



imageCLASS

LBP172dw

User's Guide

Contents

About the Machine	2
Supported Functions	3
System Manager ID and PIN	4
Measures to Prevent Unauthorized Access	5
Names of Parts and Their Functions	7
Front Side	8
Rear Side	9
Control Panel	10
Paper Drawer	12
Usable Paper	13
Precautions When Handling Paper	16
Specifications	17
Basic Specifications	18
Print Specifications	20
Network Specifications	22
Security and Management Function Specifications	23
Supported Environment	26
Recommended Functions	27
Cost Savings	28
Making Operations More Efficient	29
Setting Up	31
Configuring the Default Settings (Setup Guide)	32
Configuring the Initial Settings for Remote UI and Web Service Usage	35
Setting Up the Network	37
Selecting Wired or Wireless LAN	39
Connecting to a Wired LAN	40
Connecting to a Wireless LAN	41
Connecting to a Wireless LAN by Using the Router Button (Push Button Mode)	44
Connecting to a Wireless LAN by Entering a PIN Code (WPS PIN Code Mode)	46
Connecting to a Wireless LAN by Searching for a Router (Access Point Setup Method)	48
Connecting to a Wireless LAN by Setting the Details (Manual Setup Method)	50
Setting IPv4 Addresses	53
Setting IPv6 Addresses	55
Configuring Your Machine for Your Network Environment	57
Manually Configuring the Ethernet Settings	58
Configuring DNS	59
Configuring SMB	62
Configuring WINS	63
Configuring SNMP	64
Configuring SNTP	67
Checking the Network Status and Settings	69

Installing Software and Drivers to the Computer	72
Basic Operations	74
Turning ON and OFF the Machine	75
Turning ON the Machine	76
Turning OFF the Machine	77
Restarting the Machine	78
Reducing Power Consumption (Sleep Mode)	79
Using the Control Panel	81
Screens Displayed on the Control Panel	82
[Home] Screen	84
[Status Monitor] Screen	85
How to Operate the Control Panel	87
Entering Characters	88
Logging In to the Machine	89
Loading Paper	90
Loading Paper in the Paper Drawer	91
Preparations and Orientation for Loading Envelopes	96
Orientation for Loading Paper with a Logo	98
Specifying the Paper Size and Type	100
Setting the Paper Size and Type for the Paper Drawer	101
Registering Non-standard Size Paper (Custom Paper)	103
Hiding Unused Paper Sizes	105
Reducing the Operation Sound (Quiet Mode)	106
Printing	109
Printing Preparations	110
Preparing to Print from a Computer	111
Configuring a Printer Port (Windows)	112
Setting Up a Print Server	115
Printing from a Computer	118
Registering Non-standard Size Paper to the Computer (Custom Size)	121
Canceling Printing	123
Viewing the Print Job Status and Log	125
Linking with Mobile Devices and Integrating with a Cloud Service	127
Preparations for Linking with Mobile Devices and Integrating with a Cloud Service	128
Preparations for Direct Connection	129
Preparations for Using Universal Print	131
Registering the Machine to Microsoft Entra ID	132
Registering the Machine to the Computer	135
Preparations for Using AirPrint	136
Connecting a Mobile Device to the Machine	139
Connecting a Mobile Device via Wireless LAN Router (LAN Connection)	140
Connecting a Mobile Device Directly to the Machine (Direct Connection)	141

Using a Dedicated Application to Print (Canon PRINT)	143
Using the Cloud Integration Service to Print	144
Printing with Universal Print	145
Using AirPrint Application to Print Data	146
Printing from an Android Device	149
Printing from a Chrome OS Device	150

Security 152

Setting the Department ID and PIN for the Administrator	153
Protecting the Network	155
Setting the Firewall	156
Changing the Port Number	159
Using a Proxy	160
Using TLS	162
Using IEEE 802.1X	164
Managing and Verifying a Key and Certificate	166
Generating a Key and Certificate	167
Generating a Key and Certificate Signing Request (CSR) and Obtaining and Registering a Certificate	169
Registering a Key and Certificate or CA Certificate Obtained from an Issuing Authority	172
Verifying a Received Certificate with OCSP	174
Preventing Leaking Information	175
Preventing Unauthorized Use	176
Restricting Use of Remote UI	177
Restricting Use from a Mobile Device	179
Preventing Connection to Computer via USB Port	180
Configuring LPD, RAW, or WSD	181
Disabling HTTP Communication	183

Managing the Machine 185

Setting the Date and Time	186
Managing the Machine from a Computer (Remote UI)	187
Starting Remote UI	188
Portal Page of Remote UI	190
Checking Usage and Logs with Remote UI	192
Monitoring the Usage	194
Checking the Number of Printed Pages (Check Counter)	195
Printing and Viewing Reports and Lists	196
Changing the Report and List Print Settings	198
Updating the Firmware	199
Initializing the Settings and Data	202

Settings Menu Items 205

[Preferences]	206
[Display Settings]	207

[Timer/Energy Settings]	210
[Network]	213
[Wireless LAN Settings]	218
[TCP/IP Settings]	220
[External Interface]	226
[Accessibility]	227
[Adjustment/Maintenance]	229
[Adjust Image Quality]	230
[Special Processing]	231
[Maintenance]	235
[Function Settings]	236
[Common]	237
[Paper Feed Settings]	238
[Print Settings]	239
[Printer]	240
[Printer Settings]	241
[PDL Selection (Plug and Play)]	251
[Management Settings]	252
[User Management]	254
[Device Management]	255
[Remote UI Settings/Update Firmware]	257
[Remote UI Settings]	258
[Data Management]	259
[Security Settings]	260
[Authentication/Password Settings]	262
[Toner Delivery Settings]	263

Maintenance 265

Cleaning the Machine	267
Cleaning the Surface of the Machine	268
Cleaning the Fixing Assembly	269
Cleaning the Drum	270
Replacing Consumables	271
Replacing the Toner Cartridge	272
Checking the Remaining Amount of Consumables	277
List of Consumables	278
Adjusting the Print Density	280
Moving the Machine	281

Troubleshooting 285

Paper Jams	286
Paper Jams in the Paper Drawer, Output Tray, Inside the Machine, and in the Rear Side	287
Paper Jams That Occur Repeatedly	290
Problems with Printing Results	292
Toner Smudges and Splatters Appear	294

Streaks Appear	295
Printing Is Uneven	297
Printed Paper Is Blank	299
Smudge Marks Appear on the Edge of Printouts	300
Text or Images Are Blurry	301
Printouts Have Ghost Images	303
Printouts Are Faded	305
The Edge of the Page Is Not Printed	307
The Background Is Generally Dark	308
White Spots Appear	309
Smudge Marks Appear on the Back Side of Printouts	311
Printouts Are Skewed	312
The Printed Barcode Cannot be Scanned	313
Paper and Paper Feeding Problems	314
Paper Creases	315
Paper Curls	316
Paper Is Not Fed or Two or More Sheets Are Fed Together	317
Paper Drawer Does Not Fit in the Machine	318
Setting Up	319
The Machine Connected via WSD Port Is Not Displayed During Driver Installation	320
Cannot Connect to Wireless LAN	321
Network	322
Cannot Switch to Wireless LAN	323
Cannot Find the Print Server to Connect to	324
Cannot Connect to a Shared Printer	325
Cannot Find the IP Address of the Machine	326
AirPrint Does Not Work	327
Printing	328
Cannot Print	329
Cannot Print (Wireless LAN)	330
Cannot Print (Wired LAN)	332
Cannot Print (USB Connection)	333
Cannot Print (via Print Server)	334
Printing Is Slow	335
Management Functions and Environment Settings	336
Cannot Access Remote UI	337
Changing the Time Until Sleep Mode	338
Lost Department ID or PIN for the Administrator	339
Checking the Items That Can Be Configured on the Machine and Their Settings	340
A Message Appears	341
An Error Code Is Displayed	353
If the Problem Persists	356

Appendix	358
Manuals of the Machine	359
Using the User's Guide	360
Operation Examples When Using a Computer	362
Environmental Information, Regulations, and Standards	372
Notice	373
Trademarks and Copyrights	374
Third-party Software	376

About the Machine

- About the Machine** 2
 - Supported Functions** 3
 - System Manager ID and PIN** 4
 - Measures to Prevent Unauthorized Access** 5
 - Names of Parts and Their Functions** 7
 - Front Side 8
 - Rear Side 9
 - Control Panel 10
 - Paper Drawer 12
 - Usable Paper** 13
 - Precautions When Handling Paper 16
 - Specifications** 17
 - Basic Specifications 18
 - Print Specifications 20
 - Network Specifications 22
 - Security and Management Function Specifications 23
 - Supported Environment 26
 - Recommended Functions** 27
 - Cost Savings 28
 - Making Operations More Efficient 29

About the Machine

A19C-000

Before using the machine, check the basic information of the machine such as the supported functions, 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 vary depending on the model. Check the list for details.

▶Supported Functions(P. 3)

Check the names of parts, usable paper, and specifications of functions, as needed.

▶Names of Parts and Their Functions(P. 7)

▶Usable Paper(P. 13)

▶Specifications(P. 17)

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. 4)

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. 5)

Useful Tips

Introduces recommended functions useful for digitizing documents, reducing costs, and making operations more efficient.

▶Recommended Functions(P. 27)

Supported Functions

A19C-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 are supported by your model.

Supported Functions(P. 3)

Supported Functions

✓: Supported —: Not supported

Function	LBP172dw
Print	✓
2-sided Printing	✓
Wired LAN connection	✓
Wireless LAN connection	✓
USB connection	✓
Remote UI	✓
Keys and certificates	✓
Linking with mobile devices	✓
Display	Black and white LCD
Default System Manager ID	Not specified
Default System Manager PIN	Not specified
Toner Replenishment Service	✓

NOTE

- For details about the types of available drivers, see the Canon website for your country or region.
<https://global.canon/en/support/>

System Manager ID and PIN

A19C-002

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.

By default, the System Manager ID and System Manager PIN are not set. System Manager Mode is disabled, allowing anyone to see and change important settings. Set the System Manager ID and System Manager PIN to protect the information, and allow only certain administrators of 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. 153)**

Measures to Prevent Unauthorized Access

A19C-003

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. 5)**
- ▶ **Using a Password or PIN to Protect Information(P. 5)**
- ▶ **Precautions When Using Remote UI(P. 6)**

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. 152)**

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. 53)**
- ▶ **Setting IPv6 Addresses(P. 55)**

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 Password or PIN to Protect Information

By setting up a password or 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 password or PIN to the functions indicated below. Only users who know the password or PIN can use these functions and access the information on the machine.

Remote UI

You can require the user to enter the Remote UI password when using Remote UI.

▶ **Setting the Password to Use for Remote UI(P. 177)**

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. 153)**

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

A19C-004

Front Side

Check these parts on the front when operating the machine.

▶ Front Side(P. 8)

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

▶ Control Panel(P. 10)

- Load printing paper into the paper drawer.

▶ Paper Drawer(P. 12)

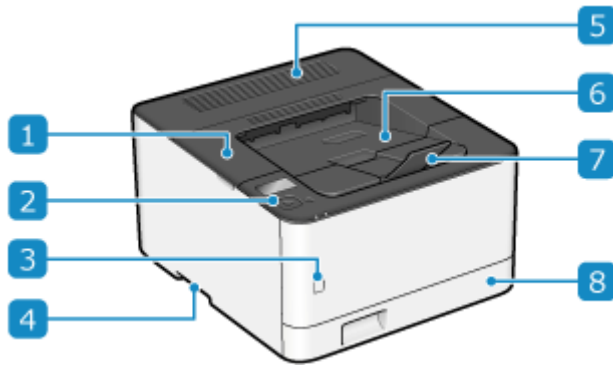
Rear Side

Check the rear parts when installing and connecting the machine and when clearing paper jams.

▶ Rear Side(P. 9)

Front Side

A19C-005



1 Toner cover

Open the toner cover when replacing the toner cartridge.

▶ **Replacing the Toner Cartridge(P. 272)**

2 Control panel

Use the display and keys to operate the machine and confirm the operations and status. ▶ **Control Panel(P. 10)**

3 Power switch

Turns the power of the machine ON and OFF. ▶ **Turning ON and OFF the Machine(P. 75)**

4 Lift handles

Hold the lift handles when moving the machine.

5 Ventilation slots

Air inside the machine is released through the ventilation slots to cool down the inside of the machine. Do not place objects next to the ventilation slots, as this can prevent ventilation.

6 Output tray

Printed paper is ejected to the output tray.

7 Paper stopper

Open the paper stopper to prevent paper from falling out of the output tray.

8 Paper drawer

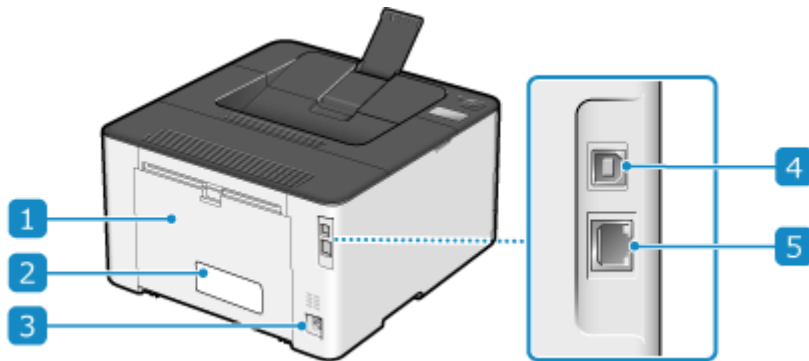
Load paper you usually use into the paper drawer. ▶ **Paper Drawer(P. 12)**

NOTE

- To ensure efficient use of the machine, regularly clean the surface.
▶ **Cleaning the Surface of the Machine(P. 268)**

Rear Side

A19C-006



1 Rear cover

Open the rear cover when a paper jam occurs inside the machine.

2 Rating label

This label shows the serial number, which is needed when making inquiries about the machine.

3 Power socket

Connect the power cord to the power socket.

4 USB port (for computer connection)

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

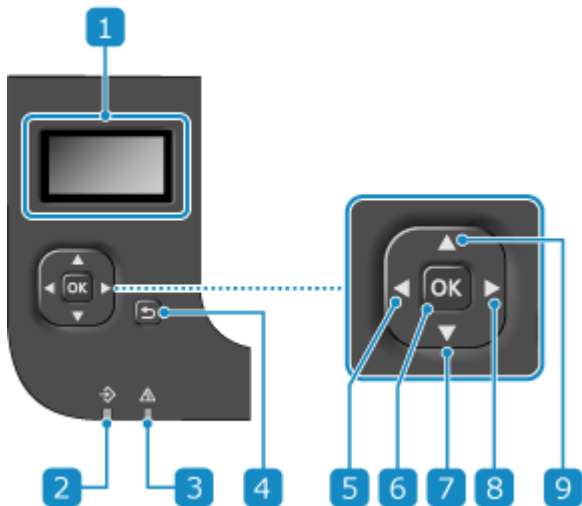
5 LAN port

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

Control Panel

A19C-007

Use the control panel to operate the machine and configure the settings.
For details on supported models, see the following: [Supported Functions\(P. 3\)](#)



1 Display

Displays the screens for operating the functions, usage, messages, and other information. [Using the Control Panel\(P. 81\)](#)

2 Data indicator ()

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

3 Error indicator ()

Blinks or lights up when a paper jam or other error occurs.

4 Back key ()

Returns you to the previous screen.

5 Left key ()

Returns to the previous screen. Press when entering text to move the cursor to the left.

6 OK key ()

Confirms the settings and selected details.

7 Down key ()

Selects the item below and decreases the value on a slider.

8 Right key (▶)

Moves to the next screen. Press when entering text to move the cursor to the right.

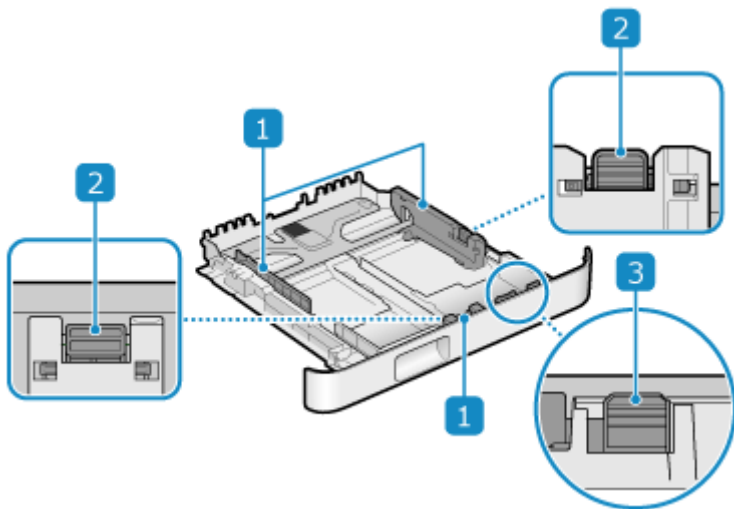
9 Up key (▲)

Selects the item above and increases the value on a slider.

Paper Drawer

A19C-008

Load paper that you usually use into the paper drawer. ▶ **Loading Paper in the Paper Drawer(P. 91)**



1 Paper guides

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

2 Lock release lever

Move the paper guides while pressing the lock release lever.

3 Lock release lever (for extending the paper drawer)

When loading paper longer than A4, extend the paper drawer toward you while pressing the lock release lever.

* When the paper drawer is extended from the machine, it is not fully housed.

Usable Paper

A19C-009

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

- ▶ Usable Paper Sizes(P. 13)
- ▶ Usable Paper Types(P. 14)
- ▶ Unusable Paper(P. 15)

NOTE

- Precautions must be taken when handling and storing paper. ▶ **Precautions When Handling Paper(P. 16)**

Usable Paper Sizes

✓ : Usable ✕ : Not usable

Paper Size	Paper Drawer	Automatic 2-sided Printing ^{*1}
A4 ^{*2}	✓	✓
B5	✓	✕
A5 ^{*3}	✓	✕
A6	✓	✕
Legal (LGL)	✓	✓
Letter (LTR) ^{*2}	✓	✓
Statement (STMT)	✓	✕
Executive (EXEC)	✓	✕
Oficio	✓	✓
Oficio (Brazil)	✓	✓
Oficio (Mexico)	✓	✓
Letter (Government)	✓	✕
Legal (Government)	✓	✕
Foolscap/Folio	✓	✓

Paper Size	Paper Drawer	Automatic 2-sided Printing ^{*1}
Foolscap (Australia)	✓	×
Legal (India)	✓	✓
3x5inch	✓	×
Envelope No.10 (COM10)	✓	×
Envelope Monarch	✓	×
Envelope C5	✓	×
Envelope DL	✓	×
Custom Paper Size	✓ ^{*4}	✓ ^{*5}

^{*1} Automatically prints on both sides without having to reload the paper.

^{*2} Enables printing of reports and lists.

^{*3} Enables loading of paper in the portrait or landscape orientation.

^{*4} You can use a custom size from 3" x 5" (76.0 mm x 127.0 mm) to 8 1/2" x 14" (216.0 mm x 356.0 mm).

^{*5} You can use a custom size from 8 1/4" x 11" (210.0 mm x 279.0 mm) to 8 1/2" x 14" (216.0 mm x 356.0 mm).

Usable Paper Types

You can use non-chlorine paper.

✓ : Usable × : Not usable

Paper Type	Paper Weight	Paper Drawer	Automatic 2-sided Printing ^{*1}
Thin 1	16 lb Bond (60 g/m ²)	✓	✓
Plain 1 ^{*2}	17 lb Bond to 18 lb Bond (61 g/m ² to 70 g/m ²)	✓	✓
Plain 2 ^{*2}	19 lb Bond to 23 lb Bond (71 g/m ² to 89 g/m ²)	✓	✓
Plain 3 ^{*2}	24 lb Bond to 28 lb Bond (90 g/m ² to 105 g/m ²)	✓	✓
Heavy 1	29 lb Bond to 32 lb Bond (106 g/m ² to 120 g/m ²)	✓	×
Heavy 2	33 lb Bond to 60 lb Cover (121 g/m ² to 163 g/m ²)	✓	×
Recycled 1 ^{*2}	17 lb Bond to 18 lb Bond (61 g/m ² to 70 g/m ²)	✓	✓

Paper Type	Paper Weight	Paper Drawer	Automatic 2-sided Printing ^{*1}
Recycled 2 ^{*2}	19 lb Bond to 23 lb Bond (71 g/m ² to 89 g/m ²)	✓	✓
Labels	—	✓	×
Color ^{*2}	17 lb Bond to 18 lb Bond (61 g/m ² to 70 g/m ²)	✓	✓
Letterhead 1	17 lb Bond to 18 lb Bond (61 g/m ² to 70 g/m ²)	✓	✓
Letterhead 2	19 lb Bond to 23 lb Bond (71 g/m ² to 89 g/m ²)	✓	✓
Letterhead 3	24 lb Bond to 28 lb Bond (90 g/m ² to 105 g/m ²)	✓	✓
Letterhead 4	29 lb Bond to 32 lb Bond (106 g/m ² to 120 g/m ²)	✓	×
Letterhead 5	33 lb Bond to 60 lb Cover (121 g/m ² to 163 g/m ²)	✓	×
Bond 1	16 lb Bond to 27 lb Bond (60 g/m ² to 104 g/m ²)	✓	✓
Bond 2	28 lb Bond to 60 lb Cover (105 g/m ² to 163 g/m ²)	✓	×
Envelope	—	✓	×

^{*1} Automatically prints on both sides without having to reload the paper.

^{*2} 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

A19C-00A

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

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

A19C-00C

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. 18)**

Specifications of Functions

▶ **Print Specifications(P. 20)**

▶ **Network Specifications(P. 22)**

▶ **Security and Management Function Specifications(P. 23)**

Operating Environment and Supported Software and Servers

▶ **Supported Environment(P. 26)**

Basic Specifications

A19C-00E

Type	Desktop
Color Supported	Black and White
Print Resolution	600 dpi x 600 dpi
Number of Tones	256 Gradation Levels
Paper Size	Maximum: 8 1/2" x 14" (216.0 mm x 356.0 mm) Minimum: 3" x 5" (76 mm x 127 mm)
Paper Type and Weight	▶ Usable Paper(P. 13)
Warm-up time *1	After powering ON 15 seconds or less After recovering from sleep mode 3.2 seconds or less
First Print Time (Letter)	4.9 seconds
Continuous Print Speed *2 (Letter)	35 sheets/minute
Paper Feeding System and Paper Capacity *3	Paper Drawer 250 sheets (17 lb Bond (64 g/m ²), 21 lb Bond (80 g/m ²))
Output System and Output Capacity *3	Output Tray 100 sheets (18 lb Bond (68 g/m ²))
Power supply	AC 110 V - 127 V, 60 Hz, 4.7 A
Power Consumption *1	Maximum Power Consumption 950 W or less During Sleep Mode 0.5 W (USB, wired LAN connection) 0.4 W (wireless LAN connection) With Power Turned OFF 0.14 W
Dimensions	14 3/8" x 15 3/4" x 8 3/4" (364.3 mm x 398.7 mm x 221.8 mm)

About the Machine

(W x D x H)	
Weight (Not including toner cartridges)	Approx. 15.2 lb (6.9 kg)
Maximum Occupancy Space	14 3/8" x 31 7/8" x 15 1/8" (364.3 mm x 810.6 mm x 383.0 mm) * Provide a space of at least 4" (100 mm) around the machine.
Memory Capacity	RAM: 256 MB
Usage Environment	Temperature: 50 °F to 86 °F (10 °C to 30 °C) Humidity: 20% to 80% RH (no condensation)

*1 May vary depending the usage environment and usage conditions.

*2 Print speed is measured based on internal testing using Letter size paper printed with 100% print ratio to original on one-sided paper. Internal testing involved continuously printing the same one page of content on plain paper. Print speed may vary depending on paper type, paper size or paper feeding direction. The device may automatically pause or slow down in order to adjust printer condition such as controlling temperature of a certain unit or limiting impact to image quality during continuous printing.

*3 May vary depending on the installation environment and paper to be used.

Print Specifications

A19C-00F

- ▶ **UFR II Printer Function(P. 20)**
- ▶ **PCL Printer Function(P. 20)**

UFR II Printer Function

Type	Embedded
Print Size	▶ Usable Paper(P. 13)
Continuous Print Speed	Same as "Continuous Print Speed" for main unit ▶ Basic Specifications(P. 18)
Resolution	Data Processing 1,200 dpi x 1,200 dpi, 600 dpi x 600 dpi
Page Description Language (PDL)	UFR II
Protocol Supported	TCP/IP: LPD, Port9100, IPP, IPPS, WSD
Resident Fonts	None
Interface	USB USB 2.0 Hi-Speed Wired LAN 10Base-T, 100Base-TX, 1000Base-T (IEEE 802.3 compliant) Wireless LAN IEEE 802.11b, IEEE 802.11g, IEEE 802.11n

PCL Printer Function

Type	Embedded
Print Size	▶ Usable Paper(P. 13)
Continuous Print Speed	Same as "Continuous Print Speed" for main unit ▶ Basic Specifications(P. 18)
Resolution	Data Processing 1,200 dpi x 1,200 dpi, 600 dpi x 600 dpi

About the Machine

Page Description Language (PDL)	PCL6, PCL5
Protocol Supported	TCP/IP: LPD, Port9100, IPP, IPPS, WSD
Resident Fonts	45 Roman, 10 Bitmap fonts
Interface	USB USB 2.0 Hi-Speed Wired LAN 10Base-T, 100Base-TX, 1000Base-T (IEEE 802.3 compliant) Wireless LAN IEEE 802.11b, IEEE 802.11g, IEEE 802.11n

Network Specifications

A19C-00H

■ Common

Protocol Supported	TCP/IP Frame type: Ethernet II Print applications: LPD, Raw, IPP, IPPS, WSD, Mopria, AirPrint, Windows Mobile Print
---------------------------	---

■ Wired LAN

Interface	10BASE-T, 100BASE-TX, 1000Base-T (RJ-45)
------------------	--

■ Wireless LAN

Standard	IEEE 802.11b, IEEE 802.11g, IEEE 802.11n
Transmission Method	IEEE 802.11b (Modulation system: DS-SS) IEEE 802.11g (Modulation system: OFDM method) IEEE 802.11n (Modulation system: OFDM method)
Communication Mode	Infrastructure Mode Access Point Mode
Security (Encryption Method)	Infrastructure Mode 128 (104) / 64 (40) bit WEP WPA-PSK (TKIP / AES-CCMP) WPA2-PSK (TKIP / AES-CCMP) WPA3-SAE (AES-CCMP) WPA-EAP (AES-CCMP) WPA2-EAP (AES-CCMP) WPA3-EAP (AES-CCMP) Access Point Mode WPA2-PSK (AES-CCMP)
Setup Method	WPS (Wi-Fi Protected Setup), Manual setup

Security and Management Function Specifications

A19C-00J

- ▶ Firewall(P. 23)
- ▶ Keys and Certificates(P. 23)
- ▶ Definition of "Weak Encryption"(P. 24)
- ▶ TLS(P. 24)

Firewall

- Up to 16 IP addresses (or ranges of IP addresses) can be specified for both IPv4 and IPv6.
- Up to 32 MAC addresses can be specified.

Keys and Certificates

The following keys and certificates are supported:

■ Self-generated Key and Self-signed Certificate or CSR

Public key algorithm (and key length)	RSA (512 bits, 1024 bits, 2048 bits, 4096 bits) DSA (1024 bits, 2048 bits, 3072 bits) ECDSA (P256, P384, P521)
Certificate signature algorithm	RSA: SHA-1*1, SHA-256, SHA-384*2, SHA-512*2 DSA: SHA-1*1 ECDSA: SHA-1*1, SHA-256, SHA-384, SHA-512

*1 Available only when installed by using the Remote UI.

*2 SHA384-RSA and SHA512-RSA are available only when the RSA key length is 1024 bits or more.

■ Key and Certificate or CA Certificate for Installation

Format	Key PKCS#12*1*2 CA certificate X.509 DER format/PEM format*2
File extension	Key ".p12" or ".pfx" CA certificate ".cer" or ".pem"

Public key algorithm (and key length)	RSA (512 bits, 1024 bits, 2048 bits, 4096 bits) DSA (1024 bits, 2048 bits, 3072 bits) ECDSA (P256, P384, P521)
Certificate signature algorithm	RSA: SHA-1 ^{*3} , SHA-256, SHA-384 ^{*4} , SHA-512 ^{*4} DSA: SHA-1 ^{*3} ECDSA: SHA-1 ^{*3} , SHA-256, SHA-384, SHA-512

*1 Requirements for the certificate contained in a key are pursuant to CA certificates.

*2 Certificates of more than 2 MB cannot be registered.

*3 Available only when installed by using the Remote UI.

*4 SHA384-RSA and SHA512-RSA are available only when the RSA key length is 1024 bits or more.

NOTE

- The machine does not support use of a certificate revocation list (CRL).

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. [▶\[Encryption Settings\]\(P. 260\)](#)

Hash	MD4, MD5, SHA-1
HMAC	HMAC-MD5
Common key encryption	RC2, RC4, DES
Public key encryption	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.

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)	—	✓	✓	✓
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

A19C-00K

▶ Operating Environment(P. 26)

Operating Environment

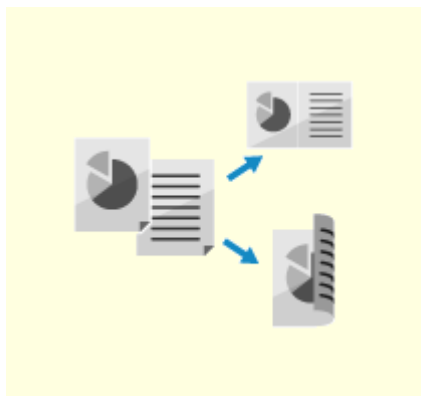
AirPrint Operating Environment	▶ Using AirPrint Application to Print Data(P. 146)
Remote UI Operating Environment *1	<p>Windows</p> <p>Microsoft Edge</p> <p>Google Chrome</p> <p>macOS</p> <p>Safari 11</p> <p>Google Chrome</p> <p>Android</p> <p>Google Chrome</p> <p>UC Browser</p> <p>iOS</p> <p>Safari 11</p> <p>UC Browser</p>

*1 You must set your Web browser to enable cookies and use JavaScript.

Recommended Functions

A19C-00L

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



▶ **Cost Savings(P. 28)**



▶ **Making Operations More Efficient(P. 29)**

Canon strives to be environmentally and energy conscious in all aspects of its operations. [Click here](#) to learn about the ways in which Canon is helping to protect the environment.



Cost Savings

A19C-00R

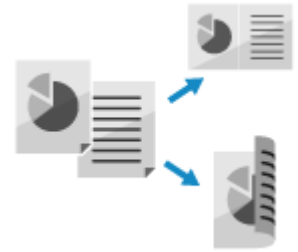
This machine can help you save costs on paper and power.

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. 118)**



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. 79)**

Making Operations More Efficient

A19C-00S

You can print data even in an environment where a computer cannot be used.

Printing Data Without Using a Computer

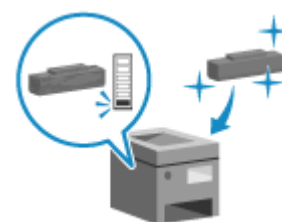
You can print data from a mobile device connected to the machine while using an application. The machine supports direct connection, allowing easy connection setup between the machine and a mobile device without having to use a wireless LAN router.

▶ Linking with Mobile Devices and Integrating with a Cloud Service (P. 127)



Through the toner replenishment service, new toner cartridges are automatically delivered to you before your existing toner cartridges are used up.

* Use of the toner replenishment service requires prior registration with select retailers. This service is only available in certain countries.



Setting Up

Setting Up	31
Configuring the Default Settings (Setup Guide)	32
Configuring the Initial Settings for Remote UI and Web Service Usage	35
Setting Up the Network	37
Selecting Wired or Wireless LAN	39
Connecting to a Wired LAN	40
Connecting to a Wireless LAN	41
Connecting to a Wireless LAN by Using the Router Button (Push Button Mode)	44
Connecting to a Wireless LAN by Entering a PIN Code (WPS PIN Code Mode)	46
Connecting to a Wireless LAN by Searching for a Router (Access Point Setup Method)	48
Connecting to a Wireless LAN by Setting the Details (Manual Setup Method)	50
Setting IPv4 Addresses	53
Setting IPv6 Addresses	55
Configuring Your Machine for Your Network Environment	57
Manually Configuring the Ethernet Settings	58
Configuring DNS	59
Configuring SMB	62
Configuring WINS	63
Configuring SNMP	64
Configuring SNTP	67
Checking the Network Status and Settings	69
Installing Software and Drivers to the Computer	72

Setting Up

A19C-00U

After installing the machine, configure the required settings to enable use of the functions.

Configuring the Default Settings of the Machine

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)(P. 32)

Setting Up the Network

To operate the machine from a computer or to connect to a server, you must connect the machine to a network. If you did not connect to the network when you configured the default settings, do that during this step.

▶Setting Up the Network(P. 37)

Installing Software and Drivers to the Computer

Install the software or drivers required to use the machine on your computer. If you did not install the software or drivers when you configured the default settings, and you want to install them separately, see the following:

▶Installing Software and Drivers to the Computer(P. 72)

■ 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. 5)

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(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. 110)

▶Preparations for Linking with Mobile Devices and Integrating with a Cloud Service(P. 128)

Configuring the Default Settings (Setup Guide)

A19C-00W

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. 32)**
- ▶ **Step 2: Setting the Date and Time(P. 32)**
- ▶ **Step 3: Connecting the Machine to a Network or Computer(P. 33)**
- ▶ **Step 4: Configuring Settings for Toner Replenishment Service(P. 33)**

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 2 to 3 individually. For the details of each setting, see the following.
 - ▶ **Setting the Date and Time(P. 186)**
 - ▶ **Setting the Department ID and PIN for the Administrator(P. 153)**
 - ▶ **Connecting to a Wireless LAN(P. 41)**


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 and press .

2 Select [Yes], and then press .

- ⇒ 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. 32)**

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

- ⇒ 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 and press .

- 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 **OK**.

⇒ The time and date are set, and the [Select Connect. Method] screen is displayed.

Step 3: Connecting the Machine to a Network or Computer

1 On the [Select Connect. Method] screen, select the connection method and press **OK**.

- To configure this setting at a later time, press [Do Not Connect Now] ► **OK**. The Setup Guide closes, and the [Home] screen is displayed. ► **[Home] Screen(P. 84)**

2 Configure the settings by following the instructions on the screen.

⇒ After the settings are complete, the toner replenishment service screen is displayed.

Step 4: Configuring Settings for Toner Replenishment Service

You can configure settings for toner replenishment service. Through toner replenishment service, new toner cartridges are automatically delivered to you before your existing toner cartridges are used up.

* Use of the toner replenishment service requires prior registration with select retailers. This service is only available in certain countries.

* This service can be set up through [Toner Delivery Settings] displayed on the [Home] screen. ► **[Home] Screen(P. 84)**

1 On the toner replenishment service screen, select [Yes] and press **OK**.

2 Press **OK**.

3 On the confirm screen of toner replenishment service, select [Accept], and then press **OK**.

If you select [Do Not Accept], the setting screen for the toner replenishment service is skipped. Proceed to Step 5. ► **Step 5: Installing the Driver and Configuring the Initial Settings Using Remote UI(P. 34)**


4 Press **OK**.

⇒ After the settings are complete, the screen for installing the driver and configuring the initial settings is displayed.

- If connecting to the server fails, try configuring the settings again through [Server Connection Status] or [Connect to Server/Verify Connection] in [Toner Delivery Set.]. ► **[Home] Screen(P. 84)**

Step 5: Installing the Driver and Configuring the Initial Settings Using Remote UI

1 Install the driver by following the instructions on the screen.

If you are not installing the driver, press [End] ► , and proceed to Step 2.

2 When driver installation is complete, press [End] ► .

⇒ The [Home] screen is displayed.

3 Configure the initial settings using Remote UI. ► [Configuring the Initial Settings for Remote UI and Web Service Usage\(P. 35\)](#)

Configuring the Initial Settings for Remote UI and Web Service Usage

A19C-08X

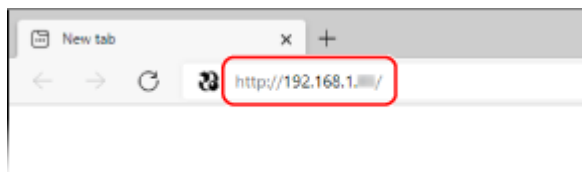
Access the IP address of the machine from a Web browser on a computer, and configure the initial settings for Remote UI and Web service usage.

Required Preparations

- Check the operating environment of Remote UI. [▶Supported Environment\(P. 26\)](#)
- Connect the computer you are using to operate Remote UI to the machine over a network. [▶Setting Up the Network\(P. 37\)](#)
- Check the IP address of the machine. [▶Checking the Network Status and Settings\(P. 69\)](#)

1 From a Web browser on a computer, access the following URL.

http://<IP address of the machine>/



⇒ The [Password Settings] screen is displayed.

- This screen is displayed only if you access it within 15 minutes of connecting the machine to the network.
- If the Remote UI login screen is displayed, log in to Remote UI in System Manager Mode. If you have not set the Remote UI password, set the password on the machine. [▶Setting the Department ID and PIN for the Administrator\(P. 153\)](#)

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\(P. 337\)](#)

2 Set the password required for login by following the instructions on the screen, and click [OK].

⇒ The [Initial Settings] screen is displayed.

* If the screen is not displayed, click [Initial Settings] on the Portal page.

3 Click [Web Service Usage], and configure the Web service usage settings.

Specify whether to use the Canon cloud integration service. If you are not configuring the Web service usage settings, proceed to Step 4.

- 1 Check the message, and click [I Accept].
- 2 Click [Next].
- 3 On the [Settings complete.] screen, check the message and click [End].
 - ▢ If the connection fails, check the settings of the machine and network. ▶ **Setting Up the Network(P. 37)**
- 4 Click [To [Initial Settings] Screen].
 - ▢ The [Initial Settings] screen is displayed.

4 Click [Close].

- ▢ The Portal page of Remote UI appears.

Setting Up the Network

A19C-00X

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.

