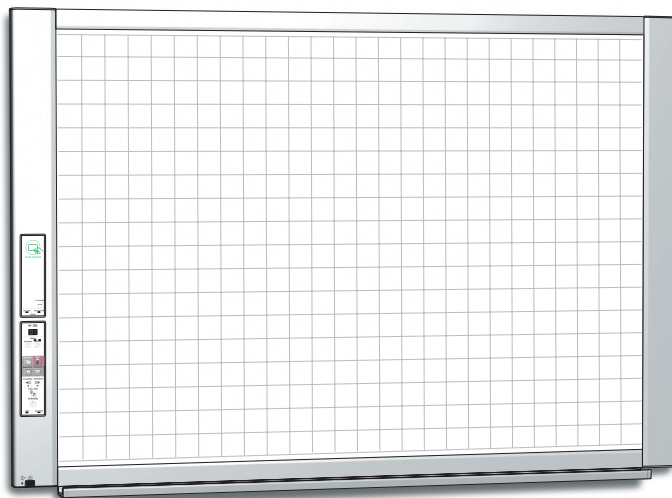# PLUS

Copyboard
(Network board)
N-32S/N-32W/N-324
User's Manual

Thank you for your purchase of the PLUS Copyboard.
Please read this User's Manual carefully before use to take full advantage of the functions of this product. After you have finished reading the manual, please keep it for future reference.

Introduction

This manual is for the network board (model name: N-32S/N-32W/N-324).

• **The models are categorized into different types.**

Model	Type
N-32S	Standard size for two screens
N-32W	Wide size for two screens
N-324	Standard size for four screens

The descriptions and diagrams in this manual refer to the model N-32S.
For using a network, refer to "N-32 Series Network Manual".
* When functions or operations are specific to a certain model of network board, the model name is specified.

NOTE

• Use only the power cord and AC power adapter supplied with the network board.
  The supplied power cord and AC power adapter cannot be used with other products.
• You will be punished for merely owning illegal copies.
• **Do not use ruled type tapes.**
  Do not move the sheet with tape, etc., attached to it. Doing so could result in malfunction.
• **Do not attach any paper on the sheet.**
  Do not copy while film-type objects or papers are attach to the sheet. Doing so could result in malfunction.

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(1) The contents of this manual may not be reprinted in part or whole without permission.
(2) The contents of this manual are subject to change without notice.
(3) Great care has been taken in the creation of this manual; however, should any questionable points, errors, or omissions be apparent, please contact us.
(4) Notwithstanding Section (3), this company will not be responsible for any claims of loss or profit or other matters deemed to be the result of using this unit.
(5) Since printer connected with the network board is based on the use as a peripheral device for the PLUS network board, we do not warrant direct connection with a computer.
(6) Manuals with incorrect collating or missing pages will be replaced.

Table of Contents

Meaning of the Terms Used in this Manual

- Main unit (or set): This refers to the network board.
- USB memory: refers to USB flash memory.
- USB memory storage: means the saving of sheet surface data using MEMORY (i.e., the USB port) of the operation panel.
- Memory for computer storage: indicates a temporary saving location of the image that has been read.
- "copy": Both "print" and "USB memory saving" mean to "copy."
- "Sheet surface": refer to the drawing portion.
- "Scroll" or "move": indicates feeding of the sheet
- Network: The communications network on which devices are interconnected in net fashion for communication (exchange of data) between the devices. For this network board, the "network" indicates the LAN below.
- LAN (Local Area Network): A closed communications network for communicating within a restricted area, such as within a company.
- FTP (File Transfer Protocol): The protocol (communications rules) used when transferring files on a TCP/IP network.
- SMTP (Simple Mail Transfer Protocol): This is the protocol used when transferring e-mail on TCP/IP networks.
- LDAP (Lightweight Directory Access Protocol): This is the protocol for accessing the service that centrally manages information on network users on TCP/IP networks (the directory service).

Package Contents

The package contents are as described below. Please check before use.

Main unit [1]
Printer* [1]
Please see the instruction manual of the printer for information about the printer accessories.
Stand* [1]
A mobile stand (with casters) for supporting the main unit. For the contents of the stand's package and instructions on assembly, see the stand's instructions or the separate Assembly and Setup Manual.
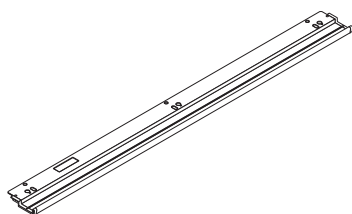
* Depending on the type of product you have purchased, may be sold separately.

Pen tray [1]
Pen tray fixing screws (M4 × 20) (temporarily fastened on main unit)

N-32S/N-324: 3 screws, N-32W: 4 screws

(See the Assembly and Setup Manual for assembly instructions.)
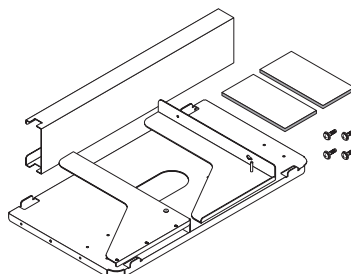
Wall mount printer table [1 set]
Bracket fixing screws (M4 × 8): 4
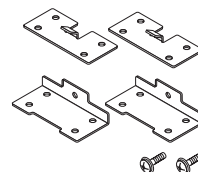AC power adapter box: 1
Velcro: 2 sets

Wall brackets [1 set]
These are brackets for mounting the main unit on a wall. (See the Assembly and Setup Manual.)

Upper wall brackets: 2

Lower wall brackets: 2
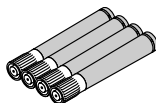
Main unit fixing screws (M4 × 12: 2)

Network board Accessories
Dedicated markers
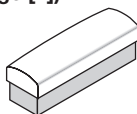(One each of black, red, blue, and green)
Use these markers to draw on the sheet surface.

Dedicated eraser [1] (Replacement sponge [2])
Use this to erase the drawing.
The eraser has four sides which can be rotated to renew the eraser. After using up the four sides, replace the eraser with one of the supplied sponges.

AC power adapter (with power cord 2.5 m) [1]
This is the power adapter for supplying power to the network board (See Page E-33).
Model: LTE36ES-S2-3
Manufacturer: Li Tone Electronics Co., Ltd.
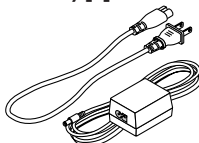
Notice
• The included AC power adapter and AC power cord are exclusively for use with this unit. Never use them with other products.

IC card [1]
Use for saving scanned data on FTP server.

PLUS
Copyboard IC Card
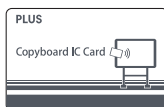
USB cable (type B ↔ type A) [1]
[PLUS code 715258900]
Cable for connecting the main unit to a computer.
Used for making the device settings.
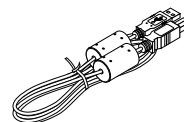
Notice
• Do not use this cable for connection to the printer.

Documents
Quick Guide [1]
Brief explanation on operation.

Assembly and Setup Manual [1]
Includes instructions on installing the set and connecting it with the printer (sold separately).

Important Safety Information [1]
Includes instructions to be heeded in order to use the set safely.

Names of the Parts

Front

Frame cover

Main unit

Sheet
Dedicated markers are used on the sheet to draw diagrams and to write.

NFC panel (See Page E-9)

Control panel (See Page E-8)

Pen tray

Input/output terminals (see next page)
* Located on the bottom surface.

Printer table
The printer* is placed here. (See the Assembly and Setup Manual.)
* The printer is sold separately.

AC adapter box
Store the AC power adapters of the network board and printer here. (See the Assembly and Setup Manual.)

*   This illustration does not show the connection cords.

Stand
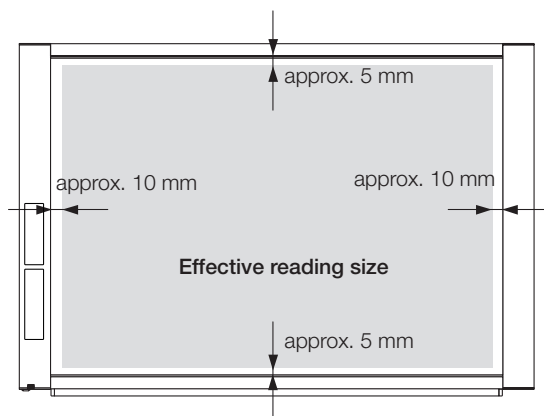This stand supports the network board. (See the Assembly and Setup Manual.)

*   Depending on the product you have purchased, the printer may be sold separately.

---

approx. 5 mm

approx. 10 mm   approx. 10 mm

Effective reading size

approx. 5 mm

Effective Reading Size
The area that can be scanned is the gray area of the diagram.

Note

• It might not be possible to print or copy when storing to USB memory or personal computer any portions that are drawn outside of this range.

Input/output terminals

USB memory port (type A)
Connect a commercially available USB memory device. Scanned images can be saved. (See page E-20)

The connector is located on the bottom surface of the main unit.
The diagram view is seen from the bottom.

* This illustration does not show the printer or connection cords.

DC input connector
Connect this with the DC plug end of the AC power adapter. (See Page E-33.) (Only connect the supplied AC power adapter; nothing else.)

Personal computer (PC) dedicated USB port (Type B)
Connect this with the USB port (type A) of the PC. Used to do the Simple Network Settings for this product. (Refer to the separate "N-32 Series Network Manual".) Can also be used to copy scanned images onto the computer. (See page E-22.)

LAN terminal (RJ-45)
Connect a commercially available LAN cable.

Printer connector (USB port Type A)
Connect this with the USB connector of the printer (See Page E-33).
(The printer connector is dedicated for use with a printer; use it only with a printer.)

Locking/unlocking the stand's casters
After installation, lock the casters with the stoppers. When moving the stand, unlock the caster's stoppers.
The stoppers are locked when the bottom is pressed. Press the top to unlock them.

Unlock
Lock
Caster
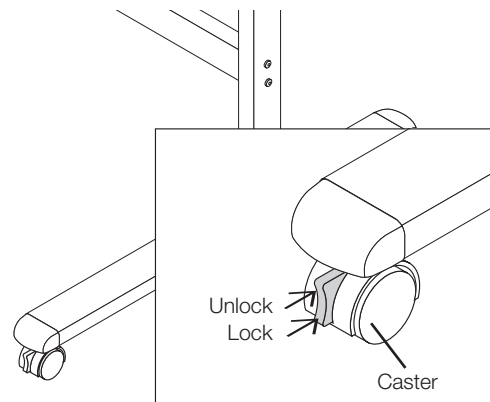
Changing the Height of the Unit

This is the height adjustment when setting up the network board on the optional stand. The stand height can be adjusted to 3 levels by 100 mm.

⚠ CAUTION

- At least two persons should hold the main unit. If not, the main unit could drop or tip, resulting in accidental injury.
- Lock the stand's casters by pressing the bottom of the caster lock button. If not, the stand could move while the main unit is being mounted or removed, resulting in accidental injury.
- After unplugging the power cord from the wall power outlet, disconnect all the connection cords from the set's input/output terminals. If the set is removed without disconnecting the cords, it could tip, resulting in accidental injury.
- If a printer is mounted on the set, remove the printer before starting. If not, the stand could tip while the main unit is being mounted or removed, resulting in accidental injury due to the printer dropping or tipping over.

