

Laser Printer *Operating Instructions*

Model No. **KX-P7305 / KX-P7310**

KX-P7305 is supplied without a network interface. KX-P7310 comes standard with a USB, Parallel, and Network interfaces. The Operating Instructions consist of the following 3 files.

- **Print.pdf**
- **Mainte.pdf**
- **Network.pdf**

These files can be opened by clicking on the highlighted names below. The printer's setup, operation, and features are described on the following pages of this file.



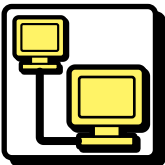
Settings and Printing (**Print.pdf**)

This section contains information on cautions, parts identification, loading media and printing and printer setup (Windows & Mac).



Maintenance and Specifications (**Mainte.pdf**)

This section contains information on cleaning the printer, replacing supplies, clearing jams, troubleshooting, error messages, repacking and specifications of the printer, media to be used and interface.



Network (**Network.pdf**)

This section contains the information to configure the printer on a network.

Please carefully read the Operating Instructions before operating.

Keep the printer CD-ROM in a safe place for future reference.

Do not expose the CD-ROM to direct sunlight or extreme heat and do not scratch or smudge the surface of the CD-ROM.

Features

Thank you for purchasing a Panasonic Laser Printer. We are sure it will meet your printing needs and give you many years of productive and efficient use.

Printing in PCL and PostScript

In addition to printing in the PCL Emulation or PostScript® Emulation for Microsoft® Windows® operating system, it also provides compatibility for Macintosh using the PageStyler II driver in the PostScript Emulation.

Paper handling

■ **Media tray** (universal cassette):

Supports loading both Letter and Legal 75 g/m² (20 lb.) paper up to 250 sheets. Transparency or envelope can be also loaded.

■ **Manual feed:**

Supports loading media (Letter/Legal paper, transparency, label and Envelope) one page at a time.

Automatic Duplex Printing (see “Duplex Printing” on page 58 (Windows), page 96 or page 114 (Macintosh) in “Settings and Printing”)

Automatically prints your (most be two pages or more) document on both sides of the paper.

Watermark Printing (see “Watermark Printing” on page 60 in “Settings and Printing”)

Imbeds a watermark (CONFIDENTIAL, DRAFT, etc.) into any document.

Overlay Printing (see “Overlay Printing” on page 64 in “Settings and Printing”)

Overlaps the overlay data (image or characters) over any document.

2 Up / 4 Up (see “Assigning Multiple Pages per Sheet” on page 55 (Windows), “Setting the Layout Menu” on page 89 or “Setting the Layout Menu” on page 105 (Macintosh) in “Settings and Printing”)

Prints 2 or 4 pages on a single sheet of paper to save paper.

(Continued)

Power Saving (see “Remote Control Panel” on page 28 in “Settings and Printing”)

Saves energy while the printer is idle.

Remote Control Panel (see “Remote Control Panel” on page 28 in “Settings and Printing”)

Supports making changes to the printer’s default settings for compatibility with application software running in the MS-DOS® operating system.

Animated Help Feature (see “Status Display” on page 68 (Windows) in “Settings and Printing”)

The Printer Status Display alerts the user of common operational errors. Click the ► button for animated help. This feature will walk you through the steps required to get your printer running again.

Bi-directional Parallel Interface or USB (Hi-Speed USB 2.0) Interface
(see “Parallel (IEEE1284) Interface” on page 59 or “USB (Universal Serial Bus) Interface” on page 61 in “Maintenance and Specifications”)

Supports communication between the computer and printer using the parallel or USB 2.0 interface.

Networking (KX-P7310 only) (see “Network” section)

Supports print data through the network interface (10 Base-T and 100 Base-TX Ethernet).



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End-user should not copy the program on the ROM in the printer.
End-user cannot be guaranteed against the program on the ROM in the printer by Wind River Co., Ltd.

The operating instructions are subject to change without notice.
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Settings and Printing

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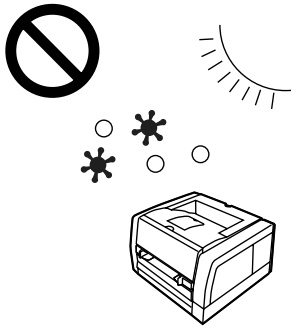
Contents of Basics Section

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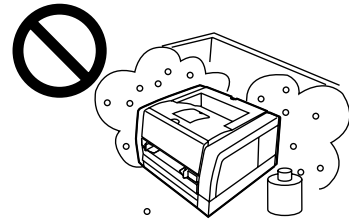


Cautions

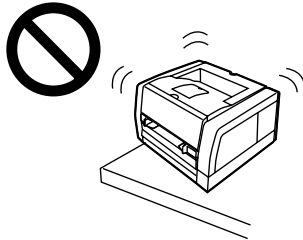
To avoid machine malfunction, do not use the equipment under the following conditions:



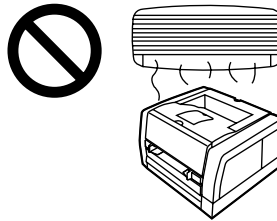
- Direct exposure to sunlight.
- Extremely high or low temperature [temperature range: 10°C to 32.5°C (50°F to 90.5°F)]
- Extremely high or low humidity. (humidity range: 20% to 80% RH)
- Condensation due to rapid change of temperature.



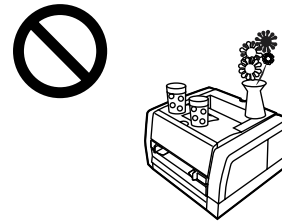
- Areas of poor ventilation.
- Areas of high dust or chemical fume concentration. (solvent etc.)



