

Canon

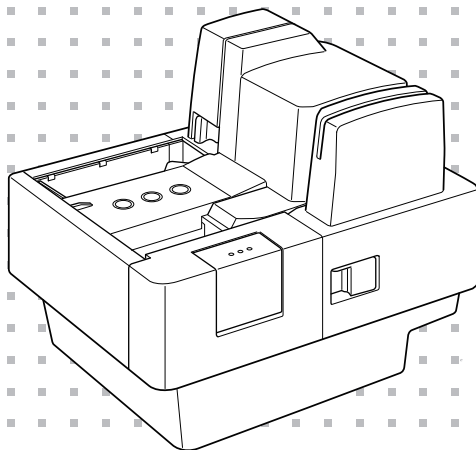


imageFORMULA

CR-150

CR-120

User Manual



Please read this manual before operating this scanner.

FCC REGULATIONS (For 120V model)

Check Reader, Model M112010/M112030/M112040/M112060/M112100/M112120

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Use of shielded cable is required to comply with class B limits in Subpart B of Part 15 of FCC Rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Canon U.S.A. Inc.

One Canon Park, Melville, NY 11747, U.S.A.

Tel. No. (800)652-2666

RADIO INTERFERENCE REGULATIONS (For 120V models)

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus", ICES-003 of the Industry Canada.

RÈGLEMENT SUR LE BROUILLAGE RADIOÉLECTRIQUE (For 120V models)

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques", NMB-003 édictée par l'Industrie Canada.

International ENERGY STAR® Office Equipment Program



As an ENERGY STAR® Partner, CANON ELECTRONICS INC. has determined that this machine meets the ENERGY STAR® Program guidelines for energy efficiency. The International ENERGY STAR® Office Equipment Program is an international program that promotes energy saving through the use of computers and other office equipment.

The program backs the development and dissemination of products with functions that effectively reduce energy consumption. It is an open system in which business proprietors can participate voluntarily. The targeted products are office equipment, such as computers, monitors, printers, fax, machine, copiers, and scanners. The standards and logos are uniform among participating nations.

This model doesn't provide "setting options" for power management.

European Union (and EEA) only.



This symbol indicates that this product is not to be disposed of with your household waste, according to the WEEE Directive (2002/96/EC) and your national law. This product should be handed over to a designated collection point, e.g., on an authorized one-for-one basis when you buy a new similar product or to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, approved WEEE scheme or your household waste disposal service. For more information regarding return and recycling of WEEE products, please visit www.canon-europe.com/environment. (EEA: Norway, Iceland and Liechtenstein)

Für EMVG

Dieses Produkt ist zum Gebrauch im Wohnbereich, Geschäftsbereich und Gewerbebereich sowie in Kleinbetrieben vorgesehen.

Model Names

The following names may be provided for the safety regulations in each sales region of the Check Reader.

CR-150: Model M112010/M112030

CR-120: Model M112040/M112060

CR-120 UV: Model M112100/M112120

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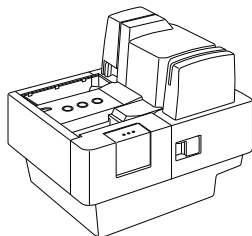
About Open Source Licenses

This product includes open source software.

For details on the license conditions for each open source software, refer to the OpenSource.txt file stored in the LICENSE folder on the disc.

Packaging: What Is in the Box?

Make sure that you have everything shown below. Check every item you have removed from the box. If any items are missing, contact your local authorized Canon dealer.



CR-150/CR-120



Disc



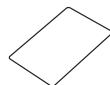
AC Adapter



Card Guard



Power Cord^{*1}



Warranty Card^{*2}



USB Cable



Setup & Operation Guide

^{*1} The power cord varies, according to the country of purchase.

^{*2} For the United States and Canada only.

Preparation Before Use

This chapter describes how to prepare the scanner to scan documents.

Setting Up the Scanner

Perform the following steps to set up the CR-150/CR-120. Refer to the section for each step for details about that step.

- 1 Check your operating environment.** (See “Checking Your Operating Environment” on p. 6.)



- 2 Install the software.** (See “Installing the Software” on p. 7.)

Install the Scanning Utility provided with the CR-150/CR-120.



- 3 Connect the scanner to a computer.** (See “Connecting the Scanner to a Computer” on p. 8.)



- 4 Turn ON the power.** (See “Turning ON the Power” on p. 9.)



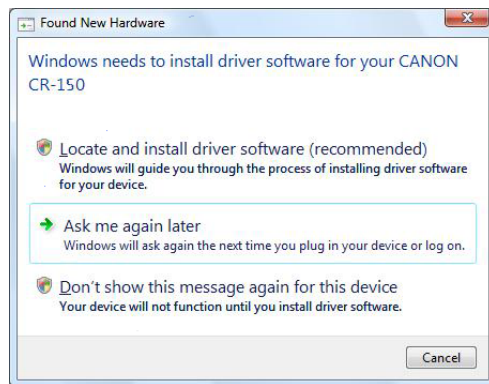
- 5 Automatically installing the device driver.** (See p. 10.)

The device driver is installed automatically when Windows recognizes the CR-150/CR-120.

! IMPORTANT

- To have the device drivers installed automatically when the computer recognizes the CR-150/CR-120, the software needs to be installed before the CR-150/CR-120 is connected to the computer.
- If you connect the computer and turn ON the CR-150/CR-120 before installing the software, the following wizard screen appears. If this happens, click [Cancel], turn OFF the CR-150/CR-120, and then install the software.

The following wizard screen is an example in Windows 7. When a similar wizard screen appears in Windows Vista/8.1/10, click [Cancel].



Wizard Screen (Windows 7)

Checking Your Operating Environment

The following computer system requirements are recommended for using the CR-150/CR-120.

Operating Systems:

- Microsoft Windows Vista (32/64bit) SP2 or later
- Microsoft Windows 7 (32/64bit) SP1 or later
- Microsoft Windows 8.1 (32/64bit)
- Microsoft Windows 10 (32/64bit)
- Microsoft Windows Server 2008 R2 Service Pack 1 or later
- Microsoft Windows Server 2012 R2

This is the environment as of November 2016.

For the latest software support information, go to the Products page on the Canon website.

Specifications:

- CPU: Intel Core2 Duo 1.6 GHz or faster
- Memory: 1 GB or more
- USB 2.0 interface

Interface Cable

- Use the cable provided or a Hi-Speed USB 2.0 interface cable to connect to the computer's USB port.

IMPORTANT

- If you use the USB interface that was provided as standard with your computer:
 - Use the most recently available USB 2.0 driver provided by Microsoft. Contact your local authorized Canon dealer for more detailed information.
 - Not all USB interfaces provided as standard with personal computers are guaranteed. Contact your local authorized Canon dealer for more detailed information.
 - Scanning speeds are slower if your computer's standard USB interface is USB 1.1.
 - You should use the USB cable originally bundled with the scanner or a Hi-Speed USB 2.0 compatible cable.
- 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 longer.
- Even if the computer satisfies the system requirements, the scanning speed may vary, depending on the specifications and operating environment of the computer and the specified scan settings.

Installing the Software

The following software applications are provided on the website.

There are 3 usable software applications.

For the latest software support information, go to the Products page on the Canon website.

ISIS / TWAIN / Canon Driver

The ISIS/TWAIN Driver is the driver conforming to the ISIS/TWAIN standard.

The Canon Driver is the Canon original standard driver. You need this driver to use the Scanning Utility.

Scanning Utility

Canon Scanning Utility is an application that provides scanning, file saving, image viewing, printing, and various other functions. A dedicated scanner driver is installed after you install the utility software.

Ranger

Ranger is an API software. For details, see "About the Ranger" on p. 29.

! IMPORTANT

- The Scanning Utility includes a device driver so that Windows can recognize the CR-150/CR-120. Be sure to install the Scanning Utility before connecting the CR-150/CR-120 to the computer.
- Some functions mentioned in this manual may not be operated in some applications.

Installing the Scanning Utility

Follow the instructions below to install the Scanning Utility and the dedicated driver.



NOTE

The dedicated scanner driver is installed after the Scanning Utility has been installed.



Turn ON your computer, and log on to Windows.



IMPORTANT

Be sure to log on as the Administrator.



Download usable software from the Canon Website.

After executing the downloaded file, follow the instructions on the screen to complete the installation.



IMPORTANT

- The displayed screen, type, file name, and folder name will differ depending on your environment or purpose. These items should be replaced as necessary.
- The computer may need to be restarted, after the installation, depending on the operating system. If this is necessary, make sure to restart the computer.

Connecting the Scanner to a Computer

The way to connect the scanner to your computer is with a USB cable.

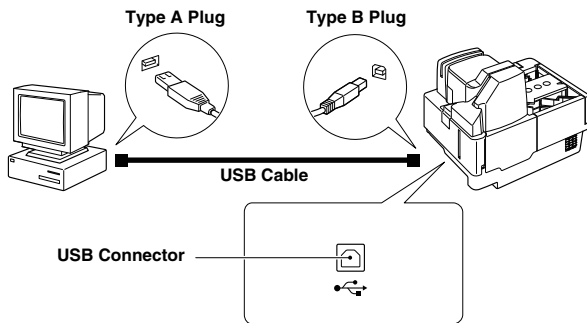
CAUTION

- Do not turn OFF the scanner or remove the interface cable when an application is running.
- Turn OFF the computer and the scanner before changing the cable.

USB Connections

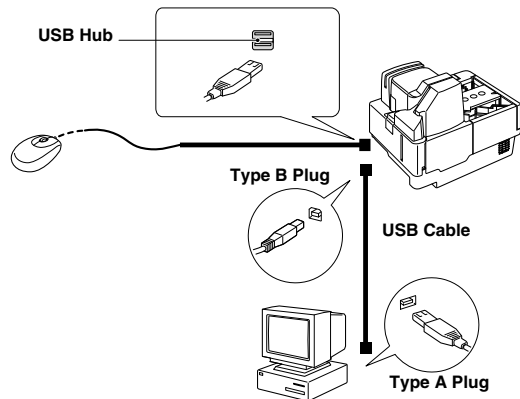
Computer peripherals

Connect the scanner and the computer with the USB cable provided or a Hi-Speed USB 2.0 cable.



Connect the scanner and the computer peripherals

Connect the scanner and the computer peripherals with the USB cable provided or a Hi-Speed USB 2.0 cable.



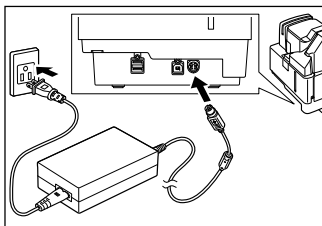
NOTE

Connect the type B plug (square) to the scanner and connect the type A plug (flat) to the USB port on the computer.

Connecting the Power Cord

Connect the power cord.

Make sure to use only the power cord provided with the scanner.



WARNING

When connecting the power cord, follow these precautions. Failure to do so may cause a fire or electrical shock.

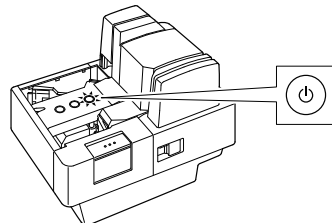
- Never grasp the power plug when your hands are wet.
- Never plug the scanner into a multiplug power strip.
- Never bundle or tie the power cord around itself or another object.
- Connect the power plug securely into the power outlet.
- Use only the power cord and power plug provided with the scanner.
- Connect only to a power outlet of the rated voltage and power supply frequency (either 100-120 V, 60 Hz or 220-240 V, 50/60 Hz, depending on your region).
- Do not plug the scanner into a power outlet shared with another device. If you use an extension cord, make sure that the extension cord is rated for the current requirements of the scanner.

Turning ON and OFF the Power

Follow the procedures below to turn the scanner power ON and OFF.

Turning ON the Power

- 1** To turn ON the scanner, press the Power Button.



When you turn ON the power, the Power Button flashes slowly and then turns solid blue.

IMPORTANT

If the scanner does not work, or the power LED continues to flash, there is a problem with the scanner. Turn OFF the power, and contact your local authorized Canon dealer or service representative to have the scanner serviced.

WARNING

If you hear strange sounds, detect smoke or abnormal heat, sense a vibration, or smell odd odors around the scanner, turn OFF the power immediately and disconnect the power cord from the power outlet. Contact your local authorized Canon dealer or service representative to have the scanner serviced.

