Logon].

3 Click [Send to E-mail Settings].

➠ The [Send to E-mail Settings] screen is displayed.

If the [Enter Address Book Password] screen appears, enter the PIN, and then click [OK].

4 For [Registration], select a One-Touch number, and enter the name to be displayed in the Address Book.

Previously registered One-Touch numbers are not displayed.

5 For [Send Destination Settings], enter the e-mail address to be registered.

6 For [SMTP Server Settings], configure the e-mail server information.

[SMTP Server]

Enter the SMTP server name (the host name or IP address) to be used for sending e-mail, using single-byte alphanumeric characters.

Input example: Host name
smtp.example.com

[SMTP Authentication]

When using SMTP authentication, select [Set], and enter the user name and password for authentication using single-byte alphanumeric characters.

7 Click [Next] ▶ [Register].

8 Restart the machine. Restarting the Machine(P. 107)

➠ The settings are applied.

Using the Downloaded Send Function Setting Tool

958J-054

You can use the downloaded Send Function Setting Tool to automatically search for and start the configuration of the machine.

Required Preparations

- Download the Send Function Setting Tool from the Canon website for your country/region.
  https://global.canon/en/support/
- Double-click the downloaded file to extract the data.

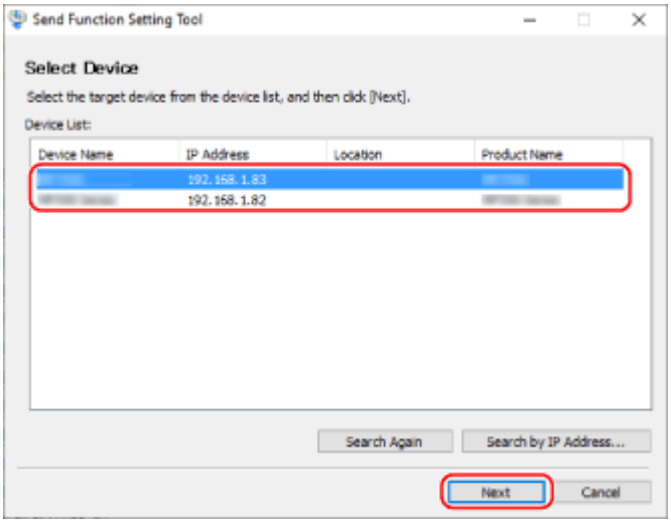
1 In the extracted Send Function Setting Tool folder, open [SendSetting] ▶ [english], and double-click [SendSetting.exe].

➠ A description of the Send Function Setting Tool is displayed.

2 Click [Next].

If a dialog box to cancel the Windows firewall appears, click [Yes].

3 From [Device List], select the machine, and click [Next].



If the machine is not displayed in [Device List], click [Search Again]. If the machine is still not displayed, click [Search by IP Address], enter the IP address of the machine, and then click [OK].

4 Click [OK].

➠ The [Start Settings] screen of the Send Function Setting Tool is displayed.

Configuring Detailed Information of the E-mail Server (Remote UI)

958J-055

Use Remote UI from a computer to configure the information of the e-mail server to use for sending scanned data by e-mail. You can also configure POP authentication before sending, SMTP authentication, and encryption communication settings.

Administrator privileges are required. The machine must be restarted to apply the settings.

If the SMTP port number of the e-mail server is other than 25 and/or the POP3 port number is other than 110, you must change the port number setting. **Changing the Port Number(P. 312)**

Required Preparations

- Connect the computer you are using to configure the settings to the machine over a network.
- Prepare the following information and keep it close by.
  - IP address of the machine **Checking the Network Status and Settings(P. 97)**
  - E-mail address of the machine
  - Setting information of the e-mail server (SMTP/POP3 server name, authentication setting, user name and password to be used for authentication, encrypted communication setting)
    * For details about the setting information, contact your provider or network administrator. Depending on the usage environment, you can also refer to the information set in the computer e-mail software.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [TX Settings] ▶ [E-Mail Settings] ▶ [Edit].

➡ The [Edit E-Mail Settings] screen is displayed.

4 Enter the basic settings of the e-mail server.

[SMTP Server]

Enter the SMTP server name (the host name or IP address) to be used for sending e-mail, using single-byte alphanumeric characters.

Input example: Host name
smtp.example.com

[E-Mail Address]

Enter the e-mail address of the machine using single-byte alphanumeric characters.

[POP Server]

When using POP authentication before sending (POP before SMTP), enter the POP3 server name (the host name or IP address) using single-byte alphanumeric characters.

Input example: Host name
pop.example.com

[User Name]

Enter the user name used for authenticating the POP3 server using single-byte alphanumeric characters.

[Set/Change Password]

To set a password to use when authenticating the POP3 server, select this checkbox, and enter the password using single-byte alphanumeric characters.

5 Configure the authentication and encryption settings for sending e-mail according to your usage environment.

■When using POP authentication (POP before SMTP) before sending

Select the [Use POP Authentication Before Sending] checkbox.
To use APOP authentication to encrypt password at authentication, also select the [Use APOP Authentication] checkbox.

■When using SMTP authentication

Select the [Use SMTP Authentication (SMTP AUTH)] checkbox, and enter the user name to be used for SMTP authentication using single-byte alphanumeric characters.
To set a password to use for SMTP authentication, select the [Set/Change Password] checkbox, and enter the password using single-byte alphanumeric characters.

■When encrypting communication with the e-mail server

Select the [Use TLS for SMTP TX] and/or [Use TLS for POP] checkboxes.
Configure whether to verify a certificate for TLS encryption communication or whether to add a common name (CN) to the verification items.

6 Click [OK].

By clicking [Check SMTP Connection] or [Check POP Connection], you can check the connection with the SMTP or POP3 server using the current settings.

7 Restart the machine. Restarting the Machine(P. 107)

➠ The settings are applied.

Preparing to Save Scanned Data to a Shared Folder

958J-056

- **Create a shared folder as a save location of the scanned data as needed. Creating a Shared Folder(P. 592)**

- **Register the shared folder information to the Address Book**

  Register the information for accessing the shared folder to the Address Book of the machine. Register from a computer using either of the following methods. You must register each shared folder that serves as a save location. You cannot use the control panel to register this information.

  Using the Send Function Setting Tool (Windows)
  Register the shared folder information to One-Touch in the Address Book.
  Registering a Shared Folder to the Address Book (Send Function Setting Tool)(P. 232)

  Using Remote UI
  Register the shared folder information to One-Touch in the Address Book or Coded Dial. **Registering Destinations to the Address Book (Remote UI)(P. 165)**

  * One-Touch is a list of destinations that can be recalled with [ ] in the Address Book or [One-Touch] in the [Home] Screen.
  Address Book Function(P. 157)
  [Home] Screen(P. 113)
  * Coded Dial is a destination with a three-digit number that can be directly recalled from the Address Book.

Registering a Shared Folder to the Address Book (Send Function Setting Tool)

958J-057

Use the Send Function Setting Tool from a computer to register the shared folder information to One-Touch in the Address Book.
* One-Touch is a list of destinations that can be recalled with [ ] in the Address Book or [One-Touch] in the [Home] Screen.
Address Book Function(P. 157)
[Home] Screen(P. 113)

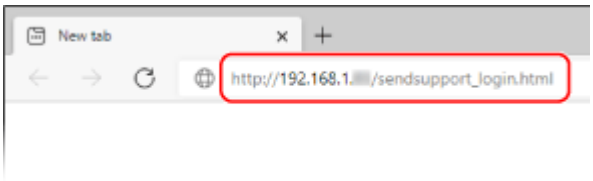
Administrator privileges are required. The machine must be restarted to apply the settings.

Required Preparations

- Connect the computer you are using to configure the settings to the machine over a network.
- Prepare the following information and keep it close by.
  - IP address of the machine **Checking the Network Status and Settings(P. 97)**
  - Name or IP address of the computer with the shared folder
    Viewing the System Information of the Computer(P. 595)
    Viewing the Network Connection Information of the Computer(P. 597)
  - Path to the shared folder
  - User name and password used for accessing the shared folder (if Restrict Access is set)

1 From a Web browser on a computer, access the following URL.

http://<IP address of this machine>/sendsupport_login.html



➡ The [Start Settings] screen of the Send Function Setting Tool is displayed.

You can also use the downloaded file to start the Send Function Setting Tool. **Using the Downloaded Send Function Setting Tool(P. 228)**

2 Click [Start].

If the login screen appears, enter the System Manager ID and PIN, and then click [Logon].

3 Click [Store to Shared Folder Settings].

➡ The [Store to Shared Folder Settings] screen is displayed.

If the [Enter Address Book Password] screen appears, enter the PIN, and then click [OK].

4 **For [Registration], select a One-Touch number, and enter the name to be displayed in the Address Book.**

Previously registered One-Touch numbers are not displayed.

5 **Enter the shared folder information in [Store Destination Settings].**

[Computer Name of Store Destination]

Enter the name or IP address of the computer with the shared folder.

* When using a DNS server, you can enter the host name or FQDN instead of the computer name or IP address.

[Shared Folder Name on Store Destination Computer]

Enter the path to the shared folder. Use "\" as a separator.

Input example: when the shared folder path is C:\users\public\share
users\public\share

If there is no folder at the entered path, a folder with the entered name is created when scanned data is saved for the first time.

* However, if there is no parent folder, or you do not have write permission to the parent folder, a sending error occurs without a folder being created.

6 **In [Status of Settings for Shared Folder], specify whether to enable Restrict Access for the shared folder.**

If Restrict Access is enabled for the shared folder, select [Set], and enter the user name and password used for accessing the shared folder using single-byte alphanumeric characters.

7 **Click [Next] ▶ [Register].**

8 **Restart the machine.** **Restarting the Machine(P. 107)**

➠ The settings are applied.

Scanning (Saving to a Computer)

958J-058



You can scan an original and save the scanned data to a computer connected to the machine. By just operating the machine, you can save scanned data to a computer. The original is scanned and the data is saved according to the settings of MF Scan Utility installed on the computer.

Required Preparations

- Make preparations such as installing the scanner driver (ScanGear MF) and application (MF Scan Utility) to the computer used as the save location. **Preparing to Save Scanned Data to a Computer(P. 222)**
- If the ScanGear MF screen appears on the computer used as the save location, close the screen.

1 Place the original. Placing Originals(P. 127)

2 On the control panel, press [Scan] in the [Home] screen. [Home] Screen(P. 113)

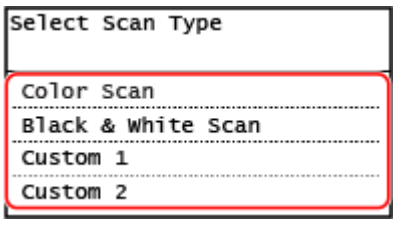
➡ The scan type selection screen is displayed.

3 Press [Computer].

➡ The screen to select the computer to be used as the save location is displayed.
When you are using the machine only with a USB-connected computer, the scan screen is displayed. Proceed to step 5.

4 Select the computer to be used as the save location.

5 Select the scan setting, and press on the control panel.



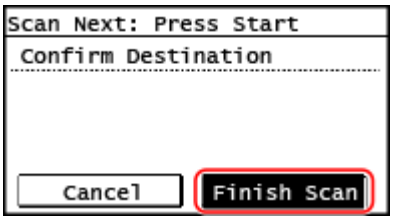
➡ Scanning of the original starts.

- The scanned data format, save location on the computer, and other settings are set for each scan setting. The original is scanned according to the selected scan setting.
- To cancel scanning, press [Cancel] ▶ [Yes]. **Canceling Scanning(P. 250)**
- When scanning is completed, the destination folder is displayed on the screen of the selected computer.

* By default, a subfolder with the scanning date is created in the [Documents] folder (Windows) or the [Pictures] folder (macOS), and the scanned data is saved to that folder.

■When [Scan Next: Press Start] appears

When an original is placed on the platen glass and is scanned, the screen for scanning additional originals is displayed.
To continue scanning originals, place them on the platen glass, and press on the control panel.
Press [Finish Scan] to save the scanned data.



* If the size of the original is different, part of the image may be missing, or the image may be scanned smaller.

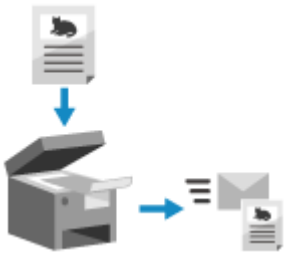
NOTE

Checking or Changing Scan Setting or Save Location

- You can check and change the scan setting selected in step 5 by using the MF Scan Utility on the computer used as the save location. **Starting MF Scan Utility(P. 245)**

Scanning (Sending by E-mail)

958J-059



You can scan an original and send the scanned data by e-mail as an attachment. Just like when sending a regular e-mail, you can add a subject and message and specify multiple destinations.

Required Preparations

- On the machine, configure the settings of the e-mail server to be used to send e-mail. **Preparing to Send Scanned Data by E-mail(P. 225)**

1 Place the original. Placing Originals(P. 127)

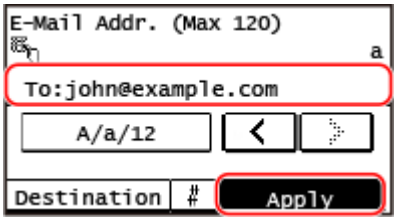
2 On the control panel, press [Scan] in the [Home] screen. [Home] Screen(P. 113)

➠ The scan type selection screen is displayed.

3 Press [E-Mail].

➠ The scan screen is displayed.

4 Specify the destination. Specifying Destinations(P. 170)

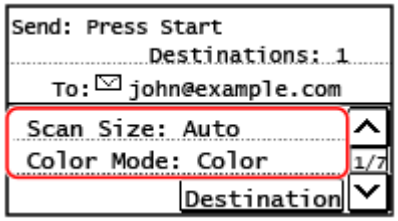


Use [Specify from Address Book] or [Specify from Coded Dial] to specify the Cc and Bcc destinations.

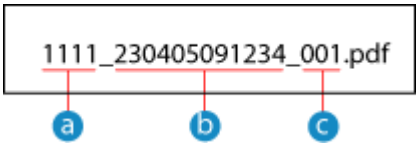
■If you can only specify [Specify Myself as Destination]

If the destination when sending is restricted due to the Authentication Settings for Send Function, you cannot specify another destination. For details, contact the administrator.

5 Configure the scan settings. Scan Settings(P. 246)



- You can also set the subject and main body of the e-mail on this screen. **E-mail Settings(P. 248)**
- Scanned data is sent with the following file name. You can also specify a custom string and add it to the start. **Setting File / Division(P. 248)**



a Communications management number

b Date sent (in this example, "April 5, 2023, 9:12:34 AM")

c File sequence number (if one file, then "001")

6 Press on the control panel.

➡ Scanning of the original starts.

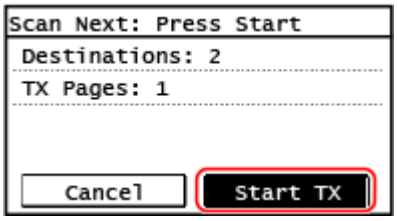
- To cancel scanning, press [Cancel] ▶ [Yes]. **Canceling Scanning(P. 250)**
- When scanning is completed, the scanned data is sent. Press on the control panel to view the sending status and log.

■When [Confirm Destination] appears

Check that the destination is correct, and then press [Start Scan].

■When [Scan Next: Press Start] appears

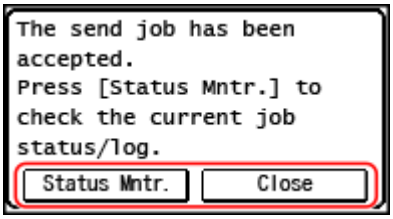
After the original is placed on the platen glass and is scanned in PDF or TIFF format, the screen for scanning additional originals is displayed.
To continue scanning originals, place on the platen glass, and press .
When scanning of all originals is completed, press [Start TX].



* If the size of the original is different, part of the image may be missing, or the image may be scanned smaller.

■When [Status Mntr.] appears

To view the save status and log, press [Status Mntr.]. **Checking the Send and Save Status and Log of Scanned Data(P. 251)**
Pressing [Close] displays the scan screen.



■When [SMTP Authentication] appears

Enter the user name and password to be used for SMTP authentication, and then press [Apply].

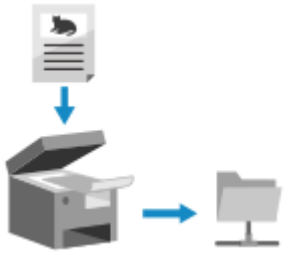
NOTE

When a Sending Error Occurs

- Depending on the e-mail server settings, a notification e-mail may be sent to the e-mail address set on the machine when a sending error occurs. If notification e-mails are left in the server, the mailbox may become full, so it is recommended to periodically empty the mailbox. **Clearing the Mail Box(P. 381)**

Scanning (Saving to a Shared Folder)

958J-05A



You can scan an original and save the scanned data to a shared folder on a computer.
This is convenient for sharing the scanned data of a paper document on a network.

Required Preparations

- Register the information for accessing the shared folder to the Address Book of the machine.
  Preparing to Save Scanned Data to a Shared Folder(P. 231)

1 Place the original. Placing Originals(P. 127)

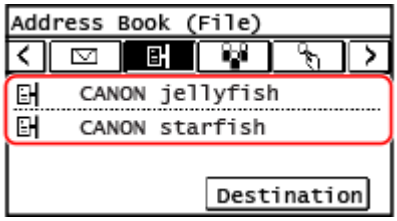
2 On the control panel, press [Scan] in the [Home] screen. [Home] Screen(P. 113)

➠ The scan type selection screen is displayed.

3 Press [File].

➠ The scan screen is displayed.

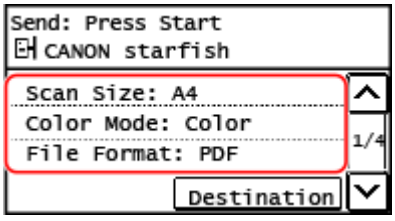
4 Specify the destination. Specifying Destinations(P. 170)



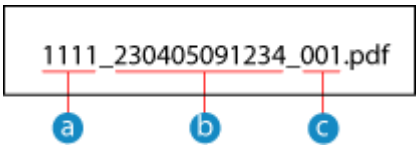
■If you can only specify [Specify Myself as Destination]

If the destination when sending is restricted due to the Authentication Settings for Send Function, you cannot specify another destination. For details, contact the administrator.

5 Configure the scan settings. Scan Settings(P. 246)



Scanned data is saved with the following file name. You can also add a specified custom string to the start. **Setting File / Division(P. 248)**



a Communications management number

b Date saved (in this example, "April 5, 2023, 9:12:34 AM")

c File sequence number (if one file, then "001")

6 Press on the control panel.

➠ Scanning of the original starts.

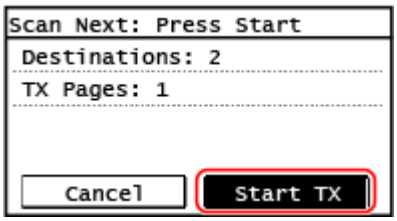
- To cancel scanning, press [Cancel] ▶ [Yes]. **Canceling Scanning(P. 250)**
- When scanning is completed, the scanned data is saved. Press on the control panel to view the save status and log. **Checking the Send and Save Status and Log of Scanned Data(P. 251)**

■When [Confirm Destination] appears

Check that the destination is correct, and then press [Start Scan].

■When [Scan Next: Press Start] appears

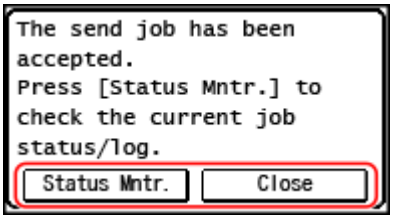
After the original is placed on the platen glass and is scanned in PDF or TIFF format, the screen for scanning additional originals is displayed.
To continue scanning originals, place on the platen glass, and press on the control panel.
When scanning of all originals is completed, press [Start TX].



* If the original has different size pages, part of the image may be missing, or the image may be scanned smaller.

■When [Status Mntr.] appears

To view the save status and log, press [Status Mntr.]. **Checking the Send and Save Status and Log of Scanned Data(P. 251)**
Pressing [Close] displays the scan screen.



■When [File Authentication] appears

Enter the user name and password to be used to access the shared folder or FTP server, and then press [Apply].

Scanning from a Computer (Saving to a Computer)

958J-05C



You can scan an original and save the scanned data to a computer connected to the machine. You can set the format and save location when scanning from a computer. This method lets you see the scanned data immediately on the computer screen so you can check the image quality and make adjustments.

Use either of the following applications to perform scanning.

Dedicated application (MF Scan Utility)
Scan easily using the setting to suit your purpose. Send scanned data to a specified application to display it and send it by e-mail. You can also use the ScanGear MF screen to configure advanced settings.
Using a Dedicated Application to Perform Scanning - MF Scan Utility(P. 241)

Other TWAIN- and WIA-supported Applications
You can also use image processing software, document software, and other applications that support TWAIN*1 or WIA*2. Scanned data is imported directly to the application for immediate editing and processing. Check the manual of the application you are using to see if it supports TWAIN or WIA.
Scanning Using Other TWAIN- and WIA-supported Applications(P. 242)

*1 TWAIN is a standard for connecting a scanner or other image input device to a computer.

*2 WIA is a function that comes standard in Windows.

Other WSD-supported Applications (Windows)
WSD is a protocol for automatic detection of printers and scanners on a network in a Windows environment. You can scan originals using an application that supports WSD without installing a scanner driver. Check the manual of the application you are using to see if it supports WSD.
Scanning Using Other WSD-supported Applications (Windows)(P. 243)

Using a Dedicated Application to Perform Scanning - MF Scan Utility

After placing an original on the machine, scan using MF Scan Utility on a computer.

Required Preparations

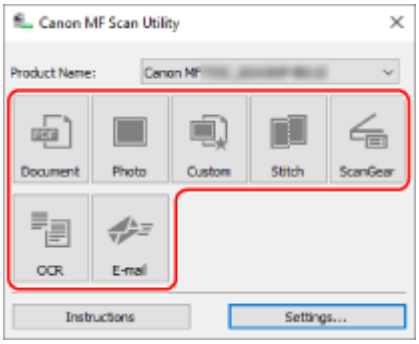
- Install the scanner driver (ScanGear MF) and application (MF Scan Utility) on the computer. **Installing Software and Drivers to the Computer(P. 100)**

1 **Place the original on the machine.** **Placing Originals(P. 127)**

2 **Start MF Scan Utility on a computer.** **Starting MF Scan Utility(P. 245)**

3 **For [Product Name], select the machine.**

4 **Click the button corresponding to the original type and purpose to start scanning.**



Click [ScanGear] to display ScanGear MF and configure the advanced scan settings. For more information, click [?] on ScanGear MF to display help.

NOTE

When Scanning Cannot Be Performed

- The machine may not be online (scan standby mode). On the control panel, select [Scan] in the [Home] screen, and press [Remote Scanner] to turn the machine online, and then repeat the operation.

Scanning Using Other TWAIN- and WIA-supported Applications

After placing an original on the machine, scan using other TWAIN- and WIA-supported application on your computer. This section describes the general procedure for this operation. Check the manual of the application you are using for detailed operations on how to use it.

Required Preparations

- Install the scanner driver (ScanGear MF) on the computer. **Installing Software and Drivers to the Computer(P. 100)**

1 **Place the original on the machine.** **Placing Originals(P. 127)**

2 **On the computer, start the application used to import the scanned data.**

3 **In the application, select the command to start the scanning operation.**

4 **Select the scanner driver (ScanGear MF or WIA) of the machine, and configure the scan settings.**

For more advanced scan settings, select ScanGear MF. For more information, click [?] on ScanGear MF to display help.

5 **Start scanning.**

➡ When scanning is completed, the scanned data is imported to the application.

If the next pages of the original are not scanned or an error message appears after scanning is completed, place the originals on the machine one at a time and perform scanning.

NOTE

When Scanning Cannot Be Performed

- The machine may not be online (scan standby mode). On the control panel, select [Scan] in the [Home] screen, and press [Remote Scanner] to turn the machine online, and then repeat the operation.

Scanning Using Other WSD-supported Applications (Windows)

After placing an original on the machine, scan using a WSD-supported application on your computer. This section describes the procedure using "Windows Fax and Scan" as an example.
Check the manual of the application you are using for detailed operations on how to use it.

Required Preparations

- Set the machine to enable use of WSD to scan. **Configuring LPD, RAW, or WSD(P. 354)**
- Register the machine with the computer to which to save scanned data. **Registering the Machine as a WSD Scanner with a Computer (Windows)(P. 224)**

1 **Place the original on the machine.** **Placing Originals(P. 127)**

2 **On the control panel, press [Scan] in the [Home] screen.** **[Home] Screen(P. 113)**

3 **Press [Remote Scanner].**

4 **On the computer, select [ ] (Start) ▶ [Windows Accessories] ▶ [Windows Fax and Scan].**

➠ The [Windows Fax and Scan] screen is displayed.

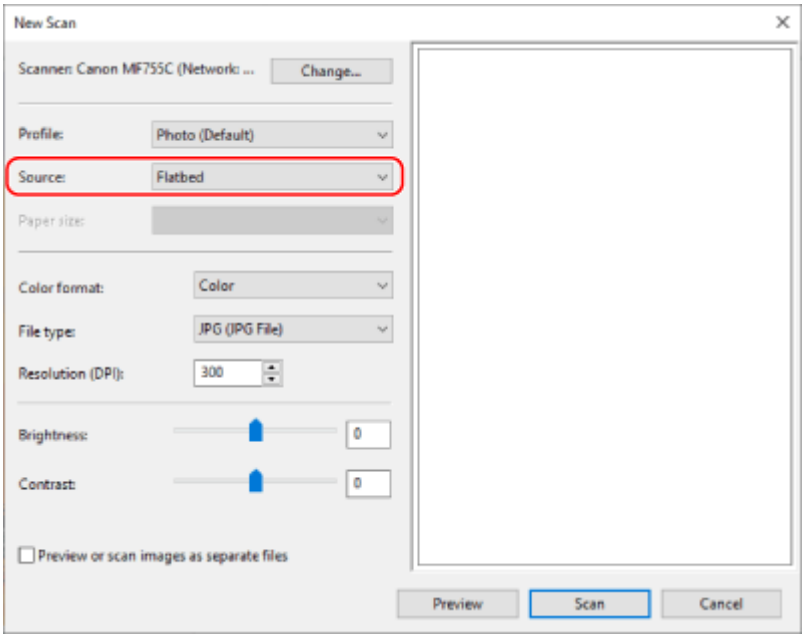
5 **Click [Scan].**

6 **Click [New Scan].**

➠ The [New Scan] screen is displayed.

If the [Select Device] screen appears, select the machine, and then click [OK].

7 **In [Source], select the location where the original is placed.**



- When placing the original on the platen glass, select [Flatbed].
- When placing the original on the feeder, select [Feeder (Scan one side)].

8 Configure the other scan settings, as needed.

- When adjusting the image quality, select the original type from [Profile].
  When scanning an original with large volumes of text, select [Document]. When scanning a photo, select [Photo (Default)].
- Select the scanned data format with [File type].
- To see a preview of the scanned data, click [Preview].

9 Click [Scan].

➠ Scanning of the original starts.
When scanning is completed, the scanned data is saved to the [Scanned Documents] folder in [Documents] and displayed in the file list on the [Windows Fax and Scan] screen.

NOTE

Registering Frequently Used Settings

- You can use the following procedure to register frequently used scan settings as profiles, and then call up these settings as needed when scanning.

  In [Profile], select [Add profile], ▶ set the information to register ▶ enter a name in [Profile name] ▶ click [Save Profile].

Starting MF Scan Utility

958J-05E

Start MF Scan Utility installed on the computer.

■When Using Windows

Click [ ] (Start) ▶ [Canon] ▶ [MF Scan Utility].

■When Using macOS

From the OS Applications folder, double-click [Canon MF Utilities] ▶ [Canon MF Scan Utility].

NOTE

- For more information on the operations and settings of MF Scan Utility, click [Instructions] on the MF Scan Utility screen to display help.

Scan Settings

958J-05F

When scanning with the machine, you can use the scanning screen to set the original size and adjust the image quality.



If the scanned data does not appear as expected, you can change the settings and scan again.
* To save scanned data to a computer, configure the settings with MF Scan Utility or ScanGear MF installed on the computer. You cannot use the control panel to configure the settings.

Setting the Original Size and Orientation(P. 246)
Adjusting Image Quality(P. 247)
Setting File / Division(P. 248)
E-mail Settings(P. 248)

NOTE

Registering the Frequently Used Scan Settings as the Default Settings

- You can change the default scan settings according to the frequently used scan settings. **Changing the Default Settings(P. 182)**

Recalling Past Settings - TX Job Log

- You can use the TX Job Log to recall the scan settings used to send or save scanned data in the past. **Specifying Destinations (TX Job Log)(P. 178)**

Setting the Original Size and Orientation

Set the size and orientation according to the original to be scanned.

[Scan Size]
Select the size of the placed original.

[Original Orientation]
Select [Portrait] or [Landscape] to suit the placed original.

[Portrait]



[Landscape]



Adjusting Image Quality

You can adjust the image quality such as when the scanned data image is not clear or the text is difficult to read.

[Color Mode]
Select the scanning color mode (Black & White/Color).

[Density]
Adjust the density to suit the original.
Press [+] to increase the density and [-] to lower it.

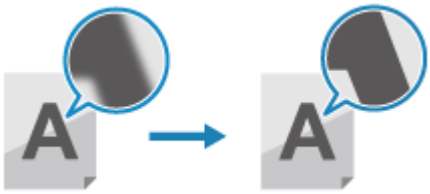
[Original Type]
Select the original type.
Scanning is performed using the image quality to suit the content of the original.

[Sharpness]
Adjust the sharpness.
Emphasize the contours and lines to make them clearer, or weaken them to make them softer.

Adjustment example:

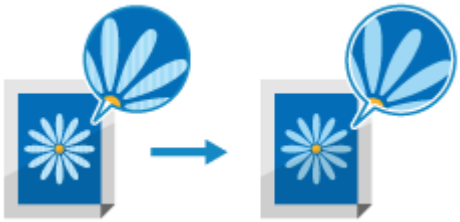
- **To make blurry text or shapes clearer**

  Press [+].



- **To reduce moire (vertical pattern noise) in pictures**

  Press [-].



NOTE

When the File Format of the Scanned Data Is JPEG

- The image quality varies depending on the compression ratio selected in [Data Size]. **Setting File / Division(P. 248)**

2-Sided Scan Settings

When scanning a 2-sided original, place the original on the feeder, and set [2-Sided Original].

[2-Sided Original]
When scanning a 2-sided original, select [Book Type] or [Calendar Type]. Select this according to the top and bottom orientation of the front and back sides of the placed original.

[Book Type] **[Calendar Type]**



Top and bottom have same orientation



Top and bottom have opposite orientation

To cancel scanning of a 2-sided original, select [Off].

Setting File / Division

Set the scanned data format and file name.
You can compress data and enable recognition of text in an original. You can also combine multiple originals into one file or create separate files for each original.

[File Format]
Select the scanned data format from PDF, JPEG, or TIFF according to your purpose and environment.

Reducing the Data Size

- **When using PDF format**
  Select [PDF (Compact)].
  The data size is reduced, but the image quality and the number of sheets that can be scanned at a time may also be reduced depending on the original type.
- **When using JPEG format**
  Select [JPEG], and set [Data Size] to [Small: Memory Priority].

Combining Multiple Originals into One File
Select PDF or TIFF format.

Dividing the Original into Separate Files

- **When using PDF format or TIFF Format**
  Select [Set PDF/TIFF Details] ▶ select PDF format or TIFF Format ▶ press [Divide into Pages] ▶ [On].
- **When using JPEG format**
  Select [JPEG].

[Data Size]
Select the data size when using JPEG format for the scanned data. The compression ratio varies according to the selected data size.

[Small: Memory Priority]
Increases the compression ratio but lowers the image quality.

[Large: Image Quality Priority]
Lowers the compression ratio but increases the data size.

[File Name]
Specify a string to add to the start of the file name of the scanned data.

E-mail Settings

You can configure the e-mail settings when sending scanned data by e-mail.

[Subject/Message]
Set the subject and main body of the e-mail.

[Reply To]
Select an e-mail address (Reply-To) from the Address Book to be used for e-mail recipients to reply to.
If no e-mail address is selected here, the e-mail address of the machine is used as the Reply-To e-mail address.

* If the e-mail address you want to use is not registered in the Address Book, register it, and then select it. **Address Book Function(P. 157)**

[Priority]
Select the priority level.

NOTE

E-mail Sender

- The e-mail address of the machine becomes the sender e-mail address (From) regardless of the [Reply To] setting.
- To send the sender's name along with the e-mail address of the machine, use the following procedure to set the unit name.

  Log in to Remote UI ▶ [Settings/Registration] ▶ [TX Settings] ▶ [Scan and Send Settings] ▶ [Edit] under [Unit Name Settings] ▶ enter the unit name ▶ [OK].

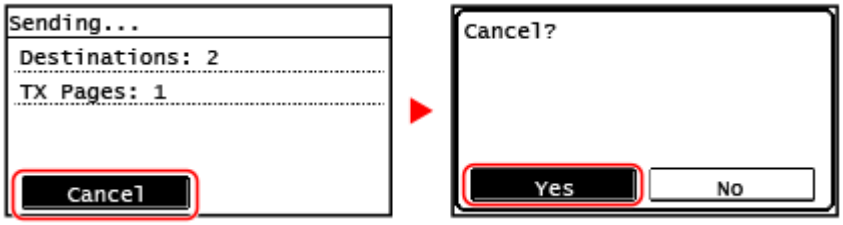
  On the control panel, select [Menu] in the [Home] screen, and then select [Function Settings] to configure the settings. **[Register Unit Name (E-Mail)](P. 454)**
- The e-mail sender is the setting shared with the machine.

Canceling Scanning

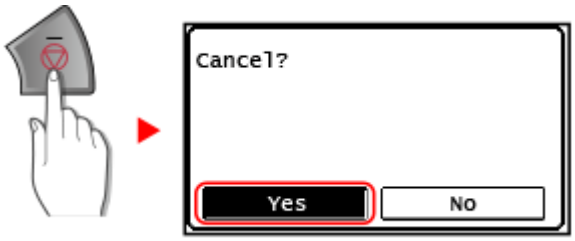
958J-05H

Follow the instructions on screen to cancel a scanning operation.

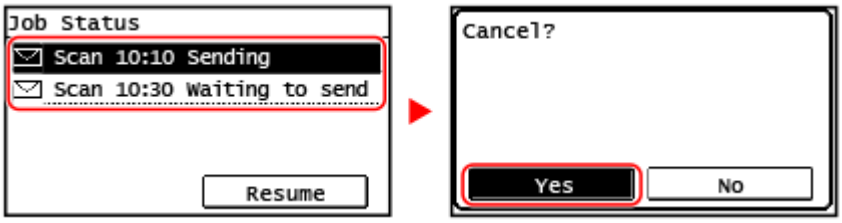
Press [Cancel] ▶ [Yes].



If the above screen is not displayed, press on the control panel, and then press [Yes].



If the job list screen is displayed, select the job to cancel, and press [Yes].



Checking the Send and Save Status and Log of Scanned Data

958J-05J

You can check the send or save status and log of data scanned with the machine.
Processes handled by the machine, including sending and saving scanned data, are managed as jobs. By checking the status and log of jobs, you can determine whether a scan job was performed correctly and the cause of errors that occur.
* If the log is hidden, you can only check the send and save status. **[Display Job Log](P. 464)**

This section describes how to check the status and log using the control panel.
You can also use Remote UI from a computer to check the status and log. **Checking Usage and Logs with Remote UI(P. 374)**

1 Press on the control panel. Control Panel(P. 21)

➡ The [Status Monitor] screen is displayed.

2 Press [TX Job].

3 Check the status and log on the [Job Status] or [Job Log].

■Checking the Send and Save Status

1 Press [Job Status], check the job being processed or waiting to be processed.

2 Select a job to view its details.

➡ The job details are displayed.

3 Check the number of pages and the destination.
For jobs with multiple destinations, press [Destination] to display the list of destinations.

■Checking the Send and Save Log

1 Press [Job Log], check the completed send and save jobs.

2 Select a job to view its details.

➡ The job details are displayed.

3 Check the number of pages and the destination.
For jobs with multiple destinations, press [Destination] to display the list of destinations.

If Send or Save Log Displays [Error]

Sending or saving was canceled, or an error occurred.
If a three-digit number starting with "#" (error code) is displayed, you can check the cause and solution using the error code. **An Error Code Is Displayed(P. 578)**

NOTE

Registering Destinations to the Address Book

- On the screen displaying the job details, press [Reg Adr Book] to register the destination to the Address Book.

  * This operation is not available when there are multiple destinations.

Copying

Copying 254
Copy Operations 255
Additional Copying Features 257
Copying Both Sides of ID Cards onto One Sheet 263
Copying Multiple Passports onto One Sheet 265
Canceling Copy Operations 268
Checking the Copy Status and Log 269

Copying

958J-06A

You can easily copy documents, photos, and other printed materials ("originals") using the copy function of the machine. In addition to basic copy settings, the machine also has settings for copying according to your original and purpose. Configure these settings when copying for more efficient operations and to save paper.

Basic Copy Operations

You can set the copy ratio (for enlarging or reducing), number of copies, and other basic settings.
Copy Operations(P. 255)

Copying According to Your Original and Purpose

You can perform 2-sided copying and adjust the image quality and other settings to suit your original and purpose.
Additional Copying Features(P. 257)

Copying for Specific Operations

You can use the following copy functions quickly from the [Home] screen or the control panel.

ID Card Copy



Copies the front and back sides of a driver's license or other ID card on the same sheet of paper at 100% magnification. This is convenient, for example, when copying ID cards at reception.
Copying Both Sides of ID Cards onto One Sheet(P. 263)

Passport Copy



Copies multiple passports together onto one sheet of paper.
Copying Multiple Passports onto One Sheet(P. 265)

■ See Also

When Results Are Not as Expected

Adjust the image quality if the black or nearly black colors of letters are not reproduced.
Adjusting the Print Quality(P. 502)

Copy Operations

958J-06C

This section describes the basic copy operations when copying documents, photos, and other printed materials ("originals").

IMPORTANT

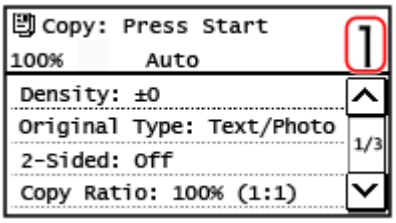
- When copying originals that have text or images extending to the edges without margins, the copy may printed with an area missing around the edge. For the size of the margin, see the basic specifications. **Basic Specifications(P. 35)**

1 Place the original. Placing Originals(P. 127)

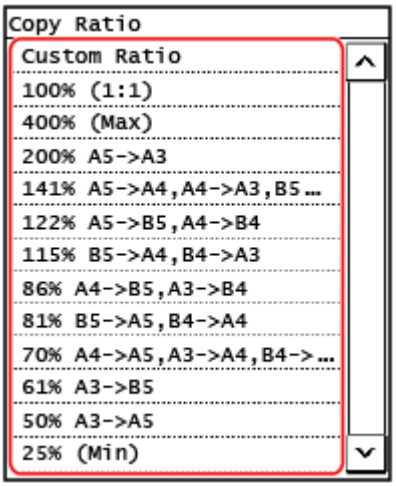
2 On the control panel, press [Copy] in the [Home] screen. [Home] Screen(P. 113)

➡ The copy screen is displayed.

3 Enter the number of copies using the numeric keys.



4 Set the Copy Ratio.



Set the ratio for enlarging or reducing copies.

Select a fixed copy ratio from the list or select [Custom Ratio] and enter a custom ratio using the enter numbers using the numeric keys.
You can specify a value from 25% to 400% in 1% increments.

5 Configure the other copy settings, as needed. Additional Copying Features(P. 257)

You can perform 2-sided copying and adjust the image quality and other settings to suit your original and purpose.

6 Press on the control panel.

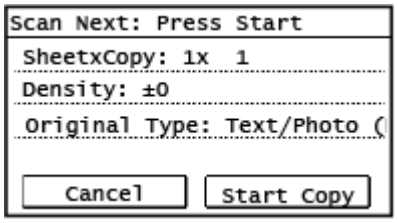
➡ Copying starts.

- To cancel copying, press [Cancel] ▶ [Yes]. **Canceling Copy Operations(P. 268)**
- Press on the control panel to view the copy job status. **Viewing the Print Job Status and Log(P. 217)**

■When [Scan Next: Press Start] appears

When an original is placed on the platen glass and copied using 2-sided copying or N on 1, the screen is displayed for scanning the next original.

1 Place the next original on the platen glass, and press on the control panel.



➡ The next original is scanned, and the same screen is displayed.
Repeat this process until scanning of all originals is completed.

- You can press [Density] and [Original Type] to change the settings for each original. Depending on the specified copy settings, [Original Type] cannot be changed.
- If the size of the original is different, part of the image may be missing, or the image may be printed smaller on the paper.

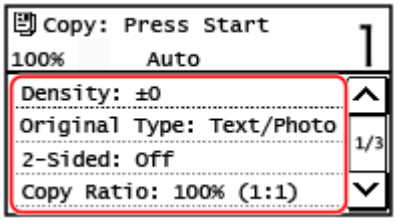
2 Press [Start Copy].

➡ The scanned originals are printed.

Additional Copying Features

958J-06E

In addition to basic copy settings, the machine also has settings for 2-sided copying, image quality adjustment, and other settings according to your original and purpose. Use the copy screen to configure these settings.



* To make copies using the ID Card Copy function, you can simply adjust the density and image quality.

Making 2-sided Copies(P. 257)
Copying Multiple Originals onto One Sheet (N on 1)(P. 258)
Collating Copies by Page (Collate)(P. 259)
Adjusting the Density(P. 260)
Adjusting the Image Quality(P. 261)

NOTE

Registering Favorite Settings

- You can register frequently used copy settings as Favorite Settings to easily call up these settings as needed when copying. **Registering Favorite Settings(P. 180)**
- You can change the default copy settings according to the frequently used scan settings. **Changing the Default Settings(P. 182)**

Basic Copy Operations

- For the basic operations when copying, see the following:
Copy Operations(P. 255)

Making 2-sided Copies

You can copy two 1-sided originals on both sides of one sheet of paper.
You can also copy a 2-sided original on both sides of one sheet of paper, or on two separate sheets of paper.
* 2-sided copying may not be available with some sizes and types of paper. **Usable Paper(P. 29)**

1 Press [2-Sided] on the copy screen.

➡ The [2-Sided] screen is displayed.

2 Select the pattern of 2-Sided copying.

[Off]

Copies 1-sided originals to separate sheets of paper.

[1->2-Sided]

Copies two 1-sided originals on both sides of one sheet of paper.

[2->2-Sided] *

Copies the front and back of 2-sided originals on both sides of one sheet of paper.

[2->1-Sided] *

Copies the front and back of 2-sided originals on two separate sheets of paper.

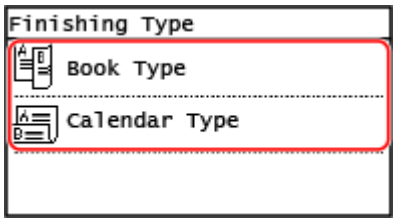
3 Set the original orientation and opening type, and copy opening type, as needed.

1. On the copy screen, press [2-Sided] ▶ [Original/Finishing Type].

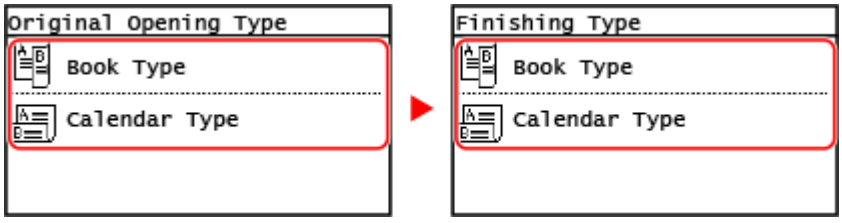
   ➡ The [Orig./Finishing Type] screen is displayed.

2. Select the combination of the 2-Sided settings between an original and a copy, and then specify the orientation and the opening type of the copy.

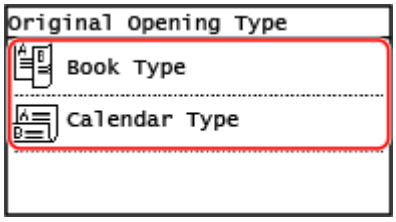
[1->2-Sided]



[2->2-Sided] *



[2->1-Sided] *



Copying Multiple Originals onto One Sheet (N on 1)

You can reduce the size of a multiple-page original and arrange the pages on one sheet of paper when copying. N on 1 is convenient when you want to save paper by copying on fewer sheets of paper than the original.
* This cannot be set at the same time as Erase Frame.

1 Press [N on 1] on the copy screen.

➡ The [N on 1] screen is displayed.

2 Select the number of pages to be combined.

[Off]

Pages are not combined.

[2 on 1]

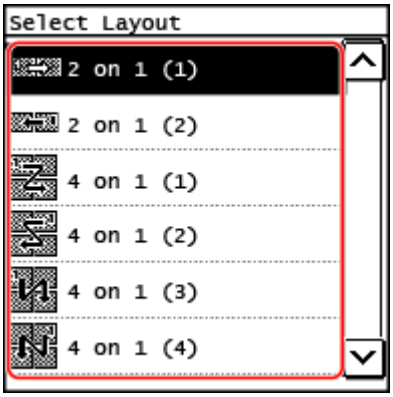
Combines a 2-page original onto one sheet of paper.

[4 on 1]

Combines a 4-page original onto one sheet of paper.

3 Select the size of the placed original.

4 Configure the layout (page order) when combining originals, as needed.



1. Press [N on 1] on the copy screen.
   - The [N on 1] screen is displayed.
2. Press [Select Layout], and select the page order.
   - The [Select Layout] screen is displayed.
3. Select the size of the placed original.

NOTE

- When combining pages, the copy ratio is set automatically according to the following. You can also change the copy ratio setting manually.
  - Number of pages to be combined
  - Original size setting
  - Size of paper used for copying
- When pages are combined, a margin may be created around the copied images.

Collating Copies by Page (Collate)

When copying multiple copies of a multi-page original, you can collate the copies in the page order of the original. This is convenient when copying handouts for meetings.

When Copying without Collating

The copies are grouped by the page of the original in the number of specified copies and not collated.
For example, when you are making three copies of a three-page original, the printouts are arranged in the following order: 1, 1, 1, 2, 2, 2, 3, 3, 3.



When Copying with Collating

The copies are collated into sets in the page order of the original.
For example, when you are making three copies of a three-page original, the printouts are arranged in the following order: 1, 2, 3, 1, 2, 3, 1, 2, 3.



1 Press [Collate] on the copy screen.

➡ The [Collate] screen is displayed.

2 Press [On].

Adjusting the Density

You can adjust the density to suit the original when copying.
If text or images in the original are too faint or dark, adjust the density of the entire original.
To create clean copies of an original with a colored background or a newspaper, adjust the density of the background.

1 Press [Density] on the copy screen.

➡ The [Density] screen is displayed.

■Adjusting the Density of the Entire Original

Drag the slider to the left or right to adjust the density.
Press [+] to increase the density and [-] to lower it.

■Adjusting the Density of the Background

1. Press [Background] ▶ [Adjust (Manual)].

   ➡ The [Adjust] screen is displayed.

2. Drag the slider to the left or right to adjust the density.
   - Press [+] to increase the density and [-] to lower it.

2 Press [Apply].

NOTE

- When you adjust the density of the background, parts other than the background may also be affected.

Adjusting the Image Quality

You can adjust the image quality such as when the copied image is not clear or the text is difficult to read. You can also erase dark borders and shadows that appear around the edges of the original.
* Erase Frame is not available when making copies using the ID Card Copy function.

■ Selecting the Image Quality for the Original Type

1 Press [Original Type] on the copy screen.

➠ The [Original Type] screen is displayed.

2 Select the original type.

➠ The copy screen is displayed.

■ When copying an original containing both text and photos

Select [Text/Photo].

■ Copying Photos Containing Halftone Dots such as in Magazines

Select [Photo].

■ Copying Originals with Large Volumes of Text such as Research Papers

Select [Text].

■ Erasing Dark Borders and Shadows around Edges of the Original (Erase Frame)

This function erases the dark borders and shadows that appear around the edges in the copied image when copying originals that are smaller than the paper size or thick originals.
* This cannot be set at the same time as N on 1.

1 Press [Erase Frame] on the copy screen.

➠ The [Erase Frame] screen is displayed.

2 Select a type of erasing a frame.

■ When Erasing Frames around the Copied Image

Select [Original Frame].

■ When Erasing Shadows on a Copied Book Image

Select [Book Frame].

3 Enter the frame width to erase, and press [Apply].

➠ The [Scan Size] screen is displayed.

When you are copying at an enlarged or reduced size, the function automatically changes the size of the frame width to erase to match the copy ratio setting.

4 **Select the size of the placed original.**

■Adjusting the Sharpness

You can emphasize the contours and lines to make them clearer in the copied image, or weaken them to make them softer.

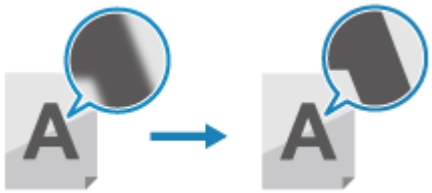
1 **Press [Sharpness] on the copy screen.**

➠ The [Sharpness] screen is displayed.

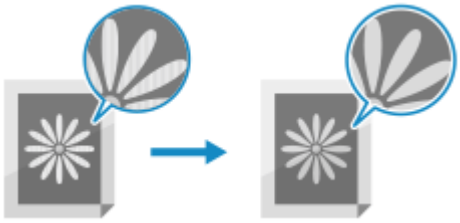
2 **Drag the slider to the left or right to adjust the sharpness.**

Adjustment example:

- **To Make Blurry Text or Shapes Clearer**
  Press [+].



- **To reduce moire (vertical pattern noise) in photos**
  Press [-].



3 **Press [Apply].**

Copying Both Sides of ID Cards onto One Sheet

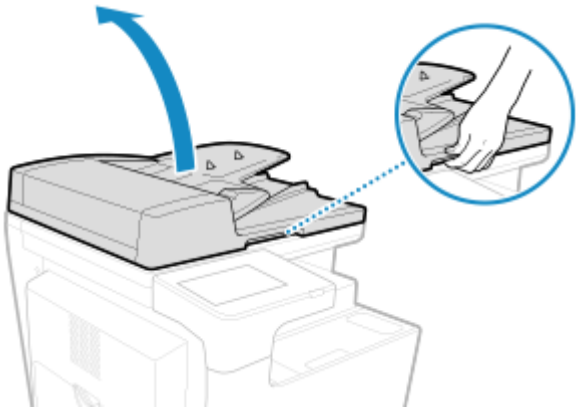
958J-06F



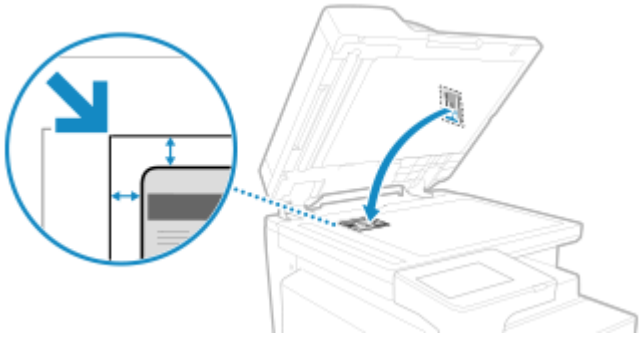
You can use the ID Card Copy function to copy the front and back sides of a driver's license or other ID card on the same sheet of paper at 100% magnification. This can be quickly performed from the [Home] screen or (ID Card Copy) on the control panel and is convenient, for example, when copying ID cards at reception.

1 Place the ID card on the platen glass.

1 Open the feeder or platen cover.



2 Place the front of the ID card face down on the platen glass in the portrait orientation while aligning the corner of the ID card with the top left corner of the platen glass.



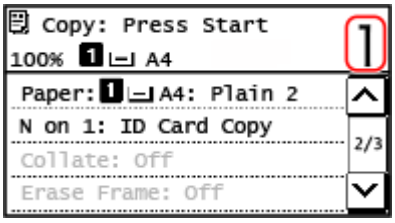
Place the ID card slightly away from the edge of the platen glass.

3 Gently close the feeder or platen cover.

2 On the control panel, press [ID Card Copy] in the [Home] screen. [Home] Screen(P. 113)

➠ The copy screen is displayed.

3 Enter the number of copies using the numeric keys.



* When you make copies using the ID Card Copy function, the copy ratio is fixed at 100%.

4 Adjust the density and image quality, as needed.

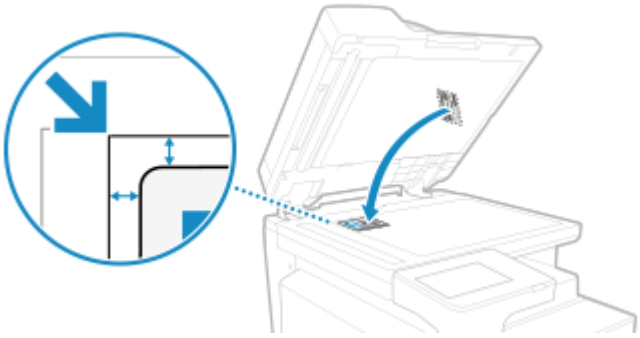
Adjusting the Density(P. 260)

Adjusting the Image Quality(P. 261)

5 Press on the control panel.

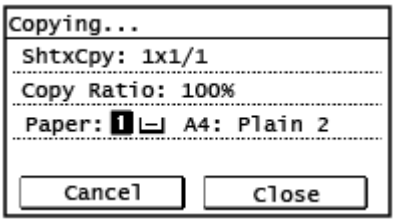
➠ The front of the ID card is scanned.

6 When [Scan Next: Press Start] is displayed, turn over the ID card and place it on the platen glass.



Place the back of the ID card face down in the same way as the front.

7 Press on the control panel.



➠ The back of the ID card is scanned and copying starts.

- To cancel copying, press [Cancel] ▶ [Yes]. **Canceling Copy Operations(P. 268)**
- Press to view the copy job status. **Viewing the Print Job Status and Log(P. 217)**

Copying Multiple Passports onto One Sheet

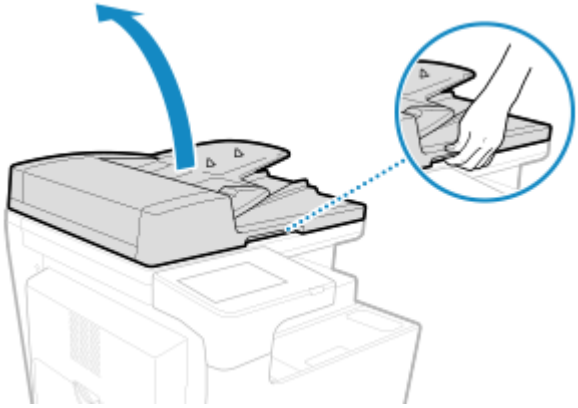
958J-06H



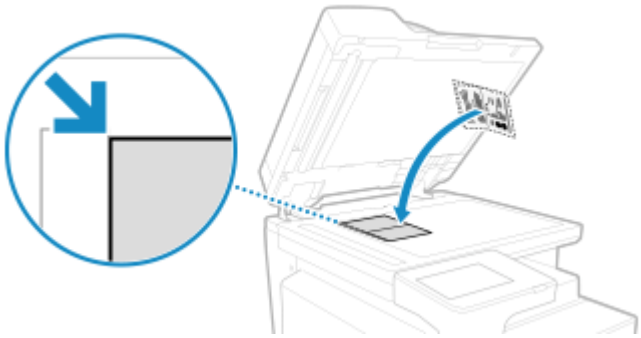
You can use the Passport Copy function to copy multiple passports together onto one sheet of paper. This can be quickly performed from the [Home] screen on the control panel.

1 Place a passport on the platen glass.

1 Open the feeder or platen cover.



2 Place the page to be scanned face down while aligning the corner of the passport with the top left corner of the platen glass, as shown.



3 Gently close the feeder or platen cover.

2 On the control panel, press [Passport Copy] in the [Home] screen. [Home] Screen(P. 113)

➠ The [Passport Copy] screen is displayed.

3 Select a combination of the number of passports and whether to use 2-sided printing.

[2 on 1 (2-Sided)]

Combines two passports onto one side of a sheet of paper by copying with 2-sided printing. Copies four passports onto both sides of a sheet of paper with 2-sided printing.

[4 on 1 (2-Sided)]

Combines four passports onto one side of a sheet of paper by copying with 2-sided printing. Copies eight passports onto both sides of a sheet of paper with 2-sided printing.

[2 on 1]

Combines two passports onto one side of a sheet of paper.

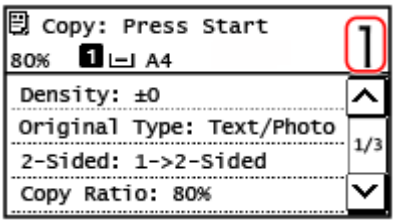
[4 on 1]

Combines four passports onto one side of a sheet of paper.

4 Select the paper source with the loaded paper to use for copying.

➡ The copy screen is displayed.

5 Enter the number of copies using the numeric keys.



* When you use Passport Copy to make copies, the copy ratio is set automatically according to the size of the paper used for copying and the number of passports to combine. You can also press [Custom Ratio] to change the copy ratio manually.

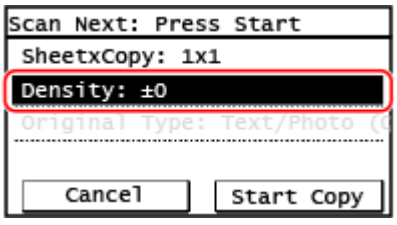
6 Configure the other copy settings, as needed. Additional Copying Features(P. 257)

- You can adjust the density and image quality.
- You can change the number of passports to combine (N on 1) and the 2-sided copy settings selected in 3.

7 Press on the control panel.

➡ The first passport is scanned.

8 When [Scan Next: Press Start] is displayed, place the next passport on the platen glass, and press on the control panel.



➡ The next passport is scanned, and the same screen is displayed.
Repeat this process until scanning of all passports is completed.

- You can press [Density] to change the settings for each passport.

9 Press [Start Copy].

➡ The scanned passports are printed.

- To cancel copying, press [Cancel] ▶ [Yes]. Canceling Copy Operations(P. 268)

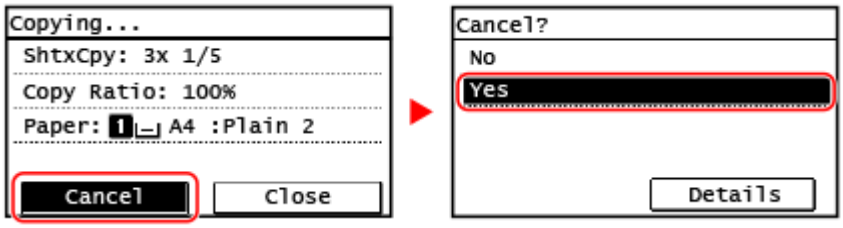
- Press  to view the copy job status. **Viewing the Print Job Status and Log(P. 217)**

Canceling Copy Operations

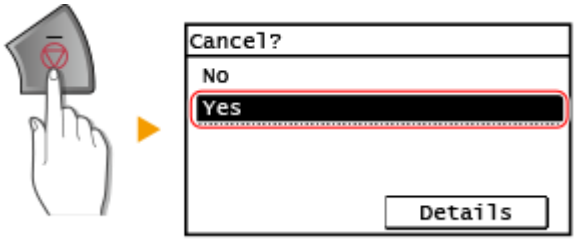
958J-06J

Follow the instructions on screen to cancel a copy operation.

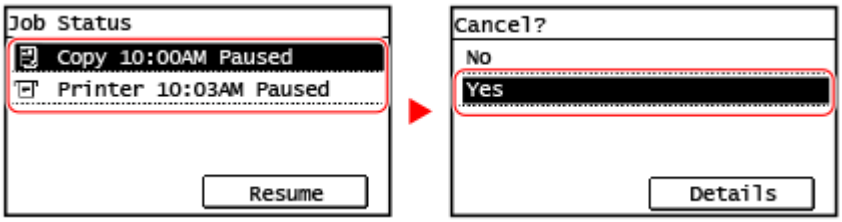
Press [Cancel] ▶ [Yes].



If the above screen is not displayed, on the control panel, press ▶ [Yes].



If the job list screen is displayed, select the job to cancel, and press [Yes].



Checking the Copy Status and Log

958J-06K

Processes handled by the machine, including copying, are managed as jobs. By checking the status and log of jobs, you can determine whether a copy job was performed correctly and the cause of errors that occur.
* If the log is set to not be displayed, you can only check the copy status. **[Display Job Log](P. 464)**

This section describes how to view this information using the control panel.
You can also check this information using Remote UI from a computer. **Checking Usage and Logs with Remote UI(P. 374)**

1 Press on the control panel. Control Panel(P. 21)

➡ The [Status Monitor] screen is displayed.

2 Press [Copy/Print Job].

3 Check the job status or the job log.

■Viewing the Copy Job Status

1. Press [Job Status].
   ➡ A list of jobs being processed or waiting to be processed is displayed.
2. Select a job to view its details.
   ➡ The job details are displayed.
3. Check the number of originals, number of copies, and other settings.

■Viewing the Copy Job Log

1. Press [Copy Job Log].
   ➡ A list of jobs being processed or waiting to be processed is displayed.
2. Select a job to view its details.
   ➡ The job details are displayed.
3. Check the number of printed pages, number of copies, and other items.

