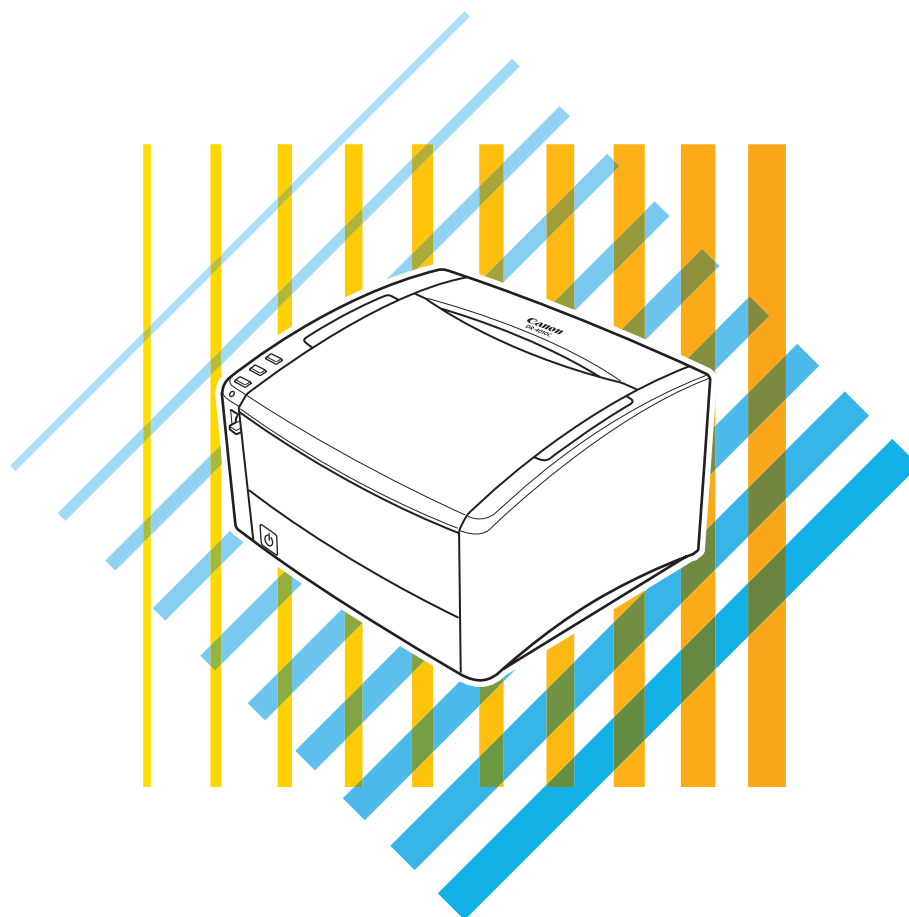




Document Scanner DR-4010C

User Manual



Please read this manual before operating this scanner.
After you finish reading this manual, store it in a safe
place for future reference.

International ENERGY STAR Program



As an ENERGY STAR[®] Partner, Canon Electronics Inc., has determined that this machine meets the ENERGY STAR[®] Program guidelines for energy efficiency.

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INTRODUCTION

Thank you for purchasing the Canon DR-4010C Document Scanner. Please read this manual thoroughly before using the scanner to familiarize yourself with its capabilities, and to make the most of its many functions. After reading this manual, store it in a safe place for future reference.

Manuals for the Scanner

The User Manual is divided into two sections: Hardware and Software. The Hardware section contains general information and instructions for using the scanner. The Software section explains how to make settings for the software required to use the scanner.

Hardware

[Chapter 1 Before Using the Scanner](#)

Safety instructions, features, scanner parts

[Chapter 2 Setup](#)

Scanner operation environment and setup procedures

[Chapter 3 Basic Operation](#)

Supported document types, basic scanning procedure, steps for clearing a paper jam

[Chapter 4 Maintenance](#)

Procedures for regular maintenance, roller replacement

[Chapter 5 Troubleshooting](#)

Troubleshooting information, application uninstall procedure

[Chapter 6 Appendix](#)

Product specifications and dimensional drawings

Software

[Chapter 7 ISIS/TWAIN Driver Settings](#)

ISIS/TWAIN driver settings

[Chapter 8 Job Registration Tool Settings](#)

Job Registration Tool settings

[Chapter 9 Practical Examples](#)

Hints and additional information about ISIS/TWAIN driver settings

Symbols Used in This Manual

The following symbols are used in this manual to explain procedures, restrictions, handling precautions, and instructions that should be observed for safety.



WARNING

Indicates a warning concerning operations that may lead to death or injury to persons if not performed correctly. To use the machine safely, always pay attention to these warnings.



CAUTION

Indicates a caution concerning operations that may lead to injury to persons, or damage to property if not performed correctly. To use the machine safely, always pay attention to these cautions.



IMPORTANT

Indicates operational requirements and restrictions. Be sure to read these items carefully to operate the machine correctly, and avoid damage to the machine.



Note

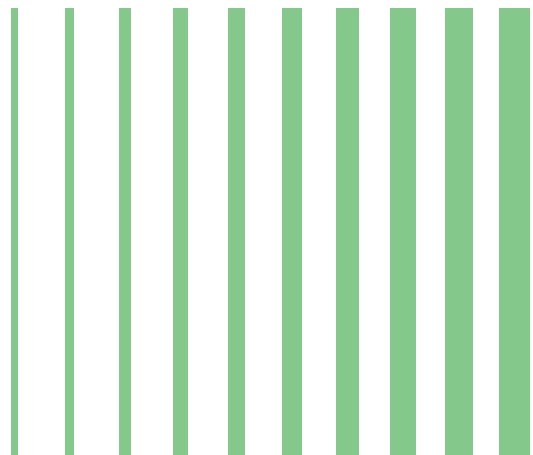
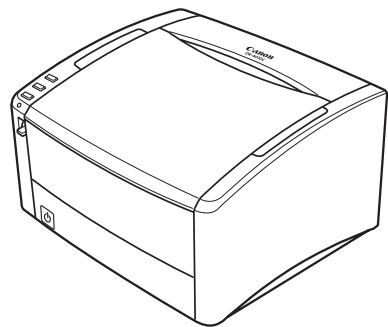
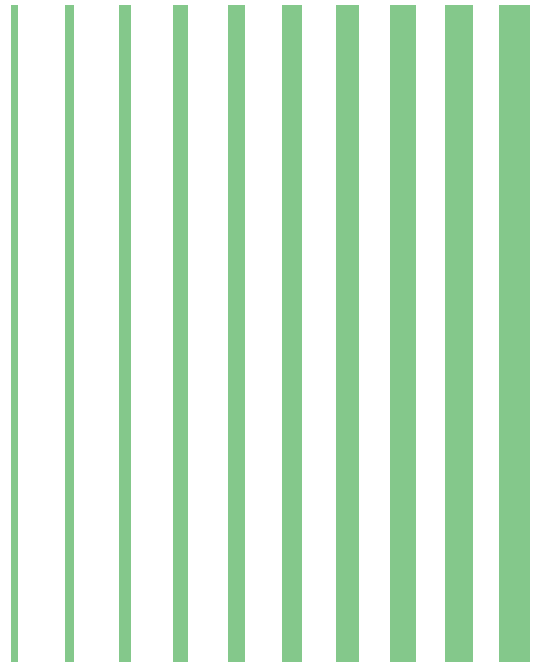
Indicates a clarification of an operation, or contains additional explanations for a procedure. Reading these notes is highly recommended.

(See “Documents,” on p. 3-1)

Shows the page number and title of a section that contains related information. Click to go to the indicated page.

Document Scanner DR-4010C

User Manual Hardware



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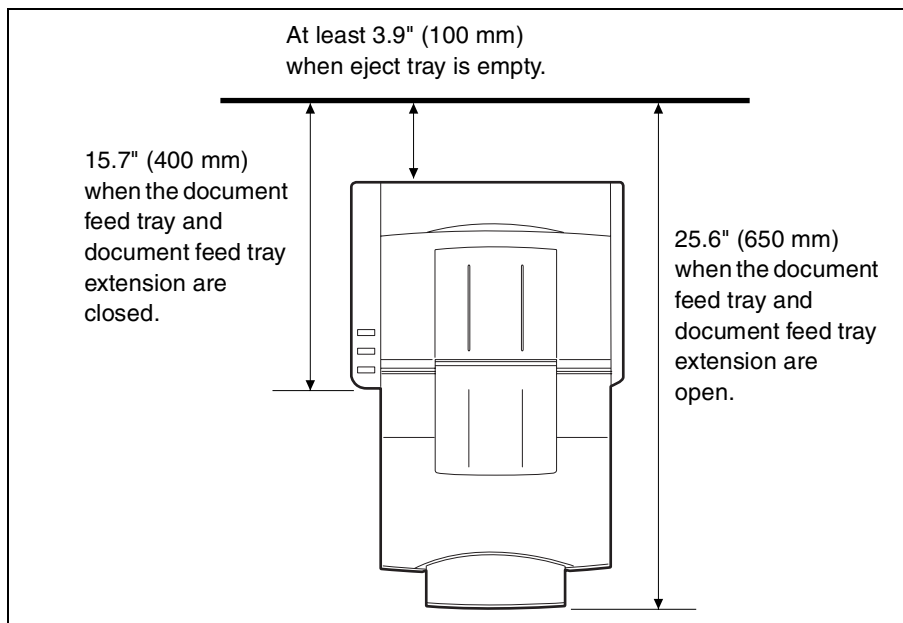
1-1 Important Safety Instructions

To ensure the safe operation of this scanner, be sure to read the safety warnings and precautions described below.

Installation Location

The performance of this scanner is affected by the environment in which it is installed. Make sure that the location where the scanner is installed meets the following environmental requirements.

- Provide adequate space around the scanner for operation, maintenance, and ventilation.



- If scanned documents are ejected to the back tray of the scanner, provide adequate space behind the scanner for documents ejected after being scanned. (See [“Preparing the Document Eject Tray,”](#) on p. 3-3.)
- Avoid installing the machine in direct sunlight. If this is unavoidable, use curtains to shade the scanner.
- Avoid locations where a considerable amount of dust accumulates.
- Avoid warm or humid locations, such as in the vicinity of a water faucet, water heater, or humidifier.
- Avoid locations where ammonia gas is emitted.
- Avoid locations near volatile or flammable materials, such as alcohol or paint thinner.
- Avoid locations that are subject to vibration.

- Avoid exposing the scanner to rapid changes in temperature. If the room in which the scanner is installed is cold but rapidly heated, water droplets (condensation) may form inside the scanner. This may result in a noticeable degradation in scanning quality.

The following conditions are recommended for optimal scanning quality:

Room temperature: 10 °C to 32.5 °C (50 °F to 90.5 °F)

Humidity: 20% to 80% RH

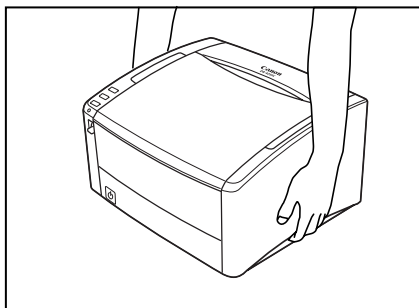
- Avoid installing the scanner near equipment that generates a magnetic field (e.g. speakers, televisions, or radios.)

Power

- Connect only to a power outlet of the rated voltage and power supply frequency. (120 V, 60 Hz or 220-240 V, 50/60 Hz depending on your region)
- Do not use a power supply that is not rated for the specified voltage. Doing so might cause a fire or electric shock.
- Do not connect other electrical equipment to the same power outlet to which the scanner is connected. Also, when using an extension cord, make sure that the extension cord is rated for the current requirements of the scanner.
- The power cord may become damaged if it is often stepped on or if heavy objects are placed on it. Continued use of a damaged power cord can lead to an accident, such as a fire or electrical shock.
- Do not use the power cord while it is coiled.
- Do not pull directly on the power cord. When disconnecting the power cord, grasp the plug and remove it from the outlet.
- Keep the area around the power plug clear of objects so that the power cord can be disconnected easily in an emergency.
- If you have any questions regarding the power supply, contact your local authorized Canon dealer or service representative for further information.

Moving the Scanner

- When moving the scanner, always hold it with both hands to avoid dropping it. The scanner weighs approximately 14.1 lb (6.4 kg).



CAUTION

Make sure to disconnect the interface cable and power cord when moving the scanner. If the scanner is transported with these items plugged in, the plugs and connectors may be damaged.

Handling



WARNING

Note the following precautions whenever using the scanner. Failure to do so may result in a fire or electric shock.

- Never use alcohol, benzene, paint thinner, aerosol sprays, or any other highly flammable substance near the scanner.
- Do not cut, damage, or modify the power cord. Do not place heavy objects on the power cord, and do not pull or excessively bend the power cord.
- Never connect the power cord when your hands are wet.
- Do not connect the scanner to a multi plug power strip.
- Do not knot or coil the power cord as this may result in a fire or electric shock. When connecting the power cord, make sure that the power plug is securely and completely inserted into the power outlet.
- Do not use power cords other than the power cord provided with this scanner.
- Never try to take the scanner apart or modify it in any way, as this is dangerous and may lead to a fire or electric shock.
- When cleaning the scanner, turn the power switch OFF and disconnect the power cord from the power supply.
- Clean the scanner using a slightly dampened cloth which has been well wrung out. Never use alcohol, benzene, paint thinner, or any other flammable substances.
- If the scanner makes strange noises, or gives off smoke, heat, or strange odors, or the scanner does not function or other abnormalities occur when you use the machine, immediately turn the power switch OFF, and disconnect the power plug from the power outlet. Then, contact your local authorized Canon dealer or the service representative for further information.
- Do not drop the scanner, or subject it to impact or strong shock. Should the scanner ever become damaged, immediately turn the power switch OFF, and disconnect the power plug from the power outlet. Then, contact your local authorized Canon dealer or service representative to have the unit serviced.
- Before moving the scanner, be sure to turn the power switch OFF, and disconnect the power plug from the power outlet.



CAUTION

- Do not install the scanner on a surface that is unstable or tilted, or in an area subject to excessive vibrations, as this may cause the scanner to fall, resulting in personal injury or damage to the scanner.
- Do not block ventilation openings. Doing so could cause the scanner to overheat, creating a risk of fire.
- Never place small metal objects such as staples, paper clips, or jewelry on the scanner. These items may fall into the scanner, and cause a fire or electric shock. Should such objects ever fall inside the scanner, immediately turn the power switch OFF, and disconnect the power plug from the power outlet. Then, contact your local authorized Canon dealer or service representative to have the unit serviced.
- Do not install the scanner in a humid or dusty location. Doing so might cause a fire or electric shock.

- Do not place objects on top of the scanner. Such objects may tip or fall over, resulting in personal injury.
- When unplugging the power cord, grasp it firmly by its plug. Do not pull directly on the power cord, as this may damage or expose the cord's internal wiring, resulting in a fire or electric shock.
- Leave sufficient space around the power plug so that it can be unplugged easily. If objects are placed around the power plug, you will be unable to unplug it in an emergency.
- Do not allow water or flammable substances (alcohol, paint thinner, benzene, etc.) to spill into the scanner, as this may result in a fire or electric shock.
- Turn OFF the power switch for safety when not using the scanner for a long period of time, such as overnight. Also, turn OFF the power switch, and disconnect the power cord from the power outlet for safety when the machine will not be used for an extended period of time, such as during consecutive holidays.
- Do not wear loose clothing or jewelry that may get caught in the scanner while you are using it. This may result in personal injury. Be extra careful of neckties and long hair. If anything becomes caught in the scanner, immediately disconnect the power cord to stop the scanner.
- Be careful when placing paper in the scanner and when removing jammed paper. It is possible to cut your hand on the edge of a sheet of paper.

Disposal

When disposing of this scanner, be sure to follow all local ordinances and laws or consult with the retailer who sold you the scanner.

1-2 Features of the DR-4010C Document Scanner

The main features of the DR-4010C document scanner are described below.

- **Fast Document Feeding**

The scanner can scan a maximum of 42 documents per minute in a range of sizes from business cards to LTR/A4 size. (Scanning conditions: Black and white, LTR/A4 size portrait, 200 dpi.) Scanning speed is the same for both color and grayscale scanning.

- **USB/SCSI Interface Supported**

The USB interface that was provided as standard on your computer and SCSI extension cards are supported. (See “2-2 Installation Requirements,” on p. 2-2.)

- **Color/Grayscale Support**

Documents can be scanned in 24-bit color or 256-level grayscale.

- **Supports a Variety of Scanning Modes**

The scanner supports the following scanning modes, depending on the document type:

- Single-sided/double-sided mode
- Single sheet/dual feeding path

- **U-Turn Path**

Documents are fed and ejected from the front of the scanner. (See “3-2 Document Feed and Eject Tray,” on p. 3-3.)

- **Straight Path**

Documents are ejected to the back of the scanner. Note that the ejected documents are stacked in the reverse order from which they were fed. (See “3-2 Document Feed and Eject Tray,” on p. 3-3.)

- **Paper Size Detection**

The scanner automatically detects the size of a scanned document and eliminates any unnecessary space around the edges of the image when storing the image, even when storing a document of irregular size.

- **Double Feed Detection**

The scanner stops feeding documents after detecting more than one document being fed at the same time. (See “Double Feed Detection Function,” on p. 3-30.)

- **Deskew**

The scanner straightens images after detecting that a document was placed askew.

- **Card Scan**

You can scan business or ID cards. Note that embossed credit cards or similar items cannot be scanned. (See “3-1 Documents,” on p. 3-1.)

- **Auto Color Detection**

The scanner detects whether the scanned document is in color or black-and-white, and saves the image accordingly.

- **Text Orientation Recognition**

This mode identifies the orientation of characters in a document, and rotates the image so the orientation of the scanned characters is straight.

- **Text Enhancement Mode**

This mode enables you to scan documents with dark backgrounds or documents with faint text written in pencil clearly.



Note

This mode may not function effectively, depending on the document type.

- **Dropout Color**

The scanner is equipped with a Dropout Color function that enables you to specify a color for the scanner to omit from the scanned image.

- **Color Enhancement**

The scanner is equipped with a Color Enhancement function that enables you to specify a color for the scanner to enhance on the scanned image.

- **Skip Blank Page Function**

The scanner is equipped with a Skip Blank Page function that enables you to scan a document without storing images of blank pages, regardless of whether each page of the document is two-sided or one-sided.

- **Prescan Function**

The scanner is equipped with a Prescan function that allows you to adjust the contrast and brightness of a prescanned image and then send the adjusted image to the application software, without needing to scan the document again.

- **Remove Binder Holes**

This mode erases the black spots that appear on scanned images from binding holes on the original document.

- **MultiStream Function**

The scanner supports MultiStream, which, according to the application, can create two images with different scanning conditions from one path scan.

However, this function can only be used if the software supports MultiStream. (See “MultiStream Function,” on p. 3-34.)

- **Long Document Compatibility**

You can scan documents up to 39.2 inches (1000 mm) long by setting the Long Document mode. (See “Long Document Mode,” on p. 3-30.)

- **Compatible with Carbonless Duplicating Paper**

The scanner is able to scan carbonless duplicating paper.

- **Energy Saving Mode**

This scanner is compatible with the International Energy Star Program, and is designed to save power by using the energy saving feature except when scanning is being performed.



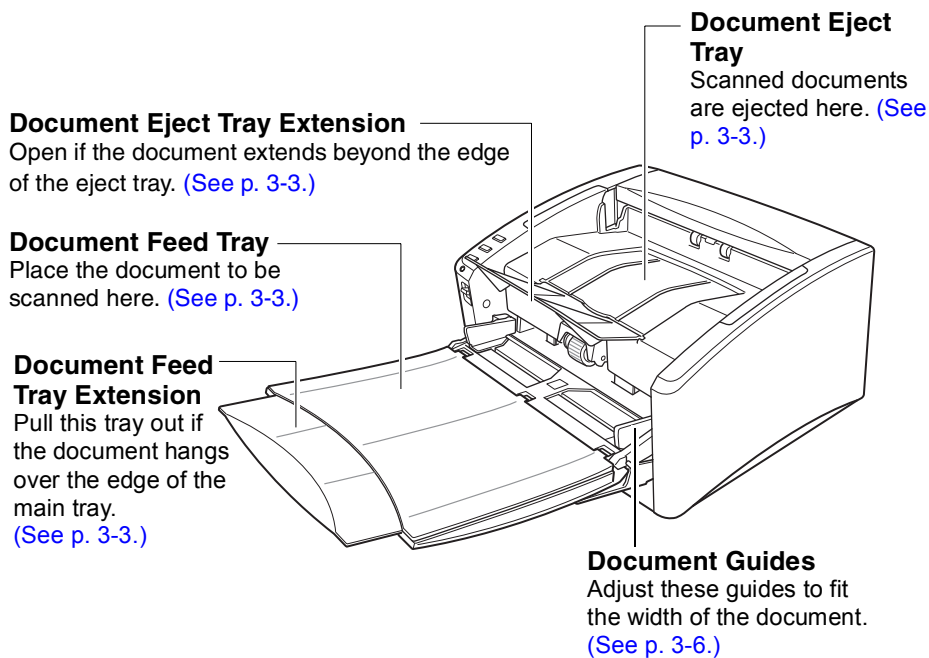
Note

Some functions may not be available depending on the software you are using.

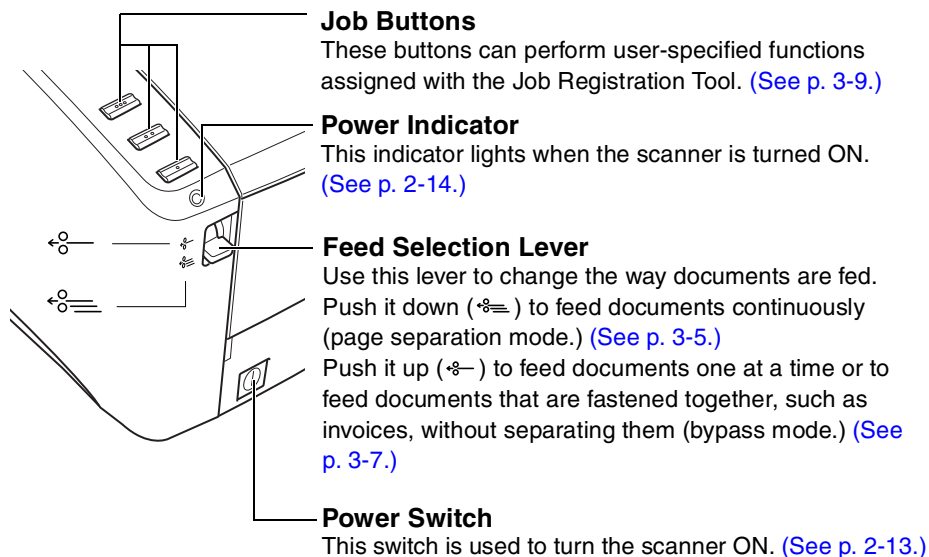
1-3 Names and Functions of Parts

This section describes the name and function of each part. Make sure to read this section and familiarize yourself with the parts of the scanner before using the scanner.

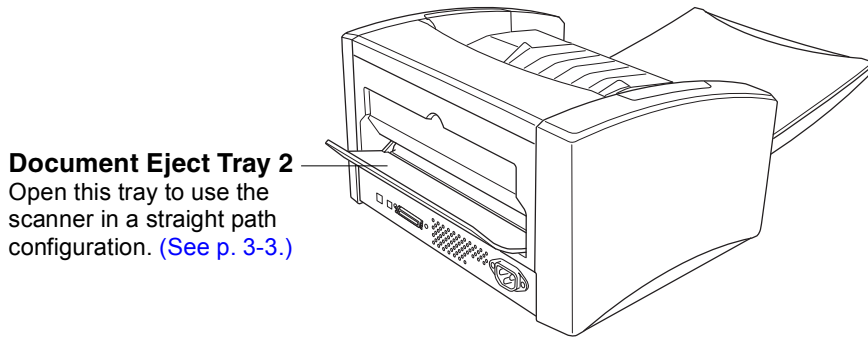
■ Front View (Feed Tray Open)



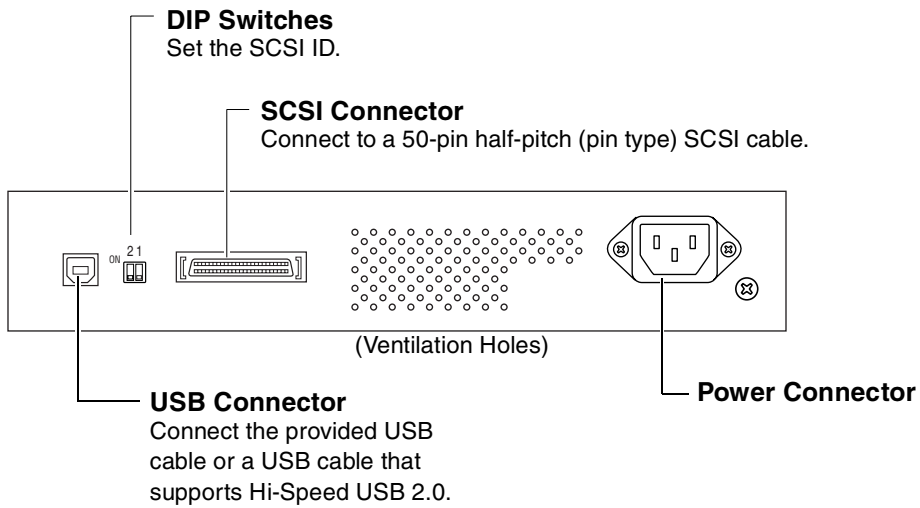
■ Controls



■ **Back View**



■ **Interfaces (See “2-4 Connecting the Scanner to the Computer,” on p. 2-11.)**



CAUTION

- Do not block the ventilation openings. Doing so could cause the scanner to overheat, creating a risk of fire.
- Do not connect both a USB cable and a SCSI cable at the same time. Doing so may cause a malfunction.

2-1 Setup Procedure

In order to prepare the scanner for use, read and follow the instructions in each section below.

[Installation Requirements](#)

[Installing the Software](#)

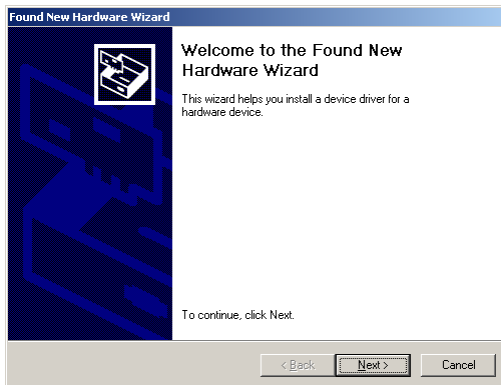
[Connecting the Scanner to the Computer](#)

[Turning the Power ON](#)



IMPORTANT

- Be sure to install the software before connecting the scanner to the computer.
- If you connect the scanner to the computer before installing the software, a wizard screen such as shown below will appear when you turn power to the scanner ON. In such a case, click the [Cancel] button to close the wizard screen and then turn power to the scanner OFF.



Wizard Screen (Windows 2000)

2-2 Installation Requirements

To use the DR-4010C scanner, your computer must satisfy the following system requirements.

- One of the following operating systems:
 - Microsoft Windows 2000 Professional SP4 or later
 - Microsoft Windows XP Professional SP2 or later
 - Microsoft Windows XP Home Edition SP2 or later
 - Microsoft Windows XP Professional x64 Edition
- A computer that meets the following specifications:
 - CPU: Pentium 4 (3.2 GHz or faster)
 - Memory: 1 GB or more
 - Hard disk: 1 GB or more available space
 - Interface: USB port present as standard equipment on the computer (Hi-Speed USB 2.0) or SCSI expansion card
 - Monitor: Resolution of 1024 × 768 (XGA) or better recommended.
- When using a SCSI expansion card, select one of the following recommended models.
SCSI cards made by Adaptec (for PCI bus)
 - AHA-2930U
 - AHA-2940AU
 - ASC-19160
 - ASC-29160NSCSI card made by Adaptec (for Card bus)
 - APA-1480
- An ISIS-compatible application or a TWAIN-compatible application that is compatible with the above operating systems.



IMPORTANT

- If you do not know the requirements for your computer system, contact the store where you purchased the computer or the manufacturer of the computer for more information.
- Do not connect both a USB interface and a SCSI card at the same time.
- Be aware of the following information when using the USB interface that was provided as standard with your computer.
 - The USB interface should be a Hi-Speed USB 2.0 interface.
 - Scanning speeds are lower if your computer's standard USB interface is USB Full-Speed (equal to USB 1.1.) In this case, using a SCSI expansion card is recommended.
 - Use the latest USB 2.0 driver made available by Microsoft. For details, consult your local authorized Canon dealer.
 - Normal operation is not guaranteed with all USB interfaces, even if present as standard equipment on the computer. For details, consult your local authorized Canon dealer.
 - The USB cable you are using should be the one originally included with the scanner or a Hi-Speed USB 2.0 compatible cable.
- Be aware of the following information when using a SCSI card.
 - Make sure to follow the procedure in the manual for the SCSI card and the computer that you are using when installing a SCSI card in your computer.
 - The overall length of the SCSI cable you can use is determined by the SCSI standards. Refer to the manual for the SCSI card you are using for more information.

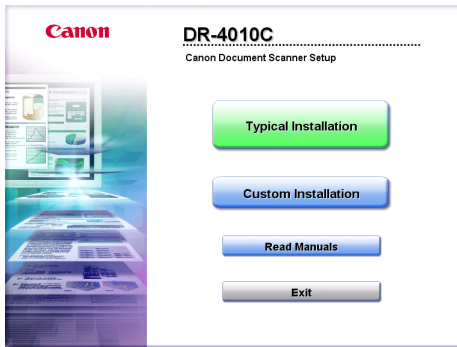
- If the CPU, memory, interface card, and other specifications do not satisfy the installation requirements, the scanning speed may be greatly reduced and transmission may take a long time.
- Even if the computer satisfies the recommended specifications, the scanning speed may vary, depending on the scan settings.
- The ISIS/TWAIN Drivers provided with the scanner do not necessarily operate on all ISIS- or TWAIN-compatible applications. For details, contact your application software retailer.

2-3 Installing the Software

This section describes how to install the required software.

Setup Disc

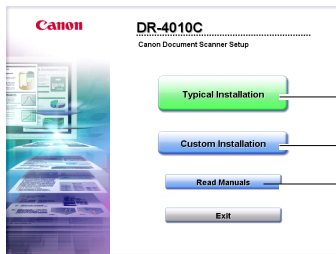
When you insert the Setup disc supplied with the scanner into the CD-ROM drive of your computer, the menu shown below should appear. If this menu does not appear, use Explorer to access the CD-ROM drive and execute the file "SETUP.EXE."



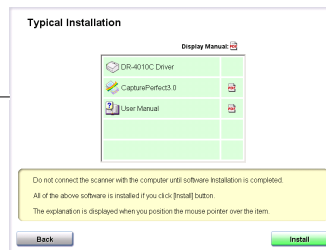
Note

The Setup disc of the DR-4010C is configured as follows.

Menu screen

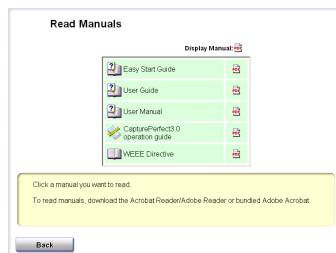


Typical Installation



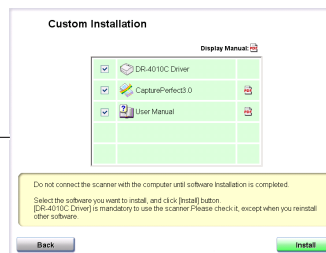
All of the indicated software is installed.

Read Manuals



The User Manual and CapturePerfect 3.0 Operation Guide electronic manuals for the scanner are installed on the computer with the rest of the software.

Custom Installation



Only the software with a selected check box is installed.

Software Installation

Install the software before connecting the scanner to the computer.

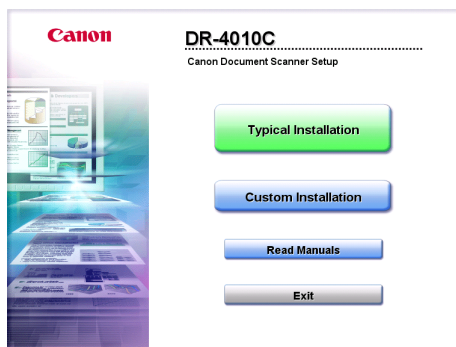
- 1 Log onto Windows with an account that has Administrator privileges.



IMPORTANT

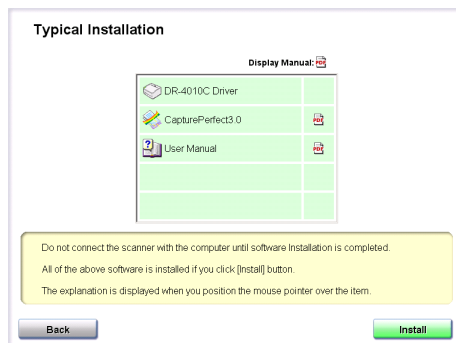
- Be sure to log on as an Administrator.
- Close all other applications before installing the software.

- 2 Insert the DR-4010C Setup disc into the PC's CD-ROM drive. The menu screen appears automatically when you insert the CD-ROM into the CD-ROM drive. If the setup wizard does not start up, execute setup.exe in the CD-ROM.



Menu Screen

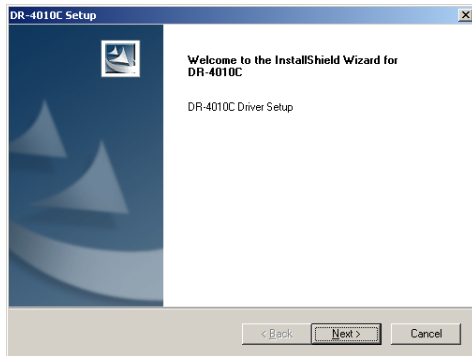
- 3 Click [Typical Installation]. The [Typical Installation] screen appears.



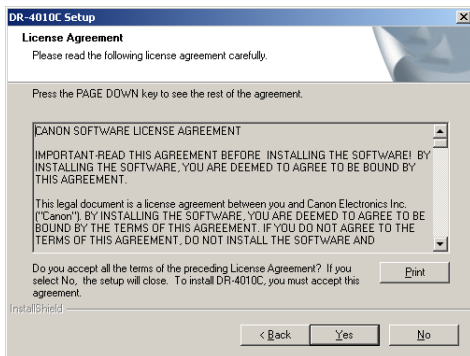
Note

- When you select [Typical Installation], all of the displayed software and the User Manual will be installed automatically. If you want to reinstall only specific software that you have previously uninstalled, select [Custom Installation] and specify the software.
- The DR-4010C driver installation comprises the Scanner Driver and Job Tool installation.

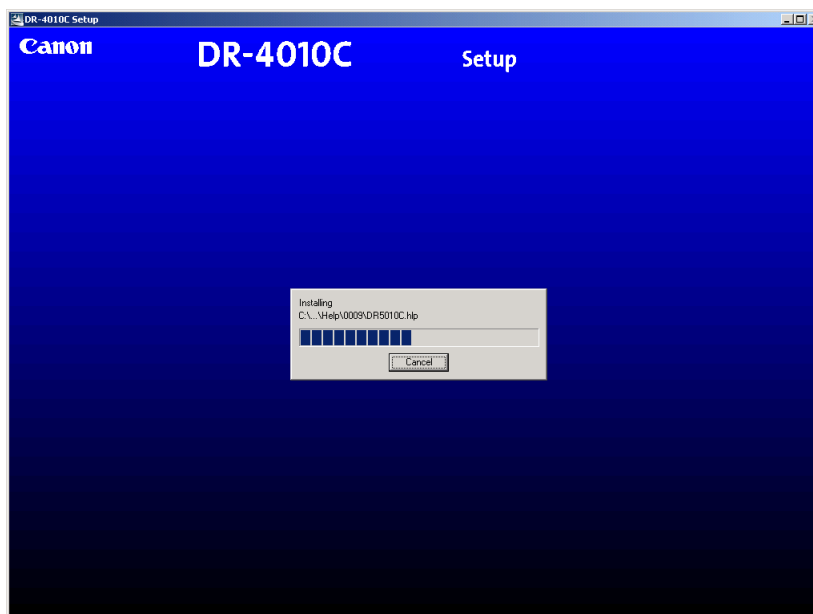
- 4 Click [Install].
Installation of the DR-4010C driver begins.