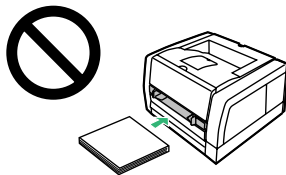
- Unstable or unlevel surfaces.



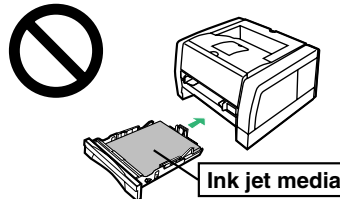
- Directly in front of air conditioning vents.



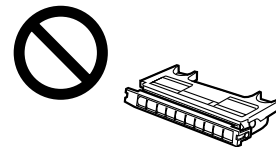
- Liquids near the equipment.



- Insert a stack of media into the manual feed. (Insert media one page at a time.)



- Media for ink jet printers (paper, transparency, etc.) or transparency for color laser printers; may wrap around the fuser heat roller and cause damage, and may need to be replaced.



- Any toner other than genuine Panasonic toner; it may damage the printer.



■ **Static Electricity Damage**

To prevent static electricity damage to any of the following components, touch a grounded metal surface, such as the printer's bare metal frame prior to touching the component.

- Interface connectors : parallel, USB, connector for 2nd feeder and network (KX-P7310 only)
- Electrical components, connectors inside the printer

■ **Interface Cable**

Always use a shielded interface cable. Use of an unshielded cable can result in radio interference with data.

■ **Power Source**

Do not use a line conditioner, transient suppressor or surge protector, it may cause a printer error.

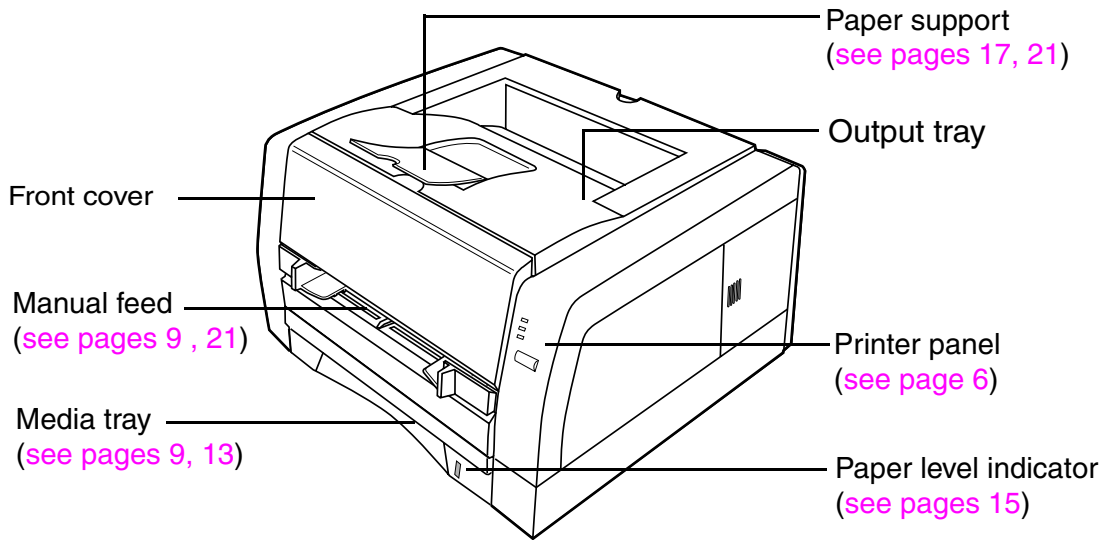
■ **Ventilation Space**

Adequate ventilation space is required between the printer and any walls, 20 mm (8 inches) is recommended.