If Copy Job Log Displays Error Information

Copying was canceled, or an error occurred.
If a three-digit number starting with "#" (error code) is displayed, you can check the cause and solution using the error code. **An Error Code Is Displayed(P. 578)**

Linking with Mobile Devices

Linking with Mobile Devices 271
Preparations for Linking with Mobile Devices 273
Preparations for Direct Connection 274
Preparations for Using AirPrint 276
Connecting a Mobile Device to the Machine 279
Connecting a Mobile Device via Wireless LAN Router (LAN Connection) 280
Connecting a Mobile Device Directly to the Machine (Direct Connection) 281
Using a Dedicated Application to Print and Scan (Canon PRINT Business) 283
Using AirPrint Application to Print and Scan Data 284
Printing from an Android Device 287
Printing from Chromebook or Other Device with Chrome OS 289

Linking with Mobile Devices

958J-06L

The machine can be operated from a smartphone, tablet, or other mobile device. By using a compatible application or service, you can easily print photos or documents through a mobile device and save data scanned with the machine to the same device.

The applications and services that are available vary depending on the mobile device you are using.

iPhone, iPad, iPod touch, Mac

Canon PRINT Business (iPhone, iPad only)
Dedicated Canon application. Enables printing and scanning. It also supports Department ID Management.
Using a Dedicated Application to Print and Scan (Canon PRINT Business)(P. 283)

AirPrint
This function is standard in Apple operating systems. You can print from applications that support AirPrint instead of having to install a dedicated application or driver.
In addition, you can use AirPrint to print from a Mac. You can also scan data with a Mac.
Preparations for Using AirPrint(P. 276)
Using AirPrint Application to Print and Scan Data(P. 284)

Android Devices

Canon PRINT Business
Dedicated Canon application. Enables printing and scanning. It also supports Department ID Management.
Using a Dedicated Application to Print and Scan (Canon PRINT Business)(P. 283)

Canon Print Service
Dedicated Canon plugin. Enables printing from any application. It also supports Department ID Management.
Using a Dedicated Plugin to Print (Canon Print Service)(P. 287)

Mopria ® Print Service
Common plugin for Mopria® certified printers and multifunction machines. Enables printing from any application without having to install a dedicated plugin or application for individual manufacturers.
Using a Common Plugin to Print (Mopria® Print Service)(P. 287)

Default Print Service
This function is standard in the OS. It enables printing from any application without having to install a dedicated application or plugin.
Printing with the Function Standard in the OS (Default Print Service)(P. 288)

Chromebook or Other Device with Chrome OS

You can use the function standard equipped in the Chrome operating system to print without having to install a dedicated application or printer driver.
Printing from Chromebook or Other Device with Chrome OS(P. 289)

IMPORTANT

When Applying a Security Policy

- When [Restrict IPP Port (Port Number: 631)] or [Restrict mDNS Port (Port Number: 5353)] is enabled, you cannot use AirPrint and Mopria® Print Service. **Security Policy Items(P. 359)**

NOTE

Using the Address Book on a Mobile Device

- When sending scanned data by e-mail with the machine, you can use Canon PRINT Business to specify a destination registered to the Address Book on a mobile device. **Specifying Destinations (Address Book on a Mobile Device)(P. 177)**

■ See Also

Managing the Machine from a Mobile Device (Remote UI)

You can use Remote UI from a Web browser on a mobile device. With Remote UI, you can check the operation status of the machine, change the machine settings, and register destinations to the Address Book. For details about starting and operating Remote UI, see the instructions for using Remote UI on a computer.

Managing the Machine from a Computer (Remote UI)(P. 368)

* Some display items are omitted in the mobile version of Remote UI. To check all items, tap [PC Version] at the bottom of the screen and switch to the computer version of Remote UI.

Preparations for Linking with Mobile Devices

958J-06R

To directly connect a mobile device to the machine or to use AirPrint, you must first configure the settings on the machine.

Preparations for Direct Connection(P. 274)
Preparations for Using AirPrint(P. 276)

Preparations for Direct Connection

958J-06S

Enable the Direct Connection function on the machine. If the machine is not connected to a network, you need to check the Network Connection Type settings.
* The Direct Connection function is not available for the models which are not equipped with a wireless LAN capability.

Enabling the Direct Connection Function(P. 274)
Checking the Network Connection Type of the Machine(P. 275)

Enabling the Direct Connection Function

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. **[Direct Connection Settings](P. 402)**
Administrator privileges are required. The machine must be restarted to apply the settings.

1 **Log in to Remote UI in System Manager Mode.** **Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Settings/Registration].** **Portal Page of Remote UI(P. 372)**

3 **Click [Network Settings] ▶ [Direct Connection Settings] ▶ [Edit].**

➡ The [Edit Direct Connection Settings] screen is displayed.

4 **Select the [Use Direct Connection] checkbox.**

5 **Configure the Direct Connection function, as needed.**

When connecting multiple mobile devices at the same time, you must specify the SSID and network key.

■To Terminate the Connection Automatically

Select the [Terminate Direct Connection Session] checkbox, and enter the time period of the direct connection until it is terminated. When multiple mobile devices are connected, they will be disconnected after the time period elapses since the last started connection.

■To Change the IP Address for Connection

In [IP Address for Direct Connection], enter any IP address.

■To specify the SSID and Network Key (When Connecting Multiple Mobile Devices at the Same Time)

By default, the SSID and network key of the machine are automatically assigned a random character string each time direct connection is performed.
To specify the SSID and network key manually, in [Access Point Mode Settings], select the [Specify SSID to Use] or [Specify Network Key to Use] checkbox, and enter an SSID or network key using single-byte alphanumeric characters.

■To Allow Mobile Devices to Always Connect to the Machine

By default, you must use the control panel to put the machine into waiting state when you want to establish a direct connection.

To allow mobile devices to always connect to the machine, in [Access Point Mode Settings], specify the SSID and network key, and select the [Always Keep Enabled If SSID/Network Key Is Specified] checkbox in [Keep Connection Enabled].

6 **Click [OK].**

7 **Restart the machine.** **Restarting the Machine(P. 107)**

➡ The settings are applied.

Checking the Network Connection Type of the Machine

If the machine is not connected to a network (wired or wireless LAN), check that the network connection type is set to wired LAN.
If the machine is connected to a network, you do not have to check this.

1 **Press**  **on the control panel.** **Control Panel(P. 21)**

➡ The [Status Monitor] screen is displayed.

2 **Press [Network Information] ▶ [Network Connection Method].**

➡ The [Network Conn. Method] screen is displayed.

3 **Check that [Wired LAN] is displayed.**

If the connection type is set to wired LAN, you can establish a direct connection even if the machine is not connected to a network.

■When [Wireless LAN] Is Displayed in [Network Conn. Method]

When the machine is not connected to a wireless LAN, a direct connection cannot be established. Connect the machine to a wireless LAN or switch the connection type to wired LAN.
Connecting to a Wireless LAN(P. 63)
Selecting Wired or Wireless LAN(P. 61)

Preparations for Using AirPrint

958J-06U

Set the basic information that is required to use AirPrint. Configure the settings related to the functions and security that will be used, according to your usage and environment.

Setting the Basic Information of AirPrint(P. 276)
Setting the Functions and Security to Be Used with AirPrint(P. 277)

NOTE

When Using Department ID Management

- Department IDs cannot be set with AirPrint. To use AirPrint while using Department ID Management, configure the settings so as not to restrict the following operations: **Enabling Department ID Management(P. 300)**
  - Printing from a computer with an unknown Department ID
  - Scanning and saving data to a computer

Setting the Basic Information of AirPrint

Configure these settings using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Network Settings] ▶ [AirPrint Settings] ▶ [Edit].

➡ The [Edit AirPrint Settings] screen is displayed.

4 Select the [Use AirPrint] checkbox, and enter the printer name.

- For the printer name, enter a name to identify the machine, using single-byte alphanumeric characters.
- If mDNS of IPv4 is set, the mDNS name is entered for the printer name. If you change the printer name, the mDNS name is also changed.

  * When you change the set printer name or mDNS name, the Mac that was connected to the machine may no longer be able to connect to it. In this case, you must register the machine on the Mac.

5 Enter the location and longitude and latitude of the machine, as needed.

If the location of the machine is set in [Settings/Registration] ▶ [Device Management] ▶ [Device Information Settings], the same character string is entered in the location. When you change the location in AirPrint Settings, the location in Device Information Settings is also changed.

6 Click [OK].

➡ The settings are applied.

7 Log out from Remote UI.

NOTE

- When the AirPrint function is enabled, the following network settings are also enabled:
  - **[Use HTTP](P. 414)**
  - **[IPP Print Settings](P. 414)**
  - **[mDNS Settings](P. 410)**
  - **[Network Link Scan Settings](P. 414)**

Setting the Functions and Security to Be Used with AirPrint

AirPrint uses the following protocols:

- IPP (printing)
- Network Link Scan (scanning)

The protocol to use varies with the function. Therefore, you can restrict the available functions by disabling the protocols. In addition, you can configure the settings to encrypt communication with TLS and configure IPP authentication when using a protocol.

Configure these settings using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required.

Required Preparations

- When encrypting communication with TLS, specify the key and certificate to use for TLS encrypted communication. **Using TLS(P. 315)**

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Network Settings] ▶ [IPP Print Settings] or [Network Link Scan Settings] ▶ [Edit].

➡ The [Edit IPP Print Settings] screen or [Edit Network Link Scan Settings] screen is displayed.

4 Configure the IPP or Network Link Scan settings.

■When Restricting the Functions to Use

Clear the [Use IPP Printing] or [Use Network Link Scan] checkboxes.

- When you clear the [Use IPP Printing] checkbox, printing with AirPrint are no longer possible.
- When you clear the [Use Network Link Scan] checkbox, scanning is no longer possible with AirPrint.

■When Encrypting Communication with TLS

Select the [Allow Only When Using TLS] or [Use TLS] checkbox.

■When Setting IPP Authentication

Select the [Use Authentication] checkbox, and set the user name to be used for IPP authentication using single-byte alphanumeric characters.
To set a password, select the [Set/Change Password] checkbox, and enter the same password in both [Password] and [Confirm] using single-byte alphanumeric characters.
Printing with AirPrint now requires authentication, and only users who know the user name and password of IPP authentication can use these functions.

5 Click [OK].

➠ The settings are applied.

6 Log out from Remote UI.

Connecting a Mobile Device to the Machine

958J-06W

To use the machine from a mobile device, you must connect it to the machine using either of the following methods:

Connecting via Wireless LAN Router (LAN Connection)

Connect a mobile device to the machine via a wireless LAN router in the same way as you connect a computer to the machine. By configuring a mobile device to connect automatically to the wireless LAN router, you do not need to manually connect it next time.

Connecting a Mobile Device via Wireless LAN Router (LAN Connection)(P. 280)



Connecting Directly (Direct Connection)

Connect a mobile device directly to the machine via Wi-Fi. You can directly connect to the machine without using wireless LAN. You must manually connect the mobile device each time you use the machine.

Preparations for Direct Connection(P. 274)
Connecting a Mobile Device Directly to the Machine (Direct Connection)(P. 281)



Connecting a Mobile Device via Wireless LAN Router (LAN Connection)

958J-06X

Connect a mobile device to the machine via a wireless LAN router in the same way as you connect a computer to the machine. By configuring a mobile device to connect automatically to the wireless LAN router, you do not need to manually connect it next time.



Required Preparations

- Connect the machine to the network using wireless or wired LAN. **Setting Up the Network(P. 59)**
  * When using a wired LAN, check that a wireless LAN router is connected to the same network.
- Set an IPv4 address to the machine. **Setting IPv4 Addresses(P. 74)**

Connect the mobile device to either of the following wireless LAN routers:

- A wireless LAN router connected to the machine
- (When the machine is connected to a wired LAN) A wireless LAN router on the network connected to the machine

For details about how to connect a mobile device to a wireless LAN router, see the manual of the mobile device.

Connecting a Mobile Device Directly to the Machine (Direct Connection)

958J-06Y

Connect a mobile device directly to the machine via Wi-Fi. You can directly connect it to the machine without using wireless LAN. You must manually connect the mobile device each time you use the machine.
By default, only one mobile device can be directly connected to the machine at any one time.
* The Direct Connection function is not available for the models which are not equipped with a wireless LAN capability.



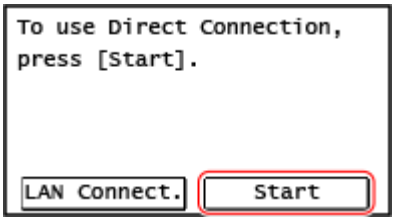
To establish a direct connection, put the machine into waiting state using the control panel, search the machine from a mobile device, and then connect to the machine by manually entering the network key.

Required Preparations

- Make preparations such as enabling the Direct Connection function on the machine. **Preparations for Direct Connection(P. 274)**

1 On the control panel, press [Mobile Portal] in the [Home] screen. [Home] Screen(P. 113)

2 Press [Start].



➠ The machine enters waiting state for Direct Connection.

Within 5 minutes of pressing [Start], you must directly connect the mobile device.

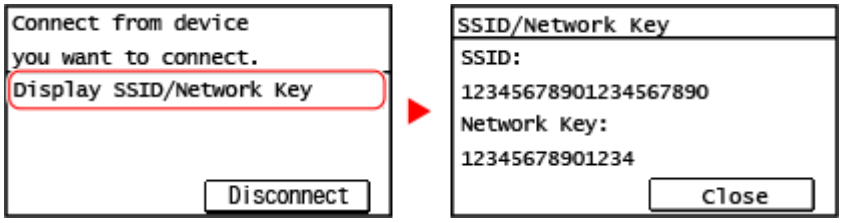
■When [Disconnect] Is Displayed

- You can skip this step when [Connect from device you want to connect.] is displayed. Proceed to Step 3.
- When [Maximum number of wireless devices connected using Direct Connection has been reached.] is displayed, you cannot connect a new mobile device until a connected mobile device is disconnected. To disconnect a connected mobile device, press [Disconnect] ▶ [Yes].
  * By default, only one mobile device can be directly connected to the machine at any one time.

3 Directly connect the mobile device.

■Manually Configuring the Wi-Fi Settings

1 Press [Display SSID/Network Key] to check the SSID and the network key of the machine.



2 In the Wi-Fi settings of the mobile device, select the SSID of the machine, and enter the network key.
For details about how to configure the Wi-Fi settings, see the manual of the mobile device.

4 When [Connected.] appears on the control panel, press [Close].

➠ The direct connection screen reappears.
By default, only one mobile device can be directly connected to the machine at any one time. [Maximum number of wireless devices connected using Direct Connection has been reached.] is displayed on the screen.

5 When you have completed your operations on the mobile device, press [Disconnect] ▸ [Yes].

➠ The direct connection is terminated.
If multiple mobile devices are connected, all devices are disconnected.

IMPORTANT

- You may not be able to connect to the Internet with Direct Connection depending on the mobile device.
- The power-saving effect of sleep mode decreases when using Direct Connection.
- The IP address of the mobile device is set automatically. If you set the IP address manually, communication using Direct Connection may not be performed correctly.

NOTE

Checking a Mobile Device Connected to the Machine

- When using Direct Connection, press [Connection Information] to display the information of the mobile device connected to the machine with Direct Connection.

If the Direct Connection Is Automatically Disconnected

- The direct connection is automatically terminated in the following cases:
  - When the Direct Connection Termination is set
  - When no data is sent or received between the mobile device and the machine for a while
  - When the wireless LAN connection of the machine is terminated

Using a Dedicated Application to Print and Scan (Canon PRINT Business)

958J-070

You can use the dedicated Canon application Canon PRINT Business to print and scan.
It also supports Department ID Management. Even when printing with an unknown Department ID is restricted, you can print by setting a Department ID.

Compatible Operating Systems and Download Site
See the Canon website.
https://global.canon/gomp/

Usage

- Connect a mobile device to the machine. **Connecting a Mobile Device to the Machine(P. 279)**
- Register the machine to Canon PRINT Business.
  When the mobile device is connected to the machine via LAN, the IP address information of the machine is required to register the machine to Canon PRINT Business. You can view the IP address with [Home] screen ▶ [Mobile Portal] ▶ [LAN Connect.] ▶ [Display Device Name/IP Address].
- If you want to scan, select [Menu] in the [Home] screen ▶ [Management Settings] ▶ [Device Management] ▶ set [Scan with Canon PRINT Business] to [On].
- For details about registering the machine, printing, and scanning, see the Help menu item in the application.

Using AirPrint Application to Print and Scan Data

958J-071

AirPrint is a print function standard in Apple operating systems. You can print from applications that support AirPrint instead of having to install a dedicated application or driver.
In addition, you can use AirPrint to print from a Mac. You can also scan data with a Mac.



When Using an iPhone, iPad, or iPod touch(P. 284)
When Using a Mac(P. 285)

IMPORTANT

When Using Department ID Management on the Machine

- You cannot use AirPrint when the following operations are restricted: **Enabling Department ID Management(P. 300)**
  - Printing from a computer with an unknown Department ID
  - Scanning and saving data to a computer

When Using an iPhone, iPad, or iPod touch

Use AirPrint to print from an iPhone, iPad, or iPod touch connected to the machine via LAN or direct connection.

Operating Environment

You can use AirPrint with the following iPhone, iPad, and iPod touch models:

- iPhone: 3GS or later
- iPad: All models
- iPod touch: Third generation or later

Required Preparations

- Set the machine to enable use of AirPrint. **Preparations for Using AirPrint(P. 276)**
- Connect the machine to an iPhone, iPad, or iPod touch. **Connecting a Mobile Device to the Machine(P. 279)**

1 Open the data to be printed on the iPhone, iPad, or iPod touch.

2 In the application with the data to be printed open, tap [ ].

➡ The menu options are displayed.

3 Tap [Print].

➡ The print options are displayed.
If print options are not displayed, the application does not support AirPrint. In this case, you cannot use AirPrint to print data.

4 Tap [Printer], and select the machine.

5 Configure the print settings.

The available settings and usable paper sizes vary depending on the application you are using.

6 Tap [Print].

➡ Printing starts.

You can check the print status or the print log by pressing  on the control panel. **Viewing the Print Job Status and Log(P. 217)**

When Using a Mac

You can use AirPrint to print and scan data from a Mac connected to the network on the same LAN as the machine or a Mac connected to the machine via USB.

Operating Environment
You can use AirPrint on a Mac with the following operating systems installed:

- Printing: OS X 10.7 or later*1
- Scanning: OS X 10.9 or later*2

*1 When printing from a Mac connected to the machine via USB, OS X 10.9 or later.

*2 When scanning with TLS encrypted communication, OS X 10.11 or later.

Required Preparations

- Set the machine to enable use of AirPrint. **Preparations for Using AirPrint(P. 276)**
- Connect the machine to a Mac. **Setting Up the Network(P. 59)**
  When connecting via USB, connect to the USB port for computer connection on the back of the machine with a USB cable. **Front Side(P. 16)**
- In [System Preferences] ▶ [Printers & Scanners] on the Mac, click [+] to register the machine.

Using AirPrint to Print Data(P. 285)
Using AirPrint to Scan Data(P. 286)

■ Using AirPrint to Print Data

1 Open the document you want to print on your Mac.

2 In the application used to open the document, click [Print].

➡ The printing dialog box appears.

3 In [Printer], select the machine.

4 Configure the print settings.

The available settings and usable paper sizes vary depending on the application you are using.

5 Click [Print].

➡ Printing starts.

You can check the print status or the print log by pressing on the control panel. **Viewing the Print Job Status and Log(P. 217)**

■ Using AirPrint to Scan Data

1 Place the original on the machine. Placing Originals(P. 127)

2 On your Mac, Click [System Preferences] ▶ [Printers & Scanners].

➡ The [Printers & Scanners] screen is displayed.

3 Select the machine.

4 On the [Scan] tab, click [Open Scanner].

➡ The [Scanner] screen is displayed.

5 Configure the scan settings.

6 Click [Scan].

➡ Scanning starts.

NOTE

When Scanning Cannot Be Performed

- The machine may not be online (scan standby mode). On the control panel, select [Scan] in the [Home] screen, and press [Remote Scanner] to turn the machine online, and then repeat the operation.

Printing from an Android Device

958J-072

Install a plugin on a mobile device to enable printing from an application that has a print function.
This machine supports Canon plugins as well as Mopria®, which is supported by various manufacturers.
You can also use the function that is standard in the OS to print data without having to install a plugin.

Using a Dedicated Plugin to Print (Canon Print Service)(P. 287)
Using a Common Plugin to Print (Mopria® Print Service)(P. 287)
Printing with the Function Standard in the OS (Default Print Service)(P. 288)

Using a Dedicated Plugin to Print (Canon Print Service)

You can use the dedicated Canon plugin Canon Print Service to print from any application.
It also supports Department ID Management. Even when printing with an unknown Department ID is restricted, you can print by setting a Department ID.

Compatible Operating Systems and Download Site

See the Canon website.
https://global.canon/psmp/

Usage

- Connect a mobile device to the machine. **Connecting a Mobile Device to the Machine(P. 279)**
- Register the machine to Canon Print Service.
  When the mobile device is connected to the machine via LAN, the IP address information of the machine is required to register the machine to Canon Print Service. You can view the IP address with [Home] screen ▶ [Mobile Portal] ▶ [LAN Connect.] ▶ [Display Device Name/IP Address].
- For details about registering the machine and the printing method, see the Canon Print Service manual in "Mobile Apps" at the online manual site.
  https://oip.manual.canon/

Using a Common Plugin to Print (Mopria® Print Service)

The machine supports Mopria® Print Service, a plugin that enables printing from any application on a Mopria® certified printer or multifunction machine.
You can print on a Mopria® certified printer available from various manufacturers, which is convenient when printing on the go, without having to install a dedicated application or plugin.

Usage

- Connect a mobile device to the machine. **Connecting a Mobile Device to the Machine(P. 279)**
- For details about how to print and Mopria® certified printers, see the following website:
  https://mopria.org/

IMPORTANT

When Using Department ID Management on the Machine

- You cannot use Mopria® Print Service to print when printing from a computer with an unknown Department ID is restricted. **Enabling Department ID Management(P. 300)**

NOTE

- By using Mopria® Scan, you can directly import scanned data to an Android device.

Printing with the Function Standard in the OS (Default Print Service)

You can use the function that is standard in the OS (Default Print Service) to print from any application.
If your version of Android supports Default Print Service, you can print data without having to install a dedicated application or plugin.

Usage

- Connect a mobile device to the machine. **Connecting a Mobile Device to the Machine(P. 279)**
- Make sure that Canon Print Service and Mopria® Print Service are not installed in the mobile device or are disabled.
- For details about the supported OS and how to print, see the following website: **https://support.google.com/android/**

NOTE

- If usage of Mopria® is restricted, you cannot use Default Print Service to print. **Restricting Use from a Mobile Device(P. 344)**

Printing from Chromebook or Other Device with Chrome OS

958J-073

You can use a Chromebook or other device equipped with Chrome OS to print without having to install a dedicated application or printer driver.

IMPORTANT

Printing from a Chrome OS Device

- Printing from a Chrome OS device may not be supported depending on your country or region.

When Using Department ID Management on the Machine

- You cannot print from a device equipped with Chrome OS when printing from a computer with an unknown Department ID is restricted. **Enabling Department ID Management(P. 300)**

Usage

- Connect a Chromebook to the machine.
  Connecting a Mobile Device via Wireless LAN Router (LAN Connection)(P. 280)
  When connecting via USB, connect to the USB port for computer connection on the back of the machine with a USB cable. **Front Side(P. 16)**
- For details about how to print using the Chromebook, see Chromebook Help.
  https://support.google.com/chromebook/answer/7225252

Security

Security 292
Setting the Department ID and PIN for the Administrator 293
Authenticating Users and Managing Groups 295
Authenticating Users and Managing Groups with Department ID (Department ID Management) 296
Registering a Department ID and PIN 298
Enabling Department ID Management 300
Setting the Department ID and PIN on a Computer 301
Confirming Usage by Department ID 304
Performing User Authentication with an LDAP Server When Sending or Saving Data 305
Protecting the Network 308
Setting the Firewall 309
Changing the Port Number 312
Using a Proxy 313
Using TLS 315
Using IPSec 317
Using IEEE 802.1X 321
Managing and Verifying a Key and Certificate 323
Generating a Key and Certificate 324
Generating a Key and Certificate Signing Request (CSR) and Obtaining and Registering a Certificate 326
Generating a Key and Obtaining and Registering a Certificate from an SCEP Server 329
If an Error Is Displayed in the Certificate Issuance Request Status 334
Registering a Key and Certificate or CA Certificate Obtained from an Issuing Authority 336
Verifying a Received Certificate with OCSP 338
Preventing Sending Data by Mistake and Leaking Information 339
Limiting Available Destinations 340
Confirming the Destination before Sending 342
Restricting Use from a Mobile Device 344
Restricting Printing 345
Restricting Printing from a Computer to Secure Print 346
Preventing Unauthorized Use 347
Restricting Address Book Registration and Editing 348
Restricting Use of Remote UI 350
Preventing Connection to Computer via USB Port 352
Configuring LPD, RAW, or WSD 354
Disabling HTTP Communication 356

Applying a Security Policy 357
Security Policy Items 359

Security

958J-074

This machine is an information device that uses communication functions and handles various data. Therefore, it is important to provide measures to prevent unauthorized access when using the machine in a network environment and measures against security risks such as sending data by mistake and leaking information.
This machine is equipped with various functions and settings to reduce these threats and vulnerabilities. Configure the settings and use them appropriately according to your usage environment and conditions for safer operation of the machine.

Creating an Administrator System

Use an administrator account to manage the machine and configure the settings. Operate the machine using a system in which only a specific administrator(s) knows the ID and PIN.

Setting the Department ID and PIN for the Administrator(P. 293)

Managing Users and Groups

Managing the users and groups that use the machine and performing authentication of its use can prevent operation by third parties and unauthorized access.

Authenticating Users and Managing Groups(P. 295)

Network Settings

Applying the network security settings according to the usage environment can reduce the threat of unauthorized access and eavesdropping.

Protecting the Network(P. 308)

Managing Usage Status

When using the function to send a scanned data, measures are needed to prevent sending data by mistake or leaking information. In addition, using a PIN and setting usage restrictions can help prevent unauthorized use of the Address Book and Remote UI. Implementing measures that include operations according to usage status of the machine can improve security.

Preventing Sending Data by Mistake and Leaking Information(P. 339)
Preventing Unauthorized Use(P. 347)

Integrated Management Using a Security Policy

Applying a security policy that exists for other devices to this machine can allow for sharing of the information security level within your organization.

Applying a Security Policy(P. 357)

Setting the Department ID and PIN for the Administrator

958J-075

Set the System Manager ID and System Manager PIN to create an administrator account.
By creating an administrator account, only those users who know these credentials can log in to System Manager Mode to view and change important settings. **System Manager ID and PIN(P. 12)**

This section describes how to configure the settings using the control panel.
You can also configure the settings using Remote UI from a computer after the System Manager ID and PIN have been set on the machine. **Managing the Machine from a Computer (Remote UI)(P. 368)**
Administrator privileges are required.

1 **On the control panel, press [Menu] in the [Home] screen.** **[Home] Screen(P. 113)**

2 **Press [Management Settings] ▶ [User Management] ▶ [System Manager Information Settings].**

➡ The [Sys. Manager Info Set.] screen is displayed.

If the login screen appears, enter the currently set System Manager ID and PIN, and then press ID or [Log In]. **Logging In to the Machine(P. 124)**

3 **Press [Sys. Manager Info Set.]**

4 **Enter the System Manager ID, and press [Apply].**

Specify any number. You cannot set a System Manager ID consisting of all zeros, such as "00" or "0000000."

5 **Enter the System Manager PIN, and press [Apply].**

Specify any number other than "7654321." You cannot set a PIN consisting of all zeros, such as "00" or "0000000."

6 **Enter the PIN again, and press [Apply].**

➡ The settings are applied.

IMPORTANT

- Do not forget the System Manager ID and PIN. If you forget your System Manager ID and PIN, contact your dealer or service representative.

NOTE

Setting the System Manager Information (imageRUNNER 2224N Only)

- On the [Sys. Manager Info Set.] screen, press [System Manager Name] to set the name of the system manager.

- You can also configure the e-mail address and other system manager information by using Remote UI from a computer.
  - The set information is displayed in [Status Monitor/Cancel] ▶ [Device Information] of Remote UI. **Checking Usage and Logs with Remote UI(P. 374)**
  - The set e-mail address becomes the destination that is selected by clicking [Mail to System Manager] on the Portal page of Remote UI. **Portal Page of Remote UI(P. 372)**

Clearing the System Manager ID and PIN Settings

- Clear the entered values of the System Manager ID and PIN, and then press [Apply] with the fields left empty.

Authenticating Users and Managing Groups

958J-076

Managing the users and groups that use the machine and performing authentication of its use can prevent operation by third parties and unauthorized access.

Department ID Management
Use Department ID Management to manage users for all functions of the machine. Only users who know the Department ID and PIN can use the machine. It is also possible to track usage of the machine by Department ID to help with managing costs.
Authenticating Users and Managing Groups with Department ID (Department ID Management) (P. 296)

LDAP Server Authentication
LDAP server authentication can be used for send and save functions when using an LDAP server.
Performing User Authentication with an LDAP Server When Sending or Saving Data(P. 305)

* You can also use Department ID Management and LDAP server authentication together at the same time.

Authenticating Users and Managing Groups with Department ID (Department ID Management)

958J-077

Department ID Management is a function for managing users and groups by allocating a Department ID to each user or group.
When using Department ID Management, it is recommended to create an administrator account and a system for management and operation by a specific user.

What You Can Do with Department ID Management(P. 296)
Operation Examples(P. 296)
Department ID Management Procedure(P. 297)

What You Can Do with Department ID Management

By using Department ID Management, you can do the following:

Enhance Security

- Set a PIN for Department ID to require authentication by entering the Department ID and PIN when a user logs in.
- Restrict operations for an unknown Department ID.

Monitor Device Usage and Manage Costs

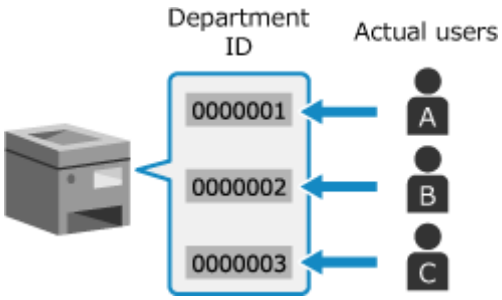
- Tally and keep track of the number of printed pages by Department ID.
- Set the maximum number of pages that can be printed by Department ID to control the number of sheets of paper that can be used.
- Restrict copy, print, or scan functions by Department ID.

Operation Examples

Assign Department IDs to users and groups according to usage environment and purpose. In addition, setting a PIN to a Department ID can prevent unauthorized access and enable stricter management.

Example 1: Managing individual users by assigning them each a Department ID

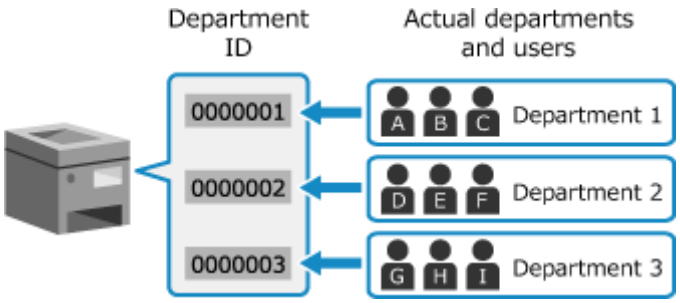
Use this method to manage individual users by assigning them each a separate Department ID.
This is useful when there are few people who use the machine and you want to limit the number of pages to be printed and function access for each user.
Users log in with their own Department ID.



Example 2: Managing users as a group

Use this method to manage multiple users in a group by assigning each group a separate Department ID.
This is useful when there are many people or groups that use the machine, such as office departments and school classes.

Users log in with the Department ID of the group to which they belong.



Department ID Management Procedure

To use Department ID Management, follow the procedure below.
Administrator privileges are required.

Step 1	**Set up Department ID Management.** **Setting the Department ID and PIN for the Administrator(P. 293)** **Registering a Department ID and PIN(P. 298)**
Step 2	**Start Department ID Management.** Restrict operations for unknown Department IDs, as needed. **Enabling Department ID Management(P. 300)**
Step 3	**Set the Department ID and PIN on each computer using the machine.** **Setting the Department ID and PIN on a Computer(P. 301)**
Step 4	**Perform Department ID Management.** **Confirming Usage by Department ID(P. 304)**

Registering a Department ID and PIN

958J-078

Register the Department ID used by a group or user to be managed.
To perform authentication at login, set a PIN.
Limit the number of pages that can be printed and usable functions for each Department ID, as needed.

This section describes how to register a Department ID and PIN using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [User Management] ▶ [Department ID Management].

➡ The [Department ID Management] screen is displayed.

4 Click [Register New Department].

➡ The [Register New Department] screen is displayed.

5 In [New Department], set the Department ID and PIN.

- Enter numbers in [Department ID].
- To set a PIN, select the [Set PIN] checkbox, and enter the same number in [PIN] and [Confirm].

  * You cannot set a Department ID or PIN consisting of all zeros, such as "00" or "0000000."

6 Configure [Restrict Functions] as needed.

- To limit the number of pages that can be printed, select the desired item and enter the maximum number of pages in [Number of Pages].
- To restrict the usable functions, select the items you want to restrict.

  * Select [Restrict Scan] to restrict the following scan functions.
    - Sending e-mails
    - Saving scanned data to a shared folder

7 Click [OK].

➡ The registered Department ID is added to [Department ID Page Total] on the [Department ID Management] screen.

8 Log out from Remote UI.

NOTE

Editing a Registered Department ID

- To edit the registered information, click the Department ID you want to edit in [Department ID Page Total] on the [Department ID Management] screen.

Enabling Department ID Management

958J-079

After registering a Department ID, configure the settings to enable Department ID Management. Once Department ID Management is started, a login screen appears when operating the machine.

By default, the following functions can be operated without having to log in.

- Printing from a computer
- Scanning and saving data to a computer

You can also restrict these operations as needed.

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, you can configure Department ID Management from [Menu] on the [Home] screen ▶ [Management Settings]. However, on the control panel, you can only enable or disable Department ID Management. Administrator privileges are required.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [User Management] ▶ [Department ID Management] ▶ [Edit].

➡ The [Edit Department ID Management] screen is displayed.

4 Select the [Department ID Management] checkbox.

5 Clear the items for the operations to be restricted, as needed.

■To restrict printing from a computer with an unknown Department ID

Clear the [Allow Print Jobs with Unknown IDs] checkbox.

* When this checkbox is cleared, you must set the Department ID on the driver to be able to print from a computer. **Setting the Department ID and PIN on a Computer(P. 301)**

■To restrict scanned data to be saved to a computer

Clear the [Allow Scan Jobs with Unknown IDs] checkbox.

* The Department ID cannot be set on the driver or application for scanned data to be saved to a computer. Therefore, when this checkbox is cleared, users can no longer save scanned data to the computer during Department ID Management.

6 Click [OK].

➡ The settings are applied.

7 Log out from Remote UI.

Setting the Department ID and PIN on a Computer

958J-07A

When restricting printing from a computer with an unknown Department ID, you must set the Department ID and PIN on each computer using the machine. If you want to include printing from a computer in the usage for each Department ID even when these are not restricted, set the Department ID and PIN for each computer.

When Using Windows(P. 301)
When Using macOS(P. 302)

■When Using Windows

Administrator privileges are required on each computer.

1 Log on to the computer using an administrator account.

2 Click [ ] (Start) ▶ [ ] (Settings) ▶ [Devices] ▶ [Printers & scanners].

➠ The [Printers & scanners] screen is displayed.

3 Click the driver of the machine ▶ [Manage] ▶ [Printer properties].

➠ The driver properties screen is displayed.

4 On the [Device Settings] tab, set [User Management] to [Department ID Management].

5 Click [Settings] at the bottom right.

➠ The [Department ID/PIN Settings] screen is displayed.

6 Set the Department ID and PIN.

- To set a PIN, select the [Allow PIN Settings] checkbox, and enter a PIN.
- Click [Verify] to confirm that the Department ID and PIN have been entered correctly.
  * This is not available when the machine is connected to the computer via the USB or Web Services on Devices (WSD) port.

7 Set the authentication process and applicable range, as needed.

■Confirming the Department ID and PIN when printing

Select the [Confirm Department ID/PIN When Printing] checkboxes.

■When the machine is connected to the computer via the USB or WSD port

Select the [Authenticate Department ID/PIN at Device] checkbox.

8 **Click [OK] ▶ [OK].**

➡ The settings are applied.

■When Using macOS

1 **Click [ ] ▶ [System Preferences] ▶ [Printers & Scanners].**

➡ The [Printers & Scanners] screen is displayed.

2 **Select the machine, and click [Options & Supplies].**

3 **On the [Options] tab, select the [Department ID Management] checkbox, and click [OK].**

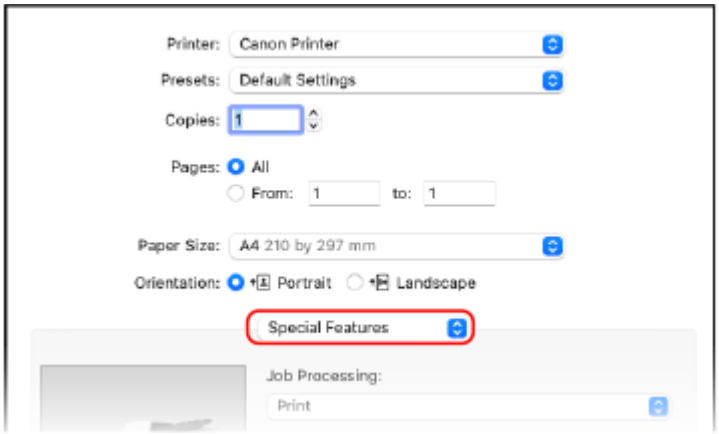
4 **On the driver setting screen, set the Department ID and PIN.**

You must set the Department ID and PIN each time you print.

■When using a printer driver

1 Display the printing dialog box, and select the printer driver of the machine. **Printing from a Computer(P. 204)**

2 From the print options pop-up menu, select [Special Features].



If print options are not displayed, click [Show Details] in the printing dialog box.

3 Select the [Use Department ID Management] checkbox, and click [Settings].

➡ The [Department ID/PIN Settings] screen is displayed.

4 Enter the Department ID and PIN.

5 Set the authentication process and applicable range, as needed.

Confirming the Department ID and PIN when printing

Select the [Confirm Department ID/PIN When Printing] checkbox.

6 Click [OK].

Confirming Usage by Department ID

958J-07C

You can view the number of pages printed and copied for each Department ID when Department ID Management is enabled.

This section describes how to view this information using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required.

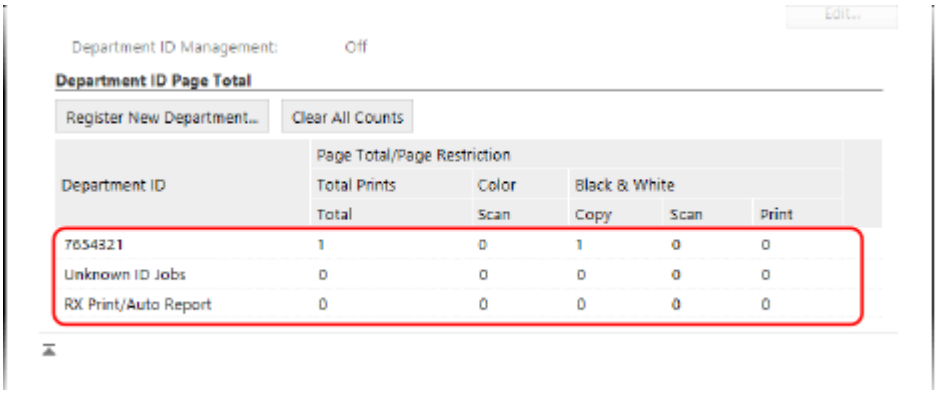
1 **Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)**

3 **Click [User Management] ▶ [Department ID Management].**

➠ The [Department ID Management] screen is displayed.

4 **In [Department ID Page Total], view the usage.**



■Resetting the count for a specific Department ID only

For the Department ID with the count to reset, click [Clear Count] ▶ [OK].

■Resetting the count for All Department IDs

Click [Clear All Counts] ▶ [OK].

5 **Log out from Remote UI after viewing the usage.**

Performing User Authentication with an LDAP Server When Sending or Saving Data

958J-07E

You can use LDAP server authentication when using the send and save functions of the machine.
The machine can display a login screen when sending or saving scanned data to restrict these functions to only those users managed by an LDAP server.
You can also restrict the send and save destinations and prohibit sending and saving for each function.
For the specifications of LDAP server authentication of the machine, see the specifications of the authentication function. **Supported Environment (imageRUNNER 2224N)(P. 47)**

Configure these settings using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required.

Required Preparations

- Register the LDAP server to be used for authentication in the machine. **Registering LDAP Servers(P. 86)**

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [TX Settings] ▶ [Authentication Settings for Send Function] ▶ [Edit].

➡ The [Edit Authentication Settings for Send Function] screen is displayed.

4 Select the [Use User Authentication] checkbox in [Basic Settings].

■During Department ID Management

Set the action when logging out after being logged in with both authentication and Department ID Management.
To display the screen to select the logout authentication after pressing the logout button, select the [Display Confirmation Screen When Logging Out] checkbox.
When this checkbox is cleared, you are logged out from both without the screen being displayed.

5 In [E-Mail Sending Settings], specify whether to allow sending of e-mails.

- When [Do Not Allow] is selected, you cannot send scanned data by e-mails.
- When [Only Allow Sending to Myself] is selected, you can only send e-mails to the e-mail addresses of the users authenticated with the LDAP server.

■When [Allow] or [Only Allow Sending to Myself] is selected

Configure the settings to display the authentication screen and specify the sender.

[Authentication Method]
Specify whether to display the authentication screen of the SMTP server when sending data.

[Display the authentication screen using the same user name as when the sending operation started]

Displays the authentication screen using the same user name and password entered on the login screen for authenticated sending.

[Display the authentication screen without any authentication information]

Displays the authentication screen without a user name and password.

[Use device-specific authentication information and do not display the authentication screen]

Perform SMTP server authentication using the user name and password set in the mail server details without displaying the authentication screen.

[Specify Authentication User Destination as Sender]
Select this checkbox to set the e-mail address of the user authenticated on the LDAP server as the sender. When this checkbox is cleared, the e-mail address of the machine set in the details of the mail server becomes the sender. **Configuring Detailed Information of the E-mail Server (Remote UI)(P. 229)**

6 In [File Sending Settings], specify whether to allow saving of scanned data to a shared folder.

- When [Do Not Allow] is selected, you cannot save scanned data to a shared folder.
- When [Only Allow Sending to Myself or Specified Folder] is selected, you can only save data to a folder registered in the LDAP server or a folder specified with [Specify Destination Folder].

■When [Allow] is selected

Configure the settings to display the authentication screen.

[When Sending File to Destination Registered in Address Book]

[Authentication Method]

Specify whether to display the authentication screen of the server when sending data.

[Display the authentication screen using the same authentication information as when the sending operation started]

Displays the authentication screen using the same user name and password entered on the login screen for authenticated sending.

[Display the authentication screen without any authentication information]

Displays the authentication screen without a user name and password.

[Use the authentication information from the address book and do not display the authentication screen]

Perform server authentication using the user name and password set in the Address Book without displaying the authentication screen.

■When [Only Allow Sending to Myself or Specified Folder] is selected

Configure the settings to display the authentication screen and the settings of the destination folder.

[When Sending File to Myself]

[Authentication Method]

Specify whether to display the authentication screen of the server when sending data.

[Use the same authentication information as when the sending operation started]

Performs server authentication using the same user name and password entered on the login screen for authenticated sending.
To display the authentication screen using the same user name and password when sending data, select the [Display Authentication Screen] checkbox.

[Display the authentication screen without any authentication information]

Displays the authentication screen without a user name and password.

[Specify Destination Folder]

To specify the store location, select this checkbox, and enter [Host Name] and [Folder Path].
When this checkbox is cleared, the store location is set using the authenticated user information registered in the LDAP server.

[Host Name]

Enter the host name for the shared folder to be used as the store location.

[Folder Path]

Enter the path to the store location excluding the host name.
To add a user name authenticated with the LDAP server to the path, select the [Add User Name] checkbox.

7 Click [OK].

➡ The settings are applied.

8 Log out from Remote UI.

Protecting the Network

958J-07F

Connecting the machine to a network allows you link it to computers and mobile devices for more convenient operations. However, this also creates risks of unauthorized access and eavesdropping over the network.
By configuring the security settings according to your network environment, you can reduce these risks to ensure safer use of the machine.

Filtering Using the Firewall Settings

Allows communications only with devices that have a specific IP address or MAC address to prevent unauthorized access.

Setting the Firewall(P. 309)

Port Control

If the port number being used by a communicating device, such as a computer or server, is changed, change the setting on the machine too. In addition, if it is clear that there is an unneeded protocol, use of the protocol is prohibited on the machine and that port is closed to prevent intrusion from the outside.

Changing the Port Number(P. 312)

Using a Proxy Server

Using a proxy server to connect the machine to a network not only facilitates managing communication with external networks but blocks unauthorized access and consolidates anti-virus protection for enhanced security.

Using a Proxy(P. 313)

Encryption of Communication Using TLS

You can use TLS to encrypt communication when using Remote UI. This reduces the risks of data eavesdropping and tampering during communication.

Using TLS(P. 315)

Encryption of Communication Using IPSec

Use Internet Protocol Security (IPSec) to encrypt data at the IP protocol level. This reduces the risk of data eavesdropping and tampering during communication without relying on an application or network configuration.

Using IPSec(P. 317)

Using the Machine in a Network with IEEE 802.1X Authentication

When connecting the machine to a network that uses IEEE 802.1X authentication, you must configure the settings on the machine such as the authentication method managed by the authentication server.

Using IEEE 802.1X(P. 321)

Managing and Verifying the Key and Certificate

You can generate a key and certificate used to encrypt communication and register a key and certificate obtained from a certification authority. By configuring the settings to check the revocation status of a certificate (using OCSP), you can check to see if a certificate received from a certification authority has been revoked.

Managing and Verifying a Key and Certificate(P. 323)

■ See Also

For the network settings at setup, see the following.

Configuring Your Machine for Your Network Environment(P. 78)

Setting the Firewall

958J-07H

Set up the packet-filtering firewall to prevent unauthorized access.
First, as a prerequisite, set whether to allow or block communication with other devices. Next, specify the IP addresses or MAC addresses of devices you want to block or allow as exceptions.
For the number of addresses that can be specified and the protocols whose communication can be restricted, see the firewall specifications. **Firewall Settings(P. 44)**

Setting IP Address Filtering(P. 309)
Setting MAC Address Filtering(P. 310)

IMPORTANT

- MAC address filtering is not available when connecting the machine to a wireless LAN.
- Multicast and broadcast addresses are not restricted even when the setting is configured to block the sending of data from the machine to other devices.

Setting IP Address Filtering

Set IPv4 address filtering or IPv6 address filtering according to your usage environment.

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. However, the control panel can only be used to enable or disable the filter. **[Firewall Settings](P. 405)**
Administrator privileges are required. The machine must be restarted to apply the settings.

IMPORTANT

- If you set an incorrect IP address, you will no longer be able to access Remote UI. If this happens, use the control panel to disable the firewall settings, and then use Remote UI to set the IP address again.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Network Settings] ▶ [Firewall Settings].

➡ The [Firewall Settings] screen is displayed.

4 Click [Edit] for the IP address send or receive filter.

- To restrict sending of data from the machine to other devices, click [Edit] for the send filter.
- To restrict receiving of data from other devices, click [Edit] for the receive filter.

5 **Select the [Use Filter] checkbox.**

➡ The IP address is enabled.

6 **In [Default Policy], set the filtering prerequisites.**

As a filtering prerequisite, select whether to allow or block communication with other devices.

7 **Register [Exception Addresses].**

- In [Address to Register], enter an IP address, and then click [Add].
- You can also specify a range of IP addresses by using a hyphen (-) or prefix length.

Input example:

- **One IPv4 address**
  192.168.0.10
- **One IPv6 address**
  fe80::10
- **Specifying a range**
  192.168.0.10-192.168.0.20
  192.168.0.32/27
  fe80::1234/64

8 **Click [OK].**

9 **Restart the machine.** **Restarting the Machine(P. 107)**

➡ The settings are applied.

Setting MAC Address Filtering

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. You cannot use the control panel to configure some of the settings. **[Firewall Settings](P. 405)**
Administrator privileges are required. The machine must be restarted to apply the settings.

IMPORTANT

- If you set an incorrect MAC address, you will no longer be able to access Remote UI. If this happens, use the control panel to disable the firewall settings, and then use Remote UI to set the MAC address again.

1 **Log in to Remote UI in System Manager Mode.** **Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Settings/Registration].** **Portal Page of Remote UI(P. 372)**

3 Click [Network Settings] ▶ [Firewall Settings].

➡ The [Firewall Settings] screen is displayed.

4 Click [Edit] for the MAC address send or receive filter.

- To restrict sending of data from the machine to other devices, click [Edit] for the send filter.
- To restrict receiving of data from other devices, click [Edit] for the receive filter.

5 Select the [Use Filter] checkbox.

➡ The MAC address is enabled.

6 In [Default Policy], set the filtering prerequisites.

As a filtering prerequisite, select whether to allow or block communication with other devices.

7 Register [Exception Addresses].

- In [Address to Register], enter a MAC address, and then click [Add].
- Enter MAC addresses without separating with hyphens (-) or colons (:).

Input example:
123A456B789C

8 Click [OK].

9 Restart the machine. Restarting the Machine(P. 107)

➡ The settings are applied.

Changing the Port Number

958J-07J

Typically, conventional port numbers are used for major protocols, but these port numbers may be changed to enhance security. As the port numbers must be the same on communicating devices, such as a computer or server, when the port number is changed, the setting on the machine also needs to be changed.

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. **[Port Number Settings](P. 415)**
Administrator privileges are required. The machine must be restarted to apply the settings.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Network Settings] ▶ [Port Number Settings] ▶ [Edit].

➡ The [Edit Port Number Settings] screen is displayed.

4 Change the port number of the protocol, and click [OK].

5 Restart the machine. Restarting the Machine(P. 107)

➡ The settings are applied.

NOTE

Protocol Settings

- For the protocol settings and settings of the functions using the protocol, see the following:
  LPD/RAW/WSD **Configuring LPD, RAW, or WSD(P. 354)**
  HTTP **Disabling HTTP Communication(P. 356)**
  Multicast Discovery **Configuring SLP Communication(P. 95)**
  POP3/SMTP **Configuring Detailed Information of the E-mail Server (Remote UI)(P. 229)**
  SNMP **Configuring SNMP(P. 90)**

Changing the Port Number of the Proxy Server or LDAP Server

- To change the port number of the proxy server or LDAP server, see the following:
  Using a Proxy(P. 313)
  Registering LDAP Servers(P. 86)

Changing the Port Number of the Printer Driver (Windows)

- When the port number of the print protocol (LPD or RAW) is changed on the machine, change the port number setting on the computer too. **Configuring a Printer Port (Windows)(P. 193)**

Using a Proxy

958J-07K

Using a proxy server to connect to a network not only facilitates managing communications with external networks but blocks unauthorized access and consolidates anti-virus protection for enhanced security.

Configure these settings using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required.

Required Preparations

- Prepare the address, port number, and authentication information of the proxy server.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Network Settings] ▶ [Proxy Settings] ▶ [Edit].

➡ The [Edit Proxy Settings] screen is displayed.

4 Select the [Use Proxy] checkbox.

5 Enter the address and port number of the proxy server.

- In [HTTP Proxy Server Address], enter the IP address and host name.
- In [HTTP Proxy Server Port Number], enter the port number.

6 Set the applicable range and authentication information according to your usage environment.

■When using a proxy server also specified for communication with devices on the same domain

Select the [Use Proxy within Same Domain] checkbox.

■When authentication is required to connect to a proxy server

Select the [Use Proxy Authentication] checkbox, and enter the user name to be used for authentication using single-byte alphanumeric characters.
To set a password to use for authentication, select the [Set/Change Password] checkbox, and enter the password using single-byte alphanumeric characters.

7 Click [OK].

➡ The settings are applied.

8 **Log out from Remote UI.**

Using TLS

958J-07L

Transport Layer Security (TLS) is a mechanism for encrypting data sent or received over the network. Encrypting communication with TLS when using Remote UI reduces the risks of data eavesdropping and tampering during communication.
To use TLS encrypted communication for Remote UI, specify the key and certificate (server certificate) you want to use, and then enable TLS on Remote UI.

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Management Settings] to configure the settings. However, the control panel can only be used to enable or disable TLS on Remote UI. **[Use Remote UI] (P. 466)**
Administrator privileges are required. The machine must be restarted to apply the settings.

Required Preparations

- Prepare the key and certificate to use for TLS encrypted communication. **Managing and Verifying a Key and Certificate(P. 323)**

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 In [Network Settings], click [TLS Settings].

➡ The [TLS Settings] screen is displayed.

4 Specify the key and certificate to use for TLS encrypted communication.

1. In [Key and Certificate Settings], click [Key and Certificate].

   ➡ The [Key and Certificate Settings] screen is displayed.

2. To the right of the key and certificate to use, click [Register Default Key].
   - When you click the key name (or certificate icon), the certificate details appear.
   - On the certificate details screen, click [Verify Certificate] to verify that the certificate is valid.

5 Set the TLS version and algorithm.

1. Click [TLS Details] ▶ [Edit].

   ➡ The [Edit TLS Details] screen is displayed.

2. Set the usable version and algorithm, and click [OK].
   Some combinations of versions and algorithms cannot be used. For the supported combinations of versions and algorithms, see the TLS specifications. **TLS(P. 45)**

   [Allowed Versions]

Specify the maximum and minimum versions of TLS.

[Algorithm Settings]

Select the checkbox of the algorithm to use for TLS.

6 Enable TLS on Remote UI.

1. Click [License/Other] ▶ [Remote UI Settings] ▶ [Edit].
   ➡ The [Edit Remote UI Settings] screen is displayed.
2. Select the [Use TLS] checkbox, and click [OK].

7 Restart the machine. Restarting the Machine(P. 107)

➡ The settings are applied.

NOTE

When a Warning Message Appears at Remote UI Startup

- A warning message about the security certificate may appear when starting up Remote UI with TLS enabled. If there are no problems with the certificate or TLS settings, you can continue operations.

Using TLS to Encrypt Sent and Received E-mails

- If the SMTP server and POP3 server support TLS, TLS can be used for communication with these servers. **Configuring Detailed Information of the E-mail Server (Remote UI)(P. 229)**

Using IPSec

958J-07R

Use IP Security Protocol (IPSec) to prevent eavesdropping and tampering of IP packets sent and received over an IP network. This performs encryption at the IP protocol level to ensure security without relying on an application or network configuration.

IPSec Applicable Conditions and Supported Modes(P. 317)
IPSec Policy Configuration(P. 317)
Setting IPSec(P. 317)

IPSec Applicable Conditions and Supported Modes

Packets where IPSec does not apply

- Packets specifying a loopback, multicast, or broadcast address
- IKE packets sent from UDP port 500
- ICMPv6 Neighbor Solicitation and Neighbor Advertisement packets

Operation mode of key exchange protocol (IKE mode)

The IKE mode supported by the machine is only the main mode that is used to encrypt packets. The non-encrypting aggressive mode is not supported.

Communication mode

The communication mode supported by the machine is only the transport mode, which encrypts only the part excluding the IP header. Tunnel mode, which encrypts the entire IP packet, is not supported.

Using IPSec together with IP address filtering

The IP address filter settings are applied first. **Setting the Firewall(P. 309)**

IPSec Policy Configuration

To perform IPSec communication on the machine, you must create an IPSec policy that includes the applicable range and algorithms for authentication and encryption. The policy is mainly made up of the following items.

Selector

Specify which IP packets to apply IPSec communication. In addition to specifying the IP address of the machine and communicating devices, you can also specify their port numbers.

IKE

The key exchange protocol supports Internet Key Exchange Version 1 (IKEv1). For the authentication method, select the pre-shared key method or digital signature method.

- **Pre-shared Key Method:**
  This authentication method uses a common key word, called Shared Key, for communication between the machine and other devices.
- **Digital Signature Method**
  The machine and the other devices authenticate each other by mutually verifying their digital signatures.

ESP/AH

Specify the settings for ESP/AH, which is the protocol used for IPSec communication. ESP and AH can be used at the same time. Use Perfect Forward Secrecy (PFS) for even greater security.

Setting IPSec

Enable the use of IPSec, and then create and register the IPSec policy. If multiple policies have been created, specify the order in which they are applied.

This section describes how to configure the settings using Remote UI from a computer.

On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. However, the control panel can only be used to enable or disable IPSec. **[Use IPSec](P. 414)**
Administrator privileges are required. The machine must be restarted to apply the settings.

Required Preparations

- Connect the machine directly to a computer on the same virtual private network (VPN) as the machine. Confirm the operation conditions, and finish the settings on the computer in advance.
- Prepare the following according to the IKE authentication method:
  - When using the pre-shared key method, enable TLS for Remote UI communication. **Using TLS(P. 315)**
  - When using the digital signature method, prepare the key and certificate to use. **Managing and Verifying a Key and Certificate(P. 323)**
- When using PFS, check that PFS is enabled on the communicating device.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Network Settings] ▶ [IPSec Settings] ▶ [Edit].

➡ The [Edit IPSec Settings] screen is displayed.

4 Select the [Use IPSec] checkbox, and click [OK].

To only receive packets that meet the policy, clear the [Receive Non-Policy Packets] checkbox.

5 Click [Register New Policy].

➡ The [Register New IPSec Policy] screen is displayed.

6 In [Policy Settings], enter the policy name, and select the [Enable Policy] checkbox.

For the policy name, enter a name to identify the policy using single-byte alphanumeric characters.

7 In [Selector Settings], set the selector.

[Local Address Settings]

Select the type of IP address of the machine to which the policy is applied.

- To apply IPSec to all IP packets, select [All IP Addresses].
- To apply IPSec to IP packets sent and received using an IPv4 or IPv6 address, select [IPv4 Address] or [IPv6 Address].

[Remote Address Settings]

Select the type of IP address of the communicating device to which the policy is applied.

- To apply IPSec to all IP packets, select [All IP Addresses].
- To apply IPSec to IP packets sent and received using an IPv4 or IPv6 address, select [All IPv4 Addresses] or [All IPv6 Addresses].

- To specify an IPv4 or IPv6 address to which IPSec is applied, select [IPv4 Manual Settings] or [IPv6 Manual Settings].

[Addresses to Set Manually]

When [IPv4 Manual Settings] or [IPv6 Manual Settings] is selected, enter the IP address. You can also specify a range of IP addresses by using a hyphen (-).

Input example:

- **One IPv4 address**
  192.168.0.10
- **One IPv6 address**
  fe80::10
- **Range specification**
  192.168.0.10-192.168.0.20

[Subnet Settings]

When [IPv4 Manual Settings] is selected, you can use a subnet mask to specify the range of IPv4 addresses.

Input example:
255.255.255.240

[Prefix Length]

When [IPv6 Manual Settings] is selected, you can use a prefix length to specify the range of IPv6 addresses. Enter the prefix length with a range of 0 to 128.

[Port Settings]

Set the port to which IPSec is applied in [Local Port] on the machine and [Remote Port] on the communicating device.

- To apply IPSec to all port numbers, select [All Ports].
- To apply IPSec to a specific protocol such as HTTP or WSD, select [Single Port], and enter the port number of the protocol.

8 In [IKE Settings], set IKE.

[IKE Mode]

The machine only supports the main mode.

[Authentication Method]

Select the authentication method of the machine.

- When [Pre-Shared Key Method] is selected, click [Shared Key Settings] ▶ enter the string to use as the shared key using single-byte alphanumeric characters ▶ click [OK].
- When [Digital Signature Method] is selected, click [Key and Certificate] ▶ [Register Default Key] to the right of the key and certificate to use.

[Validity]

Enter the valid period of IKE SA (ISAKMP SA) to use as the control communication path in minutes.

[Authentication/Encryption Algorithm]

Select the algorithm to use for key exchange.

9 In [IPSec Network Settings], configure the IPSec network settings.

[Use PFS]

Select this checkbox to configure PFS for the session key.

[Validity]

Specify the valid period of IPSec SA to use as the data communication path by time, size, or both.

- When the [Specify by Time] checkbox is selected, enter the valid period in minutes.
- When the [Specify by Size] checkbox is selected, enter the valid period in megabytes.
- When both are selected, the item whose specified value is reached first is applied.

[Authentication/Encryption Algorithm]

Select this checkbox according to the IPSec header (ESP and AH) to be used and its algorithm.

[ESP Authentication]

When [ESP] is selected, select the authentication algorithm. To perform ESP authentication, select [SHA1]. Otherwise, select [Do Not Use].

[ESP Encryption]

When [ESP] is selected, select the encryption algorithm. If you do not want to specify the algorithm, select [NULL]. To disable encryption, select [Do Not Use].

[Connection Mode]

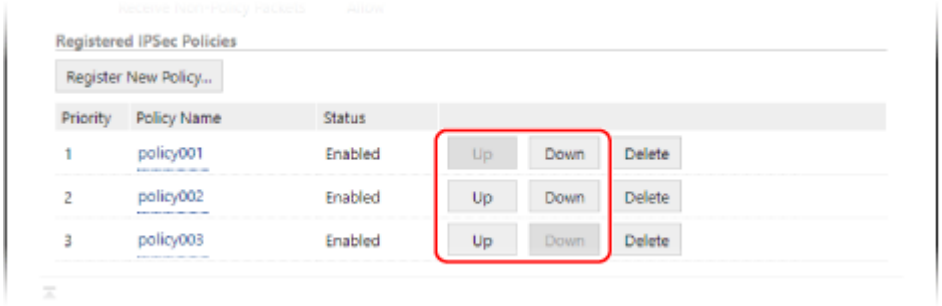
The machine only supports the transport mode.

10 Click [OK].

➠ The newly registered policy is added to [Registered IPSec Policies] on the [IPSec Settings] screen.

■When multiple policies are registered

Click [Up] or [Down] to the right of the policy name to set the priority. Higher level policies have priority in application to IPSec communication.



11 Restart the machine. Restarting the Machine(P. 107)

➠ The settings are applied.

