SHARP ®

DIGITAL MULTIFUNCTIONAL SYSTEM

START GUIDE

BEFORE USING

This section provides the safety information to use the machine and explains how to use this manual.

SETUP

This section explains software installation and connection to a computer.

APPENDIX

This section includes the troubleshooting and specifications.

Keep this manual close at hand for reference whenever needed.

Each instruction also covers the optional units used with these products.

Do not make copies of anything which is prohibited from copying by law. The following items are normally prohibited from copying by national law. Other items may be prohibited by local law.

● **Money**　　● **Stamps**　　● **Bonds**　　● **Stocks**　　● **Bank drafts**

● **Checks**　　● **Passports**　● **Driver's licenses**

In some areas, the "POWER" switch positions are marked "I" and "○" on the copier instead of "ON" and "OFF".
If your copier is so marked, please read "I" for "ON" and "○" for "OFF".
Caution!
For a complete electrical disconnection, pull out the main plug.
The socket-outlet shall be installed near the equipment and shall be easily accessible.

Shielded interface cables must be used with this equipment to maintain compliance with EMC regulations.

The equipment should be installed near an accessible socket outlet for easy disconnection.

Warning

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

CONTENTS

BEFORE USING

CAUTIONS

Follow the cautions below when using this machine.

CAUTIONS ON USING

⚠ Warning:
- The fusing area is hot. Exercise care in this area when removing misfed paper.
- Do not look directly at the light source. Doing so may damage your eyes.

ⓘ Caution:
- Do not switch the machine rapidly on and off. After turning the machine off, wait 10 to 15 seconds before turning it back on.
- Machine power must be turned off before installing any supplies.
- Place the machine on a firm, level surface.
- Do not install the machine in a humid or dusty location.
- When the machine is not used for a long time, for example, during prolonged holidays, turn the power switch off and remove the power cord from the outlet.
- When moving the machine, be sure to turn the power switch off and remove the power cord from the outlet.
- Do not cover the machine with a dust cover, cloth or plastic film while the power is on. Doing so may prevent heat dissipation, damaging the machine.
- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous laser radiation exposure.
- The socket-outlet should be installed near the machine and should be easily accessible.

IMPORTANT POINTS WHEN SELECTING AN INSTALLATION SITE

Improper installation may damage the machine. Please note the following during initial installation and whenever the machine is moved.

ⓘ Caution	If the machine is moved from a cool place to a warm place, condensation may form inside the machine. Operation in this condition will cause poor copy quality and malfunctions. Leave the machine at room temperature for at least 2 hours before use.

Do not install your machine in areas that are:

- **damp, humid, or very dusty**

- **exposed to direct sunlight**
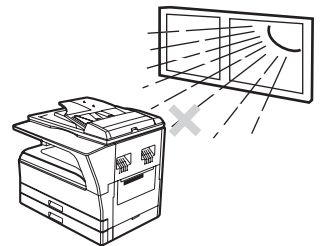
- **poorly ventilated**

- **subject to extreme temperature or humidity changes, e.g., near an air conditioner or heater**

2

The machine should be installed near an accessible power outlet for easy connection and disconnection.

Be sure to connect the power cord only to a power outlet that meets the specified voltage and current requirements. Also make certain the outlet is properly grounded.
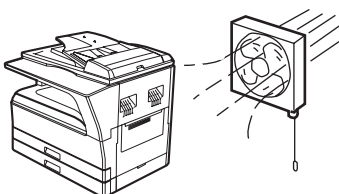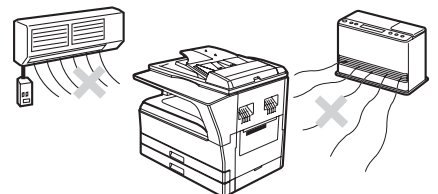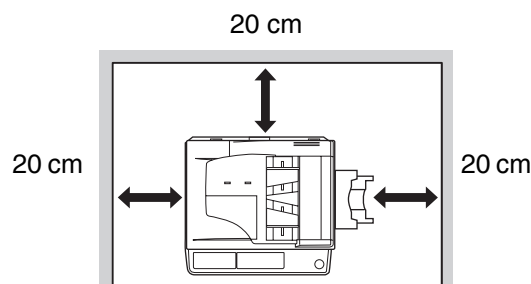
Note Connect the machine to a power outlet which is not used for other electric appliances. If a lighting fixture is connected to the same outlet, the light may flicker.

Be sure to allow the required space around the machine for servicing and proper ventilation.

20 cm

20 cm

20 cm

A small amount of ozone is produced within the copier during operation. The emission level is insufficient to cause any health hazard.
CAUTION:
It is advisable to place the copier in a ventilated area, since the small amount that is emitted may have an objectionable odor.

CAUTIONS ON HANDLING

Be careful in handling the machine as follows to maintain the performance of this machine.

Do not drop the machine, subject it to shock or strike it against any object.

Store spare toner cartridges in a cool dry place without removing from the package before use.

• If they are exposed to direct sunlight or excessive heat, poor copies may result.

Do not touch the photoconductive drum (green portion).

• Scratches or smudges on the drum will cause dirty copies.

CAUTIONS ON LASER

Wave length	785 nm ± 15 nm
Pulse times	(10.32 µs ± 10.32 ns)/7 mm
Output power	Max. 0.6 mW

Caution
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This Digital Equipment is CLASS 1 LASER PRODUCT (IEC 60825-1 Edition 1.2-2001)

Trademark acknowledgements

The following trademarks and registered trademarks are used in conjunction with the machine and its peripheral devices and accessories.

• Microsoft®, Windows®, Windows® 2000, Windows® XP, and Windows Vista® are registered trademarks or trademarks of Microsoft Corporation in the U.S.A. and other countries.

• IBM, PC/AT, and PowerPC are trademarks of International Business Machines Corporation.

• Adobe, the Adobe logo, Acrobat, the Adobe PDF logo, and Reader are registered trademarks or trademarks of Adobe Systems Incorporated in the United States and other countries.

• All other trademarks and copyrights are the property of their respective owners.

ENVIRONMENTAL INFORMATION

Products that have earned the ENERGY STAR® are designed to protect the environment through superior energy efficiency.

The products that meet the ENERGY STAR® guidelines carry the logo shown above.
The products without the logo may not meet the ENERGY STAR® guidelines.

USING THE MANUAL

This machine has been designed to provide convenient copying features in a minimum amount of office space and with maximum operational ease. To get full use of all machine features, be sure to familiarise yourself with this manual and the machine. For quick reference during machine use, keep this manual in a handy location.

ABOUT THE MANUALS

The manuals for the machine are as follows:

Start Guide (this manual)

This manual explains:
- How to install the software that allows the machine to be used as a printer and scanner for your computer
- Troubleshooting for using the machine
- Specifications
- Cautions for using the machine in safety

Operation Guide (on the accessory CD-ROM)

This manual explains:
- Part names of the machine
- Available paper type for this machine
- Basic copy procedure and advanced copy functions
  (For example: rotating the image 90 degrees, copying multiple originals onto a single sheet of paper)
- Basic print procedure and other frequently used print functions
  (For example: fitting the printed image to the paper, enlarging/reducing the print image)
- Scanning on the machine and from a computer
- Toner cartridge replacement and peripheral devices

🖉**Note**
- The display screens, messages, and key names shown in the manual may differ from those on the actual machine due to product improvements and modifications.
- Where "AR-XXXX" appears in this manual, please substitute the name of your model for "XXXX".

SOFTWARE LICENSE

The SOFTWARE LICENSE will appear when you install the software from the CD-ROM. By using all or any portion of the software on the CD-ROM or in the machine, you are agreeing to be bound by the terms of the SOFTWARE LICENSE.

HOW TO USE THE OPERATION GUIDE

The Operation Guide provides detailed instructions for operating the machine. View the Operation Guide when you use the machine after the initial setup is completed.

Viewing the manual

The "CD-ROM" that accompanies the machine contains a manual in PDF format. To view the manual in PDF format, Acrobat Reader or Adobe Reader of Adobe Systems Incorporated is required. If neither program is installed on your computer, the programs can be downloaded from the following URL:

　http://www.adobe.com/

1 **Turn on your computer.**

2 **Insert the supplied CD-ROM into your CD-ROM drive.**

3 **Click the "Start" button, click "Computer", and then double-click the CD-ROM icon ( ).**
- In Windows XP, click the "start" button, click "My Computer", and then double-click the CD-ROM icon.
- In Windows 2000, double-click "My Computer" and then double-click the CD-ROM icon.

4 **Double-click the "Manual" folder, double-click the "English" folder, and then double-click the "AR_5516_5520.pdf" icon (for AR-5516S/5520S/5516/5520/5516D/ 5520D) or "AR_5516N_5520N.pdf (for AR-5516N/5520N).**

Note
- If you will be viewing the Operation Guide repeatedly, you may find it convenient to copy this Operation Guide file to your computer.
- The Operation Guide can be printed out using Acrobat Reader. SHARP recommends printing out the sections which you refer to regularly.
- Refer to "Help" of Acrobat Reader for more details on how to use Acrobat Reader.

