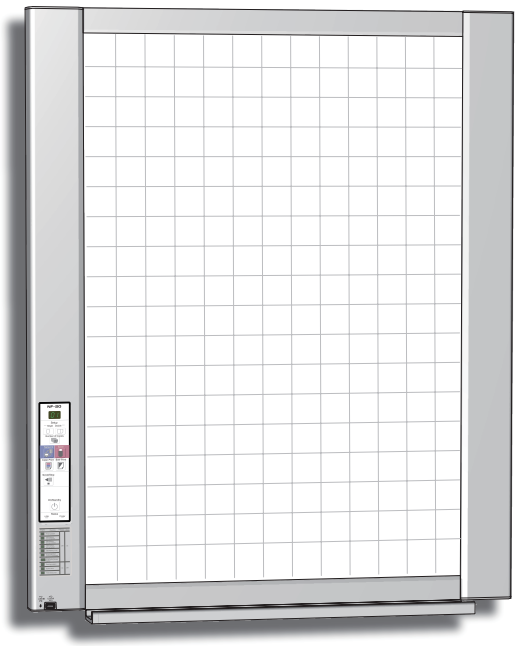
PLUS

NETWORK FLIPCHART

NF-20

User's Manual



Thank you very much for purchasing the "PLUS NETWORK FLIPCHART". 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 NF-20 model.

The descriptions and diagrams in this manual refer to the model NF-20.
*** When functions or operations are specific to a certain model of NETWORK FLIPCHART, the model name is specified.**

Cautions on using networks

About the network connection environment

- The required operating environment is subject to change without notice. Also, PLUS does not guarantee all operations.
- Even if all required operating environment conditions are met, it may happen that operations do not work properly or that some problems arise. Depending on the communications status, displays may be delayed and communication errors may occur.

Disclaimer

- PLUS will accept no responsibility whatsoever for any consequences of problems of communication impediments in connected devices due to the network functions.
- PLUS will accept no responsibility whatsoever for impediments incidental to usage of or the inability to use the network functions (loss of business profits, losses due to interruption of activities, etc.).
- PLUS will accept no responsibility whatsoever for malfunctions due to combinations with connected devices or the software used, nor for damages arising from hang-up, etc.

NOTE

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 template sheets or paper to the sheet.
Do not copy while film-type objects or papers are attach to the sheet. Doing so could result in malfunction.

Please use the AC power adapter and power cable enclosed with the product. Other power cables and AC power adapters besides those enclosed cannot be used.

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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) The use of a printer as the peripheral device of the PLUS NETWORK FLIPCHART is taken to be a prerequisite; therefore, operation will not be guaranteed when the printer is used with a direct connection to a personal computer.
(6) Manuals with incorrect collating or missing pages will be replaced.

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Meaning of the Terms Used in this Manual

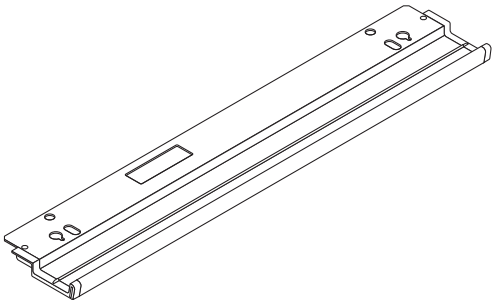
- Main Device (or Main Body): This refers to the NETWORK FLIPCHART.
- USB memory: refers to USB flash memory.
- USB memory storage: means the saving of sheet surface data using MEMORY (i.e., the USB port) of the operation panel.
- Memory for computer storage: indicates a temporary saving location of the image that has been read.
- "copy": Both "print" and "USB memory saving" mean to "copy."
- "Sheet surface": refer to the drawing portion.
- Single-sided / Double-sided: This refers to the scanning range of the sheet. Single-sided means scanning the side of the sheet currently visible while double-sided means scanning both the front and back sides of the sheet.
- "Scroll" or "move": indicates feeding of the sheet
- Memory for network storage: Memory used for network storage.
- Network: The communications network on which devices are interconnected in net fashion for communication (exchange of data) between the devices. For this NETWORK FLIPCHART, 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.

Package Contents

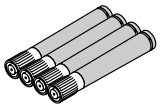
The package contents are as described below. Please check before use.

Main unit [1]

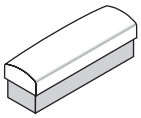
Pen tray [1]
Pen tray fixing screws (M4 × 20) (temporarily fastened on main unit)
NF-20: 2 screws
(See the Assembly and Setup Manual for assembly instructions.)



NETWORK FLIPCHART Accessories



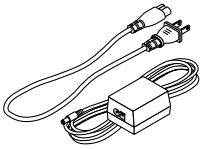
Dedicated markers
(One each of black, red, blue, and green)
Use these markers to draw on the sheet surface.



Dedicated eraser [1]
Use this to erase the drawing.

White board cleaner [1]
This is used for cleaning the seating surface. Refer to the section on cleaners on how to use this.

AC power adapter (with power cord) [1]
This is the power adapter for supplying power to the NETWORK FLIPCHART (See Page E-52).
(LTE36E-S2-3)

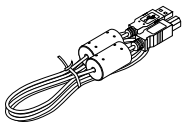


Notice

- The included AC power adapter and AC power cord are exclusively for use with this unit. Never use them with other products.

USB cable(3 m) (type A ↔ type B) [1]
[PLUS code 715258900]

Cable for connecting the main unit to a computer.



Notice

- Do not use this cable for connection to the printer (sold separately).

Documents

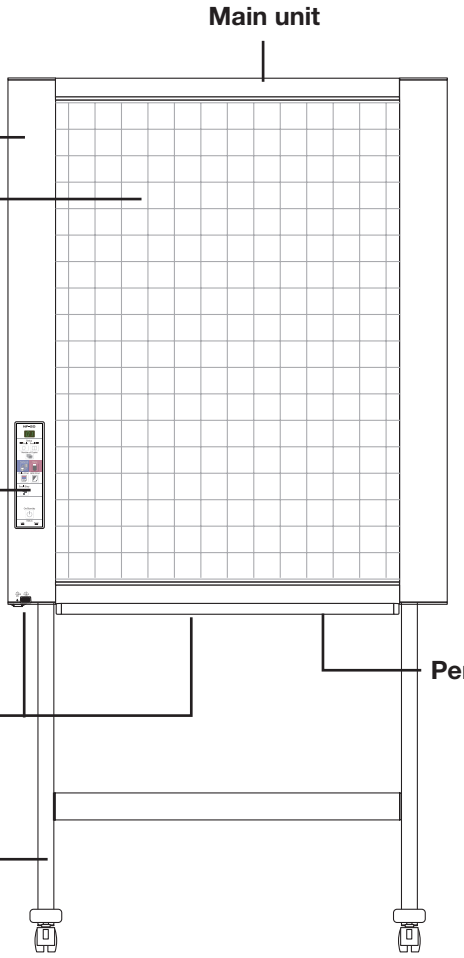
CD-ROM [1]
Includes the User's Manual (this manual) in PDF format.
The User's Manual contains instructions on using the NETWORK FLIPCHART.

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

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

Names of the Parts

Front

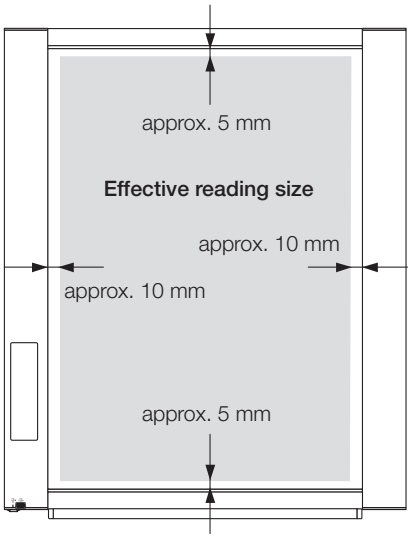


Sheet
Dedicated markers are used on the sheet to draw diagrams and to write.

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

Stand (sold separately)
This is a stand for supporting the NETWORK FLIPCHART. (See the Assembly and Setup Manual).

* This illustration does not show the connection cords.

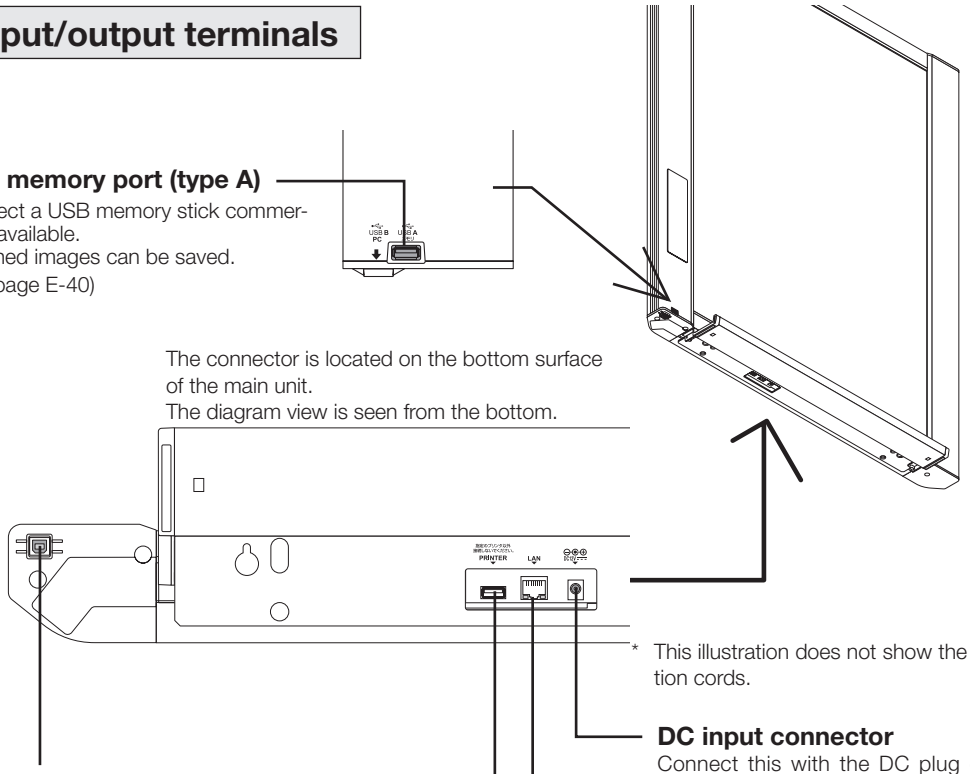


Effective Reading Size
The area that can be copied is the gray area of the diagram.

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 USB memory stick commercially available.
Scanned images can be saved.
(See page E-40)

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.

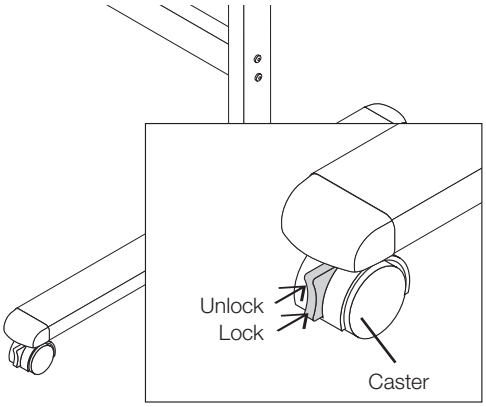
DC input connector
Connect this with the DC plug end of the AC power adapter. (See Page E-52.) (Only connect the supplied AC power adapter; nothing else.)

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

Printer connector (USB port Type A)
Connect this with the USB connector of the printer (See Page E-52).
(The printer connector is dedicated for use with a printer; use it only with a printer.)

Personal computer (PC) dedicated USB port (Type B)
Connect this with the USB port (type A) of the PC. This is used for simplified network settings of the main device. The scanned image can also be copied to the personal computer.
(See page E-17, E-38.)

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.



How to change the height and angle of the stand (sold separately)

These adjustments are required when installing the main device on a stand sold separately. The device can be set at a height of 1650 mm or 1850 mm and at an inclined angle of 0, 7 or 10 degrees.

⚠ 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) Disconnect the power plug from the power socket on the wall and disconnect all cables connected to the main body.

(2) Remove the securing knobs (two on the left and right)

(3) Remove the grommet (two on the left and right).

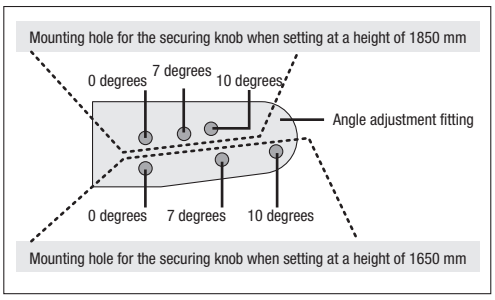
(4) Switch the mounting hole positions on the left and right of the main body.

Lift up the main body by about 1 cm to release it from the hook.

Hang the main body on the stand by mounting the holes (two on the left and right) of the main body fully onto the hooks on the stand.

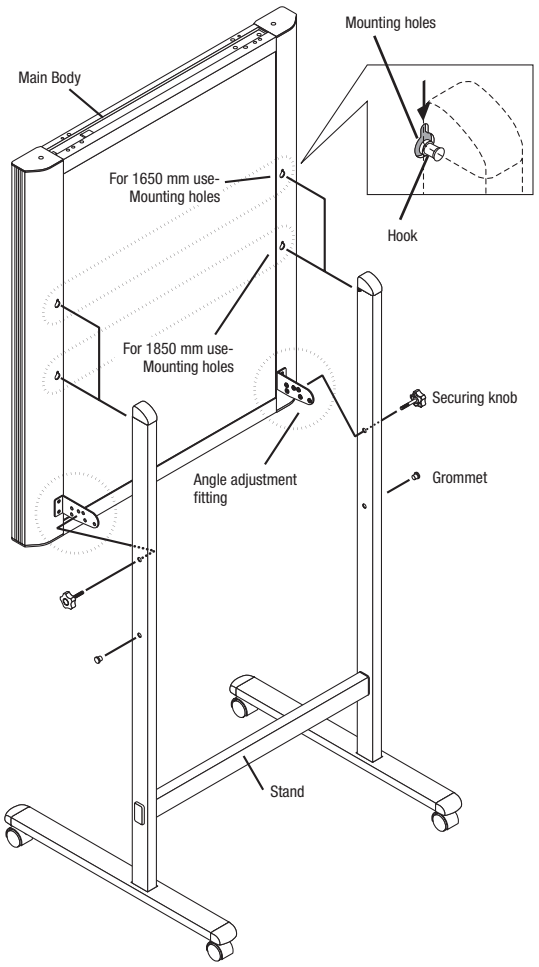
The height of the mounting hole at the top will be 1650 mm while the height of the mounting hole at the bottom will be 1850 mm.

