

Read this manual carefully before you use this product and keep it handy for future reference.

For safety, please follow the instructions in this manual.

OPERATING INSTRUCTIONS

Introduction

This manual contains detailed instructions on the operation and maintenance of this machine. To get maximum versatility from this machine all operators should carefully read and follow the instructions in this manual.

Please read the Safety Information in the "Copy Reference" before using this machine. It contains important information related to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS.

Important

Parts of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

Trademarks

Microsoft[®] and Windows[®] are registered trademarks of Microsoft Corporation in the United States and/ or other countries.

Ethernet® is a registered trademark of Xerox Corporation.

Warning:

Use of controls or adjustment or performance of procedures other than those specified in this manual might result in hazardous radiation exposure.

Notes:

Some illustrations might be slightly different from your machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Note to users in the United States of America

Notice:

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 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.

Warning

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Caution

Properly shielded and grounded cables and connectors must be used for connections to host computer (and/or peripheral) in order to meet FCC emission limits.

Declaration of conformity

Product Name: Scanner Option Model Number: Type 450e Responsible party: Ricoh Corporation Address: 5 Dedrick Place, West Caldwell, NJ 07006 Telephone number: 973-882-2000 This device complies with part 15 of 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 to users in Canada

Warning:

.....

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Remarque concernant les utilisateurs au Canada

Avertissement:

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

In accordance with IEC 60417, this machine uses the following symbols for the main power switch:

- means POWER ON.
- O means POWER OFF.

Manuals for This Machine

There are five manuals that separately describe the operational procedures for the operation and maintenance of the machine.

This manual, the Scanner Reference, contains detailed instructions for using this machine as a scanner.

To ensure safe and efficient operation of the machine, all users should read and follow the instructions contained in the following manuals.

System Settings

Describes the procedures and functions for adjusting the settings and defaults of this machine for the copier.

Copy Reference

Describes the procedures and functions for using this machine as a copier.

Scanner Reference

Describes the system settings, procedures and functions for using this machine as a scanner. (This Manual)

ScanRouter Operating Instructions

Describes the procedures and provides necessary information about using the machine with the Network TWAIN Scanner function.

ScanRouter-Browser Operating Instructions

Describes the procedures and provides necessary information about using ScanRouter-Browser.

How to Read This Manual

Symbols

In this manual, the following symbols are used:

A WARNING:

This symbol indicates a potentially hazardous situation that might result in death or serious injury when you misuse the machine without following the instructions under this symbol. Be sure to read the instructions, all of which are described in the Safety Information in the "Copy Reference".

A CAUTION:

This symbol indicates a potentially hazardous situation that might result in minor or moderate injury or property damage that does not involve personal injury when you misuse the machine without following the instructions under this symbol. Be sure to read the instructions, all of which are described in the Safety Information in the "Copy Reference".

* The statements above are notes for your safety.

∰Important

If this instruction is not followed, paper might be misfed, originals might be damaged, or data might be lost. Be sure to read this.

Preparation

This symbol indicates the prior knowledge or preparations required before operating.

🖉 Note

This symbol indicates precautions for operation, or actions to take after misoperation.

Limitation

This symbol indicates numerical limits, functions that cannot be used together, or conditions in which a particular function cannot be used.

PReference

This symbol indicates a reference.

[]

Keys that appear on the machine's panel display.

[]

Keys built into the machine's operation panel.

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1. Preparation

This machine can be used as a network scanner by installing Scanner Option Type 450e. The network scanner has two functions: the "Network Delivery Scanner" and the "Network TWAIN Scanner".

This chapter provides necessary information about the features and the best environment for this machine.

🖉 Note

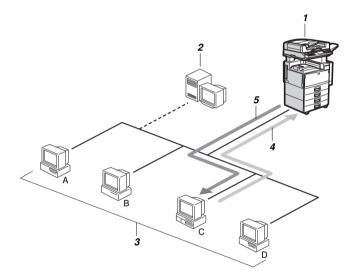
- You can add the Network Delivery Scanner function using ScanRouter which comes with the machine to deliver scanned images to clients on the network.
- □ This manual mainly explains how to use the Network TWAIN Scanner function. For more information about the operation and configuration of the Network Delivery Scanner function, see the "Operating Instructions" that come with ScanRouter.

Features

Network TWAIN Scanner

The Network TWAIN Scanner allows clients on the network to use the scanner as if the scanner were connected directly to the clients.

The illustration shows the following procedure: client C sends a message to the machine to scan the originals, and then the scanned image data is returned to client C.



ZATX500E

- **1.** scanner
- 2. ScanRouter Station

- 4. scanning command
- 5. scanned data

3. clients

🖉 Note

- Confirm that the client computers and the scanner unit are on the same local network segment. The client computers cannot be connected to the scanner unit located on a different local network segment.
- □ To use the Network TWAIN Scanner to scan originals, follow these steps.
- Setting originals

Set originals on the exposure glass (platen glass) or in the document feeder (ADF).

 \Rightarrow P.31 "Setting Originals on the Exposure Glass (Platen Glass)"

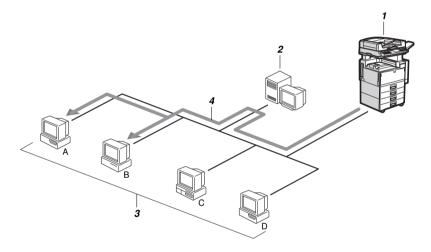
- \Rightarrow P.32 "Setting Originals in the Document Feeder (ADF)"
- ② Configuring the scanner settings from a network client Start Type 270 TWAIN Driver Ver.2 from the application using the TWAIN driver, and then configure the scanner settings.
- ③ Starting the scan Type 270 TWAIN Driver Ver.2 starts scanning.

Network Delivery Scanner

The Network Delivery Scanner is made available when ScanRouter is installed. You can deliver scanned data from the scanner to a selected client among preregistered clients.

It is also possible to deliver scanned data to multiple clients at the same time.

The following illustration shows how scanned data is delivered to clients A and B at the same time.



ZATX510E

1. scanner

3. clients

2. ScanRouter Station

4. scanned data

To deliver scanned data to a client using the Network Delivery Scanner, follow the procedure below.

For more information about operating the Network Delivery Scanner, see the "Operating Instructions" that come with ScanRouter.

🖉 Note

- □ The first four steps can be done in any order.
- Selecting the receiver Use the operation panel to set the address of the client that will receive scanned data.
- ② Selecting the sending client computer Use the operation panel to set the address of the client that will deliver scanned data.
- Configuring the scanner settings Use the operation panel to configure the scanner settings.
- ④ Setting originals

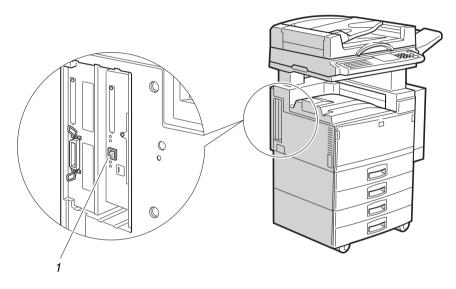
Set originals on the exposure glass (platen glass) or in the document feeder (ADF).

- ⇒ P.31 "Setting Originals on the Exposure Glass (Platen Glass)" ⇒ P.32 "Setting Originals in the Document Feeder (ADF)"
- Starting the scan Start the scan.

Confirming the Scanner Network Interface

The scanner unit is installed on the left side of the machine as shown in the illustration.

The network interface of this scanner unit supports 10BASE-T and 100BASE-TX (one of which is detected automatically).



TACH010E

1. 10BASE-T/100BASE-TX port of the scanner unit

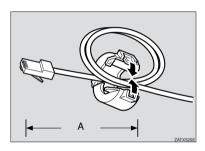
Optional equipment is installed in this illustration.