(1) Unplug the power cord from the wall power outlet, then disconnect all the connection cords from the main unit.

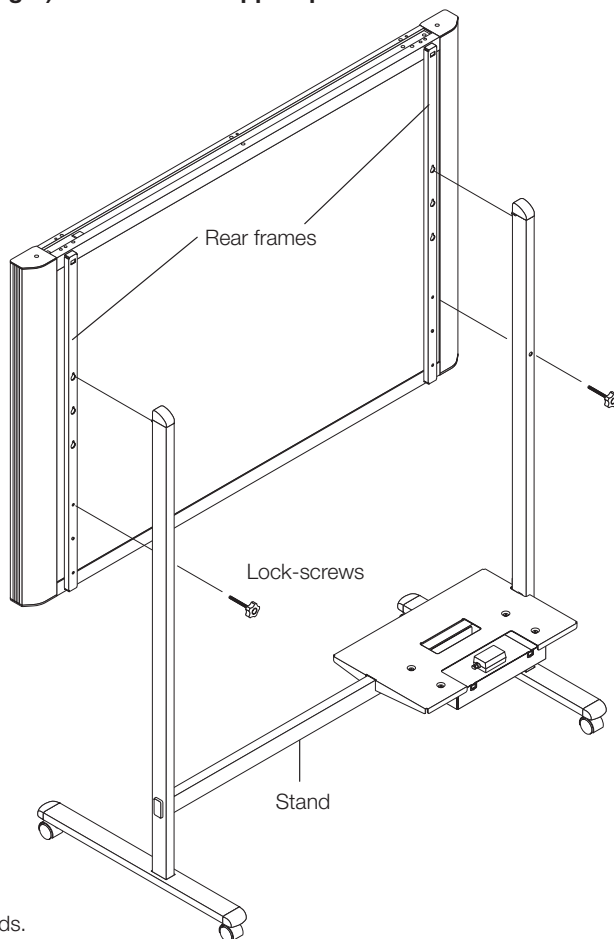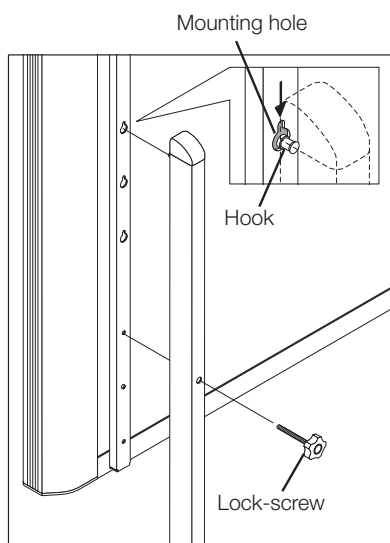**(2) Remove the locking knobs (one on each side).**

(3) Change the position of the main unit support pieces.

Lift the main unit about 1 cm to unhook it.

Insert the stand's hooks securely into in the mounting holes in the main unit's support pieces (one on each side).

(4) Fasten the two locking knobs (left and right) to the mount support pieces.

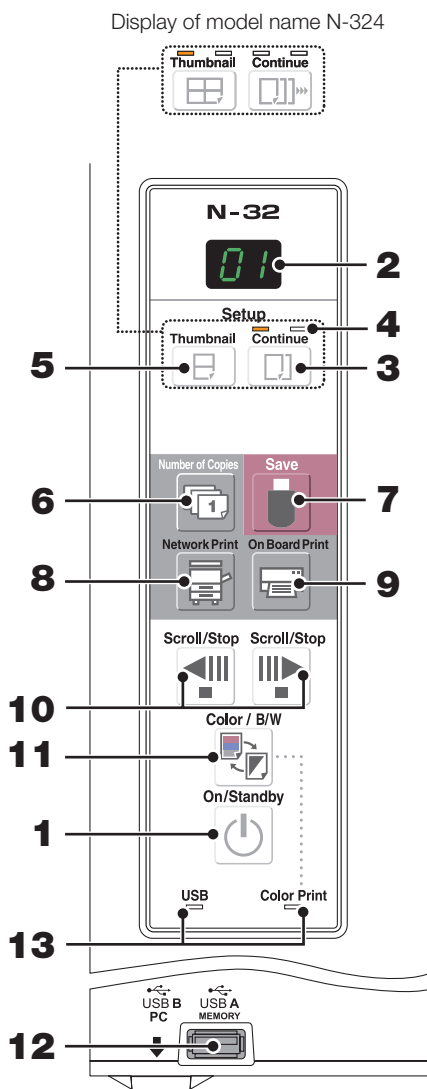**(5) Connect all the connection cables.**

* This illustration does not show the connection cords.

Control Panel

The control panel of the drawing refers to Model N-32S/N-32W.

When pressing a button, please press the center area (the square bulge). The button may not work if it is pressed on a corner.

Display of model name N-324

1 ON/Standby ( ) button
Turns the network board's power on and off (standby mode).

2 Display window
The number of copies, operating status and error messages are displayed on the 7-segment LEDs.

3 Continue (⌷]]·) button
Used to select the number of screens when printing or storing multiple screens consecutively.
Model: N-32S/N-32W (single and double screens)
Model: N-324 (one to four screens)

4 Consecutive printing number indicators
These light yellow to indicate the number of screens selected with the consecutive button.

5 Thumbnail (⊟) (⊞ on N-324) button
Used to select the layout for printing thumbnails of multiple screens on a single page.
The selected layout is indicated on the display window.
(Page E-18, "Printing Thumbnails")

6 Number of Copies (🖶)/Test print button
Press this button to set the number of copies to be printed (max. 10). The number of copies is displayed on the display window.
* " P " is displayed during test printing.

7 Save ( ) button (USB memory storage)
The sheet is moved by 1 screen and read, and the image is stored on the USB memory device.
When connected to a computer by USB cable, the image is stored in the network board's internal memory.

8 Network Print (🖨) button
The sheet is moved by 1 screen and read, and the image is printed out to the network printer on the same network.
The number of copies is displayed on the display window.
* FTP supported printer

9 On Board Print (🖨) button
The sheet is moved by 1 screen and read, and the image is printed out to the printer connected with the network board.
The number of copies is displayed on the display window.

10 Scroll/Stop (◁‖ ‖▷) button
When the ◁‖ button is pressed, the sheet scrolls one screen's worth to the left (to the next screen) and stops automatically.
When the ‖▷ button is pressed, the sheet scrolls one screen's worth to the right (to the previous screen) and stops automatically.
When pressed during scrolling, scrolling stops.

11 Color / B/W (🗎) button
Changes print color (Color / Monochrome).
Selection status is shown according to whether the Color Print status indicator is lit or off and how it lights.
Color: Green steady light
Monochrome: Off

12 USB A Memory port (USB Type A)
Saves in commercially-available USB memory images that have been read by the network board.
The USB status indicator lights green when the USB memory device is recognized.

13 Status
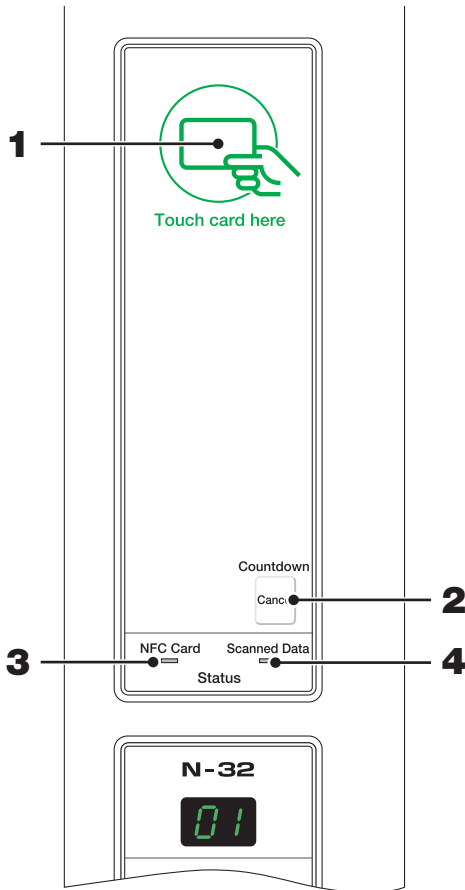Connection setting status is shown by turning on/off the indicator.
For details, see pages E-25 and E-26.

NFC panel

When pressing the button, press the center area (the square bulge). The button may not work if it is pressed on a corner.

1 IC card read/write part
Touch the IC card here.
Performs reading of IC cards or writing onto dedicated IC cards.
Touch the touch mark with the IC card. Touching other places than the touch mark may cause an error.

2 Cancel button
Cancels successive transmission standby countdown and deletes the scanned data.

3 IC Card indicator
Shows status of read/write to the IC card according to whether it is lit or off and how it lights.

| IC Card indicator	Status of IC card
Lit green	Accept IC card • Turning on the power lights green.
Flashing green	Preparing for writing to IC card
Lit red	IC card error in read/write (3 seconds)
Off	Not accept IC card The indicator lights off in the following condition: • "Network Setting" is not done. • "Network Storage" in "Security Setting" is set to "Invalid". • In operation

4 Scanned Data indicator
This indicates that scanned data is being held in the memory. If so, the indicator lights green.
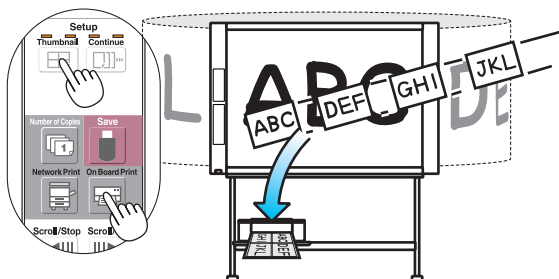
Functions of the Network board
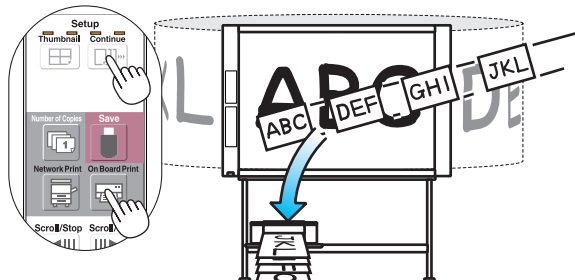
Printing Functions

① Printing
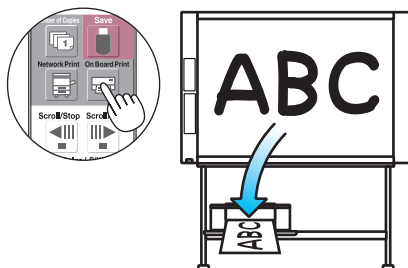
Output to paper

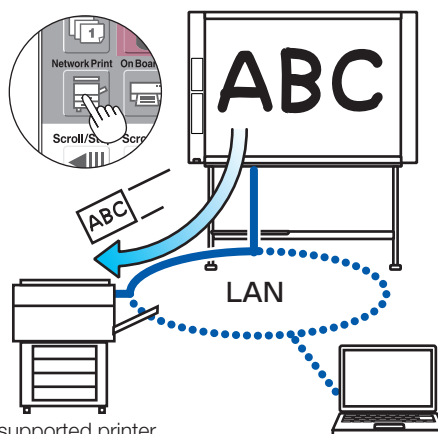### ② Printing thumbnails of multiple screens on a single page

Printing of thumbnails on single page

③ Printing or storing multiple screens consecutively

Consecutive printing or storing, one screen at a time
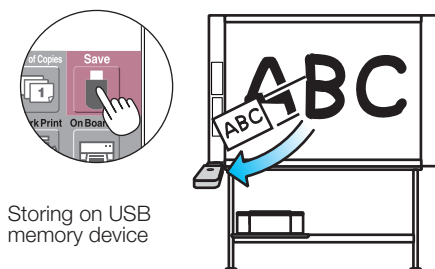
④ Print to the network printer.