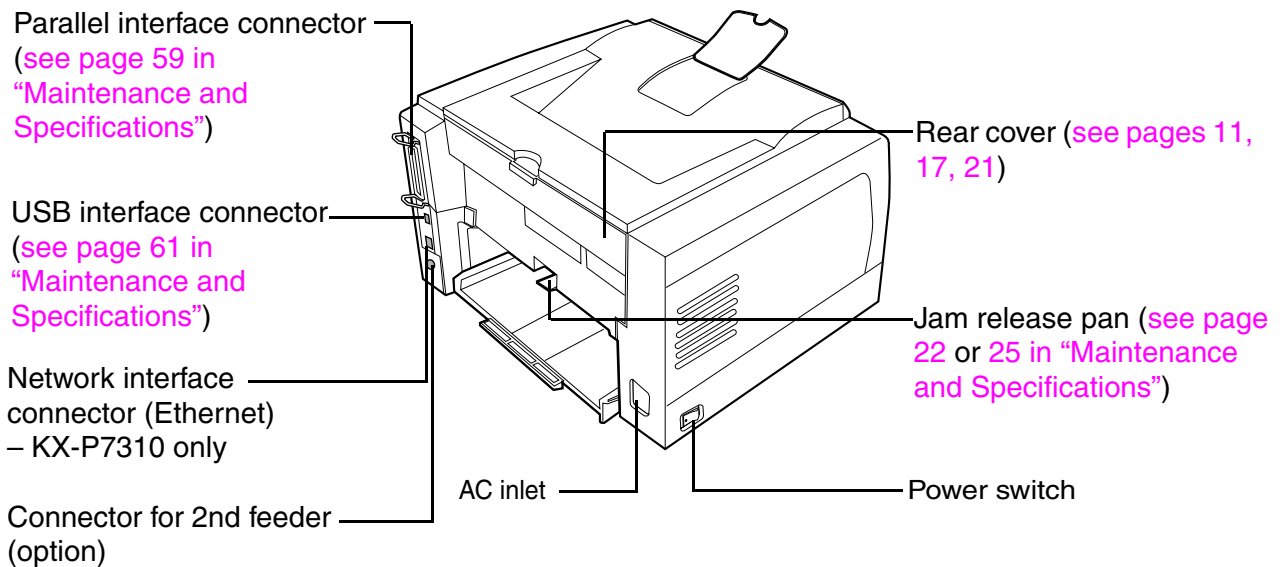


Part Names

Front Side View

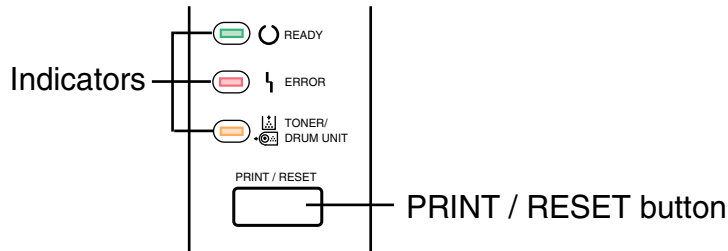


Rear Side View





Printer Panel



Indicators

Three indicators show the following printer's status.






















READY	ERROR	TONER/ DRUM UNIT	Printer Status
			Printer is warming up (the three indicators light one after another).
		*1	Printer is ready for printing or in the sleep mode.
			Internal Error occurs. -->Turn the printer off and back on again. If the problem persists, call for service on your printer.
		*1	Printer is receiving data printing or data remains in Memory. (See page 8 for additional information).

- : Indicator is lit.
- : Indicator is turned off.
- : Indicator is blinking.

*1 The status may be different depending on the printer's condition.



Printer Panel

 READY	 ERROR		 TONER/ DRUM UNIT	Printer Status
		On: 0.5 s Off: 0.5 s		Front cover is open. RAM overflow or Overrun has occurred. See "Maintenance and Specifications" for troubleshooting.
		On: 0.5 s Off: 2 s		Media jam has occurred.
		On: 1 s Off: 0.5 s		Manual feed is empty.
		On: 1 s Off: 1 s		Media tray (standard) or lower tray (2nd feeder) is empty. Media tray (standard) is not installed.
		On: 0.5 s Off: 0.5 s		Drum unit is not installed in the printer. Toner may be empty. Drum unit is worn out.
 *1				Drum unit is wearing out. Toner is low.

- █
█
█ : Indicator is lit.
- : Indicator is turned off.
- ▬▬▬
▬▬▬
▬▬▬ : Indicator is blinking.

*1 The status may be different depending on the printer's condition.



PRINT / RESET Button

The printer executes the following action depending on the printer status by pressing this button.

READY	ERROR	TONER/ DRUM UNIT	Printer Status
		*1	To recover from the error status (overrun or memory overflow), press the PRINT / RESET button less than 5 seconds .
		*1	To clear the remaining data, press the PRINT / RESET button more than 5 seconds until the READY and ERROR indicator blinks fast, then release it. The remaining data will be cleared.
		*1	To print the configuration page, press the PRINT / RESET button more than 2 seconds and less than 5 seconds .
		*1	To print the demo page, press the PRINT / RESET button more than 5 seconds until the ERROR indicator blinks fast, then release it. The ERROR indicator is turned off and the demo page will print.
		*1	To print the remaining data, press the PRINT / RESET button less than 2 seconds .
		*1	To clear the remaining data, press the PRINT / RESET button more than 2 seconds until the READY and ERROR indicator blinks fast, then release it. The remaining data will be cleared.

- : Indicator is lit.
- : Indicator is blinking.
- : Indicator is turned off.

*1 The status may be different depending on the printer's condition.



About Media

See the tables below for available media. For the notes and detailed media specification, refer to [see “Media” on page 53](#) in “Maintenance and Specifications”.

Available Media and Media Size

Media	Media size	Media tray	Manual feed	Duplex print	2nd feeder (option)
Paper Cotton paper Thick	Letter	○	○	○*1	○*1
	A4	○	○	○*1	○*1
	Legal	○	○	○*1	○*1
	B5	○	○	○*1	○*1
	Executive	○	○	○*1	○*1
	A5	○	○	X	X
	A6	○	○	X	X
Available media size*2	Max.	216 x 356 mm (8.5" x 14")	216 x 356 mm (8.5" x 14")	216 x 356 mm (8.5" x 14")	216 x 356 mm (8.5" x 14")
	Min.	105 x 148.5 mm (4.1" x 5.9")	76.2 x 127 mm (3" x 5")	182 x 257 mm (7.2" x 10.1")	182 x 257 mm (7.2" x 10.1")
Transparency	Letter	○	○	X	X
	A4	○	○	X	X
Label	Letter	X	○	X	X
	A4	X	○	X	X
Envelope	#9	○	○	X	X
	#10	○	○	X	X
	Monarch	○	○	X	X
	DL	○	○	X	X
	C5	○	○	X	X

○: supported X: not supported

*1 Cotton paper and thick paper cannot be used for duplex printing and printing from 2nd feeder.

*2 If you print a document on custom size paper, print it using the application software that page size can be set to custom size, or set the paper size to letter or A4 in the printer's media size setting.



Available Paper Weights and Capacity

	Media	Media tray	Manual feed	2nd feeder (option)
Paper weights	Plain paper	60 - 105 g/m ² (16 - 28 lb.)	60 - 105 g/m ² (16 - 28 lb.)	60 - 105g/m ² (16 - 28 lb.)
	Thick paper	X	106 - 165 g/m ² (29 - 44 lb.)	X
	Envelope	90 g/m ² (24 lb.)	90 g/m ² (24 lb.)	X
Paper capacity	Paper	250 sheets [75 g/m ² (20 lb.)]	1 sheet	550 sheets [75 g/m ² (20 lb.)]
	Transparency	20 sheets	1 sheet	X
	Label	X	1 sheet	X
	Envelope	30 sheets	1 sheet	X

X: not supported

NOTE

- Automatic duplex printing can only be performed on plain paper [75 – 90 g/m² (20 – 24 lb.)] from the media tray or 2nd feeder (option). For detailed information, see “Duplex Printing” on page 58, 96 or 114.