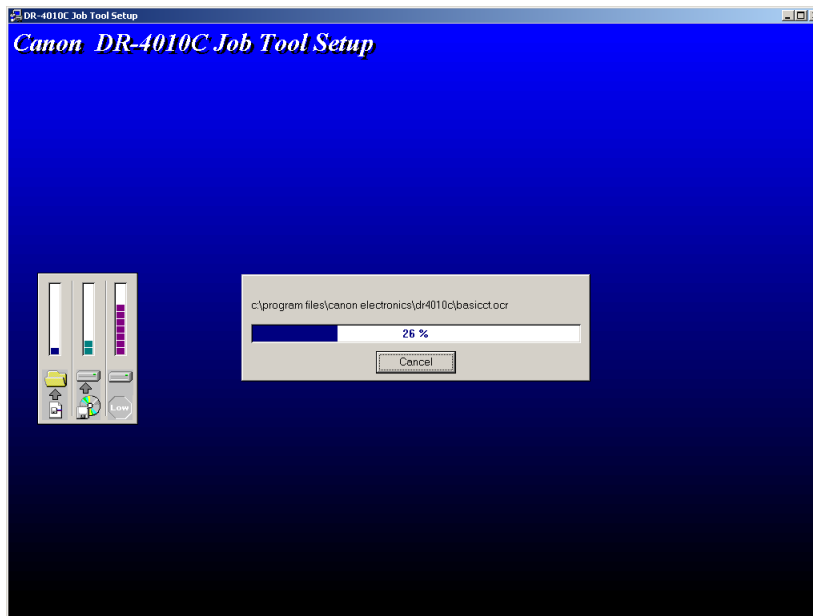
- 5 Click [Next].
The software license agreement appears.



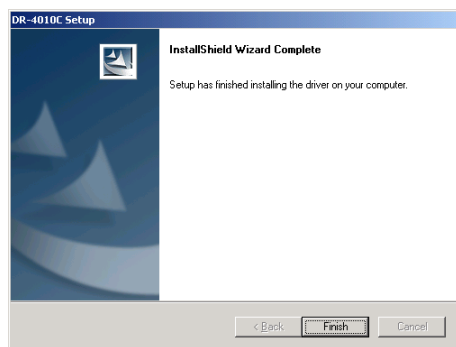
- 6 Read the license agreement and click [Yes] to accept it.
The DR-4010C driver is installed.



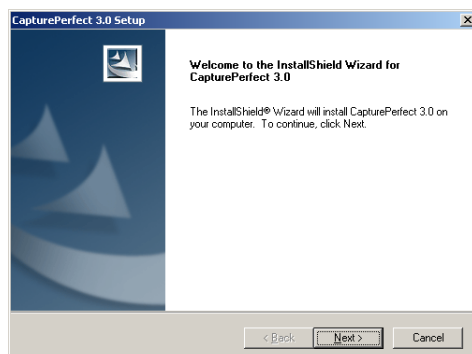
Next, the job tool software is installed.



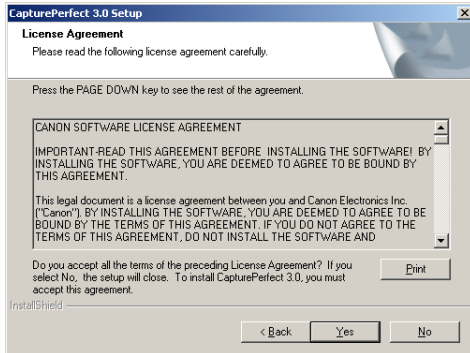
7 The DR-4010C driver installation is complete.



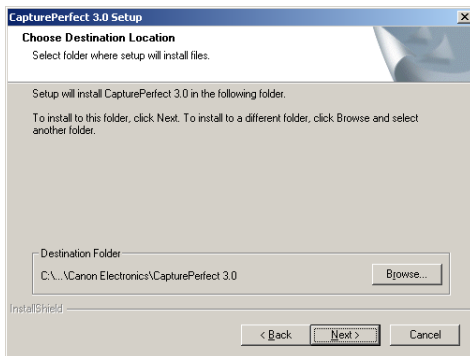
8 Click [Finish].
Installation of CapturePerfect 3.0 starts.



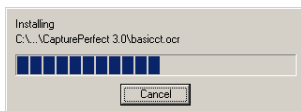
- 9 Click [Next].
The software license agreement appears.



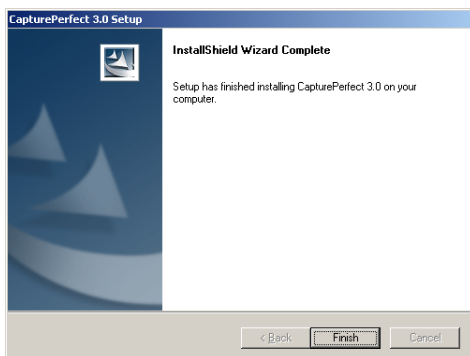
- 10 Read the license agreement and click [Yes] to accept it.
The installation location screen appears.



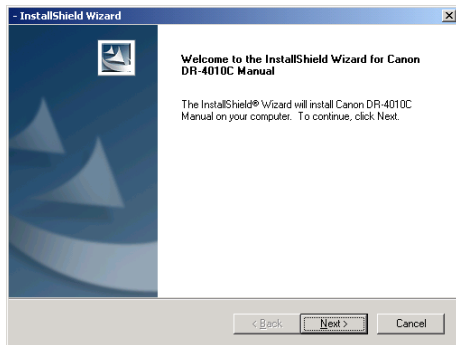
- 11 Click [Next].
CapturePerfect is installed.



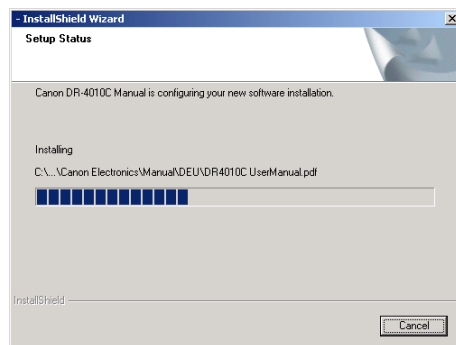
- 12 The CapturePerfect installation is complete.



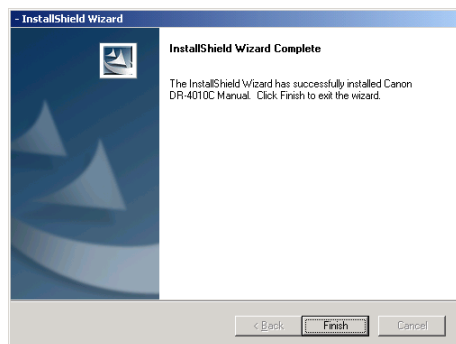
- 13** Click [Finish].
Installation of the User Manual starts.



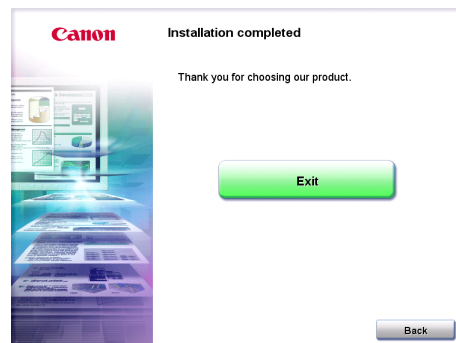
- 14** Click [Next].
The User Manual is installed.



- 15** The User Manual installation is complete.



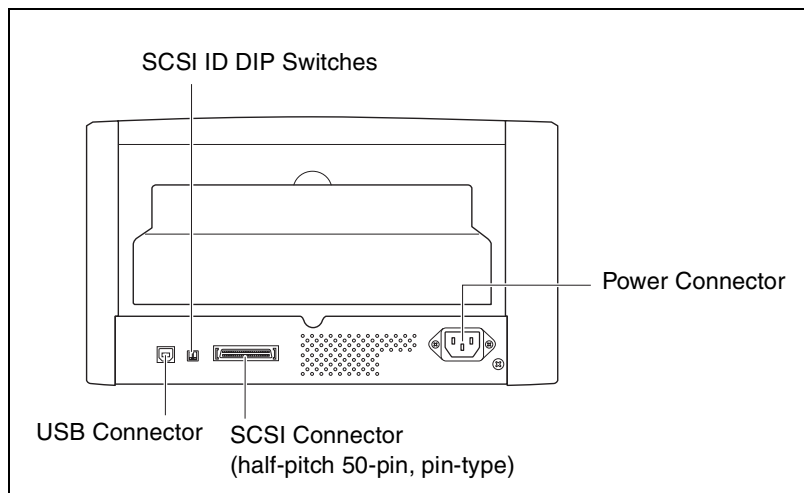
- 16** Click [Finish].
The installation completion screen appears.



- 17** Click [Exit].
Click [Back] to return to the menu screen.
- 18** After the software installation is complete, you can connect the scanner to the computer.
(See [“2-4 Connecting the Scanner to the Computer,”](#) on p. 2-11.)

2-4 Connecting the Scanner to the Computer

There are two methods for connecting the DR-4010C scanner to a computer: USB connection, which makes use of a standard USB port on the computer, and SCSI connection, which makes use of a SCSI card installed in an expansion slot of the computer. Select the method that is suitable for your computer environment.

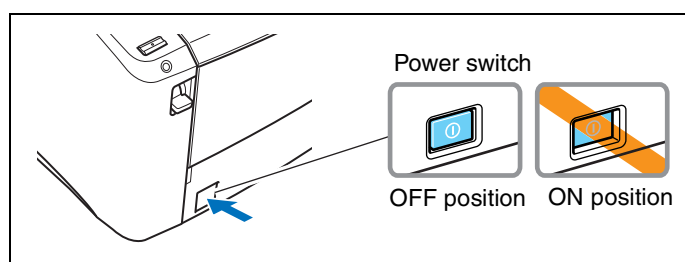


CAUTION

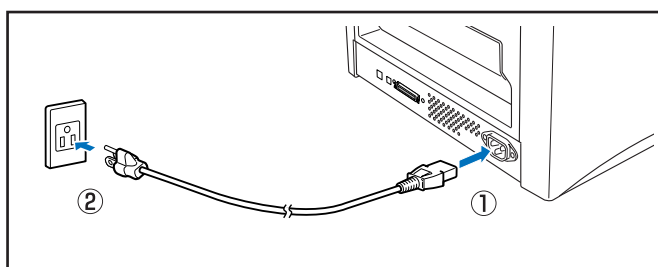
Do not connect a USB cable and SCSI cable at the same time.

Using a USB Connection

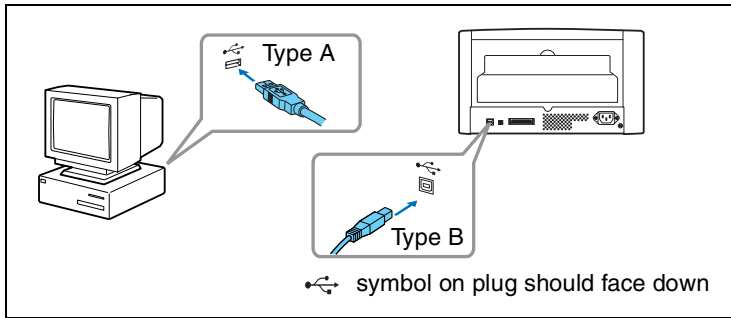
- 1 Verify that the power switch of the scanner is OFF.
If the power switch is in the ON position, push the switch to set it to OFF.



- 2 Plug the supplied power cord into the power connector on the back of the scanner. ①



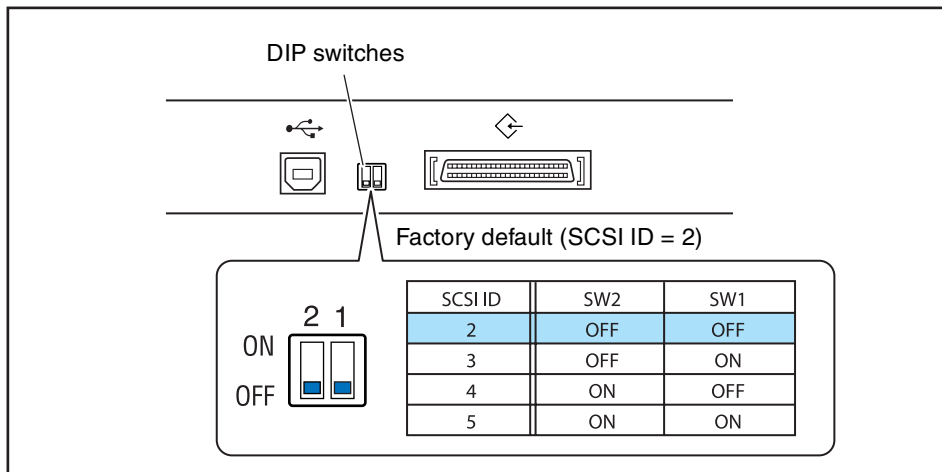
- 3 Connect the power cord into an AC outlet. ②
- 4 Use the supplied USB cable to connect the scanner to the computer.



Using a SCSI Connection

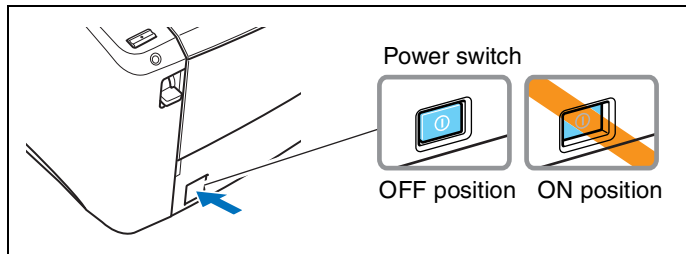
IMPORTANT

- Make sure that the computer is turned OFF before connecting the SCSI cable. If the cable is connected while the computer is on, the scanner may not be properly recognized by the computer.
- A SCSI cable is not supplied with the scanner. Purchase a cable that is suitable for the scanner and for the SCSI connector on the computer.
- The SCSI ID of the scanner is set to “SCSI ID = 2” by default. When using a daisy-chain configuration with other SCSI devices, set the DIP switches so that there is no duplication of SCSI ID numbers in the system.

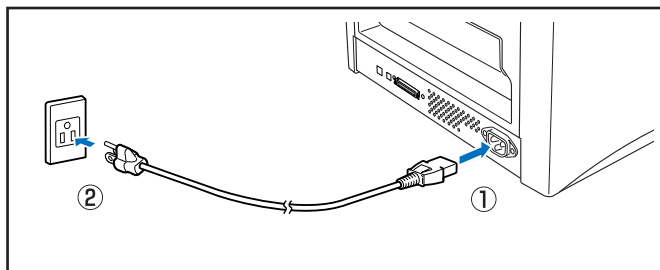


- The DR-4010C scanner incorporates a SCSI terminator which is permanently set to ON. When using a daisy-chain configuration with other SCSI devices, make sure that the DR-4010C is connected as the last device in the chain. Set the terminators of all other devices to OFF.

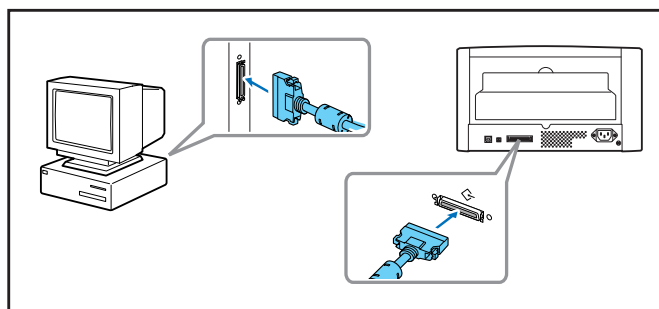
- 1** Shut down Windows and turn the computer OFF.
- 2** Verify that the power switch of the scanner is OFF.
If the power switch is in the ON position, push the switch to set it to OFF.



- 3** Plug the supplied power cord into the power connector on the rear of the unit. ①



- 4** Connect the power cord into an AC outlet. ②
- 5** Use the SCSI cable to connect the scanner to the computer.



2-5 Turning the Power ON

When you turn the computer and the scanner ON, the Plug and Play function of Windows recognizes the scanner and automatically installs the required device driver.



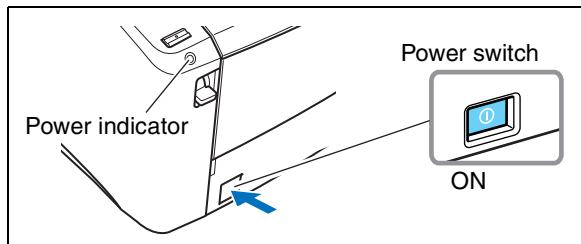
IMPORTANT

- When connecting the scanner to the computer using a SCSI cable, be sure to turn power to the scanner ON first, and then turn power to the computer ON. If you turn power to the computer ON first, the scanner may not be properly recognized by the computer.
- If you turn the power OFF, wait at least 10 seconds before turning it ON again.
- If you will not be using the scanner for an extended period, you should disconnect the power cord from the AC outlet for safety.

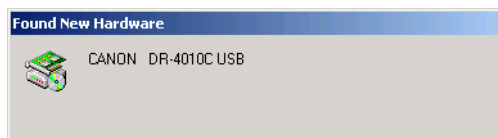
Scanner Recognition

The scanner will be recognized the first time it is connected to the computer.

- 1** Make sure that the scanner and computer are connected properly.
- 2** Press the power switch to turn the scanner ON.
The power indicator lights green.



- 3** Turn the computer ON.
- 4** Log onto Windows with an account that has Administrator privileges.
- 5** Windows recognizes the DR-4010C automatically, and installation of the device driver begins.



Windows 2000

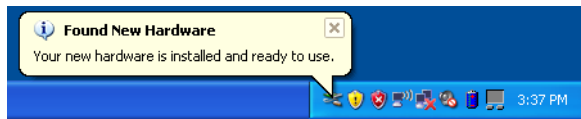


Windows XP

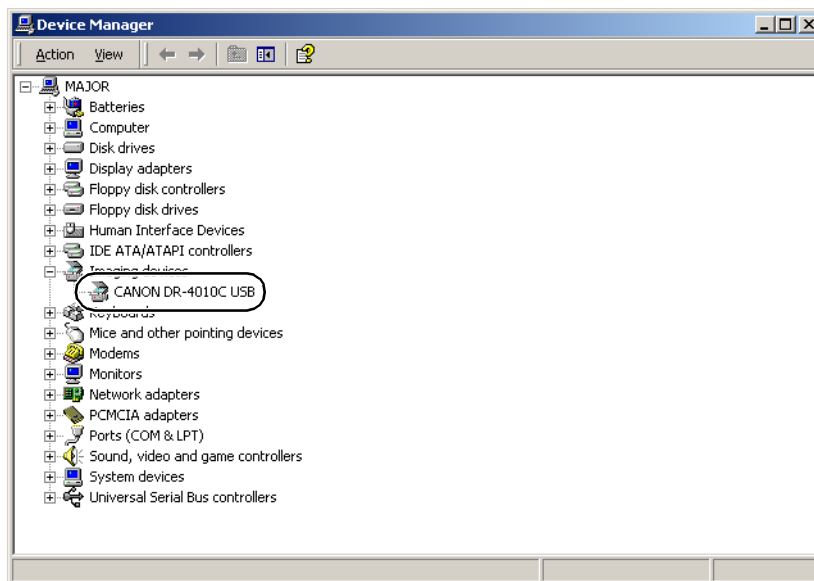


Note

- In Windows XP, a message appears when installation is complete.



- In Windows 2000, no message appears when installation is complete.
- The DR-4010C is installed in Device Manager under [Imaging Devices] as [CANON DR-4010C USB] or [CANON DR-4010C SCSI].



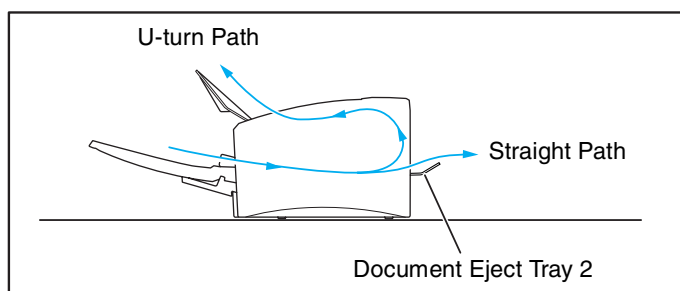
3-1 Documents

The scanner can scan documents ranging in size from business cards and checks to A4 size documents. It can also scan long documents up to 39.2" (1000 mm).

The document sizes that this scanner can scan are shown below.

Eject Direction (*1)	U-Turn Path	Straight Path
Width	2.08" to 8.62" (53 mm to 219 mm)	2.08" to 8.62" (53 mm to 219 mm)
Length (*2)	2.75" to 14" (70 mm to 356 mm)	2.75" to 14" (70 mm to 356 mm)
Weight (*3) Feeding documents are separated (Page separation mode)	14 to 32 lb bond (52 to 128 g/m ²) 0.0024" to 0.0059" (0.06 mm to 0.15 mm)	11 to 32 lb bond (42 to 128 g/m ²) 0.0020" to 0.0059" (0.05 mm to 0.15 mm)
Feeding documents are not separated (Bypass mode)	11 to 40 lb bond (42 to 157 g/m ²) 0.0020" to 0.0079" (0.05 mm to 0.20 mm)	11 to 144 lb bond (42 to 546 g/m ²) 0.0020" to 0.0026" (0.05 mm to 0.66 mm)
Business Cards ID Cards	Cannot be scanned	Can be scanned Size: 2.12" × 3.37" (53.9 mm × 85.5 mm) Thickness: 0.03" ± 0.003" (0.76 ± 0.08 mm) without embossing

(*1) The DR-4010C offers two document eject configurations: U-turn path (the document is ejected to the document eject tray at the front of the scanner) and straight path (the document is ejected to the back of the scanner.) (See "3-2 Document Tray and Eject Tray," on p. 3-3.)



(*2) You can scan documents up to 39.2" (1000 mm) long by setting the scanner to the Long Document mode. (See "Long Document Mode," on p. 3-30.)

(*3) The paper weights that can be used with the scanner vary depending on the document feed method (page separation mode or bypass mode.) (See "3-3 Placing Documents," on p. 3-5.)



IMPORTANT

A document must meet the following criteria to be scannable:

- When scanning a multiple page document, pages of the same size, thickness, and weight must be grouped together. Scanning different sizes and types of paper together can cause the scanner to jam.
- Scanning documents before the ink is dry can cause problems with the scanner. Always make sure that the ink on a document is dry before scanning it.
- Scanning documents that are written in pencil or similar material have a tendency to make the rollers and scanning glass dirty, which can lead to smudges in the scanned image and transfer the dirt to subsequent documents. Always clean the internal parts of the scanner after scanning such documents.

(See “Cleaning the Sensor Glass and the Rollers,” on p. 4-2.)

- When scanning a two-sided document that is printed on thin paper, the image on the opposite side of each page may show through. In this case, adjust the scanning intensity in the application software before scanning the document.
- Scanning the following types of documents can cause a paper jam or malfunction. To scan such a document, make a photocopy of the document and then scan the photocopy.



Wrinkled or creased documents



Extremely thin, translucent paper



Curled document



Carbon paper



Documents with paper clips or staples



Torn documents



Coated paper

- When you scan a batch of NCR (No Carbon Required) documents, make sure that they are not stuck together.
- Note that glossy paper or business cards may not be scanned correctly, or functions such as paper size detection and deskew may not function properly when scanning these types of documents, due to reflected light.
- When scanning business cards, make sure to select the bypass mode and straight path.



CAUTION

The results of scanning embossed cards are not guaranteed. Scanning embossed cards is not recommended, as they may scratch the sensor glass.



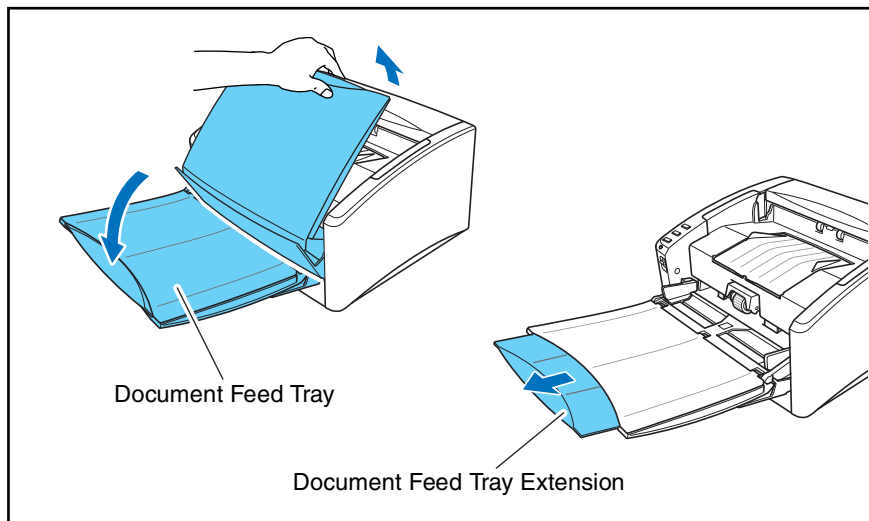
Embossed Card

3-2 Document Tray and Eject Tray

Prepare the document feed tray and document eject tray according to the paper size and feed/eject method.

Preparing the Document Feed Tray

- 1 Grasp the middle of the document feed tray and slowly open it toward you. If the documents slide off the tray, pull out the document feed tray extension.

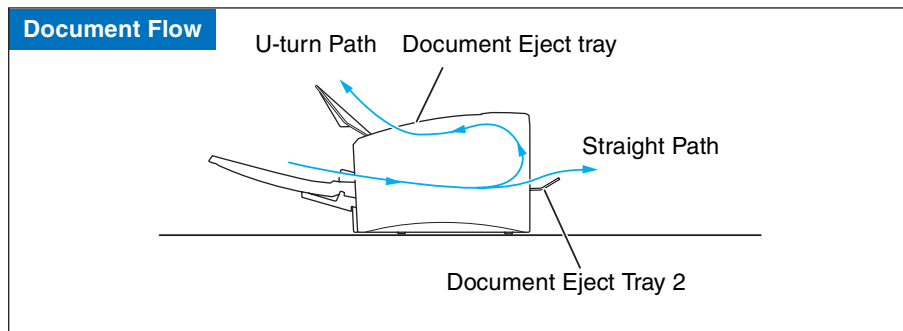


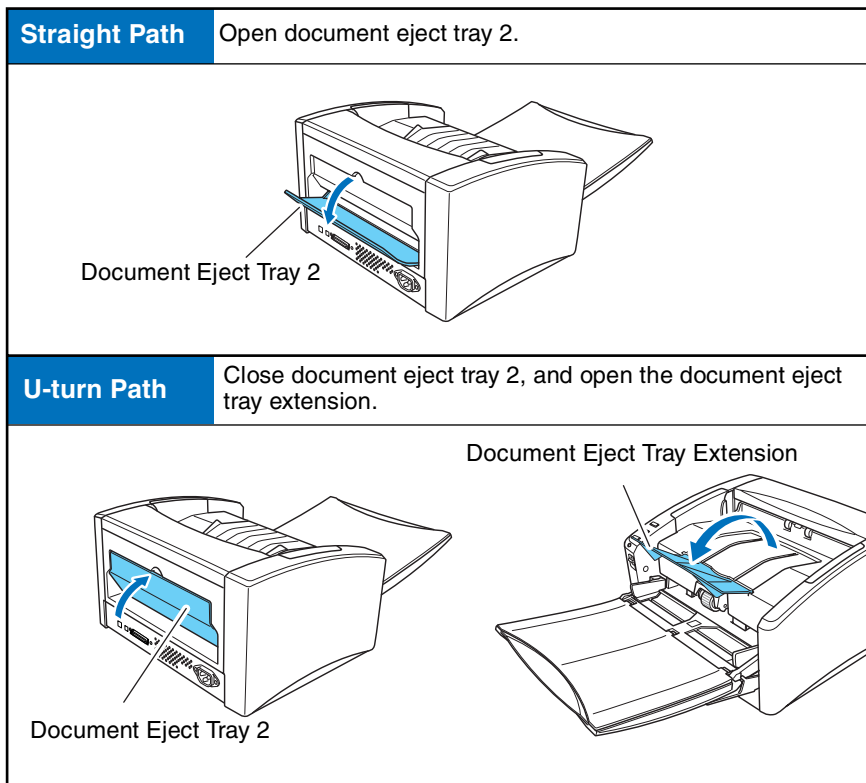
CAUTION

Do not place anything other than documents on the document feed tray. Doing so may damage the scanner, reduce scanning quality, or cause the tray to fall off, resulting in personal injury or damage to the scanner.

Preparing the Document Eject Tray

The scanner has two eject methods: documents can be ejected to the front of the scanner in a U-turn path, or to the back of the scanner in a straight path. You can switch between these methods by opening or closing the document eject tray 2. Select an eject method according to your needs.





Note

- The U-turn path is used to scan documents on paper of normal weight. Scanned documents are ejected to the document eject tray.
- The straight path is used to scan documents on thin paper, thick paper and business cards that cannot be scanned through the U-turn path. Scanned documents are ejected to the back of the scanner.
- The U-turn path cannot be used if the document eject tray 2 is open.
- When using the straight path, the pages are stacked in the reverse order from which they were fed.



IMPORTANT

- Be sure there is enough space for documents that are ejected at the back of the scanner when using the straight path. If there is not enough space for the ejected pages, the documents may be damaged or a paper jam may occur.
- Open or close the document eject tray 2 before starting to scan documents. Opening or closing the document eject tray 2 while scanning may cause a paper jam.
- When using the U-turn path, make sure to open the eject tray guide. If the guide is not opened, documents may fall off the tray and cause a paper jam.

3-3 Placing Documents

There are two methods for feeding documents, the Page Separation mode and Bypass mode. Feeding pages continuously from a stack of documents placed in the feed tray is called the Page Separation mode. Feeding documents one sheet at a time or feeding documents consisting of multiple pages that are attached, is called the bypass mode. The document feed method can be changed by moving the feed selection lever.



IMPORTANT

- Always smooth out any folds or curls in your documents before placing them into the feeder. If the leading edge of a document is curled, it may cause a paper jam.
- When continuously scanning documents on thin paper in the page separation mode, the pages may become wrinkled or folded and cause a paper jam. If this happens, scan the document in the bypass mode.

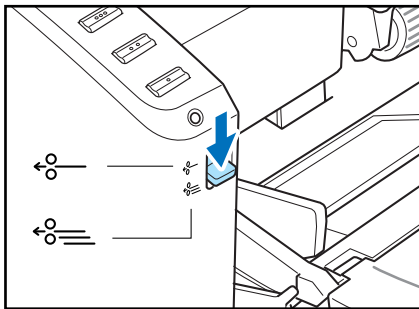


CAUTION

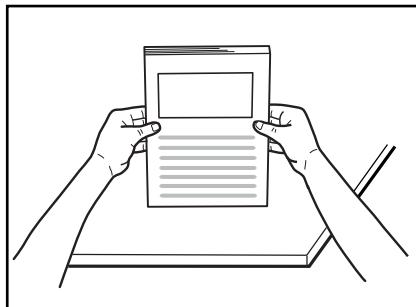
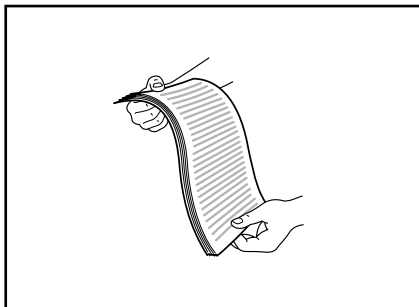
- Before you place a document, check to make sure it does not contain paper clips, staples, or other small metal objects. These items may cause a fire or electrical shock, damage the document, or cause a paper jam or scanner malfunction.
- Do not wear loose clothing or jewelry that may get caught in the scanner while you are using it. This may result in personal injury. Be extra careful of neckties and long hair. If anything gets caught in the scanner, immediately turn OFF the power switch, and disconnect the power cord from the power outlet to stop scanning.

Feeding in the Page Separation Mode

- 1 Push the feed selection lever down (☞☞☞.)



- 2 Fan the pages of the document to be scanned and align their edges.

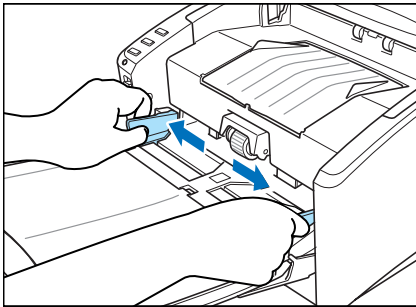




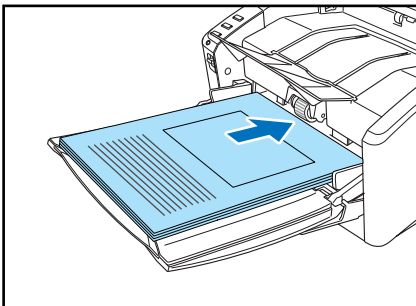
CAUTION

- Do not place the documents on top of the scanner to align them. Doing so may cause a malfunction.
- When placing documents into the feed tray, take care not to cut your hands on the edges of the paper.

3 Adjust the document guides so that they are wider than the document to be scanned.

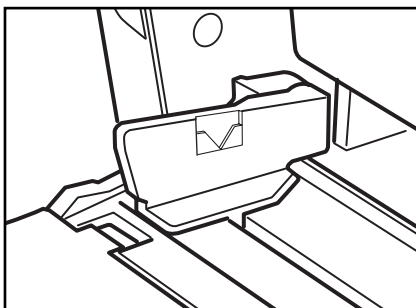


4 Place the document face up into the feed tray, so that the leading edge of the paper touches the document stoppers.

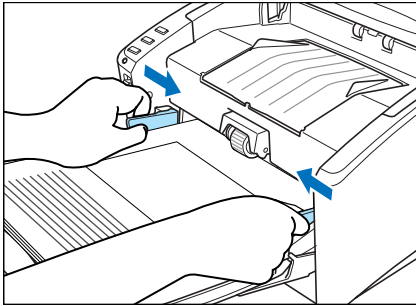


IMPORTANT

There is a load limit mark (▼) on the document guides. Do not stack documents higher than this mark (approximately 100 sheets of 20 lb bond (80 g/m²) paper.) Doing so may cause a paper jam.



- 5** Adjust the document guides to fit the width of the document.



Note

Before scanning, make sure that the document is not curled or creased, and that it is placed in the feed tray correctly. Scanning an improperly placed, curled, or creased document may damage the document or cause a paper jam.

- 6** Start scanning.

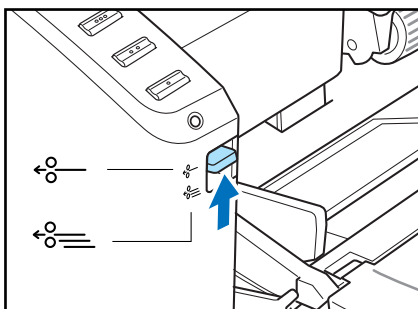


IMPORTANT

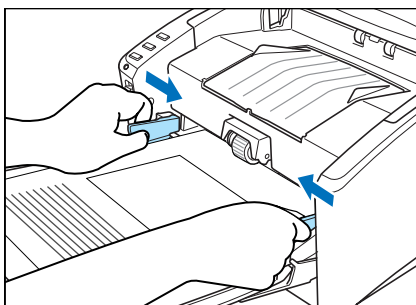
- If feeding stops due to a system error or paper jam while the scanner is scanning, resolve the problem, make sure that the scanned image of the last page that was successfully fed has been stored, and then resume scanning the remaining document pages.
- Note that documents that are printed on thin paper may fall out of the document eject tray.
- After you finish scanning, close the document feed tray and the document eject tray extension to prevent damage to the scanner while it is not being used.

Feeding in the Bypass Mode

- 1** Push the feed selection lever up (↕).



- 2** Place the document into the document feed tray one sheet at a time and adjust the position of the document guides.