(5) Fix and tighten the securing knobs to the screw holes of the two angle adjustment fittings on the left and right of the main body. At this point, the inclination angle of the copy board will change depending on the screw holes selected.



(6) Insert into the screw holes (two on the left and right) used for the securing knobs where the grommets are no longer used.

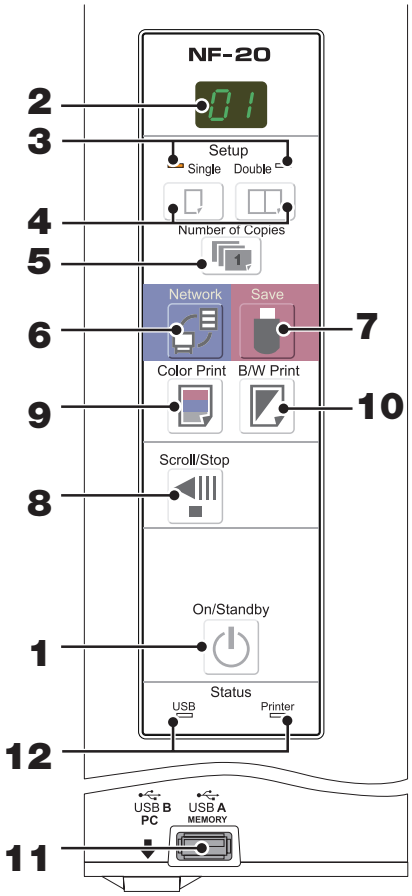
(7) Connect the various connection wires.



* This illustration does not show the connection cords.

Control Panel

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



1 ON/Standby (⏻) button

Turns the NETWORK FLIPCHART'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 Single-sided / double-sided indicator

The single-sided / double-sided setting condition is indicated by the status of the lamps (orange in color).

When the single-sided lamp is turned on: Single-sided scanning (currently visible face)

When the double-sided lamp is turned on: Double-sided scanning on the front and back

4 Single-sided / Double-sided button

This button sets up the scanning mode for either single-sided scanning (of the currently visible face) or simultaneous double-sided scanning.

When the double-sided button is pressed, double-sided scanning will be cancelled if other operating buttons are not pressed within the next minute and the device will then return to the single-sided scanning mode.

When the power supply is switched off, the device goes into the single-sided scanning mode.

5 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.

6 Network ( ) button

Move the sheet to scan one or both sides of the sheet and then store the scanned image in the storage location. The data is saved either on the NETWORK FLIPCHART or in a folder on the FTP server, as previously set.

7 Save ( ) button (USB memory storage)

Move the sheet to scan one or both sides of the sheet and then store the scanned image in the USB memory stick.

When connected to a computer by USB cable, the image is stored in the NETWORK FLIPCHART's internal memory.

8 Scroll/Stop ( ) button

Scrolls the sheet one screen portion left, then stops automatically. A press of this button while scrolling will stop the scrolling.

9 Color Print ( ) button

Move the sheet to scan one or both sides of the sheet and then print out the number of sheets shown in the display window in color.

10 B/W Print ( ) button

Move the sheet to scan one or both sides of the sheet and then print out the number of sheets shown in the display window in monochrome.

11 USB A Memory port (USB Type A)

Connect a USB memory stick commercially available.

12 Status

The connection status of the main body, USB memory, network or printer is indicated by the on / off status of the lamps.

When the function is working normally, the status lamp will light up in green. When there is an error, the status lamp will light up in red (see table below).

Check according to the error display in the display window.

See Page 47 for information on the errors and the error resolution methods.

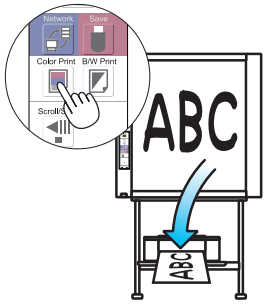
Display window	Meaning	USB indicator	Printer indicator
E1	Printer problem	Off	Lit red
EL	An unsupported printer is connected		
E2	USB Memory not recognized	Lit red	Off
E3	USB Memory storage problem		
US	USB memory not connected		
FL	Memory is full		
USb	Warning that disconnection of USB memory has been forgotten		
E4	Reading error	Flashing red	Flashing red
E5	System error		
EH	Time setting error		
E8	Security protection	Off	Off
E9	Color printed prohibited		
L1	LAN cable disconnected		
L2	FTP server recognition error		
L3	FTP server connection failure		
L4	FTP server writing failure		
L5	Network or other error		
LE	Network setting reset error		
HE	Header/footer writing error		

* The letters “USB” scroll on the display.

Functions of the NETWORK FLIPCHART

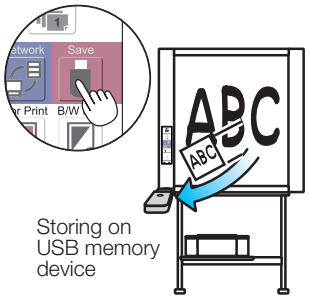
Basic Functions

① Printing



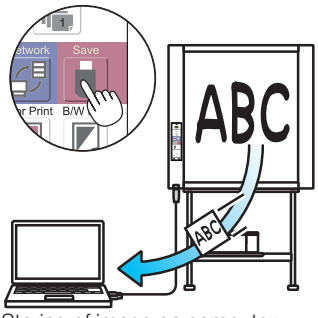
Output to paper

② Storing on USB memory devices



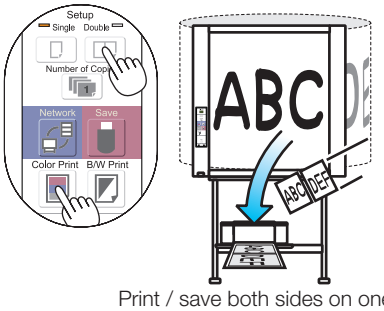
Storing on USB memory device

③ Capturing images on a computer



Storing of image on computer

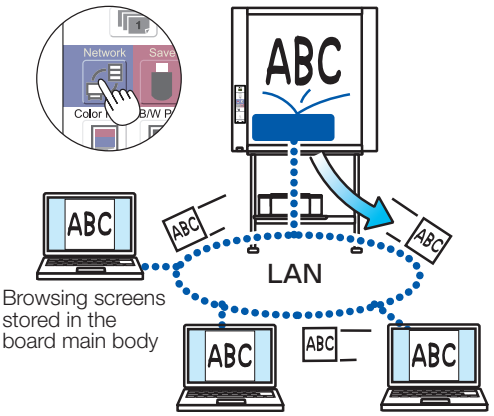
④ Full scan of both sides



Print / save both sides on one sheet together

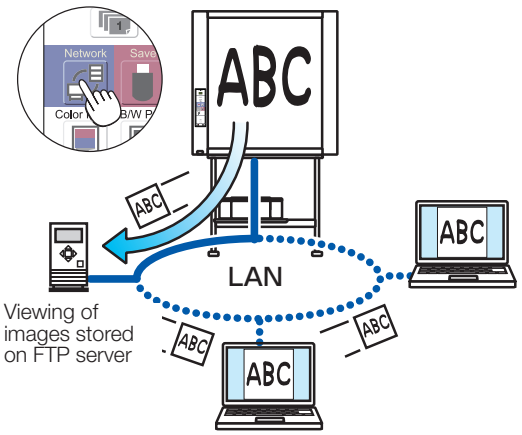
Network Functions

⑤ Browsing images stored in the main body via the network



Browsing screens stored in the board main body

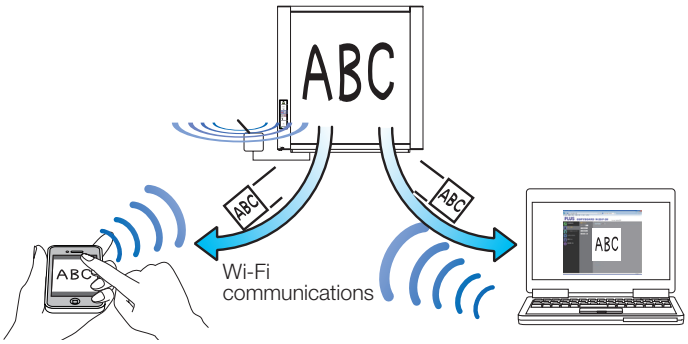
⑥ Viewing images stored on an FTP server via a network



Viewing of images stored on FTP server

Network remote control function

The NETWORK FLIPCHART can be controlled remotely from a smartphone or computer, and images on the NETWORK FLIPCHART's sheet surface can be stored on the smartphone or computer wirelessly.
For details, see "NETWORK FLIPCHART Wireless Operation Manual using "MTG Pocket" Application".



Operation Steps

The NETWORK FLIPCHART uses an image scanner to scan characters or diagrams drawn using special markers (four colors). When the Color Print or B/W Print button is pressed, the image on the screen is printed out to the printer. When a USB memory device or computer is connected, the image on the screen is saved as image data when the Save button is pressed. (For the memory for computer storage, one sheet's worth of data is saved, overwriting previously saved data.)
Furthermore, when network settings are made, image files can be saved on the NETWORK FLIPCHART or FTP server.

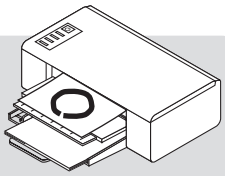
Preparation

- **Set up the newly purchased NETWORK FLIPCHART and connect a printer.**
  See a separate manual titled "Assembly and Setup Manual."
- **Plug the AC power plugs of the NETWORK FLIPCHART and printer into wall power outlets.**
- **After purchase, be sure to set the NETWORK FLIPCHART's clock. If not, the proper date and time will not be displayed on prints or in image files. See page E-12.**

Draw on the Sheet Surface

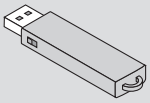
Please draw with the dedicated markers that have been supplied.
If anything other than the dedicated markers or eraser are used, it may be impossible to erase the sheet or the sheet could get dirty.
To move the sheet manually, see "Moving the sheet surface manually" on page E-32.

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 FLIPCHART 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 color printing or monochrome printing button. Move the sheet and commence scanning and copying*.
See "Printing" on Page E-44.

Saving to USB Memory



(1) Press the ON/Standby button of the NETWORK FLIPCHART to switch on the power.
(2) Insert USB memory into the Memory port (USB A port) of the NETWORK FLIPCHART.
(3) Press the Save button.
See "Using USB Memory" on Page E-40.

Saving on a computer

(1) Press the NETWORK FLIPCHART's ON/Standby button to turn the power on.
(2) Connect the NETWORK FLIPCHART to the computer using the PC dedicated USB port.
(3) Press the Save ( ) button.
(4) The image is saved on the computer.

Using a network (via LAN)

(1) Check that the NETWORK FLIPCHART is connected to a LAN port on the network.
(2) Press the NETWORK FLIPCHART's ON/Standby button to turn on the power.
(3) Press the Network button.
See "Using the NETWORK FLIPCHART Connected to a Network" on page E-30.

When Not Using the NETWORK FLIPCHART

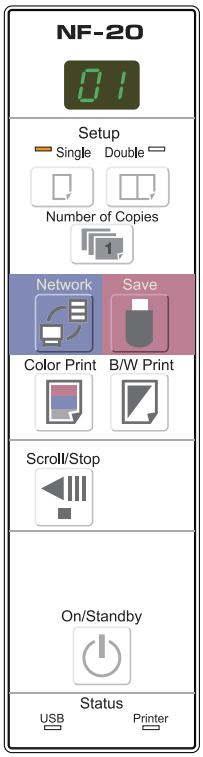
(1) By all means, cleanly erase the drawing from the sheet surface with the dedicated eraser. (Leaving the drawing for a long period will make it harder to erase.)
(2) Press the ON/Standby button of the NETWORK FLIPCHART and switch off the power (standby mode).
The power cannot be switched off while 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.
- 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. The data in the memory for network storage is not deleted.

Setting the Time

The date and time are stamped on the printing paper and recorded in the file information when files are stored on the NETWORK FLIPCHART and FTP server, so set the NETWORK FLIPCHART's time correctly.
The time can also be set from a computer via a network (when connected to a LAN). (See page E-22.)



Description of Operations

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 Color Print or B/W Print button is pressed once, the setting can be made.
Use the Color Print (Increase) and B/W Print (Decrease) buttons to set.

4 Press the Save button to enter the setting.
The NETWORK FLIPCHART 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, 2013

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

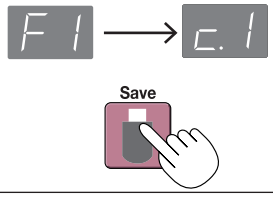
Normal mode

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.

"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.

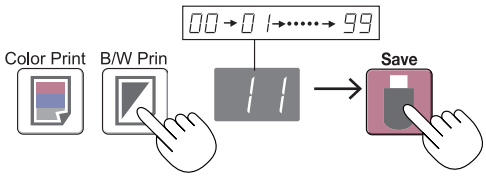


4 **Press the Save button to move to the last digits of the year**

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.

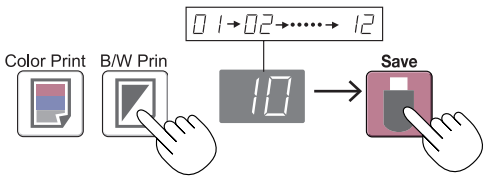
5 **Use the Color Print (Increase) and B/W Print (Decrease) buttons to select “13” (the last 2 digits of the year), then press the Save button to enter.**

The display switches to “c3” (setting of month).