THE MEANING OF "R" IN ORIGINAL AND PAPER SIZE INDICATIONS

An "R" appearing at the end of an original or paper size (A4R, etc.) indicates that the original or paper is oriented horizontally as shown below.

<Horizontal (Landscape) orientation>
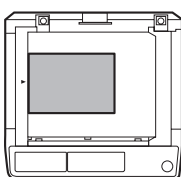
Sizes that can be placed only in the horizontal (landscape) orientation (B4, A3) do not contain the "R" in their size indication.

CONVENTIONS USED IN THIS MANUAL

⚠Warning   Warns the user that injury may result if the contents of the warning are not properly followed.

①Caution   Cautions the user that damage to the machine or one of its components may result if the contents of the caution are not properly followed.

✐Note   Notes provide information relevant to the machine regarding specifications, functions, performance, operation and such, that may be useful to the user.

SPF (AR-5516S/AR-5520S, AR-5516/AR-5520)
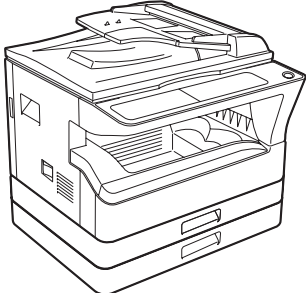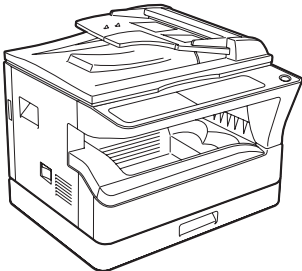
This manual refers to the Single Pass Feeder as the "SPF".

RSPF (AR-5516D/AR-5520D/AR-5516N/AR-5520N)

This manual refers to the Reversing Single Pass Feeder as the "RSPF".

DIFFERENCES BETWEEN MODELS

This manual covers the following models.

Model	AR-5520S/AR-5520/AR-5520D/AR-5520N	AR-5516S/AR-5516/AR-5516D/AR-5516N
Appearance	(With optional SPF/RSPF installed) **The above illustration is used in instances where a function and/or the operation of the machine is the same on both models.**	(With optional SPF/RSPF installed)
Copy speed	20CPM	16CPM
Paper trays	Two (250 x 2)	One (250 x 1)

SETUP

BEFORE SOFTWARE SETUP

This chapter explains how to install and configure the software that is required for the printer and scanner functions of the machine.

Note
- The scanner function is not available on the AR-5516S/AR-5520S.
- This manual refers to the CD-ROM that accompanied the machine simply as "CD-ROM".

SOFTWARE

The CD-ROM that accompanies the machine contains the following software:

AR-5516S/AR-5520S

Printer driver
The printer driver enables you to use the printer function of the machine.
The printer driver includes the Print Status Window. This is a utility that monitors the machine and informs you of the printing status, the name of the document currently being printed, and error messages.

AR-5516/AR-5520, AR-5516D/AR-5520D

MFP driver
Printer driver
The printer driver enables you to use the printer function of the machine.
The printer driver includes the Print Status Window. This is a utility that monitors the machine and informs you of the printing status, the name of the document currently being printed, and error messages.
Scanner driver
The scanner driver allows you to use the scanning function of the machine with TWAIN-compliant and WIA-compliant applications.
Button Manager
Button Manager allows you to use the scanner menus on the machine to scan a document.

AR-5516N/AR-5520N

Printer driver
The printer driver enables you to use the printer function of the machine.
Scanner driver
The scanner driver allows you to use the scanning function of the machine with TWAIN-compliant and WIA-compliant applications.
Button Manager
Button Manager allows you to use the scanner menus on the machine to scan a document.

HARDWARE AND SOFTWARE REQUIREMENTS

Check the following hardware and software requirements before installing the software.

Computer type	AR-5516S/AR-5520S/AR-5516/AR-5520/AR-5516D/AR-5520D : IBM PC/AT or compatible computer equipped with a USB 2.0*1/1.1*2 AR-5516N/AR-5520N : IBM PC/AT or compatible computer equipped with a 10BASE-T/100BASE-TX LAN connector
Operating system*3	Windows 2000 Professional, Windows XP Professional, Windows XP Home Edition, Windows Vista
Other hardware requirements	An environment on which any of the operating systems listed above can fully operate

*1 The machine's USB 2.0 port will transfer data at the speed specified by the USB 2.0 (Hi-Speed) only if the Microsoft USB 2.0 driver is preinstalled in the computer, or if the USB 2.0 driver for Windows 2000 Professional/XP/Vista that Microsoft provides through its "Windows Update" is installed.
*2 Compatible with Windows 2000 Professional, Windows XP Professional, Windows XP Home Edition, or Windows Vista preinstalled models equipped with a USB interface as standard.
*3 • The machine does not support printing from a Macintosh environment.
• Administrator's rights are required to install the software using the installer.

POWER ON THE MACHINE

The power switch is located on the left side of the machine.
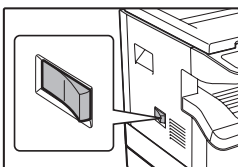
Turn the power switch to the "ON" position.

INSTALLING THE SOFTWARE
(AR-5516S/AR-5520S/AR-5516/AR-5520/AR-5516D/AR-5520D)

Note
- The screen images in this manual are mainly for Windows Vista. With other versions of Windows, some screen images may be different from those in this manual.
- If an error message appears, follow the instructions on the screen to solve the problem. After the problem is solved, the installation procedure will continue. Depending on the problem, you may have to click the "Cancel" button to exit the installer. In this case, reinstall the software from the beginning after solving the problem.

1 **The USB cable must not be connected to the machine. Make sure that the cable is not connected before proceeding.**

If the cable is connected, a Plug and Play window will appear. If this happens, click the "Cancel" button to close the window and disconnect the cable.

Note The cable will be connected in step 12.

2 **Insert the CD-ROM into your CD-ROM drive.**

3 **Click the "Start" button, click "Computer", and then double-click the CD-ROM icon ( ).**
- In Windows XP, click the "start" button, click "My Computer", and then double-click the CD-ROM icon.
- In Windows 2000, double-click "My Computer", and then double-click the CD-ROM icon.

4 **Double-click the "Setup" icon ( ).**

In Windows Vista, if a message screen appears asking you for confirmation, click "Allow".

5 **The "SOFTWARE LICENSE" window will appear. Make sure that you understand the contents of the software license, and then click the "Yes" button.**

Note You can show the "SOFTWARE LICENSE" in a different language by selecting the desired language from the language menu. To install the software in the selected language, continue the installation with that language selected.

6 **Read the message in the "Welcome" window and then click the "Next" button.**

7 **To install all of the software, click the "Standard" button and go to step 11. To install particular packages, click the "Custom" button and go to the next step.**

For AR-5516S/AR-5520S

To connect the machine and a computer directly via a USB cable, normally click the "Standard" button and go to step 11. When you click the "Custom" button, go to the next step.

8 **Click the "MFP Driver" button.**
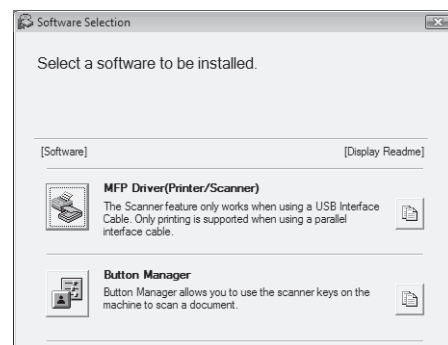
Click the "Display Readme" button to show information on packages that are selected.

For AR-5516S/AR-5520S
Click the "Printer Driver" button.

Click the "Display Readme" button to show information on packages that are selected.

9 **Select "Connected to this computer" and click the "Next" button.**

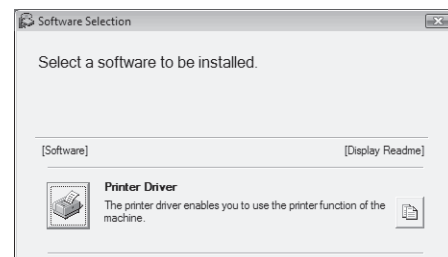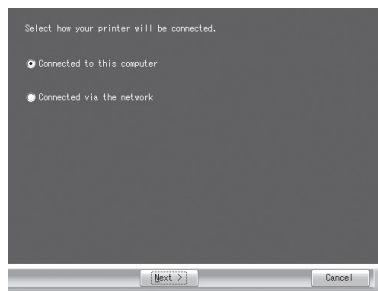Follow the on-screen instructions.

When "The installation of the SHARP software is complete." appears, click the "OK" button.