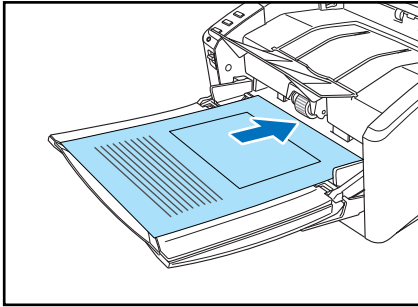


Note

For more information on placing documents, see “Feeding in the Page Separation Mode,” on p. 3-5.

3 Start scanning.

4 The document is fed.



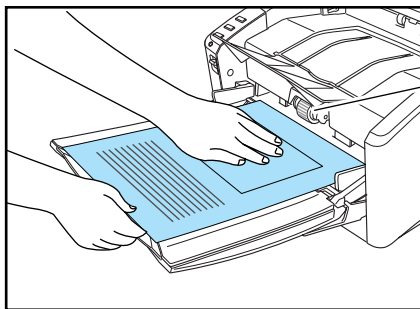
IMPORTANT

- When scanning multiple page documents that are fastened together, such as invoices, set the edge that is fastened together as the leading edge.
- When you are scanning with the bypass mode, and you place several documents that are not fastened together into the feed tray at one time, they will be fed together.



CAUTION

- **Very thin or curled documents may not feed properly. In this case, lightly press on the leading edge of the documents as you feed them. Take care not to get your hand caught under the roller unit, as this may cause personal injury.**



- **After you finish scanning, close the document feed tray and the document eject tray extension to prevent damage to the scanner while it is not being used.**

3-4 Job Function

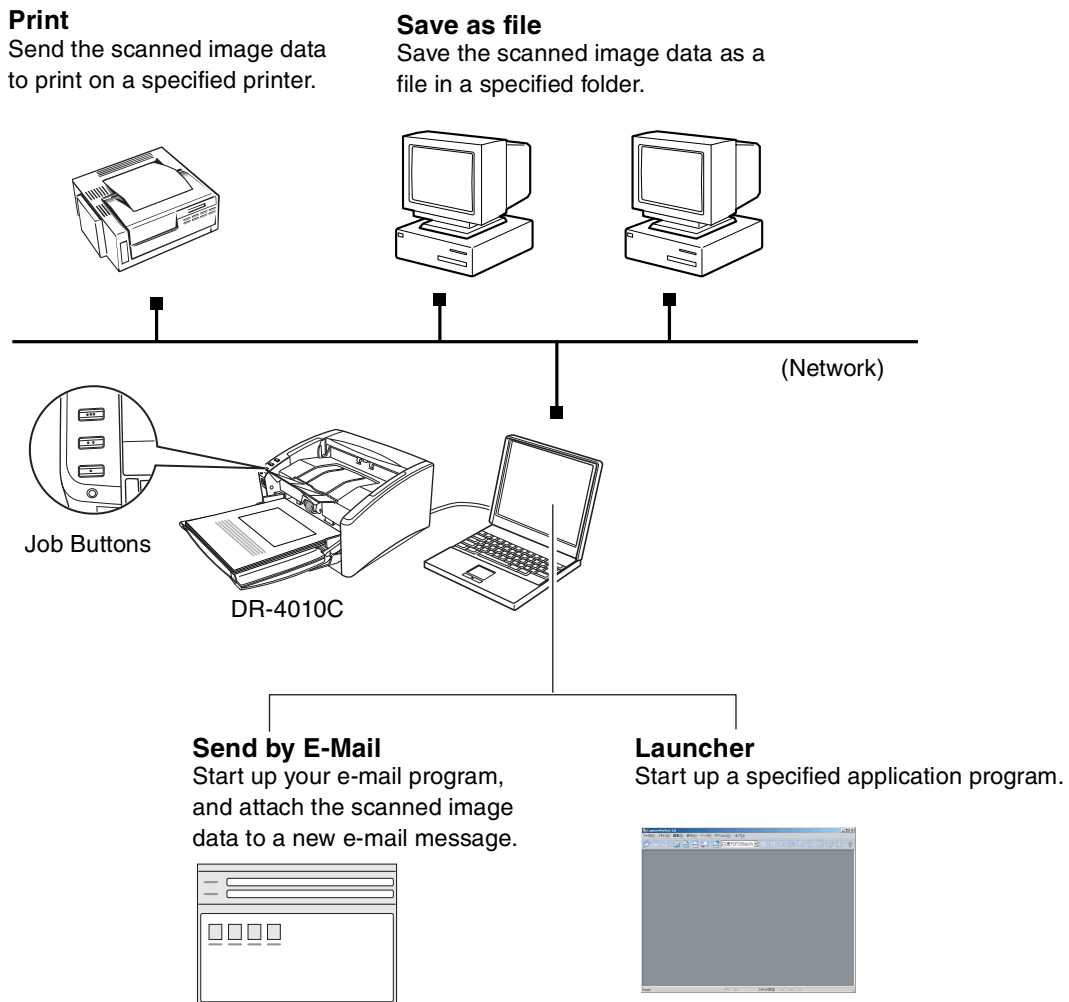
In addition to using scanning applications, such as Capture Perfect 3.0 to perform scanning, the DR-4010C is equipped with the Job Function. The Job Function enables you to scan simply by touching a job button on the scanner.

This section provides an overview of the Job Function and describes the steps for using it.

What is the Job Function ?

The Job Function enables you to program the job buttons to scan documents without having to start an application on the computer. The scanned image data are automatically processed according to instructions that you specify using the Job Registration tool. (See “Job Registration Tool,” on p. 3-10.)

The following functions can be programmed in a job button in addition to the Start and Stop functions:

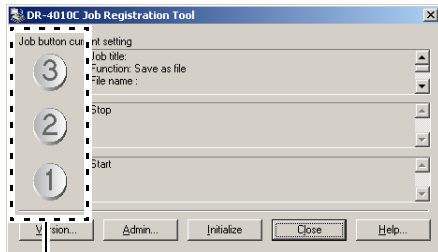


Note

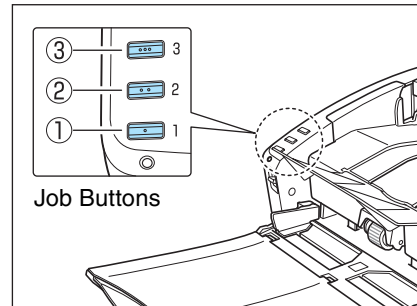
To use the Launcher function, you must first change the Windows event settings. (See “About Launcher,” on p. 3-11.)

Job Registration Tool

The Job Registration Tool is a TWAIN-compatible application that is installed with the ISIS/TWAIN driver, and launches from the Programs menu. Use the Job Registration Tool to program functions in the job buttons.



Job Button Settings

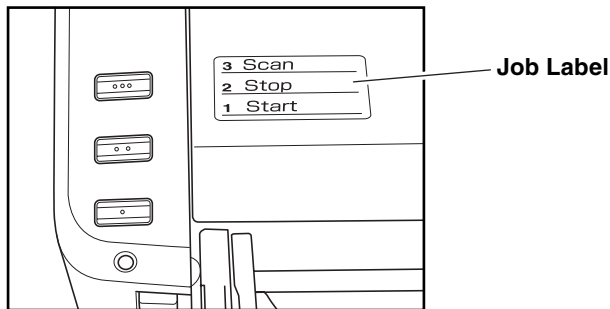


For information about Job Registration Tool settings, see Chapter 8, “Job Registration Tool Settings,” as well as the online help for the Job Registration Tool.



Note

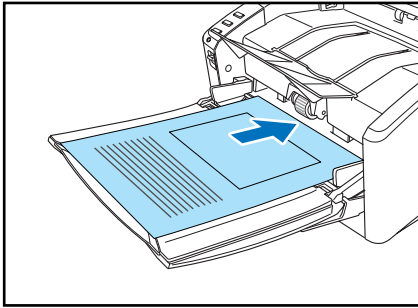
- The following jobs are preset, however, they can be changed to suit your needs.
 - ① Start: Starts scanning according to the application settings.
 - ② Stop: Stops scanning.
 - ③ Save as file: Saves scanned image data as PDF files in the [My Pictures] folder.
- If you assign scan functions to all three job buttons on the scanner, use the Start and Stop buttons on the Scan Panel to start or stop scanning. (See “Scan Panel,” on p. 3-21.)
- Write the assigned functions for each job button on the supplied job label and attach it to the scanner for your reference.



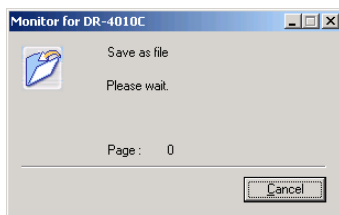
Scanning With the Job Function

To scan using the job function, use the following procedure.

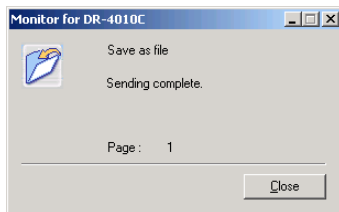
- 1 Place the documents into the feed tray. (See “3-3 Placing Documents,” on p. 3-5.)



- 2 Press the job button ③ to start the job.
The DR-4010C monitor appears, and scanning starts.



- 3 When scanning is complete, the image data are sent according to the preset conditions.
The message <Sending complete> appears on the DR-4010C monitor.



- 4 Click [Close] to close the DR-4010C monitor.



Note

- The default setting for job button ③ after the DR-4010C setup is completed is “Scan.”
- The scanned images are saved as PDF files in the folder [My Pictures] under the folder [My Documents]. The file name is a 17-character string using the date and time when the document is scanned.

About Launcher

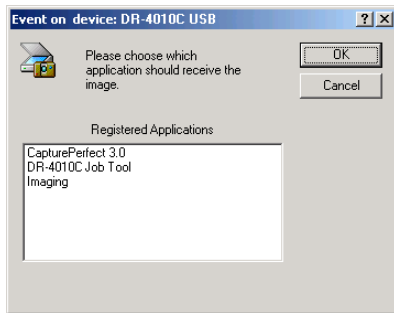
To use the Launcher feature, it is necessary to first change the Windows event settings as described below, and specify an application for each job button.



Note

- By default, all applications supporting the event function are enabled. If you do not change the event setting before you use the Launcher feature of the DR-4010C, the dialog box

shown below will appear. Select an application from this dialog box or click [Cancel] and change the event settings.



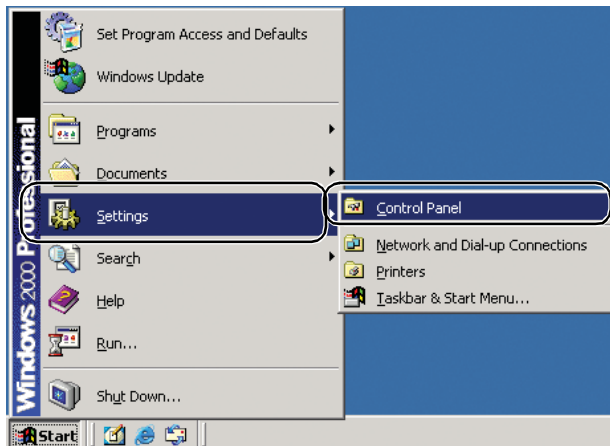
- Only applications that support the Windows event function can be started using the Launcher feature of the DR-4010C.
- Some applications may not work correctly if started using the Launcher feature.

Event Settings

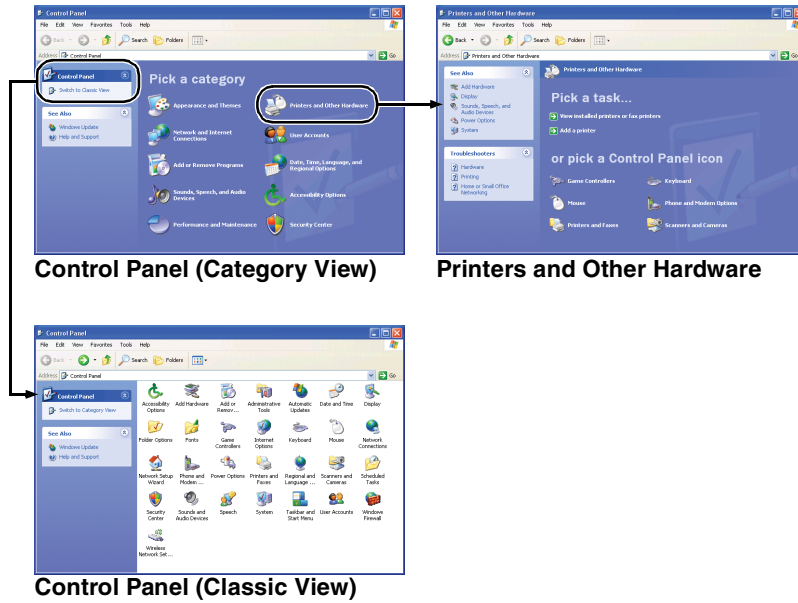
This section describes how to change the Windows event settings.

1 Open the [Event settings] dialog box.

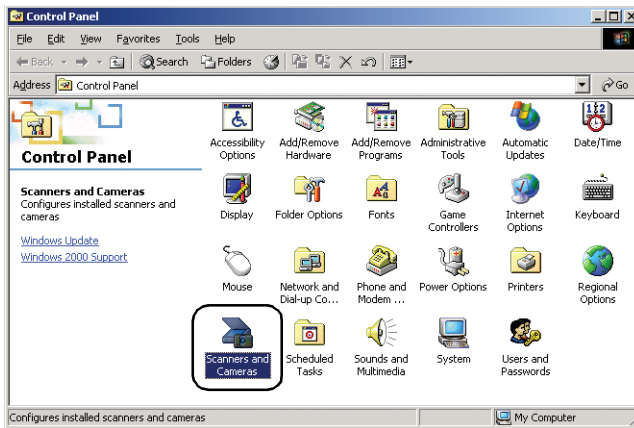
1. Click [Start] → click [Settings] on the [Start] menu → click [Control Panel]. (For Windows XP, click [Start] → [Control Panel].)



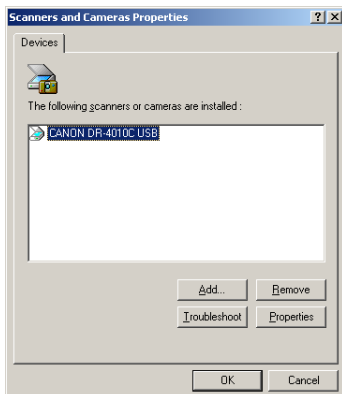
2. For Windows XP, switch the Control Panel to Classic View, or select [Printers and Other Hardware] in the working field.



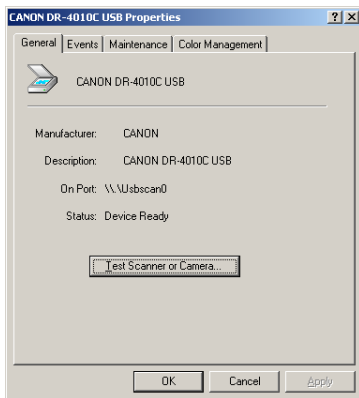
3. Double-click [Scanners and Cameras].



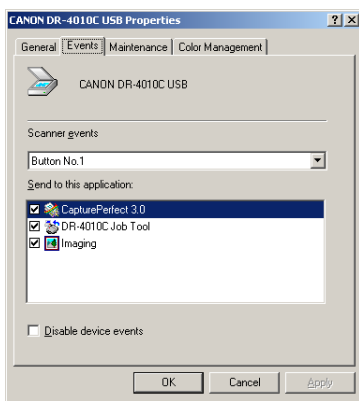
4. Select [CANON DR-4010C USB] (or [CANON DR-4010C SCSI]) → click [Properties].



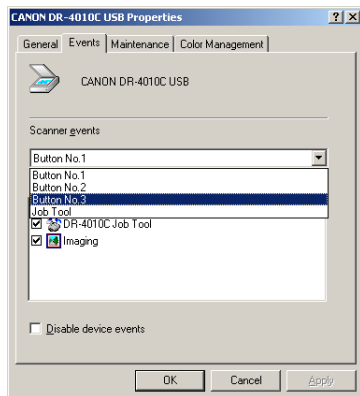
The [CANON DR-4010C USB Properties] (or [CANON DR-4010C SCSI Properties]) window appears.



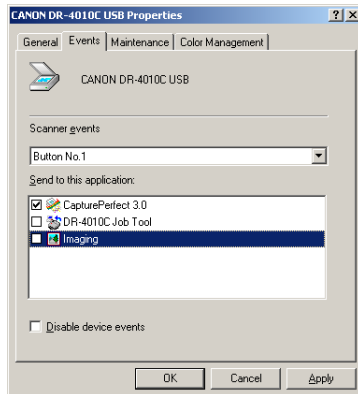
5. Click the [Events] tab.



2 Under [Scanner events], select the button whose setting you want to change (Button No. 1, Button No. 2, Button No. 3.)



- 3 By default, all applications listed under [Send to this application] are selected. Select only one application (deselect the check boxes for all other applications.) Then click [Apply].



IMPORTANT

If the [Disable device events] check box is selected, the Job Function cannot be used. Make sure that this check box is not selected.

- 4 Click [OK] to close [Scanners and Cameras Properties].
- 5 Restart Windows to enable the new event settings.

3-5 CapturePerfect 3.0

This section describes the flow of the CapturePerfect 3.0 application.

For more information on CapturePerfect 3.0, see the *CapturePerfect 3.0 Operation Guide* and the *CapturePerfect 3.0 online Help*. Familiarize yourself with CapturePerfect 3.0 by reading these sources before using the application.

What is CapturePerfect 3.0

CapturePerfect 3.0 is an ISIS-compatible application developed for Canon document scanners. CapturePerfect 3.0 includes the following modes. Select the desired scan mode from the Scan menu to perform scanning.

■ Scan Batch to File

Documents are scanned with the preset scanning conditions, and the scanned image data is saved to a specified folder.

■ Scan Batch to Print

Documents are scanned with the preset scanning conditions, and the scanned image data is printed on a specified printer.


■ Scan Batch to Mail

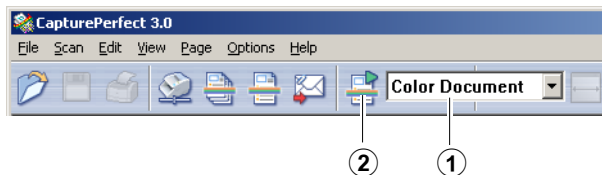
Documents are scanned with the preset scanning conditions, the e-mail software application is started, and the scanned image data is attached to a new e-mail message.

■ Scan Page

Only one page of the document is scanned.

■ Scan Job

The scanning conditions and scan mode (Scan Batch to File, Scan Batch to Print, or Scan Batch to Mail) are registered in advance as a job. The scan job can then be performed by selecting the registered job from the drop-down list (①) or by pressing  (Scan Job) on the toolbar (②).



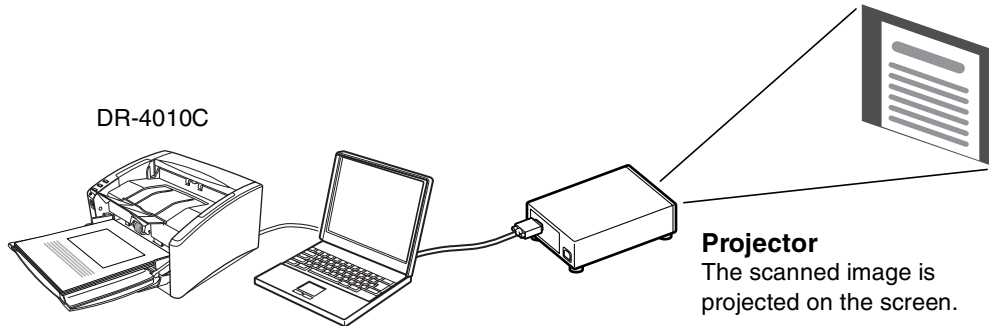
Note

The following two scan jobs are already registered.

- Color Document
Scan the document using 24-bit color, simplex, at 300 dpi resolution, and save the file in the folder [My Pictures] under the folder [My Documents].
- Binary Document
Scan the document in black-and-white, simplex, at 200 dpi resolution, and save the file in the folder [My Pictures] under the folder [My Documents].

- **Scan To Presentation**

This mode is useful when the scanner is used in environments, such as conference halls, where it can be connected to large displays or projectors. CapturePerfect 3.0 is switched to full-screen display, the document is scanned, and the scanned image is displayed at full size on the screen.

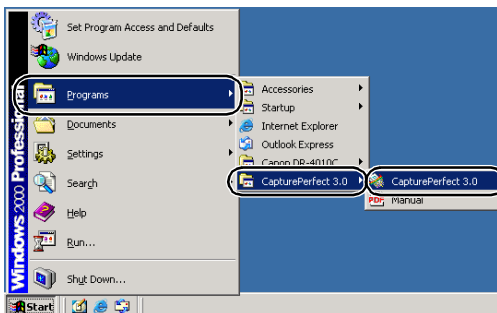


Using CapturePerfect 3.0

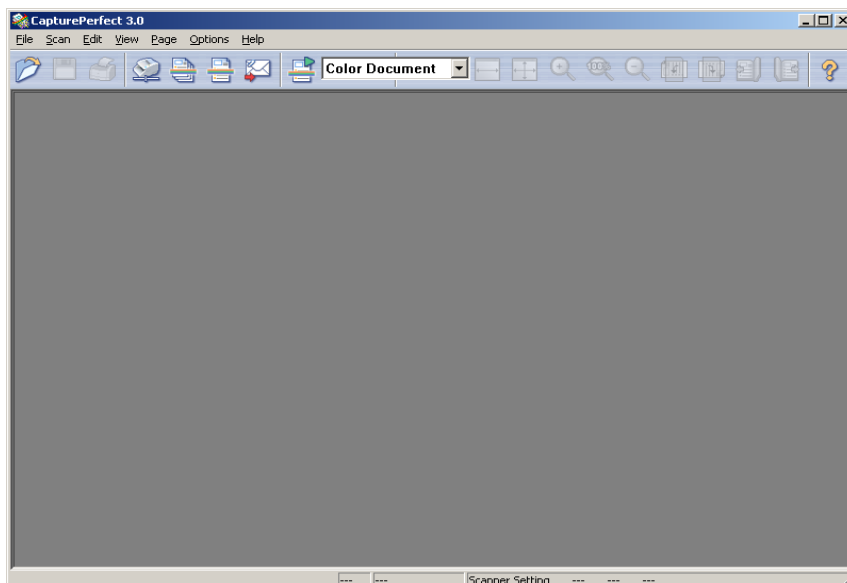
This section describes how to start up CapturePerfect 3.0, select the scanner, and scan documents. The Scan Batch to File function is used here as an example.

For details, see the *CapturePerfect 3.0 Operation Guide* and *CapturePerfect Online Help*.

- 1 Click the Windows [Start] button → click [Programs] ([All Programs] for Windows XP) → [CapturePerfect 3.0] → [CapturePerfect 3.0].

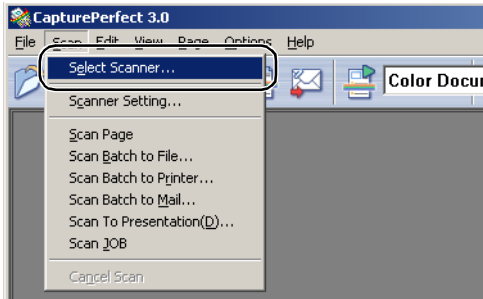


CapturePerfect 3.0 starts up.

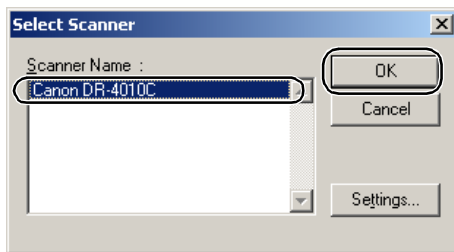


2 Follow the procedure below to select the Canon DR-4010C Document Scanner as the scanner to be used.

1. On the [Scan] menu, click [Select Scanner].



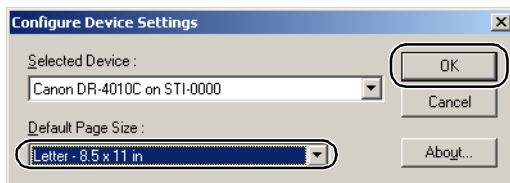
2. Select [Canon DR-4010C] → click [OK].



Note

If [Canon DR-4010C] is not displayed in the list of scanners, re-install the ISIS/TWAIN driver. (See “2-3 Installing the Software,” on p. 2-4.)

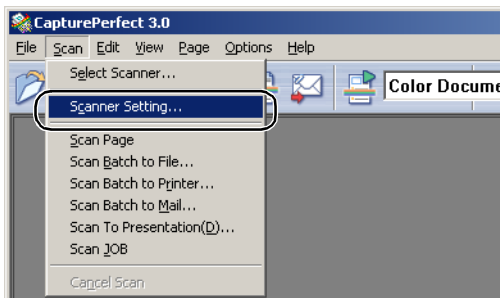
3. Set the Default Page Size and click [OK].



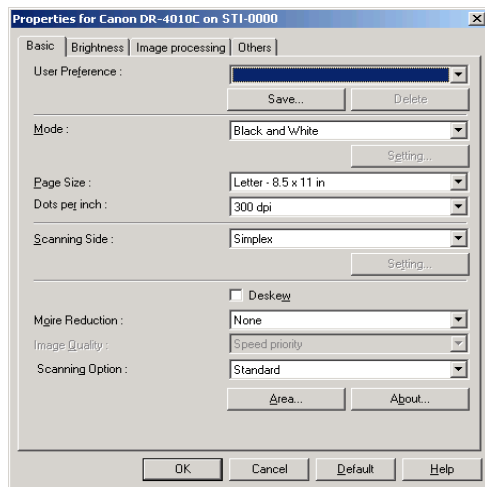
Note

This dialog box is displayed only when you select [Canon DR-4010C] for the first time and click [OK], or when you click [Setup] for [Scanner Selection].

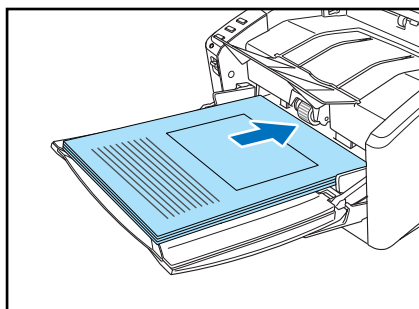
- 3 On the [Scan] menu, click [Scanner Setting].



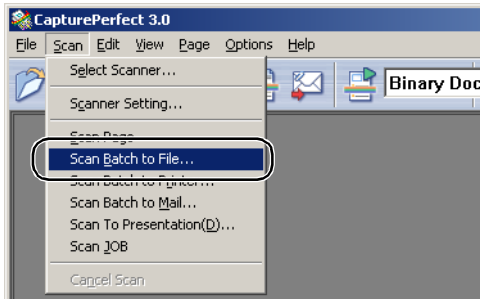
The Properties dialog box for the ISIS driver opens.



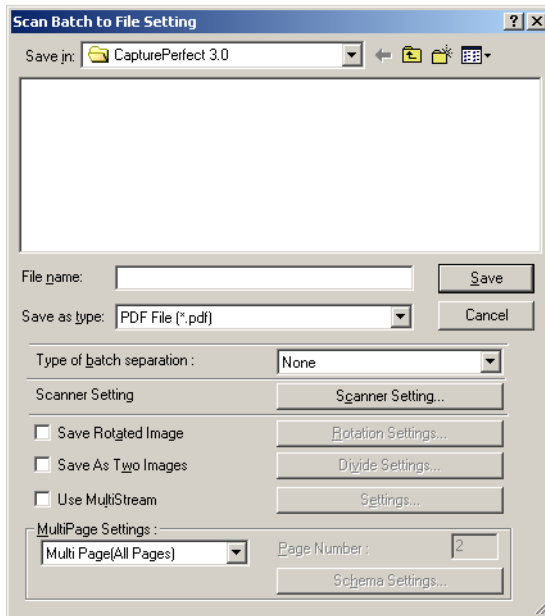
- 4 Set the scan settings.
For more information on scan settings, see [Chapter 7, "ISIS/TWAIN Driver Settings."](#)
- 5 Place your document. (See ["3-3 Placing Documents,"](#) on p. 3-5.)



- 6 On the [Scan] menu, select [Scan Batch to File].



The [Scan Batch to File Setting] dialog box opens.



For more details on how to scan documents, see the *CapturePerfect 3.0 Operation Guide* and *CapturePerfect Online Help*.

- 7 Specify the file name and the file type for saving the image data, and click [Save] to start scanning.

For details on the available settings in the [Scan Batch to File Setting] dialog box, see the *CapturePerfect 3.0 Operation Guide* and *CapturePerfect Online Help*.



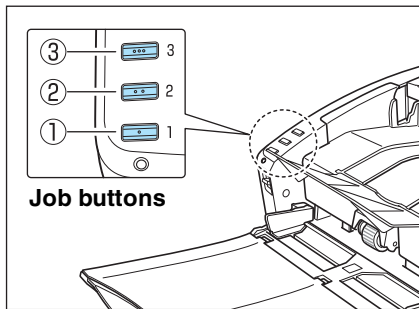
Note

If Feeding Option in the scan settings is set to “Panel-Feeding” or “Automatic Feeding,” the scan panel will appear when you start scanning. (See “Scan Panel,” on p. 3-21.)

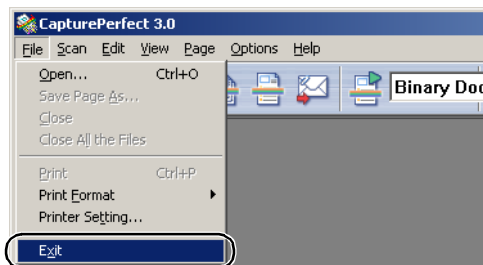
- 8 When there are no more pages of the document to scan, scanning stops. Scanning resumes or ends according to the Feeding Option setting in the scanner setup.

- Feeding Option is set to “Standard Feeding”:
The Continue dialog box is displayed. Place the next document, and click [Continue scanning] to resume scanning, or click [Stop Scanning] to end scanning.
- Feeding Option is set to “Automatic Feeding”:
Place the next document. Scanning resumes when the scanner detects the document. Alternatively, press job button ② (Stop) to stop scanning.

- Feeding Option is set to “Panel-Feeding”:
Place the next document and press job button ① (Start) to resume scanning, or press job button ② (Stop) to stop scanning.



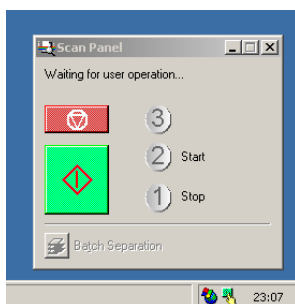
- 9 After scanning is complete, select [Exit] on the [File] menu to quit CapturePerfect 3.0.



Scan Panel

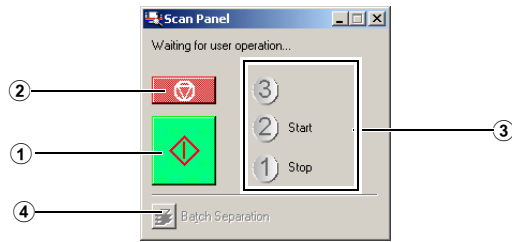
The Scan Panel is an application that is installed with the ISIS/TWAIN driver. When the DR-4010C driver starts, the scan panel appears in the task tray.

If Feeding Option in the scan settings is set to “Panel-Feeding” or “Automatic Feeding,” the Scan Panel will appear when you start scanning.



Scan Panel Functions

The Scan Panel has the following functions.



① Start button

If Feeding Option is set to “Panel-Feeding,” clicking this button starts scanning.

② Stop button

Stops scanning.

③ Job display

When the Start and Stop functions are assigned to the job buttons, [Start] and [Stop] are shown here.



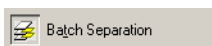
Note

If nothing is shown on the job display, the Start and Stop functions are not assigned to the job buttons. In this case, you should use the Start and Stop buttons on the Scan Panel.

④ Batch separation button

After selecting [Panel] as the batch separation setting on the [Others] tab, if you enable batch separation from the application and start scanning, this button becomes active when scanning of the current document completes, and scanning stops.

When clicked, this button depresses and remains depressed while scanning with batch separation continues, until scanning of the current document completes, and scanning stops. The button then returns to normal.



3-6 Using Patchcode Sheets

The DR-4010C ISIS driver and CapturePerfect 3.0 both support the automatic file separation function with patchcode sheets.

Patchcode patterns are printed on patchcode sheets, which are used to automatically separate files. When the scanner recognizes a patchcode sheet during scanning, the files are automatically separated at the patchcode sheet or at the image data of the next document.

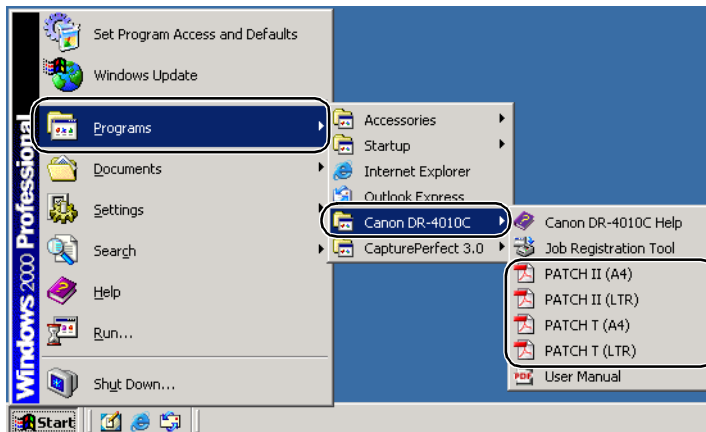


Note

- The TWAIN driver does not support batch separation.
- Patchcode sheets can be used only when the ISIS compatible application supports separating files by patchcode patterns.
- Patchcode sheets cannot be used when the MultiStream function (See “MultiStream Function,” on p. 3-34.) is being used.

About Patchcode Sheets

Patchcode sheets are data in a portable document format (PDF.) There are four types; [PATCH II (A4)], [PATCH II (LTR)], [PATCH T (A4)], [PATCH T (LTR)] according to the paper size and pattern. Click on the Windows start button, open [Programs] → [Canon DR-4010C] → [PATCH X (XX)]. Print the patchcode sheet to use it for scanning.



Note

To open patchcode sheets you need CapturePerfect 3.0, which is provided with the scanner, or an application, which supports PDF format files.



IMPORTANT

Patchcode sheets must be printed in their original size. The scanner may not recognize them as patchcode sheets if they are enlarged or reduced.

Patchcode Pattern Function

There are two types of patchcodes and their function changes according to their pattern.

■ PATCH T (FILE A)



When the scanner recognizes this patchcode printed on a patchcode sheet, it creates a separate file for the document that comes after the patchcode sheet. The image of this sheet can be saved or not, depending on the application's settings.

■ PATCH II (FILE B)



When the scanner recognizes this patchcode printed on a patchcode sheet, it creates a separate file starting from the patchcode sheet. The image of this sheet is saved, regardless of the application's settings.

How to Use Patchcode Sheets

- 1 Print patchcode sheets on a printer. Print the patchcode sheets at their original size on paper that is the same size as the image data.



Note

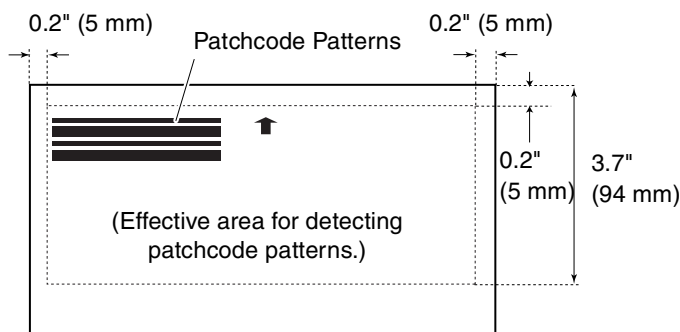
- Print [PATCH II (A4)] and [PATCH T (A4)] on A4 paper.
- Print [PATCH II (LTR)] and [PATCH T (LTR)] on LTR paper.



IMPORTANT

To copy a patchcode pattern to create a different size patchcode sheet, make sure to pay attention to the following:

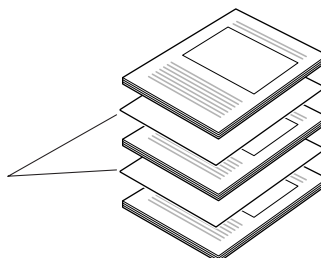
- Adjust the patchcode so that it fits into the effective area for detecting patchcode patterns.