IMPORTANT

- Connecting the machine to a network without proper security measures may leak information from the machine to third parties. [▶Protecting the Network\(P. 155\)](#)

■ 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\(P. 39\)](#)
- [▶Connecting to a Wired LAN\(P. 40\)](#)

To connect to a Wireless LAN

- [▶Selecting Wired or Wireless LAN\(P. 39\)](#)
- [▶Connecting to a Wireless LAN\(P. 41\)](#)



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\(P. 53\)](#)
 - [▶Setting IPv6 Addresses\(P. 55\)](#)

* 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. 57)**

* 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. 69)**

Selecting Wired or Wireless LAN

A19C-00Y

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. 41)**


For details on supported models, see the following: **▶Supported Functions(P. 3)**

* 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, select [Menu] in the [Home] screen and press . ▶[Home] Screen(P. 84)

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

If the login screen appears, enter the System Manager ID and PIN, and then press [<Log In>] ▶ . **▶ System Manager ID and PIN(P. 4)**

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

⇒ The message [Settings applied.] appears.
Next, connect to the wired or wireless LAN.

▶Connecting to a Wired LAN(P. 40)

▶Connecting to a Wireless LAN(P. 41)

IMPORTANT

When Switching between Wired and Wireless LAN

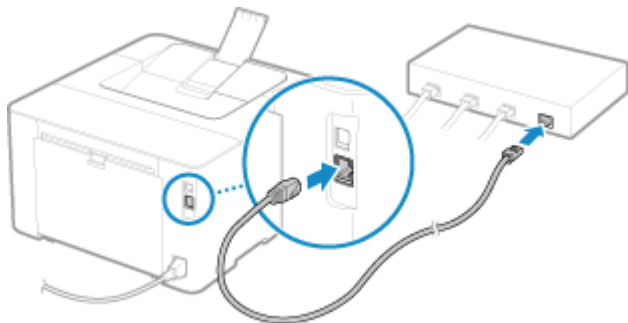
- Any installed drivers must be uninstalled and then reinstalled.
For details about uninstalling and installing drivers, see the driver manual at the online manual site.
<https://oip.manual.canon/>

Connecting to a Wired LAN

A19C-010

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\(P. 53\)](#)

- ▶ [Setting IPv6 Addresses\(P. 55\)](#)

Connecting to a Wireless LAN

A19C-011

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. 41)

▶ **Wireless LAN Router Information Required for Connection**(P. 42)

! 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. 155)

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. 219)

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. 44)

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. 46)

* 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. 48)

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.
- Encryption for WPA3: AES-CCMP

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. 50)

■ 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
- WPA3-SAE

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

- WPA3-SAE

WEP Authentication Method

- Open System
- Shared Key

Encryption for WPA/WPA2

- TKIP
- AES-CCMP
- IEEE 802.1X Authentication

Encryption for WPA3

- AES-CCMP

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

A19C-012






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, select [Menu] in the [Home] screen and press .  [Home] Screen(P. 84)

2 Press [Preferences]   [Network]   [Wireless LAN Settings]  .

⇒ The [Select Network] screen is displayed.

- If the login screen appears, enter the System Manager ID and PIN, and then press [**<Log In>**]  . 
System Manager ID and PIN(P. 4)
- If the message [Enable the wireless LAN?] appears, select [Yes] and press .
- If the message [Cannot find the access point.] appears, press .

3 Select [Other Connections] and press .

4 Select [WPS Push Button Mode] and press .

⇒ The machine starts searching for an access point.

5 After the search for an access point starts, press the button on the wireless LAN router 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.


6 When [Connected.] appears on the control panel, press .

⇒ When the machine is connected to the wireless LAN, [] appears on the [Home] screen.

7 Wait a few minutes.


⇒ By default, an IP address is set automatically.
To use a specific IP address, set this manually.

 **Setting IPv4 Addresses(P. 53)**

 **Setting IPv6 Addresses(P. 55)**

NOTE

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

- Press , and repeat the procedure starting from Step 3.

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

A19C-013

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, select [Menu] in the [Home] screen and press **OK**. **▶**[Home] Screen(P. 84)

2 Press [Preferences] **▶** **OK** **▶** [Network] **▶** **OK** **▶** [Wireless LAN Settings] **▶** **OK**.

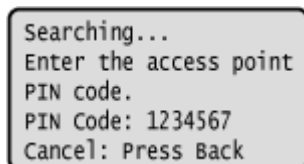
⇒ The [Select Network] screen is displayed.

- If the login screen appears, enter the System Manager ID and PIN, and then press [<Log In>] **▶** **OK**. **▶** **System Manager ID and PIN(P. 4)**
- If the message [Enable the wireless LAN?] appears, select [Yes] and press **OK**.
- If the message [Cannot find the access point.] appears, press **OK**.

3 Select [Other Connections] and press **OK**.

4 Select [WPS PIN Code Mode] and press **OK**.

⇒ 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.

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

6 When [Connected.] appears on the control panel, press **OK**.

⇒ When the machine is connected to the wireless LAN, [(w)] appears on the [Home] screen.

7 Wait a few minutes.

▢ Wait a few minutes. By default, an IP address is set automatically.
To use a specific IP address, set this manually.

▶ **Setting IPv4 Addresses(P. 53)**

▶ **Setting IPv6 Addresses(P. 55)**

NOTE

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

- Press **OK**, and repeat the procedure starting from Step 3.

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

A19C-014

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.
- Encryption for WPA3: AES-CCMP

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. 50)

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. 42)**
- 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. 164)**

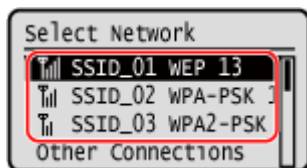
1 On the control panel, select [Menu] in the [Home] screen and press . ▶ [Home] Screen(P. 84)

2 Press [Preferences] ▶  ▶ [Network] ▶  ▶ [Wireless LAN Settings] ▶ .


⇒ The [Select Network] screen is displayed.

- If the login screen appears, enter the System Manager ID and PIN, and then press [<Log In>] ▶ . ▶ **System Manager ID and PIN(P. 4)**
- If the message [Enable the wireless LAN?] appears, select [Yes] and press .
- If the message [Cannot find the access point.] appears, check that the router is discoverable. ▶ **Cannot Connect to Wireless LAN(P. 321)**


3 Select the SSID of the wireless LAN to which you want to connect, and press .



⇒ 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 , 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. 321)**

4 Enter the network key, and press [<Apply>] ▶ .

5 Press [Yes] ▶ .

6 When [Connected.] is displayed on the control panel, press .

⇒ When the machine is connected to the wireless LAN, [] appears on the [Home] screen.

7 Wait a few minutes.


⇒ By default, an IP address is set automatically.
To use a specific IP address, set this manually.

▶ **Setting IPv4 Addresses(P. 53)**

▶ **Setting IPv6 Addresses(P. 55)**

NOTE

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

- Press , 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 3.

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

A19C-015

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. 42)**
- 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. 164)**

1 On the control panel, select [Menu] in the [Home] screen and press **OK**. **▶ [Home] Screen(P. 84)**

2 Press [Preferences] **▶ OK** **▶ [Network]** **▶ OK** **▶ [Wireless LAN Settings]** **▶ OK**.

⇒ The [Select Network] screen is displayed.

- If the login screen appears, enter the System Manager ID and PIN, and then press [<Log In>] **▶ OK**. **▶ System Manager ID and PIN(P. 4)**
- If the message [Enable the wireless LAN?] appears, select [Yes] and press **OK**.
- If the message [Cannot find the access point.] appears, select [Close] and press **OK**.

3 Select [Other Connections] and press **OK**.

4 Select [Manually Enter Network Name] and press **OK**.

⇒ The SSID input screen is displayed.

5 Enter the SSID, select [<Apply>], and press **OK**.

⇒ The [Security Settings] screen is displayed.

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

■ When using WEP

1 Select [WEP] and press **OK**.

⇒ The [802.11 Authentication] screen is displayed.

- 2 Select the authentication method.

[Open System]

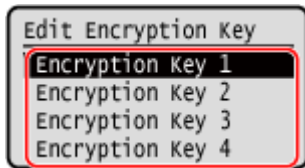
Uses open authentication.

* 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 Select [Edit Encryption Key] and press **OK**.
- 4 Select an encryption key that is not registered, and press **OK**.



⇒ The encryption key input screen is displayed.

- 5 Enter the network key, select [<Apply>], and press **OK**.

⇒ The encryption key is registered to the [Encryption Key] screen.
- 6 Select [Select Encryption Key] and press **OK**.
- 7 Select a registered encryption key, and press **OK**.

■ When Using WPA-PSK, WPA2-PSK, or WPA3-SAE

- 1 Select [WPA/WPA2-PSK], [WPA2-PSK/WPA3-SAE], or [WPA3-SAE] to match the security settings of the wireless LAN router, and then press **OK**.

⇒ The Encryption Methodscreen is displayed.
- 2 Select the encryption method and press **OK**.

⇒ 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. Note that when you are using WPA3-SAE, the encryption method is set to AES-CCMP even if you select [Auto].

- 3 Enter the network key, select [<Apply>], and press **OK**.

■ When Using WPA-EAP or WPA2-EAP

Select [WPA/WPA2-EAP] and press **OK**.

■ When Not Using a Security Standard

Select [None] and press **OK**.

- 7 Select [Yes] and press **OK**.
- 8 When [Connected.] is displayed on the control panel, press **OK**.

⇒ When the machine is connected to the wireless LAN, [] appears on the [Home] screen.

9 Wait a few minutes.


⇒ By default, an IP address is set automatically.
To use a specific IP address, set this manually.

▶ **Setting IPv4 Addresses(P. 53)**

▶ **Setting IPv6 Addresses(P. 55)**

NOTE

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

- Press , check the information of the wireless LAN router to which you want to connect, and repeat the procedure starting from Step 3.

Setting IPv4 Addresses

A19C-016

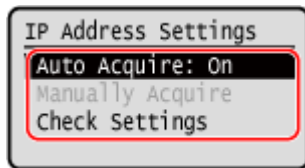
The machine's IPv4 address can either be assigned automatically using DHCP or entered manually. By default, the IPv4 address is set automatically when connected to a wired or wireless LAN, but you can set it or change it manually according to your usage environment and purpose.

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 \(Remote UI\)\(P. 187\)](#)

Administrator privileges are required. The machine must be restarted to apply the settings.

- 1 On the control panel, select [Menu] in the [Home] screen, and press **OK**. [▶\[Home\] Screen\(P. 84\)](#)
- 2 Press [Preferences] ▶ **OK** ▶ [Network] ▶ **OK** ▶ [TCP/IP Settings] ▶ **OK** ▶ [IPv4 Settings] ▶ **OK** ▶ [IP Address Settings] ▶ **OK**.
If the login screen appears, enter the System Manager ID and PIN, and then press [<Log In>] ▶ **OK**. [▶ System Manager ID and PIN\(P. 4\)](#)
- 3 Set the IP address.



■ When Manually Setting the IP Address

- 1 Select [Auto Acquire] and press **OK**.
⇒ The [Auto Acquire] screen is displayed.
- 2 Press [Select Protocol] ▶ **OK** ▶ [Off] ▶ **OK**.
- 3 Press [Auto IP] ▶ **OK** ▶ [Off] ▶ **OK**.
- 4 Select [<Apply>] and press **OK**.
⇒ The [IP Address Settings] screen is displayed.
- 5 Select [Manually Acquire] and press **OK**.
⇒ The IP address input screen is displayed.
- 6 Enter the IP address and press **OK**.
- 7 Enter the subnet mask and press **OK**.
- 8 Enter the gateway address and press **OK**.

■ When Assigning an IP Address Automatically

- 1 Select [Auto Acquire] and press **OK**.

⇒ 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 Select [<Apply>] and press **OK**.

4 Restart the machine. ▶ Restarting the Machine(P. 78)

⇒ The settings are applied.

Perform a connection test to check whether the IPv4 address is correctly configured. ▶ **Checking the Network Status and Settings(P. 69)**

NOTE

Checking the Currently Set IP Address

- On the screen in Step 3, select [Check Settings] and press **OK** 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. 112)**
If you do not know which port is being used, see the following:
▶ **Viewing the Printer Port(P. 369)**
- 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

A19C-017

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. [▶\[IPv6 Settings\]\(P. 222\)](#) 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\(P. 53\)](#)

- 1 Log in to Remote UI in System Manager Mode.** [▶Starting Remote UI\(P. 188\)](#)
- 2 On the Portal page of Remote UI, click [Settings/Registration].** [▶Portal Page of Remote UI\(P. 190\)](#)
- 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. 78)**

⇒ The settings are applied.

Perform a connection test to check whether the IPv6 address is correctly configured. ▶ **Checking the Network Status and Settings(P. 69)**

NOTE

If the IP Address Is Changed after Installing the Printer Driver

- You must add a new port. ▶ **Adding a Port(P. 112)**

Configuring Your Machine for Your Network Environment

A19C-018

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. 58)**
- ▶ **Configuring DNS(P. 59)**
- ▶ **Configuring WINS(P. 63)**
- ▶ **Configuring SNMP(P. 64)**
- ▶ **Configuring SNTP(P. 67)**

■ 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. 155)**

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. 164)**

Manually Configuring the Ethernet Settings

A19C-019

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. 215)

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. 188)

2 On the Portal page of Remote UI, click [Settings/Registration]. ▶Portal Page of Remote UI(P. 190)

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. 78)

⇒ The settings are applied.

Configuring DNS

A19C-01A

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. [▶\[TCP/IP Settings\]\(P. 220\)](#)

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\(P. 55\)](#)

1 Log in to Remote UI in System Manager Mode. [▶Starting Remote UI\(P. 188\)](#)

2 On the Portal page of Remote UI, click [Settings/Registration]. [▶Portal Page of Remote UI\(P. 190\)](#)

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.

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\(P. 367\)](#)
- 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. 78)**

⇒ The settings are applied.

Configuring SMB

A19C-01C

The Server Message Block (SMB) communication protocol is used to enable the machine as a shared printer on the network. Depending on the network environment, you may have to set the computer name and workgroup name of the machine

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. 188)**
- 2 On the Portal page of Remote UI, click [Settings/Registration]. ▶ Portal Page of Remote UI(P. 190)**
- 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. 78)**

⇒ The settings are applied.

Configuring WINS

A19C-01E

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. 223)** 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. 62)**
- 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. 188)**

2 On the Portal page of Remote UI, click [Settings/Registration]. ▶ **Portal Page of Remote UI(P. 190)**

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. 59)**

6 Restart the machine. ▶ **Restarting the Machine(P. 78)**

⇒ The settings are applied.

Configuring SNMP

A19C-01F

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. [▶\[SNMP Settings\]\(P. 214\)](#) Administrator privileges are required. The machine must be restarted to apply the settings.

Required Preparations

- To configure SNMPv3, you must enable TLS. [▶Using TLS\(P. 162\)](#)

1 Log in to Remote UI in System Manager Mode. [▶Starting Remote UI\(P. 188\)](#)

2 On the Portal page of Remote UI, click [Settings/Registration]. [▶Portal Page of Remote UI\(P. 190\)](#)

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. 78)

⇒ 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. 159)**

Configuring SNTP

A19C-01H

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. The machine must be restarted to apply the settings.

Required Preparations

- The time is adjusted based on the UTC (Coordinated Universal Time), so specify the time zone setting. [▶ Setting the Date and Time\(P. 186\)](#)
- 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\(P. 188\)](#)

2 On the Portal page of Remote UI, click [Settings/Registration]. [▶ Portal Page of Remote UI\(P. 190\)](#)

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].

8 Restart the machine. [▶ Restarting the Machine\(P. 78\)](#)

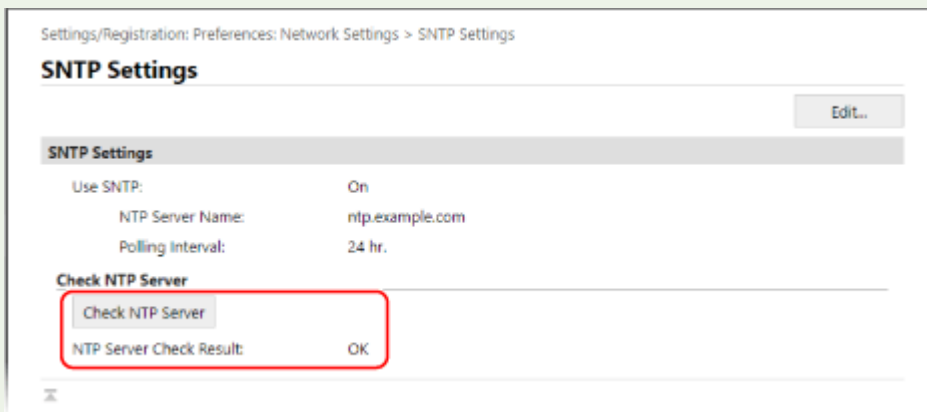
⇒ The settings are applied.

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.

Checking the Network Status and Settings

A19C-01J

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. 69)**
- ▶ **Viewing the IP address set to the machine(P. 70)**
- ▶ **Viewing the MAC Address of the Wired LAN(P. 70)**
- ▶ **Viewing the MAC Address and Connection Information of the Wireless LAN(P. 71)**

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. 53)**
 - ▶ **Setting IPv6 Addresses(P. 55)**
- 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. 215)**
- You can print the System Manager Data List to view the network settings. ▶ **Printing and Viewing Reports and Lists(P. 196)**

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. 188)**

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.

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, select **[Menu]** in the **[Home]** screen, and press **OK**. ▶ **[Home] Screen(P. 84)**

2 Press **[Preferences]** ▶ **OK** ▶ **[Network]** ▶ **OK** ▶ **[TCP/IP Settings]** ▶ **OK** ▶ **[IPv4 Settings]** ▶ **OK** ▶ **[PING Command]** ▶ **OK**.

If the login screen appears, enter the System Manager ID and PIN, and then press **[<Log In>]** ▶ **OK**. ▶ **System Manager ID and PIN(P. 4)**

3 Enter the IPv4 address of a network device, and press **OK**.

⇒ 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.

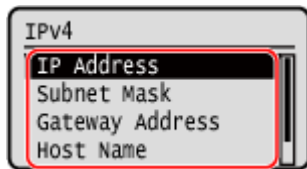
You can also check this information using Remote UI from a computer. [▶Managing the Machine from a Computer \(Remote UI\)\(P. 187\)](#)

- 1 On the control panel, select [Status Monitor] in the [Home] screen, and press **OK**. [▶ \[Home\] Screen\(P. 84\)](#)

⇒ The [Status Monitor] screen is displayed.

- 2 Press [Network Information] **▶** **OK** **▶** [IPv4] or [IPv6] **▶** **OK**.

- 3 View the setting and press **OK**.



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 \(Remote UI\)\(P. 187\)](#)

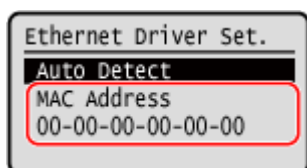
Administrator privileges are required.

- 1 On the control panel, select [Menu] in the [Home] screen, and press **OK**. [▶ \[Home\] Screen\(P. 84\)](#)

- 2 Press [Preferences] **▶** **OK** **▶** [Network] **▶** **OK** **▶** [Ethernet Driver Settings] **▶** **OK**.

If the login screen appears, enter the System Manager ID and PIN, and then press [<Log In>] **▶** **OK**. [▶ System Manager ID and PIN\(P. 4\)](#)

- 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 \(Remote UI\)\(P. 187\)](#)

Administrator privileges are required.

1 On the control panel, select [Menu] in the [Home] screen, and press **OK**. [▶\[Home\] Screen\(P. 84\)](#)

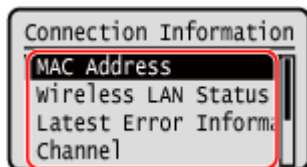
2 Press [Preferences] ▶ **OK** ▶ [Network] ▶ **OK** ▶ [Wireless LAN Settings] ▶ **OK**.

⇒ The [Select Network] screen is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then press [<Log In>] ▶ **OK**. [▶ System Manager ID and PIN\(P. 4\)](#)

3 Press [Connection Settings] ▶ **OK** ▶ [Connection Information] ▶ **OK**.

4 View the MAC address and the settings.



- Select [Latest Error Information] and press **OK** to display error information related to the wireless LAN connection.
- Select [Security Settings] and press **OK** to display the Encryption Key details.

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, press [Status Monitor] in the [Home] screen ▶ **OK** ▶ [Network Information] ▶ **OK** ▶ [Network Connection Method] ▶ **OK** ▶ [Connection Information] ▶ **OK**.

Installing Software and Drivers to the Computer

A19C-01K

Install the related software and drivers to the computer that will use the functions of the machine.

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/>

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

When the Firewall Settings of the Machine Are Configured

The computer that will be used with the machine must be allowed to communicate with the machine. If the computer is not allowed to communicate with the machine, you will not be able to install the software and drivers or use the functions of the machine. [▶Setting the Firewall\(P. 156\)](#)

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

- In Windows, you must add a new port. [▶Configuring a Printer Port \(Windows\)\(P. 112\)](#)

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

▶Viewing the Printer Port(P. 369)

- 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 data from a computer without installing software or drivers. [▶Using AirPrint Application to Print Data\(P. 146\)](#)

Basic Operations

Basic Operations	74
Turning ON and OFF the Machine	75
Turning ON the Machine	76
Turning OFF the Machine	77
Restarting the Machine	78
Reducing Power Consumption (Sleep Mode)	79
Using the Control Panel	81
Screens Displayed on the Control Panel	82
[Home] Screen	84
[Status Monitor] Screen	85
How to Operate the Control Panel	87
Entering Characters	88
Logging In to the Machine	89
Loading Paper	90
Loading Paper in the Paper Drawer	91
Preparations and Orientation for Loading Envelopes	96
Orientation for Loading Paper with a Logo	98
Specifying the Paper Size and Type	100
Setting the Paper Size and Type for the Paper Drawer	101
Registering Non-standard Size Paper (Custom Paper)	103
Hiding Unused Paper Sizes	105
Reducing the Operation Sound (Quiet Mode)	106

Basic Operations

A19C-01L

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. 75)**
- ▶ **Reducing Power Consumption (Sleep Mode)(P. 79)**

Using the Control Panel

Use the control panel to connect the machine to a mobile device and to configure the settings of the machine.

- ▶ **How to Operate the Control Panel(P. 87)**

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

- ▶ **Logging In to the Machine(P. 89)**

Loading Paper

Load printing paper into the paper drawer.

- ▶ **Loading Paper(P. 90)**

Turning ON and OFF the Machine

A19C-01R

Use the power switch to manually turn ON and OFF the machine.

- ▶ **Turning ON the Machine(P. 76)**
- ▶ **Turning OFF the Machine(P. 77)**
- ▶ **Restarting the Machine(P. 78)**

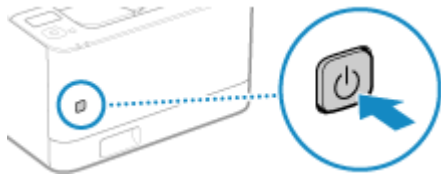
Turning ON the Machine

A19C-01S

To turn ON the machine, press the power switch on the front.

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

2 Press the power switch.



⇒ The start screen is displayed on the control panel.

NOTE

Blank Paper is Output

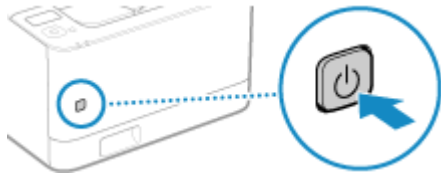
- A blank sheet of paper may be output when you turn ON the power for the first time. This is not a malfunction.

Turning OFF the Machine

A19C-01U

To turn the machine OFF, press the power switch on the front.
Turning OFF the machine deletes any data waiting to be printed.

1 Press the power switch.



- ⇒ The control panel 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.

NOTE

Turning ON the Machine Again

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

Restarting the Machine

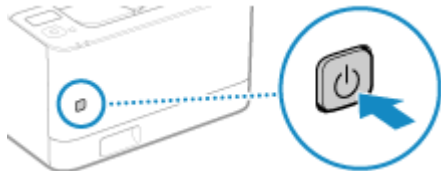
A19C-01W

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.

1 Press the power switch.



- ⇒ The control panel turns off, and the power turns OFF.
It may take a few minutes until the power turns OFF.

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)

A19C-01X

Sleep mode reduces power consumption by pausing certain operations inside the machine. You cannot manually put the machine into sleep mode. If no operations are performed for a certain period of time, the machine automatically enters sleep mode. The display turns off in sleep mode.

■ Exiting Sleep Mode

Press any key on the control panel to exit sleep mode.

■ Configuring Auto Sleep Time

Auto Sleep is a function that automatically places the machine into sleep mode if no operations are performed for a certain period of time. You can specify the timing of Auto Sleep.

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. 210)**

- 1 Log in to Remote UI. ▶ Starting Remote UI(P. 188)**
- 2 On the Portal page of Remote UI, click [Settings/Registration]. ▶ Portal Page of Remote UI(P. 190)**
- 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. 212)**
- 5 Click [OK].**
 - ⇒ The settings are applied.
- 6 Log out from Remote UI.**

NOTE

- The machine does not enter sleep mode in the following cases:
 - When the data indicator on the control panel is lit or blinking ▶ **Control Panel(P. 10)**
 - 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

Basic Operations

- When the machine is performing an adjustment, cleaning, or other operation
- When the machine is communicating with a computer or similar device

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

Using the Control Panel

A19C-01Y

Use the control panel to change the machine's settings and to connect to a mobile device.

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. 82)**
- ▶ **How to Operate the Control Panel(P. 87)**
- ▶ **Entering Characters(P. 88)**

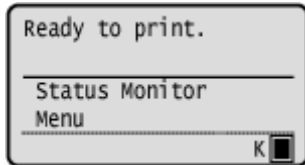
Screens Displayed on the Control Panel

A19C-020




The following are the main screens of the control panel.

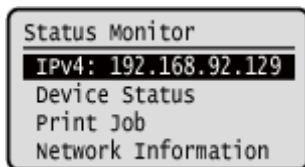
[Home] Screen

This screen appears immediately after the power is turned ON and the startup screen closes, and immediately after login.  **[Home] Screen(P. 84)**





[Status Monitor] Screen

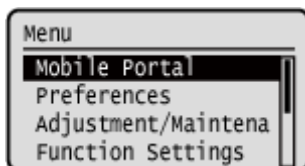
This screen is displayed when you press [Status Monitor]   on the [Home] screen and other locations. Use this screen to check the information of the machine, usage and logs, network settings, and error information.  **[Status Monitor] Screen(P. 85)**



[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.

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.




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.

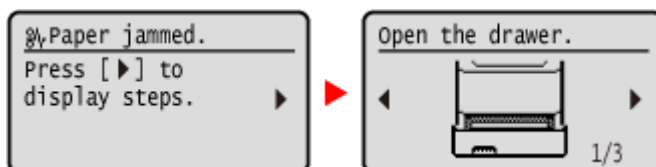
If a troubleshooting solution is not displayed, check the cause and solution by referring to the message or error code.

 **A Message Appears(P. 341)**

 **An Error Code Is Displayed(P. 353)**

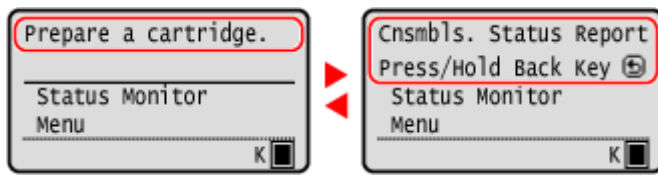
Display example:

- When an Error Occurs



- **When a Message Appears on the Screen**

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



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. 207)**
- You can invert the screen colors and adjust the contrast to make the screen easier to view. ▶ **[Accessibility] (P. 227)**

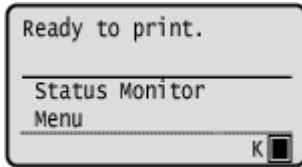
Clearing the Settings Automatically

- 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. ▶ **[Auto Reset Time](P. 211)**

[Home] Screen

A19C-021

This screen appears immediately after the power is turned ON and the startup screen closes. The status of the machine is displayed at the top and bottom of the screen for quick viewing and operations, as needed.



■ Status of the Machine

[]


When connected to a wireless LAN, [] is displayed.

[]


Displays the remaining amount of toner in the toner cartridge.

■ Function and Setting Buttons

[Status Monitor]

You can check the information of the machine, usage and logs, network settings, and error information.  **[Status Monitor] Screen(P. 85)**

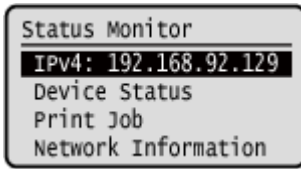
[Menu]

Configure the various settings of the machine.  **[Settings Menu Items(P. 205)]**

[Status Monitor] Screen

A19C-022

This screen is displayed when you press [Status Monitor] ► **OK** in the [Home] screen and other locations. Use this screen to check the information of the machine, usage and logs, network settings, and error information.



[IPv4]

Displays the IPv4 address of the machine by default. You can also hide this. ► **[Display IP Address](P. 209)**

[Error Information/Notification]

You can check the information of errors that occur on the machine. Take troubleshooting measures according to the error details.

► **A Message Appears(P. 341)**

► **An Error Code Is Displayed(P. 353)**

[Device Status]

[Paper Information]

Check the remaining amount of paper for the paper source.

[Cartridge Level]

Check the remaining amount of toner in the toner cartridge. Other internal parts may reach the end of their lifetime before the toner runs out.

[Check Toner Cartridge Name]

Check the toner cartridge name.

[Check Counter]

Check the total number of pages printed. ► **Checking the Number of Printed Pages (Check Counter)(P. 195)**

[Version Information]

Displays the firmware version information of the machine.

[Serial Number]

Displays the serial number of the machine.

[Print Job]

Displays the print processing status and log. ► **Viewing the Print Job Status and Log(P. 125)**

[Network Information]

[IPv4]

Check the IPv4 address and other settings. ► **Setting IPv4 Addresses(P. 53)**

[IPv6]

Check the IPv6 address and other settings. ► **Setting IPv6 Addresses(P. 55)**

[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

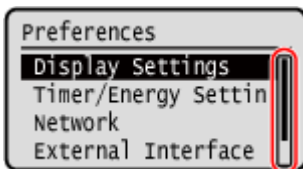
A19C-023

Use the keys on the control panel to set the various functions and check the settings.

- ▶ **Scrolling the Screen(P. 87)**
- ▶ **Moving to the Next or Previous Screen(P. 87)**
- ▶ **Confirming a Selected Item(P. 87)**
- ▶ **Using the Slider to Set Values(P. 87)**

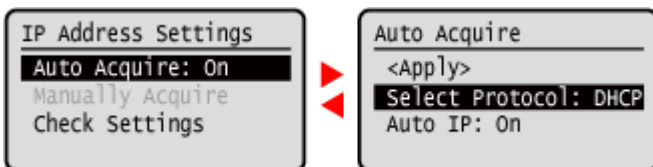
Scrolling the Screen

When the scroll bar appears on the screen, it indicates that there are items or information that cannot be completely displayed on the screen. Use ▲ or ▼ to scroll the screen in the direction pressed. The currently selected item is inverted.



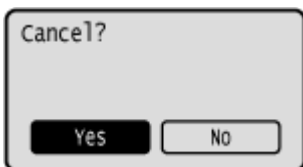
Moving to the Next or Previous Screen

To move to the next screen, press **OK** or ▶. To return to the previous screen, press ◀ or **Back**.



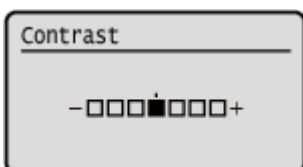
Confirming a Selected Item

To confirm a selected item, press **OK**.



Using the Slider to Set Values

To adjust the value, press ◀ or ▶.



Entering Characters

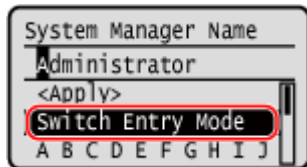
A19C-024

Use the on-screen keys to select the letters and numbers you want to enter and then press **OK** to enter the characters. You can enter letters, numbers, and symbols.



Changing the Character Type

Press [Switch Entry Mode] ► **OK**, select the character type and then press **OK**.



Moving the Cursor

Select [◀] or [▶] on the screen and then press **OK**.

Deleting Characters

Press [⌫] ► **OK** on the screen to delete one character.

If [◀] or [▶] is not displayed, pressing [⌫] ► **OK** deletes all the characters.

Entering Spaces

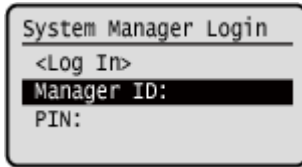
Press [Space] ► **OK**.

You can also enter a space by moving the cursor to the end of the characters and pressing [▶] ► **OK**.

Logging In to the Machine

A19C-025

When the System Manager ID is set, the login screen is displayed for operations that require administrator privileges. When the login screen is displayed on the control panel, enter the the System Manager ID and PIN to perform authentication. When authentication is successful, the screen changes, and you can continue operations.



1 Press [Manager ID] ► **OK**.

2 Enter the System Manager ID, and press **OK**.

3 Press [PIN] ► **OK**.

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

4 Enter the PIN, and press **OK**.

5 Press [<Log In>] ► **OK**.

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

6 When you have completed your operations, press **OK**.

Loading Paper

A19C-026

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\(P. 13\)](#) / [▶ Precautions When Handling Paper\(P. 16\)](#)

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

Loading Paper in the Machine

Load the paper in the paper drawer. When using envelopes or paper with logos, be careful of the orientation of the loaded paper and which side is face up.

- [▶ Loading Paper in the Paper Drawer\(P. 91\)](#)
- [▶ Preparations and Orientation for Loading Envelopes\(P. 96\)](#)
- [▶ Orientation for Loading Paper with a Logo\(P. 98\)](#)

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\(P. 100\)](#)

Loading Paper in the Paper Drawer

A19C-027

Load paper you usually use into the paper drawer, which can hold large amounts of paper. The setting method varies depending on the size of the paper to be loaded.

When Loading A4, B5, Legal, or Letter Size Paper

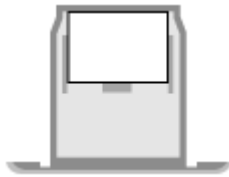
Load paper using the standard size method.

▶ **Loading Standard Size Paper(P. 91)**

When Loading A5 Size Paper

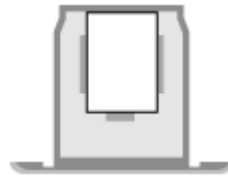
The setting method varies depending on the orientation of the paper to be loaded.

Landscape orientation (A5)



▶ **Loading Non-standard Size Paper(P. 93)**

Portrait orientation (A5R)



▶ **Loading Standard Size Paper(P. 91)**

When Loading Custom Size Paper

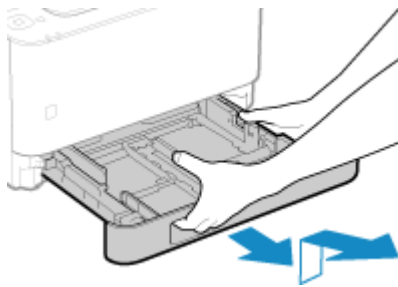
Load paper using the non-standard size method.

▶ **Loading Non-standard Size Paper(P. 93)**

Loading Standard Size Paper

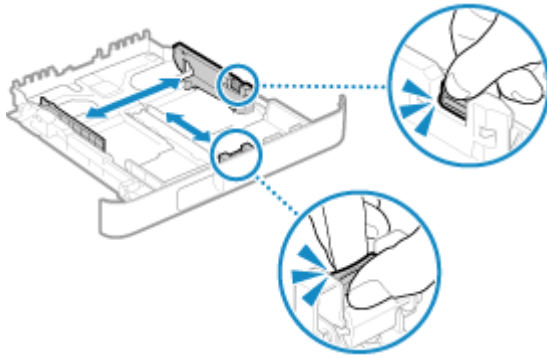
You can load paper correctly by aligning the paper guides on the paper drawer with the markings. When using paper with logos, be careful of the orientation of the loaded paper and which side is face up. ▶ **Orientation for Loading Paper with a Logo(P. 98)**

1 Pull out the paper drawer, and remove it while lifting the front side.

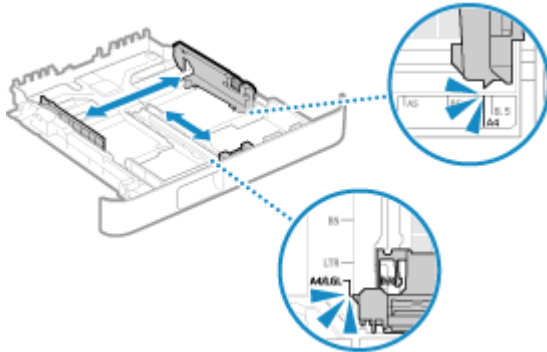


2 Align the paper guides with the size of the paper to be loaded.

1 While pressing the lock release lever, move the paper guide.

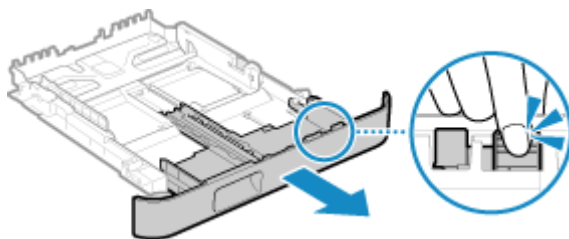


- 2** Align the projections on the paper guides with the size markings of the paper to be loaded. Paper guides that are aligned but too loose or too tight can cause misfeeds or a paper jam.

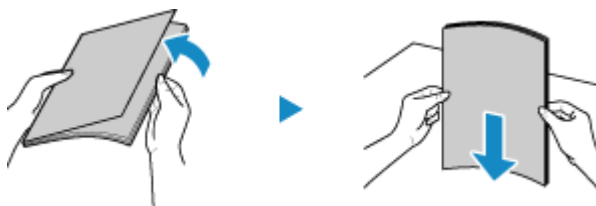


■When Loading Legal Size Paper

While pressing the lock release lever, extend the paper drawer toward you.

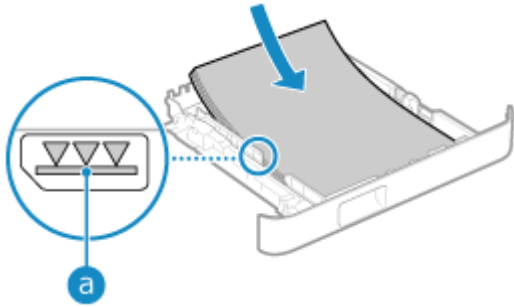


- 3** Fan the paper and align the edges.



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

- 4** Load the paper with the print side face up.