For AR-5516S/AR-5520S

When "The installation of the SHARP software is complete." appears, click the "OK" button and go to step 11.

Caution
• If you are using Windows Vista and a security warning window appears, be sure to click "Install this driver software anyway".
• If you are running Windows 2000/XP and a warning message appears regarding the Windows logo test or digital signature, be sure to click "Continue Anyway" or "Yes".

10 **You will return to the window of step 8. If you wish to install Button Manager, click the "Button Manager" button.**
If you do not wish to install the Button Manager, go to step 11.
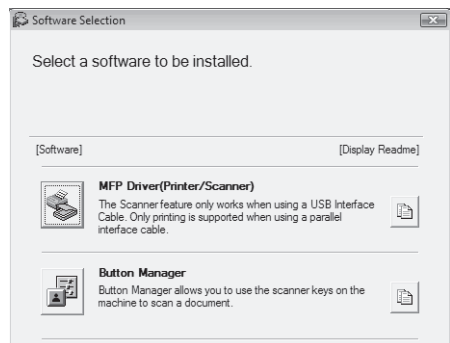
Follow the on-screen instructions.

Note
After the installation, a message prompting you to restart your computer may appear. In this case, click the "Yes" button to restart your computer.

11 **When installing is finished, click the "Close" button.**

Caution
• If you are using Windows Vista and a security warning window appears, be sure to click "Install this driver software anyway".
• If you are running Windows 2000/XP and a warning message appears regarding the Windows logo test or digital signature, be sure to click "Continue Anyway" or "Yes".

A message will appear instructing you to connect the machine to your computer. Click the "OK" button.

Note
After the installation, a message prompting you to restart your computer may appear. In this case, click the "Yes" button to restart your computer.

12 **Make sure that the power of the machine is turned on, and then connect the USB cable (p.10).**

Windows will detect the machine and a Plug and Play window will appear.

13 **Follow the instructions in the Plug and Play window to install the driver.**

Follow the on-screen instructions.

Caution
• If you are using Windows Vista and a security warning window appears, be sure to click "Install this driver software anyway".
• If you are running Windows 2000/XP and a warning message appears regarding the Windows logo test or digital signature, be sure to click "Continue Anyway" or "Yes".

This completes the installation of the software.
• If you installed Button Manager, set up Button Manager as explained in "SETTING UP BUTTON MANAGER" (p.19).

9

CONNECTING TO A COMPUTER
(AR-5516S/AR-5520S/AR-5516/AR-5520/AR-5516D/AR-5520D)

Follow the procedure below to connect the machine to your computer.
A USB cable for connecting the machine to your computer is not included with the machine. Please purchase the appropriate cable for your computer.

Interface cable

USB cable

Shielded twisted pair cable, high-speed transmission equivalent (3 m max.)
If the machine will be connected using a USB 2.0 interface, please purchase a USB cable that supports USB 2.0.

⚠ Caution	• USB is available with a PC/AT compatible computer that was originally equipped with USB and had Windows 2000 Professional, Windows XP Professional, Windows XP Home Edition or Windows Vista preinstalled. • Do not connect the USB cable before installing the Printer/MFP driver. The USB cable should be connected during installation of the Printer/MFP driver.

CONNECTING A USB CABLE

1 Insert the cable into the USB connector on the machine.

2 Insert the other end of the cable into your computer's USB connector.
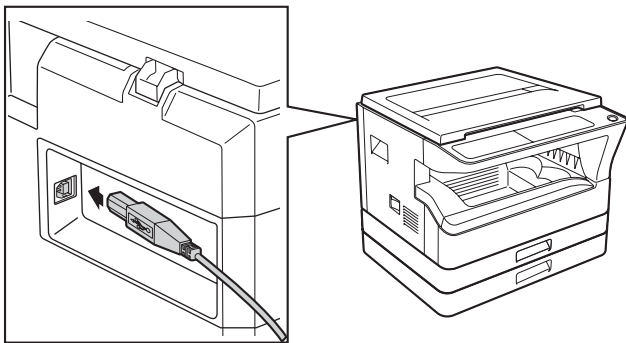
System requirements for USB 2.0 (Hi-Speed mode)

• The machine's USB 2.0 connector will transfer data at the speed specified by the USB 2.0 (Hi-Speed) only if the Microsoft USB 2.0 driver is preinstalled in the computer, or if the USB 2.0 driver for Windows 2000 Professional/XP/Vista that Microsoft provides through its "Windows Update" Web page is installed.

• Even when the Microsoft USB 2.0 driver is used, it may not be possible to obtain full USB 2.0 speed if a PC card supporting USB 2.0 is used. To obtain the latest driver (which may enable a higher speed), contact the manufacturer of your PC card.

• Connection is also possible using a USB 1.1 port on your computer. However, the specifications will be USB 1.1 specifications (Full-Speed).

• If your computer is not compatible with USB 2.0 (Hi-Speed), the "USB 2.0 mode switching" setting in the machine's system setting must be set to "Full-Speed". For more information, see "SYSTEM SETTINGS" in the Operation Guide.

USING THE MACHINE AS A SHARED PRINTER

If the machine will be used as a shared printer on a Windows network, follow these steps to install the printer driver in the client computer.
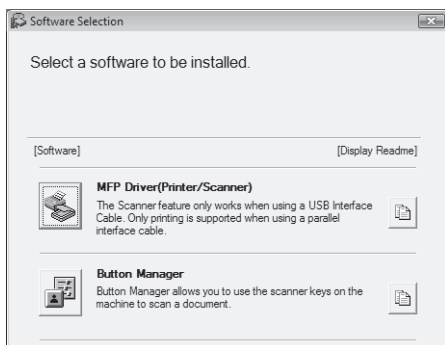
> **Note** To configure the appropriate settings in the print server, see the operation manual or help file of your operating system.

1 Perform steps 2 through 6 in "INSTALLING THE SOFTWARE (AR-5516S/AR-5520S/AR-5516/AR-5520/AR-5516D/AR-5520D)" (p.8).
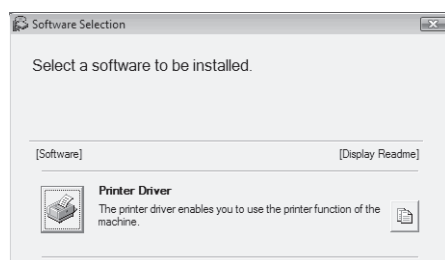
2 Click the "Custom" button.

3 Click the "MFP Driver" button.

Click the "Display Readme" button to show information on packages that are selected.

For AR-5516S/AR-5520S

Click the "Printer Driver" button.

Click the "Display Readme" button to show information on packages that are selected.

4 Select "Connected via the network" and click the "Next" button.
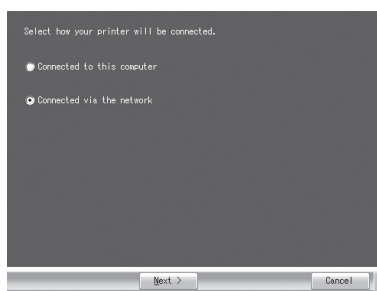
5 Select the printer name (configured as a shared printer on a print server) from the list.

In Windows 2000/XP, you can also click the "Add Network Port" button displayed below the list and select the printer to be shared by browsing the network in the window that appears.

6 Click the "Next" button.

Follow the on-screen instructions.

> **Note** If the shared printer does not appear in the list, check the settings on the print server.

> **Caution**
> • If you are using Windows Vista and a security warning window appears, be sure to click "Install this driver software anyway".
> • If you are running Windows 2000/XP and a warning message appears regarding the Windows logo test or digital signature, be sure to click "Continue Anyway" or "Yes".

7 You will return to the window of step 3. Click the "Close" button.

> **Note** After the installation, a message prompting you to restart your computer may appear. In this case, click the "Yes" button to restart your computer.

This completes the installation of the software.

INSTALLING THE SOFTWARE
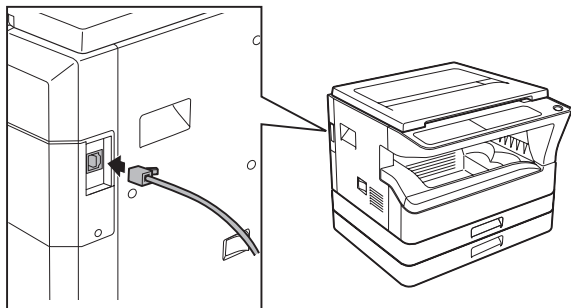
(AR-5516N/AR-5520N)

Note
- The screen images in this manual are mainly for Windows Vista. With other versions of Windows, some screen images may be different from those in this manual.
- If an error message appears, follow the instructions on the screen to solve the problem. After the problem is solved, the installation procedure will continue. Depending on the problem, you may have to click the "Cancel" button to exit the installer. In this case, reinstall the software from the beginning after solving the problem.