Connecting to the Network

This scanner unit and the network are connected using 10BASE-T or 100BASE-TX network cable.

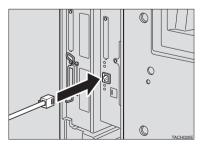
1 Confirm that the main power switch is off.

- **2** Loop the network cable twice. The loops should be about 15 cm (6 inch) from the end of the cable on the end closest to the connector.
- Attach the ferrite core to the loops.



A = 15 cm (6 inch)

4 Connect the scanner unit to the network hub using the network cable.



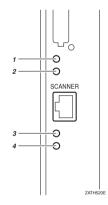
5 Turn on the main power switch.

🖉 Note

□ The default IP address is "011.022.033.044". Change the IP address in accordance with the environment you are using. For more information about changing the IP address, see P.11 "Setting Up the Network Environment".

Indicators

There are four LED indicators on the scanner unit. They can be used to confirm that the board is working properly.



1. Indicator (red)

Is on while the network is working.

2. Indicator (orange)

Is on while Network Interface Board is working.

3. Indicator (green)

Is on while using 100BASE-TX. Is off while using 10BASE-T.

4. Indicator (green)

Is on while the machine is in a network environment.

2. Setting Up the Scanner

Setting Items

This chapter explains the settings necessary to use the machine as a network scanner.

To use the machine as the Network TWAIN Scanner or the Network Delivery Scanner, the following three initial settings are required: network settings, image data settings and scanner settings.

- ★ indicates the settings required to use the machine as a network scanner. Confirm that all these settings are configured before using the machine.
- 🛱 indicates the settings required depending on the environment. Configure the settings appropriate to the environment you are using.

| | Items | Default | TWAIN *1 | Delivery *2 |
|------------|--|-------------------------|----------|-------------|
| Network | Scanner IP Address | 011.022.033.044 | * | * |
| Settings | Subnet Mask | 000.000.000.000 | ☆ | ☆ |
| | Gateway Address | 000.000.000.000 | ☆ | ☆ |
| | Access Control (Access Control Address) | 000.000.000.000 | ☆ | |
| | Access Mask (Access Con- trol Mask) | 000.000.000.000 | ☆ | |
| | Network Boot | NONE | ☆ | ☆ |
| | Delivery Server Address *3 | 000.000.000.000 | | * |
| | Mac Address ^{*4} | — | | |
| Image Data | Density | 4 | | * |
| Settings | Scan type | Text (Black & White) | | * |
| | Resolution | 100dpi | | * |
| | Scan size | Auto Detect | | * |

| | Items | Default | TWAIN *1 | Delivery *2 |
|----------|-------------------------------|---------------|----------|---------------------------|
| Scanner | Function Priority *3 | Delivery | | ☆ |
| Settings | TWAIN connection time out. *3 | Off | | $\overrightarrow{\Delta}$ |
| | Scanner Auto Clear Time *3 | Off | | ☆ |
| | Date | - | | ☆ |
| | Compression(Black & White) | On | ☆ | ☆ |
| | Compression(Gray Scale) | Standard | ☆ | ☆ |
| | Delivery option | Not Installed | | * |
| | Auto Address Update *3 | On | | * |
| | Measurement Unit *3 | mm | | * |

^{*1} Settings required for the Network TWAIN Scanner

^{*2} Settings required for the Network Delivery Scanner

*3 You cannot configure this setting if "Not Installed" is configured for "Delivery option" of the scanner settings.

^{*4} The setting value can be displayed, but not changed.

🖉 Note

- □ This chapter explains the network settings and the scanner settings necessary for using the Network TWAIN Scanner.
- To use the Network Delivery Scanner, the image data settings must be configured. For more information about the image data settings, see the "Operating Instructions" that come with ScanRouter.

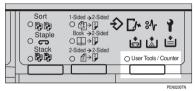
Setting Up the Network Environment

This section explains how to set up the network environment and configure essential settings. For more information about setting values, see P.13 *"Network Setting Items"*.

∰Important

Consult the network administrator for help with these settings.





The "User Tools Main Menu" appears.

| 🔳 User Tools | Main Menu | Select Item |
|-----------------------|---------------------|-------------|
| 1 System 4 Printer | 2 Copy 5 Scanner | 3 Fax |
| Counter | | Exit |

Limitation

 While scanning, delivering, printing or copying, pressing [User Tools/Counter] does not cause the message to change to "User Tools Main Menu".

2 Press **[5]** on the number keys.

The "Scanner Features" menu appears.



B Press [Network].

Scanner Features



The following message appears.

| Setup |
|-----------------------------------|
| Network Setup: |
| 1. Scanner IP Address |
| (↑ PrevMenu) (↓ Next) OK PrevMenu |

Search for the desired menu with [↓Next] or [↑Prev.].

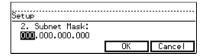
The desired menu appears.

🖉 Note

To cancel the current settings, press [PrevMenu] twice, and then press [Exit].

D Press [OK].

• If you press **[OK]** after selecting "2. Subnet Mask" in step **G**, the following message appears. When this occurs, you can change the setting by entering the desired numerical values.



• If you press **[OK]** after selecting "6. Network Boot" in step **1**, the following message appears. "*"(asterisk) is displayed with the current settings. When this occurs, you can change the setting by selecting the items.

| Setup | | |
|----------------------------|----|--------|
| 6. Network Boot: * NONE | | |
| | OK | Cancel |

6 Start settings.

- When selecting items, press [↑] or [↓] to navigate through the items to be configured on the panel display.

🖉 Note

- □ For more information about the setting items, see P.13 "*Network Setting Items*".
- □ To cancel the current settings, press **[Cancel]**. The settings return to their previous values, and the previous screen appears.

7 Press [OK].

Changed values are saved and the message displayed in step **1** appears.

🖉 Note

□ From this screen, you can also configure other network settings.

Press [PrevMenu].

The message displayed in step **B** appears.

🖉 Note

□ From this screen, you can also make the image data settings and the scanner settings.

Press [PrevMenu].

The message displayed in step **1** appears.

D Press [Exit].

The changed settings are saved, and the message before the settings were made appears.

Important

□ After pressing **[Exit]**, do not turn off the machine until the main menu is displayed, or the settings will not be applied.

🖉 Note

- □ The changed settings cannot be saved until you press [Exit]. These settings also cannot be saved if the power is turned off before [Exit] is pressed.
- □ If you press **[User Tools/Counter]** while navigating the message screens, changed settings will not be saved.

Network Setting Items

Required network settings are as follows. Make settings appropriate to the network environment.

| Items | Default | TWAIN *1 | Delivery *2 |
|--|---------------------|-------------|----------------|
| 1. Scanner IP Address | 011.022. 033.044 | * | * |
| 2. Subnet Mask | 000.000. 000.000 | ☆ | ☆ |
| 3. Gateway Address | 000.000. 000.000 | ☆ | ☆ |
| 4. Access Control (Access Control Address) | 000.000. 000.000 | Å | |
| 5. Access Mask (Access Control Mask) | 000.000. 000.000 | \$ | |
| 6. Network Boot | NONE | ☆ | ☆ |
| 7. Delivery Server Address ^{*3} | 000.000. 000.000 | | * |
| 8.Mac Address *4 | - | | |

- ^{*1} Settings required for the Network TWAIN Scanner
- ^{*2} Settings required for the Network Delivery Scanner
- *3 You cannot configure this setting if "Not Installed" is configured for "7. Delivery option" of the scanner settings.
- *4 The setting value can be displayed, but not changed.

Scanner IP Address

This is the IP address of this scanner on the network. It is essential that the IP address be entered. Set the address as follows: xxx.xxx.xxx (xxx: for any numerical value from 0–255)

🖉 Note

Do not assign the same IP address to two or more machines on the same network. If two or more machines on the network have the same IP address, the machine will not work. To confirm the address, contact the network administrator.