- Align the paper with the paper guide on the front side of the paper drawer.
- Make sure the loaded paper does not exceed the load limit line (**a**). If it exceeds the load limit line, there may be misfeeds or a paper jam.

■ 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 up.

- You can use only paper printed with this machine.
- If the printouts look faded, adjust the image quality. ▶ **[Manual Back Side Print (2-Sided Only)]**(P. 231)
- You cannot print on a side that you have already printed on.

5 Load the paper drawer into the machine.

▶ By default, the Paper Settings confirmation screen is displayed. ▶ **[Notify to Check Paper Settings]** (P. 256)

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

6 Set the paper size and type, as needed. ▶ **Setting the Paper Size and Type for the Paper Drawer**(P. 101)

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

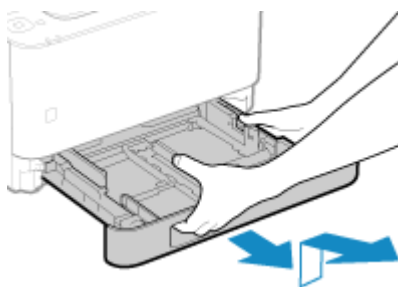
Loading Non-standard Size Paper

You can load paper correctly by aligning the paper guides on the paper drawer 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.

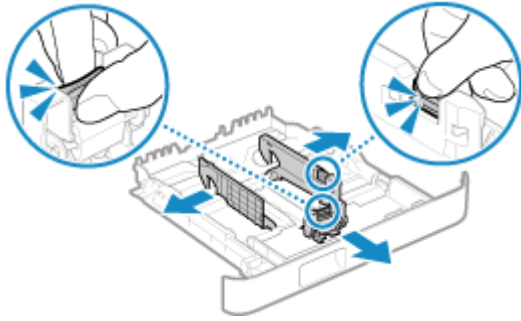
▶ **Preparations and Orientation for Loading Envelopes**(P. 96)

▶ **Orientation for Loading Paper with a Logo**(P. 98)

1 Pull out the paper drawer, and remove it while lifting the front side.



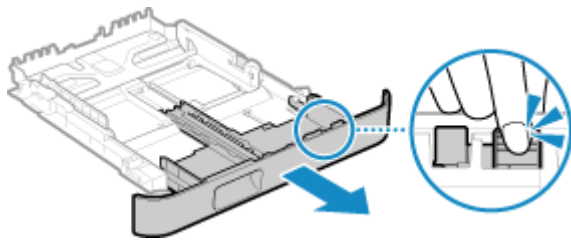
2 Slide the paper guides to the outside.



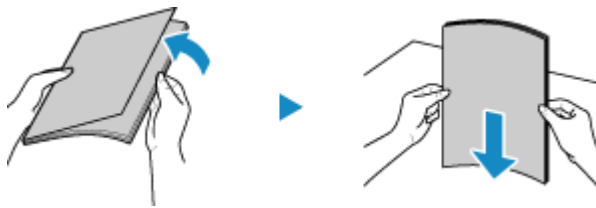
While pressing the lock release lever, move the paper guides.

■When Loading Paper Longer than A4 Size

While pressing the lock release lever, extend the paper drawer toward you.

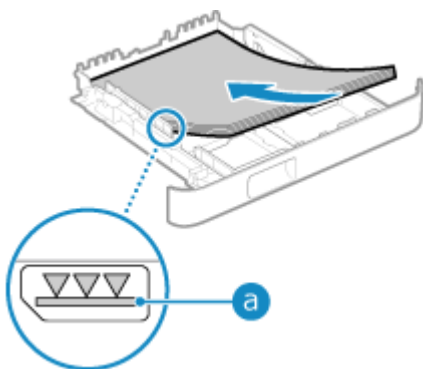


3 Fan the paper and align the edges.



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

4 Load the paper with the print side face up.



- Load the paper against the rear edge of the paper drawer.
- Make sure the loaded paper does not exceed the load limit line (a). If it exceeds the load limit line, there may be misfeeds or a paper jam.

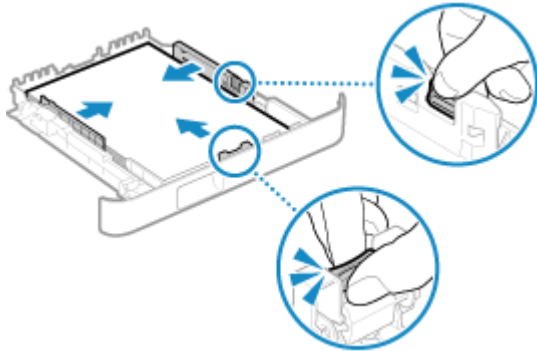
■When Printing on the Back Side of Printed Paper (Manual 2-sided Printing)

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

- You can use only paper printed with this machine.
- If the printouts look faded, adjust the image quality. [Manual Back Side Print (2-Sided Only)](P. 231)

- You cannot print on a side that you have already printed on.

5 Align the paper guides with the width and length of the paper.



- While pressing the lock release lever, align the paper guides with the width and length of the paper.
- Paper guides that are aligned but too loose or too tight can cause misfeeds or a paper jam.

6 Load the paper drawer into the machine.

- ▢ By default, the Paper Settings confirmation screen is displayed. **[Notify to Check Paper Settings] (P. 256)**

When you are using paper that is longer than A4 size, 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. 101)]**

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

Preparations and Orientation for Loading Envelopes

A19C-028

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. 96)**

▶ **Orientation of Envelopes(P. 97)**

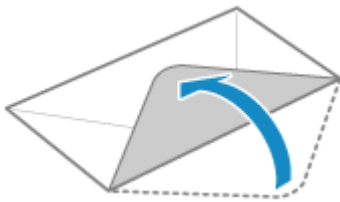
NOTE

- For the general procedure of loading envelopes, see the following:
▶ **Loading Paper in the Paper Drawer(P. 91)**

Preparations before Loading Envelopes

Align the envelopes regardless of the number of envelopes to be loaded.

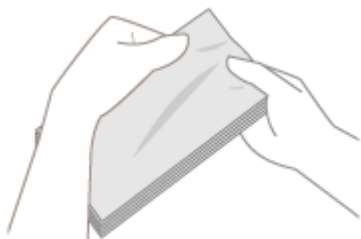
1 Close the flap of each envelope.



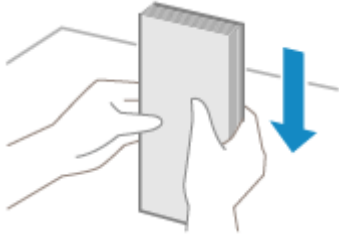
2 Flatten them to remove any air, and make sure the edges are pressed tightly.



3 Loosen any stiff corners of the envelopes, and flatten any curls.



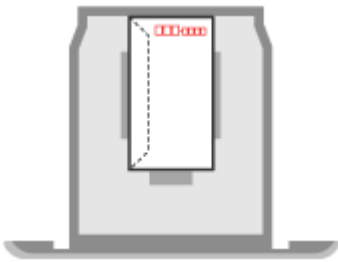
4 Align the edges of the envelopes on a flat surface.



⇒ The envelopes are ready to be loaded.

Orientation of Envelopes

Load the envelopes No. 10 (COM10), Monarch, ISO-C5, or DL in portrait orientation with the front side (non-glued side) face up and the long side of the envelope parallel with the long side of the paper drawer. Load the envelope with the flap closed and on the left side.



Orientation for Loading Paper with a Logo

A19C-029

When loading paper with a logo, pay attention to the orientation and which side is face up. By default, the orientation the paper is to be loaded and the side to print on vary depending on whether you want to print on one or both sides.

- ▶ **Printing on One Side of Paper with a Logo(P. 98)**
- ▶ **Printing on Both Sides of Paper with a Logo(P. 98)**

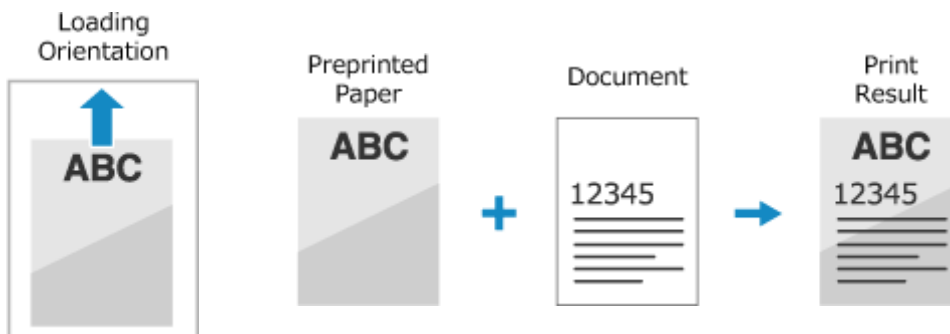
NOTE

- For the general procedure of loading paper, see the following:
 - ▶ **Loading Paper in the Paper Drawer(P. 91)**
- 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. 238)**

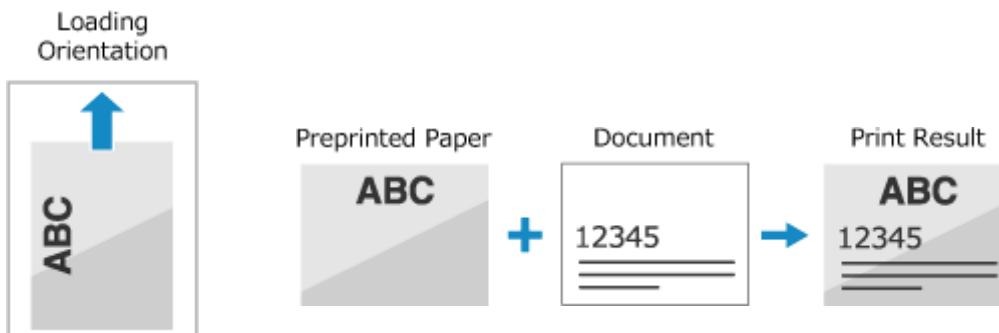
Printing on One Side of Paper with a Logo

Load the paper with the logo side (side to be printed) face up.

Paper with logo in portrait orientation



Paper with logo in landscape orientation



Printing on Both Sides of Paper with a Logo

Load the paper with the logo side (side to be printed first) face down.

Paper with logo in portrait orientation



Paper with logo in landscape orientation



Specifying the Paper Size and Type

A19C-02A

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. 101)**

Simplifying the Paper Settings

You can register and set the paper size for easier settings.

▶ **Registering Non-standard Size Paper (Custom Paper)(P. 103)**

▶ **Hiding Unused Paper Sizes(P. 105)**

Setting the Paper Size and Type for the Paper Drawer

A19C-02C

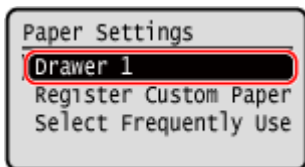
By default, the paper size and type of the paper drawer are set to LTR and Plain 2. When paper of a different size or type is loaded, change the paper settings.

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

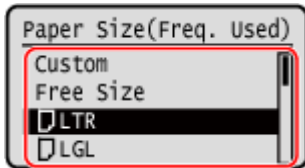
You can also configure the settings using Remote UI from a computer. [▶Managing the Machine from a Computer \(Remote UI\)\(P. 187\)](#)

1 On the control panel, select [Menu] in the [Home] screen, and press **OK**. [▶\[Home\] Screen\(P. 84\)](#)

2 Press [Paper Settings] **▶** **OK** **▶** [Drawer 1] **▶** **OK**.



3 Select the size of the paper loaded in the paper drawer, and press **OK**.



- You can scroll the screen to view paper sizes (such as envelopes) not displayed on the screen.
- If you frequently need to change the paper to be loaded, set to [Free Size]; this will reduce the number of steps required to change the setting each time. You can also display an error message when the setting in the printer driver is significantly different from the size of the loaded paper. [▶\[Action When Free Paper Size Mismatch\]\(P. 241\)](#)

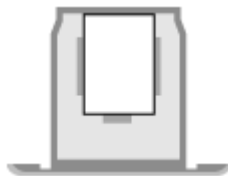
■When A5 Size Paper Is Loaded

When paper is loaded in the landscape orientation, select [A5]. When paper is loaded in the portrait orientation, select [A5R].

Landscape orientation (A5)

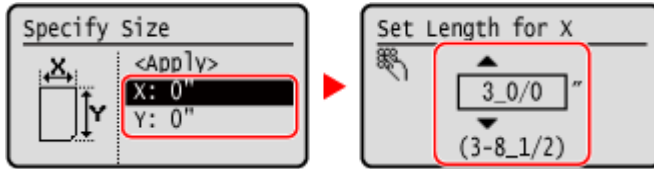


Portrait orientation (A5R)



■When Non-standard Size (Custom Size) Paper Is Loaded

- 1 Press [Custom].
- 2 Press [X] **▶** **OK** **▶** enter the value in [X] **▶** **OK**.



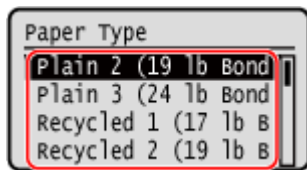
Enter the value using ▲ and ▼, with ◀ and ▶ to move the cursor between the digits for inputting whole numbers and fractions.

- 3 Enter the value in [Y] in the same way as [X].
- 4 Select [<Apply>], and press **OK**.

■ If a Set Paper Size Is Not Displayed

Press [<Other Sizes>], press **OK**, and select the paper size from the displayed list.

4 Select the type of the paper loaded in the paper drawer, and press **OK**.



If you frequently need to change the paper to be loaded, set to [Free]; this will reduce the number of steps required to change the setting each time. However, note that this setting lets the machine perform printing even if there is mismatch between the paper type setting in the printer driver and the paper type actually loaded in the machine.

When the paper type setting in the printer driver is [Auto], the machine operates the same way as when the paper type is [Plain 1].

⇒ 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. 105)**

Registering Non-standard Size Paper (Custom Paper)

A19C-02E

Custom paper is non-standard size paper whose side lengths can be freely defined within the range supported by the machine.

You can register sizes when frequently using specific non-standard size paper. You can call up the paper on the size input screen, saving you the trouble of entering the 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 \(Remote UI\)\(P. 187\)](#)

1 On the control panel, select [Menu] in the [Home] screen, and press **OK**. [▶\[Home\] Screen\(P. 84\)](#)

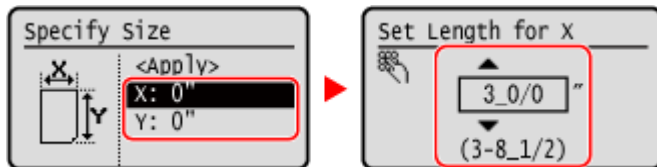
2 Press [Paper Settings] **▶** **OK** **▶** [Register Custom Paper] **▶** **OK**.

⇒ The [Register Custom Paper] screen is displayed.

3 Select the registration number, and press **OK**.

If you have selected the registered number, continue on to select [Edit], and press **OK**.

4 Press [X] **▶** **OK** **▶** enter the values in [X] **▶** **OK**.

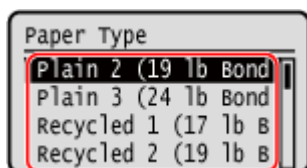


Enter the value using **▲** and **▼**, with **◀** and **▶** to move the cursor between the digits for inputting whole numbers and fractions.

5 Enter the values in [Y] in the same way as [X].

6 Select [<Apply>], and press **OK**.

7 Select the type of the paper, and press **OK**.



If you frequently need to change the paper to be loaded, set to [Free]; this will reduce the number of steps required to change the setting each time. However, note that this setting lets the machine perform printing even if there is mismatch between the paper type setting in the printer driver and the paper type actually loaded in the machine.

When the paper type setting in the printer driver is [Auto], the machine operates the same way as when the paper type is [Plain 1].

⇒ The custom paper is registered.

Hiding Unused Paper Sizes

A19C-02F

The paper settings screen displays the registered frequently used paper sizes. If unused paper sizes are displayed, you can hide these to make it easier to select a paper size.

To select a hidden paper size, press [Other Sizes] on the paper settings screen.

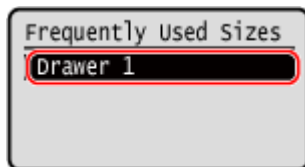
Use the control panel to configure the settings. You cannot configure the settings using Remote UI from a computer.

1 On the control panel, select [Menu] in the [Home] screen, and press **OK**. **▶**[Home] Screen(P. 84)

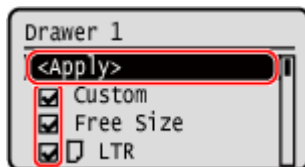
2 Press [Paper Settings] **▶** **OK** **▶** [Select Frequently Used Paper Sizes] **▶** **OK**.

⇒ The [Frequently Used Sizes] screen is displayed.

3 Press [Drawer 1], and press **OK**.



4 Clear the checkboxes of the paper sizes to hide, and press [<Apply>] **▶** **OK**.



⇒ Paper sizes whose checkboxes are cleared are not displayed on the paper settings screen.

Reducing the Operation Sound (Quiet Mode)

A19C-08Y







Quiet Mode is a function which reduces the operation sound of the machine.

- ▶ **Configuring and Canceling the Quiet Mode(P. 106)**
- ▶ **Specifying the Time(P. 106)**

Configuring and Canceling the Quiet Mode

You can set the machine to enter or exit the quiet mode from the control panel.

Use the operation panel to configure the settings. You cannot configure the settings using Remote UI from a computer.

- 1 On the operation panel, select [Menu] in the [Home] screen and press . ▶ [Home] Screen(P. 84)**
- 2 Press [Adjustment/Maintenance] ▶  [Adjust Image Quality] ▶  [Special Processing] ▶  [Quiet Mode] ▶ . ▶ [Quiet Mode](P. 233)**
- 3 Select [On] or [Off] and press .**

⇒ The settings are applied.

- If the message [When set to On, print speed slows down. Is it OK?] appears, press [Yes].

Specifying the Time

You can set the machine to enter or exit the quiet mode at a specified time.

This section describes how to configure using the Remote UI from a computer.

On the control panel, configure from [Menu] in the [Home] screen ▶ [Preferences]. ▶ [Timer/Energy Settings](P. 210)

* This setting is only available when [Quiet Mode] is set to [Off]. ▶ [Quiet Mode](P. 233)

- 1 Log in to Remote UI in System Manager Mode. ▶ Starting Remote UI(P. 188)**
- 2 On the Portal page of Remote UI, click [Settings/Registration]. ▶ Portal Page of Remote UI(P. 190)**
- 3 Click [Timer Settings] ▶ [Edit].**

⇒ The [Edit Timer Settings] screen is displayed.

- 4 Specify the time.**

■ **Setting the machine to enter the quiet mode at the specified time**

Select [Specify Quiet Mode Time Settings] and enter the time in [Start Time].

When the time is displayed in the 12-hour notation, select [AM] or [PM] after entering the time.

■ **Setting the machine to exit the quiet mode at the specified time**

Select [Specify Quiet Mode Time Settings] and enter the time in [End Time].

When the time is displayed in the 12-hour notation, select [AM] or [PM] after entering the time.

5 Click [OK].

⇒ The settings are applied.

6 Log out from Remote UI.

NOTE

- When the machine is in the quiet mode, each function operates slower than usual.

Printing

Printing	109
Printing Preparations	110
Preparing to Print from a Computer	111
Configuring a Printer Port (Windows)	112
Setting Up a Print Server	115
Printing from a Computer	118
Registering Non-standard Size Paper to the Computer (Custom Size)	121
Canceling Printing	123
Viewing the Print Job Status and Log	125

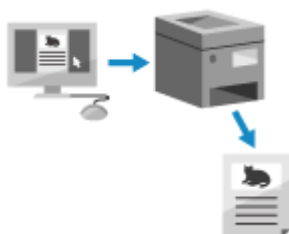
Printing

A19C-02H

You can print documents and photos from a computer.

For details on supported models, see the following: [▶Supported Functions\(P. 3\)](#)

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\(P. 111\)](#)

[▶Printing from a Computer\(P. 118\)](#)

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.

[▶Setting Up a Print Server\(P. 115\)](#)

Printing with the Standard Functions of the Operating System

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\(P. 131\)](#)

[▶Printing with Universal Print\(P. 145\)](#)

macOS

You can use AirPrint to print data. [▶Using AirPrint Application to Print Data\(P. 146\)](#)

Chrome OS

Use the print function that is standard in the operating system. [▶Printing from a Chrome OS Device\(P. 150\)](#)

■ 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 and Integrating with a Cloud Service\(P. 127\)](#)

When Results Are Not as Expected

If print results are too dark or too faint, adjust the print density.

[▶Adjusting the Print Density\(P. 280\)](#)

Printing Preparations

A19C-02J

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. 111)**
- ▶ **Setting Up a Print Server(P. 115)**
- ▶ **Preparations for Using Universal Print(P. 131)**

Preparing to Print from a Computer

A19C-02K

Install the printer driver to the computer that will be used to print. ▶ **Installing Software and Drivers to the Computer(P. 72)**

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. 364)**

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. 113)**

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

- You must add a new port. ▶ **Adding a Port(P. 112)**

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

▶ **Viewing the Printer Port(P. 369)**

- 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.

Configuring a Printer Port (Windows)

A19C-02L

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 number of the printer driver differs 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. 112)**

▶ **Changing the Port Type and Number(P. 113)**

Adding a Port

Administrator privileges are required on each computer.

Required Preparations

- Prepare the information of the IP address or DNS name (host name) of the machine and keep it close by. ▶ **Checking the Network Status and Settings(P. 69)**

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.

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].

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.

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

A19C-02R

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.

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. 115)**

▶ **Configuring the Settings for Sharing the Printer(P. 115)**

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. 111)**

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. 115)**

▶ **When Using macOS(P. 116)**

■ 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. 365)**

1 Log on to the computer that will be the print server, using an administrator account.

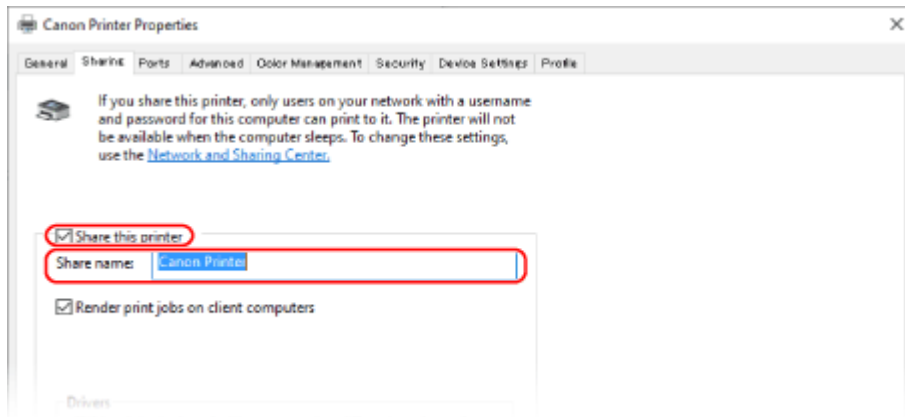
2 Click [] (Start) ▶ [] (Settings) ▶ [Devices] ▶ [Printers & scanners].

⇒ 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].
 - 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.
- 4 Install the additional driver while following the instructions on the screen.

6 Click [OK].

▣ The settings are applied.

■ When Using macOS

1 Click [Apple] ► [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.

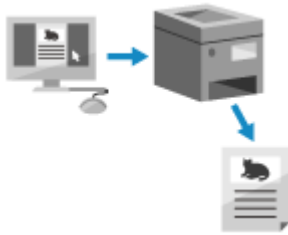
To enable specific users to use the print server, click [+] under [Users], and select the users who can use the print server.

5 Close the [Sharing] screen.

⇒ The settings are applied.

Printing from a Computer

A19C-02S



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.

NOTE

- You can use the dedicated Canon application Canon PRINT to print. ▶ **Using a Dedicated Application to Print (Canon PRINT)(P. 143)**

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

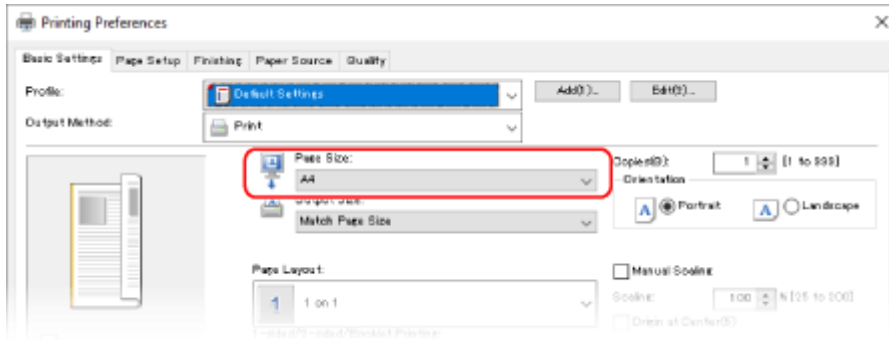
- Install the printer driver on the computer, and configure the settings according to your usage environment. ▶ **Preparing to Print from a Computer(P. 111)**
- If the document or paper to print is a non-standard size, register the size to the printer driver. ▶ **Registering Non-standard Size Paper to the Computer (Custom Size)(P. 121)**

▶ **When Using Windows(P. 118)**

▶ **When Using macOS(P. 119)**

■ 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. 123)**
- Use  or [Status Monitor] on the control panel to view the print job status and log. ▶ **Viewing the Print Job Status and Log(P. 125)**

■ **When Using macOS**

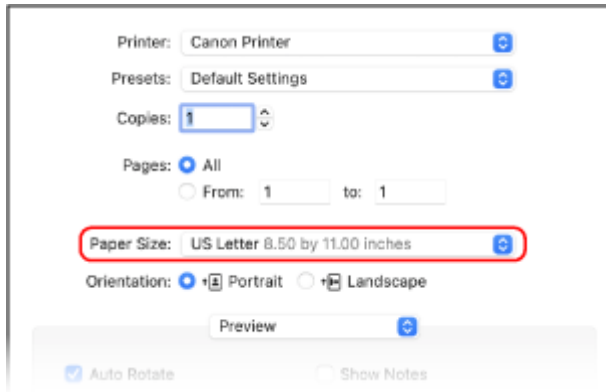
1 On your computer, open the document you want to print.

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.

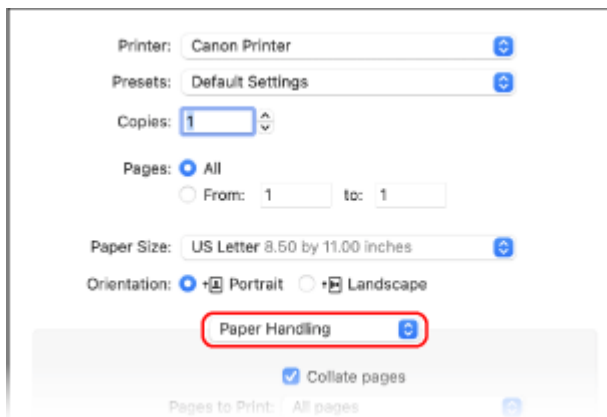
4 In [Paper Size] of the print options, select the paper size of the document.



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. 123)**
- Use  or [Status Monitor] on the control panel to view the print job status and log. ➤ **Viewing the Print Job Status and Log(P. 125)**

Registering Non-standard Size Paper to the Computer (Custom Size)

A19C-02U

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. 121)

▶ When Using macOS(P. 121)

■ When Using Windows

1 Click [] (Start) ▶ [] (Settings) ▶ [Devices] ▶ [Printers & scanners].

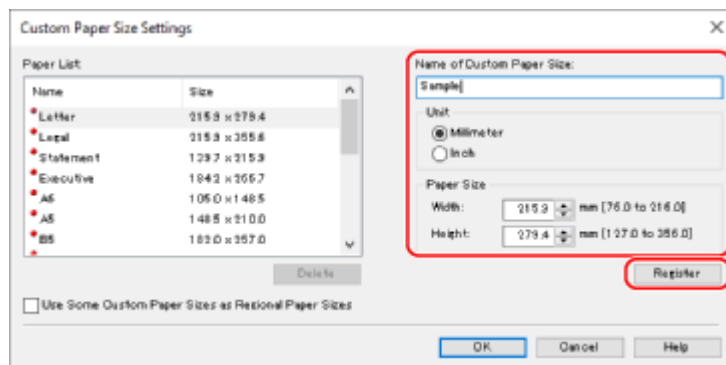
⇒ The [Printers & scanners] screen is displayed.

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

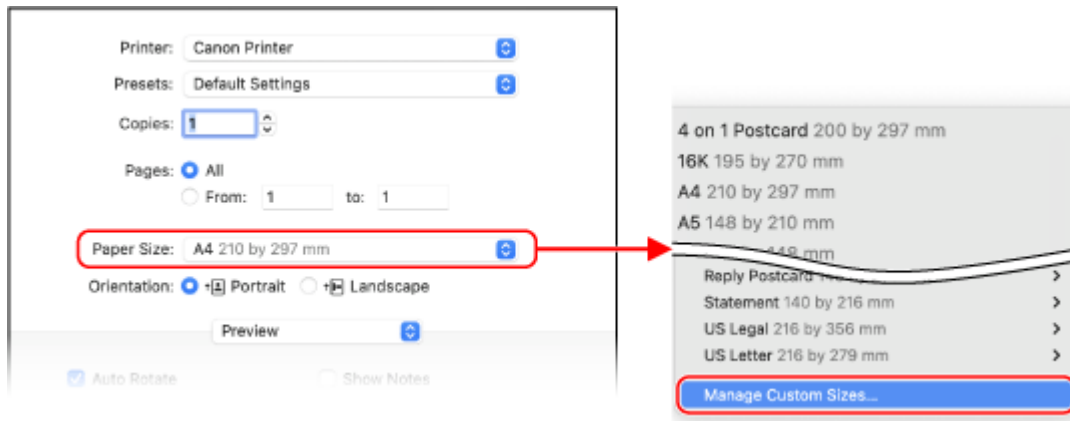
1 On your computer, open the document you want to print.

2 From the menu in the application used to open the document, click [Print].

⇒ The printing dialog box appears.

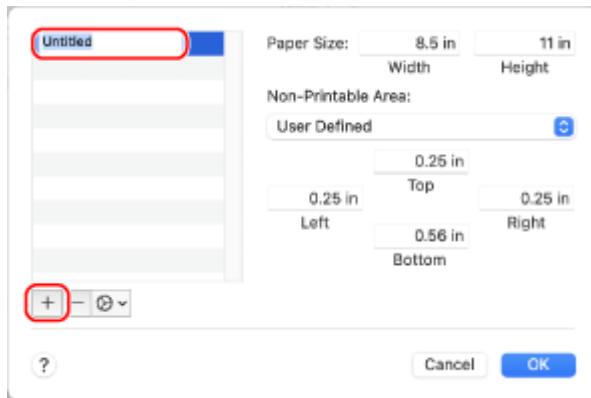
3 In [Printer], select the printer driver of the machine.

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.

Canceling Printing

A19C-02W

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.

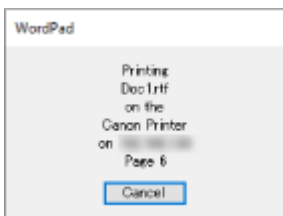
- ▶ **Canceling Printing from a Computer(P. 123)**
- ▶ **Canceling Printing with the Control Panel(P. 124)**
- ▶ **Canceling Printing with Remote UI(P. 124)**

Canceling Printing from a Computer

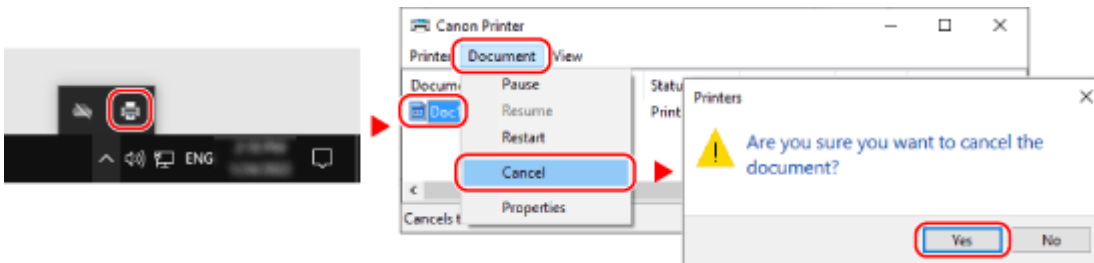
- ▶ **When Using Windows(P. 123)**
- ▶ **When Using macOS(P. 123)**

■ 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].



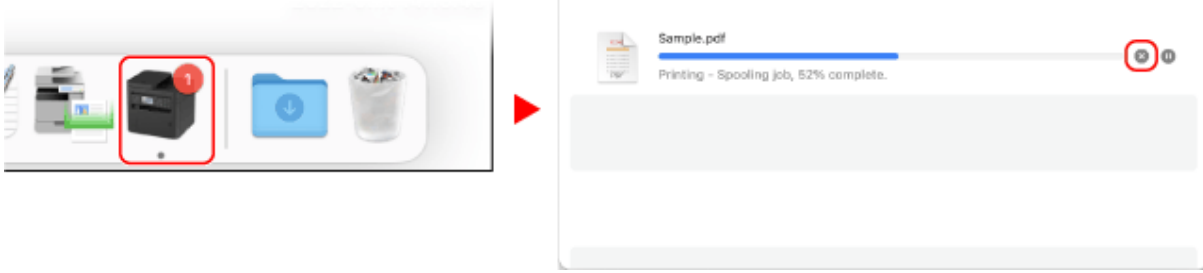
If the printer icon is not displayed in the Windows notification area or the document to be canceled is not displayed, the print data is sent to the machine after being processed on the computer.

In this case, cancel printing using the control panel of the machine or Remote UI. ▶ **Canceling Printing with the Control Panel(P. 124)**

■ When Using macOS

Click the printer icon in the Dock, select the document to cancel, and click [⌘].

Printing



Canceling Printing with the Control Panel

You can cancel printing using the procedure below.

- 1** On the control panel, press [Status Monitor] in the [Home] screen ▶ **OK** . ◀ [Home] Screen (P. 84)

⇒ The [Status Monitor] screen is displayed.

- 2** Press [Print Job] ▶ **OK** ▶ [Job Status] ▶ **OK** .

- 3** Select the job to be canceled in [Print Job Status], press **OK** .

- 4** Press [<Cancel>] ▶ **OK** ▶ [Yes] ▶ **OK** .

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. 192)**

Viewing the Print Job Status and Log

A19C-02X

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. [▶\[Display Job Log\]\(P. 255\)](#)

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\(P. 192\)](#)

1 On the control panel, press [Status Monitor] in the [Home] screen ▶ . [▶\[Home\] Screen\(P. 84\)](#)


⇒ The [Status Monitor] screen is displayed.

2 Select [Print Job], press .

3 Check the print job status and log.

■ Viewing the Print Job Status


1 Select [Job Status], press .


2 Select a job to view its details and press .

⇒ 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 Select [Job Log], press .

2 Select a job to view its details and press .

⇒ 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\(P. 353\)](#)

Linking with Mobile Devices and Integrating with a Cloud Service

Linking with Mobile Devices and Integrating with a Cloud Service	127
Preparations for Linking with Mobile Devices and Integrating with a Cloud Service	128
Preparations for Direct Connection	129
Preparations for Using Universal Print	131
Registering the Machine to Microsoft Entra ID	132
Registering the Machine to the Computer	135
Preparations for Using AirPrint	136
Connecting a Mobile Device to the Machine	139
Connecting a Mobile Device via Wireless LAN Router (LAN Connection)	140
Connecting a Mobile Device Directly to the Machine (Direct Connection)	141
Using a Dedicated Application to Print (Canon PRINT)	143
Using the Cloud Integration Service to Print	144
Printing with Universal Print	145
Using AirPrint Application to Print Data	146
Printing from an Android Device	149
Printing from a Chrome OS Device	150

Linking with Mobile Devices and Integrating with a Cloud Service

A19C-02Y

The machine can be operated from a smartphone, tablet, or other mobile device, or from a cloud service. You can use a compatible application or service to easily print photos and documents. For details on supported models, see the following: **Supported Functions(P. 3)**

Canon PRINT

Dedicated Canon application.

Using a Dedicated Application to Print (Canon PRINT)(P. 143)

Cloud Integration Service

Enables printing from mobile devices using the Canon cloud integration service.

Using the Cloud Integration Service to Print(P. 144)

Universal Print

Enables you to print documents from Windows devices via the Microsoft Cloud. If your device is connected to the Internet, you can print documents when you are away from the machine.

Preparations for Using Universal Print(P. 131)

Printing with Universal Print(P. 145)

AirPrint

This is a standard function on an iPhone, iPad, iPod touch, and Mac. You can print from applications that support AirPrint without having to install a dedicated application or driver.

Preparations for Using AirPrint(P. 136)

Using AirPrint Application to Print Data(P. 146)

Canon Print Service

Dedicated Canon plugin for Android devices. Enables printing from any application.

Using a Dedicated Plugin to Print (Canon Print Service)(P. 149)

Mopria® Print Service

Common plugin for Mopria® certified printers and multifunction machines. Enables printing from any application on an Android device without having to install a dedicated plugin or application for individual manufacturers.

Using a Common Plugin to Print (Mopria® Print Service)(P. 149)

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 a Chrome OS Device(P. 150)

■ 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 and change the machine settings. 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. 187)

* 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 and Integrating with a Cloud Service

A19C-030

To directly connect a mobile device to the machine or to use Universal Print or AirPrint, you must first configure the settings on the machine.

- ▶ **Preparations for Direct Connection(P. 129)**
- ▶ **Preparations for Using Universal Print(P. 131)**
- ▶ **Preparations for Using AirPrint(P. 136)**

Preparations for Direct Connection

A19C-031

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.

- ▶ **Enabling the Direct Connection Function(P. 129)**
- ▶ **Checking the Network Connection Type of the Machine(P. 130)**

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. 213)

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. 188)**
 - 2 On the Portal page of Remote UI, click [Settings/Registration]. ▶ Portal Page of Remote UI(P. 190)**
 - 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. 78)**

⇒ 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 On the control panel, press [Status Monitor] in the [Home] screen .  **[Home] Screen(P. 84)**

⇒ 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. 41)**

 **Selecting Wired or Wireless LAN(P. 39)**

Preparations for Using Universal Print

A19C-032

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 Microsoft Entra ID.

- ▶ **Registering the Machine to Microsoft Entra ID(P. 132)**
- ▶ **Registering the Machine to the Computer(P. 135)**

Registering the Machine to Microsoft Entra ID

A19C-033

Register the machine to the cloud-based authentication and management service, Microsoft Entra ID, and set the members or groups that will use the machine.

