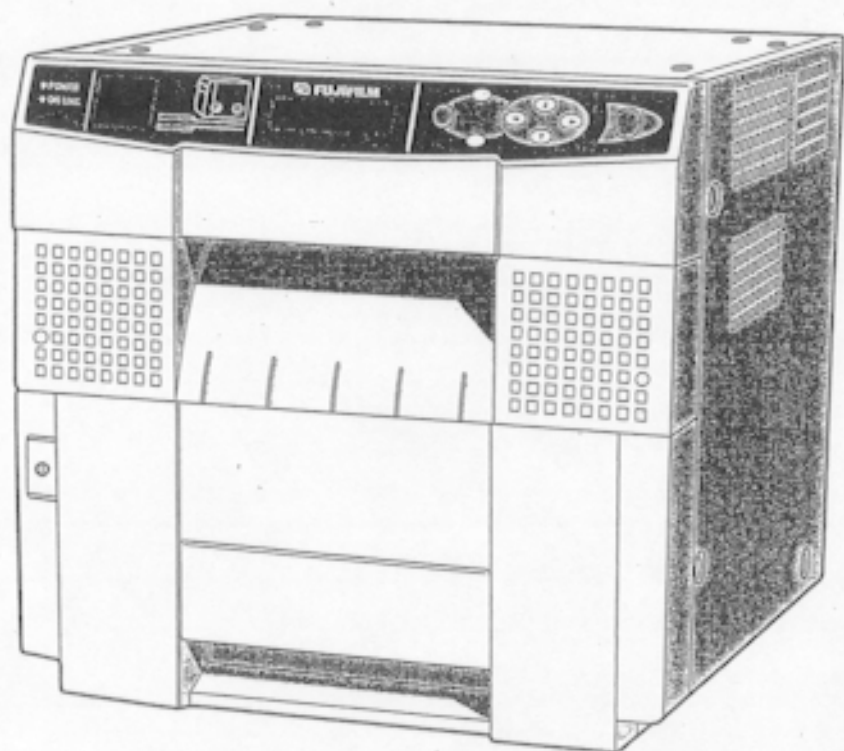


DIGITAL COLOR PRINTER

NC-600D



OWNER'S MANUAL

This manual will show you how to use your FUJIFILM DIGITAL
COLOR PRINTER NC-600D correctly.
Please follow the instructions carefully.



WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

For customers in the U.S.A.

Federal Communications Commission (FCC) Radio Frequency Interference Statement

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

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

You are cautioned that any changes or modifications not expressly approved in this manual could void your warranty.

IMPORTANT

This equipment was tested shielded interface cables. The use of these cables is required to reduce the possibly of causing interference to radio and television reception.

For customers in Canada

CAUTION

This Class B digital apparatus complies with Canadian ICES-003.

Varning: SVENSKA

APPARATEN SKALL ANSLUTAS TILL JORDAT UTTAG NÅR DEN ANSLUTS TILL KTT NÄTVERK.

Merk: NORSK

APPARATET MÅ KUN TILKOPLES JORDET STIKKONTAKT.

EC DECLARATION OF CONFORMITY

We

Name: Fuji Photo Film (Europe) G.m.b.H.
Address: Heesenstrasse 31
40549 Dusseldorf, Germany

declare that the product

Product Name: Fujifilm Digital Color Printer NC-600D
Manufacturer's Name: Fuji Photo Film Co., Ltd.
Manufacturer's Address: 26-30, Nishiazabu 2-chome, Minato-ku,
Tokyo 106-8620, Japan

is in conformity with the following Standards

Safety:	EN60950	
EMC:	EN50081-1:	1997
	EN50082-1:	1997
	EN61000-3-2:	1995
	EN61000-4-4:	1995

following the provisions of the EMC Directive (89/336/EEC, 92/31/EEC and 93/68/EEC) and Low Voltage Directive (73/23/EEC).



Dusseldorf, Germany
Place

May 1, 2000
Date

Signature/Managing Director

OWNER'S RECORD

The model and serial numbers are located on the rear panel of the Printer. Record the serial number in the space provided on the right. Refer to this numbers whenever you call upon your Fuji dealer regarding this product.