NOTE

Editing Registered Policies

- To edit the registered information, click the policy name you want to edit in [Registered IPSec Policies] on the [IPSec Settings] screen.

Using IEEE 802.1X

958J-07S

In a network environment with IEEE 802.1X authentication, only client devices (supplicants) authenticated by the authentication server (RADIUS server) are allowed to connect to the network via the LAN switch (authenticator), thereby blocking unauthorized access. When connecting the machine to a network that uses IEEE 802.1X authentication, you must configure the settings on the machine such as the authentication method managed by the authentication server.

IEEE 802.1X Authentication Methods(P. 321)
Setting IEEE 802.1X(P. 321)

IEEE 802.1X Authentication Methods

The following IEEE 802.1X authentication methods are supported:

TLS
The machine and authentication server authenticate each other by mutually verifying their certificates. This cannot be used together with another authentication method.

TTLS
This authentication method uses a user name and password for machine authentication and a CA certificate for the server authentication. MSCHAPv2 or PAP can be selected as the internal protocol, and TTLS can be used together with PEAP.

PEAP
The required settings are almost the same as those for TTLS, with MSCHAPv2 used as the internal protocol.

Setting IEEE 802.1X

First enable IEEE 802.1X, and then set the authentication method.

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. However, the control panel can only be used to enable or disable IEEE 802.1X. **[IEEE 802.1X Settings](P. 405)**
Administrator privileges are required. The machine must be restarted to apply the settings.

Required Preparations

- When using TLS as the authentication method, prepare the key and certificate issued by the certificate authority and used for authentication of the machine. **Managing and Verifying a Key and Certificate(P. 323)**

  * A preinstalled CA certificate or a CA certificate installed from Remote UI is used for server authentication.
- When using TTLS or PEAP as the authentication method, TLS-encrypt communication using Remote UI. **Using TLS(P. 315)**

1 **Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)**

3 **Click [Network Settings] ▶ [IEEE 802.1X Settings] ▶ [Edit].**

➡ The [Edit IEEE 802.1X Settings] screen is displayed.

4 Select the [Use IEEE 802.1X] checkbox, and enter the login name.

For the login name, enter a name to identify the user (EAP Identity) using single-byte alphanumeric characters.

■When verifying the certificate of an authentication server

Select the [Verify Authentication Server Certificate] checkbox.
When verifying the common name of the certificate, select the [Verify Authentication Server Name] checkbox, and enter the name of the authentication server to which the user is registered.

5 Configure the settings according to the authentication method to be used.

■When using TLS

1. Select the [Use TLS] checkbox.
2. In [Name of Key to Use], click [Key and Certificate].

   ➡ The [Key and Certificate Settings] screen is displayed.
3. To the right of the key and certificate to use, click [Register Default Key].
   - Click the key name (or certificate icon) to display the certificate details.
   - On the certificate details screen, click [Verify Certificate] to verify that the certificate is valid.

■ When using TTLS or PEAP

1. Select the [Use TTLS] or [Use PEAP] checkbox.
   When using TTLS, select the internal protocol to be used.
2. Use [Use Login Name as User Name] to specify whether to use the login name of IEEE 802.1X authentication for the user name.
3. In [User Name/Password Settings], click [Change User Name/Password].

   ➡ The [Change User Name/Password] screen is displayed.
4. Set the user name and password, and select the [OK] checkbox.
   - Enter the user name using single-byte alphanumeric characters.
   - To set a password, select the [Change Password] checkbox, and enter the same password in both [Password] and [Confirm] using single-byte alphanumeric characters.

6 Click [OK].

7 Restart the machine. Restarting the Machine(P. 107)

➡ The settings are applied.

Managing and Verifying a Key and Certificate

958J-07U

To encrypt communication with TLS when using Remote UI, or to use TLS as the IEEE 802.1X authentication method, a key and certificate are required In addition, depending on the communicating device, encrypted communication using a specified certificate may be requested, thereby requiring a key and certificate.

Managing a Key and Certificate

You can prepare a key and certificate using the following methods:

Generating a Key and Certificate on the Machine

Generate the key and certificate required for TLS on the machine. You can immediately communicate where self-signed certificates are allowed.

Generating a Key and Certificate(P. 324)

Registering a Certificate Issued by a Certificate Authority in a Self-generated Key

When a key is generated on the machine, generate a Certificate Signing Request (CSR), have the certificate authority issue a certificate, and then register that certificate in the key.

Generating a Key and Certificate Signing Request (CSR) and Obtaining and Registering a Certificate(P. 326)

Registering a Certificate Obtained from an SCEP Server to a Self-generated Key

When generating a key on the machine, request a Simple Certificate Enrollment Protocol (SCEP) server to issue a certificate, and then register the obtained certificate. You can also request that a certificate be issued at a specified date and time.

Generating a Key and Obtaining and Registering a Certificate from an SCEP Server(P. 329)

Registering a Key and Certificate or CA Certificate Obtained from an Issuing Authority

Register a key and certificate obtained from an issuing authority or a CA certificate issued by a certificate authority, without self-generating the key and certificate. You can use a digital certificate that matches the communicating device and authentication level.

Registering a Key and Certificate or CA Certificate Obtained from an Issuing Authority(P. 336)

Verifying a Certificate

You can configure the settings to verify the validity of a certificate that the machine receives from a certificate authority, using the Online Certificate Status Protocol (OCSP).

Verifying a Received Certificate with OCSP(P. 338)

Generating a Key and Certificate

958J-07W

Generate the key and certificate required for TLS-encrypted communication on the machine. A self-signed certificate is used for the self-generated key.
For the algorithm of the keys and certificates that can be generated with this machine, see the specifications of the self-generated key and self-signed certificate. **Registration of Certificates (User Signature Keys/Certificates, CA Certificates, S/MIME Certificates)(P. 44)**

Generate a key and certificate using Remote UI from a computer. You cannot use the control panel to generate a key and certificate.
Administrator privileges are required.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Device Management] ▶ [Key and Certificate Settings] ▶ [Generate Key].

➡ The [Generate Key] screen is displayed.

4 Select [Network Communication], and click [OK].

➡ The [Generate Network Communication Key] screen is displayed.

5 In [Key Settings], enter the name of the key, and select the signature and key algorithm.

- Enter the key name using single-byte alphanumeric characters.
- For the key algorithm, select [RSA] or [ECDSA], and select the key length from the pulldown menu. The longer the key length, the better the security, but this slows down communication processing.

6 In [Certificate Settings], set the certificate information.

[Validity Start Date (YYYY/MM/DD)]/[Validity End Date (YYYY/MM/DD)]

Enter the start and end dates of the certificate validity period.

[Country/Region]

Select [Select Country/Region], and then select the country or region from the pulldown menu, or select [Enter Internet Country Code], and enter the country code.

[State]/[City]/[Organization]/[Organization Unit]

Enter the items as needed using single-byte alphanumeric characters.

[Common Name]

Enter the name of the certificate subject as needed using single-byte alphanumeric characters. This corresponds to the Common Name (CN).

7 Click [OK].

➠ The generated key and certificate are added to [Registered Key and Certificate] on the [Key and Certificate Settings] screen.

8 Log out from Remote UI.

NOTE

Viewing and Verifying Detailed Information of a Generated Certificate

- When you click the key name (or certificate icon) in [Registered Key and Certificate] on the [Key and Certificate Settings] screen, the certificate details appear.
- On the certificate details screen, click [Verify Certificate] to verify that the certificate is valid.

When the Key and Certificate Cannot Be Deleted

- You cannot delete a key and certificate being used. Disable the function being used, or delete these after switching to another key and certificate.

Generating a Key and Certificate Signing Request (CSR) and Obtaining and Registering a Certificate

958J-07X

As a certificate generated on the machine does not have a signature from a certificate authority, the machine may not be able to communicate depending on the communicating device. In this case, registering a signed certificate issued by a certificate authority to the key enables communication even with a self-generated key.
For the certificate authority to issue a signed certificate, you must make a request attached with a Certificate Signing Request (CSR). The machine generates a CSR at the same time it generates a key.
For more information about the keys that can be generated by the machine and the CSR algorithm, see self-generated key and CSR specifications. **Registration of Certificates (User Signature Keys/Certificates, CA Certificates, S/MIME Certificates)(P. 44)**

Generating a Key and CSR(P. 326)
Registering a Certificate Issued by a Certificate Authority to a Key(P. 327)

Generating a Key and CSR

Generate a key and CSR using Remote UI from a computer. You cannot use the control panel to generate a key and certificate.
Administrator privileges are required.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Device Management] ▶ [Key and Certificate Settings] ▶ [Generate Key].

➡ The [Generate Key] screen is displayed.

4 Select [Key and Certificate Signing Request (CSR)], and click [OK].

➡ The [Generate Key and Certificate Signing Request (CSR)] screen is displayed.

5 In [Key Settings], enter the name of the key, and select the signature algorithm and key algorithm.

- Enter the key name using single-byte alphanumeric characters.
- For the key algorithm, select [RSA] or [ECDSA], and select the key length from the pulldown menu. The longer the key length, the better the security, but this slows down communication processing.

6 In [Certificate Signing Request (CSR) Settings], set the CSR information.

[Country/Region]

Select [Select Country/Region], and either select the country or region from the pulldown menu, or select [Enter Internet Country Code] and enter the country code.

[State]/[City]/[Organization]/[Organization Unit]

Enter the items as needed using single-byte alphanumeric characters.

[Common Name]

Enter the name of the certificate subject as needed using single-byte alphanumeric characters. This corresponds to the Common Name (CN).

7 Click [OK].

➡ The [Key and Certificate Signing Request (CSR) Details] screen is displayed.

8 Click [Store in File] to save the CSR file to a computer.

9 Log out from Remote UI.

10 Submit the application with CSR file attached to the certificate authority.

NOTE

- When the CSR is generated, the key is registered to the machine, but it cannot be used until the certificate issued by the certificate authority is registered.

Registering a Certificate Issued by a Certificate Authority to a Key

Register the certificate using Remote UI from a computer. You cannot use the control panel to register it. Administrator privileges are required.

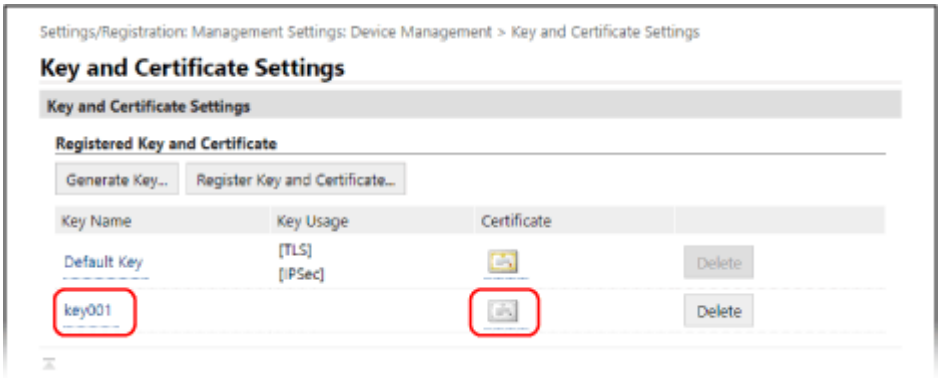
1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Device Management] ▶ [Key and Certificate Settings].

➡ The [Key and Certificate Settings] screen is displayed.

4 Click the key name (or certificate icon) to which to register the certificate.



➠ The [Key and Certificate Signing Request (CSR) Details] screen is displayed.

5 **Click [Register Certificate].**

6 **In [Specify File], click [Browse], and specify the file of the certificate issued by the certificate authority.**

7 **Click [Register].**

➠ The icon of the certificate displayed in [Registered Key and Certificate] on the [Key and Certificate Settings] screen changes from [ ] to [ ].

8 **Log out from Remote UI.**

NOTE

Viewing and Verifying Detailed Information of a Registered Certificate

- Click the key name (or certificate icon) in [Registered Key and Certificate] on the [Key and Certificate Settings] screen to display the certificate details.
- On the certificate details screen, click [Verify Certificate] to verify that the certificate is valid.

When the Key and Certificate Cannot Be Deleted

- You cannot delete a key and certificate being used. Disable the function being used, or delete these after switching to another key and certificate.

Generating a Key and Obtaining and Registering a Certificate from an SCEP Server

958J-07Y

When generating a key on the machine, you can request a Simple Certificate Enrollment Protocol (SCEP) server that manages certificates to issue a certificate. The certificate issued by an SCEP server is registered automatically to the machine.
For information about the algorithm of the keys that can be generated with this machine and certificates that can be requested to be issued, see the specifications of the self-generated key and Certificate Signing Request (CSR). **Registration of Certificates (User Signature Keys/Certificates, CA Certificates, S/MIME Certificates)(P. 44)**
This machine supports Network Device Enrollment Service (NDES) in Windows Server 2008 R2, 2012 R2, and 2016 for the SCEP server. Communication using HTTPS is not supported.

To obtain and register a certificate from an SCEP server, configure the settings for communicating with the SCEP server, and then generate a key and request certificate issuance. You can also request certificate issuance at a specified date and time.

Configuring the SCEP Server Communication Settings(P. 329)
Generating a Key and Requesting Certificate Issuance(P. 330)
Requesting Certificate Issuance at a Specified Date and Time(P. 331)

Configuring the SCEP Server Communication Settings

Configure the communication settings using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required.

Required Preparations

- Prepare the URL and port number of the SCEP server.
  * Communication using HTTPS is not supported.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Device Management] ▶ [Settings for Certificate Issuance Request (SCEP)].

➡ The [Settings for Certificate Issuance Request (SCEP)] screen is displayed.

4 In [Communication Settings], click [Edit].

➡ The [Edit Communication Settings] screen is displayed.

5 Set the SCEP server information.

[SCEP Server URL]

Enter the URL of the connecting SCEP server.

[Port Number]

Enter the port number used to communicate with the SCEP server.

[Communication Timeout]

Enter the time from search start to timeout in seconds.

6 Click [OK].

➡ The settings are applied.

7 Log out from Remote UI.

Generating a Key and Requesting Certificate Issuance

Configure the settings for generating a key and requesting the issuance of a certificate using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required. The machine must be restarted after obtaining a key.
* This method cannot be used to request issuance of a certificate when the setting for requesting issuance of a certificate at a specified date and time is enabled. **Requesting Certificate Issuance at a Specified Date and Time(P. 331)**

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Device Management] ▶ [Settings for Certificate Issuance Request (SCEP)] ▶ [Certificate Issuance Request].

➡ The [Certificate Issuance Request] screen is displayed.

4 Set the items for a key and certificate.

[Key Name]

Enter the key name using single-byte alphanumeric characters.

[Signature Algorithm]

Select the signature algorithm from the pulldown menu.

[Key Length (bit)]

Select the key length from the pulldown menu. The larger the value, the better the security, but this slows down communication processing.

[Organization]

Enter the organization name using single-byte alphanumeric characters, as needed.

[Common Name]

Enter the name of the certificate subject using single-byte alphanumeric characters.
This is also called the Common Name (CN).

[Challenge Password]

When the SCEP server has a password, enter the password for the request data used for the issuance request using single-byte alphanumeric characters.

[Key Usage]

Select the usage of the generated key. If the usage is not decided, select [None].

5 Click [Issuance Request] ▶ [OK].

➡ The request to issue a certificate is sent to the SCEP server.

6 When the message that says a certificate is acquired appears, restart the machine. Restarting the Machine(P. 107)

➡ The key and certificate are registered.

NOTE

Viewing Issuance Request Status and Error Information

- You can view detailed information on the [Settings for Certificate Issuance Request (SCEP)] screen.
  If a certificate is not issued, an error is displayed in the certificate issuance request status. For details about the message and how to resolve it, see the following:
  If an Error Is Displayed in the Certificate Issuance Request Status(P. 334)

Viewing and Verifying Detailed Information of a Registered Certificate

- In [Settings/Registration] ▶ [Device Management] ▶ [Key and Certificate Settings] ▶ [Registered Key and Certificate], click the key name (or certificate icon) to display the certificate details.
- On the certificate details screen, click [Verify Certificate] to verify that the certificate is valid.

When the Key and Certificate Cannot Be Deleted

- You cannot delete a key and certificate being used. Disable the function being used, or delete these after switching to another key and certificate.

Requesting Certificate Issuance at a Specified Date and Time

The request for certificate issuance occurs at the specified date and time. You can also set the request for certificate issuance to occur regularly.

Configure the settings using Remote UI from a computer. You cannot use the control panel to configure the settings. Administrator privileges are required.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Device Management] ▶ [Settings for Certificate Issuance Request (SCEP)].

➡ The [Settings for Certificate Issuance Request (SCEP)] screen is displayed.

4 In [Settings for Certificate Issuance Auto Request], click [Edit].

➡ The [Edit Settings for Certificate Issuance Auto Request] screen is displayed.

5 Select the [Enable Timer for Certificate Issuance Auto Request] checkbox, and enter the start date and time to request issuance of a certificate.

6 Set other items at the time of issuance auto request, as needed.

[Auto Adjust Issuance Request Time]

To adjust the certificate issuance request time, select this checkbox.
The start time for issuing a certificate may be adjusted randomly by up to 10 minutes to reduce the load on the SCEP server.

[Perform Polling When Communication Error Occurs or When Issuance Request Is Deferred]

Check the status of the SCEP server, such as when certificate issuance has been deferred. Select the checkbox and enter the number of polling retries and interval.

* Polling is not performed and an error occurs in the following cases:

- When the machine has exceeded the limit of keys and certificates that can be registered
- When an error occurs in the obtained response data
- When an error occurs in the SCEP server

[Send Periodic Issuance Requests]

The request for certificate issuance occurs automatically and regularly. Select the checkbox and select the issuance request interval from the pulldown menu.
Enabling this setting resets the start date and time to request issuance of a certificate.

[Automatically Restart Device After Acquiring Certificate]

To restart the machine after obtaining a certificate, select the checkbox.

[Delete Old Key and Certificate]

To overwrite the key and certificate with the same location where the key will be used, select the checkbox.

7 In [Settings for Key and Certificate To Be Issued], set the items for a key and certificate.

[Key Name]

Enter the key name using single-byte alphanumeric characters.

[Signature Algorithm]

Select the signature algorithm from the pulldown menu.

[Key Length (bit)]

Select the key length from the pulldown menu. The larger the value, the better the security, but this slows down communication processing.

[Organization]

Enter the organization name using single-byte alphanumeric characters, as needed.

[Common Name]

Enter the name of the certificate subject using single-byte alphanumeric characters.
This is also called the Common Name (CN).

[Challenge Password]

When the SCEP server has a password, enter the password for the request data used for the issuance request using single-byte alphanumeric characters.

[Key Usage]

Select the usage of the generated key. If the usage is not decided, select [None].

8 Click [OK].

➡ The settings are applied.

9 Log out from Remote UI.

NOTE

Viewing Issuance Request Status and Error Information

- You can view detailed information on the [Settings for Certificate Issuance Request (SCEP)] screen.
  If a certificate is not issued, an error is displayed in the certificate issuance request status. For details about the message and how to resolve it, see the following:
  If an Error Is Displayed in the Certificate Issuance Request Status(P. 334)

Viewing and Verifying Detailed Information of a Registered Certificate

- In [Settings/Registration] ▶ [Device Management] ▶ [Key and Certificate Settings] ▶ [Registered Key and Certificate], click the key name (or certificate icon) to display the certificate details.
- On the certificate details screen, click [Verify Certificate] to verify that the certificate is valid.

When the Key and Certificate Cannot Be Deleted

- You cannot delete a key and certificate being used. Disable the function being used, or delete these after switching to another key and certificate.

If an Error Is Displayed in the Certificate Issuance Request Status

958J-080

If a certificate is not issued, an error is displayed in the certificate issuance request status. Select the message from the list below, and check how to troubleshoot the problem.

Key and Certificate Registration Limit Error(P. 334)
Communication Error (SCEP ERROR - Fail Info 0: Unrecognized or Unsupported Algorithm)(P. 334)
Communication Error (SCEP ERROR - Fail Info 1: CMS Message Integrity Verification Failure)(P. 334)
Communication Error (SCEP ERROR - Fail Info 2: Forbidden or Unsupported Transaction)(P. 335)
Communication Error (SCEP ERROR - Fail Info 3: Excessive Time Difference Between CMS signingTime and System Time)(P. 335)
Communication Error (SCEP ERROR - Fail Info 4: No Certificate Identified That Matches Provided Criteria)(P. 335)
Communication Error (TCP ERROR)(P. 335)
Communication Error (HTTP ERROR <HTTP status code>)(P. 335)
Deferred(P. 335)

NOTE

- If the problem persists even after trying the troubleshooting methods, contact the SCEP server administrator.

Key and Certificate Registration Limit Error

The maximum number of keys and certificates that can be registered to the machine has been reached.
Delete unused keys and certificates.

Communication Error (SCEP ERROR - Fail Info 0: Unrecognized or Unsupported Algorithm)

The algorithm of the certificate is unknown or is not supported.

Set the [Signature Algorithm] and [Key Length (bit)] of the Certificate Issuance Request Correctly.
Generating a Key and Obtaining and Registering a Certificate from an SCEP Server(P. 329)

Communication Error (SCEP ERROR - Fail Info 1: CMS Message Integrity Verification Failure)

Certificate integrity check (CMS message signature verification) failed.

Request Certificate Issuance Again.
Generating a Key and Obtaining and Registering a Certificate from an SCEP Server(P. 329)

Communication Error (SCEP ERROR - Fail Info 2: Forbidden or Unsupported Transaction)

Communication with the SCEP server is not allowed or supported.

Set the Communication Settings of the SCEP Server Correctly.
Generating a Key and Obtaining and Registering a Certificate from an SCEP Server(P. 329)

Communication Error (SCEP ERROR - Fail Info 3: Excessive Time Difference Between CMS signingTime and System Time)

The time of the signingTime attribute in the authenticated attribute of CMS (PKCS#7) does not match the time of the SCEP server.

Check the Date and Time Settings on the Machine.
If the settings are not correct, set the time zone, and then set the current date and time.
Request certificate issuance again.

Setting the Date and Time(P. 365)

Generating a Key and Obtaining and Registering a Certificate from an SCEP Server(P. 329)

Communication Error (SCEP ERROR - Fail Info 4: No Certificate Identified That Matches Provided Criteria)

Unable to identify if the certificate matches the standard.

Contact the SCEP Server Administrator.

Communication Error (TCP ERROR)

Connection to SCEP server failed or timed out.

Set the Communication Settings of the SCEP Server Correctly.
Generating a Key and Obtaining and Registering a Certificate from an SCEP Server(P. 329)

Communication Error (HTTP ERROR <HTTP status code>)

HTTP error occurred.

Set the Communication Settings of the SCEP Server Correctly.
Generating a Key and Obtaining and Registering a Certificate from an SCEP Server(P. 329)

Deferred

SCEP server returned a deferred status.

Wait a Moment, and Request Certificate Issuance.
Generating a Key and Obtaining and Registering a Certificate from an SCEP Server(P. 329)

Registering a Key and Certificate or CA Certificate Obtained from an Issuing Authority

958J-081

Install and register a key and certificate or CA certificate obtained from a digital certificate issuing authority to the machine before starting to use them.

Register the key and certificate or CA certificate using Remote UI from a computer. You cannot use the control panel to register these.
Administrator privileges are required.

Required Preparations

- Check the conditions of the key and certificate or CA certificate usable with the machine. **Registration of Certificates (User Signature Keys/Certificates, CA Certificates, S/MIME Certificates)(P. 44)**
- When registering a key and certificate, check the password for the private key set in the file.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Device Management] [Key and Certificate Settings] or [CA Certificate Settings].

The [Key and Certificate Settings] screen or [CA Certificate Settings] screen is displayed.

4 Click [Register Key and Certificate] or [Register CA Certificate].

The [Register Key and Certificate] screen or [Register CA Certificate] screen is displayed.

5 Install the key and certificate file or CA certificate file.

1. Click [Install].
2. Click [Browse] in [Specify File], and specify the file to be installed.
3. Click [Start Installation].

The installed file is added to [Installed Key and Certificate] on the [Register Key and Certificate] screen or [Installed CA Certificate] on the [Register CA Certificate] screen.

6 Registering the key and certificate or CA certificate.

When registering a key and certificate

1. To the right of the key and certificate file to register, click [Register].

➡ The [Enter Private Key Password] screen is displayed.

2 Enter the key name password using single-byte alphanumeric characters, and click [OK].

➡ The registered key and certificate are added to [Registered Key and Certificate] on the [Key and Certificate Settings] screen.

■ When registering a CA certificate

To the right of the CA certificate file to register, click [Register].

➡ The registered CA certificate is added to [Registered CA Certificate] on the [CA Certificate Settings] screen.

7 Log out from Remote UI.

NOTE

Viewing and Verifying Detailed Information of a Registered Certificate

- When you click the key name (or certificate icon) in [Registered Key and Certificate] on the [Key and Certificate Settings] screen, the certificate details appear.
- On the certificate details screen, click [Verify Certificate] to verify that the certificate is valid.

Viewing and Verifying Detailed Information of a Registered CA Certificate

- When you click the issued to location in [Registered CA Certificate] on the [CA Certificate Settings] screen, the CA certificate details appear.
- On the CA certificate details screen, click [Verify Certificate] to verify that the CA certificate is valid.

When the Key and Certificate or CA Certificate Cannot Be Deleted

- You cannot delete a key and certificate being used. Disable the function being used, or delete these after switching to another key and certificate.
- A preinstalled CA certificate cannot be deleted. If a preinstalled CA certificate is not required, click [Disable] to the right of the CA certificate.

Verifying a Received Certificate with OCSP

958J-082

Online Certificate Status Protocol (OCSP) is a protocol for inquiring to an OCSP responder (server that supports OCSP) about the revocation status of a certificate received from a certificate authority.
You can configure the settings to verify the validity of a certificate that the machine receives from a certificate authority, using the OCSP.

Configure these settings using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Device Management] ▶ [OCSP (Online Certificate Status Protocol) Settings] ▶ [Edit].

➡ The [Edit OCSP (Online Certificate Status Protocol) Settings] screen is displayed.

4 Select the [Use OCSP (Online Certificate Status Protocol)] checkbox.

5 Set the certificate verification level and the OCSP responder.

[Certificate Verification Level]

Set whether to validate the certificate even if its revocation status cannot be confirmed, such as when the machine is unable to connect to an OCSP responder.

[OCSP Responder Settings]

Specify the URL of the OCSP responder.

[Custom URL]

When [Use Custom URL] or [Use Certificate URL (Use Custom URL If Certificate URL Cannot Be Retrieved)] is selected, enter the URL of the OCSP responder.

[Communication Timeout]

Enter the time from search start to timeout in seconds.

6 Click [OK].

➡ The settings are applied.

7 Log out from Remote UI.

Preventing Sending Data by Mistake and Leaking Information

958J-083

Leaving a printed document on the machine poses a risk of information leakage. In addition, while using mobile devices are easy and convenient, this can lead to operation errors and information theft.
You can take measures to prevent sending data by mistake and leaking information, according to the usage status of the function, to ensure safer use of the machine.

Restricting and Confirming the Destination

You can restrict the destinations to which scanned data is sent and have a screen confirming the destination displayed when sending it.

Limiting Available Destinations(P. 340)
Confirming the Destination before Sending(P. 342)

Appropriately Restricting Functions

You can restrict access to part or all of a function when using mobile devices.

Restricting Use from a Mobile Device(P. 344)

Preventing Unattended Printed Documents and Information Theft

You can store print data sent from a computer without printing them immediately.

Restricting Printing(P. 345)

■ See Also

When an LDAP server is installed, you can apply LDAP server authentication to restrict the users who can use the send and save functions and the send destinations. You can also prohibit use of functions.

Performing User Authentication with an LDAP Server When Sending or Saving Data(P. 305)

Limiting Available Destinations

958J-084

You can prevent sending scanned data by mistake and leaking data by not allowing users to use destinations in the send function log and by limiting send destinations to those registered in the Address Book or LDAP server.

Prohibiting the Use of Destinations in the Send Log(P. 340)
Sending Only to Registered Destinations(P. 340)

Prohibiting the Use of Destinations in the Send Log

Prevent specifying destinations in the TX Job Log of scan jobs.

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Function Settings] to configure the settings.
[Restrict Resending from Log](P. 452)
Administrator privileges are required.

1 **Log in to Remote UI in System Manager Mode.** **Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Settings/Registration].** **Portal Page of Remote UI(P. 372)**

3 **Click [TX Settings] ▶ [Common Settings] ▶ [Edit].**

➡ The [Edit Common Settings] screen is displayed.

4 **In [Common Settings], select the [Restrict Resending from Log] checkbox.**

5 **Click [OK].**

➡ The settings are applied.

6 **Log out from Remote UI.**

Sending Only to Registered Destinations

This limits the available send destinations to the following:

- Destinations in the Address Book
- Destinations registered to the LDAP server

When this function is enabled, users cannot enter a destination using the numeric keys or register or edit the Address Book. In addition, the TX Job Log recorded before enabling this function is deleted, leaving only the aforementioned available destinations in the TX Job Log.

This section describes how to configure the settings using Remote UI from a computer.

On the control panel, select [Menu] in the [Home] screen, and then select [Function Settings] to configure the settings.
[Restrict New Destinations](P. 452)
Administrator privileges are required.

1 **Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)**

3 **Click [TX Settings] ▶ [Restrict New Destinations] ▶ [Edit].**

➠ The [Edit Settings for New Destinations Restrictions] screen is displayed.

4 **Select the [Restrict New Destinations] checkbox.**

5 **Click [OK].**

➠ The settings are applied.

6 **Log out from Remote UI.**

Confirming the Destination before Sending

958J-085

Configure the settings to display a screen confirming the destination before an e-mail is sent. Confirm that there are no mistakes in the specified destination and entered information to prevent sending by mistake.

Choosing When to Display the Confirmation Screen

- **When specifying a destination with a coded dial number or one-touch dial**
  When a destination is specified with a coded dial number or one-touch dial, the registered destination and destination name are displayed on the confirmation screen. When a group is registered to a coded dial number or one-touch dial, the group name and number of destinations are displayed.
- **When sending an e-mail**
  When you press  to send an e-mail a screen confirming the destination is displayed. Set whether to display this only when sending to multiple destinations (Sequential Broadcast) or whenever sending an e-mail.

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Function Settings] to configure the settings.
[Common Settings](P. 452)
Administrator privileges are required.

1 Log in to Remote UI in System Manager Mode.

Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration].

Portal Page of Remote UI(P. 372)

3 Click [TX Settings].

➠ The [TX Settings] screen is displayed.

4 Configure the setting so that the screen confirming the destination is displayed.

■To display the screen when specifying the destination using a coded dial number or one-touch dial

1. Click [Common Settings] ▶ [Edit].
   ➠ The [Edit Common Settings] screen is displayed.
2. In [Common Settings], select the [Confirm When Using One-Touch/Coded Dial TX] checkbox.
3. Click [OK].

■To display the screen when sending an e-mail

1. Click [Common Settings] ▶ [Edit].
   ➠ The [Edit Common Settings] screen is displayed.
2. In [Common Settings], select the [Confirm Destination Before Sending] checkbox, and select the item to display.

3 Click [OK].

5 Log out from Remote UI.

Restricting Use from a Mobile Device

958J-087

The machine supports the Mopria® plugin, which is supported by various manufacturers.
Mopria® enables printing from any application, such as on a smartphone, or a device equipped with Chrome OS without having to install a dedicated Canon plugin.
Printing from a mobile device can be easy and convenient, but it can also lead to information leakage. You can also prohibit use of Mopria®.

Configure this setting using Remote UI from a computer. You cannot use the control panel to configure the setting. Administrator privileges are required.

1. **Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)**

2. **On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)**

3. **Click [Network Settings] ▶ [Mopria Settings] ▶ [Edit].**

   ➡ The [Edit Mopria Settings] screen is displayed.

4. **Clear the [Use Mopria] checkbox, and click [OK].**

   ➡ The settings are applied.

5. **Log out from Remote UI.**

NOTE

- When the Mopria® setting is enabled, the following network settings are also enabled:
  - HTTP **[Use HTTP](P. 414)**
  - IPP printing **[IPP Print Settings](P. 414)**
  - mDNS (IPv4/IPv6) **[mDNS Settings](P. 410)**
  - Network Link Scan **[Network Link Scan Settings](P. 414)**

Restricting Printing

958J-088

You can require users to enter a PIN before printing. This can prevent not only unattended printed documents and information theft, but also unneeded printing, thereby saving paper.

Restricting Printing from a Computer to Secure Print(P. 346)

■ See Also

By using the Department ID Management function, you can restrict the number of pages that can be printed and the print function for each Department ID. You can also restrict printing from an unknown Department ID.
Authenticating Users and Managing Groups with Department ID (Department ID Management)(P. 296)

Restricting Printing from a Computer to Secure Print

958J-089

With Secure Print, you can set a PIN to a document on the computer and send that document to the machine to be printed. Printing is performed after that PIN is entered on the machine.
Restricting printing from a computer to Secure Print can prevent unattended printed documents and information theft. You can also confirm the print data before printing to prevent unwanted printing.

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Function Settings] to configure the settings.
[Secure Print](P. 428)
Administrator privileges are required.

1 **Log in to Remote UI in System Manager Mode.** **Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Settings/Registration].** **Portal Page of Remote UI(P. 372)**

3 **Click [Secure Print Settings] ▶ [Edit].**

➡ The [Edit Secure Print Settings] screen is displayed.

4 **Check that the [Secure Print] checkbox is selected.**

5 **Select the [Restrict Printer Jobs] checkbox.**

6 **Click [OK].**

➡ The settings are applied.

7 **Log out from Remote UI.**

NOTE

- For details about printing with Secure Print and the time period that Secure Print data is saved, see the following:
  Printing a Document Secured with a PIN (Secure Print)(P. 209)
  Changing the Time Period That Print Data with a PIN (Secure Data) Is Saved(P. 212)

Preventing Unauthorized Use

958J-08C

The machine handles a variety of information including the Address Book and print data. It also provides various settings to ensure efficient management and operation. While this information and the settings provide convenience, they can also lead to information leakage and other security issues if the information and settings can be accessed by anyone.
You can take measures to restrict access and disable functions according to the usage status of the function, to ensure safer use of the machine.

Restricting Access to Information and Settings

Restricting users and operations accessing information and settings on the machine can help prevent unauthorized use and protect confidential information.

Restricting Address Book Registration and Editing(P. 348)
Restricting Use of Remote UI(P. 350)

Disabling Unused Functions

You can disable unused functions to prevent intrusion from the outside.

Preventing Connection to Computer via USB Port(P. 352)
Configuring LPD, RAW, or WSD(P. 354)
Disabling HTTP Communication(P. 356)

■ See Also

For details about the administrator account and how to manage users and groups with access to the machine, see the following.

Setting the Department ID and PIN for the Administrator(P. 293)
Authenticating Users and Managing Groups with Department ID (Department ID Management)(P. 296)

Restricting Address Book Registration and Editing

958J-08E

To prevent unauthorized adding of new entries in the Address Book and editing of existing entries, you can set a PIN and restrict the method for adding new entries.

Restricting Address Book Registration and Editing by Setting a PIN(P. 348)

NOTE

- To better prevent sending data by mistake and information leakage, allow to send only to registered destinations, and prohibit the adding and editing of entries in the Address Book. **Limiting Available Destinations(P. 340)**

Restricting Address Book Registration and Editing by Setting a PIN

You can require the entry of PIN to add a new entry to the Address Book or edit existing entries.

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Set Destination] to configure the settings. **[Address Book PIN](P. 459)**
Administrator privileges are required.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Address Book PIN] ▶ [Edit].

➡ The [Edit Address Book PIN] screen is displayed.

4 Select the [Set/Change PIN] checkbox, and set a PIN.

Enter the same number in [Address Book PIN] and [Confirm].

* You cannot set a PIN consisting of all zeros, such as "00" or "0000000."

5 Click [OK].

➡ The settings are applied.

6 Log out from Remote UI.

NOTE

Clearing the PIN Setting

- Clear the entered values of [Address Book PIN], and then click [OK] with the fields left empty.

Restricting Use of Remote UI

958J-08F

While Remote UI is convenient for operating the machine from a computer, it also poses a risk of third-party access to the machine.
You can configure the setting to require users to enter a PIN (Remote UI Access PIN) when using Remote UI to prevent unauthorized access by a third party.
If you do not use Remote UI, it is recommended that you disable the function.

Setting the PIN to Use for Remote UI(P. 350)
Disabling Remote UI(P. 351)

Setting the PIN to Use for Remote UI

You can restrict the use of Remote UI to only those users who know the Remote UI Access PIN.
This setting is not required when using Department ID Management, as Department ID authentication is performed.

This section describes how to configure the settings using the control panel.
You can also configure the settings using Remote UI from a computer after the Remote UI Access PIN has been set on the machine. **Managing the Machine from a Computer (Remote UI)(P. 368)**
Administrator privileges are required.

1 **On the control panel, press [Menu] in the [Home] screen. [Home] Screen(P. 113)**

2 **Press [Management Settings] ▶ [Remote UI Settings/Update Firmware] ▶ [Remote UI Settings] ▶ [Remote UI Access Security Settings].**

➡ The [RUI Access Security] screen is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then press ID. **Logging In to the Machine(P. 124)**

3 **Press [On].**

4 **Enter the Remote UI Access PIN, and press [Apply].**

5 **Enter the same number, and press [Apply].**

➡ The settings are applied.

NOTE

When [Management Settings] of the Settings Menu Is Initialized

- Use the settings menu on the control panel to reset the Remote UI Access PIN. **[Remote UI Access Security Settings](P. 466)**

Disabling Remote UI

You can disable Remote UI to reduce the risk of unauthorized access to the machine via the network.

Use the control panel to configure the settings. You cannot configure the settings using Remote UI from a computer. Administrator privileges are required. The machine must be restarted to apply the settings.

1 On the control panel, press [Menu] in the [Home] screen. [Home] Screen(P. 113)

2 Press [Management Settings] ▶ [Remote UI Settings/Update Firmware] ▶ [Remote UI Settings] ▶ [Use Remote UI].

➡ The [Use Remote UI] screen is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then press ID. **Logging In to the Machine(P. 124)**

3 Press [Off].

4 Restart the machine. Restarting the Machine(P. 107)

➡ The settings are applied.

Preventing Connection to Computer via USB Port

958J-08H

You can disable the USB port for computer connection on the back of the machine to reduce the risk of an external connection without going through a network with security measures.

imageRUNNER 2224N(P. 352)
imageRUNNER 2224(P. 352)

imageRUNNER 2224N

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. **[USB Settings](P. 416)**
Administrator privileges are required. The machine must be restarted to apply the settings.

1 **Log in to Remote UI in System Manager Mode.** **Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Settings/Registration].** **Portal Page of Remote UI(P. 372)**

3 **Click [External Interface Settings] ▶ [Edit].**

➡ The [Edit External Interface Settings] screen is displayed.

4 **Clear the [Use as USB Device] checkbox, and click [OK].**

5 **Restart the machine.** **Restarting the Machine(P. 107)**

➡ The settings are applied.

imageRUNNER 2224

Administrator privileges are required. The machine must be restarted to apply the settings.

1 **On the control panel, press [Menu] in the [Home] screen.** **[Home] Screen(P. 113)**

2 **Press [Preferences] ▶ [External Interface] ▶ [USB Settings] ▶ [Use as USB Device]**

➡ The [Use as USB Device] screen is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then press [Log In]. **Logging In to the Machine(P. 124)**

3 **Press [Off].**

4 Restart the machine. Restarting the Machine(P. 107)

➠ The settings are applied.

Configuring LPD, RAW, or WSD

958J-08J

Select whether to use any of the protocols below on the machine when printing or scanning documents from a computer.
You are recommended to disable any protocols you will not be using.
When using LPD or RAW, you can configure the time until reception of print data is canceled.

LPD
This protocol is not dependent on the hardware, operating system, or other platform. It is commonly used in TCP/IP network environments.

RAW
This is Windows' proprietary print data type protocol. It is used as standard in a Windows environment.

WSD
This protocol enables automatic detection of network-connected printers and scanners in a Windows environment.

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. **[TCP/IP Settings](P. 409)**
Administrator privileges are required. The machine must be restarted to apply the settings.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Network Settings].

4 Configure LPD, RAW, or WSD.

■When Configuring LPD

1. Click [LPD Settings] ▶ [Edit].
   ➡ The [Edit LPD Settings] screen is displayed.
2. Set whether to use LPD.
   When not using LPD, clear the [Use LPD Printing] checkbox, and proceed to step 5.
3. Enter the time in [RX Timeout].
   Enter the time in minutes from the start of reception standby, after print data reception is canceled, to the timeout.

■When Configuring RAW

1. Click [RAW Settings] ▶ [Edit].
   ➡ The [Edit RAW Settings] screen is displayed.
2. Set whether to use RAW.

When not using RAW, clear the [Use RAW Printing] checkbox, and proceed to step 5.

3 Enter the time in [RX Timeout].
Enter the time in minutes from the start of reception standby, after print data reception is canceled, to the timeout.

■When Configuring WSD

1 Click [WSD Settings] ▶ [Edit].

➡ The [Edit WSD Settings] screen is displayed.

2 Set whether to use WSD for each function.
When not using WSD, clear the checkbox of the function for restricting use of WSD.

Using WSD to Print Data

Select the [Use WSD Printing] checkbox.
The [Use WSD Browsing] checkbox is selected automatically, and WSD is used to obtain the information of the machine from the computer.

Using WSD to Scan Data

Select the [Use WSD Scanning] checkbox. You can perform scanning from a computer without having to install a scanner driver.
To be able to specify a computer connected via WSD as the store location when scanning from the machine, also select the [Use Computer Scanning] checkbox.

When Responding to a Search Request of the Machine by Multicast Discovery

Select the [Use Multicast Discovery] checkbox.
To keep the machine in sleep mode without responding to received multicast discovery packets, clear the checkbox.

5 Click [OK].

6 Restart the machine. Restarting the Machine(P. 107)

➡ The settings are applied.

NOTE

Adding a WSD Network Device

- Click [ ] (Start) ▶ [ ] (Settings) ▶ [Devices] ▶ [Printers & scanners] ▶ [Add printers & scanners], and perform the operations following the instructions on the screen.
- For details about installing the driver via a WSD network, see the manual of the driver at the online manual site.
https://oip.manual.canon/

Changing the Port Number

- To change the port number of each protocol, see the following:
Changing the Port Number(P. 312)

Disabling HTTP Communication

958J-08K

It is recommended to disable HTTP communication when using only the USB connection or when not using functions that require HTTP communication, such as Remote UI, WSD printing, and AirPrint.

This section describes how to configure the settings using the control panel.
You can also configure the settings using Remote UI from a computer. **Managing the Machine from a Computer (Remote UI)(P. 368)**
Administrator privileges are required.

1 **On the control panel, press [Menu] in the [Home] screen.** **[Home] Screen(P. 113)**

2 **Press [Preferences] ▶ [Network] ▶ [TCP/IP Settings] ▶ [Use HTTP].**

➡ The [Use HTTP] screen is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then click ID. **Logging In to the Machine(P. 124)**

3 **Press [Off] ▶ [Yes].**

Applying a Security Policy

958J-08L

Canon multifunction machines and printers have a security policy function for collectively configuring and managing multiple security settings according to a policy.
You cannot edit the security policy with the machine, but you can apply a security policy that has been edited with another device or device management software.

Applying a Security Policy to the Machine(P. 357)
Checking the Security Policy Applied to the Machine(P. 358)

Applying a Security Policy to the Machine

You can import a security policy exported from another device or the device management software to the machine and apply it.
* To export a security policy from an imageRUNNER ADVANCE Series model and apply it to the machine, use the device management software.

Import the security policy using Remote UI from a computer. You cannot use the control panel to import it.
Administrator privileges are required. When a security policy is imported, the machine restarts automatically.

IMPORTANT

Do not turn OFF the machine until the import is complete.

- It may take a few minutes until the process is completed. Turning OFF the machine during processing may cause data corruption or damage the machine.

Do not operate the machine during import.

- Before import, check that the machine is not printing or performing other operations.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Data Management] ▶ [Import].

➡ The [Import] screen is displayed.

4 Click [Browse] in [File Path], and specify the file to be imported.

Import the device configuration information file (*.dcm).

5 In [Decryption Password], enter the password set at export.

6 Select the [Settings/Registration] checkbox in [Select Item to Import].

7 **Click [Start Importing] ▶ [OK].**

➡ The security policy is imported to the machine.
When the import is complete, the machine restarts automatically.

8 **Click [OK].**

NOTE

Exporting a Security Policy

- You can export the security policy applied to the machine and apply it to another device (Canon device that supports security policy setting). **Importing and Exporting the Address Book and Settings(P. 382)**

  * To export a security policy from the machine and apply it to an imageRUNNER ADVANCE Series model, use the device management software.

Applying a Password-protected Security Policy

- When applying a security policy that is protected with a password from another device to the machine, the same password is set for the security policy on the machine. Thereafter, you can only import a security policy with the same password.

  * The security policy exported from the machine is also set with the same password.

Checking the Security Policy Applied to the Machine

You can check the security policy items and their usage.

Check the security policy using Remote UI from a computer. You cannot use the control panel to check this information.
Administrator privileges are required.

1 **Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)**

3 **Click [Security Settings] ▶ [Confirm Security Policy].**

➡ The [Confirm Security Policy] screen is displayed.

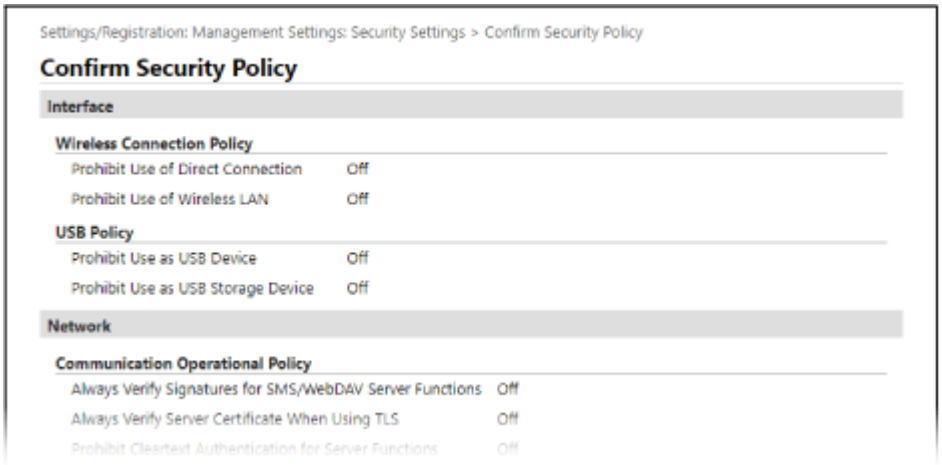
4 **Check the security policy items and their usage. Security Policy Items(P. 359)**

5 **Log out from Remote UI after viewing the usage.**

Security Policy Items

958J-08R

You can check the security policy items and their usage from Remote UI on the [Confirm Security Policy] screen.
The content set on another device or software is applied to the security policy for the machine. Therefore, there may be function items in the security policy that are not available on the machine, but these do not affect the settings or operation of the machine.



[Interface](P. 359)
[Network](P. 359)
[Authentication](P. 361)
[Key/Certificate](P. 362)
[Log] (P. 362)
[Job](P. 362)
[Storage] (P. 362)

[Interface]

[Wireless Connection Policy]
You can disable the wireless connection to prevent unauthorized access.

[Prohibit Use of Direct Connection]
You can prohibit access from mobile devices. **[Direct Connection Settings](P. 402)**

[Prohibit Use of Wireless LAN]
You can prohibit wireless access via a wireless LAN router or access point. **[Select Wired/Wireless LAN] (P. 402)**

[USB Policy]
You can disable the USB connection to prevent unauthorized access and data theft.

[Prohibit Use as USB Device]
You can prohibit a computer from connecting to the machine via the USB port. **[USB Settings](P. 416)**

[Prohibit Use as USB Storage Device]
As this function is not available on the machine, it is not applied to the security policy.

[Network]

[Communication Operational Policy]

You can require a signature or certificate verification for safer communication.

[Always Verify Signatures for SMS/WebDAV Server Functions]
As this function is not available on the machine, it is not applied to the security policy.

[Always Verify Server Certificate When Using TLS]
This verifies the certificate including Common Name (CN) when using TLS-encrypted communication.
Configuring Detailed Information of the E-mail Server (Remote UI)(P. 229)
Registering LDAP Servers(P. 86)
* This does not apply to communication with an IEEE 802.1X network.

[Prohibit Cleartext Authentication for Server Functions]
You can limit verification information to secure methods only. When you are using the machine as a server, cleartext authentication and functions using cleartext authentication are not available. **[Dedicated Port Authentication Method](P. 404)**
* If you are using an older version of the device management software or driver, you may not be able to connect to the machine. Use an updated version.

[Prohibit Use of SNMPv1]
You can prohibit use of SNMPv1 when obtaining device information from a computer. **[SNMP Settings](P. 403)**

[Port Usage Policy]
You can close unused ports to prevent external intrusion.

[Restrict LPD Port (Port Number: 515)]
You can prohibit printing using the LPD protocol. **[LPD Settings](P. 413)**

[Restrict RAW Port (Port Number: 9100)]
You can prohibit printing using the RAW protocol. **[RAW Settings](P. 413)**

[Restrict FTP Port (Port Number: 21)]
As this function is not available on the machine, it is not applied to the security policy.

[Restrict WSD Port (Port Number: 3702, 60000)]
You can prohibit the use of functions using the WSD protocol. **[WSD Settings](P. 413)**

[Restrict BMLinkS Port (Port Number: 1900)]
As this function is not available on the machine, it is not applied to the security policy.

[Restrict IPP Port (Port Number: 631)]
You can disable certain print functions that use mobile apps and prohibit related printing. **Linking with Mobile Devices(P. 271)**

[Restrict SMB Port (Port Number: 137, 138, 139, 445)]
As this function is not available on the machine, it is not applied to the security policy.

[Restrict SMTP Port (Port Number: 25)]
As this function is not available on the machine, it is not applied to the security policy.

[Restrict Dedicated Port (Port Number: 9002, 9006, 9007, 9011-9015, 9017-9019, 9022, 9023, 9025, 20317, 47545-47547)]
You can prohibit the use of dedicated ports. **[Dedicated Port Settings](P. 404)**

[Restrict Remote Operator's Software Port (Port Number: 5900)]
As this function is not available on the machine, it is not applied to the security policy.

[Restrict SIP (IP Fax) Port (Port Number: 5004, 5005, 5060, 5061, 49152)]
As this function is not available on the machine, it is not applied to the security policy.

[Restrict mDNS Port (Port Number: 5353)]

You can disable mDNS settings (IPv4/IPv6) and certain print functions that use a mobile app. This disables network discovery and automatic settings using mDNS as well as related printing.
[IPv4 Settings](P. 409)
[IPv6 Settings](P. 411)
Linking with Mobile Devices(P. 271)

[Restrict SLP Port (Port Number: 427)]
You can disable response to discovery in Multicast Discovery Settings as well as network discovery and automatic settings using SLP. **Configuring SLP Communication(P. 95)**

[Restrict SNMP Port (Port Number: 161)]
You can prohibit the use of functions using the SNMP protocol. This prohibits the machine from obtaining device information from a computer using SNMP and configuring related settings.
[SNMP Settings](P. 403)
[Scan with Canon PRINT Business](P. 464)

[Authentication]

[Authentication Operational Policy]
As this function is not available on the machine, it is not applied to the security policy.

[Prohibit Guest Users to Use Device]

[Force Setting of Auto Logout]

[Password Operational Policy]
As this function is not available on the machine, it is not applied to the security policy.

[Prohibit Caching of Password for External Servers]

[Display Warning When Default Password Is in Use]

[Prohibit Use of Default Password for Remote Access]

[Password Settings Policy]
As this function is not available on the machine, it is not applied to the security policy.

[Minimum Number of Characters for Password]

[Password Validity Period]

[Prohibit Use of 3 or More Identical Consecutive Characters]

[Force Use of at Least 1 Uppercase Character]

[Force Use of at Least 1 Lowercase Character]

[Force Use of at Least 1 Digit]

[Force Use of at Least 1 Symbol]

[Lockout Policy]
You can prohibit login for a while when the wrong password is entered a certain number of times in a row.

[Enable Lockout]
This enables Lockout. Set the Lockout threshold and Lockout period separately on the machine. **[Lockout Settings](P. 469)**

[Key/Certificate]

By preventing weak encryption and encrypting user passwords and keys within a certain hardware, you can protect sensitive data.

[Prohibit Use of Weak Encryption]
You can prohibit the use of weak encryption. **[Encryption Settings](P. 468)**

> **[Prohibit Use of Key/Certificate with Weak Encryption]**
> You can prohibit the use of keys and certificates with weak encryption.

[Use TPM to Store Password and Key]
As this function is not available on the machine, it is not applied to the security policy.

[Log]

As this function is not available on the machine, it is not applied to the security policy.

> **[Force Recording of Audit Log]**
>
> **[Force SNTP Settings]**

[Job]

[Printing Policy]
As this function is not available on the machine, it is not applied to the security policy.

> **[Prohibit Immediate Printing of Received Jobs]**

[Sending/Receiving Policy]
You can restrict the use of destinations when sending and the processing methods of received data.

> **[Allow Sending Only to Registered Addresses]**
> You can prevent users from specifying new destinations. Users can only send data to destinations registered in the Address Book. **[Restrict New Destinations](P. 452)**
>
> **[Force Confirmation of Fax Number]**
> As this function is not available on the machine, it is not applied to the security policy.
>
> **[Prohibit Auto Forwarding]**
> As this function is not available on the machine, it is not applied to the security policy.

[Storage]

As this function is not available on the machine, it is not applied to the security policy.

> **[Force Complete Deletion of Data]**

Managing the Machine

Managing the Machine 364
Setting the Date and Time 365
Managing the Machine from a Computer (Remote UI) 368
Starting Remote UI 369
Portal Page of Remote UI 372
Checking Usage and Logs with Remote UI 374
Monitoring the Usage 376
Checking the Number of Printed Pages (Check Counter) 377
Printing and Viewing Reports and Lists 378
Changing the Report and List Print Settings 380
Clearing the Mail Box 381
Importing and Exporting the Address Book and Settings 382
Updating the Firmware 385
Initializing the Settings and Data 388

Managing the Machine

958J-08S

This section describes the management functions that are required to operate the machine.

Monitoring the Operation Status and Usage of the Machine, and Configuring the Settings

Setting the Date and Time

Set the date and time for the machine. The date and time are used as the reference for the functions using date and time information, and therefore, they need to be set accurately.

Setting the Date and Time(P. 365)

Checking the Operation Status and Changing the Settings (Remote UI)

You can use a Web browser on a computer to check the operation status of the machine, change the machine settings, and register destinations to the Address Book. You can manage the machine from a remote location and efficiently perform time-consuming settings and registration on your computer.

Managing the Machine from a Computer (Remote UI)(P. 368)

Monitoring the Usage (Control Panel)

You can use the control panel of the machine to check the total number of printed pages and print communication results, settings, and other reports and lists.

Monitoring the Usage(P. 376)

Managing Servers, Various Data, and Firmware

Clearing the Server Mail Box

Delete mail from the server mail box as needed so that the mail box does not become full with notification mail sent to the e-mail address of the machine.

Clearing the Mail Box(P. 381)

Managing the Address Book and Settings

You can use the import and export functions to regularly back up the Address Book and settings. In addition, you can share the Address Book and settings with other devices to save time on registering destinations and configuring the settings.

Importing and Exporting the Address Book and Settings(P. 382)

Updating the Firmware

Update the firmware to add new functions to the machine and to fix bugs. By updating to the latest firmware, you can use the machine with more stable and comfortable operations.

Updating the Firmware(P. 385)

Initializing the Settings and Data

You can initialize all settings and data when replacing or disposing of the machine. Initializing the machine prevents access to confidential information and unauthorized use by third parties.

Initializing the Settings and Data(P. 388)

■ See Also

For the settings required to operate the machine, such as the network settings, see the following:

Setting Up(P. 53)

Setting the Date and Time

958J-08U

Set the date and time for the machine. The date and time set here are used as the reference for the functions using date and time information, and therefore, they need to be set accurately.

imageRUNNER 2224N(P. 365)
imageRUNNER 2224(P. 366)

imageRUNNER 2224N

This section describes how to configure the settings using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. **[Timer/Energy Settings](P. 399)**

1 Log in to Remote UI. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Timer Settings] ▶ [Edit].

➡ The [Edit Timer Settings] screen is displayed.

4 Enter the current date and time.

5 Set the time zone according to the region where the machine is used.

Communicating over the Internet is premised on setting the UTC (Coordinated Universal Time) correctly. The UTC is a coordinated universal time that is standard for all parts of the world. There is a time difference depending on the country or region where the machine is used.

6 Set daylight saving time as needed.

- Select the [Use Daylight Saving Time] checkbox if the machine is in a country or region with daylight saving time, and then set the start and end dates.

7 Click [OK].

➡ The settings are applied.

8 Log out from Remote UI.

imageRUNNER 2224

1 **On the control panel, press [Menu] in the [Home] screen. [Home] Screen(P. 113)**

2 **Press [Preferences] ▶ [Timer Settings] ▶ [Current Date/Time Settings].**

➡ The [Current Time Set.] screen is displayed.

3 **Enter the current date and time.**

➡ The settings are applied.

4 **Press [Date/Time Settings] ▶ [Time Zone].**

➡ The [Time Zone] screen is displayed.

5 **Set the time zone according to the region where the machine is used.**

➡ The settings are applied.

Communicating over the Internet is premised on setting the UTC (Coordinated Universal Time) correctly. The UTC is a coordinated universal time that is standard for all parts of the world. There is a time difference depending on the country or region where the machine is used.

6 **Press [Daylight Saving Time Settings] .**

➡ The [Daylight Saving Time] screen is displayed.

When you are using the machine in a country or region where daylight saving time is employed, set daylight saving time to the machine as needed.

7 **Press [On] .**

➡ The [Start] screen is displayed.

8 **Specify the starting date.**

1. Press [Month].
   ➡ The [Month] screen is displayed.
2. Select the starting month.
   ➡ The [Start] screen is displayed.
3. Press [Day].
   ➡ The [Day] screen is displayed.
4. Select the starting week.

➡ The [Day] screen is displayed.

5 Select the starting day.

➡ The [Start] screen is displayed.

6 Press [Apply].

➡ The [End] screen is displayed.

9 Specify the ending date.

1 Press [Month].

➡ The [Month] screen is displayed.

2 Select the starting month.

➡ The [End] screen is displayed.

3 Press [Day].

➡ The [Day] screen is displayed.

4 Select the starting week.

➡ The [Day] screen is displayed.

5 Select the starting day.

➡ The [End] screen is displayed.

6 Press [Apply].

➡ The settings are applied.

Managing the Machine from a Computer (Remote UI)

958J-08W

With Remote UI, you can use a Web browser on a computer to check the function operation status of the machine, change the machine settings, and register destinations to the Address Book. You can manage the machine from a remote location and efficiently perform time-consuming settings and registration on your computer.

Remote UI has the following two modes. The functions available with Remote UI vary depending on the mode you logged in to.

- **System Manager Mode**
  You can use all functions of Remote UI.
- **General User Mode**
  You can monitor usage, view logs, cancel printing, and change some settings.

Starting Remote UI(P. 369)
Portal Page of Remote UI(P. 372)
Checking Usage and Logs with Remote UI(P. 374)

See Also

It is recommended that you set up the following functions to prevent unauthorized use of Remote UI by a third party:

System Manager ID
Set the System Manager ID, which is the exclusive administrator account, so that only users with the ID can log in to System Manager Mode.
Setting the Department ID and PIN for the Administrator(P. 293)

Remote UI Access PIN
If Department ID Management is not set up, configure this setting to require PIN entry when logging in to Remote UI so that only users with the PIN can use Remote UI.
Setting the PIN to Use for Remote UI(P. 350)

Starting Remote UI

958J-08X

To use Remote UI, enter the IP address of the machine into a Web browser on a computer, and log in with System Manager Mode or General User Mode. The functions available with Remote UI vary depending on the mode you logged in to.
When Department ID Management is set up, you must log in with the Department ID. The mode to which you are logging in varies depending on the System Manager ID settings.

Required Preparations

- Check the operating environment of Remote UI. **Supported Environment (imageRUNNER 2224N)(P. 47)**
- Connect the computer you are using to operate Remote UI to the machine over a network. **Setting Up the Network(P. 59)**
- Check the IP address of the machine. **Checking the Network Status and Settings(P. 97)**

NOTE

When Department ID Management Is Not Set Up

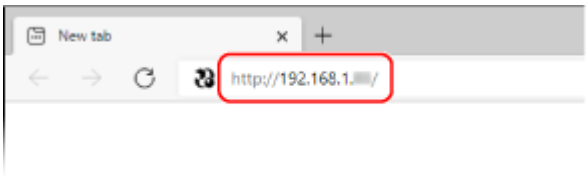
- To log in with Remote UI, you must set the Remote UI Access PIN on the machine. **Setting the PIN to Use for Remote UI(P. 350)**

When Logging in with System Manager Mode

- To log in with System Manager Mode (System Manager ID), you must first change the System Manager PIN from the default setting. **Setting the Department ID and PIN for the Administrator(P. 293)**

1 From a Web browser on a computer, access the following URL.

http://<IP address of the machine>/



➡ The Remote UI login screen appears.
When Remote UI communication is encrypted, a warning message about the security certificate may appear. If there are no problems with the certificate or TLS settings, you can continue operations.

When entering an IPv6 address, enclose the IP address in brackets [ ].