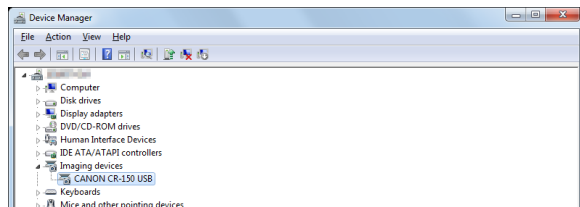
- 2 Turn ON your computer.
- 3 Windows recognizes the CR-150/CR-120 as new hardware, and installation starts automatically.



(Windows 7)

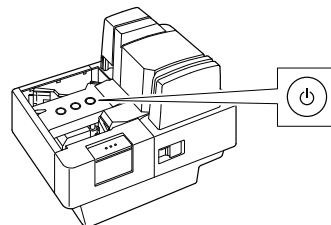
NOTE

The CR-150/CR-120 will be registered as "CANON CR-150 USB" or "CANON CR-120 USB" in the Imaging Device directory.



Turning OFF the Power

- 1 Press and hold the Power Button to turn off the power.



CAUTION

For your safety, disconnect the power plug from the power outlet if you are not using the scanner for a long period of time.

NOTE

The scanner's auto power off setting is enabled by default, and the scanner will turn off automatically if it is not operated for 4 hours. For details on how to disable this setting, see "Auto Power OFF Settings" on p. 40

INTRODUCTION

Thank you for purchasing the Canon Check Reader CR-150/CR-120. Please read this manual thoroughly before using the machine in order to familiarize yourself with its capabilities, and to make the most of its many functions. Unless otherwise noted, CR-120 is used for both the CR-120 and the CR-120 UV models, throughout this manual.

Manuals for the CR-150/CR-120

The following manuals are provided with the CR-150/CR-120. Be sure to read these manuals thoroughly before using the scanner. (The Setup & Operation Guide is extracted from the User Manual.) Electronic manual is stored as a PDF file on the supplied Disc and requires Adobe Reader to open. (You can download Adobe Reader from the Adobe Web site.)

Setup & Operation Guide (Supplied with the scanner/Electronic Manual)

Describes the procedure for setting up the CR-150/CR-120 for scanning. Set up the CR-150/CR-120 in accordance with the Setup & Operation Guide. For details on the CR-150/CR-120, refer to the *User Manual* (electronic manual).

User Manual (Electronic Manual): This Manual

Describes how to use the scanner, and includes instructions for configuring the scanner settings, as well as handling, maintenance, and troubleshooting information.

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 damaging the machine.



NOTE

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

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Important Safety Instructions

Handling



WARNING

- Never install and operate the scanner near flammable substances, such as alcohol, paint thinner, benzene, or any other type of volatile solution.
- Never damage or modify the power cord, and never place heavy objects on the power cord.
- Always make sure that your hands are dry when you are handling the power cord or power plug. Never grasp the power plug when your hands are wet.
- Never plug the scanner into a multiplug power strip.
- Never bundle, wrap, or tie the power cord around itself or another object. Connect the power plug securely into the power outlet.
- Use only the power cord and power plug provided with the scanner.
- Never attempt to disassemble or modify the scanner.
- Never use flammable aerosol products near the scanner.
- Before you clean the scanner, turn the power OFF and disconnect the power cord from the power outlet.
- To clean the scanner's exterior, use a firmly wrung cloth, moistened slightly with water. Never use any type of volatile solution, such as alcohol, benzene or paint thinner.
- If you hear strange sounds, detect smoke or abnormal heat, sense vibration, or smell odd odors around the scanner, turn OFF the Power immediately and disconnect the power cord from the power outlet. Contact your local authorized Canon dealer or service representative to have the scanner serviced.

- Handle the scanner with care. Avoid shock and vibration to the scanner caused by reckless handling. If you suspect the scanner has been accidentally damaged, turn OFF the Power immediately and disconnect the power cord from the power outlet. Contact your local authorized Canon dealer or service representative to have the scanner serviced.
- Before you move the scanner, always turn OFF the power and disconnect the power cord from the power outlet.
- This product emits low level magnetic flux. If you use a cardiac pacemaker and feel abnormalities, please be away from this product and consult your doctor.

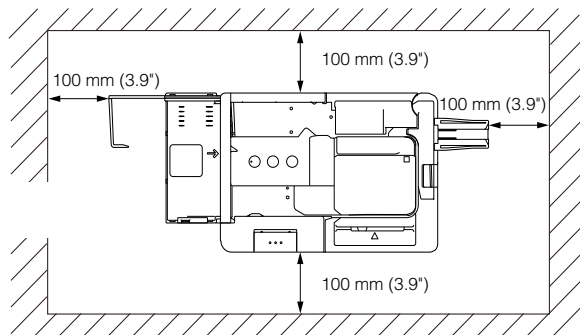


CAUTION

- To avoid damage to the scanner, never place the scanner on an unstable or vibrating surface. The scanner may tip or fall over, causing injury.
- To avoid overheating and causing a fire, never block the air vents on the left side of the scanner.
- Keep all liquids, beverages, or any type of liquid, and clips, staples, necklaces, or other metal objects away from the scanner. If you accidentally spill liquid or drop a metal object into the scanner, turn OFF the power immediately and disconnect the power cord from the power outlet. Contact your local authorized Canon dealer or service representative to have the scanner serviced.
- Never install the scanner in humid or dusty locations. Doing so may cause a fire or electrical shock.
- Never place heavy objects on top of the scanner, as these objects may tip or fall over, and cause injury.

- When you remove the power cord, grip it by the power plug head. Never attempt to disconnect the power cord from the power outlet by pulling on the power cord. Doing so may damage or expose the cord's internal wiring, and cause a fire or electrical shock.
- Keep the area around the power outlet clear of all obstacles so you can disconnect the power cord easily at all times.
- Never spill water or volatile solutions (alcohol, benzene, paint thinner) into the scanner. Doing so may cause a fire or electrical shock.
- When the scanner is not being used for a long period of time, disconnect the power cord from the power outlet.
- Avoid wearing loose fitting clothing, dangling jewelry, long ties, or long hair that could become entangled with moving parts, especially the rollers that feed paper into the scanner. If such objects become entangled, immediately disconnect the power plug from the power outlet to stop the scanner.
- Be careful when you are loading a document or clearing a paper jam. It is possible that the paper edges may cut your fingers.
- Do not open the Maintenance Cover while the scanner is operating. Doing so may result in a malfunction or injury.
- Do not touch the pins and contacts on the scanner's connector with your hands. Doing so may result in a malfunction.
- Do not touch anything except the operation buttons when documents are being fed.
- Do not turn the scanner upside down. The ink may leak from the ink disposal tank.
- It is prohibited to run scanning operations near electronic equipment.

Installation Location



For operation, maintenance, and ventilation, make sure that there is enough space around the scanner, as shown in the illustration above.

Avoid placing the scanner in the following places. It may cause a malfunction and adversely affect the scanner or your computer.

- Places exposed to direct sunlight
If installation in such places is unavoidable, provide a curtain or similar object to shade the scanner.
- Places subject to dust and fumes
Dust and cigarette fumes adversely affect the components inside the scanner.
- Near running water, a heat source, water vapor, or in an area, such as a laboratory exposed to ammonia gas, paint thinner, or other volatile chemicals
- Places subject to excessive vibration and shock

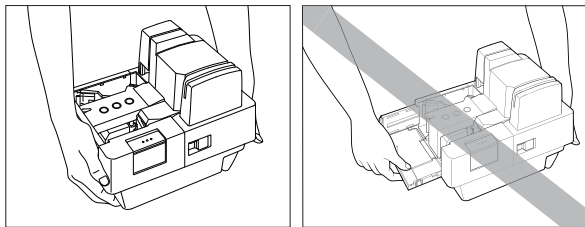
- Places subject to rapid changes in temperature or humidity
Condensation occurring inside the scanner may impair image quality. Place the scanner in a room that is within the following range:
Room temperature: 10°C to 32.5°C (50°F to 90.5°F)
Relative humidity: 20% to 80% RH
Use the recommended operating environment for the ink cartridge when using the imprinter.
- Near electronic equipment or heavy equipment that generates a strong magnetic field, such as a speaker, TV, and radio

Power Supply

- Connect only to a power outlet of the rated voltage and power supply frequency (either 100-120 V, 60 Hz or 220-240 V, 50/60 Hz, depending on your region).
- Make sure that the scanner is connected to an independent power outlet. Do not plug the scanner into an outlet shared with another device. If you use an extension cord, make sure that the extension cord is rated for the current requirements of the scanner.
- If you are unsure of anything relating to the power supply, contact your local authorized Canon dealer or service representative for further information.
- Never place an object on top of the power cord or step on the power cord.
- Never bundle the power cord or wrap the cord around an object, such as a table leg.
- Do not tug on the power cord. When you remove the power cord, grip it by the power plug head.
- Keep the area around the power outlet free of obstacles.
- Do not connect to power outlets with other electrical devices. Also, when using an extension cord, make sure that the extension cord is rated for the current requirements of the scanner.
- Disassembling and/or reassembling the AC adapter is extremely dangerous and should not be attempted under any circumstances.
- Do not place heavy objects on the AC adapter or power cord. Do not place the adapter or cords in an area where they are likely to be stepped on.
- Do not use the power cord while it is bundled.
- Never pull directly on the power cord. To remove the plug from the outlet, grasp the plug directly and remove it from the outlet.
- Keep the area around the power plug clear of articles so that the power plug can be disconnected in an emergency.
- Use only the AC adapter provided with the product. Do not use the scanner's AC adapter with any other product.
- If you have any questions about the AC adapter, contact your local authorized Canon dealer or service representative for further information.

Moving the Scanner

When you move the CR-150/CR-120, hold it firmly with both hands and carry it carefully. Do not hold the scanner by the eject stopper or the Card Guard. The scanner weighs approximately 3.2 kg (7.05 lb) .



WARNING

When moving the scanner, the warnings below should be observed

- Turn off the power of the scanner
- Push the Eject Stopper to be stored and be sure to close the Document Feed Tray
- Remove the following parts
(Card Guard, the interface cables, and the AC adapter)

Introduction to the CR-150/CR-120

This chapter describes the features of the CR-150/CR-120 scanner, what comes packaged in the box, and the names and functions of parts on the scanner.

Features of the CR-150/CR-120

The Canon Check Reader CR-150/CR-120 is a scanner with magnetic heads that can read checks and other documents that are printed with MICR (Magnetic Ink Character Recognition) compatible fonts, and is capable of OCR (Optical Character Recognition).

Features

High-Speed Scanning (200 dpi Personal Check - 152 x 70 mm)

CR-150: 150 cpm

CR-120: 120 cpm

CR-120 UV: 120 cpm (UV Scan mode)

Supports Large Documents

Documents up to 108 mm x 245 mm (4.3" x 9.6") can be scanned.

High Durability

The scanner has a high durability of 19 million scans.

Compact Size

Supports Black-and-White (Binary) and Grayscale Output

Reads MICR Characters

A magnetic head is used to scan MICR characters.

Supports OCR (Optical Character Recognition)

Character images, such as E13B, OCR-A, OCR-B, and check writer are recognized as characters by the OCR function.

Supports UV scanning (UV models only)

CR-120 UV can scan images that are printed with UV fluorescent ink. This function only scans the front side of documents.

Easy to Maintain

Large Maintenance Covers make handling paper jams and cleaning easy.

Separation OFF Mode

You can scan the following documents:

- Thick documents
- Documents that contain two or more pages together as one document
- Documents that have a rough surface
- Duplicate forms that have sticky edges

Paper Thickness Adjustment Mechanism

Adjust the Separation Roller gap to the thickness of the paper being fed.

Drop-Out Color

This function enables drop-out scanning of a specific color in the document.

Imprinter Is Standard Equipment

An imprinter mechanism, which prints text (5 lines) or a bitmap on documents as they are scanned, comes standard equipped with the scanner. The imprinter's ink cartridge is not included, and must be purchased separately. (See "About the Ink Cartridge," on p. 24.)

Placing Additional Documents

You can place additional documents while the machine is scanning.

Replaceable rollers and ink disposal tank

You can replace the rollers (Pickup Roller, Feed Roller, and Separation Roller) and the ink disposal tank.

Dedicated Card Slot

The scanner includes a dedicated slot for scanning plastic cards.