Subnet Mask

This sets a part of the IP address as the network address. Use a subnet mask if the network uses subnets. Set the mask values as follows: xxx.xxx.xxx (xxx: for any numerical value from 0–255)

🖉 Note

□ If you do not know the mask values, use the default setting.

Gateway Address

This is the address of the router or host computer used as the gateway. Set it up if you want to use the machine from a client in a different network. Set the mask values as follows: xxx.xxx.xxx (xxx: for any numerical value from 0–255)

🖉 Note

If you do not know the gateway address, use the default setting.

Access Control Address and Access Control Mask

The access control address and the access control mask are used to limit the clients that have access to the scanner on the basis of their IP addresses. They are inseparable, and therefore, if one is configured, the other must also be configured at the same time.

- The access control address uses an IP address to set the clients that can access the scanner.
- The access control mask is used with the access control address to set a range of IP addresses that can access the scanner.

Set the address as follows: xxx.xxx.xxx (xxx: for any numerical vale from 0–255)

- Note
- If you do not want to limit access to the machine, use the default settings.
- When the access control address settings coincide with the masked result of the IP address of the computer, scanning jobs from that client's IP address can be accepted by the network interface.
- □ For example, if you assign 192.168.15.16 as the access control address to the Network Interface Board, the combination of the access control mask and IP Addresses that can have access are as follows. (xxx: for any numerical value from 0–255)

| Access Control Mask | IP Addresses that have access | |
|------------------------|----------------------------------|--|
| 000.000.000.000 | xxx.xxx.xxx.xxx | |
| 255.000.000.000 | 192.xxx.xxx.xxx | |
| 255.255.000.000 | 192.168.xxx.xxx | |
| 255.255.255.000 | 192.168. 15.xxx | |
| 255.255.255.255 | 192.168. 15. 16 | |

Network Boot

This selects the way in which the client can set the IP address of the scanner.

The default setting is "NONE". To change it, consult the network administrator, and make new settings appropriate for the network environment. The settings you can select are as follows.

| Menu Items on | Available Method | | | |
|---------------------------|------------------|----------|----------|----------|
| the Panel Display | AR *1 | RA *2 | BO *3 | DH *4 |
| NONE (Default Setting) | | | | |
| ARP&PING | ☆ | | | |
| RARP&TFTP | | ☆ | | |
| BOOTP | | | 47 | |
| RARP&BOOTP | | ☆ | ☆ | |
| ARP&RARP | \$ | ☆ | | |
| ARP&BOOTP | ☆ | | ☆ | |
| ARP&RARP& BOOTP | \$ | \$ | ☆ | |
| DHCP | | | | \$ |

- *1 ARP+PING
- *2 RARP+TFTP
- *3 BOOTP
- *4 DHCP

🖉 Note

- □ If you want to use "RARP + TFTP", "BOOTP" or "DHCP", you must configure the server.
- □ When selecting DHCP, assign the scanner a fixed IP address. ⇒ P.45 "When Using DHCP"

Delivery Server Address

This is the server IP address used to deliver the scanned originals to a client on the network. Set this address when you use the machine as a Network Delivery Scanner. Set the address as follows: xxx.xxx.xxx (xxx: for any numerical value from 0–255)

🖉 Note

□ To get the delivery server IP address for the scanner, contact the network administrator.

Mac Address

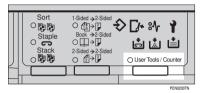
You can confirm the MAC address of the scanner unit installed in the machine. The MAC address has already been assigned for each machine, and therefore, cannot be changed.

 \Rightarrow P.45 "When Using DHCP" \Rightarrow P.46 "Assigning an IP Address with ARP+PING" 2

Setting Up the Scanner

This section explains how to set up the scanner and how to configure essential settings. For more information about the setting values, see P.18 *"Scanner Setting Items"*.

Press [User Tools/Counter].



The "User Tools Main Menu" appears.

| 🖬 User Tools | Main Menu | Select Item |
|-----------------------|---------------------|-------------|
| 1 System 4 Printer | 2 Copy 5 Scanner | 3 Fax |
| Counter | | Exit |

Limitation

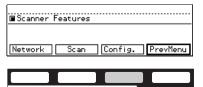
When scanning, delivering, printing or copying, pressing [User Tools/Counter] does not cause the message to change to "User Tools Main Menu".

2 Press **[5]** on the number keys.

The "Scanner Features" menu appears.



B Press [Config.].



The following message appears.

| Setup |
|----------------------|
| Configuration: |
| 1. Function Priority |
| (* PrevMenu |

4 Search for the desired menu with [↓Next] or [↑Prev.].

The desired menu appears.

🖉 Note

To cancel the current settings, press [PrevMenu] twice, and then press [Exit].

5 Press [OK].

• If you press **[OK]** after selecting "4. Date" in step **G**, the following message appears. When this occurs, you can change the setting by entering the desired numerical values.

| Setup | | | |
|----------|----------|----|--------|
| 4. Date: | 21:41:39 | | |
| | | OK | Cancel |

• If you press **[OK]** after selecting "5. Compression(Black & White)" in step **G**, the following message appears. "*"(asterisk) is displayed with the current settings. When this occurs, you can change the settings of the items.

| Setup | |
|---|--------|
| 5. Compression(Black & Whi [.] * On | te): |
| C T (UK OK | Cancel |

6 Start settings.

- When selecting items, press [↑] or [↓] to select items indicated on the panel.

🖉 Note

- □ For more information about the setting items, see P.18 *"Scanner Setting Items"*.
- □ To cancel the current settings, press **[Cancel]**. The settings return to the previous values, and the previous screen appears.

Press [OK].

Changed values are saved and the message displayed in step **1** appears.

🖉 Note

From this screen, you can also configure other scanner settings.

Press [PrevMenu].

The message displayed in step **B** appears.

🖉 Note

□ From this screen, you can configure the network settings and the image data settings.

Press [PrevMenu].

The message displayed in step **1** appears.

DPress [Exit].

The changed settings are saved, and the message before the settings were made appears.

Important

After pressing [Exit], do not turn off the machine until the main menu is displayed, or the settings will not be applied.

🖉 Note

- □ The changed settings cannot be saved until you press **[Exit]**. These settings also cannot be saved if the power is turned off before **[Exit]** is pressed.
- □ If you press **[User Tools/Counter]** while navigating the message screens, changed settings will not be saved.

Scanner Setting Items

Required scanner settings are as follows. Configure settings appropriate to the network environment.

| Items | Default | TWAIN *1 | Delivery *2 |
|---|------------------|-------------|----------------|
| 1. Function Priority ^{*3} | Delivery | | ☆ |
| 2. TWAIN connection time out. *3 | Off | | ☆ |
| 3. Scanner Auto Clear Time ^{*3} | Off | | ☆ |
| 4. Date | _ | | ☆ |
| 5. Compression (Black & White) | On | ☆ | ☆ |
| 6. Compression (Gray Scale) | Standard | ☆ | ☆ |
| 7. Delivery option | Not Installed | | * |
| 8. Auto Address Update ^{*3} | Off | | * |
| 9. Measurement Unit ^{*3} | mm | | * |

*1 Setting required for the Network TWAIN Scanner

- *2 Setting required for the Network Delivery Scanner
- *3 You cannot configure this setting if "Not Installed" is configured for the "7. Delivery option" of the scanner settings.

Function Priority

Select "TWAIN" or "Delivery" to use the Network TWAIN Scanner mode or the Network Delivery Scanner mode by pressing **[Scanner]** on the operation panel. The default setting is "Delivery".