FTP supported printer

* Printing of thumbnails of 2 screens and consecutive on Model N-32S/N-32W.

Saving Functions

⑤ **Storing on USB memory devices**

Storing on USB memory device

⑥ **Capturing images on a computer**

Storing of image on computer
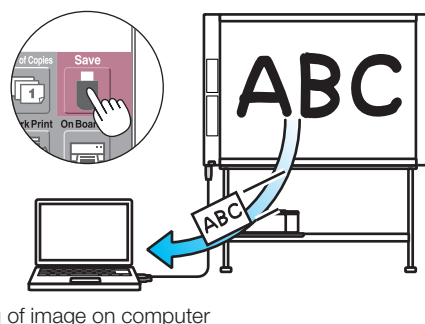
⑦ **Using the dedicated IC Card to store images on a specific folder on an FTP server.**

Blip!

PLUS
Board IC Card

FTP server

LAN

ABC

Viewing

01 02 ·········· 99

Save location
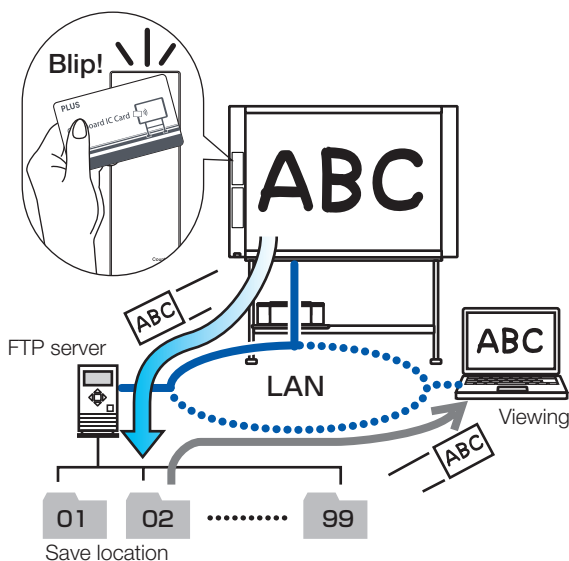
⑧ **Sends mail with attached images using IC cards (employee ID cards, etc.), or saves it in an individual folder on the FTP server.**

Blip!

Employee ID Card

SMTP server

LAN

FTP server

Registered email sddress

ABC

01 02 ·········· 99

Save location
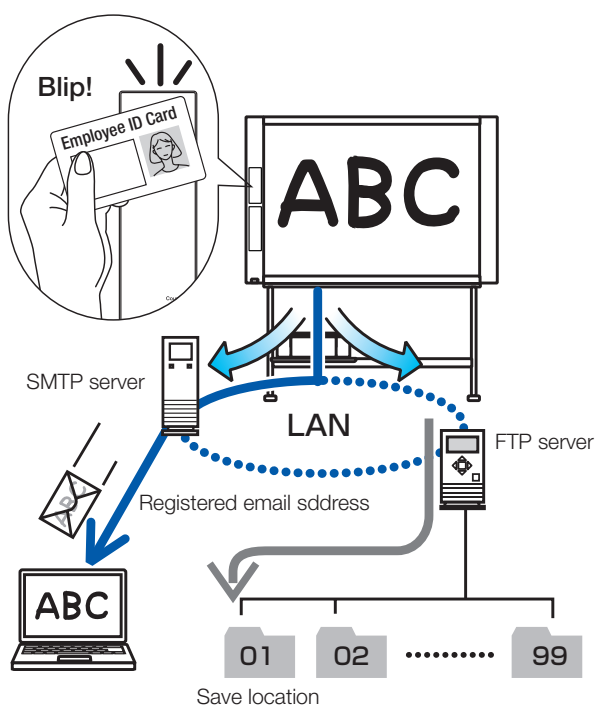
Operation Steps

The network board uses an image scanner to scan characters or diagrams drawn using special markers (four colors). The image can be printed out to the printer and be stored on a USB memory device or a computer. When connected to a network, completing the network settings makes it possible to transfer image files by e-mail, save them on the FTP server or print them on a network printer.
To use a network, refer to the separate "N-32 Series Network Manual".

Preparation
- **Set up the newly purchased network board and connect a printer.**
  See a separate manual titled "Assembly and Setup Manual."
- **Plug the AC power plugs of the network board and printer into wall power outlets.**
- **After purchase, be sure to set the network board's clock. If not, the proper date and time will not be displayed on prints or in image files. See page E-13.**

Draw on the Sheet Surface
Please draw with the dedicated markers that have been supplied.
If anything other than the dedicated markers or eraser are used, it may be impossible to erase the sheet or the sheet could get dirty.
To move the sheet manually, see "Moving the sheet surface manually" on page E-18.

Printing
(1) Set A4 or letter size paper.
    Do not set anything other than A4 or letter size paper.
(2) Press the ON/Standby ⏻ button of the network board and switch on the power.
(3) Switch on the printer power.
    For instructions on operating the printer, see the printer's operating instructions.
(4) Press the Network Print* 🖥 or the On Board Print 🖨 button. The network board will move a one-screen portion of sheet, read the image, and start the copy operation. See "Printing" on Page E-15.
    * To use a network printer, Network Setting is required.
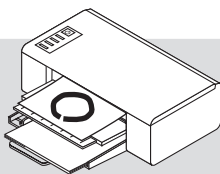
Saving to USB Memory
(1) Press the ON/Standby ⏻ button of the network board to switch on the power.
(2) Insert USB memory into the Memory •⇌ port (USB A port) of the network board.
(3) Press the Save 🔋 button.
    See "Using USB Memory" on Page E-20.
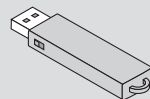
Saving on a computer
(1) Press the network board's ON/Standby (⏻) button to turn the power on.
(2) Connect the network board to the computer using the PC dedicated USB port.
(3) Press the Save (🔋) button.
(4) The image is saved on the computer.

When Not Using the Network board
(1) By all means, cleanly erase the drawing from the sheet surface with the dedicated eraser. (Leaving the drawing for a long period will make it harder to erase.)
(2) Press the ON/Standby ⏻ button of the network board and switch off the power (standby mode).
    The power cannot be switched off while the USB memory remains installed. (This is a prevention function against forgetting to unplug the USB memory.)
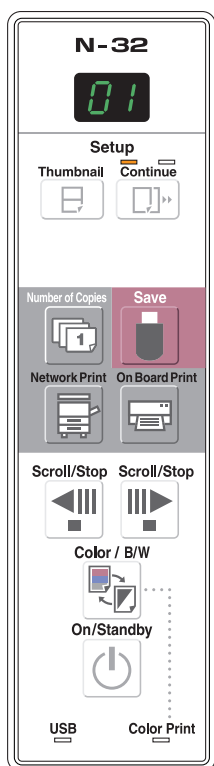(3) Switch off the printer power.

Note

- When turning on the power, wait about 5 seconds or more after the power plug has been connected before pressing the ON/Standby ⏻ button.
- The color of the images when printed in color or when saved in USB memory will differ somewhat from the marker colors.
- Blurred characters, thin lines, overlapping of markers and other factors can cause colors to differ in places and can also result in portions that cannot be scanned successfully.
- If dark horizontal lines on a printed out hard copy or image on the screen are generated, perform the scanning adjustment (white calibration). See page E-31.
- The data in the memory for computer storage is deleted when the ON/Standby ⏻ button is turned off (standby mode) or the connection with the computer is cut.

Setting the Time

Be sure to complete clock setting to print correct time and attach time and date information to the created digital files.

The time can also be set from a computer via a network (when connected to a LAN). In this section, operation for setting the time by using buttons on the network board is provided.

Description of Operations

N-32

`01`

Setup
Thumbnail　Continue

Number of Copies　Save

Network Print　On Board Print

Scroll/Stop　Scroll/Stop

Color / B/W

On/Standby

USB　Color Print

1 Switch to "CB Setup".
With the power turned on, press the Number of Copies 🔳 button while pressing the ON/Standby ⏻ button, then release the ON/Standby ⏻ button.

`F1`

2 Press the Save 🔖 button and switch to "Time Setting".
The mode switches each time the Save button is pressed.
Contents of setting mode displayed on display window

`c.1` → `c.2` → `c.3` → `c.4` → `c.5` → `c.6`

(First 2 digits)　(Last 2 digits)

Christian year　　Month　　Day　　Hours　　Minutes

3 Set the setting mode's date and time.
When the Network Print 🖨 or On Board Print 🖨 button is pressed once, the setting can be made.
Use the Network Print 🖨 (Increase) and On Board Print 🖨 (Decrease) buttons to set.

4 Press the Save 🔖 button to enter the setting.
The network board switches to the next setting position.
Repeat steps 4 and 5 to set the current date and time.
• If the ON/Standby ⏻ button is pressed during steps 3 to 5, the partially made setting is canceled and the date and time return to the values set before the setting was started.

5 Complete the setting.
When the Save 🔖 button is pressed after the minute's setting position (c.6 display) has been set, the "Time Setting" is completed and the [F1] display (CB Setup) reappears. Press the ON/Standby ⏻ button to return to the normal mode.

Preparations :
Connect the power plug to a wall power outlet (AC 100–240 V).
[Example]: Setting the date and time to 2:16 pm October 8, 2018

1 Press the ON/Standby ⏻ button to turn on the power.
The display window's LEDs light and the power turns on.

On/Standby

`01`

Normal mode

2 Press the Number of Copies 🔳 button while pressing the ON/Standby ⏻ button, then release the ON/Standby ⏻ button.
The mode switches to "CB Setup", and "F1" is displayed on the display window's LEDs.
The mode returns to the normal mode if no buttons are operated for 10 seconds.

On/Standby　Number of Copies

`F1`

"CB Setup" mode

3 **While "F1" is displayed, press the Save button to enter.**

The display switches to "c1" (first 2 digits of year).
If no buttons are operated for 10 seconds while in the time setting mode, the mode returns to the "CB Setup" mode.

$F\,1 \longrightarrow c.1$

Save

4 **Press the Save button to move to the last digits of the year**

The display switches to "c2" (last 2 digits of year).
Notice:
The first two digits of the year ("20") are fixed. Simply press the Save button to switch to the last 2 digits of the year setting position.
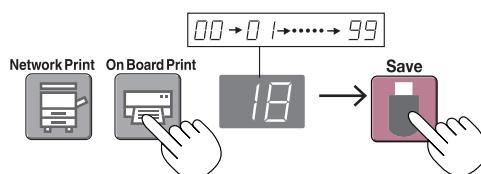
20

Save

5 **Use the Network Print (Increase) and On Board Print (Decrease) buttons to select "18" (the last 2 digits of the year), then press the Save button to enter.**
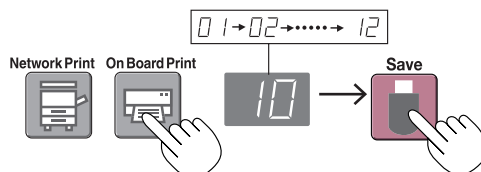
The display switches to "c3" (setting of month).