Set the IP Address

1 Insert the LAN cable into the LAN connector on the machine.

Use a network cable that is shielded.

2 Insert the CD-ROM into your CD-ROM drive.

3 Click the "Start" button, click "Computer", and then double-click the CD-ROM icon ( ).
- In Windows XP, click the "start" button, click "My Computer", and then double-click the CD-ROM icon.
- In Windows 2000, double-click "My Computer", and then double-click the CD-ROM icon.

4 Double-click the "Setup" icon ( ).

In Windows Vista, if a message screen appears asking you for confirmation, click "Allow".

5 The "SOFTWARE LICENSE" window will appear. Make sure that you understand the contents of the software license, and then click the "Yes" button.

Note You can show the "SOFTWARE LICENSE" in a different language by selecting the desired language from the language menu. To install the software in the selected language, continue the installation with that language selected.

6 Read the message in the "Welcome" window and then click the "Next" button.

7 Click the "Set the IP Address" button.
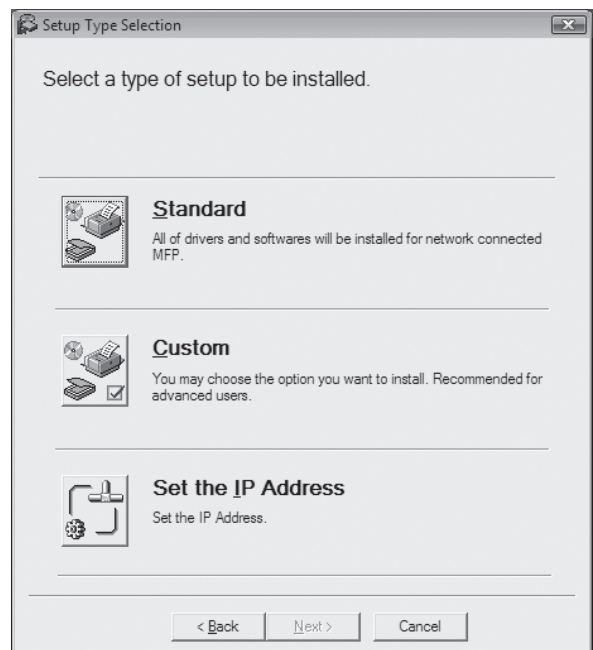
8 When the software selection screen appears, click the "Set the IP Address" button.

9 **The printer or printers connected to the network will be detected. Click the printer to be configured (the machine) and click the "Next" button.**

Set the IP Address

Select the printer to be set a network configuration.

Type Ethernet address or select from list.

Ethernet Address 08:00:1F:B2:3E:96

Search result overview

Ethernet Address	IP Address	Model Name
08:00:1F:E2:3E:96	192.168.1.43	AR-XXXX

Initialize   Search

< Back   Next >   Cancel

If a message appears regarding the Windows firewall, click the "Yes" button.

Note
- The "Ethernet Address" is indicated on the left side of the machine near the LAN connector.
- If the machine can not be recognised, enter the Ethernet Address and click the "Initialize" button to initialise the IP address. Follow the o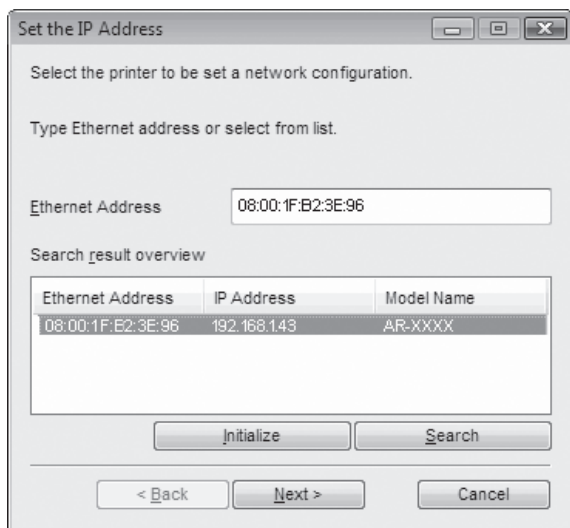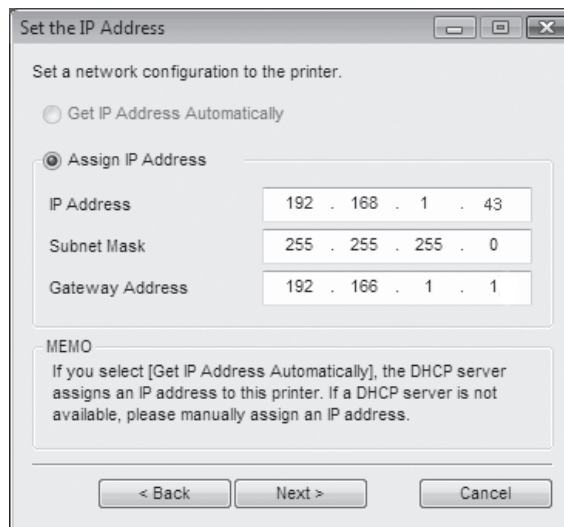n-screen instructions to click the "OK" button and then the "Search" button. If the machine is still not recognised, disable your computer's firewall and then repeat the installation from the beginning.

10 **Enter the IP address, subnet mask, and default gateway.**

The settings in the window below are examples. Be sure to ask your network administrator for the correct IP address, subnet mask, and default gateway to be entered.

Set the IP Address

Set a network configuration to the printer.

◯ Get IP Address Automatically

◉ Assign IP Address

IP Address 192 . 168 . 1 . 43

Subnet Mask 255 . 255 . 255 . 0

Gateway Address 192 . 166 . 1 . 1

MEMO
If you select [Get IP Address Automatically], the DHCP server assigns an IP address to this printer. If a DHCP server is not available, please manually assign an IP address.

< Back   Next >   Cancel

Note
When "Get IP Address Automatically" is selected, the IP address may at times change automatically. This will prevent printing. In this event, select "Assign IP Address" and enter the IP address.

11 **Click the "Next" button.**

12 **When the "Finish" screen appears, click the "Close" button.**
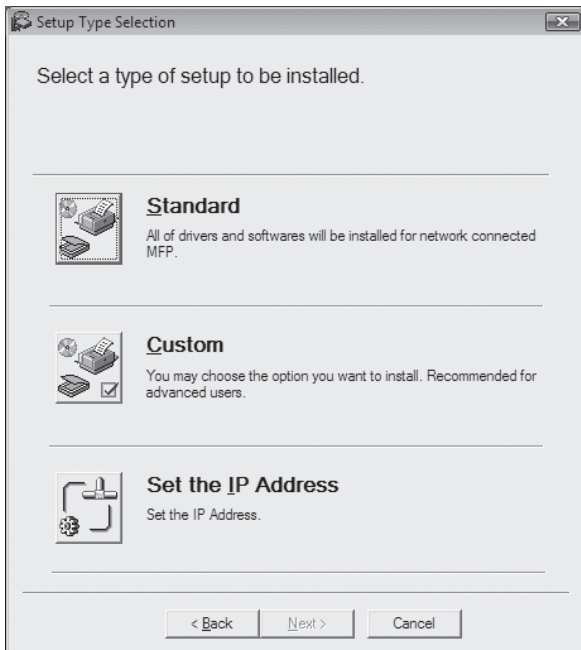
This completes setting the IP Address.
- To install all of the software, go to "Install all of the software" (p.14).
- To install particular packages, go to "Choose the option you want to install" (p.15).
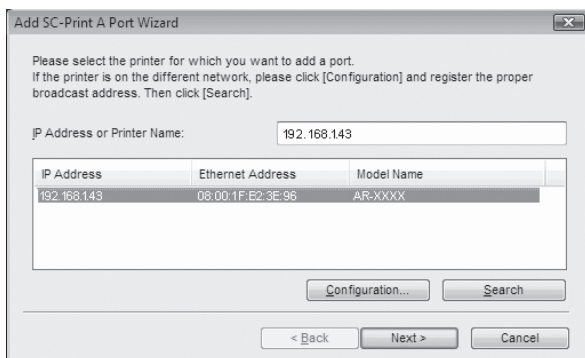
Install all of the software

If you have not set the IP Address yet, go to "Set the IP Address" (p.12).

1 **Perform step 4 through 7 in "Set the IP Address" (p.12).**

2 **Click the "Standard" button.**

Setup Type Selection

Select a type of setup to be installed.

Standard
All of drivers and softwares will be installed for network connected MFP.

Custom
You may choose the option you want to install. Recommended for advanced users.