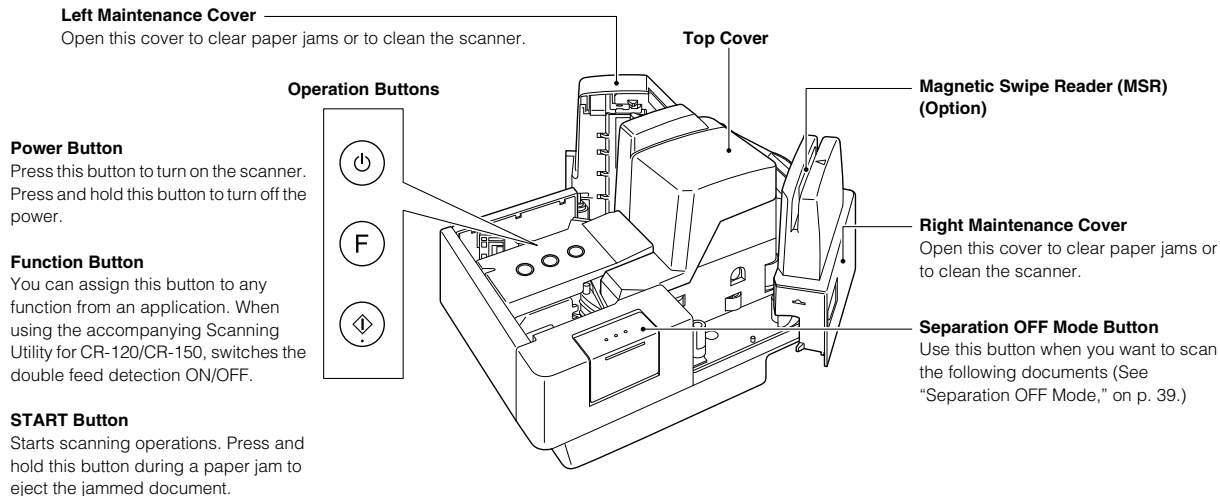
Magnetic Swipe Reader (MSR) (Option)

The scanner includes a dedicated slot for scanning a magnetic card.

Part Names

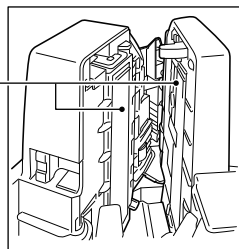
This section describes the names and functions of each part. Before you connect the CR-150/CR-120, familiarize yourself with its parts and their functions.

Front View

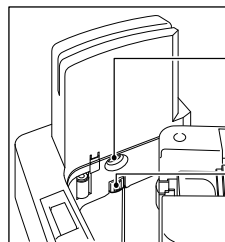


Scanner Unit

This unit scans the documents.

**Ultrasonic Sensor**

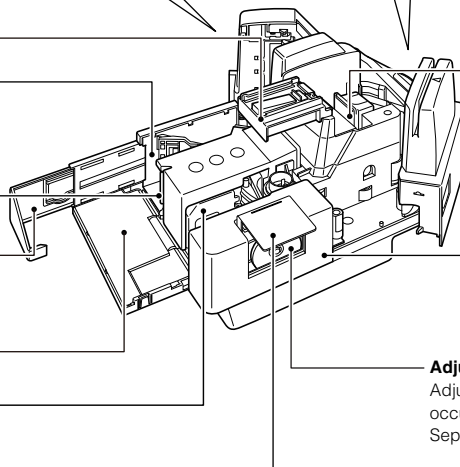
When this sensor detects overlapping documents and spacing between documents, the scanner judges that double feed occurred.

**Magnetic Head for MICR**

Reads MICR characters that have been printed with magnetic ink.

Built-in Nozzle Cleaning Unit**Eject Pocket****Card Slot****Eject Stopper**

Pull out the Eject Stopper to prevent documents from falling off the output tray.

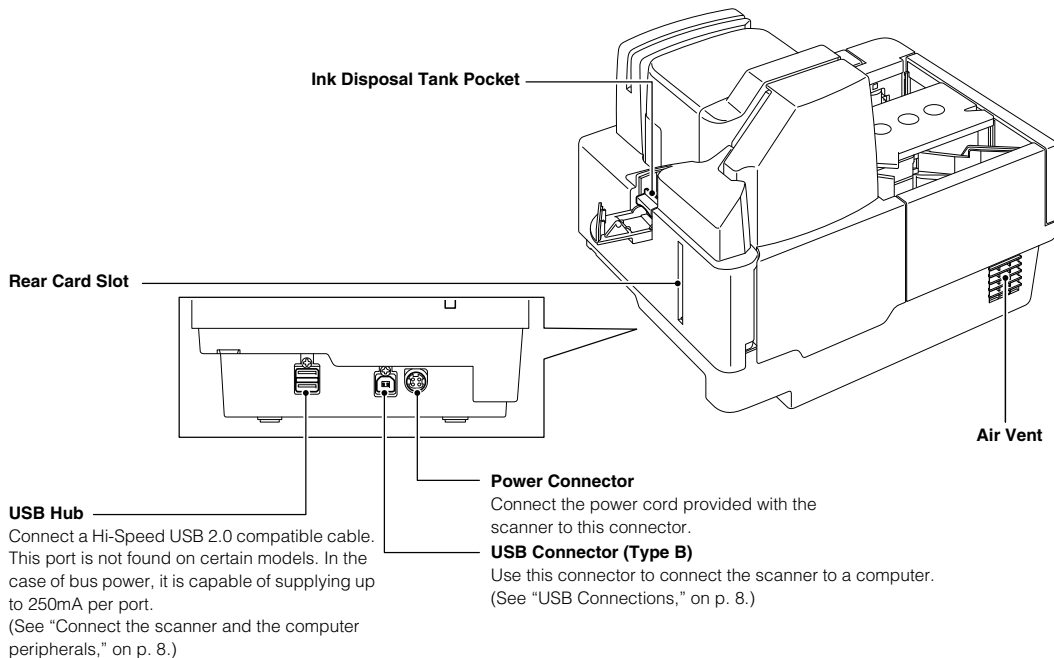
Document Feed/Eject Tray**Document Feeder****Adjustment Dial Cover****Ink Cartridge**

Ink cartridge is not included. Purchase the ink cartridge separately. (See "About the Ink Cartridge," on p. 24.)

Roller Cover**Adjustment Dial**

Adjust the Separation Roller gap if feeding errors occur too frequently. (See "Adjusting the Separation Roller Gap," on p. 63.)

Rear View

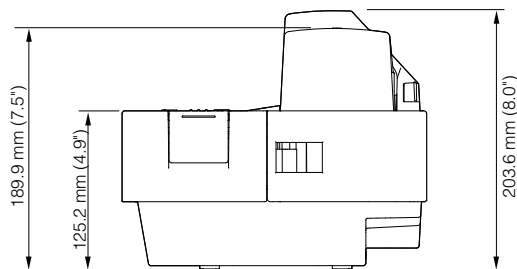
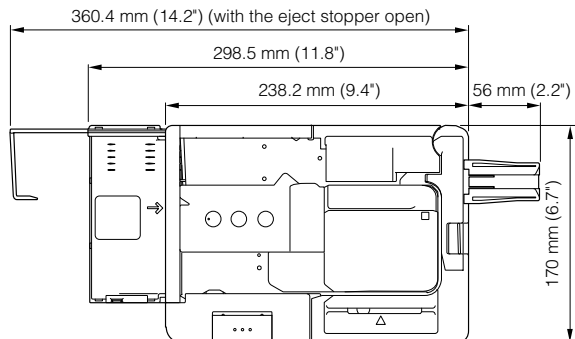


CAUTION

To avoid overheating and causing a fire, never block the air vents on the back of the scanner.

Exterior Dimensions

Units: millimeters (units in parenthesis are inches)



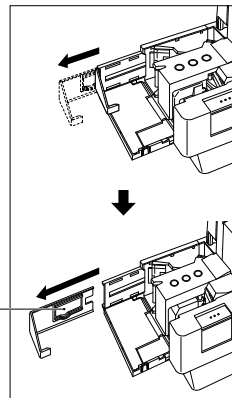
Remove and attach the Eject Stopper

The Eject Stopper can be extended or removed as shown in the figure.

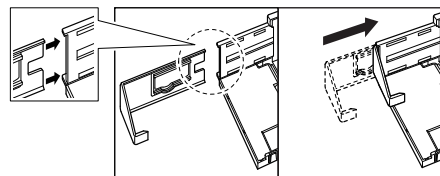
Adjust the stopper in accordance with the document.

If the document exceeds 228mm, remove the eject stopper.

Press here to remove the stopper.



When scanning is finished, push the Eject Stopper into the joint portion of the stopper to attach.



Preparing the Ink Cartridge

This section describes how to prepare the ink cartridge so that you can use the imprinter to print text or a bitmap on scanned documents.

About the Ink Cartridge

The ink cartridge is not included with the scanner. Purchase an ink cartridge separately, as shown below.

Compatible ink cartridges:

Region	Canon Ink Cartridge
North America/ South America	PG-145/ 145XL, 245/ 245XL
EU	PG-445/ 445XL, 545/ 545XL
Asia/ Oceania	PG-645/ 645XL, 745/ 745XL

! IMPORTANT

These ink cartridges are available for 5 years after production has stopped.

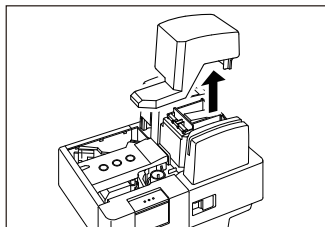
Setting the Ink Cartridge

The ink cartridge needs to be set to print. Set the ink cartridge according to the following procedure.

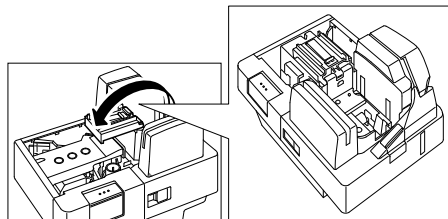
! IMPORTANT

- To set the ink cartridge, turn the scanner OFF before removing the Top Cover. After the ink cartridge is set, replace the Top Cover, and then turn the scanner back ON.
- Finish up the unpacked ink cartridge as soon as possible. More frequent cleaning of the ink cartridge is required if long time elapses after unpacking.

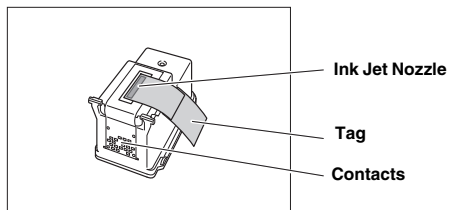
- 1 Remove the Top Cover.



- 2 When you open the Nozzle Cleaning Unit, and you can see the cartridge holder.



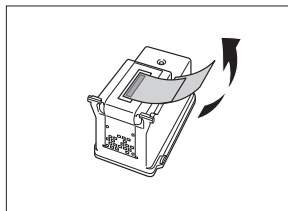
- 3** Remove the ink cartridge from its bag.



! IMPORTANT

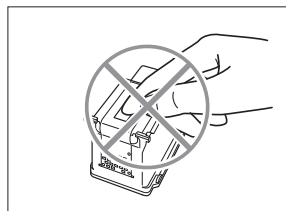
Do not touch the ink cartridge contacts. This can cause a bad electrical contact and reduced print quality.

- 4** Grasp the tag and then peel off the tape covering the ink jet nozzle.

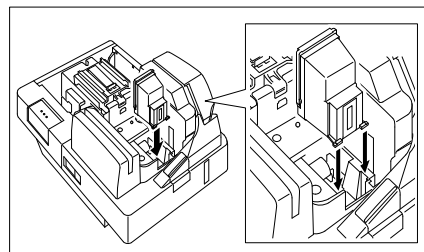


! IMPORTANT

Do not touch the ink jet nozzle or contacts after peeling off the tag and tape.



- 5** Place the ink cartridge shown in the diagram below.



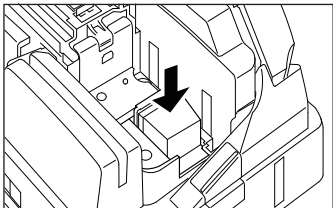
! CAUTION

Do not touch the electrical contact on the carriage. Doing so may cause a malfunction.

NOTE

Do not use more than one cartridge by rotation. If you do so, applications cannot check the ink level precisely.

- 6** Push the ink cartridge in the direction of the arrow until it clicks into place.

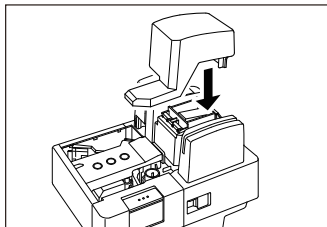


! IMPORTANT

Make sure that the ink cartridge is securely in place.

- 7** Close the Nozzle cleaning Unit.

- 8** Carefully replace the Top Cover.