Recommended Media

Media	Media size	Recommended media
Paper	Letter	Xerox 4024 DP paper 75 g/m ² (20 lb.)
	A4	Xerox paper 80 g/m ²
Transparency	Letter / A4	3M CG3300
Label	Letter	Avery 5160 – 5163, Avery 5660 – 5663
	A4	Avery L7159 – L7164
Recycled paper* ¹	Letter	Multi Use 20 lb., 24 lb.
	A4	—

*¹When using recycled paper, select Plain Paper for media type in the printer driver or see, “Loading Media and Printing” on page 11.

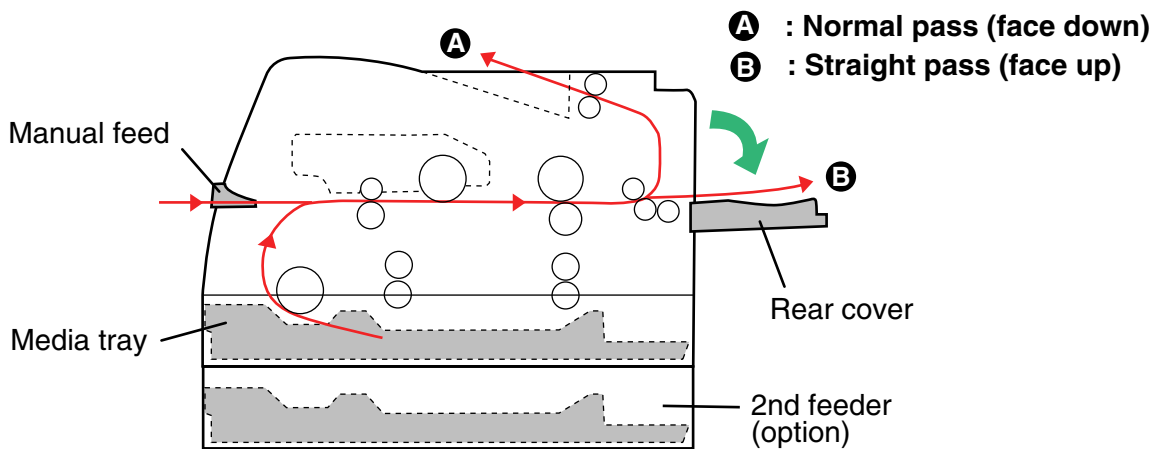


Loading Media and Printing

See the setup guide(s) for the following instructions.

- Installing the toner cartridge and drum unit
- Connecting cables
- Installing the printer software

The media is printed out to the output tray (top of the printer). When using thick paper [106 - 165 g/m² (29-44 lb.)] or when an envelope is printed, it may be curled. You can avoid this by opening the rear cover and the media is printed straight out. However, it needs to be removed after the media is printed out to avoid a media jam. For available media, see "About Media" on page 9.



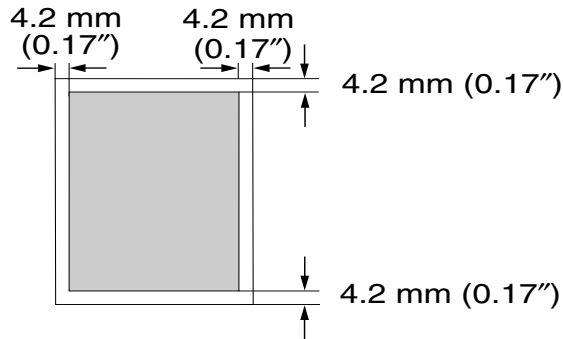
NOTE

- Be sure to use manual feed when printing a document on a thick paper [106 -165 g/m² (29-44 lb.)] or label.
- Plain paper (A4, Letter, Legal, B5, Executive) can be loaded in the optional 2nd feeder.



Margins and Print Area

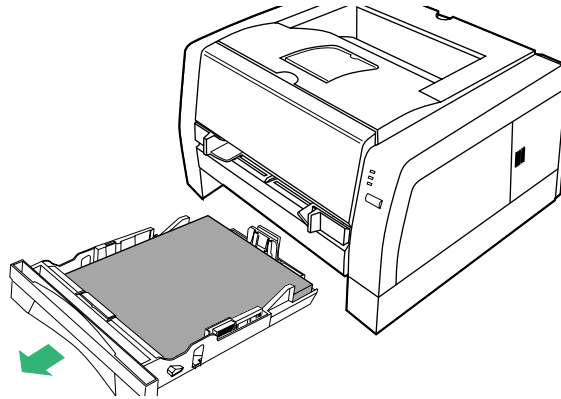
The image (print area) is printed a bit smaller than the media size. 4.2 mm (0.17") is required from the top, bottom and sides margins. You may need to adjust the page margins in the application software to match the print area.



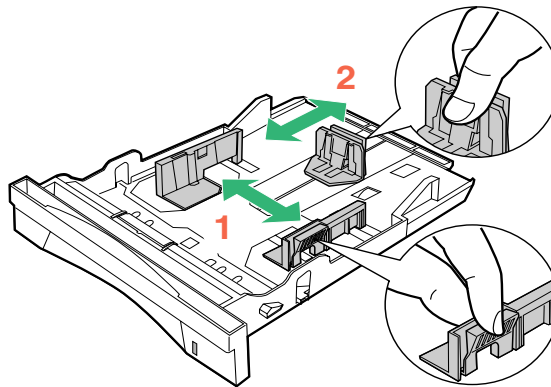


Using the Media Tray

- 1 Pull the media tray out of the printer.