Set the IP Address
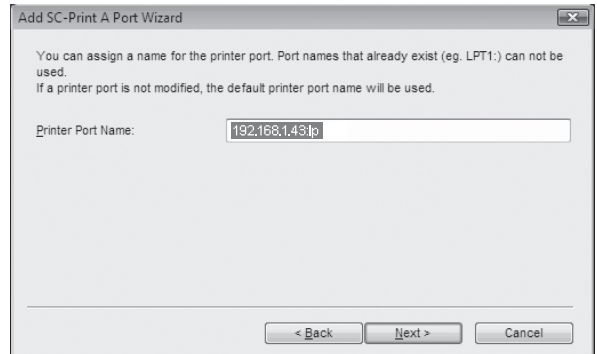Set the IP Address.

< Back   Next >   Cancel

3 **The printer or printers connected to the network will be detected. Click the printer to be configured (the machine) and click the "Next" button.**

Add SC-Print A Port Wizard

Please select the printer for which you want to add a port.
If the printer is on the different network, please click [Configuration] and register the proper broadcast address. Then click [Search].

IP Address or Printer Name: 192.168.1.43

IP Address	Ethernet Address	Model Name
192.168.1.43	08:00:1F:E2:3E:96	AR-XXXX

Configuration...   Search

< Back   Next >   Cancel

Note If the machine's IP address cannot be found, make sure the machine is powered on, make sure the network cable is connected correctly, and then click the "Search" button.
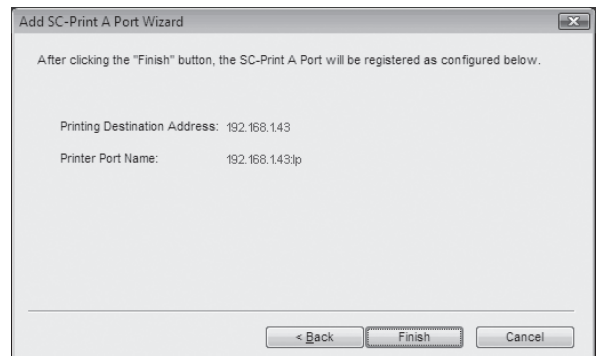
4 **In the window for setting the destination print port name, make sure that ":lp" appears at the end of the IP address and click the "Next" button.**

Add SC-Print A Port Wizard

You can assign a name for the printer port. Port names that already exist (eg. LPT1:) can not be used.
If a printer port is not modified, the default printer port name will be used.

Printer Port Name: 192.168.1.43:lp

< Back   Next >   Cancel

Note Any name can be entered in "Printer Port Name" (maximum of 63 characters).

5 **A window appears to let you check your entries. Make sure that the entries are correct and then click the "Finish" button.**
If any of the entries are incorrect, click the "Back" button to return to the appropriate window and correct the entry.

Add SC-Print A Port Wizard

After clicking the "Finish" button, the SC-Print A Port will be registered as configured below.

Printing Destination Address: 192.168.1.43

Printer Port Name: 192.168.1.43:lp

< Back   Finish   Cancel

6 **Select the model that you will be using, and click the "Next" button.**

⚠️**Caution**
- If you are using Windows Vista and a security warning window appears, be sure to click "Install this driver software anyway".
- If you are running Windows 2000/XP and a warning message appears regarding the Windows logo test or digital signature, be sure to click "Continue Anyway" or "Yes".

If a message appears regarding the Windows firewall, click the "Yes" button.

7 **When the "Finish" screen appears, click the "Close" button to finish the installation.**

📝**Note**
To use the scanner driver, you need to connect to the scanner function using SC-Scan A (see "CONNECTING TO AND DISCONNECTING FROM THE SCANNER FUNCTION USING SC-Scan A" in the Operation Guide).

This completes the installation of the software.
- If you installed Button Manager, set up Button Manager as explained in "SETTING UP BUTTON MANAGER" (p.19).
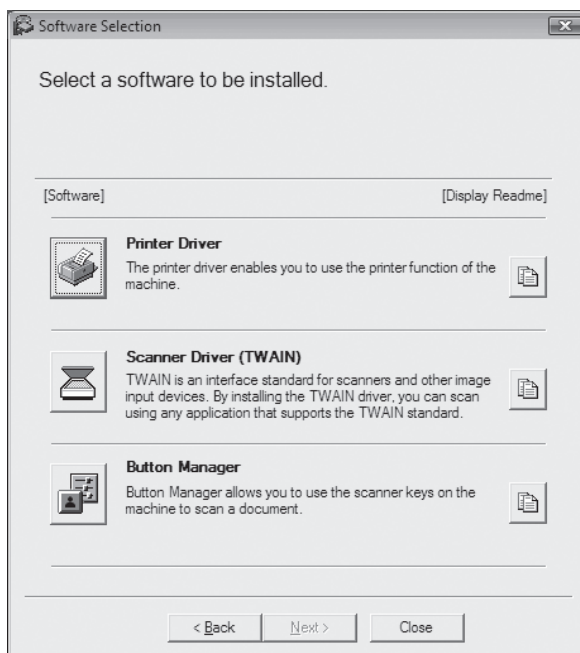
Choose the option you want to install

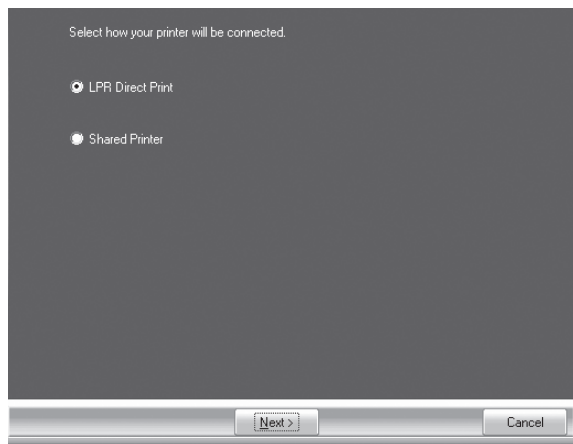If you have not set the IP Address yet, go to "Set the IP Address" (p.12).

1 **Perform step 4 through 7 in "Set the IP Address" (p.12).**

2 **Click the "Custom" button.**

3 **Click the "Printer Driver" button.**

4 **Select "LPR Direct Print", click the "Next" button and go to the next step.**

If the machine will be used as a shared printer on a network, select "Shared Printer" and click the "Next" button.
- For the port to be used, select the printer name set as a shared printer, and click the "Next" button.
- In Windows 2000/XP, you can also click the "Add Network Port" button and select the printer to be shared (the machine) by browsing the network in the window that appears.

Note If the shared printer does not appear in the list, check the settings in the printer server.

Caution
- If you are using Windows Vista and a security warning window appears, be sure to click "Install this driver software anyway".
- If you are running Windows 2000/XP and a warning message appears regarding the Windows logo test or digital signature, be sure to click "Continue Anyway" or "Yes".

Follow the on-screen instructions and go to step 8.

5 **The printer or printers connected to the network will be detected. Click the printer to be configured (the machine) and click the "Next" button.**
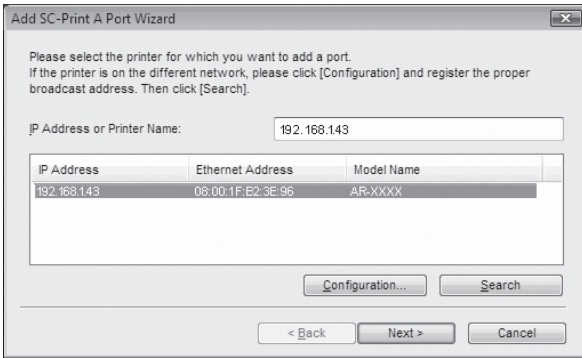
Note If the machine's IP address cannot be found, make sure the machine is powered on, make sure the network cable is connected correctly, and then click the "Search" button.

6 **In the window for setting the destination print port name, make sure that ":lp" appears at the end of the IP address and click the "Next" button.**
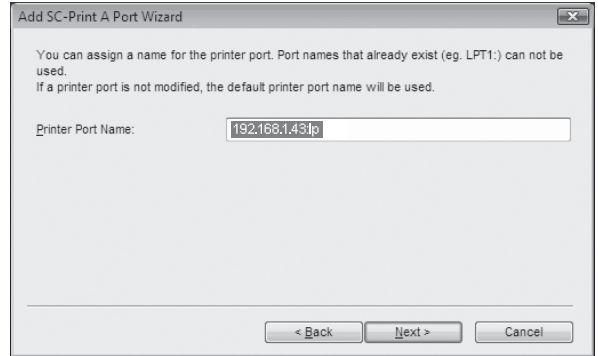
Note Any name can be entered in "Printer Port Name" (maximum of 63 characters).