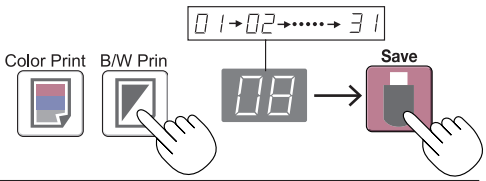
6 **Use the Color Print (Increase) and B/W Print (Decrease) buttons to select “10” (the month), then press the Save button to enter.**

The display switches to “c4” (setting of day).



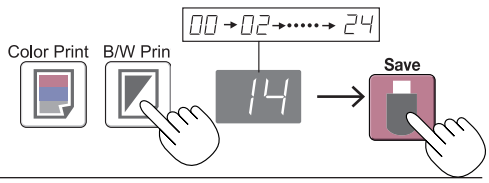
7 **Use the Color Print (Increase) and B/W Print (Decrease) buttons to select “08” (the day), then press the Save button to enter.**

The display switches to “c5” (setting of hours).



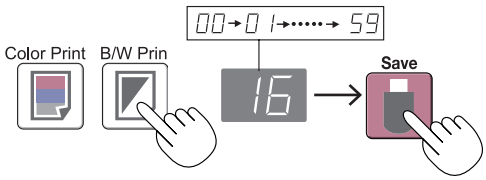
8 **Use the Color Print (Increase) and B/W Print (Decrease) buttons to select “14” (the hours), then press the Save button to enter.**

The display switches to “c6” (setting of minutes).



9 **Use the Color Print (Increase) and B/W Print (Decrease) buttons to select “16” (the minutes), then press the Save button to enter.**

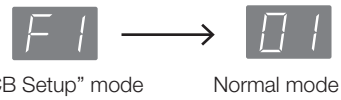
The display switches to “F1” (function setting).



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

- The NETWORK FLIPCHART also returns to the normal mode if you just wait 10 seconds.

This completes the time setting.



“CB Setup” mode Normal mode

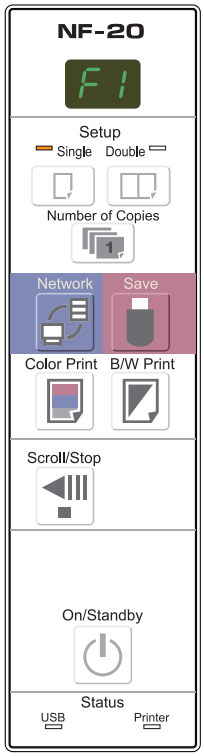
CB Setup and Network Setting Procedure

There are three ways to make the device settings: using the NETWORK FLIPCHART's operation buttons to make the settings ("CB Setup"), making the settings using a USB connection (simple network settings, and making the settings via LAN (detailed settings: "CB Setup" and "Network Setting".

CB Setup (operating the NETWORK FLIPCHART's buttons)

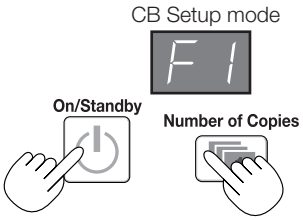
Basic setting operation

- Check that the power is on (that the display window is lit).
- When in the "CB Setup" mode, the NETWORK FLIPCHART 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.

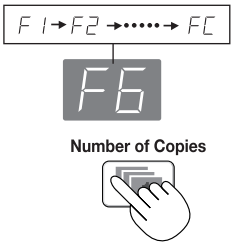
While pressing the ON/Standby button, press the Number of Copies button, then release the ON/Standby button. The NETWORK FLIPCHART switches to the CB Setup mode.
"F1" appears on the display window.
"F1" is the time setting. For instructions on the time setting, see page E-12.



2 Select "the function number", then press the Save button.

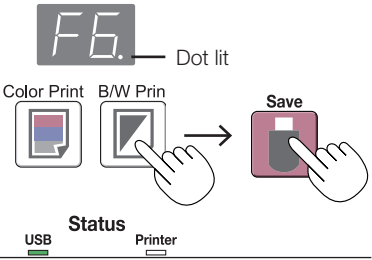
Press the Number of Copies button (the function switches each time the button is pressed, returning to F1 after FC) to select the desired function number, then press the Save button to set that function number.
For the item names of the function numbers, see the "Table of Function Numbers and Settings" on the following page.

- When the Save button is pressed, the function number to be changed is set and a dot lights (ex.: "F6.").



3 Select "the setting", then press the Save button.

Press the Color Print or B/W 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.



4 Exit the CB Setup mode.

Press the ON/Standby button. The NETWORK FLIPCHART returns to the normal mode.
The display window returns to the number of copies display.

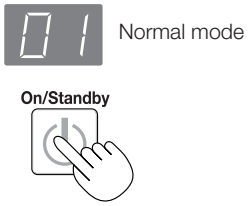


Table of Function Numbers and Settings

Function Number	Setting Item	Description	Setting	Status Indicators	
F1	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 FLIPCHART is connected to a printer.	A4*	USB ■ (Lit)	Printer ▭ (Off)
			Letter	USB ▭ (Off)	Printer ■ (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 FLIPCHART'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)	Printer ▭ (Off)
			Equal Ratio*	USB ▭ (Off)	Printer ■ (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)	Printer ▭ (Off)
			Invalid	USB ▭ (Off)	Printer ■ (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)	Printer ▭ (Off)
			High Resolution*	USB ▭ (Off)	Printer ■ (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)	Printer ▭ (Off)
			PNG*	USB ▭ (Off)	Printer ■ (Lit)
			PDF	USB ■ (Lit)	Printer ■ (Lit)
F7	Header/Footer	Setting of whether or not to output the header/footer information registered on the NETWORK FLIPCHART. "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. • For instructions on creating and registering headers and footers, see "Creating and Registering Headers and Footers" (page E-29). • Depending on the type of printer, the colors may differ from the actual graphic image.	Off*	USB ■ (Lit)	Printer ▭ (Off)
			On	USB ▭ (Off)	Printer ■ (Lit)

continued on next page

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 FLIPCHART'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 FLIPCHART's operation panel flashes and the NETWORK FLIPCHART 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)	Printer ▭ (Off)
			Enable	USB ▭ (Off)	Printer ■ (Lit)
F9	Time Day Stamp Format	Selection of the format in which the date and time are displayed. Examples of displays: YYYY/M/D 2011/1/23 01:23 DD-MMM-YYYY 23-Jan-2011 01:23 MMM-DD-YYYY Jan-23-2011 01:23	YYYY/M/D*	USB ■ (Lit)	Printer ▭ (Off)
			DD-MMM-YYYY	USB ▭ (Off)	Printer ■ (Lit)
			MMM-DD-YYYY	USB ■ (Lit)	Printer ■ (Lit)
FA	Reset Device Settings	This restores the NETWORK FLIPCHART device settings at F2 to F9 to their defaults (settings upon factory shipment). The settings marked " * " are the defaults. (1) Select FA, then press the Save button. "FA." is displayed (with the dot lit). (2) Press the Save button again. The settings are reset.	—	—	—
FC	Network Enabled mode	Selection of the network enabled mode. Group: Setting for storing data on the NETWORK FLIPCHART or FTP server Public: Setting for storing just single panel of data on the NETWORK FLIPCHART one at a time and acquiring it via a browser or smartphone application. * After the selection is made, the system reboots when the Save button is pressed.	Group*	USB ■ (Lit)	Printer ▭ (Off)
			Public	USB ▭ (Off)	Printer ■ (Lit)

Simple Network Settings (via USB)

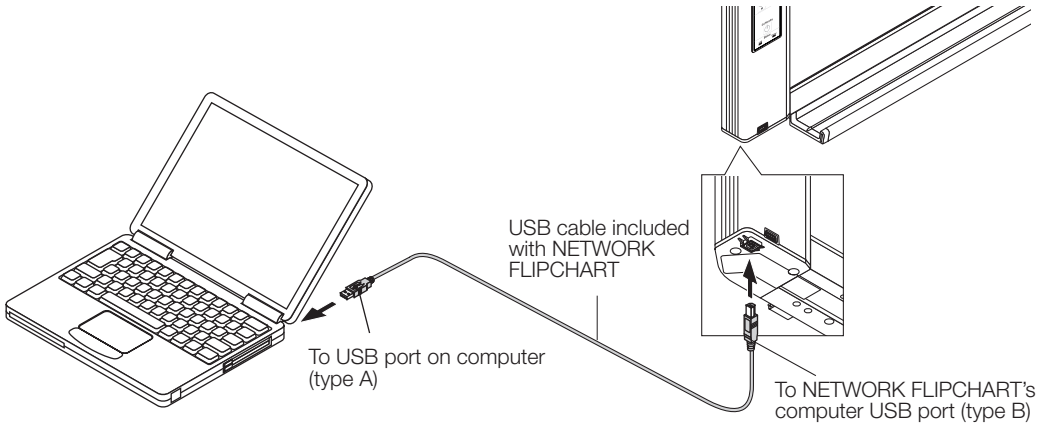
Upon purchase (by default), the NETWORK FLIPCHART's IP address and subnet mask are not yet set. When first connecting the NETWORK FLIPCHART to a network to use it, use the simple network settings to set the NETWORK FLIPCHART's IP address on the network following the procedure below.

Notice

- When making network settings, following the instructions of the network administrator.

1 Turn on the NETWORK FLIPCHART's power and connect the NETWORK FLIPCHART's computer USB port for (type B) to the computer using a USB cable.

- Normally, on Windows XP/Windows Vista/Windows 7, the standard driver is installed automatically and the NETWORK FLIPCHART is recognized by the computer as a removable device.



2 Open "My Computer", and in this open the NETWORK FLIPCHART (removable device).

1 Double-click the "My Computer" (or "Computer") icon to open.
2 Double-click the NETWORK FLIPCHART (a device displayed as a removable disk) to open the NETWORK FLIPCHART's computer storage memory.
- To check that the NETWORK FLIPCHART is operating as a device, right-click "My Computer" (or "Computer") to display the menu, then check that "PLUS NETWORK FLIPCHART USB Device" is displayed as the disk drive name at "Management" → "Device Manager" for Windows 7 ("Properties" → "Device Manager" for Windows XP).

3 Use a program on the computer (Notepad, etc.) to open the "setting.ini" file in the "setup" folder.

1 Double-click the "setup" folder to open it.
2 Open the "setting.ini" file (text format) located in this folder using Notepad or another program on the computer and directly overwrite the contents of the settings file.
- The only characters that can be input are numbers and periods.
  Do not insert any spaces. If so, the file will be identified as corrupt when the NETWORK FLIPCHART is started and the settings will be reset to the defaults.

continued on next page

Contents upon purchase and when network settings are reset

IP Address=* ..... Input the IP address (fixed).
Subnet Mask=* ..... Input the subnet mask.
Default Gateway=* ..... Input the default gateway if necessary.

Item	Item name	Setting	Default
IP address	IP Address	Any value	Blank
Subnet mask	Subnet Mask	Any value	Blank
Default gateway	Default Gateway	Any value	Blank

4 Save the “setting.ini” settings file, overwriting the previous file.

Save to location: “setup” folder on NETWORK FLIPCHART (removable disk)
File name: setting.ini

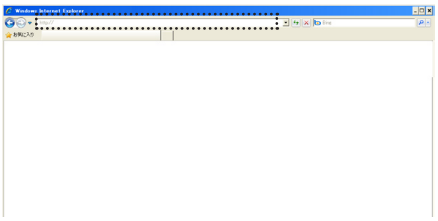
- We recommend making a note of changed settings for future reference.

Once overwriting is completed, the NETWORK FLIPCHART reboots automatically.

Perform the USB disconnection procedure on the computer (see step 3 on page E-43), then disconnect the USB cable.

5 Check the connection.

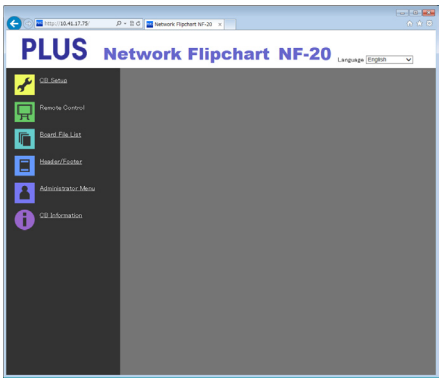
1 Connect a network device such as a switching hub to the main device by connecting it to the LAN port on the main device using a LAN cable commercially available.
2 Launch a web browser (ex.: Internet Explorer) on a computer connected to network.
3 In the address field, input “http://” followed by the IP address that was set, then press the [Enter] key.
If the NETWORK FLIPCHART’s top screen opens, the NETWORK FLIPCHART has been correctly connected to network.



If the NETWORK FLIPCHART’s top screen does not open

This could be due to one of the following:

- Have you made a mistake inputting the IP address that was set?
- Is the NETWORK FLIPCHART’s LAN terminal properly connected to a LAN port on the network?
- Is the IP address that was set being used by another device?
- If multiple units of this NETWORK FLIPCHART are connected, are they connected to the network with the same IP address?
- Is the IP address that was set within the automatic acquisition range of the DHCP of the router, etc.?
- When using a proxy server, add the NETWORK FLIPCHART’s IP address to the “Exceptions” in the proxy’s settings to set so that the proxy is not used.



Making Detailed Settings (via LAN)

Use this procedure to make the NETWORK FLIPCHART device settings (“CB Setup”), network settings, etc., with the NETWORK FLIPCHART connected to a local area network (hereafter referred to as “LAN” or “the network”) using a computer’s web browser.

Access authority is required to make the detailed settings. There are three levels of authority – “administrator authority”, “file list browsing authority” and “no authority”, and the selectable menu items (some setting items) are restricted accordingly. Register the administrator and users at “User Setting” on page E-25.

Table of Menu Items and Access Authority Levels

Menu Item	Some Setting Items	Administrator Authority	File List Browsing Authority	No Authority
CB Setup		○	○	○
Board File List	Preview and Download	○	○	—
	Delete	○	—*	—
Header/Footer		○	○	○
Administrator Menu	Network Setting	○	—	—
	User Setting	○	—	—
	Security Setting	○	—	—
	Disk management Setting	○	—	—
CB Information		○	○	○

○ mark: Accessible : — mark: Not accessible

* When the “Delete User Image Data” security setting is set to “Valid”, deleting is possible with file list browsing authority.

