MG2500 series
Online Manual

Scanning
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Scanning

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Scanning from a Computer

- Scanning with IJ Scan Utility
- Scanning with Application Software that You are Using (ScanGear)
- Useful Information on Scanning
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Scanning with IJ Scan Utility

- What Is IJ Scan Utility (Scanner Software)?
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- Scanning Multiple Items at One Time
- Saving after Checking Scan Results
- Sending Scanned Images via E-mail
- Extracting Text from Scanned Images (OCR)
- IJ Scan Utility Screens
What Is IJ Scan Utility (Scanner Software)?

IJ Scan Utility is an application that allows you to easily scan photos, documents, etc. You can complete from scanning to saving at one time by simply clicking the corresponding icon in the IJ Scan Utility main screen.

![IJ Scan Utility Interface](image)

What You Can Do with IJ Scan Utility

**Scan Easily according to Purposes**

You can scan by simply clicking an icon such as **Auto** to scan easily, **Photo** to scan with settings suitable for photos, or **Document** to sharpen text in a document or magazine for better readability, according to the item type or your purpose.

**Note**

Refer to "IJ Scan Utility Main Screen" for details on the IJ Scan Utility main screen.

**Save Scanned Images Automatically**

Scanned images are automatically saved in a preset folder. You can change the folder as required.

**Note**

- The default save folders are as follows.
  - Windows 8: **My Documents** folder
  - Windows 7: **My Documents** folder
  - Windows Vista: **Documents** folder
  - Windows XP: **My Documents** folder
- Refer to "Settings Dialog Box" for how to specify a folder.

**Integrate with Applications**

You can utilize scanned images through integration with other applications; display scanned images in your favorite application, attach them to e-mails, extract text from images, and more.
Important

- Some functions are available only when My Image Garden is installed.

Note

- Refer to "Settings Dialog Box" for how to set the applications to integrate with.
Starting IJ Scan Utility

Follow the steps below to start IJ Scan Utility.

**Windows 8:**
Select **IJ Scan Utility** on the Start screen to start IJ Scan Utility.
If **IJ Scan Utility** is not displayed on the Start screen, select the **Search** charm, then search for "IJ Scan Utility".

**Windows 7/Windows Vista/Windows XP:**
From the **Start** menu, select **All Programs > Canon Utilities > IJ Scan Utility > IJ Scan Utility** to start IJ Scan Utility.
Easy Scanning with Auto Scan

You can scan easily by automatically detecting the item type.

**Important**

- The following types of items may not be scanned correctly. In that case, adjust the cropping frames (scan areas) in whole image view of ScanGear (scanner driver) and scan again.
  - Photos that have a whitish background
  - Items printed on white paper, hand-written documents, business cards, etc.
  - Thin items
  - Thick items

1. Make sure that your scanner or printer is turned on.

2. Place items on the platen of your scanner or printer.
   - **Placing Items (When Scanning from a Computer)**

3. Start IJ Scan Utility.

4. Click **Auto**.

   ![Canon IJ Scan Utility](image)

   Scanning starts.

**Note**

- Click **Cancel** to cancel the scan.
- To apply suitable corrections based on the item type, click **Settings...**, then select the **Apply recommended image correction** checkbox in the **Settings (Auto Scan)** dialog box.
- Scanned images are saved in the folder set for **Save in** in the **Settings (Auto Scan)** dialog box displayed by clicking **Settings...**. In the **Settings (Auto Scan)** dialog box, you can also make advanced scan settings.
- Refer to the following pages to scan by specifying the item type.
  - **Scanning Photos**
  - **Scanning Documents**
Scanning with Favorite Settings
**Scanning Photos**

You can scan photos placed on the platen with settings suitable for photos.

1. Place the photo on the platen.
   - **Placing Items (When Scanning from a Computer)**

2. Start IJ Scan Utility.

3. Click **Settings...**, select the **Settings (Photo Scan)** dialog box, then set the paper size, resolution, etc. as required.
   When setting is completed, click **OK**.

4. Click **Photo**.

![Canon IJ Scan Utility](image)

Scanning starts.

**Note**

- Click **Cancel** to cancel the scan.
- Scanned images are saved in the folder set for **Save in** in the **Settings (Photo Scan)** dialog box displayed by clicking **Settings...**. In the **Settings (Photo Scan)** dialog box, you can also make advanced scan settings.
Scanning Documents

You can scan items placed on the platen with settings suitable for documents.

1. Place the item on the platen.
   ➡ Placing Items (When Scanning from a Computer)

2. Start IJ Scan Utility.

3. Click Settings..., select the Settings (Document Scan) dialog box, then set the paper size, resolution, etc. as required.
   When setting is completed, click OK.

4. Click Document.

   Scanning starts.

Note

- Click Cancel to cancel the scan.
- Scanned images are saved in the folder set for Save in in the Settings (Document Scan) dialog box displayed by clicking Settings.... In the Settings (Document Scan) dialog box, you can also make advanced scan settings.
Scanning with Favorite Settings

You can scan items placed on the platen with your favorite settings saved beforehand. This is convenient for saving frequently used settings or when specifying scan settings in detail.

1. Start IJ Scan Utility.

2. Click **Settings...**, select the **Settings (Custom Scan)** dialog box, then set the select source, resolution, etc.
   When setting is completed, click **OK**.
   
   **Note**
   
   - Once the settings are made, you can scan with the same settings from the next time.

3. Place the item on the platen.
   
   ➤ **Placing Items (When Scanning from a Computer)**

4. Click **Custom**.

   ![Canon IJ Scan Utility](image)

   Scanning starts.

   **Note**

   - Click **Cancel** to cancel the scan.
   - Scanned images are saved in the folder set for **Save in** in the **Settings (Custom Scan)** dialog box displayed by clicking **Settings...**. In the **Settings (Custom Scan)** dialog box, you can also make advanced scan settings.
Scanning Items Larger than the Platen (Image Stitch)

You can scan the left and right halves of an item larger than the platen and combine them back into one image. Items up to approximately twice as large as the platen are supported.

**Note**
- The following explains how to scan from the item to be placed on the left side.

1. **Start IJ Scan Utility.**

2. **Click Settings...,** select the **Settings (Scan and Stitch) dialog box,** then set the item type, resolution, etc. as required.
   
   When setting is completed, click **OK.**

3. **Click Stitch.**

   ![Image Stitch window](image)

   The **Image Stitch** window appears.

4. **In Select Output Size,** select an output size according to the paper size.
5. Make sure that **Scan from Left** is selected in **Scan Direction**.

6. Place the item that is to be displayed on the left side of the screen face-down on the platen.

7. Click **Start Scanning Image 1**.
The first item is scanned and appears in Image 1.

**Note**

- Click **Cancel** to cancel the scan.

8. Place the item that is to be displayed on the right side of the screen face-down on the platen.

9. Click **Start Scanning Image 2**.
The second item is scanned and appears in 2.

**Note**
- Click **Cancel** to cancel the scan.

10. Adjust the scanned images as required.
Use the Toolbar to rotate or zoom in/out, or drag the images to adjust their positions.

![Image Stitch window](image)

**Note**
- Select the **Adjust cropping frames** checkbox to specify the area to be saved.

**Adjusting Cropping Frames in the Image Stitch Window**
- To scan an item again, select the image in the Preview area or the thumbnail at the top of the screen, then click ✗ (Delete). The selected image is deleted, allowing you to scan the item again.

11. Click **Save**.
The combined image is saved.

**Note**

- Refer to "Image Stitch Window" for details on the **Image Stitch** window.
- You can make advanced scan settings in the **Settings (Scan and Stitch)** dialog box displayed by clicking **Settings....**
Scanning Multiple Items at One Time

You can scan two or more photos (small items) placed on the platen at one time and save each image individually.

**Important**

- The following types of items may not be scanned correctly. In that case, adjust the cropping frames (scan areas) in whole image view of ScanGear (scanner driver) and scan again.
  - Photos that have a whitish background
  - Items printed on white paper, hand-written documents, business cards, etc.
  - Thin items
  - Thick items

Refer to "Scanning Multiple Documents at One Time with ScanGear (Scanner Driver)" for your model from Home of the *Online Manual* for details.

Using Auto Scan

Whether there are multiple items or not is detected automatically. Click **Auto** and scan.

**Easy Scanning with Auto Scan**

Not Using Auto Scan

In the Settings dialog box, set **Paper Size** to **Auto scan** and scan.

**Note**

- The screens for scanning with favorite settings are used as examples in the following descriptions.

1. Place the items on the platen.
   
   **Placing Items (When Scanning from a Computer)**

2. Start IJ Scan Utility.

3. Click **Settings**...
The Settings dialog box appears.

4. Click **Custom Scan**.

5. Select **Select Source** according to the items to be scanned.
6. Select **Auto scan** for **Paper Size**, then click **OK**.

The IJ Scan Utility main screen appears.

**Note**

- Refer to the following pages for details on the setting items in the Settings dialog box.
  - [Settings (Photo Scan) Dialog Box](#)
  - [Settings (Document Scan) Dialog Box](#)
  - [Settings (Custom Scan) Dialog Box](#)
7. Click **Custom**.

Multiple items are scanned at one time.

**Note**

- Click **Cancel** to cancel the scan.
- Scanned images are saved in the folder set for **Save in** in the corresponding Settings dialog box displayed by clicking **Settings**... In each Settings dialog box, you can also make advanced scan settings.
Saving after Checking Scan Results

You can check the scan results, then save the images to a computer.

**Important**
- You cannot check the scan results before saving when scanned using Auto scan.

**Note**
- The screens for scanning photos are used as examples in the following descriptions.

1. Start IJ Scan Utility.

2. Click **Settings**....

   The **Settings** dialog box appears.

3. Click **Photo Scan**.

4. Select the **Check scan results** checkbox, then click **OK**.
The IJ Scan Utility main screen appears.

**Note**

- Refer to the following pages for details on the setting items in the Settings dialog box.
  - Settings (Photo Scan) Dialog Box
  - Settings (Document Scan) Dialog Box
  - Settings (Custom Scan) Dialog Box
  - Settings (Scan and Stitch) Dialog Box
  - Settings (ScanGear) Dialog Box

5. Click **Photo**.

Scanning starts.

When scanning is completed, the **Save Settings** dialog box appears.

**Note**

- Click **Cancel** to cancel the scan.
6. Change the image order or file save options as required.

You can change the image order or file save options in the **Save Settings** dialog box.

### Note

- The default save folders are as follows.
  - Windows 8: **My Documents** folder
  - Windows 7: **My Documents** folder
  - Windows Vista: **Documents** folder
  - Windows XP: **My Documents** folder

7. Click **OK**.

Scanned images are saved according to the settings.
Sending Scanned Images via E-mail

You can send scanned images via e-mail.

**Note**

- The screens for scanning photos are used as examples in the following descriptions.

1. **Start IJ Scan Utility.**

2. **Click Settings....**

   ![](image1.png)

   The Settings dialog box appears.

3. **Click Photo Scan.**

   ![](image2.png)

4. **Select Attach to e-mail in Application Settings,** then select an e-mail client.
Note

- You can add e-mail clients to use for attachments from the pull-down menu.
- If None (Attach Manually) is selected, manually attach scanned and saved images to e-mail.

5. Click OK.

The IJ Scan Utility main screen appears.
**Note**

- Refer to the following pages for details on the setting items in the Settings dialog box.
  - Settings (Auto Scan) Dialog Box
  - Settings (Photo Scan) Dialog Box
  - Settings (Document Scan) Dialog Box
  - Settings (Custom Scan) Dialog Box
  - Settings (ScanGear) Dialog Box

6. **Click Photo.**

![Canon IJ Scan Utility](image)

Scanning starts.

When scanning is completed, the specified e-mail client starts and the images will be attached to a new message.

**Note**

- Click **Cancel** to cancel the scan.
- The scanned images are saved according to the settings made in the Settings dialog box.
- When the **Check scan results** checkbox is selected in the Settings dialog box, the **Save Settings** dialog box appears. After you set the save options and click **OK**, the scanned images are saved and automatically attached to a new message of the specified e-mail client.

7. **Specify the recipient, enter the subject and message, then send e-mail.**

Refer to the manual of your e-mail client for e-mail settings.
Extracting Text from Scanned Images (OCR)

Scan text in scanned magazines and newspapers and display it in Notepad (included with Windows).

**Note**
- You can extract text when scanning via **Document, Custom, or ScanGear**.
- The screens for scanning documents are used as examples in the following descriptions.

1. **Start IJ Scan Utility.**

2. **Click Settings....**

   ![](image1.png)

   The **Settings dialog box** appears.

3. **Click Document Scan.**

   ![](image2.png)
4. Select **Start OCR** for **Application Settings**, then select the application in which you want to display the result.

![Settings (Document Scan)](image)

**Note**
- When My Image Garden is specified, after the image is scanned, the text in the image is extracted and appears in Notepad (included with Windows).

5. Click **OK**.
The IJ Scan Utility main screen appears.

**Note**

- Refer to the following pages for details on the setting items in the Settings dialog box.
  - **Settings (Document Scan) Dialog Box**
  - **Settings (Custom Scan) Dialog Box**
  - **Settings (ScanGear) Dialog Box**

6. Click **Document**.

Scanning starts.

When scanning is completed, the scanned images are saved according to the settings, and the extracted text appears in the specified application.

**Note**

- Click **Cancel** to cancel the scan.
- Text displayed in Notepad (included with Windows) is for guidance only. Text in the image of the following types of documents may not be detected correctly.
- Documents containing text with font size outside the range of 8 points to 40 points (at 300 dpi)
- Slanted documents
- Documents placed upside down or documents with text in the wrong orientation (rotated characters)
- Documents containing special fonts, effects, italics, or hand-written text
- Documents with narrow line spacing
- Documents with colors in the background of text
- Documents containing multiple languages
IJ Scan Utility Screens

- IJ Scan Utility Main Screen
- Settings Dialog Box
  - Settings (Auto Scan) Dialog Box
  - Settings (Photo Scan) Dialog Box
  - Settings (Document Scan) Dialog Box
  - Settings (Custom Scan) Dialog Box
  - Settings (Scan and Stitch) Dialog Box
  - Settings (ScanGear) Dialog Box
  - Settings (General Settings) Dialog Box
- Data Format Settings Dialog Box
- Save Settings Dialog Box
- Image Stitch Window
IJ Scan Utility Main Screen

Follow the steps below to start IJ Scan Utility.

Windows 8:
Select IJ Scan Utility on the Start screen to start IJ Scan Utility.
If IJ Scan Utility is not displayed on the Start screen, select the Search charm, then search for "IJ Scan Utility".

Windows 7/Windows Vista/Windows XP:
From the Start menu, select All Programs > Canon Utilities > IJ Scan Utility > IJ Scan Utility to start IJ Scan Utility.

You can complete from scanning to saving at one time by simply clicking the corresponding icon.

- **Product Name**
  Displays the name of the product that IJ Scan Utility is currently set to use.
  If the displayed product is not the one you want to use, select the desired product from the list.

- **Auto**
  Detects the type of items automatically and saves them to a computer. The data format for saving will also be set automatically.
  Save settings and the response after scanning can be specified in the Settings (Auto Scan) dialog box.

- **Photo**
  Scans items as photos and saves them to a computer.
  Scan/save settings and the response after scanning can be specified in the Settings (Photo Scan) dialog box.

- **Document**
  Scans items as documents and saves them to a computer.
  Scan/save settings and the response after scanning can be specified in the Settings (Document Scan) dialog box.

- **Custom**
Scans items with your favorite settings and saves the images to a computer. The item type can be automatically detected. Scan/save settings and the response after scanning can be specified in the Settings (Custom Scan) dialog box.

• **Stitch**
  Displays the Image Stitch window in which you can scan the left and right halves of an item larger than the platen and combine the scanned images back into one image. Scan/save settings and the response after scanning can be specified in the Settings (Scan and Stitch) dialog box.

• **ScanGear**
  Starts ScanGear (scanner driver) in which you can make image corrections and color adjustments when scanning. Scan/save settings and applications can be specified in the Settings (ScanGear) dialog box.

• **Instructions**
  Opens this guide.

• **Settings...**
  Displays the Settings dialog box in which you can specify the scan/save settings and the response after scanning.
Settings Dialog Box

There are two tabs in the Settings dialog box: (Scanning from a Computer) and (General Settings). When you click a tab, the view in the red frame switches and you can make advanced settings to functions on each tab.

(Scanning from a Computer) Tab

You can specify how to respond when scanning from IJ Scan Utility or My Image Garden.