$00 \rightarrow 01 \rightarrow \cdots\cdots \rightarrow 99$

Network Print   On Board Print   Save

$18 \longrightarrow$

6 **Use the Network Print (Increase) and On Board Print (Decrease) buttons to select "10" (the month), then press the Save button to enter.**
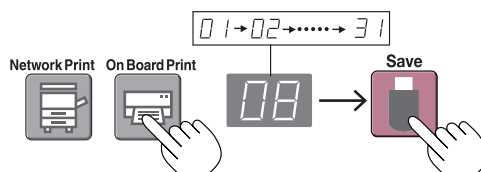
The display switches to "c4" (setting of day).

$01 \rightarrow 02 \rightarrow \cdots\cdots \rightarrow 12$

Network Print   On Board Print   Save

$10 \longrightarrow$

7 **Use the Network Print (Increase) and On Board Print (Decrease) buttons to select "08" (the day), then press the Save button to enter.**

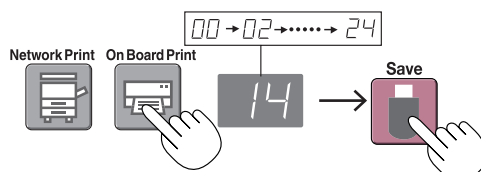The display switches to "c5" (setting of hours).

$01 \rightarrow 02 \rightarrow \cdots\cdots \rightarrow 31$

Network Print   On Board Print   Save

$08 \longrightarrow$

8 **Use the Network Print (Increase) and On Board Print (Decrease) buttons to select "14" (the hours), then press the Save button to enter.**

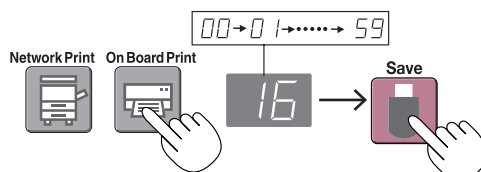The display switches to "c6" (setting of minutes).

$00 \rightarrow 02 \rightarrow \cdots\cdots \rightarrow 24$

Network Print   On Board Print   Save

$14 \longrightarrow$

9 **Use the Network Print (Increase) and On Board Print (Decrease) buttons to select "16" (the minutes), then press the Save button to enter.**

The display switches to "F1" (function setting).

$00 \rightarrow 01 \rightarrow \cdots\cdots \rightarrow 59$

Network Print   On Board Print   Save

$16 \longrightarrow$

10 **Press the ON/Standby button to return to the normal mode.**

• The network board also returns to the normal mode if you just wait 10 seconds.

This completes the time setting.

$F\,1 \longrightarrow 01$

"CB Setup" mode   Normal mode

Printing (printer sold separately)

Use a printer to print out the image that has been drawn on the sheet surface. Use a PLUS-designated printer. Operations and names of parts differ from printer to printer. For details of operations, see your printer's operating instructions. The network board can print out to the printer connected to the network board or a network.

Preparing the Printer

Please check that the network board and the printer have been connected. See Page E-33.

1

Set the paper.
Please use A4 or letter size printer paper.
• When using letter size paper, set letter size paper in the CB Setup mode. (See page E-24.)

1) Arrange the paper edges so that they are even.
2) Insert paper at the specified position of the paper tray.
3) Press the paper guide gently until it touches the paper.

Note

See your printer's operating instructions for a description of the paper that can be used.

Notice

• Depending on the printer's specifications, some time may be required for cleaning of the print head.

Power switch

Paper guide

Paper

Paper tray

Discharge tray
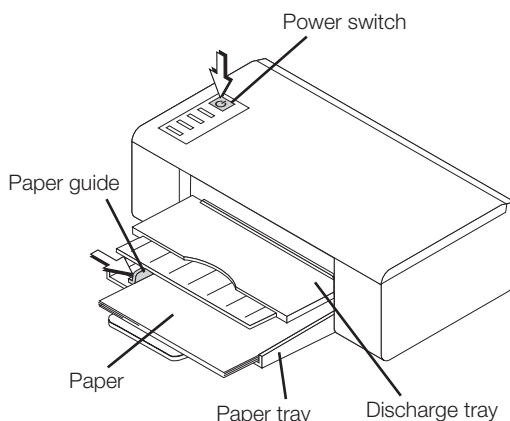
Appearance of printer is for illustration purposes.

2

Switch on the power.
Press the power switch. The power indicator lights.

This completes the preparation of the printer.
Press the On Board Print ⌨ button on the network board's control panel. One page worth of data is read and the printing operation starts.

Notice

• Depending on the printer, indicators, etc., may flash after the power is turned until the printer is prepared to print. In this case, see the printer's operating instructions and check that the printer is ready before starting the printing operation on the network board.
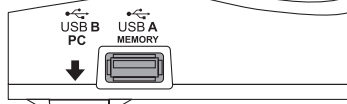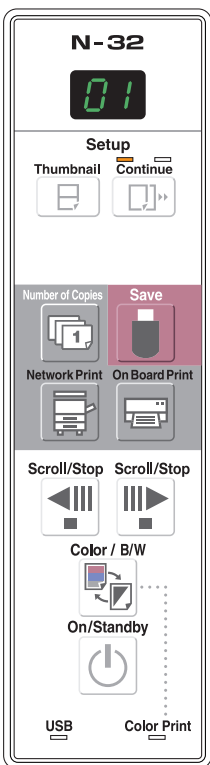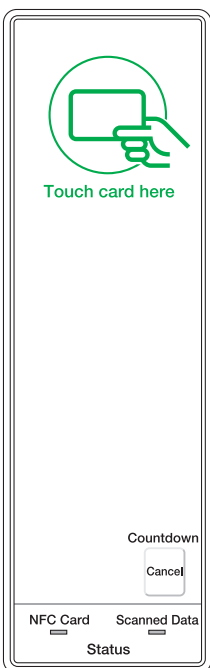
3

When finished printing...
Switch off the printer power and remove the paper.
Close the paper tray.

Caution

• Do not turn off the power or disconnect the USB cable during printing.

Preparing the Printer connected to a Network

• Printers available for the Network Print ⌨ button are FTP supported network printers. Some printers may not be supported. If you do not have a FTP supported network printer, use software "**Printer Server for PLUS Copyboard**" for printing. Please download this software from "https://www.plus-vision.com/en/support/download/software.html".
• To print out to the printer connected to a network, set "FTP Print" for "Board/Printer Setting" of "Network Setting". To do settings, refer to the separate "N-32 Series Network Manual".

Touch card here

Countdown

Cancel

NFC Card   Scanned Data

Status

N-32

01

Setup

Thumbnail   Continue

Number of Copies   **Save**

1

Network Print   On Board Print

Scroll/Stop   Scroll/Stop

Color / B/W

On/Standby

USB   Color Print

USB **B**   USB **A**
PC   MEMORY

Basic Printing Operation

Preparation:

Preparation: Check that the AC power plugs of the network board and printer are connected to wall power outlets.

**1** **Press the ON/Standby ⏻ button and switch on the power.**

On/Standby

⏻

Prepare the printer. (See the previous page.)

> **Note**
> - When turning on the power, wait about 5 seconds or more after the power plug has been connected before pressing the ON/Standby ⏻ button.
> - Press the ON/Standby ⏻ button to switch on the power. The LED of the display window will light.
> - Turn on the network board's power before turning on the printer's power.

2 **Press the Scroll/Stop ◀ or ▶ button and display the sheet surface you want to print.**
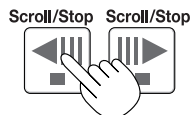
Scroll/Stop   Scroll/Stop
◀||| |||▶

When the Scroll/Stop ◀ button is pressed, the sheet surface scrolls one screen's worth to the left (to the next screen) and stops automatically.
When the Scroll/Stop ▶ button is pressed, the sheet surface scrolls one screen's worth to the right (to the previous screen) and stops automatically.
To stop during scrolling, press the Scroll/Stop ◀ or ▶ button again.
- There are four screen only on model N-324.

> **Note**
> - To display the next screen, press the Scroll/Stop button after scrolling stops. If the button is pressed during scrolling, scrolling stops immediately. When pressed again, the sheet is scrolled one screen's worth from the point at which it stopped.
> - The one-screen that is visible is printable position.
> - To fine-adjust the sheet surface position, with the sheet stopped, move the sheet slowly by hand. The sheet can be moved either to the left or to the right.
> - Printing of the portion located around the sheet surface might not be possible. Please see "Effective reading size" on Page E-5.

3 **Press the Number of Copies 🖶 button and select the number of copies.**

Number of Copies

02

Note

- "01" is selected when the power is turned on.
- Up to 10 copies can be specified and displayed on the display window.
- The number of copies increases by 1 each time the Number of Copies button is pressed, and " P " is displayed after "10" (this is used for test printing: see page E-30). When the button is pressed again, the display switches to "01". The number switches continuously if the button is held in.
- After setting the number of copies, proceed to step 4 within 1 minute. The number of copies is reset to "01" if no operation is performed within 1 minute.

---

4 **Press the Network Print 📇 or the On Board Print 🖨 button to print.**

Network Print   On Board Print

or

The reading operation is performed for a one-sheet portion (while the sheet is scrolled) and the printing operation is performed.

To change printing color (Color or B/W), perform thumbnail printing or continuous printing, make each setting (see next page) and press the appropriate Print button.

Notice

- To use the network printing function, connect the FTP supported printer to the same network where the network board is located, and make the printer settings on the network board.

Cancellation of the print operation in progress

When the ON/Standby ⏻ button is pressed, the reading of the sheet stops, and the partially read image data is printed. Wait until the sheet is expelled from the printer.

Note

- If the ON/Standby ⏻ button is pressed while the sheet surface is being read, printing is interrupted and only part of the image will be printed.
- The one-screen portion is reduced to A4 paper size and printed.
  For wide type network boards (model N-32W), the image is compressed about 75% in the horizontal direction. To print with the same proportions as the image on the sheet surface, see "CB Setup (Operating the Network Board's Buttons)" (page E-24).
- A flashing " $E\ 1$ " in the display window indicates a print error. See "Meaning of Error Messages" on Page E-27.
- When printing, a time stamp (date and time) is printed at the top right of the sheet. See "CB Setup (Operating the Network Board's Buttons)" on page E-24.

---

5 **When the network board is not going to be used, press the ON/Standby ⏻ button and switch off the power (standby mode).**

On/Standby

- Switch off the printer power.