🖉 Note

- □ When selecting "TWAIN" and pressing **[Scanner]**, the mode switches to the Network TWAIN Scanner mode. You can switch to the Network Delivery Scanner mode by pressing **[Cancel]**.
- □ When Selecting "Delivery" and pressing **[Scanner]**, the mode switches to the Network Delivery Scanner mode. Remember that you cannot do the opposite (that is, switch from the Network Delivery Scanner mode to the Network TWAIN Scanner mode.) If you want to use the machine as the Network TWAIN Scanner, access the machine from the computer which will scan the originals.

Important

□ After changing settings, turn the main power switch off and on. If this is not done, the settings will not be applied.

TWAIN connection time out.

You can set the duration to switch the mode from "Delivery" to "TWAIN" while using the machine as the Network Delivery Scanner when other clients are accessing the machine to scan originals as the Network TWAIN Scanner.

- If you select "Off", you can switch to the Network TWAIN Scanner immediately.
- When selecting "On", input the disconnect duration time (3-30 seconds) with the number keys. The default setting is "Off".

Scanner Auto Clear Time

When selecting a receiver, a sender or image data settings using the Network Delivery Scanner mode, if you do not input anything for a certain amount of time, the command you have made will be cleared.

- When selecting "On", use the number keys to enter the length of time (10-999 seconds) the machine waits before clearing the settings.
- If "Off" is selected, the settings will not be cleared.

The default setting is "Off".

Date

Set the current date and time. Enter the information in the following sequence with the number keys: year (four digits), month, day, hour (24 hour style), minute and second.

🖉 Note

□ The date set here is for clients who use the machine as the Network Delivery Scanner to see the length of time that is needed to scan originals.

Compression(Black & White)

You can configure whether or not the transmitted data is to the be compressed. Compression allows data to be sent to the computer in less time. Select "On" or "Off". The default setting is "On".

🖉 Note

Compression is for reducing the amount of time used to deliver the image to the computer, and not for compressing the scanned image. The amount of time required to send the data depends on the amount of data and the network conditions.

Compression(Gray Scale)

You can configure the amount of compression applied to the scanned gray scale data. Compression allows the data to be sent to the personal computer in less time. The default setting is "Standard".

🖉 Note

- Compression is for reducing the amount of time used to send the image to the computer, and not for compressing the scanned original image.
- Lower compression rates require more time to transfer, from lower to highest, "Low" "Standard" "High" and "Off".
- The amount of time required to send the data depends on the amount of data and the network conditions.

Delivery option

This setting is necessary to use the machine as the Network Delivery Scanner with ScanRouter installed. When you set "Delivery option" to "Installed", the following settings are available. When you set the "Delivery option" to "Not Installed", these settings are not available.

- Network Settings "7. Delivery Server Address"
- Scanner Settings "1. Function Priority", "2. TWAIN connection time out.", "3. Scanner Auto Clear Time", "8. Auto Address Update", "9. Measurement Unit".

The default setting is "Not In-stalled".

∰Important

After changing the settings, turn the main power switch off and on. If this is not done, the new settings will not be applied.

Auto Address Update

When using the machine as the Network Delivery Scanner, you can use this function to automatically update the address book (the lists of addresses and senders).

- When selecting "On", pressing **[Address]** while in the Network Delivery Scanner mode, the address saved in the machine is compared with the one saved in the ScanRouter Station, and then it will be updated.
- When selecting "Off", only when you turn on the main power switch, the address is updated.

The default setting is "On".

Measurement Unit

You can set the unit of measurement that is shown on the operation panel when scanning originals by selecting the area to be scanned with the Network Delivery Scanner mode.

Select "mm" or "inch".

The default setting is "mm".

3. Installing the Driver

Features

The drivers (provided on the CD-ROM labeled "Type270 TWAIN Driver") allow you to use this machine with the installed scanner unit through the network. To use the machine as a network scanner, Type 270 TWAIN Driver Ver.2 is required. A Web Browser used for monitoring the scanner unit on the network is also included on the CD-ROM.

This chapter provides necessary information about the features and environment required to use and install/uninstall the driver. This chapter also includes information about using a Web Browser to monitor the scanner on a network.

Type 270 TWAIN Driver Ver.2

This driver allows you to scan originals with a scanner. Be sure to install this driver before using the scanner unit.

The driver can also provides the following functions: compounding written rows, such as those of date and page numbers, and adjusting the slant of letters.

⇒ P.23 "Installing/Uninstalling Type 270 TWAIN Driver Ver.2"

🖉 Note

□ Type 270 TWAIN Driver Ver.2 is included on the CD-ROM in the following directory:

\DRIVER\TWAIN\

Configuring Network Interface Board with a Web Browser

You can use a Web Browser to view the printer and scanner status through the network. If the computer is connected to the network and is configured to use a Web Browser, you can use this function regardless of the computer's OS. You do not need to install any additional applications to use this function.

🖉 Note

□ For more information about a Web Browser, see the Online Help that is included on the CD-ROM in the following directory:

\HELP\WSMHLP\

Environments

To use Type 270 TWAIN Driver Ver.2, the following hardware and software environments are required.

Personal Computer

75 MHz or faster Intel Pentium CPU (200 MHz or faster recommended) The computer must have a CD-ROM drive. (The driver is provided on a CD-ROM.)

♦ OS

Windows 95/98 or Windows NT 4.0/3.51

🖉 Note

□ Windows 3.1x is not supported.

Memory

Windows 95/98: 16 MB or more (48 MB or more recommended) Windows NT 4.0/3.51: 24 MB or more (64 MB or more recommended)

Display

Requires SVGA (800×600) supporting 256 colors or more.

Hard Disk

100 MB of hard disk space (100 MB or more recommended) are required for the installation, save and preview image files.

Ethernet Board

It must be compatible with Windows 95/98 or Windows NT 4.0/3.51 environments.

🖉 Note

□ The Ethernet board does not work if it is not recognized in the Windows 95/98 or Windows NT 4.0/3.51 environments.

Ethernet Cable

Use category 5 STP cabling with an RJ-45 connector.

Network Protocol

TCP/IP

TWAIN Compliant Application

An application compliant to TWAIN 1.6 or later must be installed.

🖉 Note

□ If you are not sure that the application you are using is compliant to TWAIN 1.6 or later, contact the manufacturer of the application.

Installing/Uninstalling Type 270 TWAIN Driver Ver.2

To use this scanner unit, Type 270 TWAIN Driver Ver.2 must be installed. Installation differs depending on Windows 95/98, Windows NT 4.0 or Windows NT 3.51. Install the driver in accordance with the OS you are using.

When you reinstall Type 270 TWAIN Driver Ver.2, or when it becomes unnecessary, uninstall the driver in accordance with the OS you are using.

Important

- Before starting this installation, close all documents and applications. In a network environment, confirm that users who are logged on are disconnected. Be sure to do this when it will create the least interference with other users.
- After installing the driver, you must restart the computer.
- □ If Type 450 TWAIN Driver (other products) is installed, uninstall it first, and then install Type 270 TWAIN Driver Ver.2.

Using Windows 95/98

Preparation

Before installation, confirm that the computer you are using is configured to use the TCP/IP protocol, by selecting **[Configuration]** in **[Network]** from **[Control Panel]**.

Installing

When using Windows 95/98, follow these steps.

Close all the applications that are currently running.

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

A setup program starts automatically and the **[welcome]** dialog box appears.

₽ Reference

If the setup program does not start automatically, see P.24 *"Starting the Setup Program"*.

B Read the message on the screen carefully, and then click [Next].

[Software License Agreement] appears.

4 Read the message on the screen carefully. If you agree, click [Yes]. [Select Program Folder] appears.

E Read the message on the screen carefully. If you agree, click [Next].

Usually, you do not need to change the program folder.