- Settings (Auto Scan) Dialog Box
- Settings (Photo Scan) Dialog Box
- Settings (Document Scan) Dialog Box
- Settings (Custom Scan) Dialog Box
- Settings (Scan and Stitch) Dialog Box
- Settings (ScanGear) Dialog Box

(General Settings) Tab

You can set the product to use, file size restriction on e-mail attachment, language to detect text in images, and folder in which to save images temporarily.

- Settings (General Settings) Dialog Box
Settings (Auto Scan) Dialog Box

Click **Auto Scan** on the (Scanning from a Computer) tab to display the **Settings (Auto Scan)** dialog box.

In the **Settings (Auto Scan)** dialog box, you can make advanced scan settings to scan by automatically detecting the item type.

(1) Scan Options Area
(2) Save Settings Area
(3) Application Settings Area

**Important**

- When the Settings dialog box is displayed from My Image Garden, the setting items for **Application Settings** do not appear.

**Supported Items**

Photos, postcards, business cards, magazines, newspapers, documents, and BD/DVD/CD.

**Important**

- To scan the following types of items, specify the item type and size in the **Settings (Photo Scan)** dialog box, **Settings (Document Scan)** dialog box, or **Settings (Custom Scan)** dialog box, then click **Photo**, **Document**, or **Custom** in the IJ Scan Utility main screen. You cannot scan correctly with **Auto**.
  - A4 size photos
Text documents smaller than 2L (5 inches x 7 inches) (127 mm x 178 mm), such as paperback pages with the spine cut off
- Items printed on thin white paper
- Long narrow items such as panoramic photos
- Reflective disc labels may not be scanned as expected.
- Place items to be scanned on the platen correctly. Otherwise, items may not be scanned correctly.

Refer to "Placing Items (When Scanning from a Computer)" for how to place items.

**Note**

- To reduce moire in scans, set **Select Source** to **Magazine** in the **Settings (Document Scan)** dialog box or **Settings (Custom Scan)** dialog box, then click **Document** or **Custom** in the IJ Scan Utility main screen.

(1) **Scan Options Area**

- **Apply recommended image correction**
  Applies suitable corrections automatically based on the item type.

  **Important**

  - The color tone may differ from the source image due to corrections. In that case, deselect the checkbox and scan.

  **Note**

  - Scanning takes longer than usual when you enable this function.

(2) **Save Settings Area**

- **File Name**
  Enter the file name of the image to be saved. When you save a file, the date and four digits are appended to the set file name in the "_20XX0101_0001" format.

- **Data Format**
  **Auto** is selected. The following data formats are automatically applied according to the item type when saving.
  - Photos, postcards, BD/DVD/CD, and business cards: JPEG
  - Magazines, newspapers, and documents: PDF

  **Important**

  - The save format may differ depending on how you place the item.

  **Placing Items (When Scanning from a Computer)**
**Note**

- You can change the data format from **Settings**....

**• Settings...**

Click to display the **Data Format Settings** dialog box in which you can set the quality of the images to be saved, keyword search of PDF files and their compression type, and the data format in which to save images scanned with Auto Scan.

**• Save in**

Displays the folder in which to save the scanned images. To change the folder, specify the destination folder in the **Select Destination Folder** dialog box displayed by selecting **Add...** from the pull-down menu.

- The default save folders are as follows.
  - Windows 8: **My Documents** folder
  - Windows 7: **My Documents** folder
  - Windows Vista: **Documents** folder
  - Windows XP: **My Documents** folder

**Important**

- When the Settings dialog box is displayed from My Image Garden, this option does not appear.

(3) **Application Settings Area**

**• Open with an application**

Select this when you want to enhance or correct the scanned images.

You can specify the application from the pull-down menu.

**• Send to an application**

Select this when you want to use the scanned images as they are in an application that allows you to browse or organize images.

You can specify the application from the pull-down menu.

**• Send to a folder**

Select this when you also want to save the scanned images to a folder other than the one specified in **Save in**.

You can specify the folder from the pull-down menu.

**• Attach to e-mail**

Select this when you want to send e-mails with the scanned images attached.

You can specify the e-mail client you want to start from the pull-down menu.

**• Do not start any application**
Saves to the folder specified in **Save in**.

**Note**

- Specify the application or folder in the **Select Application** or **Select Destination Folder** dialog box displayed by selecting **Add...** from the pull-down menu.

**• Instructions**

Opens this guide.

**• Defaults**

You can restore the settings in the displayed screen to the default settings.
Settings (Photo Scan) Dialog Box

Click **Photo Scan** on the (Scanning from a Computer) tab to display the **Settings (Photo Scan)** dialog box.

In the **Settings (Photo Scan)** dialog box, you can make advanced scan settings to scan items as photos.

(1) **Scan Options Area**

- **Select Source**
  - *Photo* is selected.

- **Color Mode**

- **Paper Size**

(2) **Save Settings Area**

(3) **Application Settings Area**

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**Important**

When the Settings dialog box is displayed from My Image Garden, the setting items for **Application Settings** do not appear.

(1) **Scan Options Area**

- **Select Source**

- **Color Mode**

- **Paper Size**
Select the size of the item to be scanned. When you select Custom, a screen in which you can specify the paper size appears. Select a Unit, then enter the Width and Height, and then click OK.

![Custom Size Setting](image)

**Note**
- Click Defaults to restore the specified settings to the default settings.

• Resolution
Select the resolution of the item to be scanned. The higher the resolution (value), the more detail in your image. ➞Resolution

• Image Processing Settings
Click + (Plus) to set the following.

**Important**
- When Color Mode is Black and White, Image Processing Settings is not available.

  • Sharpen outline
  Emphasizes the outline of the subjects to sharpen the image.

(2) Save Settings Area

• File Name
Enter the file name of the image to be saved. When you save a file, the date and four digits are appended to the set file name in the "_20XX0101_0001" format.

• Data Format
Select the data format in which to save the scanned images. You can select JPEG/Exif, TIFF, or PNG.

**Important**
- You cannot select JPEG/Exif when Color Mode is Black and White.

• Settings...
Click to display the **Data Format Settings** dialog box in which you can set the quality of the images to be saved, keyword search of PDF files and their compression type, and the data format in which to save images scanned with Auto Scan.

- **Save in**
  Displays the folder in which to save the scanned images. To change the folder, specify the destination folder in the **Select Destination Folder** dialog box displayed by selecting **Add...** from the pull-down menu.
  The default save folders are as follows.
  Windows 8: **My Documents** folder
  Windows 7: **My Documents** folder
  Windows Vista: **Documents** folder
  Windows XP: **My Documents** folder

  **Important**
  - When the Settings dialog box is displayed from My Image Garden, this option does not appear.

- **Check scan results**
  Displays the **Save Settings** dialog box after scanning.

  **Important**
  - When the Settings dialog box is displayed from My Image Garden, this option does not appear.

(3) **Application Settings Area**

- **Open with an application**
  Select this when you want to enhance or correct the scanned images.
  You can specify the application from the pull-down menu.

- **Send to an application**
  Select this when you want to use the scanned images as they are in an application that allows you to browse or organize images.
  You can specify the application from the pull-down menu.

- **Send to a folder**
  Select this when you also want to save the scanned images to a folder other than the one specified in **Save in**.
  You can specify the folder from the pull-down menu.

- **Attach to e-mail**
  Select this when you want to send e-mails with the scanned images attached.
You can specify the e-mail client you want to start from the pull-down menu.

- **Do not start any application**
  Saves to the folder specified in **Save in**.

**Note**

- Specify the application or folder in the **Select Application** or **Select Destination Folder** dialog box displayed by selecting **Add...** from the pull-down menu.

- **Instructions**
  Opens this guide.

- **Defaults**
  You can restore the settings in the displayed screen to the default settings.
Settings (Document Scan) Dialog Box

Click **Document Scan** on the (Scanning from a Computer) tab to display the **Settings (Document Scan)** dialog box.

In the **Settings (Document Scan)** dialog box, you can make advanced scan settings to scan items as documents.

(1) Scan Options Area
(2) Save Settings Area
(3) Application Settings Area

**Important**

- When the Settings dialog box is displayed from the Scan screen of My Image Garden, the setting items for **Application Settings** do not appear.

(1) Scan Options Area

- **Select Source**
  
  Select the type of item to be scanned.

  Scanning documents: **Document**
  
  Scanning magazines: **Magazine**
• **Color Mode**
  Select the color mode in which to scan the item.

• **Paper Size**
  Select the size of the item to be scanned.
  When you select **Custom**, a screen in which you can specify the paper size appears.
  Select a **Unit**, then enter the **Width** and **Height**, and then click **OK**.

![Custom Size Setting]

  **Note**
  - Click **Defaults** to restore the specified settings to the default settings.

• **Resolution**
  Select the resolution of the item to be scanned.
  The higher the resolution (value), the more detail in your image.
  
  ![Resolution]

  **Note**
  - Only **300 dpi** or **400 dpi** can be set when **Start OCR** is selected in **Application Settings**.

• **Image Processing Settings**
  Click **(Plus)** to set the following.

  **Note**
  - When **Color Mode** is **Black and White**, only **Reduce gutter shadow**, **Correct slanted text document**, and **Detect the orientation of text document and rotate image** appear.

• **Apply Auto Document Fix**
  Select this checkbox to sharpen text in a document or magazine for better readability.

  **Important**
  - The color tone may differ from the source image due to corrections. In that case, deselect the checkbox and scan.
Note
Scanning takes longer than usual when you enable this function.

- **Sharpen outline**
  Emphasizes the outline of the subjects to sharpen the image.

- **Reduce show-through**
  Sharpens text in an item or reduces show-through in newspapers, etc.

- **Reduce moire**
  Reduces moire patterns.
  Printed materials are displayed as a collection of fine dots. "Moiré" is a phenomenon where uneven gradation or a stripe pattern appears when such photos or pictures printed with fine dots are scanned.

  **Note**
  Scanning takes longer than usual when you enable **Reduce moire**.

- **Reduce gutter shadow**
  Reduces gutter shadows that appear between pages when scanning open booklets.

  **Note**
  Use ScanGear (scanner driver)'s **Advanced Mode** tab to correct gutter shadows when scanning non-standard size items or specified areas. Refer to "Gutter Shadow Correction" for your model from Home of the **Online Manual** for details.

- **Correct slanted text document**
  Detects the scanned text and corrects the angle (within -0.1 to -10 degrees or +0.1 to +10 degrees) of the document.

  **Important**
  The following types of documents may not be corrected properly since the text cannot be detected correctly.
  - Documents in which the text lines are inclined more than 10 degrees or the angles vary by line
  - Documents containing both vertical and horizontal text
  - Documents with extremely large or small fonts
  - Documents with small amount of text
  - Documents containing figures/images
  - Hand-written text
  - Documents containing both vertical and horizontal lines (tables)
Note

- Scanning takes longer than usual when you enable Correct slanted text document.

• Detect the orientation of text document and rotate image

Automatically rotates the image to the correct orientation by detecting the orientation of text in the scanned document.

Important

- Only text documents written in languages that can be selected from Document Language in the Settings (General Settings) dialog box are supported.
- The orientation may not be detected for the following types of settings or documents since the text cannot be detected correctly.
  - Resolution is outside the range of 300 dpi to 600 dpi
  - Font size is outside the range of 8 points to 48 points
  - Documents containing special fonts, effects, italics, or hand-written text
  - Documents with patterned backgrounds
In that case, select the Check scan results checkbox and rotate the image in the Save Settings dialog box.

(2) Save Settings Area

• File Name

Enter the file name of the image to be saved. When you save a file, the date and four digits are appended to the set file name in the "_20XX0101_0001" format.

• Data Format

Select the data format in which to save the scanned images. You can select JPEG/Exif, TIFF, PNG, PDF, or PDF (Multiple Pages).

Important

- You cannot select JPEG/Exif when Color Mode is Black and White.
- When Start OCR is selected in Application Settings, you cannot select PDF or PDF (Multiple Pages).

• Settings...

Click to display the Data Format Settings dialog box in which you can set the quality of the images to be saved, keyword search of PDF files and their compression type, and the data format in which to save images scanned with Auto Scan.

• Save in
Displays the folder in which to save the scanned images. To change the folder, specify the destination folder in the Select Destination Folder dialog box displayed by selecting Add... from the pull-down menu.

The default save folders are as follows.
Windows 8: My Documents folder
Windows 7: My Documents folder
Windows Vista: Documents folder
Windows XP: My Documents folder

**Important**

- When the Settings dialog box is displayed from My Image Garden, this option does not appear.

- **Check scan results**
  Displays the Save Settings dialog box after scanning.

**Important**

- When the Settings dialog box is displayed from My Image Garden, this option does not appear.

(3) Application Settings Area

- **Open with an application**
  Select this when you want to enhance or correct the scanned images. You can specify the application from the pull-down menu.

- **Send to an application**
  Select this when you want to use the scanned images as they are in an application that allows you to browse or organize images. You can specify the application from the pull-down menu.

- **Send to a folder**
  Select this when you also want to save the scanned images to a folder other than the one specified in Save in. You can specify the folder from the pull-down menu.

- **Attach to e-mail**
  Select this when you want to send e-mails with the scanned images attached. You can specify the e-mail client you want to start from the pull-down menu.

- **Start OCR**
  Select this when you want to convert text in the image into text data using specified OCR software.
You can specify the application from the pull-down menu.

- **Do not start any application**
  Saves to the folder specified in **Save in**.

Note

- Specify the application or folder in the **Select Application** or **Select Destination Folder** dialog box displayed by selecting **Add...** from the pull-down menu.

- **Instructions**
  Opens this guide.

- **Defaults**
  You can restore the settings in the displayed screen to the default settings.
Click **Custom Scan** on the (Scanning from a Computer) tab to display the **Settings (Custom Scan)** dialog box.

In the **Settings (Custom Scan)** dialog box, you can make advanced scan settings to scan according to your preference.

(1) **Scan Options Area**
(2) **Save Settings Area**
(3) **Application Settings Area**

**Important**

When the Settings dialog box is displayed from the Scan screen of My Image Garden, the setting items for **Application Settings** do not appear.

(1) **Scan Options Area**

- **Select Source**
  
  Select the type of item to be scanned. When **Auto** is selected, the item type is automatically detected.
  
  **Color Mode**, **Paper Size**, and **Resolution** are automatically set as well.
Important

- Item types supported by **Auto** are photos, postcards, business cards, magazines, newspapers, documents, and BD/DVD/CD.
- To scan the following types of items, specify the item type or size. You cannot scan correctly with **Auto**.
  - A4 size photos
  - Text documents smaller than 2L (5 inches x 7 inches) (127 mm x 178 mm), such as paperback pages with the spine cut off
  - Items printed on thin white paper
  - Long narrow items such as panoramic photos
  - Reflective disc labels may not be scanned as expected.
  - Place items correctly according to the type of item to be scanned. Otherwise, items may not be scanned correctly.
  - Refer to "Placing Items (When Scanning from a Computer)" for how to place items.

Note

- To convert text in the image into text data after scanning, specify **Select Source** instead of selecting **Auto**.
- To reduce moire, set **Select Source** to **Magazine**.

Color Mode

Select the color mode in which to scan the item.

Note

- Only **Color** is available when **Select Source** is **Auto**.

Paper Size

Select the size of the item to be scanned.

When you select **Custom**, a screen in which you can specify the paper size appears. Select a **Unit**, then enter the **Width** and **Height**, and then click **OK**.

Note

- Only **Auto** is available when **Select Source** is **Auto**.
- Click **Defaults** in the screen in which you can specify the paper size to restore the specified settings to the default settings.
• Resolution
Select the resolution of the item to be scanned.
The higher the resolution (value), the more detail in your image.

Resolution

Note
- Only Auto is available when Select Source is Auto.
- Only 300 dpi or 400 dpi can be set when Start OCR is selected in Application Settings.

• Image Processing Settings
Click (Plus) to set the following. Available setting items vary by Select Source.

When Select Source is Auto

- **Apply recommended image correction**
  Applies suitable corrections automatically based on the item type.

  **Important**
  - The color tone may differ from the source image due to corrections. In that case, deselect the checkbox and scan.

  **Note**
  - Scanning takes longer than usual when you enable this function.

When Select Source is Photo

  **Important**
  - When Color Mode is Black and White, Image Processing Settings is not available.

- **Sharpen outline**
  Emphasizes the outline of the subjects to sharpen the image.

When Select Source is Magazine or Document

  **Note**
  - When Color Mode is Black and White, only Reduce gutter shadow, Correct slanted text document, and Detect the orientation of text document and rotate image appear.