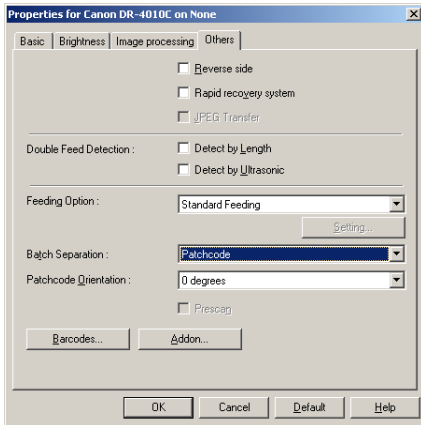
- When copying a patchcode pattern, the copy should be the same size and print density as the pattern on the original. Extremely dark or light copies may not be scanned correctly.

- 2 Insert the patchcode sheet in front of the document that you want to save as a separate file before placing the documents on the scanner.

Insert patchcode sheets in front of the documents you want to save as separate files.



- 3 On the [Other] tab of the ISIS driver properties, set the batch separation setting to “Patchcode.”

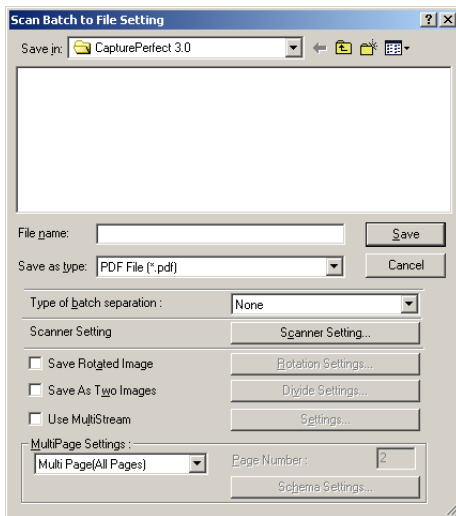


- 4 From the application, perform scanning with batch separation enabled.



Note

If you are scanning with CapturePerfect, set the Type of batch separation setting to “Scan, Continue Scanning” or “Skip, Continue Scanning.”



- If “Scan, Continue Scanning” is selected, the patchcode sheet image is also saved and scanning continues.
- If “Skip, Continue Scanning” is selected and the PATCH T (FILE A) pattern is detected, the patchcode sheet image is not saved and scanning continues.



IMPORTANT

Make sure to keep the patchcode sheets clean. In particular, the effective area for detecting patterns should be kept clean. Also, do not fold them or allow them to become creased. If this happens, the scanner will not be able to read them.

3-7 Clearing a Paper Jam

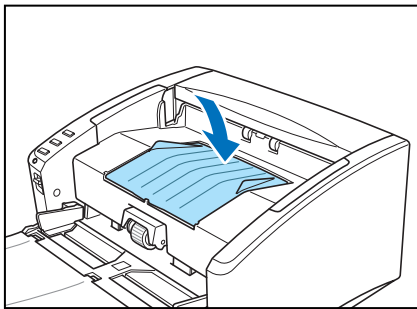
When paper jams occur during scanning, use the following procedure to clear them.



CAUTION

When removing jammed paper, take care not to cut your hands on the edges of the paper.

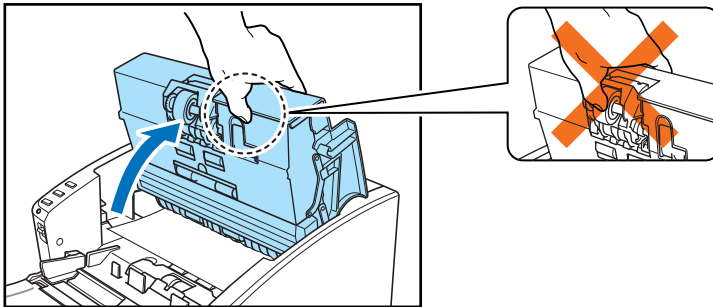
- 1 Remove any documents that have been left in the eject tray, and close the eject tray guide.



IMPORTANT

If a document stops in the eject tray, remove the document before closing the document eject tray extension. Attempting to force the document eject tray extension closed may damage the document.

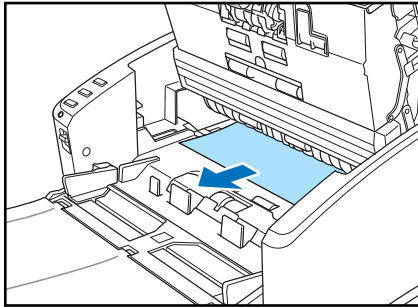
- 2 Carefully open the upper unit until the jammed document can be removed.



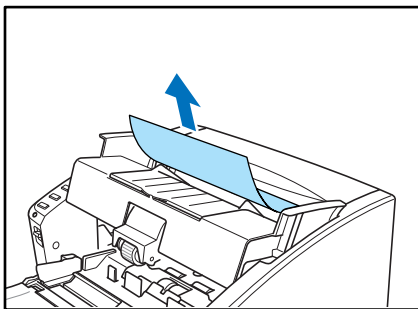
IMPORTANT

When opening the upper unit, do not grasp the roller unit in the center. Doing so may distort the rollers and lead to feeding errors.

- 3** Remove the jammed document.
- If the jam occurred in the feed section



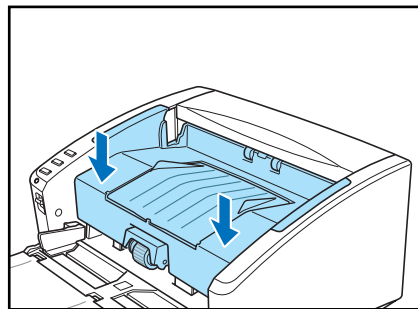
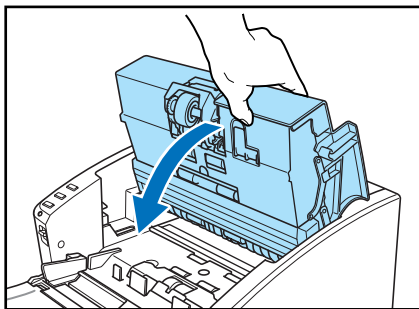
- If the jam occurred in the eject section



IMPORTANT

Make sure to pull the document out carefully, without applying too much force. If jammed paper tears while it is being removed, make sure to remove any remaining pieces from inside the scanner.

- 4** Close the upper unit slowly. Make sure that the upper unit is completely closed by pushing on both edges with both hands until you hear a click.



CAUTION

When closing the upper unit, be careful not to get your fingers caught, as this may result in personal injury.



IMPORTANT

Do not force the upper unit to close. Doing so may damage the scanner.



Note

- After removing the jammed paper, check to see if the last page was scanned, and then continue scanning.

- If a paper jam occurs when “Rapid recover system” is enabled in the ISIS/TWAIN driver settings, the image data of the document is not saved and scanning stops. This allows you to continue scanning from the document that caused the paper jam after the paper jam is fixed.

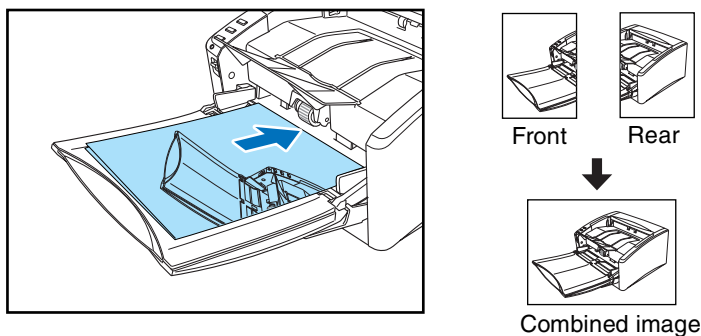
3-8 Other Functions

This scanner also supports the scanning functions described below.

- **Folio Scan**
Documents larger than A4 (up to A3) can be scanned by folding them first.
- **Double Feed Detection Function**
The scanner will detect a double feed and stop scanning.
- **Long Document Mode**
Allows scanning of documents up to 39.2" (1,000 mm) in length.
- **MultiStream Function**
Two types of images are output from a single scanning pass.

Folio Scan

This function supports the scanning of documents that are larger than A4 and therefore do not fit in the feeder. (The maximum size is A3.) To use the function, fold the document and place it into the feeder. The DRC-4010C will scan both sides and combine the scanned images into a single image.



- To use this function, select Folio as the “Scanning Side” setting. For details, see Chapter 7, “ISIS/TWAIN Driver Settings.”
- The scanned image of the front side of the document becomes the left half of the combined image.
- The maximum size for the combined image is A3. When using the Folio function for an irregular-sized document, set Page Size to “Auto-detection.”
- When you face the front of the scanner, the fold should be on the right side.



IMPORTANT

- When folding the document, align the right and left sides and create a sharp, straight fold. Otherwise the document may jam or the image may not be aligned properly.
- The fold line itself will not be scanned. Keep this in mind if there is content such as photos, diagrams, or text that spans the fold.
- For Folio scanning, only bypass mode (P.3-7) can be used.
- Adjust the document guides to fit the width of the document. Otherwise, the image may scan as skewed or shifted.

Double Feed Detection Function

The scanner is equipped with a [Double Feed Detection] function that automatically detects when two or more pages are fed at the same time (double feed) while scanning continuously.

There are two methods for multiple feed detection. The detection method is selected by the ISIS/TWAIN driver.

Detecting Double Feed by Document Length

This detection method is effective when scanning a document on pages that are all of the same size. The length of the first page scanned is used as a standard against which the rest of the pages are compared. If any page is 2.0" (50 mm) longer or shorter than the first page, it is considered a double feed and scanning stops.

Detecting Double Feed with Ultrasonic Waves

This detection method is effective when scanning a document on pages that are different sizes. Ultrasonic waves are used to detect pages that are fed at the same time as well as the space between pages. Scanning stops if a double feed is detected.

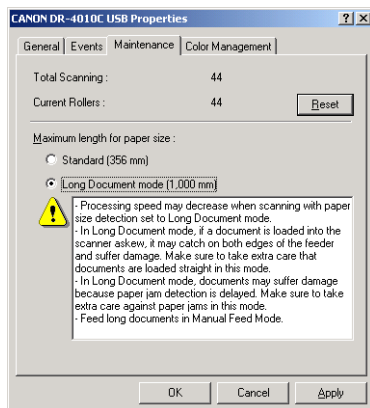


Note

- Ultrasonic double feed detection works only when the documents overlap by 2.0" (50 mm) or more.
- If the documents are stuck together with static electricity, the ultrasonic double feed detection method will not correctly detect them as a double feed.

Long Document Mode

Normally, the scanner can scan documents up to 14" (356 mm) long. However, if you change the paper size setting to Long Document mode, you can scan documents up to a maximum of 39.2" (1,000 mm) long. (See "Long Document Mode Settings," on p. 3-31.)



IMPORTANT

When scanning in the Long Document mode, set the paper size for the ISIS/TWAIN driver to "Auto-detection" to allow the scanner to detect and scan documents up to 39.2" (1,000 mm) long. Note the following when using the Long Document mode:

- Scanning documents up to 39.2" (1,000 mm) long may not be possible with some scanning modes.
- Documents may be scanned more slowly when the scanner is scanning with automatic size detection in Long Document mode.

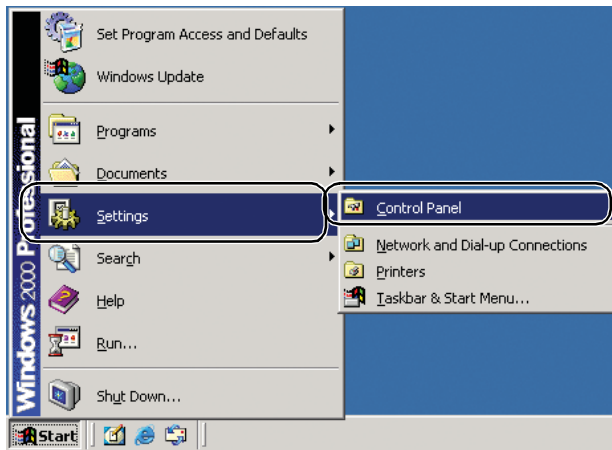
- When scanning in the Long Document mode, if the document is placed on the scanner in a skewed position, it may be damaged. Be careful to place the document so that it is not skewed.
- When scanning with the Long Document mode, paper jam detection may react slowly, resulting in damage to the document. Be careful to avoid paper jams.
- When scanning long documents, make sure to feed them one page at a time with the bypass mode.

Long Document Mode Settings

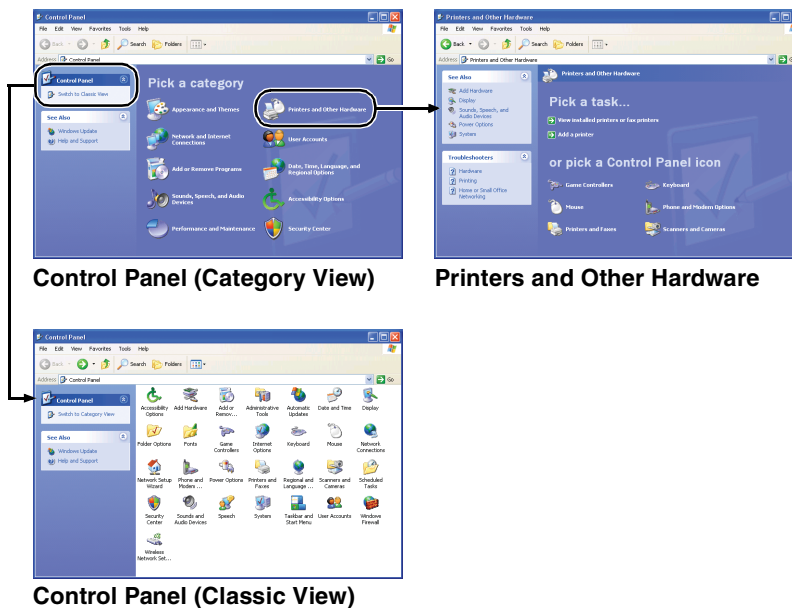
Follow the procedure below to set the Long Document mode.

1 Use the following procedure to open the [CANON DR-4010C USB Properties] (or [CANON DR-4010C SCSI Properties].)

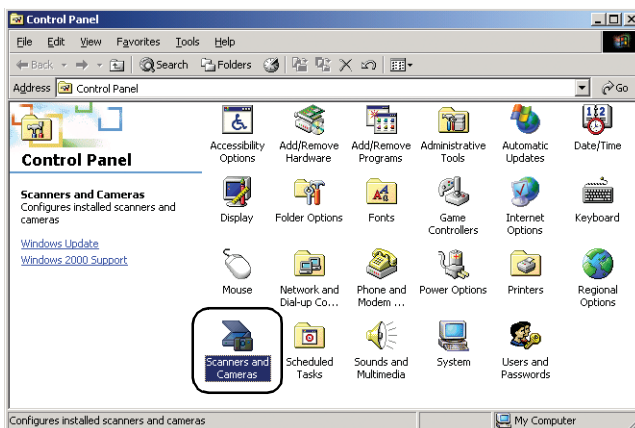
1. Click [Start] → [Settings] on the [Start] menu → click [Control Panel]. (For Windows XP, click [Start] → click [Control Panel].)



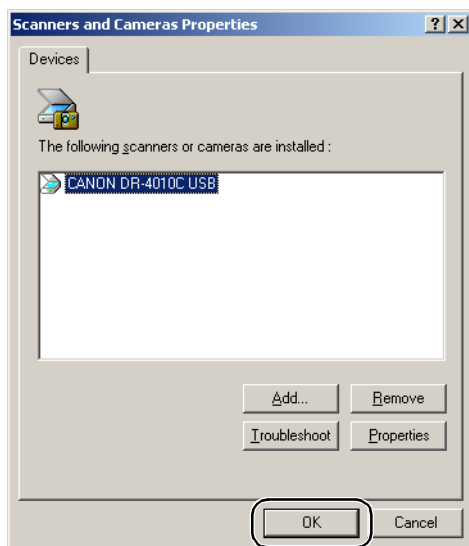
2. For Windows XP, switch the Control Panel to Classic View, or select [Printers and Other Hardware] in the working field.



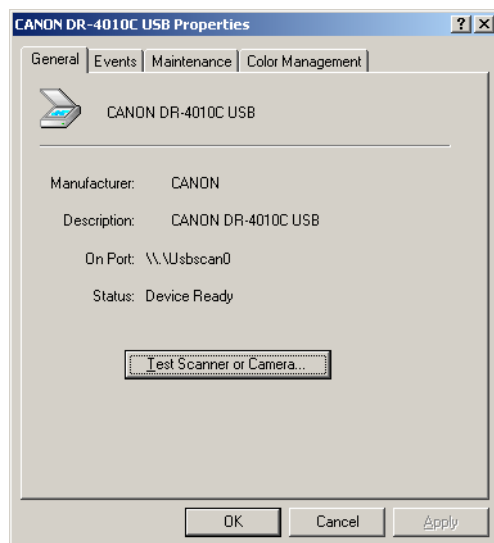
3. Double-click [Scanners and Cameras].



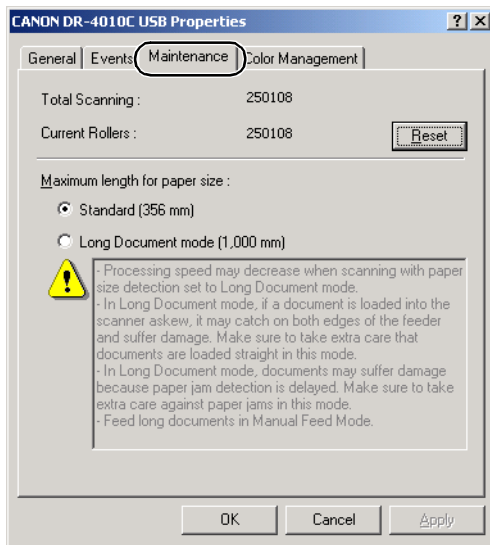
4. Select [CANON DR-4010C USB] or ([CANON DR-4010C SCSI]) → click [Properties].



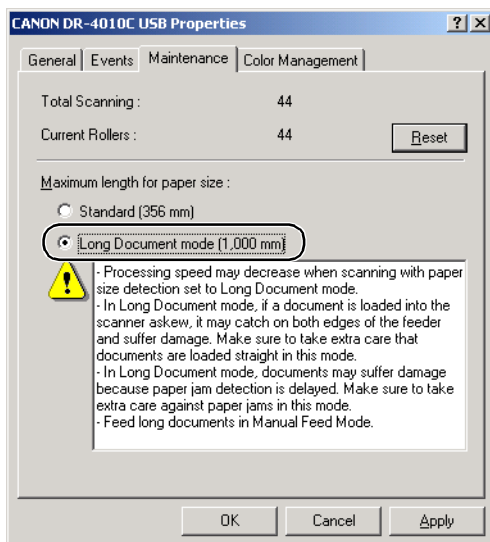
The [CANON DR-4010C USB Properties] (or [CANON DR-4010C SCSI Properties]) window appears.



2 Click the [Maintenance] tab.



3 Click [Long Document mode (1,000 mm)].



4 Click [Apply] to change the scanner's settings.

5 Click [OK] to close [Scanners and Cameras Properties].

6 Turn the scanner OFF and then ON again.



IMPORTANT

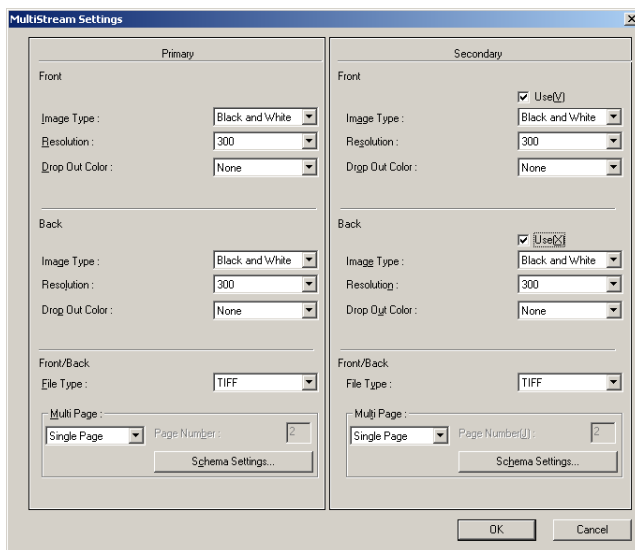
- If you are using a SCSI connection, turn OFF the computer and then turn the scanner OFF and then ON again.
- Wait at least 10 seconds before turning the scanner back ON after it has been turned OFF.

MultiStream Function

If the application that you are using supports the MultiStream function, then it is possible to scan a document once and simultaneously output two types of images (Primary image and Secondary image.)

CapturePerfect 3.0 supports the MultiStream function. The following settings are possible.

- You can set the Primary or Secondary image and Front or Back for the Image Type (mode), Resolution or Drop Out Color.
- You can change the File Type for the Primary image and the Secondary image. However, you cannot change Front or Back from File Type.



Note

- When using the MultiStream function, “Auto Color Detection,” “Prevent Bleed Through,” “Prescan,” and “Batch Separation by Patchcode Sheet” cannot be set.
- The MultiStream function is not available when “Auto Color Detection” is selected for the Mode setting in the ISIS/TWAIN driver.

4-1 Regular Maintenance

Clean the scanner on a regular basis as described below to maintain peak scanning quality.

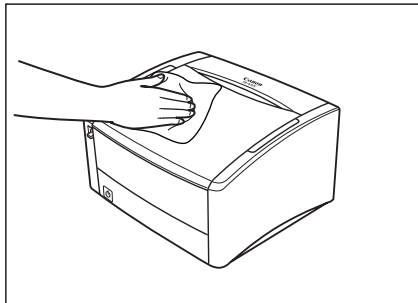


CAUTION

- When cleaning the scanner, turn OFF the power switch and disconnect the power cord from the power outlet.
- Do not use excessive force when removing or attaching the rollers. Doing so may damage them.
- Do not use spray type cleaners to clean the scanner. Precision mechanisms, such as the light source, may get wet, and cause a malfunction.
- Never use paint thinner, alcohol, or other organic solvents to clean the scanner. Such solvents can damage or discolor the exterior of the scanner, or create a risk of fire or electrical shock.

Cleaning the Scanner

To clean the exterior of the scanner, dampen a cloth with water or a mild detergent, wring the cloth out thoroughly, and then wipe the dirt away. Then use a dry, soft cloth to wipe away any moisture.



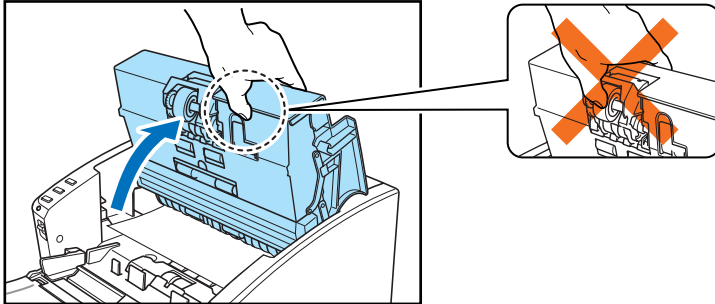
Cleaning the Feed Path

Dust or paper particles in the document feed opening or inside the scanner can cause lines in scanned images. Use compressed air to periodically clean dust and paper particles from the document feed opening and the inside of the scanner. After finishing a large scanning job, turn OFF the scanner and then clean out any paper particles.

Cleaning the Sensor Glass and the Rollers

If scanned images have extraneous marks, or if the scanned documents are dirty, the sensor glass or rollers inside the scanner may be dirty. Clean them periodically.

- 1 Carefully open the upper unit until it stops.



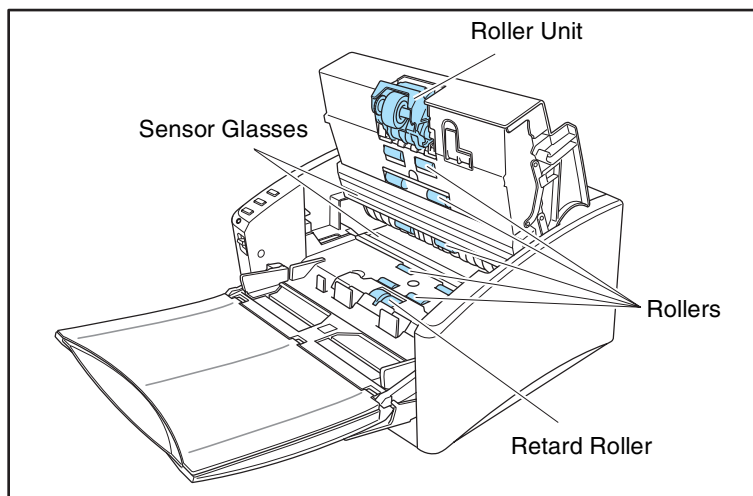
IMPORTANT

When opening the upper unit, do not grasp the roller unit in the center. Doing so may distort the rollers and lead to feeding errors.



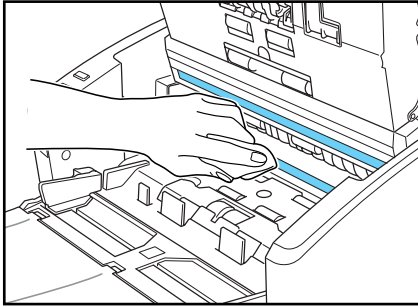
Note

The location of the sensor glass and various rollers are shown below.



- 2 Use compressed air to keep the interior of the scanner free of dust and paper particles.

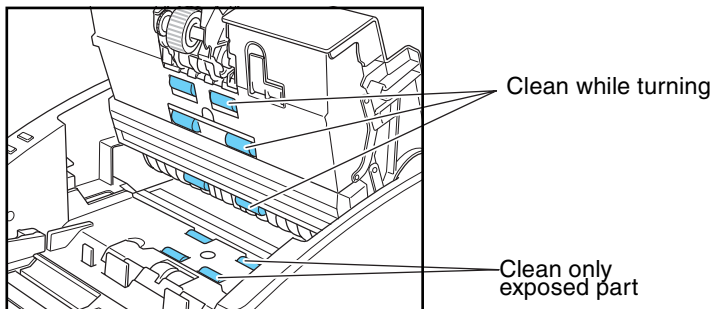
- 3** Use a clean dry cloth to wipe dirt off the sensor glass.
Wipe both the top and bottom sensor glasses.



IMPORTANT

Scratches on the sensor glass may cause marks on the images and could cause feeding errors. If there are scratches on the sensor glass, contact your local authorized Canon dealer or service representative.

- 4** Dampen a cloth with water, wring it out thoroughly, and then wipe the rollers of the upper unit while turning them.
Do not try to turn the rollers in the lower part of the scanner. Clean these rollers simply by wiping the exposed part.

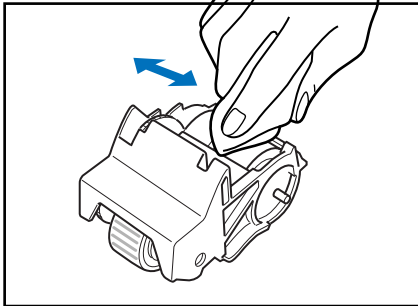


IMPORTANT

- Do not use detergent to clean the rollers, since any detergent remaining on the rollers could cause a feeding error.
- Do not try to turn the rollers in the lower part of the scanner. Turning these rollers by force may damage them and lead to feeding errors.

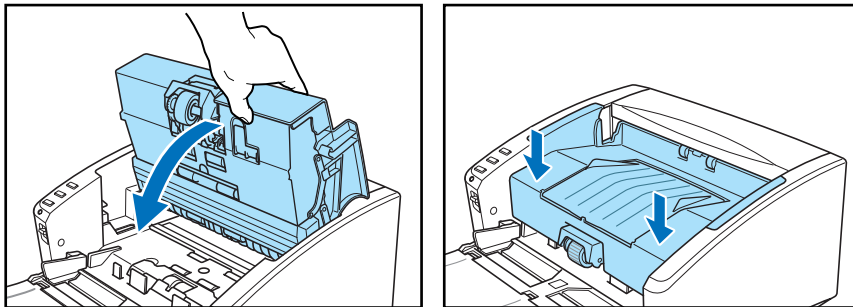
- 5** Remove the roller unit and the retard roller. (See [“Removing the Roller Unit,”](#) on p. 4-9, and [“Removing the Retard Roller,”](#) on p. 4-11.)

- 6** Wipe the removed rollers with a cloth that has been moistened with water and thoroughly wrung out.



- 7** Attach the rollers that were removed. (See “Attaching the Roller Unit,” on p. 4-10, and “Attaching the Retard Roller,” on p. 4-12.)

- 8** Make sure that the upper unit is completely closed by pushing on both edges with both hands until you hear a click.



CAUTION

When closing the upper unit, be careful not to get your fingers caught, as this may result in personal injury.



IMPORTANT

Do not force the upper unit to close. Doing so may damage the scanner.

4-2 Removing and Attaching the Rollers

To clean or replace the roller unit or retard roller, remove and then attach the parts as described in each respective section.



IMPORTANT

Feed rollers are consumable parts. When the rollers start to wear out, paper jams and misfeeds may occur more often. When this happens, purchase an exchange roller kit and replace the roller unit and the retard roller.

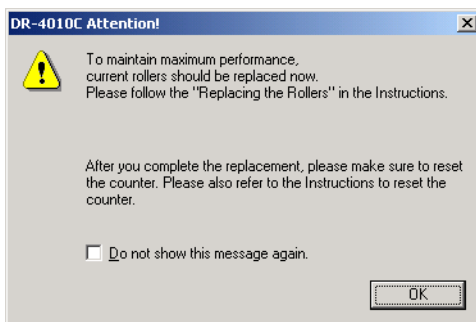


CAUTION

Do not use excessive force when removing or attaching the rollers. Doing so may damage them.

Roller Replacement Cycle

When the rollers being used have fed more than 250,000 pages, a roller replacement message appears on the computer. Purchase an exchange roller kit and replace the roller unit and the retard roller.



IMPORTANT

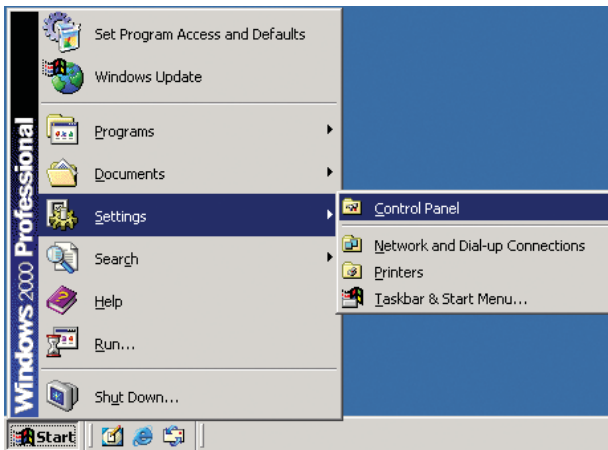
- If misfeeds happen often, check the rollers for wear, and replace them if necessary before the message is displayed.
- Be sure to reset the counter after replacing the rollers. (See [“Resetting the Counter,”](#) on p. 4-6.)
- For information about the exchange roller kit (roller unit, retard roller,) contact your local authorized Canon dealer or service representative.

Resetting the Counter

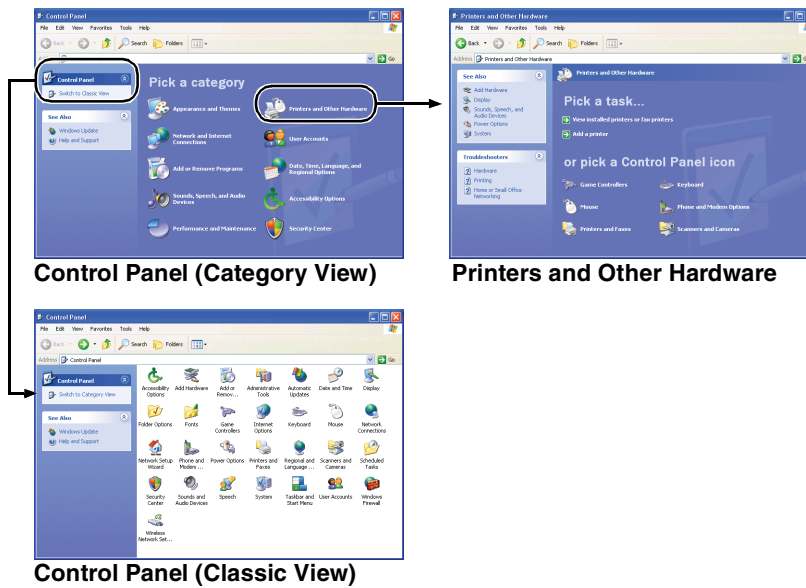
After replacing the feed rollers, open the [Counter setup] dialog box and reset the counter.

1 Open the [Event settings] dialog box.

1. Click the [Start] button, → [Settings] on the [Start] menu → click [Control Panel]. (For Windows XP, click the [Start] button → click [Control Panel].)



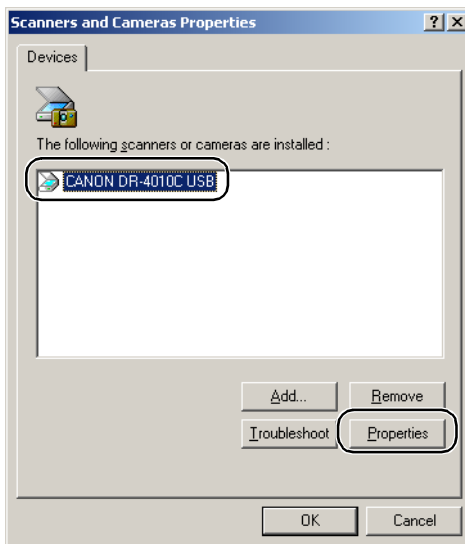
2. For Windows XP, switch the Control Panel to Classic View, or select [Printers and Other Hardware] in the working field.



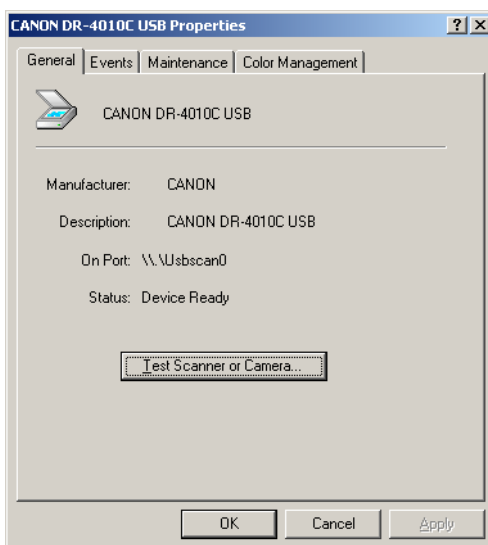
3. Double-click [Scanners and Cameras].



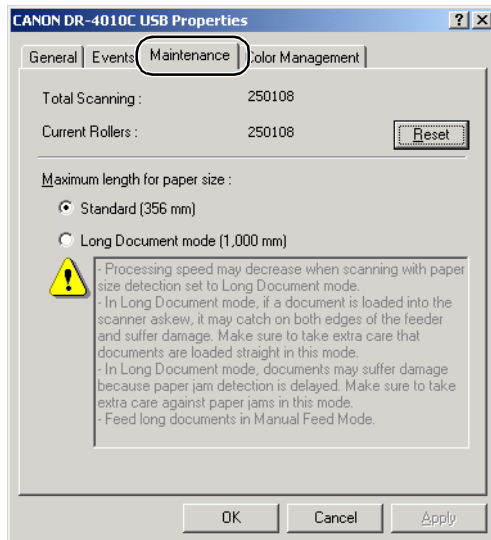
4. Select [CANON DR-4010C USB] (or [CANON DR-4010C SCSI]), → click [Properties].