Software

This chapter describes how to use the Scanning Utility and the Ranger.

How to Use the Software

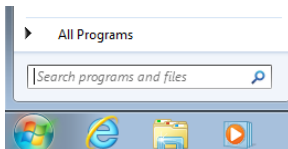
This section describes how to start up the Scanning Utility so that you can use the scanner. Read the Help files for the Scanning Utility for information on how to use it.

How to Use the Scanning Utility

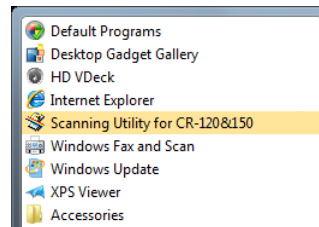
This section describes the procedure for using the Scanning Utility. Read the [Help] file in [Scanning Utility] for more information.

- 1 Click [Start], and then click [All Programs].

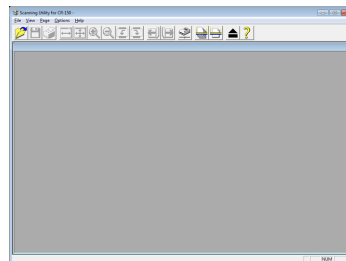
The procedure in Windows Vista/8.1/10 is different from the ones described in this manual. Refer to the Windows Vista/8.1/10 "Help and Support Center" to select [Run].



- 2 Click [Scanning Utility for CR-120&150].

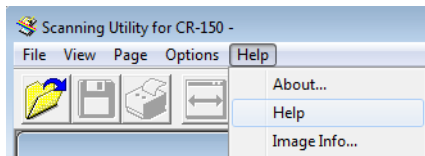


- 3 Start the Scanning Utility.

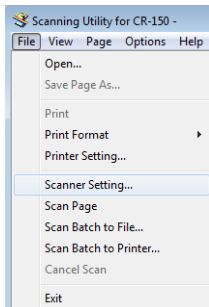


NOTE

The basic operation of the Scanning Utility is noted in the Scanning Utility help file. On the [Help] menu, click [Help] to view the explanation.

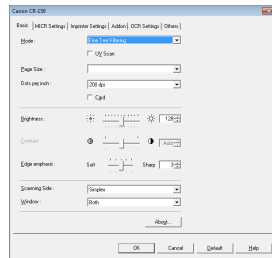


- 4** Select [Scanner Setting] from the [File] menu.



The Settings dialog box appears.

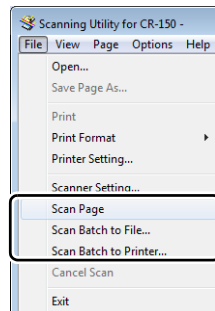
- 5** Set the scan conditions and click [OK].



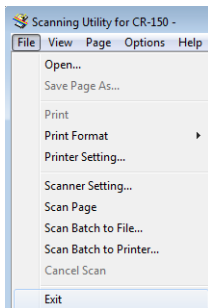
NOTE

For information about the settings for the scan conditions, click [Help] on the Settings dialog box to open the Help file.

- 6** Select the scanning method from the [File] menu and start scanning.



- 7** When scanning is finished, click [Exit] on the [File] menu to quit the Scanning Utility.



How to Download the Ranger

About the Ranger

Silver Bullet Technology's Ranger™ Transport API software, allowing it to be easily integrated into existing systems or be mixed and matched with a wide range of leading check processing software.

- 1** Turn ON your computer, and start Windows.

! IMPORTANT

Be sure to log on as the administrator.

- 2** Download usable software from the Canon Website.

After executing the downloaded file, follow the instructions on the screen to complete the installation.

! IMPORTANT

- The displayed screen, type, file name, and folder name will differ depending on your environment or purpose. These items should be replaced as necessary.
- The computer may need to be restarted, after the installation, depending on the operating system. If this is necessary, make sure to restart the computer.

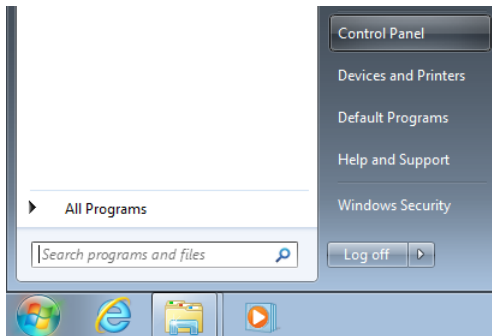
Uninstalling the Software

This section describes how to uninstall the Scanning Utility and the Ranger.

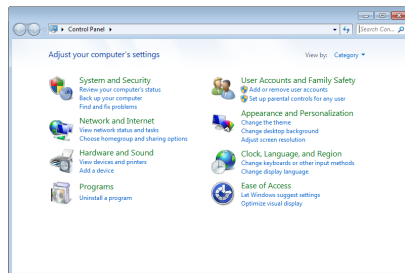
! IMPORTANT

- Be sure to log on as the Administrator.
- The procedure in Windows Vista/8.1/10 is different from the ones described in this manual. Refer to the Windows Vista/8.1/10 "Help and Support Center" to uninstall the software.

1 Click [Start], and then click [Control Panel].

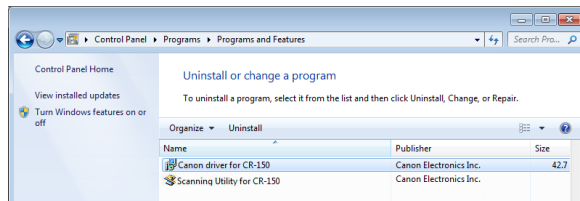


2 Click [Uninstall a program].



The [Programs and Features] dialog box appears.

3 Select the software that you want to remove from the list in the dialog box, and then click [Uninstall].



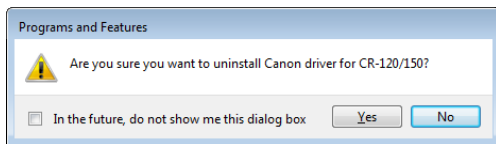
NOTE

When the [User Account Control] dialog box appears, click [Continue].

! IMPORTANT

- If you uninstall the "Scanning Utility for CR-120/CR-150" you also need to uninstall the "Canon Driver for CR-120/CR-150."
- If you uninstall the Ranger, select the "Ranger for CR-120/CR-150."

4 The Confirm File Deletion dialog box appears.



If you selected "Canon Driver for CR-120/CR-150," the above dialog box appears.

5 Click [Yes], and the uninstaller starts.

Follow the instructions on the screen to finish uninstalling the software.

Document Feeding and Scanning

This chapter describes precautions regarding documents that can be handled on this scanner and scanning operations.

Documents

This section describes the types of documents that can be used and how to place them.



CAUTION

Treat the documents carefully. The paper edges may cut your fingers.

Document

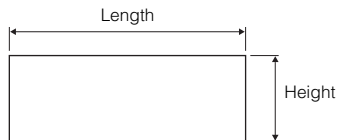
The CR-150/CR-120 can feed a wide variety of document sizes. The ranges of height and length for a document are:

Height : 60 to 108 mm (2.4" to 4.3")

Length : 90 to 245 mm (3.5" to 9.6")

Thickness : 0.08 to 0.20 mm (0.003" to 0.008")

Weight : 64 to 157 g/m² (17 to 40 lb bond)



Follow these guidelines when you prepare a document for scanning:

- If the document exceeds 228 mm, remove the eject stopper. (See "Remove and attach the Eject Stopper," on p. 23.)
- Before scanning documents that contain pasted artwork, make sure that the ink or paste is thoroughly dry. If the documents are scanned with wet ink or paste, the inside of the scanner may become dirty and it may cause a malfunction.
- If you scan a document written in pencil, the letters may not be scanned properly or the pencil may rub off onto the rollers and stain subsequent documents. Before you scan this kind of document, make a copy, and then scan the copy. After scanning a document written in pencil or some other soft writing material, be sure to clean the scanning rollers. (See "Cleaning the Scanning Glass and Rollers," on p. 49.)
- If you scan thin paper in the Duplex mode, the ink printed on the back side may be scanned. If this happens, adjust the scanning density.
- Scanning documents with a rough surface may not feed easily, and may cause friction between the documents, resulting in a feeding error. If this happens, feed the documents one by one.
- To avoid paper jams, damage to documents, and a scanner malfunction, do not feed the following types of paper into the scanner. If you want to scan these types of paper, first make a copy, and then scan the copy.



Wrinkled or creased paper



Curled paper



Torn paper



Paper with clips or staples



Carbon backed paper



Coated paper or fax recording paper



Extremely thin paper



Paper with binding holes



NOTE

- Note that mixing documents of different thickness may cause a malfunction during feeding.
- Curled, wrinkled, or folded documents may cause an error. If this happens, straighten out the curls, or reduce the number of documents loaded.

Envelope

You can also scan the envelope. When using separation OFF mode, you can scan an envelope with thickness up to 0.5 mm (0.02") or weight up to 413 g/m² (111 lb bond).



NOTE

- Disable the double feed detection function. (See "Using Ultrasonic Double Feed Detection," on p. 34.)
- If the envelope is not the first document in the batch, it may cause a feeding error or a paper jam.
- Some type of envelope may cause a feeding error or a paper jam.

Cards (plastic cards)

You can also scan cards. To scan a card, use the card slot. With embossed cards, you can scan both sides. The number of cards that can be loaded is 1. The condition of the embossment may prevent you from getting an appropriate image. The specifications for cards that can be scanned are as follows:

Size : 86 mm (3.39") x 54 mm (2.13") (ISO/IEC standard)

Orientation : Horizontal feeding only.

For embossed cards : Up to 1.4 mm (0.055")



NOTE

If you try to transfer a check while a card is loaded in the card slot, the card is ejected because the feeding path is blocked.

Using Ultrasonic Double Feed Detection

The double feed detection function that the scanner is equipped with uses the penetration of ultrasonic waves to detect when two or more documents are fed at the same time.

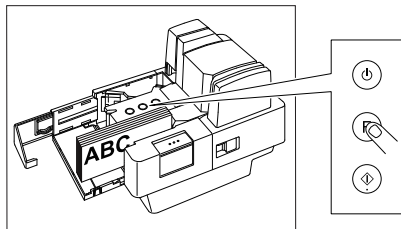
If false detections happen too often, disable the double feed detection function.



NOTE

When Using the Accompanying Scanning Utility for CR-120/CR-150:

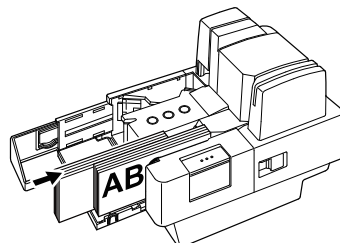
You can disable the double feed detection function to push the Function Button. When the function is disabled, the light of the Function Button is off.



Placing Documents

Note the following points when placing documents on the scanner.

- **Place the document so that the side to be scanned faces the side shown in the figure below.**



- **A maximum of 150 documents can be loaded at one time (80 g/m² (21 lb bond)). Make sure stacks do not exceed 15 mm in height (including curling).**
- **Additional documents can be placed while the machine is scanning.**



IMPORTANT

- Align the documents and set the bottom of the documents level in the document tray (Document Feed/Eject Tray).
- Do not exceed the load capacity when placing documents.
- Removing the Eject Stopper
If the document exceeds 228 mm, remove the eject stopper. (See "Remove and attach the Eject Stopper," on p. 23.)

Document Feeding and Scanning

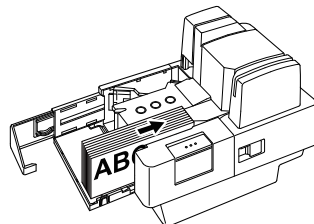
This section describes how to load and scan documents.

CAUTION

- Avoid wearing loose fitting clothing, dangling jewelry, long ties, or long hair that could become entangled with moving parts, especially the rollers that feed paper through the scanner. If such objects become entangled, immediately disconnect the power plug from the power outlet.
- Check the paper stack and remove all clips, staples, pins, or any other type of metal or plastic fastener. These objects may cause damage to the document, a paper jam, or a scanner malfunction.
- Do not touch anything except the operation buttons when documents are being fed.
- Do not touch documents that are being fed under any circumstances. The documents that are being fed may cut your hand.

Scan Procedure

- 1 Open the Document Feed / Eject Tray.
- 2 Carefully align the edges of the document.
- 3 Loads the documents with their front sides facing right and without exceeding the load capacity.



- 4 Adjust the Eject Stopper in accordance with the document.
- 5 Instruct scanning to start from the software application.