Example:

http://[fe80:2e9e:fcff:fe4e:dbce]/

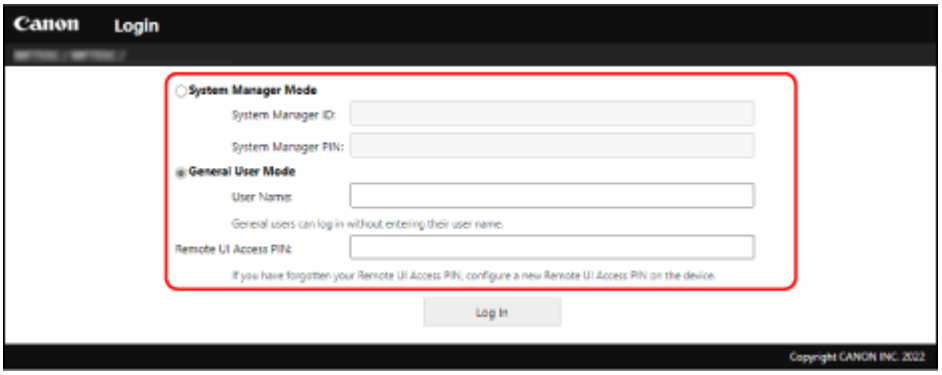
■If the Remote UI Login Screen Is Not Displayed

When a message such as [Cannot access Remote UI.] is displayed and the login screen is not displayed, see the following:
Cannot Access Remote UI or Send Function Setting Tool(P. 558)

2 Enter the items required for login.

■When Department ID Management is not set up

Select [System Manager Mode] or [General User Mode], and enter the required items according to the setting status.



[System Manager Mode]

When the System Manager ID is set, enter the System Manager ID and System Manager PIN. **System Manager ID and PIN(P. 12)**

* When logging in with System Manager Mode, you must change the System Manager PIN from the default setting. **Setting the Department ID and PIN for the Administrator(P. 293)**

[General User Mode]

You can log in without entering a user name, but enter a print user name when checking and canceling jobs waiting to be printed.

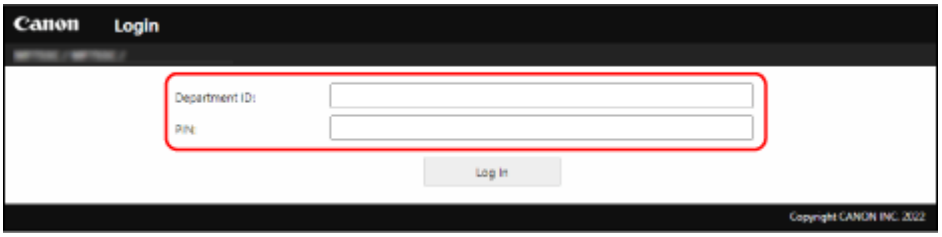
* If a user name is not set in the printer driver, the logon user name of the computer that sent the print data is set automatically.

[Remote UI Access PIN]

When the Remote UI Access PIN is set, enter the PIN.

■When Department ID Management is set

Enter the Department ID and PIN.



When the System Manager ID is set

When logging in with System Manager Mode, enter the System Manager ID and System Manager PIN.
When a Department ID other than the System Manager ID is entered, you will log in with General User Mode.

When the System Manager ID is not set

No matter which Department ID is entered, you will log in with System Manager Mode. **Logging In to the Machine(P. 124)**

* When logging in with System Manager Mode, you must change the System Manager PIN from the default setting. **Setting the Department ID and PIN for the Administrator(P. 293)**

3 Click [Log In].

➠ The Portal page of Remote UI appears. **Portal Page of Remote UI(P. 372)**

4 When you have completed your operations, click [Log Out].

➠ The login screen appears after logging out from Remote UI.

IMPORTANT

- Do not access other websites when using Remote UI.

NOTE

Setting the Time Until the User Is Automatically Logged Out

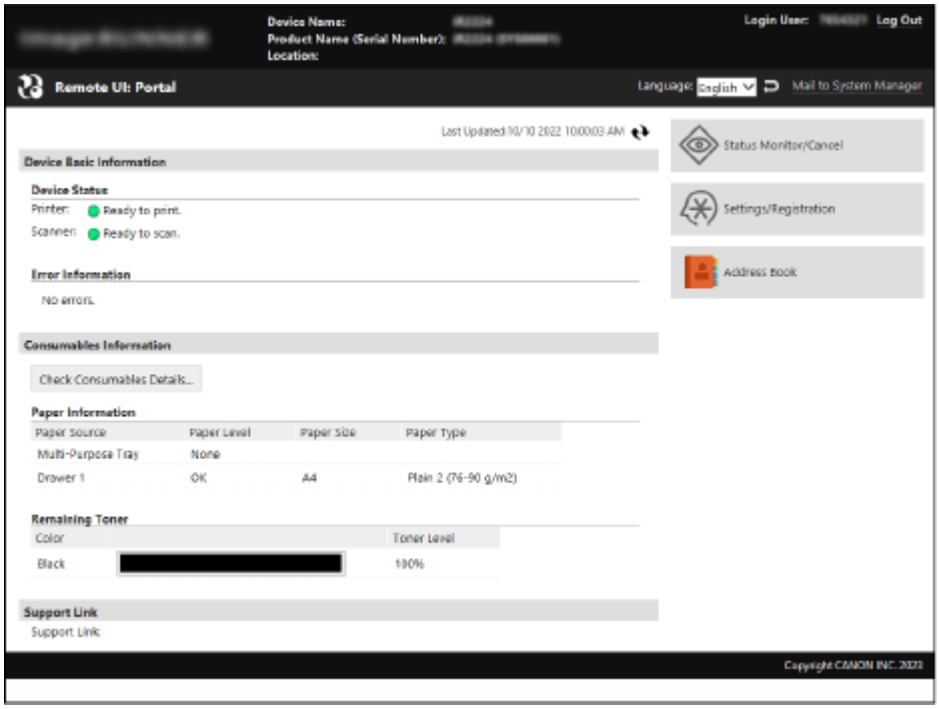
- The user is automatically logged out from Remote UI if no operations are performed for a certain period of time. Use the following procedure to set the time until the user is logged out.

  Log in to Remote UI in System Manager Mode ▶ [Settings/Registration] ▶ [Network Settings] ▶ [Session Settings] ▶ [Edit] ▶ enter the time until the user is logged out ▶ [OK]

Portal Page of Remote UI

958J-08Y

When you log in to Remote UI, the Portal page (Remote UI top page) appears. From here you can check the operations status of the machine, view various information, and change the settings with button operations.



[Device Name]
Displays the device name set in [Settings/Registration] ▶ [Device Management] ▶ [Device Information Settings].

[Product Name] /[Product Name (Serial Number)]
Displays the product name of the machine.
Depending on the model, the serial number may also be displayed.

[Location]
Displays the installation location set in [Settings/Registration] ▶ [Device Management] ▶ [Device Information Settings].

[Login User]
Displays the information of the logged in user.

[Log Out]
You are logged out of Remote UI, and the login screen is displayed.

[Language]
You can change the display language of Remote UI.
* The display languages of the computer and Remote UI must be the same. If the display languages are not the same, the entered information may not be displayed correctly, or you may not be able to reference a folder, server, or other specified destination.

[Mail to System Manager]
Creates e-mail for the administrator indicated in [Settings/Registration] ▶ [User Management] ▶ [System Manager Information].

[Last Updated]
Displays the date and time that the information displayed on the Portal page was last updated.
Click [ ] to the right of the date and time to update these.

[Device Basic Information]
Displays the current status and error information of the machine.

When an error occurs, this displays a link to the error information screen.

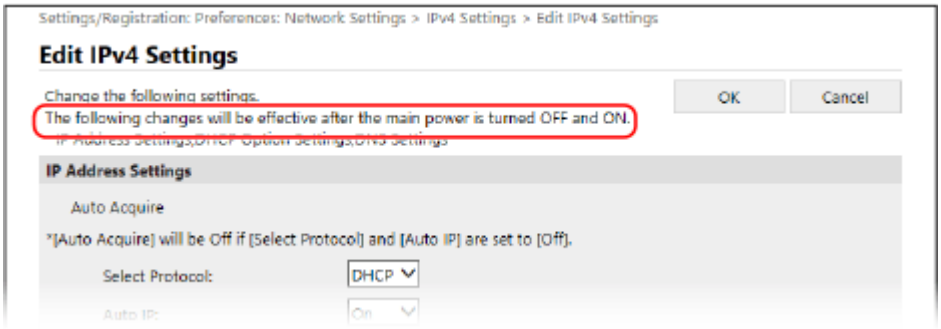
[Consumables Information]
Displays the paper source information and the remaining amount in the toner cartridge.
Click [Check Consumables Details] to display the toner cartridge name.

[Support Link]
Displays a link to support information for this machine that is set in [Settings/Registration] ▶ [License/Other] ▶ [Support Link].

[Status Monitor/Cancel]
Click this to display the [Status Monitor/Cancel] screen.
From here, you can check the status and logs of a function, operation status of the machine, and error information. **Checking Usage and Logs with Remote UI(P. 374)**

[Settings/Registration]
Click this to display the [Settings/Registration] screen.
If you logged in with System Manager Mode, you can change any settings and perform operations such as saving and importing data.

- The items that can be set in the [Settings/Registration] screen are nearly the same as those of the control panel, but some items can only be set with either the control panel or Remote UI. **Settings Menu Items(P. 393)**
- Depending on the item, you may have to restart the machine for the settings to be applied. If a restart is required, a message appears at the top of the screen.



[Address Book]
Click this to display the [Address Book] screen.
If you logged in with System Manager Mode, you can register and edit destinations in the Address Book. **Registering Destinations to the Address Book (Remote UI)(P. 165)**

Checking Usage and Logs with Remote UI

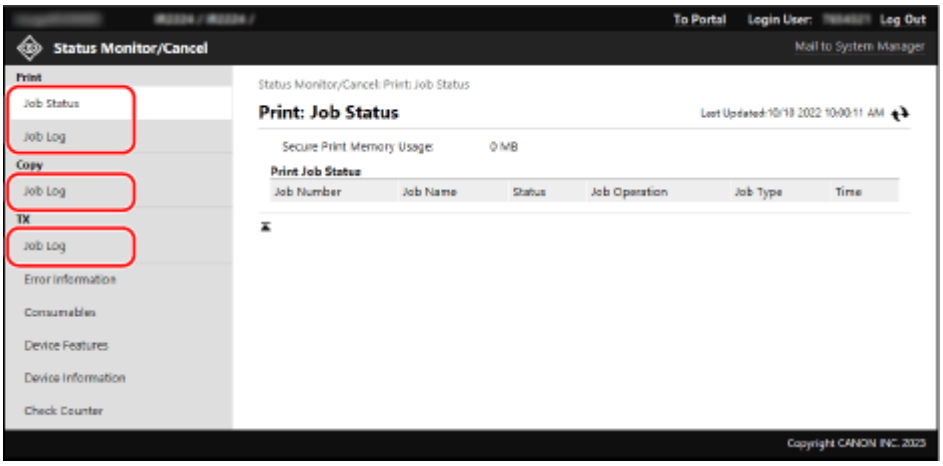
958J-090

From Status Monitor/Cancel in Remote UI, you can check the status and logs of a function, operation status of the machine, and error information.

1 Log in to Remote UI. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Status Monitor/Cancel]. Portal Page of Remote UI(P. 372)

3 Select an item to view the status or log.



[Print]

[Job Status]

Displays the status (Printing or Waiting) of printed data.
When you log in the Remote UI using the System Manager Mode or the Department ID, the status of all print jobs is displayed.
If you entered your user name in [User Name] when you logged in with General User Mode, only the print job status for that user is visible.

- Click [Job Number] for paused prints and secure prints to display print details and view the user name and number of printed sheets.
- Click [Cancel] in [Job Operation] to delete the print data for jobs that are printing or waiting.

[Job Log]

Displays the print job log.

[Copy]

[Job Log]

Displays the copy job log

[TX]

[Job Log]

Displays the TX job log for scan jobs.

[Error Information]

Displays information of errors occurring on the machine.

* You can view the same information by clicking the link displayed in [Error Information] on the Portal page.

[Consumables]

Displays the paper size and type of each paper source and the toner cartridge name.

* You can view the same information by clicking [Check Consumables Details] on the Portal page.

[Device Features]

Displays the specifications of the machine and the status of optional equipment.

[Device Information]

Displays information of the machine, such as the product name and serial number, as well as the firmware version and system manager information.

- [Device Name] and [Location] display the information set in [Settings/Registration] ▶ [Device Management] ▶ [Device Information Settings].
- [System Manager Information] displays the information set in [Settings/Registration] ▶ [User Management] ▶ [System Manager Information].

[Check Counter]

Displays the total number of pages copied and printed to date. **Checking the Number of Printed Pages (Check Counter)(P. 377)**

4 Log out from Remote UI after viewing the usage.

Monitoring the Usage

958J-091

You can use the control panel of the machine to check the total number of copied and printed pages and print communication results, settings, and other reports and lists.

Checking the Number of Printed Pages (Check Counter)(P. 377)
Printing and Viewing Reports and Lists(P. 378)

■ See Also

You can also check the counter using Remote UI from a computer. In Remote UI, you can also check the status and logs of a function, operation status of the machine, and error information.
Checking Usage and Logs with Remote UI(P. 374)

Checking the Number of Printed Pages (Check Counter)

958J-092

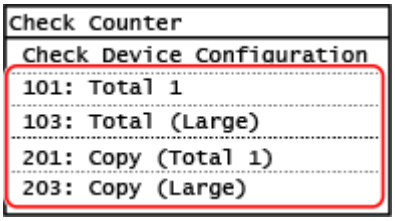
You can display a counter showing the total number of pages copied and printed.
The number of printed pages includes printed reports and lists.

This section describes how to check the number of printed pages using the control panel.
You can also check this information using Remote UI from a computer. **Checking Usage and Logs with Remote UI(P. 374)**

1 Press on the control panel. Control Panel(P. 21)

➡ The [Check Counter] screen is displayed.

2 Select the counter to check.



[101: Total 1]

Displays the total number of pages copied and printed on paper of size B4 or smaller.

[103: Total (Large)]

Displays the total number of pages copied and printed on paper of size larger than B4.

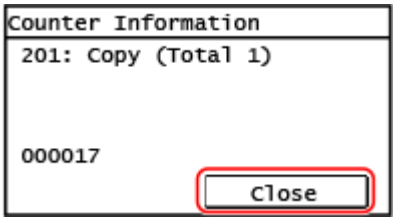
[201: Copy (Total 1)]

Displays the total number of pages copied on paper of size B4 or smaller.

[203: Copy (Large)]

Displays the total number of pages copied on paper of size larger than B4.

3 Check the number of printed pages, and press [Close].



NOTE

Operations Available on the Check Counter Screen

- The items displayed on the screen vary depending on your country or region.
- Press [Check Device Configuration] to check the configuration of options on the machine and the serial number of the machine.

Printing and Viewing Reports and Lists

958J-093

You can print and view reports and lists including machine usage, communication results, and settings.

Types of Reports and Lists(P. 378)
Printing Reports and Lists(P. 379)

NOTE

2-Sided Printing of Reports and Lists

- Reports and lists are printed on paper on one side by default. You can change the setting to print on both sides. **Changing the Report and List Print Settings(P. 380)**

Types of Reports and Lists

Machine Usage Reports

You can print and view the following reports related to usage of the machine:

- **PCL Font List**
  Displays the fonts available in PCL mode.
- **Department ID Management Report**
  Displays the number of printed pages and other usage for each Department ID when Department ID Management is enabled.

Communication Results Reports

You can print and view the following reports related to communication results including sending results and saving results.
With the exception of communication management reports, communication results reports cannot be printed manually. You must configure the settings in advance to print the reports automatically. **Changing the Report and List Print Settings(P. 380)**

- **Communication Management Report**
  Displays all communication results for scanned data.
  By default, this is printed automatically after every 40 communication events.
  You can also configure the settings to print sending and saving results in a different format.
- **E-mail and File Sending Result Report**
  Displays the sending results of e-mails and the saving results of the shared folder.
  By default, this is printed automatically only when an error occurs.
  * When an error occurs during sending or saving, the error code is not displayed in the e-mail or file sending result report. To view the error code, print a communication management report.

Settings Lists

You can print and view the following lists that summarize the registration information and settings of the machine:

- **Address Book List**
  Displays the destination information registered in the Address Book by [Coded Dial], [One-Touch], and [Group].
- **User Data List**
  Displays the serial number and other machine information as well as the settings that do not require administrator privileges.
- **System Manager Data List**
  Displays the serial number and other machine information as well as the settings that require administrator privileges.
- **IPSec Policy List**

Displays the settings of the IPSec policies registered to the machine.

Printing Reports and Lists

Print reports and lists using the control panel. You cannot print these using Remote UI from a computer. Administrator privileges are required to print the following reports and lists:

- Department ID Management Report
- System Manager Data List
- IPSec Policy List

1 On the control panel, press [Menu] in the [Home] screen. [Home] Screen(P. 113)

2 Press [Output Rprt.] ▶ [Print List].

➡ The [Print List] screen is displayed.

3 Select the report or list to print.

➡ A screen confirming the paper available for printing is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then press ID or [Log In]. **Logging In to the Machine(P. 124)**

■To Print Address Book List

Select [Address Book List], and select the items to print.

4 Check that printable paper is set in the machine, and press [OK] ▶ [Yes].

➡ The report or list is printed.

Changing the Report and List Print Settings

958J-094

Reports and lists are printed on paper on one side by default. You can change the setting to print on both sides. You can also change the setting to automatically print communication results reports.

Use the control panel to configure the settings. You cannot configure the settings using Remote UI from a computer.

1 On the control panel, press [Menu] in the [Home] screen. [Home] Screen(P. 113)

2 Press [Output Rprt.] ▶ [Report Settings].

➡ The [Report Settings] screen is displayed.

3 Change the report and list print settings.

■To Print Reports and Lists on Both Sides

1 Press [Default Settings for Report Output] ▶ [2-Sided Printing].

➡ The [2-Sided Printing] screen is displayed.

2 Press [On].

■To Change the Communication Management Report Settings

1 Press [Communication Management Report].

➡ The [Comm. Mngt. Report] screen is displayed.

2 Configure the report settings.

- To print automatically after every 40 communication events, press [Auto Print (40 Transmissions)] ▶ [On].
- To configure the settings to print sending and saving results and receiving results in a different format, press [Separate TX/RX] ▶ [On].

■To Change the E-mail or File Sending Result Report Settings

1 Press [E-Mail/File TX Result Report].

➡ The [E-Mail/File TX Report] screen is displayed.

2 Select whether to print this report automatically.
To print automatically after each send or save job, select [On]. To print automatically only when an error occurs, select [Only When Error Occurs].

Clearing the Mail Box

958J-095

When scanned data is sent by e-mail and a send error occurs, the mail server may send an error notification e-mail to the e-mail address of the machine. Delete all mail from the server mail box, as needed, so that the mail box does not become full with notification mail.

Clear the mail box using Remote UI from a computer. You cannot use the control panel to clear the mail box. Administrator privileges are required.

IMPORTANT

- When the mail box is cleared, all mail in the e-mail inbox of the server is deleted. Be careful not to delete needed unread mail.

1 **Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)**

3 **Click [TX Settings] [E-Mail Settings].**

The [E-Mail Settings] screen is displayed.

4 **In [Clear Mail Box], click [Clear].**

5 **Click [OK].**

All mail in the mail box on the server is deleted.

6 **Log out from Remote UI.**

Importing and Exporting the Address Book and Settings

958J-096

You can write the Address Book and settings to files and save (export) them to a computer. You can also load an exported file and apply (import) the Address Book and settings to the machine.
You can use the import and export functions to back up the Address Book and settings in case of an accident.
In addition, an exported file can be imported to another device[*1] to enable sharing of the Address Book and settings with another device without having to register destinations or configure settings.

Some items cannot be imported or exported. **Settings that Can Be Imported and Exported (imageRUNNER 2224N)(P. 470)**

[*1] The Address Book can be applied to other models, but the settings of the machine can only be applied to the same model.

Exporting the Address Book and Settings(P. 382)
Importing the Address Book and Settings(P. 383)

IMPORTANT

Do Not Turn OFF the Machine until the Import or Export Is Complete.

- It may take a few minutes until the process is completed. Turning OFF the machine during processing may cause data corruption or damage the machine.

Do Not Operate the Machine during Import or Export.

- Before import or export, check that the machine is not printing or performing other operations.

Exporting the Address Book and Settings

Select the items to export and write them to a file. When exporting the Address Book, select the file format that suits your needs.

Configure these settings using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required.

1 **Log in to Remote UI in System Manager Mode.** **Starting Remote UI(P. 369)**

2 **On the Portal page of Remote UI, click [Settings/Registration].** **Portal Page of Remote UI(P. 372)**

3 **Click [Data Management] ▶ [Export].**

➡ The [Export] screen is displayed.

4 **In [Select Item to Export], select the items to export.**

■When Importing the Address Book to a Different Model

Select the [Address Book (ABK)] checkbox.
If a PIN is set for the Address Book, enter the Address Book PIN.

* The Address Book is exported as a Canon Address Book file (*.abk). When this file format is selected, the settings of the machine cannot be exported at the same time.

■When Backing Up or Importing the Address Book to the Same Model

Select the [Address Book] checkbox.
If a PIN is set for the Address Book, enter the Address Book PIN.

* The data is exported as a device configuration information file (*.dcm). When this file format is selected, the settings of the machine can be exported at the same time.

■When Exporting the Settings of the Machine

Select the [Settings/Registration] checkbox.

5 In [Encryption Password], set a password.

- Enter the same password in [Encryption Password] and [Confirm] using single-byte alphanumeric characters.
- A password is required to import exported data.
- If you selected [Address Book (ABK)] in Step 4, this step is not required. Proceed to Step 6.

6 Click [Start Exporting] to save the exported data as a file to a computer.

7 Log out from Remote UI.

Importing the Address Book and Settings

Specify the exported file and select the items to be imported.

File formats for import

- Device configuration information file (*.dcm)
- Canon Address Book file (*.abk)

Configure these settings using Remote UI from a computer. You cannot use the control panel to configure the settings.
Administrator privileges are required. Depending on the items to be imported, the machine restarts automatically.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Data Management] [Import].

The [Import] screen is displayed.

4 Click [Browse] in [File Path], and specify the file to be imported.

5 **Enter the decryption password.**

■**When a Device Configuration Information File (*.dcm) Is Specified**

Enter the password set at export.

■**When a Canon Address Book File (*.abk) Is Specified**

Enter a custom string regardless of the password set at export.

6 **In [Select Item to Import], select the items to import.**

■**Importing the Address Book Data**

Select the [Address Book] checkbox.
If a PIN is set for the Address Book of the machine, enter the Address Book PIN.

* When importing the data, the Address Book currently registered to the machine is overwritten.

■**When Importing the Settings of the Machine**

Select the [Settings/Registration] checkbox.

7 **Click [Start Importing] ▶ [OK].**

➠ The selected file is imported to the machine.

8 **When the screen indicating that importing has completed appears, click [OK].**

When [Settings/Registration] is selected in Step 6 and the import is complete, the machine restarts automatically.

9 **Log out from Remote UI.**

Updating the Firmware

958J-097

When functions are added or the software version is upgraded, the firmware of the machine is updated.
Check the version of the firmware, and update the firmware via the Internet or a computer according to the usage environment of the machine.

■ For imageRUNNER 2224N

✔ : Can be updated — : Cannot be updated

Usage environment of the machine	Connection via Internet	Connection via computer
Wired LAN connection	✔	✔
Wireless LAN connection	✔	—
USB connection	—	✔
Use IPv6	—	—

* You cannot update the firmware in an IPv6 Environment. Connect the machine to a computer via USB, and update from the computer.

Checking the Firmware Version(P. 385)
Updating the Firmware via the Internet(P. 386)
Updating the Firmware via a Computer(P. 386)

Checking the Firmware Version

Check the current version of the firmware before updating it, and then check the version after updating to see if the update was performed correctly.

This section describes how to check the firmware version using the control panel.
You can also use Remote UI from a computer to check the firmware version. **Managing the Machine from a Computer (Remote UI)(P. 368)**
Administrator privileges are required.

1 **On the control panel, press [Menu] in the [Home] screen. [Home] Screen(P. 113)**

2 **Press [Management Settings] ▶ [Remote UI Settings/Update Firmware] ▶ [Update Firmware].**

➡ The [Update Firmware] screen is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then press ID or [Log In]. **Logging In to the Machine(P. 124)**

3 **Select [Version Information].**

➡ Displays the current version of the firmware.

Updating the Firmware via the Internet

Use the control panel to update the firmware via the Internet. You cannot update it using Remote UI from a computer. Administrator privileges are required. When the firmware has been updated, the machine restarts automatically.

Required Preparations

- Connect the machine to the Internet. **Setting Up the Network(P. 59)**

1 On the control panel, press [Update Firmware] in the [Home] screen. [Home] Screen(P. 113)

➡ The machine accesses the Canon server to see if new firmware is available.
When [This is the latest firmware version.] appears, no update is available.

If the login screen appears, enter the System Manager ID and PIN, and then press ID. **System Manager ID and PIN(P. 12)**

2 Press [Yes].

3 In the licensing screen, press [Accept].

➡ The firmware update confirmation screen is displayed.

4 Press [OK].

➡ Downloading of the firmware starts.
When the download is complete, the machine restarts automatically, and the firmware is updated.

IMPORTANT

- Do not turn OFF the machine until the restart is complete.

Updating the Firmware via a Computer

Update the firmware from a computer connected to the machine via wired LAN or USB.

Required Preparations

- Download the latest firmware from the Canon website for your country/region to the computer performing the update.
https://global.canon/en/support/

■How to Update from a Computer

See the "User Support Tool Operation Guide" included with the firmware.

■To Put the Machine into Update Waiting State (Download Mode)

Use the following procedure.

Use the control panel to perform this operation. You cannot perform this operation using Remote UI from a computer. Administrator privileges are required.

1 On the control panel, press [Menu] in the [Home] screen. [Home] Screen(P. 113)

2 Press [Management Settings] ▶ [Remote UI Settings/Update Firmware]*1 ▶ [Update Firmware].

➡ The [Update Firmware] screen is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then press ID or [Log In]. **Logging In to the Machine(P. 124)**

*1 Depending on the model, [Update Firmware] may appear.

3 Press [Via PC] ▶ [Yes].

➡ Switches the machine to download mode and puts it into update waiting state.

Initializing the Settings and Data

958J-098

You can initialize the settings and registered data to reset the machine to the factory settings. You can initialize specified settings and data only or initialize all settings and data.

Initializing Specific Settings and Data
You can initialize the following items separately:

- Settings menu: Initializes the settings of [Menu] in the [Home] screen.
- Key and Certificate: Initializes the settings of the key and certificate as well as CA certificate, and clears everything except the pre-installed key and certificate.
- Address Book: Clears the destinations registered in the Address Book.

Initializing Specific Settings and Data (imageRUNNER 2224N)(P. 388)

Initializing Specific Settings and Data (imageRUNNER 2224)(P. 389)

Initializing All Settings and Data
You can reset all settings to the factory settings, and clear all stored data including logs. Initialization is performed to prevent access to confidential information and unauthorized use such as when replacing or disposing of the machine.
Initializing All Settings and Data(P. 390)

Initializing Specific Settings and Data (imageRUNNER 2224N)

This section describes how to initialize settings and data using Remote UI from a computer.
On the control panel, select [Menu] in the [Home] screen, and then perform initialization from [Preferences] or [Management Settings]. **[Initialize Network Settings](P. 406)** / **[Data Management](P. 467)**
Administrator privileges are required. Depending on the item to be initialized, you may have to restart the machine.

1 Log in to Remote UI in System Manager Mode. Starting Remote UI(P. 369)

2 On the Portal page of Remote UI, click [Settings/Registration]. Portal Page of Remote UI(P. 372)

3 Click [Data Management].

➡ The [Data Management] screen is displayed.

4 Select the item to initialize.

■Initializing the Settings Menu
Click [Initialize Menu], and select the setting to be initialized from [Menu to Initialize].

■When Initializing a Key and Certificate
Click [Initialize Key and Certificate].

■When Initializing the Address Book
Click [Initialize Address Book].
If the [Enter PIN] screen appears, enter the Address Book PIN, and then click [OK].

5 Click [Initialize] ▶ [OK].

➡ The specified item is initialized.

6 Log out from Remote UI.

■When the Settings Menu Is Initialized

When any of the following is initialized, restart the machine to apply the initialized settings. **Restarting the Machine(P. 107)**

- [Preferences]
- [Function Settings]
- [Management Settings]
- [Network Settings]

NOTE

When Initializing a Key and Certificate

- Functions using a key and certificate such as TLS or IKE of IPSec are disabled. To use these functions again, you must set the key and certificate, and then enable the function.

When [Management Settings] of the Settings Menu Is Initialized

- This also initializes the Remote UI Access PIN. To use Remote UI, you must set the Remote UI Access PIN again. **Setting the PIN to Use for Remote UI(P. 350)**

Initializing Specific Settings and Data (imageRUNNER 2224)

Administrator privileges are required. Depending on the item to be initialized, you may have to restart the machine.

1 On the control panel, press [Menu] in the [Home] screen. **[Home] Screen(P. 113)**

2 Press [Management Settings] ▶ [Data Management] ▶ [Initialize Menu].

➡ The [Initialize Menu] screen is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then click [Log In]. **Logging In to the Machine(P. 124)**

3 Select the setting to be initialized.

4 Press [Yes].

➡ The specified item is initialized.

■When the Settings Menu Is Initialized

When any of the following is initialized, restart the machine to apply the initialized settings. **Restarting the Machine(P. 107)**

- [Preferences]
- [Function Settings]
- [Management Settings]

Initializing All Settings and Data

Use the control panel to initialize all settings and data. You cannot initialize these using Remote UI from a computer. Administrator privileges are required. When these are initialized, the machine restarts automatically.

IMPORTANT

- Before initialization, check that there is no data being processed or waiting to be processed. This data is deleted when the initialization is performed.

1 **On the control panel, press [Menu] in the [Home] screen. [Home] Screen(P. 113)**

2 **Press [Management Settings] ▶ [Initialize All Data/Settings].**

➡ The initialization confirmation screen is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then press ID or [Log In]. **Logging In to the Machine(P. 124)**

3 **Press [Yes] ▶ [Yes].**

➡ All settings and data are initialized.

When initialization is complete, the machine restarts automatically.

Settings Menu Items

Settings Menu Items 393
[Preferences] 394
[Display Settings] 396
[Timer/Energy Settings] 399
[Network] 402
[Wireless LAN Settings] 407
[TCP/IP Settings] 409
[External Interface] 416
[Accessibility] 417
[Volume Settings] 419
[Adjustment/Maintenance] 421
[Adjust Image Quality] 422
[Special Processing] 424
[Maintenance] 427
[Function Settings] 428
[Common] 430
[Paper Feed Settings] 431
[Print Settings] 433
[Scan Settings] 434
[Generate File] 435
[Copy] 436
[Printer] 439
[Printer Settings] 440
[PDL Selection (Plug and Play)] 450
[Send] 451
[Common Settings] 452
[Scan and Send Settings] 454
[Set Destination] 459
[Management Settings] 460
[User Management] 462
[Device Management] 463
[License/Other] or [Update Firmware] 465
[Remote UI Settings] 466
[Data Management] 467
[Security Settings] 468

[Authentication/Password Settings] 469
Settings that Can Be Imported and Exported (imageRUNNER 2224N) 470
[Preferences] 471
[Adjustment/Maintenance] 475
[Function Settings] 476
[Set Destination] 479
[Management Settings] 480

Settings Menu Items

958J-099

This section describes the items available in the settings menu displayed when you press [Menu] in the [Home] screen on the control panel.
From the settings menu, you can run functions and modify the settings according to the machine's operating environment or its usage.
Administrator privileges are required to view or change some settings. Note also that the machine may need to be restarted for changed settings to take effect.

[Preferences](P. 394)
[Adjustment/Maintenance](P. 421)
[Function Settings](P. 428)
[Set Destination](P. 459)
[Management Settings](P. 460)

Support for Importing and Exporting Setting Data

The settings menu items can be used with the Import and Export functions to regularly back up your settings or share them with other machines.
Check this list to see which settings can be imported and exported.
Settings that Can Be Imported and Exported (imageRUNNER 2224N)(P. 470)

■ See Also

If a Login Screen Appears

If a System Manager ID has been set, a login screen may appear when certain items are selected. Once you enter the required information and the login is authenticated, you can view or change the settings.
Logging In to the Machine(P. 124)

If the Machine Must be Restarted

After changing the settings, restart the machine.
Restarting the Machine(P. 107)

Settings Not Included in the Menus

The Paper Settings items appear when you press  on the control panel.

Specifying the Paper Size and Type(P. 144)

Configuring Settings from Remote UI

The settings menu items can also be specified from a computer using Remote UI. In Remote UI, specify the settings from [Settings/Registration] in the Portal page.
The items that can be specified in [Settings/Registration] in Remote UI are almost identical to those in the control panel settings menu, but there are also items that can be specified only from the control panel or only from Remote UI. Note also that some of the item names differ in Remote UI.
Managing the Machine from a Computer (Remote UI)(P. 368)

Checking the Settings

You can check a list of the current settings by printing them out.
Printing and Viewing Reports and Lists(P. 378)

[Preferences]

958J-09A

These are settings used to configure features such as the control panel screen displays and the network settings according to the environment in which the machine is used.

[Display Settings](P. 394)
[Timer/Energy Settings](P. 394)
[Network](P. 394)
[External Interface](P. 394)
[Accessibility](P. 394)
[Volume Settings](P. 395)

[Display Settings]

[Menu] ▶ [Preferences]

Configure the control panel screen displays.
[Display Settings](P. 396)

[Timer/Energy Settings]

[Menu] ▶ [Preferences]

Set the date and time and specify the Energy Saver settings.
[Timer/Energy Settings](P. 399)

[Network]

[Menu] ▶ [Preferences]

Configure the network environment for the machine.
[Network](P. 402)

* [Network] may not be displayed depending on the model, the installed options, and other settings.

[External Interface]

[Menu] ▶ [Preferences]

Configure the USB connection.
[External Interface](P. 416)

[Accessibility]

[Menu] ▶ [Preferences]

Configure control panel screen features such as screen color inversion and message display time to make the screen easier to see.
[Accessibility](P. 417)

[Volume Settings]

[Menu] ▶ [Preferences]

Set whether the machine emits sounds notifying you of operations and statuses.
[Volume Settings](P. 419)

* [Volume Settings] may not be displayed depending on the model, the installed options, and other settings.

[Display Settings]

958J-09C

Configure the control panel screen displays.
* Values in bold red text are the default settings for each item.

- **[Default Screen after Startup/Restoration](P. 396)**
- **[Button Display Order on Home Screen](P. 396)**
- **[Language](P. 397)**
- **[Remote UI Language](P. 397)**
- **[Millimeter/Inch Entry Switch](P. 397)**
- **[Display IP Address](P. 398)**
- **[Notify to Clean Original Scanning Area] (P. 398)**

[Default Screen after Startup/Restoration]

[Menu] ▶ [Preferences] ▶ [Display Settings]

Specify the screen displayed after the start screen appears when the machine is turned ON and immediately after an Auto Reset.
Setting this for the [Status Monitor] enables you to also specify the screen displayed immediately after the [Status Monitor] screen is closed.

[**Home**]
[Copy]
[Scan]
[Secure Print]*1
[Status Monitor] [**Home**] [Copy] [Scan] [Secure Print]*1

*1 May not be displayed depending on the model, the installed options, and other settings.

[Button Display Order on Home Screen]

[Menu] ▶ [Preferences] ▶ [Display Settings]

Rearrange the buttons so that you can run frequently used functions more quickly from the [Home] screen of the control panel. **Customizing the [Home] Screen(P. 122)**

[Set Display Order]
[Insert and Delete Blank]

[Language]

[Menu] ▶ [Preferences] ▶ [Display Settings]

Change the language shown on the control panel and used in printed reports.

* Depending on your country or region, the [Language] setting may not be available, or its content or default setting may be different.

[Bahasa Melayu]
[Deutsch]
[**English**]
[Español]
[Français]
[Italiano]
[Português]
[Tiếng Việt Nam]
[ภาษาไทย]
[日本語]
[中文(繁體)]
[中文(简体)]
[한국어]

[Remote UI Language]

[Menu] ▶ [Preferences] ▶ [Display Settings]

Change the language shown on Remote UI screens.

* [Remote UI Language] may not be displayed depending on the model, the installed options, and other settings.

* Depending on your country or region, the [Remote UI Language] setting may not be available, or its content or default setting may be different.

[**English**]
[Japanese]
[French]
[Spanish]
[German]
[Italian]
[Portuguese]
[Chinese (Simplified)]
[Chinese (Traditional)]
[Korean]

[Millimeter/Inch Entry Switch]

[Menu] ▶ [Preferences] ▶ [Display Settings]

Change the units shown on the screen for entering length and width.

[**Millimeter**]
[Inch]

[Display IP Address]

[Menu] ▶ [Preferences] ▶ [Display Settings]

Specify whether to display the machine's IPv4 address in the [Status Monitor] screen. **[Status Monitor] Screen(P. 115)**

* [Display IP Address] may not be displayed depending on the model, the installed options, and other settings.

[Off]
[**On**]

[Notify to Clean Original Scanning Area]

[Menu] ▶ [Preferences] ▶ [Display Settings]

Specify whether a message is displayed to notify you if soiling is detected during feeder use.

* [Notify to Clean Original Scanning Area] may not be displayed depending on the model, the installed options, and other settings.

[Off]
[**On**]

[Timer/Energy Settings]

958J-09E

Set the date and time and specify the Energy Saver settings.
* Values in bold red text are the default settings for each item.

[Current Date/Time Settings](P. 399)
[Date/Time Settings](P. 399)
[Date Format](P. 399)
[Time Format](P. 400)
[Auto Reset Time](P. 400)
[Function After Auto Reset](P. 400)
[Auto Sleep Time](P. 401)

[Current Date/Time Settings]

[Menu] ▶ [Preferences] ▶ [Timer/Energy Settings]

Set the date and time for the machine. The date and time set here are used as a reference for the functions that use date and time information. **Setting the Date and Time(P. 365)**
Before configuring this setting, check that the correct time zone is selected. **[Date/Time Settings](P. 399)**

* The current date and time cannot be changed for one hour after Daylight Saving Time is set.

[Date/Time Settings]

[Menu] ▶ [Preferences] ▶ [Timer/Energy Settings]

Set the time zone (UTC*1) and Daylight Saving Time according to the region where the machine is installed.

*1 The UTC (Coordinated Universal Time) is a coordinated universal time that is standard for all parts of the world. Internet-based communication relies on the UTC being set correctly.

* Depending on your country or region, the [Date/Time Settings] setting may not be displayed, or its content or default setting may be different.

* When you change the time zone, the current time setting is automatically changed accordingly. **[Current Date/Time Settings](P. 399)** .

* If daylight saving time is enabled, specify the dates from which and to which daylight saving time is in effect.

[Time Zone]
[(UTC-12:00) International Date Line West] to [**(UTC) Coordinated Universal Time**] to [(UTC+14:00) Kiritimati Island]

[Daylight Saving Time Settings]
[**Off**]
[On]
[Start]: Month, Week, Day
[End]: Month, Week, Day

[Date Format]

[Menu] ▶ [Preferences] ▶ [Timer/Energy Settings]

Set the order in which the year, month, and day are displayed.

* Depending on your country or region, the [Date Format] setting may not be available, or its content or default setting may be different.

[YYYY MM/DD]
[MM/DD/YYYY]
[**DD/MM YYYY**]

[Time Format]

[Menu] ▶ [Preferences] ▶ [Timer/Energy Settings]

Set 12 Hour or 24 Hour as the format for displayed time.

[**12 Hour (AM/PM)**]
[24 Hour]

[Auto Reset Time]

[Menu] ▶ [Preferences] ▶ [Timer/Energy Settings]

If the control panel is not used for a set period, a function called "Auto Reset Time" automatically restores the default settings.
You can specify the amount of time that elapses before Auto Reset is performed.

* You can also change the screen that is displayed after an Auto Reset. **[Function After Auto Reset](P. 400)**

0 (Off)
1 to **2** to 9 (min.)

NOTE

Situations Where Auto Reset is Not Triggered

- When the Error lamp on the control panel is flashing **Control Panel(P. 21)**
- When the [Menu] screen or an error message[*1] is displayed on the control panel
- When processing of some sort (such as printing) is in progress

[*1] Auto Reset is performed for some messages.

[Function After Auto Reset]

[Menu] ▶ [Preferences] ▶ [Timer/Energy Settings]

Set the screen displayed after an Auto Reset.

- To view the specified screen, specify the screen in [Default Function]. Specify the displayed screen in [Default Screen after Startup/Restoration]. **[Default Screen after Startup/Restoration](P. 396)**
- To display the screen for the function being used before the Auto Reset, specify the screen in [Selected Function].

[**Default Function**]
[Selected Function]

[Auto Sleep Time]

[Menu] ▶ [Preferences] ▶ [Timer/Energy Settings]

Set the time after which the machine automatically goes into sleep mode. **Reducing Power Consumption (Sleep Mode)(P. 108)**

* Use of the default settings is recommended to achieve the most effective power savings.

1 to 60 (min.)

[Network]

958J-09F

Specify the settings for the machine's network environment.
* Values in bold red text are the default settings for each item.
* [Network] may not be displayed depending on the model, the installed options, and other settings.

- **[Select Wired/Wireless LAN](P. 402)**
- **[Wireless LAN Settings](P. 402)**
- **[Direct Connection Settings](P. 402)**
- **[Easy Connection via PC](P. 403)**
- **[TCP/IP Settings](P. 403)**
- **[SNMP Settings](P. 403)**
- **[Dedicated Port Settings](P. 404)**
- **[Dedicated Port Authentication Method](P. 404)**
- **[Waiting Time for Connection at Startup](P. 404)**
- **[Ethernet Driver Settings](P. 404)**
- **[IEEE 802.1X Settings](P. 405)**
- **[Firewall Settings](P. 405)**
- **[Device Settings Management On/Off](P. 405)**
- **[RMT-SW](P. 406)**
- **[Initialize Network Settings](P. 406)**

[Select Wired/Wireless LAN]

[Menu] ▶ [Preferences] ▶ [Network]

Set whether to connect the machine to the network using a wired or wireless LAN. **Selecting Wired or Wireless LAN(P. 61)**

* If you are switching from a wired LAN to a wireless LAN, you can make the change within the procedure for configuring the wireless LAN.

[**Wired LAN**]
[Wireless LAN]

[Wireless LAN Settings]

[Menu] ▶ [Preferences] ▶ [Network]

Specify the settings for connecting the machine to a wireless LAN and to save energy while the machine is connected to a wireless LAN.
[Wireless LAN Settings](P. 407)

[Direct Connection Settings]

[Menu] ▶ [Preferences] ▶ [Network]

Specify the settings for using a direct connection and for the connection function. **Enabling the Direct Connection Function(P. 274)**

[Use Direct Connection]
  [**Off**]
  [On]

[Time Until Direct Connection Termination]
  0 (Off)
  1 to 60 (min.)

[Access Point Mode Settings]

[Use Custom SSID]
[**Off**]
[On]
[SSID (1-20 Characters)]
[Use Custom Network Key]
[**Off**]
[On]
[Network Key (10 Char.)]

[Keep Enabled If SSID/Ntwk Key Spcfd]
[**Off**]
[On]

[IP Address Settings for Direct Conn.]
192.168.22.1

[Easy Connection via PC]

[Menu] ▶ [Preferences] ▶ [Network]

Start cableless setup mode.
To configure the network settings using the Canon Laser NW Device Setup Utility, select cableless setup mode.

* You can download the Canon Laser NW Device Setup Utility from the Canon website for your country/region.
https://global.canon/en/support/

[TCP/IP Settings]

[Menu] ▶ [Preferences] ▶ [Network]

Specify the settings for using the machine on a TCP/IP network.
[TCP/IP Settings](P. 409)

[SNMP Settings]

[Menu] ▶ [Preferences] ▶ [Network]

Specify the settings for setting up, monitoring, and controlling the machine using SNMP management software.
Configuring SNMP(P. 90)
To ensure compliance with the protocol's advanced specifications (RFC2790) when the machine's status is being monitored, set [Format Host Resources MIB to RFC2790] to [On].

[SNMPv1 Settings]
[Off]
[**On**]

[SNMPv3 Settings]
[**Off**]
[On]

[Acquire Printer Mngt. Info. from Host]
[**Off**]
[On]

[Format Host Resources MIB to RFC2790]
[Off]
[**On**]

[Dedicated Port Settings]

[Menu] ▶ [Preferences] ▶ [Network]

Specify whether to use a dedicated port.
Use a dedicated port for tasks such as printing from a computer, scanning using the MF Scan Utility, and configuring or browsing the machine's settings.

[Off]
[**On**]

[Dedicated Port Authentication Method]

[Menu] ▶ [Preferences] ▶ [Network]

Set the authentication method when using a dedicated port.
If you specify [Mode 2], communication via the dedicated port will be limited to secure authentication methods only. This may mean that you cannot connect to the machine from device management software, drivers or other software.

[**Mode 1**]
[Mode 2]

[Waiting Time for Connection at Startup]

[Menu] ▶ [Preferences] ▶ [Network]

Set the waiting time until a connection is established when the machine starts up.
If the machine is connected via a device such as a switching hub, you may not be able to connect to the network even when the setting on the machine is correct. If so, set the waiting time and reconnect.

0 to 300 (sec.)

[Ethernet Driver Settings]

[Menu] ▶ [Preferences] ▶ [Network]

Set the Ethernet communication method. **Manually Configuring the Ethernet Settings(P. 79)**
This also allows you to check the MAC address on a wired LAN. **Viewing the MAC Address of the Wired LAN(P. 98)**

[MAC Address]

[Auto Detect]
[Off]
[Communication Mode]
[**Half Duplex**]
[Full Duplex]
[Ethernet Type]
[**10BASE-T**]
[100BASE-TX]

[**On**]

[IEEE 802.1X Settings]

[Menu] ▶ [Preferences] ▶ [Network]

Specify whether to use IEEE 802.1X.
Use Remote UI from a computer to set the IEEE 802.1X authentication method. **Using IEEE 802.1X(P. 321)**

* [IEEE 802.1X Settings] may not be displayed depending on the model, the installed options, and other settings.

[**Off**]
[On]

[Firewall Settings]

[Menu] ▶ [Preferences] ▶ [Network]

Specify whether to enable an IP address filter and MAC address filter.
Use Remote UI from a computer to set the default policy for filtering and the exception addresses. **Setting the Firewall(P. 309)**

[IPv4 Address Filter]
[Outbound Filter]
[**Off**]
[On]
[Inbound Filter]
[**Off**]
[On]

[IPv6 Address Filter]
[Outbound Filter]
[**Off**]
[On]
[Inbound Filter]
[**Off**]
[On]

[MAC Address Filter]
[Outbound Filter]
[**Off**]
[On]
[Inbound Filter]
[**Off**]
[On]

[Device Settings Management On/Off]

[Menu] ▶ [Preferences] ▶ [Network]

Select whether to use the device management software to manage Address Book destinations, settings, and other data in the machine. For more information, see the manual of the software you are using.

[Off]
[**On**]

[RMT-SW]

[Menu] ▶ [Preferences] ▶ [Network]

Normally, use the machine with this set to [Off].
When your service representative carries out device maintenance remotely, he or she may change this to [On].

[**Off**]
[On]

[Initialize Network Settings]

[Menu] ▶ [Preferences] ▶ [Network]

Use this to restore the network settings to the factory settings. **Initializing Specific Settings and Data (imageRUNNER 2224N)(P. 388)**

[Wireless LAN Settings]

958J-09H

Specify the settings for connecting the machine to a wireless LAN and to save energy while the machine is connected to a wireless LAN.
* Values in bold red text are the default settings for each item.
* [Wireless LAN Settings] may not be displayed depending on the model, the installed options, and other settings.

[Select Network](P. 407)
[Other Connections](P. 407)
[Connection Settings](P. 408)

[Select Network]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [Wireless LAN Settings]

Select a wireless LAN router (access point) from the displayed list and enter the network key to connect. **Connecting to a Wireless LAN by Searching for a Router (Access Point Setup Method)(P. 69)**

[Other Connections]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [Wireless LAN Settings]

Connect to the wireless LAN by a method other than selecting the wireless LAN router from a list.

[Manually Enter Network Name]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [Wireless LAN Settings] ▶ [Other Connections]

Connect to a wireless LAN router by manually entering all the router information, such as the SSID, network key and security settings. **Connecting to a Wireless LAN by Setting the Details (Manual Setup Method)(P. 71)**

[Security Settings]
  [None]
  [WEP]
    [**Open System**]
      Encryption keys 1 to 4
    [Shared Key]
      Encryption keys 1 to 4
  [**WPA/WPA2-PSK**]
    [**Auto**]
    [AES-CCMP]
  [WPA/WPA2-EAP]

[WPS Push Button Mode]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [Wireless LAN Settings] ▶ [Other Connections]

Connect to a wireless LAN by pressing a button on a LAN router that supports WPS push button mode. **Connecting to a Wireless LAN by Using the Router Button (Push Button Mode)(P. 66)**

[WPS PIN Code Mode]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [Wireless LAN Settings] ▶ [Other Connections]

Connect to a wireless LAN router that supports WPS PIN code mode by registering a PIN code generated by the machine. Use a computer or similar device to register the PIN code. **Connecting to a Wireless LAN by Entering a PIN Code (WPS PIN Code Mode)(P. 67)**

[Connection Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [Wireless LAN Settings]

Configure the setting to save power when connecting by wireless LAN, and check the wireless LAN connection information.

[Power Save Mode]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [Wireless LAN Settings] ▶ [Connection Settings]

Specify whether to periodically set the machine to Power Save Mode according to signals sent from the wireless LAN router.

[Off]
[**On**]

[Connection Information]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [Wireless LAN Settings] ▶ [Connection Settings]

Check data such as the security settings, as well as the wireless LAN MAC address and other connection information. **Viewing the MAC Address and Connection Information of the Wireless LAN(P. 99)**

[MAC Address]
[Wireless LAN Status]
[Latest Error Information]
[Channel]
[Network Name]
[Security Settings]
[Power Save Mode]

[TCP/IP Settings]

958J-09J

Specify the settings to use the machine on a TCP/IP network.
* Values in bold red text are the default settings for each item.
* [TCP/IP Settings] may not be displayed depending on the model, the installed options, and other settings.

- **[IPv4 Settings](P. 409)**
- **[IPv6 Settings](P. 411)**
- **[WINS Settings](P. 412)**
- **[LPD Settings](P. 413)**
- **[RAW Settings](P. 413)**
- **[WSD Settings](P. 413)**
- **[IPP Print Settings](P. 414)**
- **[Use HTTP](P. 414)**
- **[Use IPSec](P. 414)**
- **[Network Link Scan Settings](P. 414)**
- **[Port Number Settings](P. 415)**
- **[MTU Size](P. 415)**

[IPv4 Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings]

Specify the settings to use the machine in an IPv4 environment.

[IP Address Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings] ▶ [IPv4 Settings]

Set the IPv4 address either automatically or manually. **Setting IPv4 Addresses(P. 74)**

[Auto Acquire]
[Select Protocol]
[Off]
[**DHCP**]
[Auto IP]
[Off]
[**On**]

[Manually Acquire]*1
[IP Address]: 0.0.0.0
[Subnet Mask]: 0.0.0.0
[Gateway Address]: 0.0.0.0

[Check Settings]

*1 May not be displayed depending on the model, the installed options, and other settings.

[PING Command]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings] ▶ [IPv4 Settings]

Execute a PING command to check whether the machine can connect to devices on the network. **Checking Whether the Machine Can Connect to Network Devices(P. 97)**

[DNS Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings] ▶ [IPv4 Settings]

Specify the DNS settings when using the machine in an environment with a Domain Name System (DNS) implemented. **Configuring DNS(P. 80)**

[DNS Server Settings]
[Primary DNS Server]: 0.0.0.0
[Secondary DNS Server]: 0.0.0.0

[DNS Host Name/Domain Name Settings]
[Host Name]
[Domain Name]

[DNS Dynamic Update Settings]
[**Off**]
[On]
[DNS Dyn. Updt. Intrvl.]
0 to **24** to 48 (hr.)

[mDNS Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings] ▶ [IPv4 Settings]

Specify the mDNS settings to use DNS functions in an environment such as Bonjour with no DNS installed.

[Off]

[**On**]
[mDNS Name]

[DHCP Option Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings] ▶ [IPv4 Settings]

Specify the settings for using a DHCP server in an IPv4 environment with a Domain Name System (DNS) implemented. **Configuring DNS(P. 80)**

[Acquire Host Name]
[Off]
[**On**]

[DNS Dynamic Update]
[**Off**]
[On]

[Acquire DNS Server Address]
[Off]
[**On**]

[Acquire Domain Name]
[Off]
[**On**]

[Acquire WINS Server Address]
[Off]
[**On**]

[Acquire SMTP Server Address]
[**Off**]
[On]

[Acquire POP Server Address]
[**Off**]
[On]

[IPv6 Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings]

Specify the settings for using the machine in an IPv6 environment.
You can set multiple IPv6 addresses and use them at the same time. **Setting IPv6 Addresses(P. 76)**

[Use IPv6]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings] ▶ [IPv6 Settings]

Configure whether to use IPv6.

[**Off**]
[On]
[Check Settings]

[Stateless Address Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings] ▶ [IPv6 Settings]

Configure whether to use a stateless address.

[Off]
[**On**]
[Check Settings]

[Use DHCPv6]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings] ▶ [IPv6 Settings]

Configure whether to use a stateful address obtained from a DHCP server using DHCPv6.

[**Off**]
[On]
[Check Settings]

[DNS Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings] ▶ [IPv6 Settings]

Specify the DNS settings when using the machine in an environment with a Domain Name System (DNS) implemented. **Configuring DNS(P. 80)**

[DNS Host Name/Domain Name Settings]
[Use IPv4 Host/Domain]
[Off]
[Host Name]
[Domain Name]

[On]

[DNS Dynamic Update Settings]
[Off]
[On]
[Regist. Manual Addr.]
[Off]
[On]
[Regist. Stateful Addr.]
[Off]
[On]
[Regist Stateless Addr.]
[Off]
[On]
[DNS Dynamic Update Interval]
0 to 24 to 48 (hr.)

[mDNS Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings] ▶ [IPv6 Settings]

Specify the mDNS settings to use DNS functions in an environment such as Bonjour with no DNS installed.

[Off]

[On]
[Use IPv4 Name for mDNS]
[Off]
[mDNS Name]
[On]

[DHCP Option Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings] ▶ [IPv6 Settings]

Specify the settings for using a DHCP server in an IPv4 environment with a Domain Name System (DNS) implemented. **Configuring DNS(P. 80)**

[Acquire DNS Server Address]
[Off]
[On]

[Acquire Domain Name]
[Off]
[On]

[WINS Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings]

Configure WINS (Windows Internet Name Service) when using the machine in a network environment that uses both NetBIOS and TCP/IP. **Configuring WINS(P. 85)**

[WINS Resolution]

[Off]
[On]
[WINS Server Address]: 0.0.0.0

[LPD Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings]

Specify whether to use the LPD protocol. **Configuring LPD, RAW, or WSD(P. 354)**
If the LPD protocol is used, you can also set the time from the start of reception standby, after print data reception is canceled, to the timeout.

[LPD Print Settings]
[Off]
[**On**]

[RX Timeout]
1 to **5** to 60 (min.)

[RAW Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings]

Specify whether to use the RAW protocol. **Configuring LPD, RAW, or WSD(P. 354)**
If the RAW protocol is used, you can also set the time from the start of reception standby, after print data reception is canceled, to the timeout.

[RAW Print Settings]
[Off]
[**On**]

[RX Timeout]
1 to **5** to 60 (min.)

[WSD Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings]

Specify whether to use the WSD protocol. You can specify this setting for each of the functions that use the WSD protocol. **Configuring LPD, RAW, or WSD(P. 354)**

[WSD Print Settings]
[Use WSD Print]
[Off]
[**On**]
[Use WSD Browsing]
[Off]
[**On**]

[Use Multicast Discovery]
[Off]
[**On**]

[WSD Scan Settings]
[Use WSD Scan]
[**Off**]
[On]
[Use Computer Scan]
[**Off**]
[On]

[IPP Print Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings]

Specify whether to use IPP (Internet Printing Protocol). You can use IPP when printing with AirPrint. **Setting the Functions and Security to Be Used with AirPrint(P. 277)**
When using IPP, you can also specify whether TLS encryption is used for communication.

[Use IPP Printing]
[Off]
[**On**]

[Allow IPP Printing Only When Using TLS]
[**Off**]
[On]

[Use HTTP]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings]

Specify whether to use HTTP. **Disabling HTTP Communication(P. 356)**

[Off]
[**On**]

[Use IPSec]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings]

Specify whether to use IPSec (IP Security Protocol).
Use Remote UI from a computer to specify setting such as the IPSec policy, selector, and IKE. **Using IPSec(P. 317)**

[**Off**]
[On]

[Network Link Scan Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings]

Specify whether to use Network Link Scan. You can use Network Link Scan when scanning documents with AirPrint. **Setting the Functions and Security to Be Used with AirPrint(P. 277)**
When using Network Link Scan, you can also specify whether TLS encryption is used for communication.

* Setting [Use Network Link Scan] to [On] enables HTTP communication. **[Use HTTP](P. 414)**

[Use Network Link Scan]
[**Off**]
[On]

[Use TLS]
[**Off**]
[On]

[Port Number Settings]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings]

Specify the port number for the protocol used in accordance with the port numbers for the computer, server or other device. **Changing the Port Number(P. 312)**

[LPD]
1 to **515** to 65535

[RAW]
1 to **9100** to 65535

[WSD Multicast Discovery]
1 to **3702** to 65535

[HTTP]
1 to **80** to 65535

[Multicast Discovery]
1 to **427** to 65535

[POP3]
1 to **110** to 65535

[SMTP TX]
1 to **25** to 65535

[SNMP]
1 to **161** to 65535

[MTU Size]

[Menu] ▶ [Preferences] ▶ [Network] ▶ [TCP/IP Settings]

If communication slows down due to the size of the packets sent, use this to change the maximum size for outgoing packets.

[1300]
[1400]
[**1500**]

[External Interface]

958J-09K

Specify the settings for USB connections.
* Values in bold red text are the default settings for each item.

[USB Settings](P. 416)

[USB Settings]

[Menu] ▶ [Preferences] ▶ [External Interface]

Specify the settings for using the USB ports.
Specify whether to use the USB port for connecting to the computer in [Use as USB Device]. **Preventing Connection to Computer via USB Port(P. 352)**

[Use as USB Device]
[Off]
[**On**]

[Accessibility]

958J-09L

Configure control panel screen features such as screen color inversion and message display time to make the screen easier to see.
* Values in bold red text are the default settings for each item.

[Invert Screen Colors](P. 417)
[Contrast](P. 417)
[Message Display Time](P. 417)
[Scrolling Speed](P. 417)
[Cursor Movement Type](P. 418)

[Invert Screen Colors]

[Menu] ▶ [Preferences] ▶ [Accessibility]

Specify whether light and dark on the control panel screen are reversed.

[**Off**]
[On]

[Contrast]

[Menu] ▶ [Preferences] ▶ [Accessibility]

Adjust the contrast to make the control panel screen easier to view.

7 levels

[Message Display Time]

[Menu] ▶ [Preferences] ▶ [Accessibility]

Set the number of seconds for which each message is displayed when 2 messages are displayed alternately on the control panel screen.

1 to **2** to 5 (sec.)

[Scrolling Speed]

[Menu] ▶ [Preferences] ▶ [Accessibility]

Set the scrolling speed when operating the screen.

[Slow]
[**Standard**]
[Fast]

[Cursor Movement Type]

[Menu] ▶ [Preferences] ▶ [Accessibility]

Set the cursor operation when entering text or number.
Set to [Auto] to move the cursor automatically to the next input field after entering text or number. When set to [Manual], you must press  to move the cursor.

[**Auto**]
[Manual]

[Volume Settings]

958J-09R

Set whether the machine emits sounds notifying you of operations and statuses. **Adjusting the Sound Volume(P. 184)**
* [Volume Settings] may not be displayed depending on the model, the installed options, and other settings.

[Entry Tone](P. 419)
[Invalid Entry Tone](P. 419)
[Restock Supplies Tone](P. 419)
[Warning Tone](P. 419)
[Job Done Tone](P. 420)
[Energy Saver Alert](P. 420)
[Original in Feeder Detection Tone](P. 420)

[Entry Tone]

[Menu] ▶ [Preferences] ▶ [Volume Settings]

Set whether to emit a sound when you press the keys and buttons on the control panel.

[Off]
[**On**]

[Invalid Entry Tone]

[Menu] ▶ [Preferences] ▶ [Volume Settings]

Set whether to emit a sound when an invalid key is pressed, such as when you enter a value outside the setting range.

[**Off**]
[On]

[Restock Supplies Tone]

[Menu] ▶ [Preferences] ▶ [Volume Settings]

Set whether to emit a sound when the toner cartridges are nearing the end of their lifetime.

[**Off**]
[On]

[Warning Tone]

[Menu] ▶ [Preferences] ▶ [Volume Settings]

Set whether to emit a sound when the machine has a paper jam or other malfunction.

[Off]
[**On**]

[Job Done Tone]

[Menu] ▶ [Preferences] ▶ [Volume Settings]

Set whether to emit a sound when an operation on the machine is completed, such as copying or scanning.

[Off]
[**On**]

[Energy Saver Alert]

[Menu] ▶ [Preferences] ▶ [Volume Settings]

Set whether to emit a sound when the machine enters and exits sleep mode.

[**Off**]
[On]

[Original in Feeder Detection Tone]

[Menu] ▶ [Preferences] ▶ [Volume Settings]

Set whether the machine beeps when it is detected that an original is loaded in the feeder.

* [Original in Feeder Detection Tone] may not be displayed depending on the model, the installed options, and other settings.

[Off]
[**On**]

[Adjustment/Maintenance]

958J-09S

Use this setting to adjust the print quality and when cleaning the machine.

[Adjust Image Quality](P. 421)
[Maintenance](P. 421)

[Adjust Image Quality]

[Menu] ▶ [Adjustment/Maintenance]

Use this setting to adjust the image quality and for special processing according to the paper used.
[Adjust Image Quality](P. 422)

[Maintenance]

[Menu] ▶ [Adjustment/Maintenance]

Carry out maintenance to clean the machine.
[Maintenance](P. 427)

[Adjust Image Quality]

958J-09U

Use this setting to adjust the image quality and for special processing according to the paper used.
* Values in bold red text are the default settings for each item.