Installation starts, and **[Setup Complete]** appears when it is completed.

🖉 Note

During installation, if the dialog box appears asking you to confirm that you want to rewrite the pre-installed files, click [Yes].

6 Confirm the message on the screen, and then click [Finish].

Select [Yes, I want to restart my computer now.].

🖉 Note

- □ If the screen message asking if you want to restart the computer does not appear in step **G**, click **[Finish]**.
- When restarting Windows by installing this driver, the message of "WINASPI has been replaced the old version" might be displayed. In this case, click [lgnore].

Starting the Setup Program

If the setup program does not start automatically after inserting the CD-ROM into the CD-ROM drive, follow these steps.

- Double-click the [My Computer] icon, and then double-click [Control Panel].
- **2** Double-click [Add/Remove Programs].

[Add/Remove Program Properties] appears.

B Click [Install/Uninstall], and then click [Install] (for Windows 98) or [Setup](for Windows 95).

[Install Programs From Floppy Disk or CD-ROM] appears.

4 Click [Next].

5 Type the name of the CD-ROM drive in the command line, followed by "\DRIVER\TWAIN\ OTHERS\SETUP.EXE" (do not include the quotation marks), and then click [OK].

🖉 Note

□ An example would be "D:\DRIVER\ TWAIN\OTHERS\SETUP.EXE" when the drive letter is "D".

Installation starts.

When Finishing Installation

After installation, "Type 270 TWAIN Driver Ver.2", "Help Files" and "Readme.txt" are registered.

Help Files

"Help Files" is a help system that contains information about the operational process to scan an image and configuring the image data settings using Type 270 TWAIN Driver Ver.2.

Readme.txt

"Readme.txt" contains information about using Type 270 TWAIN Driver Ver.2. Be sure to read it before using them.

Uninstalling

When Type 270 TWAIN Driver Ver.2 is no longer needed, uninstall it. You can delete Type 270 TWAIN Driver Ver.2 and other related files from the hard disk. When reinstalling Type 270 TWAIN Driver Ver.2, uninstall it first, and then reinstall it.

🖉 Note

- □ When uninstalling, the setting values file is not deleted.
- Double-click the [My Computer] icon, and then double-click [Control Panel].
- **2** Double-click [Add/Remove Programs].

The **[Add/Remove Program Properties]** dialog box appears.

Click [Type 270 TWAIN Driver Ver.2] and click [Add/Remove].

A dialog box appears to confirm cancellation.

4 Read the message on the screen carefully. If you agree, click [Yes].

Uninstallation starts.

5 When [Uninstall successfully] is displayed below the dialog box, click [OK].

The dialog box closes.

Using Windows NT 4.0

Preparation

Before installation, confirm that the computer you are using is configured to use the TCP/IP protocol, by selecting **[Protocols]** in **[Network]** from **[Control Panel]**.

🖉 Note

□ To install the Type 270 TWAIN Driver Ver.2, you must be logged on as a member of the Administrators group.

Installing

1 Close all the applications that are currently running.

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

A setup program starts automatically and the **[welcome]** dialog box appears.

If the setup program does not start automatically, see P.24 *"Starting the Setup Program"*.

B Read the message on the screen carefully. If you agree, click [Next].

[Software License Agreement] appears.

4 Read the message on the screen carefully. If you agree, click [Yes].[Select Program Folder] appears.

5 Read the message on the screen carefully. If you agree, click [Next].

Usually, you do not need to change the program folder.

Installation starts, and **[Setup Complete]** is displayed when it is completed.

6 Confirm the message on the screen, and then click [Finish].

Select [Yes, I want to restart my computer now.].

🖉 Note

□ If the screen message asking if you want to restart the computer does not appear in step **①**, click **[Finish]**.

When Finishing Installation

After installation, "Type 270 TWAIN Driver Ver.2", "Help Files" and "Readme.txt" are registered.

Help Files

"Help Files" is a help system that contains information about the operational process to scan an image and configuring the image data settings using Type 270 TWAIN Driver Ver.2.

Readme.txt

"Readme.txt" contains information about using Type 270 TWAIN Driver Ver.2. Be sure to read it before using them.

Uninstalling

When Type 270 TWAIN Driver Ver.2 is no longer needed, uninstall it. You can delete Type 270 TWAIN Driver Ver.2 and other related files from the hard disk. When reinstalling Type 270 TWAIN Driver Ver.2, uninstall it first, and then reinstall it.

🖉 Note

- □ When uninstalling, the setting values file is not deleted.
- Double-click the [My Computer] icon, and then double-click [Control Panel].
- Double-click [Add/Remove Programs].

[Add/Remove Program Properties] appears.

Click [Type 270 TWAIN Driver Ver.2] and then click [Add/Remove].

A dialog box appears to confirm cancellation.

4 Read the message on the screen carefully. If you agree, click [Yes]. Uninstallation starts.

5 When [Uninstall successfully] is indicated below the dialog box, click [OK].

The dialog box closes.

Using Windows NT 3.51

Preparation

Before installation, confirm that the computer you are using is configured to use the TCP/IP protocol, by selecting [Network Settings] in [Network] from [Control Panel].

🖉 Note

To install the Type 270 TWAIN Driver Ver.2, you must be logged on as a member of the Administrators group.

Installing

Close all the applications that are currently running.

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

Open [File Manager].

4 From the file menu, click [Run...]. [Run] appears.

5 Type the name of the CD-ROM drive in the command line, followed by "\DRIVER\TWAIN\ OTHERS\SETUP.EXE" (do not include the quotation marks), and then click [OK].

🖉 Note

□ An example would be "D:\DRIVER\ TWAIN\OTHERS\SETUP.EXE" when the drive letter is "D".

The [welcome] dialog box appears.

6 Read the message on the screen carefully, and then press [Next].

[Software License Agreement] appears.

- Read the message on the screen carefully. If you agree, click [Yes].[Select Program Folder] appears.
- Read the message on the screen carefully. If you agree, click [Next].

Usually, you do not need to change the program folder.

Installation starts, and **[Setup Complete]** is indicated when it is completed.

9 Confirm the message on the screen, and then click [Finish].

Select [Yes, I want to restart my computer now.].

🖉 Note

□ If the screen message asking if you want to restart the computer does not appear in step **D**, click **[Finish]**.

When Finishing Installation

After installation, "Type 270 TWAIN Driver Ver.2", "Help Files", "Readme.txt" and "Uninstall" are registered.

Help Files

"Help Files" is a help system that contains information about the operational process to scan an image and configuring the image data settings using Type 270 TWAIN Driver Ver.2.

Readme.txt

"Readme.txt" contains information about using Type 270 TWAIN Driver Ver.2. Be sure to read it before using them.

Uninstall

Use "Uninstall" to uninstall Type 270 TWAIN Driver Ver.2.

Uninstalling

When Type 270 TWAIN Driver Ver.2 is no longer needed, uninstall it. You can delete Type 270 TWAIN Driver Ver.2 and other related files from the hard disk. When reinstalling Type 270 TWAIN Driver Ver.2, uninstall it first, and then reinstall it.

🖉 Note

- When uninstalling, the setting values file is not deleted.
- Double-click the [Uninstall] icon from the Type 270 TWAIN Driver Ver.2 group in the program manager.

2 From now, follow the instructions displayed on the screen.

4. Basic Operation

Using as a scanner

Changing to Scanner Mode

This scanner unit has two scanner functions: the "Network TWAIN Scanner" and the "Network Delivery Scanner".

₽ Reference

To configure the function priority, see P.18 "Scanner Setting Items".

Limitation

- □ In the following cases, the machine cannot be used as a scanner.
 - While scanning originals for copying
 - While scanning a fax message for transmission
 - During immediate fax transmission

Using the Network TWAIN Scanner

1 Set originals.

2 Configure the scan options using the computer.

3 Start the scan.

✓ Reference

For more information about using the Network TWAIN Scanner, see Type 270 TWAIN Driver Ver.2 help.