7 **A window appears to let you check your entries. Make sure that the entries are correct and then click the "Finish" button.**

If any of the entries are incorrect, click the "Back" button to return to the appropriate window and correct the entry.
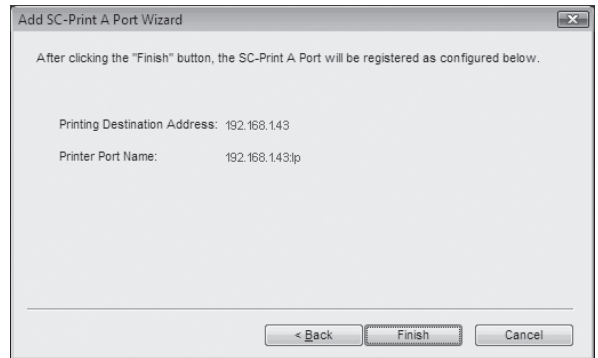
8 Select the model that you will be using, and click the "Next" button.

9 Select whether or not you wish the printer to be your default printer and click the "Next" button.

Follow the on-screen instructions.

⚠ **Caution**
- If you are using Windows Vista and a security warning window appears, be sure to click "Install this driver software anyway".
- If you are running Windows 2000/XP and a warning message appears regarding the Windows logo test or digital signature, be sure to click "Continue Anyway" or "Yes".

10 When "The installation of the SHARP software is complete." appears, click the "OK" button.

11 You will return to the window of step 3 on page 15.
- To install the Scanner Driver, go to step 12.
- To install the Button Manager, go to step 16.
- If you do not want to install the Scanner Driver or the Button Manager, go to step 19.

12 Click the "Scanner Driver (TWAIN)" button.

13 Click the "Yes" button.

SHARP AR-5516/5520 Series MFP Driver

Setup has completed gathering all necessary installation information. Do you want to continue your installation?

Yes   No

⚠ **Caution**
- If you are using Windows Vista and a security warning window appears, be sure to click "Install this driver software anyway".
- If you are running Windows 2000/XP and a warning message appears regarding the Windows logo test or digital signature, be sure to click "Continue Anyway" or "Yes".
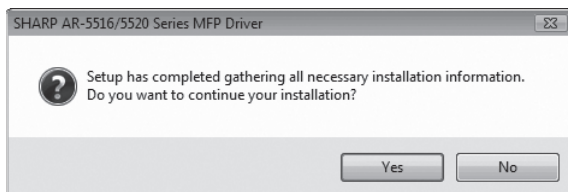
If a message appears regarding the Windows firewall, click the "Yes" button.

14 When "The installation of the SHARP software is complete." appears, click the "OK" button.

15 You will return to the window of step 3 on page 11.
- If you want to install the Button Manager continuously, go to the next step.
- If you want to end the installation, go to step 19.

16 Click the "Button Manager" button.

Follow the on-screen instructions.

17 When "The installation of the Software is complete." appears, click the "Finish" button.

18 You will return to the window of step 3 on page 11.

19 Click the "Close" button to finish the installation.

📝 **Note**
To use the scanner driver, you need to connect to the scanner function using SC-Scan A (see "CONNECTING TO AND DISCONNECTING FROM THE SCANNER FUNCTION USING SC-Scan A" in the Operation Guide).

This completes the installation of the software.
- If you installed Button Manager, set up Button Manager as explained in "SETTING UP BUTTON MANAGER" (p.19).

CONFIGURING THE PRINTER DRIVER

After installing the printer driver, you must configure the printer driver settings appropriately for the number of paper trays on the machine and the size of paper loaded in each.

1 **Click the "Start" button, click "Control Panel", and then click "Printer".**
- In Windows XP, click the "start" button and click "Printers and Faxes".
- In Windows 2000, click the "Start" button, select "Settings", and then click "Printers".

Note In Windows XP, if "Printers and Faxes" does not appear in the "start" menu, select "Control Panel", select "Printers and Other Hardware", and then select "Printers and Faxes".

2 **Click the "SHARP AR-XXXX" printer driver icon and select "Properties" from the "Organize" menu.**
In Windows XP/2000, select "Properties" from the "File" menu.

3 **Click the "Configuration" tab and set the printer configuration based on the options that have been installed.**
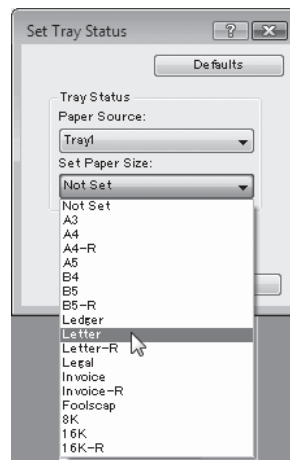Set the printer configuration properly. If not, printing may not take place correctly.
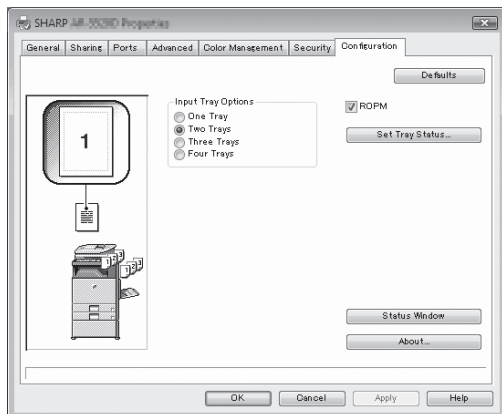
Printer driver screen for AR-5520/AR-5520D

4 **Click the "Set Tray Status" button and select the size of paper that is loaded in each tray.**
Select a tray in the "Paper Source" menu, and select the size of paper loaded in that tray from the "Set Paper Size" menu. Repeat for each tray.

5 **Click the "OK" button in the "Set Tray Status" window.**

6 **Click the "OK" button in the printer properties window.**

SETTING UP BUTTON MANAGER

Button Manager is a software program that works with the scanner driver to enable scanning from the machine. To scan using the machine, Button Manager must be linked with the scan menu on the machine. Follow the steps below to link Button Manager to scanner events.
When using AR-5516N/5520N, note that you need to connect to the scanner function using SC-Scan A previously (see "CONNECTING TO AND DISCONNECTING FROM THE SCANNER FUNCTION USING SC-Scan A" in the Operation Guide).

Windows XP/Vista

1 Click the "Start" button, click "Control Panel", click "Hardware and Sound", and then click "Scanners and Cameras".
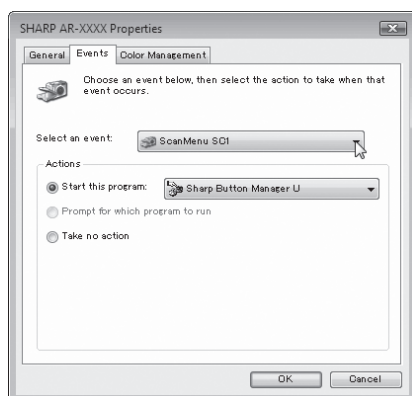
In Windows XP, click the "start" button, select "Control Panel" and click "Printers and Other Hardware", and then click "Scanners and Cameras".

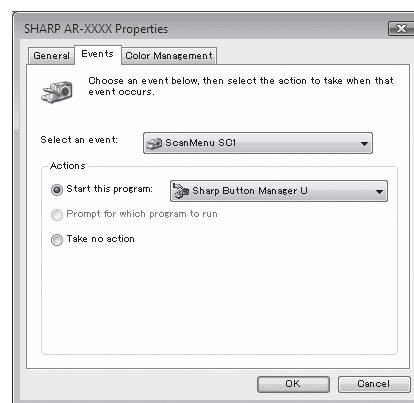**2 Click the "SHARP AR-XXXX" icon and select "Properties".**

In Windows XP, select "Properties" from the "File" menu.

3 In the "Properties" screen, click the "Events" tab.

4 Select "ScanMenu SC1" from the "Select an event" pull-down menu.

5 Select "Start this program" and then select "Sharp Button Manager U" from the pull-down menu.

6 Repeat Steps 4 and 5 to link Button Manager to "ScanMenu SC2" through "ScanMenu SC6".

Select "ScanMenu SC2" from the "Select an event" pull-down menu. Select "Start this program", select "Sharp Button Manager U" from the pull-down menu. Do the same for each ScanMenu through "ScanMenu SC6".

7 Click the "OK" button.

Button Manager is now linked to the scan menu (1 through 6).
The scan settings for each of scan menu 1 through 6 can be changed with the setting window of Button Manager.
For the factory default settings of the scan menu and the procedures for configuring Button Manager settings, see "BUTTON MANAGER SETTINGS" in the Operation Guide.