- **Apply Auto Document Fix**
  Select this checkbox to sharpen text in a document or magazine for better readability.
**Important**

- The color tone may differ from the source image due to corrections. In that case, deselect the checkbox and scan.

**Note**

- Scanning takes longer than usual when you enable this function.

- **Sharpen outline**
  Emphasizes the outline of the subjects to sharpen the image.

- **Reduce show-through**
  Sharpens text in an item or reduces show-through in newspapers, etc.

- **Reduce moire**
  Reduces moire patterns.
  Printed materials are displayed as a collection of fine dots. "Moirè" is a phenomenon where uneven gradation or a stripe pattern appears when such photos or pictures printed with fine dots are scanned.

**Note**

- Scanning takes longer than usual when you enable **Reduce moire**.

- **Reduce gutter shadow**
  Reduces gutter shadows that appear between pages when scanning open booklets.

**Note**

- Use ScanGear (scanner driver)'s **Advanced Mode** tab to correct gutter shadows when scanning non-standard size items or specified areas. Refer to "Gutter Shadow Correction" for your model from Home of the Online Manual for details.

- **Correct slanted text document**
  Detects the scanned text and corrects the angle (within -0.1 to -10 degrees or +0.1 to +10 degrees) of the document.

**Important**

- The following types of documents may not be corrected properly since the text cannot be detected correctly.
  - Documents in which the text lines are inclined more than 10 degrees or the angles vary by line
  - Documents containing both vertical and horizontal text
  - Documents with extremely large or small fonts
  - Documents with small amount of text
- Documents containing figures/images
- Hand-written text
- Documents containing both vertical and horizontal lines (tables)

**Note**
- Scanning takes longer than usual when you enable **Correct slanted text document**.

**Detect the orientation of text document and rotate image**
Automatically rotates the image to the correct orientation by detecting the orientation of text in the scanned document.

**Important**
- Only text documents written in languages that can be selected from Document Language in the **Settings (General Settings)** dialog box are supported.
- The orientation may not be detected for the following types of settings or documents since the text cannot be detected correctly.
  - Resolution is outside the range of 300 dpi to 600 dpi
  - Font size is outside the range of 8 points to 48 points
  - Documents containing special fonts, effects, italics, or hand-written text
  - Documents with patterned backgrounds
In that case, select the **Check scan results** checkbox and rotate the image in the **Save Settings** dialog box.

(2) **Save Settings Area**

- **File Name**
Enter the file name of the image to be saved. When you save a file, the date and four digits are appended to the set file name in the "_20XX0101_0001" format.

- **Data Format**
Select the data format in which to save the scanned images.
You can select **JPEG/Exif**, **TIFF**, **PNG**, **PDF**, **PDF (Multiple Pages)**, or **Auto**.

**Important**
- When **Auto** is selected, the save format may differ depending on how you place the item.
  - **Placing Items (When Scanning from a Computer)**
- You cannot select **JPEG/Exif** when **Color Mode** is **Black and White**.
- When **Start OCR** is selected in **Application Settings**, you cannot select **PDF**, **PDF (Multiple Pages)**, or **Auto**.
Note

- **Auto** appears only when **Auto** is selected for Select Source.

- **Settings...**
  Click to display the Data Format Settings dialog box in which you can set the quality of the images to be saved, keyword search of PDF files and their compression type, and the data format in which to save images scanned with Auto Scan.

- **Save in**
  Displays the folder in which to save the scanned images. To change the folder, specify the destination folder in the Select Destination Folder dialog box displayed by selecting Add... from the pull-down menu.
  The default save folders are as follows.
  Windows 8: **My Documents** folder
  Windows 7: **My Documents** folder
  Windows Vista: **Documents** folder
  Windows XP: **My Documents** folder

  **Important**
  - When the Settings dialog box is displayed from My Image Garden, this option does not appear.

- **Check scan results**
  Displays the Save Settings dialog box after scanning.

  **Important**
  - This does not appear when Select Source is Auto.
  - When the Settings dialog box is displayed from My Image Garden, this option does not appear.

(3) **Application Settings Area**

- **Open with an application**
  Select this when you want to enhance or correct the scanned images.
  You can specify the application from the pull-down menu.

- **Send to an application**
  Select this when you want to use the scanned images as they are in an application that allows you to browse or organize images.
  You can specify the application from the pull-down menu.

- **Send to a folder**
Select this when you also want to save the scanned images to a folder other than the one specified in **Save in**.
You can specify the folder from the pull-down menu.

- **Attach to e-mail**
  Select this when you want to send e-mails with the scanned images attached.
  You can specify the e-mail client you want to start from the pull-down menu.

- **Start OCR**
  Select this when you want to convert text in the image into text data using specified OCR software.
  You can specify the application from the pull-down menu.

- **Do not start any application**
  Saves to the folder specified in **Save in**.

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**Note**

- Specify the application or folder in the **Select Application** or **Select Destination Folder** dialog box displayed by selecting **Add...** from the pull-down menu.

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- **Instructions**
  Opens this guide.

- **Defaults**
  You can restore the settings in the displayed screen to the default settings.
Settings (Scan and Stitch) Dialog Box

Click **Scan and Stitch** on the **(Scanning from a Computer)** tab to display the **Settings (Scan and Stitch)** dialog box.

In the **Settings (Scan and Stitch)** dialog box, you can make advanced scan settings for scanning items larger than the platen.

(1) **Scan Options Area**
(2) **Save Settings Area**
(3) **Application Settings Area**

**Important**

- When the Settings dialog box is displayed from the Scan screen of My Image Garden, the setting items for **Application Settings** do not appear.

(1) **Scan Options Area**

- **Select Source**
  
  Select the type of item to be scanned.
  
  Scanning photos: **Photo**
  
  Scanning documents: **Document**
  
  Scanning magazines: **Magazine**
To reduce moire, set Select Source to Magazine.

- **Color Mode**
  Select the color mode in which to scan the item.

- **Resolution**
  Select the resolution of the item to be scanned.
  The higher the resolution (value), the more detail in your image.
  ➢ Resolution

- **Image Processing Settings**
  Click (Plus) to set the following. Available setting items vary by Select Source.

  ➢ Important
  - When Color Mode is Black and White, Image Processing Settings is not available.

  When Select Source is Photo
  - **Sharpen outline**
    Emphasizes the outline of the subjects to sharpen the image.

  When Select Source is Magazine or Document
  - **Sharpen outline**
    Emphasizes the outline of the subjects to sharpen the image.
  - **Reduce show-through**
    Sharpens text in an item or reduces show-through in newspapers, etc.
  - **Reduce moire**
    Reduces moire patterns.
    Printed materials are displayed as a collection of fine dots. "Moire" is a phenomenon where uneven gradation or a stripe pattern appears when such photos or pictures printed with fine dots are scanned.

  ➢ Note
  - Scanning takes longer than usual when you enable Reduce moire.

(2) **Save Settings Area**

- **File Name**
  Enter the file name of the image to be saved. When you save a file, the date and four digits are appended to the set file name in the "_20XX0101_0001" format.
• **Data Format**
Select the data format in which to save the scanned images.
You can select **JPEG/Exif**, **TIFF**, **PNG**, **PDF**, or **PDF (Multiple Pages)**.

**Important**
- You cannot select **JPEG/Exif** when **Color Mode** is **Black and White**.

• **Settings...**
Click to display the **Data Format Settings** dialog box in which you can set the quality of
the images to be saved, keyword search of PDF files and their compression type, and
the data format in which to save images scanned with Auto Scan.

• **Save in**
Displays the folder in which to save the scanned images. To change the folder, specify
the destination folder in the **Select Destination Folder** dialog box displayed by
selecting **Add...** from the pull-down menu.
The default save folders are as follows.
Windows 8: **My Documents** folder
Windows 7: **My Documents** folder
Windows Vista: **Documents** folder
Windows XP: **My Documents** folder

**Important**
- When the Settings dialog box is displayed from My Image Garden, this option does
  not appear.

• **Check scan results**
Displays the **Save Settings** dialog box after scanning.

**Important**
- When the Settings dialog box is displayed from My Image Garden, this option does
  not appear.

(3) **Application Settings Area**

• **Open with an application**
Select this when you want to enhance or correct the scanned images.
You can specify the application from the pull-down menu.

• **Send to an application**
Select this when you want to use the scanned images as they are in an application that
allows you to browse or organize images.
You can specify the application from the pull-down menu.
• **Send to a folder**
  
  Select this when you also want to save the scanned images to a folder other than the one specified in **Save in**.
  
  You can specify the folder from the pull-down menu.

• **Do not start any application**
  
  Saves to the folder specified in **Save in**.

**Note**

- Specify the application or folder in the **Select Application** or **Select Destination Folder** dialog box displayed by selecting **Add...** from the pull-down menu.

• **Instructions**
  
  Opens this guide.

• **Defaults**
  
  You can restore the settings in the displayed screen to the default settings.
Settings (ScanGear) Dialog Box

Click **ScanGear** on the (Scanning from a Computer) tab to display the **Settings (ScanGear)** dialog box.

In the **Settings (ScanGear)** dialog box, you can specify how to save images when scanning items by starting ScanGear (scanner driver) and how to respond after saving them.

![Settings (ScanGear) dialog box](image)

**(1) Save Settings Area**

**(2) Application Settings Area**

### Important

- When the Settings dialog box is displayed from My Image Garden, the setting items for **Application Settings** do not appear.

**(1) Save Settings Area**

- **File Name**
  
Enter the file name of the image to be saved. When you save a file, the date and four digits are appended to the set file name in the "_20XX0101_0001" format.

- **Data Format**
  
Select the data format in which to save the scanned images.

  You can select **JPEG/Exif**, **TIFF**, **PNG**, **PDF**, or **PDF (Multiple Pages)**.
Note

- When PDF or PDF (Multiple Pages) is selected, images up to 9600 pixels x 9600 pixels can be scanned.
- When the Enable large image scans checkbox is selected in Save Settings, or when Start OCR is selected in Application Settings, you can select JPEG/Exif, TIFF, or PNG.

• Settings...
Click to display the Data Format Settings dialog box in which you can set the quality of the images to be saved, keyword search of PDF files and their compression type, and the data format in which to save images scanned with Auto Scan.

• Save in
Displays the folder in which to save the scanned images. To change the folder, specify the destination folder in the Select Destination Folder dialog box displayed by selecting Add... from the pull-down menu.
The default save folders are as follows.
Windows 8: My Documents folder
Windows 7: My Documents folder
Windows Vista: Documents folder
Windows XP: My Documents folder

Important

- When the Settings dialog box is displayed from My Image Garden, this option does not appear.

• Enable large image scans
Select this checkbox to scan images up to 21000 pixels x 30000 pixels and 1.8 GB.

Important

- When this checkbox is selected, you cannot select Send to an application, Send to a folder, Attach to e-mail, or Start OCR.
- When the Settings dialog box is displayed from My Image Garden, this option does not appear.

Note

- When this checkbox is not selected, images up to 10208 pixels x 14032 pixels can be scanned.

• Check scan results
Displays the Save Settings dialog box after scanning.
Important

- When the Settings dialog box is displayed from My Image Garden, this option does not appear.

(2) Application Settings Area

- **Open with an application**
  Select this when you want to enhance or correct the scanned images.
  You can specify the application from the pull-down menu.

- **Send to an application**
  Select this when you want to use the scanned images as they are in an application that allows you to browse or organize images.
  You can specify the application from the pull-down menu.

- **Send to a folder**
  Select this when you also want to save the scanned images to a folder other than the one specified in Save in.
  You can specify the folder from the pull-down menu.

- **Attach to e-mail**
  Select this when you want to send e-mails with the scanned images attached.
  You can specify the e-mail client you want to start from the pull-down menu.

- **Start OCR**
  Select this when you want to convert text in the image into text data using specified OCR software.
  You can specify the application from the pull-down menu.

- **Do not start any application**
  Saves to the folder specified in Save in.

Note

- Specify the application or folder in the Select Application or Select Destination Folder dialog box displayed by selecting Add... from the pull-down menu.

- **Instructions**
  Opens this guide.

- **Defaults**
  You can restore the settings in the displayed screen to the default settings.
Settings (General Settings) Dialog Box

Click the (General Settings) tab to display the Settings (General Settings) dialog box. In the Settings (General Settings) dialog box, you can set the product to use, file size restriction on e-mail attachment, language to detect text in images, and folder in which to save images temporarily.

- **Product Name**
  Displays the name of the product that IJ Scan Utility is currently set to use. If the displayed product is not the one you want to use, select the desired product from the list.

- **E-mail Attachment Size**
  You can restrict the size of scanned images to be attached to an e-mail. You can select Small (Suitable for 640 x 480 Windows), Medium (Suitable for 800 x 600 Windows), Large (Suitable for 1024 x 768 Windows), or No Change.

**Important**

- When the Settings dialog box is displayed from My Image Garden, this option does not appear.

- **Document Language**
  Select the language for detecting text in images.

- **Folder to Save Temporary Files**
  Displays the folder in which to save images temporarily. Click Browse... to specify the destination folder.
• **Instructions**
  Opens this guide.

• **Defaults**
  You can restore the settings in the displayed screen to the default settings.
Data Format Settings Dialog Box

Display the Data Format Settings dialog box by one of the following operations.

- Click Settings... of Save Settings on each tab of the Settings dialog box
- Click Settings... of Save Settings in the Save Settings dialog box that appears after scanning with the Check scan results checkbox selected in the Settings dialog box

In the Data Format Settings dialog box, you can set the quality of the images to be saved, keyword search of PDF files and their compression type, and the data format in which to save images scanned with Auto Scan.

- **JPEG Image Quality**
  You can specify the image quality of JPEG files.

- **Create a PDF file that supports keyword search**
  Select this checkbox to convert text in images into text data and create PDF files that support keyword search.

  **Note**

  PDF files that are searchable in the language selected in Document Language on the (General Settings) tab of the Settings dialog box are created.

- **PDF Compression**
  Select the compression type for saving PDF files.

  - **Standard**
    It is recommended that you normally select this setting.

  - **High**
    Compresses the file size when saving, allowing you to reduce the load on your network/server.
Note

- When **Black and White** is set for **Color Mode** on the (Scanning from a Computer) tab of the Settings dialog box, PDF files will be saved in **Standard** even if **High** is set.

• **Format for Item Detected as Document in Auto Scan**
  You can specify the data format for automatically saving items detected as documents in Auto Scan.

• **Format for Item Detected as Photo in Auto Scan**
  You can specify the data format for automatically saving items detected as photos in Auto Scan.

• **Defaults**
  You can restore the settings in the displayed screen to the default settings.
Save Settings Dialog Box

Select the **Check scan results** checkbox in **Save Settings** of the Settings dialog box to display the **Save Settings** dialog box after scanning.

You can specify the data format and destination while viewing the thumbnails of scan results.

**Important**

- After scanning from My Image Garden, the **Save Settings** dialog box does not appear.

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(1) Preview Operation Buttons
(2) Scan Results Area
(3) Save Settings Area

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(1) Preview Operation Buttons

- 📄 / 📄 (Rotate Left 90°)/(Rotate Right 90°)

  Rotates scanned images 90 degrees counter-clockwise or clockwise.

  Select the image you want to rotate, then click 📄 (Rotate Left 90°) or 📄 (Rotate Right 90°).

**Important**

- The preview operation buttons do not appear when the **Enable large image scans** checkbox is selected in the **Settings (ScanGear)** dialog box.
(2) Scan Results Area
Displays the thumbnails of the scanned images. You can change the save order of images via drag-and-drop. The file names for saving appear below the thumbnails.

(3) Save Settings Area

• File Name
Enter the file name of the image to be saved. When you save a file, the date and four digits are appended to the set file name in the "_20XX0101_0001" format.

• Data Format
Select the data format in which to save the scanned images.
You can select JPEG/Exif, TIFF, PNG, PDF, or PDF (Multiple Pages).

Important
- You cannot select PDF or PDF (Multiple Pages) in the following cases.
  - When scanned by clicking Photo in the IJ Scan Utility main screen
  - The Enable large image scans checkbox is selected in Save Settings of the Settings (ScanGear) dialog box
  - Start OCR is selected in Application Settings of the Settings (Document Scan), Settings (Custom Scan), or Settings (ScanGear) dialog box
  - You cannot select JPEG/Exif when Color Mode is Black and White.

• Settings...
Click to display the Data Format Settings dialog box in which you can set the quality of the images to be saved, keyword search of PDF files and their compression type, and the data format in which to save images scanned with Auto Scan.