Notice

- When connecting the NETWORK FLIPCHART to the network, be sure to consult the network administrator before making the settings.

Note

- Depending on the network being used, the display speed and button response may be slow and operations may not be performed. If this happens, consult your network administrator. Also, the NETWORK FLIPCHART may not respond if buttons are operated successively. In this case, wait awhile then operate again. If there is no response after a while, turn off the NETWORK FLIPCHART’s power, then turn the power back on.
- If the top screen does not display with a web browser, press the [Ctrl] + [F5] keys to refresh the web browser’s screen.
- The NETWORK FLIPCHART uses JavaScript and cookies. Set the web browser so that these functions will operate.
- The NETWORK FLIPCHART performs automatic page reading (redirecting). Set the web browser so that this function will operate.

Basic Setting Operations

Here we explain how to display and close the settings screens, using the Internet Explorer web browser as an example.

Preparations:

1. Use a LAN cable to connect the NETWORK FLIPCHART’s LAN terminal to the LAN port on the switching hub.
2. Turn on the NETWORK FLIPCHART’s power.

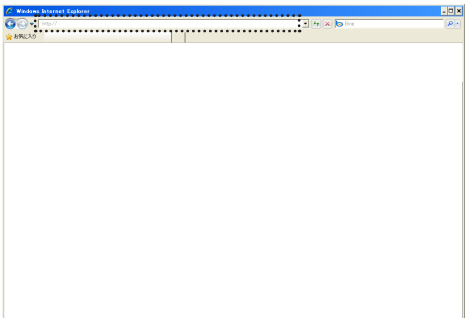
Launch the web browser on the computer connected to the network.

“Page cannot be displayed” may in some cases appear, but simply continue to the next step.

continued on next page

2 Input the NETWORK FLIPCHART's IP address.

In the web browser's URL field, input "http://" followed by the NETWORK FLIPCHART's IP address, then press the [Enter] key.
When the NETWORK FLIPCHART is connected, the top screen appears.



Connecting the NETWORK FLIPCHART to the network upon purchase

Upon purchase, the NETWORK FLIPCHART's IP address and subnet mask are not yet set. Be sure to check the section "Simple Network Settings (via USB)" (see page E-17) and set the IP address, etc.

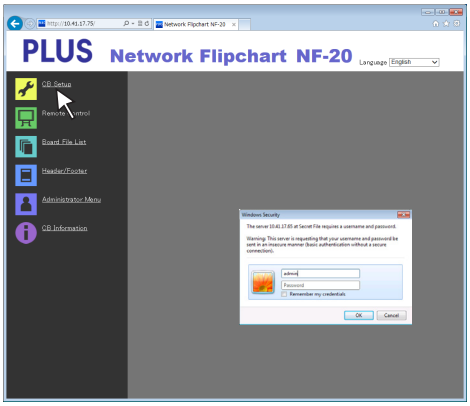
3 From the menu, click the desired setting item.

When setting items for which verification are required are clicked, the user verification screen is displayed.
Input the user name and password, then click the [OK] button.

- No password is set upon purchase.
  For the user name, input "admin", then click the [OK] button.
- At the user verification screen, the administrator's user name and administrator's password can also be used for verification.

Once verification is validated, the desired page is displayed.
See the respective pages in this manual for explanations.

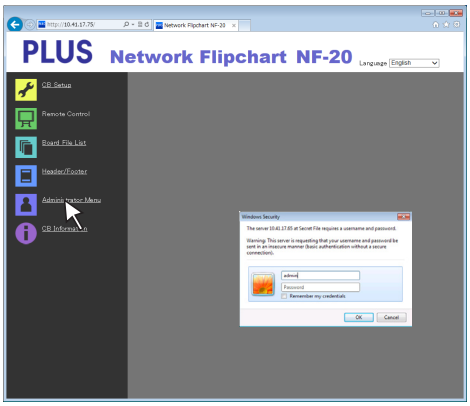
CB Setup (page E-22)
Board File List (page E-33)
Header/Footer (page E-23)
Administrator Menu
CB Information (page E-27)



Click "Administrator Menu" to change the settings below.
The menu can be accessed with administrator authority.

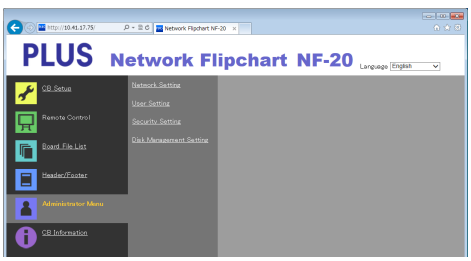
Network Setting (page E-24)
User Setting (page E-25)
Security Setting (page E-26)
Disk management Setting (page E-27)

1. Click "Administrator Menu".
   The administrator verification screen appears.
2. Input the administrator's user name and administrator's password, then click the [OK] button.
   - No password is set upon purchase.
     For the user name, input "admin", then click the [OK] button.
   Once verification is validated, the administrator authority menu is displayed.
   Click the desired menu item to display the settings page.



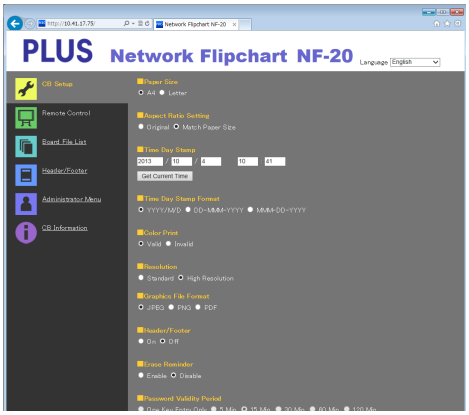
Note

- The user name and password are case sensitive. Be sure to input them properly.



4 Make the changes or settings.

The screen at the right is an example of what may be displayed, here showing the “CB Setup” page.



Selecting and inputting

Radio buttons

One of the selection items can be selected. When ○ is clicked, it switches to ◉.

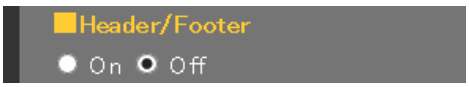
Input boxes

When a box is clicked, the arrow cursor switches to the “ | ” character input cursor. Input characters in the same way as you would on a computer.

- The characters that can be input are restricted according to the item’s type of setting. (See page E-23)

Browse and Upload buttons

See “Header/Footer”. (Page E-29)

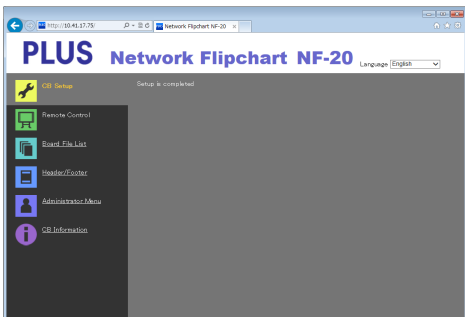


Setup button

When clicked, the settings/changes are sent to the NETWORK FLIPCHART, overwriting previous settings.
Once overwriting is completed, the “CB Setup” page switches to the “Setup is completed” character display.

- If the IP address in the network settings, etc., has been changed, the NETWORK FLIPCHART reboots. (See page E-24.)

After making settings or changes, be sure to click the “Setup” button to overwrite the previous settings on the NETWORK FLIPCHART.



5 Close the web browser.

Click the web browser’s close button ([X]) to close it.

CB Setup

This is the page where the NETWORK FLIPCHART's various functions are set and changed. The settings are the same as on "Table of Function Numbers and Settings" in the section on making the settings operating the NETWORK FLIPCHART's buttons. (For instructions on displaying the screen, see "Basic Setting Operations" step 3 on page E-20.)

NETWORK FLIPCHART Setting Item	Setting/Description	Default
Paper size	Select the printing paper size.	A4
Aspect Ratio Setting	Select the aspect ratio for printing.	Match to printing paper size
Time Date Stamp	Set the NETWORK FLIPCHART's date and time. Input as follows: Year: 4 digits, Month: 2 digits (Ex.: 03 for March), Day: 2 digits (Ex.: 06 for the 6th), Hours: 2 digits in 24-hour mode (Ex.: 14 for 2 pm, 06 for 6 am), Minutes: 2 digits (Ex.: 00 for 0 minutes) • Do not insert spaces. If the date and time setting values are incorrect, an error message is displayed. Get Current Time: When the "Get Current Time" button is clicked, the display switches to the computer's current time. This eliminates the need to make the current date and time setting.	
Color Printing	Color printing can be set to Valid or Invalid.	Valid
Resolution	Select the resolution at which scanned images are saved.	High Resolution
Graphics File Format	Select the format in which scanned images are saved.	PNG
Header/Footer	Set whether or not to output the header/footer information registered on the NETWORK FLIPCHART.	Disable (Off)
Erase Reminder	Set the erase reminder function.	Disable
Setup	When the [Setup] button is clicked, the above settings/changes are sent to the NETWORK FLIPCHART, overwriting previous settings. Once overwriting is completed, the "CB Setup" page switches to the "Setup is completed" character display.	
Certification Validity Period	This is used for remote control. For details, see "NETWORK FLIPCHART Wireless Operation Manual using "MTG Pocket" Application".	

Header/Footer

This is the screen for registering headers and footers on the NETWORK FLIPCHART and checking the image. (For instructions on displaying the screen, see “Basic Setting Operations” step 3 on page E-20.)

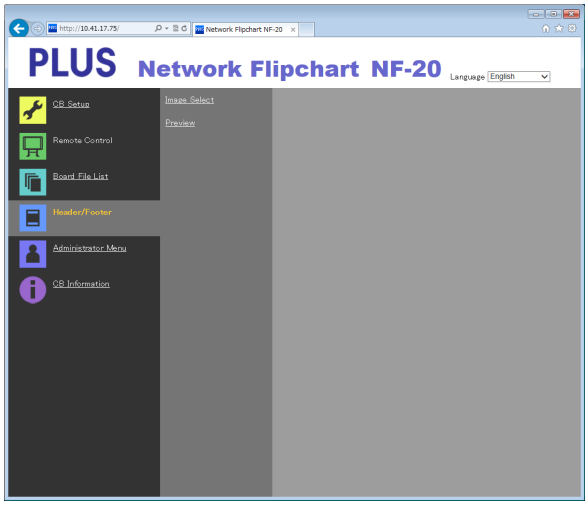
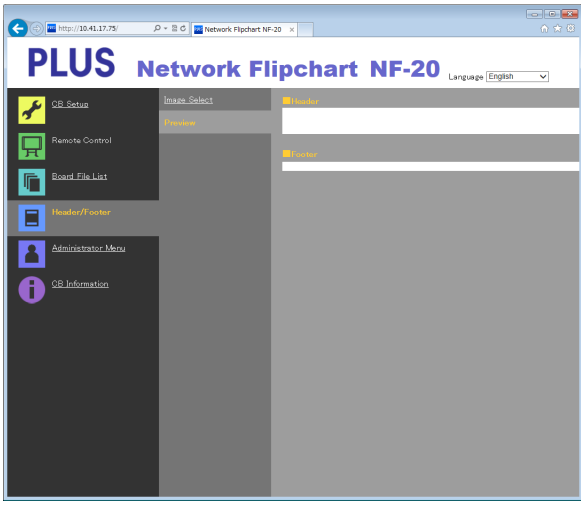


Image Select screen

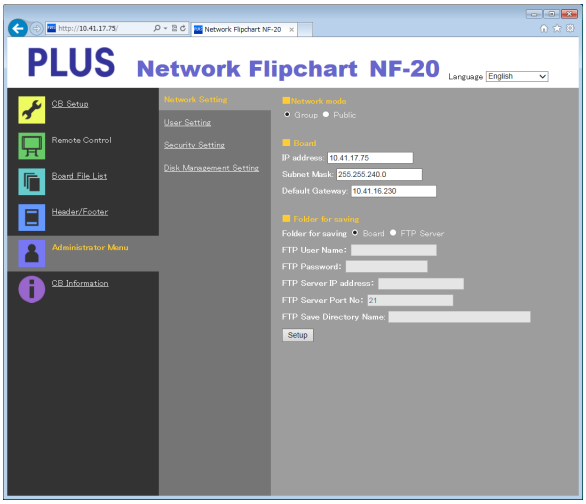


Preview screen

Image Select/Preview Item	Setting/Description	Default
Select Header/Footer Image	Select whether the image to be registered on the NETWORK FLIPCHART is a header or footer. Click the radio buttons to select. • For instructions on creating images, see page E-45.	Header
Browse	When the [Browse] button is clicked, the computer’s “Browse Files” screen opens. Select the image, then click the [OK] button to set it.	—
Upload	This uploads the selected header or footer image to the NETWORK FLIPCHART. When the [Upload] button is clicked, uploading starts. • If an image is already registered on the NETWORK FLIPCHART, that image is overwritten.	—
Preview	This displays a preview of the header or footer image registered on the NETWORK FLIPCHART.	—

Network Setting

Make the settings for the NETWORK FLIPCHART's IP address, the FTP server's IP address, etc.
(For instructions on displaying the screen, see "Basic Setting Operations" step 3 on page E-20.)