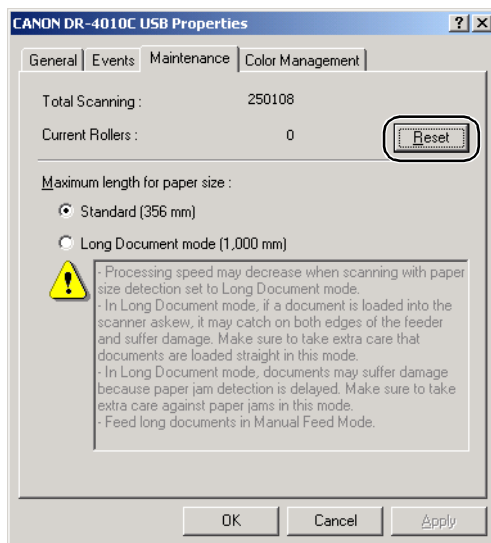
[CANON DR-4010C USB Properties] (or [CANON DR-4010C SCSI Properties]) is displayed.



2 Click the [Maintenance] tab.



3 Click the [Reset] button, and then make sure that the counter for the roller being used is set to 0.



Removing/Attaching the Roller Unit

To remove or attach the roller unit, proceed as follows.

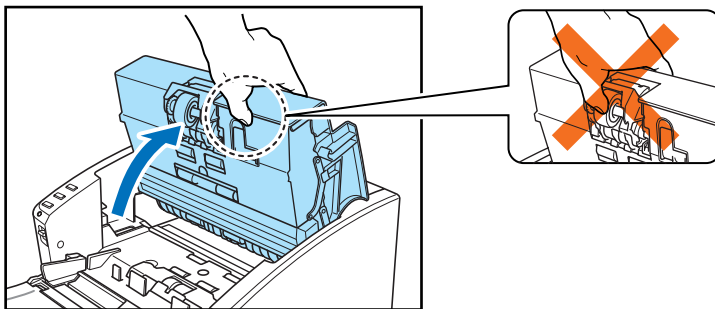


CAUTION

Use caution when removing or attaching the roller unit. Using too much force may lead to damage or personal injury.

Removing the Roller Unit

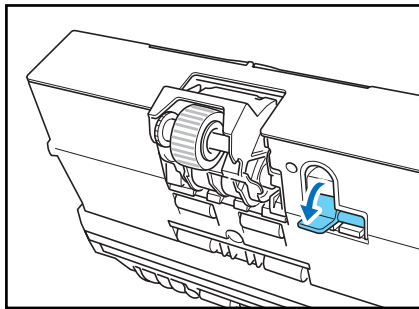
- 1 Carefully open the upper unit until it stops.



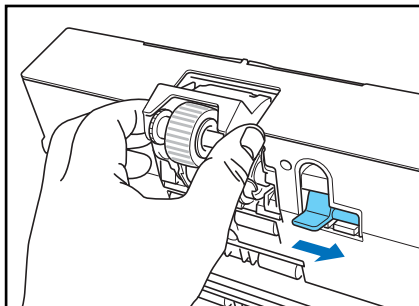
IMPORTANT

When opening the upper unit, do not grasp the roller unit in the center. Doing so may distort the rollers and lead to feeding errors.

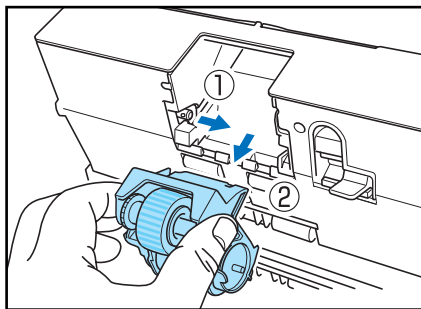
- 2 Push the roller lock lever down.



- 3 While supporting the roller unit with your hand, slide the roller lock lever to the right.

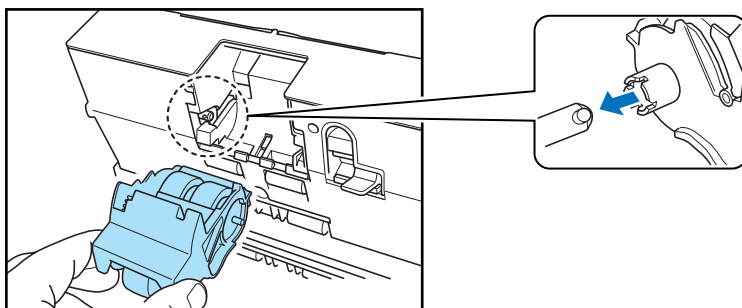


- 4** Move the roller unit to the right ① and then pull it out ②.



Attaching the Roller Unit

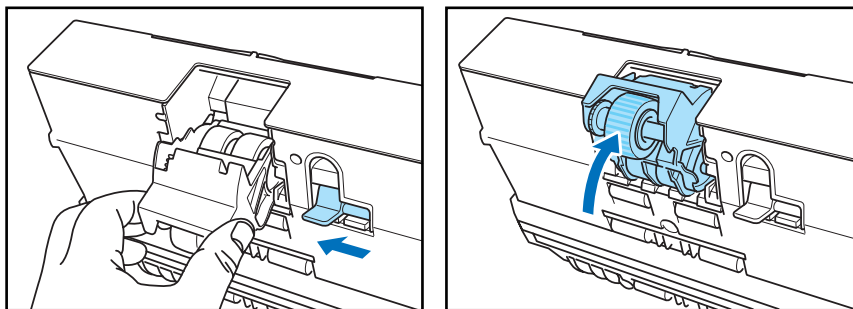
- 1** Align the cutout on the roller unit with the shaft pin on the main unit.



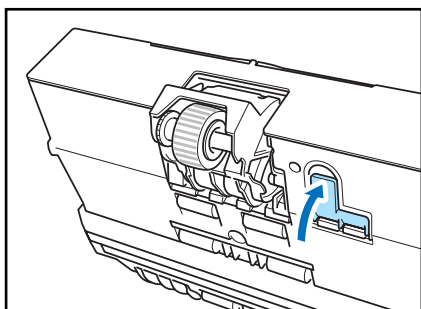
Note

If the cutout and pin do not fit, rotate the roller until the parts are properly matched.

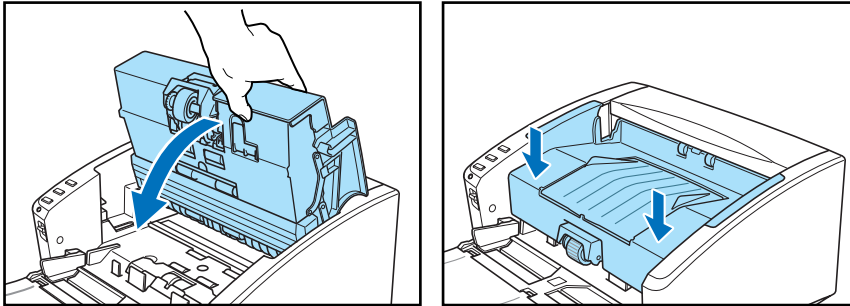
- 2** Slide the roller lock lever to the left and raise the roller unit into position.



- 3** Push the roller lock lever up to lock the roller unit.



- 4 Carefully lower the upper unit. Finally, push the upper unit down with both hands at the sides until the unit clicks into place. Verify that the upper unit is properly closed.



CAUTION

When closing the upper unit, be careful not to get your fingers caught, as this may result in personal injury.



IMPORTANT

Do not force the upper unit to close. Doing so may damage the scanner.

Removing and Attaching the Retard Roller

To remove or attach the retard roller, proceed as follows.

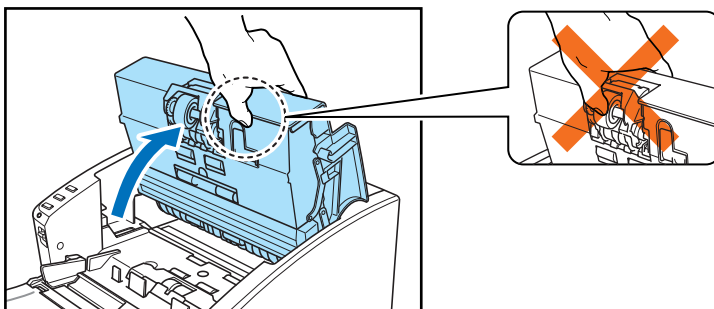


CAUTION

Do not use excessive force when removing or attaching the retard roller. Doing so may damage it.

Removing the Retard Roller

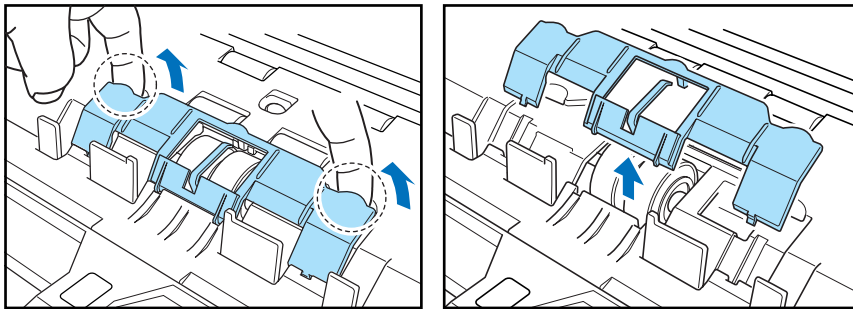
- 1 Hold the upper unit as shown in the diagram, and open it until it stops.



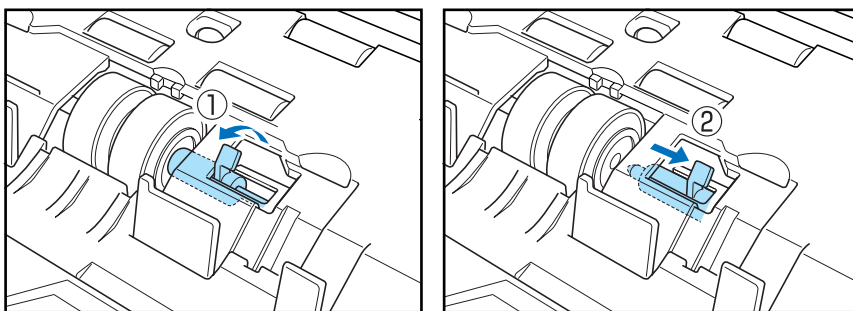
IMPORTANT

When opening the upper unit, do not grasp the roller unit in the center. Doing so may distort the rollers and lead to a feeding error.

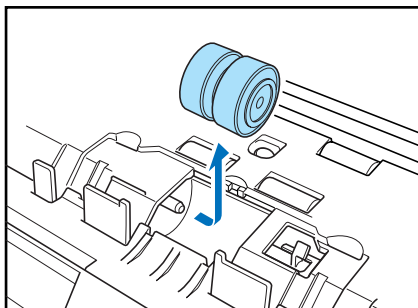
- 2** Insert a finger of each hand into the grooves on both ends of the roller cover and remove the cover.



- 3** Move the roller lock lever down and forward (①,) and then slide it to the right (②.)

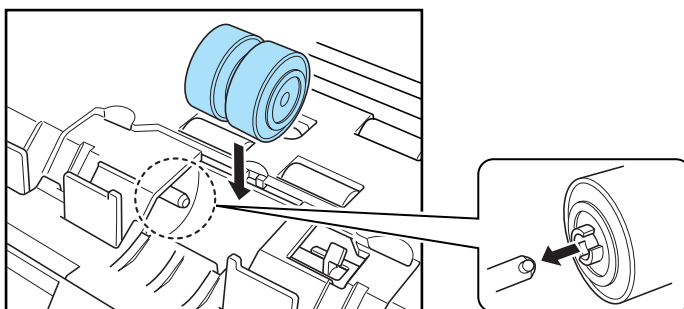


- 4** Shift the retard roller to the right to remove it.

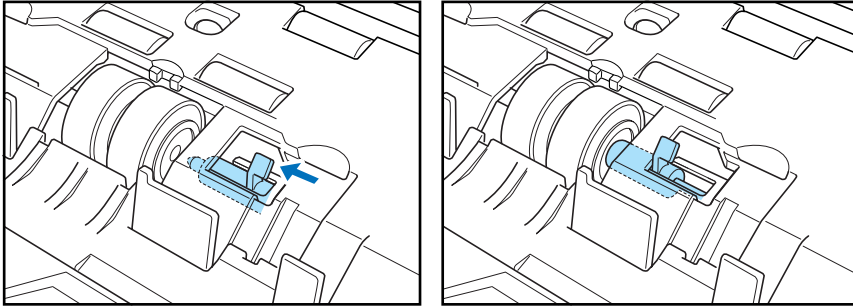


Attaching the Retard Roller

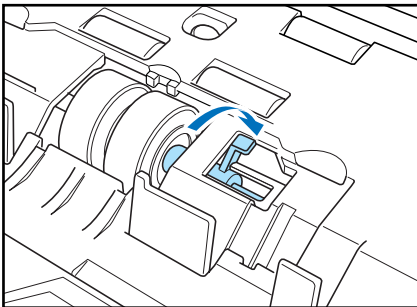
- 1** Position the retard roller so the notch in the roller is facing the scanner's shaft.



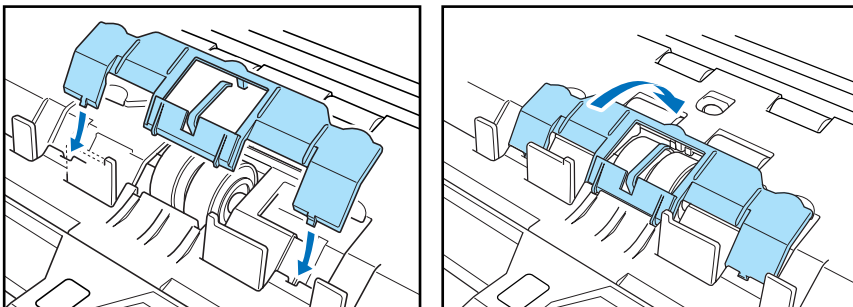
- 2** Slide the roller lock lever to the left, and insert it into the retard roller slot.



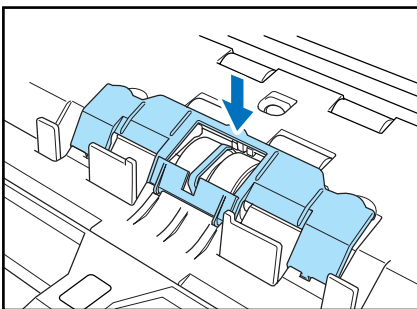
- 3** Push the roller lock lever towards the back of the scanner to lock the retard roller into place.



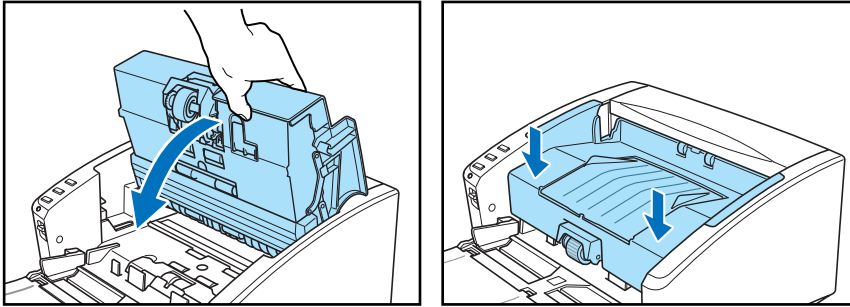
- 4** Replace the roller cover.



- 5** Push the center of the roller cover down and make sure that it clicks into place.



- 6** Close the upper unit slowly. Make sure that the upper unit is completely closed by pushing on both edges with both hands until you hear a click.



CAUTION

When closing the upper unit, be careful not to get your fingers caught, as this may result in personal injury.



IMPORTANT

Do not force the upper unit to close. Doing so may damage the scanner.

5-1 Troubleshooting

This section describes the possible problems that might occur during use of the scanner and how to solve them.

The Scanner Does Not Turn ON	P.5-1
The Scanner Is Not Recognized (Connecting via USB).....	P.5-1
The PC Does Not Recognize the Scanner (Connecting via SCSI)	P.5-2
Scanning Is Not Performed	P.5-2
Slow Scanning Speed	P.5-3
Documents Do Not Feed Properly	P.5-3
Saved Image Files Do Not Open	P.5-4
Scanning Results Are Not as Expected	P.5-4

If, after consulting this section, you still cannot resolve the problem, contact your local authorized Canon dealer or your service representative.

✘ The Scanner Does Not Turn ON

Check the following if the scanner does not turn ON:

- Is the power cord connected correctly?
- Is the power cord inserted into the power outlet?

For details on connecting the power cord, see “2-4 Connecting the Scanner to the Computer,” on p. 2-11.

✘ The Scanner Is Not Recognized (Connecting via USB)

The following are possible causes of the PC failing to recognize the scanner. Check each possible cause.

Problem The scanner is not correctly connected.

Solution Make sure that the scanner and the computer are correctly connected with the USB cable. (See p. 2-11.)

Problem The scanner power is switched OFF.

Solution Make sure that the scanner is switched ON. If the scanner is OFF, turn the scanner ON. (See p. 2-11.)

Problem The scanner does not support your USB interface.

Solution This product is not guaranteed to operate with all types of USB interfaces. Contact your local authorized Canon dealer or service representative for more information. (See p. 2-2.)

Problem The scanner does not support the USB cable.

Solution Use the USB cable provided with the scanner.

Problem The USB hub is not compatible with the scanner.

Solution Remove the USB hub.

✗ The PC Does Not Recognize the Scanner (Connecting via SCSI)

The following are possible causes of the PC failing to recognize the scanner. Check each possible cause.

Problem The scanner is not connected correctly.

Solution Make sure that the scanner and the computer are correctly connected. (See p. 2-12.)

Problem The SCSI card is not correctly installed in the PC.

Solution Refer to the documentation for the SCSI card and the computer. Make sure that the SCSI card is correctly installed in the computer and that it is enabled properly under the operating system in use.

Problem The scanner's SCSI ID is identical to the SCSI ID of another device.

Solution Check the SCSI IDs of all SCSI devices connected to the system and set a unique SCSI ID for the scanner. (See p. 2-12.)

Problem The terminator is not set correctly.

Solution Shut down both the PC and the scanner, and then turn the scanner ON first, and then the PC. (See p. 2-12.)

Problem There is a problem with another SCSI device that is connected in the daisy chain.

Solution Do not use the daisy chain connection configuration. (See p. 2-12.)

Problem The PC was turned ON before the scanner.

Solution Shut down both the PC and the scanner, and then turn the scanner ON first, and then the PC. (See p. 2-14.)

Problem The scanner is not ON.

Solution Check to see if the scanner is ON. If the scanner is not ON, shut down the PC, then turn the scanner ON first, and then the PC. (See p. 2-14.)

Problem The SCSI card is not compatible with the scanner.

Solution Use a recommended SCSI card. (See p. 2-2.)

✗ Scanning Is Not Performed

Check the following if the scanner does not scan an image even though the scanning operation is performed:

- Has the application software been installed correctly? Has the application software been set up correctly?
- Is there a problem in the PC system?

**IMPORTANT**

- If documents are not scanned normally even if the scanner setup is OK, a probable cause is that the scanner driver or application software is not running correctly. Re-install the scanner driver or application software.
- When system errors result in the scanner not functioning at all, turn OFF the scanner and wait at least ten seconds before turning it ON again. If the error continues to occur, restart the computer.
- When scanning continues, make sure that the last document scanned was scanned correctly.

X Slow Scanning Speed

The following problems might cause the scanning speed to be slow.

Problem Other applications are running in the background on your PC.

Solution Quit all other applications that are running.

Problem Resident applications, such as anti-virus software, are draining memory resources.

Solution Quit all resident applications.

Problem Temporary files cannot be created in the TEMP folder, as there is not enough free space on the hard disk.

Solution Delete unwanted files on the hard disk to increase free space on the hard disk.

Problem The USB port you are using does not support Hi-Speed USB 2.0.

Solution Scanning speeds are lower if your computer's standard USB interface is not compatible with Hi-Speed USB 2.0. Use a computer that is equipped with USB that is compatible with Hi-Speed USB 2.0 as standard. (See "2-2 Installation Requirements," on p. 2-2.)

Problem The USB cable does not support Hi-Speed USB 2.0.

Solution Use the USB cable provided with the scanner.

Problem The USB hub does not support Hi-Speed USB 2.0.

Solution Remove the USB hub.

X Documents Do Not Feed Properly

The following are possible causes of a document failing to feed properly. Check each possible cause.

Problem Static electricity, etc., is causing the pages of the document to stick together, and they cannot be separated correctly by the scanner.

Solution Before you place your document, thoroughly fan the stack of papers. (See "3-3 Placing Documents," on p. 3-5.)

Problem Attempting to scan a document of a size, thickness, or weight that the scanner cannot scan.

Solution Check the size, thickness, and weight of the document. For precautions concerning documents, see “3-1 Documents,” on p. 3-1.

Problem The rollers inside the scanner are dirty or worn.

Solution Clean the rollers, see “4-1 Regular Maintenance,” on p. 4-1. If the rollers are worn, then they need to be replaced. Contact your local authorized Canon dealer or service representative to purchase a roller replacement kit.



IMPORTANT

The retard roller and roller unit are consumable components. You need to replace the retard roller and roller unit when cleaning does not appear to improve performance. Contact your local authorized Canon dealer or your service representative about purchasing a roller replacement kit, and then replace the retard roller and the roller unit.

✘ Saved Image Files Do Not Open

When image files saved by CapturePerfect 3.0 cannot be opened by other applications, the probable causes are as follows.

Symptoms A multi-page TIFF file saved in CapturePerfect 3.0 cannot be opened by other applications.

Problem The application you are using to open the TIFF file does not support multi-page TIFF files.

Solution Open the file with an application that supports multi-page TIFF files.

Symptoms A TIFF file saved in CapturePerfect 3.0 cannot be opened by other applications.

Problem If the TIFF file saved in CapturePerfect 3.0 has been compressed, the application you are using to open the TIFF file does not support the compression type that was used to save the file in CapturePerfect 3.0.

Solution Set the compression type for the image file to [None] and save the file again in CapturePerfect 3.0.

✘ Scanning Results Are Not as Expected

If there is a problem with the scanning result (e.g., the scanned image is not clear, or the image is striped or dirty,) the probable causes are incorrect ISIS/ TWAIN driver settings or a problem with the scanning unit inside the scanner. Scanning results can also become skewed if the ISIS/ TWAIN driver has not been installed correctly, or the application in use does not support ISIS/ TWAIN driver functions.

Symptoms The scanned image is too dark (or faint.)

Problem The [Brightness] setting is not set to an appropriate value.

Solution If the image is dark, set a higher [Brightness] setting, or if the image is faint, set a lower [Brightness] setting.

Symptoms Text or images on the rear side of your document appear in the scanned image.

Problem The [Brightness] setting is too low, or the paper is too thin.

Solution Set a higher [Brightness] setting. If the paper is too thin, make a copy of the documents and then scan the copy. Alternatively, enable the [Prevent bleed through/remove background] setting.

Symptoms Double-sided scanning is not possible.

Problem “Scanning Side” is set to [Simplex].

Solution Set “Scanning Side” to [Duplex].

Symptoms A black margin appears around the scanned document.

Problem A document smaller than the preset paper size has been scanned. Or, the loaded document has shifted out of position.

Solution Set [Page size] to [Auto-detection]. Or, set [Border Removal] to on.

Symptoms The scanned image is skewed.

Problem The document has been fed at an angle. (skew)

Solution Use the document guide adapter to prevent document skew, and set [Deskew] to on.

Symptoms Lines, smudges, or dirt appear on the scanned image.

Problem The scanning glass or rollers inside the scanner are dirty.

Solution Clean the scanning glass and rollers. (See p. 4-1.)
If lines still appear on the image even after cleaning the scanning glass and rollers, the scanning glass inside the scanner may be scratched. Contact your local authorized Canon dealer or service representative.

Symptoms The scanned image is abnormal for certain documents.

Problem Functions such as [Auto-detection], [Deskew], or [Border Removal] were used when scanning documents containing text or photos up to their edges. (The scanner cannot accurately process the edges of documents.)

Solution Disable functions such as [Auto-detection], [Deskew], or [Border Removal] when scanning documents containing text or photos up to their edges.

Symptoms The scanned image is abnormal in some applications.

Problem A function not supported by the application was used.

Solution Some applications do not support functions such as auto-detection of the paper size. Scanning documents with an application such as this will result in an abnormal scanned image. Try scanning with auto-detection of the paper size set to “off.”

5-2 Uninstalling Software

If the ISIS/TWAIN driver, and “CapturePerfect 3.0” are not operating normally, follow the procedure below to uninstall them.

Then, re-install the software from the DR-4010C setup disc. (See “2-3 Installing the Software,” on p. 2-4.)



IMPORTANT

Be sure to log on as an administrator when using Windows 2000 Professional or Windows XP.

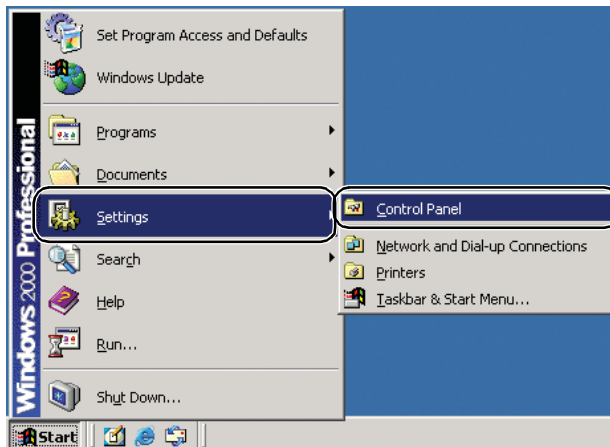
1

Click the [Start] button → click [Settings] → [Control Panel].



Note

For Windows XP, click the [Start] button → click [Control Panel].



The [Control Panel] window appears.

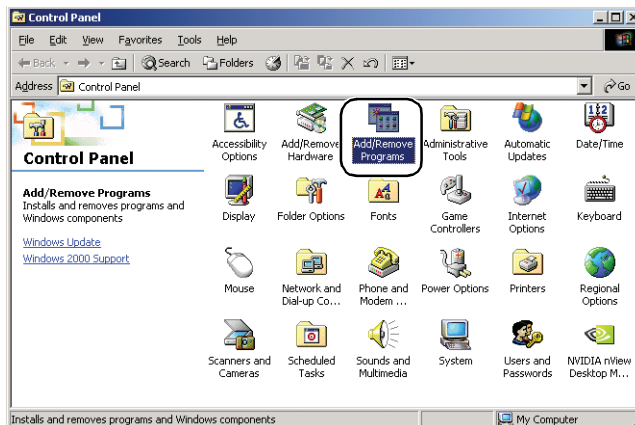
2

Double-click [Add/Remove Programs].

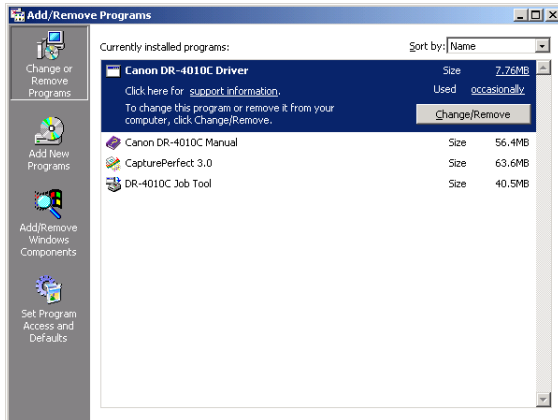


Note

If you are using Windows XP, double-click the [Add or Remove Programs].



The [Add/Remove Programs Properties] dialog box appears.



Note

For Windows XP, the [Add or Remove Programs] dialog box appears.

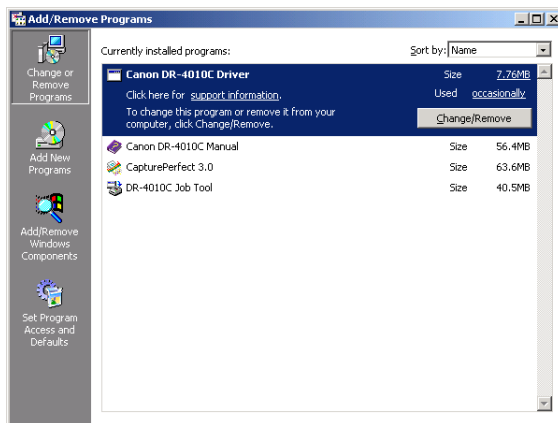
- From the list in the dialog box, select the application you want to delete → click [Change/Remove].

For more information on uninstalling each application, see the following:

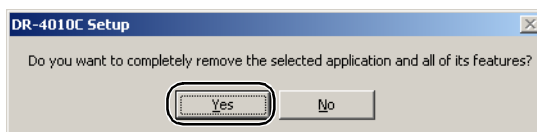
- “Uninstalling the ISIS/TWAIN Driver,” on p. 5-7
- “Uninstalling the Job Registration Tool,” on p. 5-8
- “Uninstalling CapturePerfect 3.0,” on p. 5-10.

Uninstalling the ISIS/TWAIN Driver

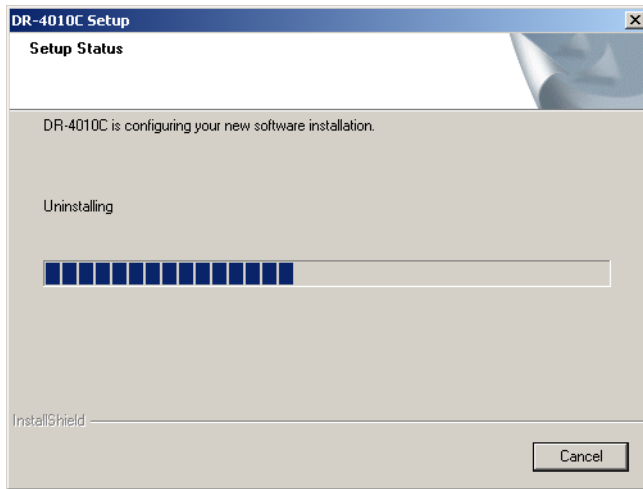
- From the Programs list in the dialog box, select [Canon DR-4010C Driver] → click the [Change/Remove] button.



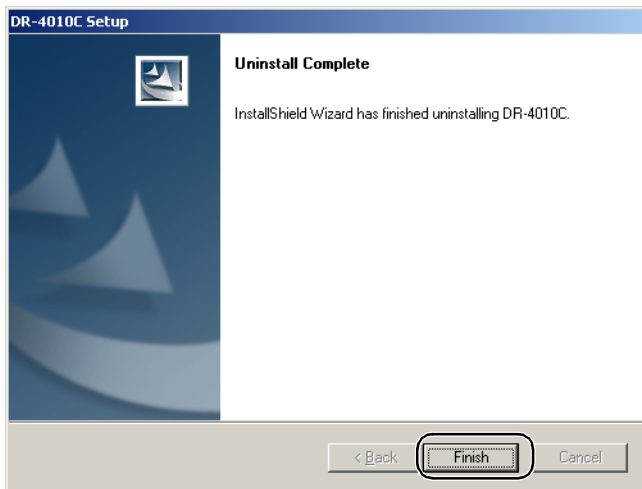
- The [Confirm File Deletion] screen appears. Click the [Yes] button.



The uninstall procedure is carried out.

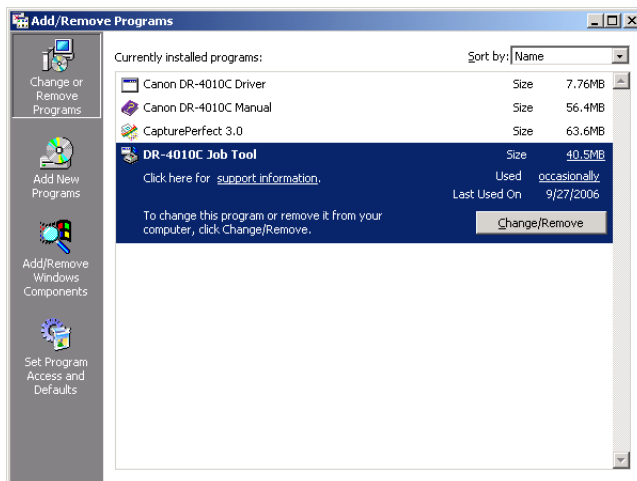


- 3 After uninstall is complete, click the [Finish] button to exit the uninstaller.

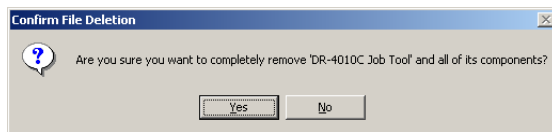


Uninstalling the Job Registration Tool

- 1 From the Programs list in the dialog box, select [DR-4010C Job Registration Tool] and click the [Change/Remove] button.

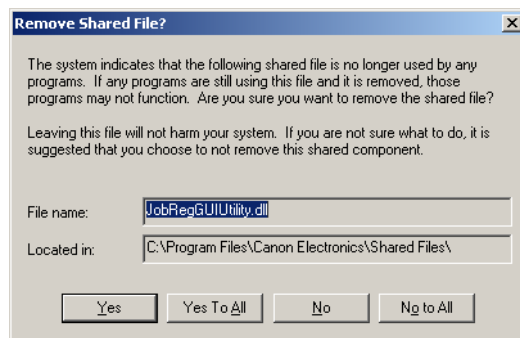


2 The [Confirm File Deletion] screen appears. Click the [Yes] button.

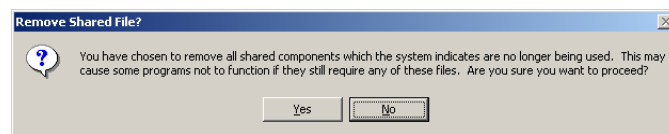


The [Remove Shared File?] dialog box appears.

3 Click the [Yes To All] button.



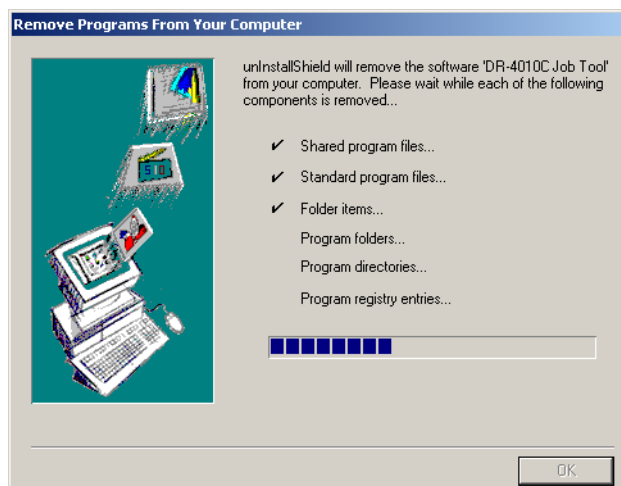
A confirmation message appears.



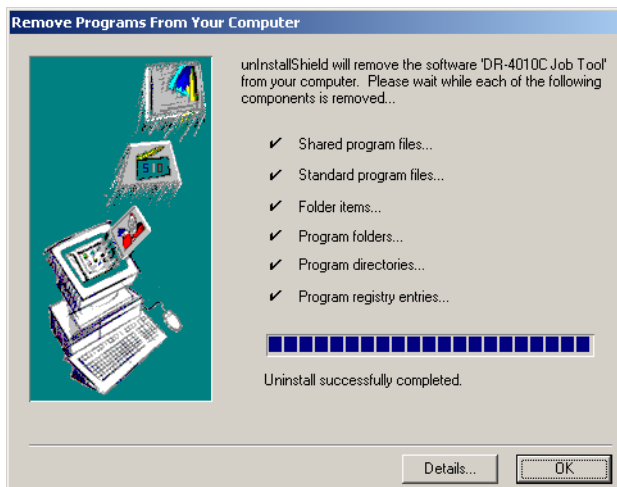
Note

Under Windows XP, the [Add/Remove Programs] dialog box appears.

4 Click the [Yes] button. The uninstall procedure is carried out.

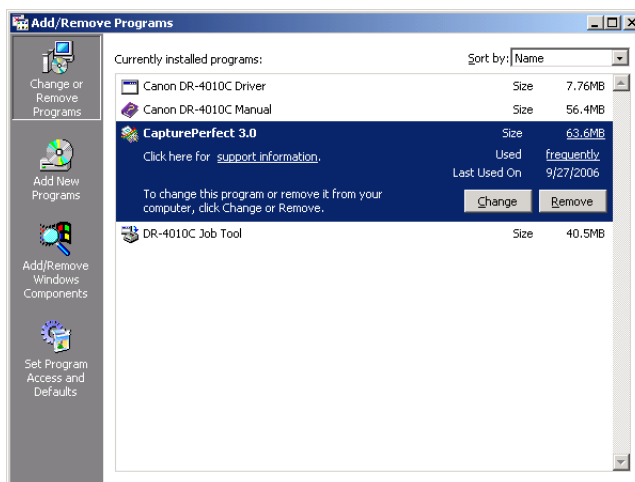


- 5 After uninstall is complete, click the [OK] button to exit the uninstaller.