- 🔗 **Step 1: Registering the Machine to Microsoft Entra ID(P. 132)**
- 🔗 **Step 2: Specifying the Members and Groups to Use the Machine(P. 134)**

Step 1: Registering the Machine to Microsoft Entra ID

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. 188)

2 On the Portal page of Remote UI, click [Settings/Registration]. 🔗 Portal Page of Remote UI(P. 190)

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.
- Note that you may need to change [Application ID], [Microsoft Entra ID Authentication URL], or [Microsoft Entra ID Registration URL] depending on your cloud environment.
- If you change [Application ID], [Microsoft Entra ID Authentication URL], or [Microsoft Entra ID Registration URL] by mistake, manually set the initial values shown below.
 - [Application ID]: f9fc375c-c7ba-4e5c-b213-23affd792cc1
 - [Microsoft Entra ID Authentication URL]: <https://login.microsoftonline.com/organizations/oauth2/v2.0>
 - [Microsoft Entra ID Registration URL]: <https://register.print.microsoft.com/api/v1.0/register>

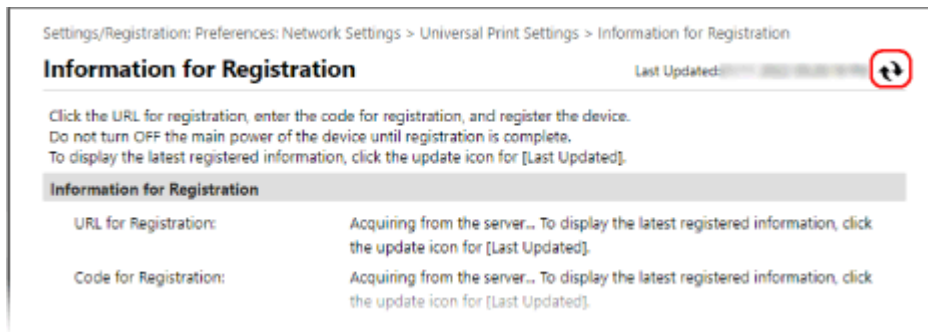
6 Click [OK].

⇒ The [Universal Print Settings] screen is displayed.

7 Click [Register] in [Registration Status].

⇒ The [Information for Registration] screen is displayed.

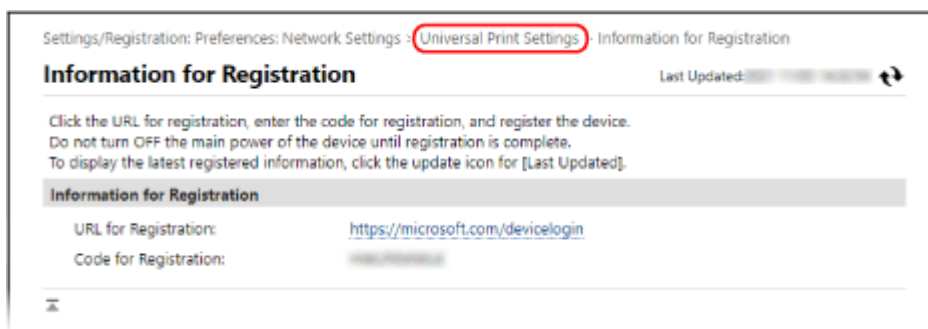
8 Wait several seconds, and then click [↻].



9 Click the link displayed in [URL for Registration].

10 Register the machine according to the instructions on the screen.

11 Click [Universal Print Settings] at the top of the Remote UI screen.



⇒ The [Universal Print Settings] screen is displayed.

12 Wait a few minutes, and then click [↻].

⇒ When registration is complete, [Registered] is displayed in [Registration Status].

13 Log out from Remote UI.

NOTE

Canceling the Registration

- Click [Unregister] on the [Universal Print Settings] screen ► [OK]. On the Microsoft Entra ID 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 Microsoft Entra ID 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

A19C-034

Register the machine, which is registered to Microsoft Entra ID, to the computer to be used for Universal Print.

Required Preparations

- Register the machine to Microsoft Entra ID. [▶ Registering the Machine to Microsoft Entra ID\(P. 132\)](#)

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.

Preparations for Using AirPrint

A19C-035

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. 136)**
- ◉ **Setting the Functions and Security to Be Used with AirPrint(P. 137)**

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. 188)**

2 On the Portal page of Remote UI, click [Settings/Registration]. ◉ **Portal Page of Remote UI(P. 190)**

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:

- HTTP ▶[Use HTTP](P. 225)
- IPP printing ▶[IPP Print Settings](P. 224)
- mDNS (IPv4) ▶[mDNS Settings](P. 221)
- mDNS (IPv6) ▶[mDNS Settings](P. 221)

Setting the Functions and Security to Be Used with AirPrint

AirPrint uses the IPP protocol.

You can configure the settings to encrypt communication with TLS and configure IPP authentication when using the 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. 162)

1 Log in to Remote UI in System Manager Mode. ▶Starting Remote UI(P. 188)

2 On the Portal page of Remote UI, click [Settings/Registration]. ▶Portal Page of Remote UI(P. 190)

3 Click [Network Settings] ▶ [IPP Print Settings] ▶ [Edit].

⇒ The [Edit IPP Print Settings] screen is displayed.

4 Configure the IPP settings.

■When Restricting the Functions to Use

Clear the [Use IPP Printing] checkbox.

When you clear the checkbox, printing with AirPrint is no longer possible.

■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

A19C-036

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. 140)



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 router. You must manually connect the mobile device each time you use the machine.

▶ Preparations for Direct Connection(P. 129)

▶ Connecting a Mobile Device Directly to the Machine (Direct Connection)(P. 141)



Connecting a Mobile Device via Wireless LAN Router (LAN Connection)

A19C-037

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. 37)**
 - * 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. 53)**

Connect the mobile device to either of the following wireless LAN routers:

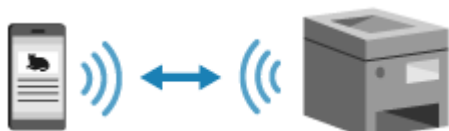
- A wireless LAN router connected to the machine
- (When the machine is connected to a wired LAN) A wireless LAN router on the network connected to the machine

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)

A19C-038

Connect a mobile device directly to the machine via Wi-Fi. You can directly connect it to the machine without using wireless LAN router. You must manually connect the mobile device each time you use the machine. To connect a mobile device directly, use the control panel to put the machine into the waiting state, and then search for the machine from the mobile device. Next, enter the network key to connect the mobile device to the machine. By default, only one mobile device can be directly connected to the machine at any one time. Setting a fixed SSID and network key enables you to connect up to five mobile devices at the same time.



Required Preparations

- Make preparations such as enabling the Direct Connection function on the machine. [▶ Preparations for Direct Connection\(P. 129\)](#)

1 On the control panel, select [Menu] in the [Home] screen, and press [Mobile Portal] . [▶ \[Home\] Screen\(P. 84\)](#)

⇒ The [Mobile Portal] screen is displayed.

2 Select [<Connect>] and press .

⇒ The machine enters waiting state for Direct Connection.

- Within 5 minutes of pressing [<Connect>], you must directly connect the mobile device.
- You can skip this step when [Connect from device you want to connect.] is displayed. Press and proceed to Step 3.
- When [Maximum number of wireless devices connected w/ 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>] ▶ .

* By default, only one mobile device can be directly connected to the machine at any one time.

3 Directly connect the mobile device.

- 1 Check the machine's SSID and network key displayed on the control panel screen.

- 2 In the Wi-Fi settings of the mobile device, select the SSID of the machine, and enter the network key.

⇒ The [Mobile Portal] 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 w/ Direct Connection has been reached.] is displayed on the screen.

For details about how to configure the Wi-Fi settings, see the manual of the mobile device.

4 When you have completed your operations on the mobile device, press [**<Disconnect>**] ▶ **OK**.

⇒ 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 you are using the machine via a wireless LAN connection and the connection drops out

Using a Dedicated Application to Print (Canon PRINT)

A19C-039

You can use the dedicated Canon application Canon PRINT to print.

▶ **When Using a Computer (Windows)(P. 143)**

▶ **When Using a Mobile Device(P. 143)**

When Using a Computer (Windows)

Compatible Operating Systems and Download Site

Search for "Canon PRINT" from Microsoft Store.

When Using a Mobile Device

Compatible Operating Systems and Download Site

- When using iOS/iPadOS
Search for "Canon PRINT" from App Store.
- When using Android
Search for "Canon PRINT" from Google Play.

Usage






- Connect a mobile device to the machine. ▶ **Connecting a Mobile Device to the Machine(P. 139)**
- Register the machine to Canon PRINT.
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.
You can view the IP address with [Menu] on the control panel ▶ **OK** ▶ [Mobile Portal] ▶ **OK** ▶ [Display Device Name/IP Address] ▶ **OK**.
- For details about registering the machine and printing, see the Help menu item in the application.

Using the Cloud Integration Service to Print

A19C-03A

You can use the Canon cloud integration service to print documents and photos stored in cloud services.

Usage

- To use the cloud integration service, the machine must be registered.
- Use the procedure below to issue the registration code used to register the machine.
On the control panel, press [Menu] ►  ► [Preferences] ►  ► [Network] ►  ► [Web Service Setup] ►  ► [Issue Registration Code].  **[Web Service Setup](P. 216)**
- For information on how to register the machine and how to print, see **here** .
* Depending on the country or region, this service may not be available and the available applications may vary.

Printing with Universal Print

A19C-03C

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 Microsoft Entra ID.

Required Preparations

- Register the machine to Microsoft Entra ID, and set the members or groups that will use the machine. ▶
Registering the Machine to Microsoft Entra ID(P. 132)
- To each computer that will use Universal Print, register the machine that is registered to Microsoft Entra ID.
▶**Registering the Machine to the Computer(P. 135)**

For details about how to print with Universal Print and the supported operating systems, see the Microsoft website.
<https://docs.microsoft.com/>

Using AirPrint Application to Print Data

A19C-03E

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.



▶ **When Using an iPhone, iPad, or iPod touch(P. 146)**

▶ **When Using a Mac(P. 147)**

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. 136)**
- Connect the machine to an iPhone, iPad, or iPod touch. ▶ **Connecting a Mobile Device to the Machine(P. 139)**

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.

Use [Status Monitor] on the control panel to view the print job status and log. [▶ Viewing the Print Job Status and Log\(P. 125\)](#)

When Using a Mac

You can use AirPrint to print 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 OS X 10.7 or later*¹ installed.

*¹ When printing from a Mac connected to the machine via USB, OS X 10.9 or later.

Required Preparations

- Set the machine to enable use of AirPrint. [▶ Preparations for Using AirPrint\(P. 136\)](#)
- Connect the machine to a Mac. [▶ Setting Up the Network\(P. 37\)](#)
When connecting via USB, connect to the USB port for computer connection on the back of the machine with a USB cable. [▶ Rear Side\(P. 9\)](#)
- In [System Preferences] ▶ [Printers & Scanners] on the Mac, click [+] to register the machine.

■ 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.

Use [Status Monitor] on the control panel to view the print job status and log.  **Viewing the Print Job Status and Log(P. 125)**

Printing from an Android Device

A19C-03F

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.

- ▶ **Using a Dedicated Plugin to Print (Canon Print Service)(P. 149)**
- ▶ **Using a Common Plugin to Print (Mopria® Print Service)(P. 149)**

Using a Dedicated Plugin to Print (Canon Print Service)

You can use the dedicated Canon plugin Canon Print Service to print from any application.

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. 139)**
- 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 [Menu] on the control panel ▶ **OK** ▶ [Mobile Portal] ▶ **OK** ▶ [Display Device Name/IP Address] ▶ **OK**.
- 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. 139)**
- For details about how to print and Mopria® certified printers, see the following website:
<https://mopria.org/>

Printing from a Chrome OS Device

A19C-03H

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.

Usage

- Connect a Chromebook to the machine.
 - ▶ **Connecting a Mobile Device via Wireless LAN Router (LAN Connection)(P. 140)**
When connecting via USB, connect to the USB port for computer connection on the back of the machine with a USB cable. ▶ **Rear Side(P. 9)**
- For details about how to print using the Chromebook, see Chromebook Help.
<https://support.google.com/chromebook/answer/7225252/>

Security

Security	152
Setting the Department ID and PIN for the Administrator	153
Protecting the Network	155
Setting the Firewall	156
Changing the Port Number	159
Using a Proxy	160
Using TLS	162
Using IEEE 802.1X	164
Managing and Verifying a Key and Certificate	166
Generating a Key and Certificate	167
Generating a Key and Certificate Signing Request (CSR) and Obtaining and Registering a Certificate ...	169
Registering a Key and Certificate or CA Certificate Obtained from an Issuing Authority	172
Verifying a Received Certificate with OCSP	174
Preventing Leaking Information	175
Preventing Unauthorized Use	176
Restricting Use of Remote UI	177
Restricting Use from a Mobile Device	179
Preventing Connection to Computer via USB Port	180
Configuring LPD, RAW, or WSD	181
Disabling HTTP Communication	183

Security

A19C-03J

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 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. 153)

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. 155)

Managing Usage Status

For example, using a PIN or password and setting usage restrictions can help prevent unauthorized use of Remote UI. Implementing measures that include operations according to usage status of the machine can improve security.

▶ Preventing Leaking Information(P. 175)


▶ Preventing Unauthorized Use(P. 176)

Setting the Department ID and PIN for the Administrator

A19C-03K


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\(P. 4\)](#)

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 \(Remote UI\)\(P. 187\)](#)
Administrator privileges are required.

1 On the control panel, select [Menu] in the [Home] screen, and press . [\[Home\] Screen\(P. 84\)](#)

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 [<Log In>] .

3 Press [System Manager ID and PIN]  enter the System Manager ID .

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

4 Enter the System Manager PIN, and press .

Specify any number other than "7654321." You cannot set a PIN consisting of all zeros, such as "00" or "0000000."

5 Enter the PIN again, and press .

⇒ 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. [If the Problem Persists\(P. 356\)](#)

NOTE

Setting the System Manager Information

- 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. 192)
- 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. 190)**

Clearing the System Manager ID and PIN Settings

- Clear the entered values of the System Manager ID and PIN, and then click [Apply] with the fields left empty.

Protecting the Network

A19C-03L

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. 156)**

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. 159)**

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. 160)**

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. 162)**

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. 164)**

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. 166)**

■ See Also

For the network settings at setup, see the following.

▶ **Configuring Your Machine for Your Network Environment(P. 57)**

Setting the Firewall

A19C-03R

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\(P. 23\)](#)

[▶Setting IP Address Filtering\(P. 156\)](#)

[▶Setting MAC Address Filtering\(P. 157\)](#)

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. [▶\[Firewall Settings\]\(P. 216\)](#)

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\(P. 188\)](#)

2 On the Portal page of Remote UI, click [Settings/Registration]. [▶Portal Page of Remote UI\(P. 190\)](#)

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\(P. 78\)](#)

☞ 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. ▶ [\[Firewall Settings\]\(P. 216\)](#) 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\(P. 188\)](#)

2 On the Portal page of Remote UI, click [Settings/Registration]. ▶ [Portal Page of Remote UI\(P. 190\)](#)

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\(P. 78\)](#)

► The settings are applied.

Changing the Port Number

A19C-03S

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. 225)**

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. 188)**

2 On the Portal page of Remote UI, click [Settings/Registration]. ▶ **Portal Page of Remote UI(P. 190)**

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. 78)**

⇒ 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. 181)**

HTTP ▶ **Disabling HTTP Communication(P. 183)**

SNMP ▶ **Configuring SNMP(P. 64)**

Changing the Port Number of the Proxy Server

- To change the port number of the proxy server, see the following:
 - ▶ **Using a Proxy(P. 160)**

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. 112)**

Using a Proxy

A19C-03U

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. 188)

2 On the Portal page of Remote UI, click [Settings/Registration]. ▶ Portal Page of Remote UI(P. 190)

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

A19C-03W

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. [▶\[Use Remote UI\] \(P. 258\)](#)

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\(P. 166\)](#)

1 Log in to Remote UI in System Manager Mode. [▶Starting Remote UI\(P. 188\)](#)

2 On the Portal page of Remote UI, click [Settings/Registration]. [▶Portal Page of Remote UI\(P. 190\)](#)

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\(P. 24\)](#)

[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\(P. 78\)](#)

⇒ 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 IEEE 802.1X

A19C-03X

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. 164)**

▶ **Setting IEEE 802.1X(P. 164)**

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. 216)**

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. 166)**
 - * 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. 162)**

1 Log in to Remote UI in System Manager Mode. ▶ **Starting Remote UI(P. 188)**

2 On the Portal page of Remote UI, click [Settings/Registration]. ▶ **Portal Page of Remote UI(P. 190)**

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. 78)

⇒ The settings are applied.

Managing and Verifying a Key and Certificate

A19C-03Y

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. For details on supported models, see the following: [🔗Supported Functions\(P. 3\)](#)

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. 167)

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. 169)

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. 172)

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. 174)

Generating a Key and Certificate

A19C-040

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. [▶Keys and Certificates\(P. 23\)](#)

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\(P. 188\)](#)

2 On the Portal page of Remote UI, click [Settings/Registration]. [▶Portal Page of Remote UI\(P. 190\)](#)

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

A19C-041

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. [▶Keys and Certificates\(P. 23\)](#)

[▶Generating a Key and CSR\(P. 169\)](#)

[▶Registering a Certificate Issued by a Certificate Authority to a Key\(P. 170\)](#)

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\(P. 188\)](#)

2 On the Portal page of Remote UI, click [Settings/Registration]. [▶Portal Page of Remote UI\(P. 190\)](#)

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.

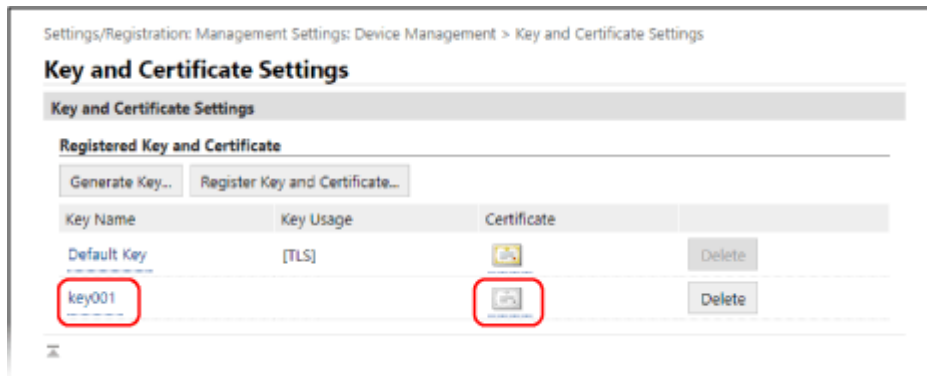
1 Log in to Remote UI in System Manager Mode. ▶ Starting Remote UI(P. 188)

2 On the Portal page of Remote UI, click [Settings/Registration]. ▶ Portal Page of Remote UI(P. 190)

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.

Registering a Key and Certificate or CA Certificate Obtained from an Issuing Authority

A19C-042

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. [▶Keys and Certificates\(P. 23\)](#)
- 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\(P. 188\)](#)

2 On the Portal page of Remote UI, click [Settings/Registration]. [▶Portal Page of Remote UI\(P. 190\)](#)

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

A19C-043

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. 188)**
- 2 On the Portal page of Remote UI, click [Settings/Registration]. ▶ Portal Page of Remote UI(P. 190)**
- 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 Leaking Information

A19C-044

Leaving a printed document on the machine poses a risk of information leakage. In addition, while using mobile devices is easy and convenient, these can lead to information theft.

You can take measures to prevent leaking information, according to the usage status of the function, to ensure safer use of the machine.

Appropriately Restricting Functions

You can restrict access to part or all of a function using mobile devices.

▶ Restricting Use from a Mobile Device(P. 179)

Preventing Unauthorized Use

A19C-045

The machine 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 Use of Remote UI(P. 177)**
- ▶ **Restricting Use from a Mobile Device(P. 179)**

Disabling Unused Functions

You can disable unused functions to prevent intrusion from the outside.

- ▶ **Preventing Connection to Computer via USB Port(P. 180)**
- ▶ **Configuring LPD, RAW, or WSD(P. 181)**
- ▶ **Disabling HTTP Communication(P. 183)**

■ See Also

For details about the administrator account, see the following.

- ▶ **Setting the Department ID and PIN for the Administrator(P. 153)**

Restricting Use of Remote UI

A19C-046

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 password 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 Password to Use for Remote UI(P. 177)**

▶ **Disabling Remote UI(P. 177)**

Setting the Password to Use for Remote UI

You can restrict the use of Remote UI to only those users who know the Remote UI password.

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 password has been set on the machine. ▶ **Managing the Machine from a Computer (Remote UI)(P. 187)**

Administrator privileges are required.

1 On the control panel, select [Menu] in the [Home] screen, and press **OK**. ▶ [Home] Screen(P. 84)

2 Press [Management Settings] ▶ **OK** ▶ [Remote UI Settings/Update Firmware] ▶ **OK** ▶ [Remote UI Settings] ▶ **OK** ▶ [Use Password] ▶ **OK**.

⇒ The [Use Password] screen is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then press [<Log In>] ▶ **OK**. ▶ System Manager ID and PIN(P. 4)

3 Set [Use Password] to [On], enter the Remote UI password, and press **OK**.

4 Enter the same password, and press **OK**.

⇒ 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 password. ▶ [Use Password](P. 258)

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, select [Menu] in the [Home] screen, and press **OK**. **▶**[Home] Screen(P. 84)

2 Press [Management Settings] **▶** **OK** **▶** [Remote UI Settings/Update Firmware] **▶** **OK** **▶** [Remote UI Settings] **▶** **OK**.

⇒ The [Remote UI Settings] screen is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then press [<Log In>] **▶** **OK**. **▶**
System Manager ID and PIN(P. 4)

3 Press [Use Remote UI] **▶** **OK** **▶** [Off] **▶** **OK**.

4 Restart the machine. **▶**Restarting the Machine(P. 78)

⇒ The settings are applied.

Restricting Use from a Mobile Device

A19C-047

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. 188)**
- 2 On the Portal page of Remote UI, click [Settings/Registration]. ▶ Portal Page of Remote UI(P. 190)**
- 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. 225)
 - IPP printing ▶[IPP Print Settings](P. 224)
 - mDNS (IPv4) ▶[mDNS Settings](P. 221)
 - mDNS (IPv6) ▶[mDNS Settings](P. 221)

Preventing Connection to Computer via USB Port

A19C-048

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.

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. 226)

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. 188)

2 On the Portal page of Remote UI, click [Settings/Registration]. ▶Portal Page of Remote UI(P. 190)

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. 78)

⇒ The settings are applied.

Configuring LPD, RAW, or WSD

A19C-049

Select whether to use any of the protocols below on the machine when printing 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 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. 220)**



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. 188)**
- 2 On the Portal page of Remote UI, click [Settings/Registration].  Portal Page of Remote UI(P. 190)**
- 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.

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. 78)**

◻► 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. 159)**

Disabling HTTP Communication

A19C-04A

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 \(Remote UI\)\(P. 187\)](#)

Administrator privileges are required.

1 On the control panel, select [Menu] in the [Home] screen, and press . [▶\[Home\] Screen\(P. 84\)](#)

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 press [<Log In>]  . [▶System Manager ID and PIN\(P. 4\)](#)

3 Press [Off]    [Yes]  .

Managing the Machine

Managing the Machine	185
Setting the Date and Time	186
Managing the Machine from a Computer (Remote UI)	187
Starting Remote UI	188
Portal Page of Remote UI	190
Checking Usage and Logs with Remote UI	192
Monitoring the Usage	194
Checking the Number of Printed Pages (Check Counter)	195
Printing and Viewing Reports and Lists	196
Changing the Report and List Print Settings	198
Updating the Firmware	199
Initializing the Settings and Data	202

Managing the Machine

A19C-04C

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. 186)**

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 and change the machine settings. 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. 187)**

Monitoring the Usage (Control Panel)

You can use the control panel of the machine to check the total number of printed pages and print the settings and other reports and lists.

▶ **Monitoring the Usage(P. 194)**

Managing Servers, Various Data, and Firmware

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. 199)**

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. 202)**

■ See Also

For the settings required to operate the machine, such as the network settings, see the following:

▶ **Setting Up(P. 31)**

Setting the Date and Time

A19C-04E

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.

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. 210)

1 Log in to Remote UI. ▶Starting Remote UI(P. 188)

2 On the Portal page of Remote UI, click [Settings/Registration]. ▶Portal Page of Remote UI(P. 190)

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 the coordinated time standard used to regulate time in 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.

Managing the Machine from a Computer (Remote UI)

A19C-04F

With Remote UI, you can use a Web browser on a computer to check the function operation status of the machine and change the machine settings. You can manage the machine from a remote location and efficiently perform time-consuming settings and registration on your computer.

For details on supported models, see the following: [Supported Functions\(P. 3\)](#)

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\(P. 188\)](#)

[Portal Page of Remote UI\(P. 190\)](#)

[Checking Usage and Logs with Remote UI\(P. 192\)](#)

■ 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\(P. 153\)](#)

Remote UI Password

Configure this setting to require password entry when logging in to Remote UI so that only users with the password can use Remote UI.

[Setting the Password to Use for Remote UI\(P. 177\)](#)

Starting Remote UI

A19C-04H

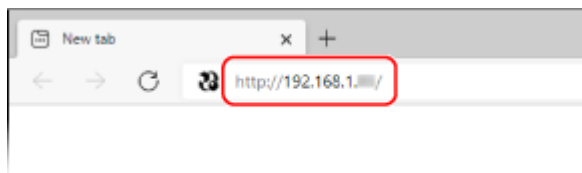
To use Remote UI, enter the IP address of the machine into a Web browser on a computer, and log in with System Manager Mode or General User Mode. The functions available with Remote UI vary depending on the mode you logged in to.

Required Preparations

- Check the operating environment of Remote UI. [▶Supported Environment\(P. 26\)](#)
- Connect the computer you are using to operate Remote UI to the machine over a network. [▶Setting Up the Network\(P. 37\)](#)
- Check the IP address of the machine. [▶Checking the Network Status and Settings\(P. 69\)](#)

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:

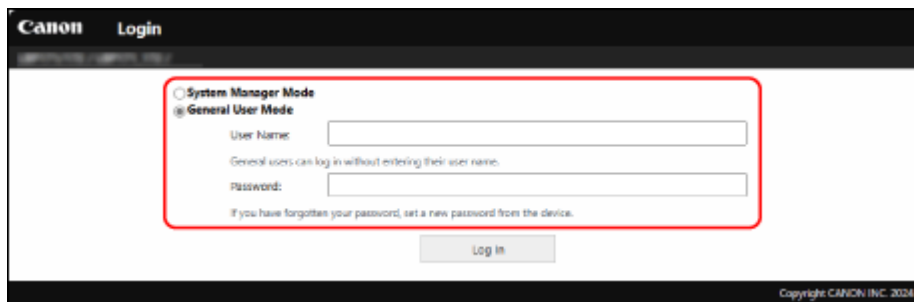
http://[fe80:2e9e:fcff:fe4e:dbce]/

■ 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\(P. 337\)](#)

2 Select [System Manager Mode] or [General User Mode], and enter the items required for login.



[System Manager Mode]

When the System Manager ID is set, enter the System Manager ID and System Manager PIN. [▶System Manager ID and PIN\(P. 4\)](#)

* 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. 153)**

[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.

[Password]

When the Remote UI password is set, enter the password.

3 Click [Log In].

⇒ The Portal page of Remote UI appears. ▶ **Portal Page of Remote UI(P. 190)**

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

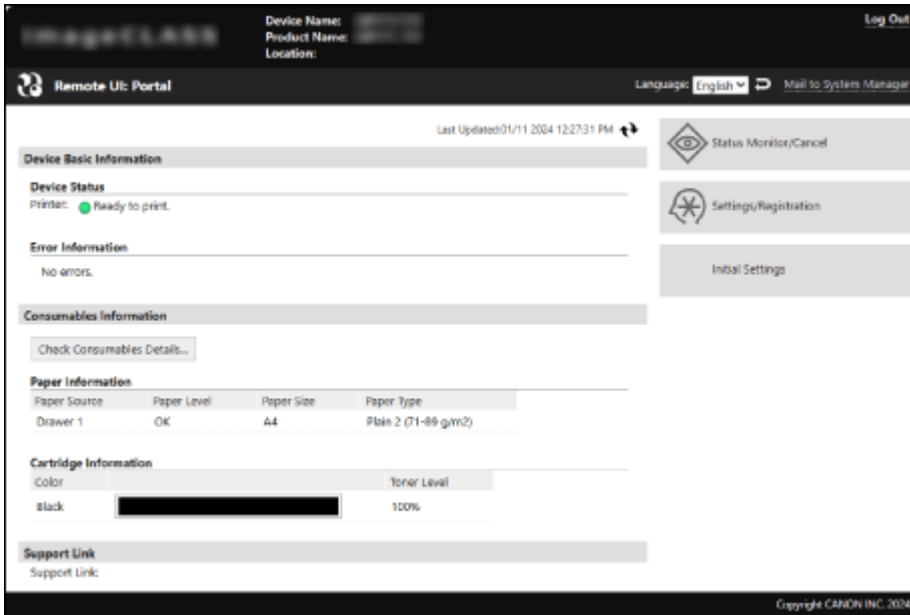
- The user is automatically logged out from Remote UI if no operations are performed for a certain period of time. Use the following procedure to set the time until the user is logged out.

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

A19C-04J

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 remaining amount of ink 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. ▶

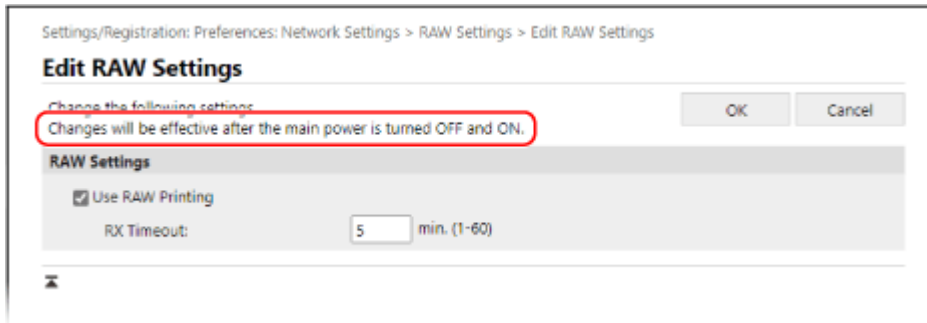
Checking Usage and Logs with Remote UI(P. 192)

[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. 205)**
- 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.



[Initial Settings]

Click this to display the [Initial Settings] screen.

This is displayed only when you log in with System Manager Mode.

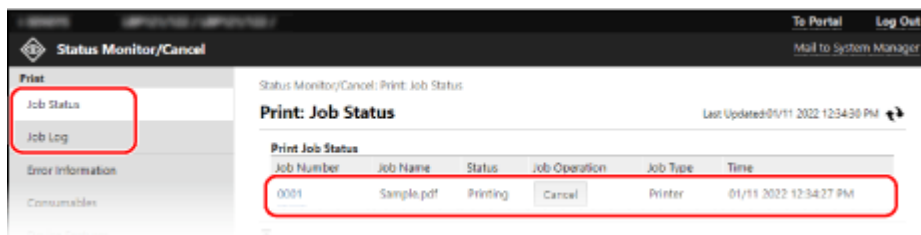
You can configure the initial settings for Remote UI and Web service usage. ▶ **Configuring the Initial Settings for Remote UI and Web Service Usage(P. 35)**

Checking Usage and Logs with Remote UI

A19C-04K

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. 188)
- 2 On the Portal page of Remote UI, click [Status Monitor/Cancel]. ▶ Portal Page of Remote UI(P. 190)
- 3 Select an item to view the status or log.



[Print]

[Job Status]

Displays the status (Printing or Waiting) of printed data from a computer.

If you logged in with Administrator Mode, this displays the print status for all jobs.

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 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 from a computer.

[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 the 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.

[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 printed to date. ▶ **Checking the Number of Printed Pages (Check Counter)(P. 195)**

[Cartridge Log]

Displays a usage record in the toner cartridge.

[Eco Information]

Displays the average number of sheets output and average power consumption per month.

4 Log out from Remote UI after viewing the usage.

Monitoring the Usage

A19C-04L

You can use the control panel of the machine to check the total number of printed pages and print the machine settings and other reports and lists.

▶ **Checking the Number of Printed Pages (Check Counter)(P. 195)**

▶ **Printing and Viewing Reports and Lists(P. 196)**

■ 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. 192)**

Checking the Number of Printed Pages (Check Counter)

A19C-04R

You can display a counter showing the total number of pages printed to date by black & white. 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\(P. 192\)](#)

- 1 On the control panel, press [Status Monitor] in the [Home] screen ▶ . ▶  [Home] Screen(P. 84)**

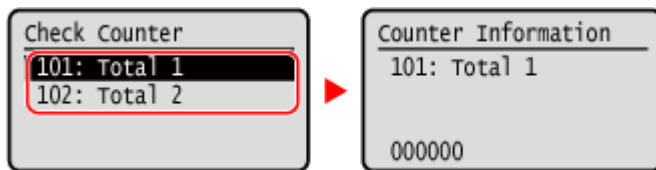
⇒ The [Status Monitor] screen is displayed.

- 2 Press [Device Status] ▶  ▶ [Check Counter] ▶ .**

⇒ The [Check Counter] screen is displayed.

- 3 Select the item you want to check, and press .**

- 4 Check the number of printed pages.**



[101: Total 1]

Displays the total number of printed pages.

[102: Total 2]

Displays the total number of printed pages.

Printing and Viewing Reports and Lists

A19C-04S

You can print and view reports and lists including machine usage and settings.

▶ **Types of Reports and Lists(P. 196)**

▶ **Printing Reports and Lists(P. 196)**

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. 198)**

Types of Reports and Lists

Machine Usage Reports

You can print and view the following reports related to usage of the machine including power consumption and status of consumables:

- **Eco Report**
Displays the number of printed pages and power consumption per month. You can see how to save paper and power based on this information.
- **Consumables Status Report**
Displays the status of consumables installed in the machine.
- **Cartridge Log Report**
Displays a log of toner cartridge usage.

Settings Lists

You can print and view the following lists that summarize the registration information and settings of the machine:

- **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.

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:


- System Manager Data List

- 1 On the control panel, select [Menu] in the [Home] screen, and press **OK**. ▶ [Home] Screen(P. 84)

2 Press [Output Reports] ► **OK** ► [Print List] ► **OK**.

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 [<Log In>] ► **OK** . 
System Manager ID and PIN(P. 4)

4 Check that printable paper is set in the machine, select [Yes], and press **OK**.

⇒ The report or list is printed.

Changing the Report and List Print Settings

A19C-04U

Reports and lists are printed on paper on one side by default. You can change the setting to print on both sides.

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

1 On the control panel, select [Menu] in the [Home] screen, and press .  [Home] Screen(P. 84)

2 Press [Output Reports]    [Report Settings]  .

⇒ The [Report Settings] screen is displayed.

3 Select [Default Settings for Report Output] and press .

⇒ The [Default Settings for Report Output] screen is displayed.

4 Press [2-Sided Printing]    [On]  .

Updating the Firmware

A19C-04W

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.

✓ : 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. 199)**
- ▶ **Updating the Firmware via the Internet(P. 200)**
- ▶ **Updating the Firmware via a Computer(P. 200)**





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. 187)**

Administrator privileges are required.

- 1 On the control panel, select [Menu] in the [Home] screen, and press . ▶ [Home] Screen(P. 84)**
- 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 [<Log In>] ▶ . ▶ **System Manager ID and PIN(P. 4)**
- 3 Select [Version Information] and press .**

⇒ 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. 37)**

1 On the control panel, select [Menu] in the [Home] screen, and press **OK**. ▶ **[Home] Screen(P. 84)**

2 Press [Management Settings] ▶ **OK** ▶ [Remote UI Settings/Update Firmware] ▶ **OK** ▶ [Update Firmware] ▶ **OK**.

⇒ The [Update Firmware] screen is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then press [<Log In>] ▶ **OK**. ▶ **System Manager ID and PIN(P. 4)**

3 Press [Via Internet] ▶ **OK** ▶ [Yes] ▶ **OK**.

⇒ The firmware update confirmation screen is displayed.

4 In the licensing screen, press **OK**.

5 Press **OK**.

⇒ Downloading of the firmware starts.

IMPORTANT

- Do not turn the machine OFF while it is restarting or during the firmware update. Doing so may cause the update to fail.
- Failed updating may result in an error message appearing during startup and the machine being unusable. In this event, use the dedicated recovery firmware to redo the update via a computer. ▶ **Updating the Firmware via a Computer(P. 200)**
* Download the dedicated recovery firmware from the Canon website for your country/region.
<https://global.canon/en/support>

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, select [Menu] in the [Home] screen, and press . [Home] Screen(P. 84)

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 [**<Log In>**]  . 

System Manager ID and PIN(P. 4)

3 Press [Via PC]    [Yes]  .

⇒ Switches the machine to download mode and puts it into update waiting state.

Initializing the Settings and Data

A19C-04X

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.

▶ Initializing Specific Settings and Data(P. 202)

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. 203)

Initializing Specific Settings and Data

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. 217) / ▶[Data Management](P. 259)

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. 188)

2 On the Portal page of Remote UI, click [Settings/Registration]. ▶Portal Page of Remote UI(P. 190)

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].

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. 78)**

- [Preferences]
- [Function Settings]
- [Management Settings]
- [Network Settings]

NOTE

When Initializing a Key and Certificate

- Functions using a key and certificate such as TLS 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 password. To use Remote UI, you must set the Remote UI password again. ▶ **Setting the Password to Use for Remote UI(P. 177)**

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, select [Menu] in the [Home] screen, and press **OK**. ▶ **[Home] Screen(P. 84)**

2 Press [Management Settings] ▶ **OK** ▶ [Initialize All Data/Settings] ▶ **OK**.

⇒ The initialization confirmation screen is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then press [<Log In>] ▶ **OK**. ▶ **System Manager ID and PIN(P. 4)**

3 Press **OK** ▶ [Yes] ▶ **OK**.

⇒ All settings and data are initialized.

When initialization is complete, the machine restarts automatically.