Model No. NC-600D

Serial No. _____

Please read the Safety Notes (see page 5.14) and make sure you understand them before using the printer.

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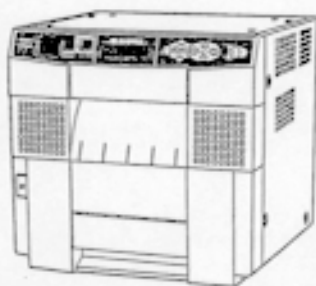
PARTS CHECKLIST

The printer packaging should contain the items listed below. Check that all these items are present as you unpack the printer.



When you transport the printer or request repairs, re-use the cardboard box in which the printer was shipped. The cardboard box effectively protects important printer components and should be stored carefully for future use.

■ Digital Color Printer (main unit) (NC-600D)

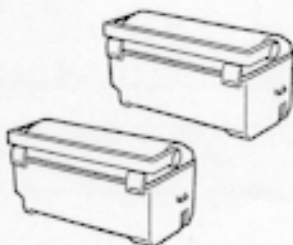


■ Paper cartridges (2)

These are installed in the printer.



These are paper cartridges specifically for the NC-600D and are not compatible with printer such as the NC-300D.

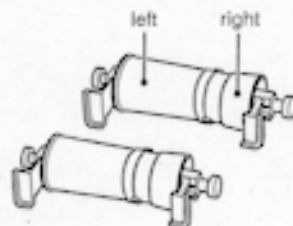


■ Paper flanges (left/right) (2)

One paper flange is installed in each paper cartridge.



These are paper flanges specifically for the NC-600D and are not compatible with printer such as the NC-300D.



■ Power cord (1) (approx. 1.8.m/5.9ft.)



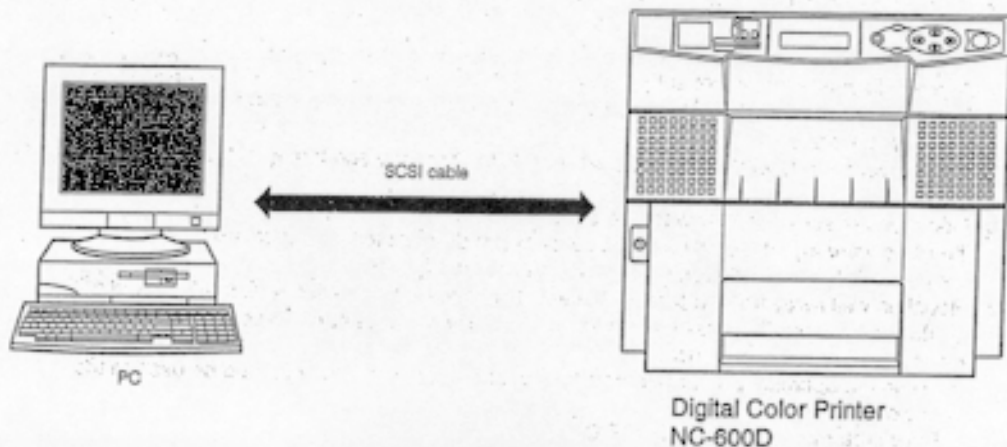
■ Paper type label (1 sheet)

■ Owner's Manual (1 set) (this document)

■ Warranty (1)

EXAMPLE OF NORMAL USAGE

The figure below shows how the NC-600D printer is normally used.



NOTES ON USING THE NC-600D

Installation Location

To ensure that the printer is used correctly and safely, install it in the following type of location:

- A location not subject to strong lights such as direct sunlight or studio lighting.
If necessary, install curtains or blinds to block the light. Exposing the thermo-autochrome paper to strong light before or during printing will cause color reproduction defects.
- On a level surface that is not subject to strong vibrations and can bear the weight of the printer.
- A location that does not obstruct the ventilation grilles on each side of the front panel
- A well-ventilated, dust-free location.
Dusty environments will increase the likelihood of soiling and scratching of the printing surface of the paper.
- A location not subject to rapid temperature variations.
The rapid warming of a cold room will cause water droplets to form inside the printer (condensation) and lead to paper jams or inferior print quality.
- A location well away from water taps, kettles, humidifiers, air conditioners, heating appliances, cooking stoves, etc. (high temperatures and humidity or low temperatures and humidity).
- Recommended ambient conditions
To obtain the optimum printer performance (print quality), the printer should be used in the following conditions:
Temperature: +18°C to +26°C (+65°F to +82°F)
Humidity: 40% to 60% RH (no condensation)
In cold conditions, the time required before printing can begin will increase and this delay may cause an error.
- Avoid locations close to equipment that generates a strong magnetic field (motors, transformers, televisions, speakers, magnets, etc.) as this can result in printer malfunctions.