NOTE

- When Using the Accompanying Scanning Utility for CR-120/CR-150:
There are three scanning methods as follows. Follow the each instruction.

Scan 1 page

Click [Scan Page] from the [File] menu.

Scan Batch to File

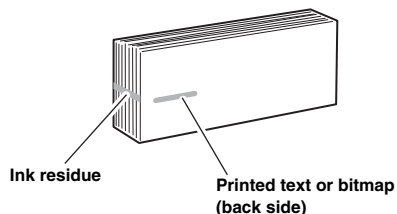
- ① Click [Scan Batch to File] from the [File] menu.
- ② Input the File name, and then click [Save].
- ③ Select Simplex or Duplex, and then click [Start Scanning].

Scan Batch to Printer

- ① Click [Scan Batch to Printer] from the [File] menu.
 - ② Select Simplex or Duplex, and then click [Start Scanning].
- You can also start scanning with pressing the START Button.

6 Scanning starts.

When printing with the imprinter, ink may get on the leading edge of the document because the documents are ejected onto the printed surface.



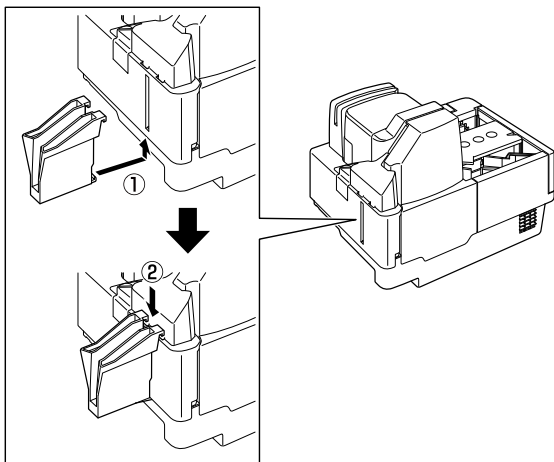
! IMPORTANT

If you configure scanning conditions that consume a large amount of the computer's memory, scanning may stop because of insufficient memory. If an error message appears due to insufficient memory while scanning is in progress, exit the application, change the scanning conditions, and then try scanning again.

Loading cards

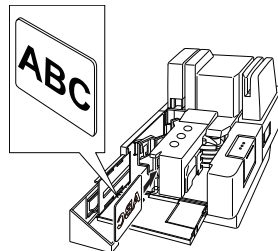
About the Card Guard

When scanning plastic cards, use of card guard is recommended. Attach the card guard to the back of the unit (Rear Card Slot) as shown in the figure below.

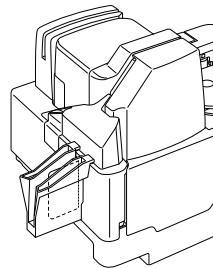


Use the card slot when scanning plastic cards. Scan the cards one at a time according to the following procedure:

- 1 Orient the front side of the card toward the left, and insert the card straight into the card slot.



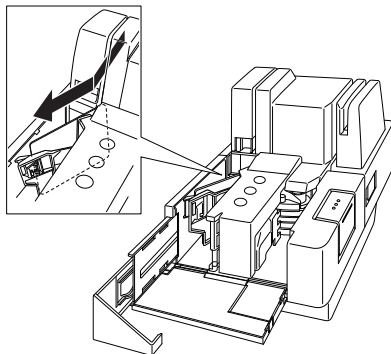
- 2 When the scanner detects the card, release the card, and use the application program to start scanning.
When you use an application program to start scanning, the card is fed and scanning starts.
During scanning, a portion of the card will protrude from the rear card slot at the rear of the scanner.



⚠ CAUTION

- Keep the area around the rear card slot clear of objects.
- When you want to insert a card in the card slot, remove any documents from the feed tray.
- Embossed cards may not be scanned correctly, depending on the type of embossment.

- 3** After a plastic card is scanned, it is ejected into the eject pocket.

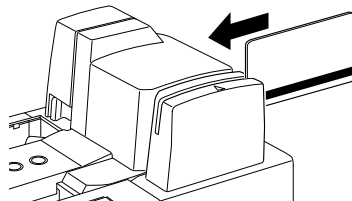


Magnetic card scanning (Option)

When scanning a magnetic card, use the Magnetic Swipe Reader (MSR).

Compatible Magnetic Swipe Reader (MSR): 1732C003

Scan the cards one at a time according to the following procedure: Place the magnetic stripe of the magnetic card against the reading area of the magnetic sensor, and swipe the card in the direction of the arrow. Use the application program to check the scanning results.



⚠ IMPORTANT

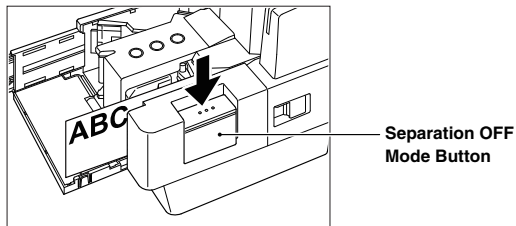
You can swipe the card in either direction, but when you swipe the card, make sure that the magnetic stripe on the card is facing the sensor logo [▲] on the scanner.

Separation OFF Mode

Use this separation OFF mode when you want to scan the following documents:

- Thick documents
- Documents that contain two or more pages together as one document
- Documents that have a rough surface
- Duplicate forms that have sticky edges

Feed these documents one by one and press the Separation OFF Mode Button.



! IMPORTANT

For duplicate forms, load the side with the sticky edges toward the feeding entry point.

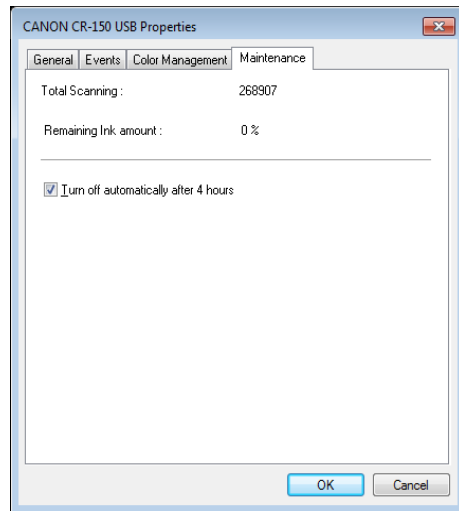
Auto Power OFF Settings

The CR-150/CR-120 includes an Auto Power OFF function. When this function is enabled, the scanner will turn OFF automatically if no operations are performed for 4 hours.

To enable or disable this setting, follow the procedure below.

- 1** Start Windows and log in as a user with administrator privileges.
- 2** Click the Start button, and then click [Control Panel], [Hardware and Sound], and [Devices and Printers].
- 3** Right-click the [CANON CR-150] or [CANON CR-120] icon, and then click [Scan Properties] in the context menu.
- 4** If the [User Account Control] dialog box appears, click [Yes] to close the dialog box.
The [CANON CR-150 (or CR-120) USB Properties] screen appears.

- 5** Click the [Maintenance] tab, and then select or clear the [Turn off automatically after 4 hours] check box.



- 6** Click [OK] to close the scanner properties.

Language settings for Magnetic Swipe Reader (MSR):(Option)

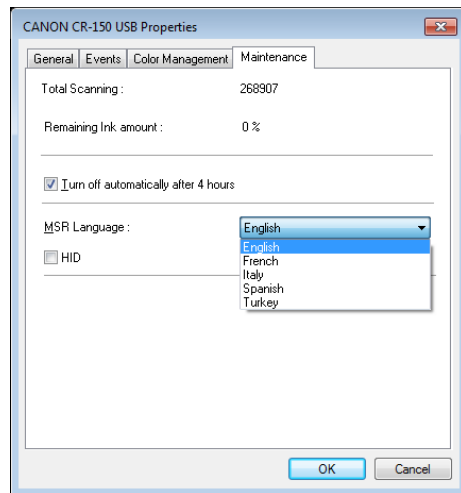
The CR-150/CR-120 includes the Magnetic Swipe Reader (MSR) function (Option).

When this function is enabled, you can select the MSR language. To enable or disable this setting, follow the procedure below.

- 1 Start Windows and log in as a user with administrator privileges.
- 2 Click the Start button, and then click [Control Panel], [Hardware and Sound], and [Devices and Printers].
- 3 Right-click the [CANON CR-150] or [CANON CR-120] icon, and then click [Scan Properties] in the context menu.
- 4 If the [User Account Control] dialog box appears, click [Yes] to close the dialog box.
The [CANON CR-150 (or CR-120) USB Properties] screen appears.

- 5 Click the [Maintenance] tab, and then select or clear the [HID] check box. When [HID] check box is selected, you can select the language from the following [English] (factory set default), [French], [Italy], [Spanish], or [Turkey].

*HID (Human Interface Device)



- 6 Click [OK] to close the scanner properties.

Troubleshooting

This chapter describes the problems that might occur in the CR-150/CR-120 and how to remedy them.

When the Scanner Is Not Recognized

The following causes and remedies describe why your computer may not recognize the scanner.

Cause The Scanning Utility is not installed.

Remedy Install the Scanning Utility before connecting the scanner to the computer. (See "Setting Up the Scanner," on p. 5.)

Cause The scanner is not correctly connected to the computer.

Remedy Connect the scanner to the computer correctly. (See "Connecting the Scanner to a Computer," on p. 8.)

Cause The CR-150/CR-120 is not recognized by your computer.

Remedy

- Restart your computer.
- If your computer has multiple USB ports, try using a different USB port.
- Disconnect the USB cable, make sure the computer and scanner are turned ON, and then reconnect the cable.

Cause The USB interface provided as standard with your computer is not compatible with the scanner.

Remedy Not all USB interfaces provided as standard with personal computers are guaranteed. Contact your local authorized Canon dealer for more detailed information. (See "Checking Your Operating Environment," on p. 6.)

Cause USB cable is not compatible with the scanner.

Remedy Use the USB cable provided with the scanner. (See "Checking Your Operating Environment," on p. 6.)

Cause USB hub is not compatible with the scanner.

Remedy Remove the USB hub to use the scanner. (See "Checking Your Operating Environment," on p. 6.)

Cause The CR-150/CR-120 turns OFF automatically.

Remedy Check whether the Auto Power OFF function of the CR-150/CR-120 is enabled. If it is enabled, disable it.

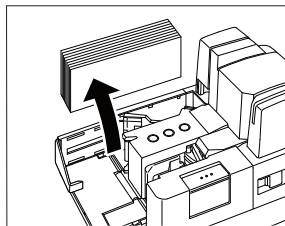
Clearing Paper Jams

If paper has jammed, open the Maintenance Cover and remove the jammed paper.

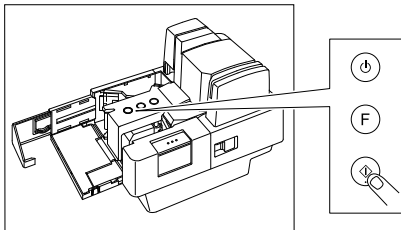
! CAUTION

- Be careful when you clear a paper jam. You may be injured unexpectedly. For example, the paper edges may cut your fingers, or the document may be damaged.
- Remove all jammed sheets of paper. Paper scraps left inside the scanner may cause a paper jam or malfunction.

- 1 Remove scanned documents from the Eject Pocket.



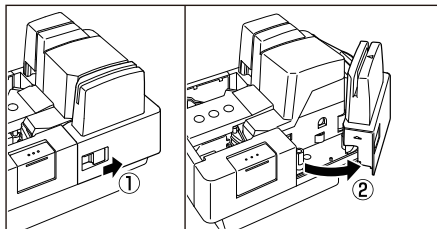
- 2** Press and hold the START Button.
The jammed document is ejected into the Eject Pocket.



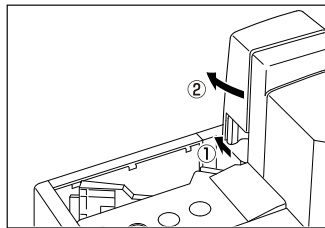
NOTE

If the above procedure does not clear the paper jam, perform the following to remove the jammed document.

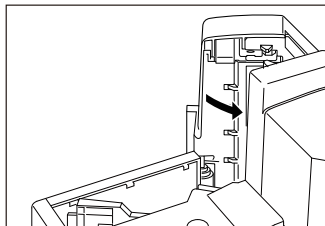
- 3** Pull the Open Button, and pull the Right Maintenance Cover open to the right.