Settings Menu Items

Settings Menu Items	205
[Preferences]	206
[Display Settings]	207
[Timer/Energy Settings]	210
[Network]	213
[Wireless LAN Settings]	218
[TCP/IP Settings]	220
[External Interface]	226
[Accessibility]	227
[Adjustment/Maintenance]	229
[Adjust Image Quality]	230
[Special Processing]	231
[Maintenance]	235
[Function Settings]	236
[Common]	237
[Paper Feed Settings]	238
[Print Settings]	239
[Printer]	240
[Printer Settings]	241
[PDL Selection (Plug and Play)]	251
[Management Settings]	252
[User Management]	254
[Device Management]	255
[Remote UI Settings/Update Firmware]	257
[Remote UI Settings]	258
[Data Management]	259
[Security Settings]	260
[Authentication/Password Settings]	262
[Toner Delivery Settings]	263

Settings Menu Items

A19C-04Y

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. 206)

▶[Adjustment/Maintenance](P. 229)

▶[Function Settings](P. 236)

▶[Management Settings](P. 252)

▶[Toner Delivery Settings](P. 263)

Menu Route Map (List)

This list shows you the settings menu items and the values set.

Click the icon below to view the corresponding Menu Route Map (PDF).



■ 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. 89)**

If the Machine Must be Restarted

After changing the settings, restart the machine.

▶**Restarting the Machine(P. 78)**

Settings Not Included in the Menus

The Paper Settings items appear when you press [Paper Settings] in the [Menu] screen.

▶**Specifying the Paper Size and Type(P. 100)**

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. 187)**

Checking the Settings

You can check a list of the current settings by printing them out.

▶**Printing and Viewing Reports and Lists(P. 196)**

[Preferences]

A19C-050

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.

* Values in bold red text indicate the default setting for each item.

- ▶ **[Display Settings](P. 206)**
- ▶ **[Timer/Energy Settings](P. 206)**
- ▶ **[Network](P. 206)**
- ▶ **[External Interface](P. 206)**
- ▶ **[Accessibility](P. 206)**

[Display Settings]

[Menu] ▶ [Preferences]

Configure the control panel screen displays.

- ▶ **[Display Settings](P. 207)**

[Timer/Energy Settings]

[Menu] ▶ [Preferences]

Set the date and time and specify the Energy Saver settings.

- ▶ **[Timer/Energy Settings](P. 210)**

[Network]

[Menu] ▶ [Preferences]

Configure the network environment for the machine.

- ▶ **[Network](P. 213)**

[External Interface]

[Menu] ▶ [Preferences]

Configure the USB connection.

- ▶ **[External Interface](P. 226)**

[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. 227)**

[Display Settings]

A19C-051

Configure the control panel screen displays.

* Values in bold red text are the default settings for each item.

- ▶ [Language](P. 207)
- ▶ [Remote UI Language](P. 207)
- ▶ [Millimeter/Inch Entry Switch](P. 208)
- ▶ [Gram/Pound Switch](P. 208)
- ▶ [Displ. Timing for Cartridge Prep. Notif.](P. 208)
- ▶ [Show Warnings](P. 208)
- ▶ [Action When Warning](P. 208)
- ▶ [Display IP Address](P. 209)

[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.

[Deutsch]
[English]
[Español]
[Français]
[Italiano]
[Português]
[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.

* 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]

[Gram/Pound Switch]

[Menu] ► [Preferences] ► [Display Settings]

You can change the units displayed such as for the paper weight.

* [Gram/Pound Switch] is only displayed when [Select Country/Region] is set to [United States (US)] or [Canada (CA)].

[Gram]
[Pound]

[Displ. Timing for Cartridge Prep. Notif.]

[Menu] ► [Preferences] ► [Display Settings]

When the toner in a toner cartridge runs low, a message appears notifying you to prepare a new toner cartridge. To manually specify when this message appears (the toner level in a cartridge), specify the timing in [Custom]. When [Auto] is enabled, the machine automatically decides when to display the message.

[Auto]
[Custom]
2 to **20** to 99 (%)

[Show Warnings]

[Menu] ► [Preferences] ► [Display Settings]

Specify whether a notification message is displayed when a toner cartridge is low on toner.

* If the machine is configured to stop printing when a toner cartridge is low on toner, this cannot be set to [Off]. ►
[Action When Warning](P. 208)

[Low Cartridge Level]
[Off]
[On]

[Action When Warning]

[Menu] ► [Preferences] ► [Display Settings]

Specify whether to continue printing when a toner cartridge is low on toner.

If this is set to [Stop Printing], a notification message appears when the toner cartridge runs low on toner. ► **[Show Warnings](P. 208)**

[Low Cartridge Level]
[Continue Printing]
[Stop Printing]

[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. 85)

[Off]
[On]

[Timer/Energy Settings]

A19C-052

Set the date and time and specify the Energy Saver settings.

* Values in bold red text are the default settings for each item.

- ▶ **[Quiet Mode Time](P. 210)**
- ▶ **[Current Date/Time Settings](P. 210)**
- ▶ **[Date/Time Settings](P. 210)**
- ▶ **[Date Format](P. 211)**
- ▶ **[Time Format](P. 211)**
- ▶ **[Auto Reset Time](P. 211)**
- ▶ **[Auto Sleep Time](P. 212)**

[Quiet Mode Time]

[Menu] ▶ [Preferences] ▶ [Timer/Energy Settings]

Specify the period of time where the machine enters and exits the quiet mode in order to reduce the operation sound of the machine. ▶ **Reducing the Operation Sound (Quiet Mode)(P. 106)**

* This setting is only available when [Quiet Mode] is set to [Off]. ▶ **[Quiet Mode](P. 233)**

[Off]
[On]
[Start Time]
0:00 to 12:59 AM/PM
[End Time]
0:00 to 12:59 AM/PM

[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. 186)**

Before configuring this setting, check that the correct time zone is selected. ▶ **[Date/Time Settings](P. 210)**

* 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 is the coordinated time standard used to regulate time in 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. 210)** .

* 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-05:00) Eastern Time (US & Canada)]** 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. This setting specifies whether Auto Reset is invoked.

If you enable Auto Reset, you can then set the time after which it is triggered.

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. 10)**
- 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.

[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. 79)**

* Use of the default settings is recommended to achieve the most effective power savings.

1 to 120 (min.)

[Network]

A19C-053

Specify the settings for the machine's network environment.

* Values in bold red text are the default settings for each item.

- ▶ [Select Wired/Wireless LAN](P. 213)
- ▶ [Wireless LAN Settings](P. 213)
- ▶ [Direct Connection Settings](P. 213)
- ▶ [Easy Connection via PC](P. 214)
- ▶ [TCP/IP Settings](P. 214)
- ▶ [SNMP Settings](P. 214)
- ▶ [Dedicated Port Settings](P. 215)
- ▶ [Dedicated Port Authentication Method](P. 215)
- ▶ [Waiting Time for Connection at Startup] (P. 215)
- ▶ [Ethernet Driver Settings](P. 215)
- ▶ [IEEE 802.1X Settings](P. 216)
- ▶ [Firewall Settings](P. 216)
- ▶ [Web Service Setup](P. 216)
- ▶ [Web Service Inquiry](P. 217)
- ▶ [RMT-SW](P. 217)
- ▶ [Initialize Network Settings](P. 217)

[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. 39)**

* 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.

<p>[Wired LAN]</p> <p>[Wireless LAN]</p>
--

[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. 218)**

[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. 129)**

<p>[Use Direct Connection]</p> <p>[Off]</p> <p>[On]</p> <p>[Time Until Direct Connection Termination]</p> <p>0 (Off)</p> <p>1 to 60 (min.)</p> <p>[Access Point Mode Settings]</p>
--

[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]* ¹
[Off]
[On]
[Config. IP Address For Direct Conn.]
192.168.22.1

*¹ May not be displayed depending on the model and other settings.

[Easy Connection via PC]

[Menu] ► [Preferences] ► [Network]

Start cableless setup mode.

To configure the network settings using the application, select cableless setup mode.

[TCP/IP Settings]

[Menu] ► [Preferences] ► [Network]

Specify the settings for using the machine on a TCP/IP network.

► **[TCP/IP Settings](P. 220)**

[SNMP Settings]

[Menu] ► [Preferences] ► [Network]

Specify the settings for setting up, monitoring, and controlling the machine using SNMP management software. ►

Configuring SNMP(P. 64)

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 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. 58)**

This also allows you to check the MAC address on a wired LAN. ▶ **Viewing the MAC Address of the Wired LAN(P. 70)**

[Auto Detect]
 [Off]
 [Communication Mode]
 [Half Duplex]
 [Full Duplex]
 [Ethernet Type]
 [10BASE-T]
 [100BASE-TX]
 [On]

[MAC Address]

[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\(P. 164\)](#)

* [IEEE 802.1X Settings] may not be displayed depending on the model 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\(P. 156\)](#)

[IPv4 Address Filter]
[Outbound Filter]
<input type="checkbox"/> [Off]
<input type="checkbox"/> [On]
[Inbound Filter]
<input type="checkbox"/> [Off]
<input type="checkbox"/> [On]
[IPv6 Address Filter]
[Outbound Filter]
<input type="checkbox"/> [Off]
<input type="checkbox"/> [On]
[Inbound Filter]
<input type="checkbox"/> [Off]
<input type="checkbox"/> [On]
[MAC Address Filter]
[Outbound Filter]
<input type="checkbox"/> [Off]
<input type="checkbox"/> [On]
[Inbound Filter]
<input type="checkbox"/> [Off]
<input type="checkbox"/> [On]

[Web Service Setup]

[Menu] ▶ [Preferences] ▶ [Network]

Specify whether to use the Canon cloud integration service.

- To use the Canon cloud integration service, you must register the machine to a dedicated server.

You can use [Issue Registration Code] to issue a code to use for registration. **▶Using the Cloud Integration Service to Print(P. 144)**

* Depending on the country or region, this service may not be available and the available applications may vary.

[Web Service Usage] <input type="checkbox"/> [Off] <input type="checkbox"/> [On] [Issue Registration Code]

[Web Service Inquiry]

[Menu] ▶ [Preferences] ▶ [Network]

The machine accesses the server of the Canon cloud integration service to see if the sent print data is available. If print data is available, printing is performed. **▶Using the Cloud Integration Service to Print(P. 144)**

* Depending on the country or region, this service may not be available and the available applications may vary.

[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].

<input type="checkbox"/> [Off] <input type="checkbox"/> [On]

[Initialize Network Settings]

[Menu] ▶ [Preferences] ▶ [Network]

Use this to restore the network settings to the factory settings. **▶Initializing Specific Settings and Data(P. 202)**

[Wireless LAN Settings]

A19C-054

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.

▶ [Select Network](P. 218)

▶ [Other Connections](P. 218)

▶ [Connection Settings](P. 219)

[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. 48)**

[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. 50)**

[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]
[WPA2-PSK/WPA3-SAE]
[Auto]
[AES-CCMP]
[WPA3-SAE]
[Auto]
[AES-CCMP]

[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. 44)**

[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. 46)**

[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. 71)**

[MAC Address]
[Wireless LAN Status]
[Latest Error Information]
[Channel]
[Network Name]
[Security Settings]
[Power Save Mode]

[TCP/IP Settings]

A19C-055

Specify the settings to use the machine on a TCP/IP network.

* Values in bold red text are the default settings for each item.

- ▶ [IPv4 Settings](P. 220)
- ▶ [IPv6 Settings](P. 222)
- ▶ [WINS Settings](P. 223)
- ▶ [LPD Settings](P. 223)
- ▶ [RAW Settings](P. 224)
- ▶ [WSD Settings](P. 224)
- ▶ [IPP Print Settings](P. 224)
- ▶ [Use HTTP](P. 225)
- ▶ [Port Number Settings](P. 225)
- ▶ [MTU Size](P. 225)

[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. 53)**

[**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 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. 69)**

[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. 59)**

[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. 59)**

[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]

[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\(P. 55\)](#)

[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\(P. 59\)](#)

[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.]
<input type="checkbox"/> [Off]
<input type="checkbox"/> [On]
[Regist Stateless Addr.]
<input type="checkbox"/> [Off]
<input type="checkbox"/> [On]
[DNS Dyn. Updt. Intrvl.]
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.

<input type="checkbox"/> [Off]
<input checked="" type="checkbox"/> [On]
[Use IPv4 Name for mDNS]
<input type="checkbox"/> [Off]
[mDNS Name]
<input checked="" type="checkbox"/> [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. 59)**

[Acquire DNS Server Address]
<input type="checkbox"/> [Off]
<input checked="" type="checkbox"/> [On]
[Acquire Domain Name]
<input type="checkbox"/> [Off]
<input checked="" type="checkbox"/> [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. 63)**

[WINS Resolution]
<input type="checkbox"/> [Off]
<input type="checkbox"/> [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. 181)**

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. 181)**

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. 181)**

[WSD Print Settings]
[Use WSD Print]
[Off]
[On]
[Use WSD Browsing]
[Off]
[On]
[Use Multicast Discovery]
[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. 137)**

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. 183)**

[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. 159)**

[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

[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]

A19C-056

Specify the settings for USB connections.

* Values in bold red text are the default settings for each item.

▶ [USB Settings](P. 226)

[USB Settings]

[Menu] ▶ [Preferences] ▶ [External Interface]

Specify whether to use the USB port for connecting to a computer. ▶ **Preventing Connection to Computer via USB Port(P. 180)**

[Use as USB Device]

[Off]

[**On**]

[Accessibility]

A19C-057

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. 227)
- ▶ [Contrast](P. 227)
- ▶ [Message Display Time](P. 227)
- ▶ [Scrolling Speed](P. 227)
- ▶ [Cursor Movement Type](P. 228)

[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.

Set to [Auto] to move the cursor automatically to the next input field after entering text. When set to [Manual], you must press ► to move the cursor.

[Auto]

[Manual]

[Adjustment/Maintenance]

A19C-058

Use this setting to adjust the print quality and when cleaning the machine.

▶[Adjust Image Quality](P. 229)

▶[Maintenance](P. 229)

[Adjust Image Quality]

[Menu] ▶ [Adjustment/Maintenance]

Use this setting to adjust the image quality or print position and for special processing according to the paper used.

▶[Adjust Image Quality](P. 230)

[Maintenance]

[Menu] ▶ [Adjustment/Maintenance]

Carry out maintenance to clean the machine.

▶[Maintenance](P. 235)

[Adjust Image Quality]

A19C-059

Use this setting to adjust the image quality or print position and for special processing according to the paper used.
* Values in bold red text are the default settings for each item.

▶ **[Printer Density](P. 230)**

▶ **[Toner Save](P. 230)**

▶ **[Special Processing](P. 230)**

[Printer Density]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality]

If printed text or fine lines appear faded, adjust the density. ▶ **Adjusting the Print Density(P. 280)**

9 levels

[Toner Save]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality]

Specify whether to adjust the print quality to save toner.
To give priority to print quality, select [Off].

[Off]

[On]

[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. 231)**

[Special Processing]

A19C-05A

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. 231) | ▶ [Correct Paper Conveyance](P. 233) |
| ▶ [High Humidity Mode](P. 232) | ▶ [Talc Paper Mode](P. 233) |
| ▶ [Low Humidity Mode](P. 232) | ▶ [Quiet Mode](P. 233) |
| ▶ [Reduce Ghosting 1](P. 232) | ▶ [Correct Blurry Image](P. 234) |
| ▶ [Prevent Fogging](P. 232) | ▶ [Transfer Adjustment Mode](P. 234) |
| ▶ [Reduce Toner Flaking](P. 233) | ▶ [Reduce Faint Print After Replacing Cart.](P. 234) |

[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, printing on the back side may appear faint. If this occurs, setting the paper source to [On] 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 may occur.

[Drawer 1] [Off] [On]

[Rough Surface Paper Mode]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing] ▶ [Special Paper Processing]

if you are using paper with a rough surface, printed images may appear faint. If this occurs, setting the paper source to [On] may improve the print results.

* Specifying [On] in this setting may lead to slower print speeds or changes in the image quality.

[Drawer 1] [Off] [On]

[Envelope Flap Closing Prevention]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing] ▶ [Special Paper Processing]

Depending on the type of envelope and the operating environment, the envelope flap may stick down during printing. If so, specifying [On] in this setting may reduce the likelihood of envelope flaps sticking down.

* If this is set to [On], the print may be faded because the toner is not fully fixed on the paper.

[Off]
[On]

[High Humidity Mode]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

Printing in a high-humidity environment may cause uneven print density. If so, specifying [On] may improve the print results.

* Specifying [On] in this setting may lead to blurred images and/or text in low-humidity environments.

[Off]
[On]

[Low Humidity Mode]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

Printing in a low-humidity environment may lead to blurred images and/or text. In this case, selecting [Mode 1] may improve the print results. If that does not work, try selecting [Mode 2] and then [Mode 3].

* Enabling this setting may reduce the density or create fading in a humid environment.

[Off]
[Mode 1]
[Mode 2]
[Mode 3]

[Reduce Ghosting 1]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

If you print on small-sized paper and then continue printing on a larger sized paper, ghost images may appear in the unprinted sections of the paper. In this case, selecting [On] in this setting may improve the print results.

* When you select [On], the printing speed may decrease.

[Off]
[On]

[Prevent Fogging]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

White (blank) areas in the printed image may be darkened. If so, specifying [On] may correct the problem.

* When you select [On], the print density may decrease.

[Off]
[On]

[Reduce Toner Flaking]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

Depending on the paper type and operating environment, the toner in printed images may peel off. If so, specifying [Mode 1] in this setting may improve the print results. If this does not solve the problem, specify [Mode 2].

* Enabling this setting may result in ghosting in blank areas.

[Off]
[Mode 1]
[Mode 2]

[Correct Paper Conveyance]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

Continuous printing may result in repeated paper jams. In this case, selecting [On] may reduce the frequency of paper jams.

* When you select [On], the printing speed may decrease.

[Off]
[On]

[Talc Paper Mode]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

Printing in a high-temperature or high-humidity environment may cause white spots on a printed image. In this case, selecting [On] may improve the print results.

*When you select [On], the print quality may be affected.

[Off]
[On]

[Quiet Mode]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

If the operation sound during printing is loud, selecting [On] may reduce the operation sound.

* When you select [On], the printing speed will decrease.

[Off]
[On]

[Correct Blurry Image]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

Smudges may appear on the printed paper. In this case, selecting [Mode 1] may improve the print results. If that does not work, try selecting [Mode 2].

* When this setting is enabled, the print density may decrease or the print speed may be slower.

[Off]
[Mode 1]
[Mode 2]

[Transfer Adjustment Mode]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

Depending on the paper used, printing may appear uneven with printing in a humid environment. In this case, selecting [Mode 1] may improve the print results. If that does not work, try selecting [Mode 2].

* When this setting is enabled, the print density may vary in an environment with low humidity.

[Off]
[Mode 1]
[Mode 2]

[Reduce Faint Print After Replacing Cart.]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Adjust Image Quality] ▶ [Special Processing]

Print may be faded immediately after installing a new replacement toner cartridge. If so, specifying [On] in this setting may improve the print results. This setting takes effect the next time a toner cartridge is replaced.

* Specifying [On] will result in a longer delay than usual between replacing toner cartridge and being able to print.

[Off]
[On]

[Maintenance]

A19C-05C

Carry out maintenance to clean the machine.

* Values in bold red text are the default settings for each item.

▶ **[Clean Fixing Assembly](P. 235)**

▶ **[Clean Drum](P. 235)**

▶ **[Control Condensation](P. 235)**

[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. 269)**

[Clean Drum]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Maintenance]

If the printout is smudged, the drum may be dirty. Perform this operation to clean the drum. ▶ **Cleaning the Drum(P. 270)**

[Control Condensation]

[Menu] ▶ [Adjustment/Maintenance] ▶ [Maintenance]

In environments subject to sudden temperature changes, condensation may form and cause images and/or text to be faint or blurred. If so, specifying [On] may improve the print results.

During condensation removal, a blank sheet of paper may be output without being printed correctly. If you set this to [On], you can set whether to restrict printing.

* If you set this to [On], you must keep the machine ON to continuously remove the condensation.

[Off]

[On]

[Allow Job Printing During Process]

[Do Not Allow Job Printing During Process]

[Function Settings]

A19C-05E

Specify the settings for printing.

* Values in bold red text are the default settings for each item.

🔴 [Common](P. 236)

🔴 [Printer](P. 236)

[Common]

[Menu] ▶ [Function Settings]

Specify the settings for function operation, such as the paper source and printing.

🔴 [Common](P. 237)

[Printer]

[Menu] ▶ [Function Settings]

Specify the printer settings.

🔴 [Printer](P. 240)

[Common]

A19C-05F

Specify the settings for function operations, such as the paper source and printing.

▶ **[Paper Feed Settings](P. 237)**

▶ **[Print Settings](P. 237)**

[Paper Feed Settings]

[Menu] ▶ [Function Settings] ▶ [Common]

Specify the settings for the paper source.

▶ **[Paper Feed Settings](P. 238)**

[Print Settings]

[Menu] ▶ [Function Settings] ▶ [Common]

Specify the settings for printing.

▶ **[Print Settings](P. 239)**

[Paper Feed Settings]

A19C-05H

Specify the settings for the paper source.

* Values in bold red text are the default settings for each item.

☉ [Switch Paper Feed Method](P. 238)

[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. 98)**

* 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].

[Drawer 1] [Speed Priority] [Print Side Priority]
--

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]

A19C-05J

Specify the settings for printing.

* Values in bold red text are the default settings for each item.

▶ [Auto Delete Suspended Jobs](P. 239)

[Auto Delete Suspended Jobs]

[Menu] ▶ [Function Settings] ▶ [Common] ▶ [Print Settings]

Specify whether to automatically delete the print 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]

0 to **5** to 240 (min.)

[Printer]

A19C-05K

Specify the printer settings.

- ▶ **[Printer Settings](P. 240)**
- ▶ **[PDL Selection (Plug and Play)](P. 240)**

[Printer Settings]

[Menu] ▶ [Function Settings] ▶ [Printer]

Specify the settings for printer operation and for processing print data.

- ▶ **[Printer Settings](P. 241)**

[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. 251)**

[Printer Settings]

A19C-05L

Specify the settings for printer operation and for processing print data.

* Values in bold red text are the default settings for each item.

- ▶ [Action When Free Paper Size Mismatch](P. 241)
- ▶ [Copies](P. 241)
- ▶ [2-Sided Printing](P. 241)
- ▶ [Default Paper](P. 242)
- ▶ [Paper Size Override](P. 242)
- ▶ [Print Quality](P. 242)
- ▶ [Layout](P. 243)
- ▶ [Auto Error Skip](P. 244)
- ▶ [Timeout](P. 244)
- ▶ [Speed/Print Side Priority for 2-Sided](P. 245)
- ▶ [Check Paper Size in Tray](P. 245)
- ▶ [Recovery Printing](P. 245)
- ▶ [UFR II](P. 245)
- ▶ [PCL](P. 246)
- ▶ [Imaging Settings](P. 250)

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.

[Action When Free Paper Size Mismatch]

[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings]

When the paper size of each paper source is set to [Free Size] in [Paper Settings], you can specify the operation that is to be performed when the size of the loaded paper is significantly different from the setting in the printer driver. If the printer driver's settings do not match the size and type of loaded paper, a paper jam or printing error may occur.

[Drawer 1] [Force Output] [Display Error]
--

[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.

[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. 13)**

[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 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. 242)**

* [Density] may not be displayed depending on the model, 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 smoothing processing that will produce smoother printed outlines in text and figures.

[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. 243)

- 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 0.01" (0.5 mm) increments in the plus (+) or minus (-) offset direction, in accordance with the edge specified in [Binding Location]. ▶[Binding Location](P. 243)

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

-1.90 to **0.00** to +1.90 (inches) or -50.0 to **00.0** to +50.0 (mm)

[Offset Short Edge] or [Offset Long Edge]

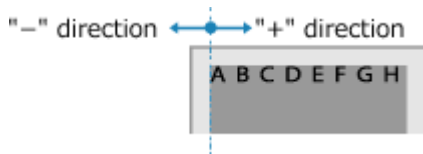
[Menu] ▶ [Function Settings] ▶ [Printer] ▶ [Printer Settings] ▶ [Layout]

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 0.01" (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.



-2.00 to **0.00** to +2.00 (inches) or -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.)

[Speed/Print Side Priority for 2-Sided]

[Menu] ► [Function Settings] ► [Printer] ► [Printer Settings]

Specify whether to print the last page on one side of the paper when using 2-sided printing and the last page number is odd, or the last page is blank or cannot be printed and ends with an odd page number.

- To print the last page on one side of the paper, select [Speed Priority].
- To print the last page on both sides of the paper, select [Print Side Priority].
When using paper printed with a logo for example, selecting [Print Side Priority] aligns the orientation and print side with that of other pages.

[**Speed Priority**]
[Print Side Priority]

[Check Paper Size in Tray]

[Menu] ► [Function Settings] ► [Printer] ► [Printer Settings]

Specify whether to determine the paper size in the paper source and the paper size in the printer driver. When [On] is selected, printing is canceled if the paper sizes do not match.

[Off]
[**On**]

[Recovery Printing]

[Menu] ► [Function Settings] ► [Printer] ► [Printer Settings]

Specify whether to resume printing from the page where an error that stops printing occurred after the error is resolved.

* When [Off] is selected, the page where the error occurred is not printed. Printing resumes from the next page, but it may resume two pages later when using 2-sided printing and depending on when the error occurred.

[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.

To print at high definition with clear text outlines

Specify [Resolution]. This is useful for printing files with text and fine lines.

To print at a higher resolution than the [Resolution] setting, specify [High Resolution]. This is useful for printing data with fine lines and small text, such as CAD files.

* Selecting [High Resolution] may reduce the consistency of textures.

To print with highlighted contrast between light and dark areas

Specify [Color Tone]. This is useful for printing image files such as photos.

To print with smoother gradations and outlines

Specify [Gradation]. This is useful for printing files such as figures that use tonal gradations.

[Resolution/Gradation]
[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. 196)**

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, 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, 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 **60** 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]	[PSTEXT]
[ISOL1]	[ROMAN8]
[ISOL2]	[ROMAN9]
[ISOL5]	[VNINTL]
[ISOL6]	[VNMATH]
[ISOL9]	[VNUS]
[LEGAL]	[WIN30]
[MATH8]	[WINBALT]
[MCTEXT]	[WINL1]
[MSPUBL]	[WINL2]
[PC1004]	[WINL5]
[PC775]	

[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, and other settings.

3 to **8 1/2** (inches) or 76 to **216** (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, and other settings.

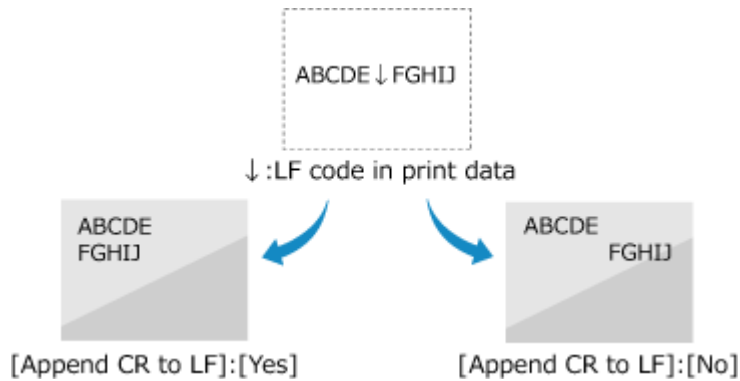
5 to **14** (inches) or 127 to **356** (mm)

[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.

[Resolution/Gradation]

[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 with highlighted contrast between light and dark areas

Specify [Gradation]. This is useful for printing image files such as photos.

To print with smoother gradations and outlines

Specify [Resolution]. This is useful for printing files such as figures that use tonal gradations.

To print at high definition with clear text outlines

Specify [High Resolution]. This is useful for printing files with text and fine lines.

[Gradation]
[Resolution]
[High Resolution]

[PDL Selection (Plug and Play)]

A19C-092

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.

▶ **[Network]**(P. 251)

▶ **[USB]**(P. 251)

[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]

[Management Settings]

A19C-05R

Specify the settings for managing the machine users, the system, and other data.

- ▶[User Management](P. 252)
- ▶[Device Management](P. 252)
- ▶[Remote UI Settings/Update Firmware](P. 252)
- ▶[Data Management](P. 252)
- ▶[Security Settings](P. 252)
- ▶[Initialize All Data/Settings](P. 252)

[User Management]

[Menu] ▶ [Management Settings]

Register and manage information on the machine's administrator.

- ▶[User Management](P. 254)

[Device Management]

[Menu] ▶ [Management Settings]

Specify and manage the settings for information and operations relating to the machine's hardware.

- ▶[Device Management](P. 255)

[Remote UI Settings/Update Firmware]

[Menu] ▶ [Management Settings]

Specify and manage the settings for information and operations relating to the machine's software.

- ▶[Remote UI Settings/Update Firmware](P. 257)

[Data Management]

[Menu] ▶ [Management Settings]

Manage or initialize stored data and the machine's settings.

- ▶[Data Management](P. 259)

[Security Settings]


[Menu] ▶ [Management Settings]

Specify and manage the security settings, such as the machine's authentication functions and system verification.

- ▶[Security Settings](P. 260)

[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. 202)**

[User Management]

A19C-05S

Register and manage information on the machine's administrator.

* Values in bold red text are the default settings for each item.

▶ **[System Manager Information Settings](P. 254)**

[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.

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. 153)**

* By default, the System Manager ID and System Manager PIN are not set. ▶ **System Manager ID and PIN(P. 4)**

[System Manager ID and PIN] [System Manager ID] [System Manager PIN] [System Manager Name]

[Device Management]

A19C-05U

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. 255)
- ▶ [Select Country/Region](P. 255)
- ▶ [Display Job Log](P. 255)
- ▶ [Displ. Consmbls. Info (RUI/Toner Status)](P. 256)
- ▶ [Notify to Check Paper Settings](P. 256)
- ▶ [Canon Genuine Mode](P. 256)

[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. 190)**

[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.

[United States (US)]
[Canada (CA)]
[Brazil (BR)]
[Mexico (MX)]
[Panama (PA)]
[Other]

[Display Job Log]

[Menu] ▶ [Management Settings] ▶ [Device Management]

Specify whether the logs for printing are shown on the Status Monitor screen.

- ▶ [Status Monitor] Screen(P. 85)
- ▶ **Checking Usage and Logs with Remote UI(P. 192)**

[Off]
[On]

[Displ. Consmbls. Info (RUI/Toner Status)]

[Menu] ► [Management Settings] ► [Device Management]

Specify whether a button that accesses sites for purchasing toner cartridges is displayed in Toner Status and Remote UI. You can also specify whether Toner Status is used.

- Specify whether to show the button in Remote UI in [Displ. Consumables Purchase Button (RUI)].
- Specify whether to use Toner Status in [Toner Status] in the [Toner Status Settings].
- If you opt to use Toner Status, use [Displ CnsmbL Purch Btn] in the [Toner Status Settings] to specify whether to show the button.

Toner Status sends notification of the remaining amount of toner in the machine to the computer on which the tool is installed. Download Toner Status from the Canon website for your country/region, and install it on your computer.

<https://global.canon/en/support/>

[Displ. Consumables Purchase Button (RUI)] [Off] [On]
[Toner Status Settings] [Off] [On]
[Displ CnsmbL Purch Btn] [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. 91)**

[Off] [On]

[Canon Genuine Mode]

[Menu] ► [Management Settings] ► [Device Management]

Specify whether to switch to Canon Genuine Mode.

- Normally, there is no need to change this setting.
- Your Canon service representative may change this setting. If this setting is not displayed, contact the machine's administrator.

[Off] [On]

[Remote UI Settings/Update Firmware]

A19C-05W

Specify and manage the settings for information and operations relating to the machine's software.

▶ [Remote UI Settings](P. 257)

▶ [Update Firmware](P. 257)

[Remote UI Settings]

[Menu] ▶ [Management Settings] ▶ [Remote UI Settings/Update Firmware]

Specify the settings for using Remote UI and for Restrict Access for Remote UI.

▶ [Remote UI Settings](P. 258)

[Update Firmware]

[Menu] ▶ [Management Settings] ▶ [Remote UI Settings/Update Firmware]

Check the machine's firmware version and update the firmware via the Internet or a computer. ▶ **Updating the Firmware(P. 199)**

[Via PC]

[Via Internet]

[Version Information]

[Notification Settings]

[Off]

[On]

[Remote UI Settings]

A19C-05X

Specify the settings for using Remote UI and for Restrict Access for Remote UI.

* Values in bold text are the default settings for each item.

▶ **[Use Remote UI]**(P. 258)

▶ **[Use Password]**(P. 258)

[Use Remote UI]

[Menu] ▶ [Management Settings] ▶ [Remote UI Settings/Update Firmware] ▶ [Remote UI Settings]

Specify whether to use Remote UI. ▶ **[Disabling Remote UI]**(P. 177)

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. 162)

[Off]
[On]
[Use TLS]
[Off]
[On]

[Use Password]

[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 Password. ▶ **[Setting the Password to Use for Remote UI]**(P. 177)

[Off]
[On]
[Password (4-32 Char.)]

[Data Management]

A19C-05Y

Manage or initialize the data and settings on the machine.
 * Values in bold red text are the default settings for each item.

- ▶ [Enable Product Extended Survey Program](P. 259)
- ▶ [Initialize Key and Certificate](P. 259)
- ▶ [Initialize Menu](P. 259)

[Enable Product Extended Survey Program]

[Menu] ▶ [Management Settings] ▶ [Data Management]

Specify whether to use the Product Extended Survey Program (a program for surveying machine usage).

The Product Extended Survey Program is installed at the same time as the drivers. It automatically sends monthly updates of information on device usage to Canon over a 10-year period. The program does not send personal information or any information other than that shown above.

[Off]
 [On]

[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(P. 202)**

[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(P. 202)**

[Preferences]
 [Adjustment/Maintenance]
 [Function Settings]
 [Management Settings]
 [Initialize All]

[Security Settings]

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. 260)
- ▶ [Encryption Settings](P. 260)
- ▶ [Verify System at Startup](P. 260)
- ▶ [Recommended Security Set. for Usage Env.](P. 261)

[Authentication/Password Settings]

[Menu] ▶ [Management Settings] ▶ [Security Settings]

Configure the authentication functions for the machine.

- ▶ [Authentication/Password Settings](P. 262)

[Encryption Settings]

[Menu] ▶ [Management Settings] ▶ [Security Settings]

Specify whether to restrict the use of weak encryption or keys and certificates that use weak encryption.

[Prohibit Use of Weak Encryption] [Off] [On]
[Prohibit Key/Cert. with Weak Encryption] [Off] [On]

[Verify System at Startup]

[Menu] ▶ [Management Settings] ▶ [Security Settings]

Verify that the system has not been tampered with 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. 199)**
- If the screen remains blank after some time, system recovery may not be possible. Contact your dealer or service representative. ▶ **If the Problem Persists(P. 356)**

[Off] [On]

[Recommended Security Set. for Usage Env.]

[Menu] ► [Management Settings] ► [Security Settings]

You can now specify all the recommended security settings for your usage environment simply by selecting the machine's environment type. See "Security Settings Navigator" for the available environment types. **Security Settings Navigator**

NOTE

- If you change the machine to the recommended security settings for each type, functions you want to use may become unavailable or other problems may occur. In this case, you can undo the changes and restore the previous security settings. If you manually changed settings that were changed with [Recommended Security Set. for Usage Env.], the changes are not retained. The machine returns to the state before executing [Recommended Security Set. for Usage Env.].

[Authentication/Password Settings]

A19C-061

Specify the settings for the machine's authentication functions.

* Values in bold red text are the default settings for each item.

🔍 [Authentication Function Settings](P. 262)

[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].

[Enable Lockout]

[Off]

[On]

[Lockout Threshold]

1 to 10 (times)

[Lockout Period]

1 to 60 (min.)

[Toner Delivery Settings]

A19C-062

Specify the settings for toner replenishment service. Use of the toner replenishment service requires prior registration with select retailers. This service is only available in certain countries.

* Values in bold red text are the default settings for each item.

- ▶ [Connect to Server/Verify Connection](P. 263)
- ▶ [Toner Delivery Settings](P. 263)
- ▶ [Server Connection Status](P. 263)
- ▶ [Register for Toner Replenishment Service](P. 263)

[Connect to Server/Verify Connection] *1

[Menu] ▶ [Toner Delivery Settings]

Connect to the server for the toner replenishment service or verify the connection.

*1 May not be displayed depending on the model, the installed options, and other settings.

[Toner Delivery Settings]

[Menu] ▶ [Toner Delivery Settings]

Activate or deactivate the connection to the server for the toner replenishment service.

<p>[Deactivate]</p> <p>[Activate]</p>

[Server Connection Status]

[Menu] ▶ [Toner Delivery Settings]

Display the connection status of the server for the toner replenishment service.

[Register for Toner Replenishment Service]

[Menu] ▶ [Toner Delivery Settings]

Print out a "Toner Replenishment Program Registration Process" and register for the toner replenishment service.

Maintenance

Maintenance	265
Cleaning the Machine	267
Cleaning the Surface of the Machine	268
Cleaning the Fixing Assembly	269
Cleaning the Drum	270
Replacing Consumables	271
Replacing the Toner Cartridge	272
Checking the Remaining Amount of Consumables	277
List of Consumables	278
Adjusting the Print Density	280
Moving the Machine	281

Maintenance

A19C-063

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 paper becomes dirty, or the print quality has deteriorated, clean the parts causing the problem according to the symptoms.

▶ **Cleaning the Machine(P. 267)**

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. 271)**

Adjusting the Print Density

If printed text or fine lines appear faded, adjust the print density.

▶ **Adjusting the Print Density(P. 280)**

Changing the Installation Location

When moving the machine, perform the prescribed procedure to prevent accident or damage.

▶ **Moving the Machine(P. 281)**

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. 285)**

If the problem still cannot be resolved or you think the machine needs to be checked, contact your dealer or service representative. ▶ **If the Problem Persists(P. 356)**

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. Allow the machine adjust to the ambient temperature and humidity for at least two hours before use.
- The machine may not operate properly when used at high altitudes (3,280 yards (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. 286)**
- ▶ **Problems with Printing Results(P. 292)**
- ▶ **Paper and Paper Feeding Problems(P. 314)**

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. 194)**

Cleaning the Machine

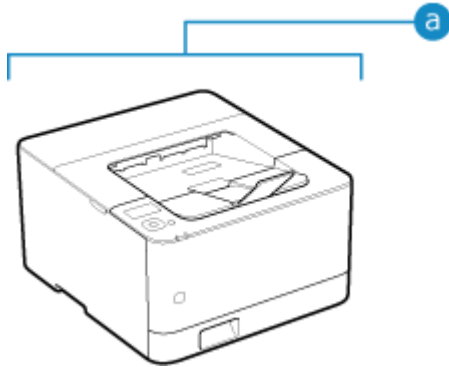
A19C-064

To ensure efficient use of the machine, regularly clean the various parts and keep them clean. If the 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) frequently.