WARNING



- If you install the NC-600D on a table, ensure that the front of the printer is at least 35 cms (14 in.) back from the edge of the table so that the paper tray does not extend over the edge of the table when pulled out as this could cause the printer to fall or tip over and cause injury.
- Leave a space of at least 20 cms (8 in.) between the printer and adjacent walls when installing the printer. Also leave some space between the printer and any other devices to allow effective heat dissipation. Accumulation of excessive heat inside the printer will cause a fire.

Power Supply

- Supply power from a dedicated power source with a stable voltage.
- Connect the printer's power plug directly to a grounded wall-mounted power socket that provides at least 15A. The use of desk-mounted power socket extensions, double adapters or multi-socket power boards will result in printer malfunctions.
- Do not connect the printer into a power supply circuit used by another large device such as an air conditioner or photocopier as this will result in printer malfunctions.
- Check the following at regular intervals:
 - That the power plug is securely inserted into the power socket.
 - That the power plug and power cord are not abnormally hot.
 - That the power cord is not cracked or abraded.

Notes on Operation

- Do not attempt any operation not described in this Owner's Manual.
- Do not remove the paper cartridge while the "PROCESS- or "PROCESS- green lamp is lit or flashing (P.1.11).
Removing the paper cartridge in this situation will interrupt printing and cause a paper jam.
- Do not set the [Ⓜ POWER] switch to off or unplug the power cord while the "PROCESS- or "PROCESS- green lamp is lit or flashing. Cutting the power will interrupt printing and cause a paper jam.
- Use the following procedure to unplug the printer:
 - (1) Check that the "PROCESS- or "PROCESS- green lamp is not lit or flashing.
 - (2) Turn the power switch off.
 - (3) Check that all the lamps on the control panel are off.
 - (4) Unplug the power cord from the power socket.
- If the printer is connected to a PC, do not set the [Ⓜ POWER] switch to off or switch the PC off while the "PROCESS- or "PROCESS- green lamp is lit or flashing as this will make normal printing impossible.

WARNING

If the printer is emitting smoke, is unusually hot to the touch, or is emitting any unusual odor or noise, stop using the printer immediately, turn off the power switch on the printer, and then unplug the printer's power cable from the power socket. After checking that smoke is no longer being emitted, contact your FUJI dealer or authorized FUJI service facility to request repairs.



Cleaning the Printer Casing

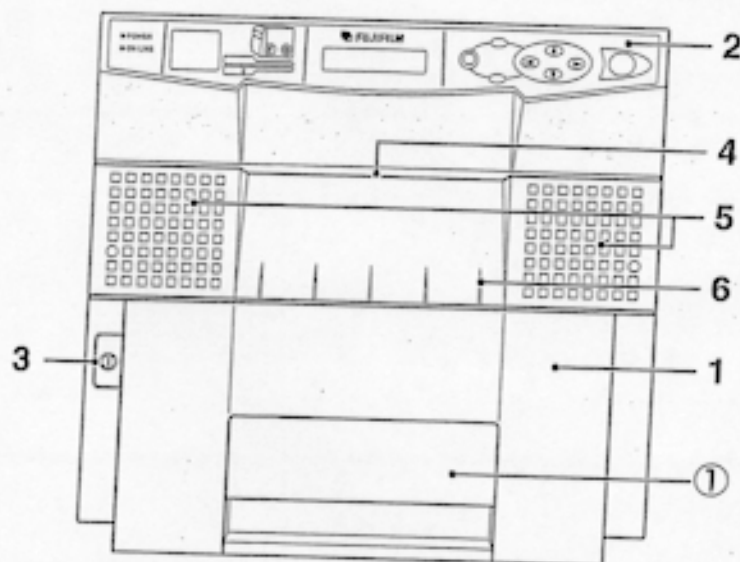
- Do not use volatile substances such as thinners, benzene or disinfectants on the printer casing as these may react with the casing or damage the coating.
- Clean the casing by wiping it with a soft cloth. For particularly heavy soiling, apply a neutral detergent diluted with water to a cloth and wipe the casing. Then use a dry cloth to wipe away any moisture.
- Unplug the printer from the power socket before cleaning the printer casing.