- 2 Pinch the media guides and slide them to the approximate width (1) and length (2) of the media.

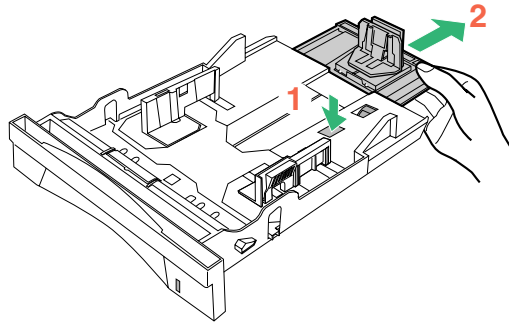




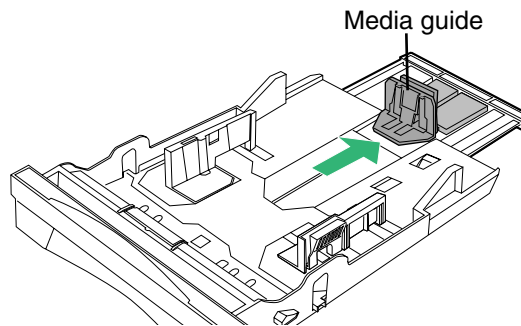
Loading Media and Printing

NOTE

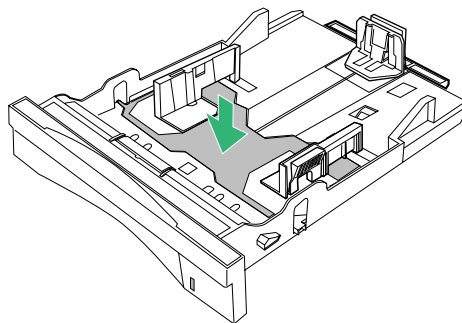
- When loading legal paper, slide the length guide unit (2) to extend while pressing the stopper (1).



- If the media guide is removed, slide it back in.

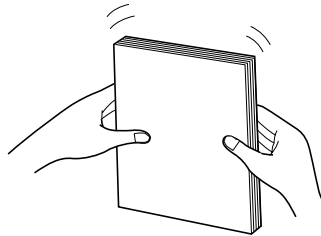


- If the metal plate is in the up position, the media tray cannot be inserted into the printer. Push the metal plate down until it clicks, locking it in place.





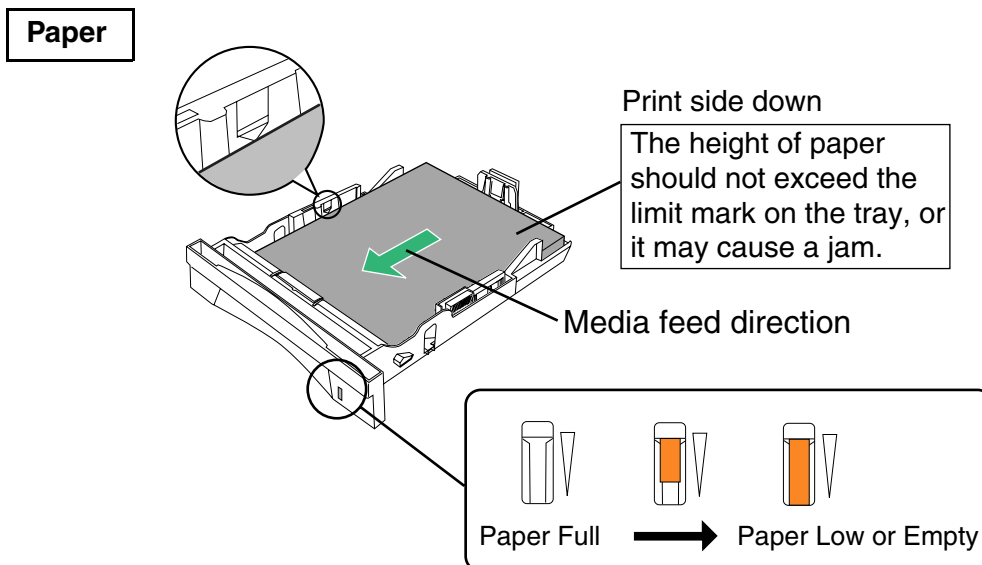
- 3 Tap the media stack on a level surface to avoid media jams or skewed printing.

**NOTE**

- Be careful not to leave fingerprints on the media, which can result in a smudged print.
- Reusing media (used paper or jammed paper) that has been fed through the printer once can reduce the life of the consumables and paper path components.

- 4 Place media with the **print side down**.

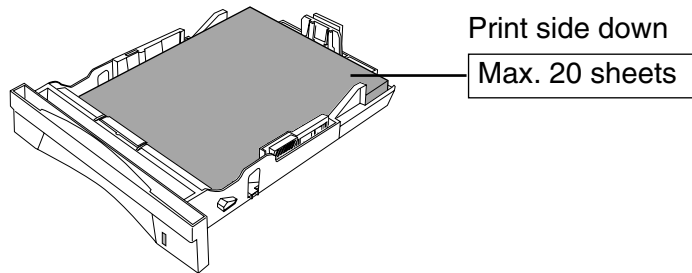
- Transparencies, labels or envelope cannot be loaded in the optional 2nd feeder.