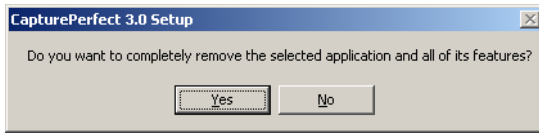


Uninstalling CapturePerfect 3.0

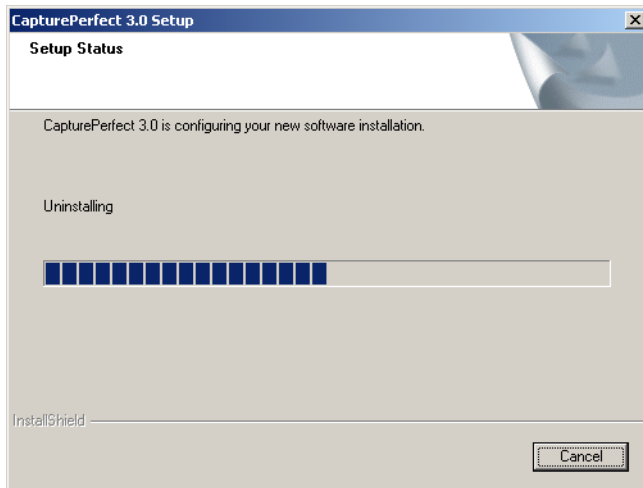
- 1 Select [CapturePerfect 3.0] from the list in the dialog box → click the [Remove] button.



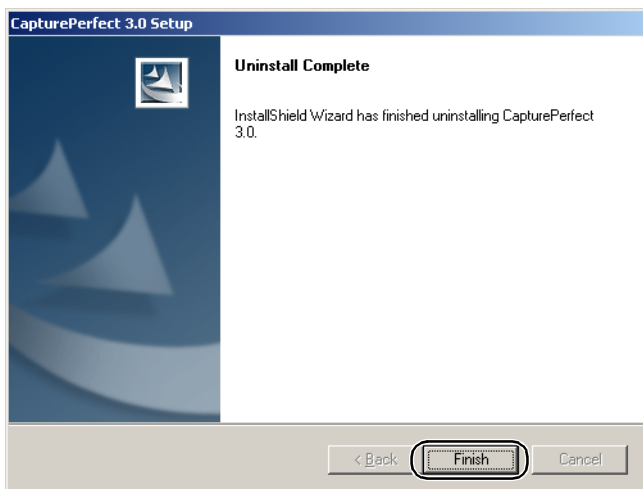
- 2** The file delete confirmation screen appears. Click the [Yes] button.



Uninstallation starts.



- 3** After uninstallation is complete, click the [Finish] button to exit the uninstaller.



6-1 Specifications

Specifications

Type	Desktop sheetfed scanner		
Scanning Document Specifications			
Width:	2.08" to 8.6" (53 to 219 mm)		
Length:	2.75" to 14" (70 to 356 mm)		
	2.75" to 39.3" (70 to 1000 mm) in Long document mode		
Weight: Using the U-Turn Path			
(Feed with page separation mode)	14 to 32 lb bond (0.0024" to 0.0059")	52 to 128 g/m ² (0.06 mm to 0.15 mm)	
(Feed with bypass mode)	11 to 40 lb bond (0.0020" to 0.0079")	42 to 157 g/m ² (0.05 mm to 0.2 mm)	
Weight: Using the Straight Path			
(Feed with page separation mode)	14 to 32 lb bond (0.0024" to 0.0059")	52 to 128 g/m ² (0.06 mm to 0.15 mm)	
(Feed with bypass mode)	11 to 144 lb bond (0.0020" to 0.026")	42 to 546 g/m ² (0.05 mm to 0.66 mm)	
Business cards are supported. However, scanning embossed cards is not guaranteed.			
Size:	2.12" × 3.37" (53.9 mm × 85.5 mm)		
Thickness:	0.03" ± 0.003" (0.76 ± 0.08 mm)		
Document Feeding Method	Automatic/Manual		
Scanning Method	Color 3-line contact image sensor		
Light Source	LED		
Effective Scanning Width	236 mm		
Scanning Side	Simplex/Duplex		
Scanning Modes	Black and white, Error diffusion, Advanced text enhancement, Advanced text enhancement II, Highspeed text enhancement, 256-level grayscale, 24 bit color, Auto Color Detection		
Scanning Resolution (Primary Scan Lines × Secondary Scan Lines)	100 × 100 dpi, 150 × 150 dpi, 200 × 200 dpi 240 × 240 dpi, 300 × 300 dpi, 400 × 400 dpi, 600 × 600 dpi		
Scanning Speed (A4)		Simplex	Duplex
Black and White	200 × 200 dpi	42 pages/min.	84 images/min.
	300 × 300 dpi	42 pages/min.	84 images/min.
	600 × 600 dpi (Speed priority)	42 pages/min.	42 images/min.
	600 × 600 dpi (Image quality priority)	20 pages/min.	24 images/min.
256-level Gray	200 × 200 dpi	42 pages/min.	84 images/min.
	300 × 300 dpi	42 pages/min.	84 images/min.
	600 × 600 dpi (Speed priority)	42 pages/min.	42 images/min.
	600 × 600 dpi (Image quality priority)	20 pages/min.	24 images/min.

24-bit Color	200 × 200 dpi	42 pages/min.	84 images/min.	
	300 × 300 dpi	42 pages/min.	84 images/min.	
	600 × 600 dpi (Speed priority)	24 pages/min.	24 images/min.	
	600 × 600 dpi (Image quality priority)	20 pages/min.	(not supported)	
Amount of paper that can be stacked in automatic feeder	10 mm stack, maximum (100 sheets of 20 lb bond (80 g/m ²))			
Interface	Hi-Speed USB 2.0 / SCSI-III			
Other Functions	Double feed detection, Long Document mode			
Dimensions (with trays closed)	12.5" × 10.9" × 7.3" (W × D × H)			
	318 mm × 278 mm × 185.5 mm (W × D × H)			
Dimensions (with trays open)	12.5" × 21.5" × 7.4" (W × D × H)			
	318 mm × 545 mm × 187 mm (W × D × H)			
Weight	Approximately 14.1 lb (6.4 kg)			
Power Supply	AC 120 V (60 Hz)			
	AC 220-240 V (50 / 60 Hz)			
Power Consumption	120 V model	220-240 V model		
	Scanning:	25 W maximum	24 W maximum	
	Standby:	Under 3 W	Under 3 W	
Noise	Not more than 68 dB			
Operating Environment	Temperature: 10°C to 32.5°C (50°F to 90.5°F)			
	Humidity: 20% to 80% RH			

- The functions described above can be used if they are supported by the application software.
- Some functions may not be available, depending on the performance of your PC and on your software.

Due to our ongoing efforts to improve our products, the specifications described above are subject to change without notice.

Replacement Parts

Exchange roller kit (product code: 1921B001)

Kit to replace the roller unit (pickup roller, feed roller) and retard roller.

- Refer to [“Removing and Attaching the Rollers,”](#) on p. 4-5 for information about replacing the rollers.
- Contact your local authorized Canon dealer or service representative for detailed information about the replacement parts.

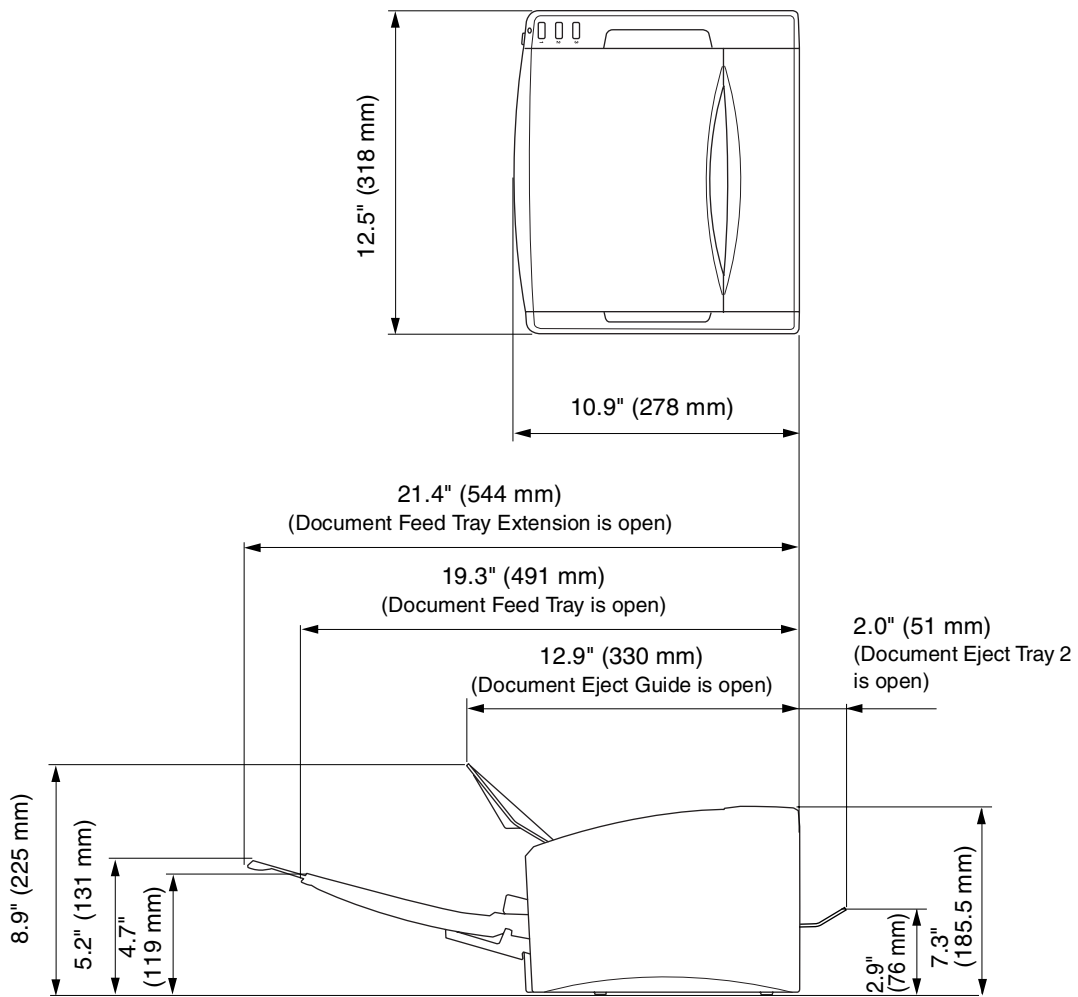
Options

Bar code module (product code: 0434B003)

Additional software to allow the ISIS/TWAIN driver to recognize bar codes.

Contact your local authorized Canon dealer or service representative for detailed information about the Bar code module.

External Dimensions



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Document Scanner DR-4010C

User Manual
Software



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This chapter describes the dialog boxes of the ISIS and TWAIN drivers. Please read this chapter and the ISIS/TWAIN driver's Help before making driver settings.

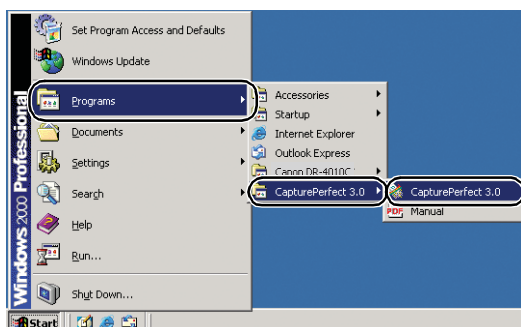
7-1 Before Use

This scanner can scan documents ranging in size from business cards and checks to A4 size documents. It can also scan business cards.

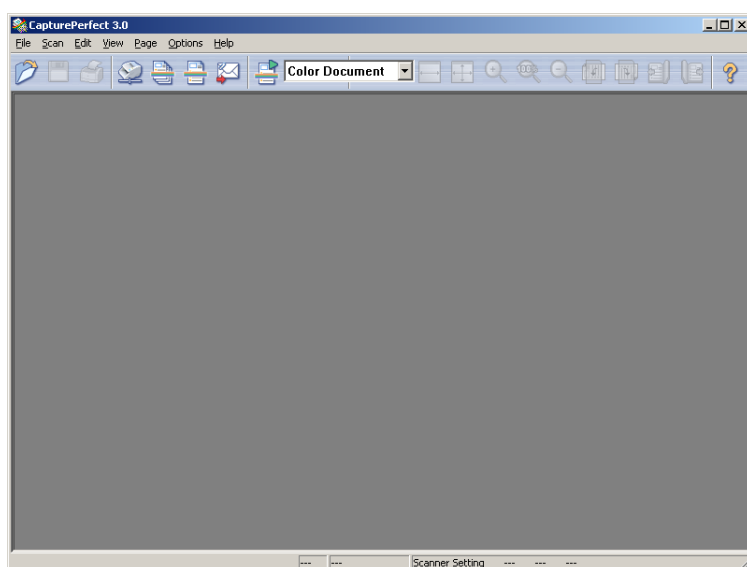
To use the DR-4010C with an ISIS/TWAIN-compliant application, the DR-4010C must first be selected as the scanner to be used.

This section describes how to select the scanner using CapturePerfect 3.0 (an ISIS-compatible application program.) As the scanner selection procedure depends on the application program being used, refer to your application's user's manual as needed to select the scanner.

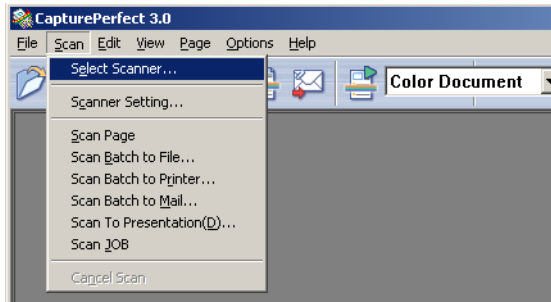
- 1 Click the Windows [Start] button, and then click [Programs] ([All Programs] for Windows XP) → [CapturePerfect 3.0] → [CapturePerfect 3.0].



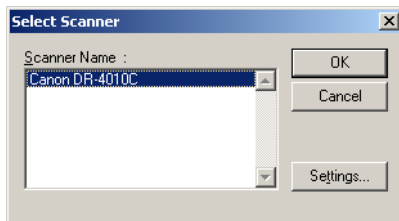
CapturePerfect 3.0 starts up.



- 2** On the [Scan] menu, click [Select Scanner].



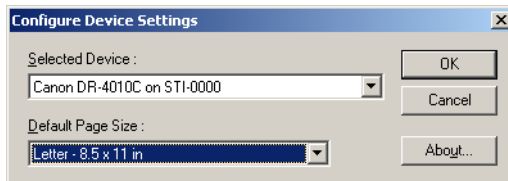
- 3** Select [Canon DR-4010C] → click the [OK] button.



Note

If [Canon DR-4010C] is not displayed in the list of scanners, re-install the ISIS/TWAIN driver.

- 4** Click the [Settings] button to set a default page size.

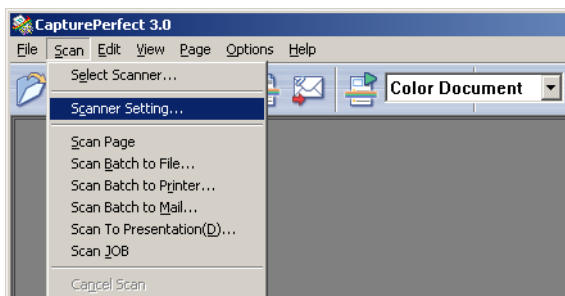


Note

- Clicking the [Default] button in the ISIS driver Properties dialog box causes that setting to be applied here.
- With the TWAIN driver, the default size is A4 and cannot be changed.

- 5** Click [OK] to finish scanner selection.

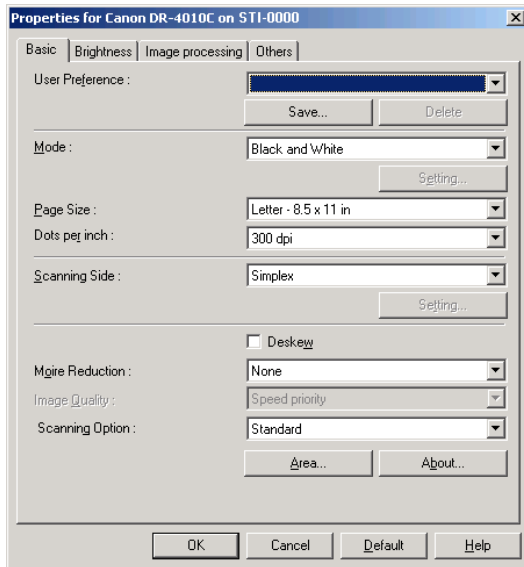
- 6** On the [Scan] menu, click [Scanner Setting].



The Properties dialog box for the ISIS driver opens.

7-2 ISIS/TWAIN Driver Properties Dialog Box

The ISIS/TWAIN driver properties dialog box consists of four tabs: Basic, Brightness, Image processing and Others. See the description of each tab sheet for details.



[OK] Button

Applies settings and closes the dialog box.

[Scan] Button (TWAIN driver only)

To control scanning from the properties dialog box when using a TWAIN-compatible application program, the [Scan] button is displayed instead of the [OK] button to scan with the current settings.

[Cancel] Button

Rejects changes to settings and closes the dialog box.

[Default] Button

Returns the settings to their default state.

[Help] Button

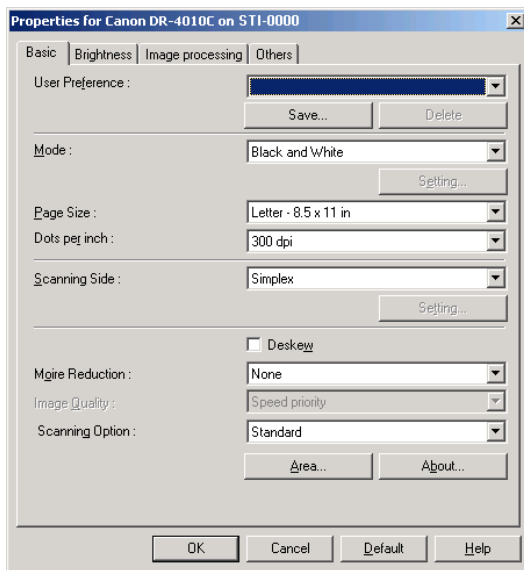
Displays help for the open tab sheet and dialog box.

Basic Tab Sheet

This [Basic] tab sheet is displayed when the driver is called directly and not from another settings dialog box. The driver is called directly when using applications that do not have their own scanner setting or scanning dialog boxes, such as CapturePerfect and Job Registration Tool.

Basic Tab Sheet (ISIS/TWAIN driver)

This [Basic] tab sheet is displayed when the driver is called directly and not from another settings dialog box. The driver is called directly when using applications that do not have their own scanner setting or scanning dialog boxes, such as CapturePerfect and Job Registration Tool.

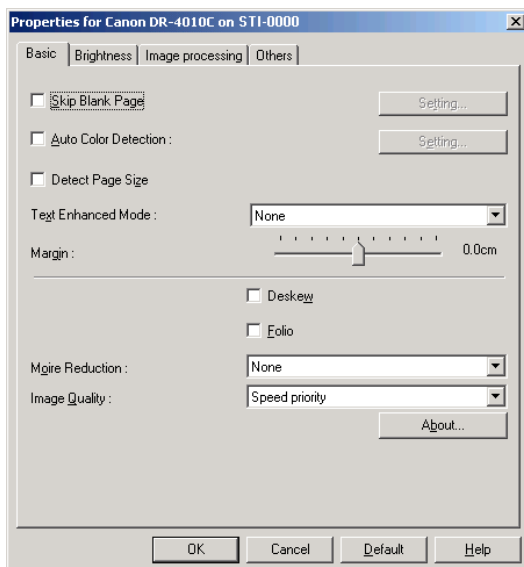


☞ “Scanning Option” does not appear on the ISIS driver.

[Basic] Tab Sheet Extended Version (ISIS driver only)

This [Basic] tab sheet is displayed when the DR-4010C ISIS Driver is called from a scanner setting or scanning dialog box belonging to an ISIS-compatible application program.

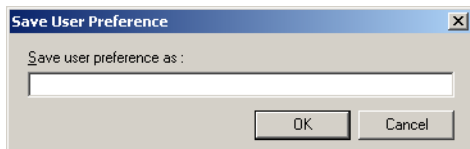
This [Basic] tab sheet provides settings for DR-4010C functions that are not supported in the dialog box belonging to the application program.



- ☞ Refer to the descriptions of the following function for details about “Skip Blank Page,” “Auto Color Detection,” “Detect Page Size,” “Text Enhanced Enhancement Mode” and “Margin.”
 - Skip Blank Page → [Scanning Side]
 - Auto Color Detection → [Mode]
 - [Detect Page Size] → [Page Size]
 - [Text Enhanced Mode] → [Mode]
 - Margin → Scan Area Dialog Box
 - Folio → [Scanning Side]

User Preferences

Click [Save] to open the [Save User Preference] dialog box.

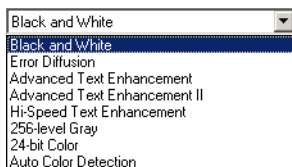


The [Save User Preference] dialog box saves the current settings under an assigned name. You can select the name of a saved set of user preferences in the list box to load those settings into each tab sheet.

- ☞ Assigned names can consist of up to 32 characters (or 16 double-byte characters.)

Mode

Select the mode for scanned images.



- ☞ Some functionality is limited depending on the mode setting. (See “Mode-Dependent Function Limitations,” on p. 7-7.)
- ☞ The Text Enhancement modes are good for scanning documents with a background color or design behind text, by removing or processing the surrounding background to enhance the text for easy reading.
- ☞ Three text enhancement modes are provided to suit different background types. Select the mode that seems to best suit your document. We recommend confirming an image by prescanning the first page.

[Black and White]

Use this mode to scan text and line drawing documents as black and white (binary) images.

[Error Diffusion]

Use this mode to scan documents containing photos as black and white (binary) images.

[Advanced Text Enhancement]

Use this mode to scan documents with a dark or non-uniform (pattern) background.

- ☞ If the background is uniform it is removed where it surrounds the text.
- ☞ If the background is non-uniform, such a pattern, it is processed to enhance text readability.

[Advanced Text Enhancement II]

Use this mode to scan documents with a light uniform background and low-contrast text.

- ☞ The background in tight spaces around text may not be removed.

- ☞ Documents with low-contrast text can be made more readable by adjusting Contrast on the [Brightness] tab sheet.
- ☞ If the background is non-uniform, such as a pattern, the background remains visible in the image, and text may be hard to read.

[High-Speed Text Enhancement]

This mode optimizes processing speed by performing background processing within the scanner, and is good for scanning documents with light background and dark text.

- ☞ If the text and background in a document have nearly the same density, the text may be hard to read.
- ☞ Areas with uniform background may appear as non-uniform white in the image.
- ☞ Because background processing is performed within the scanner, scanned images are more susceptible to lines appearing due to dirt on the scanning table glass. In cases where this may be a problem, try scanning again after cleaning the scanner glass, or select one of the [Advanced Text Enhancement] or [Advanced Text Enhancement II] modes instead.

[256-level Gray]

Scans documents such as photos as 256-level grayscale images.

[24-bit Color]

Scans documents such as color photos as full-color images.

[Auto Color Detection]

Whether a document is black and white or color is detected before the scanned image is saved.

- ☞ When [Auto Color Detection] is enabled, the [Setting] button is enabled for opening the [Auto Color Detection] dialog box, where you can make settings affecting how color documents are judged, and select which scanning mode to use for black and white.
- ☞ Depending on the application program, operation may become unstable when [Auto Color Detection] is enabled. In that case, [Auto Color Detection] should be disabled.
- ☞ When using an application that supports the MultiStream function (such as CapturePerfect), if [Auto Color Detection] is selected, the MultiStream function is disabled.

Mode-Dependent Function Limitations

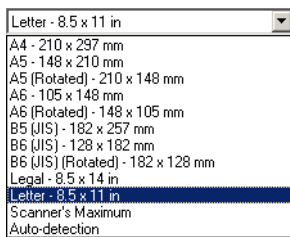
The following tab sheet functions are partially disabled according to the selected mode. Refer to “[Brightness] Tab Sheet,” on p. 7-13 for the [Brightness] tab sheet settings.

Tab sheet	Basic		Image processing						Others		
	Deskew	Moiré Reduction	Edge emphasis	Erase Dot	Border Removal	Prevent Bleed Through / Remove Background	Reverse Image (TWAIN driver)	Color drop-out	JPEG Transfer	Batch Separation	Prescan
Scanning mode											
Black and White	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	✓
Error Diffusion	✓	✓	✓	—	✓	✓	✓	✓	—	✓	✓
Advanced Text Enhancement	✓	✓	✓	✓	✓	—	✓	✓	—	✓	✓
Advanced Text Enhancement II	✓	✓	—	✓	✓	—	✓	✓	—	✓	✓
High-Speed Text Enhancement	—	—	—	✓	—	—	✓	✓	—	✓	✓
256-level Gray	✓	✓	✓	—	✓	✓	—	✓	✓	✓	✓
24-bit Color	✓	✓	✓	—	✓	✓	—	—	✓	✓	✓
Auto Color Detection	✓	✓	✓	✓	✓	—	—	—	✓	—	—

✓ : Available for setting
 — : Not available for setting

Page Size

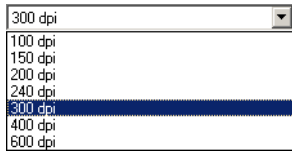
Select the page size of the document to be scanned.



- ☞ Select [Auto-detection] to scan the following kinds of documents.
 - Documents of undetermined size
 - Documents including mixed page sizes
 - When using the Long document mode (See “Long Document Mode,” on p. 3-30.)
- ☞ When [Auto-detection] is selected, area settings in the Scan Area dialog box are disabled.
- ☞ The [Auto-detection] process may malfunction in the following situations. If this occurs, select a standard size such as [A4] or [Letter], or click the [Area] button to create a custom page size. (See “[Scan Area] Dialog Box,” on p. 7-11.)
 - When scanning a page with a dark area at the left or right edge
 - When scanning a glossy or reflective document
 - When the brightness setting is incorrect
 - When Custom setting is selected in the Gamma Settings dialog box
- ☞ Depending on the application program, operation may become unstable when [Auto-detection] is enabled. In that case, [Auto-detection] should be disabled.

Dots per inch

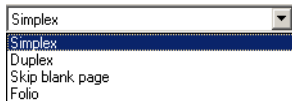
Select the scanning resolution.



- ☞ Higher resolutions provide clearer images, but produce larger files.
- ☞ When the selected resolution is 300 dpi or less, the [Moire Reduction] setting is enabled to allow reduction of Moire patterns in scanned images.
- ☞ When the selected resolution is 400 or 600 dpi, the [Image Quality] setting is enabled.

Scanning Side

Select which page side(s) to scan.



[Simplex]

Scan only the front (top) side of documents loaded at the feeder inlet.

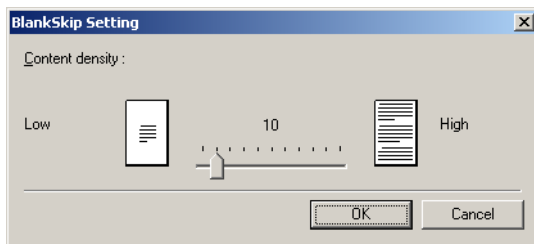
[Duplex]

Scan both sides of documents.

[Skip Blank Page]

As each document page is scanned, its scanned image is judged as to whether it is blank, and if so, the image is not saved.

- ☞ Selecting [Skip Blank Page] enables the [Setting] button, which opens the [Blank Skip Setting] dialog box.
- ☞ Adjust the [Content density] setting in the [Blank Skip Setting] dialog box if blank pages are not skipped, or if non-blank pages are skipped.



The Content density should be adjusted according to document content, so that only blank pages are skipped: increase the setting if they are not skipped, and decrease the setting if non-blank pages are skipped.

- ☞ The Skip Blank Pages function may not work properly if the [Custom] setting is enabled in the Gamma Settings dialog box.
- ☞ When the [Scan Single Page] feeding option is selected in the [Others] tab sheet of the TWAIN driver, the [Simplex] scanning side setting is selected automatically.
- ☞ If the application program provides its own simplex/duplex scanning side setting, select Simplex in this dialog box.

[Folio]

Documents that are normally folded in half are scanned on both sides and composed into one image. (See “Folio Scan,” on p. 3-29.)

☞ [Folio] is not displayed if [Patchcode] is selected as the Batch Separation setting on the [Others] tab sheet.



[Deskew] Check Box

The Deskew function detects slanted document pages and straightens the scanned images.

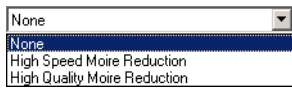
☞ The Deskew function does not work properly in the following situations. Disable Deskew in these cases.

- When scanning a page with a dark area near the edge
- When scanning a glossy or reflective document
- When the brightness setting is incorrect
- When Custom setting is selected in the Gamma Settings dialog box

☞ Note that in other cases, depending on the document, the slant of the image may not be corrected properly or part of the image may be omitted.

Moire Reduction

When 300 dpi or lower resolution is selected, you can enable Moire reduction if Moire patterns appear in scanned images.



[None]

No Moire processing is performed.

[High Speed Moire Reduction]

This mode gives priority to scanning speed, and generates images with the specified resolution from images scanned at 300 dpi. When 300 dpi resolution is selected, [High-Speed Moire Reduction] is not displayed.

[High Quality Moire Reduction]

This mode gives priority to image quality, and generates images with the specified resolution from images scanned at 600 dpi.

Although image quality is high, scanning is slow.

When [High Quality Moire Reduction] is selected while Page Size is set to [Auto-detection], Mode is set to [24-bit Color], and Scanning Side is set to [Duplex] all at the same time, a portion of the document may not be scanned due to insufficient memory on the scanner. If this occurs, lower the image quality by selecting [Speed priority], or change the Scanning Side setting to [Simplex].

Image Quality

When 400 or 600 dpi resolution is selected, you can enable this and select either [Speed Priority] or [Image Quality Priority Image].



[Speed Priority]

This mode gives priority to scanning speed, and generates 400 or 600 dpi images from images scanned at 300 dpi.

Although scanning speed is fast, image quality is slightly reduced.

[Image Quality Priority]

This mode gives priority to image quality, and scans at 600 dpi.

When 400 dpi resolution is selected, 400 dpi images are generated from images scanned at 600 dpi.

☞ Scanning with 24-bit Color is disabled when [Image Quality Priority] is selected. Also, an error may be displayed with some combinations with other settings, in which case [Speed Priority] should be selected, or other settings changed.

[Scan Options] (TWAIN driver only)

Specify operation when scanning continuously with a TWAIN-compatible application.

[Standard image]

Eject a scanned page before scanning the next page.

[Scan Ahead]

Scan pages continuously, so scanning speed is faster than [Standard image].

[Scan Single Page]

The [Scanning Side] setting on the [Basic] tab sheet becomes [Simplex], and one page is scanned. When [High Quality Moire Reduction] is selected while Page Size is set to [Auto-detection], Mode is set to [24-bit Color], and Scanning Side is set to [Duplex] all at the same time, a portion of the document may not be scanned due to insufficient memory on the scanner. If this occurs, lower the image quality by selecting [Speed priority], or change the Scanning Side setting to [Simplex].

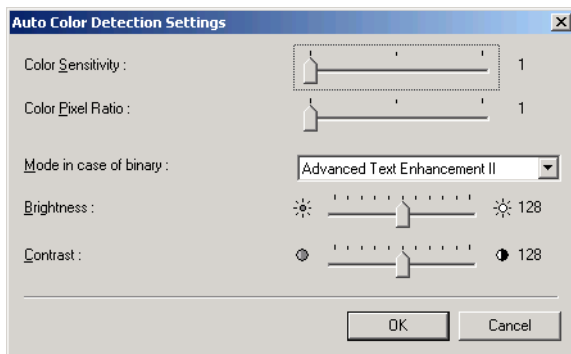
[Area] Button

Open the [Scan Area] dialog box to specify the area to scan. (See “[Scan Area] Dialog Box,” on p. 7-11.)

The [Area] button is not displayed if the application program provides its own function to specify scan area.

[Auto Color Detection Settings] Dialog Box

This dialog box appears when you select [Auto Color Detection], where you can make settings for detecting whether scanned images are color or black and white, and select the mode to use when an image is detected as black and white.



Color Sensitivity

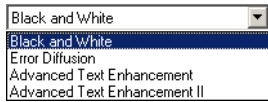
Adjusts sensitivity to colors in a document.

Color Pixel Ratio

Select from three color pixel ratio settings.

Mode in case of binary

Select the scanning mode when a page is judged to be black and white.



[High-Speed Text Enhancement] is disabled when [Auto Color Detection] is enabled.

Brightness

This control adjusts brightness when [Advanced Text Enhancement] or [Advanced Text Enhancement II] is selected with Black and White mode. For other modes, brightness is set on the [Brightness] tab sheet.

Contrast

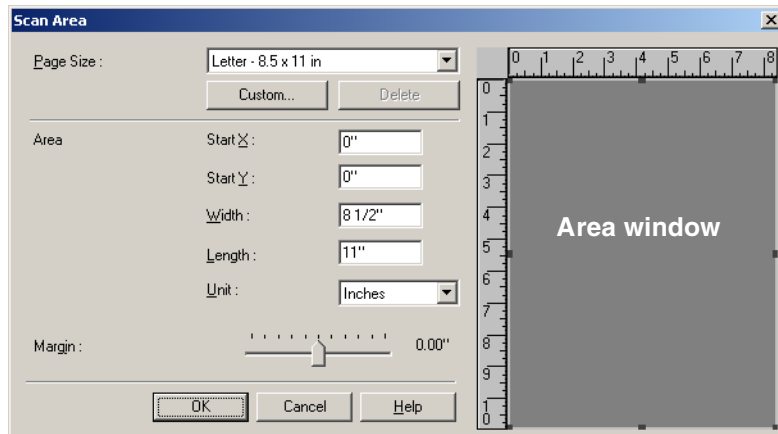
This control adjusts contrast when [Advanced Text Enhancement II] is selected with Black and White mode. For other modes, contrast is set on the [Brightness] tab sheet.

[Scan Area] Dialog Box

In this dialog box you can define the area of the document page to scan on a selected page size, and register non-standard document page sizes.

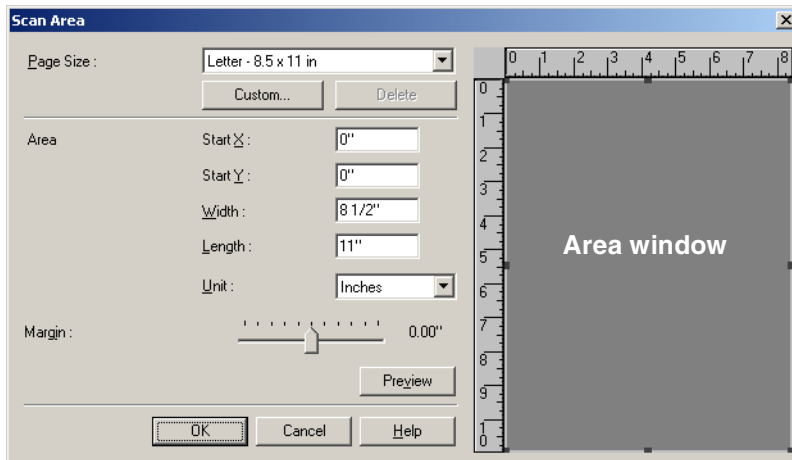
The Scan Area dialog box is different for ISIS and TWAIN drivers: for the TWAIN driver, one of two dialog box types is displayed depending on the application program used.