NOTES ON SHIPPING THE PRINTER

- When shipping the printer, always check that the power cord and any cables have been disconnected.
- If there is any remaining paper in the paper cartridge, be sure to remove the paper roll. Failure to remove the paper roll will cause a paper jam. Secure the end of the removed paper with tape and return the roll to the protective packaging in which it was supplied. Then expel the air from the package and seal the package with tape for shipping.
- To ship the printer, use the cardboard carton in which the printer was packed when it was purchased.
- This printer is a precision instrument. Ensure that it is not subjected to strong impacts during transportation.

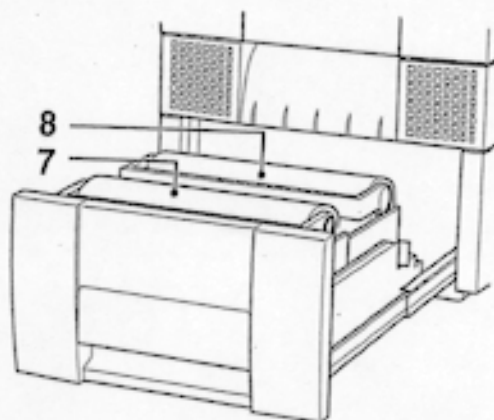
NAMES AND FUNCTIONS OF COMPONENTS

Front Panel

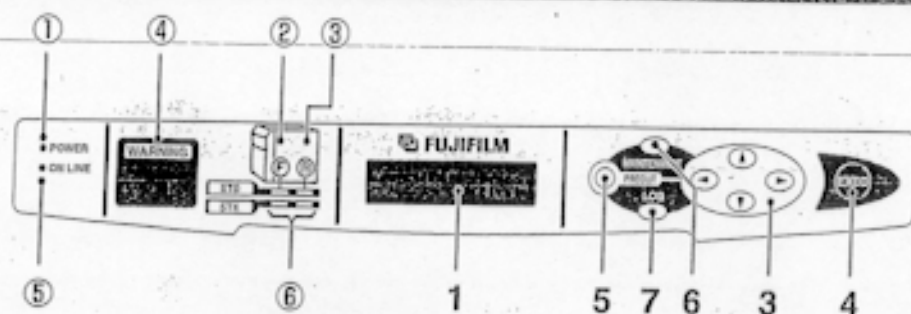


- 1 **Paper cartridge tray**
To open the cartridge tray, lift the tray lock lever ① and pull the tray out. The cartridge tray holds two paper cartridges.
- 2 **Control panel**
Displays the printer's status and is used to enter printer settings.
- 3 **[POWER] switch**
Turns the printer on and off.
- 4 **Paper eject slot**
Printed pages are ejected from this slot.
- 5 **Ventilation grilles**
These grilles house dust filters that prevent friction inside the printer.
- 6 **Paper guide ribs**

- 7 **Front (F) paper cartridge**
- 8 **Rear (R) paper cartridge**



Control Panel



1 LCD (liquid-crystal display) panel

Shows the printer's status. When you use menus to control the printer, this panel shows the menu line on which the cursor is positioned. If an error occurs, this panel displays the error code and error message.