[Printer Density](P. 422)
[Toner Save](P. 422)
[Black Text Processing for Color](P. 422)
[Spd/Img Qlty Priority for Rotate+Collate](P. 423)
[Special Processing](P. 423)
[Remove Streaks from Orig. Scanning Area](P. 423)

[Printer Density]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality]

When the print results are too dark or too light, you can adjust the density.

9 Levels

[Toner Save]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality]

You can specify whether to save toner when printing a repot or list of copies.

* If you select [On], the print result may be faded or blurred.

[**Off**]
[Save Mode (Low Saving)]
[Save Mode (High Saving)]

[Black Text Processing for Color]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality]

When you are scanning originals in color, make adjustments to give priority to reproducing color text that is close to black or making black text easier to see. **Adjusting the Reproducibility of Near Black Color Text(P. 503)**

[Feeder]*1
7 levels

[Platen Glass]
7 levels

*1 May not be displayed depending on the model, the installed options, and other settings.

[Spd/Img Qlty Priority for Rotate+Collate]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality]

Specify the print operation when rotating the output.

[**Speed Priority**]
[Image Quality Priority]

[Special Processing]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality]

Use a range of processes to resolve problems that arise due to factors such as the paper type, the material used, or its condition.
[Special Processing](P. 424)

[Remove Streaks from Orig. Scanning Area]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality]

Specify whether stained areas are omitted from scanning when streaks are detected during feeder use.

* [Remove Streaks from Orig. Scanning Area] may not be displayed depending on the model, the installed options, and other settings.

* Note that if soiled areas are not scanned, images and text in soiled areas will also not be scanned. If streak-shaped unscanned areas appear when scanning originals with this set to [On], clean the feeder. **Cleaning the Feeder(P. 488)**

[Off]
[**On**]

[Special Processing]

958J-09W

Use a range of processes to resolve problems that arise due to factors such as the paper type, the material used, or its condition.
* Values in bold red text are the default settings for each item.

[Special Paper Processing](P. 424)
[Transfer Adjustment Mode](P. 425)
[Reduce Humid Paper Curling](P. 425)
[Image Blurring Prevention Mode](P. 425)
[Priority for Hot Pressure Roller for Fix](P. 425)
[Corr. Paper Conveyance (Thin/Humid Ppr.)](P. 426)

[Special Paper Processing]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

Specify special processing for the paper in the following situations:

- If you are using special paper
  - To print on the back of printed paper
  - For paper with a rough surface
- If the envelope flap is stuck down
- If the paper curls during printing

[Manual Back Side Print (2-Sided Only)]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing] ▶ [Special Paper Processing]

If you are using paper that has already been printed on, toner smudges and splatters may appear on the back side. If so, specifying [On] for that paper source may improve the print results.

* When this is set to [On], if some time has passed since the front side of the paper was printed, or depending on the operating environment humidity, changes in image quality or paper jams may occur.

[Multi-Purpose Tray]
[**Off**]
[On]

[Drawer 1]
[**Off**]
[On]

[Drawer 2]*1
[**Off**]
[On]

*1 May not be displayed depending on the model, the installed options, and other settings.

[Transfer Adjustment Mode]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

The print quality may be deteriorated or there may be uneven densities.

- If the print is output but the toner is not fully fixed, select [Mode 4] and [Mode 5] in that order.
- When you want to print on damp paper, select [Mode 2] and [Mode 3] in that order.

[Mode 1]
[Mode 2]
[**Mode 3**]
[Mode 4]
[Mode 5]

[Reduce Humid Paper Curling]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

When you print on damp paper, a paper jam may occur or output paper may be curled. Specifying this setting may improve the situation.

* Specifying [Mode 3] may reduce the print speed.

[**Off**]
[Mode 1]
[Mode 2]
[Mode 3]

[Image Blurring Prevention Mode]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

Uneven images may appear on the printed paper. In this case, specifying [Mode 1] may improve the print result. If this does not correct the problem, select [Mode 2] and [Mode 3] in that order.

[**Off**]
[Mode 1]
[Mode 2]
[Mode 3]

[Priority for Hot Pressure Roller for Fix]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

When you print on large size paper after printing on small size paper, it may take a long time to start printing on the large size paper.

- To prioritize the print speed, specify [Productivity Priority 1] and [Productivity Priority 2] in that order.
- To prioritize the print quality, specify [Image Quality Priority].

[Productivity Priority 1]
[Productivity Priority 2]

[**Image Quality Priority**]

[Corr. Paper Conveyance (Thin/Humid Ppr.)]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

Paper jams may occur frequently when printing on thin paper or damp paper. Specifying this setting to [On] may reduce paper jams.

[**Off**]
[On]

[Maintenance]

958J-09X

Carry out maintenance to clean the machine.
* Values in bold red text are the default settings for each item.

[Clean Feeder](P. 427)
[Clean Transfer Roller](P. 427)
[Clean Fixing Assembly](P. 427)
[Clean Drum](P. 427)

[Clean Feeder]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Maintenance]

If wiping and cleaning the feeder does not remedy the problems listed below, perform this operation to clean the feeder. **Cleaning the Feeder with Paper(P. 490)**

* [Clean Feeder] may not be displayed depending on the model, the installed options, and other settings.

- Originals become dirty
- Originals frequently jam
- Printouts appear smudged after scanning or copying

[Clean Transfer Roller]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Maintenance]

If print quality deteriorates or dots appear on printouts, perform this operation to clean the transfer roller. **Cleaning the Transfer Roller(P. 492)**

[Clean Fixing Assembly]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Maintenance]

Perform this operation to clean the fixing assembly if black streaks appear on printed paper following procedures such as toner cartridge replacement. **Cleaning the Fixing Assembly(P. 493)**

[Clean Drum]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Maintenance]

If print quality deteriorates, perform this operation to clean the drum unit. **Cleaning the Drum(P. 494)**

[Function Settings]

958J-09Y

Specify the settings for printing, scanning, and copying.
* Values in bold red text are the default settings for each item.

[Common](P. 428)
[Copy](P. 428)
[Printer](P. 428)
[Send](P. 428)
[Secure Print](P. 428)

[Common]

[Menu] ▶ [Function Settings]

Specify the settings for function operation, such as the paper source, printing, and scanning.
[Common](P. 430)

[Copy]

[Menu] ▶ [Function Settings]

Specify the settings for copying.
[Copy](P. 436)

[Printer]

[Menu] ▶ [Function Settings]

Specify the printer settings.
[Printer](P. 439)

[Send]

[Menu] ▶ [Function Settings]

Specify the settings for sending scanned data.
[Send](P. 451)

* [Send] may not be displayed depending on the model, the installed options, and other settings.

[Secure Print]

Specify whether to use the Secure Print function, which assigns a PIN for printing. **Printing a Document Secured with a PIN (Secure Print)(P. 209)**

* [Secure Print] may not be displayed depending on the model, the installed options, and other settings.

- To restrict printing from a computer to Secure Print jobs only, specify [Restrict Printer Jobs] also. **Restricting Printing from a Computer to Secure Print(P. 346)**

- To change the period of time until the print data that was sent with a PIN (secure data) and is temporarily saved in the memory of the machine is deleted, specify the [Secure Print Deletion Time] setting also. **Changing the Time Period That Print Data with a PIN (Secure Data) Is Saved(P. 212)**

[Use Secure Print]
[Off]
[**On**]

[Restrict Printer Jobs]
[**Off**]
[On]

[Secure Print Deletion Time]
10 to **30** to 240 (min.)

[Common]

958J-0A0

Specify the settings for function operations, such as the paper source, printing and scanning.

[Paper Feed Settings](P. 430)
[Print Settings](P. 430)
[Scan Settings](P. 430)
[Generate File](P. 430)

[Paper Feed Settings]

[Menu] ▶ [Function Settings] ▶ [Common]

Specify the settings for the paper source.
[Paper Feed Settings](P. 431)

[Print Settings]

[Menu] ▶ [Function Settings] ▶ [Common]

Specify the settings for printing.
[Print Settings](P. 433)

[Scan Settings]

[Menu] ▶ [Function Settings] ▶ [Common]

Specify the settings for scanning.
[Scan Settings](P. 434)

[Generate File]

[Menu] ▶ [Function Settings] ▶ [Common]

Specify the settings for scan file generation.
[Generate File](P. 435)

[Paper Feed Settings]

958J-0A1

Specify the settings for the paper source.
* Values in bold red text are the default settings for each item.

[Drawer Auto Selection On/Off](P. 431)
[Switch Paper Feed Method](P. 432)

[Drawer Auto Selection On/Off]

[Menu] ▶ [Function Settings] ▶ [Common] ▶ [Paper Feed Settings]

Specify the settings for each function so that the machine automatically selects the correct paper source for the size of the paper to be printed. **Using the Appropriate Paper Source for Each Function(P. 154)**

[Copy]
- [Multi-Purpose Tray]
  - [**Off**]
  - [On]
- [Drawer 1]
  - [Off]
  - [**On**]
- [Drawer 2]*1
  - [Off]
  - [**On**]

[Printer]
- [Multi-Purpose Tray]
  - [Off]
  - [**On**]
- [Drawer 1]
  - [Off]
  - [**On**]
- [Drawer 2]*1
  - [Off]
  - [**On**]

[Other]
- [Multi-Purpose Tray]
  - [**Off**]
  - [On]
- [Drawer 1]
  - [Off]
  - [**On**]
- [Drawer 2]*1
  - [Off]
  - [**On**]

*1 May not be displayed depending on the model, the installed options, and other settings.

[Switch Paper Feed Method]

[Menu] ▶ [Function Settings] ▶ [Common] ▶ [Paper Feed Settings]

Specify the settings used when printing on paper with a pre-printed logo.
Normally, when such paper is used, you need to change the direction in which the paper is loaded and which side faces up according to whether printing is 1-sided or 2-sided.
If you set [Print Side Priority] as the paper source for the loaded paper, there is no need to change the direction of the paper loaded or which side faces up. If you specify [Print Side Priority], always load the paper using the method for 2-sided printing. **Orientation for Loading Paper with a Logo(P. 139)**

* If you specify [Print Side Priority] in this setting, 1-sided printing will be slower. If you are using paper without a pre-printed logo, or if you are not using 2-sided printing for paper with a pre-printed logo, specify [Speed Priority].

[Multi-Purpose Tray]
[**Speed Priority**]
[Print Side Priority]

[Drawer 1]
[**Speed Priority**]
[Print Side Priority]

[Drawer 2][*1]
[**Speed Priority**]
[Print Side Priority]

[*1] May not be displayed depending on the model, the installed options, and other settings.

NOTE

- If you specify [Print Side Priority] for a paper source containing a paper that cannot be used for 2-sided printing, that setting is disabled and the machine operates using the [Speed Priority] setting.

[Print Settings]

958J-0A2

Specify the settings for printing.
* Values in bold red text are the default settings for each item.

[Auto Delete Suspended Jobs](P. 433)

[Auto Delete Suspended Jobs]

[Menu] ▶ [Function Settings] ▶ [Common] ▶ [Print Settings]

Specify whether to automatically delete the print or copy job when an error occurs and printing stops.
If you specify automatic deletion, you can also specify the time before the job is deleted.

[**Off**]

[On]
[Time Until Auto Delete]
0 to **5** to 240 (min.)

[Scan Settings]

958J-0A3

Specify the settings for scanning.
* Values in bold red text are the default settings for each item.

[Speed/Img. Qlty. Priority for Color Scan](P. 434)
[Auto Online](P. 434)
[Auto Offline](P. 434)

[Speed/Img. Qlty. Priority for Color Scan]

[Menu] ▶ [Function Settings] ▶ [Common] ▶ [Scan Settings]

Select whether to give priority to speed or print quality when scanning originals.

[**Speed Priority**]
[Image Quality Priority]

[Auto Online]

[Menu] ▶ [Function Settings] ▶ [Common] ▶ [Scan Settings]

Specify whether the machine automatically goes online (scan standby mode) when you are scanning from a computer. If you specify [Off] in this setting, you must press [Scan] ▶ [Remote Scanner] in the control panel [Home] screen to bring the machine online before performing the scan.

[Off]
[**On**]

[Auto Offline]

[Menu] ▶ [Function Settings] ▶ [Common] ▶ [Scan Settings]

Specify the amount of time where the machine remains online (Scan Standby Mode), but no scanning is performed. After the specified time, the machine is brought offline.

[Auto Offline Time]
0 (Off)
1 to **5** to 60 (min.)

[Generate File]

958J-0A4

Specify the settings for scan file generation.
* Values in bold red text are the default settings for each item.

[Output File Image Settings](P. 435)

[Output File Image Settings]

[Menu] ▶ [Function Settings] ▶ [Common] ▶ [Generate File]

Specify the gamma value used when a scan file is converted to YCbCr for transmission.
Setting a gamma value that matches that of the display used by the recipient ensures that image display is faithful to the original.

[YCbCr TX Gamma Value]
[Gamma 1.0]
[Gamma 1.4]
[**Gamma 1.8**]
[Gamma 2.2]

NOTE

- For information on the display's gamma value, see the manual for the display.

[Copy]

958J-0A5

Specify the settings for copying.
* Values in bold red text are the default settings for each item.

[Change Default Settings](P. 436)
[Auto Recognize Original Orientation](P. 437)
[Initialize Default Settings](P. 438)

[Change Default Settings]

[Menu] ▶ [Function Settings] ▶ [Copy]

Change the default settings for copying. **Changing the Default Settings(P. 182)**
The values specified here are also restored when you press  on the control panel while the copy screen is displayed.

[Number of Copies]
1 to 999

[Density]
9 levels
[Background]
[Auto]
[**Adjust (Manual)**]
9 levels

[Original Type]
[Text]
[**Text/Photo**]
[Photo]

[2-Sided]*1
[**Off**]*1
[1->2-Sided]*1
[2->2-Sided]*1
[2->1-Sided]*1
[Original/Finishing Type]

[Copy Ratio]
[Custom Ratio]
[**100% (1:1)**]
[400% (Max)]
[200% A5->A3]
[141% A5->A4, A4->A3, B5->B4]
[122% A5->B5, A4->B4]
[115% B5->A4, B4->A3]
[86% A4->B5, A3->B4]
[81% B5->A5, B4->A4]

[70% A4->A5, A3->A4, B4->B5]
[61% A3->B5]
[50% A3->A5]
[25% (Min)]

[Paper]
[**Auto**]
[Multi-Purpose Tray]
[Drawer 1]
[Drawer 2]*1

[N on 1]
[**Off**]
[2 on 1]
[4 on 1]
[ID Card Copy]
[Select Layout]

[Collate]
[**Off**]
[On]

[Erase Frame]
[**Off**]
[Original Frame]
1 to **4** to 50 (mm)
[Book Frame]
1 to **10** to 50 (mm)

[Sharpness]
7 levels

[Different Size Originals]*1
[**Off**]
[On]

[Book->2 Pages]
[**Off**]
[On]

*1 May not be displayed depending on the model, the installed options, and other settings.

[Auto Recognize Original Orientation]

[Menu] ▶ [Function Settings] ▶ [Copy]

Automatically rotate images by calculating original size/copy ratio/etc, and print them on paper loaded in the paper source.

[Off]
[**On**]

[Initialize Default Settings]

[Menu] ▶ [Function Settings] ▶ [Copy]

Use this to restore the copy settings to the factory settings.

[Printer]

958J-0A6

Specify the printer settings.

[Printer Settings](P. 439)
[PDL Selection (Plug and Play)](P. 439)

[Printer Settings]

[Menu] ▶ [Function Settings] ▶ [Printer]

Specify the settings for printer operation and for processing print data.
[Printer Settings](P. 440)

[PDL Selection (Plug and Play)]

[Menu] ▶ [Function Settings] ▶ [Printer]

Specify which Page Description Language (PDL) to use when connecting the machine to a computer using Plug and Play.
[PDL Selection (Plug and Play)](P. 450)

* [PDL Selection (Plug and Play)] may not be displayed depending on the model, the installed options, and other settings.

[Printer Settings]

958J-0A7

Specify the settings for printer operation and for processing print data.
* Values in bold red text are the default settings for each item.

- **[Prioritize Driver Settings When Printing](P. 440)**
- **[Copies](P. 440)**
- **[2-Sided Printing](P. 441)**
- **[Default Paper](P. 441)**
- **[Paper Size Override](P. 441)**
- **[Print Quality](P. 441)**
- **[Layout](P. 442)**
- **[Auto Error Skip](P. 444)**
- **[Timeout](P. 444)**
- **[Prioritize Multi-Purpose Tray](P. 444)**
- **[UFR II](P. 444)**
- **[PCL](P. 445)**
- **[Imaging Settings](P. 449)**

NOTE

If the control Panel and Printer Driver Have the Same Settings

- Priority is given to the printer driver settings. The control panel settings are valid for operating systems such as UNIX and PCL printing where printer drivers cannot be used and when printing from mobile devices.

[Prioritize Driver Settings When Printing]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings]

Specify for each paper source whether the printer driver settings are given priority over the paper size and type specified from  on the control panel.
If you specify [On] in this setting, the machine will print from the paper source specified by the printer driver, regardless of the paper setting on the machine.
Also, if [On] is specified here and the size of the paper loaded differs markedly from that specified in the printer driver settings, you can specify whether printing proceeds anyway or printing is stopped and an error message is displayed.

* Note that specifying [On] in this setting when the paper loaded in the machine does not match the paper specified by the printer driver could lead to paper jams or printing errors.

* Several sheets of paper may be printed even if the machine is configured to cancel printing when an error message is displayed.

[Multi-Purpose Tray]
[**Off**]
[On]
[**Paper Size and Type**]
[Paper Type Only]

[Copies]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings]

Specify the number of copies to be printed.

1 to 999

[2-Sided Printing]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings]

Specify whether to print on both sides of the paper.

* [2-Sided Printing] may not be displayed depending on the model, the installed options, and other settings.

[**Off**]
[On]

[Default Paper]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings]

Specify the paper size and type to be used when printing from a mobile device or an OS that does not support the printer driver.
See below for the papers that can be specified.
Usable Paper(P. 29)

[Paper Size Override]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings]

Specify whether the machine substitutes A4 size paper for Letter size paper and vice-versa when printing.
Specifying [On] in this setting means that if, for example, printing on A4 size paper is specified on the computer and there is only Letter size paper loaded, the job is printed on Letter size paper instead.

* Print settings are specified in an application or printer driver, but this setting can only be specified on the control panel.

[**Off**]
[On]

[Print Quality]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings]

Adjust print quality settings such as the density and resolution according to the document being printed and the purpose.

[Density]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [Print Quality]

Adjust the toner density used when printing.
For more precise adjustment, you can adjust the levels of the three density areas in [Density (Fine Adjust)].

* Note that you cannot adjust the toner density if [Toner Save] is set to [On]. **[Toner Save](P. 442)**

* [Density] may not be displayed depending on the model, the installed options, and other settings.

[Density]
17 levels

[Density (Fine Adjust)]

[High]/[Medium]/[Low]
17 levels

[Toner Save]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [Print Quality]

Specify whether to save toner when printing.
Specify [On] in this setting when you only want to check the layout or other finishing prior to the final print, such as before printing a very large job.

[**Off**]
[On]

[Image Refinement]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [Print Quality]

Specify whether to use the smoothing process which allows printing outlines of characters or diagrams smoothly.

[Off]
[**On**]

[Resolution]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [Print Quality]

Specify the resolution used to process print data.
To print with a higher resolution, specify [1200 dpi] in this setting.

[1200 dpi]
[**600 dpi**]

[Layout]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings]

Specify the gutter direction or margin and the print position.

[Binding Location]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [Layout]

Specify whether the gutter will be on the long edge or the short edge when the printed document will be bound using a method such as staples.
Use this setting in conjunction with the [Gutter] setting to adjust the binding position and margins. **[Gutter] (P. 443)**

- To bind the paper on the long edge, specify [Long Edge] in this setting.



- To bind the paper on the short edge, specify [Short Edge] in this setting.



[**Long Edge**]
[Short Edge]

[Gutter]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [Layout]

Offset the print position to adjust the width of the margin that will form the gutter.
Specify the offset width in 0.5 mm increments in the plus (+) or minus (-) offset direction, in accordance with the edge specified in [Binding Location]. **[Binding Location](P. 442)**

If [Binding Location] is set to [Long Edge]
Specify the offset width by selecting a positive (+) value to bind on the left edge of the paper or a negative (-) value to bind on the right edge.



Specified as a positive (+) value



Specified as a negative (-) value

If [Binding Location] is set to [Short Edge]
Specify the offset width by selecting a positive (+) value to bind on the top edge of the paper or a negative (-) value to bind on the bottom edge.



Specified as a positive (+) value



Specified as a negative (-) value

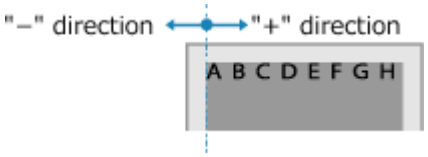
-50.0 to **00.0** to +50.0 (mm)

[Offset Short Edge] or [Offset Long Edge]

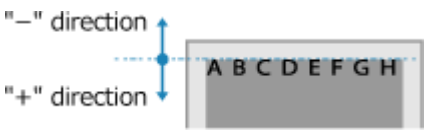
[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [Layout]

Offset the print position of text and images. Use this setting when the printed text and images are shifted towards one edge of the paper or when they extend beyond the print range.
Specify the offset width as a positive (+) or negative (-) value in 0.5 mm increments for each paper edge direction and print side.

To Offset Along the Short Edge (Horizontally)
Specify the adjustment width by selecting a positive (+) value to adjust to the right on the paper or a negative (-) value to adjust to the left on the paper.



To Offset Along the Long Edge (Vertically)
Specify the adjustment width by selecting a positive (+) value to adjust down on the paper or a negative (-) value to adjust up on the paper.



-50.0 to **00.0** to +50.0 (mm)

[Auto Error Skip]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings]

Specify whether to continue printing if an error occurs during printing.
It is recommended that the [Off] setting normally be used so that printing stops when an error occurs.

[**Off**]
[On]

[Timeout]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings]

Specify the time from the start of waiting to receive print data until reception times out when print data reception is interrupted.

5 to **15** to 300 (sec.)

[Prioritize Multi-Purpose Tray]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings]

Specify whether to give priority to paper feeding from the multi-purpose tray over feeding from the paper drawer when the machine automatically selects the correct paper source for the size of the paper to be printed.
If you specify [On] in this setting and the same paper is loaded into both the multi-purpose tray and the paper drawer, paper is fed from the multi-purpose tray.

[**Off**]
[On]

[UFR II]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings]

Specify the print data processing method used when the UFR II Printer Driver is used.

[Halftones]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [UFR II]

Specify the print method used to reproduce halftones (intermediate areas between light and dark areas) according to the print data content.

The reproduction method of halftones can be set separately for text, graphics (lines or figures), and image (photos).

- Specify [Resolution] for high-resolution printing where text outlines are clear. Suitable for printing data with text and fine lines.
- Specify [Color Tone] for printing with contrasting light and shade and with a sharp gradation. Suitable for printing image data such as photographic images.
- Specify [Gradation] for smooth printing of tones and outlines. Suitable for printing data such as figures that use gradations.
- Specify [High Resolution] for printing outlines of characters more clearly and finely than specifying [Resolution]. Suitable for printing data with text and fine lines or CAD data.

[Text]
[**Resolution**]
[Color Tone]
[Gradation]
[High Resolution]

[Graphics]
[Resolution]
[**Color Tone**]
[Gradation]
[High Resolution]

[Image]
[Resolution]
[**Color Tone**]
[Gradation]
[High Resolution]

[Paper Save]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [UFR II]

Specify whether to disable output for blank pages included in the print data.

[Off]
[**On**]

[PCL]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings]

Specify the PCL printing settings, such as page layout and print quality.

[Paper Save]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [PCL]

Specify whether to disable output for blank pages included in print data.

[**Off**]
[On]

[Orientation]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [PCL]

Select [Portrait] (vertical orientation) or [Landscape] (horizontal orientation) as the page orientation.

[**Portrait**]
[Landscape]

[Font Number]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [PCL]

Specify the font to use by selecting a corresponding font ID number.

* You can print the PCL font list with font samples from the control panel. **Printing and Viewing Reports and Lists(P. 378)**

0 to 54

[Point Size]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [PCL]

Set the font size in points, adjustable in 0.25 increments.

- You can specify this setting only when a proportionally-spaced scalable font is selected in [Font Number].

* [Point Size] may not be displayed depending on the model, the installed options, and other settings.

4.00 to **12.00** to 999.75 (point)

[Pitch]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [PCL]

Set the font pitch, or cpi (characters per inch), adjustable in 0.01 increments.

- You can specify this setting only when a fixed-pitch scalable font or a bitmap font is selected in [Font Number].

* [Pitch] may not be displayed depending on the model, the installed options, and other settings.

0.44 to **10.00** to 99.99 (cpi)

[Form Lines]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [PCL]

Set the number of lines printed on one page from 5 to 128.

- This setting is automatically changed according to the settings specified in [Default Paper Size] and [Orientation].

* Depending on your country or region, the [Form Lines] setting may not be available, or its content or default setting may be different.

5 to **64** to 128 (lines)

[Character Code]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [PCL]

Select the character code that is best suited to the computer you are sending print data from.

- The specified setting is ignored when the character code is controlled by the font specified in [Font Number].

[DESKTOP]	[**PC8**]
[ISO11]	[PC850]
[ISO15]	[PC852]
[ISO17]	[PC858]
[ISO21]	[PC8DN]
[ISO4]	[PC8TK]
[ISO6]	[PIFONT]
[ISO60]	[PSMATH]

[ISO69]
[ISOL1]
[ISOL2]
[ISOL5]
[ISOL6]
[ISOL9]
[LEGAL]
[MATH8]
[MCTEXT]
[MSPUBL]
[PC1004]
[PC775]
[PSTEXT]
[ROMAN8]
[ROMAN9]
[VNINTL]
[VNMATH]
[VNUS]
[WIN30]
[WINBALT]
[WINL1]
[WINL2]
[WINL5]

[Custom Paper]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [PCL]

Specify whether to set a custom paper size.
Specify [On] to set the dimensions of the paper in [X dimension] and [Y dimension].

[**Off**]
[On]

[Unit of Measure]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [PCL]

Select the unit of measurement used to set custom paper sizes.

* Depending on your country or region, the [Unit of Measure] setting may not be displayed, or its content or default setting may be different.

[**Millimeters**]
[Inches]

[X dimension]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [PCL]

Specify the horizontal dimension (short edge) of the custom paper.

* [X dimension] may not be displayed depending on the model, the installed options, and other settings.

140 to **431** (mm)

[Y dimension]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [PCL]

Specify the vertical dimension (long edge) of the custom paper.

* [Y dimension] may not be displayed depending on the model, the installed options, and other settings.

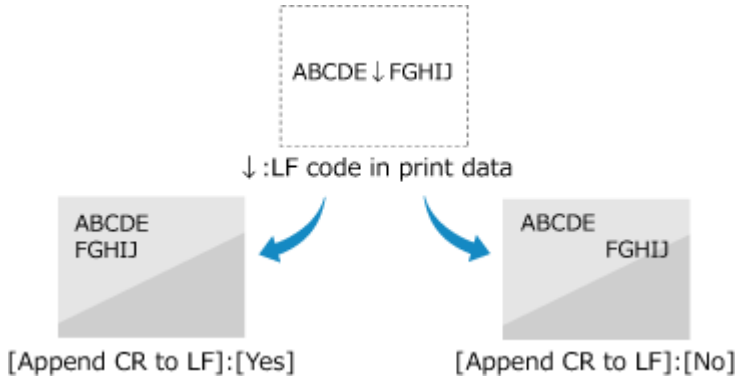
95 to **297** (mm)

[Append CR to LF]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [PCL]

Select whether to append a carriage return (CR) when the machine receives a line feed code (LF).

- If [Yes] is selected, the print position moves to the beginning of the next line when the machine receives an LF code.
- If [No] is selected, the print position moves to the next line, just under the received LF code.



[Yes]
[**No**]

[Enlarge A4 Print Width]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [PCL]

Select whether to expand the width of the printable area of A4 size paper in portrait orientation to that of Letter size.

[**Off**]
[On]

[Halftones]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [PCL]

Specify the print method used to reproduce halftones (intermediate areas between light and dark areas) according to the print data content.

The reproduction method of halftones can be set separately for text, graphics (lines or figures), and image (photos).

- Specify [Resolution] for high-resolution printing where text outlines are clear. Suitable for printing data with text and fine lines.
- Specify [Color Tone] for printing with contrasting light and shade and with a sharp gradation. Suitable for printing image data such as photographic images.
- Specify [Gradation] for smooth printing of tones and outlines. Suitable for printing data such as figures that use gradations.
- Specify [High Resolution] for printing outlines of characters more clearly and finely than specifying [Resolution]. Suitable for printing data with text and fine lines or CAD data.

[Text]
  [**Resolution**]
  [Color Tone]
  [Gradation]
  [High Resolution]

[Graphics]
  [Resolution]
  [**Color Tone**]

[Gradation]
[High Resolution]

[Image]
[Resolution]
[**Color Tone**]
[Gradation]
[High Resolution]

[Imaging Settings]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings]

Specify the print data processing method used for printing JPEG or TIFF format image files.

[Halftones]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [Imaging Settings]

Specify the print method used to reproduce halftones (intermediate areas between light and dark areas) according to the image content.

To Print Images Such as Digital Camera Photos
Specify [Gradation] to produce a print with contrasting light and shade and with a sharp gradation.

To Print Figures or Graphs Containing Gradation Areas
Specify [Resolution] to produce a print with smooth gradation and smooth edges.

To Print Documents Containing Many Characters
Specify [High Resolution] to produce a fine print with clear edges of text.

[**Gradation**]
[Resolution]
[High Resolution]

[PDL Selection (Plug and Play)]

958J-0A8

Specify which Page Description Language (PDL) to use when the machine is connected to a computer using Plug and Play.
* Values in bold red text are the default settings for each item.
* [PDL Selection (Plug and Play)] may not be displayed depending on the model, the installed options, and other settings.

[Network](P. 450)
[USB](P. 450)

[Network]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [PDL Selection (Plug and Play)]

Specify the Page Description Language (PDL) to use when the machine is connected to a networked computer using Plug and Play.

- When connecting the machine as a printer, select from the following:
  - When connecting as a UFR II printer: [UFR II]
  - When connecting as a PCL6 printer: [PCL6]

[**UFR II**]
[PCL6]

[USB]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [PDL Selection (Plug and Play)]

Specify the Page Description Language (PDL) to use when the machine is connected to a computer via USB using Plug and Play.

- When connecting the machine as a printer, select from the following:
  - When connecting as a UFR II printer: [UFR II]
  - When connecting as a PCL6 printer: [PCL6]

[**UFR II**]
[PCL6]

[Send]

958J-0A9

Specify the settings for sending scanned data.
* [Send] may not be displayed depending on the model, the installed options, and other settings.

[Common Settings](P. 451)
[Scan and Send Settings](P. 451)

[Common Settings]

[Menu] ▶ [Function Settings] ▶ [Send]

Specify the settings for restricting the transmission of scanned data, and for displaying a destination confirmation screen.
[Common Settings](P. 452)

* [Common Settings] may not be displayed depending on the model, the installed options, and other settings.

[Scan and Send Settings]

[Menu] ▶ [Function Settings] ▶ [Send]

Specify the settings for sending scanned data.
[Scan and Send Settings](P. 454)

[Common Settings]

958J-0AA

Specify the settings for restricting the transmission of scanned data, and for displaying the confirmation screen when sending data.
* Values in bold red text are the default settings for each item.
* [Common Settings] may not be displayed depending on the model, the installed options, and other settings.

[Restrict New Destinations](P. 452)
[Restrict Resending from Log](P. 452)
[One-Touch/Coded Dial TX Confirmation](P. 452)
[Confirm Destination Before Sending](P. 452)
[Display Notif. When Job Is Accepted](P. 453)

[Restrict New Destinations]

[Menu] ▶ [Function Settings] ▶ [Send] ▶ [Common Settings]

Specify whether to restrict the destinations that can be specified when sending scanned data to destinations that are registered in the Address Book or on the LDAP server. **Limiting Available Destinations(P. 340)**

[**Off**]
[On]

[Restrict Resending from Log]

[Menu] ▶ [Function Settings] ▶ [Send] ▶ [Common Settings]

Specify whether to prohibit the specification of destinations from the TX Job Log for scan jobs. **Limiting Available Destinations(P. 340)**

[**Off**]
[On]

[One-Touch/Coded Dial TX Confirmation]

[Menu] ▶ [Function Settings] ▶ [Send] ▶ [Common Settings]

Specify whether the registered destination confirmation screen is shown when the destination is specified using a Coded Dial number or One-Touch Dial. **Confirming the Destination before Sending(P. 342)**

[**Off**]
[On]

[Confirm Destination Before Sending]

[Menu] ▶ [Function Settings] ▶ [Send] ▶ [Common Settings]

Specify whether a destination confirmation screen is shown when you send an e-mail. **Confirming the Destination before Sending(P. 342)**

[**Off**]
[On]

[Only for Sequential Broadcast]

[Display Notif. When Job Is Accepted]

[Menu] ▶ [Function Settings] ▶ [Send] ▶ [Common Settings]

Processes handled by the machine, including sending scanned data are managed as jobs. Select whether to display the screen for confirming reception as a job after scan operations are performed.
When you select [On], you can display a screen to view the sending status and log.

[Off]
[**On**]

[Scan and Send Settings]

958J-0AC

Specify the settings for sending scanned data.
* Values in bold red text are the default settings for each item.
* [Scan and Send Settings] may not be displayed depending on the model, the installed options, and other settings.

[Register Unit Name (E-Mail)](P. 454)
[E-Mail Settings](P. 454)
[File Settings](P. 456)

[Register Unit Name (E-Mail)]

[Menu] ▶ [Function Settings] ▶ [Send] ▶ [Scan and Send Settings]

Register an e-mail sender.
Registered sender names are posted to the destination along with the e-mail address of the machine.
If the sender name is not registered, only the machine's e-mail address is posted.

[E-Mail Settings]

[Menu] ▶ [Function Settings] ▶ [Send] ▶ [Scan and Send Settings]

Specify the settings for sending e-mail.

[Change Default Settings]

[Menu] ▶ [Function Settings] ▶ [Send] ▶ [Scan and Send Settings] ▶ [E-Mail Settings]

Change the default settings for sending scanned data via e-mail. **Changing the Default Settings(P. 182)**
When you press  on the control panel while the e-mail sending screen is displayed, the settings revert to the values specified here.

[Scan Size]
- [**Auto**]
- [A4]
- [A4R]
- [A3]
- [A5]
- [A5R]
- [B4]
- [B5]
- [B5R]
- [8K]
- [16K]
- [16KR]
- [LTR]
- [LTRR]
- [LGL]
- [STMT]
- [STMTR]
- [EXEC]

[11x17]
[FOOLSCAP/FOLIO]
[OFICIO]
[Government-LTR]
[Government-LTRR]
[Argentina-LTR]
[Argentina-LTRR]
[Government-LGL]
[India-LGL]
[AUS-FOOLSCAP]
[Brazil-OFICIO]
[Mexico-OFICIO]
[Ecuador-OFICIO]
[Argentina-OFICIO]
[F4A]

[Color Mode]
[**Color**]
[Black & White]

[File Format]
[**PDF**]
[PDF (Compact)]
[JPEG]
[TIFF]
[Set PDF/TIFF Details]
[PDF]/[PDF (Compact)]/[TIFF]
[Divide into Pages]
[**Off**]
[On]

[Density]
9 levels

[Original Type]
[Text]
[**Text/Photo**]
[Photo]

[Different Size Originals]*1
[**Off**]
[On]

[2-Sided Original]*1
[**Off**]
[Book Type]
[Calendar Type]

[Sharpness]
7 levels

[Data Size]
[Small: Memory Priority]
[**Standard**]
[Large: Image Quality Priority]

[Subject/Message]
[Subject]
[Message]

[Reply To]
[**None**]
[Specify from Address Book]

[Priority]
[Low]
[**Standard**]
[High]

*1 May not be displayed or available depending on the model, the installed options, and other settings.

[Initialize Default Settings]

[Menu] ▶ [Function Settings] ▶ [Send] ▶ [Scan and Send Settings] ▶ [E-Mail Settings]

Use this to restore the settings to send scanned data via e-mail to the factory settings.

[Link Mobile Device Address Book]

[Menu] ▶ [Function Settings] ▶ [Send] ▶ [Scan and Send Settings] ▶ [E-Mail Settings]

Specify whether destinations registered in the Address Book on a mobile device can be specified if you are sending scanned data via e-mail. **Specifying Destinations (Address Book on a Mobile Device)(P. 177)**
Set [Use Remote UI Access PIN] to [On] to require that a PIN be entered when sending destinations from a mobile device to the machine as the destination. For this, use the same PIN as Remote UI access PIN. **Setting the PIN to Use for Remote UI(P. 350)**

[Link Mobile Device Address Book]
[**Off**]
[On]

[Use Remote UI Access PIN]
[Off]
[**On**]

[File Settings]

[Menu] ▶ [Function Settings] ▶ [Send] ▶ [Scan and Send Settings]

Specify the operation settings used for saving scanned data to a shared folder.

[Change Default Settings]

[Menu] ▶ [Function Settings] ▶ [Send] ▶ [Scan and Send Settings] ▶ [File Settings]

Change the default settings for saving scanned data to a shared folder. **Changing the Default Settings(P. 182)**

When you press  on the control panel while the file sending screen is displayed, the settings revert to the values specified here.

[Scan Size]
- [**Auto**]
- [A4]
- [A4R]
- [A3]
- [A5]
- [A5R]
- [B4]
- [B5]
- [B5R]
- [8K]
- [16K]
- [16KR]
- [LTR]
- [LTRR]
- [LGL]
- [STMT]
- [STMTR]
- [EXEC]
- [11x17]
- [FOOLSCAP/FOLIO]
- [OFICIO]
- [Government-LTR]
- [Government-LTRR]
- [Argentina-LTR]
- [Argentina-LTRR]
- [Government-LGL]
- [India-LGL]
- [AUS-FOOLSCAP]
- [Brazil-OFICIO]
- [Mexico-OFICIO]
- [Ecuador-OFICIO]
- [Argentina-OFICIO]
- [F4A]

[Color Mode]
- [**Color**]
- [Black & White]

[File Format]
- [**PDF**]
- [PDF (Compact)]
- [JPEG]
- [TIFF]
- [Set PDF/TIFF Details]
  - [PDF]/[PDF (Compact)]/[TIFF]

[Divide into Pages]
[**Off**]
[On]

[Density]
9 levels

[Original Type]
[Text]
[**Text/Photo**]
[Photo]

[Different Size Originals]*1
[**Off**]
[On]

[2-Sided Original]*1
[**Off**]
[Book Type]
[Calendar Type]

[Sharpness]
7 levels

[Data Size]
[Small: Memory Priority]
[**Standard**]
[Large: Image Quality Priority]

*1 May not be displayed or available depending on the model, the installed options, and other settings.

[Initialize Default Settings]

[Menu] ▶ [Function Settings] ▶ [Send] ▶ [Scan and Send Settings] ▶ [File Settings]

Use this to restore the settings to save scanned data to a shared folder to the factory settings.

[Set Destination]

958J-0AK

Specify the settings for the Address Book PIN.
* [Set Destination] may not be displayed depending on the model, the installed options, and other settings.

[Address Book PIN](P. 459)

[Address Book PIN]

[Menu] ▶ [Set Destination]

Specify that a PIN must be entered to add new entries to the Address Book or edit existing entries. **Restricting Address Book Registration and Editing by Setting a PIN(P. 348)**

[Management Settings]

958J-0AL

Specify the settings for managing the machine users, the system, and other data.

[User Management](P. 460)
[Device Management](P. 460)
[License/Other] or [Update Firmware](P. 460)
[Data Management](P. 460)
[Security Settings](P. 460)
[Initialize All Data/Settings](P. 460)

[User Management]

[Menu] ▶ [Management Settings]

Register and manage information on the machine's administrator and users.
[User Management](P. 462)

[Device Management]

[Menu] ▶ [Management Settings]

Specify and manage the settings for information and operations relating to the machine's hardware.
[Device Management](P. 463)

[License/Other] or [Update Firmware]

[Menu] ▶ [Management Settings]

Specify and manage the settings for information and operations relating to the machine's software.
[License/Other] or [Update Firmware](P. 465)

[Data Management]

[Menu] ▶ [Management Settings]

Manage or initialize stored data and the machine's settings.
[Data Management](P. 467)

[Security Settings]

[Menu] ▶ [Management Settings]

Specify and manage the security settings, such as the machine's authentication functions and system verification.
[Security Settings](P. 468)

[Initialize All Data/Settings]

[Menu] ▶ [Management Settings]

Initialize the settings and registered data to reset the machine to the factory settings.
Initializing the Settings and Data(P. 388)

[User Management]

958J-0AR

Register and manage information on the machine's administrator and users.
* Values in bold red text are the default settings for each item.

[System Manager Information Settings](P. 462)
[Department ID Management](P. 462)

[System Manager Information Settings]

[Menu] ▶ [Management Settings] ▶ [User Management]

Specify a System Manager ID and System Manager PIN to create a dedicated administrator account.
If needed, you can also specify the administrator's name*1.
Use Remote UI from a computer to specify other administrator information, such as the e-mail address. **Setting the Department ID and PIN for the Administrator(P. 293)**

[System Manager ID and PIN]
  [System Manager ID]
  [System Manager PIN]

[System Manager Name]*1

*1 May not be displayed depending on the model, the installed options, and other settings.

[Department ID Management]

[Menu] ▶ [Management Settings] ▶ [User Management]

To enhance security and manage function use and costs, assign a Department ID to users and groups that use the machine. **Authenticating Users and Managing Groups with Department ID (Department ID Management)(P. 296)**

* [Department ID Management] may not be displayed depending on the model, the installed options, and other settings.

[**Off**]
[On]

[Device Management]

958J-0AS

Specify and manage settings for information and operations relating to the machine's hardware.
* Values in bold red text are the default settings for each item.

[Device Information Settings](P. 463)
[Select Country/Region](P. 463)
[Display Job Log](P. 464)
[Scan with Canon PRINT Business](P. 464)
[Notify to Check Paper Settings](P. 464)

[Device Information Settings]

[Menu] ▶ [Management Settings] ▶ [Device Management]

Specify a name to identify the machine and the installation location.
The information specified here appears in the Remote UI Portal page. **Portal Page of Remote UI(P. 372)**

* [Device Information Settings] may not be displayed depending on the model, the installed options, and other settings.

[Device Name]
[Location]

[Select Country/Region]

[Menu] ▶ [Management Settings] ▶ [Device Management]

Specify the country or region where the machine is used. The default setting may vary depending on the setting selected at initial power-ON.

* Depending on your country or region, the [Select Country/Region] setting may not be available, or its content or default setting may be different.

[Hong Kong (HK)]
[Singapore (SG)]
[Malaysia (MY)]
[Thailand (TH)]
[Vietnam (VN)]
[Argentina (AR)]
[Chile (CL)]
[**Other (Asia)**]
[Other (Latin America)]
[Australia (AU)]
[Korea (KR)]
[India (IN)]
[New Zealand (NZ)]
[Other]

[Display Job Log]

[Menu] ▶ [Management Settings] ▶ [Device Management]

Specify whether the logs for printing, scanning, and copying are shown on the Status Monitor screen and in the communication management reports.
[Status Monitor] Screen(P. 115)
Checking Usage and Logs with Remote UI(P. 374)
Printing and Viewing Reports and Lists(P. 378)

[Off]
[**On**]

[Scan with Canon PRINT Business]

[Menu] ▶ [Management Settings] ▶ [Device Management]

Specify whether the machine's scanning functions can be used from a mobile device with Canon PRINT Business installed.

* [Scan with Canon PRINT Business] may not be displayed depending on the model, the installed options, and other settings.

[Off]
[**On**]

[Notify to Check Paper Settings]

[Menu] ▶ [Management Settings] ▶ [Device Management]

Specify whether the Notify to Check Paper Settings screen appears when the paper drawer is loaded into the machine.
Loading Paper in the Paper Drawer(P. 131)

[Off]
[**On**]

[License/Other] or [Update Firmware]

958J-0AU

Specify and manage the settings for information and operations relating to the machine's software.
* Values in bold red text are the default settings for each item.

[Register License](P. 465)
[Remote UI Settings](P. 465)
[Update Firmware](P. 465)

[Register License]

[Menu] ▶ [Management Settings] ▶ [License/Other]

To use the system options with the machine, register your license key.

* [Register License] may not be displayed depending on the model, the installed options, and other settings.

[Remote UI Settings]

[Menu] ▶ [Management Settings] ▶ [License/Other]

Specify the settings for using Remote UI and for Restrict Access for Remote UI.
[Remote UI Settings](P. 466)

* [Remote UI Settings] may not be displayed depending on the model, the installed options, and other settings.

[Update Firmware]

[Menu] ▶ [Management Settings] ▶ [License/Other]/[Update Firmware]

Check the machine's firmware version and update the firmware via the Internet or a computer.
Updating the Firmware(P. 385)

[Via PC]
[Via Internet]*1
[Version Information]
[Notification Settings]*1 [Off] [**On**]

*1 May not be displayed depending on the model, the installed options, and other settings.

[Remote UI Settings]

958J-0AW

Specify the settings for using Remote UI and for Restrict Access for Remote UI.
* Values in bold red text are the default settings for each item.
* [Remote UI Settings] may not be displayed depending on the model, the installed options, and other settings.

[Use Remote UI](P. 466)
[Remote UI Access Security Settings](P. 466)

[Use Remote UI]

[Menu] ▶ [Management Settings] ▶ [Remote UI Settings/Update Firmware] ▶ [Remote UI Settings]

Specify whether to use Remote UI. **Disabling Remote UI(P. 351)**
If you opt to use Remote UI, you can also specify whether to use TLS encryption for communication when using Remote UI. **Using TLS(P. 315)**

[Off]

[**On**]
  [Use TLS]
    [**Off**]
    [On]

[Remote UI Access Security Settings]

[Menu] ▶ [Management Settings] ▶ [Remote UI Settings/Update Firmware] ▶ [Remote UI Settings]

When using Remote UI, set this setting to [On], and set the Remote UI Access PIN. **Setting the PIN to Use for Remote UI(P. 350)**

[**Off**]

[On]
  [Remote UI Access PIN]

[Data Management]

958J-0AX

Manage or initialize the data and settings on the machine.
* Values in bold red text are the default settings for each item.

[Initialize Key and Certificate](P. 467)
[Initialize Address Book](P. 467)
[Initialize Menu](P. 467)

[Initialize Key and Certificate]

[Menu] ▶ [Management Settings] ▶ [Data Management]

Initialize the key and certificate settings and CA certificate settings, and delete all keys and certificates other than pre-installed ones. **Initializing Specific Settings and Data (imageRUNNER 2224N)(P. 388)**

* [Initialize Key and Certificate] may not be displayed depending on the model, the installed options, and other settings.

[Initialize Address Book]

[Menu] ▶ [Management Settings] ▶ [Data Management]

Delete the destinations registered in the Address Book. **Initializing Specific Settings and Data (imageRUNNER 2224N)(P. 388)**

* [Initialize Address Book] may not be displayed depending on the model, the installed options, and other settings.

[Initialize Menu]

[Menu] ▶ [Management Settings] ▶ [Data Management]

Initialize the [Menu] settings in the [Home] screen. Select the settings to be initialized. **Initializing Specific Settings and Data (imageRUNNER 2224N)(P. 388)**

[Preferences]
[Adjustment/Maintenance]
[Function Settings]
[Set Destination]*1
[Management Settings]
[Initialize All]

*1 May not be displayed depending on the model, the installed options, and other settings.

[Security Settings]

958J-0AY

Specify and manage security settings such as the machine's authentication functions and system verification.
* Values in bold red text are the default settings for each item.

[Authentication/Password Settings](P. 468)
[Encryption Settings](P. 468)
[Verify System at Startup](P. 468)

[Authentication/Password Settings]

[Menu] ▶ [Management Settings] ▶ [Security Settings]

Configure the authentication functions for the machine.
[Authentication/Password Settings](P. 469)

* [Authentication/Password Settings] may not be displayed depending on the model, the installed options, and other settings.

[Encryption Settings]

[Menu] ▶ [Management Settings] ▶ [Security Settings]

Specify whether to restrict the use of weak encryption or keys and certificates that use weak encryption.

* [Encryption Settings] may not be displayed depending on the model, the installed options, and other settings.

[Prohibit Use of Weak Encryption]
[**Off**]
[On]

[Prohibit Key/Cert. with Weak Encryption][*1]
[**Off**]
[On]

[*1] May not be displayed or available depending on the model, the installed options, and other settings.

[Verify System at Startup]

[Menu] ▶ [Management Settings] ▶ [Security Settings]

Verify that the system when starting up the machine.

If Tampering is Detected

- The machine switches to update standby mode. You need to update the firmware. **Updating the Firmware(P. 385)**
- If the screen remains blank after some time, system recovery may not be possible. Contact your dealer or service representative.

[**Off**]
[On]

[Authentication/Password Settings]

958J-0C0

Specify the settings for the machine's authentication functions.
* Values in bold red text are the default settings for each item.
* [Authentication/Password Settings] may not be displayed depending on the model, the installed options, and other settings.

[Authentication Function Settings](P. 469)

[Authentication Function Settings]

[Menu] ▶ [Management Settings] ▶ [Security Settings] ▶ [Authentication/Password Settings]

Specify the settings for enhanced security using the authentication functions.

[Lockout Settings]

[Menu] ▶ [Management Settings] ▶ [Security Settings] ▶ [Authentication/Password Settings] ▶ [Authentication Function Settings]

Specify whether to switch to a state that does not permit login (lockout) for a set period if authentication fails. If you use lockout, you can also specify how many consecutive times authentication fails before lockout is invoked in [Lockout Threshold] and specify the length of the lockout period in [Lockout Period].

* This does not apply to Department ID authentication.

[Enable Lockout]
[**Off**]
[On]

[Lockout Threshold]*1
1 to 10 (times)

[Lockout Period]*1
1 to 60 (min.)

*1 May not be displayed or available depending on the model, the installed options, and other settings.

Settings that Can Be Imported and Exported (imageRUNNER 2224N)

958J-0C1

You can view a list of support for importing and exporting the machine's settings.

[Preferences](P. 471)
[Adjustment/Maintenance](P. 475)
[Function Settings](P. 476)
[Set Destination](P. 479)
[Management Settings](P. 480)

NOTE

- See the following for information on how to import and export data.
  Importing and Exporting the Address Book and Settings(P. 382)

[Preferences]

958J-0C2

Support for importing and exporting the [Preferences] is as shown below.

✔: Can be imported or exported
—: Cannot be imported or exported

[Display Settings](P. 471)
[Timer/Energy Settings](P. 471)
[Network](P. 472)
[External Interface](P. 473)
[Accessibility](P. 473)
[Volume Settings](P. 474)

[Display Settings]

Setting	Import and Export
[Default Screen after Startup/Restoration]	✔
[Button Display Order on Home Screen]	—
[Language]	✔
[Remote UI Language]	✔
[Millimeter/Inch Entry Switch]	✔
[Display IP Address]	✔
[Notify to Clean Original Scanning Area]	✔

[Timer/Energy Settings]

Setting	Import and Export
[Current Date/Time Settings]	—
[Date/Time Settings]	✔
[Date Format]	✔
[Time Format]	✔

Setting	Import and Export
[Auto Reset Time]	✓
[Function After Auto Reset]	✓
[Auto Sleep Time]	✓

[Network]

Setting		Import and Export
[Select Wired/Wireless LAN]		✓
[Wireless LAN Settings]	[Manually Enter Network Name]	✓
	[WPS Push Button Mode]	—
	[WPS PIN Code Mode]	—
	[Power Save Mode]	✓
	[Connection Information]	—
[Direct Connection Settings]		—
[Easy Connection via PC]		—
[TCP/IP Settings]	[IPv4 Settings]	✓ *1
	[IPv6 Settings]	✓
	[WINS Settings]	✓
	[LPD Settings]	✓
	[RAW Settings]	✓
	[WSD Settings]	✓
	[IPP Print Settings]	✓
	[Use HTTP]	✓
	[Use IPSec]	—

Setting		Import and Export
	[Network Link Scan Settings]	✓
	[Port Number Settings]	✓
	[MTU Size]	✓
[SNMP Settings]		✓
[Dedicated Port Settings]		✓
[Dedicated Port Authentication Method]		✓
[Waiting Time for Connection at Startup]		✓
[Ethernet Driver Settings]		✓
[IEEE 802.1X Settings]		—
[Firewall Settings]		✓
[Device Settings Management On/Off]		✓
[RMT-SW]		✓
[Initialize Network Settings]		—

*1 The [PING Command] is " — ."

[External Interface]

Setting	Import and Export
[USB Settings]	✓

[Accessibility]

Setting	Import and Export
[Invert Screen Colors]	✓
[Contrast]	✓

Setting	Import and Export
[Message Display Time]	✓
[Scrolling Speed]	✓
[Cursor Movement Type]	✓

[Volume Settings]

Setting	Import and Export
[Entry Tone]	✓
[Invalid Entry Tone]	✓
[Restock Supplies Tone]	✓
[Warning Tone]	✓
[Job Done Tone]	✓
[Energy Saver Alert]	✓
[Original in Feeder Detection Tone]	✓

[Adjustment/Maintenance]

958J-0C3

Support for importing and exporting the [Adjustment/Maintenance] is as shown below.
* Some items are not available depending on the model and the installed options.

✔: Can be imported or exported
—: Cannot be imported or exported

[Adjust Image Quality](P. 475)
[Maintenance](P. 475)

[Adjust Image Quality]

Setting	Import and Export
[Printer Density]	✔
[Toner Save]	✔
[Black Text Processing for Color]	✔
[Spd/Img Qlty Priority for Rotate+Collate]	✔
[Special Processing]	✔
[Remove Streaks from Orig. Scanning Area]	✔

[Maintenance]

Setting	Import and Export
[Clean Feeder]	—
[Clean Transfer Roller]	—
[Clean Fixing Assembly]	—
[Clean Drum]	—

[Function Settings]

958J-0C4

Support for importing and exporting the [Function Settings] is as shown below.
* Some items are not available depending on the model and the installed options.

✔ : Can be imported or exported
— : Cannot be imported or exported

[Common](P. 476)
[Copy](P. 476)
[Printer](P. 476)
[Send](P. 477)
[Secure Print](P. 478)

[Common]

Setting	Import and Export
[Paper Feed Settings]	✔
[Print Settings]	✔
[Scan Settings]	✔ *1
[Generate File]	✔

*1 The [Auto Online] is " — ."

[Copy]

Setting	Import and Export
[Change Default Settings]	✔
[Auto Recognize Original Orientation]	✔
[Initialize Default Settings]	—

[Printer]

Setting		Import and Export
[Printer Settings]	[Prioritize Driver Settings When Printing]	✔

Setting		Import and Export
	[Copies]	✓
	[2-Sided Printing]	✓
	[Default Paper]	✓
	[Paper Size Override]	✓
	[Print Quality]	✓
	[Layout]	✓
	[Auto Error Skip]	✓
	[Timeout]	✓
	[Prioritize Multi-Purpose Tray]	✓
	[UFR II]	✓
	[PCL]	✓
	[Imaging Settings]	✓
[PDL Selection (Plug and Play)]	[Network]	—
	[USB]	✓

[Send]

Setting	Import and Export
[Common Settings]	✓
[Scan and Send Settings]	✓ *1

*1 [Change Default Settings] in [E-Mail Settings] and [Change Default Settings] in [File Settings] are " — ."

[Secure Print]

Setting	Import and Export
[Secure Print]	✔

[Set Destination]

958J-0C5

Support for importing and exporting the [Set Destination] is as shown below.

✔: Can be imported or exported
—: Cannot be imported or exported

[Address Book PIN](P. 479)

[Address Book PIN]

Setting	Import and Export
[Address Book PIN]	✔

[Management Settings]

958J-0C6

Support for importing and exporting the [Management Settings] is as shown below.

✔: Can be imported or exported
—: Cannot be imported or exported

[User Management](P. 480)
[Device Management](P. 480)
[License/Other] or [Update Firmware](P. 480)
[Data Management](P. 481)
[Security Settings](P. 481)
[Initialize All Data/Settings](P. 481)

[User Management]

Setting	Import and Export
[System Manager Information Settings]	✔
[Department ID Management]	✔

[Device Management]

Setting	Import and Export
[Device Information Settings]	✔
[Select Country/Region]	—
[Display Job Log]	✔
[Scan with Canon PRINT Business]	✔
[Notify to Check Paper Settings]	✔

[License/Other] or [Update Firmware]

Setting	Import and Export
[Register License]	—

Setting	Import and Export
[Remote UI Settings]	—
[Update Firmware]	—

[Data Management]

Setting	Import and Export
[Initialize Key and Certificate]	—
[Initialize Address Book]	—
[Initialize Menu]	—

[Security Settings]

Setting	Import and Export
[Authentication/Password Settings]	—
[Encryption Settings]	—
[Verify System at Startup]	✓

[Initialize All Data/Settings]

Setting	Import and Export
[Initialize All Data/Settings]	—

Maintenance

Maintenance 483
Cleaning the Machine 485
Cleaning the Surface of the Machine 486
Cleaning the Platen Glass 487
Cleaning the Feeder 488
Cleaning the Transfer Roller 492
Cleaning the Fixing Assembly 493
Cleaning the Drum 494
Replacing Consumables 495
Replacing the Toner Cartridges 496
Checking the Remaining Amount of Consumables 499
List of Consumables 500
Adjusting the Print Quality 502
Adjusting the Reproducibility of Near Black Color Text 503

Maintenance

958J-0C7

To ensure safe and convenient use of the machine, daily maintenance that includes cleaning and replacement of consumables is required.
If you notice a deterioration in the print quality or frequent paper jams, perform cleaning and adjustment to improve it.

Performing Maintenance Operations

In addition to performing regular maintenance, operations are required according to the machine status and print quality.

Cleaning

Regularly clean the various parts of the machine. If the original or paper becomes dirty, or the print quality has deteriorated, clean the parts causing the problem according to the symptoms.
Cleaning the Machine(P. 485)

Replacing Consumables

If a message about consumables appears on the screen of the control panel or Remote UI, or the print quality deteriorates, replace the consumables.
Replacing Consumables(P. 495)

Adjusting the Print Quality

If the printed color is not reproduced properly or the print results are not as expected, adjust the print quality according to the symptoms that occur.
Adjusting the Print Quality(P. 502)

IMPORTANT

Maintenance and Inspections

- The minimum holding period for performance parts for repairs and toner cartridges is seven (7) years after production of the machine model is discontinued.
- If a problem occurs during operation, see the following:
  Troubleshooting(P. 507)

Installation

- If you find the machine's operation to be noisy in some operating modes or due to your surroundings, we recommend setting up the machine in a separate location from your office.
- Water droplets (condensation) may form inside the machine if the room where the machine is installed is heated rapidly, or if the machine is moved from a cool, dry location to a warm, humid location. Using the machine under these conditions may result in problems such as paper jams, poor print quality, or faults. Let the machine adjust to the ambient temperature and humidity for at least two hours before use.
- Machines with storage devices such as hard disks may not operate properly when used at high altitudes (3,000 meters above sea level or higher).

■ See Also

Checking the Required Troubleshooting Solutions from the Symptoms

You can check the required maintenance operations and settings according to the status of the machine and the error description.
Paper Jams(P. 508)
Problems with Printing Results(P. 521)
Paper and Paper Feeding Problems(P. 530)

Viewing the Number of Printed Pages and Machine Usage

As a guide to when to perform maintenance, you can view the number of printed pages using the counter and view the usage of the machine from reports and lists.

Monitoring the Usage(P. 376)

Cleaning the Machine

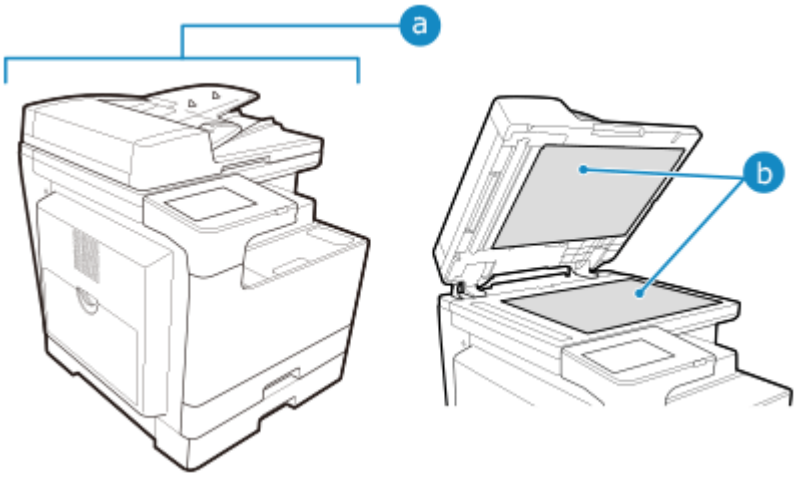
958J-0C8

To ensure efficient use of the machine, regularly clean the various parts and keep them clean.
If the original or paper becomes dirty, or the print quality has deteriorated, clean the parts causing the problem according to the symptoms.

Parts to Clean on a Regular Basis

Clean the surface (a), the platen glass, and the underside of the feeder or platen cover (b) frequently.

Cleaning the Surface of the Machine(P. 486)
Cleaning the Platen Glass(P. 487)



Parts to Clean When Symptoms Occur

If the following symptoms occur, clean the feeder or fixing assembly and transfer belt inside the machine.