▶ Cleaning the Surface of the Machine(P. 268)



Parts to Clean When Symptoms Occur

If the paper becomes dirty or print quality has deteriorated, clean the fixing assembly and drum inside the machine.

▶ Cleaning the Fixing Assembly(P. 269)

▶ Cleaning the Drum(P. 270)

Cleaning the Surface of the Machine

A19C-065

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.

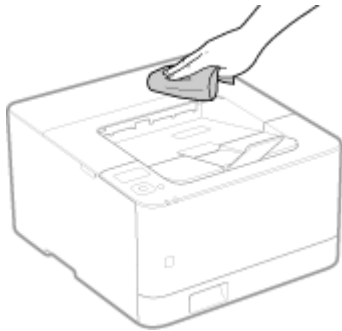
NOTE

- Black dots in the surface of the machine are due to the use of recycled materials and are not a quality problem.

1 Turn OFF the power and remove the power cord from the outlet. ▶Turning OFF the Machine(P. 77)

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. 8)

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. 76)

Cleaning the Fixing Assembly

A19C-066

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 a toner cartridge has reached the end of its lifetime.

Required Preparations

- Check that there is enough amount of toner remaining in the toner cartridge. [▶Checking the Remaining Amount of Consumables\(P. 277\)](#)

1 On the control panel, select [Menu] in the [Home] screen, and press **OK**. [▶\[Home\] Screen\(P. 84\)](#)

2 Press [Adjustment/Maintenance] **▶** **OK** **▶** [Maintenance] **▶** **OK** **▶** [Clean Fixing Assembly] **▶** **OK**.

⇒ The available paper sizes and types are displayed on the confirmation screen.

3 Check that available paper is loaded, and then press **OK**.

⇒ The paper is fed to the machine, and cleaning starts.
When cleaning is completed, a blank sheet of paper is output.

Cleaning the Drum

A19C-067

If the printout is smudged, the drum 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, select [Menu] in the [Home] screen, and press **OK**. **▶**[Home] Screen(P. 84)

2 Press [Adjustment/Maintenance] **▶** **OK** **▶** [Maintenance] **▶** **OK** **▶** [Clean Drum] **▶** **OK**.

⇒ The [Clean Drum] screen is displayed.

3 Select [Start], and press **OK**.

⇒ Cleaning is performed.

When cleaning is completed, the message [Finished.] appears, and then the [Maintenance] screen is displayed.

Replacing Consumables

A19C-068

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 Cartridge(P. 272)**
- ▶ **Checking the Remaining Amount of Consumables(P. 277)**
- ▶ **List of Consumables(P. 278)**

Replacing the Toner Cartridge

A19C-069

Replace the toner cartridge at the appropriate time according to messages that appear and a change in print quality.

Before replacing the toner cartridge, check the precautions in Important Safety Instructions. **▶Manuals of the Machine(P. 359)**

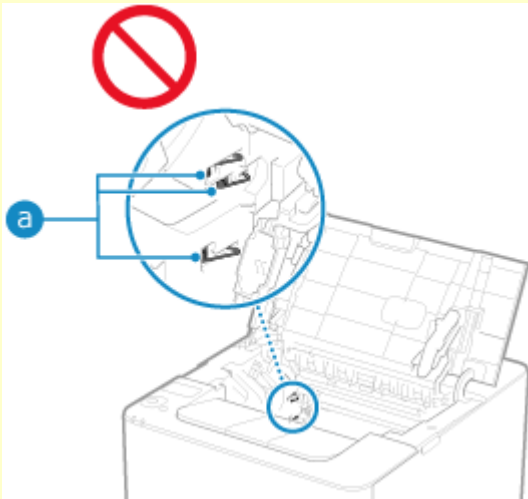
▶When to Replace the Toner Cartridge(P. 273)

▶Before Replacing Toner Cartridge(P. 273)

▶Replacing Toner Cartridge(P. 275)

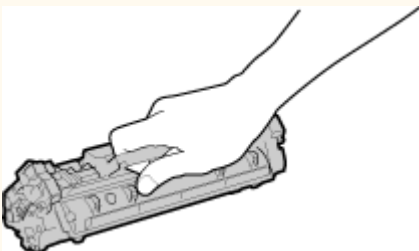
CAUTION

- Do not touch the contacts (a) inside the machine. Doing so may result in a fault.

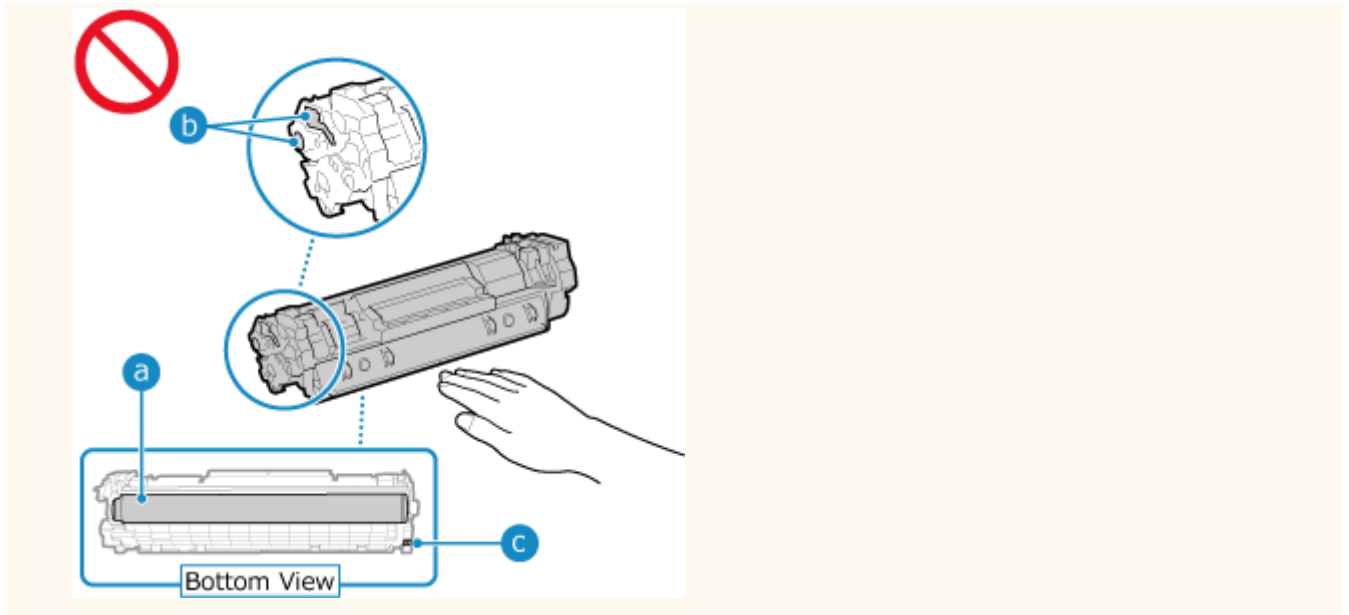


IMPORTANT

- Be sure to hold the toner cartridge using the handle.



- Do not scratch the drum surface (a) or expose it to light. Also, do not touch the electrical contacts (b) or the toner cartridge memory (c).



When to Replace the Toner Cartridge

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 cartridge without replacing it. For details about the message and how to resolve it, see the following:

🔴 A Message Appears (P. 341)

When Print Quality Deteriorates

If printouts show any of the symptoms below, the toner cartridge is near the end of their lifetime. It is recommended to replace the toner cartridge even if a message does not appear.

Streaks appear



Printing is uneven



Toner smudges and splatters appear



White spots appear



Partially faded



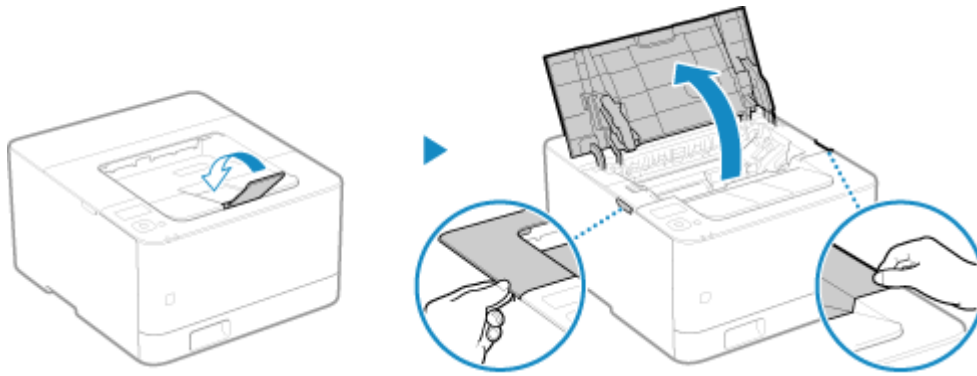
The entire background is darkened



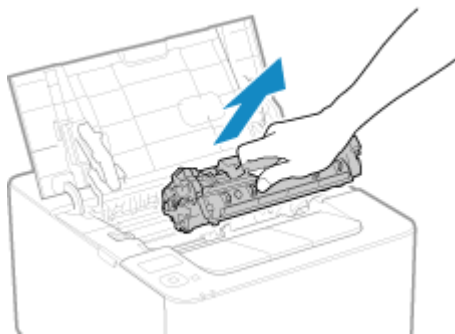
Before Replacing Toner Cartridge

Perform the following procedure before replacing the toner cartridge. The message on the screen may disappear, and the print quality may improve.

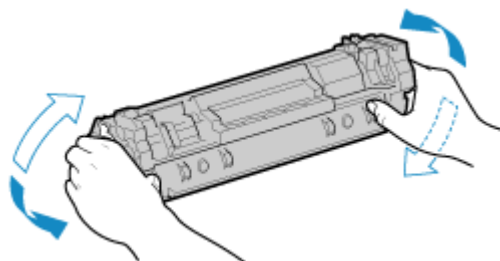
- 1 Close the paper stopper, and then open the toner cover.



2 Gently remove the toner cartridge.

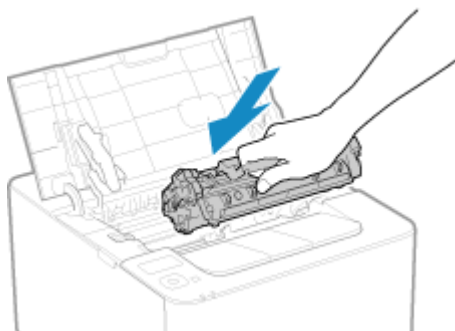


3 Shake the toner cartridge five or six times to evenly distribute the toner inside the cartridge.



Be careful not to touch the drum surface on the bottom of the toner cartridge.

4 Install the toner cartridge.

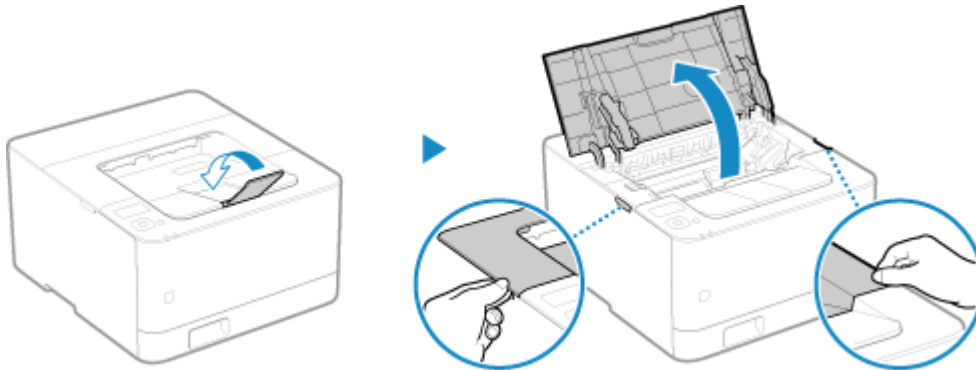


The bottom of the toner cartridge is unprotected. Be careful not to bump the bottom of the toner cartridge against the slot frame or other parts when installing.

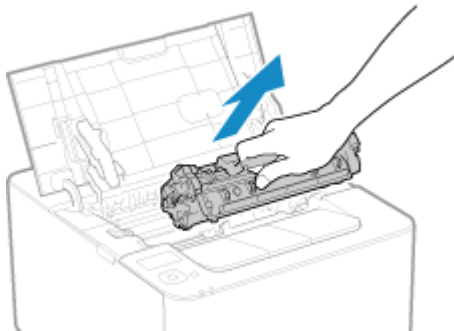
5 Close the toner cover.

Replacing Toner Cartridge

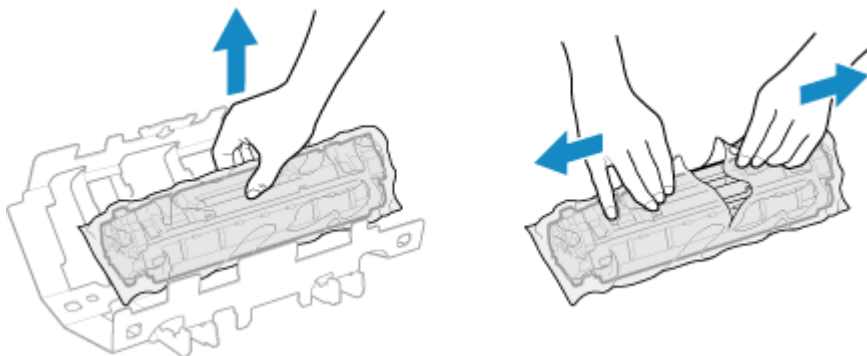
- 1** Close the paper stopper, and then open the toner cover.



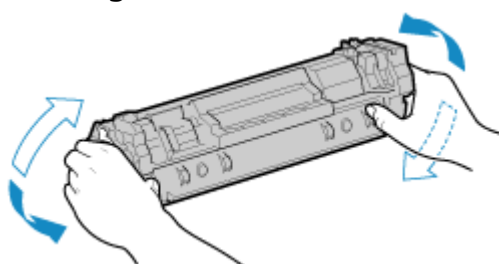
- 2** Gently remove the toner cartridge.



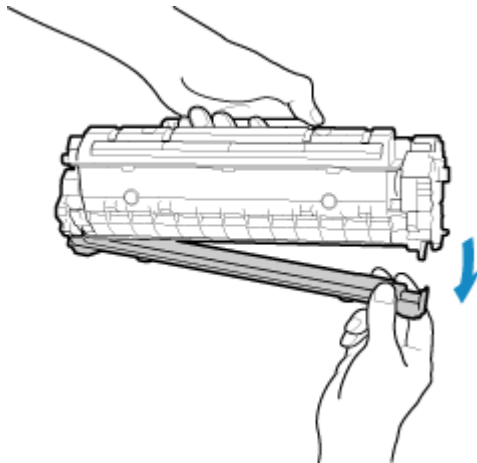
- 3** Remove the toner cartridge from the packing material on a level surface.



- 4** Shake the toner cartridge five or six times to evenly distribute the toner inside the cartridge.

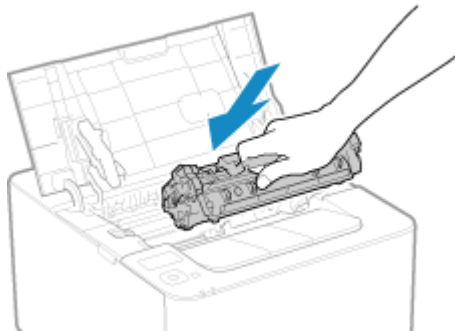


5 Remove the protective cover of the toner cartridge.



Be careful not to touch the drum surface on the bottom of the toner cartridge.

6 Install the toner cartridge.



The bottom of the toner cartridge is unprotected. Be careful not to bump the bottom of the toner cartridge against the slot frame or other parts when installing.

7 Close the toner cover.

Checking the Remaining Amount of Consumables

A19C-06A

You can view the percentage of the current remaining amount of toner in the toner cartridge in increments of 10%. Check the remaining amount of toner in the toner cartridge, for example, to see if you need to prepare a new toner cartridge before printing a large volume document.

* The displayed value for the remaining amount of toner in the toner cartridge is for reference and may not indicate the actual amount remaining.

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. 187)**

1 On the control panel, select [Status Monitor] in the [Home] screen, and press **OK**. ▶ **Control Panel(P. 10)**

2 Press [Device Status] ▶ **OK** ▶ [Cartridge Level] ▶ **OK**.

⇒ The remaining amount of toner in the toner cartridge is displayed.

3 Check the remaining amount of toner in the toner cartridge.

NOTE

- You can configure the settings to notify you to prepare a new toner cartridge when the current toner cartridge reaches a specified amount. ▶ **[Displ. Timing for Cartridge Prep. Notif.](P. 208)**

List of Consumables

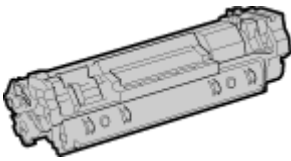
A19C-06C

The item names of the machine consumables and number of sheets that can be printed are shown below. In addition, precautions must be taken when handling and storing consumables. See also "Important Safety Instructions." **Manuals of the Machine(P. 359)**

For optimum print quality, using Canon genuine Toner, Cartridge and Parts is recommended.



■ Toner Cartridge



Supplied Toner Cartridge

The average number of sheets that can be printed*¹ with the supplied toner cartridge is shown below.

*¹ The average yield is based on "ISO/IEC 19752" (the global standard related to "Method for the determination of toner cartridge yield for monochromatic electrophotographic printers and multi-function devices that contain printer components" issued by International Organization for Standardization (ISO)) when printing A4 size plain paper with the default print density setting.

1,000 sheets

Replacement Toner Cartridge

The Canon genuine toner cartridge for replacement and average number of sheets that can be printed*¹ are shown below.

For optimum print quality, using Canon genuine toner cartridges is recommended.

*¹ The average yield is based on "ISO/IEC 19752" (the global standard related to "Method for the determination of toner cartridge yield for monochromatic electrophotographic printers and multi-function devices that contain printer components" issued by International Organization for Standardization (ISO)) when printing A4 size plain paper with the default print density setting.

Canon Cartridge 072

1,400 sheets

Canon Cartridge 072 H

4,100 sheets

CAUTION

Store toner cartridge as described below. Storing toner cartridge in an improper location or environment may cause problems such as data loss.

- Store unopened until immediately prior to use.
- Store toner cartridge in the following conditions:
 - Storage temperature range: 32 - 95 °F (0 - 35 °C)

 **CAUTION**

- Storage humidity range: 35% to 85% 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.

- Do not store toner cartridge 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)
- Do not store toner cartridge upright or upside down.
- Store the packaging material safely for future use. It will be needed for situations such as storing the machine with the toner cartridge removed.
- Canon reserves the right to reposition, reshape, add, or remove packaging material without notice.

 **IMPORTANT****Be careful of counterfeit toner cartridges**

- Please be aware that there are counterfeit Canon toner cartridges in the marketplace. Use of counterfeit toner cartridge 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 cartridge. For more information, see <https://global.canon/ctc/>.

NOTE

- The toner cartridge may need to be replaced before reaching the average number of sheets that can be printed depending on the installation environment, paper size to be printed, and original type.

Adjusting the Print Density

A19C-06E

If print results are too dark or too faint, adjust the print density.

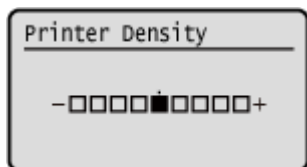
Use the control panel to perform adjustment. You cannot perform adjustment using Remote UI from a computer.

1 On the control panel, select [Menu] in the [Home] screen, and press **OK**. **▶**[Home] Screen(P. 84)

2 Press [Adjustment/Maintenance] **▶** **OK** **▶** [Adjust Image Quality] **▶** **OK** **▶** [Printer Density] **▶** **OK**.

⇒ The [Printer Density] screen is displayed.

3 Adjust the density, and press **OK**.



Specify [+] to increase the density and [-] to reduce it.

Moving the Machine

A19C-06F

The machine is a heavy object. When moving the machine for cleaning or to change locations, be sure to perform the procedure below to prevent injury, accident, or damage to the machine.

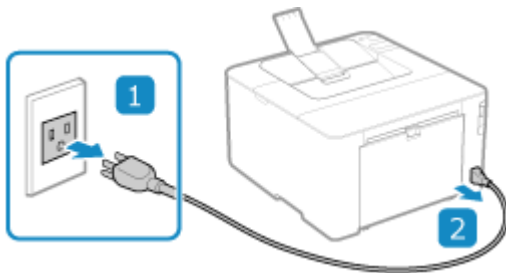
! IMPORTANT

- If the machine is to be transported for relocation, removals, etc., take the following steps to prevent damage and faults during transportation:
 - Remove the toner cartridge.
 - Securely pack the machine in the original packaging (box) and packing materials.

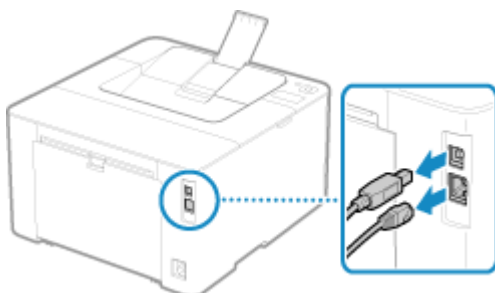
1 Turn OFF the machine. ▶Turning OFF the Machine(P. 77)

Turning OFF the machine deletes any data waiting to be printed.

2 Unplug the power cord in the order shown.



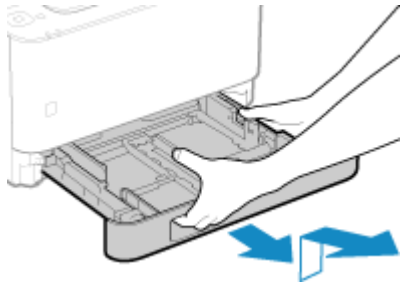
3 Unplug all cables and cords connected to the machine.



* The number of connected cables and cords varies depending on the usage environment.

4 When moving the machine a long distance, remove the toner cartridge to prevent spilling of toner. ▶Replacing Toner Cartridge(P. 275)

5 Pull out the drawer, and remove it while lifting the front side.



6 Close the paper stopper and all other open components.

7 Lift up the machine to move it.



The machine is a heavy object. For the dimensions and weight of the machine, see the basic specifications. ▶ **Basic Specifications(P. 18)**

8 Gently lower the machine.

For the installation procedure after moving, see "Setup Guide." ▶ **Manuals of the Machine(P. 359)**

Troubleshooting

Troubleshooting	285
Paper Jams	286
Paper Jams in the Paper Drawer, Output Tray, Inside the Machine, and in the Rear Side	287
Paper Jams That Occur Repeatedly	290
Problems with Printing Results	292
Toner Smudges and Splatters Appear	294
Streaks Appear	295
Printing Is Uneven	297
Printed Paper Is Blank	299
Smudge Marks Appear on the Edge of Printouts	300
Text or Images Are Blurry	301
Printouts Have Ghost Images	303
Printouts Are Faded	305
The Edge of the Page Is Not Printed	307
The Background Is Generally Dark	308
White Spots Appear	309
Smudge Marks Appear on the Back Side of Printouts	311
Printouts Are Skewed	312
The Printed Barcode Cannot be Scanned	313
Paper and Paper Feeding Problems	314
Paper Creases	315
Paper Curls	316
Paper Is Not Fed or Two or More Sheets Are Fed Together	317
Paper Drawer Does Not Fit in the Machine	318
Setting Up	319
The Machine Connected via WSD Port Is Not Displayed During Driver Installation	320
Cannot Connect to Wireless LAN	321
Network	322
Cannot Switch to Wireless LAN	323
Cannot Find the Print Server to Connect to	324
Cannot Connect to a Shared Printer	325
Cannot Find the IP Address of the Machine	326
AirPrint Does Not Work	327
Printing	328


Cannot Print	329
Cannot Print (Wireless LAN)	330
Cannot Print (Wired LAN)	332
Cannot Print (USB Connection)	333
Cannot Print (via Print Server)	334
Printing Is Slow	335
Management Functions and Environment Settings	336
Cannot Access Remote UI	337
Changing the Time Until Sleep Mode	338
Lost Department ID or PIN for the Administrator	339
Checking the Items That Can Be Configured on the Machine and Their Settings	340
A Message Appears	341
An Error Code Is Displayed	353
If the Problem Persists	356

Troubleshooting

A19C-06H

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.

■ Checks Before Contacting Us

▶ If the Problem Persists(P. 356)

■ Frequently Asked Questions

▶ Lost Department ID or PIN for the Administrator(P. 339)

▶ Cannot Print(P. 329)

▶ [Memory is full.] Is Displayed on the Control Panel, and the Operation Cannot Be Performed.(P. 350)

▶ I want to set a password for using Remote UI(P. 177)

■ Frequently Asked Questions about Operations

I Want to Print on an Envelope.

Place the envelope in the paper drawer 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. 96)

▶ Specifying the Paper Size and Type(P. 100)

▶ Printing from a Computer(P. 118)

Printing from a Computer Results in an Error.

Use the printer driver to add a new port or change an existing port.

▶ Configuring a Printer Port (Windows)(P. 112)


The Message "Size/Settings Mismatch" Is Displayed

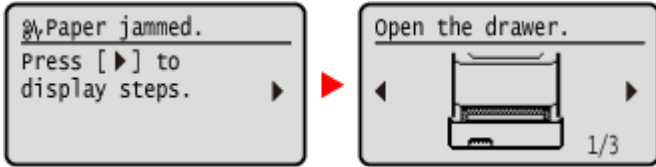
Check the paper size setting.

▶ Size/Settings Mismatch(P. 351)

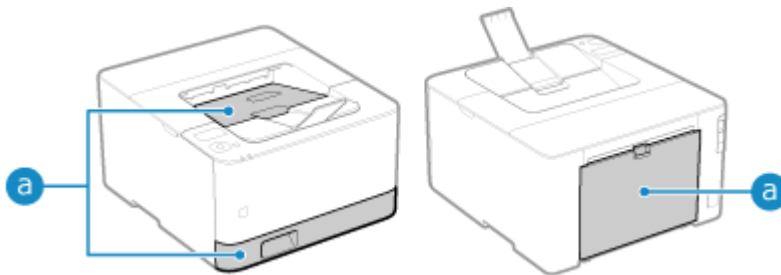
Paper Jams

A19C-06J


If paper jams in the machine, [Paper jammed.] appears on control panel. Press , 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 Paper drawer, output tray, and rear side

 **Paper Jams in the Paper Drawer, Output Tray, Inside the Machine, and in the Rear Side(P. 287)**

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.  **If the Problem Persists(P. 356)**

When All Paper Jams Have Been Cleared

- Immediately remove your hands from the machine 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

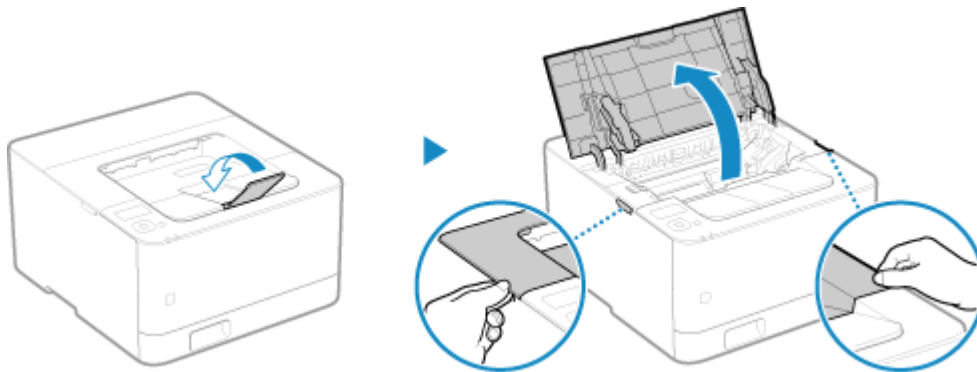
- Be sure to remove it so that no pieces remain.

Paper Jams in the Paper Drawer, Output Tray, Inside the Machine, and in the Rear Side

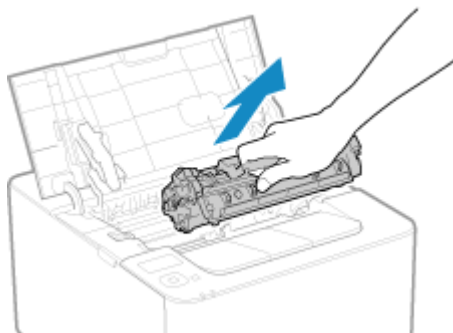
A19C-06K

Use the procedure below to check the paper drawer, output tray, inside the machine, and rear side, and to remove any jammed paper. If the paper tears, ensure that no pieces are left behind.

- 1 Close the paper stopper before opening the toner cover.**



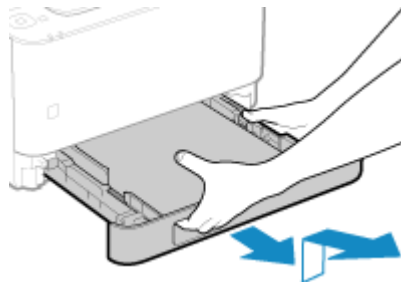
- 2 Remove the toner cartridge.**



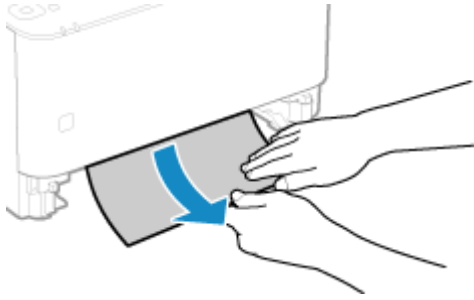
Slowly pull it out at the same angle as the slot.

- 3 Remove the paper jammed in the paper drawer.**

- 1 Pull out the paper drawer, and remove it while lifting the front side.**



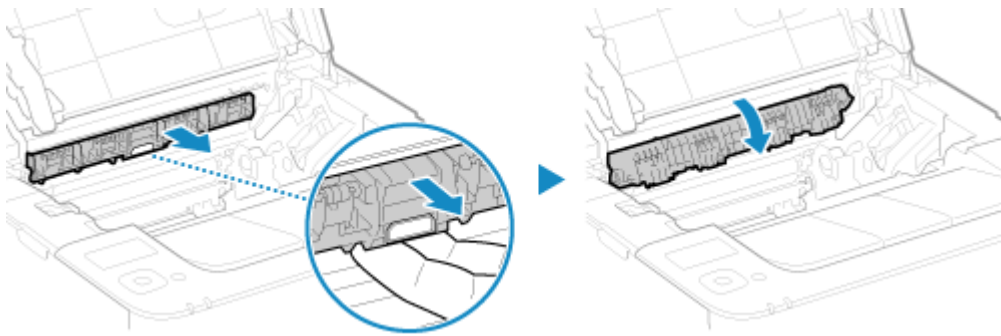
- 2 Gently pull out the paper.**



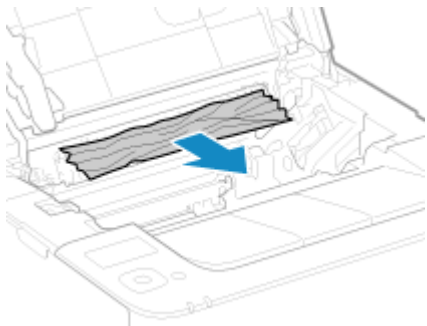
- 3** Load the paper drawer into the machine.
- 4** When [Is all of the jammed paper removed?] is displayed, press [Yes] ► **OK**.

4 Remove the paper jammed inside the paper exit guide.

- 1** Pull out the paper exit guide.



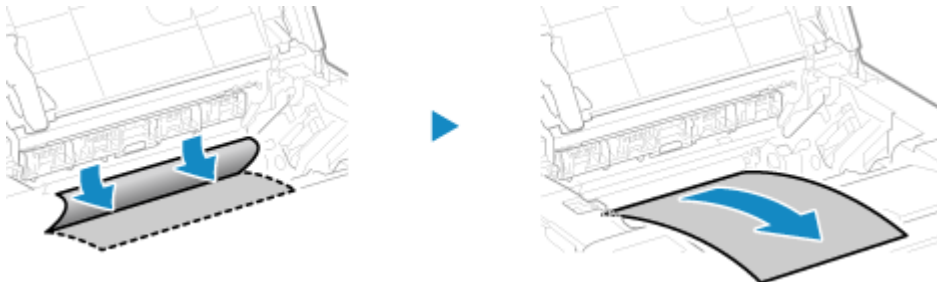
- 2** Gently pull out the paper.



- 3** Close the paper exit guide.

5 Remove the paper jammed inside the machine.

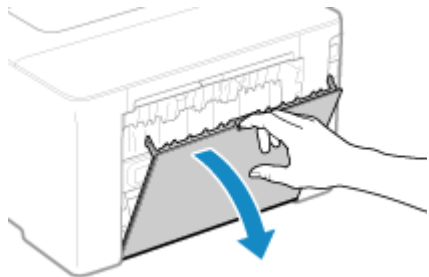
- 1** Gently pull out the paper.



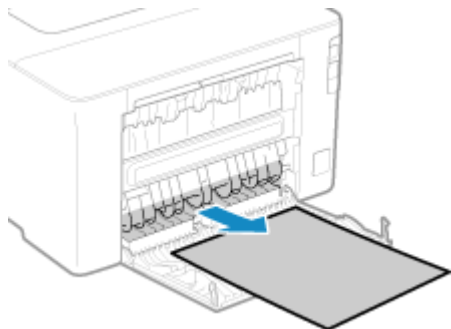
Holding both sides of the paper, pull the front edge of the paper out and downwards.

6 Remove the paper jammed inside rear cover.

1 Open the rear cover.

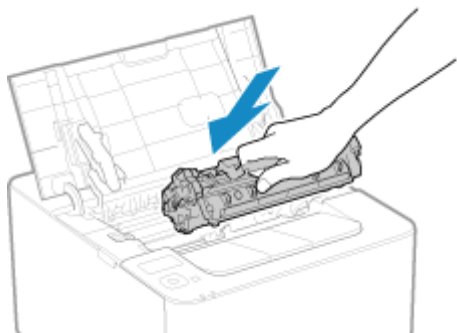


2 Gently pull out the paper.



3 Close the rear cover.

7 Insert the toner cartridge.



8 Close the toner cover.

⇒ 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\(P. 290\)](#)

Paper Jams That Occur Repeatedly

A19C-06L

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. 286)**

Are You Using Appropriate Paper?

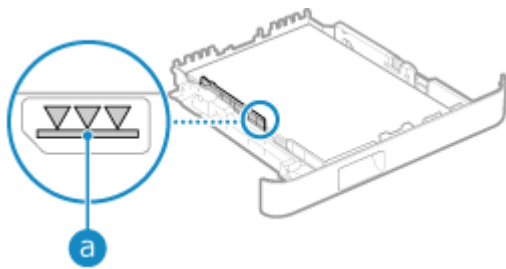
Check whether the paper in the machine is usable, and replace it with appropriate paper, as needed.

▶ Usable Paper(P. 13)

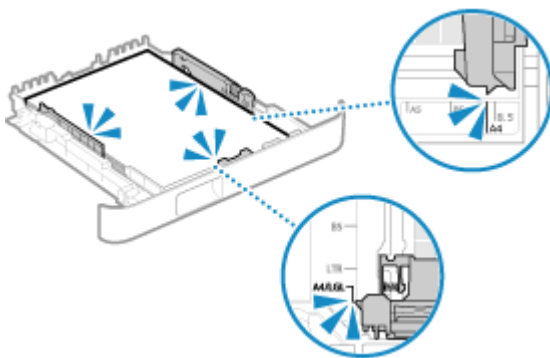
▶ Loading Paper(P. 90)

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. 90)**
- Make sure the loaded paper does not exceed the load limit line (**a**).



- Check that the paper guides are not too loose or too tight.



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.

Does This Occur When Printing Continuously?

If so, setting [Correct Paper Conveyance] to [On] may reduce the frequency of paper jams.

[Home] screen on the control panel ▶ [Menu] ▶ **OK** ▶ [Adjustment/Maintenance] ▶ **OK** ▶ [Adjust Image Quality] ▶ **OK** ▶ [Special Processing] ▶ **OK** ▶ [Correct Paper Conveyance] ▶ **OK** ▶ [On] ▶ **OK**

* When you select [On], the printing speed may decrease.

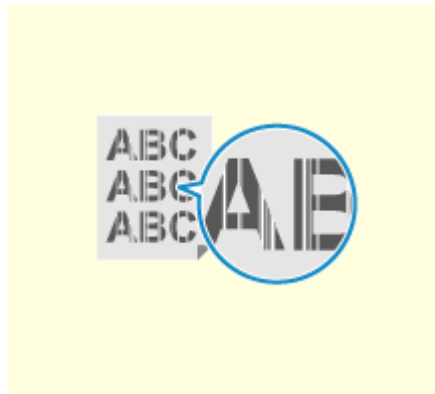
Problems with Printing Results

A19C-06R

If printouts show any of the symptoms below, check how to troubleshoot the problem based on the symptom.