2 LED lamps

- ① POWER lamp Shows whether the printer is switched on (lamp lit) or switched off (lamp off).
- ② PROCESS-⑦ lamp Shows the status of the front paper cartridge. This lamp shows whether the cartridge is printing (lamp lit green), overheated, preheating or undergoing automatic calibration (lamp blinking green), stopped due to a paper jam (lamp lit red), or stopped due to a paper warning (lamp blinking red).
- ③ PROCESS-⑧ lamp Shows the status of the rear paper cartridge. This lamp shows whether the cartridge is printing (lamp lit green), overheated, preheating or undergoing automatic calibration (lamp blinking green), stopped due to a paper jam (lamp lit red), or stopped due to a paper warning (lamp blinking red).
- ④ WARNING lamp Shows that a warning (lamp blinking) or error (lamp lit) has occurred.
- ⑤ ON LINE lamp Shows whether the printer is displaying the menu options (lamp lit green) or is in the OFF LINE status.
- ⑥ Paper type ID (STD/STK) lamps Show the type of paper (STD: Standard; STK: Stickers) currently loaded in the front ⑦ and rear ⑧ paper cartridges. These lamps are green when the respective paper is loaded. If you pull out the paper cartridge tray just after the paper runs out (lamp flashing green), the lamps go off.

Cursor keys

Use the cursor keys to control the printer and specify printer settings. Use these keys to:

- move the cursor in the menu screens and
- increase and decrease numeric values (◀ key to decrease, ▶ key to increase).

[EXEC] key

During print head calibration, hold this key down and press the ◀ or ▶ cursor key to calibrate the print head.

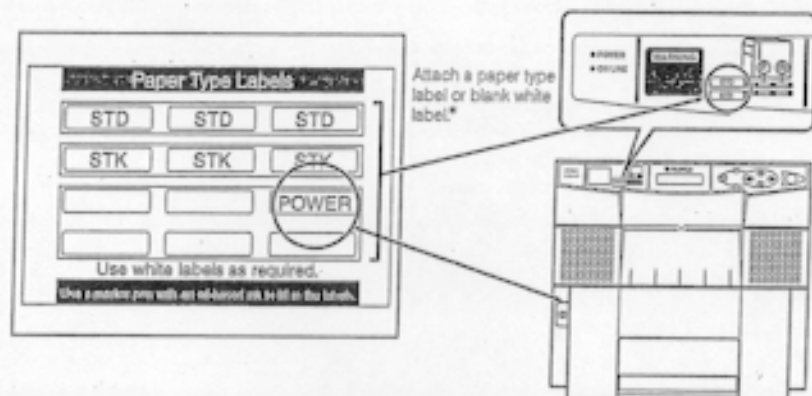
[PRECUT] key

Press this key if the printer does not precut the paper automatically when you load a new roll of paper or when you reload the paper cartridge after clearing a paper jam.

6. **[MAINTENANCE] key**
Press this key to switch to or return from the Maintenance menu.
7. **[LOG] key**
Press this key to switch to or return from the Error Log Check menu.

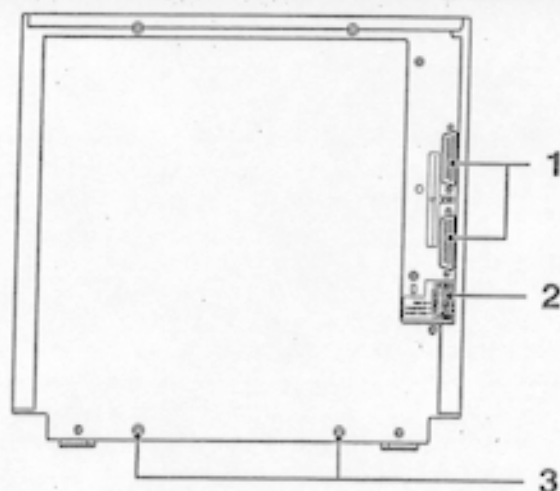
Using the Paper Type Labels

Attach the enclosed paper type labels as required.

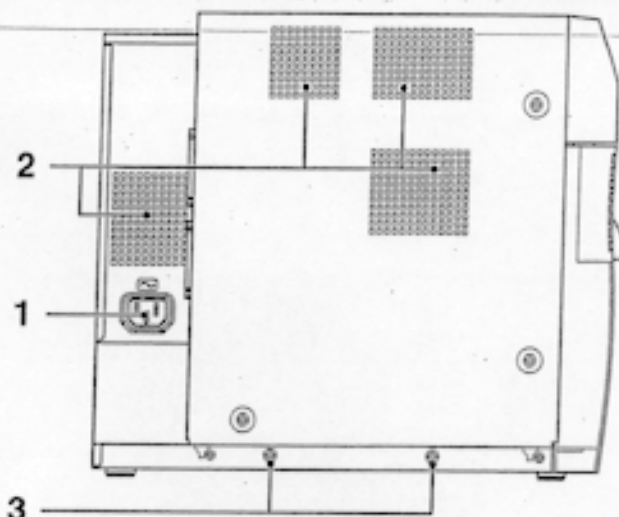


* Normally, the "Standard (STD)" label is attached in the upper position and the "Sticker Paper (STK PPR)" label in the lower position.