Windows 2000

1 Click the "Start" button, select "Settings", and then click "Control Panel".

2 Double-click the "Scanners and Cameras" icon.

3 Select "SHARP AR-XXXX" and click the "Properties" button.

4 In the "Properties" screen, click the "Events" tab.

5 Select "ScanMenu SC1" from the "Scanner events" pull-down menu.
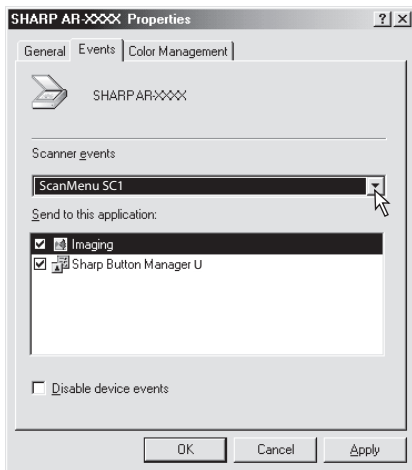
6 Select "Sharp Button Manager U" in "Send to this application".
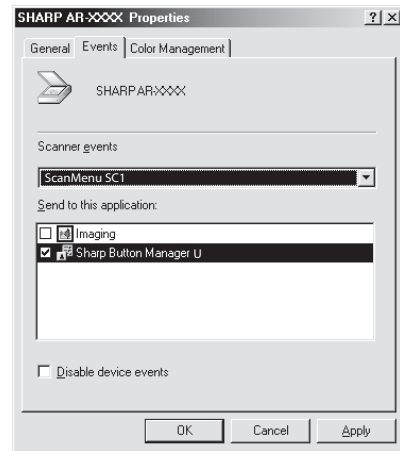
Note If other applications are shown, deselect the checkboxes for the other applications and leave only the Button Manager checkbox selected.

7 Click the "Apply" button.

8 Repeat Steps 5 through 7 to link Button Manager to "ScanMenu SC2" through "ScanMenu SC6".

Select "ScanMenu SC2" from the "Scanner events" pull-down menu. Select "Sharp Button Manager U" in "Send to this application" and click the "Apply" button. Do the same for each ScanMenu through "ScanMenu SC6".
When the settings have been completed, click the "OK" button to close the screen.

Button Manager is now linked to the scan menu (1 through 6).
The scan settings for each of scan menu 1 through 6 can be changed with the setting window of Button Manager.
For the factory default settings of the scan menu and the procedures for configuring Button Manager settings, see "BUTTON MANAGER SETTINGS" in the Operation Guide.

APPENDIX

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TROUBLESHOOTING

If the software is not installed correctly, check the following items on your computer.

The driver cannot be installed (Windows 2000/XP)

If the driver cannot be installed in Windows 2000/XP, follow these steps to check your computer's settings.

1 **Click the "start" button and then click "Control Panel".**

In Windows 2000, click the "Start" button, select "Settings", and then click "Control Panel".

2 **Click "Performance and Maintenance", and then click "System".**

In Windows 2000, double-click the "System" icon.

3 **Click the "Hardware" tab and then click the "Driver Signing" button.**

4 **Check "What action do you want Windows to take?" ("File signature verification" in Windows 2000).**

If the option "Block" has been selected, it will not be possible to install the driver. Select the option "Warn" and then install the driver as explained in "INSTALLING THE SOFTWARE (AR-5516S/AR-5520S/AR-5516/AR-5520/AR-5516D/AR-5520D)" (p.8).

Plug and Play window does not appear (AR-5516S/AR-5520S/AR-5516/AR-5520/AR-5516D/AR-5520D)

If the Plug and Play window does not appear after you connect the machine to your computer with a USB cable and turn on the machine, follow the steps below to verify that the USB port is available.

1 **Click the "Start" button, select "Control Panel", and then click "System and Maintenance".**

- In Windows XP, click the "start" button, click "Control Panel", and then click "Performance and Maintenance".
- In Windows 2000, click the "Start" button, select "Settings", and then click "Control Panel".

2 **Click "Device Manager", and if a message screen appears asking you for confirmation, click "Continue".**

"Universal Serial Bus controllers" will appear in the list of devices.
- In Windows XP, click "System", click the "Hardware" tab, and click the "Device Manager" button.
- In Windows 2000, double-click the "System" icon, click the "Hardware" tab, and click the "Device Manager" button.

3 **Click the ⊞ icon beside "Universal Serial Bus controllers".**
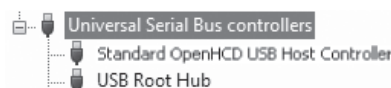
Two items should appear: your controller chipset type and Root Hub. If these items appear, you can use the USB port. If the "Universal Serial Bus controllers" shows a yellow exclamation point or does not appear, you must check your computer manual for USB troubleshooting or contact your computer manufacturer.

4 **Once you have verified that the USB port is enabled, install the software as explained in "INSTALLING THE SOFTWARE (AR-5516S/AR-5520S/AR-5516/AR-5520/AR-5516D/AR-5520D)" (p.8).**

The driver cannot be correctly installed by Plug and Play
(AR-5516S/AR-5520S/AR-5516/AR-5520/AR-5516D/AR-5520D)

If the driver cannot be correctly installed by Plug and Play (for example, Plug and Play takes place without copying the required files for the driver installation), follow these steps to remove unneeded devices and then install the driver as explained in "INSTALLING THE SOFTWARE (AR-5516S/AR-5520S/AR-5516/AR-5520/AR-5516D/AR-5520D)" (p.8).

1 Click the "Start" button, select "Control Panel", and then click "System and Maintenance".

- In Windows XP, click the "start" button, click "Control Panel", and then click "Performance and Maintenance".
- In Windows 2000, click the "Start" button, select "Settings", and then click "Control Panel".

2 Click "Device Manager", and if a message screen appears asking you for confirmation, click "Continue".

- In Windows XP, click "System", click the "Hardware" tab, and click the "Device Manager" button.
- In Windows 2000, double-click the "System" icon, click the "Hardware" tab, and click the "Device Manager" button.

3 Click the ⊞ icon beside "Other devices".
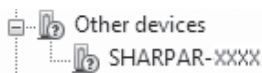
If "SHARP AR-XXXX" appears, select and delete the item.

> **✍Note** If "Other devices" does not appear, close the "Device Manager" window.

4 Install the software as explained in "INSTALLING THE SOFTWARE (AR-5516S/AR-5520S/AR-5516/AR-5520/AR-5516D/AR-5520D)" (p.8).

Removing the software

If you need to remove the software, follow these steps.

1 Click the "Start" button, and then click "Control Panel".

- In Windows XP, click the "start" button and then click "Control Panel".
- In Windows 2000, click the "Start" button, select "Settings", and then click "Control Panel".

2 Click "Uninstall a program".

- In Windows XP, click "Add or Remove Programs".
- In Windows 2000, double-click the "Add/Remove Programs" icon.

3 Select the driver from the list, and remove the software.

For more information, refer to your operating manual or to the help files for your operating system.

4 Restart your computer.

SPECIFICATIONS

Model	AR-5516S/AR-5516/AR-5516D/AR-5516N	AR-5520S/AR-5520/AR-5520D/AR-5520N
Type	Digital Multifunctional System, Desktop	
Photoconductive type	OPC drum	
Document glass type	Fixed	
Copy system	Dry, electrostatic transfer	
Originals	Sheets, bound documents	
Original sizes	Max. A3	
Copy size	Max. A3 Min. A6 (A6 must be fed from the bypass tray) Image loss: Max. 4 mm (leading and trailing edges) Max. 4.5 mm (along other edges in total)	
Copying speed (one-sided copying at 100% copy ratio)	9 copies/min. A3 10 copies/min. B4 12 copies/min. A4R 14 copies/min. B5R 16 copies/min. A4, B5, A5	11 copies/min. A3 12 copies/min. B4 14 copies/min. A4R 16 copies/min. B5R 20 copies/min. A4, B5, A5
Continuous copy	Max. 999 copies; subtractive counter	
First-copy time*	Approx. 7.2 sec. or less	
Warm-up time	Approx. 45 sec.	
Copy ratio	Variable: 25% to 400%, in 1% increments (total 376 steps) (50% to 200% when SPF/RSPF is used.) Fixed preset: 50%, 70%, 81%, 86%, 100%, 115%, 122%, 141%, 200%	
Exposure system	Document glass: Moving optical source, slit exposure (stationary platen) with automatic exposure SPF/RSPF: Moving original	
Paper feed	One automatic feeding paper tray (250 sheets) + bypass tray (100 sheets)	Two automatic feeding paper trays (250 sheets each) + bypass tray (100 sheets)
Fusing system	Heat rollers	
Developing system	Dry-type two-component magnetic brush development	
Light source	Cold cathode fluorescent lamp	
Resolution	(AUTO/TEXT mode) Scan: 600 x 300 dpi (Factory default), 600 x 600 dpi Output: 600 x 600 dpi (PHOTO mode) Scan: 600 x 600 dpi Output: 600 x 600 dpi	
Gradation	Scanning: 256 Printing: 2 value	
Power supply	Local voltage ±10% (For this machine's power supply requirements, see the name plate located on the back of the machine.)	
Power consumption	Max. 1.2 kW	
Typical electricity consumption	1.71 kWh/week 1.95 kWh/week (AR-5516N)	2.03 kWh/week 2.24 kWh/week (AR-5520N)