• Save in
Displays the folder in which to save the scanned images. To change the folder, specify the destination folder in the Select Destination Folder dialog box displayed by selecting Add... from the pull-down menu.
The default save folders are as follows.
Windows 8: My Documents folder
Windows 7: My Documents folder
Windows Vista: Documents folder
Windows XP: My Documents folder
Image Stitch Window

Click **Stitch** in the IJ Scan Utility main screen to display the Image Stitch window.
You can scan the left and right halves of an item larger than the platen and combine the images back into one image. You can scan items up to approximately twice as large as the platen.

(1) Settings and Operation Buttons
(2) Toolbar
(3) Thumbnail View Area
(4) Preview Area

**Note**
- The displayed items vary depending on the select source and view.

(1) Settings and Operation Buttons

- **Select Output Size**
  - **B4 (B5 x 2)**
    Scans the left and right halves of a B4 size item separately.
  - **A3 (A4 x 2)**
    Scans the left and right halves of an A3 size item separately.
  - **11 x 17 (Letter x 2)**
    Scans the left and right halves of an item twice as large as Letter size separately.
• **Full Platen x 2**
  Scans the left and right halves of an item twice as large as the platen separately.

• **Scan Direction**
  • **Scan from Left**
    Displays the first scanned image on the left side.
  • **Scan from Right**
    Displays the first scanned image on the right side.

• **Scan Image 1**
  • **Start Scanning Image 1**
    Scans the first item.

• **Scan Image 2**
  • **Start Scanning Image 2**
    Scans the second item.
• Adjust cropping frames
  You can adjust the scan area in preview.
  If no area is specified, the image of the size selected in Select Output Size will be saved. If an area is specified, only the image in the cropping frame will be scanned and saved.
  ➜ Adjusting Cropping Frames in the Image Stitch Window

• Save
  • Save
    Saves the two scanned images as one image.

• Cancel
  Cancels Stitch scan.

(2) Toolbar

• Toolbar
  You can delete the scanned images or adjust the previewed images.

  • (Delete)
    Deletes the scanned image.

  • (Enlarge/Reduce)
    Allows you to enlarge or reduce the preview image.
    Left-clicking the Preview area enlarges the displayed image.
    Right-clicking the Preview area reduces the displayed image.
• (Rotate Left)
  Rotates the preview image 90 degrees counter-clockwise.

• (Invert Vertically)
  Rotates the preview image 180 degrees.

• (Rotate Right)
  Rotates the preview image 90 degrees clockwise.

• (Open Guide)
  Opens this page.

(3) Thumbnail View Area

• Thumbnail View Area
  Displays the thumbnails of the scanned images. Appears blank if none has been scanned.

(4) Preview Area

• Preview Area
  Displays the scanned images. You can adjust the layout by dragging the scanned image or check the results of the settings made in "(1) Settings and Operation Buttons."

  • When no image has been scanned

  • After scanning the first item by clicking Start Scanning Image 1
The image is scanned in the direction specified in **Scan Direction**, and 2 appears next to it.

- **After scanning the second item by clicking Start Scanning Image 2**

The two scanned images appear.

**Related Topic**

- **Scanning Items Larger than the Platen (Image Stitch)**
Scanning with Application Software that You are Using (ScanGear)

- What Is ScanGear (Scanner Driver)?
- Scanning with Advanced Settings Using ScanGear (Scanner Driver)
- Starting ScanGear (Scanner Driver)
- Scanning in Basic Mode
- Scanning in Advanced Mode
- Scanning Multiple Documents at One Time with ScanGear (Scanner Driver)
- Correcting Images and Adjusting Colors with ScanGear (Scanner Driver)
- ScanGear (Scanner Driver) Screens
- Placing Items (When Scanning from a Computer)
- Adjusting Cropping Frames (ScanGear)
- General Notes (Scanner Driver)
What Is ScanGear (Scanner Driver)?

ScanGear (scanner driver) is software required for scanning documents. It enables you to specify the output size and make image corrections when scanning.

ScanGear can be started from My Image Garden or IJ Scan Utility. It can be also started from other applications that are compatible with a standard interface called TWAIN. (ScanGear is a TWAIN-compatible driver.)

What You Can Do with This Software

This software enables you to preview scan results or set document type and output size, etc. when scanning documents. It is useful when you want to scan in a specific color tone, as it allows you to make various corrections and adjust brightness, contrast, etc.

Screens

There are two modes: Basic Mode and Advanced Mode. Switch modes by clicking a tab on the upper right of the screen.

Basic Mode

Use the Basic Mode tab to scan easily by following three simple on-screen steps (1, 2, and 3).
Advanced Mode

Use the **Advanced Mode** tab to specify the color mode, output resolution, image brightness, color tone, etc. when scanning.
Scanning with Advanced Settings Using ScanGear (Scanner Driver)

- Starting ScanGear (scanner driver)
  - Starting ScanGear (Scanner Driver)
- Scanning documents after making simple image corrections
  - Scanning in Basic Mode
- Scanning documents after making advanced image corrections and brightness/color adjustments
  - Scanning in Advanced Mode
- Scanning multiple documents at one time after making image corrections and color adjustments
  - Scanning Multiple Documents at One Time with ScanGear (Scanner Driver)
Starting ScanGear (Scanner Driver)

Use ScanGear (scanner driver) to make image corrections and color adjustments when scanning. ScanGear can be started from My Image Garden or an application.

Starting from My Image Garden

Follow these steps to start ScanGear from My Image Garden.

1. Start My Image Garden.
   For how to start My Image Garden, refer to *My Image Garden Guide*.

2. Click the driver icon in the Scan screen of My Image Garden.
   The ScanGear screen appears.

Starting from an Application

Follow these steps (example) to start ScanGear from an application.

The procedure varies depending on the application. For details, refer to the application's manual.

1. Start the application.

2. On the menu of the application, select the machine.

3. Select the command to scan a document.
   The ScanGear screen appears.
Scanning in Basic Mode

Use the Basic Mode tab to scan easily by following the on-screen steps.
Refer to "Scanning Multiple Documents at One Time with ScanGear (Scanner Driver)" to scan multiple documents at one time.

Important

- The following types of documents may not be scanned correctly. In that case, click (Thumbnail) on the Toolbar to switch to whole image view and scan.
  - Photos that have a whitish background
  - Documents printed on white paper, hand-written text, business cards, etc.
  - Thin documents
  - Thick documents
- The following types of documents may not be scanned correctly.
  - Documents smaller than 1.2 inches (3 cm) square
  - Photos that have been cut to various shapes

1. Place the document on the Platen, then start ScanGear (scanner driver).
   ➤Placing Items (When Scanning from a Computer)
   ➤Starting ScanGear (Scanner Driver)

2. Set Select Source according to the document placed on the Platen or ADF.

   ![ScanGear Interface]

   Note

   - To scan magazines containing many color photos, select Magazine (Color).
3. Click Preview.

Preview image appears in the Preview area.

![ScanGear interface with Preview highlighted]

**Note**

- Colors are adjusted based on the document type selected in Select Source.

4. Set Destination.

5. Set Output Size according to purpose.

    Output size options vary by the item selected in Destination.

6. Adjust the cropping frames (scan areas) as required.

    Adjust the size and position of the cropping frames on the preview image.

    - Adjusting Cropping Frames (ScanGear)

7. Set Image corrections as required.

8. Click Scan.

    Scanning starts.

**Note**

- Click (Information) to open a dialog box in which you can check the current scan settings (document type, etc.).

- A response of ScanGear after scanning can be specified in Status of ScanGear dialog after scanning on the Scan tab of the Preferences dialog box.
Related Topic

- Basic Mode Tab
Scanning in Advanced Mode

Use the Advanced Mode tab to specify the color mode, output resolution, image brightness, color tone, etc. when scanning.

Refer to "Scanning Multiple Documents at One Time with ScanGear (Scanner Driver)" to scan multiple documents at one time.

**Important**

- The following types of documents may not be scanned correctly. In that case, click (Thumbnail) on the Toolbar to switch to whole image view and scan.
  - Photos that have a whitish background
  - Documents printed on white paper, hand-written text, business cards, etc.
  - Thin documents
  - Thick documents

- The following types of documents may not be scanned correctly.
  - Documents smaller than 1.2 inches (3 cm) square
  - Photos that have been cut to various shapes

1. Place the document on the Platen, then start ScanGear (scanner driver).
   - Placing Items (When Scanning from a Computer)
   - Starting ScanGear (Scanner Driver)

2. Click the Advanced Mode tab.
   The tab switches to Advanced Mode.
3. Set **Input Settings** according to the document or purpose.

4. Click **Preview**.
   Preview image appears in the Preview area.

5. Set **Output Settings**.

6. Adjust the cropping frame (scan area), correct image, and adjust colors as required.
   - **Adjusting Cropping Frames (ScanGear)**
   - **Image Settings**
   - **Color Adjustment Buttons**

7. Click **Scan**.
   Scanning starts.

**Note**

- Click ![Information](image) (Information) to open a dialog box in which you can check the current scan settings (document type, etc.).
- A response of ScanGear after scanning can be specified in **Status of ScanGear dialog after scanning** on the **Scan tab** of the **Preferences** dialog box.
Related Topic

- Advanced Mode Tab
Scanning Multiple Documents at One Time with ScanGear (Scanner Driver)

You can scan two or more photos (small documents) on the Platen at one time on the Basic Mode tab and Advanced Mode tab.

This section explains how to scan multiple documents from the Basic Mode tab.

**Important**

- To scan multiple documents as a single image, scan in whole image view.
- The following types of documents may not be cropped correctly. In that case, adjust the cropping frames (scan areas) in whole image view and scan.
  - Photos that have a whitish background
  - Documents printed on white paper, hand-written text, business cards, etc.
  - Thin documents
  - Thick documents

**Scanning Multiple Documents in Whole Image View**

- The following types of documents may not be scanned correctly.
  - Documents smaller than 1.2 inches (3 cm) square
  - Photos that have been cut to various shapes

**Note**

- You can also scan multiple documents at one time from the Advanced Mode tab. Use the Advanced Mode tab to make advanced scan settings such as the color mode, output resolution, image brightness, and color tone.
- Refer to the corresponding sections below for details on the Basic Mode tab and Advanced Mode tab.

1. Place the document on the Platen, then start ScanGear (scanner driver).
   - Placing Items (When Scanning from a Computer)
   - Starting ScanGear (Scanner Driver)

2. Set **Select Source** according to the document placed on the Platen.
3. Click **Preview**.

   Thumbnails of the preview images appear in the Preview area. Cropping frames are specified automatically according to the document size.

4. Set **Destination**.

5. Set **Output Size** according to purpose.

6. Adjust the cropping frames and set **Image corrections** as required.

   **Note**

   - You can correct each image separately. Select the frame you want to correct.
   - In thumbnail view, you can only create one cropping frame per image. To create multiple cropping frames in an image, scan in whole image view.
7. Select the images you want to scan.
   Select the checkboxes of the images you want to scan.

8. Click **Scan**.

---

**Scanning Multiple Documents in Whole Image View**

Follow these steps if thumbnails are not displayed correctly when previewed or if you want to scan multiple documents as a single image.

### Note

- Positions of slanted documents are not corrected in whole image view.

   Switch to whole image view.

2. Set **Destination**.
3. Set **Output Size** according to purpose.

   **Invert aspect ratio** will be enabled when **Output Size** is set to anything but **Flexible**. Click this button to rotate the cropping frame. Click again to return it to the original orientation.

4. Adjust the cropping frames.

   Adjust the size and position of the cropping frames on the preview image. You can also create two or more cropping frames.

   If an area is not specified, the document will be scanned at the document size (Auto Crop). If an area is specified, only the portion in the specified area will be scanned.

   ➤ Adjusting Cropping Frames (ScanGear)

5. Set **Image corrections** as required.

6. Click **Scan**.

   Areas framed by broken lines are scanned.

---

**Note**

- A response of ScanGear after scanning can be specified in **Status of ScanGear dialog after scanning** on the **Scan tab** of the **Preferences** dialog box.
Correcting Images and Adjusting Colors with ScanGear (Scanner Driver)

- Sharpening out-of-focus photos, reducing dust and scratches, and correcting faded colors
  - Correcting Images (Unsharp Mask, Reduce Dust and Scratches, Fading Correction, etc.)
- Previewing and changing the color tone of the entire image to scan
  - Adjusting Colors Using a Color Pattern
- Brightening colors that have faded with time or due to colorcast
  - Adjusting Saturation and Color Balance
- Adjusting images that are too dark or bright, or too flat due to lack of contrast
  - Adjusting Brightness and Contrast
- Adjusting the color tone using histogram (a graph showing brightness distribution)
  - Adjusting Histogram
- Adjusting the image brightness using tone curve (a graph of brightness balance)
  - Adjusting Tone Curve
- Sharpening characters in text documents or reducing show-through effects
  - Setting Threshold
Correcting Images (Unsharp Mask, Reduce Dust and Scratches, Fading Correction, etc.)

The **Image Settings** functions on the **Advanced Mode** tab of ScanGear (scanner driver) allow you to enhance the outline of the subjects, reduce dust/scratches, and correct faded colors when scanning images.

### Setting Items

Click (Arrow) of a function and select an item from the pull-down menu.

- **Reduce Dust and Scratches:** None, Low, Medium, High
- **Fading Correction:** None
- **Grain Correction:** None
- **Gutter Shadow Correction:** None

### Important

- Do not apply these functions to images without moire, dust/scratches, or faded colors. The color tone may be adversely affected.
- Refer to "Image Settings" for details and precautions on each function.

### Note

- Refer to "Scanning in Advanced Mode" to start the **Advanced Mode** tab of ScanGear and scan.
Adjusting the image brightness and color tone
Set Image Adjustment to Auto, Photo, Magazine, or Document according to the document type.

<table>
<thead>
<tr>
<th>None</th>
<th>Auto</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.jpg" alt="Image1" /></td>
<td><img src="image2.jpg" alt="Image2" /></td>
</tr>
</tbody>
</table>

Reducing show-through in text documents or lightening the base color in recycled paper, newspapers, etc. when scanning documents
Set Reduce Show-through to ON.

<table>
<thead>
<tr>
<th>OFF</th>
<th>ON</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3.jpg" alt="Image3" /></td>
<td><img src="image4.jpg" alt="Image4" /></td>
</tr>
</tbody>
</table>

Sharpening slightly out-of-focus images
Set Unsharp Mask to ON.

<table>
<thead>
<tr>
<th>OFF</th>
<th>ON</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image5.jpg" alt="Image5" /></td>
<td><img src="image6.jpg" alt="Image6" /></td>
</tr>
</tbody>
</table>

Reducing gradations and stripe patterns
Set Descreen to ON.

<table>
<thead>
<tr>
<th>OFF</th>
<th>ON</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image7.jpg" alt="Image7" /></td>
<td><img src="image8.jpg" alt="Image8" /></td>
</tr>
</tbody>
</table>
**Note**

- Printed photos and pictures are displayed as a collection of fine dots. "Moire" is a phenomenon where uneven gradation or a stripe pattern appears when such photos or pictures printed with fine dots are scanned. **Descreen** is the function for reducing this moire effect.

**Reducing dust and scratches**

Set **Reduce Dust and Scratches** to **Low**, **Medium**, or **High** according to the degree of dust and scratches.

<table>
<thead>
<tr>
<th>None</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Dogs" /></td>
<td><img src="image2" alt="Dogs" /></td>
</tr>
</tbody>
</table>

**Correcting photos that have faded with time or due to colorcast**

Set **Fading Correction** to **Low**, **Medium**, or **High** according to the degree of fading or colorcast.

<table>
<thead>
<tr>
<th>None</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3" alt="Fountain" /></td>
<td><img src="image4" alt="Fountain" /></td>
</tr>
</tbody>
</table>

**Reducing graininess**

Set **Grain Correction** to **Low**, **Medium**, or **High** according to the degree of graininess.

<table>
<thead>
<tr>
<th>None</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image5" alt="Grain" /></td>
<td><img src="image6" alt="Grain" /></td>
</tr>
</tbody>
</table>
Correcting shadows that appear between pages when scanning open booklets

Set Gutter Shadow Correction to Low, Medium, or High according to the degree of shadows.

<table>
<thead>
<tr>
<th>None</th>
<th>Medium</th>
</tr>
</thead>
</table>

![Comparison of None and Medium Gutter Shadow Correction]
Adjusting Colors Using a Color Pattern

You can preview color changes and reproduce natural colors by using the color pattern function in ScanGear (scanner driver)'s **Basic Mode** tab.

**Color Adjustment**

Correct colors that have faded with time or due to colorcast. "Colorcast" is a phenomenon where a specific color affects the entire picture due to the weather or ambient strong colors.

Click an arrow in **Color Adjustment** to emphasize the corresponding color.