Using the Network Delivery Scanner

Press [Scanner].

The screen for the scanner mode appears.

2 Set originals.

B Set the scan options, an address and a sender.

4 Press [Start].

PReference

For more information about using the Network Delivery Scanner, see the "Operating Instructions" that come with ScanRouter.

Interrupting Scanning

If you want to scan while copying or faxing, follow the procedure below.

Scanning while copying

Usually, you cannot use this machine as a scanner until it finishes copying.

Preparation

Select "06.Function Switch" of the "System Settings" menu to set "Instant". For more information about how to access this menu, see the "System Settings".

Press [Clear/Stop].

Copying is interrupted.

2 Remove the originals.

B Press [Reset].

4 Start the scan.

🖉 Note

□ When the scan is completed, press **[Copy]** and restart copying.

Scanning while scanning a fax message for memory transmission

Usually, you cannot use the scanner function until scanning a fax message for memory transmission is completed.

Preparation

Select "06.Function Switch" of the "System Settings" menu to set "Instant". For more information about how to access this menu, see the "System Settings".

Press [Clear/Stop].

The fax message scan is interrupted.

🖉 Note

While using the quick memory delivery, previously scanned originals will be delivered.

2 Remove the originals.

3 Start the scan.

🖉 Note

□ When the scan is completed, press **[Fax]** and restart faxing.

Scanning while doing an Immediate Fax Transmission

Usually, you cannot use the scanner function while an immediate fax transmission is in progress.

Preparation

Select "06.Function Switch" of the "System Settings" menu to set "Instant". For more information about how to access this menu, see the "System Settings".

Press [Clear/Stop].

The immediate fax transmission is interrupted.

🖉 Note

- Previously scanned originals will be delivered.
- **2** Remove the originals.
- **3** Start the scan.

🖉 Note

□ When the scan is completed, press **[Fax]** and restart faxing.

Scanning while printing

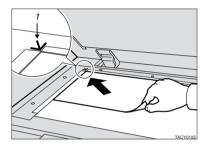
You can scan without interrupting printing.

Setting Originals on the Exposure Glass (Platen Glass)

The exposure glass (platen glass) can be used when scanning originals that cannot be set in the document feeder (ADF), such as books or originals that have been pasted together. These types of originals will be referred to as "book originals". Follow the procedure below to set originals on the exposure glass (platen glass).

Lift the platen cover or the document feeder (ADF), and place the original face down on the exposure glass (platen glass).

Align the original with the reference mark.



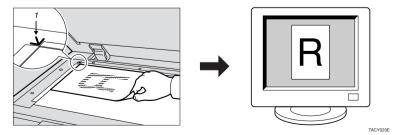
1. Reference mark

∰Important

□ Set the original after correction fluid and ink has completely dried. Not taking this precaution could mark the exposure glass (platen glass) and cause marks to be copied.

🖉 Note

Set the original in the direction shown in the illustration. The direction of resulting scan is as follows.



1. Reference mark

2 Lower the platen cover or the document feeder (ADF).

Setting Originals in the Document Feeder (ADF)

You can set several pages of originals in the document feeder (ADF) at a time. Only originals that consist of separate sheets of paper can be set in the document feeder (ADF); these originals will be called "sheet originals". It is possible to copy not only one side but both sides of originals that are set in the document feeder (ADF).

🖉 Note

□ The document feeder (ADF) is optional. Preparation is required to use it.

Non-recommended originals for the document feeder

For more information about recommended and non-recommended originals for the document feeder (ADF), see the "Copy Reference".

Important

- When using the scanner unit, you cannot set the following types of originals in addition to those you cannot use for the copy function in the document feeder (ADF).
 - Originals smaller than A5
 - Originals longer than the long-edge of Double Letter
- Setting non-recommended originals in the document feeder (ADF) might cause paper misfeeds or damage to the originals. Set these originals on the exposure glass (platen glass).

Setting Originals in the Document Feeder

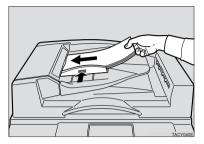
- Do not stack originals above the limit mark.
- When copying thin originals (41–52 g/m² 11–14 lb), set the originals on the exposure glass (platen glass) to avoid damage due to a multi-sheet feed (if several sheets are fed together at the same time).
- When irregular size originals that are longer than A4 or Letter are loaded, a paper misfeed may occur in the document feeder (ADF).
- For more information about the automatically detected original size, see the "Copy Reference".

🖉 Note

The automatically detected original size differs depending on Metric/ Inch version.

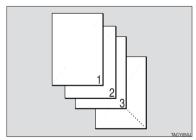
1-sided Scanning

Set the originals into the document feeder (ADF) with the side to be scanned face up.

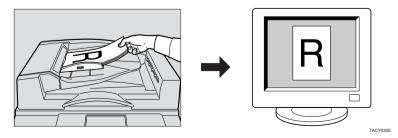


🖉 Note

□ The sheets of the original should be ordered in the preferred page sequence.



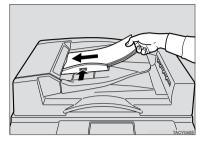
- □ To avoid a multi-sheet feed (in which the ADF feeds through more than one sheet at a time), shuffle the pages of the original before setting them in the document feeder (ADF).
- □ Set the original with the same direction as shown in the illustration. The direction of the resulting scan is as follows.



2 Adjust the guide on the document feeder (ADF) to the size of the originals.

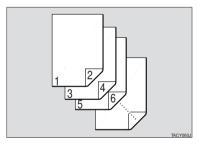
2-sided Scanning

1 Set the originals in the document feeder (ADF) with the side to be scanned first (the front side of the original) face up.

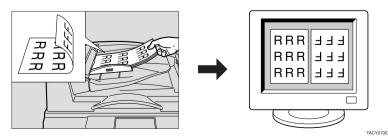


Note

□ The sheets of the original should be ordered in the preferred page sequence.



- □ To avoid a multi-sheet feed (in which the ADF feeds through more than one sheet at a time), shuffle the pages of the original before setting them in the document feeder (ADF).
- Set the original with the same direction of the front side as shown in the illustration. The direction of the resulting scan of the reverse side will be upside down, as shown below. However, you can rotate the direction of the resulting scan by changing the settings of Type 270 TWAIN Driver Ver.2. For more information about changing the settings, see the Help that come with Type 270 TWAIN Driver Ver.2.



5. Appendix

Troubleshooting

This section explains the possible causes and the actions to take when the scanner does not scan an image in the expected manner.

| Status | Cause | Action |
|--|---|--|
| The scanned image is dirty. | The exposure glass (platen glass) or the platen cover is dirty. | Clean the exposure glass (platen glass) or the platen cover. |
| The scanned image is dis- torted or out of position. | The original was moved while it was being scanned. | Do not move the original while it is being scanned. |
| | The original was not pressed flat against the ex- posure glass (platen glass). | Confirm that the original is pressed flat against the exposure glass (platen glass). |
| The scanned image is up- side down. | The original was placed upside down. | Place the original in the correct direction. |
| | | ✓ Reference ⇒ P.31 "Setting Originals on the Exposure Glass (Platen Glass)" |
| | | \Rightarrow P.32 "Setting Origi- nals in the Document Feeder (ADF)" |
| The original image cannot be scanned. | The original was placed with the front and the back reversed. | When setting originals on the exposure glass (platen glass), place the side to be scanned face down; when setting originals in the doc- ument feeder (ADF), place the side to be scanned face up. |
| | | ✓ Reference ⇒ P.31 "Setting Originals on the Exposure Glass (Platen Glass)" ⇒ P.32 "Setting Originals in the Document Feeder (ADF)" |
| The image density has changed in the middle of the scan. | Some types of originals may cause the density to change in the middle of a scan. | Set the Erase Background to "off" and scan the origi- nal again. |

Copier Error Messages

Image Data Setting Error Messages

This section describes possible causes of and actions to take for error messages displayed on the machine's operation panel. Error messages are classified into three groups: the image data settings, the copier and the Network Delivery scanner.