Weight	Approx. 28.2 kg Approx. 28.4 kg (AR-5516N)	Approx. 33.1kg Approx. 33.3 kg (AR-5520N)
Dimensions	590 mm (W) x 550 mm (D) x 470 mm (H)	590 mm (W) x 550 mm (D) x 555 mm (H)

* First-copy time is measured with original on the document glass with the following settings made, in fully ready condition with fuser at operating temperature and mirror motor at operating speed, actual time may vary based on environment conditions.
•A4 size paper is fed from paper tray 1
•Exposure mode is AUTO
•Scanning resolution is 600 x 300 dpi

Acoustic noise emission (measurement according to ISO7779)

Sound power level L_{WA}		
Printing mode (continuous printing)		6.5 B
Standby mode		3.3 B
Sound pressure level L_{PA} (actual measurement)		
Printing mode	Bystander positions	48 dB (A)
	Operator positions	49 dB (A)
Standby mode	Bystander positions	18 dB (A)
	Operator positions	17 dB (A)

Ambient environment
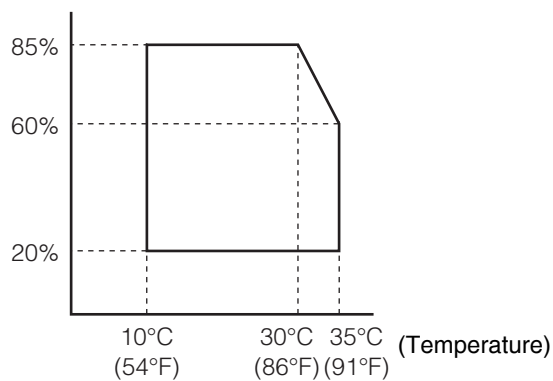
Peripheral Devices

The following peripheral devices can be connected to the machine. For details, see "PERIPHERAL DEVICES AND SUPPLIES" in the Operation Guide.

Product name	Model
250-sheet paper feed unit	AR-D34
2 x 250-sheet paper feed unit	AR-D35
Single pass feeder	AR-SP10*1
Reversing Single pass feeder	AR-RP10*2

*1 AR-5516S/AR-5520S/AR-5516/AR-5520
*2 AR-5516D/AR-5520D/AR-5516N/AR-5520N

Printer Function

Print speed*	AR-5516S/AR-5516/AR-5516D/AR-5516N Max. 16 ppm AR-5520S/AR-5520/AR-5520D/AR-5520N Max. 20 ppm
Resolution	600 dpi
Memory	AR-5516S/AR-5520S 16 MB AR-5516/AR-5520, AR-5516D/AR-5520D, AR-5516N/AR-5520N 64 MB
Emulation	SHARP SPLC (Sharp Printer Language with Compression)
Interface connector	AR-5516S/AR-5520S/AR-5516/AR-5520/AR-5516D/AR-5520D : USB connector (USB 2.0) AR-5516N/AR-5520N : 10BASE-T/100BASE-TX
Interface cables	AR-5516S/AR-5520S/AR-5516/AR-5520/AR-5516D/AR-5520D : [USB cable] Shielded twisted pair cable (max. length 3 m, must support USB 2.0) Please purchase a commercially available USB cable. AR-5516N/AR-5520N : [network cable] Shielded network cable that supports 10BASE-T/100BASE-TX Please purchase a commercially available shielded network cable.

* Print speed during printing of the second sheet and following sheets when using A4 plain paper and performing continuous one-sided printing of the same page.

Scanner Function (AR-5516/AR-5520, AR-5516D/AR-5520D, AR-5516N/AR-5520N)

Type	Flatbed scanner
Scanning method	Document glass/SPF/RSPF
Light source	Cold cathode fluorescent lamp
Resolution	Factory default: 150 dpi Setting range: 50 dpi - 9600 dpi
Original types	Sheets, bound documents
Effective scanning area	Approx. 297 mm (Lengthwise) x 431 mm (Width)
Scanning speed	0.962 msec/line (300 dpi)
Input Data	1 bit or 12 bit
Output Data	1 bit or 8 bit
Scanning colours	Black and white 2 value, Greyscale
Protocol	TWAIN, WIA (Windows XP/Vista), STI
Interface	AR-5516S/AR-5520S/AR-5516/AR-5520/AR-5516D/AR-5520D : USB 2.0 (Full-Speed/Hi-Speed compatible interface) AR-5516N/AR-5520N : 10BASE-T/100BASE-TX
Drop out colour	No
Supported operating systems	Windows 2000/XP/Vista (Detailed information can be found in "HARDWARE AND SOFTWARE REQUIREMENTS" (p.7))
Void area	Max. 2.5 mm (leading and trailing edges) Max. 3.0 mm (along other edges in total)
Interface cables	AR-5516S/AR-5520S/AR-5516/AR-5520/AR-5516D/AR-5520D : [USB cable] Shielded twisted pair cable (max. length 3 m, must support USB 2.0) Please purchase a commercially available USB cable. AR-5516N/AR-5520N : [network cable] Shielded network cable that supports 10BASE-T/100BASE-TX Please purchase a commercially available shielded cable.
Scanner utilities	Button Manager

Note As a part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

INFORMATION ON DISPOSAL

A. Information on Disposal for Users (private households)

1. In the European Union

Attention: If you want to dispose of this equipment, please do not use the ordinary dust bin!

Used electrical and electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment.

Following the implementation by member states, private households within the EU states may return their used electrical and electronic equipment to designated collection facilities free of charge*. In some countries* your local retailer may also take back your old product free of charge if you purchase a similar new one.

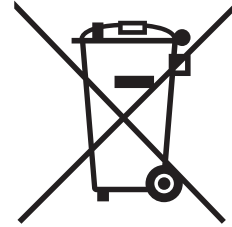*) Please contact your local authority for further details.

If your used electrical or electronic equipment has batteries or accumulators, please dispose of these separately beforehand according to local requirements.

By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

Attention: Your product is marked with this symbol. It means that used electrical and electronic products should not be mixed with general household waste. There is a separate collection system for these products.

2. In other Countries outside the EU

If you wish to discard this product, please contact your local authorities and ask for the correct method of disposal.

For Switzerland: Used electrical or electronic equipment can be returned free of charge to the dealer, even if you don't purchase a new product. Further collection facilities are listed on the homepage of www.swico.ch or www.sens.ch.

B. Information on Disposal for Business Users.

1. In the European Union

If the product is used for business purposes and you want to discard it:

Please contact your SHARP dealer who will inform you about the take-back of the product. You might be charged for the costs arising from take-back and recycling. Small products (and small amounts) might be taken back by your local collection facilities.
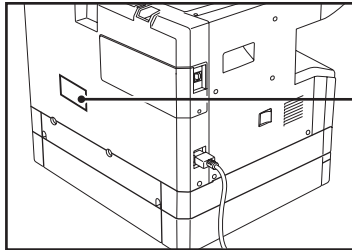
For Spain: Please contact the established collection system or your local authority for take-back of your used products.

2. In other Countries outside the EU

If you wish to discard of this product, please contact your local authorities and ask for the correct method of disposal.

LUOKAN 1 LASERLAITE

KLASS 1 LASERAPPARAT

CLASS 1
LASER PRODUCT

LASER KLASSE 1

LASER KLASY 1

CAUTION
CLASS 3B INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.

VORSICHT
UNSICHTBARE LASERSTRAHLUNG DER KLASSE 3B, WENN ABDECKUNG GEÖFFNET UND SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT. NICHT DEM STRAHL AUSSETZEN.

ADVARSEL
USYNLIG LASERSTRÅLING AF KLASSE 3B VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.
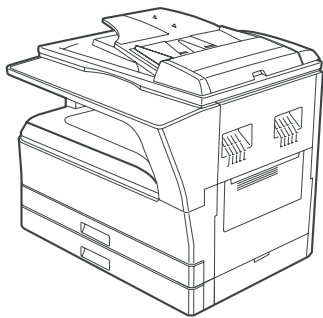
ADVERSEL
USYNLIG KLASSE 3B LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.

VARNING
OSYNLIG LASERSTRÅLNING KLASS 3B NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRRAR ÄR URKOPPLADE. UNDVIK EXPONERING FÖR STRÅLEN.

VARO!
AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTÖNTÄ LUOKAN 3B LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

注 意
盖板打开并且连锁装置处于无效状态时，请不要直视激光光束。

警 告
當打開並使連鎖裝置失效時，會產生等級3B不可見的雷射光照射，應避免暴露於雷射光中。

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Laserstrahlung

⚠ **注 意（サービスマン用）**
カバーを開けてインターロックを無効にした場合には、クラス 3Bレーザー放射の恐れがあります。レーザー光にさらされないようにしてください。

>PET<

The above label is affixed to the laser unit inside the machine.

SHARP ELECTRONICS (Europe) GmbH

Sonninstraße 3, D-20097 Hamburg

SHARP

SHARP CORPORATION