Cyan & red, magenta & green, and yellow & blue are complementary color pairs (each pair produces a shade of gray when mixed). You can reproduce the natural colors of the scene by reducing the cast color and increasing the complementary color.
It is recommended that you find a portion in the image where it should be white, and adjust the colors so that the portion turns white.

Preview image appears in the center. Preview image colors change as you adjust them.

Below is an example of correcting a bluish image. Since **Blue** and **Green** are too strong, click the **Yellow** and **Magenta** arrows to correct.

<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Before Image" /></td>
<td><img src="image2.png" alt="After Image" /></td>
</tr>
</tbody>
</table>

**Note**

- Color adjustments are applied only to the cropping frames (scan areas) or the frame selected in thumbnail view.
  - You can select multiple frames or cropping frames by clicking them while pressing the Ctrl key.
- You can also select a color tone from the color pattern displayed on the left of the **Color Pattern** screen.
- You can also use this function to add a specific tint to an image. Increase the magenta to add a warm tint, and increase the blue to add a cool tint.
Adjusting Saturation and Color Balance

In ScanGear (scanner driver)'s **Advanced Mode** tab, click ![Saturation/Color Balance](image). (Saturation/Color Balance).

![Image Settings](image) ![Saturation/Color Balance](image)

**Note**

- Click **Defaults** to reset all adjustments in the current window.

**Saturation**

Adjust the image's saturation (vividness). You can brighten colors that have faded with time, etc.

Move ▲ (Slider) under **Saturation** to the left to decrease the saturation (darken the image), and to the right to increase the saturation (brighten the image). You can also enter a value (-127 to 127).

![Saturation](image)

<table>
<thead>
<tr>
<th>Saturation decreased</th>
<th>Original image</th>
<th>Saturation increased</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Image" /></td>
<td><img src="image" alt="Image" /></td>
<td><img src="image" alt="Image" /></td>
</tr>
</tbody>
</table>

**Note**

- The natural color tone of the original image may be lost if you increase saturation too much.
Color Balance

Adjust images that have a colorcast. "Colorcast" is a phenomenon where a specific color affects the entire picture due to the weather or ambient strong colors.

Move ▲ (Slider) under **Color Balance** to the left or right to emphasize the corresponding color.

**Cyan & Red**

**Magenta & Green**

**Yellow & Blue**

These are complementary color pairs (each pair produces a shade of gray when mixed). You can reproduce the natural colors of the scene by reducing the cast color and increasing the complementary color.

It is usually difficult to correct the image completely by adjusting only one color pair. It is recommended that you find a portion in the image where it should be white, and adjust all three color pairs so that the portion turns white.

You can also enter a value (-127 to 127).

Below is an example of an image in which the "Cyan & Red" pair has been adjusted.
Adjusting Brightness and Contrast

In ScanGear (scanner driver)'s **Advanced Mode** tab, click **Brightness/Contrast**.

![Image of Brightness/Contrast settings](image)

**Note**

- Click (Down arrow) to switch to detailed view. Click (Up arrow) to return to the previous view.
- Click **Defaults** to reset all adjustments in the current window.

**Channel**

Each dot of an image is a mixture of Red, Green, and Blue in various proportions (gradation). These colors can be adjusted individually as a "channel."

- **Master**
  Adjust the Red, Green, and Blue combined.

- **Red**
  Adjust the Red channel.

- **Green**
  Adjust the Green channel.

- **Blue**
Adjust the Blue channel.

**Note**

- Only Grayscale will be displayed in Channel when Color Mode is Grayscale.

**Brightness**

Adjust the image brightness. Move ▲ (Slider) under Brightness to the left to darken and right to brighten the image. You can also enter a value (-127 to 127).

<table>
<thead>
<tr>
<th>Brightness:</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark</td>
<td>Bright</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Darkened</th>
<th>Original image</th>
<th>Brightened</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Darkened" /></td>
<td><img src="image" alt="Original image" /></td>
<td><img src="image" alt="Brightened" /></td>
</tr>
</tbody>
</table>

**Note**

- Highlights may be lost if you brighten the image too much, and shadows may be lost if you darken the image too much.

**Contrast**

"Contrast" is the degree of difference between the brighter and darker parts of an image. Increasing contrast will increase the difference, thus sharpening the image. Decreasing contrast will decrease the difference, thus softening the image.

Move ▲ (Slider) under Contrast to the left to decrease and right to increase the contrast of the image. You can also enter a value (-127 to 127).

<table>
<thead>
<tr>
<th>Contrast:</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>High</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Decreased contrast</th>
<th>Original image</th>
<th>Increased contrast</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Decreased contrast" /></td>
<td><img src="image" alt="Original image" /></td>
<td><img src="image" alt="Increased contrast" /></td>
</tr>
</tbody>
</table>
Increasing the contrast is effective in adding a three-dimensional feel to soft images. However, shadows and highlights may be lost if you increase the contrast too much.
Adjusting Histogram

In ScanGear (scanner driver)'s **Advanced Mode** tab, click \[Histogram\] (Histogram).

![Image of ScanGear Advanced Mode with Histogram settings]

**Note**

- Click **Defaults** to reset all adjustments in the current window.

**Channel**

Each dot of an image is a mixture of Red, Green, and Blue in various proportions (gradation). These colors can be adjusted individually as a "channel."

- **Master**
  
  Adjust the Red, Green, and Blue combined.

- **Red**
  
  Adjust the Red channel.

- **Green**
  
  Adjust the Green channel.

- **Blue**
  
  Adjust the Blue channel.

**Note**

- Only **Grayscale** will be displayed in **Channel** when **Color Mode** is **Grayscale**.

**Reading Histograms**

You can see the histogram of a specified area for each **Channel**. The higher the histogram peak, the more data is distributed to that level.
More data is distributed to the highlight side.
More data is distributed to the shadow side.
Data is widely distributed between the highlight and shadow.

Adjusting Histograms (Using the Slider)

Select a Channel, then move ▲ (Black-point Slider) or ▼ (White-point Slider) to specify the level to be set as the shadow or highlight.

- All parts to the left of ▲ (Black-point Slider) will be black (level 0).
- The parts at △ (Mid-point Slider) will turn to the color exactly between the black-point and white-point.
- All parts to the right of ▼ (White-point Slider) will turn white (level 255).

When Image Adjustment is set to anything but None, the adjustments shown below are performed automatically.

Moving the Black-point and White-point Sliders

Move the Black-point Slider or White-point Slider to adjust brightness.

Images with more data distributed to the highlight side
Move the Black-point Slider toward the highlight side.

Images with more data distributed to the shadow side
Move the White-point Slider toward the shadow side.
Images with widely distributed data
Move the Black-point Slider toward the highlight side, and White-point Slider toward the shadow side.

Moving the Mid-point Slider
Move the Mid-point Slider to specify the level to be set as the middle of the tonal range.

Images with more data distributed to the highlight side
Move the Mid-point Slider toward the highlight side.

Images with more data distributed to the shadow side
Move the Mid-point Slider toward the shadow side.

Adjusting Histograms (Using the Droppers)
When you select a Channel and click the Black-point, Mid-point, or White-point Dropper, the mouse pointer on the preview image changes to a dropper. Click a Dropper displayed below the histogram to change the setting.
- The point clicked with [Black-point Dropper] will be the darkest point. You can also enter a value (0 to 245).
- The point clicked with [Mid-point Dropper] will be the middle of the tonal range. You can also enter a value (5 to 250).
- The point clicked with [White-point Dropper] will be the brightest point. You can also enter a value (10 to 255).
- Click [Dropper] for Gray Balance and click the area you want to adjust the color in the preview image. The clicked point will be set as the achromatic color reference, and the rest of the image is adjusted accordingly. For instance, if snow in a photo appears bluish, click the bluish part to adjust the whole image and reproduce natural colors.
Adjusting Tone Curve

In ScanGear (scanner driver)'s Advanced Mode tab, click (Tone Curve Settings).

![Image of Tone Curve Settings]

**Note**

- Click Defaults to reset all adjustments in the current window.

**Channel**

Each dot of an image is a mixture of Red, Green, and Blue in various proportions (gradation). These colors can be adjusted individually as a "channel."

- **Master**
  Adjust the Red, Green, and Blue combined.

- **Red**
  Adjust the Red channel.

- **Green**
  Adjust the Green channel.

- **Blue**
  Adjust the Blue channel.

**Note**

- Only Grayscale will be displayed in Channel when Color Mode is Grayscale.

**Reading Tone Curves**

With ScanGear, scanning images via a scanner is the input, and displaying to a monitor is the output. "Tone Curve" shows the balance of tone input and output for each Channel.
Adjusting Tone Curve

In Select Tone Curve, select a tone curve from No correction, Overexposure, Underexposure, High contrast, Reverse the negative/positive image, and Edit custom curve.

No correction (No adjustment)

Overexposure (Convex curve)

The midtone data of the input side is stretched toward the highlight of the output side, resulting in a bright-toned image when viewed on a monitor.

Underexposure (Concave curve)

The midtone data of the input side is stretched toward the shadow of the output side, resulting in a dark-toned image when viewed on a monitor.

High contrast (S curve)

The highlight and shadow of the input side are enhanced, resulting in a high-contrast image.
Reverse the negative/positive image (Downward-sloping line)

The input and output sides are reversed, resulting in a negative-positive inverted image.

Edit custom curve

You can drag specific points on the Tone Curve to freely adjust the brightness of the corresponding areas.
Setting Threshold

The brightness of color and grayscale images is expressed in a value between 0 and 255. However, in creating black and white images, all colors are mapped to either black (0) or white (255). "Threshold" is the borderline value that determines a color as black or white. By adjusting the threshold level, you can sharpen text in a document or reduce show-through in newspapers.

This function is available when Color Mode is Black and White.

In ScanGear (scanner driver)'s Advanced Mode tab, click (Threshold).

Note

- Click Defaults to reset all adjustments in the current window.

Adjusting Threshold

Move ▲ (Slider) to the right to increase the threshold value and thus increase the black areas. Move the slider to the left to decrease the value and thus increase the white areas. You can also enter a value (0 to 255).
ScanGear (Scanner Driver) Screens

- Basic Mode Tab
- Advanced Mode Tab
  - Input Settings
  - Output Settings
  - Image Settings
  - Color Adjustment Buttons
- Preferences Dialog Box
  - Scanner Tab
  - Preview Tab
  - Scan Tab
  - Color Settings Tab
Basic Mode Tab

This mode allows you to scan easily by following the on-screen steps. This section describes the settings and functions available on the Basic Mode tab.

(1) Settings and Operation Buttons
(2) Toolbar
(3) Preview Area

Note
The displayed items vary by document type and view.

(1) Settings and Operation Buttons

- Select Source
  - Photo (Color)
    Scan color photos.
  - Magazine (Color)
    Scan color magazines.
  - Document (Color)
    Scan documents in color.
  - Document (Grayscale)
    Scan documents in black and white.
Note

- When you select a document type, the unsharp mask function will be active. The image adjustment function which adjusts images based on the document type will also be active.
- If you select **Magazine (Color)**, the descreen function will be active.

• **Display Preview Image**
  
  • **Preview**

  Performs a trial scan.

![ScnGear](image)

**Note**

- When using the machine for the first time, scanner calibration starts automatically. Wait a while until the preview image appears.

• **Destination**

Select what you want to do with the scanned image.

  • **Print**

    Select this to print the scanned image on a printer.

  • **Image display**

    Select this to view the scanned image on a monitor.

  • **OCR**

    Select this to use the scanned image with OCR software. "OCR software" is software that converts text scanned as an image into text data that can be edited in word processors and other programs.

• **Output Size**

  Select an output size.
Output size options vary by the item selected in **Destination**.

- **Flexible**
  Allows you to freely adjust the cropping frames (scan areas).

  **In thumbnail view**
  Drag the mouse over a thumbnail to display a cropping frame. When a cropping frame is displayed, the portion within the cropping frame will be scanned. When no cropping frame is displayed, each frame is scanned individually.

  **In whole image view**
  When no cropping frame is displayed, the entire Preview area will be scanned. When a cropping frame is displayed, the portion within the cropping frame will be scanned.

- **Paper Size (L, A4, etc.)**
  Select an output paper size. The portion within the cropping frame will be scanned at the size of the selected paper size. You can drag the cropping frame to enlarge/reduce it while maintaining the aspect ratio.

- **Monitor Size (1024 x 768 pixels, etc.)**
  Select an output size in pixels. A cropping frame of the selected monitor size will be displayed and the portion within the cropping frame will be scanned. You can drag the cropping frame to enlarge/reduce it while maintaining the aspect ratio.

- **Add/Delete...**
  Opens the **Add/Delete the Output Size** dialog box, in which you can specify custom output sizes. You can select this option when **Destination** is **Print** or **Image display**.

  ![Add/Delete the Output Size](image.png)

  In the **Add/Delete the Output Size** dialog box, you can specify multiple output sizes and save them at one time. Saved items will be registered to the **Output Size** list and can be selected, along with the predefined items.

  **Add**
  To add a size, enter **Output Size Name**, **Width**, and **Height**, then click **Add**. For **Unit**, you can select **inches** or **mm** when **Destination** is **Print** but you can only select **pixels** when **Destination** is **Image display**. The name of the added size
appears in **Output Size List**. Click **Save** to save the items listed in **Output Size List**.

**Delete**

To delete an item, select it in **Output Size List** and click **Delete**. Click **Save** to save the items listed in **Output Size List**.

### Important

- You cannot delete predefined output sizes such as A4 and 1024 x 768 pixels.

### Note

- Save up to 10 items.
- An error message appears when you enter a value outside the setting range. Enter a value within the setting range.

### Note

- For details on whether or how the cropping frame is initially displayed on a preview image, refer to **Cropping Frame on Previewed Images** in "Preview Tab" (Preferences dialog box).

### Invert aspect ratio

Available when **Output Size** is set to anything but **Flexible**.

Click this button to rotate the cropping frame. Click again to return it to the original orientation.

### Adjust cropping frames

You can adjust the scan area within the Preview area.

If an area is not specified, the document will be scanned at the document size (Auto Crop). If an area is specified, only the portion in the cropping frame will be scanned.

[Adjusting Cropping Frames (ScanGear)]

### Image corrections

Allows you to apply corrections to images.

### Important

- **Apply Auto Document Fix** and **Correct fading** are available when **Recommended** is selected on the **Color Settings** tab of the **Preferences** dialog box.

### Note

- Available functions vary by the document type selected in **Select Source**.

- **Apply Auto Document Fix**
Sharpens text in a document or magazine for better readability.

**Important**
- Scanning may take longer than usual when this checkbox is selected.
- The color tone may change from the source image due to corrections. In that case, deselect the checkbox and scan.
- Correction may not be applied properly if the scan area is too small.

- **Correct fading**
  Corrects and scans photos that have faded with time or have a colorcast.

- **Reduce gutter shadow**
  Corrects shadows that appear between pages when scanning open booklets.

**Important**
- For precautions on using this function, refer to "Gutter Shadow Correction."

- **Color Pattern...**
  Allows you to adjust the image's overall color. You can correct colors that have faded due to colorcast, etc. and reproduce natural colors while previewing color changes.

**Important**
- This setting is not available when you select **Color Matching** on the Color Settings tab of the Preferences dialog box.

- **Perform Scan**
  - **Scan**
    Starts scanning.

**Note**
- When scanning starts, the progress will be displayed. Click **Cancel** to cancel the scan.

- **Preferences...**
  Opens the Preferences dialog box in which you can make scan/preview settings.

- **Close**
  Closes ScanGear (scanner driver).

(2) Toolbar
- **Toolbar**
You can adjust or rotate preview images. The buttons displayed on the Toolbar vary by view.

In thumbnail view

In whole image view

•  (Thumbnail) /  (Whole Image)
  Switches the view in the Preview area.
  ➔(3) Preview Area

•  (Rotate Left)
  Rotates the preview image 90 degrees counter-clockwise.
  - The result will be reflected in the scanned image.
  - The image returns to its original state when you preview again.

•  (Rotate Right)
  Rotates the preview image 90 degrees clockwise.
  - The result will be reflected in the scanned image.
  - The image returns to its original state when you preview again.

•  (Auto Crop)
  Displays and adjusts the cropping frame automatically to the size of the document displayed in the Preview area. The scan area is reduced every time you click this button if there are croppable areas within the cropping frame.

•  (Check All Frames)
  Available when two or more frames are displayed.
  Selects the checkboxes of the image in thumbnail view.

•  (Uncheck All Frames)
  Available when two or more frames are displayed.
  Deselects the checkboxes of the image in thumbnail view.