🖉 Note

If an error message that is not described here appears, turn the power off and on. If this does not clear the error message, take a note of the contents and number of the error message and contact your sales or service representative.

PReference

If an error message appears on the display of the client computer starting a scan, see P.39 "*Type 270 TWAIN Driver Ver.2 Error Messages*".

| | , |
|---|---|
| Cannot detect original size. Check wheth- er original is placed and select the proper size. | Place the original again.Set the original size to be scanned. |
| Invalid data size. Check the scanning res- olution. | Reset the original size to be scanned.Lower the resolution value.Add the optional memory module. |
| Memory full. Cannot continue, send the existing scanned data or delete, reset and repeat the process. | Reset the original size to be scanned.Lower the resolution value.Add the optional memory module. |
| | Note This message appears when the second or later pages of the originals cannot be scanned. If you want to send the scanned pages (up to the previous page) only, press [Send]. This procedure must be completed within about 15 minutes after the error occurs. If you press [Delete], all the stored data is deleted and no data is sent. Scan the remaining pages after the memory capacity is back to normal. |
| Memory full. Cannot scan. Scanning has stopped the scanned data has been delet- ed. | • Press [Exit] and delete the scanned da- ta. |
| | • Add the optional memory module. |

| • | |
|--|--|
| Place originals in the ADF correctly. | • The cover of the document feeder (ADF) is open. Close the cover. |
| ADF left in open position. Close ADF. | • The document feeder (ADF) is open. Lower it to the correct position. |
| Clear misfed original(s) | • A misfeed of the original occurred in the document feeder (ADF). Remove the misfed original. |
| Cannot scan due to another application currently in use. | • The machine is using another function such as the copy function. Wait until the machine finishes using the other function. |
| Turn Operation Switch off then on. If er- ror appears again call service. | Confirm that the scanner unit is properly connected to the network. Turn the power switch off and then on again. If you cannot clear the error message, take a note of the contents and number of the error message and contact your sales representative. ("SC4xxx" is the error number. The displayed error number differs depending on the kind of error.) |

Copier Error Messages

Network Delivery Scanner Error Messages

| Address update failed. Try again? | Confirm that the delivery application used by the ScanRouter Station is working. There is not enough hard disk space available on the ScanRouter Station. Increase the amount of free disk space (minimum 200 MB). |
|---|---|
| You have exceeded address data limit. Check the data. | • More than 200 addresses have been registered. Reduce the number of addresses to 200 or less. |
| Error in sending image. Scan with the same settings and resend. | • Confirm that the scanner unit is properly connected to the network. |
| Page limit exceeded, to scan remaining pages, press Exit then Start (to run as a new Job). | • The number of pages the machine is to scan at a time exceeds the page limit. Wait until the scanned data is delivered, and then restart scanning. |
| You have exceeded data capacity please wait until the current data has been sent. | • The amount of data the machine can transact at a time exceeds the data ca- pacity. Wait until the current docu- ment data is delivered, and then restart scanning. |
| Cannot communicate with the server. Check the operating status and server connection. | • Confirm that the scanner unit is properly connected to the network. |

Type 270 TWAIN Driver Ver.2 Error Messages

This section describes possible causes and actions to take for the error messages displayed on the computer's screen. Error messages are classified into four groups: the image data settings, scanning operation, the copier and others.

🖉 Note

□ If an error message that is not described here appears, turn the power off, and then back on again. If this does not clear the error message, take a note of the contents and number of the error message and contact your sales or service representative.

PReference

If a message appears on the machine's operation panel, see P.36 *"Copier Error Messages"*.

| [Low memory. Please quit another application.] | • Memory is low. Quit other currently running applications, and then restart scanning. |
|---|--|
| [Fail in creating or saving file.] | • There is not enough hard disk space available. Delete unnecessary files. |
| [Fail in saving preview image] | • There is not enough hard disk space available. Delete unnecessary files. |
| [Can not find document size. Set the original size.] | Place the original again. Set the original size to be scanned. |
| [Frame memory shortage. Can not scan de- tected size.] | Reset the original size to be scanned. Lower the resolution value. |

Image Data Setting Error Messages

Scanning Operation Error Messages

| [Set the original on ADF.] | • Load originals in the document feeder (ADF) properly. |
|----------------------------|---|
| [Stop Scanning.] | • Scanning has stopped. |

Copier Error Messages

| [Power off or cable problem. Check the scanner.] | • Confirm that the scanner unit is properly connected to the network. |
|---|---|
| | • Confirm that the power switch of the machine is not off. |
| [Can not use Scanner. Check connection of Scanner.] | • Confirm that the scanner unit is properly connected to the network. |
| | • Confirm that the power switch of the machine is not off. |
| [Scanner not ready. Check the scanner.] | • The cover of the document feeder (ADF) is open. Close the cover. |
| | • The document feeder (ADF) is open. Lower it to the correct position. |
| [Scanner error.] | • Confirm that the cover of the document feeder (ADF) is not open. |
| [Clear Misfeed(s) in ADF.] | • A misfeed of the original occurred in the document feeder (ADF). Remove the misfed original. |
| [Check power switch.] | • Confirm that the cover of the document feeder (ADF) is not open. |
| | • Confirm that the scanner unit is properly connected to the network. |
| | • Confirm that the machine is not in Low-Power Mode. If Low-Power Mode is on, cancel it by pressing [Energy Saver]. |
| [Scanning function is unavailable. Call your service representative.] | • An error message that cannot be cleared occurred in the machine. Contact your service representative. |

| [Scanner error.] | Confirm that the Ethernet board has been properly detected by Windows.Confirm that the computer has been |
|--|---|
| | configured to use TCP/IP.⇒ P.23 "In- stalling/Uninstalling Type 270 TWAIN Driver Ver.2" |
| | Confirm that the Ethernet cable is properly connected to the network. |
| [Can not save in default file.] | • The data cannot be saved in the default file. |
| | • Save the data in a different file. |
| [Cannot connect to the scanner. Check the net- work address and mask settings.] | • Access mask is configured. Contact the network or scanner administrator. |
| [Please wait. Another user is using the scan- ner.] | • Another user is using the machine to scan originals. Wait for a while before attempting to access the machine. |
| [Communication error on the network.] | • The machine is using another function such as the copy function. Wait until the machine finishes using other func- tions. Wait for a while before attempt- ing to access the machine. |

Other Error Messages

Status Messages

The following table shows the status messages on the panel display of the machine and its conditions when used as a scanner.

| Status | Message | Descriptions |
|--|--------------|---|
| While standing by. | Ready | • Input from all of the func- tion keys is accepted. |
| | | • Input from the [Interrupt] key is accepted. |
| | | • Interrupt requests from other functions are accepted. |
| | | • The System Reset function works. |
| Accessing the machine from a client on the net- | Connecting | • Input is not accepted from any of the function keys. |
| work. | | • Input from the [Interrupt] key is not accepted. |
| | | • Interrupt requests from other functions are not accepted. |
| | | • The System Reset function does not work. |
| During continuous scan- ning (while scanning | Scanning | • Input is not accepted from any of the function keys. |
| originals placed on the document feeder (ADF). | | • Input from the [Interrupt] key is not accepted. |
| While transferring the scanned data to a computer. | | • Interrupt requests from other functions are not accepted. |
| | | • The System Reset function does not work. |
| While feeding originals using the document feed- | Please wait. | • Input is not accepted from any of the function keys. |
| er (ADF). | | • Input from the [Interrupt] key is not accepted. |
| | | • Interrupt requests from other functions are not accepted. |
| | | • The System Reset function does not work. |

Relationship Between Resolution and Scanning Area

The resolution and scanning area are inter-related. As the resolution increases, the area than can be scanned decreases, and vice-versa.