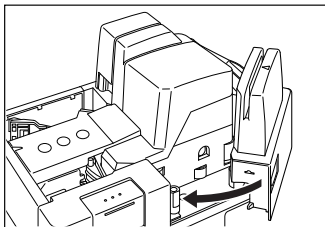
- 4** Press the Open Button, and push the Left Maintenance Cover open to the left.



- 5** Remove the paper that has jammed.
6 Close the Left Maintenance Cover. Make sure that it is completely closed until you hear a click.



- 7** Close the Right Maintenance Cover. Make sure that it is completely closed until you hear a click.



Feeding Trouble

If the document is not fed properly or the detection functions do not work properly, remedy the problem by checking the following conditions.

Condition **A paper jam has occurred.**

Cause and
Remedy

- Check to make sure that the size and thickness of the document are within the supported range of the scanner, and if the quality of the paper is appropriate. For cautions on handling documents, (See "Documents," on p. 32.)
- Documents with rough surfaces may cause a paper feed error.
Scan one sheet at a time in the separation OFF mode. (See "Separation OFF Mode," on p. 39.)
- Dirty or worn rollers inside the scanner may cause a paper jam.
Clean the rollers if they are dirty. (See "Cleaning the Scanning Glass and Rollers," on p. 49.) Worn rollers must be replaced. Some rollers are replaceable. (See "Replacing the Rollers," on p. 60.) If the rollers are not replaceable, contact your local authorized Canon dealer or service representative to have the scanner serviced.
- The Separation Roller gap is too wide. Adjust the Separation Roller gap. (See "Adjusting the Separation Roller Gap," on p. 63.)

Condition **Card Jam.**

Cause and Remedy • Open the Left Maintenance Cover to remove the card.
• Press and hold the Start button, then jammed card will be ejected.

Condition **A double feed error often occurs.**

Cause and Remedy A double feed error may occur when documents with different thicknesses are mixed. Adjust the Separation Roller gap. (See "Adjusting the Separation Roller Gap," on p. 63.)

Condition **MICR characters are not recognized correctly.**

Cause and Remedy • The scanner cannot correctly read MICR characters if the magnetic head is dirty. Clean the MICR magnetic head. (See "Cleaning the Magnetic Head," on p. 52.)
• If MICR characters cannot be recognized correctly after cleaning the head, the MICR head may be worn. Contact your local authorized Canon dealer or service representative to have the scanner serviced.
• The MICR text is on the back of the document. Load the side with the MICR characters facing right in the document tray.

Other Causes • Some of the MICR characters are scratched or missing. Splattered MICR ink or toner may also be the problem.

Condition **The imprinter is not printing correctly (missing imprint dots).**

Cause and Remedy Ink is clogged in the ink jet nozzle. Clean the ink jet nozzle. Cleaning the ink jet nozzle is recommended before using the CR-150/CR-120. (See "Cleaning the Ink Jet Nozzles," on p. 53.)

Other Causes The ink cartridge may be empty.

Condition **Documents get dirty when using the imprinter.**

Cause and Remedy Ink from the imprinter has been placed on the feed path. Clean the ink off the feed path. (See "Cleaning the Ink Jet Nozzles," on p. 53 and "Cleaning the Feed Path," on p. 47.)

Condition **Scanning speed had reduced suddenly.**

Cause and Remedy Processing may be slowed when scanning in the long period of time and continuously to avoid overheat inside the scanner. Wait a while before scanning again.

When the Scanned Image Is Not Normal

If there is a problem with the scanned image (the image is not sharp or stripes appear), one of the following conditions may be a probable cause. Check the following conditions, and take the appropriate action.

The scanning glass or rollers are dirty.

If the scanning glass or rollers are dirty, the dirt will appear on the scanned image.

► Clean the scanning glass and rollers. For details, see "Cleaning the Scanning Glass and Rollers," on p. 49.

The scan conditions are inappropriate.

If the scan conditions are inappropriate, the scanned image will not be sharp or will appear as dark.

► Check the brightness and other scanner settings.

If the scanned image is blurry or the document has not been scanned at all, the brightness may be set too high.

If the scanned image appears dark, the brightness may be set too low.

► Check the basic Scanning Conditions. (UV models only)

If other than [16-level Gray] or [256-level Gray] is selected for Mode menu in the scanner driver, the scanned image may not be appropriate.

Also, check the settings on the driver and the software application.

The driver or application does not run correctly.

If the document cannot be scanned correctly even if the scan conditions are adjusted, the driver or the application may not be functioning correctly.

► Reinstall the driver or application.

For details on how to install the driver, see "Installing the Software," on p. 7.

For details on how to install the application, see the applications instruction manual.

Memory becomes insufficient and scanning stops.

If you configure scanning conditions that use a large amount of the computer's memory, scanning may stop because of insufficient memory. Although this depends on the computer's memory size, the possibility of insufficient memory increases if any of the following scanning conditions overlap.

- The page size is set to [Scanner's Maximum].
- A high resolution (300dpi etc.) is specified for [Dots per inch].

If an error message appears due to insufficient memory while scanning is in progress, exit the application, change the scanning conditions (e.g. reduce the resolution or page size) and then try scanning again.

Other Causes

Even if the computer may be recognizing the scanner correctly, and the driver and the application is installed correctly, scanning may not be performed correctly. If this happens, the interface card is not compatible. Use the recommended interface card.

If the above remedies do not rectify the problem, contact your local authorized Canon dealer or service representative to have the scanner serviced.

Maintenance

This chapter describes how to clean and maintain the scanner.

Daily Cleaning

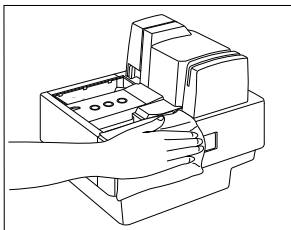
To ensure high-quality image scanning, regularly clean your CR-150/CR-120 as described below.

CAUTION

- Before you clean the scanner, turn OFF the scanner and computer, and disconnect the power cord from the power outlet. Otherwise, it may cause an electrical shock.
- Never clean the scanner with any kind of organic solvent, such as alcohol, benzene, or paint thinner. This may cause a fire and electrical shock, or cause the exterior of the scanner to disfigure or discolor.
- Never spray mild detergent or water directly on the scanning glass. The spray could penetrate below the glass and contaminate the internal light source and lenses.

Cleaning the Main Unit

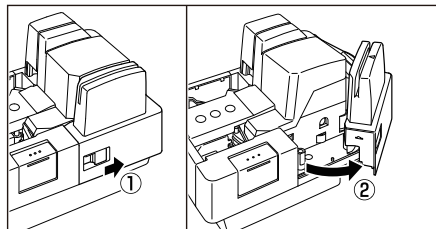
Wipe the scanner with a firmly wrung cloth, moistened slightly with water. Then, wipe off with a clean, dry cloth.



Cleaning the Feed Path

If dirt appears on scanned documents, clean the feed path. Clean the feed path regularly.

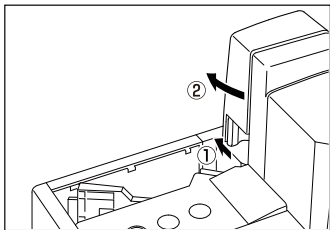
- 1 Pull the Open Button, and pull the Right Maintenance Cover open to the right.



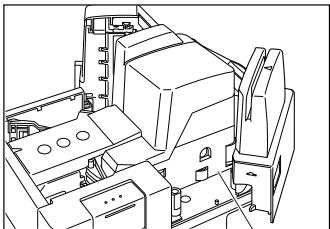
IMPORTANT

If you notice paper dust in the feed path when you open the Maintenance Cover, clean it out with a clean dry cloth or cotton swabs.

- 2** Press the Open Button, and push the Left Maintenance Cover open to the left.

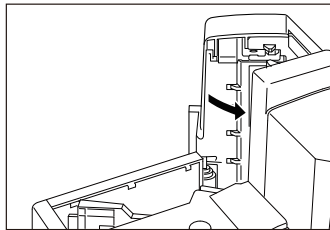


- 3** Wipe the feed path with a firmly wrung cloth, moistened slightly with water. Then, wipe off with a clean, dry cloth.

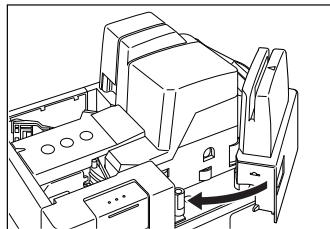


Feed Path

- 4** Close the Left Maintenance Cover. Make sure that it is completely closed until you hear a click.



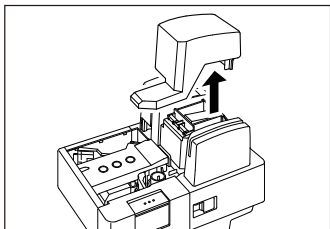
- 5** Close the Right Maintenance Cover. Make sure that it is completely closed until you hear a click.



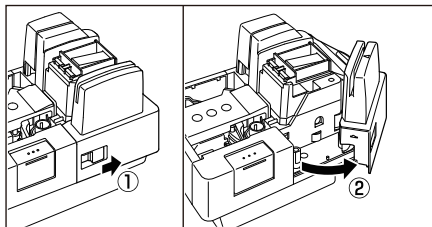
Cleaning the Scanning Glass and Rollers

If stripes appear on scanned images or if dirt appears on scanned documents, clean the scanning glass and rollers. Clean the scanning glass and rollers regularly.

- 1 Remove the Top Cover.



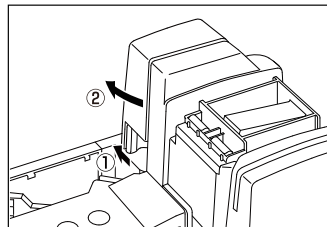
- 2 Pull the Open Button, and pull the Right Maintenance Cover open to the right.



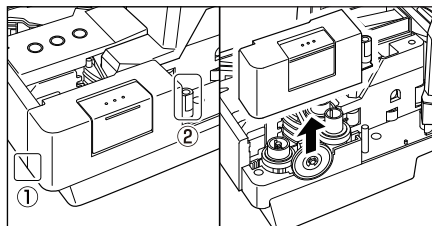
! IMPORTANT

If you notice paper dust in the feed path when you open the Maintenance Cover, clean it out with a clean dry cloth or cotton swabs.

- 3 Press the Open Button, and push the Left Maintenance Cover open to the left.



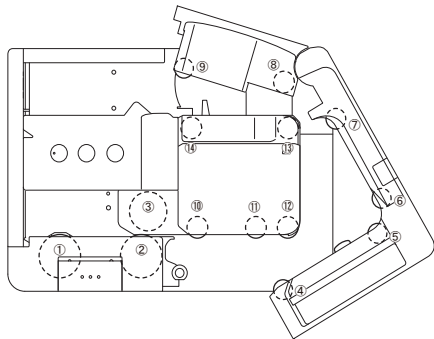
- 4 Remove the Roller Cover.



! IMPORTANT

As shown in the figure, release hook ① (left bottom) and hook ② (right top toward the back) of the roller cover, and then lift up the cover. This will allow you to remove the cover.

- 5** Spin the rollers while wiping them clean with a firmly wrung cloth dampened with water.
There are 14 roller positions, as shown in the diagram below.

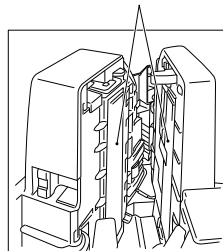


 NOTE

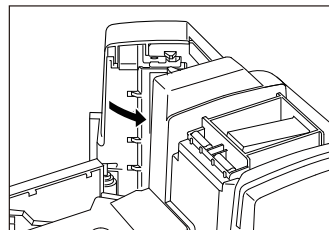
- Use cotton swabs to clean the rollers.
- Roller in position ③ is turned by the roller in position ②. Turn the roller in position ② to wipe the rollers.
- Rollers in positions ⑩, ⑬, and ⑭ are turned by the roller in position ⑫. Turn the roller in position ⑫ to wipe the rollers.
- Rollers in positions ① to ③ are replaceable. Replace rollers when cleaning them. (See "Replacing the Rollers," on p. 60.)

- 6** Use a clean dry cloth to clean the entire scanning glass.

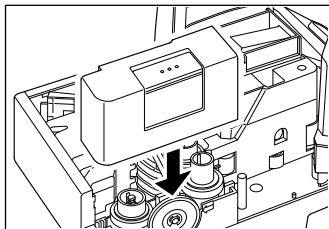
Scanning Glass



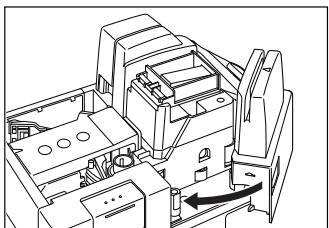
- 7** Close the Left Maintenance Cover.