Rear Panel



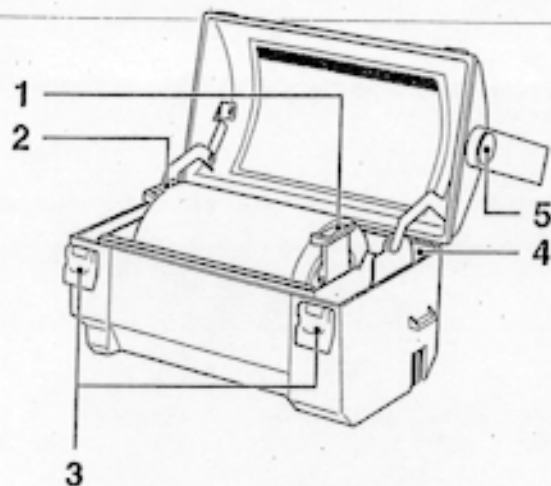
- 1 **SCSI ports (2)**
Use this port to connect to the SCSI port on a PC via a SCSI cable.
- 2 **DIP switches**
Use these to set the SCSI ID, SCSI terminator ON/OFF setting, and the SCSI Parity check ON/OFF setting.
- 3 **Printer fixing screws**
Use these to mount the printer more stably on commercially available angle-brackets.

Side Panel (Left)

- 1** ~ (Power Input) socket
Plug the enclosed power supply cord in here.
- 2** Ventilation holes
These are also provided on the right side panel.
- 3.** Printer fixing screws
Use these to mount the printer more stably on commercially available angle-brackets.
These are also provided on the right side panel.

Paper Cartridge

Fit the enclosed paper flanges into the paper roll and load the roll into the paper cartridge.



1 Paper flange (right)

2 Paper flange (left)

Used to install the paper roll in the paper cartridge.

3 Clips

Hold the paper cartridge top cover closed (one on each side).

4 Paper guide

Used to align the edges of the paper roll.

Be sure to align the paper:

- When loading a new paper roll
- When reloading the paper after clearing a paper jam.

5 Handle

Used for transporting the paper cartridge.

When you are installing the paper cartridge in the cartridge tray, fold the handle down towards you.

CONNECTING THE SCSI CABLE



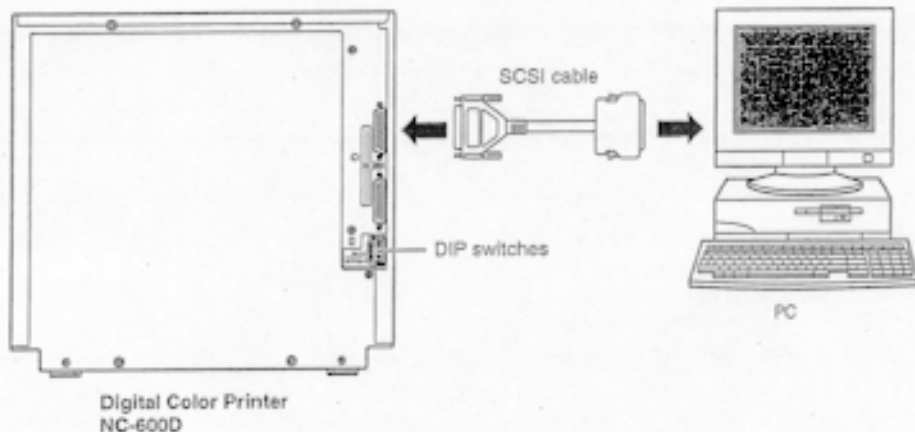
- Ensure that all the equipment is switched off before connecting or disconnecting equipment.
- Connect the power cord last.
- Push the connector firmly into the port to ensure a proper connection.
- Read the instructions provided with each device carefully to ensure that you use them correctly.
- If the SCSI bus is not terminated correctly, the printer will not operate normally. This can also cause faults in all the devices connected to the SCSI bus.
- As with the NC-600D printer, some devices have SCSI termination circuits built into the device itself.
- The total length of the SCSI cable used to connect all the equipment should not exceed 6 meters (19.6 ft.).