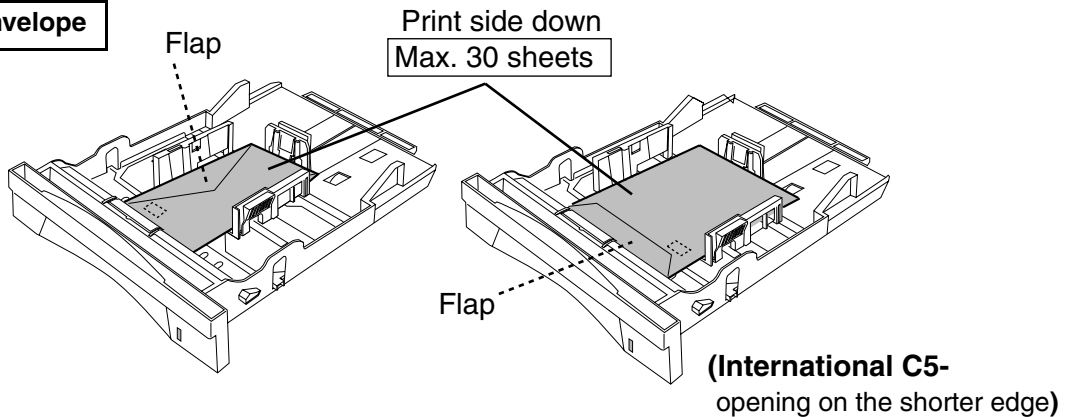


Loading Media and Printing

Transparency



Envelope

**NOTE**

- Most media has instructions recommending the side to be printed first.
- Do not mix different types or thicknesses of media in the media tray at one time; this may cause a jam.
- Loading media exceeding the designated sheets may cause a media jam or shifting of print.

5

Adjust the media guides to the media size.

- Be sure that the stoppers of the media guides are put in the grooves of the media tray.

6

Slide the media tray completely into the slot.

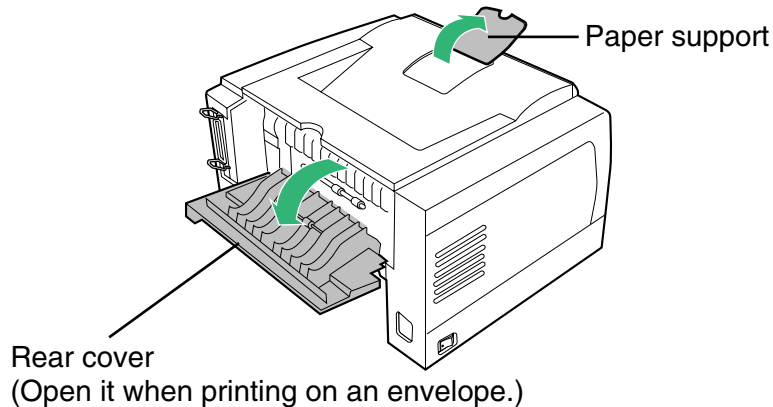
CAUTION

- Be sure to hold the media tray with both hands so you do not drop it especially when it is fully loaded.



7 Raise the paper support so that the media is not dropped from the output tray.

- It is recommended to print envelopes with the rear cover of the printer open to avoid curling or wrinkles.



- When you notice some straight lines on the projected image on the screen (OHP), it is recommended to open the rear cover, so the media (transparency) is printed straight out.

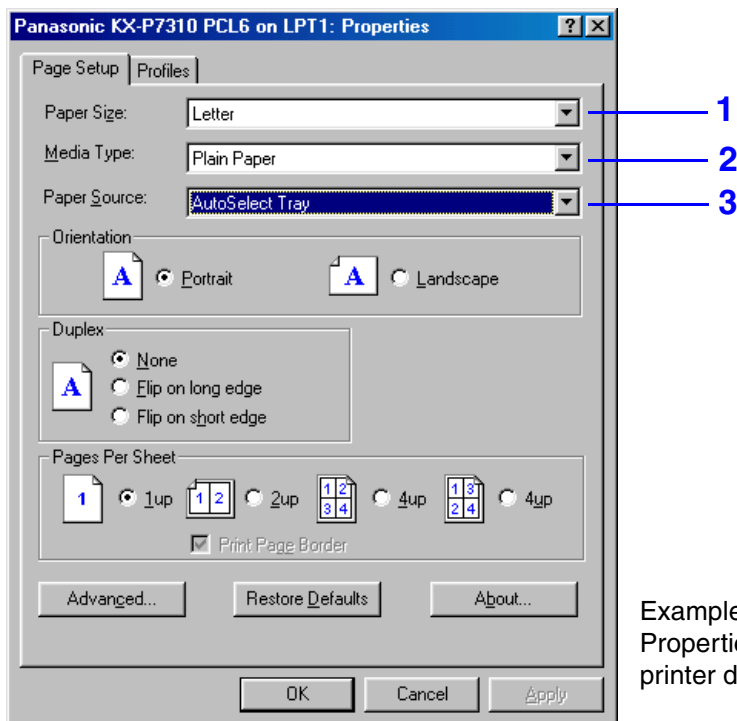
Before printing a document, specify the paper size, media type and paper source from the printer driver following the steps below.



8 Specify the printer's driver setting depending on the operating system.

For Windows®*1

- (1) Display the print window in the application software.
- (2) Select **Panasonic KX-P7305 PCL6**, **Panasonic KX-P7305 PS**, **Panasonic KX-P7310 PCL6** or **Panasonic KX-P7310 PS** printer.
- (3) Click **Properties** ([**Preferences**] for Windows XP*2 / Windows Server™ 2003*3) to display the printer properties window.
- (4) Select **AutoSelect Tray** for paper source (3) and specify the paper size (1) and media type (2).
 - When the optional 2nd feeder is installed in your printer, Media Tray is changed to Upper and Lower selection is added to Paper Source.
 - You cannot feed Thick Paper or Labels from the Media Tray (Upper) or (Lower) Paper Source.
 - You can only feed plain paper (A4, Letter, Legal, B5 or Executive) from the lower tray. Also Cotton paper cannot be fed from the lower tray.
 - For detailed information to setup the printer driver, refer to the Help menu (see "Displaying Help of the Printer Properties Window" on page 47).