Note

- When the Erase Reminder function is set to "Enable"
  When the ON/Standby ⏻ button is pressed, the display window and all the indicators flash simultaneously, the sheet automatically moves to the surface that is not yet erased and the power turns off. To set the Erase Reminder function to "Disable", see page E-26.
  * The Erase Reminder function may not work properly due to dirt on the sheet's adhesive sections or marker residue.
- If no button is operated within 30 minutes, the power turns off automatically (auto power off).
  When the power is turned off, scanned images stored in the unit's internal memory are cleared.
- The auto power off function is canceled when the network board and computer are connected by USB cable.

Moving the sheet surface manually

The sheet can be moved even when the power of the network board is switched off.
The sheet can be moved with your hand either in left or right. Please place your hand at the vertical center and move the sheet slowly.

Notice
- Quick movement can cause damage to the drive mechanism of the network board.

Note
- When the Erase Reminder function is set to "Enable", the Erase Reminder function may not operate properly if the sheet surface is moved by hand.
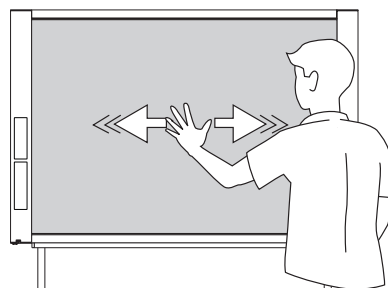
Printing Thumbnails

Multiple screens from the screen at the current position can be printed on a single page.
- The thumbnail printing function is for printing only. Storing with the Save 🔖 or Network 🖳 button is not possible.

1. Press the Thumbnail ⊟ button and select the page layout.

Thumbnail

Thumbnail
(Button on model N-324)

The mode switches in the following order each time the button is pressed.
Thumbnails of 2 screens → Cancel ...
(Thumbnails of 2 screens → Thumbnails of 4 screens (horizontally) → Thumbnails of 4 screens (vertically) → Cancel ... on model N-324)
- The thumbnails are arranged in order from the currently visible screen, counted to the right as screen 1 and screen 2 (screen 1, screen 2, screen 3, and screen 4 on model N-324).
  To start from a particular screen, press the Scroll/Stop ▲ or ▼ button to scroll to that screen.

Notice
- Note that if you have drawn on the sheet after moving it manually part way or after stopping scrolling in the middle, the amount of movement for one screen's worth changes, so the position of the scanned images will be substantially off.
- This product uses an endless sheet. Note that the position of the scanned images may go slightly off due to stretching of the sheet or slippage.

Display window status and page layout

Thumbnail selection	Movement of display window LEDs	Page layout
Thumbnails of 2 screens	⊏⊐ ↔ ⊏⊐	1 / 2
Thumbnails of 4 screens (arranged horizontally)	o → oo → 8o → 88	1 2 / 3 4
Thumbnails of 4 screens (arranged vertically)	o → 8 → 8o → 88	1 3 / 2 4
Cancel (1 screen)	⊏⊐	Cancel (1)

2. Press Network Print 🖨 or On Board Print 🖶 button to print.

When one of the print buttons is pressed, the specified number of screens is collected sequentially in the scanning memory and thumbnail processing is performed. Printing starts after this processing is completed.

Network Print   **or**   **On Board Print**

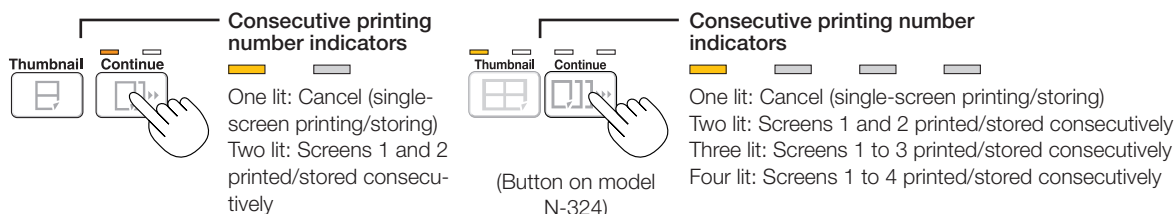When printing is finished, thumbnail printing is canceled.

Note
- To print thumbnails of 3 screens on model N-324, specify thumbnails of 4 screens (arranged horizontally or vertically).
- If there is a blank screen in the specified sequence, that screen is printed as a blank.
- If the ON/Standby button is pressed during scanning, scanning is interrupted and only the images that have been scanned are printed as thumbnails.

Consecutive Printing

Multiple screens from the screen at the current position can be printed (or stored).

1. Press the Continue ⟦⟧⟫ button and select the number of screens.

Consecutive printing number indicators

Thumbnail Continue

One lit: Cancel (single-screen printing/storing)
Two lit: Screens 1 and 2 printed/stored consecutively

(Button on model N-324)

Consecutive printing number indicators

Thumbnail Continue

One lit: Cancel (single-screen printing/storing)
Two lit: Screens 1 and 2 printed/stored consecutively
Three lit: Screens 1 to 3 printed/stored consecutively
Four lit: Screens 1 to 4 printed/stored consecutively

The mode switches in the following order each time the button is pressed.
Screens 1 and 2 → Cancel ...
(Screens 1 and 2 → Screens 1 to 3 → Screens 1 to 4 → Cancel ... on model N-324)
The number of consecutive screens is indicated by the number of consecutive printing number indicators that are lit yellow. ("CP" is displayed on the display window when consecutive printing is selected.)

* The screens are counted in order from the currently visible screen as screen 1 and screen 2 (screen 1, screen 2, screen 3, and screen 4 on model N-324). To start from a particular screen, press the Scroll/Stop ⬆ or ⬇ button to scroll to that screen.

Notice

- Note that if you have drawn on the sheet after moving it manually part way or after stopping scrolling in the middle, the amount of movement for one screen's worth changes, so the position of the scanned images will be substantially off.
- This product uses an endless sheet. Note that the position of the scanned images may go slightly off due to stretching of the sheet or slippage.

2. Press Network Print ▤ or On Board Print ▤ button to print.

When one of the print buttons is pressed, the screens are scanned and printed repeatedly until the specified number of screens has been scanned and printed.

Network Print   or   On Board Print
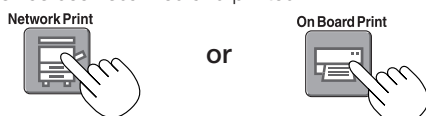
When printing is finished, consecutive printing is canceled.

Note

- If there is a blank screen in the specified sequence, that screen is printed as a blank.
- If the ON/Standby button is pressed during scanning, scanning is interrupted and only the images that have been scanned are printed.
- If printing of multiple copies has been specified (with the Number of Copies button), after scanning, the specified number of copies is printed, and this is repeated until the specified number of screens has been scanned and printed.

Changing Printing Color

Printing color can be selected between color and monochrome.

1. Press the Color / B/W ▤ button to select color or monochrome.

Color / B/W
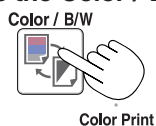
Color Print

The Color Print status indicator lights to indicate the following condition:
Lit green: Color print
Off: Monochrome print

Note

- If "Color Print" in CB Setup is set to "Invalid", a press of the Color / B/W button will select forcibly monochrome color. To select "Valid" for "Color Print" in CB Setup, see page E-24 in "CB Setup (Operating the Network Board's Buttons)".

Using USB Memory

The content of what has been drawn on the sheet surface of the network board can be saved in USB memory. Later, the saved image can be read into a personal computer and made into a document of the proceedings of the meeting, or affixed to a document.

The name of the folder on the USB memory device is "CB_Image". Image files are stored in this folder.

By factory setting upon purchase, image files are named "PV-xxx.pdf" (PDF files), where "xxx" refers to a 3-digit number starting from 001 (ex.: PV-001.pdf).

Notice

- No USB flash memory device is included. When purchasing a USB flash memory device, pay attention to the following:
  1. USB flash memory devices formatted in FAT16/FAT32 are supported. USB flash memory devices in NTFS format cannot be used.
  2. USB flash memory devices protected by a security function cannot be used.
  3. USB flash memory devices with a capacity of over 32 GB cannot be used.
  4. If the USB flash memory device is divided into multiple partitions, only one partition can be recognized with this unit.

USB Memory Storage Procedure

Preparation:

Check that the network board's AC power plug is connected to a wall power outlet.
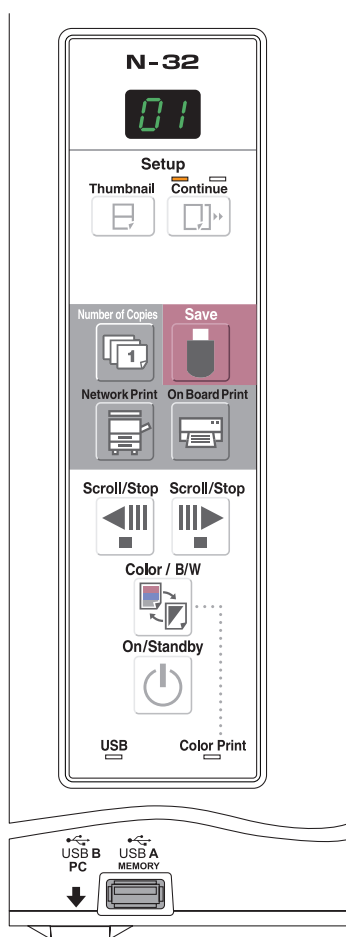
1 Press the ON/Standby ⏻ button and switch on the power.

On/Standby

Note

- When turning on the power, wait about 5 seconds or more after the power plug has been connected before pressing the ON/Standby button.
- Press the ON/Standby ⏻ button to switch on the power. The LED of the display window will light.

2 Insert the USB memory device into the USB A Memory •⇇ port of the network board.

Notice

- Check the side (polarity) of the USB memory device before inserting it. Forcing it in the reverse orientation will damage the USB A Memory port or USB memory device.
- Be careful not to bump into the USB memory device with hand or body while it is mounted. Doing so could damage the USB memory device or USB A Memory port.
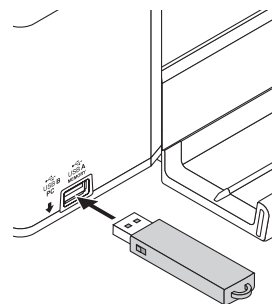
3 Press the Scroll/Stop ◀▮ or ▮▶ button to display the screen to be stored.

Scroll/Stop   Scroll/Stop

The procedure for displaying the sheet surface you want to store is the same as for printing.

See "Basic Printing Operation" on page E-16.

Note

- The one screen portion that is viewable will be saved in USB memory.
- Saving of the portion located around the sheet surface might not be possible. Please see "Effective reading size" on Page E-5.

N-32

01

Setup

Thumbnail   Continue

Number of Copies   Save

Network Print   On Board Print

Scroll/Stop   Scroll/Stop

Color / B/W

On/Standby

USB   Color Print

USB B   USB A
PC   MEMORY

4 Press the Save ▯ button to store.

Save

Display window

Flashing indicator "rotates" sequentially during USB memory storage operation.

- The reading operation is performed for a one-sheet portion (while the sheet is scrolled) and USB memory storage starts after the scrolling completes.
- Multiple screens can be stored consecutively. (See Page E-19, "Consecutive Printing".)
- If the images are in PDF format, all the images are combined into1 file. For other image formats, the images are stored in multiple files with -1, -2 added to the end of the sequential file names. (Example: PV-001-1.png, PV-001-2.png).