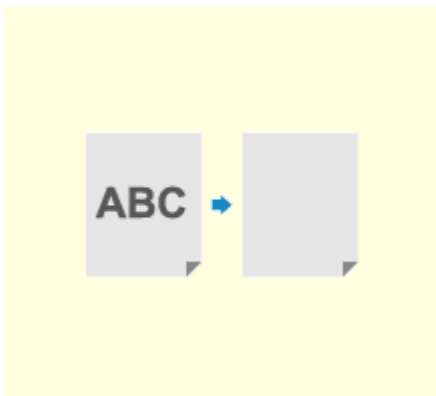
▶ **Toner Smudges and Splatters Appear(P. 294)**



▶ **Streaks Appear(P. 295)**



▶ **Printing Is Uneven(P. 297)**



▶ **Printed Paper Is Blank(P. 299)**



▶ **Smudge Marks Appear on the Edge of Printouts(P. 300)**



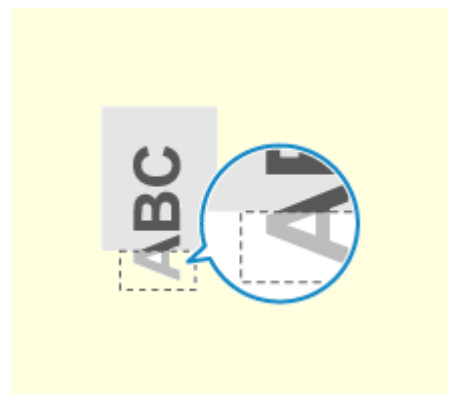
▶ **Text or Images Are Blurry(P. 301)**



▶ **Printouts Have Ghost Images(P. 303)**



▶ **Printouts Are Faded(P. 305)**



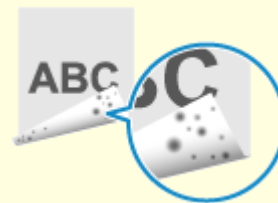
▶ **The Edge of the Page Is Not Printed(P. 307)**



▶ **The Background Is Generally Dark(P. 308)**



▶ **White Spots Appear(P. 309)**



▶ **Smudge Marks Appear on the Back Side of Printouts(P. 311)**



▶ **Printouts Are Skewed(P. 312)**



▶ **The Printed Barcode Cannot be Scanned(P. 313)**

Toner Smudges and Splatters Appear

A19C-06S

Troubleshoot by checking in the following order:

- ▶ **Step 1: Checking the Paper(P. 294)**
- ▶ **Step 2: Checking the Toner Cartridge(P. 294)**
- ▶ **Step 3: Checking the Usage Environment of the Machine(P. 294)**
- ▶ **Step 4: Checking the Maintenance Status(P. 294)**

Step 1: Checking the Paper

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. 13)**
- ▶ **Loading Paper(P. 90)**

Step 2: Checking the Toner Cartridge

Check the Remaining Amount of Toner in the Toner Cartridge.

If the remaining amount of toner in the toner cartridge is low, replace the toner cartridge.






- ▶ **Checking the Remaining Amount of Consumables(P. 277)**
- ▶ **Replacing the Toner Cartridge(P. 272)**

* Depending on the usage condition of the machine, the actual remaining amount of toner may be lower than indicated or the parts may be deteriorated. If the problem persists, replace the toner cartridges.

Step 3: Checking the Usage Environment of the Machine

Are You Using the Machine in an Environment with Low Humidity?

Setting [Low Humidity Mode] to [Mode 1] may solve the problem. If that does not work, try selecting [Mode 2] and then [Mode 3] in sequence.

[Home] screen on the control panel ▶ [Menu] ▶  ▶ [Adjustment/Maintenance] ▶  ▶ [Adjust Image Quality] ▶  ▶ [Special Processing] ▶  ▶ [Low Humidity Mode] ▶  ▶ select the mode.

* Enabling this setting may reduce the density or create fading in a humid environment.

Step 4: Checking the Maintenance Status

Have You Cleaned the Fixing Assembly?

These symptoms may occur when the fixing assembly is dirty. In this case, clean the fixing assembly. ▶ **Cleaning the Fixing Assembly(P. 269)**

Streaks Appear

A19C-06U

Troubleshoot by checking in the following order:

- ▶ **Step 1: Checking the Paper(P. 295)**
- ▶ **Step 2: Checking the Toner Cartridge(P. 295)**
- ▶ **Step 3: Checking the Usage Environment of the Machine(P. 295)**
- ▶ **Step 4: Checking the Maintenance Status(P. 296)**

Step 1: Checking the Paper

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. 13)**
- ▶ **Loading Paper(P. 90)**

Step 2: Checking the Toner Cartridge

Check the Remaining Amount of Toner in the Toner Cartridge.

If the remaining amount of toner in the toner cartridge is low, replace the toner cartridge.

- ▶ **Checking the Remaining Amount of Consumables(P. 277)**
- ▶ **Replacing the Toner Cartridge(P. 272)**

* Depending on the usage condition of the machine, the actual remaining amount of toner may be lower than indicated or the parts may be deteriorated. If the problem persists, replace the toner cartridges.

Step 3: Checking the Usage Environment of the Machine

Is the Machine Installed in a Location Subject to Strong Wind Such as from an Air Conditioner?

If so, adjust the air direction and volume of the air conditioner.

If that does not work, setting [Switch Paper Feed Method] to [Print Side Priority] may improve the problem.

[Home] on the control panel ▶ [Menu] ▶ **OK** ▶ [Function Settings] ▶ **OK** ▶ [Common] ▶ **OK** ▶ [Paper Feed Settings] ▶ **OK** ▶ [Switch Paper Feed Method] ▶ **OK** ▶ [Drawer 1] ▶ **OK** ▶ Print Side Priority ▶ **OK**

* When you select [Print Side Priority], the printing speed for 1-Sided printing will decrease.

Are You Using the Machine in an Environment with Sudden Temperature Changes?

Sudden temperature changes can create condensation, which can result in faded or blurry images and text. Continuing to use the machine under these conditions may result in paper jams, printing defects, faults, or other problems. Allow the machine to adjust to the ambient temperature and humidity for at least 2 hours before use.

Step 4: Checking the Maintenance Status

Have You Cleaned the Fixing Assembly?

These symptoms may occur when the fixing assembly is dirty. In this case, clean the fixing assembly. ▶
Cleaning the Fixing Assembly(P. 269)

Printing Is Uneven

A19C-06W

Troubleshoot by checking in the following order:

- ▶ **Step 1: Checking the Paper(P. 297)**
- ▶ **Step 2: Checking the Toner Cartridge(P. 297)**
- ▶ **Step 3: Checking the Usage Environment of the Machine(P. 297)**

Step 1: Checking the Paper

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. 13)**
- ▶ **Loading Paper(P. 90)**

Step 2: Checking the Toner Cartridge

Check the Remaining Amount of Toner in the Toner Cartridge.

If the remaining amount of toner in the toner cartridge is low, replace the toner cartridge.

- ▶ **Checking the Remaining Amount of Consumables(P. 277)**
- ▶ **Replacing the Toner Cartridge(P. 272)**

* Depending on the usage condition of the machine, the actual remaining amount of toner may be lower than indicated or the parts may be deteriorated. If the problem persists, replace the toner cartridges.

Step 3: Checking the Usage Environment of the Machine

Are You Using the Machine in a Humid Environment?

Setting [High Humidity Mode] to [On] may solve the problem.

[Home] screen on the control panel ▶ [Menu] ▶ **OK** ▶ [Adjustment/Maintenance] ▶ **OK** ▶ [Adjust Image Quality] ▶ **OK** ▶ [Special Processing] ▶ **OK** ▶ [High Humidity Mode] ▶ **OK** ▶ [On] ▶ **OK**

* Setting this to [On] may blur images and text in an environment with low humidity.

Are You Using the Machine in an Environment with Sudden Temperature Changes?

Sudden temperature changes can create condensation, which can result in faded or blurry images and text. Continuing to use the machine under these conditions may result in paper jams, printing defects, faults, or other problems. Allow the machine to adjust to the ambient temperature and humidity for at least 2 hours before use.

Is the Machine Installed in a Location Subject to Strong Wind Such as from an Air Conditioner?

If so, adjust the air direction and volume of the air conditioner.
If that does not work, setting [Switch Paper Feed Method] to [Print Side Priority] may improve the problem.

[Home] on the control panel ▶ [Menu] ▶ **OK** ▶ [Function Settings] ▶ **OK** ▶ [Common] ▶ **OK** ▶ [Paper Feed Settings] ▶ **OK** ▶ [Switch Paper Feed Method] ▶ **OK** ▶ [Drawer 1] ▶ **OK** ▶ [Print Side Priority] ▶ **OK**

* When you select [Print Side Priority], the printing speed for 1-Sided printing will decrease.

Printed Paper Is Blank

A19C-090

Troubleshoot by checking the items below.

Is Condensation Removal Being Performed?

Check the control panel, and wait for condensation removal to finish.

Smudge Marks Appear on the Edge of Printouts

A19C-06X

Troubleshoot by checking in the following order:

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. 13)**
 - ▶ **Loading Paper(P. 90)**

Are You Printing to the Edge of the Paper Without Margins?

This symptom may occur when the margin is set to none in the printer driver. To print with this machine, a margin of 1/4" (5 mm) (3/8" (10 mm) at the top and bottom of an envelope) is required.

On the [Printing preferences] screen of the printer driver, configure the following setting to provide a margin.

[Finishing] tab ▶ [Advanced Settings] ▶ [Expand Print Region and Print] ▶ [Off]

Have You Cleaned the Fixing Assembly?

These symptoms may occur when the fixing assembly is dirty. In this case, clean the fixing assembly. ▶ **Cleaning the Fixing Assembly(P. 269)**

Text or Images Are Blurry

A19C-06Y

Troubleshoot by checking the following steps:

- ▶ **Step 1: Checking the Paper(P. 301)**
- ▶ **Step 2: Checking the Usage Environment of the Machine(P. 301)**
- ▶ **Step 3: Checking the Special Processing Settings(P. 301)**

Step 1: Checking the Paper

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. 13)**
- ▶ **Loading Paper(P. 90)**

Step 2: Checking the Usage Environment of the Machine

Are You Using the Machine in an Environment with Low Humidity?

Setting [Low Humidity Mode] to [Mode 1] may solve the problem. If that does not work, try selecting [Mode 2] and then [Mode 3] in sequence.

[Home] screen on the control panel ▶ [Menu] ▶ **OK** ▶ [Adjustment/Maintenance] ▶ **OK** ▶ [Adjust Image Quality] ▶ **OK** ▶ [Special Processing] ▶ **OK** ▶ [Low Humidity Mode] ▶ **OK** ▶ select the mode ▶ **OK**

* Enabling this setting may reduce the density or create fading in a humid environment.

Are You Using the Machine in a Humid Environment?

Setting [High Humidity Mode] to [On] may solve the problem.

[Home] screen on the control panel ▶ [Menu] ▶ **OK** ▶ [Adjustment/Maintenance] ▶ **OK** ▶ [Adjust Image Quality] ▶ **OK** ▶ [Special Processing] ▶ **OK** ▶ [High Humidity Mode] ▶ **OK** ▶ [On] ▶ **OK**

* Setting this to [On] may blur images and text in an environment with low humidity.

Are You Using the Machine in an Environment with Sudden Temperature Changes?

Sudden temperature changes can create condensation, which can result in faded or blurry images and text. Continuing to use the machine under these conditions may result in paper jams, printing defects, faults, or other problems. Allow the machine to adjust to the ambient temperature and humidity for at least 2 hours before use.

Step 3: Checking the Special Processing Settings

Is [Correct Blurry Image] enabled?

Setting [Correct Blurry Image] to [Mode 1] may improve the print results. If that does not work, select [Mode 2].

[Home] screen on the control panel ▶ [Menu] ▶ **OK** ▶ [Adjustment/Maintenance] ▶ **OK** ▶ [Adjust Image Quality] ▶ **OK** ▶ [Special Processing] ▶ **OK** ▶ [Correct Blurry Image] ▶ **OK** ▶ [Mode 1] or [Mode 2] ▶ **OK**

* When this setting is enabled, the print density may decrease or the print speed may be slower.

Printouts Have Ghost Images

A19C-070

Troubleshoot by checking the following steps:

- ▶ **Step 1: Checking the Paper and Toner Cartridge(P. 303)**
- ▶ **Step 2: Checking the Occurrence of Ghost Images(P. 303)**
- ▶ **Step 3: Checking the Maintenance Status of the Machine(P. 303)**
- ▶ **Step 4: Checking the Special Processing Setting(P. 304)**

Step 1: Checking the Paper and Toner Cartridge

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. 13)**
- ▶ **Loading Paper(P. 90)**

Have the Toner Cartridge Reached the End of Their Lifetime?

Parts inside the toner cartridge may have deteriorated. If this symptom occurs, it is recommended to replace the toner cartridge regardless of the remaining amount of toner or messages displayed. ▶ **Replacing the Toner Cartridge(P. 272)**

Step 2: Checking the Occurrence of Ghost Images

Do Ghost Images Appear in Unprinted Sections?

If you print on small-sized paper and then continue printing on a larger sized paper, ghost images may appear in the unprinted sections of the paper. In this event, setting [Reduce Ghosting 1] to [On] may improve the print results.

[Home] screen on the control panel ▶ [Menu] ▶ **OK** ▶ [Adjustment/Maintenance] ▶ **OK** ▶ [Adjust Image Quality] ▶ **OK** ▶ [Special Processing] ▶ **OK** ▶ [Reduce Ghosting 1] ▶ **OK** ▶ [On] ▶ **OK**

* When you select [On], the printing speed may decrease.

Do Ghost Images Appear Within the Same Page?

Setting [Transfer Adjust. Mode] to [Mode 1] may solve the problem. If that does not work, select [Mode 2].

[Home] screen on the control panel ▶ [Menu] ▶ **OK** ▶ [Adjustment/Maintenance] ▶ **OK** ▶ [Adjust Image Quality] ▶ **OK** ▶ [Special Processing] ▶ **OK** ▶ [Transfer Adjust. Mode] ▶ **OK** ▶ [Mode 1] or [Mode 2] ▶ **OK**

* When this setting is enabled, the print density may vary in an environment with low- humidity.

Step 3: Checking the Maintenance Status of the Machine

Have You Cleaned the Fixing Assembly?

These symptoms may occur when the fixing assembly is dirty. In this case, clean the fixing assembly. ▶ **Cleaning the Fixing Assembly(P. 269)**

Step 4: Checking the Special Processing Setting

Is [Reduce Toner Flaking] Enabled?

If so, setting [Reduce Toner Flaking] to [Off] may improve the problem.

[Home] screen on the control panel ▶ [Menu] ▶ **OK** ▶ [Adjustment/Maintenance] ▶ **OK** ▶ [Adjust Image Quality] ▶ **OK** ▶ [Special Processing] ▶ **OK** ▶ [Reduce Toner Flaking] ▶ **OK** ▶ [Off] ▶ **OK**

Printouts Are Faded

A19C-071

Troubleshoot by checking the following steps:

- ▶ **Step 1: Checking the Paper and Toner Cartridge(P. 305)**
- ▶ **Step 2: Checking the Usage Environment of the Machine(P. 305)**
- ▶ **Step 3: Checking the Special Processing Setting(P. 306)**

Step 1: Checking the Paper and Toner Cartridge

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. 13)**
 - ▶ **Loading Paper(P. 90)**
- Set the paper size and type correctly according to the loaded paper. ▶ **Specifying the Paper Size and Type(P. 100)**

Does the Printed Toner Flake Off Depending on Paper Type or Usage Environment?

If so, setting [Reduce Toner Flaking] to [Mode 1] may improve the problem. If that does not work, select [Mode 2].

[Home] screen on the control panel ▶ [Menu] ▶ **OK** ▶ [Adjustment/Maintenance] ▶ **OK** ▶ [Adjust Image Quality] ▶ **OK** ▶ [Special Processing] ▶ **OK** ▶ [Reduce Toner Flaking] ▶ **OK** ▶ [Mode 1] or [Mode 2] ▶ **OK**

* When this setting is enabled, ghost images may appear in unprinted areas.

Have the Toner Cartridge Reached the End of Their Lifetime?

Parts inside the toner cartridge may have deteriorated. If this symptom occurs, it is recommended to replace the toner cartridge regardless of the remaining amount of toner or messages displayed. ▶ **Replacing the Toner Cartridge(P. 272)**

* Depending on the usage condition of the machine, the actual remaining amount of toner may be lower than indicated or the parts may be deteriorated.

Step 2: Checking the Usage Environment of the Machine

Is the Machine Installed in a Location Subject to Strong Wind Such as from an Air Conditioner?

If so, adjust the air direction and volume of the air conditioner.
If that does not work, setting [Switch Paper Feed Method] to [Print Side Priority] may improve the problem.

[Home] on the control panel ▶ [Menu] ▶ **OK** ▶ [Function Settings] ▶ **OK** ▶ [Common] ▶ **OK** ▶ [Paper Feed Settings] ▶ **OK** ▶ [Switch Paper Feed Method] ▶ **OK** ▶ [Drawer 1] ▶ **OK** ▶ [Print Side Priority] ▶ **OK**

* When you select [Print Side Priority], the printing speed for 1-Sided printing will decrease.

Are You Using the Machine in an Environment with Sudden Temperature Changes?

Sudden temperature changes can create condensation, which can result in faded or blurry images and text. Continuing to use the machine under these conditions may result in paper jams, printing defects, faults, or

other problems. Allow the machine to adjust to the ambient temperature and humidity for at least 2 hours before use.

Step 3: Checking the Special Processing Setting

Is [Special Processing] Enabled?

If so, setting [Special Processing] below to [Off] may improve the problem. ▶**[Special Processing](P. 231)**

- [Envelope Flap Closing Prevention]

[Home] screen on the control panel ▶ [Menu] ▶ **OK** ▶ [Adjustment/Maintenance] ▶ **OK** ▶ [Adjust Image Quality] ▶ **OK** ▶ [Special Processing] ▶ **OK**

The Edge of the Page Is Not Printed

A19C-072

Troubleshoot by checking in the following order:

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. 13)**
- ▶ **Loading Paper(P. 90)**

Are the Paper Guides Correctly Aligned with the Paper?

Paper guides that are aligned but too loose or too tight can cause part of the page to not be printed. Check the paper guides, and align them with the width of the paper. ▶ **Loading Paper(P. 90)**

Are You Printing to the Edge of the Paper Without Margins?

This symptom may occur when the margin is set to none in the printer driver. To print with this machine, a margin of 1/4" (5 mm) (3/8" (10 mm) at the top and bottom of an envelope) is required.

On the [Printing preferences] screen of the printer driver, configure the following setting to provide a margin.

[Finishing] tab ▶ [Advanced Settings] ▶ [Expand Print Region and Print] ▶ [Off]

The Background Is Generally Dark

A19C-073

Troubleshoot by checking in the following order:

Are White Areas Lightly Colored?

Setting [Prevent Fogging] to [On] may solve the problem.

[Home] screen on the control panel ▶ [Menu] ▶  ▶ [Adjustment/Maintenance] ▶  ▶ [Adjust Image Quality] ▶  ▶ [Special Processing] ▶  ▶ [Prevent Fogging] ▶  ▶ [On] ▶ 

* When you select [On], the print density may decrease.

Check the Remaining Amount of Toner in the Toner Cartridge.

Check the remaining amount of toner in the toner cartridge, and replace the toner cartridge if it is low.

▶ **Checking the Remaining Amount of Consumables(P. 277)**

▶ **Replacing the Toner Cartridge(P. 272)**

* Depending on the usage condition of the machine, the actual remaining amount of toner may be lower than indicated or the parts may be deteriorated. If the problem persists, replace the toner cartridges.

White Spots Appear

A19C-074

Troubleshoot by checking the following steps:

- ▶ **Step 1: Checking the Paper(P. 309)**
- ▶ **Step 2: Checking the Toner Cartridge(P. 309)**
- ▶ **Step 3: Checking the Occurrence of White Spots(P. 309)**
- ▶ **Step 4: Checking the Usage Environment of the Machine(P. 310)**
- ▶ **Step 5: Checking the Maintenance Status(P. 310)**

Step 1: Checking the Paper

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. 13)**
- ▶ **Loading Paper(P. 90)**

Are You Using Paper That Has Absorbed Moisture?

Check the precautions, and replace the paper with dry paper.

- ▶ **Precautions When Handling Paper(P. 16)**
- ▶ **Loading Paper(P. 90)**

Step 2: Checking the Toner Cartridge

Check the Remaining Amount of Toner in the Toner Cartridge.

If the remaining amount of toner in the toner cartridge is low, replace the toner cartridge.

- ▶ **Checking the Remaining Amount of Consumables(P. 277)**
- ▶ **Replacing the Toner Cartridge(P. 272)**

* Depending on the usage condition of the machine, the actual remaining amount of toner may be lower than indicated or the parts may be deteriorated. If the problem persists, replace the toner cartridges.

Step 3: Checking the Occurrence of White Spots

Are Dark Characters and Lines Printed Hollowed Out?

Setting [Transfer Adjust. Mode] to [Mode 1] may solve the problem. If that does not work, select [Mode 2].

[Home] screen on the control panel ▶ [Menu] ▶ **OK** ▶ [Adjustment/Maintenance] ▶ **OK** ▶ [Adjust Image Quality] ▶ **OK** ▶ [Special Processing] ▶ **OK** ▶ [Transfer Adjustment Mode] ▶ **OK** ▶ [Mode 1] or [Mode 2] ▶ **OK**

* When this setting is enabled, the print density may vary in an environment with low- humidity.

Step 4: Checking the Usage Environment of the Machine

Does the Printed Toner Flake Off Depending on Paper Type or Usage Environment?

If so, setting [Reduce Toner Flaking] to [Mode 1] may improve the problem. If that does not work, select [Mode 2].

[Home] screen on the control panel ▶ [Menu] ▶ **OK** ▶ [Adjustment/Maintenance] ▶ **OK** ▶ [Adjust Image Quality] ▶ **OK** ▶ [Special Processing] ▶ **OK** ▶ [Reduce Toner Flaking] ▶ **OK** ▶ [Mode 1] or [Mode 2] ▶ **OK**

* When this setting is enabled, ghost images may appear in unprinted areas.

Are You Using Very Dusty Paper?

Setting [Talc Paper Mode] to [On] may solve the problem.

[Home] screen on the control panel ▶ [Menu] ▶ **OK** ▶ [Adjustment/Maintenance] ▶ **OK** ▶ [Adjust Image Quality] ▶ **OK** ▶ [Special Processing] ▶ **OK** ▶ [Talc Paper Mode] ▶ **OK** ▶ [On] ▶ **OK**

* Specifying [On] in this setting may lead to changes in the image quality.

Are You Using the Machine in an Environment with Sudden Temperature Changes?

Sudden temperature changes can create condensation, which can result in faded or blurry images and text. Continuing to use the machine under these conditions may result in paper jams, printing defects, faults, or other problems. Allow the machine to adjust to the ambient temperature and humidity for at least 2 hours before use.

Step 5: Checking the Maintenance Status

Have You Cleaned the Drum?

These symptoms may occur when the drum is dirty. In this case, clean the drum. **▶ Cleaning the Drum(P. 270)**

Smudge Marks Appear on the Back Side of Printouts

A19C-075

Troubleshoot by checking in the following order:

Are You Using Paper That Is Smaller Than the Size of the Print Data?

Replace with paper that is the same size as the print data. ▶ **Loading Paper(P. 90)**

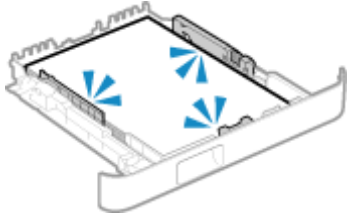
Have You Cleaned the Fixing Assembly?

These symptoms may occur when the fixing assembly is dirty. In this case, clean the fixing assembly. ▶ **Cleaning the Fixing Assembly(P. 269)**

Printouts Are Skewed

A19C-076

This symptom may occur when the paper guides are aligned but too loose or too tight. Check the paper guides, and align them with the width of the paper. ➤ **Loading Paper(P. 90)**



The Printed Barcode Cannot be Scanned

A19C-077

Troubleshoot by checking in the following order:

Are You Using a Very Small Barcode or One With Thick Lines?

- Enlarge the barcode.
- If the barcode lines are perpendicular to the output feed direction, rotate the image 90° so that the lines are parallel.

Try using Barcode Adjustment Mode

Setting the mode in [Barcode Adjustment Mode] in the printer driver may solve the problem. The improvement effect is weakest with [Mode 1] and strongest with [Mode 5]. Try selecting [Mode 1] first, and then change to the next higher mode, as needed.

- Specify the settings below in the [Printing preferences] screen of the printer driver.

[Finishing] tab ▶ [Advanced Settings] ▶ [Barcode Adjustment Mode] ▶ select the mode

* When this setting is enabled, the print density may decrease.

- If setting [Barcode Adjustment Mode] to [Mode 5] does not work, changing the [Printer Density] may solve the problem. ▶**[Printer Density](P. 230)**

Paper and Paper Feeding Problems

A19C-078

Check how to troubleshoot the problem based on the symptom.

- ▶ **Paper Creases(P. 315)**
- ▶ **Paper Curls(P. 316)**
- ▶ **Paper Is Not Fed or Two or More Sheets Are Fed Together(P. 317)**
- ▶ **Paper Drawer Does Not Fit in the Machine(P. 318)**

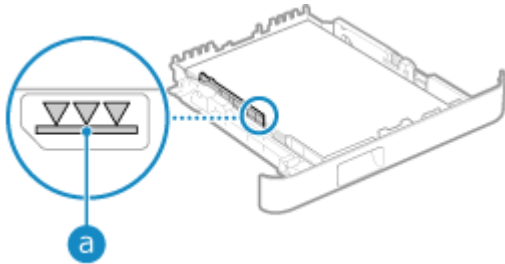
Paper Creases

A19C-079

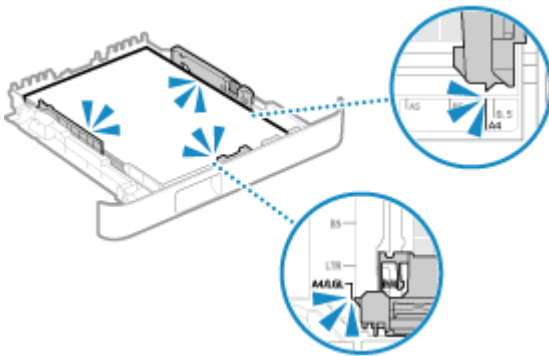
Troubleshoot by checking the items below.

Is Paper Loaded Correctly?

- Make sure the loaded paper does not exceed the load limit line (a).



- Check that the paper guides are aligned with the markings and are not too loose or too tight.



Are You Using Paper That Has Absorbed Moisture?

Check the precautions, and replace the paper with dry paper.

- **Precautions When Handling Paper(P. 16)**
- **Loading Paper(P. 90)**

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. 13)**
- **Loading Paper(P. 90)**

Paper Curls

A19C-07A

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. 13)**
 - ▶ **Loading Paper(P. 90)**
- Set the paper size and type correctly according to the loaded paper. ▶ **Specifying the Paper Size and Type(P. 100)**
- Setting [Switch Paper Feed Method] to [Print Side Priority] may improve the problem.

[Home] on the control panel ▶ [Menu] ▶ **OK** ▶ [Function Settings] ▶ **OK** ▶ [Common] ▶ **OK** ▶ [Paper Feed Settings] ▶ **OK** ▶ [Switch Paper Feed Method] ▶ **OK** ▶ [Drawer 1] ▶ **OK** ▶ [Print Side Priority] ▶ **OK**

- * When you select [Print Side Priority], the printing speed for 1-Sided printing will decrease.
- Load the paper with the side to be printed (paper front and back) reversed.
 - * In rare cases, the symptom may worsen depending on the paper used. In this case, print on the original side of the paper.

Are You Using Paper That Has Absorbed Moisture?

Try the following in the order below:

- Check the precautions, and replace the paper with dry paper.
 - ▶ **Precautions When Handling Paper(P. 16)**
 - ▶ **Loading Paper(P. 90)**
- Change the paper type setting to a thinner paper. ▶ **Specifying the Paper Size and Type(P. 100)**

Paper Is Not Fed or Two or More Sheets Are Fed Together

A19C-07C

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. 13)**
- ▶ **Loading Paper(P. 90)**

Is Paper Loaded Correctly?

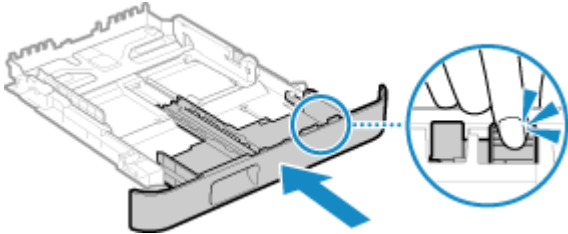
- Fan the paper thoroughly in small batches so that it is not stuck together.
- Align the edges by tapping the paper on a flat surface a few times before loading the paper. ▶ **Loading Paper(P. 90)**
- Do not load paper of different sizes or types together.

Paper Drawer Does Not Fit in the Machine

A19C-093

The paper drawer may be extended.

When you are using paper of A4 size or smaller, decrease the size of the paper drawer while pressing the lock release lever.



* When you are using paper that is longer than A4 size, the paper drawer is extended from the machine and is not fully housed.

Setting Up

A19C-07F

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. 320)**

■ 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. 321)**

Cannot Connect to Wired LAN

The IP address setting may have failed. Set the IP address again.

▶ **Setting IPv4 Addresses(P. 53)**

▶ **Setting IPv6 Addresses(P. 55)**

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 Using TLS Encryption

If you specify a TLS version that is not supported by your OS operating system, browser, or other software, you will not be able to connect to the machine using TLS encryption.

Update your OS operating system and other software, or incrementally downgrade the TLS version until you can successfully connect to the machine. Note, however, that downgrading your TLS version may result in a connected environment that is not protected by adequate security.

▶ **Using TLS(P. 162)**

■ 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

A19C-07H

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. 224)**

Check the OS Network Settings.

Configure the settings below if they have not been configured.

In Windows, click [Start] (Start) ▶ [Settings] (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] (Start) ▶ [Settings] (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

A19C-07J

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. 321)**
- ▶ **Step 2: Checking the Status of the Machine and Wireless LAN Router(P. 321)**
- ▶ **Step 3: Reconnecting to a Wireless LAN(P. 321)**

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.

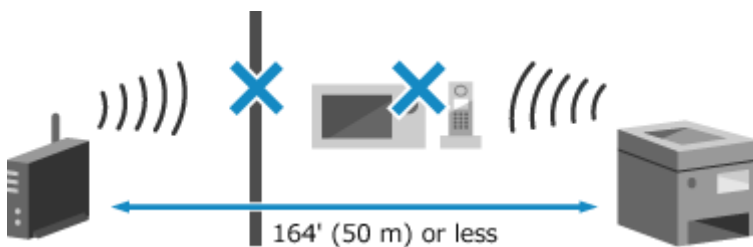
Step 2: Checking the Status of the Machine and Wireless LAN Router

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 164' (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. 41)**

Network

A19C-07K

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. 323)**
- ▶ **Cannot Find the Print Server to Connect to(P. 324)**
- ▶ **Cannot Connect to a Shared Printer(P. 325)**
- ▶ **Cannot Find the IP Address of the Machine(P. 326)**
- ▶ **AirPrint Does Not Work(P. 327)**

Cannot Switch to Wireless LAN

A19C-07L

Use the network settings to switch from wired LAN connection to wireless LAN connection.

1 On the control panel, select [Menu] in the [Home] screen, and press **OK**. **▶**[Home] Screen(P. 84)

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

⇒ The [Select Wired/Wireless LAN] screen is displayed.

If the login screen appears, enter the System Manager ID and PIN, and then press [<Log In>] **▶** **OK**. **▶**
System Manager ID and PIN(P. 4)

3 Press [Wireless LAN] **▶** **OK**.

⇒ The message [Settings applied.] appears.

4 Connect the machine to the wireless LAN. **▶**Connecting to a Wireless LAN(P. 41)

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

A19C-07R

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\(P. 364\)](#)

Cannot Connect to a Shared Printer

A19C-07S

Check if a shared printer is displayed on the network computer. ▶ **Displaying a Shared Printer in the Print Server(P. 364)**

If it is not displayed, contact the network or print server administrator.

Cannot Find the IP Address of the Machine

A19C-07U

View the IP address using the following procedure:

Viewing the IPv4 Address

[Home] screen on the control panel ▶ [Status Monitor] ▶ **OK** ▶ [Network Information] ▶ **OK** ▶ [IPv4] ▶ **OK** ▶ view the setting.

Viewing the IPv6 Address

[Home] screen on the control panel ▶ [Status Monitor] ▶ **OK** ▶ [Network Information] ▶ **OK** ▶ [IPv6] ▶ **OK** ▶ 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. 53)**
 - ▶ **Setting IPv6 Addresses(P. 55)**

AirPrint Does Not Work

A19C-07W

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\(P. 78\)](#)

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\(P. 341\)](#)

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\(P. 37\)](#)
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. [▶Rear Side\(P. 9\)](#)

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\(P. 137\)](#)

Is Bonjour Enabled on Your Apple Device?

Enable Bonjour if it is not enabled. For details, see the manual of your Apple device.

Printing

A19C-07X

This is a list of problems that can occur when printing. Check how to troubleshoot the problem based on the symptom.

- ▶ **Cannot Print(P. 329)**
- ▶ **Printing Is Slow(P. 335)**

■ Problems with Printing Results

If the printing results are not as expected, see the following:

- ▶ **Problems with Printing Results(P. 292)**

■ Frequently Asked Questions about Operations

I Want to Print on an Envelope.

Place the envelope in the paper drawer 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. 96)**
- ▶ **Specifying the Paper Size and Type(P. 100)**
- ▶ **Printing from a Computer(P. 118)**

Cannot Print

A19C-07Y

Troubleshoot by checking the items below.

Has an Error Occurred?

Check the print 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. 125)**
- ▶ **An Error Code Is Displayed(P. 353)**

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. 370)**

Check the Network Status and Settings.

Check the required items according to the usage environment.

- ▶ **Cannot Print (Wireless LAN)(P. 330)**
- ▶ **Cannot Print (Wired LAN)(P. 332)**
- ▶ **Cannot Print (USB Connection)(P. 333)**
- ▶ **Cannot Print (via Print Server)(P. 334)**

Cannot Print (Wireless LAN)

A19C-080

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\(P. 71\)](#)

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\(P. 321\)](#)

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\(P. 71\)](#)
 - ▶[Viewing the Network Connection Information of the Computer\(P. 367\)](#)
- 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\(P. 41\)](#)

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\(P. 369\)](#)
- ▶[Configuring a Printer Port \(Windows\)\(P. 112\)](#)

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] ▶ **OK** ▶ [Preferences] ▶ **OK** ▶ [Network] ▶ **OK**
 ▶ [Firewall Settings] ▶ **OK** ▶ [MAC Address Filter] ▶ **OK** ▶ [Outbound Filter] or [Inbound Filter] ▶ **OK** ▶
 [Off] ▶ **OK** ▶ Restart the machine.

- 2 Configure the firewall correctly. ▶ **Setting the Firewall(P. 156)**

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. ▶ **If the Problem Persists(P. 356)**

Cannot Print (Wired LAN)

A19C-081

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. 369)**
- ▶ **Configuring a Printer Port (Windows)(P. 112)**

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] ▶ **OK** ▶ [Preferences] ▶ **OK** ▶ [Network] ▶ **OK**
 ▶ [Firewall Settings] ▶ **OK** ▶ [IPv4 Address Filter] ▶ **OK** ▶ [Outbound Filter] or [Inbound Filter] ▶ **OK** ▶
 [Off] ▶ **OK** ▶ Restart the machine.

To Disable IPv6 Address Filter

[Home] screen on the control panel ▶ [Menu] ▶ **OK** ▶ [Preferences] ▶ **OK** ▶ [Network] ▶ **OK**
 ▶ [Firewall Settings] ▶ **OK** ▶ [IPv6 Address Filter] ▶ **OK** ▶ [Outbound Filter] or [Inbound Filter] ▶ **OK** ▶
 [Off] ▶ **OK** ▶ Restart the machine.

To Disable MAC Address Filter

[Home] screen on the control panel ▶ [Menu] ▶ **OK** ▶ [Preferences] ▶ **OK** ▶ [Network] ▶ **OK**
 ▶ [Firewall Settings] ▶ **OK** ▶ [MAC Address Filter] ▶ **OK** ▶ [Outbound Filter] or [Inbound Filter] ▶ **OK** ▶
 [Off] ▶ **OK** ▶ Restart the machine.

- 2 Configure the firewall correctly. ▶ **Setting the Firewall(P. 156)**

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. ▶ **If the Problem Persists(P. 356)**

Cannot Print (USB Connection)

A19C-082

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. 369)**
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. 370)**

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. 180)**

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. ▶ **If the Problem Persists(P. 356)**

Cannot Print (via Print Server)

A19C-083

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. 324)**

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. 364)**

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. ▶ **If the Problem Persists(P. 356)**

Printing Is Slow

A19C-084

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. 90)

Management Functions and Environment Settings

A19C-085

This is a list of frequently asked questions about management functions. Check the applicable item.

- ▶ **Cannot Access Remote UI(P. 337)**
- ▶ **Changing the Time Until Sleep Mode(P. 338)**
- ▶ **Lost Department ID or PIN for the Administrator(P. 339)**
- ▶ **Checking the Items That Can Be Configured on the Machine and Their Settings(P. 340)**

Cannot Access Remote UI

A19C-086

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, troubleshoot by checking the items below.

Set the Remote UI Password.

To access the Remote UI, you must set the Remote UI password.

Administrator privileges are required to configure the setting.

[Home] screen on the control panel ▶ [Menu] ▶ **OK** ▶ [Management Settings] ▶ **OK** ▶ [Remote UI Settings/ Update Firmware] ▶ **OK** ▶ [Remote UI Settings] ▶ **OK** ▶ [Use Password] ▶ **OK** ▶ [On] ▶ **OK** ▶ enter the password ▶ **OK** ▶ enter the password again ▶ **OK**

* You cannot set a password consisting of all zeros, such as "0000000."

Change the System Manager PIN.

When logging in with System Manager Mode, 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] ▶ **OK** ▶ [Management Settings] ▶ **OK** ▶ [User Management] ▶ **OK** ▶ [System Manager Information Settings] ▶ **OK** ▶ [System Manager ID and PIN] ▶ **OK** ▶ enter the System Manager ID ▶ **OK** ▶ enter the PIN ▶ **OK** ▶ enter the PIN again ▶ **OK**

* 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 Time Until Sleep Mode

A19C-087

In addition to being able to change the time until the machine enters sleep mode, you can also configure a specified time the machine enters sleep mode.

➤ **Reducing Power Consumption (Sleep Mode)(P. 79)**

Lost Department ID or PIN for the Administrator

A19C-088

Contact the administrator to check whether the System Manager ID and System Manager PIN were changed from the default settings.

The System Manager ID and System Manager PIN are not set by default.

* 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. 153)**

NOTE

- If you still cannot recover your System Manager ID and PIN even after confirming the above information, contact your dealer or service representative. ▶ **If the Problem Persists(P. 356)**

Checking the Items That Can Be Configured on the Machine and Their Settings

A19C-089

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. 196)**

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

A19C-08A

If a message appears on the control panel, select the message from the list below, and check how to troubleshoot the problem.