- Original becomes dirty, paper is jammed, or smudges appear on printouts.
  Cleaning the Feeder(P. 488)
- Paper becomes dirty or print quality has deteriorated.
  Cleaning the Fixing Assembly(P. 493)
  Cleaning the Transfer Roller(P. 492)
  Cleaning the Drum(P. 494)

Cleaning the Surface of the Machine

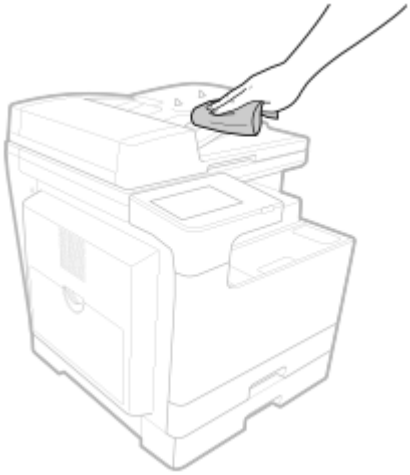
958J-0C9

Regularly clean the surface of the machine to keep it clean. In addition, remove dust from the ventilation holes to ensure efficient ventilation and cooling of the inside of the machine.

1 Turn OFF the power and remove the power cord from the outlet. Turning OFF the Machine(P. 106)

Turning OFF the machine deletes any data waiting to be printed.

2 Wipe the surface of the machine and the ventilation slots.



- Wipe with a soft cloth soaked in water or diluted neutral detergent and wrung out.
- For the location of the ventilation slots, see the part names on the front of the machine. **Front Side(P. 16)**

3 Allow the parts to fully dry.

4 Plug the power cord into the outlet, and turn ON the machine. Turning ON the Machine(P. 105)

Cleaning the Platen Glass

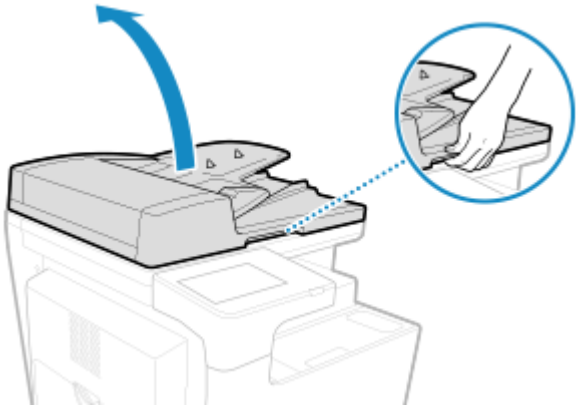
958J-0CA

Regularly clean the platen glass and rear of the feeder or platen cover to prevent originals from becoming dirty and printouts from appearing to be smudged.
If the platen glass or rear of the feeder or platen cover is dirty, originals can become dirty and printouts can become smudged after scanning or copying.

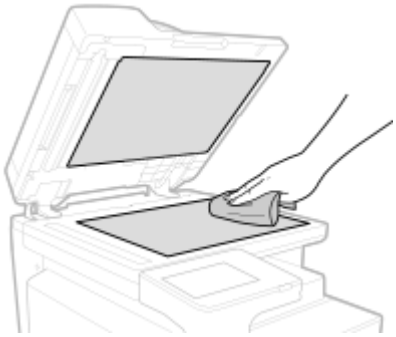
1 **Turn OFF the power and remove the power cord from the outlet. Turning OFF the Machine(P. 106)**

Turning OFF the machine deletes any data waiting to be printed.

2 **Open the feeder or platen cover.**



3 **Wipe the platen glass and rear of the feeder or platen cover.**



Wipe with a cloth soaked in water and wrung out. Next, wipe with a soft, dry cloth.

4 **Allow the parts to fully dry.**

5 **Gently close the feeder or platen cover.**

6 **Plug the power cord into the outlet, and turn ON the machine. Turning ON the Machine(P. 105)**

Cleaning the Feeder

958J-0CC

If the following symptoms occur when using the feeder, wipe clean the feeder:

- Originals become dirty
- Originals frequently jam
- Printouts appear smudged after scanning or copying

If you do not see an improvement after wiping the feeder, use paper to perform cleaning.

Cleaning the Feeder by Wiping(P. 488)
Cleaning the Feeder with Paper(P. 490)

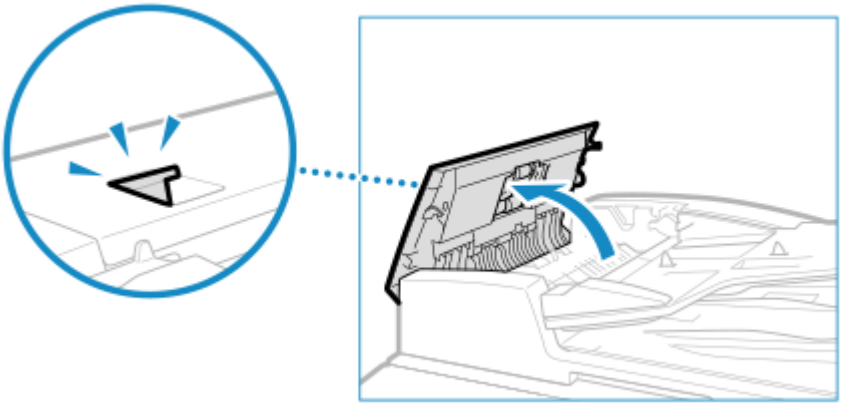
Cleaning the Feeder by Wiping

Wipe the rollers inside the feeder and the feeder original scanning area to remove any adhering graphite powder and dust.

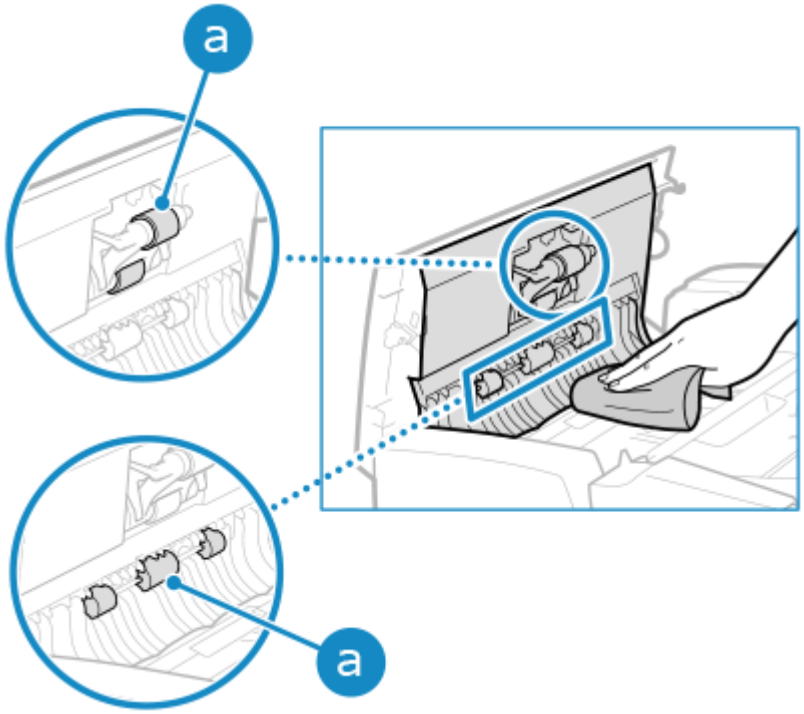
1 Turn OFF the power and remove the power cord from the outlet. Turning OFF the Machine(P. 106)

Turning OFF the machine deletes any data waiting to be printed.

2 Pull the lever, and open the feeder cover.



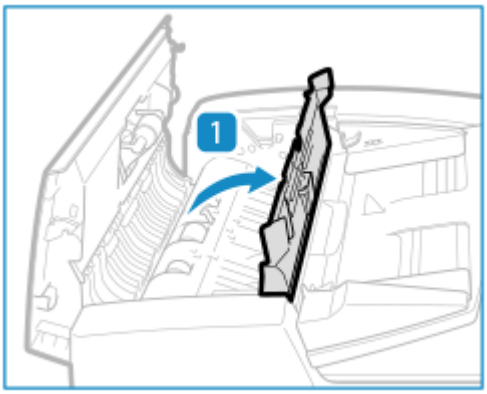
3 Wipe the rollers (a) inside the feeder and surrounding areas.



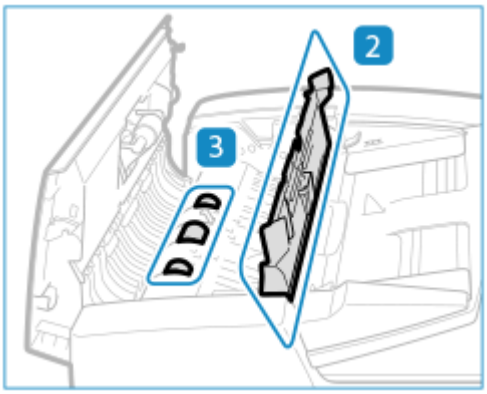
Wipe with a cloth soaked in water and wrung out. Next, wipe with a soft, dry cloth.

4 Clean the inside of the inner cover of the feeder.

1 Open the inner cover of the feeder.



2 Wipe the transparent plastic.

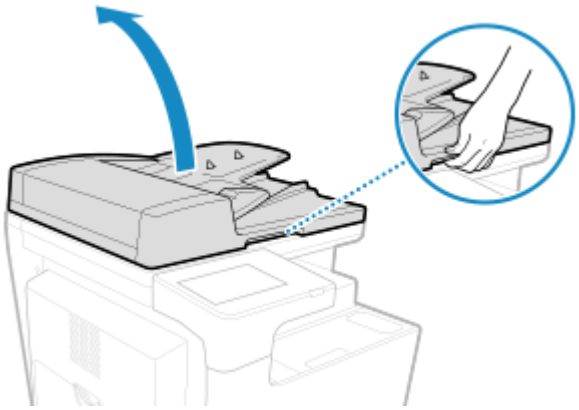


Wipe with a cloth soaked in water and wrung out. Next, wipe with a soft, dry cloth.

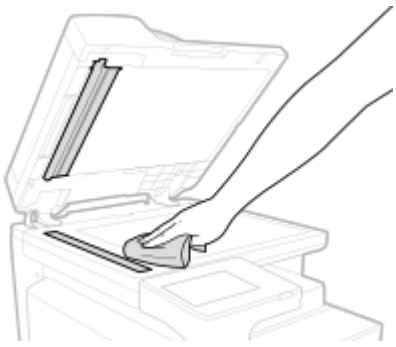
3 Wipe the rollers (a total of three places) inside the inner cover.
Wipe with a cloth soaked in water and wrung out. Next, wipe with a soft, dry cloth.

5 **Close the inner cover and feeder cover.**

6 **Open the feeder.**



7 **Wipe the feeder original scanning area.**



Wipe with a cloth soaked in water and wrung out. Next, wipe with a soft, dry cloth.

8 **Allow the parts to fully dry.**

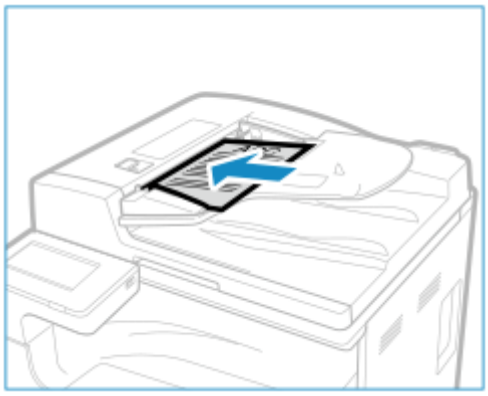
9 **Gently close the feeder cover.**

10 **Plug the power cord into the outlet, and turn ON the machine. Turning ON the Machine(P. 105)**

Cleaning the Feeder with Paper

Clean the feeder by running paper through the inside.

1 **Load 10 sheets of A4 or letter size plain paper into the feeder. Placing Originals(P. 127)**



2 **On the control panel, press [Menu] in the [Home] screen.** **[Home] Screen(P. 113)**

3 **Press [Adjustment/Maintenance] ▶ [Maintenance] ▶ [Clean Feeder].**

➡ The [Clean Feeder] screen is displayed.

4 **Press [Start].**

➡ The paper loaded in the feeder is fed to the machine, and cleaning starts.
The paper is output when cleaning is completed.

Cleaning the Transfer Roller

958J-0CE

If the printout is smudged, the transfer roller inside the machine may be dirty. Clean the transfer roller using the procedure below.
The transfer roller cannot be cleaned when data is waiting to be printed.

1 **On the control panel, press [Menu] in the [Home] screen. [Home] Screen(P. 113)**

2 **Press [Adjustment/Maintenance] ▶ [Maintenance] ▶ [Clean Transfer Roller].**

➡ The [Clean Transfer Roller] screen is displayed.

3 **Press [Start].**

➡ Cleaning is performed.
When cleaning is completed, the message [Finished.] appears, and then the [Maintenance] screen is displayed.

Cleaning the Fixing Assembly

958J-0CF

If the printout is smudged, the fixing assembly may be dirty. In this case, you can clean the fixing assembly using paper.
The fixing assembly cannot be cleaned when data is waiting to be printed or when a toner cartridge or drum unit has reached the end of its lifetime.
To clean the fixing assembly, you need plain A4 or Letter size paper. Set the paper in the multi-purpose tray before performing the following procedure. **Loading Paper(P. 130)**

Required Preparations

Check that there is enough amount of toner remaining in the toner cartridge. **Checking the Remaining Amount of Consumables(P. 499)**

1 **On the control panel, press [Menu] in the [Home] screen.** **[Home] Screen(P. 113)**

2 **Press [Adjustment/Maintenance] ▶ [Maintenance] ▶ [Clean Fixing Assembly].**

➡ The available paper sizes and types are displayed on the confirmation screen.

3 **Check that available paper is loaded, and then press [OK] ▶ [Start].**

➡ The paper is fed to the machine, and cleaning sheet is printed out.

4 **Load the printed cleaning sheet in the multi-purpose tray, with the printed side face up.**

5 **Press [OK].**

➡ Cleaning is performed.
When cleaning is completed, the message [Finished.] appears, and then the [Maintenance] screen is displayed.

Cleaning the Drum

958J-0CH

If the printout is smudged, the drum inside the machine may be dirty. Clean the drum using the procedure below.
The drum cannot be cleaned when data is waiting to be printed.

1 **On the control panel, press [Menu] in the [Home] screen. [Home] Screen(P. 113)**

2 **Press [Adjustment/Maintenance] ▶ [Maintenance] ▶ [Clean Drum].**

➡ The [Clean Drum] screen is displayed.

3 **Press [Start].**

➡ Cleaning is performed.
When cleaning is completed, the message [Finished.] appears, and then the [Maintenance] screen is displayed.

Replacing Consumables

958J-0CJ

If a message about consumables appears on the screen of the control panel or Remote UI, or the print quality deteriorates, replace the consumables.
You can view the current remaining amount of consumables on the control panel and Remote UI. For the consumable item names and number of sheets that can be printed, see the list of consumables.

Replacing the Toner Cartridges(P. 496)
Checking the Remaining Amount of Consumables(P. 499)
List of Consumables(P. 500)

Replacing the Toner Cartridges

958J-0CK

Replace the toner cartridges at the appropriate time according to messages that appear and a change in print quality.

Before replacing the toner cartridges, check the precautions in Important Safety Instructions. **Manuals of the Machine(P. 588)**

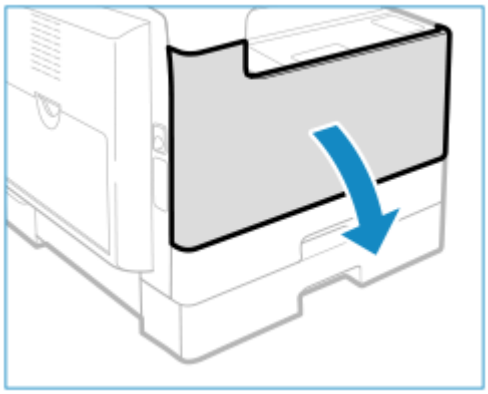
When to Replace the Toner Cartridges(P. 496)
Replacing Toner Cartridges(P. 496)

When to Replace the Toner Cartridges

When a Message Appears on the Screen of the Control Panel or Remote UI
Follow the message on the screen to prepare a new toner cartridge and replace the old one. Print quality may suffer if you continue using the toner cartridges without replacing them.
For details about the message and how to resolve it, see the following:
A Message Appears(P. 563)

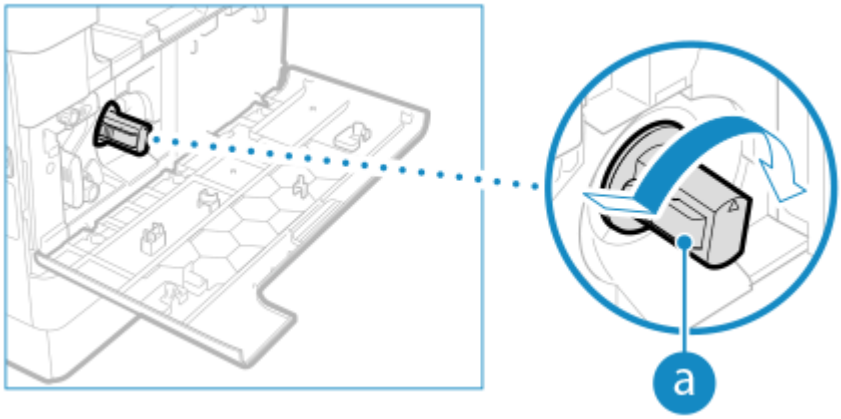
Replacing Toner Cartridges

1 Open the front cover.

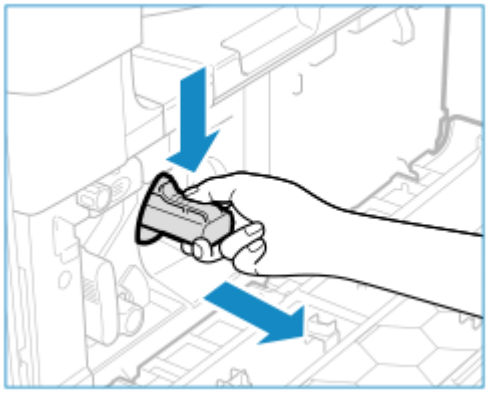


2 While pressing the unlock tab on the grip (a), turn the toner cartridge in the direction of the arrow (clockwise).

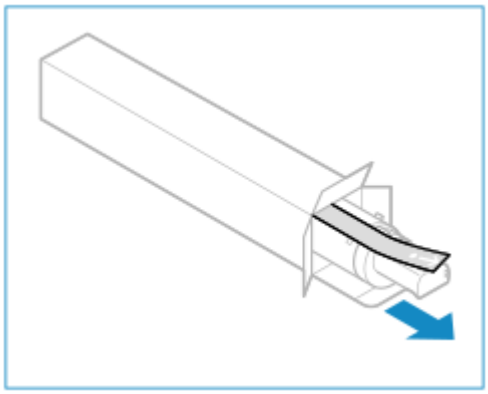
Make sure to avoid applying shocks to the toner cartridge by hitting it against something, etc. Doing so may cause the toner to leak.



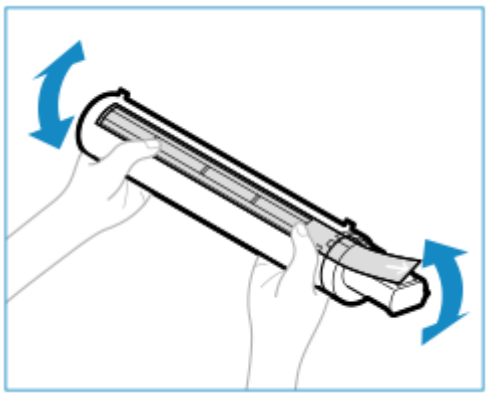
3 **Pressing the unlock tab, pull out the toner cartridge.**



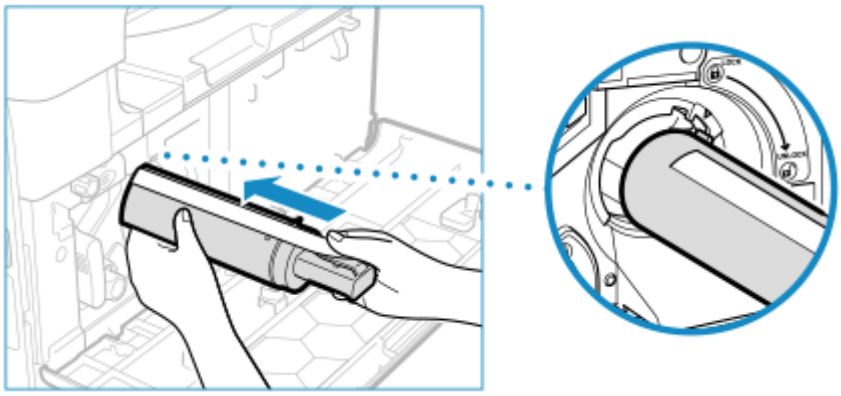
4 **Remove the new toner cartridge from its box.**



5 **Shake the new toner cartridge 5 or 6 times as shown below to evenly distribute the toner inside the cartridge.**

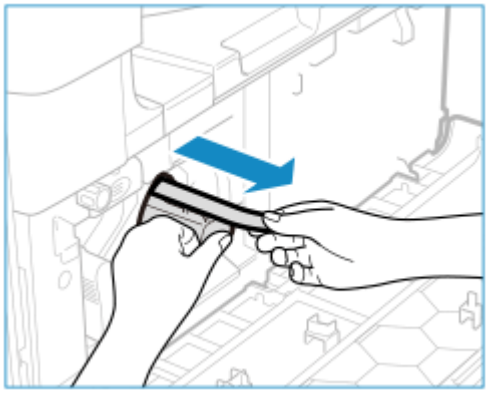


6 **Install the toner cartridge.**

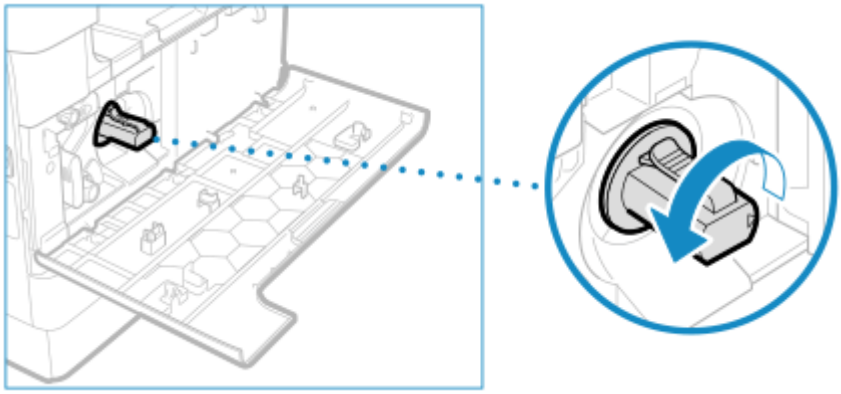


- Make sure that the side of the cartridge with the label is facing up, and push the toner cartridge into the machine as far as it will go.
- Support the new toner cartridge with one hand from underneath, while pushing it into the machine with the other hand.

7 Hold the toner cartridge in place with one hand, and then remove the protective seal by pulling it straight out with the other hand.



8 Turn the toner cartridge in the direction of the arrow (counterclockwise).



- Turn the toner cartridge fully until it locks into place.

9 Close the front cover.

Checking the Remaining Amount of Consumables

958J-0CR

The remaining toner in the toner cartridge is displayed in a unit of 10 %. Before printing a large amount of pages, check the remaining amount of the toner cartridge and prepare for a new toner cartridge, if necessary.
* The indicated remaining amounts of the toner cartridge can be used only as guide and may differ from the actual amounts.

This section describes how to view this information using the control panel.
You can also check this information using Remote UI from a computer. **Managing the Machine from a Computer (Remote UI)(P. 368)**

1 Press on the control panel. **[Status Monitor] Screen(P. 115)**

➡ The [Status Monitor] screen is displayed.

2 Press [Device Status] ▶ [Toner Level].

➡ The remaining amount of toner in the toner cartridges is displayed.

3 Check the remaining amount of toner in the toner cartridge.

List of Consumables

958J-0CS

This section describes the replacement parts (consumables/consumable parts) used by the machine. Purchase the replacement parts from your dealer or service representative that you purchased the machine from. Follow the precautions when handling and storing the replacement parts. See also "Important Safety Instructions." **Manuals of the Machine(P. 588)**

For optimum print quality, using Canon genuine Toner, Toner cartridge and Parts is recommended.

Consumables(P. 500)

Consumables

■ Toner Cartridge for Replacement

Confirm that the code on the front cover of the machine and the one on the package of the genuine toner are the same.

Model name	Genuine Canon toner
imageRUNNER 2224N / 2224	• Canon NPG-59 Black Toner

IMPORTANT

Be careful of counterfeit toners

- Please be aware that there are counterfeit Canon toners in the marketplace. Use of counterfeit toner may result in poor print quality or machine performance. Canon is not responsible for any malfunction, accident or damage caused by the use of counterfeit toner.
  For more information, see global.canon/ctc.

NOTE

- When disposing of used toner cartridges, check the following: **Environmental Information, Regulations, and Standards(P. 602)**

CAUTION

Store toner cartridges as described below. Storing toner cartridges in an improper location or environment may cause problems such as data loss.

- Store unopened until immediately prior to use.
- Do not store toner cartridges upright or upside down.

CAUTION

- Do not store toner cartridges in the following locations:
  - Locations exposed to open flames
  - Locations exposed to direct sunlight or bright light for five minutes or more
  - Locations exposed to excessively salty air
  - Locations heavily exposed to corrosive gases (e.g. aerosol sprays or ammonia)
  - Very hot and/or humid locations
  - Locations subject to dramatic changes in temperature and humidity likely to cause condensation
  - Very dusty locations
  - Locations within the reach of children
  - Locations close to products affected by magnetism (e.g. floppy disks or disk drives)
- Store the packaging material safely for future use. It will be needed for situations such as storing the machine with the toner cartridges removed.
- Canon reserves the right to reposition, reshape, add, or remove packaging material without notice.
- Store toner cartridges in the following conditions:
  - Storage temperature range: 10 to 30°C
  - Storage humidity range: 20% to 80% RH (relative humidity, condensation-free)*1

*1 Even within the approved storage humidity range, water droplets (condensation) may develop inside the toner cartridge if the temperatures inside and outside the toner cartridge differ. Condensation will adversely affect the print quality.

Adjusting the Print Quality

958J-0CU

If the printed color is not reproduced properly or the print results are not as expected, adjust the print quality according to the symptoms that occur.

Black or near-black colors are not reproduced. Adjusting the Reproducibility of Near Black Color Text(P. 503)



Adjusting the Reproducibility of Near Black Color Text

958J-0CW

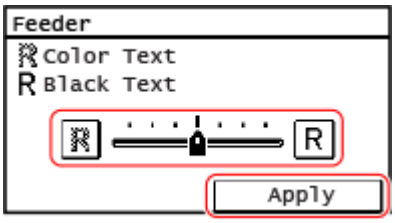
When scanning originals in color, you can make adjustments with priority given to reproducing near black color text (color text) or making black text easier to see.
You can make individual adjustments for scanning with the feeder and platen glass.
* When the original type is set to other than [Photo] for scanning, this adjustment is applied. **Scan Settings(P. 246)**

Use the control panel to perform adjustment. You cannot perform adjustment using Remote UI from a computer.

1 On the control panel, press [Menu] in the [Home] screen. [Home] Screen(P. 113)

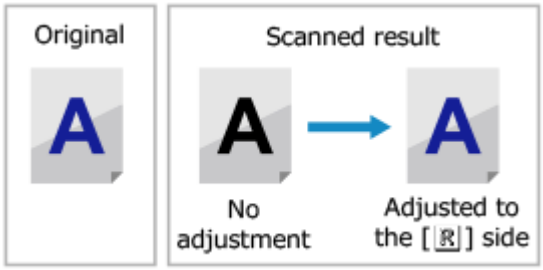
2 Press [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Black Text Processing for Color].

3 In [Feeder] or [Platen Glass], perform adjustment with priority given to reproducing either color text or black text.



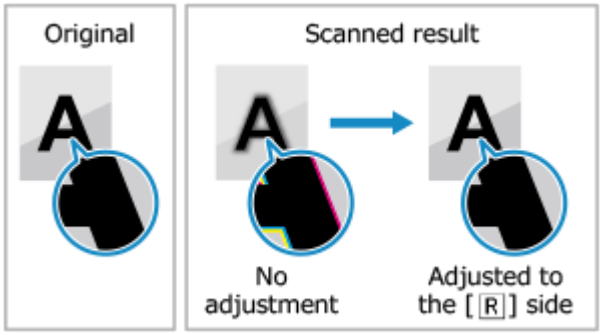
■When Giving Priority to Reproducing Color Text

Move the slider to [ ] to make color text appear closer to the color of the original.



■When Giving Priority to Visibility of Black Text

Move the slider to [R] to make black text easier to see.



4 **Press [Apply].**

Troubleshooting

Troubleshooting 507
Paper Jams 508
Paper Jams inside the Machine and in a Paper Source 510
Paper Jams in the Feeder 515
Paper Jams That Occur Repeatedly 519
Problems with Printing Results 521
The Printed Image is Displaced or Skewed 522
Images Are Uneven or Faint 523
Printouts Appear Dirty or Smudged 524
Black Streaks Appear 525
Bleedthrough Occurs 526
Images Are Not Printed on the Intended Side of the Paper 527
Images Are Not Printed in the Intended Size 528
The Orientation Does Not Match on Both Sides of the Paper When Using 2-Sided Printing 529
Paper and Paper Feeding Problems 530
Paper Creases 531
Paper Curls 533
Paper Is Not Fed or Two or More Sheets Are Fed Together 534
Setting Up 535
The Machine Connected via WSD Port Is Not Displayed During Driver Installation 536
Cannot Connect to Wireless LAN 537
Network 538
Cannot Switch to Wireless LAN 539
Cannot Find the Print Server to Connect to 540
Cannot Connect to a Shared Printer 541
Cannot Find the IP Address of the Machine 542
AirPrint Does Not Work 543
Printing and Copying 544
Cannot Print or Copy 545
Cannot Print (Wireless LAN) 546
Cannot Print (Wired LAN) 548
Cannot Print (USB Connection) 549
Cannot Print (via Print Server) 550
Printing Is Slow 551

Scanning 552
Cannot Save Scanned Data to a Computer 553
Cannot Save Scanned Data to a Shared Folder 555
Management Functions and Environment Settings 557
Cannot Access Remote UI or Send Function Setting Tool 558
Changing the Volume of the Confirmation Sound and Warning Tone 559
Changing the Time Until Sleep Mode 560
Lost Department ID or PIN for the Administrator 561
Checking the Items That Can Be Configured on the Machine and Their Settings 562
A Message Appears 563
An Error Code Is Displayed 578

Troubleshooting

958J-0CX

This chapter describes how to troubleshoot problems and answers frequently asked questions.
Select an item to check from the contents or the list below.
You can click [ ] at the top of the screen to search for the message or error code (three-digit number starting with #) that appears on the control panel, and check how to troubleshoot problems.

■ Frequently Asked Questions

- **Lost Department ID or PIN for the Administrator(P. 561)**
- **Cannot Print or Copy(P. 545)**
- **[Memory is full.] Is Displayed on the Control Panel, and the Operation Cannot Be Performed.(P. 573)**
- **Error Code "#801" Is Displayed(P. 580)**

■ Frequently Asked Questions about Operations

I Want to Scan an Original.
Make preparations according to the scanned data save destination and sending method, and then scan the original.
Scanning(P. 219)

I Want to Send Scanned Data by E-mail.
You can scan an original and send the scanned data by e-mail as an attachment.
Scanning (Sending by E-mail)(P. 236)

I Want to Print on an Envelope.
Place the envelope in the paper drawer or multi-purpose tray while paying attention to the orientation and side of the envelope.
Then, set the paper size and type according to the placed envelope.
Next, use the print driver of the computer to set the paper size of the document and the paper size to print, and then perform printing.
Preparations and Orientation for Loading Envelopes(P. 137)
Specifying the Paper Size and Type(P. 144)
Printing from a Computer(P. 204)

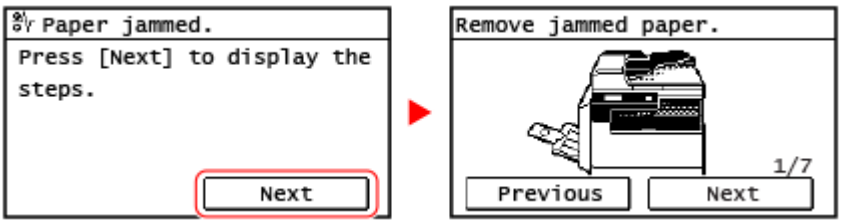
NOTE

- If the problem persists even after trying the troubleshooting methods, contact your dealer or service representative.

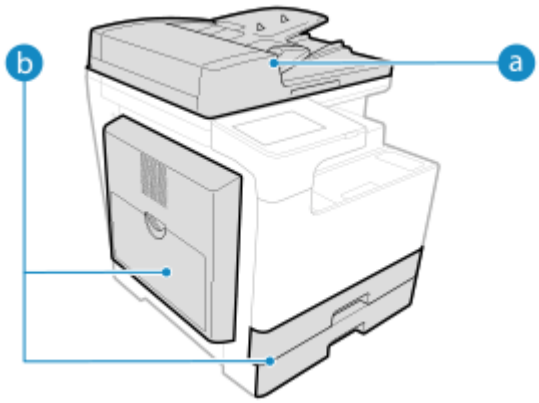
Paper Jams

958J-0CY

If paper jams in the machine, [Paper jammed.] appears on control panel. Press [Next], and follow the displayed instructions on how to clear the paper jam.



For details about clearing paper jams from various parts of the machine, see below.



a Feeder

Paper Jams in the Feeder(P. 515)

b Inside the main unit and paper source

Paper Jams inside the Machine and in a Paper Source(P. 510)

CAUTION

Do not forcibly remove the jammed paper from the machine.

- Forcibly removing the paper may result in personal injury or damage parts of the machine. If you cannot remove the paper, contact your dealer or service representative.

When All Paper Jams Have Been Cleared

- Immediately remove your hands from the machine and optional equipment so that your clothing and hands do not get caught in the rollers.

IMPORTANT

When clearing paper jams, do not turn the power OFF.

- Data being printed is erased when you turn the power OFF.

When the Paper Gets Torn

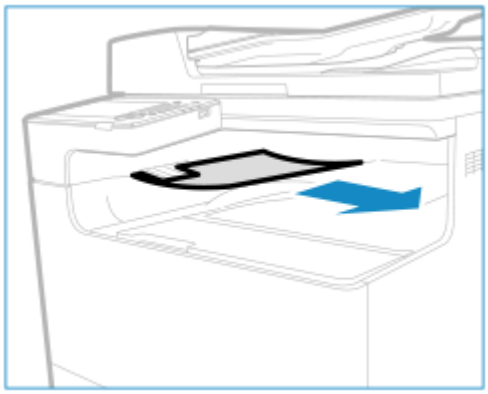
- Be sure to remove it so that no pieces remain.

Paper Jams inside the Machine and in a Paper Source

958J-0E0

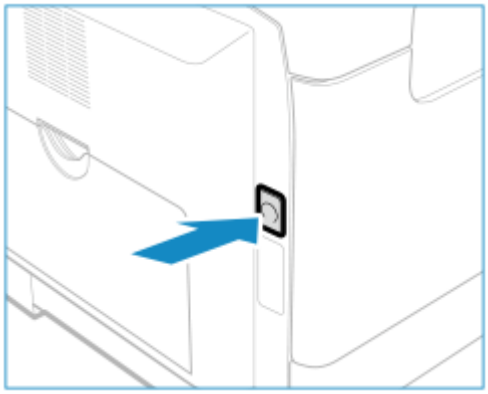
Remove the jammed paper from the location where it occurred. If the paper tears, be sure to remove the parts so that no pieces remain.

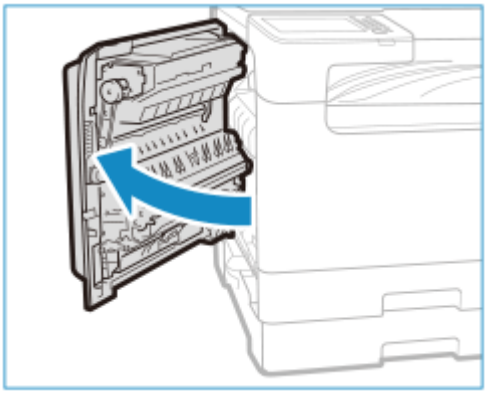
1 Remove the jammed paper from the output tray.



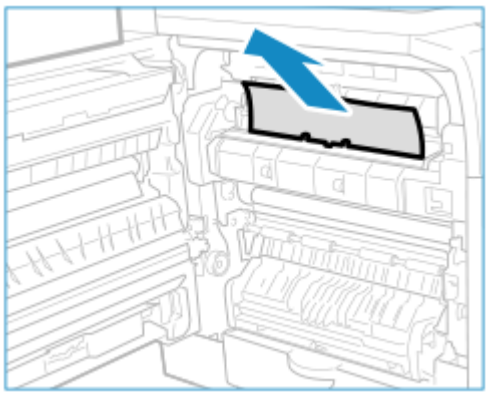
If paper is jammed, gently pull it out in the direction of the arrow.

2 Press the button on the cover on the left side of the main unit, and open the cover on the left side of the main unit.



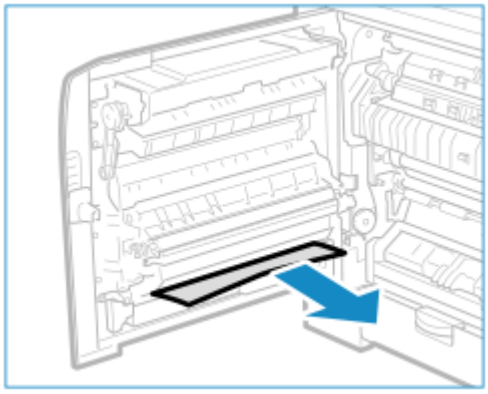


3 Remove the jammed paper.

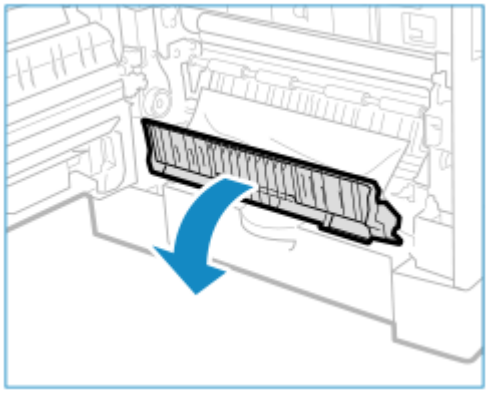


If you are using the imageRUNNER 2224, proceed to Step 5.

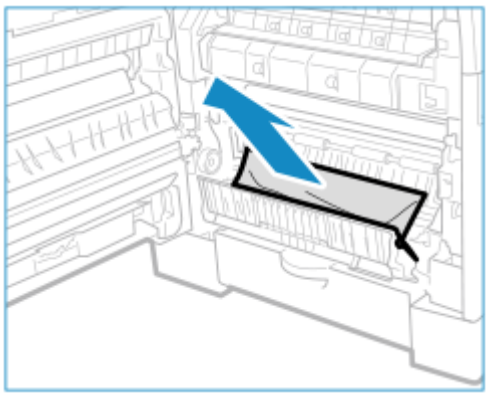
4 **Remove any jammed paper that is protruding from the upper and lower parts of the duplex unit.**



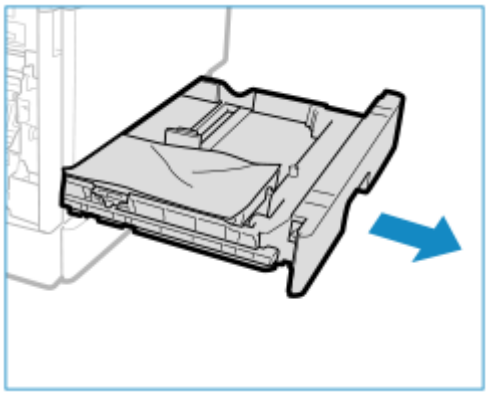
5 **Open the cover on the left side of paper drawer 1.**



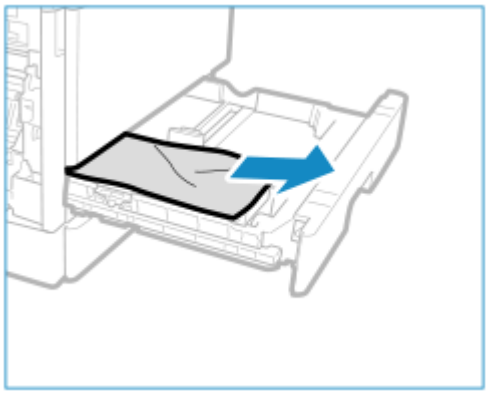
6 **Remove the jammed paper.**



7 **Hold the handle of the paper drawer 1 and pull it out until it stops.**



8 **Remove the jammed paper.**

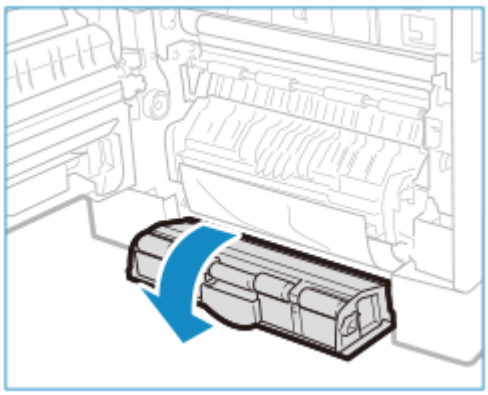


9 **Gently insert the paper drawer 1 into the machine.**

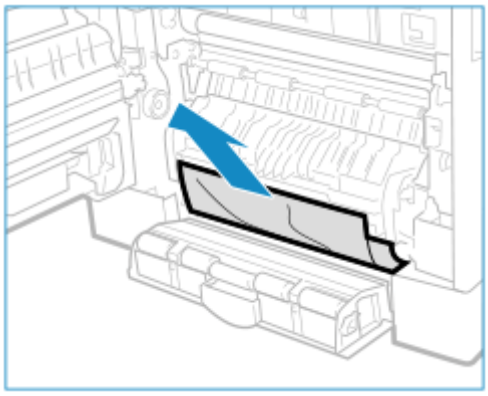
10 **Close the cover on the left side of paper drawer 1.**

If you are using the imageRUNNER 2224, proceed to Step 17.

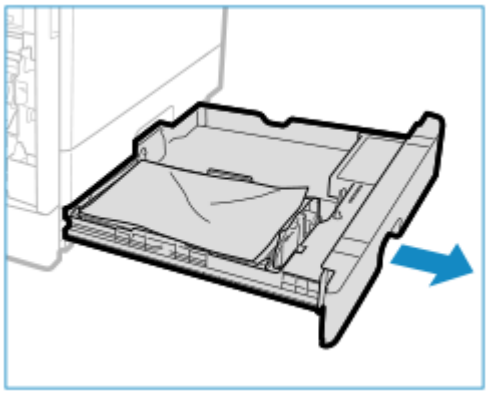
11 **Open the cover on the left side of paper drawer 2.**



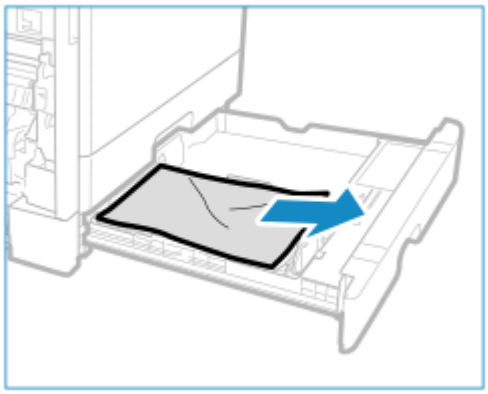
12 **Remove the jammed paper.**



13 **Hold the handle of the paper drawer 2 and pull it out until it stops.**



14 **Remove the jammed paper.**



15 **Gently insert the paper drawer 2 into the machine.**

16 **Close the cover on the left side of paper drawer 2.**

17 **Place your hand where the hand symbol is located on the cover on the left side of the main unit, and then gently close the cover on the left side of the main unit until it clicks into place in the closed position.**

➠ The message [Paper jammed.] disappears, and printing resumes automatically.
If printing does not resume automatically, try printing again.

NOTE

If Paper Jams Occur Repeatedly

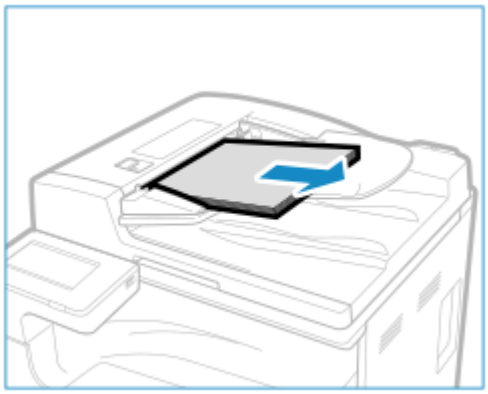
- Check the status of the machine and paper. **Paper Jams That Occur Repeatedly(P. 519)**

Paper Jams in the Feeder

958J-0E1

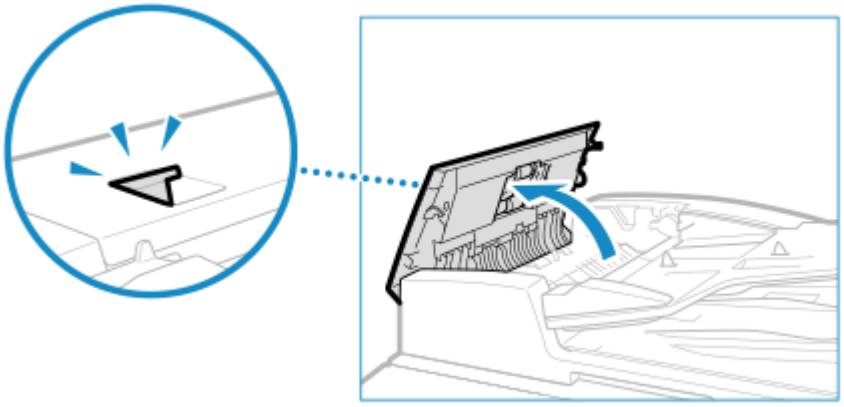
Remove the original jammed inside or at the rear side of the feeder. If the original tears, be sure to remove the parts so that no pieces remain.

1 Remove any originals from the original supply tray.

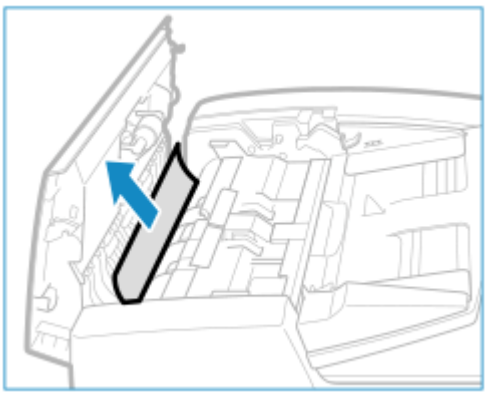


2 Check whether an original is jammed in the feeder cover.

1 Pull the lever to open the feeder cover.

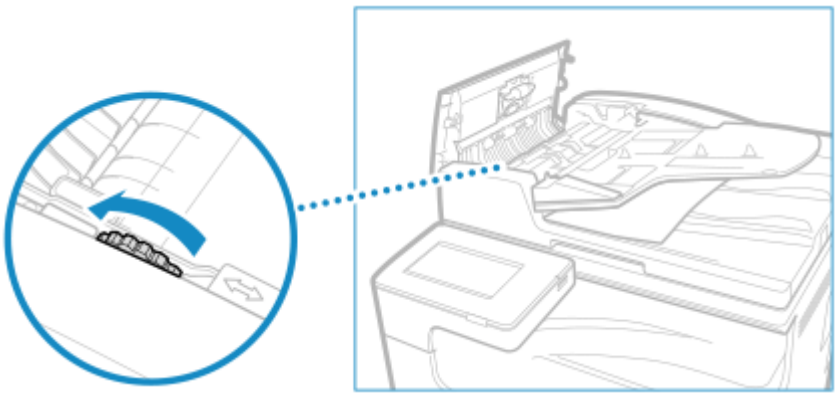


2 If an original is jammed, gently pull it out in the direction of the arrow.

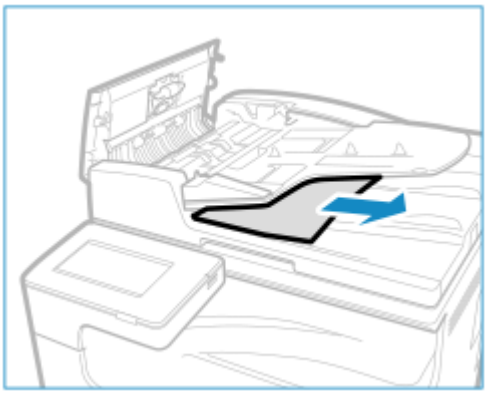


3 Check whether an original is jammed in the original output tray.

1 Turn the green knob counterclockwise.

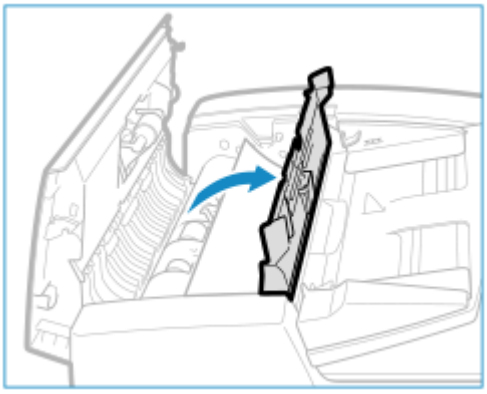


2 If an original is jammed, gently pull it out in the direction of the arrow.

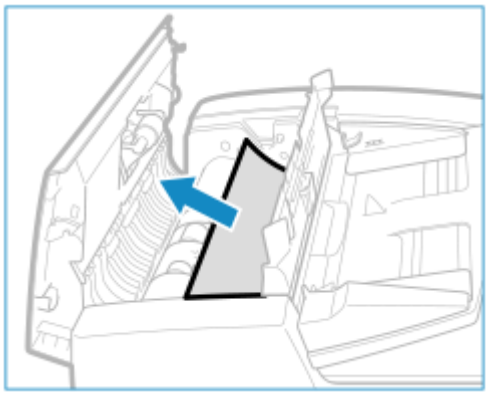


4 Check whether an original is jammed inside the inner cover of the feeder.

1 Open the inner cover of the feeder.



2 If an original is jammed, gently pull it out in the direction of the arrow.

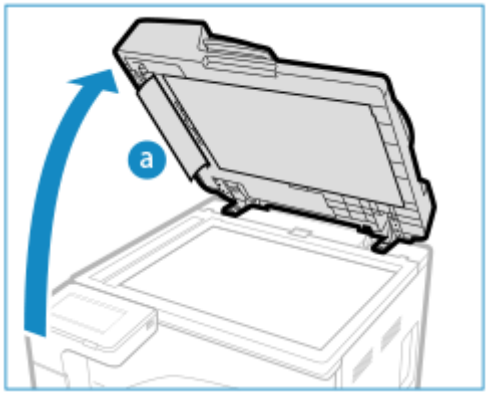


3 Close the inner cover of the feeder.

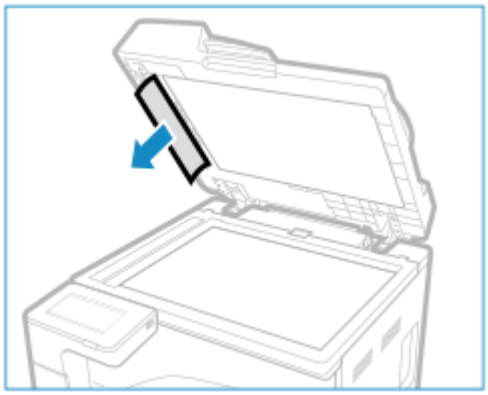
5 After removing all jammed originals, close the feeder cover.

6 Lift up the feeder, and check whether there is a jammed original.

1 Lift up the feeder, and check the position indicated by a.



2 If an original is jammed, gently pull it out in the direction of the arrow.



7 Close the feeder gently and place the original in the feeder again.

➠ The message [Paper jammed.] disappears, and you can scan the original.
Jobs in which an original jammed are canceled automatically. The job does not resume even if you place the original again, so execute the job again.

NOTE

If Paper Jams Occur Repeatedly

- Check the status of the machine and original. **Paper Jams That Occur Repeatedly(P. 519)**

Paper Jams That Occur Repeatedly

958J-0E2

Troubleshoot by checking the items below.

Are There Paper Scraps or Foreign Objects Inside the Machine?

Remove any paper scraps or foreign objects. **Paper Jams(P. 508)**

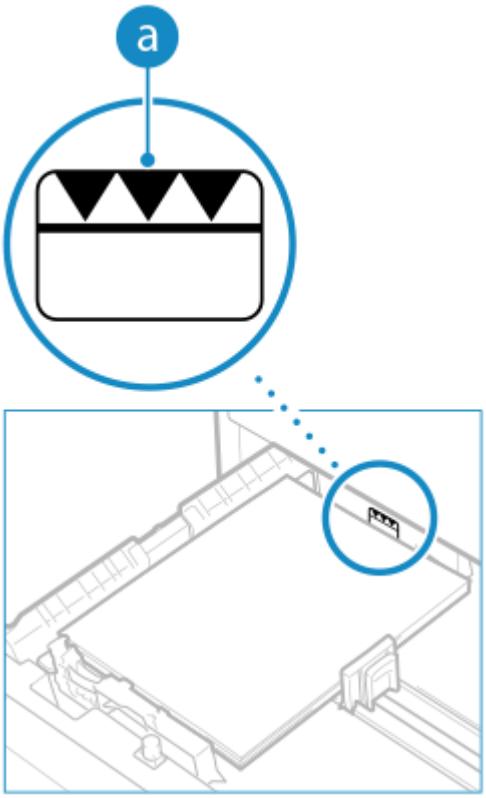
Are You Using Appropriate Paper?

Check whether the paper in the machine is usable, and replace it with appropriate paper, as needed.
Usable Paper(P. 29)
Loading Paper(P. 130)

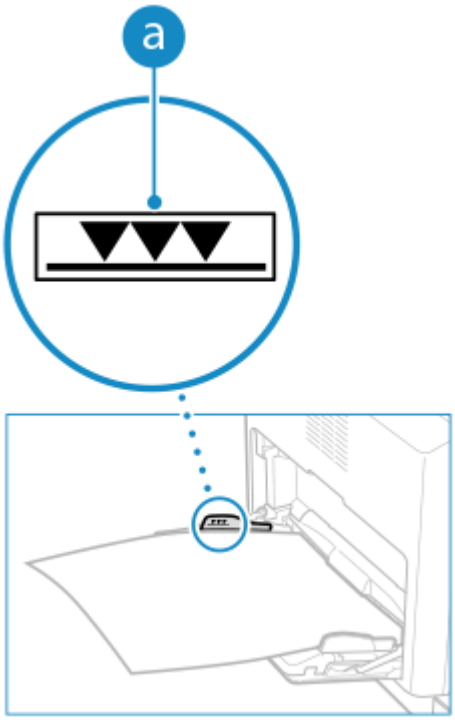
Is Paper Loaded Correctly?

- Fan the paper thoroughly in small batches so that it is not stuck together.
- Align the edges by tapping the paper on a flat surface a few times before loading the paper. **Loading Paper(P. 130)**
- Make sure the loaded paper does not exceed the load limit line (a).

Paper Drawer



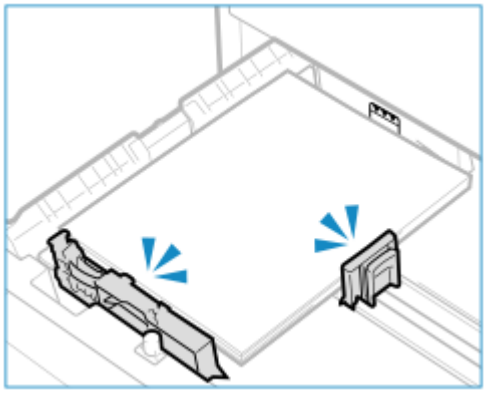
Multi-purpose Tray

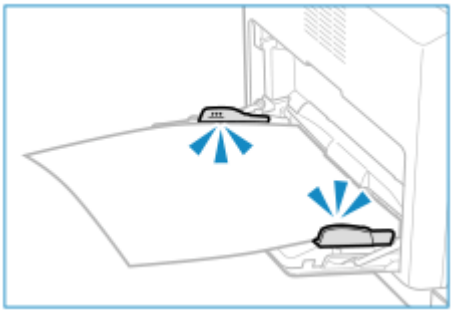


- Check that the paper guides are aligned with the markings.

Paper Drawer

Multi-purpose Tray





Do Paper Jams Occur When Printing on the Back Side of Printed Paper?

Flatten the edges of the paper to thoroughly remove any curls.

* When printing on the back side of printed paper, you can only use paper printed with this machine. Do not use paper printed with another printer or multifunction machine, as this can cause paper jams or damage the machine.

Do Paper Jams Occur When Printing on Paper in the Optional Cassette Feeding Module-AK?

Reinstall Cassette Feeding Module-AK. For details about installing Cassette Feeding Module-AK, see "Setup Guide." **Manuals of the Machine(P. 588)**

Problems with Printing Results

958J-0E3

If printouts show any of the symptoms below, check how to troubleshoot the problem based on the symptom.

The Printed Image is Displaced or Skewed(P. 522)
Images Are Uneven or Faint(P. 523)
Printouts Appear Dirty or Smudged(P. 524)
Black Streaks Appear(P. 525)
Bleedthrough Occurs(P. 526)
Images Are Not Printed on the Intended Side of the Paper(P. 527)
Images Are Not Printed in the Intended Size(P. 528)
The Orientation Does Not Match on Both Sides of the Paper When Using 2-Sided Printing(P. 529)

The Printed Image is Displaced or Skewed

958J-0E4

Troubleshoot by checking the items below.

Are the Paper Guides Misaligned?

Match the paper guides with the paper loaded in the paper source. **Loading Paper(P. 130)**

Images Are Uneven or Faint

958J-0E5

Troubleshoot by checking the items below.

Are You Using Paper That Has Absorbed Moisture?

Check the precautions, and replace the paper with dry paper.
Precautions When Handling Paper(P. 33)
Loading Paper(P. 130)

Adjusting Density

Adjusting the density may improve the problem. **[Printer Density](P. 422)**

Have You Cleaned the Drum Unit?

These symptoms may occur when the drum unit is dirty. In this case, clean the drum unit. **Cleaning the Drum(P. 494)**

Printouts Appear Dirty or Smudged

958J-0E6

Troubleshoot by checking the items below.

Have You Cleaned the Drum Unit?

These symptoms may occur when the drum unit is dirty. In this case, clean the drum unit. **Cleaning the Drum(P. 494)**

Black Streaks Appear

958J-0E7

Troubleshoot by checking the items below.

Is the Original Scanning Area Dirty?

Clean the original scanning area. **Cleaning the Feeder(P. 488)**

Bleedthrough Occurs

958J-0E8

Troubleshoot by checking the items below.

Is the Density of Backgrounds Set Appropriately?

If bleed-through is observed with the print result, adjusting the density of background can improve the problem, giving a fine print.

Copy Operations(P. 255)
[Printer Density](P. 422)

Images Are Not Printed on the Intended Side of the Paper

958J-0E9

Troubleshoot by checking the items below.

Is the Orientation of the Loaded Paper Correct?

Check the orientation and side of the paper that is facing up. Load the paper again if it is incorrectly orientated.
Loading Paper(P. 130)

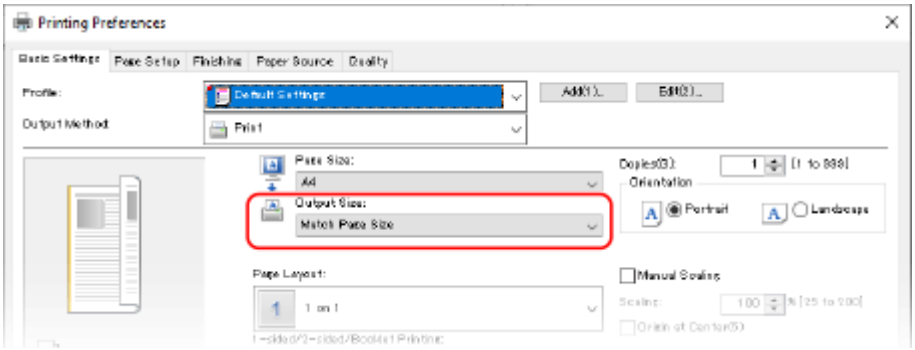
Images Are Not Printed in the Intended Size

958J-0EA

Troubleshoot by checking the items below.

Do the Original Size and Size of the Paper That Is Loaded Match?

- Replace the paper that is loaded with paper of the size you want to print on.
- Match [Output Size] in the printer driver with the size of paper to print on.



The Orientation Does Not Match on Both Sides of the Paper When Using 2-Sided Printing

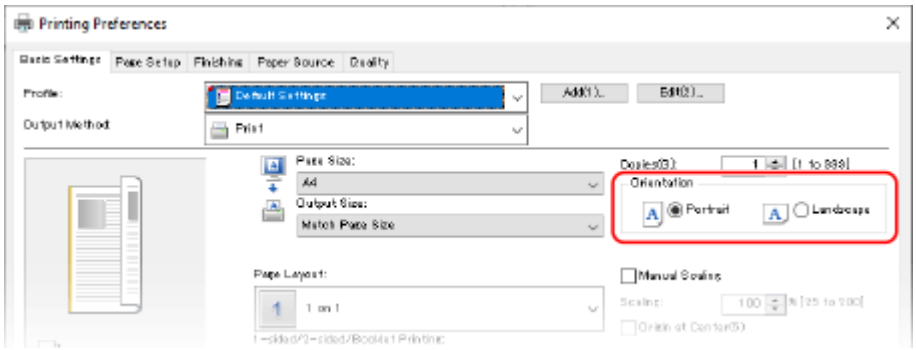
958J-0EC

Troubleshoot by checking the items below.