Example:
Properties window of PCL
printer driver

*1 Microsoft® Windows® operating system (hereafter Windows)

*2 Microsoft® Windows® XP operating system (hereafter Windows XP)

*3 Microsoft® Windows Server™ 2003 operating system (hereafter Windows Server 2003)



- (5) Click **[OK]** and print a document.
 - If you opened the rear cover at step 7, be sure to remove the media every time media is printed out.

For Mac OS 8.5 - Mac OS 9.2

- (1) Open a document to print.
- (2) Select **Page Setup...** from the application's **File** menu.
- (3) Select your printer from the **Format for** menu.
- (4) Specify the paper size (Page Attributes) and click **[OK]**.
- (5) Select **Print...** from the application's **File** menu.
- (6) Select **Auto** or **Media Tray** from **All pages from of Paper Source** in the **General** menu.
 - When selecting the **Auto**, be sure that the media is not inserted in the manual feed. Otherwise, the media may be fed from the manual feed.
 - If the optional 2nd feeder is installed in the printer, Option Cassette can be available.
 - **Auto Select** is invalid selection.
- (7) Specify media type (Printer Specific Options).
 - You cannot feed Thick Paper or Label from the Media Tray.
 - You can only feed Plain Paper from the Option Cassette (option). Cotton paper cannot be fed from the Option Cassette. For the detailed information, "[Setting the Printer Specific Options](#)" on page 91.
- (8) Click **[Print]** to print the document.
 - If you opened the rear cover at step 7, be sure to remove the media every time the media is printed out.



For Mac OS X 10.1 - Mac OS X 10.2

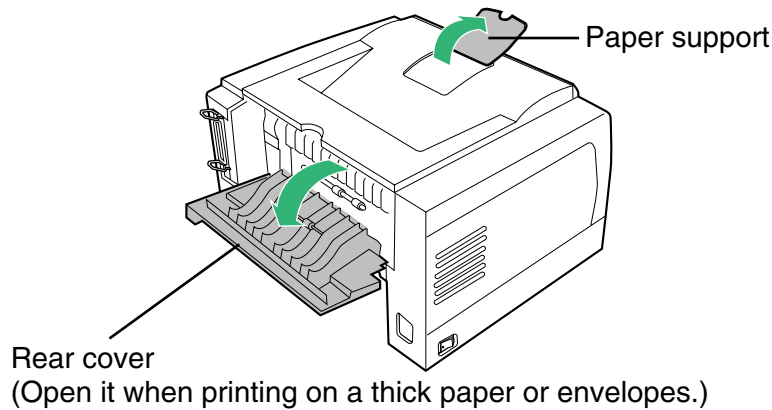
- (1) Open a document to print.
- (2) Select **Page Setup...** from the application's **File** menu.
- (3) Select your printer from the **Format for** menu.
- (4) Specify the paper size (Page Attributes) and click **[OK]**.
- (5) Select **Print...** from the application's **File** menu.
- (6) Select your printer from the **Printer** menu.
- (7) Select **Auto** from **All pages from** of the **Paper Feed** menu and specify the media type (Printer Features).
 - When selecting the **Auto**, be sure that the media is not inserted in the manual feed. Otherwise, the media may be fed from the manual feed.
 - If the optional 2nd feeder is installed in the printer, Option Cassette can be available.
 - **Auto Select** is invalid selection.
 - You cannot feed Thick Paper or Label from the Media Tray.
 - You can only feed Plain Paper from the Option Cassette (option). Cotton paper cannot be fed from the Option Cassette. For the detailed information, "[Setting the Printer Features](#)" on page 110.
- (8) Click **[Print]** to print the document.
 - If you opened the rear cover at step 7, be sure to remove the media every time the media is printed out.



Using the Manual Feed

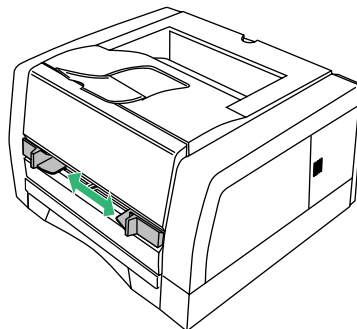
The manual feed serves as an additional tray for loading any type of media that ranges in size from 76.2 mm x 127 mm to 216 mm x 356 mm (3" x 5" to 8.5" x 14"). When using thick paper [106 – 165 g/m² (29 – 44 lb.)] or labels, use the manual feed.

- 1 Raise the paper support so that the media is not dropped from the output tray.
 - It is recommended to open the rear cover of the printer to avoid curls or wrinkles if you print a document on thick paper [106 – 165 g/m² (29 – 44 lb.)] or an envelope.



- If you notice lines on the projected image on (OHP), it is recommended to open the rear cover, so the media (transparency) is printed using the straightest path out.

- 2 Separate the media guides to the approximate width of the media.