•  (Select All Frames)
  Available when two or more frames are displayed.
  Selects the images in thumbnail view and outlines them in blue.
• [Select All Cropping Frames]
  Available when two or more cropping frames are specified.
  Turns the cropping frames into thick broken lines and applies the settings to all of them.

• [Remove Cropping Frame]
  Removes the selected cropping frame.

• [Information]
  Displays the version of ScanGear and the current scan settings (document type, etc.).

• [Open Guide]
  Opens this page.

(3) Preview Area

• Preview Area
  This is where a trial image appears after you click Preview. You can also check the results of the settings (image corrections, color adjustments, etc.) made in "(1) Settings and Operation Buttons."

When [Thumbnail] is displayed on the Toolbar

Cropping frames are specified according to the document size, and thumbnails of scanned images are displayed. Only the images with the checkbox selected will be scanned.
Note

- When multiple images are previewed, different outlines indicate different selection status.
  - Focus Frame (thick blue outline): The displayed settings will be applied.
  - Selected Frame (thin blue outline): The settings will be applied to the Focus Frame and Selected Frames simultaneously. You can select multiple images by clicking them while pressing the Ctrl key.
  - Unselected (no outline): The settings will not be applied.
- Double-click a frame to zoom in on the image. Click ⏪ ⏫ (Frame Advance) at the bottom of the screen to display the previous or next frame. Double-click the frame again to return the display to its non-magnified state.

When 📸 (Whole Image) is displayed on the Toolbar

Items on the Platen are scanned and displayed as a single image. All portions in the cropping frames will be scanned.

Note

- You can specify the cropping frame on the displayed image. In thumbnail view, you can only create one cropping frame per image. In whole image view, you can create multiple cropping frames.
- ➤ Adjusting Cropping Frames (ScanGear)

Related Topic

- Scanning in Basic Mode
Advanced Mode Tab

This mode allows you to make advanced scan settings such as the color mode, output resolution, image brightness, and color tone.

This section describes the settings and functions available on the Advanced Mode tab.

(1) Settings and Operation Buttons
(2) Toolbar
(3) Preview Area

Note

- The displayed items vary by document type and view.

(1) Settings and Operation Buttons

- **Favorite Settings**
  You can name and save a group of settings (Input Settings, Output Settings, Image Settings, and Color Adjustment Buttons) on the Advanced Mode tab, and load it as required. It is convenient to save a group of settings if you will be using it repeatedly. You can also use this to reload the default settings.
  Select Add/Delete... from the pull-down menu to open the Add/Delete Favorite Settings dialog box.
Enter **Setting Name** and click **Add**; the name appears in **Favorite Settings List**. When you click **Save**, the item appears in the **Favorite Settings** list and can be selected, along with the predefined items. To delete an item, select it in **Favorite Settings List** and click **Delete**. Click **Save** to save the settings displayed in **Favorite Settings List**.

**Note**

- You can set **Add/Delete...** in **Favorite Settings** after preview.
- Save up to 10 items.

- **Input Settings**
  Specify the input settings such as the document type and size.

- **Output Settings**
  Specify the output settings such as the output resolution and size.

- **Image Settings**
  Enable/disable various image correction functions.

- **Color Adjustment Buttons**
  Fine corrections to the image brightness and color tones can be made including adjustments to the image's overall brightness or contrast and adjustments to its highlight and shadow values (histogram) or balance (tone curve).

- **Zoom**
  Zooms in on a frame, or zooms in on the image in the area specified with a cropping frame (scan area). When zoomed in, **Zoom** changes to **Undo**. Click **Undo** to return the display to its non-magnified state.

**In thumbnail view**

When multiple images are displayed in thumbnail view, clicking this button zooms in on the selected frame. Click (Frame Advance) at the bottom of the screen to display the previous or next frame.
You can also zoom in on an image by double-clicking the frame. Double-click the frame again to return the display to its non-magnified state.

In whole image view
Rescans the image in the area specified with a cropping frame at higher magnification.

Note

- **Zoom** rescans the document and displays high-resolution image in Preview.
- (Enlarge/Reduce) on the Toolbar zooms in on the preview image quickly. However, the resolution of the displayed image will be low.

- **Preview**
Performs a trial scan.

- **Scan**
Starts scanning.

Note

- When scanning starts, the progress will be displayed. Click **Cancel** to cancel the scan.
- When scanning is completed, a dialog box prompting you to select the next action may appear. Follow the prompt to complete. For details, refer to **Status of ScanGear dialog after scanning** in "Scan Tab" (Preferences dialog box).
It will take time to process the images if the total size of the scanned images exceeds a certain size. In that case, a warning message appears; it is recommended that you reduce the total size. To continue, scan in whole image view.

- **Preferences...**
  Opens the Preferences dialog box in which you can make scan/preview settings.

- **Close**
  Closes ScanGear (scanner driver).

### (2) Toolbar

- **Toolbar**
  You can adjust or rotate preview images. The buttons displayed on the Toolbar vary by view.

#### In thumbnail view

#### In whole image view

- **(Thumbnail) / (Whole Image)**
  Switches the view in the Preview area.
  ➞(3) Preview Area

- **(Clear)**
  Deletes the preview image from the Preview area.
  It also resets the Toolbar and color adjustment settings.

- **(Crop)**
  Allows you to specify the scan area by dragging the mouse.

- **(Move Image)**
  Allows you to drag the image until the part you want to see is displayed when an image enlarged in the Preview area does not fit in the screen. You can also move the image using the scroll bars.

- **(Enlarge/Reduce)**
Allows you to zoom in on the Preview area by clicking the image. Right-click the image to zoom out.

- **(Rotate Left)**
  Rotates the preview image 90 degrees counter-clockwise.
  - The result will be reflected in the scanned image.
  - The image returns to its original state when you preview again.

- **(Rotate Right)**
  Rotates the preview image 90 degrees clockwise.
  - The result will be reflected in the scanned image.
  - The image returns to its original state when you preview again.

- **(Auto Crop)**
  Displays and adjusts the cropping frame automatically to the size of the document displayed in the Preview area. The scan area is reduced every time you click this button if there are croppable areas within the cropping frame.

- **(Check All Frames)**
  Available when two or more frames are displayed.
  Selects the checkboxes of the image in thumbnail view.

- **(Uncheck All Frames)**
  Available when two or more frames are displayed.
  Deselects the checkboxes of the image in thumbnail view.

- **(Select All Frames)**
  Available when two or more frames are displayed.
  Selects the images in thumbnail view and outlines them in blue.

- **(Select All Cropping Frames)**
  Available when two or more cropping frames are specified.
  Turns the cropping frames into thick broken lines and applies the settings to all of them.

- **(Remove Cropping Frame)**
  Removes the selected cropping frame.

- **(Information)**
  Displays the version of ScanGear and the current scan settings (document type, etc.).
(3) Preview Area

**Preview Area**

This is where a trial image appears after you click **Preview**. You can also check the results of the settings (image corrections, color adjustments, etc.) made in "(1) Settings and Operation Buttons."

**When  (Thumbnail) is displayed on the Toolbar**

Cropping frames are specified according to the document size, and thumbnails of scanned images are displayed. Only the images with the checkbox selected will be scanned.

**Note**

- When multiple images are previewed, different outlines indicate different selection status.
  - Focus Frame (thick blue outline): The displayed settings will be applied.
  - Selected Frame (thin blue outline): The settings will be applied to the Focus Frame and Selected Frames simultaneously. You can select multiple images by clicking them while pressing the Ctrl key.
  - Unselected (no outline): The settings will not be applied.

**When  (Whole Image) is displayed on the Toolbar**

Items on the Platen are scanned and displayed as a single image. All portions in the cropping frames will be scanned.
Note

- You can specify the cropping frame on the displayed image. In thumbnail view, you can only create one cropping frame per image. In whole image view, you can create multiple cropping frames.
  ➡️ Adjusting Cropping Frames (ScanGear)

Related Topic

- Scanning in Advanced Mode
**Input Settings** allows you to set the following items:

- **Select Source**
  The type of document to be scanned is displayed.

- **Paper Size**
  Select the size of the document to be scanned. This setting is available in whole image view only.
  When you select a size, the Preview area size changes accordingly.

**Important**
- Some applications have a limit to the amount of scan data they can receive. Available scan range is as follows.
  - 21000 pixels x 30000 pixels or less
  - If you change **Paper Size** after previewing, the preview image will be deleted.

**Note**
- If you are not sure which size you should select for **Paper Size**, set **Paper Size** to **Full Platen**, then measure the size of the document and enter the values into (Width) and (Height).

- **Color Mode**
  Select how to scan the document.
  - **Color**
Select this mode to scan color documents or to create color images. This mode renders the image in 256 levels (8 bit) of R(ed), G(reen), and B(lue).

- **Grayscale**
  Select this mode to scan black and white photos or to create black and white images. This mode renders the image in 256 levels (8 bit) of black and white.

- **Black and White**
  Select this mode to scan photos and documents in black and white. This mode renders the image in black and white. The contrast in the image is divided at certain levels (threshold level) into black and white and is rendered in two colors. The threshold level can be set with (Threshold).

- **Input Size**
  In thumbnail view, the cropped document size is displayed after preview.
  In whole image view, the **Paper Size** is displayed before preview, and the cropping frame (scan area) size is displayed after preview.
  You can adjust the cropping frame size by entering the values into (Width) and (Height).
  Click (Change Aspect Ratio) and change it to (Keep Aspect Ratio) to maintain the aspect ratio when you specify the cropping frame size.

**Important**

- Input size settings are available only when **Output Size** in **Output Settings** is **Flexible**. If you select a size other than **Flexible**, a cropping frame calculated from **Output Size** and **Output Resolution** is displayed, and its aspect ratio is fixed.

**Note**

- The values you can enter will be within the range of the selected document size. The minimum size is 96 pixels x 96 pixels when **Output Resolution** is 600 dpi, scaled at 100 %.
- When Auto Crop is performed in whole image view, the aspect ratio will not be maintained since the size will be prioritized.
- Refer to "Adjusting Cropping Frames (ScanGear)" for details on cropping frames.
Output Settings allows you to set the following items:

- **Output Resolution**
  Select the resolution to scan at.
  The higher the resolution (value), the more detail in your image.
  Select a resolution from the options displayed by clicking the button, or enter a value within the range of 25 dpi to 19200 dpi (in 1 dpi increments).
  Refer to "Resolution" for your model from Home of the Online Manual for details.

- **Output Size**
  Select an output size.
  Select **Flexible** to set custom sizes or select a size for printing or displaying.
  Select **Add/Delete...** to set custom size and save it as a new output size option.

  - **Flexible**
    You can specify the output resolution and scale, and adjust the cropping frames (scan areas).

  **In thumbnail view**
  Drag the mouse over a thumbnail to display a cropping frame. When a cropping frame is displayed, the portion within the cropping frame will be scanned. When no cropping frame is displayed, each frame is scanned individually.

  **In whole image view**
  When no cropping frame is displayed, the entire Preview area will be scanned. When a cropping frame is displayed, the portion within the cropping frame will be scanned.
**Note**

- To enlarge/reduce the scanned image, enter values into (Width) and (Height) in **Output Settings** or specify a value (by 1 %) for %. Although the maximum value available for % depends on the **Output Resolution**, it can be specified for up to 19200 dpi (the maximum available output resolution).

- **Paper Size (L, A4, etc.) & Monitor Size (1024 x 768 pixels, etc.)**

  (Width), (Height), and scale cannot be specified. The preview image will be cropped according to the selected output size and resolution. The portion within the cropping frame will be scanned at the size of the selected paper/monitor size. You can drag the cropping frame to enlarge, reduce, or move it while maintaining the aspect ratio.

- **Add/Delete...**

  Opens the **Add/Delete the Output Size** dialog box, in which you can specify custom output sizes.

  In the **Add/Delete the Output Size** dialog box, you can specify multiple output sizes and save them at one time. Saved items will be registered to the **Output Size** list and can be selected, along with the predefined items.

  **Add**

  To add a size, select **Print** or **Image display** for **Destination**, then enter **Output Size Name**, **Width**, and **Height** then click **Add**. For **Unit**, you can select **inches** or **mm** when **Destination** is **Print** but you can only select **pixels** when **Destination** is **Image display**. The name of the added size appears in **Output Size List**. Click **Save** to save the items listed in **Output Size List**.

  **Delete**

  To delete an item, select it in **Output Size List** and click **Delete**. Click **Save** to save the items listed in **Output Size List**.

  **Important**

  - You cannot delete predefined output sizes such as **A4** and **1024 x 768 pixels**.
### Note

- Save up to 10 items for each destination.
- An error message appears when you enter a value outside the setting range. Enter a value within the range displayed in the message.

### Note

- Refer to "Adjusting Cropping Frames (ScanGear)" for details on cropping frames.
- For details on whether or how the cropping frame is initially displayed on a preview image, refer to **Cropping Frame on Previewed Images** in "Preview Tab" (Preferences dialog box).

<table>
<thead>
<tr>
<th>• (Switch Aspect Ratio)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available when Output Size is set to anything but Flexible.</td>
</tr>
<tr>
<td>Click this button to rotate the cropping frame. Click again to return it to the original orientation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>• Data Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>The data size when scanned with the current settings is displayed.</td>
</tr>
</tbody>
</table>

### Note

- When the data size exceeds a certain size, the value appears in red. In that case, a warning message appears when you click Scan. It is recommended that you adjust the settings to reduce Data Size. To continue, scan in whole image view.
Image Settings

Important

- Do not apply these functions to images without moire, dust/scratches, or faded colors. The color tone may be adversely affected.
- Image correction results may not be reflected in the preview image.

Note

- Selectable settings depend on Color Mode settings.
- Scanning may take longer than usual when you use Image Settings.

Image Settings allows you to set the following items:

• Image Adjustment

  When Image Adjustment is set, the brightness of the specified portion of the image is optimized. Images can be adjusted according to the automatically detected document type or the specified document type. The result of the adjustment will be reflected in the entire image.

  • None
    Image Adjustment will not be applied.

  • Auto
    Applies Image Adjustment by automatically detecting the document type. It is recommended that you normally select this setting.

  • Photo
    Applies Image Adjustment suitable for photos.
• **Magazine**
  Applies Image Adjustment suitable for magazines.

• **Document**
  Applies Image Adjustment suitable for text documents.

### Important
- You can set **Image Adjustment** after preview.
- You can set this setting when **Recommended** is selected on the **Color Settings** tab of the **Preferences** dialog box.

### Note
- If the image is not adjusted properly with **Auto**, specify the document type.
- The color tone may change from the source image due to the Image Adjustment. In that case, set **Image Adjustment** to **None**.

• **Reduce Show-through**
  Use this function to reduce show-through in duplex documents or lighten the base color in recycled paper and other colored paper when scanning documents.

  • **OFF**
    Show-through will not be reduced.

  • **ON**
    Select this to reduce show-through in duplex documents or lighten the base color. It is recommended that you normally select this setting.

### Important
- **Reduce Show-through** can be set when **Recommended** is selected on the **Color Settings** tab of the **Preferences** dialog box and **Document** or **Magazine** is selected for **Image Adjustment**.

• **Unsharp Mask**
  Emphasizes the outline of the subjects to sharpen the image when scanning photos.

  • **OFF**
    Unsharp Mask will not be applied.

  • **ON**
    Emphasizes the outline of the subjects to sharpen the image. It is recommended that you normally select this setting.

• **Descreen**
  Printed photos and pictures are displayed as a collection of fine dots. "Moire" is a phenomenon where uneven gradation or a stripe pattern appears when such photos or
pictures printed with fine dots are scanned. **Descreen** is the function for reducing this moire effect.

- **OFF**
  Moire will not be reduced.

- **ON**
  Reduces moire. It is recommended that you normally select this setting.

**Note**

Even if **Descreen** is set to **ON**, some moire effects may remain if **Unsharp Mask** is set to **ON**. In that case, set **Unsharp Mask** to **OFF**.

- **Reduce Dust and Scratches**
  Scanned photos may contain white dots caused by dust or scratches. Use this function to reduce such noise.

- **None**
  Dust and scratches will not be reduced.

- **Low**
  Select this to reduce small dust particles and scratches. Large ones may remain.

- **Medium**
  It is recommended that you normally select this setting.

- **High**
  Select this to reduce large dust particles and scratches; however, evidence of the reduction process may remain or delicate parts of the image may be removed.

**Important**

This function may not be effective for some types of photos.

**Note**

It is recommended that you select **None** when scanning printed materials.

- **Fading Correction**
  Use this function to correct photos that have faded with time or have a colorcast. "Colorcast" is a phenomenon where a specific color affects the entire picture due to the weather or ambient strong colors.