Scan Area Dialog Box (ISIS Driver)

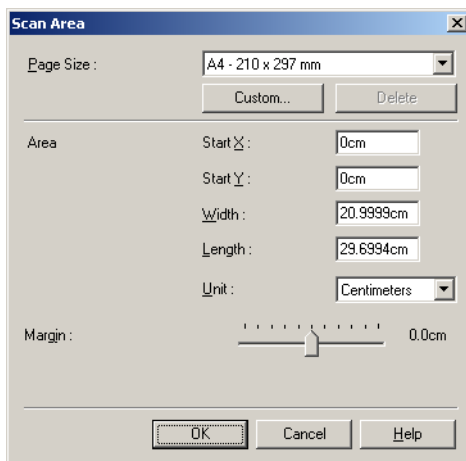


Scan Area Dialog Box (TWAIN Driver)

This dialog box appears with application programs that display the [Scan] button in the Properties dialog box.



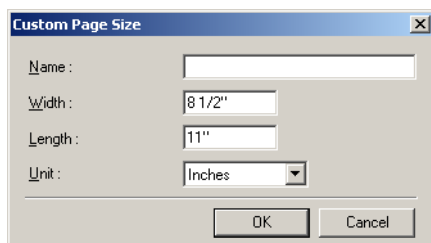
The Area window and [Preview] button are not displayed when using applications like the Job Registration Tool that display the [OK] button in the Properties dialog box.



Page Size

This setting is linked to the [Page Size] setting, for selecting the size of document pages to scan.

Clicking the [Custom] button opens the [Custom Page Size] dialog box, where non-standard page sizes can be registered as custom page sizes.



Area

Select the area to be scanned.

Area settings here are overridden in the following cases:

- When the [Auto-detection] page size is selected
- When [Text Orientation Recognition] is enabled on the [Image processing] tab sheet

- ☞ When [Deskew] is enabled on the [Basic] tab sheet, the specified area may be displaced when scanning.

Area Window

The size indicated for the Area window corresponds to the page size setting, and the area within the panel indicates the current scanning area.

- ☞ The scanning area can be adjusted by dragging the handles ■ bordering the Area window with your mouse.
- ☞ With CapturePerfect, the last scanned image appears in the Area window.

Margin

This control adjusts the top, bottom, left and right margins around the scanning area so that you can expand the scanning area to include the edges of a document, or reduce it to avoid black frames around scanned images.

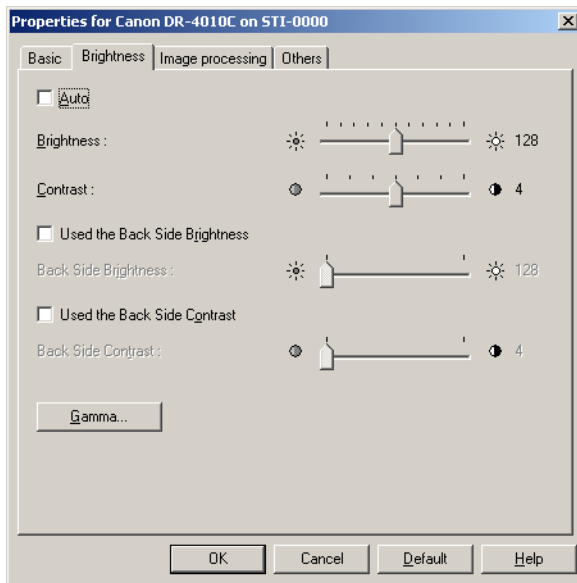
- ☞ If the edges of documents are missing from scanned images, move the slider to the right to expand the scanning area.
- ☞ To eliminate the black frame around scanned images, reduce the scanning area by moving the slider to the left.
- ☞ The measurement units for margins are determined by the [Unit] setting. However, changing the margin [Unit] setting is not possible on the extended version of the [Basic] tab sheet (P.7-4.)

Preview Button (TWAIN driver only)

Click the [Preview] button to scan one document page and display its preview image in the Area window.

[Brightness] Tab Sheet

On the [Brightness] tab sheet, you can adjust brightness and contrast for scanning, and access gamma settings. The availability of brightness and contrast settings depends on the mode setting on the [Basic] tab sheet, and if [Custom] gamma setting is enabled, all settings on this tab are disabled and cannot be changed.



The availability of brightness and contrast settings are as follows according to the mode setting on the [Basic] tab sheet.

Scanning mode	Auto	Brightness	Contrast	Back Side Brightness	Back Side Contrast
Black and White	✓	✓	✓	✓	✓
Error Diffusion	—	✓	✓	✓	✓
Advanced Text Enhancement	—	✓	—	—	—
Advanced Text Enhancement II	—	✓	✓	—	—
High-Speed Text Enhancement	—	✓	✓	—	—
256-level Gray	—	✓	✓	✓	✓
24-bit Color	—	✓	✓	✓	✓
Auto Color Detection	—	✓	✓	✓	✓

✓ : Available for setting

— : Not available for setting, or automatically set

[Auto] Check Box

This check box is enabled when the scanning mode is [Black and White], and selecting it adjusts brightness and contrast to match the document.

Brightness

Adjusts the brightness of images to be scanned.

- ☞ If images are too dark or if text on the back bleeds through, you can drag the slider to the right to increase the setting.
- ☞ If images are too light, drag the slider to the left to decrease the setting.
- ☞ When the [Auto] check box is selected, the slider selects a brightness level to be used for automatic adjustment.

Contrast

Adjusts the contrast of images to be scanned.

[Use Back Side Brightness] Check Box

If the brightness of the front and back of the document pages is different, select this to adjust only the brightness of the back side.

[Use Back Side Contrast] Check Box

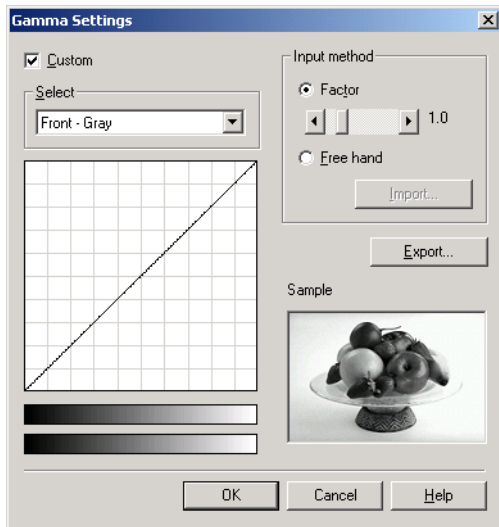
If the contrast of the front and back of the document pages is different, select this to adjust only the contrast of the back side.

[Gamma] Button

This button opens the [Gamma Settings] dialog box, where you can adjust the gamma curve.

[Gamma Settings] Dialog Box

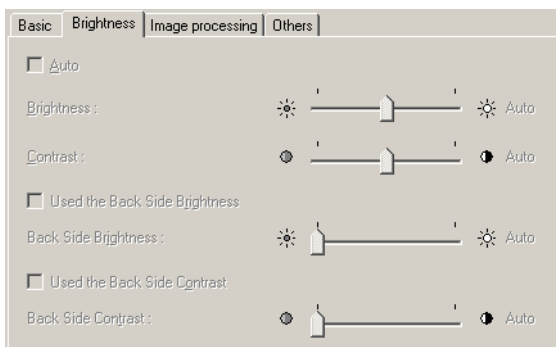
Use the [Gamma Settings] dialog box to adjust the gamma correction value.



[Custom] Check Box

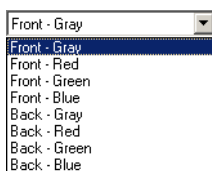
Select this check box to set custom gamma correction.

- ☞ When [Custom] gamma setting is selected, all settings on the [Brightness] tab sheet are made automatically.



Select

Select the side and color for custom setting.



- ☞ The color bar and color of the sample image are changed to show the specified color.

Input method

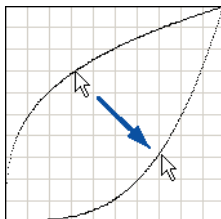
Select the setting method for gamma correction.

[Factor]

Move the slider left or right to adjust gamma correction factor between 0.2 and 5.0.

- ☞ The gamma correction value, Gamma Curve Graph and sample image color are interlinked.
- ☞ Clicking at a point in the Gamma Curve Graph with your mouse changes the gamma curve and color of the sample image to match that point.

You can also move the gamma curve by dragging it with the mouse.



[Freehand]

The output value for a particular input value in the gamma table can be specified with the mouse.

- Click any point in the Gamma Curve Graph to set that point as an output value.
- Drag the mouse on the Gamma Curve Graph to set the output value according to the mouse movement.

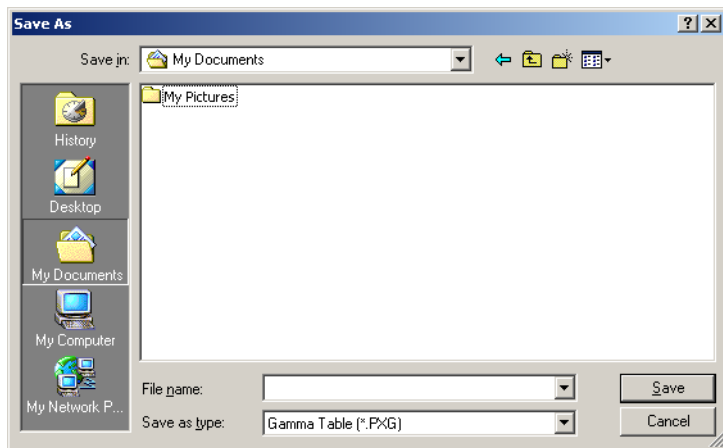
[Import] Button

Clicking this button loads gamma table data (*.png file) that was previously stored with the [Export] button.

Imported gamma data is reflected in the Gamma Curve Graph.

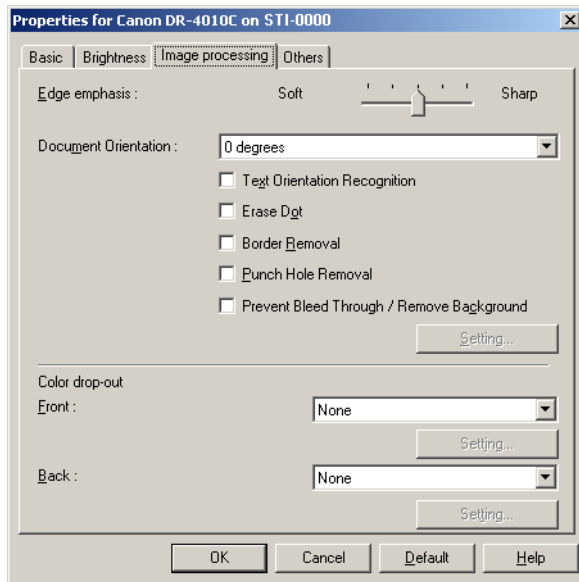
[Export] Button

Clicking this button exports the custom gamma curve settings as a gamma table file (*.pxg.)



[Image processing] Tab Sheet

The [Image processing] tab sheet provides settings affecting processing of scanned images. Some settings may be disabled depending on the mode settings on the [Basic] tab sheet. Refer to “[Mode-Dependent Function Limitations](#),” on p. 7-7 for details.



[Reverse Image] Check Box (TWAIN driver only)

The document is scanned with black and white reversed when scanning in black and white (binary) mode.

[Edge Emphasis]

Adjusts image contours. Move the slider toward Soft to soften image contours, or toward Sharp to sharpen image contours.

[Document Orientation]

This setting selects an angle (0, 90, 180 or 270 degrees) to rotate scanned images for orientation normalization.

Scanned images are rotated as follows according to the orientation of loaded documents and the selected rotation angle.

Feeder documents: face up				
Image rotation (clockwise)	0°	90°	180°	270°
Flatbed documents: face down				

[Text Orientation Recognition] Check Box

Select this check box to detect text orientation in scanned images, and rotate images in 90° increments as needed to normalize orientation.



- ☞ When [Text Orientation Recognition] is selected, [Image Rotation] and area settings in the Scan Area dialog box are disabled.
- ☞ Some application programs do not support [Text Orientation Recognition]. Please disable [Text Orientation Recognition] if your application program behaves abnormally when it is enabled.

[Erase Dot] Check Box

Select this to remove isolated black pixels (3x3 dots or smaller) from a white background, or isolated white pixels from a black background.

[Border Removal] Check Box

Select this to remove black borders surrounding scanned images.

[Punch Hole Removal] Check Box

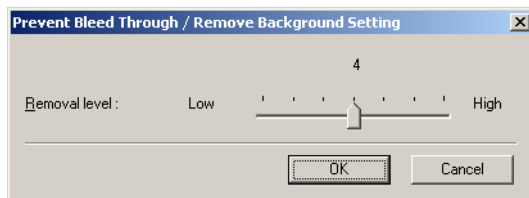
Select this to remove the black spots from scanned images when scanning documents with punch holes.

- ☞ If punch holes are located within text or graphics in the document, they may be misidentified as graphics, and may not be removed.

[Prevent Bleed Through / Remove Background] Check Box

Select this to Prevent Bleed Through when scanning thin document pages and those with dark content on the back side, or to remove the background from document images.

When this check box is selected, the [Setting] button is enabled to allow adjustment of the removal level in the [Prevent Bleed Through / Remove Background Setting] dialog box.

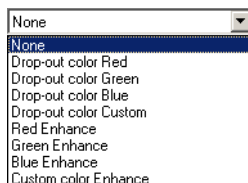


[Reverse Image] Check Box (TWAIN driver only)

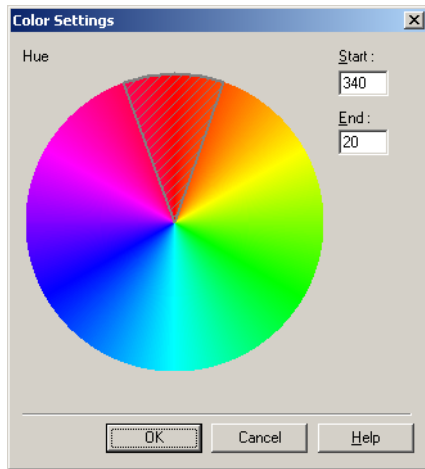
Select this check box to reverse (swap) black and white when scanning documents as black and white (binary) images.

Color Drop-Out

These selections are enabled for scanning modes other than 24-bit Color, so that you can select a primary color (red, green, blue) or gray to be ignored (dropped out) or enhanced.



The [Setting] buttons are enabled when [Drop-out color Custom] or [Custom Color Enhance] is selected, so that you can specify a color range in the [Color Settings] dialog box for drop-out or enhancement.

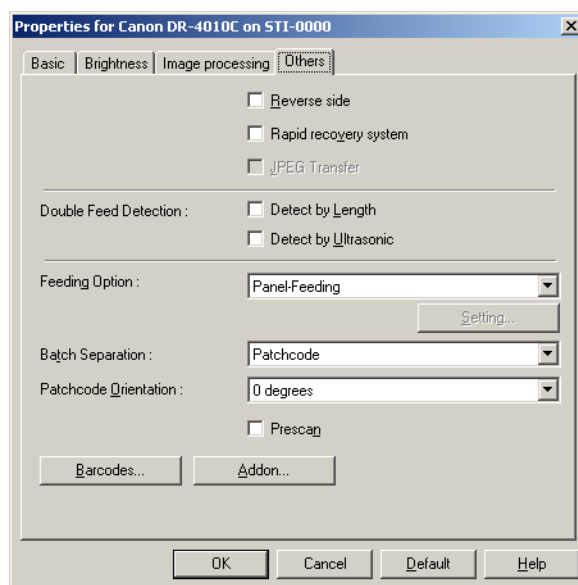


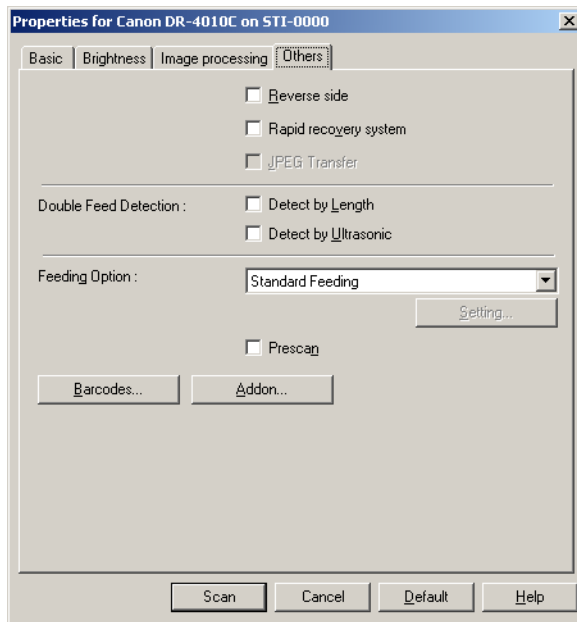
- ☞ The color range within the shaded (cross-hatched) area is dropped out or enhanced.
- ☞ You can move the shaded area by dragging with the mouse.
- ☞ You can change the specified color range by dragging the edges of the shaded area.
- ☞ Because your operating environment affects the colors you specify on screen, they may not match those actually dropped out or enhanced: that is, the colors you specify may not match those processed.

[Others] Tab Sheet

The settings on the [Others] tab sheet are different for the ISIS and TWAIN drivers. Also, some settings may be disabled depending on the mode settings on the [Basic] tab sheet. Refer to [“Mode-Dependent Function Limitations,”](#) on p. 7-7 for details.

[Others] Tab Sheet (ISIS driver)



[Others] Tab Sheet (TWAIN driver)**[Reverse side]**

Scanning occurs as follows depending on the scanning side settings.

- ☞ When this check box is selected and the scanning side is set to [Simplex], only the back of each page is scanned.
- ☞ When this check box is selected and the scanning side is set to [Duplex] or [Skip Blank Page], the back of each page is scanned first, followed by the front.

[Rapid Recovery System] Check Box

If a paper jam causes paper transport to stop while scanning, scanning stops without sending an error notification to the application program. After fixing the cause of the stoppage, you can continue scanning with the standard operations.

[JPEG Transfer] Check Box

When this check box is selected, scanned image data is always compressed to JPEG format within the scanner for output to the computer.

Scanned image data is output from the scanner as an uncompressed or JPEG transfer, depending on instructions from the ISIS/TWAIN driver or application program.

- ☞ Uncompressed transfers output raw scanned image data, so when the image data is large, significant time may be required for transfer from the scanner to the computer.
- ☞ JPEG transfer is good for color and grayscale images, as scanned image data is JPEG-compressed within the scanner before output.

This reduces the size of the image data for output, so transfer time from the scanner to the computer is shortened.

When JPEG Transfer is selected, image data from the scanner is always output as JPEG-compressed data.

- ☞ When the uncompressed saving format is selected in the application program, JPEG-compressed image data is reconverted to uncompressed data before transfer to the application. Image quality is degraded slightly as a result.
- ☞ This check box setting is ignored if the application program requests a JPEG transfer.
- ☞ Of course application program requests depend on the specifications of the particular program.

Double Feed Detection

This function stops document transport when double feeding of document pages is detected, and provides selection of the detection method to suit the documents to be scanned.

[Detect by Length]

This method of double feed detection is good for batch scanning of same-size documents: the length of the first document page fed is taken as a standard, and when a subsequent document is detected to be 50 mm longer (or shorter) than the standard, a double feed is judged to have occurred, and document transport is stopped.

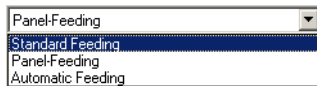
[Detect by Ultrasonic]

This method of double feed detection is good for batch scanning of different-size documents: the overlapping of documents transported in a batch is detected ultrasonically, and if the detected overlap is 50 mm or more, a double feed is judged to have occurred and document transport is stopped.

- ☞ Both detection methods can be used at the same time.
- ☞ If the documents overlap by less than 50 mm, or if the documents cling (such as from static electricity,) ultrasonic detection of double feeds may be unreliable.

Feeding Option

Here you can select the feeding method for document scanning.



[Standard Feeding]

This feeding method is good for scanning small batches of documents that are loaded one batch at a time: scanning stops when the loaded documents have been scanned.

[Panel Feeding]

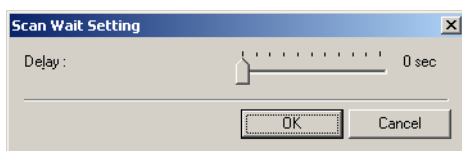
This feeding method is good for scanning batches of documents of different sizes: after loading the documents, press the Job button (assigned as a Start button on the scanner) to start scanning, and press the assigned Stop button to stop scanning.

- ☞ When scanning documents with different-size pages, after loading the documents, you can adjust the document guide position.

[Automatic Feeding]

This feeding method is good for scanning batches of same-size documents: scanning starts when the scanner detects loaded documents, and stops when you press the Stop button.

- ☞ When [Automatic Feeding] is selected, the [Setting] button is enabled to allow setting the delay time from when a loaded document is detected until scanning starts. (See "Scanning Multiple Documents," on p. 9-3.)



Batch Separation (ISIS driver only)

Items available for selection depend on the Feeding Option setting: select batch separation timing (for when to start scanning) according to the batch separation capabilities provided by the application program.

With the [Standard Feeding] Feeding Option



With the [Automatic Feeding] or [Panel Feeding] Feeding Option

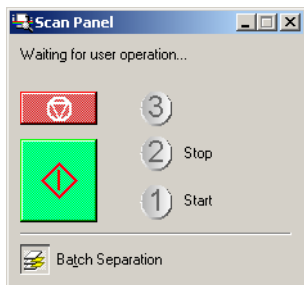


[Auto]

Each batch of documents is saved with different file names.

[Panel]

Document batches are separated when the [Batch Separation] button on the Scan Panel is pressed. (See “Scan Panel,” on p. 3-21.)



[Patchcode]

Batches are separated whenever a patchcode sheet is detected between documents. (See “3-6 Using Patchcode Sheets,” on p. 3-23.)

☞ When [Patchcode] is selected, the [Folio] Scanning Side setting on the [Basic] tab sheet is not available.

Patchcode Orientation (ISIS driver only)

When [Patchcode] batch separation is enabled, you can select patchcode orientation here.



☞ Settings for various patchcode types and orientations on document pages are as follows.

Patch T FILE A				
Patch II FILE B				
Patchcode orientation	0°	90°	180°	270°

[Prescan] Check Box

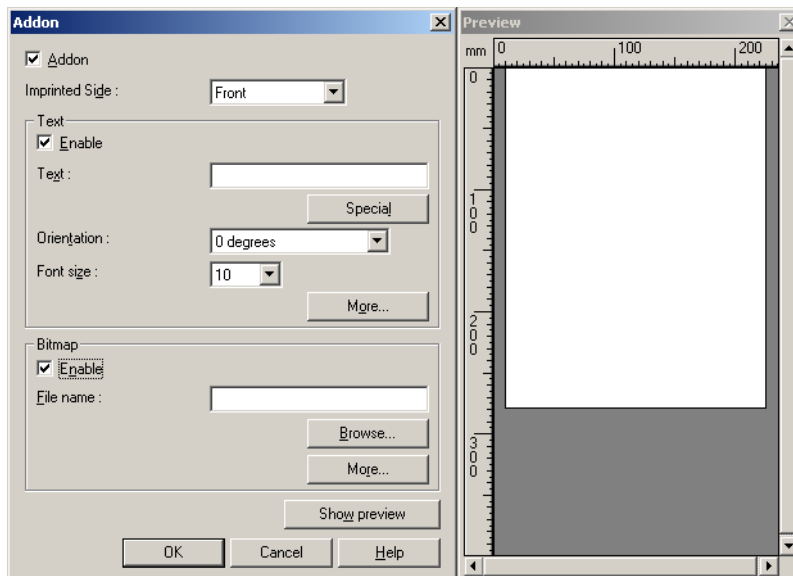
When this check box is selected, the first document page is prescanned and displayed in the Prescan panel when scanning is first started. Continue scanning after you confirm or adjust brightness and contrast of the scanned image in the Prescan window. (See “Prescan,” on p. 9-7.)

[Barcodes] Button

This is enabled when the optional barcode module is installed: click it to open the Barcode dialog box and make settings affecting barcode detection in documents. For details, see the ISIS/TWAIN driver Help, or contact your supplier.

[Addon] Button

This button opens the [Addon] dialog box, where you can make setting for adding text or bitmap images to scanned document images. (See “Addon Dialog Box,” on p. 7-24.)

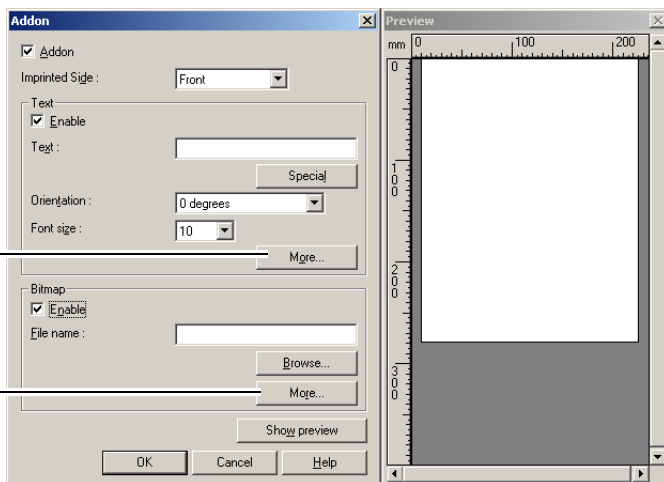


Addon Dialog Box

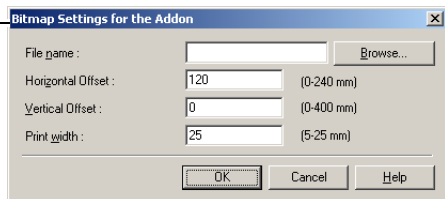
The [Addon] dialog box provides access to the following dialog boxes, where you can make setting for adding text or bitmap images to scanned document images.

The [Addon] dialog box enables you to make setting for adding text or bitmap images to scanned document images.

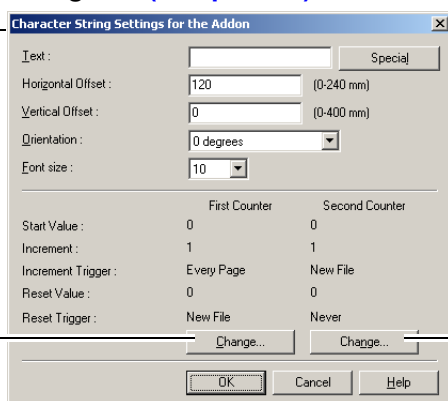
Addon Dialog Box



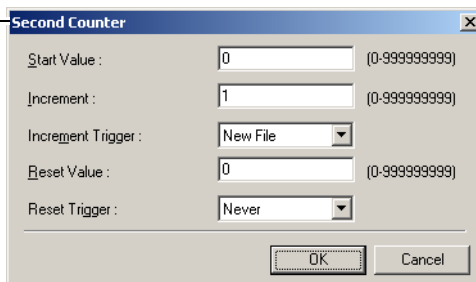
Bitmap Settings for the Addon Dialog Box (See p. 7-27.)



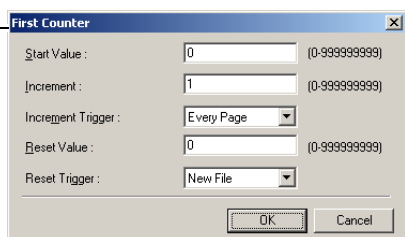
Character String Settings for the Addon Dialog Box (See p. 7-27.)



Second Counter Settings Dialog Box



First Counter Settings Dialog Box



[Addon] Check Box

Select this check box to apply text or bitmap images to scanned document images.

Imprinter Side

Select the side on which to apply your text or images.



[Enable] Check Box

Select this check box to enable the application of add-on text.

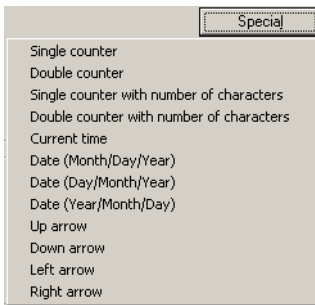
Text

Enter the text string to be applied.

The following characters can be entered.

- Numerals 0 to 9
- Alphabetic characters A to Z and a to z
- Punctuation and symbols: !"#\$%&'()*+-. /:;<>=?@[]{}~` \

Enter special text such as counters, dates and arrows from the list that appears by clicking the [Special] button. The selected abbreviation is inserted into the text string.



[Single counter] abbreviation: <C>

Inserts one 9-digit counter.

[Double counter] abbreviation: <CC>

Inserts two 9-digit counters.

[Single counter with number of characters] abbreviation: <Cx>

A dialog box appears in which to specify the number of characters of the single counter. The specified number of characters of the single counter will be inserted into scanned images.

[Double counter with number of characters] abbreviation: <CxCx>

A dialog box appears in which to specify the number of characters of the double counter. The specified number of characters of the double counter will be inserted into scanned images.

[Current time] abbreviation: <TIME>

Inserts the time of scanning using 8 digits in 24-hour format.

[Date (Month/Day/Year)] abbreviation: <MDY>

Inserts the date of scanning using 10 characters in Month/Day/Year format.

[Date (Day/Month/Year)] abbreviation: <DMY>

Inserts the date of scanning using 10 characters in Day/Month/Year format.

[Date (Year/Month/Day)] abbreviation: <YMD>

Inserts the date of scanning using 10 characters in Year/Month/Day format.

[Up arrow] abbreviation: <U>

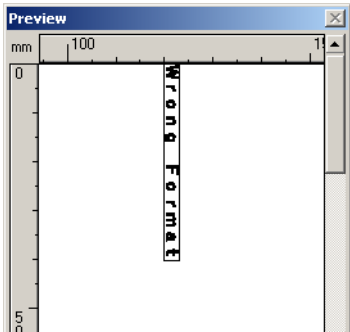
Inserts an up arrow (↑) symbol.

[Down arrow] abbreviation: <D>

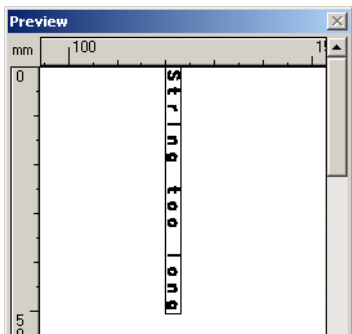
Inserts a down arrow (↓) symbol.

- [Left arrow] abbreviation: <L>
Inserts a left arrow (←) symbol.
- [Right arrow] abbreviation: <R>
Inserts a right arrow (→) symbol.

☞ Special text can only be entered for one type of counter. If entered for two counter types, the Preview panel displays an error message.



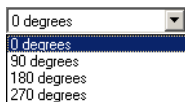
☞ Add-on text may consist of up to 96 characters. However, the actual number of characters may be limited by font size. If the number of characters to apply exceeds the maximum allowed, the Preview panel displays an error.



☞ When inserting special text, the actual number of characters to apply can become quite large, even though little text is actually entered.

[Orientation]

Specify the orientation for the text to be applied.



☞ Text orientation relative to the feeding direction is as follows.

Orientation	0°	90°	180°	270°
Addon	↑ ABC...	↑ ...CBA ←	↑ ABC...	↑ A...CBA

[Font size]

Select the font size of the text to be applied.

Font size (points):3, 4, 6, 8, 9, 10, 12, 16, 18 , 20, 24, 28, 30 or 38

- ☞ When add-on text is applied to an image, the size of the characters depends on the scan resolution.

[Enable] Check Box

Select this check box to enable application of bitmap images to scanned images.

- ☞ When adding a bitmap image, it is processed when scanning is started. This can cause some delay before scanning actually begins, depending on the size and settings of the bitmap image.
- ☞ When adding a bitmap image, a message is displayed until scanning begins.

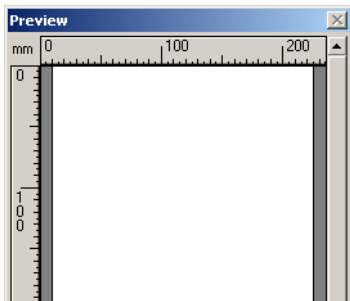
[File name]

Specify the file name of the image to be applied.

- ☞ The bitmap image with the specified file name is rotated 90 degrees when applied.
- ☞ Only bitmap images (*.bmp files) can be applied.

Preview Panel

The specified content to be applied is displayed in the Preview panel.



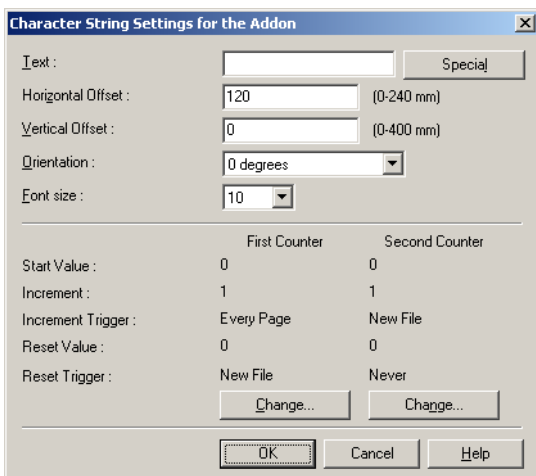
- ☞ You can magnify the Preview display in four steps with the left mouse button, and reduce it with the right mouse button.

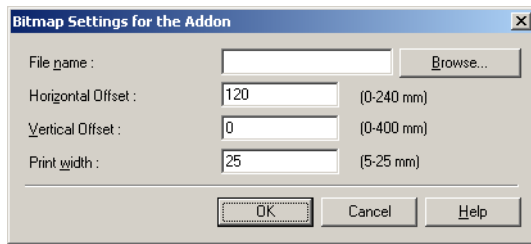
[Show preview] button

Click this button to activate the Preview panel.

Text/Bitmap Settings Dialog Box

Here you can make settings for text or bitmaps to be applied to scanned images.





[Horizontal Offset]

Enter the desired offset from the edge of the document feeder inlet.



- ☞ When applying an add-on to the front side, enter the offset from the left side of the feeder inlet.
- ☞ When applying an add-on to the back side, enter the offset from the right side of the feeder inlet.
- ☞ The entered offset is the distance to the left end of the applied text (or bitmap image.)

[Vertical Offset]

Enter the distance from the top edge of the page.



Print width

Enter the width of the bitmap image to be applied.



- ☞ The bitmap image will be rotated 90° clockwise and compressed to the specified width before it is applied.
- ☞ An error message may appear depending on the size of the image file. If this happens, reduce the Print width.

First Counter

This is the current setting for the single counter, or for the first counter if double counters are selected.

- ☞ Settings can be changed in the First Counter settings dialog box.

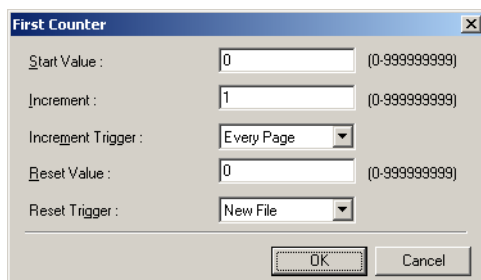
Second Counter

This is the current setting for the second counter if double counters are selected.

- ☞ Settings can be changed in the Second Counter settings dialog box.

First and Second Counter Settings Dialog Boxes

Make settings for add-on counters.



Start Value

Enter the start value for the counter.

Increment

This is the counter increment value. The counter increments by the value entered here.

Increment Trigger

Specifies the type of event that triggers a counter increment.

[New File] (ISIS driver only)

The counter increments when a batch separation occurs according to the Batch Separation settings on the [Others] tab sheet. (See “Batch Separation (ISIS driver only),” on p. 7-21.)

[Every Page]

Increments once per page.

[None]

No counter increment occurs.

Reset Value

Select the initial value when the counter is reset.

Reset Trigger

Specifies the type of event that resets the counter.

[New File] (ISIS driver only)

The counter is reset when a batch separation occurs according to the Batch Separation settings on the [Others] tab sheet. (See “Batch Separation (ISIS driver only),” on p. 7-21.)

[Every Page]

Resets the counter once per page.

[None]

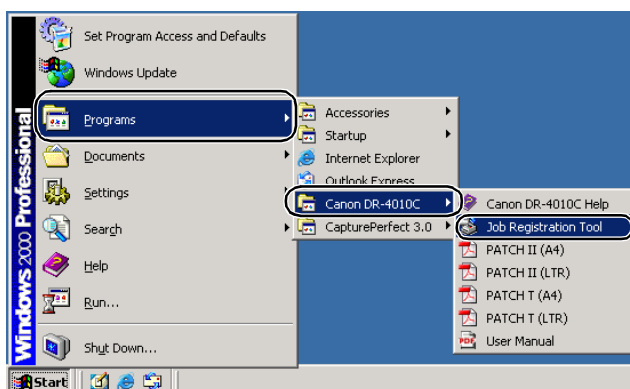
No counter reset occurs.