US

The (5 second) flashing "US" display indicates that the USB memory has not been inserted. Please insert the USB memory and then press the Save ▯ button.

FL

A (5 second) flashing "FL" display indicates that there is insufficient free capacity to permit storage in USB memory. Replace with a USB memory device having sufficient capacity.
See "Meaning of Error Messages" on Page E-27 for other error displays.

Note

- Depending on the USB memory, it may take time for recognition or it may take time for saving.
- When the ON/Standby ⏻ button is pressed during the reading operation, the reading operation will be discontinued and the partially read image data will be stored in the USB memory.
  To move the sheet surface, stop scrolling, then press the Scroll/Stop ◁▯ or ▯▷ button.
- The date and time of the saved file will reflect the network board time setting. See "Setting the Time" on Page E-13.
- When a certain amount of free capacity is not available in the USB memory, "FL" will be displayed when the Save ▯ button is pressed. Delete data, set the sheet surface back to the original status, then press the Save ▯ button again.
- When the network board and a computer are connected by USB cable, the data is stored in the main unit's internal memory.

5 Removing the USB memory

Check that the flashing rotation of the display window has changed to steady lighting and that the USB memory access indicator is not flashing, then pull the USB memory straight out. (Please see your USB memory manual for details.)
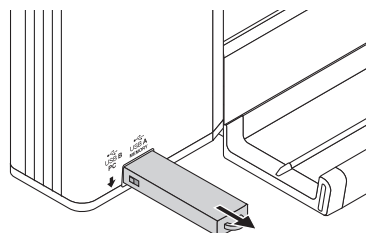
Notice

- Do not unplug the USB memory device during the USB memory storage operation (i.e., during the rotating, flashing display in the display window), or while the access indicator of the USB memory device is flashing because data will be destroyed.

6 When the network board is not going to be used, press the ON/Standby ⏻ button and switch off the power (standby mode).

On/Standby

Note

- "*USb*" letters appearing at one-second intervals in a moving display in the display window indicate that a USB memory device is mounted. Unplugging the USB memory device will switch off the power. (A function that serves as a reminder to unplug the USB memory device)
- When the network board and a computer are connected by USB cable, the auto power off function (which turns the power off automatically) is canceled.
- Scanned image files stored in the memory for computer storage are deleted when the ON/Standby ⏻ button is turned off.

Using the network board connected to a computer

When the network board and a computer are connected by USB cable, the network board is recognized as an external memory device (removable device). Below is the procedure for copying the "CBImage" file from this device onto the computer.

Images can be stored in JPEG (.jpg), PNG (.png) or PDF (.pdf) format, selectable in the network board settings ("CB Setup"). (See pages E-24.) The factory default is "PNG".

⚠ **CAUTION**	With this function, if the operation for disconnecting the USB connection between the network board and computer is performed or the network board's power is turned off, the image data in the network board's computer storage memory is deleted. Be sure to save important image data on the computer, etc.

Notice

- Only one screen's worth of data can be stored in the network board's memory for computer storage.
  When the network board's save operation is performed successively, previous data is overwritten.
- Do not store computer data in the network board's memory for computer storage.
- The memory for computer storage cannot be formatted from a computer.
- Do not disconnect the USB cable or access the network board while data is being saved after pressing the network board's Save 🔲 button. Doing so will cause the computer's operation to become unstable.
- Do not press operation buttons on the network board while the network board's memory for computer storage is being accessed from the computer. Doing so will result in increased time for response between the computer and network board, and operations may not be possible.
- When connected to a Macintosh computer, the warning message "The disk was not ejected properly." is displayed, but the data can be stored normally in the computer's memory.

1 **Turn on the network board's power and connect the PC dedicated USB port (type B) and computer using the USB cable.**
- Usually the standard driver is installed automatically and the network board is identified by the computer as a removable device.

USB cable included with network board

To USB port on computer (type A)

To network board's computer USB port (type B)
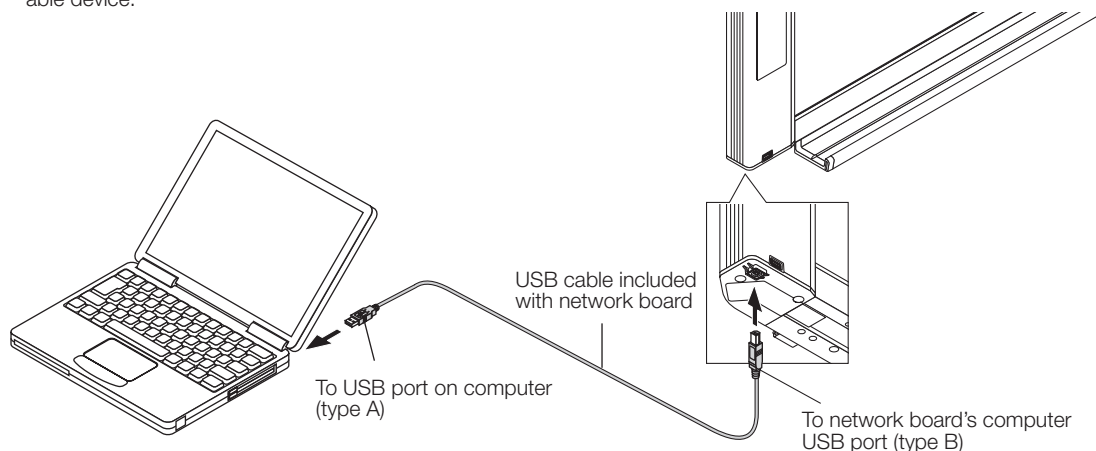
2 **Press the Save 🔲 button to store.**

Save

LEDs flash in circular motion during saving in memory for computer storage

Display window

- One sheet's worth of the screen is scanned (scrolled) and storing in the memory for computer storage starts once scrolling stops.
  The LEDs on the display window flash in a circular motion during saving in the memory for computer storage.
- When storing is performed using consecutive printing function (see page E-19), a consecutive storage number is added after "CBImage". (Example: For two screens – CBImage-1.png, CBImage-2.png)
- If the images are in PDF format, all the images are joined in 1 file.

3 Launch Explorer and open this unit's removable device.

(1) When the device icon for the network board (displayed as a removable disk) is double-clicked, the network board's internal memory opens.

The "CBImage" file is the scanned image file (".jpg", ".png" or ".pdf", according to setting).

• The "setup" folder contains the simple network settings file.

(2) Copy the "CBImage" file to [My Documents], etc., on the computer (".jpg", ".png" or ".pdf", according to setting).

Perform the USB disconnection operation on the computer before disconnecting the USB cable.

Note that the image data in the network board's computer storage memory is deleted if the operation for disconnecting the USB connection between the network board and computer is performed at this time.

Note

If both USB memory device and computer are connected to the network board, data is saved in memory for PC. Data is not saved in memory for USB.

• The "setup" folder will be created in memory for PC. This folder contains the "setting.ini" file recording the firmware version, MAC address, network settings.

For details, refer to the separate "N-32 Series Network Manual".

CB Setup (Operating the Network Board's Buttons)

There are two ways to make the device settings: using the network board's operation buttons to make the settings ("CB Setup") and making the settings via the web on the computer connected to a network.
The description here provides operation using the network board's buttons.
For using the network board connected to a network, refer to the separate "N-32 Series Network Manual".

Basic setting operation

- Check that the power is on (that the display window is lit).
- When in the "CB Setup" mode, the network board will return to the normal mode if no buttons are operated for 10 seconds, so operate the buttons within 10 seconds.
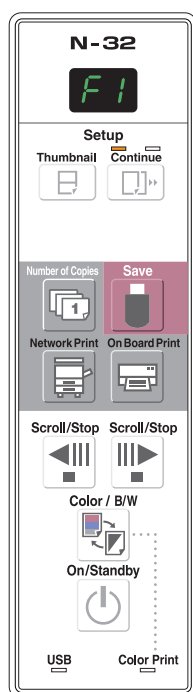
1 Switch to the CB Setup mode.
While pressing the ON/Standby ⏻ button, press the Number of Copies 🖺 button, then release the ON/Standby ⏻ button. The network board switches to the CB Setup mode.
"F1" appears on the display window.
"F1" is the time setting. For instructions on the time setting, see page E-13.

CB Setup mode

On/Standby   Number of Copies
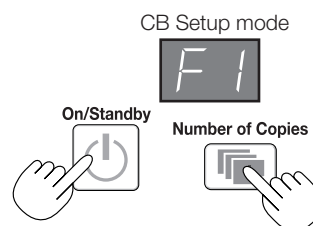
2 Select "the function number", then press the Save 🔒 button.
Press the Number of Copies 🖺 button (the function switches each time the button is pressed, returning to F1 after FF) to select the desired function number, then press the Save 🔒 button to set that function number.
For the item names of the function numbers, see the "Table of Function Numbers and Settings" on the following page.
- When the Save 🔒 button is pressed, the function number to be changed is set and a dot lights (ex.: "F6.").

F1➔F2 ➔•••••➔ FA

F6

Number of Copies
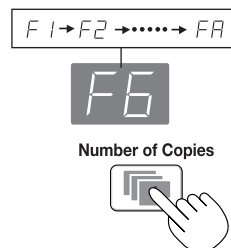
3 Select "the setting", then press the Save 🔒 button.
Press the Network Print 🖶 or On Board Print 🖶 button, check the setting, then press the Save 🔒 button to set.
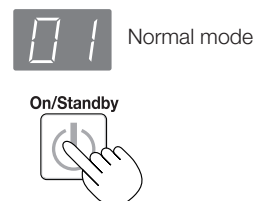Check the setting according to whether the USB and Printer Status indicators are lit or off. See the "Table of Function Numbers and Settings" on the following page.

F6. — Dot lit

Network Print   On Board Print   Save

USB   Color Print
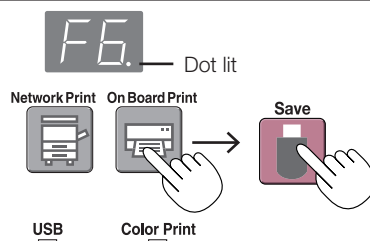
4 Exit the CB Setup mode.
Press the ON/Standby ⏻ button. The network board returns to the normal mode.
The display window returns to the number of copies display.