🖉 Note

- □ The size of the scanning area in the table is standard.
- □ The **[Colors/Gradations]** setting will affect the relationship between the resolution and the scanning area.

Limitation

□ The maximum scanning area may differ depending on the memory capacity of the machine and image compressing method.

| Commiss Area | | Resolution (dpi) | | | | | | | | | | | | | | |
|----------------------|-----|------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Scanning Area | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 |
| A3 | 235 | 943 | 2121 | 3772 | 5893 | 8487 | - | - | - | - | - | - | - | - | 1 | - |
| A4 | 117 | 470 | 1061 | 1886 | 2945 | 4247 | 5779 | 7545 | - | - | - | - | - | - | - | - |
| A5 | 58 | 234 | 527 | 939 | 1469 | 2116 | 2876 | 3759 | 4758 | 5877 | 7113 | 8467 | - | - | 1 | - |
| A6 | 28 | 117 | 264 | 468 | 733 | 1058 | 1437 | 1879 | 2381 | 2935 | 3554 | 4233 | 4963 | 5759 | 6614 | 7519 |
| B4 | 176 | 705 | 1591 | 2826 | 4422 | 6364 | - | - | - | - | - | - | - | - | - | - |
| B5 | 87 | 353 | 794 | 1414 | 2208 | 3183 | 4329 | 5659 | 7167 | - | - | - | - | - | - | - |
| B6 | 43 | 174 | 394 | 702 | 1098 | 1582 | 2154 | 2815 | 3564 | 4401 | 5325 | 6339 | 7440 | - | - | - |
| 11×17in | 227 | 913 | 2051 | 3652 | 5702 | 8217 | - | - | - | - | - | - | - | - | - | - |
| Legal 8 1/2×14in | 144 | 579 | 1304 | 2324 | 3629 | 5225 | 7110 | - | - | - | - | - | - | - | - | - |
| Letter 8 1/2×11in | 113 | 455 | 1024 | 1826 | 2852 | 4105 | 5587 | 7304 | - | - | - | - | - | - | - | - |
| 5 1/2×8 1/2in | 56 | 227 | 512 | 913 | 1423 | 2051 | 2794 | 3652 | 4616 | 5702 | 6902 | 8217 | - | - | I | - |

Binary / Halftone

- Value : data in KB
- — : unavailable combination

Gray Scale

| Coordina Area | | Resolution (dpi) | | | | | | | | | | | | | | |
|-----------------------|------|------------------|------|------|------|------|-----|-----|-----|------|------|------|------|------|------|------|
| Scaning Area | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 |
| A3 | 1887 | 7550 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| A4 | 942 | 3774 | 8493 | - | - | - | - | 1 | - | - | - | - | - | - | - | - |
| A5 | 469 | 1880 | 4233 | 7524 | - | - | - | I | - | - | - | - | - | - | 1 | - |
| A6 | 234 | 939 | 2116 | 3761 | 5877 | 8466 | - | I | - | - | - | - | - | - | I | - |
| B4 | 1414 | 5662 | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 | - |
| B5 | 706 | 2831 | 6369 | - | - | - | - | I | - | - | - | - | - | - | I | - |
| B6 | 351 | 1409 | 3171 | 5639 | 8811 | - | - | I | - | - | - | - | - | - | I | - |
| 11×17 in | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Legal 8 1/2×14 in | 1162 | 4648 | - | - | - | - | - | I | - | - | - | - | - | - | I | - |
| Letter 8 1/2×11 in | 913 | 3652 | 8217 | - | - | - | - | I | I | - | - | - | - | - | I | - |
| 5 1/2×8 1/2 in | 456 | 1826 | 4108 | 7304 | - | - | - | - | - | - | - | - | - | - | - | - |

- Value : data in KB
- — : unavailable combination

When Using DHCP

Note the following points when using DHCP (Dynamic Host Configuration Protocol).

Supported Systems

Windows NT Server 4.0 can be configured as a DHCP server.

Configuring the Scanner with a Reserved IP Address

To always assign the same IP address, configure a reserved IP address using the DHCP server.

🖉 Note

When multiple DHCP servers are used, reserve the same IP address with each DHCP server. The Network Interface Board needs to receive information from the DHCP server that it contacts.

Follow these steps to configure the scanner with a reserved IP address.

Start the DHCP manager.

Select the scope that will be used, and on the [Scope] menu, click [Reservation].

E Type the IP address into [IP Address].

⁴ Type the MAC address of the Network Interface Board into [Unique Identifier].

🖉 Note

- Do not use hyphens to separate the numbers.
- □ If you do not know the MAC address, it can be found on the configuration page printed by the printer.

5 Type a name and comment into the [Client Name] box and the [Client Comment] box.

🖉 Note

□ For more information about client names, see P.45 "*The Others*".

Click [Add].

An IP address is reserved.

Click [Close] to close the dialog box.

The Others

- When you click **[Active Lease]** on the **[Scope]** menu of DHCP manager, a list of client leases appears. When the reserved IP address is not active, the name of the reservation is the name entered in the client Name field of the Add Reserved Clients dialog box. When the reserved IP address becomes active, the client name changes to the client name configured by the Network Interface Board. Only the first 13 letters of the scanner name appear here.
- When the DHCP server does not assign an IP address, the network interface of this scanner unit uses 11.22.33.44 as a temporary IP address.⇒ P.11 "Setting Up the Network Environment"
- Because 11.22.33.44 is a special IP address, you cannot scan using this address.
- When using DHCP relay agent in a network environment that uses a dial up router to connect to the network interface of this scanner unit, an increase in communication fees can occur.

Assigning an IP Address with ARP+PING

Using TCP/IP, you can assign the IP address using ARP and PING. The following example is for a BSD UNIX workstation (SunOS 4.x).

Preparation

ARP+PING should be set to active on the network boot configuration before assigning the IP address using ARP+PING. For more information about setting it to active, see the P.13 "Network Setting Items".

U Log on to the workstation as root.

2 Use the arp command to assign the IP address to the MAC address of Network Interface Board.

arp -s 192.168.15.16 00:00:74:62:5C:65

🖉 Note

□ 192.168.15.16 is the IP address, and 00:00:74:62:5C:65 is the MAC address.

Assign the IP address using the ping command.

- # ping 192.168.15.16
- **4** Use the ping command again to confirm the address.

ping 192.168.15.16

If the address has been configured correctly, the following message appears.

192.168.15.16 is alive

If the address has been configured incorrectly, the following message appears.

```
no answer from 192.168.15.16
```

We have to Confirm the MAC Address

The MAC address (Ethernet address) of Network Interface Board is required in order to use ARP and PING to assign the IP address.

The MAC address can be seen on the scanner configuration page.

Specifications

| Scanning method | One dimension solid scanning system through CCD |
|-----------------------|--|
| Image sensor type | CCD image sensor |
| Original types | Sheet, Book, Object |
| Interface | Ethernet (10BASE-T/100BASE-TX) |
| | ℬ Note |
| | \Box Be sure to use category 5 STP cable. |
| Maximum original size | A3 |
| Resolution | 600 dpi |
| | • For monochrome 256-value (gray scale) scanning, a resolution of 100 to 600 dpi can be set (in units of 1 dpi). |
| | • For monochrome or monochrome (half tone) scanning, a resolution of 100 to 2400 dpi can be set (in units of 1 dpi). |

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