- ▶ **A counterfeit or non-Canon cartridge may be in use. Close: Press OK(P. 342)**
- ▶ **Cannot analyze the authentication server certificate.(P. 342)**
- ▶ **Cannot find the access point.(P. 342)**
- ▶ **Cannot print. A non-Canon or counterfeit cartridge may be in use. Close: Press OK(P. 342)**
- ▶ **Cannot print RX data.(P. 343)**
- ▶ **Cart. Comm. Error A counterfeit or non-Canon cartridge may be in use. Close: Press OK(P. 343)**
- ▶ **Cart. Comm. Error Cannot print. A non-Canon or counterfeit cartridge may be in use. Close: Press OK(P. 343)**
- ▶ **Cart. end of lifetime. Rplcmt. recommended.(P. 343)**
- ▶ **Change the authentication password.(P. 344)**
- ▶ **Check the authentication settings.(P. 344)**
- ▶ **Could not connect.(P. 344)**
- ▶ **Could not connect. Check the encryption key settings.(P. 344)**
- ▶ **Could not connect. Device will restart.(P. 345)**
- ▶ **Could not connect. Max connections to access point reached(P. 345)**
- ▶ **Could not connect using the wireless LAN.(P. 345)**
- ▶ **Could not connect using WPS.(P. 345)**
- ▶ **Could not detect any connections from wireless devices.(P. 346)**
- ▶ **Could not perform cleaning.(P. 346)**
- ▶ **Could not perform Open System auth. Chk encryp. key set.(P. 346)**
- ▶ **Could not perform Shared Key auth. Chk encryp. key set.(P. 346)**
- ▶ **Direct Connection terminated.(P. 347)**
- ▶ **Easy Conn. via PC ended due to timeout Device will restart.(P. 347)**
- ▶ **Encryption key is not set correctly. Check the encryption key settings.(P. 347)**
- ▶ **Encryption key not set correctly. Check encryption key set.(P. 348)**
- ▶ **End of Cart. Lifetime(P. 348)**
- ▶ **IEEE 802.1X error. An unknown error occurred.(P. 348)**
- ▶ **IEEE 802.1X error. Cannot analyze auth. server certificate.(P. 348)**
- ▶ **IEEE 802.1X error. Change the auth. password.(P. 348)**
- ▶ **IEEE 802.1X error. Check the auth. settings.(P. 348)**
- ▶ **IEEE 802.1X error. Configure correct authentication info.(P. 349)**
- ▶ **IEEE 802.1X error. Configure the info. required for auth.(P. 349)**
- ▶ **IEEE 802.1X error. No reply from the destination.(P. 349)**
- ▶ **IEEE 802.1X error. The auth. server cert. has expired.(P. 349)**
- ▶ **IEEE 802.1X error. The auth. server cert. is incorrect.(P. 349)**
- ▶ **Incorrect number of characters/invalid characters entered.(P. 349)**
- ▶ **Insert the toner cartridge.(P. 350)**
- ▶ **Low Cartridge Level(P. 350)**
- ▶ **Memory is full.(P. 350)**
- ▶ **No Paper(P. 350)**
- ▶ **No reply from the destination.(P. 350)**
- ▶ **No response from host.(P. 350)**
- ▶ **Paper jammed.(P. 351)**
- ▶ **Prepare a cartridge.(P. 351)**
- ▶ **Problems resulting from the use of non-Canon cartridges are not covered by the warranty.(P. 351)**
- ▶ **Set the correct authentication information.(P. 351)**
- ▶ **Set the information necessary for authentication.(P. 351)**
- ▶ **Size/Settings Mismatch(P. 351)**

- ▶ **The authentication server certificate has expired.(P. 352)**
- ▶ **The authentication server certificate is incorrect.(P. 352)**
- ▶ **Use Remote UI to set info. necessary for authentication.(P. 352)**

NOTE

- If the problem persists even after trying the troubleshooting methods, contact your dealer or service representative. ▶ **If the Problem Persists(P. 356)**

A counterfeit or non-Canon cartridge may be in use. Close: Press OK

A toner cartridge whose print quality cannot be guaranteed may be in use. For optimum print quality, using Canon genuine toner cartridges is recommended.

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. 164)**

Cannot find the access point.

An error occurred, preventing the machine from detecting the wireless LAN router (access point).

Did You Connect Within the Fixed Time?

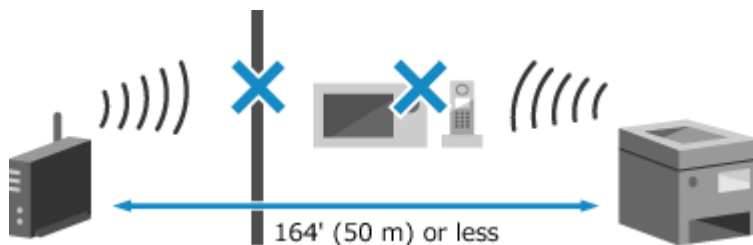
When connecting by pressing a button on the wireless LAN router, set the connection type on the control panel of the machine, and then press the button on the wireless LAN router within two minutes. ▶ **Connecting to a Wireless LAN by Using the Router Button (Push Button Mode)(P. 44)**

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. 50)**

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 164' (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 print. A non-Canon or counterfeit cartridge may be in use. Close: Press OK

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 Cartridge(P. 272)**

For optimum print quality, using Canon genuine toner cartridges is recommended. ▶ **List of Consumables(P. 278)**

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 Rear Cover or Toner Cover Open on the Machine?

Close the covers if they are open.

Is Paper Loaded?

Load paper if not loaded. ▶ **Loading Paper(P. 90)**

Is Paper Jammed?

If so, remove any jammed paper. ▶ **Paper Jams(P. 286)**

Have the Toner Cartridge Reached the End of Their Lifetime?

Check the remaining amount of toner in the toner cartridge, and replace any toner cartridge, as needed.

▶ **Checking the Remaining Amount of Consumables(P. 277)**

▶ **Replacing the Toner Cartridge(P. 272)**

Cart. Comm. Error A counterfeit or non-Canon cartridge may be in use. Close: Press OK

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 New Toner Cartridge.

▶ **Replacing the Toner Cartridge(P. 272)**

- For optimum print quality, using Canon genuine toner cartridges is recommended. ▶ **List of Consumables(P. 278)**
- If the message still appears after repeatedly reinstalling the toner cartridge, contact your dealer or service representative. ▶ **If the Problem Persists(P. 356)**

Cart. Comm. Error Cannot print. A non-Canon or counterfeit cartridge may be in use. Close: Press OK

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 New Toner Cartridge.

▶ **Replacing the Toner Cartridge(P. 272)**

- For optimum print quality, using Canon genuine toner cartridges is recommended. ▶ **List of Consumables(P. 278)**
- If the message still appears after repeatedly reinstalling the toner cartridge, contact your dealer or service representative. ▶ **If the Problem Persists(P. 356)**

Cart. end of lifetime. Rplcmt. recommended.

The toner cartridge has reached the end of their lifetime.

It Is Recommended to Replace with New Toner Cartridge.

Replace the toner cartridge. [▶ Replacing the Toner Cartridge\(P. 272\)](#)

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\(P. 164\)](#)

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. [▶ \[Direct Connection Settings\]\(P. 213\)](#)

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\(P. 70\)](#)

[▶ Setting IPv4 Addresses\(P. 53\)](#)

Could not connect. Check the encryption key settings.

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\(P. 41\)](#)

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 \(Access Point Setup Method\)\(P. 48\)](#)
- Using the Manual Setup Method, connect with the WEP authentication method set to [Open System]. [▶ Connecting to a Wireless LAN by Setting the Details \(Manual Setup Method\)\(P. 50\)](#)

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.

Could not connect. Device will restart.

An error occurred, preventing the machine from connecting in Access Point Mode. Alternatively, an error occurred when starting cableless setup mode.

Restart the Machine, and Start Cableless Setup Mode Again.

Administrator privileges are required.

[Home] on the control panel ▶ [Menu] ▶ **OK** ▶ [Preferences] ▶ **OK** ▶ [Network] ▶ **OK** ▶ [Easy Connection via PC] ▶ **OK** ▶ start the settings on the computer

Could not connect. Max connections 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 connect using the wireless LAN.

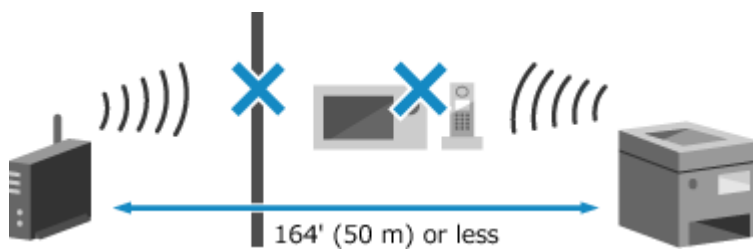
An error occurred, preventing the machine from connecting to the wireless LAN.

Restart the Machine, and Configure the Wireless LAN Connection Again.

▶ Connecting to a Wireless LAN (P. 41)

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 164' (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.

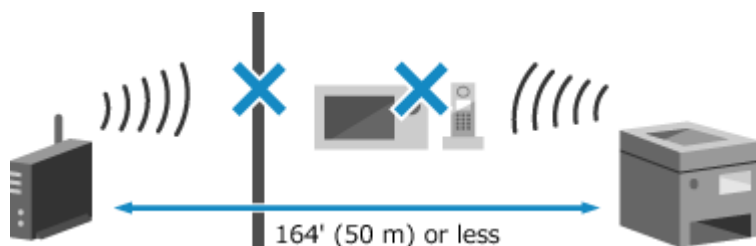
Wait a Moment, and Configure the Settings Again.

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 164' (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. 41)**

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 due to jammed paper or another problem.

Is Paper Loaded?

Load paper in the paper drawer if not loaded. ▶ **Loading Paper in the Paper Drawer(P. 91)**

Is Paper Jammed?

If so, remove any jammed paper. ▶ **Paper Jams(P. 286)**

Check the remaining amount of toner in the toner cartridge.

A sufficient amount of toner in the toner cartridge is required to clean the fixing assembly. Check the remaining amount of toner in the toner cartridge, and replace the toner cartridge, as needed.

▶ **Checking the Remaining Amount of Consumables(P. 277)**

▶ **Replacing the Toner Cartridge(P. 272)**

Could not perform Open System auth. Chk encryp. key set.

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. 50)**

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. 71)**

For the setup method, see the manual of the wireless LAN router or contact the manufacturer.

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. 41)

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. 48)**
- 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. 50)**

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. 141)**

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] ▶  ▶ 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. 41)

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. 48)**
- 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. 50)**

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.

Encryption key not set correctly. Check encryption key set.

The network key (encryption key) of the wireless LAN router (access point) may not be configured correctly on the machine.

Reset the Network Key.

Reset the network key. [▶Connecting to a Wireless LAN\(P. 41\)](#)

End of Cart. Lifetime

The toner cartridge has reached the end of their lifetime.

It Is Recommended to Replace with New Toner Cartridge.

Replace the toner cartridge. [▶Replacing the Toner Cartridge\(P. 272\)](#)

IEEE 802.1X error. An unknown error occurred.

An error occurred, preventing the machine from establishing the IEEE 802.1X authentication connection.

Check the Ethernet Cable and Switch Status.

Set the Authentication Method and Authentication Information (Keys and Certificates, Password, CA Certificate) Correctly.

[▶ Setting IEEE 802.1X\(P. 164\)](#)

[▶Managing and Verifying a Key and Certificate\(P. 166\)](#)

Check the Authentication Method Set on the RADIUS Server, and Set This Correctly.

[▶ Setting IEEE 802.1X\(P. 164\)](#)

Check the Expiry Date of the RADIUS Server.

[▶ Setting IEEE 802.1X\(P. 164\)](#)

IEEE 802.1X error. Cannot analyze auth. 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.

Check the Certificate of the RADIUS Server, and Change the Setting, as Needed.

[▶ Setting IEEE 802.1X\(P. 164\)](#)

IEEE 802.1X error. Change the auth. password.

The password has expired.

Set a New Password.

[▶ Setting IEEE 802.1X\(P. 164\)](#)

IEEE 802.1X error. Check the auth. 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\(P. 164\)](#)

IEEE 802.1X error. Configure correct authentication info.

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. 164)**
- ▶ **Managing and Verifying a Key and Certificate(P. 166)**

IEEE 802.1X error. Configure the info. required for auth.

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. 164)**
- ▶ **Managing and Verifying a Key and Certificate(P. 166)**

IEEE 802.1X error. 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.

IEEE 802.1X error. The auth. server cert. 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. 164)**

IEEE 802.1X error. The auth. server cert. 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. 164)**
- ▶ **Registering a Key and Certificate or CA Certificate Obtained from an Issuing Authority(P. 172)**

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. 41)**

Insert the toner cartridge.

The toner cartridge is not installed correctly.

Reinstall the Toner Cartridge.

▶ Replacing the Toner Cartridge(P. 272)

If the message still appears after repeatedly reinstalling the toner cartridge, contact your dealer or service representative. ▶ **If the Problem Persists(P. 356)**

Low Cartridge Level

It is nearing the time to replace the toner cartridge.

Prepare New Toner Cartridge, and Replace the Old Ones, as Needed.

When printing large printing jobs, it is recommended to replace the toner cartridge. ▶ **Replacing the Toner Cartridge(P. 272)**

To Continue Printing, Press [Continue Printing].

NOTE

- You can manually specify when this message appears (when toner is low). ▶ **[Displ. Timing for Cartridge Prep. Notif.](P. 208)**

Memory is full.

Printing cannot be performed due to insufficient available memory. If there is data waiting to be printed, wait until the processing is completed.

Reduce the File Size or Divide the File.

Optimize the file to make it smaller, or divide the file and then print it.

No Paper

There is no paper loaded, or the paper loaded cannot be used to print reports or lists.

Load the Paper.

Load the paper for printing reports, lists, and set the paper size and type. ▶ **Loading Paper(P. 90)**

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. 41)**

When Connected via Wired LAN

Check that the Ethernet cable is properly connected. ▶ **Connecting to a Wired LAN(P. 40)**

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. 286)**

Prepare a cartridge.

It is nearing the time to replace the toner cartridge.

Prepare New Toner Cartridge, and Replace the Old Ones, as Needed.

When printing large jobs, it is recommended to replace the toner cartridge. ▶ **Replacing the Toner Cartridge(P. 272)**

To Continue Printing, Press [Continue Printing].

NOTE

- You can manually specify when this message appears (when toner is low). ▶ **[Displ. Timing for Cartridge Prep. Notif.](P. 208)**

Problems resulting from the use of non-Canon cartridges are not covered by the warranty.

A toner cartridge whose print quality cannot be guaranteed may be in use. For optimum print quality, using Canon genuine toner cartridges is recommended.

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. 164)**

▶ **Managing and Verifying a Key and Certificate(P. 166)**

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. 164)**

▶ **Managing and Verifying a Key and Certificate(P. 166)**

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.

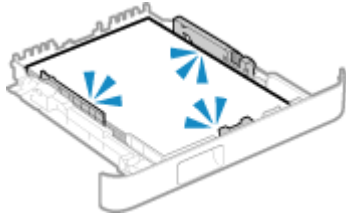
When Using the Loaded Paper

- 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. 101)**
- 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. 118)**

When Reloading Paper

Load paper of the size set on the control panel or printer driver. ▶ **Loading Paper(P. 90)**

Check That the Paper Guides Are Not Too Loose or Too Tight.



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. 164)**

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. 164)**
- ▶ **Registering a Key and Certificate or CA Certificate Obtained from an Issuing Authority(P. 172)**

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.

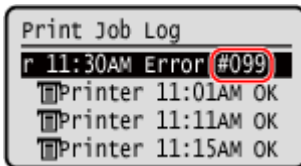
Check the following, and change the setting, as needed. ▶ **Setting IEEE 802.1X(P. 164)**

- 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

A19C-08C

If printing cannot be performed, or another error occurs, an error code (three-digit number starting with "#") is displayed in the job log.



Select the error code from the list below, and check how to troubleshoot the problem.

#001 to #099

▶ #037(P. 353) ▶ #099(P. 353)

#701 to #799

▶ #753(P. 353) ▶ #766(P. 354)

#801 to #899

▶ #852(P. 354) ▶ #853(P. 354) ▶ #861(P. 354) ▶ #863(P. 354)

#901 to #999

▶ #934(P. 355) ▶ #995(P. 355)

NOTE

- If the problem persists even after trying the troubleshooting methods, contact your dealer or service representative. ▶ **If the Problem Persists(P. 356)**

#037

Printing could not be performed due to the file size.

Reduce the File Size or Divide the File.

Optimize the file to make it smaller, or divide the file and then print it.

#099

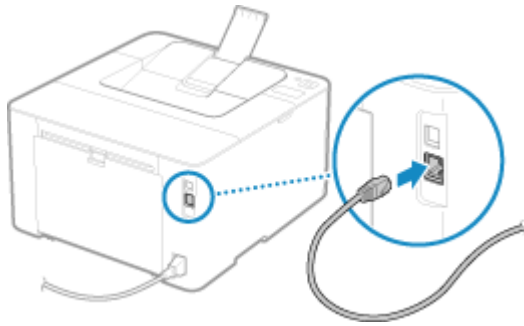
The job was canceled.

This does not indicate a malfunction. Perform the operation again, as needed.

#753

The machine was unable to connect to the network due to a disconnected Ethernet cable.

Check That the Ethernet Cable Is Properly Connected.



#766

The certificate has expired.

Renew the certificate, or use a certificate that is not expired.

▶ **Managing and Verifying a Key and Certificate(P. 166)**

Are the current date and time on the machine correct?

Check the date and time settings. If the settings are not correct, set the time zone, and then set the current date and time. ▶ **Setting the Date and Time(P. 186)**

#852

The power of the machine turned OFF for some reason.
Make sure the power plug is firmly inserted into an outlet.

#853

Printing 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.

#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. 118)**

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. 78)**

#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 again.

* Disable the Auto Delete Suspended Jobs function, or change the time until the data is automatically deleted. 📌 **[Auto Delete Suspended Jobs](P. 239)**

#995

Sending or receiving of a waiting job was canceled.
Try sending or receiving again, as needed.

If the Problem Persists

A19C-08E

If the problem persists even after trying the troubleshooting methods, contact your dealer or service representative.

IMPORTANT

Do not disassemble or repair the machine yourself.

- Disassembling or repairing the machine yourself may void the warranty.

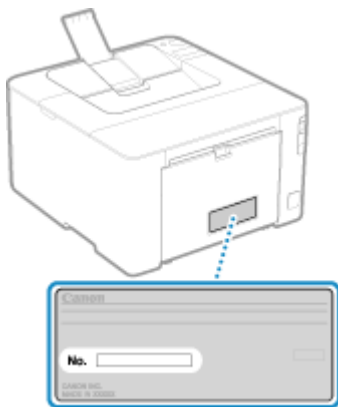
Checks Before Contacting Us

- Product name (LBP172dw)
- Dealer purchased from
- Details of the problem (such as operation details and their results)
- Serial number

How to Look Up the Serial Number

[Home] screen 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. 187)**
- You can also check this information on the label on the back of the machine.



Customer Support (U.S.A.)

If you cannot solve a problem by referring to the information in this chapter, for the fastest resolution, please refer to available support materials (including the Knowledgebase FAQs and How to Video material) for your product at <https://www.usa.canon.com/support>.

Customer Support (Canada)

If you cannot solve a problem by referring to the information in this chapter, for the fastest resolution, please refer to available support materials (including the Knowledgebase FAQs and How to Video material) for your product at www.canon.ca/support.

Appendix

Appendix	358
Manuals of the Machine	359
Using the User's Guide	360
Operation Examples When Using a Computer	362
Environmental Information, Regulations, and Standards	372
Notice	373
Trademarks and Copyrights	374
Third-party Software	376

Appendix

A19C-08F

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. 359)

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. 360)

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. 362)

Other Information

▶ Environmental Information, Regulations, and Standards(P. 372)

▶ Notice(P. 373)

▶ Trademarks and Copyrights(P. 374)

▶ Third-party Software(P. 376)

Manuals of the Machine

A19C-08H

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 the process from unpacking the machine to setting it up 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. 360)**

NOTE

- For information on drivers, and software manuals, see the online manual site.
<https://oip.manual.canon/>

Using the User's Guide

A19C-08J

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. 360)**

▶ **Symbols(P. 360)**

▶ **Key and Button Indicators(P. 361)**

▶ **Search Function(P. 361)**

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(P. 3)**

Screens and Illustrations

In the User's Guide, unless otherwise stated, the following are used in the screens and illustrations.

Model

LBP172dw

Toner Cartridges

Canon Cartridge 072

Computer Operating System

Windows 10

macOS 11

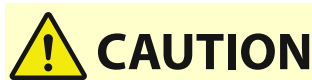
- The screens may vary depending on the model.
- The operations and screens may vary depending on the computer operating system.
- The screens are subject to change due to updates of the drivers and software.

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. 359)**



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.



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: Back key



Buttons Displayed on the Control Panel and Computer Screen

Enclosed in square brackets [].

Example:

[Menu]

[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

A19C-08L

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.

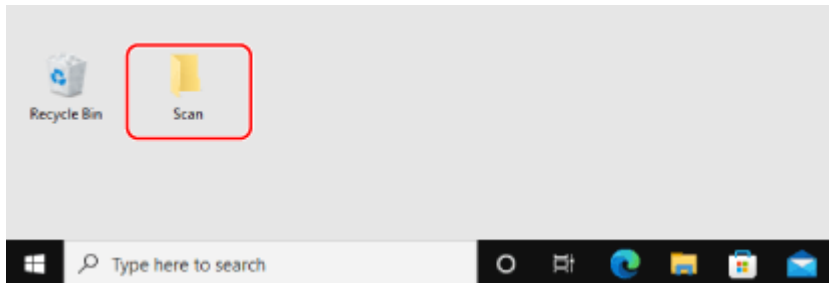
- ▶ **Creating a Shared Folder(P. 362)**
- ▶ **Enabling Network Discovery(P. 364)**
- ▶ **Displaying a Shared Printer in the Print Server(P. 364)**
- ▶ **Viewing the System Information of the Computer(P. 365)**
- ▶ **Viewing the Network Connection Information of the Computer(P. 367)**
- ▶ **Viewing the Printer Port(P. 369)**
- ▶ **Viewing Two-way Communication(P. 370)**
- ▶ **Printing a Test Page(P. 370)**

Creating a Shared Folder

- ▶ **When Using Windows(P. 362)**
- ▶ **When Using macOS(P. 363)**

■ When Using Windows

1 Create a folder in any location (such as Desktop).



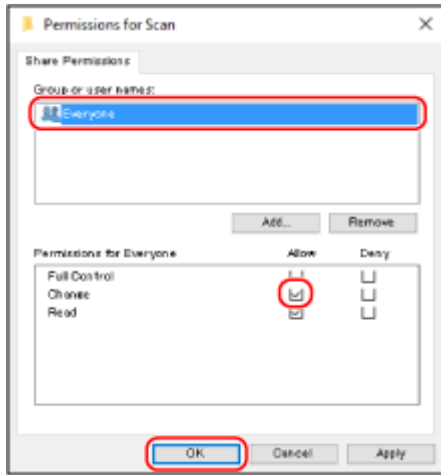
2 Right-click the created folder, and click [Properties].

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.

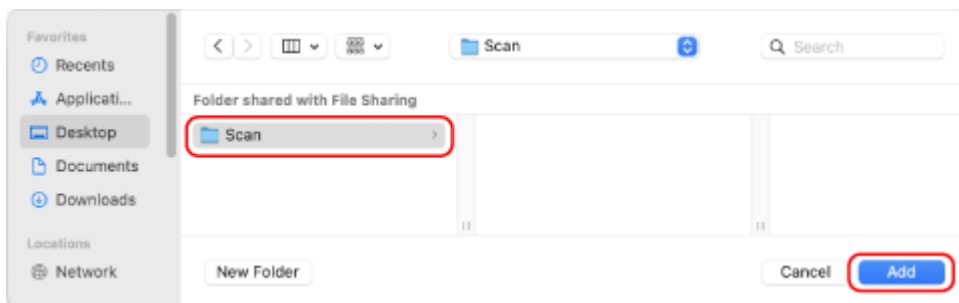
■ When Using macOS

1 Click [Apple] ► [System Preferences] ► [Sharing].

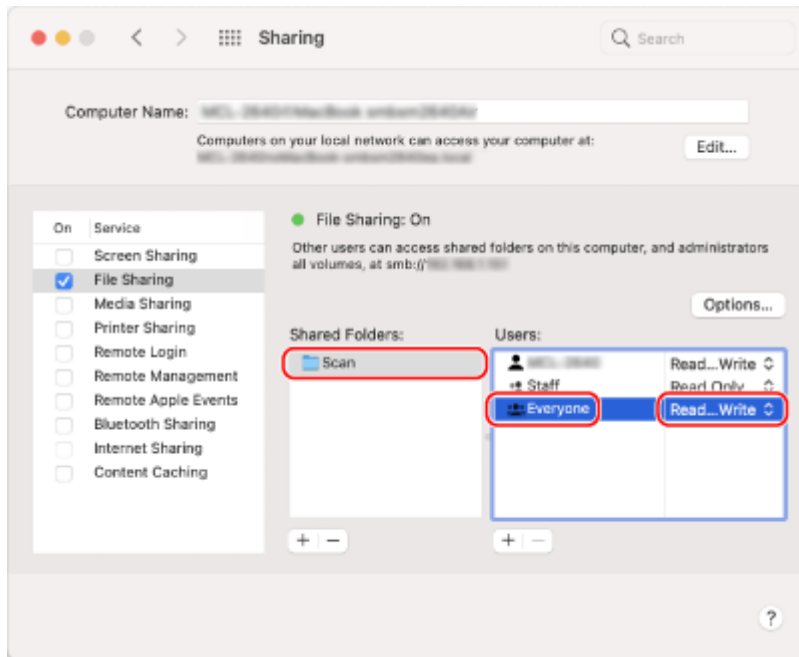
►► The [Sharing] screen is displayed.

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.

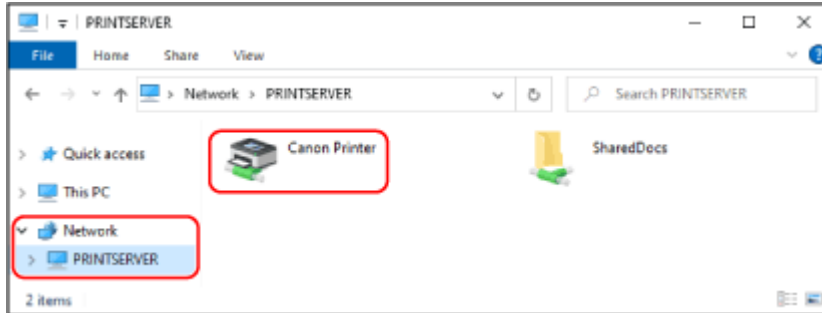
3 In [Network discovery], select [Turn on network discovery], and click [Save changes].

Displaying a Shared Printer in the Print Server

- When Using Windows(P. 365)
- When Using macOS(P. 365)

■ 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\(P. 364\)](#)

■ When Using macOS

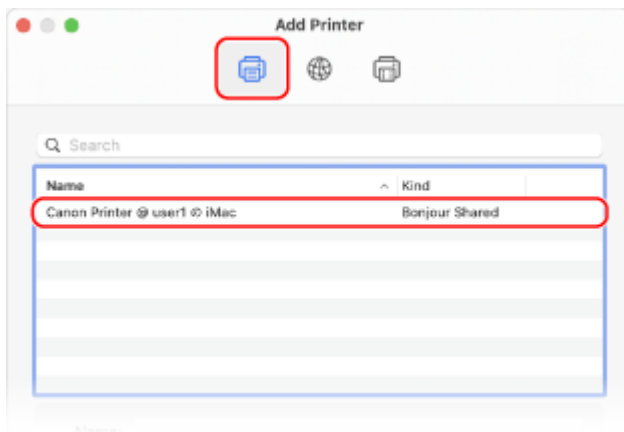
- 1 Click [🍏] ▶ [System Preferences] ▶ [Printers & Scanners].

⇒ 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

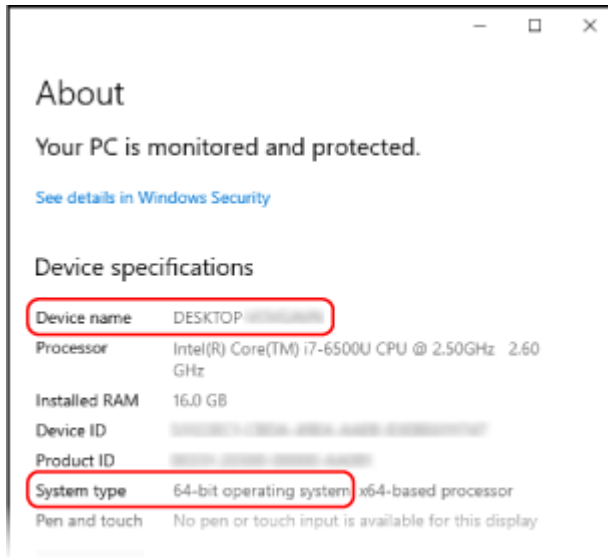
- ▶ [When Using Windows\(P. 366\)](#)
- ▶ [When Using macOS\(P. 366\)](#)

■ When Using Windows

1 Right-click [Start] (Windows logo), 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

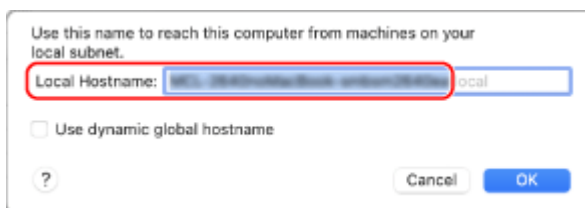
1 Click [Apple logo] ▶ [System Preferences] ▶ [Sharing].

⇒ 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. 367)

▶ When Using macOS(P. 368)

■ When Using Windows

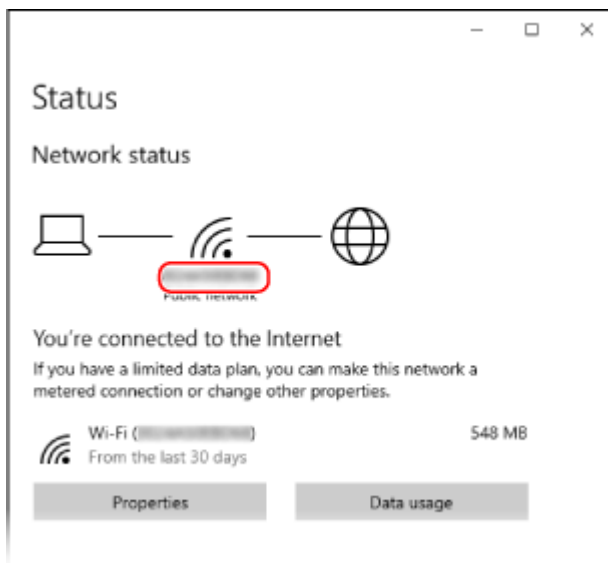
1 Right-click [] (Start), and click [Network Connections].

⇒ The [Status] screen is displayed.

2 View the network connection information.

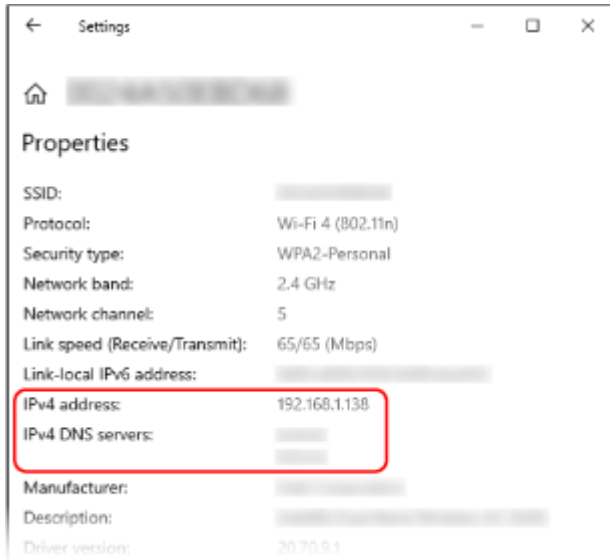
■ Viewing the SSID of the Wired LAN

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.



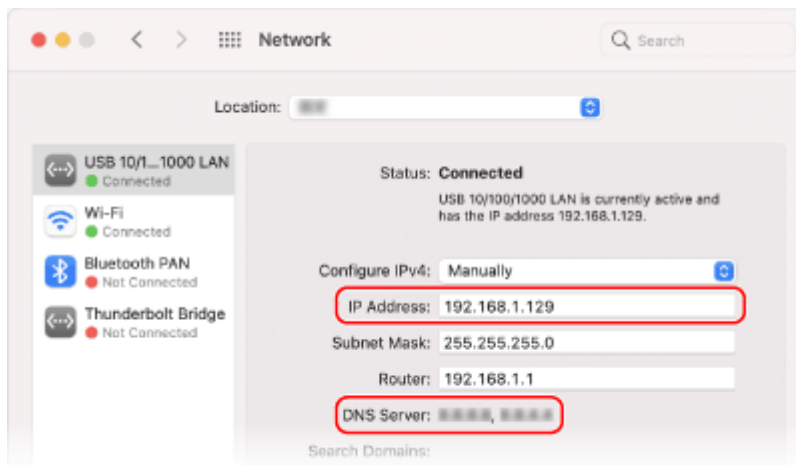
■ When Using macOS

1 Click [🍏] ► [System Preferences] ► [Network].

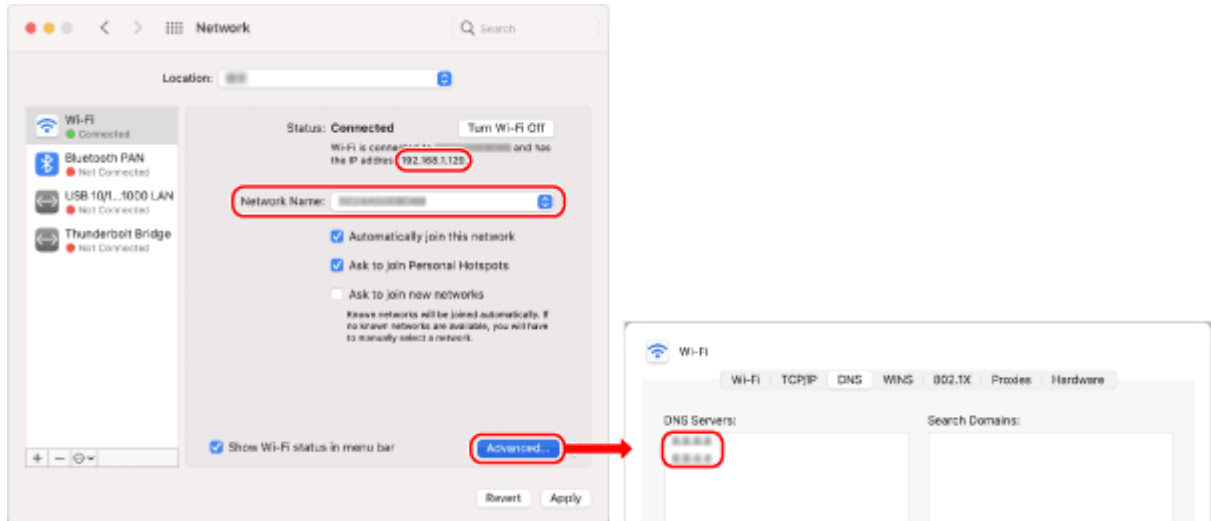
⇒ The [Network] screen is displayed.

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

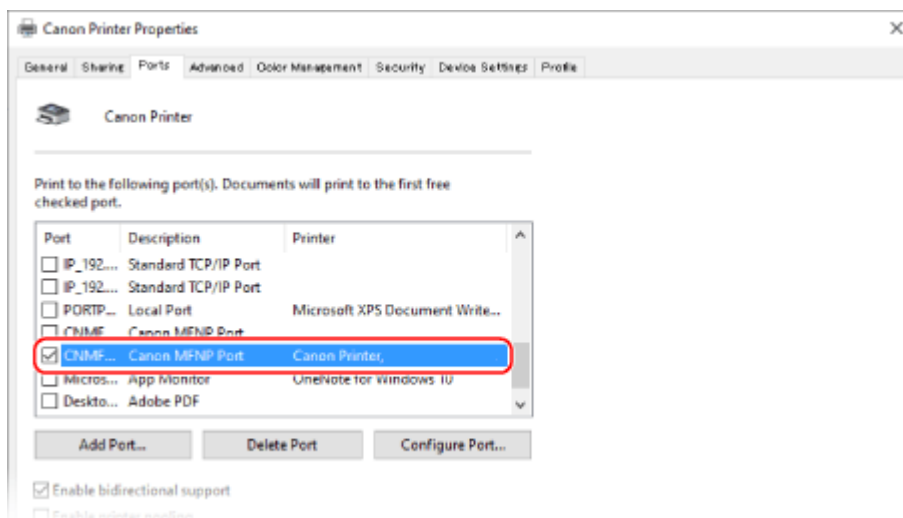
1 Click [Start] ► [Settings] ► [Devices] ► [Printers & scanners].

► 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

- You must add a new port. ▶ [Adding a Port\(P. 112\)](#)

Viewing Two-way Communication

- 1 Click [Start] (Start) ▶ [Settings] (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 Letter size paper in the paper drawer. ▶ [Loading Paper in the Paper Drawer\(P. 91\)](#)

▶ [When Using Windows\(P. 370\)](#)

▶ [When Using macOS\(P. 370\)](#)

■ When Using Windows

- 1 Click [Start] (Start) ▶ [Settings] (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 [Apple] ▶ [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.

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A19C-08R

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1.Adobe PDF Scan Library	2
2.Amazon Root CA.....	5
3. expat	11
4.Net-SNMP	12
5.wpa_suppllicant	24
6.XKCP.....	26

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5.wpa_suppllicant

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This package may include either wpa_suppllicant, hostapd, or both. See README file respective subdirectories (wpa_suppllicant/README or hostapd/README) for more details.

Source code files were moved around in v0.6.x releases and compared to earlier releases, the programs are now built by first going to a subdirectory (wpa_suppllicant or hostapd) and creating build configuration (.config) and running 'make' there (for Linux/BSD/cygwin builds).

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6.XKCP

Implementation by the Keccak Team, namely, Guido Bertoni, Joan Daemen,
#Michael Peeters, Gilles Van Assche and Ronny Van Keer,
#hereby denoted as "the implementer".

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