About the SCSI Interface



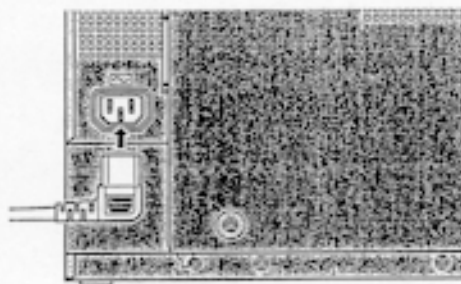
- The SCSI (Small Computer System Interface) format conforms to the ANSI X3.131-1986 standard.
- The configuration of the SCSI port type differs depending on the type of PC and the peripheral device. Check the SCSI ports on each of your SCSI devices before purchasing your SCSI cables. The NC-600D printer uses a D-sub 25-pin socket (female, #4-40 lock nuts) connector that accepts a SCSI cable with a D-sub 25-pin pin (male, #4-40 lock bolts) connector.
- The SCSI cable can be connected to either of the printer's SCSI ports.
- When this printer is the last connected device on the SCSI chain, use the DIP switches on the rear panel to set the SCSI terminator to ON. You should also use the DIP switches to set the printer's SCSI ID and SCSI parity (P.4.2).



CONNECTING THE POWER CORD

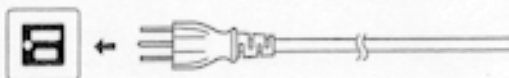
1 Check that the printer is switched off (that the [① POWER] switch is in raised position).

2 Plug the printer's power cord into the ~ (power input) socket in the side panel.



3 Plug the other end of the power cord to a grounded power socket.

- The socket-outlet shall be installed near the equipment and shall be easily accessible.
- The illustration shows the AC plug & power socket for US/Canada model. The shape differs for other countries.



4. SPECIFYING AND CHECKING PRINTER SETTINGS

This chapter describes the DIP switches used to set up the printer and provides details of the Maintenance menu.

SPECIFYING THE SCSI SETTINGS	4.2
USING THE MAINTENANCE MENU	4.4
MAINTENANCE MENU ITEMS	4.5

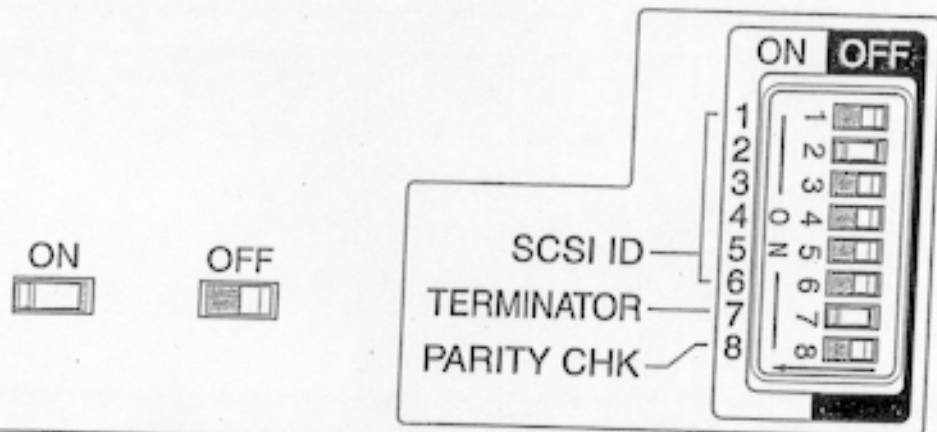


SPECIFYING THE SCSI SETTINGS

The DIP switches on the rear panel of the printer are used to specify the following SCSI settings:

- SCSI ID (number): DIP switches 1 to 6
- SCSI terminator (TERMINATOR) setting: DIP switch 7
- SCSI parity check (PARITY CHK) setting: DIP switch 8

At shipment, DIP switch 2 is set to ON (SCSI ID = 2), DIP switch 7 is ON (SCSI terminator ON), and all other switches are set to OFF.