01   Normal mode

On/Standby

Table of Function Numbers and Settings

Function Number	Setting Item	Description	Setting	Status Indicators	
F 1	Time Setting	The date and time are stamped on the printing paper and recorded in the file information when files are stored.	Year, month, day, hours, minutes	Not lit	
F2	Paper Size	Selection of whether to print in A4 paper size or letter size. • This operates when the network board is connected to a printer.	A4	USB ■ (Lit)	Color Print ▢ (Off)
			Letter	USB ▢ (Off)	Color Print ■ (Lit)
F3	Aspect Ratio Setting	Selection of the image's vertical-to-horizontal ratio (aspect ratio) when printing. Equal Ratio: The image is printed with the same ratio as the network board's sheet surface. Compressed: The image is compressed in the horizontal direction to the ratio of A4 or letter size paper for printing (ex: circles become ellipses).	Compressed	USB ■ (Lit)	Color Print ▢ (Off)
			Equal Ratio	USB ▢ (Off)	Color Print ■ (Lit)
F4	Color Printing	If this is set to [Invalid], color printing is not possible. Valid: When this is set, color printing is possible. Invalid: When this is set, color printing is not possible.	Valid	USB ■ (Lit)	Color Print ▢ (Off)
			Invalid	USB ▢ (Off)	Color Print ■ (Lit)
F5	Resolution	Selection of the image file's resolution. Standard: The vertical/horizontal size of the scanned image is set to 1/2. The amount of data is 1/4 that of when "High Resolution" is selected. High Resolution: The image file has the same resolution as the scanned image (vertical/horizontal size of 1/1). The picture quality is better than when "Standard" is selected.	Standard	USB ■ (Lit)	Color Print ▢ (Off)
			High Resolution	USB ▢ (Off)	Color Print ■ (Lit)
F6	Graphics File Format	Selection of the format in which image files are saved. Scanned images are converted into JPEG (extension ".jpg"), PNG (extension ".png") or PDF (extension ".pdf") format.	JPEG	USB ■ (Lit)	Color Print ▢ (Off)
			PNG	USB ▢ (Off)	Color Print ■ (Lit)
			PDF	USB ■ (Lit)	Color Print ■ (Lit)
F7	Header/Footer	Setting of whether or not to output the header/footer information registered on the network board. "Off": The header/footer information is not output. "On": The header/footer information is output when printing and when saving image files. Note: • Headers and footers refer to the information at the top and bottom margins, respectively, of printed pages or images. Titles, company names or other characters or images can be inserted so that the same information is provided on all pages. • Header/footer information is registered on the network board via a network. For instructions on creating and registering headers and footers, refer to the separate "N-32 Series Network Manual". • Depending on the type of printer, the colors may differ from the actual graphic image.	Off	USB ■ (Lit)	Color Print ▢ (Off)
			On	USB ▢ (Off)	Color Print ■ (Lit)

Function Number	Setting Item	Description	Setting	Status Indicators	
F8	Erase Reminder	Setting of whether or not to notify the user that characters or diagrams drawn on the back side of the network board's sheet surface have not been erased. This is effective for confidential meetings, etc. Disable: The Erase Reminder function does not work. (Setting upon factory shipment) Enable: When the ON/Standby button is pressed to turn the power off, the display window on the network board's operation panel flashes and the network board automatically moves to the non-erased surface, after which the power turns off. • The Erase Reminder function may not work properly due to dirt on the sheet adhesive or marker traces.	Disable	USB ■ (Lit)	Color Print ▢ (Off)
			Enable	USB ▢ (Off)	Color Print ■ (Lit)
F9	Time Day Stamp Format	Selection of the format in which the date and time are displayed. Examples of displays: YYYY/M/D 2018/1/23 01:23 DD-MMM-YYYY 23-Jan-2018 01:23 MMM-DD-YYYY Jan-23-2018 01:23	YYYY/M/D	USB ■ (Lit)	Color Print ▢ (Off)
			DD-MMM-YYYY	USB ▢ (Off)	Color Print ■ (Lit)
			MMM-DD-YYYY	USB ■ (Lit)	Color Print ■ (Lit)
FF	Reset Device Settings	This restores the network board device settings at F2 to F9 to their defaults (settings upon factory shipment). (1) Select FF, then press the Save ▮ button. "FF." is displayed (with the dot lit). (2) Press the Save ▮ button again. The settings are reset.	—	—	—

Meaning of Error Messages

If any of the following flashing indications appear in the display window of the control panel, please check the matters described below.
Error messages flash for 5 seconds, then stop flashing, remaining lit.

```
N-32

E 1

Setup
```
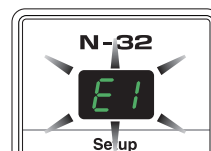
Network board (main unit) related errors

Error Display Number		Problem and Solution	
E1	Printer not connected No printing paper Printer problem	• Is the printer cable connected? • Is power being supplied to the printer? • When the printer uses an AC power adapter, is the cable disconnected somewhere?	• Connect the printer properly and switch on the printer power.
		• Has paper been set in the printer?	• Turn the power of the printer off and then on again, and load the printer with A4 or letter size paper.
		• Is the printer error indicator flashing (or lit)?	• Read the printer instruction manual.
E2	USB Memory not recognized	• Is the USB memory unformatted.	• This unit supports the FAT and FAT 32 formats. Perform the formatting with the personal computer.
		• Is a USB memory that is not supported by the network board being used?	• The file formats for USB memory devices that can be used on this network board are FAT and FAT32.
		• Is the USB memory device plugged in fully?	• Please check the operation with a personal computer.
		• Is the USB memory damaged?	—
E3	Memory storage problem	• An error occurred during memory storage.	• Please perform memory storage again. • Do not insert or remove the USB memory during processing.
E4	Reading problem	• There is a lighting fault of the reading light source, or a read signal error.	• Unplug the power plug from the power outlet and then plug it in again.
E5	System error	• There is a memory or internal fault.	• Unplug the power plug from the power outlet and then plug it in again.
E8	Security protection	• The operation is set to "Disable" in the security settings.	• Change the setting of the desired item to "Enable". (Refer to the separate "N-32 Series Network Manual".)
E9	Color printing prohibited	• Coloring printing is set to "Disable".	• Change the color printing setting to "Enable". (See pages E-25.)
U5	USB memory not connected	• USB memory device is not plugged into the main unit.	• Plug the USB memory device into the USB port.
FL	Memory is full	• There is no available space.	• Please delete unnecessary data using a personal computer.
EL	An unsupported printer is connected	• A printer that is not supported by the network board has been connected.	• Press the ON/Standby ⏻ button and switch off the power. When a record is required, switch on the power and save to USB memory.
EH	Time setting error	• An error has occurred when setting the time.	• Start over and set the proper date and time.
When the "USb" letter display is flowing...Warning that disconnection of USB memory has been forgotten U5 → 5b → b		• Did you press the ON/Standby ⏻ button while the USB memory device was plugged into the main unit?	• A USB memory device is plugged into the main unit. When the USB memory device is disconnected, the power will be switched off and the unit will enter the standby mode.

If the problem persists, please contact your nearby PLUS Corporation sales office, dealer, or store.

Network (main unit) related errors

Error Display Number		Problem and Solution	
L1	LAN cable disconnected	• No cable is connected to the LAN terminal.	• Connect the LAN cable properly.
L2	FTP/SMTP/LDAP server recognition error	• The account name or password in the FTP, SMTP or LDAP settings is wrong.	• Input the correct values. *1
L3	FTP/SMTP/LDAP server connection failure	• The FTP server's IP address is wrong. • The SMTP or LDAP server's address is wrong.	• Consult your network administrator, then make the proper settings. *1
L4	FTP server writing or SMPT server sending failure, or LDAP server personal authentication failure	• There is no FTP storage folder. • Failed to get e-mail address from the LDAP server.	• Consult your network administrator, then make the proper settings. *1
L5	IP address not set, other network error	• An error other than one indicated by L1 to L4 has occurred.	• Unplug the power cord from the power outlet then plug it back in.
LC	FTP printing error	• The FTP printing error has occurred.	• Check if the settings for FTP printing are correct. *1
Ld *2	Recipient address error	• Either the term of validity of the recipient address has expired or the domain is restricted.	• Consult your network administrator, then change the settings. *1
LE	Network settings reset error	• An error has occurred in resetting the network settings.	• The network reset number is wrong. Input the correct number and repeat the operation. *1
HE	Header/footer writing error	• This occurs when the size of the inserted image is too large.	• Adjust the image then repeat the operation.

*1: For instructions on adjusting the settings, see the separate "N-32 Series Network Manual".

*2: If "Ld" is displayed, an error beep is sounds simultaneously while the display flashes for 3 seconds along with the status indicator (red), then the display returns to "01".

Network-related errors indicate errors in access between the network board and network. In some cases they are related to the network system, so consult the network administrator. If the problem persists, it may be due to a network board malfunction. Contact your store of purchase.

Troubleshooting

Please check the following matters before making a request for servicing.

	Condition	Please Check
Network board Related	Pressing the ON/Standby ⏻ button does not switch on the power.	• Check whether the cable of the AC power adapter is disconnected from the DC connector of the Network board or the wall outlet. (Unplug the AC power cable from the outlet, wait several seconds and then plug it back into the outlet again.)
	Writing on the sheet is not erased with the eraser.	• Was a marker other than a dedicated marker used?
	Dark horizontal lines on a printed out hard copy or image on the screen are generated.	• Perform the scanning adjustment (white calibration). (See page E-31.)
	Parts of characters and lines are not displayed on printouts or in image data.	• Blurred characters and thin lines may not be displayed on printouts or in image data.
	Scanned copy (image) is dirty, Erase Reminder function is activated even when sheet is erased with the eraser	• Is there marker residue or substantial quantities of refuse on the sheet? (If the sheet is dirty, moisten a soft cloth with water, wring well, then wipe the sheet in a stroking manner.)
	When the network board and PC are connected, the PC does not recognize the network board	• Check whether the network board is in an operable condition, and whether the USB cable is connected properly. • Is the network board connected to the PC via a USB hub? (Connect the network board directly to the USB port of the PC.)
	The date is not updated.	• The network board's battery is dead. Contact your store of purchase.

* If the problem persists, please contact your nearby PLUS Corporation sales office, dealer, or store.

	Condition	Please Check
Printer Related	The network board's power turns on, but the printer's power does not.	• Check whether the printer's power plug (DC plug) is securely inserted. If the power still does not turn on, check whether the printer's AC power adapter side plug is unplugged from the AC power adapter. (For some printers it is directly mounted.)
	Printing is not possible when On Board Print 🖶 button is pressed.	• Check that the power cable of the printer and the printer cable are securely connected. • Check that the printer power indicator is lit. • Check whether the network board's status indicators and the printer's error indicator are lit. If an error is displayed on the network board's display window, see page E-27. (Please see the printer instruction manual for information about printer errors.)
	The paper feed is abnormal.	• Possible causes include damp paper, overly thin or thick paper, only one sheet of paper is set, and a curved setting of the paper. (Please see the instruction manual for your printer.)
	An altered color is printed, not the specified color.	• Please replace the print cartridges with new ones.
	• Print is very pale, there are white lines on it, or page is dirty. • Printed colors are very different from those of the markers that were used.	Is the print cartridge's nozzle partially choked? • Make a test print and check the conditions of the nozzle.

Also see the descriptions of error indications at "Network (main unit) related errors" on page E-28.

Condition		Please Check

Network related	Network communications not possible	• Is the LAN cable properly inserted?
		• The LAN cable could be defective.
		  Use a straight cable (10Base-T or 100Base-TX compatible) to connect the network board to the network.
		• Set the IP address and subnet mask at "Simple Network Settings (via USB)"*.
		  * Be sure to check with the network administrator before making the various settings.
		• Depending on the type or setting of DHCP server, some IP address cannot be acquired. If this happens, set the IP address manually.
		• If the SMTP server address or LDAP server address are not set to the IP address settings, transmission is not possible if the DNS server is not properly set. Check the DNS server settings.

	Checking MAC address	• See "Simple Network Settings (via USB)"*.
	Cannot log in.	• Is "Caps Lock" set on the computer's keyboard while inputting the user name and password?
	Printing is not possible when Network Print 🖶 button is pressed.	• Set the Printer Setting in the "Network Setting"*.