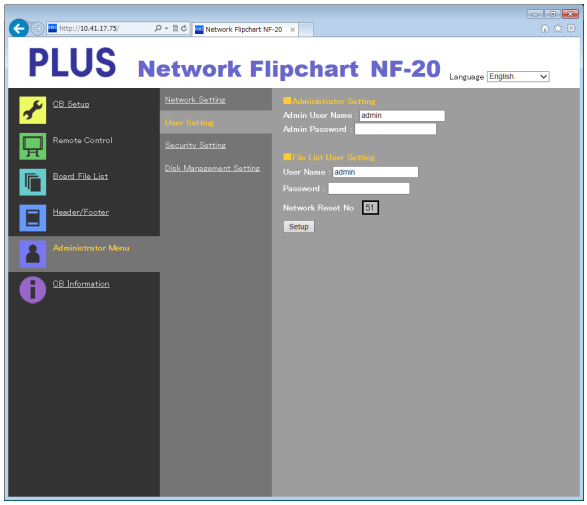
Network Setting Item	Setting/Description	Default
IP address	Change the NETWORK FLIPCHART's IP address. Use a fixed IP address for the NETWORK FLIPCHART. When connecting to a network using the DHCP of a router, etc., change the IP address to one that is outside of the automatic acquisition range	Any value
Subnet Mask	Set the NETWORK FLIPCHART's subnet mask.	Any value
Default Gateway	Set the NETWORK FLIPCHART's default gateway.	Any value
Folder for saving	Set the folder in which the NETWORK FLIPCHART's scanned images are saved. Board: The images are saved on the NETWORK FLIPCHART. FTP Server: The images are saved in the specified folder on the FTP server.	Board
FTP User Name	This is the user name registered on the FTP server. This is required for the NETWORK FLIPCHART to log in to the FTP server and save image files.	Blank
FTP Password	This is the password registered on the FTP server. This is required for the NETWORK FLIPCHART to log in to the FTP server and save image files.	Blank
FTP Server IP Address	Input the FTP server's IP address.	Blank
FTP Server Port	This is the FTP server's standard control port number. Normally use with this number. If the FTP server's port number has been changed, change this following the instructions of the network administrator.	21
FTP Save Directory Name	Input the name of the subfolder in the FTP server folder in which image files are saved.	Blank
Setup	When the [Setup] button is clicked, the above settings/changes are sent to the NETWORK FLIPCHART, overwriting previous settings. Once overwriting is completed, the display switches to the "Setup is completed. Rebooting. Wait for a while." character display. If the IP address, subnet mask or default gateway have been changed, the NETWORK FLIPCHART automatically reboots. During rebooting, the NETWORK FLIPCHART's display window LEDs flash in circular motion. Wait until they turn off.	—
Network Mode	Usually select "Group". "Public" is used for remote control. For details, see "NETWORK FLIPCHART Wireless Operation Manual using "MTG Pocket" Application".	

Note

- Only single-byte alpha-numeric characters can be used for the FTP user name, password, storage location folder name, etc. Symbols and spaces etc. cannot be used.

User Setting

Set the user name and password required for administrator and user verification and the number required for resetting the network settings.
(For instructions on displaying the screen, see “Basic Setting Operations” step 3 on page E-20.)



User Setting Item	Setting/Description	Default
Admin User name	Set the administrator’s user name. • Input using no more than 14 characters. The name will be case sensitive for verification.	admin
Admin Password	Set the administrator’s password. • Input using no more than 14 characters. The password will be case sensitive for verification.	None
User Name	Set the user name. The limit to the number characters that can be input is the same as for the administrator’s user name.	admin
Password	Set the password. The limit to the number characters that can be input is the same as for the administrator’s password.	None
Network Reset No.	This is the number used for resetting the network settings. (See page E-28) Note: Be sure to copy down this number. It will be required if you forget the administrator’s password.	—
Setup	When the [Setup] button is clicked, the above settings/changes are sent to the NETWORK FLIPCHART, overwriting previous settings. Once overwriting is completed, the “CB Setup” page switches to the “Setup is completed.” character display.	—

Note

- Copy down the user settings in case you should forget them.

Admin User name ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Admin Password ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

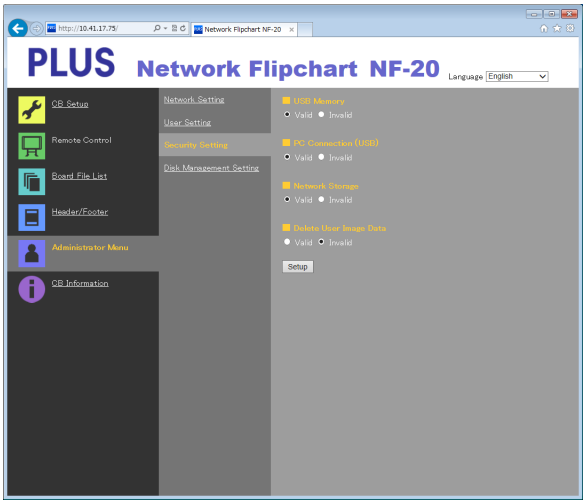
User Name ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Password ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Network Reset No. ☐☐

Security Setting

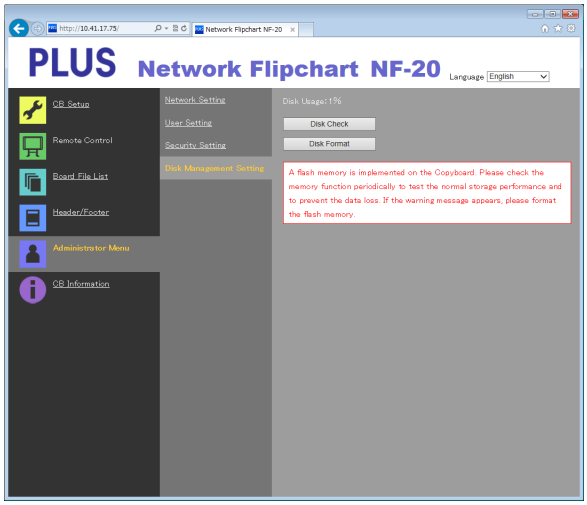
These security settings can be made to restrict access to setting items.
For this page, the security settings page cannot be displayed unless [Administrator Menu] is clicked and the administrator's user name and password are input on the verification screen. (For instructions on displaying the screen, see "Basic Setting Operations" step 3 on page E-20.)



Security Setting Item	Setting/Description	Default
USB Memory	Set whether or not to enable or disable saving on USB memory devices.	Valid
PC connection (USB)	Set whether or not to enable or disable saving in a computer storage memory.	Valid
Network Storage	Set whether or not to enable or disable transfer of image files to network storage (folder for saving: "Board" or "FTP Server") to a computer or FTP server. Notice: • When set to "Invalid", the network storage memory is formatted. Transfer important image files to a computer before setting this.	Valid
Delete User Image Data	Set whether to enable or disable the file list "Delete" function with file list browsing authority. When set to "Invalid", the image files stored on the NETWORK FLIP-CHART cannot be deleted.	Valid
Setup	When the [Setup] button is clicked, the above settings/changes are sent to the NETWORK FLIPCHART, overwriting previous settings. Once overwriting is completed, the "CB Setup" page switches to the "Setup is completed." character display.	—

Disk management Setting

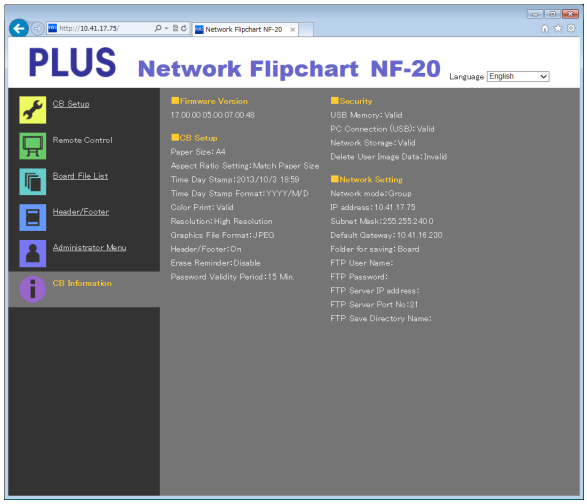
The amount of disk space used can be checked, the disk can be checked and the disk can be formatted here.
(For instructions on displaying the screen, see “Basic Setting Operations” step 3 on page E-20.)



Disk Management Setting Item	Setting/Description	Default
Disk Usage	This displays the amount of network storage memory used (in percentage).	—
Disk Check	When the [Disk Check] button is clicked, checking of the network storage memory starts. When checking is completed, the results of the check are displayed. If a warning is displayed, format the disk.	—
Disk Format	When the [Disk Format] button is clicked, the disk is formatted. Notice: • Transfer important image files to a computer before formatting.	—

CB Information

This displays the contents of the detailed settings made on the NETWORK FLIPCHART and the NETWORK FLIPCHART’s firmware version.
Note that the passwords are not displayed.
(For instructions on displaying the screen, see “Basic Setting Operations” step 3 on page E-20.)



Resetting the Network Settings

Operate the buttons on the NETWORK FLIPCHART to reset the network settings to their defaults.

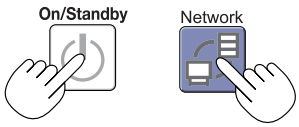
Setting items that are reset: Admin User name, Admin Password, User Name, Password, IP Address, Subnet Mask, Default Gateway, Folder for saving, FTP User Name, FTP Password, FTP Server IP Address, FTP Server Port, FTP Save Directory Name

Notice

- Once reset, the network settings cannot be restored.

1. While pressing the ON/Standby button, press the Network button.

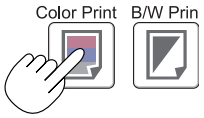
The NETWORK FLIPCHART switches to the network settings reset mode and “00” flashes on the display window.



2. Press the Color Print (Increase) or B/W Print (Decrease) button to display the network reset number.

- The network reset number can be viewed when User Setting is selected with administrator authority.

The display switches as follows each time the Color Print (Increase) button is pressed:
01 → 02 → …… → 99 → 00 → 01
The display switches as follows each time the B/W Print (Decrease) button is pressed:
99 → 98 → …… → 01 → 00 → 99



3. Press the Save button to enter.

To cancel, press the ON/Standby button.
When the reset number matches, “LA” flashes for 5 seconds on the display window, then the NETWORK FLIPCHART’s network settings are overwritten with the default values and the NETWORK FLIPCHART automatically reboots.

If “LE” flashes for 5 seconds then stops flashing, remaining lit, the reset number is wrong.

- Press the ON/Standby button to cancel, then start over from step 1.

Creating and Registering Headers and Footers

The header/footer function allows you to superimpose your company name, logo, etc., at the top or bottom of scanned images for printing or display. The date and time are printed at the top right of the header.

Creating header and footer images

Use your image software to create a JPEG file.

Create the image with the resolutions below.

Max. size for header images: 1248 × 110 dots * Image format: JPEG
Max. size for footer images: 1248 × 40 dots Image format: JPEG

* This is sometimes expressed as “pixels”.

Note

- Even for image data whose resolution is within the allowable limits, it may happen that the top and bottom of the image are not displayed.

Image display position

Images are displayed at roughly the center in the horizontal direction. In the vertical direction they are positioned next to the scanned image area. Consider this when creating images with less than the maximum size.

Suggestions on creating images

Scan the logo data with an image scanner, save this on the computer as image data, then crop or reduce its size to fit within the specified resolution and save this new data.
Use Windows Paint, etc., to paste images, input characters, etc., to create the image.
When saving, save in JPEG format with a size within the maximum size.

Registering created images on the NETWORK FLIPCHART

Example: Here we explain how to register a header image. Use the same procedure to register footer images.

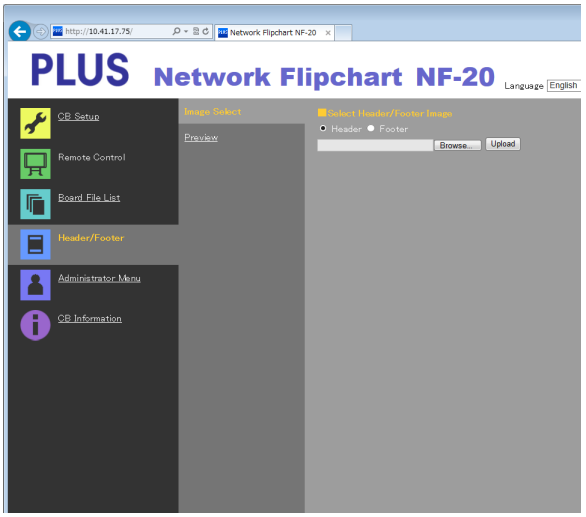
1. Open the “Header/Footer” screen at Detailed Settings (via LAN). (See page E-19.)
2. Header/Footer Image Select
   - When a preview is selected, click “Image Select” on the submenu.

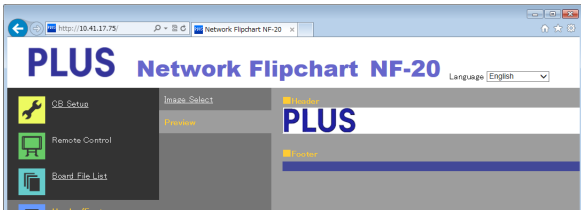
   Click the “Header” radio button.
3. Select the header image you have created.
   Click the [Browse] button to display the computer’s “Browse Files” screen.
   Select the image file to be registered as the header, then click the [OK] button. The file name is displayed.
4. Click the [Upload] button to upload the image to the NETWORK FLIPCHART.
   When uploading is completed, “Completed successfully” is displayed.
   At this time, “HF” flashes on the NETWORK FLIPCHART’s display window (for 5 seconds, after which it stops flashing, remaining lit).
   If “Data size is too large” is displayed, the image cannot be registered.
   Close the web browser, then adjust the image file’s size.

Note

- When headers or footers are registered, the header/footer function is set to “Enable”.

Click “Preview” to check the registered image.
This completes registration. Close the web browser.





When connecting to the network the first time

(1) Make the settings of the IP address, etc., required for connecting the NETWORK FLIPCHART to the network. See “Simple Network Settings (via USB)” (page E-17).

(2) Use a commercially available LAN cable (10Base-T or 100Base-TX straight cable) to connect the NETWORK FLIPCHART’s LAN terminal to the LAN port on a hub, etc.

(3) Make the NETWORK FLIPCHART’s network settings or FTP server settings from a web browser. (See “Making Detailed Settings (via LAN)” on page E-19.)
If you plan to store image files on an FTP server, create the folder for storing the files on the FTP server. Ask your network administrator for instructions on settings and creating the folder.