Always switch the printer off before changing the DIP switch settings. The new settings are valid once the printer is switched back on.

Setting the SCSI ID

Use the procedure given here to set the SCSI ID. The SCSI ID can be set to any value from 0 to 6.



Do not connect devices with the same SCSI ID to the same SCSI chain as this will cause equipment faults.

1

Set the DIP switch for the desired SCSI ID to ON.

DIP switch	SCSI ID						
	0	1	2	3	4	5	6
1	OFF	ON	OFF	OFF	OFF	OFF	OFF
2	OFF	OFF	ON	OFF	OFF	OFF	OFF
3	OFF	OFF	OFF	ON	OFF	OFF	OFF
4	OFF	OFF	OFF	OFF	ON	OFF	OFF
5	OFF	OFF	OFF	OFF	OFF	ON	OFF
6	OFF	OFF	OFF	OFF	OFF	OFF	ON



If you set multiple DIP switches to ON, the switch with the smallest number is used as the SCSI ID.

Setting the SCSI Terminator

When the NC-600D is the last device in the SCSI chain, set the SCSI terminator to ON.

- 1 Use DIP switch 7 to set the SCSI terminator ON or OFF.

ON: Switches the SCSI terminator on.

OFF: Switches the SCSI terminator off.

Setting the SCSI Parity Check

This setting specifies whether a parity check is performed (ON) or not (OFF) on the SCSI data transferred from the PC.

- 1 Use DIP switch 8 to switch SCSI parity checking ON or OFF.

ON: Switches parity checking on.

OFF: Switches parity checking off.

-  When SCSI parity checking is set to ON, you must ensure that the SCSI parity is also set to ON at the PC and at any other devices connected to the SCSI chain at the same time. If the SCSI parity is off on any connected device, a communication error will occur and you will not be able to print.

SPECIFICATIONS

* Design and specifications are subject to change without notice.

System

Printing method	Light-fixing thermal color print system (TA system)
Resolution	12.6 dots/mm (320 dpi)
Compatible paper	Thermo-autochrome paper (TA paper)
Color reproduction	16.7 million colors at 256 levels in each of R, G and B
Color/Quality adjustment functions	Print quality: RGB Color Balance, Sharpness, Noise Reduction (Coring) (function controlled from the PC)
Consecutive copies printed	Up to 255

Paper Size	Print Size	Resolution
127 x 50 mm (5 x 2 in.)	121 x 44 mm (4.8 x 1.7 in.)	1,524 x 554 dots
:	:	:
127 x 89 mm (L size) (5 x 3.5 in.)	121 x 83 mm (4.8 x 3.3 in.)	1,524 x 1,044 dots
:	:	:
127 x 178 mm (2L size) (5 x 7 in.)	121 x 172 mm (4.8 x 6.8 in.)	1,524 x 2,166 dots *
:	:	:
127 x 270 mm (5 x 10.6 in.)	121 x 264 mm (4.8 x 10.4 in.)	1,524 x 3,324 dots

* When stickers are printed, paper sizes from L to 2L can be used.
Approx. 35 sec. per L-size print (following the completion of data transfer and preliminary paper feed)

Minimum printing time

Input/Output

SCSI terminals	D-sub 25-pin, socket (female, #4-40 lock nuts) connectors (2)
----------------	---

Power Supply

Power supply	AC 110-120 V, 60 Hz, 5A (US/Canada model) AC 220-240 V, 50/60 Hz, 2A (Europe model)
Power consumption	320 W
Power plug/cord	Plug with ground/Approx. 1.8 m (5.9 ft.)
Dimensions	331 x 370 x 320 mm (W x H x D) excluding attachments
Weight (main unit)	Approx. 25 kg (55 lbs.) (including paper cartridges)
Operation environment	+5°C (+41°F) to +35°C (+95°F), 20% to 80% RH (no condensation)
Recommended operation environment	+18°C (+65°F) to +28°C (+82°F), 40% to 60% RH (no condensation)
Accessories	See P.1.3
Consumables	Thermo-autochrome paper

Paper Type	Product Number	Print capacity (L size)
Standard	RL-HG240	240
Sticker paper (unseparated)	RL-HG230S	230