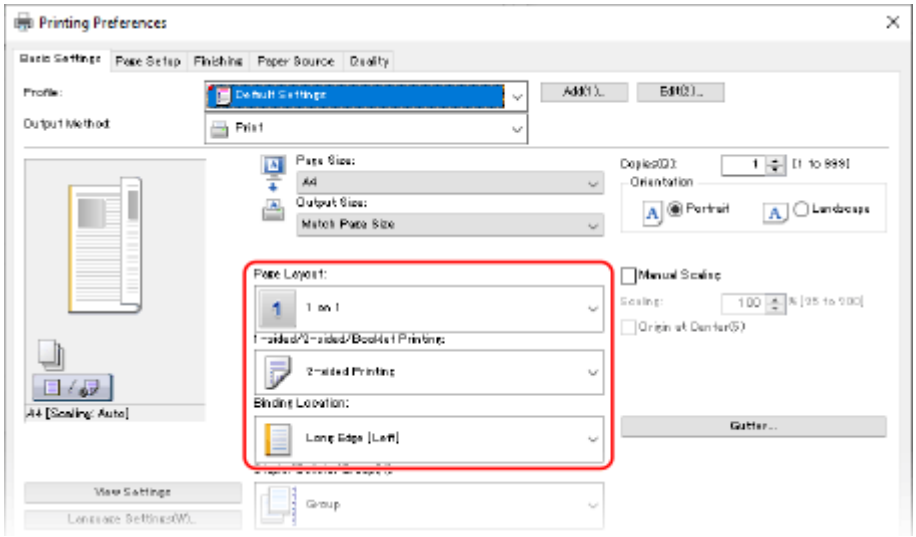
Are the Settings for 2-Sided Printing Correct?

Follow the procedure below to check the print settings.

1. Select the orientation of the original on the print settings screen of the application.
2. On the [Basic Settings] screen of the driver, set [Orientation] to the same orientation you set in step 1.



3. While checking the print preview, set [Page Layout] ▶ [Page Order] ▶ [1-sided/2-sided/Booklet Printing] ▶ [Binding Location].



Paper and Paper Feeding Problems

958J-0EE

Check how to troubleshoot the problem based on the symptom.

Paper Creases(P. 531)
Paper Curls(P. 533)
Paper Is Not Fed or Two or More Sheets Are Fed Together(P. 534)

Paper Creases

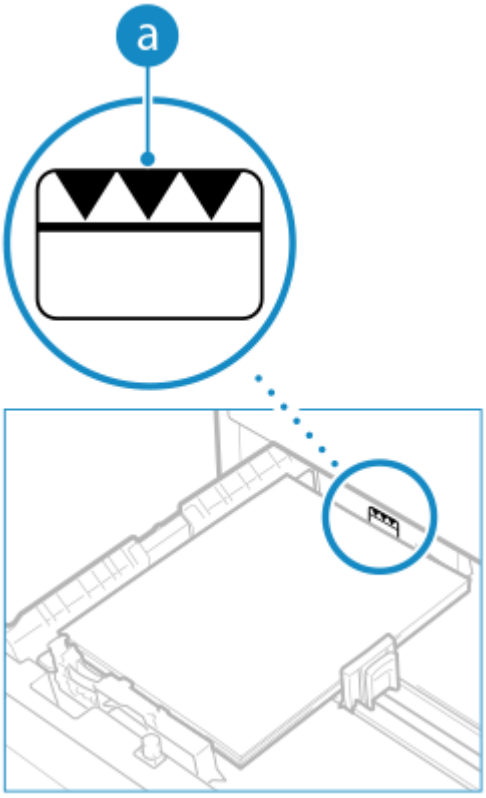
958J-0EF

Troubleshoot by checking the items below.

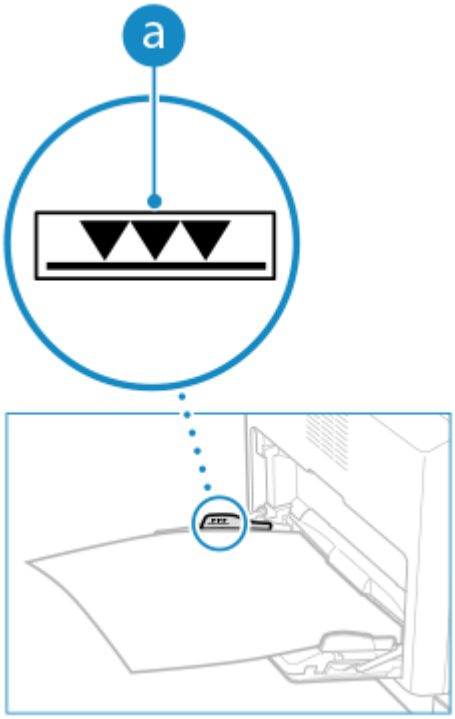
Is Paper Loaded Correctly?

- Make sure the loaded paper does not exceed the load limit guides (a).

Paper Drawer

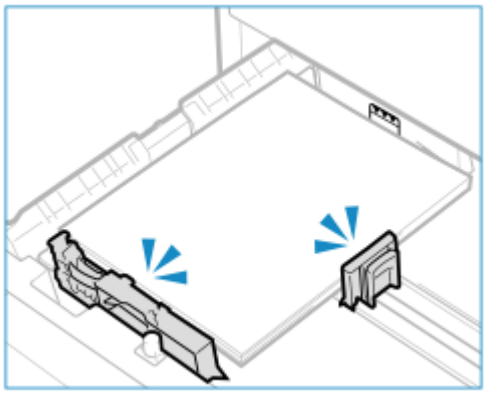


Multi-purpose Tray

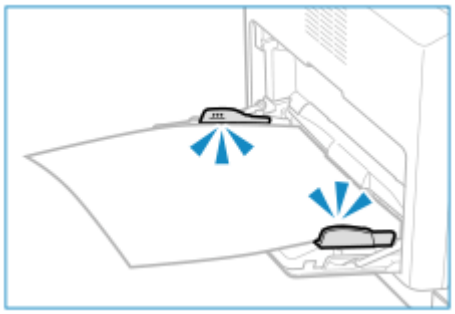


- Check that the paper guides are aligned with the markings.

Paper Drawer



Multi-purpose Tray



Are You Using Paper That Has Absorbed Moisture?

Check the precautions, and replace the paper with dry paper.
Precautions When Handling Paper(P. 33)

Loading Paper(P. 130)

Are You Using Appropriate Paper?

Check whether the paper in the machine is usable, and replace it with appropriate paper, as needed.

Usable Paper(P. 29)
Loading Paper(P. 130)

Paper Curls

958J-0EH

Troubleshoot by checking the items below.

Are You Using Appropriate Paper?

- Check whether the paper in the machine is usable, and replace it with appropriate paper, as needed.
  Usable Paper(P. 29)
  Loading Paper(P. 130)
- Set the paper size and type correctly according to the loaded paper. **Specifying the Paper Size and Type(P. 144)**
- Change the paper type setting to a thinner paper. **Specifying the Paper Size and Type(P. 144)**

Paper Is Not Fed or Two or More Sheets Are Fed Together

958J-0EJ

Troubleshoot by checking the items below.

Are You Using Appropriate Paper?

Check whether the paper in the machine is usable, and replace it with appropriate paper, as needed.
Usable Paper(P. 29)
Loading Paper(P. 130)

Is Paper Loaded Correctly?

- Fan the paper thoroughly in small batches so that it is not stuck together.
- Align the edges by tapping the paper on a flat surface a few times before loading the paper. **Loading Paper(P. 130)**
- Do not load paper of different sizes or types together.

Setting Up

958J-0EK

This is a list of problems that can occur during setup of the machine. Check how to troubleshoot the problem based on the symptom.

■ Problems During Driver Installation

The Machine Connected via WSD Port Is Not Displayed During Driver Installation(P. 536)

■ Problems with Wireless LAN and Wired LAN Connection

Cannot Connect to Wireless LAN

Check whether the machine can connect to the network.

Cannot Connect to Wireless LAN(P. 537)

Cannot Connect to Wired LAN

The IP address setting may have failed. Set the IP address again.

Setting IPv4 Addresses(P. 74)
Setting IPv6 Addresses(P. 76)

Cannot Connect to Wireless LAN and Wired LAN at the Same Time

You cannot connect the machine to a wireless LAN and wired LAN at the same time. You can connect to USB and wireless LAN or USB and wired LAN at the same time.

Cannot Connect with TLS Encrypted Communication

If you set a TLS version that is not supported by your operating system or software such as the browser, the machine cannot connect to the network using TLS encrypted communication.
Upgrade your operating system and software, or lower the TLS version until connections are possible.
However, if you lower the TLS version, connections may not be sufficiently secure.

Using TLS(P. 315)

■ Problems with USB Connection

The Computer Cannot Communicate with the Machine

Try the following:

- Replace the USB cable. If the USB cable is long, replace it with a short cable.
- If you are using a USB hub, connect the machine directly to the computer using a USB cable.

The Machine Connected via WSD Port Is Not Displayed During Driver Installation

958J-0EL

Troubleshoot by checking the items below.

Check the Settings of the Machine.

Configure the settings below if they have not been configured.
The machine must be restarted to apply the settings.

WSD Printing and Multicast Discovery Settings

Log in to Remote UI in System Manager Mode ▶ [Settings/Registration] ▶ [Network Settings] ▶ [WSD Settings] ▶ [Edit] ▶ select the [Use WSD Printing] and [Use Multicast Discovery] checkboxes ▶ [OK] ▶ restart the machine.

On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. **[WSD Settings](P. 413)**

Selecting the Page Description Language

Select the page description language (PDL) of the installed driver.

Log in to Remote UI in System Manager Mode ▶ [Settings/Registration] ▶ [Printer Settings] ▶ [PDL Selection (Plug and Play)] ▶ [Edit] ▶ select the PDL in [Network] ▶ [OK] ▶ restart the machine.

On the control panel, select [Menu] in the [Home] screen, and then select [Function Settings] to configure the settings. **[Network](P. 450)**

Check the OS Network Settings.

Configure the settings below if they have not been configured.

In Windows, click [ ] (Start) ▶ [ ] (Settings) ▶ [Network & Internet] ▶ [Status] ▶ [Change connection properties] ▶ [Network profile] ▶ [Private]

Check Whether the Driver Is Installed.

Use the following procedure to check whether the driver of the machine is displayed.

In Windows, click [ ] (Start) ▶ [ ] (Settings) ▶ [Devices] ▶ [Printers & scanners] ▶ check whether the driver is displayed.

If the driver is displayed, it is installed. In this case, uninstall the driver, and then reinstall it.
For details about uninstalling and installing drivers, see the driver manual at the online manual site.
https://oip.manual.canon/

Cannot Connect to Wireless LAN

958J-0ER

Troubleshoot by checking the status of the computer, wireless LAN router (access point), and machine with the steps below.

Step 1: Checking the Status of the Computer and Wireless LAN Router(P. 537)
Step 2: Checking the Status of the Machine and Wireless LAN Router(P. 537)
Step 3: Reconnecting to a Wireless LAN(P. 537)

Step 1: Checking the Status of the Computer and Wireless LAN Router

Have You Configured the Settings of the Computer and Wireless LAN Router?

Configure the required settings if they have not been configured.

Are the Power Cables and Ethernet Cable Connected Correctly?

If any cables are connected incorrectly or disconnected, connect them correctly.

Is the Power of Wireless LAN Router On?

If you cannot establish a connection even if the power is on, turn off the power of the computer and router and turn it on again.

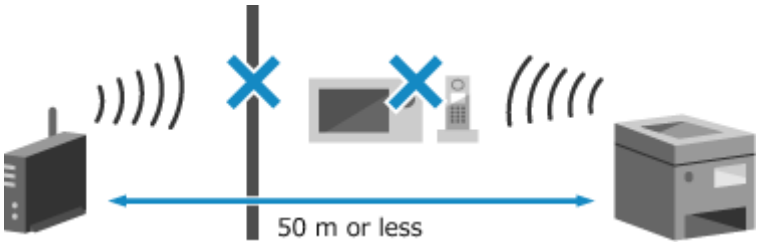
Step 2: Checking the Status of the Machine and Wireless LAN Router

Is the Power of the Machine ON?

If the power is ON, turn OFF the power and turn it ON again.

Is the Location Appropriate?

- The machine and wireless LAN router should be installed in a location without walls or other obstructions between the devices and within range of 50 m.
- Do not install near a microwave oven, cordless telephone, or other device that generates radio waves.



Step 3: Reconnecting to a Wireless LAN

Connect to the wireless LAN using the connection type according to your wireless LAN router. **Connecting to a Wireless LAN(P. 63)**

Network

958J-0ES

This is a list of problems that can occur with the network. Check how to troubleshoot the problem based on the symptom.

Cannot Switch to Wireless LAN(P. 539)
Cannot Find the Print Server to Connect to(P. 540)
Cannot Connect to a Shared Printer(P. 541)
Cannot Find the IP Address of the Machine(P. 542)
AirPrint Does Not Work(P. 543)

Cannot Switch to Wireless LAN

958J-0EU

Use the network settings to switch from wired LAN connection to wireless LAN connection.

1 **On the control panel, press [Menu] in the [Home] screen. [Home] Screen(P. 113)**

2 **Press [Preferences] ▶ [Network] ▶ [Select Wired/Wireless LAN].**

If the login screen appears, enter the System Manager ID and PIN, and then press ID. **Logging In to the Machine(P. 124)**

3 **Press [Wireless LAN].**

➡ The message [Settings applied.] appears.

4 **Connect the machine to the wireless LAN. Connecting to a Wireless LAN(P. 63)**

5 **Install the driver to the computer that will use the machine.**

When switching the machine from wired LAN connection to wireless LAN connection, any installed drivers must be uninstalled and then reinstalled.
For details about uninstalling and installing drivers, see the driver manual at the online manual site.
https://oip.manual.canon/

Cannot Find the Print Server to Connect to

958J-0EW

Troubleshoot by checking the items below.

Are the Print Server and Computer Connected Correctly?

- Check the network settings of the print server and computer, and make sure they are connected correctly.
- If they are connected using an Ethernet cable, make sure the cable is connected correctly.

Is the Print Server Started?

Start the print server if it has not been started.

Are there Any Restrictions with Connecting to the Print Server?

Check with the administrator of the print server, and ask for permission, if needed.

Is Network Discovery Enabled? (Windows)

Enable network discovery if not enabled. **Enabling Network Discovery(P. 594)**

Cannot Connect to a Shared Printer

958J-0EX

Check if a shared printer is displayed on the network computer. **Displaying a Shared Printer in the Print Server(P. 594)**

If it is not displayed, contact the network or print server administrator.

Cannot Find the IP Address of the Machine

958J-0EY

View the IP address using the following procedure:

Viewing the IPv4 Address

on the control panel ▶ [Network Information] ▶ [IPv4] ▶ view the setting.

Viewing the IPv6 Address

on the control panel ▶ [Network Information] ▶ [IPv6] ▶ view the setting.

NOTE

If the IP Address Is Displayed as "0.0.0.0"

- A suitable IP address is not set. Set the IP address again.
  Setting IPv4 Addresses(P. 74)
  Setting IPv6 Addresses(P. 76)

AirPrint Does Not Work

958J-0F0

Troubleshoot by checking the items below.

Is the Power of the Machine ON?

If the machine is ON, restart the machine, and try AirPrint again. **Restarting the Machine(P. 107)**

Does an Error Message Appear on the Control Panel?

Follow the instructions of the error message on the screen to fix the problem. **A Message Appears(P. 563)**

When Using a Mac, Is it Correctly Connected to the Machine?

Connect the Mac to the network on the same LAN as the machine. **Setting Up the Network(P. 59)**
When connecting via USB, directly connect the Mac to the USB port for computer connection on the back of the machine with a USB cable. **Front Side(P. 16)**

Are You Required to Enter the Department ID and PIN to Print from a Computer? (When Using Department ID Management on the Machine)

If you are required to enter a Department ID and PIN to print from a computer, the machine blocks printing from an unknown Department ID, so AirPrint cannot be used. To enable use of AirPrint, cancel blocking of printing when the Department ID is unknown. **Enabling Department ID Management(P. 300)**

Have the Functions Usable with AirPrint Been Restricted?

If the protocol (IPP or Network Link Scan) for use with AirPrint has been disabled to restrict functions, cancel this restriction to enable the use of AirPrint. **Setting the Functions and Security to Be Used with AirPrint(P. 277)**

Is Bonjour Enabled on Your Apple Device?

Enable Bonjour if it is not enabled. For details, see the manual of your Apple device.

Printing and Copying

958J-0F1

This is a list of problems that can occur when printing and copying. Check how to troubleshoot the problem based on the symptom.

Cannot Print or Copy(P. 545)
Printing Is Slow(P. 551)

■ Problems with Printing Results

If the printing or copying results are not as expected, see the following:
Problems with Printing Results(P. 521)

■ Frequently Asked Questions about Operations

I Want to Print on an Envelope.

Place the envelope in the paper drawer or multi-purpose tray while paying attention to the orientation and side of the envelope.
Then, set the paper size and type according to the placed envelope.
Next, use the printer driver of the computer to set the paper size of the document and the paper size to print, and then perform printing.

Preparations and Orientation for Loading Envelopes(P. 137)
Specifying the Paper Size and Type(P. 144)
Printing from a Computer(P. 204)

Cannot Print or Copy

958J-0F2

Troubleshoot by checking the items below.

Has an Error Occurred?

Check the print or copy processing status and log, and if a three-digit number starting with "#" (error code) is displayed, check how to troubleshoot the problem based on the error code.
Viewing the Print Job Status and Log(P. 217)
Checking the Copy Status and Log(P. 269)
An Error Code Is Displayed(P. 578)

Can You Print a Test Page?

If you can print a test page, check if the print settings of the application are correct.
Printing a Test Page(P. 600)

Check the Network Status and Settings.

Check the required items according to the usage environment.
Cannot Print (Wireless LAN)(P. 546)
Cannot Print (Wired LAN)(P. 548)
Cannot Print (USB Connection)(P. 549)
Cannot Print (via Print Server)(P. 550)

Cannot Print (Wireless LAN)

958J-0F3

Troubleshoot by checking the items below.

Check the Wireless LAN Connection Status.

Check the connection status of the machine, and take action according to the status. **Viewing the MAC Address and Connection Information of the Wireless LAN(P. 99)**

If the Machine Is Not Connected to the Wireless LAN

Check the status of the computer and wireless LAN router (access point) and the status of the machine, and reconnect to the wireless LAN. **Cannot Connect to Wireless LAN(P. 537)**

If the Connection Is Poor

Change the following settings on the wireless LAN router, and try printing:

- Change the channel of the wireless LAN router. If there are multiple wireless LAN routers, separate the channels by five or more channels.
- Increase the wireless output of the wireless LAN router if possible.

Are the Machine and Computer Connected to the Same Wireless LAN Router?

- When you are using a computer connected to a wireless LAN, check that the SSID (identifier of the wireless LAN router) of the machine matches that of the computer.
  Viewing the MAC Address and Connection Information of the Wireless LAN(P. 99)
  Viewing the Network Connection Information of the Computer(P. 597)
- If the SSID of the machine and the computer do not match, configure the wireless LAN connection settings on the machine again, and connect the machine to the SSID to which the computer is connected. **Connecting to a Wireless LAN(P. 63)**

Is the Printer Port of the Computer Configured Correctly? (Windows)

Change the settings if they have not been configured correctly. If there is no available port, add a new port.
Viewing the Printer Port(P. 599)
Configuring a Printer Port (Windows)(P. 193)

Can You Access Remote UI?

If you cannot access Remote UI, the firewall settings of the machine may be incorrect, preventing communication with the computer.
Use the following procedure to disable the firewall settings with the control panel, and then use Remote UI to configure the firewall again.

Administrator privileges are required. The machine must be restarted to apply the settings.

1 Disable the firewall settings.

To Disable IPv4 Address Filter

[Home] screen on the control panel ▶ [Menu] ▶ [Preferences] ▶ [Network] ▶ [Firewall Settings] ▶ [IPv4 Address Filter] ▶ [Outbound Filter] or [Inbound Filter] ▶ [Off] ▶ Restart the machine.

To Disable IPv6 Address Filter

[Home] screen on the control panel ▶ [Menu] ▶ [Preferences] ▶ [Network] ▶ [Firewall Settings] ▶ [IPv6 Address Filter] ▶ [Outbound Filter] or [Inbound Filter] ▶ [Off] ▶ Restart the machine.

To Disable MAC Address Filter

[Home] screen on the control panel ▶ [Menu] ▶ [Preferences] ▶ [Network] ▶ [Firewall Settings] ▶ [MAC Address Filter] ▶ [Outbound Filter] or [Inbound Filter] ▶ [Off] ▶ Restart the machine.

2 Configure the firewall correctly. **Setting the Firewall(P. 309)**

Reinstall the Printer Driver.

Uninstall the installed driver, and then reinstall it.
For details about uninstalling and installing drivers, see the driver manual at the online manual site.
https://oip.manual.canon/

Are You Using Resident Software?

If you are using resident software, such as security software, disable it and then try printing.

Can You Print from Another Computer in the Network?

If you cannot print from another computer, contact your dealer or service representative.

Cannot Print (Wired LAN)

958J-0F4

Troubleshoot by checking the items below.

Is the Printer Port of the Computer Configured Correctly? (Windows)

Change the settings if they have not been configured correctly. If there is no available port, add a new port.
Viewing the Printer Port(P. 599)
Configuring a Printer Port (Windows)(P. 193)

Can You Access Remote UI?

If you cannot access Remote UI, the firewall settings of the machine may be incorrect, preventing communication with the computer.
Use the following procedure to disable the firewall settings with the control panel, and then use Remote UI to configure the firewall again.

Administrator privileges are required. The machine must be restarted to apply the settings.

1 Disable the firewall settings.

To Disable IPv4 Address Filter

[Home] screen on the control panel ▶ [Menu] ▶ [Preferences] ▶ [Network] ▶ [Firewall Settings] ▶ [IPv4 Address Filter] ▶ [Outbound Filter] or [Inbound Filter] ▶ [Off] ▶ Restart the machine.

To Disable IPv6 Address Filter

[Home] screen on the control panel ▶ [Menu] ▶ [Preferences] ▶ [Network] ▶ [Firewall Settings] ▶ [IPv6 Address Filter] ▶ [Outbound Filter] or [Inbound Filter] ▶ [Off] ▶ Restart the machine.

To Disable MAC Address Filter

[Home] screen on the control panel ▶ [Menu] ▶ [Preferences] ▶ [Network] ▶ [Firewall Settings] ▶ [MAC Address Filter] ▶ [Outbound Filter] or [Inbound Filter] ▶ [Off] ▶ Restart the machine.

2 Configure the firewall correctly. **Setting the Firewall(P. 309)**

Reinstalling the Printer Driver

Uninstall the installed driver, and then reinstall it.
For details about uninstalling and installing drivers, see the driver manual at the online manual site.
https://oip.manual.canon/

Are You Using Resident Software?

If you are using resident software, such as security software, disable it and then try printing.

Can You Print from Another Computer in the Network?

If you cannot print from another computer, contact your dealer or service representative.

Cannot Print (USB Connection)

958J-0F5

Troubleshoot by checking the items below.

Check the USB Cable.

- If you are using a long USB cable, replace it with a short USB cable.
- If you still cannot print with a short USB cable, the cable may be damaged. Replace with a new USB cable, and try printing.

Are You Using a USB Hub?

Connect the machine directly to the computer using a USB cable.

Try Using Another USB Port.

Connect the USB cable to another USB port on your computer.

Is the Printer Port of the Computer Configured Correctly? (Windows)

If the printer port is not configured correctly or there is no available port, reinstall the printer driver. When you reinstall the driver, the correct port is configured automatically. **Viewing the Printer Port(P. 599)**
For details about installing the driver, see the manual of the driver at the online manual site.
https://oip.manual.canon/

Is Two-way Communication Between the Machine and Computer Enabled? (Windows)

Enable two-way communication if it is not enabled, and restart the computer and machine. **Viewing Two-way Communication(P. 600)**

Is a Setting Preventing the Machine from Establishing a USB Connection to the Computer?

If usage of the USB port for computer connection on the back of the machine is restricted, cancel this setting. **Preventing Connection to Computer via USB Port(P. 352)**

Are You Using Resident Software?

If you are using resident software, such as security software, disable it and then try printing.

Can You Print via USB Connection from Another Computer?

If you cannot print from another computer, contact your dealer or service representative.

Cannot Print (via Print Server)

958J-0F6

Troubleshoot by checking the items below.

Can You Print from the Print Server?

If you can print, check the connection between the computer and the print server. **Cannot Find the Print Server to Connect to(P. 540)**

Reinstall the Printer Driver.

Uninstall the installed driver, and then reinstall it.
For details about uninstalling and installing drivers, see the driver manual at the online manual site.
https://oip.manual.canon/

Installing in Windows

Use a print server to install the printer driver.
Double-click the shared printer on the print server, and follow the instructions on the screen to install the printer driver. **Displaying a Shared Printer in the Print Server(P. 594)**

Are You Using Resident Software?

If you are using resident software, such as security software, disable it and then try printing.

Can You Print via a Print Server from Another Computer?

If you cannot print from another computer, contact your dealer or service representative.

Printing Is Slow

958J-0F7

It takes time until the first page is printed. The printing speed may be slower after continuous printing or printing on narrow paper to allow for adjustments of the temperature or image quality of the machine.

In all other cases, an error may have occurred. Troubleshoot by checking the items below.

Check the Paper Orientation.

This symptom may occur depending on the paper orientation. Change the paper orientation if possible. **Loading Paper(P. 130)**

Is Secure Print Enabled?

This symptom may occur when Secure Print is enabled. Use the procedure below to disable Secure Print. The machine must be restarted to apply the settings.

Log in to Remote UI in System Manager Mode ▶ [Settings/Registration] ▶ [Secure Print Settings] ▶ [Edit] ▶ clear the [Secure Print] checkbox ▶ [OK] ▶ restart the machine.

On the control panel, select [Menu] in the [Home] screen, and then select [Function Settings] to configure the settings. **[Secure Print](P. 428)**

Scanning

958J-0F8

If you have problems when scanning, restart the machine and computer.

If the problem persists even after restarting, check the following troubleshooting methods.
Cannot Save Scanned Data to a Computer(P. 553)
Cannot Save Scanned Data to a Shared Folder(P. 555)

■ Frequently Asked Questions about Operations

I Want to Scan an Original.
Make preparations according to the scanned data save destination and sending method, and then scan the original.
Scanning(P. 219)

I Want to Send Scanned Data by E-mail.
You can scan an original and send the scanned data by e-mail as an attachment.
Scanning (Sending by E-mail)(P. 236)

Cannot Save Scanned Data to a Computer

958J-0F9

Use the following steps to check the status of the computer used as the store location and the machine:

Step 1: Checking the Occurrence of the Problem(P. 553)
Step 2: Checking the Status of the Computer(P. 553)
Step 3: Checking the Status of the Machine(P. 553)
Step 4: Checking the Store Location of the Scanned Data(P. 554)

Step 1: Checking the Occurrence of the Problem

Check using the following in the order below:

Does the Problem Occur on All Computers?

If so, check the network status and settings of the machine. If the machine is not connected to a network, reconfigure the network settings.
Checking the Network Status and Settings(P. 97)
Setting Up the Network(P. 59)

Are You Saving Scanned Data to the Computer for the First Time?

If so, make preparations such as installing the scanner driver (ScanGear MF) and application (MF Scan Utility) to the computer used as the store location. **Preparing to Save Scanned Data to a Computer(P. 222)**

On the Screen for Selecting the Computer to Be Used as the Store Location, Is the Computer Displayed? (Only When Scanning from the Machine)

If the computer to be used as the store location is not displayed, scanned data communication may be blocked due to the security software settings.
For details about the security software settings, contact the software manufacturer.

Step 2: Checking the Status of the Computer

Did You Install and Update the Security Software?

If so, the security may have been strengthened, preventing communication between the machine and computer.
For a workaround, contact the software manufacturer.

Reinstall the Scanner Driver.

Uninstall the installed driver, and then reinstall it.
For details about uninstalling and installing drivers, see the driver manual at the online manual site.
https://oip.manual.canon/

Step 3: Checking the Status of the Machine

Was the IP Address of the Machine or Other Device Changed?

If so, check whether the machine and other device have the same IP address. If they have the same IP address, change it to a different IP address.
Setting IPv4 Addresses(P. 74)
Setting IPv6 Addresses(P. 76)

Step 4: Checking the Store Location of the Scanned Data

Check the Attributes of the Store Location (Windows).

On the computer, check that the attributes of the store location are not read only.

1. Right-click the store location, and click [Properties].
   - The properties screen of the store location is displayed.
2. On the [General] tab, check that the [Read-only] checkbox in [Attributes] is not selected.
3. If the checkbox is selected, clear the [Read-only] checkbox.

Cannot Save Scanned Data to a Shared Folder

958J-0FA

Use the following steps to check the status of the shared folder of the store location and the machine:

Step 1: Checking the Occurrence of the Problem(P. 555)
Step 2: Checking the Status of the Computer with the Shared Folder(P. 555)
Step 3: Checking the Status of the Machine(P. 555)
Step 4: Checking the Shared Folder(P. 556)

Step 1: Checking the Occurrence of the Problem

Check using the following in the order below:

Does the Problem Occur with All Shared Folders?

If so, check the network status and settings of the machine. If the machine is not connected to a network, reconfigure the network settings.
Checking the Network Status and Settings(P. 97)
Setting Up the Network(P. 59)

Are You Saving Scanned Data to the Shared Folder for the First Time?

If so, register the information for accessing the shared folder to the Address Book of the machine. **Preparing to Save Scanned Data to a Shared Folder(P. 231)**

Step 2: Checking the Status of the Computer with the Shared Folder

Did You Change the Password of the Computer with the Shared Folder?

If so, change the password used to access the shared folder using the information of the shared folder registered to the Address Book. **Registering Destinations to the Address Book (Remote UI)(P. 165)**

Did You Update Windows?

If so, the security may have been strengthened, preventing communication between the machine and computer.
If the shared folder on the computer does not have a password, set a password, and register the information for accessing the shared folder to the Address Book of the machine. **Preparing to Save Scanned Data to a Shared Folder(P. 231)**

Did You Install or Update the Security Software?

If so, the security may have been strengthened, preventing communication between the machine and computer.
For a workaround, contact the software manufacturer.

Step 3: Checking the Status of the Machine

Was the IP Address of the Machine or Other Device Changed?

If so, check whether the machine and other device have the same IP address. If they have the same IP address, change it to a different IP address.
Setting IPv4 Addresses(P. 74)
Setting IPv6 Addresses(P. 76)

Step 4: Checking the Shared Folder

Do You Have Permission to Access the Shared Folder?

If you do not have permission to access the shared folder, on the computer, change the permission to enable saving of scanned data.

When Using Windows

1. Right-click the shared folder of the store location, and click [Properties].
   - The properties screen of the shared folder is displayed.
2. On the [Security] tab, check that [Change] in [Everyone] is set to [Allow].
3. If not, set [Change] in [Everyone] to [Allow].

When Using macOS

1. Click [ ] ▶ [System Preferences] ▶ [Sharing].
   - The [Sharing] screen is displayed.
2. Select [File Sharing], and in [Shared Folders], select the shared folder of the store location.
3. Check that [Everyone] in [Users] has the access permission of [Read & Write].
4. If not, select [Read & Write] from the [Everyone] pop-up menu.

Check the Attributes of the Shared Folder (Windows).

On the computer, check that the attributes of the shared folder are not read only.

1. Right-click the shared folder of the store location, and click [Properties].
   - The properties screen of the shared folder is displayed.
2. On the [General] tab, check that the [Read-only] checkbox in [Attributes] is not selected.
3. If the checkbox is selected, clear the [Read-only] checkbox.

Management Functions and Environment Settings

958J-0FR

This is a list of frequently asked questions about management functions. Check the applicable item.

Cannot Access Remote UI or Send Function Setting Tool(P. 558)
Changing the Volume of the Confirmation Sound and Warning Tone(P. 559)
Changing the Time Until Sleep Mode(P. 560)
Lost Department ID or PIN for the Administrator(P. 561)
Checking the Items That Can Be Configured on the Machine and Their Settings(P. 562)

Cannot Access Remote UI or Send Function Setting Tool

958J-0FS

If the message [Cannot access Remote UI.] or [Cannot continue the settings because the function to perform settings for the device is restricted.] appears and you cannot access Remote UI or Send Function Setting Tool, troubleshoot by checking the items below.

Set the Remote UI Access PIN.

To access the Remote UI and Send Function Setting Tool, you must set the Remote UI Access PIN.

Administrator privileges are required to configure the setting.

[Home] screen on the control panel ▶ [Menu] ▶ [Management Settings] ▶ [Remote UI Settings/Update Firmware] ▶ [Remote UI Settings] ▶ [Remote UI Access Security Settings] ▶ [On] ▶ enter the PIN ▶ [Apply] ▶ enter the PIN again ▶ [Apply]

* You cannot set a PIN consisting of all zeros, such as "00" or "0000000."
* A Remote UI PIN is not required when Department ID Management is enabled.

Change the System Manager PIN.

When logging in with System Manager Mode or accessing Send Function Setting Tool, you must change the System Manager PIN from the default settings.

Administrator privileges are required to change the settings.

[Home] screen on the control panel ▶ [Menu] ▶ [Management Settings] ▶ [User Management] ▶ [System Manager Information Settings] ▶ [System Manager ID and PIN] ▶ enter the System Manager ID ▶ [Apply] ▶ enter the PIN ▶ [Apply] ▶ enter the PIN again ▶ [Apply]

* You cannot set a System Manager ID or PIN consisting of all zeros, such as "00" or "0000000."
* Only allow certain administrators to have access to the System Manager ID and PIN after the settings are changed.

Changing the Volume of the Confirmation Sound and Warning Tone

958J-0FU

You can adjust the volume of the sounds emitted by the machine and set whether the machine emits sounds notifying you of operations and statuses.

Adjusting the Volume(P. 185)

Changing the Time Until Sleep Mode

958J-0FW

You can change the time until the machine enters sleep mode.
Reducing Power Consumption (Sleep Mode)(P. 108)

Lost Department ID or PIN for the Administrator

958J-0FX

Contact the administrator to check whether the System Manager ID and System Manager PIN were changed from the default settings.

If they have not been changed from the default settings, they are listed below.

- **System Manager ID:** 7654321
- **System Manager PIN:** 7654321

* If they have not been changed from the default settings, change them for enhanced security, and allow only certain administrators to know this information. **Setting the Department ID and PIN for the Administrator(P. 293)**

NOTE

- If you still cannot recover your System Manager ID and PIN even after confirming the above information, contact your dealer or service representative.

Checking the Items That Can Be Configured on the Machine and Their Settings

958J-0FY

You can print the User Data List and System Manager Data List to check the items that can be configured on the machine and their settings.
Printing and Viewing Reports and Lists(P. 378)

User Data List
Displays the settings that do not require administrator privileges.

System Manager Data List
Displays the settings that require administrator privileges.

A Message Appears

958J-0H0

If a message appears on the control panel, select the message from the list below, and check how to troubleshoot the problem.

- **Amount in cart. cannot be displ. correctly.(P. 564)**
- **An error occurred during certificate verification.(P. 564)**
- **Cannot analyze the authentication server certificate.(P. 564)**
- **Cannot change the destination type of any destination that is registered to a group.(P. 565)**
- **Cannot find the access point.(P. 565)**
- **Cannot perform Open System authentication. Check the encryption key settings.(P. 566)**
- **Cannot print RX data.(P. 566)**
- **Cannot print. A non-Canon or counterfeit cartridge may be in use.(P. 566)**
- **Cart. end of lifetime. Rplcmt. recommended.(P. 566)**
- **Cartridge Comm. Error Cannot print. A non-Canon or counterfeit cartridge may be in use.(P. 567)**
- **Cartridge Comm. Error Problems resulting from the use of non-Canon cartridges are not covered by the warranty.(P. 567)**
- **Change the authentication password.(P. 567)**
- **Check the authentication settings.(P. 567)**
- **Copying is restricted.(P. 567)**
- **Could not connect using the wireless LAN.(P. 568)**
- **Could not connect using WPS.(P. 568)**
- **Could not connect.(P. 568)**
- **Could not connect. Check the encryption key settings.(P. 569)**
- **Could not connect. Max no. of devices that can connect to access point reached(P. 569)**
- **Could not detect any connections from wireless devices.(P. 569)**
- **Could not perform cleaning.(P. 569)**
- **Could not perform IEEE 802.1X authentication. Cannot analyze the authentication server certificate.(P. 569)**
- **Could not perform IEEE 802.1X authentication. Change the authentication password.(P. 570)**
- **Could not perform IEEE 802.1X authentication. Check the authentication settings.(P. 570)**
- **Could not perform IEEE 802.1X authentication. Configure the correct authentication information.(P. 570)**
- **Could not perform IEEE 802.1X authentication. Configure the information required for authentication.(P. 570)**
- **Could not perform IEEE 802.1X authentication. No reply from the destination.(P. 570)**
- **Could not perform IEEE 802.1X authentication. The authentication server certificate has expired.(P. 571)**
- **Could not perform IEEE 802.1X authentication. The authentication server certificate is incorrect.(P. 571)**
- **Could not perform Shared Key auth. Chk encryp. key set.(P. 571)**
- **Direct Connection terminated.(P. 571)**
- **Easy Conn. via PC ended due to timeout Device will restart.(P. 571)**
- **Encryption key is not set correctly. Check the encryption key settings.(P. 572)**
- **End of Cart. Lifetime(P. 572)**
- **Incorrect number of characters/invalid characters entered.(P. 572)**
- **Insert the drum unit.(P. 572)**
- **Insert the toner cartridge.(P. 572)**
- **Low Cartridge Level(P. 573)**
- **Memory is full.(P. 573)**
- **No reply from the destination.(P. 573)**
- **No response from host.(P. 573)**
- **Paper jammed.(P. 573)**
- **Prepare the toner cartridge.(P. 574)**
- **Printing is restricted.(P. 574)**
- **Remote scanning is restricted.(P. 574)**

Replace the toner cartridge.(P. 574)
Scanning is restricted.(P. 574)
Set the correct authentication information.(P. 575)
Set the information necessary for authentication.(P. 575)
Size/Settings Mismatch(P. 575)
Specifying and registering new destinations is restricted.(P. 575)
The authentication server certificate has expired.(P. 576)
The authentication server certificate is incorrect.(P. 576)
The computer is restricted.(P. 576)
The memory is full. Scanning will be canceled. Do you want to print?(P. 576)
Turn the main power OFF and ON. If the problem persists, change the drum unit.(P. 576)
Use Remote UI to set info. necessary for authentication.(P. 576)

NOTE

- If the problem persists even after trying the troubleshooting methods, contact your dealer or service representative.

Amount in cart. cannot be displ. correctly.

The remaining amount cannot be displayed correctly due to incorrect installation of the toner cartridge, a damaged toner cartridge, or the use of a non-Canon toner cartridge.

Reinstall the Toner Cartridge.
Replacing the Toner Cartridges(P. 496)

- For optimum print quality, using Canon genuine toner cartridges is recommended. **List of Consumables(P. 500)**
- If the message still appears after repeatedly reinstalling the toner cartridge, contact your dealer or service representative.

An error occurred during certificate verification.

An error occurred during verification due to an expired certificate or incorrect information.

Install the Correct Key and Certificate or CA Certificate.
Check the expiration date, certification authority, and other information, and then install the key and certificate or CA certificate. **Registering a Key and Certificate or CA Certificate Obtained from an Issuing Authority(P. 336)**

Are the Current Date and Time on the Machine Correct?
Check the date and time settings on the machine. If the settings are not correct, set the time zone, and then set the current date and time. **Setting the Date and Time(P. 365)**

Cannot analyze the authentication server certificate.

The certificate of the authentication server may not be correct, or it may be a format unsupported by the machine.

Check the Certificate of the Authentication Server, and Change the Setting, as Needed.
Setting IEEE 802.1X(P. 321)

Cannot change the destination type of any destination that is registered to a group.

The selected destination is registered to a group, so you cannot change the destination type.

Delete the Destination from the Group, Change the Destination Type, and Then Register It to the Group Again.

1. Delete the destination from the group.

Deleting Using Remote UI

Log in to Remote UI in System Manager Mode ▶ [Address Book] ▶ [One-Touch] or [Coded Dial] ▶ select the group to which the destination is registered ▶ [Edit] ▶ select the destination ▶ [Delete] ▶ [OK]

Deleting Using the Control Panel

[Home] screen on the control panel ▶ [Addr. Book] ▶[Details/Edit] ▶ select the group to which the destination is registered ▶ [Edit] ▶ [Number of Destinations] ▶ select the destination ▶ [Remove] ▶ [Yes] ▶ [Apply] ▶ [Apply]

2. Change the destination type.
Registering Destinations to the Address Book (Remote UI)(P. 165)
Editing and Deleting Destinations in the Address Book (Control Panel)(P. 164)

3. Register the destination to the group again.
Registering Groups to the Address Book (Remote UI)(P. 168)
Registering Groups to the Address Book (Control Panel)(P. 162)

Cannot find the access point.

An error occurred, preventing the machine from detecting the wireless LAN router (access point).

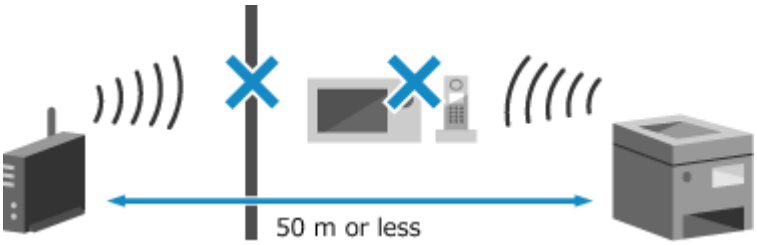
Is Connection Type Configured Correctly?
Select the connection type (WPS) according to the method supported by the wireless LAN router. **Connecting to a Wireless LAN by Using the Router Button (Push Button Mode)(P. 66)**

Did You Connect Within the Fixed Time?
When connecting by pressing a button on the wireless LAN router, set the connection type on the control panel of the machine, and then press the button on the wireless LAN router within one or two minutes. **Connecting to a Wireless LAN by Using the Router Button (Push Button Mode)(P. 66)**

Are the SSID and Network Key Configured Correctly?
When entering the wireless LAN router information manually, check the SSID and network key of the wireless LAN router, and configure the settings correctly on the machine. **Connecting to a Wireless LAN by Setting the Details (Manual Setup Method)(P. 71)**

Are the Machine and Wireless LAN Router Located Appropriately?

- The machine and wireless LAN router should be installed in a location without walls or other obstructions between the devices and within range of 50 m.
- Do not install near a microwave oven, digital cordless telephone, or other device that generates radio waves.



Check the Security Settings of the Wireless LAN Router.
For details, see the manual of the wireless LAN router or contact the manufacturer.

Cannot perform Open System authentication. Check the encryption key settings.

The WEP authentication methods of the machine and wireless LAN router (access point) do not match, or MAC address filtering of the wireless LAN router is set to prevent a connection to the machine, thereby preventing Open System Authentication.

Use the Manual Setup Method to Change the WEP Authentication Method to [Shared Key], and Connect Again.
Connecting to a Wireless LAN by Setting the Details (Manual Setup Method)(P. 71)
In the MAC address filtering setting of the wireless LAN router, allow the connection to the machine.
Check the MAC address of the machine, and configure the wireless LAN router to allow a connection from that MAC address. **Viewing the MAC Address and Connection Information of the Wireless LAN(P. 99)**
For the setup method, see the manual of the wireless LAN router or contact the manufacturer.

Cannot print RX data.

Received data cannot be printed for some reason.

Do the Cause and Solution Appear on the Control Panel?
If so, follow the instructions on the screen.

Is the Front Cover, the Cover on the Left Side of the Main Unit, the Feeder Cover, or another cover Open on the Machine?
Close the covers if they are open.

Is Paper Loaded?
Load paper if not loaded. **Loading Paper(P. 130)**

Is Paper Jammed?
If so, remove any jammed paper. **Paper Jams(P. 508)**

Has the Toner Cartridge Reached the End of Their Lifetime?
Check the remaining amount in the toner cartridge, and replace any of the toner cartridge, as needed.
Checking the Remaining Amount of Consumables(P. 499)
Replacing the Toner Cartridges(P. 496)

Cannot print. A non-Canon or counterfeit cartridge may be in use.

Printing cannot be performed due to the use of a toner cartridge whose print quality cannot be guaranteed.

Replace with a New Toner Cartridge.
Replacing the Toner Cartridges(P. 496)

- For optimum print quality, using Canon genuine toner cartridges is recommended. **List of Consumables(P. 500)**

Cart. end of lifetime. Rplcmt. recommended.

The toner cartridge has reached the end of their lifetime.

It Is Recommended to Replace with a New Toner Cartridge
Press [Display Recovery Steps] and replace the toner cartridge while following the instructions on the screen.
Replacing the Toner Cartridges(P. 496)

[Error Information/Notification] ▶ [End of Cartridge Lifetime] ▶ [Display Recovery Steps]

Cartridge Comm. Error Cannot print. A non-Canon or counterfeit cartridge may be in use.

Printing cannot be performed due to incorrect installation of the toner cartridge, a damaged toner cartridge, or the use of a toner cartridge whose print quality cannot be guaranteed.

Reinstall the Toner Cartridge. Or, Replace with a New Toner Cartridge.
Replacing the Toner Cartridges(P. 496)

- For optimum print quality, using Canon genuine toner cartridges is recommended. **List of Consumables(P. 500)**
- If the message still appears after repeatedly reinstalling the toner cartridges, contact your dealer or service representative.

Cartridge Comm. Error Problems resulting from the use of non-Canon cartridges are not covered by the warranty.

Printing cannot be performed due to incorrect installation of the toner cartridge, a damaged toner cartridge, or the use of a non-Canon toner cartridge, resulting in a communication error.

Reinstall the Toner Cartridge.
Replacing the Toner Cartridges(P. 496)

- For optimum print quality, using Canon genuine toner cartridges is recommended. **List of Consumables(P. 500)**
- If the message still appears after repeatedly reinstalling the toner cartridges, contact your dealer or service representative.

Change the authentication password.

The password has expired.
Set a new password.

Check the authentication settings.

The authentication method set on the machine does not match that set on the RADIUS server.

Check the Authentication Method Set on the RADIUS Server, and Set This Correctly.
Setting IEEE 802.1X(P. 321)

Copying is restricted.

Copying is restricted due to Department ID Management.

Log In with a Department ID That Does Not Restrict Copying.
For the Department ID and PIN, contact the system administrator.

To Cancel Restriction, Change the [Restrict Functions] Setting of Your Department ID.

Log in to Remote UI in System Manager Mode ▶ [Settings/Registration] ▶ [User Management] ▶ [Department ID Management] ▶ select the Department ID to edit ▶ clear the [Restrict Black & White Copy] checkboxes ▶ [OK]

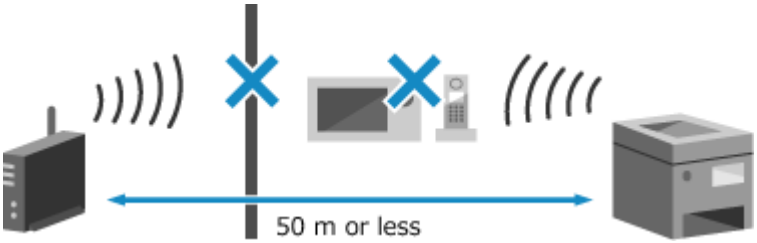
Could not connect using the wireless LAN.

An error occurred, preventing the machine from connecting to the wireless LAN.

Restart the Machine, and Configure the Wireless LAN Connection Again.
Connecting to a Wireless LAN(P. 63)

Are the Machine and Wireless LAN Router (Access Point) Located Appropriately?

- The machine and wireless LAN router should be installed in a location without walls or other obstructions between the devices and within range of 50 m.
- Do not install near a microwave oven, digital cordless telephone, or other device that generates radio waves.



Check the Security Settings of the Wireless LAN Router.
For details, see the manual of the wireless LAN router or contact the manufacturer.

Could not connect using WPS.

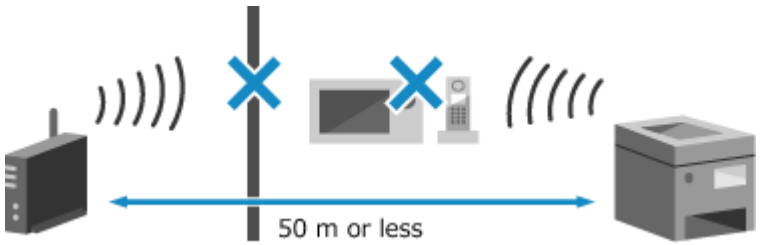
An error occurred, preventing the machine from establishing a WPS connection.

Wait a Moment, and Configure the Settings Again.
If you still cannot establish a WPS connection, check whether the wireless LAN router (access point) supports WPS.

If It Supports WPS

Check that the machine and wireless LAN router are located appropriately.

- The machine and wireless LAN router should be installed in a location without walls or other obstructions between the devices and within range of 50 m.
- Do not install near a microwave oven, digital cordless telephone, or other device that generates radio waves.



If It Does Not Support WPS

Connect using a different connection type. **Connecting to a Wireless LAN(P. 63)**

Could not connect.

An error occurred, preventing the machine from establishing a direct connection.

Wait a Moment, and Try Connecting Again.
If you still cannot establish a connection, restart the machine.

Set the IP Address for Connection to Something Other Than "192.168.22.xx".
The machine must be restarted to apply the settings.

Log in to Remote UI in System Manager Mode ▶ [Settings/Registration] ▶ [Network Settings] ▶ [Direct Connection Settings] ▶ [Edit] ▶ in [IP Address for Direct Connection], enter the IP address ▶ [OK] ▶ restart the machine

On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to configure the settings. **[Direct Connection Settings](P. 402)**

Is the Subnet Mask Configured Correctly?
Check the IPv4 subnet mask settings. Change the settings if they have not been configured correctly. For details, contact the network administrator.
Viewing the IP address set to the machine(P. 98)
Setting IPv4 Addresses(P. 74)

Could not connect. Check the encryption key settings.

The network key (encryption key) of the wireless LAN router (access point) is not configured correctly, preventing connection.

Reset the Network Key.
Check the network key of the wireless LAN router, and configure the settings correctly on the machine. **Connecting to a Wireless LAN(P. 63)**

Could not connect. Max no. of devices that can connect to access point reached

The maximum number of devices that can be connected to the wireless LAN router (access point) has been reached, preventing connection.

Reduce the Number of Devices (Clients) Connected to the Wireless LAN Router.
For the maximum number of connections, see the manual of the wireless LAN router or contact the manufacturer.

Could not detect any connections from wireless devices.

An error occurred, preventing the machine from detecting mobile devices.

Did You Connect Within the Fixed Time?
Connect the mobile device to the machine within five minutes of the SSID and network key being displayed.

Could not perform cleaning.

Cleaning could not be performed because a paper jam occurred while cleaning the fixing unit.

Is Paper Jammed?
If so, remove any jammed paper. **Paper Jams(P. 508)**

Could not perform IEEE 802.1X authentication. Cannot analyze the authentication server certificate.

Check the certificate of the authentication server, and change the setting, as needed.

Check the Certificate of the RADIUS Server, and Change the Setting, as Needed.

Setting IEEE 802.1X(P. 321)

Could not perform IEEE 802.1X authentication. Change the authentication password.

The password has expired.

Set a New Password.
Setting IEEE 802.1X(P. 321)

Could not perform IEEE 802.1X authentication. Check the authentication settings.

The authentication method set on the machine does not match that set on the RADIUS server.

Check the Authentication Method Set on the RADIUS Server, and Set This Correctly.
Setting IEEE 802.1X(P. 321)

Could not perform IEEE 802.1X authentication. Configure the correct authentication information.

The authentication method or authentication information of IEEE 802.1X is not set correctly.

Set the Authentication Method and Authentication Information (Keys and Certificates, Password, CA Certificate) Correctly.
Setting IEEE 802.1X(P. 321)
Managing and Verifying a Key and Certificate(P. 323)

Could not perform IEEE 802.1X authentication. Configure the information required for authentication.

The authentication method or authentication information of IEEE 802.1X is not set correctly.

Set the Authentication Method and Authentication Information (Keys and Certificates, Password, CA Certificate) Correctly.
Setting IEEE 802.1X(P. 321)
Managing and Verifying a Key and Certificate(P. 323)

Could not perform IEEE 802.1X authentication. No reply from the destination.

The network connection may have a problem.

Check the Network Status and Settings.

- Check the Ethernet cable and switch status.
- Check the network key of the wireless LAN router, and configure the settings correctly on the machine.

Could not perform IEEE 802.1X authentication. The authentication server certificate has expired.

The server certificate sent from the RADIUS server has expired.

Check the Expiry Date of the RADIUS Server.
Setting IEEE 802.1X(P. 321)

Could not perform IEEE 802.1X authentication. The authentication server certificate is incorrect.

A CA certificate that supports the certificate of the authentication server is not registered to the machine.

Check the Certificate Information of the Authentication Server, and Register a Supported CA Certificate.
Setting IEEE 802.1X(P. 321)
Registering a Key and Certificate or CA Certificate Obtained from an Issuing Authority(P. 336)

Could not perform Shared Key auth. Chk encryp. key set.

The network key (encryption key) of the wireless LAN router (access point) is not configured correctly, or the WEP authentication methods of the machine and wireless LAN router do not match, preventing Shared Key Authentication.

Reset the Network Key.
Check the network key of the wireless LAN router, and configure the settings correctly on the machine. **Connecting to a Wireless LAN(P. 63)**

Match the WEP Authentication Method on the Machine and Wireless LAN Router.
The machine may be set to Shared Key Authentication, and the wireless LAN router may be set to Open System Authentication. Change the WEP setting according to the authentication method you are using.

When Using Open System Authentication

Connect to the wireless LAN using either of the following methods:

- Connect with the access point setup method. **Connecting to a Wireless LAN by Searching for a Router (Access Point Setup Method)(P. 69)**
- Using the Manual Setup Method, connect with the WEP authentication method set to [Open System]. **Connecting to a Wireless LAN by Setting the Details (Manual Setup Method)(P. 71)**

When Using Shared Key Authentication

On the wireless LAN router, change the WEP authentication method to "Shared Key", and connect again. For the setup method, see the manual of the wireless LAN router or contact the manufacturer.

Direct Connection terminated.

The connection with a mobile device was terminated.

Directly Connect Again.
Connecting a Mobile Device Directly to the Machine (Direct Connection)(P. 281)

Easy Conn. via PC ended due to timeout Device will restart.

30 minutes have elapsed since the start of the cableless setup mode without connecting to the computer.

Restart the Machine, and Start Cableless Setup Mode Again.

Administrator privileges are required.

[Home] on the control panel ▶ [Menu] ▶ [Preferences] ▶ [Network] ▶ [Easy Connection via PC] ▶ [Yes] ▶ start the settings on the computer

Encryption key is not set correctly. Check the encryption key settings.

The network key (encryption key) of the wireless LAN router (access point) is not configured correctly on the machine. Alternatively, the WEP authentication method of the machine does not match that of the wireless LAN router.

Reset the Network Key.
Check the network key of the wireless LAN router, and configure the settings correctly on the machine. **Connecting to a Wireless LAN(P. 63)**

Match the WEP Authentication Method on the Machine and Wireless LAN Router.
The machine may be set to Shared Key Authentication, and the wireless LAN router may be set to Open System Authentication. Change the WEP setting according to the authentication method you are using.

When Using Open System Authentication

Connect to the wireless LAN using either of the following methods:

- Connect with the access point setup method. **Connecting to a Wireless LAN by Searching for a Router (Access Point Setup Method)(P. 69)**
- Using the Manual Setup Method, connect with the WEP authentication method set to [Open System]. **Connecting to a Wireless LAN by Setting the Details (Manual Setup Method)(P. 71)**

When Using Shared Key Authentication

On the wireless LAN router, change the WEP authentication method to "Shared Key", and connect again. For the setup method, see the manual of the wireless LAN router or contact the manufacturer.

End of Cart. Lifetime

The toner cartridges have reached the end of their lifetime.

It Is Recommended to Replace with New Toner Cartridges.
Press [Display Recovery Steps] and replace the toner cartridges while following the instructions on the screen. **Replacing the Toner Cartridges(P. 496)**

Incorrect number of characters/invalid characters entered.

The network key of the wireless LAN router (access point) is not configured correctly on the machine.

Reset the Network Key.
Check the network key of the wireless LAN router, and configure the settings correctly on the machine. **Connecting to a Wireless LAN(P. 63)**

Insert the drum unit.

The drum unit is not installed correctly.

Reinstall the Drum Unit.
If the message still appears after repeatedly reinstalling the drum unit, contact your dealer or service representative.

Insert the toner cartridge.

The toner cartridge is not installed correctly.

Reinstall the Toner Cartridge.
Replacing the Toner Cartridges(P. 496)

If the message still appears after repeatedly reinstalling the toner cartridge, contact your dealer or service representative.

Low Cartridge Level

It is nearing the time to replace the toner cartridges.

Prepare New Toner Cartridges, and Replace the Old Ones, as Needed.
When printing large printing jobs, it is recommended to press [Display Recovery Steps] and replace the toner cartridges while following the instructions on the screen. **Replacing the Toner Cartridges(P. 496)**

Memory is full.

Scanning cannot be performed due to insufficient available memory. If there is data waiting to be printed or sent, wait until the processing is completed.

When Scanning, Change the Data Size to a Small File Format.

imageRUNNER 2224N

[Home] screen on the control panel ▶ [Scan] ▶ select the scan type ▶ Enter the destination ▶ [File Format] ▶ select the file format.

For details about the file formats, see the following:
Setting File / Division(P. 248)

imageRUNNER 2224

Scanning from a Computer (Saving to a Computer)(P. 241)

No reply from the destination.

The Ethernet cable may not be connected or there may be a problem with the switch.
Check the Ethernet cable and switch status.

No response from host.

The machine is not connected correctly to the network.

Check the Settings of the Machine and Network, and Connect Again.

When Connected via Wireless LAN

Configure the settings correctly according to your usage environment. **Connecting to a Wireless LAN(P. 63)**

When Connected via Wired LAN

Check that the Ethernet cable is properly connected. **Connecting to a Wired LAN(P. 62)**

Paper jammed.

Paper jammed in the machine during printing.

Remove the Jammed Paper, and If Printing Does Not Resume Automatically, Try Printing Again.
Paper Jams(P. 508)

Prepare the toner cartridge.

It is nearing the time to replace the toner cartridge.

Prepare a New Toner Cartridge, and Replace the Old Ones, as Needed.
When printing a large number of pages, press  ▶ [Error Information/Notification] ▶ [Replace Toner Cartridge] ▶ [Display Recovery Steps] and replace toner cartridges following the instructions on the screen.
Replacing the Toner Cartridges(P. 496)

Printing is restricted.

Printing is restricted due to Department ID Management.

Log In with a Department ID That Does Not Restrict Printing.
For the Department ID and PIN, contact the system administrator.

To Cancel Restriction, Change the [Restrict Functions] Setting of Your Department ID.

Log in to Remote UI in System Manager Mode ▶ [Settings/Registration] ▶ [User Management] ▶ [Department ID Management] ▶ select the Department ID to edit ▶ clear the [Restrict Black & White Copy] checkboxes ▶ [OK]

Remote scanning is restricted.

Scanning from a computer is restricted due to Department ID Management.

To Cancel Restriction, Change the [Department ID Management] Setting.

Log in to Remote UI in System Manager Mode ▶ [Settings/Registration] ▶ [User Management] ▶ [Department ID Management] ▶ [Edit] ▶ select the [Allow Scan Jobs with Unknown IDs] checkboxes ▶ [OK]

Replace the toner cartridge.

Cannot print because the toner has run out.

Replace with a New Toner Cartridge.
When printing a large number of pages, press  ▶ [Error Information/Notification] ▶ [Replace Toner Cartridge] ▶ [Display Recovery Steps] and replace toner cartridges following the instructions on the screen.
Replacing the Toner Cartridges(P. 496)

Scanning is restricted.

Scanning is restricted due to Department ID Management.

Log In with a Department ID That Does Not Restrict Scanning.
For the Department ID and PIN, contact the system administrator.

To Cancel Restriction, Change the [Restrict Functions] Setting of Your Department ID.

Log in to Remote UI in System Manager Mode ▶ [Settings/Registration] ▶ [User Management] ▶ [Department ID Management] ▶ select the Department ID to edit ▶ clear the [Restrict Scan] checkboxes ▶ [OK]

Set the correct authentication information.

The authentication method or authentication information of IEEE 802.1X is not set correctly.

Set the Authentication Method and Authentication Information (Keys and Certificates, Password, CA Certificate) Correctly.

Setting IEEE 802.1X(P. 321)
Managing and Verifying a Key and Certificate(P. 323)

Set the information necessary for authentication.

The authentication method or authentication information of IEEE 802.1X is not set correctly.

Set the Authentication Method and Authentication Information (Keys and Certificates, Password, CA Certificate) Correctly.

Setting IEEE 802.1X(P. 321)
Managing and Verifying a Key and Certificate(P. 323)

Size/Settings Mismatch

The size of the paper loaded in the machine does not match that set on the control panel or printer driver.

Match the Size of the Loaded Paper with the Paper Size Setting.