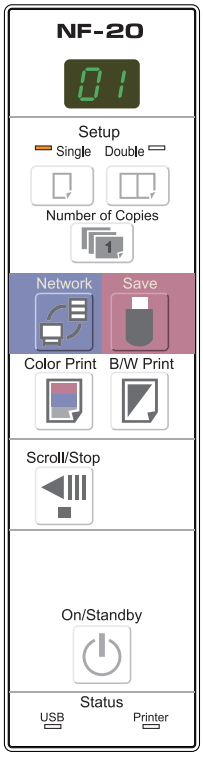
Notice

- Be sure to transfer important image files stored on the NETWORK FLIPCHART itself to a computer (data backup). If the NETWORK FLIPCHART should for some reason malfunction, depending on the malfunction the stored data may be lost or become impossible to transfer. Note that PLUS will accept no responsibility whatsoever for loss of data, etc.
- The NETWORK FLIPCHART will not operate properly if the firewall is activated.

The following explanation assumes that the LAN cable has been connected and the various network settings have been completed.

Saving scanned images on the NETWORK FLIPCHART or FTP server

Model name: NF-20



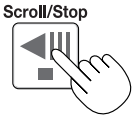
Preparations :
Check that the power plug is connected to a wall power outlet.

1 Press the ON/Standby button to turn on the power.

Note

- When turning on the power after the power plug has been connected or the power has been turned off (set to the standby mode), wait about 5 seconds or more before pressing the ON/Standby button.
- When the ON/Standby button is pressed and the power turns on, the display window’s LEDs light.

2 Press the Scroll/Stop button to display the screen to be stored.



The text written on the front and back sides can be saved in one image file.
Page 32 “How to store images of both sides”

Note

- When “Board” (network storage memory) is selected as the save to location, approximately 100 image files can be saved.
- It may not be possible to save the edges of the sheet surface. See “About the scanning tolerance range” on page E-5.

continued on next page

3 Press the Network button to save the image.

LEDs flash in circular motion during saving

[Display window]

- After scanning (scrolling) one or both sides of the sheet is completed*, the data is then stored at the storage location set up in the network settings.
  * Differs depending on whether it is set up for single-sided or double-sided scanning. (refer to Page 32)
  For instructions on selecting the save to location, see “Network Settings” on page E-24.

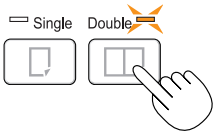
Note

- Depending on the network communications conditions, some time may be required for identification and storage.
- If “E8” flashes (for about 5 seconds), “Invalid” is set at “Security Setting” → “Network Storage”. (See page E-26.)
- If “L1” to “L5” flashes (for about 5 seconds), this indicates that the network settings are incorrect. (See page E-48.)
- If “FL” flashes (for about 5 seconds), there is not enough space in the save to location. Delete image files to provide space. (See pages E-37, E-38.)
- If the ON/Standby button is pressed during the scanning operation, saving is interrupted and the image data scanned up to that point is saved.
  To move the sheet surface, wait until scrolling stops, then press the Scroll/Stop button.
- When the Network button is pressed, image files are stored successively in the save to location.
  The NETWORK FLIPCHART’s date and time are recorded as the date and time of saved files. For instructions on setting the time, see pages E-12, E-22.

4 When not using the NETWORK FLIPCHART, press the ON/Standby button to turn off the power (standby mode).

How to store images of both sides

The double-sided full scan is a function to scan the information written on the front and back sides together and then store the image data in a single file. When the power supply is first switched on, the device is set up for single-sided scanning.



Press the double-sided button or single-sided button to set up the scanning mode.

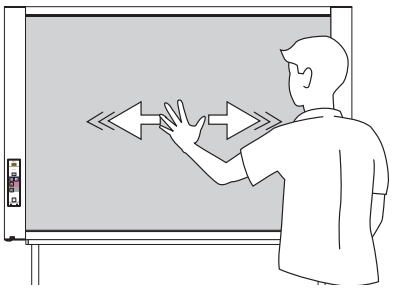
Setting	Indicator	Paper Layout / Stored Images
Full scan of both sides (Double-sided scanning)		
Single-sided scanning (scan only the side currently visible)		

Notice

- When setting up the device for double-sided full scanning, press an operating button such as the print button within one minute. If not, the device will return to the normal scanning mode.
- When the image is saved or printed, the device will automatically return to the single-sided scanning mode.

Moving the sheet surface manually

The sheet can be moved even when the power of the NETWORK FLIPCHART 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 FLIPCHART.
- When the sheet surface is moved, roller traces may appear on parts of the screen.

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.

Transferring image files to/deleting them from the computer

Image files stored in the folder for saving (“Board” or “FTP Server”) can be transferred to your own computer. The operation differs according to the setting for where scanned images are stored. (See “Network Settings” on page E-24.)
The image files are saved in JPEG, PNG (default) or PDF format, according to the image format setting. (See “CB Setup” on pages E-14, E-22.)

The information below must be input to transfer the files.
If you do not know this information, ask your company’s network administrator.
Log in to the folder for saving (meaning connect to the communications path): IP address of the NETWORK FLIPCHART or FTP server
Verification screen:
If the folder for saving is set to “Board” … User name and password registered at “User Setting”.
If the folder for saving is set to “FTP Server” … User name and password registered on the FTP server

When the folder for saving is set to “Board”

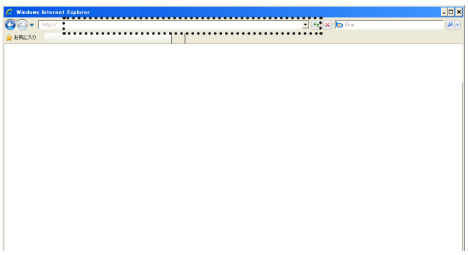
The scanned images are saved on the NETWORK FLIPCHART. These images are downloaded (transferred) onto the computer connected on the network. Downloading is possible even when the NETWORK FLIPCHART is in the standby mode (but not if the NETWORK FLIPCHART’s power is not connected to a power outlet).

1 Launch the web browser on the computer and log into the NETWORK FLIPCHART.

Input the NETWORK FLIPCHART’s IP address, then press the [Enter] key.

- Upon shipment from the factory and when set to the defaults, the NETWORK FLIPCHART’s IP address has not been set, so logging in is not possible.

The top menu is displayed.

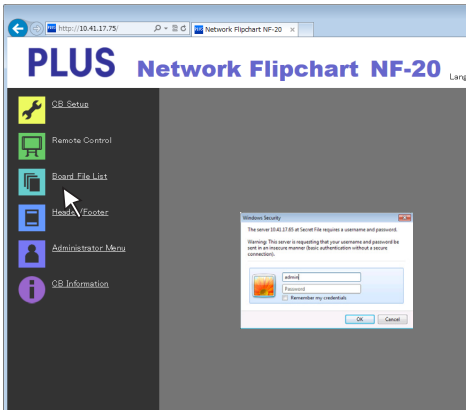


2 Click “Board File List” on the menu.

The verification screen opens.

- No password is set upon purchase.
  For the user name, input “admin”, then click the [OK] button.
- When a user password is set, input the user name (case sensitive) and password (case sensitive), then click the [OK] button.

If the user name is correct, the verification screen closes and the file list is displayed.



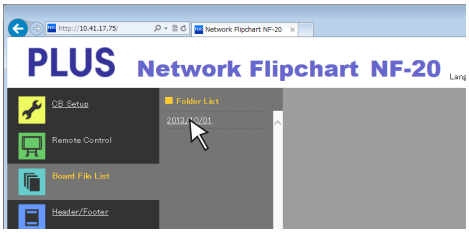
Note

- We recommend setting a user name and password to prevent unwanted persons from logging in. (See “User Setting” on page E-25.)

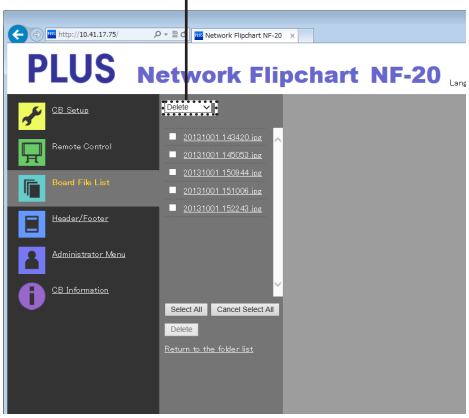
continued on next page

3 Click the desired date.

- Image files are managed in groups by date (the date the scanned image files were saved). Because of this, display the date list.
- Check that “Download” is selected for the [Download/Delete] selection button.
  When “▼” is clicked, a pull-down list is displayed. Click [Download].



[Download/Delete] selection button

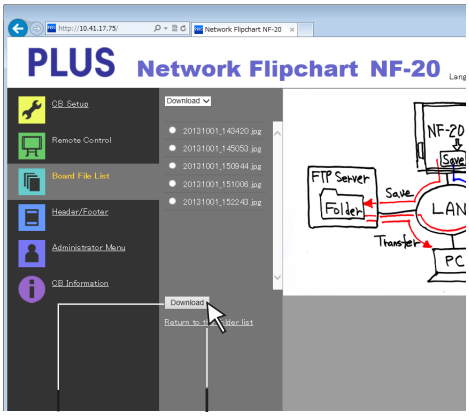


4 From the file list, select the image to be transferred to the computer.

When the radio button ○ is clicked, it is checked ◉ and a preview image is displayed.

Download the image onto the computer.

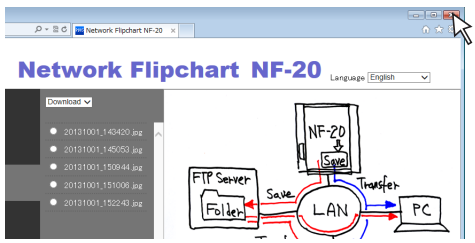
(1) Click the [Download] button.
(2) The computer’s “Save as …” screen appears.
(3) Select the folder for saving, then click the [Save] button.
Downloading starts.
To download other files, click “Return to the Folder List” to return to the file list, then repeat from step 3.
Multiple files cannot be selected and downloaded together.



[Download] button (“Return to the Folder List”)

5 Close the web browser.

Click the web browser’s close button ([X]) to close it.



Deleting image files from the NETWORK FLIPCHART

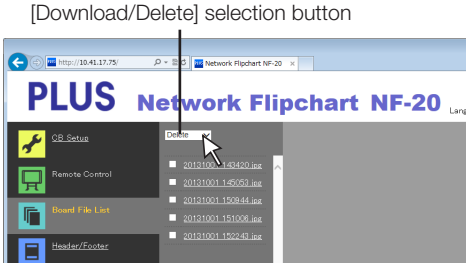
Notice

- When “Invalid” is set at “Delete User Image Data” in “Security Setting”, files cannot be deleted. This can be changed to “Valid” with the administrator’s authority. (See page E-26.)

1 Perform steps 1, 2 and 3 on page E-33 to display the file list screen.

2 Select [Delete].

When “▼” on the [Download/Delete] selection button is clicked, a pull-down list is displayed. Click [Delete].
When [Delete] is selected, the radio buttons switch to checkboxes ☐.



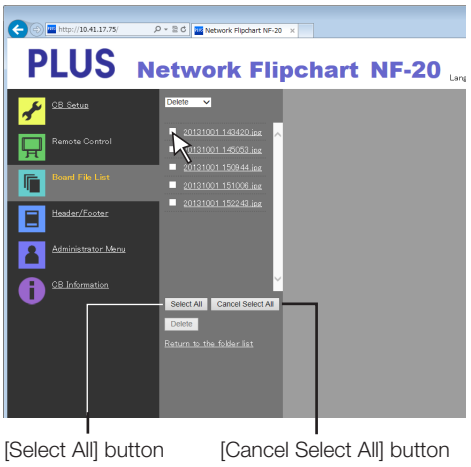
3 Select the image file to be deleted.

To select and delete individual files:
Click the checkbox for the image file to be deleted to check it.

To delete all files:
Click the [Select All] button. All the checkboxes are checked. If there are several files you do not want to delete, uncheck the checkboxes for those files.
To uncheck the checkboxes for all the files, click [Cancel Select All] to uncheck all the checkboxes.

Note

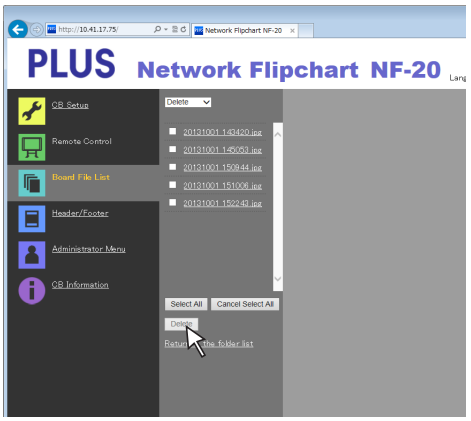
- Images are previewed when their file name is clicked.
- Check the scanned images using their preview images before deleting them.



4 Delete the file(s).

Be sure to transfer important image files to a computer before deleting them (data backup). Once deleted, the files cannot be retrieved.
When the [Delete] button is clicked, the image files whose checkboxes are checked are deleted.

- When “Invalid” is set at “Delete User Image Data” in “Security Setting”, the message “No delete authority” is displayed, indicating that the files cannot be deleted. (See “Security Settings” on page E-26.)



When the folder for saving is set to “FTP Server”

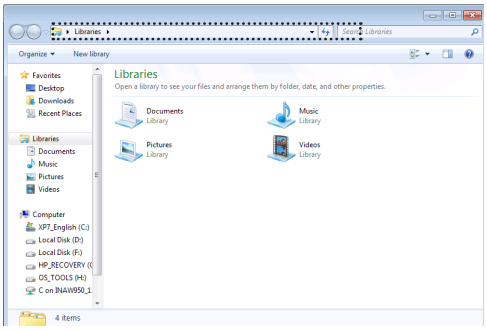
When the folder for saving is set to “FTP Server”, the scanned images are saved on the FTP server connected on the network. Transfer these images onto the computer connected on the network.
The following explains how to transfer the files using Explorer on the computer.

1 Click the computer icon or, from the Start menu, click “Computer”.

Explorer opens.

2 Log in to the FTP server.

Click on Explorer’s address field, input the FTP server’s IP address after “ftp://”, then press the [Enter] key.
The FTP server’s verification screen opens.