- **None**
  Fading Correction will not be applied.

- **Low**
Select this to correct a small amount of fading and colorcast.

- **Medium**
  It is recommended that you normally select this setting.

- **High**
  Select this to correct a large amount of fading and colorcast. This can affect the tone of the image.

---

**Important**

- You can set **Fading Correction** after preview.
- You can set this setting when **Recommended** is selected on the **Color Settings** tab of the **Preferences** dialog box.
- Correction may not be applied properly if the scan area is too small.

---

**Grain Correction**

Use this function to reduce graininess (roughness) in photos taken with high-speed or sensitized film.

- **None**
  Graininess will not be reduced.

- **Low**
  Select this when the photo is slightly grainy.

- **Medium**
  It is recommended that you normally select this setting.

- **High**
  Select this when the photo is very grainy. This can affect the gradation and sharpness of the image.

---

**Important**

- Correction may not be applied properly if the scan area is too small.

---

**Gutter Shadow Correction**

Use this function to correct shadows that appear between pages when scanning open booklets.

When you set the **Gutter Shadow Correction** setting in the preview image, the result will be reflected. Preview the effects before scanning, as results vary depending on the type of document and how it is pressed.

Unclear or blurred text/lines caused by curved pages are not corrected.

- **None**
  Gutter shadow will not be corrected.
• **Low**
  Select this when the effect level is too strong with the medium setting.

• **Medium**
  It is recommended that you normally select this setting.

• **High**
  Select this when the effect level is too weak with the medium setting.

**Important**

- Do not place objects that weigh 4.4 lbs (2.0 kg) or more on the Platen. Also, do not press on the document with a force exceeding 4.4 lbs (2.0 kg). If you press heavily, the scanner may not work correctly or you might break the glass.

- Align the document with the edge of the Platen. If not, the shadow will not be corrected properly.

- Shadows may not be corrected properly depending on the document. If the page background is not white, shadows may not be detected correctly or may not be detected at all.

- While scanning, press down on the spine with the same amount of pressure you used to preview the scan. If the binding part is not even, the shadow will not be corrected properly.

- How to place the document depends on your model and the document to be scanned.
Note

- Cover the document with black cloth if white spots, streaks, or colored patterns appear in scan results due to ambient light entering between the document and the Platen.
- If the shadow is not corrected properly, adjust the cropping frame (scan area) on the preview image.

Adjusting Cropping Frames (ScanGear)
Color Adjustment Buttons

The Color Adjustment Buttons allow you to make fine corrections to the image brightness and color tones including adjustments to the image’s overall brightness or contrast and adjustments to its highlight and shadow values (histogram) or balance (tone curve).

Important

- The Color Adjustment Buttons are not available when you select Color Matching on the Color Settings tab of the Preferences dialog box.

Note

- Selectable settings depend on Color Mode settings.
- When you adjust the image via the Color Adjustment Buttons, the results will be reflected in the preview image.

Click a Color Adjustment Button to set the following items:

- 🌈 (Saturation/Color Balance)
  Adjust the saturation (vividness) and color tone of the image. Use this function to brighten colors that have faded with time or due to colorcast. "Colorcast" is a phenomenon where a specific color affects the entire picture due to the weather or ambient strong colors.
  ➤ Adjusting Saturation and Color Balance

- 🌴 (Brightness/Contrast)
  Adjust the brightness and contrast of the image. If the image is too dark or too bright, or if the image quality is flat due to lack of contrast, you can adjust the levels of brightness and contrast.
Adjusting Brightness and Contrast

- **(Histogram)**
  A histogram allows you to see the data concentration at each brightness level of an image. You can specify the brightest level (highlight) and darkest level (shadow) within an image, cut the levels and expand the middle of the tonal range of the image.

- **(Tone Curve Settings)**
  Adjust the brightness of an image by selecting the type of graph (tone curve) showing the balance of tone input and output. You can make fine adjustments to the brightness of a specific area.

- **(Final Review)**
  Make a final check of color adjustments. The final synthesized tone curve and the histogram derived from the subsequent image processing will be displayed. There are no settings to make in this screen.

  ![Final Review]

  - For a color image, select a color in **Channel** to check either **Red**, **Green**, or **Blue**, or select **Master** to check three colors together.

  - If you place the cursor on the preview image, the portion will be enlarged and its RGB values (only L when **Color Mode** is **Grayscale**) before and after the adjustments will be displayed.

- **(Threshold)**
  Set the boundary (threshold) at which black and white are divided. By adjusting the threshold level, you can sharpen text in a document or reduce show-through in newspapers.

  ![Threshold]
• **Custom**

You can name and save a set of tone curve and threshold settings of the Color Adjustment Buttons.
Select **Add/Delete...** from the pull-down menu; when **Color Mode** is set to anything but **Black and White**, the **Add/Delete Tone Curve Settings** dialog box opens; when **Color Mode** is **Black and White**, the **Add/Delete Threshold Settings** dialog box opens.

![Add/Delete Tone Curve Settings dialog box](image)

Enter **Setting Name** and click **Add**; the name appears in **Tone Curve Settings List** or **Threshold Settings List**. Click **Save** to save.
To delete an item, select it in **Tone Curve Settings List** or **Threshold Settings List** and click **Delete**. Click **Save** to save the settings displayed in **Tone Curve Settings List** or **Threshold Settings List**.
You can load and apply the saved tone curve/threshold settings to a preview image. To load the settings, select the saved item from the pull-down menu.

**Note**

- Save up to 20 items.

• **Defaults**

Reset all adjustments (saturation/color balance, brightness/contrast, histogram, and tone curve).
Preferences Dialog Box

Click **Preferences**... in the ScanGear (scanner driver) screen to open the **Preferences** dialog box.

In the **Preferences** dialog box, you can make advanced settings to ScanGear functions via the **Scanner**, **Preview**, **Scan**, and **Color Settings** tabs.

**Scanner Tab**
Allows you to set the quiet mode, auto power settings, folder in which to save images temporarily, and music file to play during or at the end of a scan.

**Preview Tab**
Allows you to select what to do with Preview when ScanGear is started, how to display cropping frames after previewing images, and the cropping size for thumbnails of scanned documents.

**Scan Tab**
Allows you to select what to do with ScanGear after scanning image.

**Color Settings Tab**
Allows you to select how to adjust color, and specify the monitor gamma value.
Scanner Tab

On the **Scanner** tab, you can specify the following settings.

![Image of Scanner Tab Settings]

- **Auto Power Settings**
  You can set to turn the machine on or off automatically.
  Click **Settings**... to display the **Auto Power Settings** dialog box.

  ![Auto Power Settings Dialog]

  **Note**

  - If the machine is off or bi-directional communication is disabled, a message may appear because the computer cannot collect the machine status. In that case, click **OK** to exit ScanGear (scanner driver).

- **Auto Power On**
  Select **Enable** to turn on the machine automatically when data is received.

- **Auto Power Off**
  Specify the amount of time you want to set from the list. When this time lapses without any data being received, the machine turns off automatically.

- **Quiet Settings**
  The silent function allows you to reduce the operating noise of this machine. Use this when you wish to reduce the operating noise such as when scanning or printing at night.
Click **Settings...** to set the quiet mode.

**Note**

- You can set the quiet mode from the operation panel of the machine, the printer driver, or ScanGear.
  
  No matter how the setting is made, it applies to operations from the operation panel of the machine or when printing/scanning from a computer, etc.

- Scanning or printing may take longer than usual when this function is used.

![Quiet Settings](image)

- **Do not use quiet mode**
  
  Select this option when you wish to use the machine with volume of normal operating noise.

- **Always use quiet mode**
  
  Select this option when you wish to reduce the operating noise of the machine.

- **Use quiet mode during specified hours**
  
  Select this option when you wish to reduce the operating noise of the machine during a specified period of time.

  Set the **Start time** and **End time** during which quiet mode is to be activated.

**Important**

- The time specified in **Start time** and in **End time** must be different.

- When the hours are specified, quiet mode is not applied to operations (copy, direct print, etc.) performed directly from the printer.

- **Select Folder Where Temporary Files are Saved**
  
  Displays the folder in which to save images temporarily. To change the folder, click **Browse...** to specify another one.

- **Sound Settings**
  
  You can set the machine to play music during/at the end of a scan.

  Select the **Play Music During Scanning** or **Play Sound When Scanning is Completed** checkbox, then click **Browse...** and specify a sound file.

  You can specify the following files.

  - MIDI file (*.mid, *.rmi, *.midi)
• Calibration Settings

When you set **Execute at Every Scan** to **ON**, the scanner will be calibrated every time before previewing and scanning, to reproduce correct color tones in scanned images.

---

**Note**

- Even when **Execute at Every Scan** is set to **OFF**, the scanner may be calibrated automatically in some cases (such as immediately after you turn the machine on).
- Calibration may take time depending on your computer.
Preview Tab

On the Preview tab, you can specify the following settings.

- **Preview at Start of ScanGear**
  Select what to do with Preview when ScanGear (scanner driver) is started.
  - **Automatically Execute Preview**
    ScanGear will automatically start previewing at startup.
  - **Display Saved Preview Image**
    The previously saved preview image will be displayed. The Color Adjustment Button settings, the Toolbar settings, and the Advanced Mode tab settings are also saved.
  - **None**
    No preview image will be displayed at startup.

  **Note**
  - Select **None** if you do not want to save the preview image.

- **Cropping Frame on Previewed Images**
  Select how to display cropping frames after previewing images.
  - **Execute Auto Cropping on Previewed Images**
    The cropping frame (scan area) will automatically be displayed in the document size after previewing.
  - **Display the Last Frame on Previewed Images**
A cropping frame of the same size as the last used cropping frame will be displayed after previewing.

- **None**
  No cropping frame will be displayed after previewing.

- **Cropping Size for Thumbnail View**
  Select the cropping size for thumbnails of scanned documents.

  - **Larger**
    Displays 105 % (in width and height) of the area displayed for the standard size.

  - **Standard**
    The standard size.

  - **Smaller**
    Displays 95 % (in width and height) of the area displayed for the standard size.

**Note**

- When you change the **Cropping Size for Thumbnail View** setting, the preview images will be refreshed and cropped to the new size. As the preview images are refreshed, the color adjustments and other settings applied to them are reset.
Scan Tab

On the Scan tab, you can specify the following settings.

- **Status of ScanGear dialog after scanning**
  Select what to do with ScanGear (scanner driver) after scanning images.
  - **Close ScanGear automatically**
    Select this to return to the original application when scanning is completed.
  - **Do not close ScanGear automatically**
    Select this to return to the ScanGear screen for another scan when scanning is completed.
  - **Display the dialog to select next action**
    Select this to open a screen and select what to do when scanning is completed.

- **Note**
  - Even if Do not close ScanGear automatically or Display the dialog to select next action is set, some applications may not support it.
Color Settings Tab

On the **Color Settings** tab, you can specify the following settings.

- **Color Adjustment**
  Select one of the following. You can select one when **Color Mode** is **Color** or **Grayscale**.
  - **Recommended**
    Select this to vividly reproduce the tone of a document on the screen. It is recommended that you normally select this setting.
  - **Color Matching**
    Select this to automatically match the scanner, monitor, and color printer colors, thus reducing time and trouble to manually match the monitor and printer colors. Color Adjustment Buttons will be disabled. This function is available when **Color Mode** is **Color**.
    - **Source(Scanner)**: Select scanner profile.
    - **Target**: Select target profile.
    - **Monitor**: Select this checkbox to display preview image with optimum correction for monitor.
    - **Defaults**: Returns to the default **Color Matching** settings.
  - **None**
    Select this to disable color correction provided by ScanGear (scanner driver).
Note

- Color Matching is available when ScanGear, monitor, color management-compliant application (such as Adobe Photoshop), and printer are set up correctly. Refer to the corresponding manual for the monitor, printer, and application settings.

• Monitor Gamma

By setting the gamma value of a monitor, you can adjust the input data to the brightness characteristics of the monitor. Adjust the value if your monitor’s gamma value does not match the default value set in ScanGear, and the colors of the original image are not accurately reflected in the monitor. Click **Defaults** to return to the default Monitor Gamma value (2.20).

Note

- Refer to the manual of your monitor to check its gamma value. If it is not written in the manual, contact the manufacturer.
Placing Items (When Scanning from a Computer)

Learn how to place items on the platen of your scanner or printer. Place items correctly according to the type of item to be scanned. Otherwise, items may not be scanned correctly.

**Important**
- Do not place objects on the document cover. When you open the document cover, the objects may fall into your scanner or printer, resulting in malfunction.
- Close the document cover when scanning.

Placing Items

Place items as described below to scan by detecting the item type or size automatically.

**Important**
- When scanning by specifying the paper size in IJ Scan Utility or ScanGear (scanner driver), align an upper corner of the item with the corner at the arrow (alignment mark) of the platen.
- Photos that have been cut to various shapes and items smaller than 1.2 inches (3 cm) square cannot be cropped accurately when scanning.
- Reflective disc labels may not be scanned as expected.

<table>
<thead>
<tr>
<th>For Photos, Postcards, Business Cards, or BD/DVD/CD</th>
<th>For Magazines, Newspapers, or Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Images" /> <img src="image2.png" alt="Images" /> <img src="image3.png" alt="Images" /> <img src="image4.png" alt="Images" /></td>
<td><img src="image5.png" alt="Images" /> <img src="image6.png" alt="Images" /> <img src="image7.png" alt="Images" /> <img src="image8.png" alt="Images" /></td>
</tr>
</tbody>
</table>

**Placing a Single Item**

Place the item face-down on the platen, with 0.4 inch (1 cm) or more space between the edges (diagonally striped area) of the platen and the item. Portions placed on the diagonally striped area cannot be scanned.

Place the item face-down on the platen and align an upper corner of the item with the corner at the arrow (alignment mark) of the platen. Portions placed on the diagonally striped area cannot be scanned.
**Important**

- Large items (such as A4 size photos) that cannot be placed away from the edges/arrow (alignment mark) of the platen may be saved as PDF files. To save in a format other than PDF, scan by specifying the data format.

**Placing Multiple Items**

Allow 0.4 inch (1 cm) or more space between the edges (diagonally striped area) of the platen and items, and between items. Portions placed on the diagonally striped area cannot be scanned.

(A) more than 0.4 inch (1 cm)

**Note**

- You can place up to 12 items.
- Positions of slanted items (10 degrees or less) are corrected automatically.

**Important**

- Refer to "Loading Originals" for your model from Home of the *Online Manual* for details on the portions in which items cannot be scanned.
Adjusting Cropping Frames (ScanGear)

"Cropping" is the act of selecting the area you want to keep in an image and discarding the rest when scanning it.

On the **Basic Mode** tab and **Advanced Mode** tab, you can specify cropping frames (scan areas) on the image(s) displayed in the Preview area of the screen.

When you perform a scan, each area specified with a cropping frame will be scanned as a separate image.

**Note**

- In whole image view, you can specify multiple cropping frames on the preview image.
- Refer to "Adjusting Cropping Frames in the Image Stitch Window" for your model from Home of the *Online Manual* for how to adjust cropping frames with IJ Scan Utility.

**Initial Cropping Frame**

**In thumbnail view**

No cropping frame is specified. You can drag the mouse over a thumbnail to specify a cropping frame.

**In whole image view**

An active cropping frame is automatically specified around the preview image. You can drag the cropping frame in the Preview area to specify the area.

**Note**

- You can change the auto crop setting in the **Preferences** dialog box. Refer to **Cropping Frame on Previewed Images** in "Preview Tab" for details.

**Cropping Frame Types**

(1) Thick cropping frame (rotating or stationary)

Represents a selected cropping frame. Appears only in whole image view. You can select multiple cropping frames by clicking them while pressing the Ctrl key. Output size, image corrections, and other settings on the **Basic Mode** tab or **Advanced Mode** tab will be applied to all the selected cropping frames.
(2) Thin cropping frame
- In thumbnail view
  Output size, image corrections, and other settings on the **Basic Mode** tab or **Advanced Mode** tab will be applied.
- In whole image view
  Represents an unselected cropping frame. The settings on the **Basic Mode** tab or **Advanced Mode** tab will not be applied.

**Adjusting a Cropping Frame**

The cursor will change into \(\text{Arrow}\) when it is positioned over a cropping frame. If you click and drag the mouse in the direction of the arrow, the cropping frame will expand or contract accordingly.

![Image of cropping frame](image.png)

The cursor will change into \(\text{Crosshair Arrow}\) when it is positioned within a cropping frame. Click and drag the mouse to move the entire cropping frame.