When Using the Loaded Paper

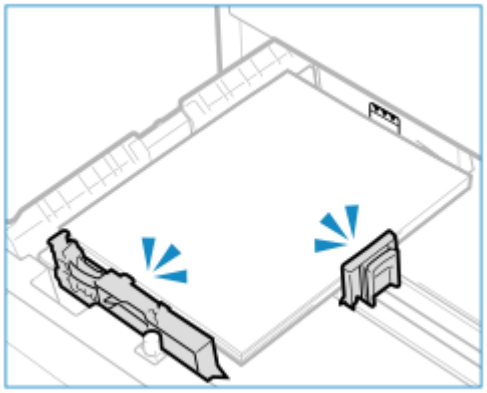
- Change the paper size setting on the control panel to match the size of the loaded paper.
  Setting the Paper Size and Type for the Paper Drawer(P. 145)
  Setting the Paper Size and Type for the Multi-purpose Tray(P. 147)
- When printing from a computer, change the paper size setting on the printer driver to match the size of the loaded paper. **Printing from a Computer(P. 204)**

When Reloading Paper

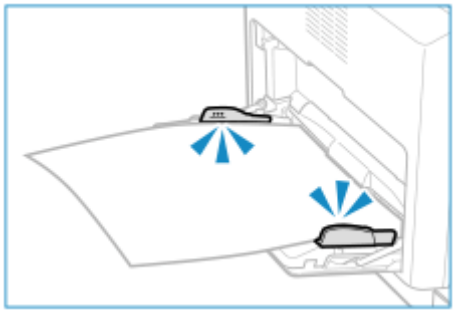
Load paper of the size set on the control panel or printer driver. **Loading Paper(P. 130)**

Check that the paper guides are aligned with the markings.

Paper drawer



Multi-purpose Tray



Specifying and registering new destinations is restricted.

Destinations that can be specified for sending are restricted to those destinations registered in the Address Book.

To Cancel Restriction, Change the [Restrict New Destinations] Setting.

Log in to Remote UI in System Manager Mode ▶ [Settings/Registration] ▶ [TX Settings] ▶ [Restrict New Destinations] ▶ [Edit] ▶ clear the [Restrict New Destinations] checkbox ▶ [OK]

On the control panel, select [Menu] in the [Home] screen, and then select [Function Settings] to change the setting. **[Restrict New Destinations](P. 452)**

The authentication server certificate has expired.

The server certificate sent from the RADIUS server has expired.

Check the Expiry Date of the RADIUS Server.
Setting IEEE 802.1X(P. 321)

The authentication server certificate is incorrect.

A CA certificate that supports the certificate of the authentication server is not registered to the machine.

Check the certificate information of the authentication server, and register a supported CA certificate.
Setting IEEE 802.1X(P. 321)
Registering a Key and Certificate or CA Certificate Obtained from an Issuing Authority(P. 336)

The computer is restricted.

Saving of scanned data to a computer is restricted due to Department ID Management.

To Cancel Restriction, Change the [Restrict Functions] Setting of Your Department ID.

Log in to Remote UI in System Manager Mode ▶ [Settings/Registration] ▶ [User Management] ▶ [Department ID Management] ▶ select the Department ID to edit ▶ clear the [Allow Scan Jobs with Unknown IDs] checkboxes ▶ [OK]

The memory is full. Scanning will be canceled. Do you want to print?

Reading of the original cannot be performed due to insufficient available memory. Alternatively, all the pages could not be read when sorting and copying.

Divide the Original Before Copying.
Print up to the pages that were read or cancel the job, and then divide the original before copying.

Turn the main power OFF and ON. If the problem persists, change the drum unit.

The drum unit have reached the end of their lifetime.

Change to a new drum unit.

Use Remote UI to set info. necessary for authentication.

The authentication method or authentication information of IEEE 802.1X is not set correctly.

Check the IEEE 802.1X Setting, and Set This Correctly.
Check the following, and change the setting, as needed. **Setting IEEE 802.1X(P. 321)**

- The login name is specified correctly.

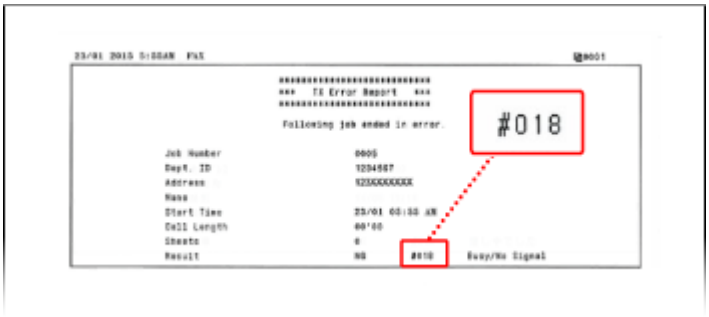
- At least one of the following checkboxes is selected: [Use TLS], [Use TTLS], and [Use PEAP].
- When using TLS, a key and certificate are registered.
- When using TTLS or PEAP, the user name and password are set correctly.

An Error Code Is Displayed

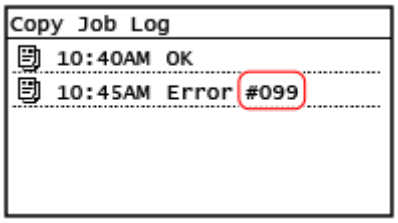
958J-0H1

If printing cannot be performed, or scanned data cannot be sent or received, or another error occurs, an error code (three-digit number starting with "#") is displayed in the report or job log.

Report



Job Log



Select the error code from the list below, and check how to troubleshoot the problem.

#001 to #099
#001(P. 578) #037(P. 578) #099(P. 579)

#701 to #799
#701(P. 579) #703(P. 579) #752(P. 579) #753(P. 579) #755(P. 580) #766(P. 580)

#801 to #899
#801(P. 580) #802(P. 581) #804(P. 581) #806(P. 581) #809(P. 581) #810(P. 581) #813(P. 582) #816(P. 582) #818(P. 582) #819(P. 582) #820(P. 582) #821(P. 582) #827(P. 582) #829(P. 582) #839(P. 583) #841(P. 583) #844(P. 583) #846(P. 583) #852(P. 583) #853(P. 584) #861(P. 584) #863(P. 584)

#901 to #999
#934(P. 584) #995(P. 585)

NOTE

- If the problem persists even after trying the troubleshooting methods, contact your dealer or service representative.

#001

The original is jammed in the feeder.

Remove the Jammed Original.
Paper Jams in the Feeder(P. 515)

#037

Printing could not be performed due to the file size.

When Printing, Reduce the File Size or Divide the File.
Optimize the file to make it smaller, or divide the file and then print it.

#099

The job was canceled.
This does not indicate a malfunction. Perform the operation again, as needed.

#701

Authentication could not be performed due to incorrect entry of the Department ID or PIN. Alternatively, the user attempted to perform an operation restricted with Department ID Management without entering the Department ID.

Enter the Correct Department ID and PIN.
If you lost your Department ID or PIN, contact the system administrator.

To Cancel Restriction, Change the [Department ID Management] Setting.

Log in to Remote UI in System Manager Mode ▶ [Settings/Registration] ▶ [User Management] ▶ [Department ID Management] ▶ [Edit] ▶ select the [Allow Print Jobs with Unknown IDs] and [Allow Scan Jobs with Unknown IDs] checkboxes ▶ [OK]

#703

The machine does not have sufficient free memory.

Is Any Other Data Being Sent?
Wait for sending to be completed before sending again.

Are You Sending an Original with Many Pages?
Divide the original and send it.

Restart the Machine, and Then Send or Save the Data Again.
Restarting the Machine(P. 107)

#752

The SMTP/POP3 server name is not configured correctly, or the machine is not connected correctly to the network.

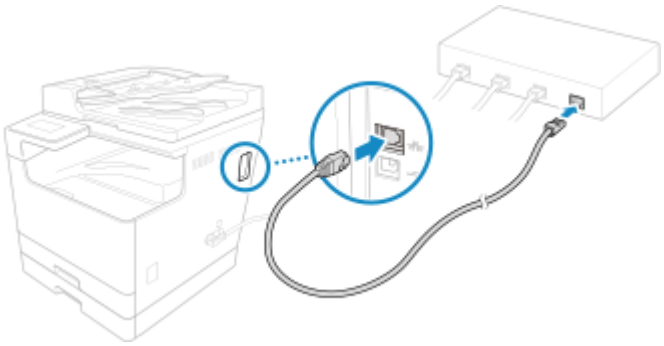
Configure the SMTP or POP3 Server Name Correctly.
Configuring Detailed Information of the E-mail Server (Remote UI)(P. 229)

Check the Network Status and Settings.
If the machine is not connected to a network, reconfigure the network settings.
Checking the Network Status and Settings(P. 97)
Setting Up the Network(P. 59)

#753

The machine was unable to connect to the network due to a disconnected Ethernet cable.

Check That the Ethernet Cable Is Properly Connected.



#755

The TCP/IP is not configured correctly, or the machine was unable to connect to the network due to the set wait time before connection.

Check the Network Status and Settings.
If the machine is not connected to a network, reconfigure the network settings.
Checking the Network Status and Settings(P. 97)
Setting Up the Network(P. 59)

Is There a Set Wait Time Before Connection?
Check whether a wait time is set.

Log in to Remote UI in System Manager Mode ▶ [Settings/Registration] ▶ [Network Settings] ▶ [Waiting Time for Connection at Startup]

On the control panel, select [Menu] in the [Home] screen, and then select [Preferences] to view this information. **[Waiting Time for Connection at Startup](P. 404)**

- If a wait time is set, a connection cannot be established immediately after turning ON the power of the machine. Sending starts after the wait time has elapsed.
- To change the wait time, click [Edit] on the above [Waiting Time for Connection at Startup] screen, enter the wait time, and then click [OK].

#766

The certificate has expired.

Renew the certificate, or use a certificate that is not expired.
Managing and Verifying a Key and Certificate(P. 323)

Are the current date and time on the machine correct?
Check the date and time setitngs. If the settings are not correct, set the time zone, and then set the current date and time. **Setting the Date and Time(P. 365)**

#801

The machine cannot connect to the SMTP server, or the information of the SMTP server or shared folder is not set correctly.

Check the Network Status and Settings.
If the machine is not connected to a network, reconfigure the network settings.
Checking the Network Status and Settings(P. 97)
Setting Up the Network(P. 59)

Set the information of the SMTP server or shared folder correctly.

When Sending an E-mail

Set the information of the SMTP server correctly. **Configuring Detailed Information of the E-mail Server (Remote UI)(P. 229)**

When Saving to a Shared Folder

Use Remote UI to display the Address Book, click the applicable destination, and set the information of the shared folder correctly. **Registering Destinations to the Address Book (Remote UI)(P. 165)**

When Sending an E-mail, Check the Status of the SMTP Server.

- If you receive an error message from the SMTP server, check the details and take action.
- Check that the SMTP server is operating properly on the network. For details about the SMTP server status, contact your provider.

When Saving to a Shared Folder, Check the Status of the Shared Folder and Computer.
Check that both the shared folder and the computer with the shared folder are operating properly.

#802

The SMTP, POP3, or FTP server name is not set correctly.

When Sending an E-mail, Correctly Set the SMTP or POP3 Server Name.
Configuring Detailed Information of the E-mail Server (Remote UI)(P. 229)

When Saving to an FTP Server, Set the FTP Server Name Correctly.
Use Remote UI to display the Address Book, click the applicable destination, and set the server name correctly. **Registering Destinations to the Address Book (Remote UI)(P. 165)**

#804

You do not have permission to access the shared folder, or the destination is not set correctly.

Does the Sending User (User Name Registered as a Destination) Have Write Permission for the Store Location?
If the user does not have permission, grant write permission to the sending user for the store location. For details, contact the network administrator.

Set the Correct Path to the Shared Folder.
Use Remote UI to display the Address Book, click the applicable destination, and set the server name correctly. **Registering Destinations to the Address Book (Remote UI)(P. 165)**

#806

The user name or password to be used to access the shared folder is not set correctly. Alternatively, the destination of the e-mail is not set correctly.

When Saving to a Shared Folder, Correctly Set the User Name and Password to Be Used to Access the Server.
Use Remote UI to display the Address Book, click the applicable destination, and set the user name and password correctly. **Registering Destinations to the Address Book (Remote UI)(P. 165)**

When Sending an E-mail, Specify a Correct E-Mail Address Before Sending.
When you are using a destination in the Address Book, check that the e-mail address registered in the Address Book is correct. **Registering Destinations (Address Book)(P. 156)**

#809

The file could not be saved because a file with the same name already exists on the SMB server.
Delete the file, and scan again.

#810

The machine cannot connect to the POP3 server, or the information of the POP3 server is not set correctly.

Check the Network Status and Settings.

If the machine is not connected to a network, reconfigure the network settings.
Checking the Network Status and Settings(P. 97)
Setting Up the Network(P. 59)

Set the information of the POP3 server correctly.
Configuring Detailed Information of the E-mail Server (Remote UI)(P. 229)

Check the Status of the POP3 Server.
Check that the POP3 server is operating properly on the network. For details about the POP3 server status, contact your provider.

#813

The user name or password to be used for POP3 server authentication is not set correctly.

Set the User Name and Password Correctly.
Configuring Detailed Information of the E-mail Server (Remote UI)(P. 229)

#816

The maximum number of pages that can be printed for the department has been reached.

Check the Usage, and Reset the Count to Zero.
Confirming Usage by Department ID(P. 304)

#818

The received data is in a format that cannot be printed.
Have the sender change the file format and resend the file.

#819

The received data has invalid MIME information and cannot be processed.
Have the sender check the settings and resend the data.

#820

The received data has invalid BASE64 or uuencode data and cannot be processed.
Have the sender check the settings and resend the data.

#821

The received data has a TIFF analysis error and cannot be processed.
Have the sender check the settings and resend the data.

#827

The received data includes unsupported MIME information and cannot be processed.
Have the sender check the settings and resend the data.

#829

The received data exceeds the maximum size that can be received by the machine.

Have the Sender Check and Resend the Data.

The machine prints or saves to memory pages 1 to 999 and deletes page 1,000 and beyond. Have the sender resend page 1,000 and beyond.

#839

The user name or password to be used for SMTP authentication is not set correctly.

Set the User Name and Password Correctly.
Configuring Detailed Information of the E-mail Server (Remote UI)(P. 229)

#841

Communication with the SMTP server is set to be encrypted, but there is no encryption algorithm shared with the SMTP server, so encrypted communication failed. Alternatively, a verify certificate error occurred.

Check the Algorithms Supported by the SMTP Server and Those Supported by the Machine.

- For details about the algorithms supported by the SMTP server, contact your provider.
- For details about the algorithms supported by the machine, see the following:
  Registration of Certificates (User Signature Keys/Certificates, CA Certificates, S/MIME Certificates) (P. 44)

Is an Appropriate CA Certificate Registered?
Check that the CA certificate used for authentication of the SMTP server is registered to the machine.
Registering a Key and Certificate or CA Certificate Obtained from an Issuing Authority(P. 336)

Check the SMTP Server Certificate.
Check that the server certificate is correct and is not a self-signed certificate.

Disable Encryption When Communicating with the SMTP Server
Configuring Detailed Information of the E-mail Server (Remote UI)(P. 229)

#844

Communication with the POP3 server is set to be encrypted using POP authentication before sending data (POP before SMTP), but encrypted communication failed. Alternatively, a verify certificate error occurred.

Is an Appropriate CA Certificate Registered?
Check that the CA certificate used for authentication of the POP3 server is registered to the machine.
Registering a Key and Certificate or CA Certificate Obtained from an Issuing Authority(P. 336)

Check the POP3 Server Certificate.
Check that the server certificate is correct and is not a self-signed certificate.

Disable Encryption When Communicating with the POP3 Server
Configuring Detailed Information of the E-mail Server (Remote UI)(P. 229)

#846

APOP authentication is set to be used to encrypt the password at authentication using POP authentication before sending data (POP before SMTP), but APOP authentication failed.

Disable APOP Authentication.
Configuring Detailed Information of the E-mail Server (Remote UI)(P. 229)

#852

The power of the machine turned OFF for some reason.
Make sure the power plug is firmly inserted into an outlet.

#853

Printing or Secure Print failed for some reason.
If the operation was canceled when print data was being sent from a computer to the machine, try printing again. Otherwise, check the following:

Are You Printing a Large Job?
The data volume may have exceeded the processing capacity of the machine. Reduce the number of pages to print, or print when there is no print data being printed or waiting to be printed.

Is the Data to Be Printed Corrupted?
If the data is corrupted or otherwise damaged, fix the data.

Are You Trying to Print with Secure Print?
The machine may be configured not to use the Secure Print function. Try either of the following methods:

- Enable Secure Print.

  The machine must be restarted to apply the settings.

  Log in to Remote UI in System Manager Mode ▶ [Settings/Registration] ▶ [Secure Print Settings] ▶ [Edit] ▶ select the [Secure Print] checkbox ▶ [OK] ▶ restart the machine

  On the control panel, select [Menu] in the [Home] screen, and then select [Function Settings] to configure the settings. **[Secure Print](P. 428)**

- Print without using the Secure Print function.

Was the Secure Print Data Left for a While?
If printing of the Secure Print data is not performed after a set period of time, the data is deleted from the memory automatically. If the save period elapses and the data is deleted automatically, try printing with Secure Print again.

* You can change the save period (time until the data is deleted). **Changing the Time Period That Print Data with a PIN (Secure Data) Is Saved(P. 212)**

#861

You are using an unsupported printer driver, or the data you are trying to print is corrupted.

Use the printer driver of the machine, and try printing again.
Printing from a Computer(P. 204)

Is the Data to Be Printed Corrupted?
If the data is corrupted or otherwise damaged, fix the data.

#863

An error occurred, preventing printing.

Restart the Machine, and Then Print the Data Again.
Restarting the Machine(P. 107)

#934

The job was deleted by the Auto Delete Suspended Jobs function.

Resolve the Error That Caused the Job to Be Suspended.
Resolve the error, and try printing or copying again.

* Disable the Auto Delete Suspended Jobs function, or change the time until the data is automatically deleted. **[Auto Delete Suspended Jobs](P. 433)**

#995

Sending or receiving of a waiting job was canceled.
Try sending or receiving again, as needed.

Appendix

Appendix 587
- **Manuals of the Machine** 588
- **Using the User's Guide** 589
- **Operation Examples When Using a Computer** 592
- **Environmental Information, Regulations, and Standards** 602
- **Notice** 603
- **Trademarks and Copyrights** 604
- **Third-party Software** 606

Appendix

958J-0H2

In this chapter, you can view the manuals of the machine and the basic operations required when using the machine with a computer.

Manuals of the Machine

Manuals are provided according to your purpose.

Manuals of the Machine(P. 588)

The User's Guide (this manual) contains information on all functions of the machine and specifications as well as how to maintain the machine. You can search for specific information and change the text size and layout.

Using the User's Guide(P. 589)

Basic Operations When Using with a Computer

You must set up a computer to use the machine from the computer and view information set on the machine from the computer. The operations are introduced using Windows and macOS operation examples.

Operation Examples When Using a Computer(P. 592)

Other Information

Environmental Information, Regulations, and Standards(P. 602)
Notice(P. 603)
Trademarks and Copyrights(P. 604)
Third-party Software(P. 606)

Manuals of the Machine

958J-0H3

The manuals below are provided with the machine. Use these according to your purpose.
Click on the icon to display the corresponding manual (PDF).

Important Safety Instructions
This contains required information to prevent injury and accidental damage to property.



Setup Guide
This explains how to set up the machine so that it is ready to use.



User's Guide (this manual)
This describes all the functions of the machine in detail. It also contains the specifications and describes how to maintain the machine. The User's Guide is displayed in a Web browser.
Using the User's Guide(P. 589)

Send Setting Guide
This describes the preparations and settings for sending scanned data by e-mail and saving it to a shared folder.

* Send Function Setting Tool must be downloaded if you need it. The Send Setting Guide can be displayed by starting Send Function Setting Tool.

NOTE

- For details about the drivers, software, and manual of the Application Library, see the online manual site.
https://oip.manual.canon/

Using the User's Guide

958J-0H4

The User's Guide (this manual) contains information on all functions of the machine and specifications as well as how to maintain the machine.
You can use the User's Guide to find useful information through the contents and search function.
* Click [ ] or [ ] at the top of the screen to change between contents and search keyword display.

Screens and Illustrations(P. 589)
Symbols(P. 589)
Key and Button Indicators(P. 590)
Search Function(P. 590)

NOTE

- The User's Guide describes the various functions of all model series including the machine. You can view a table indicating which functions and options are supported for each model. **Supported Functions and Options(P. 3)**

Screens and Illustrations

In the User's Guide, unless otherwise stated, the following are used in the screens and illustrations.

Model
imageRUNNER 2224N

Options
DADF-AY

Duplex Unit-E

Cassette Feeding Module-AK

Computer Operating System
Windows 10

macOS 11

- The screens may vary depending on the model.
- The operations and screens may vary depending on the computer operating system.
- The screens are subject to change due to updates of the drivers and software.

Symbols

The warnings and cautions are also listed in the Important Safety Instructions supplied with the machine. See this for more information. **Manuals of the Machine(P. 588)**

WARNING Indicates a warning concerning operations that may lead to death or serious personal injury if not performed correctly. To ensure that you use the machine safely, always observe these warnings.

CAUTION Indicates a precaution for preventing the risk of personal injury or property damage other than a product fault due to improper use of the machine. To ensure that you use the machine safely, always observe these cautions.

Indicates an operation that must not be performed. Read these items carefully, and make sure not to perform the described operations.

IMPORTANT

Indicates important requirements and restrictions for security and data protection as well as precautions that should be observed. Be sure to read these items to avoid malfunction, fault, or property damage due to incorrect operation.

NOTE

Indicates a clarification of an operation, or contains additional explanations for a procedure.

Key and Button Indicators

The control panel keys and buttons displayed on the screen are indicated as follows:

Control Panel Keys
Indicated with an icon.

Example: Home key



Buttons Displayed on the Control Panel and Computer Screen
Enclosed in square brackets [ ].

Example:

[]

[Cancel] ▶ [Yes]
[Settings applied.]

Search Function

1 Click [] at the top of the screen.

➠ The search keyword input field is displayed at the top left of the screen.

2 Enter a keyword, and click [] or press the [Enter] key on the computer.

- Separate multiple keywords with spaces to search for pages that include all keywords.
- Enclose keywords in double quotation marks (") to search for pages that only contain complete matches including spaces.

3 Click the search result to view the page.

- Click [] to show or hide the search results.

- Click [ ] to display the contents.

Operation Examples When Using a Computer

958J-0H6

When using the machine from a computer, you must configure the settings of the computer according to the function you are using. In addition, you may need the computer information to view the information set on the machine. In this case, use the operation examples below to check the required settings and information on the computer.

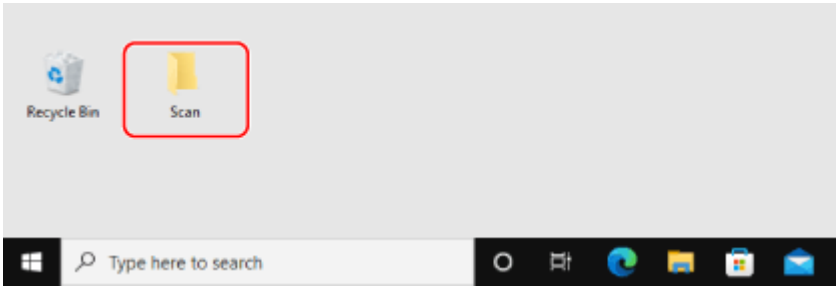
Creating a Shared Folder(P. 592)
Enabling Network Discovery(P. 594)
Displaying a Shared Printer in the Print Server(P. 594)
Viewing the System Information of the Computer(P. 595)
Viewing the Network Connection Information of the Computer(P. 597)
Viewing the Printer Port(P. 599)
Viewing Two-way Communication(P. 600)
Printing a Test Page(P. 600)

Creating a Shared Folder

When Using Windows(P. 592)
When Using macOS(P. 593)

■When Using Windows

1 Create a folder in any location (such as Desktop).



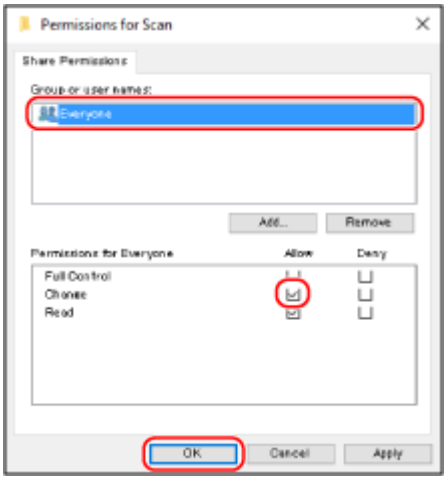
2 Right-click the created folder, and click [Properties].

3 On the [Sharing] tab, click [Advanced Sharing].

➠ The [Advanced Sharing] screen is displayed.

4 Select the [Share this folder] checkbox, and click [Permissions].

5 Configure the access privilege.



1 In [Group or user names], select [Everyone].

2 In [Permissions], select the [Allow] checkbox in [Change].

3 Click [OK].

6 Click [OK] ▶ [Close].

➠ The created folder can be used as a shared folder.

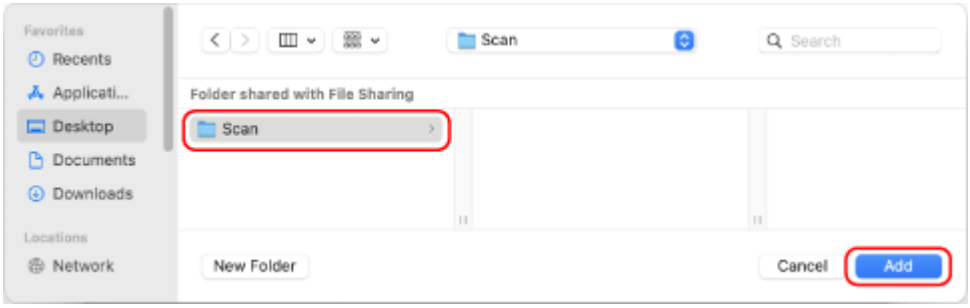
■When Using macOS

1 Click [ ] ▶ [System Preferences] ▶ [Sharing].

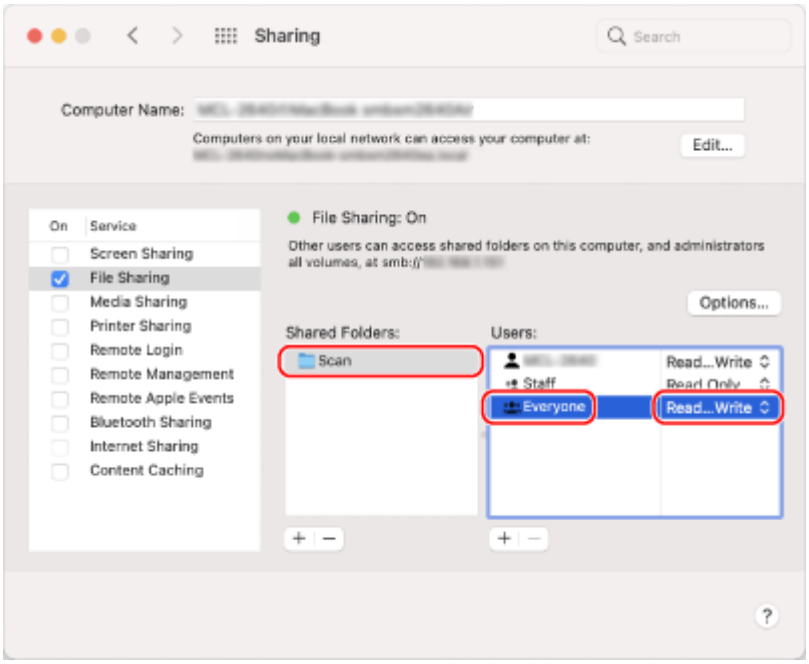
➠ The [Sharing] screen is displayed.

2 Select the [File Sharing] checkbox, and click [+] in [Shared Folders].

3 Create a folder in any location (such as Desktop), and click [Add].



4 Configure the access privilege.



1 In [Shared Folders], select the created folder.

2 In [Users], select [Everyone] ▶ [Read & Write].

5 Close the screen.

➠ The created folder can be used as a shared folder.

Enabling Network Discovery

1 Right-click [⊞] (Start), and click [Network Connections].

➠ The [Status] screen is displayed.

2 Click [Network and Sharing Center] ▶ [Change advanced sharing settings].

➠ The [Advanced sharing settings] screen is displayed.

3 In [Network discovery], select [Turn on network discovery], and click [Save changes].

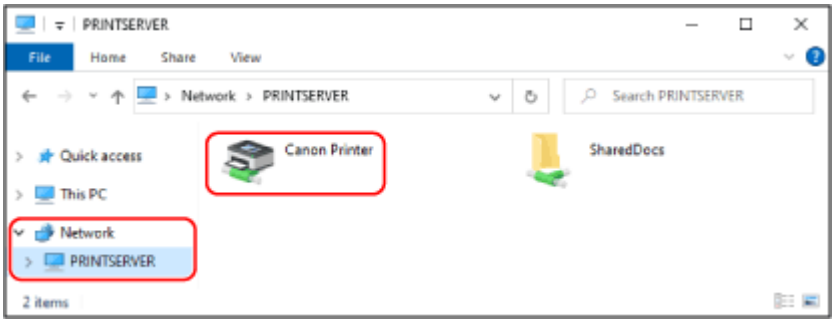
Displaying a Shared Printer in the Print Server

When Using Windows(P. 595)
When Using macOS(P. 595)

■When Using Windows

1 Right-click [⊞] (Start), and click [File Explorer].

2 In [Network], select the print server to display the shared printer.



If nothing is displayed in [Network], enable network discovery. **Enabling Network Discovery(P. 594)**

■When Using macOS

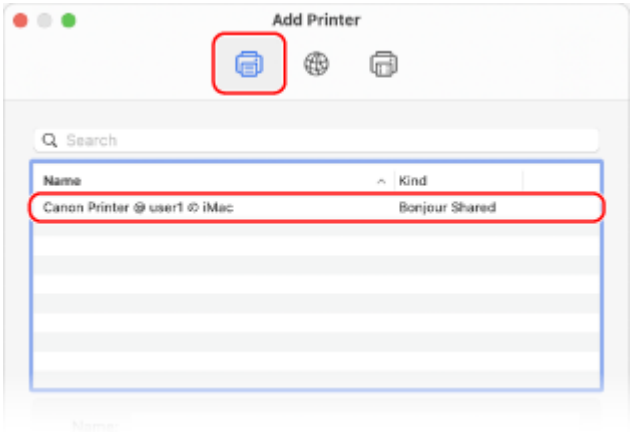
1 Click [ ] ▶ [System Preferences] ▶ [Printers & Scanners].

➠ The [Printers & Scanners] screen is displayed.

2 Click [+] at the bottom left.

➠ The [Add] screen is displayed.

3 Click [ ], to display the shared printer.



Viewing the System Information of the Computer

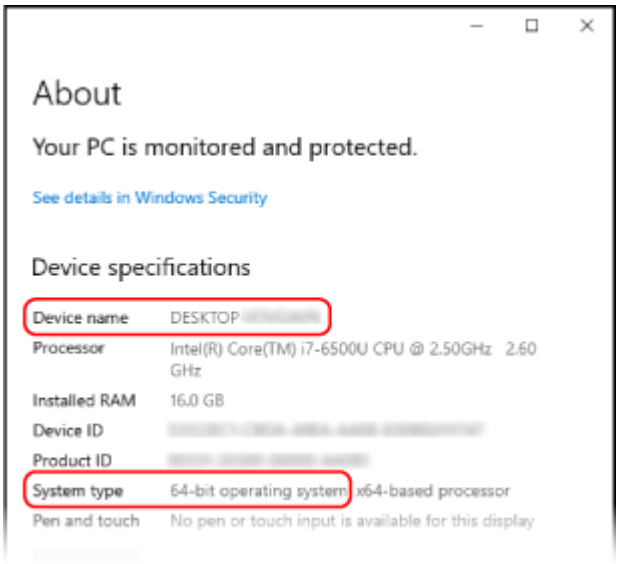
When Using Windows(P. 596)
When Using macOS(P. 596)

■When Using Windows

1 Right-click [⊞] (Start), and click [System].

➠ The [About] screen is displayed.

2 In [Device specifications], view the computer name and operating system version.



- The computer name is displayed in [Device name].
- The operating system version is displayed in [System type].
  If the computer has a 32-bit operating system, "32-bit Operating System" is displayed.
  If the computer has a 64-bit operating system, "64-bit Operating System" is displayed.

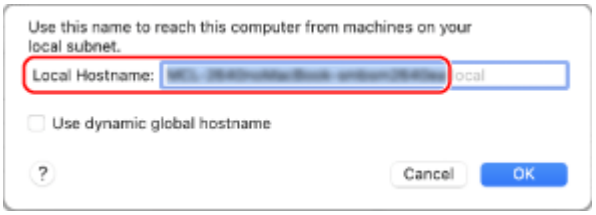
■When Using macOS

1 Click [ ] ▶ [System Preferences] ▶ [Sharing].

➠ The [Sharing] screen is displayed.
The name displayed in [Computer Name] on the [Sharing] screen may not be usable on the network. Use the following procedure to view the computer name used on the network.

2 Click [Edit].

3 In [Local Hostname], view the computer name.



Parts displayed in gray are not included in the computer name.

4 **Click [Cancel].**

Viewing the Network Connection Information of the Computer

When Using Windows(P. 597)
When Using macOS(P. 598)

■When Using Windows

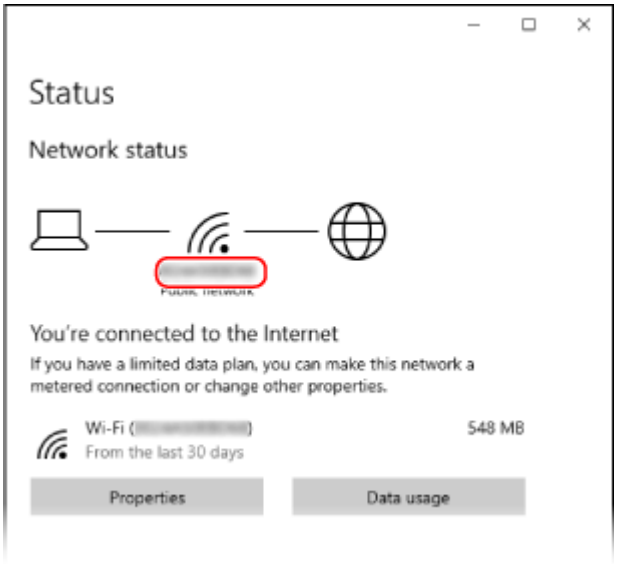
1 **Right-click [⊞] (Start), and click [Network Connections].**

➠ The [Status] screen is displayed.

2 **View the network connection information.**

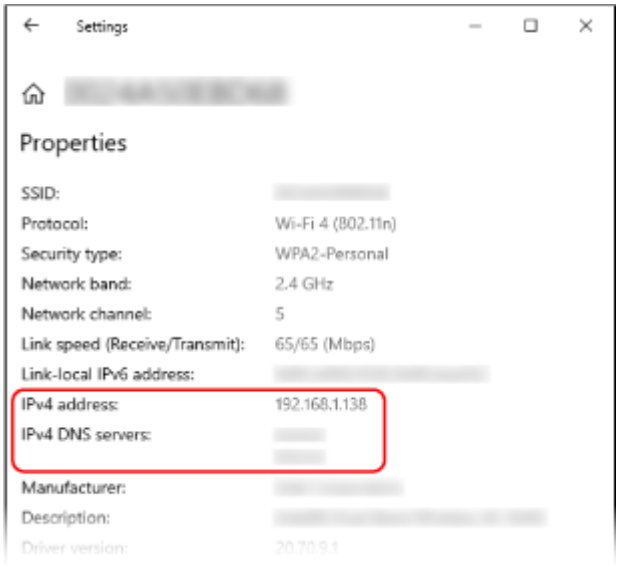
■Viewing the SSID of the Wired LAN

View the SSID in [Network status].



■Viewing the IP Address and DNS Server

1. Click [Properties] for the connected network.
2. In [Properties], view the IP address and DNS server.



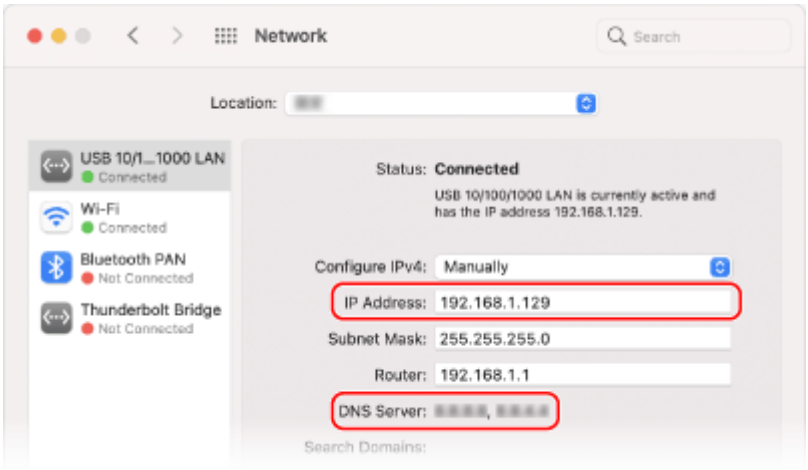
■When Using macOS

1 Click [ ] ▶ [System Preferences] ▶ [Network].

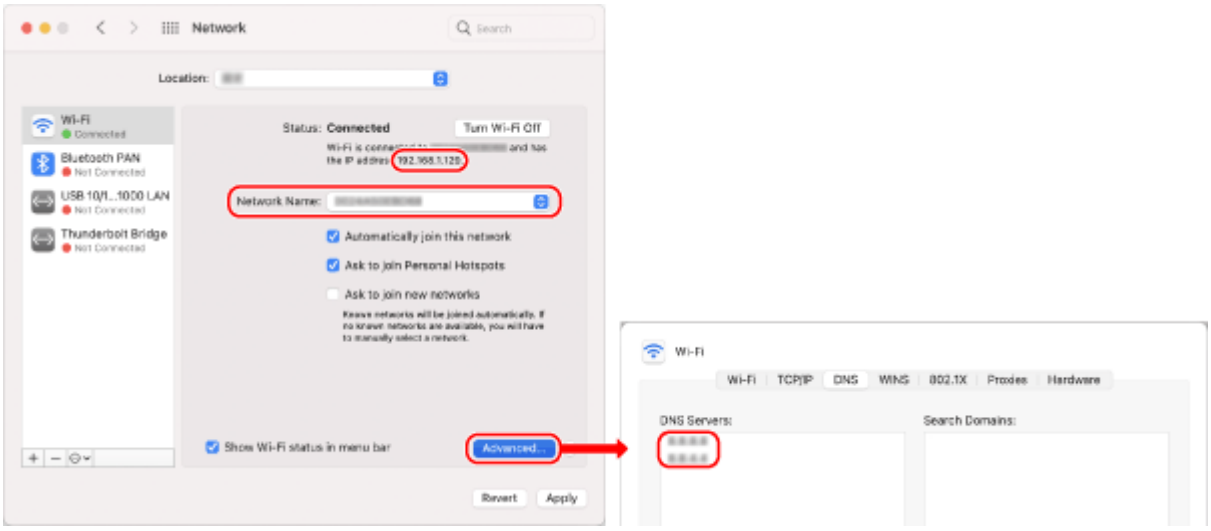
➠ The [Network] screen is displayed.

2 View the IP address, DNS server, and other information.

■For Wired LAN



■For Wireless LAN



- View the SSID in [Network Name].
- View the IP address in [Status].
- Click [Advanced], and view the DNS server on the [DNS] tab.

Viewing the Printer Port

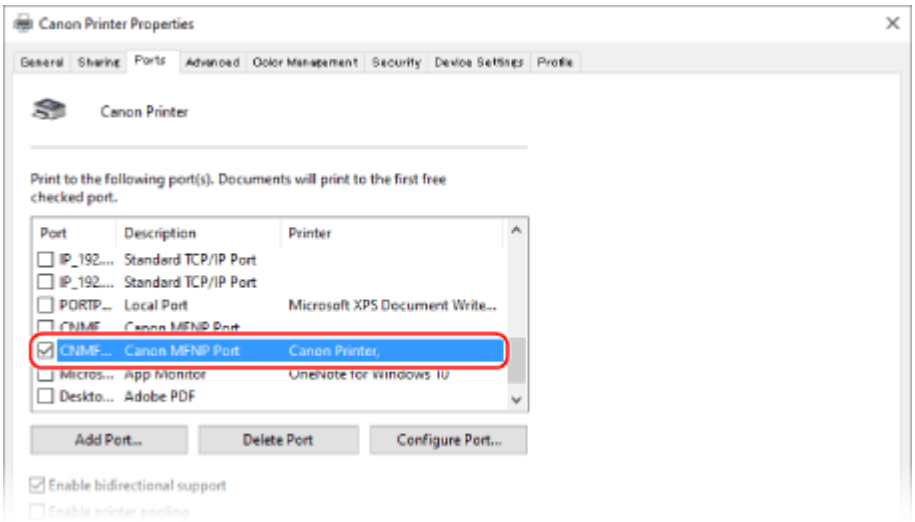
1 **Click [ ] (Start) ▶ [ ] (Settings) ▶ [Devices] ▶ [Printers & scanners].**

➠ The [Printers & scanners] screen is displayed.

2 **Click the printer driver of the machine ▶ [Manage] ▶ [Printer properties].**

➠ The printer driver properties screen is displayed.

3 **On the [Ports] tab, view the port being used.**



NOTE

If the IP Address of the Machine Is Changed

- The required action depends on the port you are using.
  - If [Canon MFNP Port] is displayed in [Description], the connection is maintained as long as the machine and computer belong to the same subnet, so no action is required on the computer.
  - If [Standard TCP/IP Port] is displayed in [Description], you must add a new port. **Adding a Port(P. 193)**

Viewing Two-way Communication

1 Click [ ] (Start) ▶ [ ] (Settings) ▶ [Devices] ▶ [Printers & scanners].

➡ The [Printers & scanners] screen is displayed.

2 Click the printer driver of the machine ▶ [Manage] ▶ [Printer properties].

➡ The printer driver properties screen is displayed.

3 On the [Ports] tab, check that the [Enable bidirectional support] checkbox is selected.

Printing a Test Page

Required Preparations

- Load A4 size paper in the paper drawer. **Loading Paper in the Paper Drawer(P. 131)**

When Using Windows(P. 600)
When Using macOS(P. 601)

■When Using Windows

1 Click [ ] (Start) ▶ [ ] (Settings) ▶ [Devices] ▶ [Printers & scanners].

➡ The [Printers & scanners] screen is displayed.

2 Click the printer driver of the machine ▶ [Manage] ▶ [Printer properties].

➡ The printer driver properties screen is displayed.

3 On the [General] tab, click [Print Test Page].

➡ When the print data is sent correctly, a test page is printed from the machine.

■When Using macOS

1 **Click [ ] ▶ [System Preferences] ▶ [Printers & Scanners].**

➡ The [Printers & Scanners] screen is displayed.

2 **Select the machine, and click [Open Print Queue].**

3 **From the [Printer] menu, click [Print Test Page].**

➡ When the print data is sent correctly, a test page is printed from the machine.

Environmental Information, Regulations, and Standards

958J-0H7

■IPv6 Ready Logo

The protocol stack included in this product has obtained the IPv6 Ready Logo Phase-2 established by the IPv6 Forum.

■E-Waste Rules

India only

This product is not to be disposed of with your household waste, according to the E-Waste (Management) Rules, 2016. This product should be handed over to a designated collection point, e.g., to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information regarding return and recycling of WEEE products, please visit https://in.canon/en/consumer/web/e-waste or write to us at cipl.ewaste@canon.co.in.

Also, this product complies with the "E-Waste (Management) Rules, 2016" and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1 % by weight and 0.01 % by weight for Cadmium, except for the exemptions set in Schedule II of the Rule.

■When disposing of used toner cartridges

- To protect the environment and make more effective use of resources, Canon promotes the recovery and recycling of used toner cartridges. Please cooperate in the recovery of toner cartridges (resource reuse). For details on resource reuse, see the Canon website:
  global.canon/ctc
  When disposing of toner cartridges, pack them in their original packaging to prevent toner dispersal and dispose of the cartridges in accordance with your local government instructions.

Notice

958J-0H8

- The information in this document is subject to change without notice.
- CANON INC. MAKES NO WARRANTY OF ANY KIND WITH REGARD TO THIS MANUAL, EITHER EXPRESS OR IMPLIED, EXCEPT AS STIPULATED HEREIN, INCLUDING WITHOUT LIMITATION THEREOF WARRANTIES AS TO MARKETABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OF USE, OR NON-INFRINGEMENT OF PATENT RIGHTS. CANON INC. SHALL NOT BE LIABLE FOR ANY DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE, NOR FOR LOSSES OR EXPENSES RESULTING FROM THE USE OF THIS MANUAL.
- If you are unable to view the manual in PDF format, download Adobe Acrobat Reader from the Adobe Systems website (https://get.adobe.com/reader/).

Trademarks and Copyrights

958J-0H9

■ Trademarks

Adobe, Acrobat and Reader are registered trademarks of Adobe Systems Incorporated in the United States and/or other countries.
Apple, Bonjour, iPad, iPhone, iPod touch, Mac, macOS, OS X, and Safari are trademarks of Apple Inc. AirPrint and the AirPrint logo are trademarks of Apple Inc.
iOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.
Mopria®, the Mopria® Logo and the Mopria® Alliance logo are registered trademarks and service marks of Mopria Alliance, Inc. in the United States and other countries. Unauthorized use is strictly prohibited.
Google Chrome, Chrome OS, Chromebook, and Android are trademarks of Google LLC.
This product contains the Universal Font Scaling Technology or UFST® under license from Monotype Imaging, Inc.
UFST® is a trademark of Monotype Imaging, Inc. registered in the United States Patent and Trademark Office and may be registered in certain jurisdictions.
UFST: Copyright © 1989 - 1996, 1997, 2003, 2004, 2008, 2014 all rights reserved, by Monotype Imaging Inc.



The PDF logo is a trademark or registered trademark of Adobe Systems Incorporated in the United States and other countries.

Copyright © 2008 Adobe Systems Incorporated. All rights reserved.

Protected by U.S. Patents 6,185,684; 6,205,549; 7,213,269; 7,272,628; 7,278,168; Patents pending in the U.S. and other countries.

All instances of the name PostScript in the text are references to the PostScript language as defined by Adobe Systems Incorporated unless otherwise stated. The name PostScript also is used as a product trademark for Adobe Systems' implementation of the PostScript language interpreter.

Except as otherwise stated, any reference to a "PostScript printing device," "PostScript display device," or similar item refers to a printing device, display device or item (respectively) that contains PostScript technology created or licensed by Adobe Systems Incorporated and not to devices or items that purport to be merely compatible with the PostScript language.

Adobe, the Adobe logo, PostScript, the PostScript Logo, and PostScript 3 are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

All other trademarks are the property of their respective owners.

All brand names and product names appearing on this document are registered trademarks or trademarks of their respective owners.

All other trademarks are the property of their respective owners.

■ Copyright

Unauthorized reproduction of the contents of this document in whole or in part is prohibited.

V_221018

Third-party Software

958J-0HA

For details about third-party software, click the following icon:

Third-Party Services



Third-Party Software Included in This Manual



The Software Subjected to Other License Conditions

Please refer to Contents of Software and respective License terms below, for more detail and corresponding license conditions.

Contents of Software

Names of Software

1. Adobe PDF Scan Library 2
2. expat 5
3. Net-SNMP 6
4. OpenSSL 18

1.Adobe PDF Scan Library

Portions use software under the following terms:

This product contains either BSAFE and/or TIPEM software by RSA Security Inc.

This product includes software developed by the Apache Software Foundation (http://www.apache.org/).
Copyright (c) 1998-2000 The Apache Software Foundation. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The end-user documentation included with the redistribution, if any, must include the following acknowledgment:
"This product includes software developed by the Apache Software Foundation (http://www.apache.org/)."

Alternately, this acknowledgment may appear in the software itself, if and wherever such third-party acknowledgments normally appear.
4. The names "Xerces" and "Apache Software Foundation" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact apache@apache.org.
5. Products derived from this software may not be called "Apache", nor may "Apache" appear in their name, without prior written permission of the Apache Software Foundation.

THIS SOFTWARE IS PROVIDED ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE APACHE SOFTWARE FOUNDATION OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT

(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This software consists of voluntary contributions made by many individuals on behalf of the Apache Software Foundation and was originally based on software copyright (c) 1999, International Business Machines, Inc., http://www.ibm.com. For more information on the Apache Software Foundation, please see <http://www.apache.org/>.

March 27, 2003

Portions of this product are based on Modifications created from the Original Code known as the "Sablotron XSLT Processor". The Sablotron XSLT Processor is subject to the Mozilla Public License Version 1.1 (the "License"). You may obtain a copy of
the License at http://www.mozilla.org/MPL/

Software distributed under the License is distributed on an "AS IS" basis, WITHOUT WARRANTY OF ANY KIND, either express or implied. See the License for the specific language governing rights and limitations under the License.

The Original Code is the Sablotron XSLT Processor.

The Initial Developer of the Original Code is Ginger Alliance Ltd. Portions created by Ginger Alliance are Copyright (C) 2000 Ginger Alliance Ltd. All Rights Reserved.

Pursuant to sections 3.2 and 3.6 of the License, the Modifications created by Adobe Systems Incorporated are available as Source Code. The Modifications may be downloaded via the Internet from:

http://partners.adobe.com/asn/tech/xml/sablotron/index.jsp

The Original Code may be downloaded via the Internet from:

https://sourceforge.net/projects/sablotron/

Portions Copyright (c) 1997-1999 Silicon Graphics Computer Systems, Inc.

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies

and that both that copyright notice and this permission notice appear in supporting documentation. Silicon Graphics makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

The Loki Library

Portions Copyright (c) 2001 by Andrei Alexandrescu . This code accompanies the book: Alexandrescu, Andrei. "Modern C++ Design: Generic Programming and Design Patterns Applied". Portions Copyright (c) 2001. Addison-Wesley. Permission to use, copy, modify, distribute and sell this software for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. The author or Addison-Wesley Longman make no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Updated Information/Additional Third Party Code Information available at http://www.adobe.com/go/thirdparty .

2.expat

Copyright (c) 1998, 1999, 2000 Thai Open Source Software Center Ltd
and Clark Cooper
Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006 Expat maintainers.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

3.Net-SNMP

Various copyrights apply to this package, listed in various separate parts below. Please make sure that you read all the parts.

---- Part 1: CMU/UCD copyright notice: (BSD like) -----

Copyright 1989, 1991, 1992 by Carnegie Mellon University

Derivative Work - 1996, 1998-2000
Copyright 1996, 1998-2000 The Regents of the University of California

All Rights Reserved

Permission to use, copy, modify and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of CMU and The Regents of the University of California not be used in advertising or publicity pertaining to distribution of the software without specific written permission.

CMU AND THE REGENTS OF THE UNIVERSITY OF CALIFORNIA DISCLAIM ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL CMU OR THE REGENTS OF THE UNIVERSITY OF CALIFORNIA BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM THE LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

---- Part 2: Networks Associates Technology, Inc copyright notice (BSD) -----

Copyright (c) 2001-2003, Networks Associates Technology, Inc

All rights reserved.

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice,
  this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright
  notice, this list of conditions and the following disclaimer in the
  documentation and/or other materials provided with the distribution.

* Neither the name of the Networks Associates Technology, Inc nor the
  names of its contributors may be used to endorse or promote
  products derived from this software without specific prior written
  permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS
IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO,
THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR
PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR
CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL,
EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO,
PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS;
OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY,
WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR
OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF
ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 3: Cambridge Broadband Ltd. copyright notice (BSD) -----

Portions of this code are copyright (c) 2001-2003, Cambridge Broadband Ltd.
All rights reserved.

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice,

this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* The name of Cambridge Broadband Ltd. may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDER ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 4: Sun Microsystems, Inc. copyright notice (BSD) -----

Copyright (c) 2003 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.

Use is subject to license terms below.

This distribution may include materials developed by third parties.

Sun, Sun Microsystems, the Sun logo and Solaris are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice,
  this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright
  notice, this list of conditions and the following disclaimer in the
  documentation and/or other materials provided with the distribution.

* Neither the name of the Sun Microsystems, Inc. nor the
  names of its contributors may be used to endorse or promote
  products derived from this software without specific prior written
  permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 5: Sparta, Inc copyright notice (BSD) -----

Copyright (c) 2003-2013, Sparta, Inc
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice,
  this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright
  notice, this list of conditions and the following disclaimer in the
  documentation and/or other materials provided with the distribution.

* Neither the name of Sparta, Inc nor the names of its contributors may
  be used to endorse or promote products derived from this software
  without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 6: Cisco/BUPTNIC copyright notice (BSD) -----

Copyright (c) 2004, Cisco, Inc and Information Network
Center of Beijing University of Posts and Telecommunications.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice,
  this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright
  notice, this list of conditions and the following disclaimer in the
  documentation and/or other materials provided with the distribution.

* Neither the name of Cisco, Inc, Beijing University of Posts and
  Telecommunications, nor the names of their contributors may
  be used to endorse or promote products derived from this software
  without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 7: Fabasoft R&D Software GmbH & Co KG copyright notice (BSD) -----

Copyright (c) Fabasoft R&D Software GmbH & Co KG, 2003
oss@fabasoft.com
Author: Bernhard Penz <bernhard.penz@fabasoft.com>

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* The name of Fabasoft R&D Software GmbH & Co KG or any of its subsidiaries, brand or product names may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDER ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF

SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 8: Apple Inc. copyright notice (BSD) -----

Copyright (c) 2007 Apple Inc. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of Apple Inc. ("Apple") nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY APPLE AND ITS CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL APPLE OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 9: ScienceLogic, LLC copyright notice (BSD) -----

Copyright (c) 2009, ScienceLogic, LLC
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of ScienceLogic, LLC nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 10: Lennart Poettering copyright notice (BSD-like) -----

Copyright 2010 Lennart Poettering

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files

(the "Software"), to deal in the Software without restriction,
including without limitation the rights to use, copy, modify, merge,
publish, distribute, sublicense, and/or sell copies of the Software,
and to permit persons to whom the Software is furnished to do so,
subject to the following conditions:

The above copyright notice and this permission notice shall be
included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,
EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF
MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND
NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS
BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN
ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN
CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE
SOFTWARE.

---- Part 11: IETF copyright notice (BSD) -----

Copyright (c) 2013 IETF Trust and the persons identified as authors of
the code. All rights reserved.

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions are
met:

* Redistributions of source code must retain the above copyright notice,
this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright
notice, this list of conditions and the following disclaimer in the
documentation and/or other materials provided with the distribution.

* Neither the name of Internet Society, IETF or IETF Trust, nor the
names of specific contributors, may be used to endorse or promote
products derived from this software without specific prior written
permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 12: Arista Networks copyright notice (BSD) ----

Copyright (c) 2013, Arista Networks, Inc.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of Arista Networks, Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT,

INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 13: VMware, Inc. copyright notice (BSD) -----

Copyright (c) 2016, VMware, Inc.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of VMware, Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 14: USC/Information Sciences Institute copyright notice (BSD) -----

Copyright (c) 2017-2018, Information Sciences Institute
All rights reserved.

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice,
  this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright
  notice, this list of conditions and the following disclaimer in the
  documentation and/or other materials provided with the distribution.

* Neither the name of Information Sciences Institue nor the names of its
  contributors may be used to endorse or promote products derived from
  this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS
IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO,
THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR
PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR
CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL,
EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO,
PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS;
OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY,
WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR
OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF
ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

4.OpenSSL

OpenSSL License

```
/*
 ====================================================================
 =======
 * Copyright (c) 1998-2018 The OpenSSL Project.  All rights reserved.
 *
 * Redistribution and use in source and binary forms, with or without
 * modification, are permitted provided that the following conditions
 * are met:
 *
 * 1. Redistributions of source code must retain the above copyright
 *    notice, this list of conditions and the following disclaimer.
 *
 * 2. Redistributions in binary form must reproduce the above copyright
 *    notice, this list of conditions and the following disclaimer in
 *    the documentation and/or other materials provided with the
 *    distribution.
 *
 * 3. All advertising materials mentioning features or use of this
 *    software must display the following acknowledgment:
 *    "This product includes software developed by the OpenSSL Project
 *    for use in the OpenSSL Toolkit. (http://www.openssl.org/)"
 *
 * 4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to
 *    endorse or promote products derived from this software without
 *    prior written permission. For written permission, please contact
 *    openssl-core@openssl.org.
 *
 * 5. Products derived from this software may not be called "OpenSSL"
 *    nor may "OpenSSL" appear in their names without prior written
 *    permission of the OpenSSL Project.
 *
 * 6. Redistributions of any form whatsoever must retain the following
```

```
 *      acknowledgment:
 *      "This product includes software developed by the OpenSSL Project
 *      for use in the OpenSSL Toolkit (http://www.openssl.org/)"
 *
 * THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS'' AND ANY
 * EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
 * IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR
 * PURPOSE ARE DISCLAIMED.   IN NO EVENT SHALL THE OpenSSL PROJECT OR
 * ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
 * SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT
 * NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;
 * LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
 * HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT,
 * STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
 * ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED
 * OF THE POSSIBILITY OF SUCH DAMAGE.
 *
================================================================
=======
 *
 * This product includes cryptographic software written by Eric Young
 * (eay@cryptsoft.com).   This product includes software written by Tim
 * Hudson (tjh@cryptsoft.com).
 *
 */

 Original SSLeay License
 -----------------------

/* Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)
 * All rights reserved.
 *
 * This package is an SSL implementation written
 * by Eric Young (eay@cryptsoft.com).
 * The implementation was written so as to conform with Netscapes SSL.
 *
 * This library is free for commercial and non-commercial use as long as
 * the following conditions are aheared to.   The following conditions
```

* apply to all code found in this distribution, be it the RC4, RSA,
* lhash, DES, etc., code; not just the SSL code. The SSL documentation
* included with this distribution is covered by the same copyright terms
* except that the holder is Tim Hudson (tjh@cryptsoft.com).
*
* Copyright remains Eric Young's, and as such any Copyright notices in
* the code are not to be removed.
* If this package is used in a product, Eric Young should be given attribution
* as the author of the parts of the library used.
* This can be in the form of a textual message at program startup or
* in documentation (online or textual) provided with the package.
*
* Redistribution and use in source and binary forms, with or without
* modification, are permitted provided that the following conditions
* are met:
* 1. Redistributions of source code must retain the copyright
*   notice, this list of conditions and the following disclaimer.
* 2. Redistributions in binary form must reproduce the above copyright
*   notice, this list of conditions and the following disclaimer in the
*   documentation and/or other materials provided with the distribution.
* 3. All advertising materials mentioning features or use of this software
*   must display the following acknowledgement:
*   "This product includes cryptographic software written by
*   Eric Young (eay@cryptsoft.com)"
*   The word 'cryptographic' can be left out if the rouines from the library
*   being used are not cryptographic related :-).
* 4. If you include any Windows specific code (or a derivative thereof) from
*   the apps directory (application code) you must include an acknowledgement:
*   "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"
*
* THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS'' AND
* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
* ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE
* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT

```
* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
* SUCH DAMAGE.
*
* The licence and distribution terms for any publically available version or
* derivative of this code cannot be changed.  i.e. this code cannot simply be
* copied and put under another distribution licence
* [including the GNU Public Licence.]
*/
```

This Font Software is licensed under the SIL Open Font License, Version 1.1.

This license is copied below, and is also available with a FAQ at: http://scripts.sil.org/OFL

SIL OPEN FONT LICENSE Version 1.1 - 26 February 2007

PREAMBLE
The goals of the Open Font License (OFL) are to stimulate worldwide development of collaborative font projects, to support the font creation efforts of academic and linguistic communities, and to provide a free and open framework in which fonts may be shared and improved in partnership with others.

The OFL allows the licensed fonts to be used, studied, modified and redistributed freely as long as they are not sold by themselves. The fonts, including any derivative works, can be bundled, embedded, redistributed and/or sold with any software provided that any reserved names are not used by derivative works. The fonts and derivatives, however, cannot be released under any other type of license. The requirement for fonts to remain under this license does not apply to any document created using the fonts or their derivatives.

DEFINITIONS
"Font Software" refers to the set of files released by the Copyright Holder(s) under this license and clearly marked as such. This may include source files, build scripts and documentation.

"Reserved Font Name" refers to any names specified as such after the copyright statement(s).

"Original Version" refers to the collection of Font Software components as distributed by the Copyright Holder(s).

"Modified Version" refers to any derivative made by adding to, deleting, or substituting -- in part or in whole -- any of the components of the Original Version, by changing formats or by porting the Font Software to a new environment.

"Author" refers to any designer, engineer, programmer, technical writer or other person who contributed to the Font Software.

PERMISSION & CONDITIONS
Permission is hereby granted, free of charge, to any person obtaining a copy of the Font Software, to use, study, copy, merge, embed, modify, redistribute, and sell modified and unmodified copies of the Font Software, subject to the following conditions:

1) Neither the Font Software nor any of its individual components, in Original or Modified Versions, may be sold by itself.

2) Original or Modified Versions of the Font Software may be bundled, redistributed and/or sold with any software, provided that each copy contains the above copyright notice and this license. These can be included either as stand-alone text files, human-readable headers or in the appropriate machine-readable metadata fields within text or binary files as long as those fields can be easily viewed by the user.

3) No Modified Version of the Font Software may use the Reserved Font Name(s) unless explicit written permission is granted by the corresponding Copyright Holder. This restriction only applies to the primary font name as presented to the users.

4) The name(s) of the Copyright Holder(s) or the Author(s) of the Font Software shall not be used to promote, endorse or advertise any Modified Version, except to acknowledge the contribution(s) of the Copyright Holder(s) and the Author(s) or with their explicit written permission.

5) The Font Software, modified or unmodified, in part or in whole, must be distributed entirely under this license, and must not be distributed under any other license. The requirement for fonts to remain under this license does not apply to any document created using the Font Software.

TERMINATION
This license becomes null and void if any of the above conditions are not met.

DISCLAIMER
THE FONT SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF COPYRIGHT, PATENT, TRADEMARK, OR OTHER RIGHT. IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, INCLUDING ANY GENERAL, SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF THE USE OR INABILITY TO USE THE FONT SOFTWARE OR FROM OTHER DEALINGS IN THE FONT SOFTWARE.