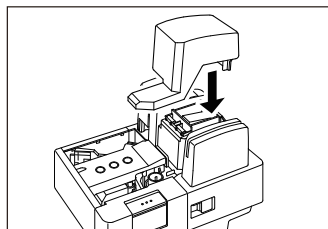
- 8** Replace the Roller Cover.



- 9** Close the Right Maintenance Cover.



- 10** Carefully replace the Top Cover.



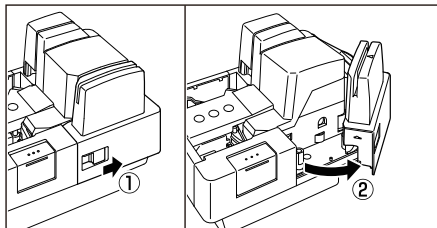
! IMPORTANT

If paper jams and double feeds (two papers being fed at the same time) still occur after cleaning the rollers, the rollers may be worn. The rollers need to be changed. Some rollers are replaceable. (See "Replacing the Rollers," on p. 60.) If the rollers are not replaceable, contact your local authorized Canon dealer or service representative to have the scanner serviced.

Cleaning the Magnetic Head

If the magnetic head is dirty, then MICR characters cannot be scanned correctly. Periodically, clean the magnetic head with a commercially available audio head cleaner.

- 1** Pull the Open Button, and pull the Right Maintenance Cover open to the right.

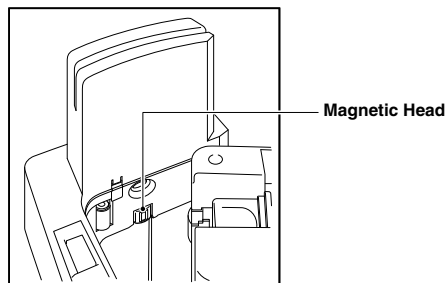


! IMPORTANT

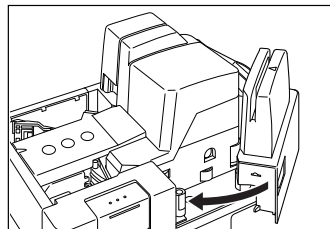
If you notice paper dust in the feed path when you open the Maintenance Cover, clean it out with a clean dry cloth or cotton swabs.

- 2** Use a commercially available audio head cleaner to clean the magnetic head.

The magnetic head is located in the positions shown in the diagram below.



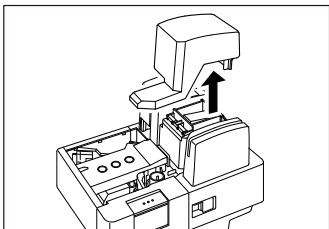
- 3** Close the Right Maintenance Cover.



Cleaning the Ink Jet Nozzles

Ink that collects around the ink jet nozzles may stain your documents or cause the text or bitmap to appear as scratched. Clean the area around the ink jet nozzles periodically. Cleaning the ink jet nozzles is also efficient action when the printed text or bitmap becomes faint.

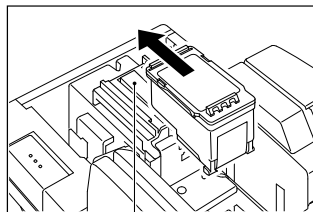
- 1** Remove the Top Cover.



For more information, see "Replacing the Ink Cartridge," on p. 57.

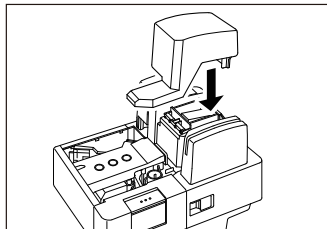
- 2** Use the Built-in Nozzle Cleaning Unit to remove the ink from around the ink jet nozzles.

Swipe the ink cartridge 2 or 3 times on the Built-in Nozzle Cleaning Pad shown in the diagram below. If the text or bitmap still appear faint after this operation, replace the ink cartridge (See "Replacing the Ink Cartridge," on p. 57.)



Built-in Nozzle Cleaning Pad

- 3** Set the ink cartridge.
For more information, see "Setting the Ink Cartridge," on p. 24.
- 4** Carefully replace the Top Cover.



Cleaning with the Cleaning Cards (United States Only)

If a black stripe appears on the back-side of scanned images or if dirt appears on the paper documents upon scanning or for preventative measures, we recommend that you clean your Canon CR-Series scanner as needed with a cleaning card. Using a cleaning card will minimize the frequent cleaning as instructed in this manual.

It is best to perform a cleaning at beginning or end of the day. A cleaning card does not clean the ink jet nozzles, so please remove the ink cartridge and perform a nozzle cleaning (See "Cleaning the Ink Jet Nozzles," on p. 53.)

! IMPORTANT

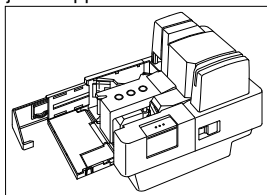
- This operation is for the Cleaning cards that are available only in the United States.
- Contact your local authorized Canon dealer or service representative for the available cleaning card.

Prepare for the Cleaning mode

If you perform cleaning with the cleaning cards, follow the procedures below to set the scanner to the cleaning mode.

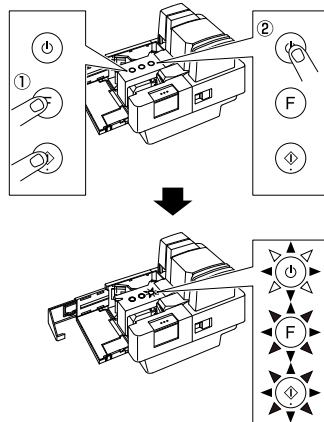
- 1** Turn OFF the scanner.
- 2** Open the Document Feed / Eject Tray.

- 3** Pull the Eject Stopper.



- 4** As shown in the figure, while pressing the START and Function buttons, press the Power Button once.

Confirm that the power lamp is blinking more than twice before releasing fingers from the buttons (START and Function button).

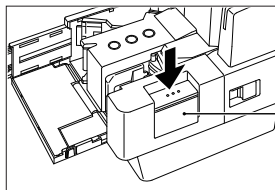


If the scanner turned ON properly, the power LED continues to blink.
(FUNCTION LED and the START LED is ON.)

Check Path Cleaning

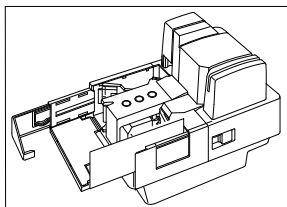
Follow the procedures below to perform check path cleaning.

- 1 Confirm that the scanner is set to the cleaning mode. (See "Prepare for the Cleaning mode," on p. 54)
- 2 Press the Separation OFF Mode Button.



Separation OFF
Mode Button

- 3 Place the cleaning card (for Check Path Cleaning) in the document tray.



- 4 Press the START Button to start cleaning.
- 5 Please repeat steps 3 and 4.

A typical cleaning is feeding the cleaning card 3 to 7 times. If the scanner is extremely dirty, you may need to use another cleaning card.

- 6 Turn OFF the scanner.

NOTE

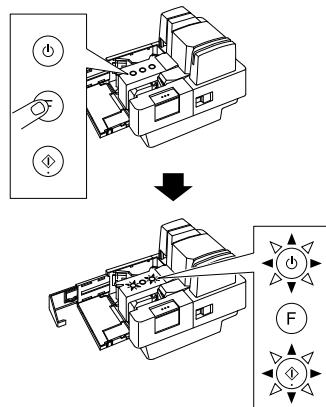
Allow 1 to 2 minutes for the moisture on the Canon CR-Series scanner from the cleaning card to thoroughly dry before scanning documents.

Card Path Cleaning

Follow the procedures below to perform card path cleaning.

- 1 Confirm that the scanner is set to the cleaning mode. (See "Prepare for the Cleaning mode," on p. 54)
- 2 Press and hold the FUNCTION Button.

Press and hold the Function button for at least 2 seconds, and then release it.

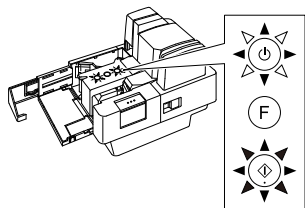


If the scanner is set to the Card Path Cleaning mode properly, the POWER LED and the START LED continues to blink.



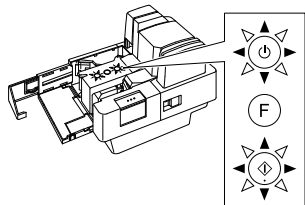
NOTE

If you press the Function Button shortly in Step 2, the scanner is set to the Check Path Cleaning mode. In this case, the POWER LED is blinking and the START LED is ON. (The light of the Function Button is off.)



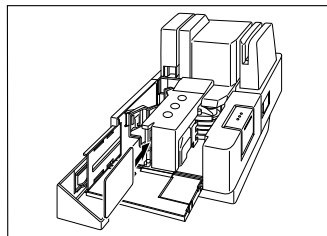
If you do not press and hold the Function Button long enough, the scanner recognizes that the button is pressed just once. (For details on how to Check Path Cleaning, see "Check Path Cleaning," on p. 55)

If you want to continue the Card Path Cleaning, press and hold the Function Button long enough again and confirm that the POWER LED and the START LED continues to blink.



3

Insert the cleaning card (for Card Path Cleaning) into the Card slot



4

Press the START Button to start cleaning.

5

Please repeat steps 3 and 4.

A typical cleaning is feeding the cleaning card 3 to 7 times. If the scanner is extremely dirty, you may need to use another cleaning card.

6

Turn OFF the scanner.



NOTE

Allow 1 to 2 minutes for the moisture on the Canon CR-Series scanner from the cleaning card to thoroughly dry before scanning documents.

Maintenance

Make the following adjustments to maintain scanning quality.

Replacing the Ink Cartridge

The ink cartridge needs to be replaced if the printed text becomes scratchy or faint even if you have cleaned the ink jet nozzle. Replace the ink cartridge according to the following procedure below.

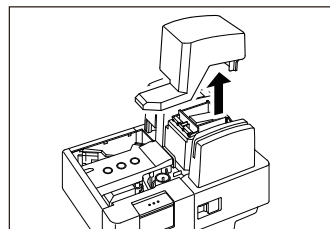
! IMPORTANT

- The ink disposal tank must be replaced when the ink cartridge is replaced. (See "Replacing the Ink Disposal Tank," on p. 58.)
- To replace the ink cartridge, turn the scanner OFF before removing the Top Cover. After the ink cartridge is set, replace the Top Cover, and then turn the scanner back ON.
- Finish up the unpacked ink cartridge as soon as possible. More frequent cleaning of the ink cartridge is required if long time elapses after unpacking.

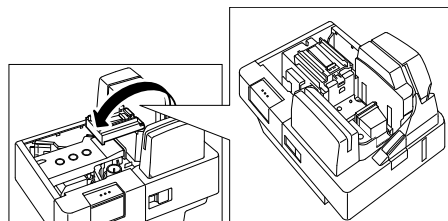
NOTE

- Use a Canon ink cartridge. (See "About the Ink Cartridge," on p. 24.)
- Do not use more than one cartridge by rotation. If you do so, applications cannot check the ink level precisely.

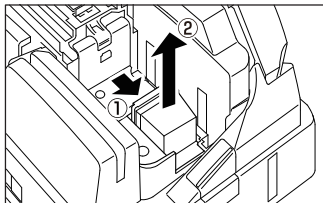
1 Remove the Top Cover.



2 Open the Nozzle Cleaning Unit.



- 3** Push the ink cartridge backward, and then remove the ink cartridge.



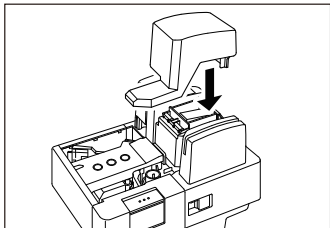
CAUTION

Do not touch the ink jet nozzle right after imprinting. The nozzle may be very hot.

- 4** Set the ink cartridge.

For more information, see "Setting the Ink Cartridge," on p. 24.

- 5** Carefully replace the Top Cover.



Replacing the Ink Disposal Tank

When the following conditions appear, you have to replace the ink disposal tank according to the following procedure.