![Image of cropping frame](image.png)

**Note**

- On the **Advanced Mode** tab, you can specify the cropping frame size by entering the values into \(\text{Width}\) and \(\text{Height}\) in **Input Settings**.
- You can rotate a cropping frame 90 degrees by clicking \(\text{Switch Aspect Ratio}\).
  However, \(\text{Switch Aspect Ratio}\) is not available when **Output Size** is **Flexible**.

**Creating Multiple Cropping Frames**

**In thumbnail view**

You can only create one cropping frame per image.
In whole image view

Click and drag the mouse in a space outside the existing cropping frame to create a new cropping frame in the Preview area. The new cropping frame will be the active cropping frame, and the old cropping frame will be the unselected cropping frame.

You can create multiple cropping frames and apply different scan settings to each cropping frame. You can also select multiple cropping frames by clicking them while pressing the Ctrl key. If you select multiple cropping frames and change the settings on a tab at the right of ScanGear, the settings will be applied to all the selected cropping frames. When you create a new cropping frame, it retains the settings of the latest cropping frame.

**Note**

- Create up to 12 cropping frames.
- Scanning takes longer than usual when multiple cropping frames are selected.

Deleting Cropping Frames

In thumbnail view
To delete a cropping frame, click an area outside the cropping frame on an image.

**In whole image view**

To delete a cropping frame, select it and click (Remove Cropping Frame) on the Toolbar. Alternatively, press the Delete key. When there are multiple cropping frames, all the selected cropping frames (active cropping frame and selected cropping frames) are deleted simultaneously.
General Notes (Scanner Driver)

ScanGear (scanner driver) is subject to the following restrictions. Keep these points in mind when using it.

Scanner Driver Restrictions

• When using the NTFS file system, the TWAIN data source may not be invoked. This is because the TWAIN module cannot be written to the winnt folder for security reasons. Contact the computer's administrator for help.

• Some computers (including laptops) connected to the machine may not resume correctly from standby mode. In that case, restart the computer.

• Do not connect two or more scanner or multifunction printers with scanner function to the same computer simultaneously. If multiple scanning devices are connected, you cannot scan from the operation panel of the machine and also may experience errors while accessing the devices.

• Scanning may fail if the computer has resumed from sleep or standby mode. In that case, follow these steps and scan again.
  1. Turn off the machine.
  2. Exit ScanGear, then disconnect the USB cable from the computer and reconnect it.
  3. Turn on the machine.

• ScanGear cannot be opened in multiple applications at the same time. Within an application, ScanGear cannot be opened for the second time when it is already open.

• Be sure to close the ScanGear window before closing the application.

• When using a network compatible model by connecting to a network, the machine cannot be accessed from multiple computers at the same time.

• When using a network compatible model by connecting to a network, scanning takes longer than usual.

• Make sure that you have adequate disk space available when scanning large images at high resolutions. For example, at least 300 MB of free space is required to scan an A4 document at 600 dpi in full-color.

• ScanGear and WIA driver cannot be used at the same time.

• Do not enter the computer into sleep or hibernate state during scanning.
Applications with Restrictions on Use

• If you start Media Center included in Windows XP Media Center Edition 2005, you may not be able to scan using the operation panel of the machine. In that case, restart the computer.

• You cannot scan images with Media Center included in Windows XP Media Center Edition 2005. Scan with other applications such as IJ Scan Utility.

• Some applications may not display the TWAIN user interface. In that case, refer to the application's manual and change the settings accordingly.

• Some applications do not support continuous scanning of multiple documents. In some cases, only the first scanned image is accepted, or multiple images are scanned as one image.

• To import scanned images into Microsoft Office 2000, first save them using IJ Scan Utility, then import the saved files from the Insert menu.

• When scanning Platen size images into Microsoft Office 2003 (Word, Excel, PowerPoint, etc.), click Custom Insert in the Insert Picture from Scanner or Camera screen. Otherwise, images may not be scanned correctly.

• When scanning images into Microsoft Office 2007/Microsoft Office 2010 (Word, Excel, PowerPoint, etc.), use Microsoft Clip Organizer.

• Images may not be scanned correctly in some applications. In that case, increase the operating system's virtual memory and retry.

• When image size is too large (such as when scanning large images at high resolution), your computer may not respond or the progress bar may remain at 0 % depending on the application. In that case, cancel the action (for example by clicking Cancel on the progress bar), then increase the operating system's virtual memory or reduce the image size/resolution and retry. Alternatively, scan the image via IJ Scan Utility first, then save and import it into the application.
Useful Information on Scanning

- Adjusting Cropping Frames in the Image Stitch Window
- Resolution
- Data Formats
- Color Matching
Adjusting Cropping Frames in the Image Stitch Window

"Cropping" is the act of selecting the area you want to keep in an image and discarding the rest when scanning it.

In the Image Stitch window, you can specify a cropping frame on the image displayed in the Preview area.

Note

Refer to "Adjusting Cropping Frames (ScanGear)" for your model from Home of the Online Manual for how to adjust cropping frames with ScanGear (scanner driver).

Initial Cropping Frame

No cropping frame is specified. When you select the Adjust cropping frames checkbox, an active cropping frame is automatically specified around the image in the Preview area. You can drag the cropping frame to specify the area.

When you perform a scan, the image in the area specified with the cropping frame will be scanned.

Adjusting a Cropping Frame

The cursor will change into (Arrow) when it is positioned over a cropping frame. Click and drag the mouse to expand or contract the cropping frame.

The cursor will change into (Crosshair Arrow) when it is positioned within a cropping frame. Click and drag the mouse to move the entire cropping frame.

Deleting Cropping Frames

To delete the cropping frame, deselect the Adjust cropping frames checkbox.
Resolution

The data in the image you have scanned is a collection of dots carrying information about brightness and color. The density of these dots is called "resolution", and resolution will determine the amount of detail your image contains. The unit of resolution is dots per inch (dpi). Dpi is the number of dots per inch (2.5 cm).

The higher the resolution (value), the more detail in your image; the lower the resolution (value), the less detail.

How to Set the Resolution

You can set the resolution in the following screens.

- **IJ Scan Utility**
  - Resolution on the (Scanning from a Computer) tab of the Settings dialog box
- **ScanGear (Scanner Driver)**
  - Output Resolution in Output Settings on the Advanced Mode tab

Appropriate Resolution Settings

Set the resolution according to the use of the scanned image.

<table>
<thead>
<tr>
<th>Item Type</th>
<th>Use</th>
<th>Color Mode</th>
<th>Appropriate Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color photo</td>
<td>Copying (Printing)</td>
<td>Color</td>
<td>300 dpi</td>
</tr>
<tr>
<td></td>
<td>Creating a postcard</td>
<td>Color</td>
<td>300 dpi</td>
</tr>
<tr>
<td></td>
<td>Saving to a computer</td>
<td>Color</td>
<td>300 dpi</td>
</tr>
<tr>
<td></td>
<td>Using on a website or attaching to e-mail</td>
<td>Color</td>
<td>150 dpi</td>
</tr>
<tr>
<td>Black and white photo</td>
<td>Saving to a computer</td>
<td>Grayscale</td>
<td>300 dpi</td>
</tr>
<tr>
<td></td>
<td>Using on a website or attaching to e-mail</td>
<td>Grayscale</td>
<td>150 dpi</td>
</tr>
<tr>
<td>Text document (document or magazine)</td>
<td>Copying</td>
<td>Color, Grayscale, or Black and White</td>
<td>300 dpi</td>
</tr>
<tr>
<td>Use Case</td>
<td>Color/Grayscale Options</td>
<td>Resolution (dpi)</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------------------------------------</td>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td>Attaching to e-mail</td>
<td>Color, Grayscale, or Black and White</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Scanning text using OCR</td>
<td>Color or Grayscale</td>
<td>300</td>
<td></td>
</tr>
</tbody>
</table>

**Important**

- If you double the resolution, the data size of the scanned image quadruples. If the file is too large, the processing speed will slow down significantly, and you will experience inconvenience such as lack of memory. Set the minimum required resolution according to the use of the image.

**Note**

- When you will be printing the scanned image by enlarging it, scan by setting a higher resolution than the recommended one above.
Data Formats

You can select a data format when saving scanned images. You should specify the most suitable data format according to how you want to use the image on which application. Available data formats vary by application and operating system (Windows or Mac OS).

See below for the characteristics of each image data format.

PNG (Standard File Extension: .png)
A data format often used on websites.
PNG is suitable for editing saved images.

JPEG (Standard File Extension: .jpg)
A data format often used on websites and for digital camera images.
JPEG features high compression rates. JPEG images slightly degrade every time they are saved, and cannot be returned to their original state.
JPEG is not available for black and white images.

TIFF (Standard File Extension: .tif)
A data format featuring a relatively high compatibility between various computers and applications.
TIFF is suitable for editing saved images.

Note
- Some TIFF files are incompatible.
- IJ Scan Utility supports the following TIFF file formats.
  - Uncompressed, black and white binary
  - Uncompressed, RGB (8 bits per channel)
  - Uncompressed, Grayscale

PDF (Standard File Extension: .pdf)
A data format for electronic documents, developed by Adobe Systems Incorporated.
It can be used on various computers and operating systems, and fonts can be embedded as well; therefore, people in different environments can exchange the files without being aware of the differences.
Color Matching

"Color Matching" is the act of making adjustments so that the color tones match between the original item, the monitor display, and the color printout. On your scanner or printer, the color tones are adjusted as shown below.

Example: When sRGB is selected as the output profile (target)

Input Profile (Source)

Scanner

ScanGear (Scanner Driver)

Output Profile (Target)

sRGB

OS
Application

Application Driver

Monitor
Printer

The image's color space is converted from the scanner's color space to sRGB by ScanGear.

When displaying on a monitor, the image's color space is converted from sRGB to the monitor's color space based on the operating system's monitor settings and the application's working space settings.

When printing, the image's color space is converted from sRGB to the printer's color space based on the application's print settings and the printer driver's settings.
Other Scanning Methods

- Scanning with WIA Driver
- Scanning Using the Control Panel (Windows XP Only)
Scanning with WIA Driver

You can scan an item from a WIA (Windows Image Acquisition)-compliant application. WIA is a driver model implemented in Windows XP or later. It allows you to scan items without using an application.

The procedure varies depending on the application. The following procedures are examples only.

Refer to the application's manual for details.

Scanning with WIA Driver 2.0

The following is an example of scanning using "Windows Fax and Scan."

1. Place the item on the platen.
   ➤ Placing Items (When Scanning from a Computer)

2. Select New on the File menu of "Windows Fax and Scan," then click Scan....
   The scan setting screen appears.

3. Specify the settings.
   • Scanners
     The currently set product name is displayed. To change the scanner, click Change... and select the product you want to use.
   • Profile
     Select Photo (Default) or Documents according to the item to be scanned. To save a new Profile, select Add profile.... You can specify the details in the Add New Profile dialog box.
   • Source
     Select a scanner type.
   • Paper size
     This setting is not available for your scanner or printer.
   • Color format
     Select the color mode in which to scan the item.
   • File type
     Select a data format from JPEG, BMP, PNG, and TIFF.
• **Resolution (DPI)**
  Enter the resolution. Specify a value between 50 dpi and 600 dpi.
  ➤Resolution

• **Brightness**
  Move the slider to adjust the brightness. Move it to the left to darken and right to brighten the image. You can also enter a value (-100 to 100).

• **Contrast**
  Move the slider to adjust the contrast. Moving it to the left will decrease the contrast of the image, thus softening the image. Moving it to the right will increase the contrast of the image, thus sharpening the image. You can also enter a value (-100 to 100).

• **Preview or scan images as separate files**
  Select this checkbox to preview or scan multiple images as separate files.

4. Click **Preview** to preview the image.
   The preview image appears on the right.

5. Click **Scan**.
   When scanning is completed, the scanned image appears in the application.

**Scanning with WIA Driver 1.0**
The following is an example of scanning using "Paint."

1. Place the item on the platen.
  ➤Placing Items (When Scanning from a Computer)

2. Click **From scanner or camera** from the **File** menu of Paint. (Select the command to scan an item in the application.)

3. Select the type of picture according to the item to be scanned.
   Select from **Color picture**, **Grayscale picture**, **Black and white picture or text**, and **Custom Settings**.

   ➤**Note**
   - To scan with the values previously set in **Adjust the quality of the scanned picture**, select **Custom Settings**.
4. Click **Adjust the quality of the scanned picture** and set the preferences as required.

   • **Brightness**
     Move the slider to adjust the brightness. Move it to the left to darken and right to brighten the image. You can also enter a value (-127 to 127).

   • **Contrast**
     Move the slider to adjust the contrast. Moving it to the left will decrease the contrast of the image, thus softening the image. Moving it to the right will increase the contrast of the image, thus sharpening the image. You can also enter a value (-127 to 127).

   • **Resolution (DPI)**
     Enter the resolution. Specify a value between 50 dpi and 600 dpi.

5. Click **Preview** to preview the image.
   The preview image appears on the right. Drag □ to specify the scan area.

6. Click **Scan**.
   When scanning is completed, the scanned image appears in the application.
Scanning Using the Control Panel (Windows XP Only)

You can scan images via the Control Panel of Windows XP using the WIA driver.

1. From the Start menu, select Control Panel.

2. Click Printers and Other Hardware > Scanners and Cameras, then double-click Canon XXX series (where "XXX" is the model name). The Scanner and Camera Wizard dialog box appears.

3. Click Next.

4. Select Picture type according to the item to be scanned.

   ![Scanner and Camera Wizard dialog box]

   **Note**

   To scan with the values previously set in Custom settings, select Custom.

5. Click Custom settings to set the preferences as required.

   ![Custom settings settings]

   • Brightness
Move the slider to adjust the brightness. Move it to the left to darken and right to brighten the image. You can also enter a value (-127 to 127).

- **Contrast**
  Move the slider to adjust the contrast. Moving it to the left will decrease the contrast of the image, thus softening the image. Moving it to the right will increase the contrast of the image, thus sharpening the image. You can also enter a value (-127 to 127).

- **Resolution (DPI)**
  Enter the resolution. Specify a value between 50 dpi and 600 dpi.
  ➡️Resolution

- **Picture type**
  Select the type of scan you want for your item.

- **Reset**
  Click to restore the original settings.

6. Click **Preview** to preview the image.
   The preview image appears on the right. Drag to specify the scan area.

7. Click **Next** and follow the instructions.
Placing Items (When Scanning from a Computer)

Learn how to place items on the platen of your scanner or printer. Place items correctly according to the type of item to be scanned. Otherwise, items may not be scanned correctly.

**Important**

- Do not place objects on the document cover. When you open the document cover, the objects may fall into your scanner or printer, resulting in malfunction.
- Close the document cover when scanning.

Placing Items

Place items as described below to scan by detecting the item type or size automatically.

**Important**

- When scanning by specifying the paper size in IJ Scan Utility or ScanGear (scanner driver), align an upper corner of the item with the corner at the arrow (alignment mark) of the platen.
- Photos that have been cut to various shapes and items smaller than 1.2 inches (3 cm) square cannot be cropped accurately when scanning.
- Reflective disc labels may not be scanned as expected.

<table>
<thead>
<tr>
<th>For Photos, Postcards, Business Cards, or BD/DVD/CD</th>
<th>For Magazines, Newspapers, or Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Photo" /> <img src="image" alt="Postcard" /> <img src="image" alt="Business Card" /> <img src="image" alt="Disc" /></td>
<td><img src="image" alt="Magazine" /> <img src="image" alt="Newspaper" /> <img src="image" alt="Document" /></td>
</tr>
</tbody>
</table>

**Placing a Single Item**

Place the item face-down on the platen, with 0.4 inch (1 cm) or more space between the edges (diagonally striped area) of the platen and the item. Portions placed on the diagonally striped area cannot be scanned.

Place the item face-down on the platen and align an upper corner of the item with the corner at the arrow (alignment mark) of the platen. Portions placed on the diagonally striped area cannot be scanned.
Important

- Large items (such as A4 size photos) that cannot be placed away from the edges/arrow (alignment mark) of the platen may be saved as PDF files. To save in a format other than PDF, scan by specifying the data format.

Placing Multiple Items

Allow 0.4 inch (1 cm) or more space between the edges (diagonally striped area) of the platen and items, and between items. Portions placed on the diagonally striped area cannot be scanned.

(A) more than 0.4 inch (1 cm)

Note

- You can place up to 12 items.
- Positions of slanted items (10 degrees or less) are corrected automatically.

Important

- Refer to "Loading Originals" for your model from Home of the Online Manual for details on the portions in which items cannot be scanned.