This chapter describes Job Registration Tool settings for job functions. Refer to Section “3-4 Job Function,” on p. 3-9 for details.

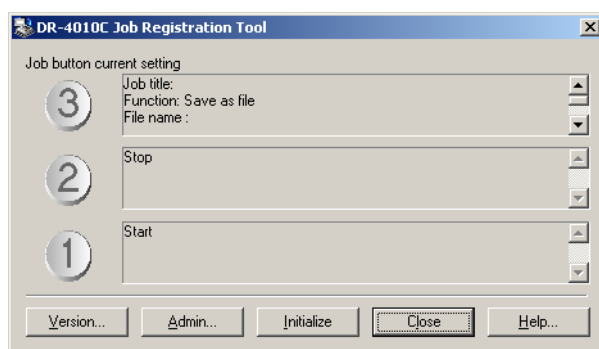
8-1 Starting the Job Registration Tool

The Job Registration Tool is a TWAIN-compliant application program that installs with the ISIS/TWAIN driver, and is started by the following procedure.

- 1 Click the Windows [Start] button, and click then [Programs] ([All Programs] for Windows XP) → [DR-4010C] → [Job Registration Tool].



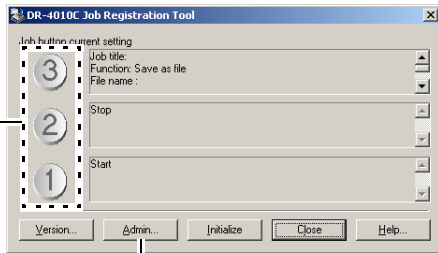
The Job Registration Tool starts. (See “8-2 Job Registration Tool Settings Dialog Box,” on p. 8-2.)



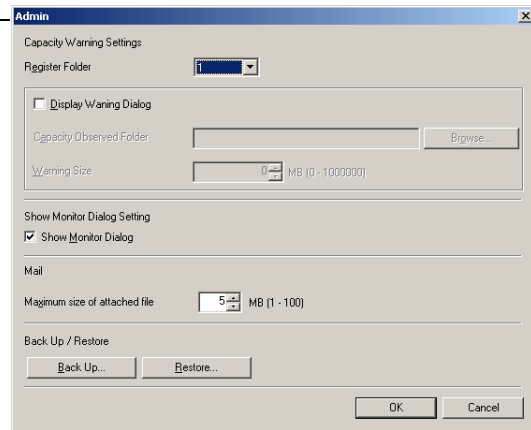
8-2 Job Registration Tool Settings Dialog Box

The Job Registration Tool Settings dialog box provides access to the [New/Editing] dialog box and the [Admin] dialog box, and the New/Edit dialog box provides access to function setting dialog boxes. (See “[New/Editing] Dialog Box,” on p. 8-4.)

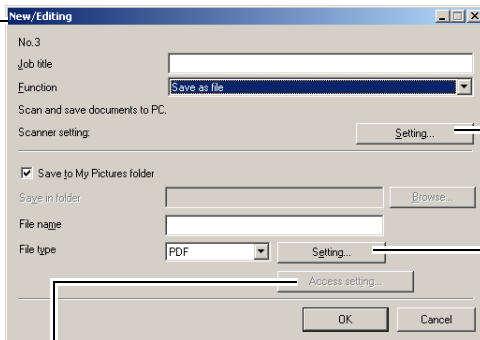
Job Registration Tool Dialog Box (p. 8-3)



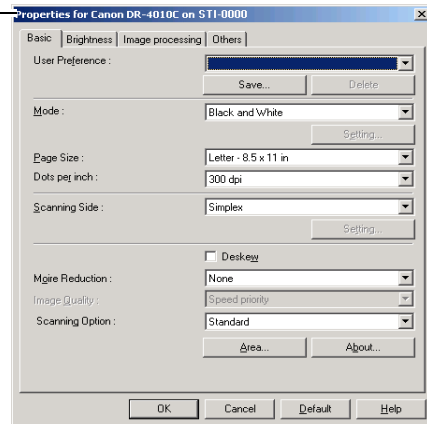
[Admin] Dialog Box (p. 8-8)



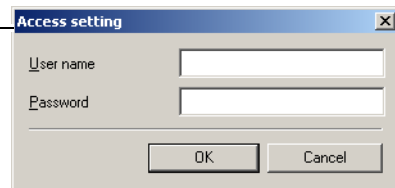
[New/Editing] Dialog Box (p. 8-4)



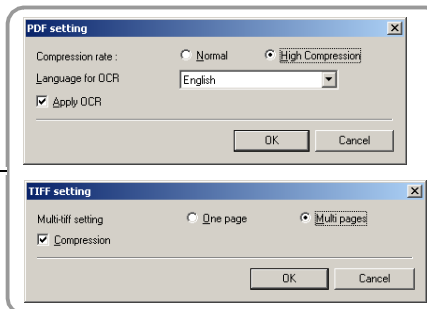
Scanner Settings Dialog Box



Access Setting

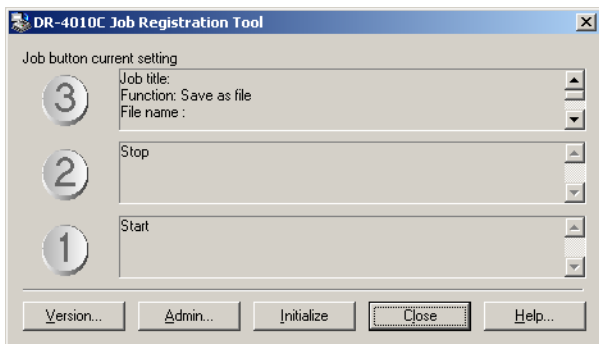


PDF/TIFF Settings



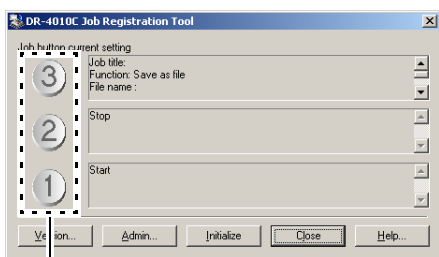
Job Registration Tool Dialog Box

This dialog box appears when the Job Registration Tool is started from the Programs menu.

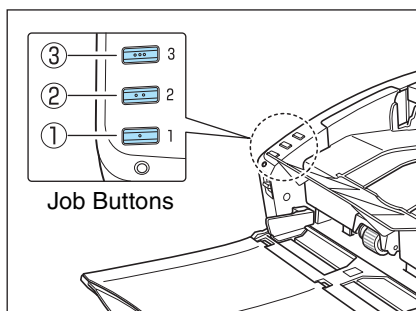


Job Button Settings List

The displayed job buttons correspond to those on the scanner, showing their currently assigned settings. Clicking on the job buttons (1, 2 and 3) opens the New/Editing dialog box. (See “[New/Editing] Dialog Box,” on p. 8-4.)



Job Button Settings



[Version] Button

Displays the version of the Job Registration Tool.

[Admin] Button

Opens the Admin dialog box. (See “Administration Dialog Box,” on p. 8-8.)

[Initialize] Button

Returns the settings to their default state.

[Close] Button

Closes the Job Registration Tool Settings dialog box.

[Help] Button

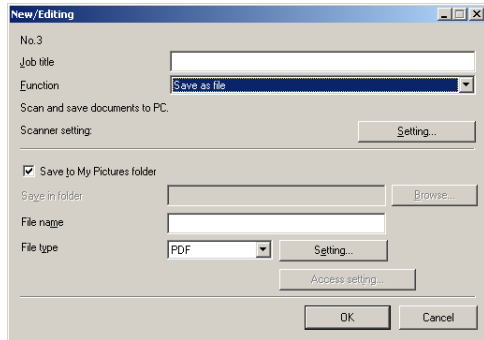
Displays the Help for the Job Registration Tool.

[New/Editing] Dialog Box

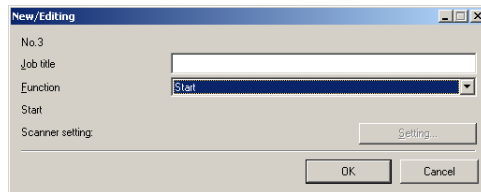
The [New/Editing] dialog box appears when you click a Job button in the Job Registration Tool dialog box.

The [New/Editing] dialog box appears as follows depending on the function settings registered to the Job buttons.

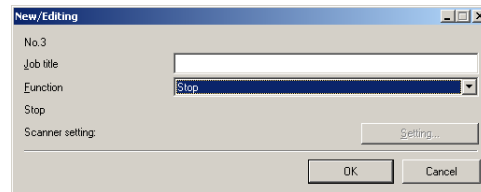
Save as file



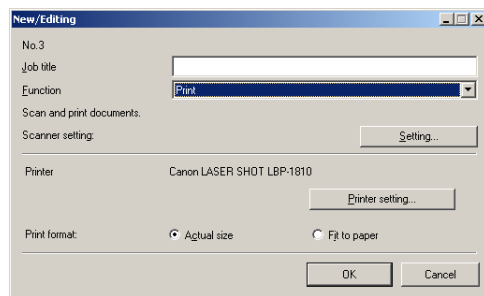
Start



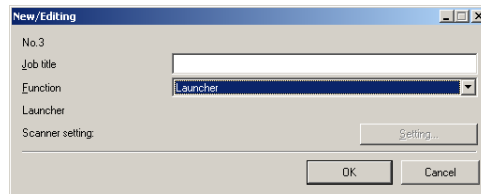
Stop



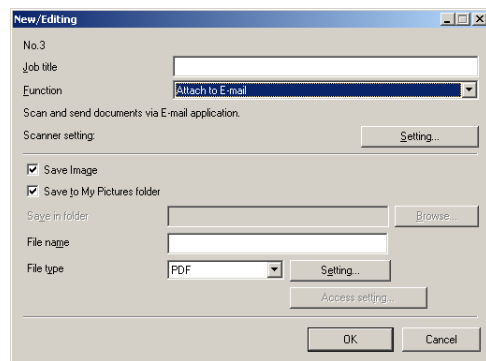
Print



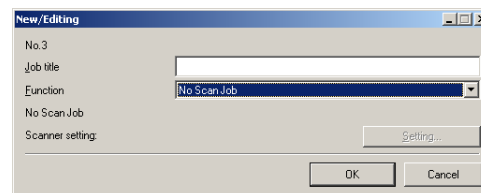
Launcher



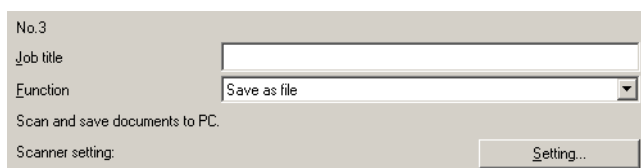
Attach to E-mail



No scan job



Settings Common to Each Function



Job Number [No. 1 to No. 3]

Shows the selected job button number. Settings are registered to the job button with the displayed number.

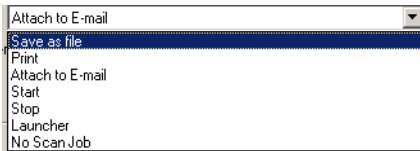
Job title

Enter the job title to be displayed in the Job Button Settings list.

☞ Job titles may consist of up to 29 alphanumeric characters.

Function

Select the function to register to this job.

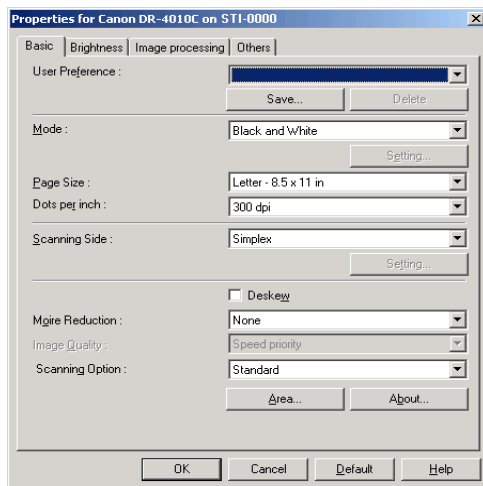


☞ When changing functions, the [New/Editing] dialog box is changed. (P.8-4)

☞ Applications programs started by the [Launcher] function use Windows "Event" function settings. (See "About Launcher," on p. 3-11.)

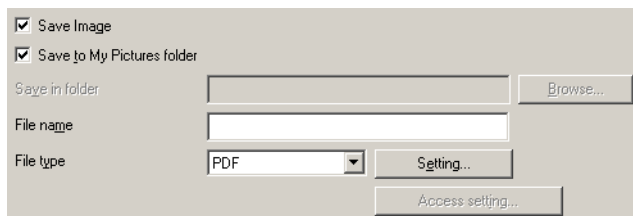
Scanner setting

When the "Save as file," "Print" or "Attach to E-mail" function is selected, Scanner settings are enabled, and you can press the [Setting] button to make scanner settings.



☞ Refer to Chapter 7, "ISIS/TWAIN Driver Settings" for scanner setting procedures.

Settings to Save Image Files (Functions: Save as file and Attach to E-mail)



[Save Image] Check Box

This check box appears when [Attach to E-mail] is selected as the [Function]. Select this box to save scanned images.

[Save to My Pictures folder] Check Box

Saves image files to My Pictures in the My Documents folder.

☞ When this check box is not selected, the [Save in folder] and [Access setting] buttons are enabled.

Save in folder

When the [Save to My Pictures folder] check box is not selected, this is enabled for you to enter a folder name in which to save scanned images. You can also select a folder by clicking the [Browse] button.

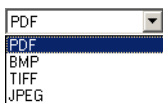
File name

Enter a name for the files to save.

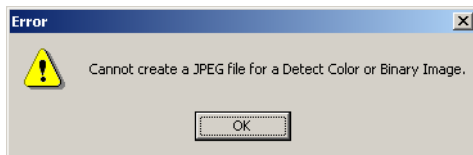
- ☞ File names may consist of up to 32 alphanumeric characters.
- ☞ A time stamp is appended to the file name indicating the time of scanning.

File type

Enter the file format for saved files.



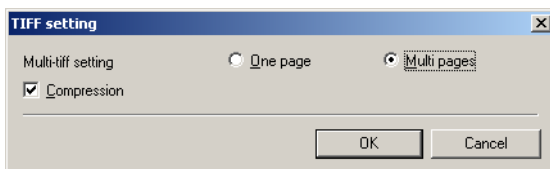
- ☞ Selecting [TIFF] or [PDF] enables the [Setting] button.
- ☞ When the [Auto Color Detection] scanner setting is selected, an error is displayed if [JPEG] is selected when you click the [OK] button. If this error appears, select another file format or change the scanner setting.



[Setting] Button

This button is enabled to display the corresponding setting dialog box when the [TIFF] or [PDF] file format is selected.

TIFF Settings Dialog Box



[Multi-tiff setting]

Select the method for saving image files when scanning multi-page documents.

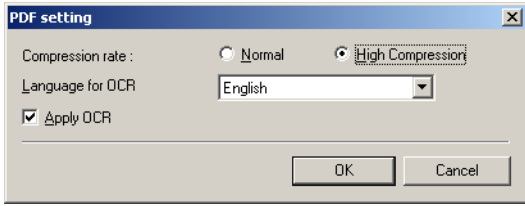
- Select [One page] to save each page in its own image file.
- Select [Multi pages] to save all pages in one image file.

[Compression] Check Box

Select this check box to compress images saved to files. Black and white (binary) images are compressed in CCITT Group 4 format, and grayscale and color images in JPEG format. When this check box is not selected, the saved files are much larger.

- ☞ CCITT Group 4: This compression format was designed for data communications (such as with fax devices) of black and white (binary) images.
- ☞ JPEG: This compression format is for saving grayscale and color images. When the [Compression] check box is selected, a standard level of JPEG compression is applied.
- ☞ If your application program does not support the above compression formats, you may be unable to open scanned image files. In this case disable [Compression] when scanning.

PDF Settings Dialog Box



Compression rate

Select the compression rate for PDF files.

- Select [Normal] to save with standard compression.
- Select [High Compression] to save files with high compression. Although file size is reduced, image quality may be slightly degraded.
- ☞ The Compression rate setting is enabled when the scanner is set to [256-level Gray] or [24-bit Color] mode. When [Black and White] or [Error Diffusion] binary image scanning mode is selected, file size depends on the content of the scanned document.

Language for OCR

When the [Apply OCR] check box is selected, the target language for OCR can be selected in the list box.



- ☞ Chinese OCR with the [Simplified Chinese] or [Traditional Chinese] settings requires a Chinese language environment to display properly.

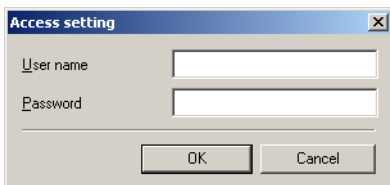
[Apply OCR] Check Box

Select this check box to enable recognition of the text within images and to save the recognized text data with the image.

- ☞ Characters within document images are recognized as text and saved as appended text data in PDF (*.pdf) files.

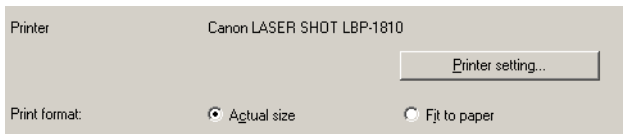
[Access setting] Button

This button is enabled when the [Save to My Pictures folder] check box is not selected, allowing entry of the user name and password required to access the shared network folder specified for [Save in folder].



- ☞ Access to shared network folders may be restricted to users with certain access permission. In this case, users cannot access the shared folder without entering the correct user name and password.
Confirm the access rights for the shared network folder with the network administrator, then enter the user name and password.

Setting to Print Scanned Images (Function: Print)



[Printer]

Shows the printer to use for printing images. Click the [Printer setting] button to change printer settings.

[Print format]

Select whether to resize images for printing.

- Select [Actual size] to print images the same size as their original documents.
- Select [Fit to paper] if the scanned documents were larger than the printer paper, to resize the images to the printer paper size.

Buttons

[OK] button

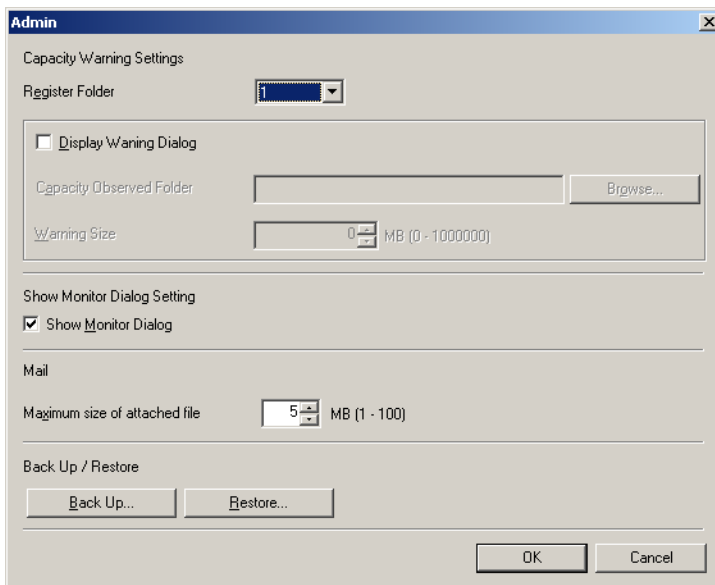
Click this button to accept changes and return to the Job Registration Tool dialog box.

[Cancel] button

Click this button to reject changes and return to the Job Registration Tool dialog box.

Administration Dialog Box

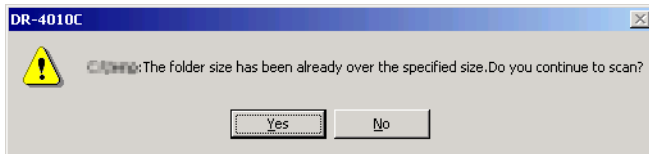
This dialog box appears when you click the [Admin] button in the Job Registration Tool dialog box. Here you can set [Capacity Warning Settings], [Show Monitor Dialog Setting], [Maximum size of attached file] and job data [Back Up/Restore].



Settings for Monitoring the Folder for Saved Images

[Capacity Warning Settings]

The Capacity Warning Settings allow you to specify in advance the folder for saving image files, and the space to be available for saving files. If the space required to save a file would exceed the specified Warning Size when starting to scan or while scanning, a warning message appears.



- ☛ A warning size (capacity) can be specified for up to five folders, with the number (1 to 5) of the folder to be selected registered by [Register Folder].

[Display Warning Dialog] Check Box

Select this check box when you want to limit space available in a destination folder, by registering the folder number and specifying a warning size.

[Capacity Observed Folder]

Specify a folder to monitor for available space

[Warning Size]

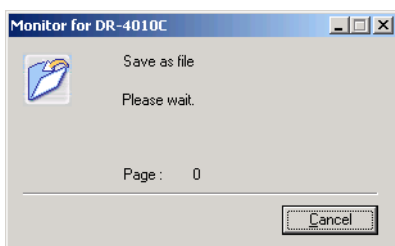
Enter the maximum total size for all files saved to the specified folder.

- ☛ When saving to removable storage media such as CD-R, specify the maximum capacity of the media.
- ☛ When folder monitoring ([Display Warning Dialog]) is enabled, a warning message appears when starting to scan if the total size of the files in the specified folder exceeds the specified limit.
- ☛ If a warning message appears, follow the instructions in the message to either continue scanning or change the save destination first.

Monitor Job Dialog Settings

[Show Monitor Dialog] Check Box

Select this check box to display the Monitor dialog to display job progress while scanning.



Setting the Maximum Size of E-Mail Attachments

[Maximum size of attached file]

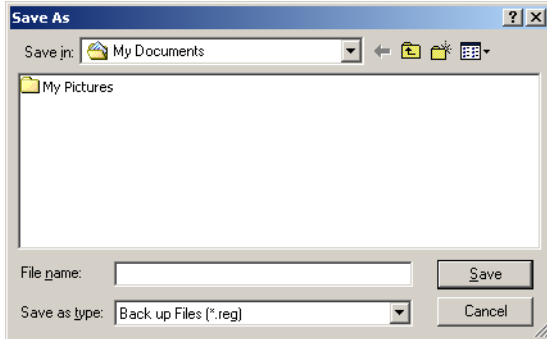
Specify the maximum image file size that can be attached when [Attach to E-mail] is selected. When the scanned image size reaches the specified maximum, a message appears and scanning stops.

- ☛ The maximum size of attached files must not exceed the limit determined by the mail server. Ask your e-mail system administrator for the attachment size limit of the mail server.

[Back Up / Restore] Settings

[Back Up] Button

Writes a backup file (*.reg) of registered job data to the specified folder.



[Restore] Button

Restores the job data from a stored backup file (*.reg.)

☞ If the currently registered job number is the same as that of an existing backup file, the existing backup file is overwritten by the registered job.

Buttons

[OK] button

Click this button to accept changes and return to the Job Registration Tool dialog box.

[Cancel] button

Click this button to reject changes and return to the Job Registration Tool dialog box.

This chapter provides examples of settings for the DR-4010C ISIS/TWAIN driver. Refer to these examples when making ISIS/TWAIN driver settings. For descriptions of particular setting items, see [“ISIS/TWAIN Driver Settings,”](#) on p. 7-1.

Scanning Both Sides of Pages

- **To scanning both sides of pages**

Select [Duplex] for the Scanning Side setting on the [Basic] tab sheet. (See [“Scanning Side,”](#) on p. 7-8.)



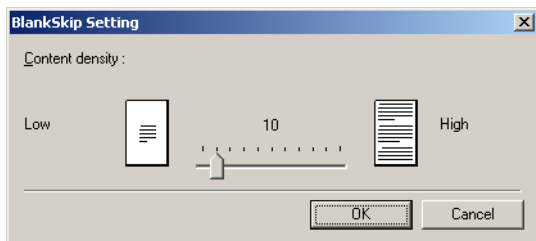
- **To avoid scanning blank pages, such as pages at the back of a document**

Select [Skip blank page] for the Scanning Side setting on the [Basic] tab sheet. Duplex scanning is performed, and pages images detected as blank are not saved. (See [“Scanning Side,”](#) on p. 7-8.)



- **If blank pages are not skipped, even when [Skip blank page] is selected**

Increase the [Content density] in the [Blank Skip Setting] dialog box. If the [Content density] is set too low for documents with a light background, they may not be detected as blank pages, and not be skipped. (See [“Scanning Side,”](#) on p. 7-8.)



- **If documents with text are skipped as blank pages**

Decrease the [Content density] in the [Blank Skip Setting] dialog box. If the [Content density] is set too high for documents with little text, they may be incorrectly detected as blank pages, and be skipped. (See [“Scanning Side,”](#) on p. 7-8.)

Scanning Non-Standard-Size Documents

- **To scan non-standard-size documents**

If non-standard-size documents are scanned with a standard size selected for the Page Size setting on the [Basic] tab sheet, black regions may appear around the scanned document image. To scan non-standard-size documents, select [Auto-detection] as the [Page Size]. Page size is then detected automatically. (See [“Page Size,”](#) on p. 7-7.)



- **To scan long-page documents**

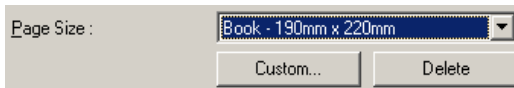
Set the scanning mode to Long Document mode, and select [Auto-detection] as the [Page Size] in the Properties dialog box. Document pages may be up to one meter long.

(See “Long Document Mode,” on p. 3-30, and “Page Size,” on p. 7-7)



- **To register a non-standard page size**

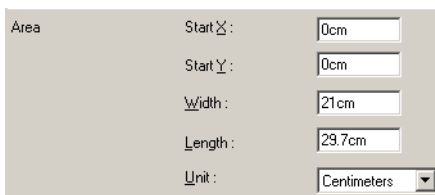
A non-standard page size not already registered as a page size selection can be saved as a custom page size by selecting the [Custom] button in the Scan Area dialog box. (See “User Preferences,” on p. 7-5.)



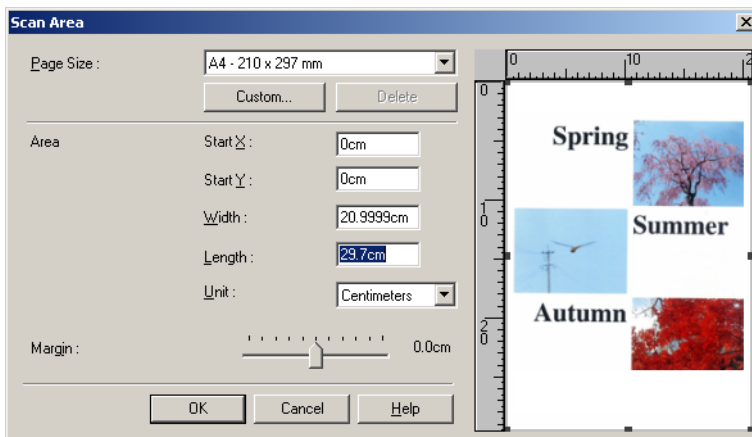
Adjusting the Scan Area

- **To scan only part of the document page.**

You can specify any area on the page in the Scan Area dialog box. However, scan area settings are ignored when [Auto-detection] is selected as the [Page Size]. (See “[Scan Area] Dialog Box,” on p. 7-11.)



With the TWAIN driver, load a document in the scanner and click the [Preview] button to scan one page.) The scanned image is displayed in the Area window so that you can adjust the scan area while viewing the preview image. (See “Preview Button (TWAIN driver only),” on p. 7-13.)



With CapturePerfect, the last scanned image appears in the Area window. After executing [Scan Single Page], open the Scan Area dialog box to view the scanned image in the Area window, where you can set the scan area while viewing the preview image.

- **To avoid losing the edges of an image due to shifting of the document page, or to remove black frames from around images**

Adjust the scan area using the [Margin] slider in the Scan Area dialog box.



If the edges are missing from the image, move the slider to the right to expand the scanning area. Alternatively, to eliminate the black frame around scanned images, move the slider to the left to reduce the scanning area.

Scanning Multiple Documents

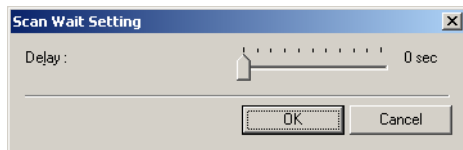
- **To scan a document that cannot be loaded all at once as multiple separate batches**

Set the [Feeding Option] on the [Basic] tab sheet to either [Automatic Feeding] or [Panel Feeding]. (See “Feeding Option,” on p. 7-21.)

When [Automatic Feeding] is selected as the [Feeding Option], the scanner detects documents and starts scanning as they are loaded, so continuous scanning is available just by loading the document batches repeatedly.



The [Setting] button allows setting a delay time from when a document is loaded until scanning starts.



Set a delay time when you need to adjust the document guides or align the pages after loading a document with automatic feeding.

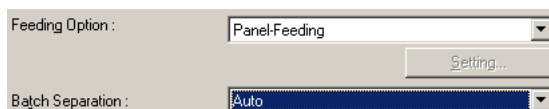
When [Panel Feeding] is selected as the [Feeding Option], scanning does not start until you press the Start button.



After loading different-size documents, adjust the document guides or sort the pages before pressing the Start button to start scanning.

- **To create separate files for each batch of documents during continuous scanning (ISIS driver only)**

Set the [Feeding Option] on the [Basic] tab sheet to either [Automatic Feeding] or [Panel Feeding], and set [Batch Separation] to [Auto]. Each batch of documents is saved with different file names. (See “Batch Separation (ISIS driver only),” on p. 7-21.)



- **To scan a batch of documents one page at a time**

Set the [Feeding Option] to either [Automatic Feeding] or [Panel Feeding], and scan each page. After scanning each page, the scanner returns to the waiting state.



When [Automatic Feeding] is selected as the [Feeding Option], the scanner detects documents and starts scanning as they are loaded.



When [Panel Feeding] is selected as the [Feeding Option], press the Start button to scan after loading each page.

- **To stop the scanner when pages double feed**

Confirm that the [Double Feed Detection] method selected on the [Others] tab sheet suits the document being scanned. (See “Double Feed Detection,” on p. 7-21.)



Image Adjustments for Scanning

- **To enhance text in documents with a background (when scanning in black and white (binary) mode.)**

Select [Advanced Text Enhancement] as the Mode on the [Basic] tab sheet. The background behind the text is removed or processed so that the text is emphasized for better legibility. (See “Mode,” on p. 7-5.)



- **To scan documents with different brightness on the front and back**

Adjust the back side brightness and contrast on the [Brightness] tab sheet. However, when a text enhancement mode is selected, the back side brightness cannot be adjusted. (See “[Brightness] Tab Sheet,” on p. 7-13.)

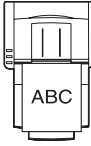
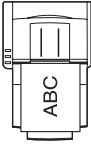

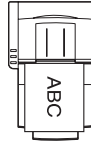






- **To rotate scanned images**

Select a rotation angle (0, 90, 180 or 270 degrees) as the Document Orientation setting on the [Image processing] tab sheet. (See “[Document Orientation],” on p. 7-17.)

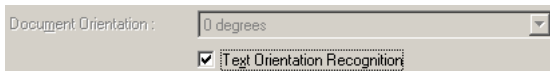


Scanned images are rotated as follows according to the orientation of loaded documents and the selected angle.

Feeder documents: face up				
Image rotation (clockwise)	0°	90°	180°	270°
Flatbed documents: face down				

- **To rotate images to match document text**

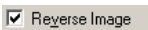
Select [Text Orientation Recognition] on the [Image processing] tab sheet. The text orientation on each page is detected, and the scanned image is rotated in 90-degree increments as needed for normalization.



When [Text Orientation Recognition] is selected, image rotation is disabled.

- **To reverse black and white in scanned images (TWAIN driver only)**

Select [Reverse Image] on the [Image processing] tab sheet. Black and white are reversed in scanned images. (See “[Reverse Image] Check Box (TWAIN driver only),” on p. 7-18.)



- **To ignore a particular color when scanning**

Select a color to be ignored (dropped out) in [Color drop-out] on the [Image processing] tab sheet, and that color will be eliminated from scanned images. (See “Color Drop-Out,” on p. 7-18.)



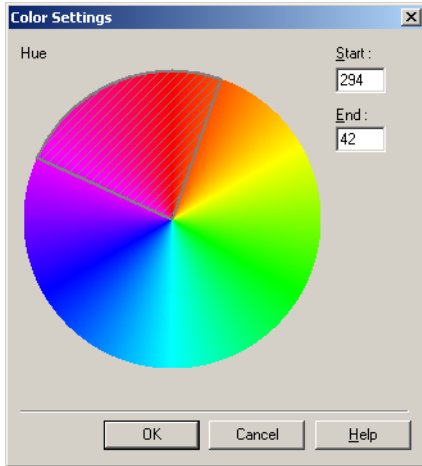
- **To enhance a particular color when scanning**

Select the color to be enhanced in [Color drop-out] on the [Image processing] tab sheet, and that color will be enhanced in scanned images. (See “Color Drop-Out,” on p. 7-18.)



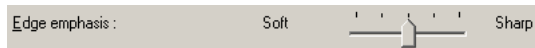
- **To skip or enhance a custom color**

Select [Drop-out color Custom] or [Custom color Enhance] in the [Color drop-out] list on the [Image processing] tab sheet to open the [Color Settings] dialog box. Here you can specify the range of colors to be dropped out or enhanced. (See “Color Drop-Out,” on p. 7-18.)



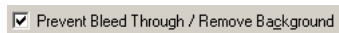
- **To enhance contours in images**

Adjust the [Edge Emphasis] setting on the [Image processing] tab sheet. (See “[Edge Emphasis],” on p. 7-17.)



- **To Prevent Bleed Through of text from the back side of thin document pages, or to remove the background from scanned images**

Select [Prevent Bleed Through / Remove Background] on the [Image processing] tab sheet. Bleed-through on thin paper and backgrounds are removed from scanned images. (See “[Prevent Bleed Through / Remove Background] Check Box,” on p. 7-18.)



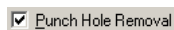
- **To remove black areas around images**

Select the [Border Removal] check box on the [Image processing] tab sheet. The black areas around images are removed. (See “[Border Removal] Check Box,” on p. 7-18.)



- **To remove the black spots from scanned images when scanning documents with punch holes**

Select the [Punch Hole Removal] check box on the [Image processing] tab sheet. The black spots from punch holes in documents are removed from scanned images. (See “[Punch Hole Removal] Check Box,” on p. 7-18.)



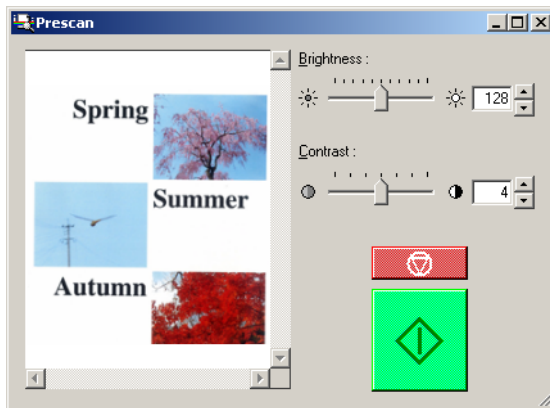
Prescan

- **To confirm images before scanning**

Select the [Prescan] check box on the [Others] tab sheet, and scan. When scanning is first started, the first document page is prescanned and displayed in the Prescan panel.



- **About the Prescan Panel**



The Prescan window provides adjustments for image brightness and contrast of the first document page before continuing scanning.

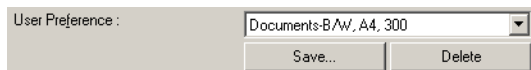
The image displayed in the prescan panel can be magnified for confirmation (with the mouse over the preview image, left click to magnify, and right click to reduce.)

Brightness and contrast adjustments are reflected in the prescan panel image. After confirming the image, click the Start button to resume scanning with the adjusted settings. Click the Stop button to stop scanning.

Preserving Your Settings

- **To preserve your settings for future use**

Register a name for your settings as [User Preference] on the [Basic] tab sheet. When you want to recall your settings later, select the name of your registered user preferences, and they will be reflected in the tab sheets.





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