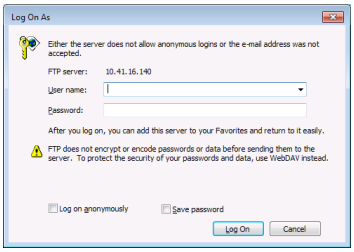


3 Input the required fields on the verification screen.

Input the user name and password registered on the FTP server, then click the [Log In] button.

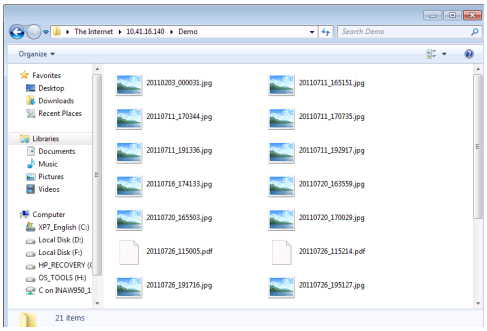
- Input the user name (case sensitive) and password (case sensitive), then click the [Log In] button.

If the user name and password are correct, the verification screen closes and the file list is displayed.



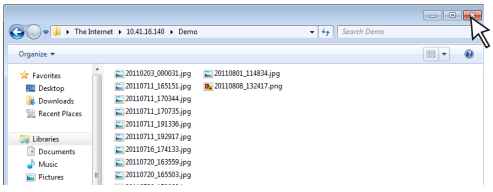
4 Transfer the image file(s) to the computer.

From the FTP server’s screen listing the folders/files, select the desired folder(s) or image file(s), right-click the mouse to display a pull-down menu, select “Copy”, then copy the folder(s) or file(s) to My Computer, etc.
Copying is also possible by clicking and dragging.



5 Close the Explorer window.

Click the close button ([X]) on the Explorer window to close Explorer.



Note

- Logging in to the FTP server from a web browser
  The procedure is the same as for “When the folder for saving is set to “Board”” on page E-33.
  However, to log in, input the FTP server’s IP address (input “ftp://”, then input the IP address), and at the verification screen input the user name and password registered on the FTP server.

Deleting image files on the FTP server

At step 4 on the previous page, select the folder(s) or image file(s) to be deleted, right-click the mouse to display a pull-down menu and select “Delete”. At the verification screen, click “Yes”. The folder(s) or file(s) are deleted.

If folder(s) or file(s) cannot be deleted

- Is access to the FTP server’s folder restricted?

Notice

- Be very careful when deleting folders or files from the FTP server.
- Check again before deleting to avoid accidentally deleting other folders or files.

Using the NETWORK FLIPCHART connected to a computer

When the NETWORK FLIPCHART and a computer are connected by USB cable, the NETWORK FLIPCHART 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 FLIPCHART settings (“CB Setup”). (See pages E-14, E-22.) The factory default is “PNG”.

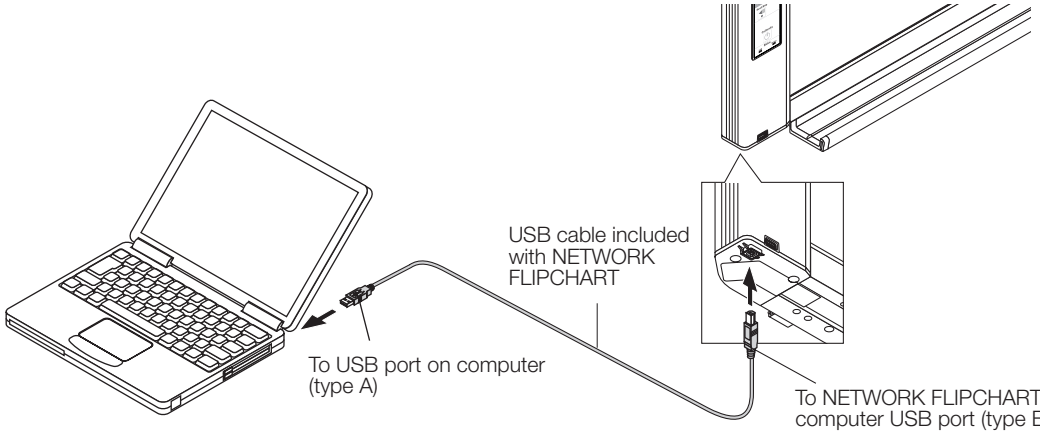
⚠ CAUTION	With this function, if the operation for disconnecting the USB connection between the NETWORK FLIPCHART and computer is performed or the NETWORK FLIPCHART’s power is turned off, the image data in the NETWORK FLIPCHART’s computer storage memory is deleted. Be sure to save important image data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

Notice

- Only one screen’s worth of data can be stored in the NETWORK FLIPCHART’s memory for computer storage. When the NETWORK FLIPCHART’s save operation is performed successively, previous data is overwritten.
- Do not store computer data in the NETWORK FLIPCHART’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 FLIPCHART while data is being saved after pressing the NETWORK FLIPCHART’s Save button. Doing so will cause the computer’s operation to become unstable.
- Do not press operation buttons on the NETWORK FLIPCHART while the NETWORK FLIPCHART’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 FLIPCHART, 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 FLIPCHART’s power and connect the PC dedicated USB port (type B) and computer using the USB cable.

- Usually, with Windows XP/Windows Vista/Windows 7, the standard driver is installed automatically and the NETWORK FLIPCHART is identified by the computer as a removable device.



2 Press the Save button to store.

Display window

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

- After scanning (scrolling) of one or both sides of the sheet is completed*, the data is then stored in the PC storage memory.
  When the data is being saved in the PC storage memory, the displays in the display window will blink sequentially in a clockwise direction.
  * Differs depending on whether it is set up for single-sided or double-sided scanning. (refer to Page 32)

continued on next page

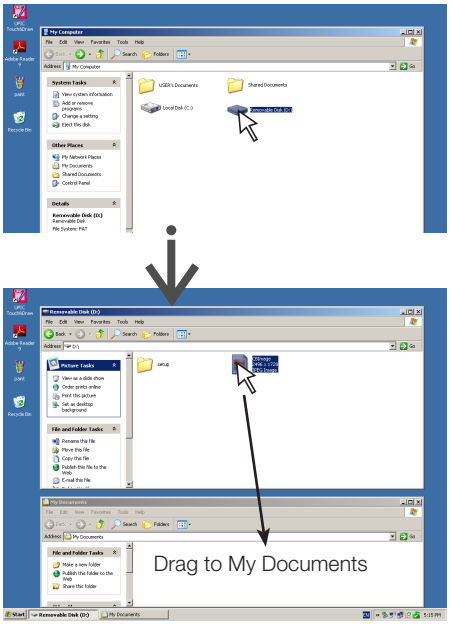
3 On the computer, open “My Computer”, and from there open the NETWORK FLIPCHART identified as a removable device.

(1) Double-click the “My Computer” (or “Computer”) icon to open it.

(2) When the device icon for the NETWORK FLIPCHART (displayed as a removable disk) is double-clicked, the NETWORK FLIPCHART’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.

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

To disconnect the USB cable, follow the procedure in step 3 on page E-43.
Note that the image data in the NETWORK FLIPCHART’s computer storage memory is deleted if the operation for disconnecting the USB connection between the NETWORK FLIPCHART and computer is performed at this time.



Using USB Memory

The content of what has been drawn on the sheet surface of the NETWORK FLIPCHART 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.

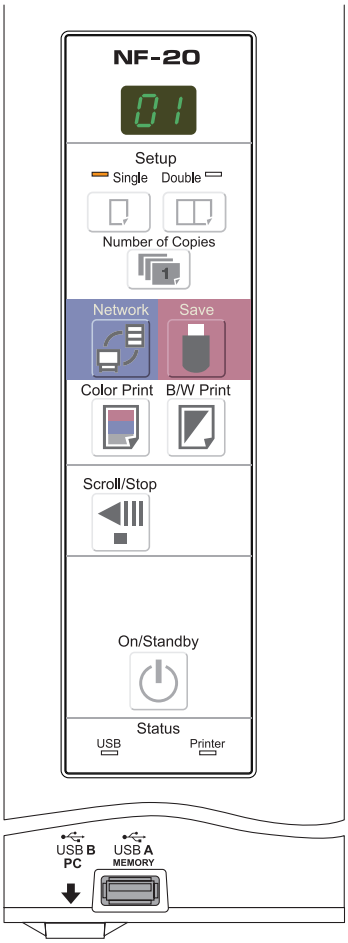
Notice

- 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 memory devices with multiple drives or partitions cannot be used.

USB Memory Storage Procedure

Preparation:
Check that the NETWORK FLIPCHART's AC power plug is connected to a wall power outlet.

Model name: NF-20



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

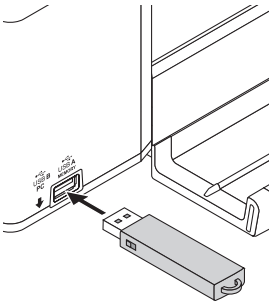
Note

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

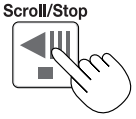
2 Connecting a USB memory stick to the USB memory port of the main device

Notice

- Check the orientation of the USB memory stick first before connecting it. When inserted forcefully in a wrong orientation, the USB port and USB memory may be damaged.
- 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 button to display the screen to be stored.



The procedure for displaying the sheet surface you want to store is the same as for printing.
See "Basic Printing Operation" on page E-45.

Note

- Saving of the portion located around the sheet surface might not be possible. Please see "Effective reading size" on Page E-5.

continued on next page

4 Press the Save button to store.

Display window

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

- When the USB memory device is connected, the USB Status indicator on the main unit display panel lights green. Check that it is lit before pressing the Save button.
- After scanning (scrolling) of one or both sides of the sheet is completed*, the data is then stored in the USB memory stick.
  When the data is being saved in the USB memory stick, the displays in the display window will blink sequentially in a clockwise direction.
  * Differs depending on whether it is set up for single-sided or double-sided scanning. (refer to Page 32)

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.

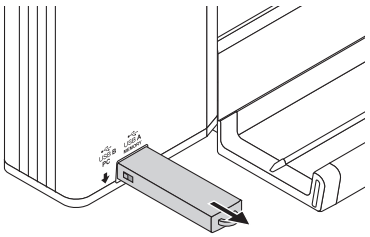
A (5 second) flashing "FL" display indicates that there is insufficient free capacity to permit storage in USB memory. Replace with a USB memory device having sufficient capacity.
See "Meaning of Error Messages" on Page E-47 for other error displays.

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 button.
- The date and time of the saved file will reflect the NETWORK FLIPCHART time setting. See "CB Setup" on Page E-14, 22.
- When the NETWORK FLIPCHART and a computer are connected by USB cable, the data is stored in the main unit's internal memory. Note that it is not stored in the USB 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 FLIPCHART is not going to be used, press the ON/Standby button and switch off the power (standby mode).

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 FLIPCHART 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. Files in the memory for network storage are not deleted.

Saving Image Files on a Computer/Deleting Image Files

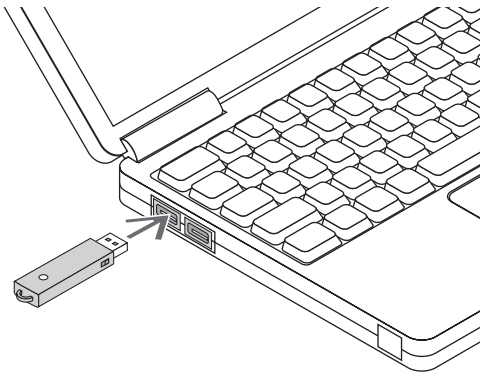
Examples of operations follow for saving the image files in the USB memory device to the hard disk of the personal computer, and for deleting the folder when the USB memory capacity is full. (There are various methods that can be used for saving and deleting including the use of Explorer.) See the instruction manual of your personal computer or the software that you are using for information about using a personal computer.

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.png” (PNG files), where “xxx” refers to a 3-digit number starting from 001 (ex.: PV-001.png).
Images can be stored in JPEG, PNG or PDF format, selectable in the NETWORK FLIPCHART settings (“CB Setup”). (See pages E-14, E-22.)

1 Connecting a USB memory stick to the USB port on a personal computer

When connecting to the personal computer for the first time, the installation of a USB driver is required. Follow the instructions manual of the USB memory device that you are using.

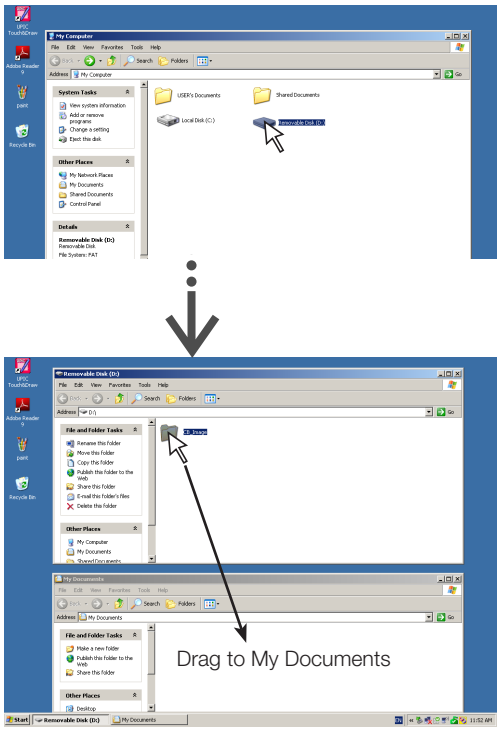
- Usually, with Windows XP/Windows Vista/Windows 7, the standard driver is installed automatically and the NETWORK FLIPCHART is identified as “Removable disk” in “My Computer” (or “Computer”).



2 Saving the image files of a USB memory device to a personal computer

1. Open “My Computer” (or “Computer”) and from within, open the drive of the connected USB memory device.
The folder named “CB_Image” is the saved data of the NETWORK FLIPCHART.

2. Store the “CB_Image” folder in “My Documents” or another location.
All of the data contained in “CB_Image” will be stored.