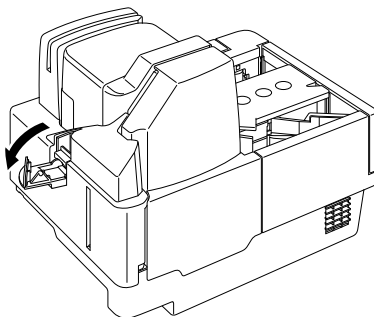
- When the ink cartridge is replaced.
- When clumpy ink appears on the ink disposal tank as shown below.



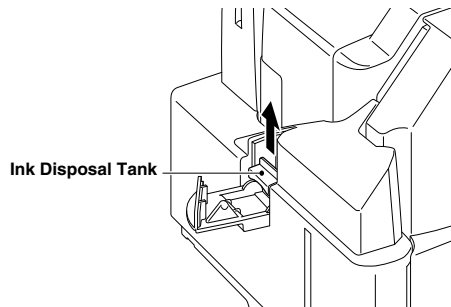
The replacement ink disposal tank is not included with the scanner. Purchase an ink disposal tank, as shown below.

Compatible ink disposal tank: 1732C002

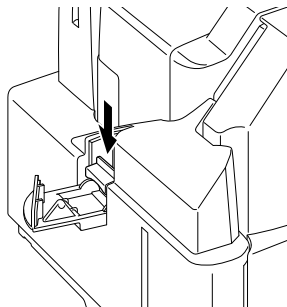
- 1** Open the Ink Disposal Tank Pocket.



- 2** Remove the ink disposal tank.



- 3** Attach the ink disposal tank.



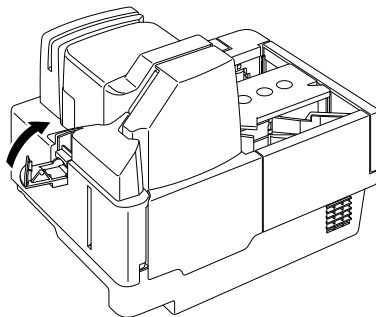
! WARNING

Do not print without the ink disposal tank. Doing so may cause a malfunction.

NOTE

- Be careful not to get dirty with ink.
- When you discard the ink disposal tank, put it in the plastic bag in the box of the ink disposal tank.

- 4** Close the Ink Disposal Tank Pocket.



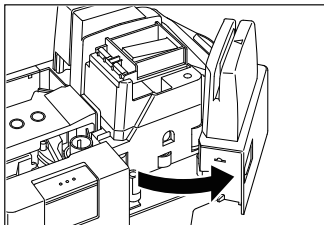
Replacing the Rollers

When rollers are worn, paper jams and double feeds tend to occur. You can replace the rollers (Pickup Roller, Feed Roller, and Separation Roller) according to the following procedure.

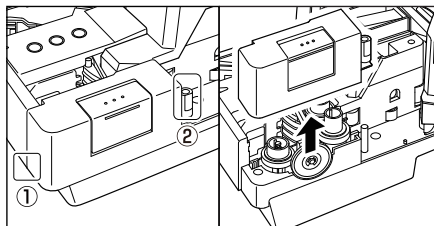
The exchange roller kit is not included with the scanner. Purchase an exchange roller kit separately, as shown below.

Compatible exchange roller kit: 1732C001

- 1** Pull the Open Button, and pull the Right Maintenance Cover open to the right.



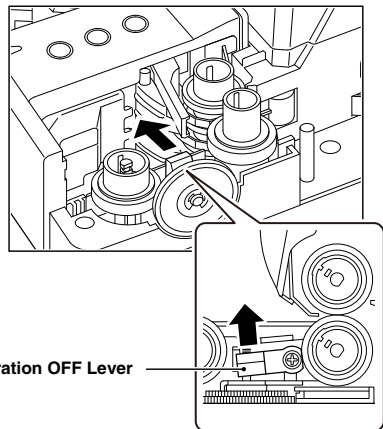
- 2** Remove the Roller Cover.



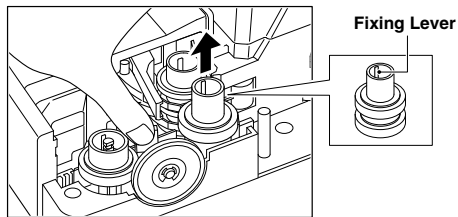
! IMPORTANT

As shown in the figure, release hook ① (left bottom) and hook ② (right top toward the back) of the roller cover, and then lift up the cover. This will allow you to remove the cover.

- 3** Push up the Separation OFF Lever in the direction of the arrow.

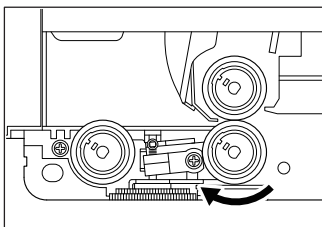


- 4** While pushing up the Separation OFF Lever, pinch the edge of the Feed Roller and the fixing lever, and then remove the roller.

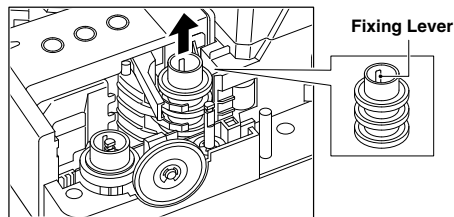


 NOTE

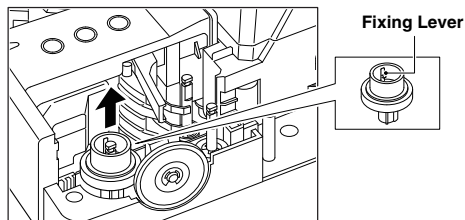
If the Feed Roller (Separation Roller) is not removed easily because of the fixing lever position, turn the Feed Roller in clockwise direction by hand.



- 5** Pinch the Separation Roller at the rim and the fixing lever, and then remove it.



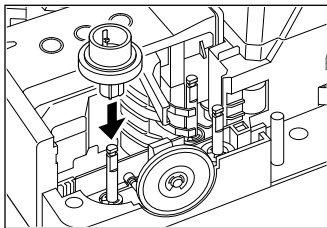
- 6** Pinch the Pickup Roller at the rim and the fixing lever, and then remove it.



 NOTE

If the Pickup Roller is not removed easily because of the fixing lever position, turn the Pickup Roller by hand.

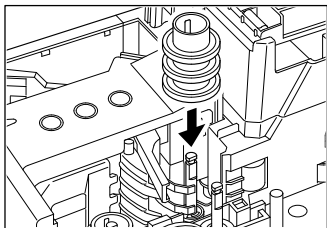
- 7** Attach the Pickup Roller. Align the notch on the roller axis with the hole on the roller.



! IMPORTANT

Push down the roller until it clicks into place.

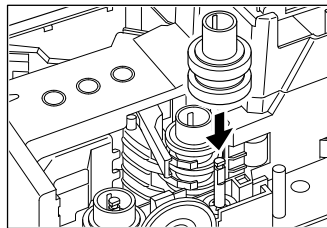
- 8** Attach the Separation Roller. Align the notch on the roller axis with the hole on the roller.



! IMPORTANT

Push down the roller until it clicks into place.

- 9** Attach the Feed Roller. Align the notch on the roller axis with the hole on the roller.

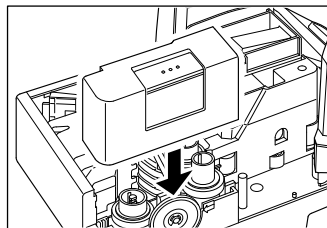


! IMPORTANT

Push down the roller until it clicks into place.

- 10** Adjust the Adjustment Dial to 6.
For more information, see “Adjusting the Separation Roller Gap,” on p. 63.

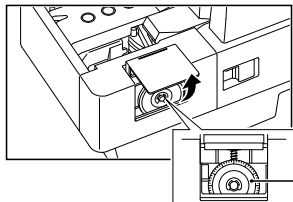
- 11** Replace the Roller Cover.



Adjusting the Separation Roller Gap

If double feed should occur too often, adjust the Separation Roller gap according to the following procedure.

- 1** Pull up the Adjustment Dial Cover.



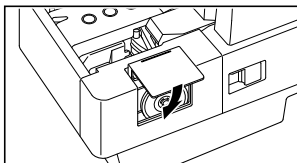
Adjustment Dial

Turn the dial to the left to widen the gap, and turn it to the right to narrow the gap.

- 2** Adjust the Adjustment Dial.

Turn the Adjustment Dial clockwise 3 clicks (to the direction in which the number decreases) to narrow the Separation Roller Gap. If documents are not fed after the above operation, turn the Adjustment Dial counterclockwise 1 click (to the direction in which the number increases) to widen the Separation Roller Gap.

- 3** Close the Adjustment Dial Cover.



CAUTION

Do not use the Adjustment Dial any other time except when adjusting the Separation Roller gap. Turning the Adjustment Dial too much may damage the scanner.

Specifications

Scanner Specifications

Type	Desktop sheet feed
Document size	Height: 60 to 108 mm (2.4" to 4.3") Length: 90 to 245 mm (3.5" to 9.6") (You can scan documents up to 2,000 mm (78.7") long by setting the scanner to the Long Document mode.) Thickness: 0.08 to 0.20 mm (0.003" to 0.008") Weight: 64 to 157 g/m ² (17 to 40 lb bond)
Card	Size: 86 mm x 54 mm (3.39" x 2.13")(ISO / IEC standard) For embossed cards: Up to 1.4 mm (0.055") Loading capacity: 1 card
Document feeding	Automatic / Not separate
Scanning method	Contact image sensor (CMOS)
Light source	RGB LED (UV model : UV LED + RGB LED)
Scanning side	Simplex/Duplex
Scanning mode	Black-and-white, Fine text filtering, Error diffusion, 256 level grayscale, 16 level grayscale, 24-bit Color (Card Scan only)

Scanning resolution (primary scan lines x secondary scan lines)

Document type	Color mode	Resolutions	
In the case of a check	Black and White Grayscale	Scanning	200 x 200 dpi, 300 x 300 dpi
		Output	100 x 100 dpi, 120 x 120 dpi, 150 x 150 dpi, 200 x 200 dpi, 240 x 240 dpi, 300 x 300 dpi
In the case of a card	Color	Scanning	600 x 600 dpi
		Output	600 x 600 dpi

Scanning speed	CR-150: 150 cpm
(200 dpi Personal Check - 152 x 70 mm)	CR-120: 120 cpm CR-120UV: 120 cpm (UV Scan mode)
Automatic feeder capacity	Load limit of less than 15 mm (0.59")
Automatic document feed capacity	Up to 150 sheets (80 g/m ² (21 lb bond)) Make sure stacks do not exceed 15 mm (0.59") in height (including curling).
Interface	Hi-Speed USB 2.0 (Type A x 1, Type B x 1) (The model with USB HUB option has additional ports.)
Other functions	Automatic paper size detection, Ultrasonic double feed detection, Dropout color, Des skew
Dimensions	203.6 mm (H) x 170 mm (W) x 238.2 mm (D) (8.0" (H) x 6.7" (W) x 9.4" (D))
Weight	CR-150: Approximately 3.2 kg (7.05 lb) CR-120: Approximately 3.2 kg (7.05 lb)
Power requirement	AC 100-120V (60 Hz) or AC 220-240V (50/60 Hz)

Power consumption

		Scanning	Sleep mode
CR-150	120V 220-240V	22W or less	2.7W or less
CR-120/CR-120UV	120V 220-240V	22W or less	2.7W or less

Noise	Less than 72 dB
Operating environment	Temperature: 10°C to 32.5°C (50°F to 90.5°F) Humidity: 20% to 80% RH

AC Adapter Specifications

Model number	MG1-5039
Input	AC 100-240V 50/60Hz 1.06-0.6 A
Output	DC24V 2.0A
Weight	Approximately 0.2 kg (0.44 lb) (excluding power cord)

- **Use the recommended operating environment for the ink cartridge when using the imprinter.**
- **You can use the functions noted above if your software supports them.**
- **These functions may not work depending on your computer's capabilities and the software you are using.**

Specifications are subject to change without notice.

Replacement parts

Exchange roller kit (product code: 1732C001)

Kit to replace the rollers (Pickup Roller, Feed Roller, and Separation Roller).
(See "Replacing the Rollers," on p. 60)

Ink cartridge

This ink cartridge is used by the imprinter.
(See "About the Ink Cartridge," on p. 24)

Ink Disposal Tank (product code: 1732C002)

This ink disposal tank is used by the imprinter.
(See "Replacing the Ink Disposal Tank," on p. 58)

- Contact your local authorized Canon dealer or service representative for detailed information about the replacement parts.

Option

Magnetic Swipe Reader (MSR) (Product code: 1732C003)

This is the optional item to scan the magnetic card.

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