* For setting or checking for network, refer to the separate "N-32 Series Network Manual".

Test Printing (checking the printing status of inkjet printers)
1) With the network board's power on (with the display window lit), press the Number of Copies button repeatedly to display " P " on the display window.
2) Press the Color / B/W 🖶 button to select a printing color mode and press the On Board Print 🖶 button.
* Test printing starts.

Check the print
• Is the each color line printed uniformly?
• Are there missing dots, pale lines, lines with thinner ink than others, etc.?

Remedy
• If the nozzle is partially clogged, follow manufacturer's cleaning instruction.
• If the quality of the print does not improve even though the nozzle has been cleaned, wipe off the ink on the surface of the nozzle.

* Please see your printer manual for information about printing problems, printer maintenance, and details related to printing.

Updating the network board's internal program
See the PLUS website for instructions on updating the program and to download the latest program.

Scanning Adjustment (White Calibration)

If dark lines (horizontal black lines) on a printed out hard copy or image on the screen are generated, you need to optimally adjust the sensitivity of reading the sheet surface.
If the scanning image does not work due to generation of dark lines, update the program and perform the white calibration in the following steps.
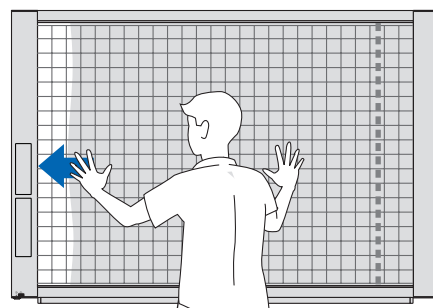
Preparation:

1. **Use the supplied white board cleaner or damp cloth to clean the 20 cm of width on the left edge of the network board.**

   Avoid cleaning the joint part of the sheets. Doing so may cause incorrect calibration.

20 cm or longer
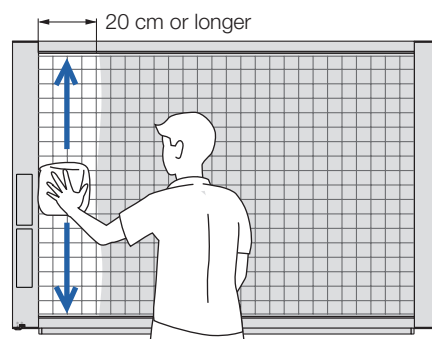
2. **Feed the sheet manually until the half width of cleaned sheet is covered by the frame of the network board.**

Operation

1. **Make sure that the network board's power is turned on.**

   (Display on the display window is "01".)

2. **Press the Scroll/Stop button (on the left) while pressing and holding the On/Standby button.**

   On/Standby   Scroll/Stop
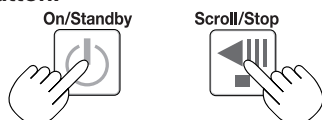
3. **Release the buttons.**

   The display "CAL" will be changed.

   * "CA" → "AL" → "L" in this order

4. **Press the Save button.**

   The display on the display window starts rotating and adjusting automatically.

   Save

5. **When the display on the display window is flashing "AA", press the On/Standby button.**

   The display on the display window returns to "01", indicating that the reading adjustment is completed.

   On/Standby

N-32
Setup
Thumbnail   Continue
Number of Copies   Save
Network Print   On Board Print
Scroll/Stop   Scroll/Stop
Color / B/W
On/Standby
USB   Color Print

E-31
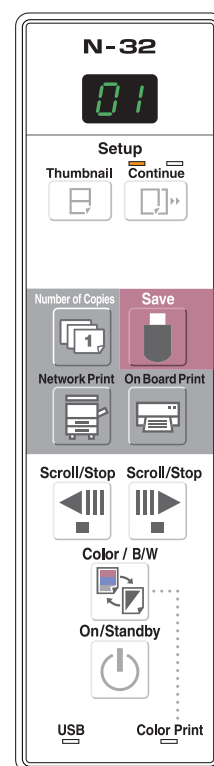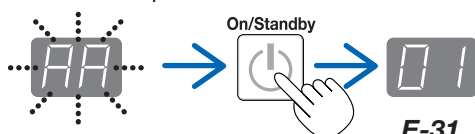
Specifications

BOARD TYPE (Model name)			Standard (N-32S)	Wide (N-32W)	4-screen (N-324)
Form	Installation method		Self-standing (T-shaped legs), or wall mounting		
	External dimensions (T-shaped legs[*1])		W1480 × D675 × H1947[*2] mm	W1980 × D675 × H1947[*2] mm	W1480 × D675 × H1947[*2] mm
	Main unit weight		20 kg[*3]	25 kg[*3]	25 kg[*3]
	T-shaped legs weight		12.5 kg		
BOARD	Panel Size		H910 × W1300 mm	H910 × W1800 mm	H910 × W1300 mm
	Effective reading size		H900 × W1280 mm	H900 × W1780 mm	H900 × W1280 mm
	Number of Pages		2		4
	Paging		Bi-directional, endless (Horizontal scrolling)		
	Drive method		Sheet movement		
	Reading method		CIS (Contact Image Sensor)		
	Reading illumination light source		RGB LED		
	Reading resolution		Main scanning direction (vertical sheet surface) 1.92 dots/mm (50 dpi or equivalent) Sub scanning direction (horizontal sheet surface) 1.92 dots/mm (50 dpi or equivalent)		
	Reading time		approx. 15 s	approx. 21 s	approx. 15 s
Interface	Board	File format	JPEG, PNG, PDF		
		Screen size	Standard type: 2458 × 1728 dots (fixed) Wide type: 3418 × 1728 dots (fixed)		
	External memory	Type	USB Flash Disk [*4]		
		Compatible FAT types	FAT 16, 32 [*7]		
		Interface	USB2.0		
	Network	LAN port	RJ-45 (10Base-T/100Base-TX)		
		Supported protocol	TCP/IP (FTP/FTPS, HTTP/HTTPS, DHCP, NetBIOS Name Service)		
	Printing	Printing resolution	300 dpi or equivalent		
		No. print colors	Eight colors or two color monochrome		
		Printer interface	Conforming to USB 2.0 standards		
		Supported network printer [*6]	FTP supported printer [*5]		
	IC card	Standard	Mifare FeliCa		
		Type	Mifare: Classic 1K / Classic 4K / Ultralight FeliCa: Lite-S / Lite / Standard		
		Dedicated IC card	MIFARE Standard 1K		
Added functions	Clock		Used for the timestamp and for file dating properties		
	PC connection		Images can be acquired and device settings made via USB (using a browser)		
Power supply	AC power adapter		Input : AC100–240V/50–60 Hz, Max 0.75 A Output : DC 12 V, 3.0 A		
	Power consumption		In standby: 3 W, During operation: 12 W (not including printer)		
Operating conditions	Temperature:		10–35°C		
	Humidity:		30–85% (No condensation)		
Miscellaneous	Ruled lines		50 mm cross-ruled squares		
	Miscellaneous		Whiteboard markers (black, red, blue, and green)		
Operating environment	Web browser		Windows: Internet Explorer 8.0 or later Macintosh: Safari 9 or later * Enable JavaScript.		

Remarks

*1: The height is adjustable at 1747, 1847 and 1947 mm.
*2: The value indicated for "H" (height) is the maximum height.
*3: Not including the weight of the printer.
*4: USB flash drive not included. The memory capacity corresponds to 32GB or less.
*5: Some printer may not be compatible.
*6: 6:SSLcommunications are not supported.
*7: EX-FAT and NTFS are not compatible.
• Please note that for quality improvement purposes, specifications and design are subject to change without prior notice.
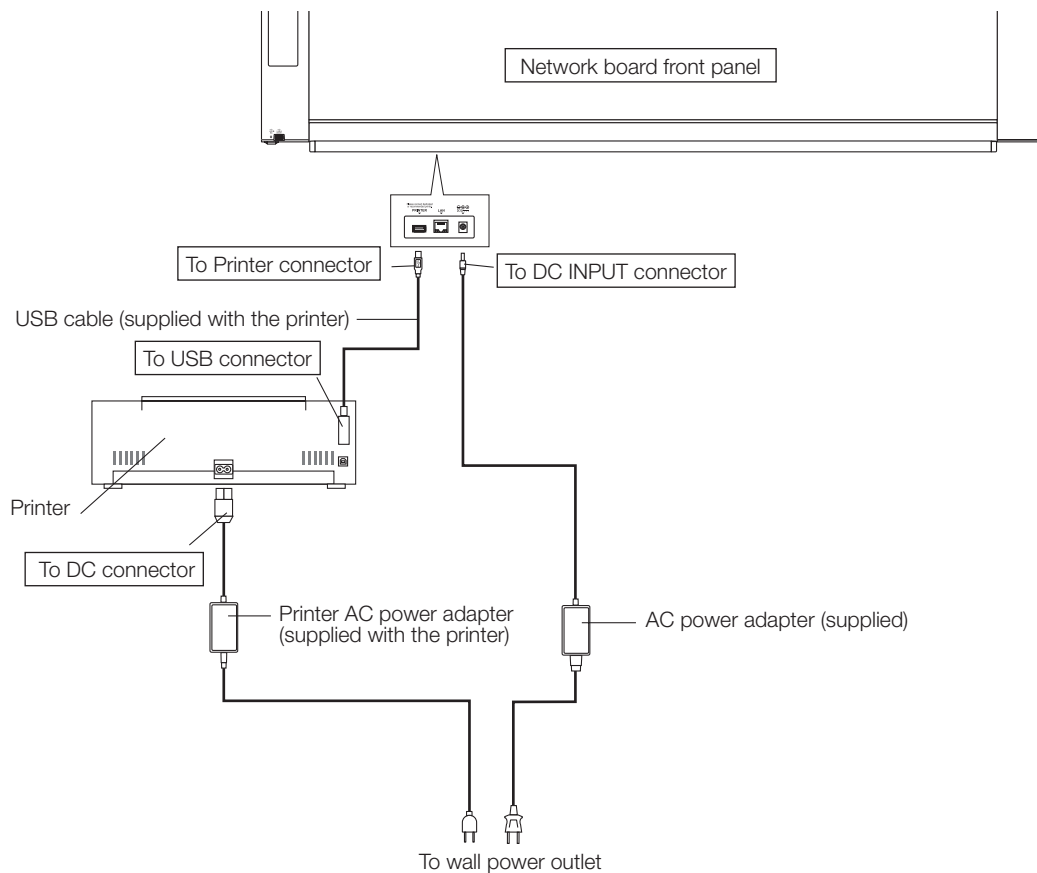
Appendix

Connections and Wiring Diagram

• The connections and wiring diagram below is included here for checking the connections.

[Network board and Printer Connections Diagram]

Network board front panel

To Printer connector

To DC INPUT connector

USB cable (supplied with the printer)

To USB connector

Printer

To DC connector

Printer AC power adapter (supplied with the printer)

AC power adapter (supplied)

To wall power outlet

* Appearance of printer is for illustration purposes.

Note

• The AC power adapters of accessories and printers that have been verified to be operation many differ from the ones shown on the connections diagram (they may be of the built-in or mounted-on type).

PLUS Corporation

ISO 14001 certification.