Notice

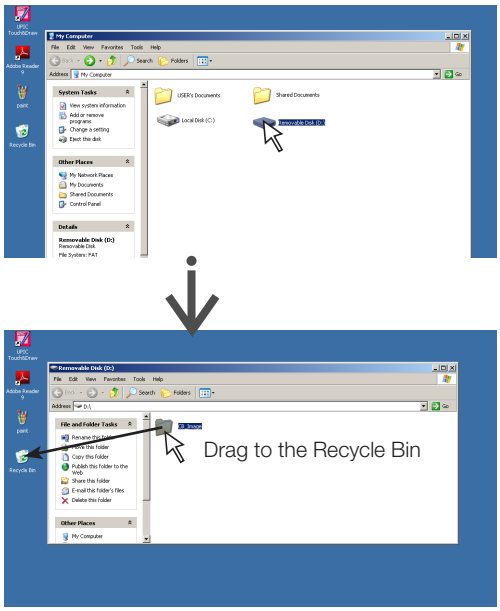
Depending on the computer’s usage environment, these operations may not work properly. This could be the case for example:

- when several USB devices are connected simultaneously to the computer.
- when the USB device is connected to a USB hub or when it is connected using an extension cable.

continued on next page

Deleting USB memory image files with the computer

Before deleting important image files, be sure to save them on the computer (as a data backup).



1. Open “My Computer (or “Computer”)” and then open the drive icon which shows USB memory.
The folder named “CB_Image” contains the memory storage data of the NETWORK FLIPCHART.

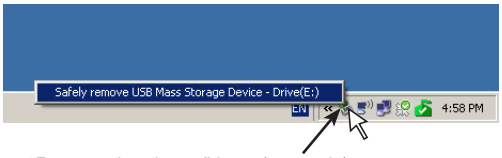
2. Place the “CB_Image” folder in the “Recycle Bin”, right click on the icon and select “Empty Recycle Bin” from the pull-down menu.
All of the data contained in “CB_Image” will be deleted.

Even when the entire folder is deleted, a new CB_Image folder will be created automatically when USB memory is used again with the NETWORK FLIPCHART.

3

Disconnect the USB memory

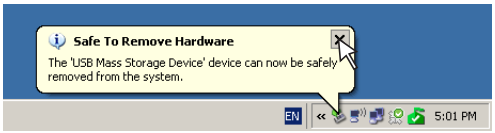
The disconnecting procedure depends on the computer’s operating system. For details, refer to the computer’s operating instructions or help files.



“Remove hardware” icon (example)

1. Click the [Hardware Removal] icon that is displayed in the task tray.
Click “Stop USB Mass storage Device - drive (E)”. (The E drive character will differ depending on the personal computer system.)

2. When the “USB mass storage device can be safely removed.” screen is displayed, click the display.



3. Click [X] to close.
This allows the USB memory device to be unplugged from the computer.

Note

- Do not disconnect the USB memory device while the USB memory device’s access indicator is flashing. Doing so will damage the data.
- The USB drive may not be disconnected properly, for example if the computer is in the process of checking the status of peripherals.

Printing (printer sold separately)

Use a printer (sold separately) to print the data 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.

Preparing the Printer

Please check that the NETWORK FLIPCHART and the printer have been connected. See Page E-52.

1 Set the paper.

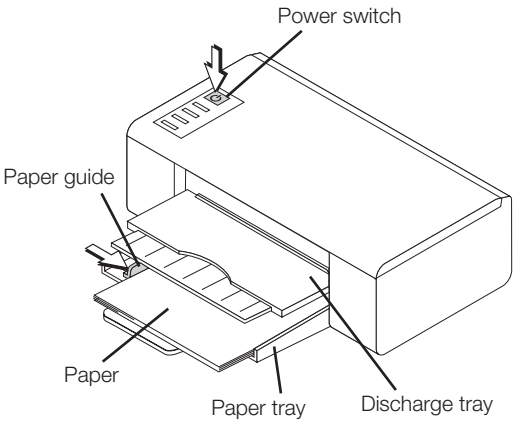
Please use A4 or letter size printer paper.

- When using letter size paper, set letter size paper in the device settings. (See page E-15, E-22.)

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.



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 Color Print button or the B/W Print button on the NETWORK FLIPCHART's control panel. One page worth of data is read and the printing operation starts.

Notice

- Depending on the printer, it may take a while for the printer to get ready for printing after the power supply is switched on.
  In this case, see the printer's operating instructions and check that the printer is ready before starting the printing operation on the NETWORK FLIPCHART.

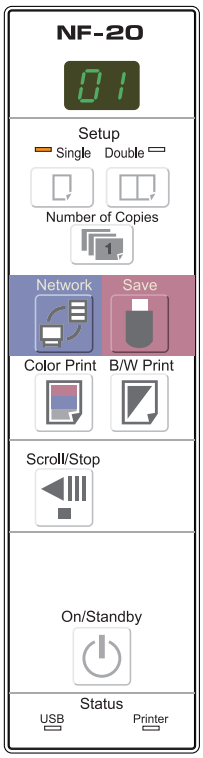
3 When finished printing...

Switch off the printer power and remove the paper.
Close the paper tray.

Notice

- Caution: Do not turn off the power or disconnect the USB cable during printing.

Model name: NF-20



Basic Printing Operation

Preparation:

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

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

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 FLIPCHART's power before turning on the printer's power.

2 Press the Scroll/Stop button and display the sheet surface you want to print.

There are two screens.

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.

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.

continued on next page

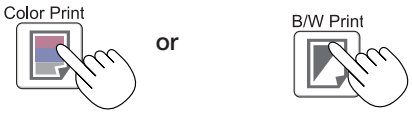
3 Press the Number of Copies button and select the number of copies.

The text written on the front and back sides can be printed on a single sheet of paper. Page 32 “How to store images of both sides”

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-50). 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 Color Print or the B/W Print button to print.



- Scan (scroll) one or both sides of the sheet and then print out the image.

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 image of one or both sides will be compressed onto an A4-size sheet of paper and then printed out.
- A flashing “E 1” in the display window indicates a print error. See “Meaning of Error Messages” on Page E-47.
- When printing, a time stamp (date and time) is printed at the top right of the sheet. See “CB Setup” on page E-14, E-22.

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

- Switch off the printer power.

Note

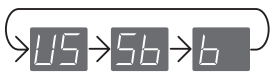
- When the Erase Reminder function is set to “Enable”
  When the ON/Standby button is pressed, the display window and all the indicators flash simultaneously, the sheet automatically moves to the surface that is not yet erased and the power turns off. To set the Erase Reminder function to “Disable”, see page E-16, E-22.
  * 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 main device is connected to a personal computer through a USB cable, the auto-power off function will be disabled.

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.

NETWORK FLIPCHART (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 FLIPCHART being used?	• The file formats for USB memory devices that can be used on this NETWORK FLIPCHART 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	• Scanning 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”. (See page E-26.)
E9	Color printing prohibited	• Coloring printing is set to “Disable”.	• Change the color printing setting to “Enable”. (See pages E-15, E-22.)
US	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 (See Page E-35, E-42).
EL	An unsupported printer is connected	• A printer that is not supported by the NETWORK FLIPCHART 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 		• 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	
	LAN cable disconnected	• No cable is connected to the LAN terminal.	• Connect the LAN cable properly.
	FTP server recognition error	• The user name or password is wrong.	• Input the correct user name and password. (See page E-24.)
	FTP server connection failure	• The FTP server's IP address is wrong.	• Consult the network administrator then set the FTP server's IP address. (See page E-24.)
	FTP server writing failure	• There is no FTP storage folder.	• Consult the network administrator then set the FTP storage folder.
	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.
	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. (See page E-25.)
	Header/footer writing error	• This occurs when the size of the inserted image is too large.	• Adjust the image then repeat the operation.

Network-related errors indicate errors in access between the NETWORK FLIPCHART 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 FLIPCHART malfunction. Contact your store of purchase.

Troubleshooting

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

	Condition	Please Check
NETWORK FLIPCHART 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 FLIPCHART 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?
	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 FLIPCHART and PC are connected, the PC does not recognize the NETWORK FLIPCHART	• Check whether the NETWORK FLIPCHART is in an operable condition, and whether the USB cable is connected properly. • Is the NETWORK FLIPCHART connected to the PC via a USB hub? (Connect the NETWORK FLIPCHART directly to the USB port of the PC.)
	The date is not updated.	• The NETWORK FLIPCHART'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 FLIPCHART's power turns on, but the printer's power does not.	• Check whether the printer's power plug (DC plug) is securely inserted. If power still cannot be switched on despite doing so, check whether the AC power adapter plug of the printer in the adapter holder is disconnected from the AC power adapter (depending on the printer, direct connection may be possible).
	Printing is not possible when Color Print (or B/W 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 FLIPCHART's status indicators and the printer's error indicator are lit. If an error is displayed on the NETWORK FLIPCHART's display window, see page E-47. (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.
	There is no printing.	• Check that the print cartridge is properly set. • Check that the print cartridge is not plugged.
	• 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-48.

	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 FLIPCHART 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.
	Cannot log in.	• Is “Caps Lock” set on the computer’s keyboard while inputting the user name and password?

Test Printing

1) With the NETWORK FLIPCHART’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 Print ( ) button for a color print, the B/W Print ( ) button for a black-and-white print.

* 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 choked, clean it.
- If the quality of the print does not improve even though the nozzle has been cleaned, wipe off the ink on the surface of te nozzle.

For details, see the “User’s Guide” included with the printer.

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

Updating the NETWORK FLIPCHART’s internal program

See the PLUS website for instructions on updating the program and to download the latest program.

Specifications

BOARD TYPE (Model name)			NF-20
Form	Installation method		Wall-hanging or self-standing type (T-legged)*1
	External dimensions (T-shaped legs*1)		W830 × D72 × H995 mm
	Main unit weight		10 kg
	External dimensions of the T-legged stand (including the main body)*1		W830 × D674 × H1850*3 mm
	T-shaped legs weight*1*2		8.3 kg
BOARD	Panel Size		H650 × W910 mm
	Effective reading size		H630 × W900 mm
	Number of Pages		2
	Paging		Endless in one direction (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		Black & white: approx. 8 Secs. Color: approx. 8 Secs.
Interface	Board	File format	JPEG, PNG, PDF
		Screen size	Standard type: 624 × 824 dots (fixed) High Resolution: 1248 × 1728 dots (fixed)
	External memory	Type	USB Flash memory*4
		Compatible FAT types	FAT 16, 32
		Interface	USB2.0
	Network	LAN port	RJ-45 (10Base-T/100Base-TX)
	Printing	Printing resolution	300 dpi or equivalent
		No. print colors	8-tone color or 2-tone monochrome
		Printer interface	USB2.0
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: 8 W (not including printer)
Operating conditions	Temperature:		10–35°C
	Humidity:		30–85% (No condensation)
Miscellaneous	Ruled lines		34 mm cross-ruled squares
	Miscellaneous		Dedicated markers (black, red, blue, and green)
Operating environment	Web browser		Windows: Internet Explorer Version 8.0 or above Macintosh: Safari Version 5 or above * Enable JavaScript.

Remarks

*1: T-legged (stand) is sold separately. The height of the stand can be adjusted in 2 steps - 1850 and 1650 mm. The inclination angle can be adjusted in three steps - 0, 7 and 10 degrees.

*2: Printer tray is sold separately.

*3: The maximum dimension is indicated for the height (H).

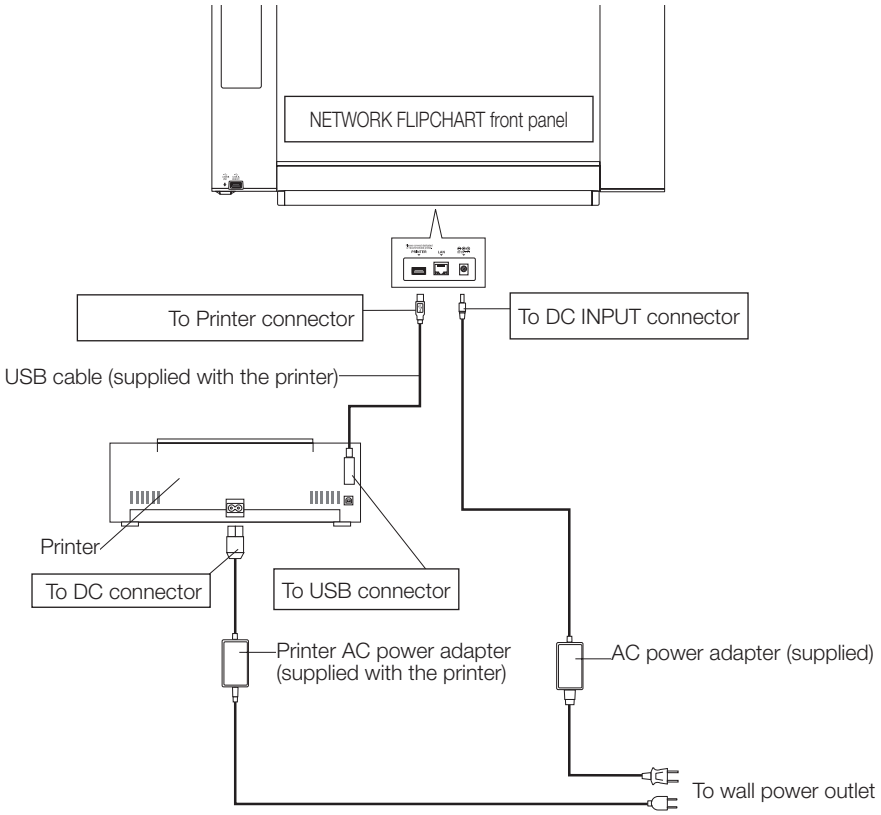
*4: The device does not come with a USB memory stick.

- Please note that for quality improvement purposes, specifications and design are subject to change without prior notice.

Connections and Wiring Diagram

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

[NETWORK FLIPCHART and Printer Connections Diagram]



* Appearance of printer is for illustration purposes.

Note

- The AC power adapter of the printer may differ from the model shown in the connection diagram (in-built type, assembly type).

PLUS Corporation

ISO 14001 certification.

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