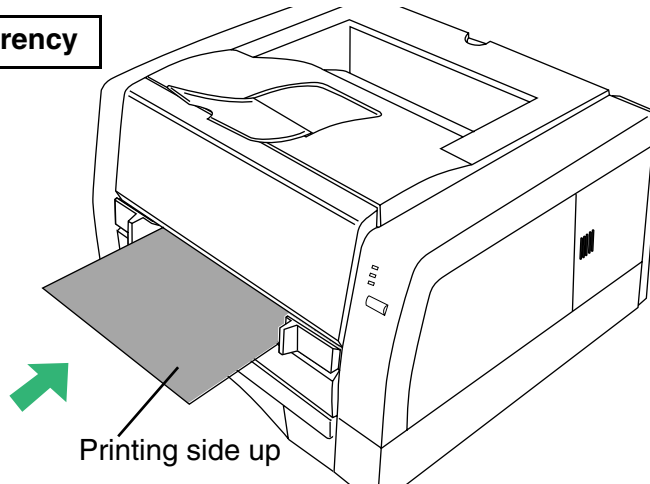
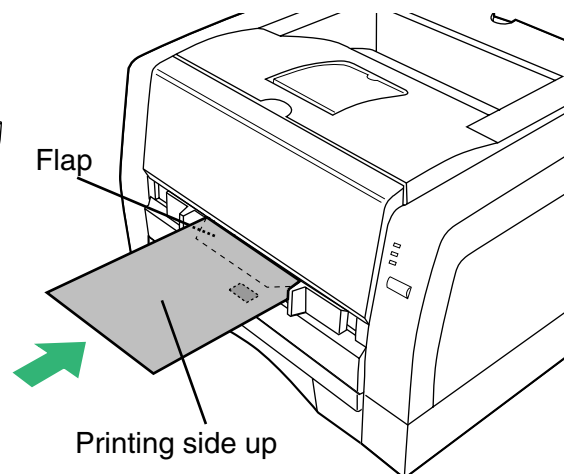
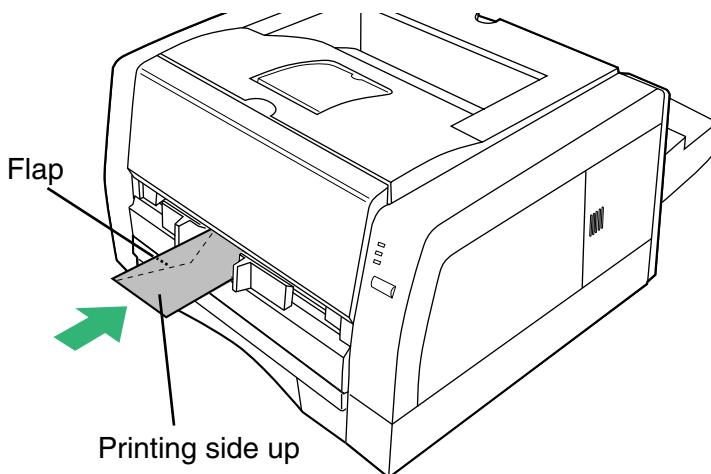


Loading Media and Printing

- 3** Insert media with the **printing side up** into the manual feed while adjusting the media guides to the media width.

The inserted media is slightly fed into the manual feed automatically.

- Be sure to insert media into the manual feed one at a time.

Paper / Label / Transparency**Envelope**

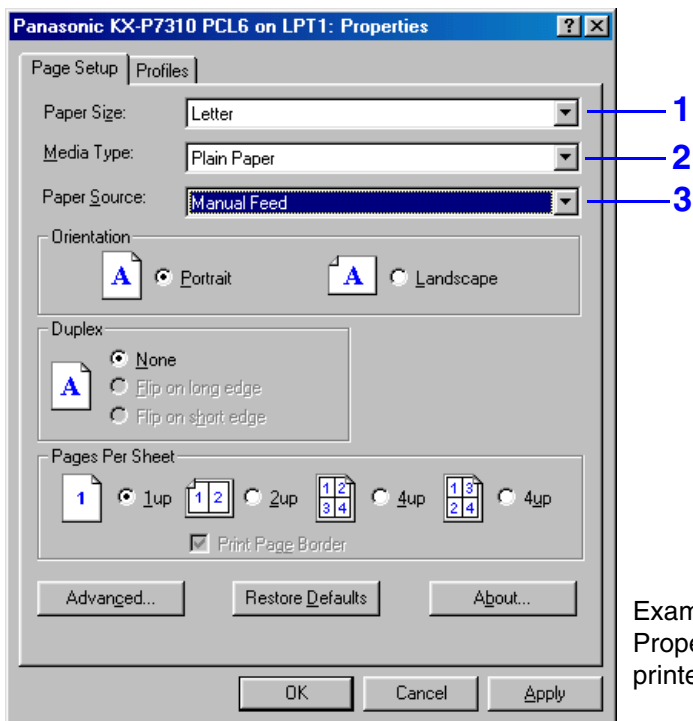
**(International C5-
opening on the shorter edge)**



4 Specify the printer driver's setting depending on the operating system.

For Windows

- (1) Display the print window in the application software.
- (2) Select **Panasonic KX-P7305 PCL6**, **Panasonic KX-P7305 PS**, **Panasonic KX-P7310 PCL6** or **Panasonic KX-P7310 PS** printer.
- (3) Click **Properties** ([**Preferences**] for Windows XP / Windows Server 2003) to display the printer properties window.
- (4) Select **Manual Feed** for paper source (3) and specify the paper size (1) and media type (2).
 - For the detailed information to setup the printer driver, refer to the Help menu (see [“Displaying Help of the Printer Properties Window”](#) on page 47).



- (5) Click [**OK**] and print a document.
 - If you opened the rear cover on step 1, be sure to remove the media each time media is printed out.



For Mac OS 8.5 - Mac OS 9.2

- (1) Open a document to print.
- (2) Select **Page Setup...** from the application's **File** menu.
- (3) Select your printer from the **Format for** menu.
- (4) Specify the paper size (Page Attributes) and click **[OK]**.
- (5) Select **Print...** from the application's **File** menu.
- (6) Select **Manual Feed** from **All pages from** of **Paper Source** in the **General** menu.
- (7) Specify media type (Printer Specific Options).
- (8) Click **[Print]** to print the document.
 - If you opened the rear cover at step 1, be sure to remove the media every time the media is printed out.

For Mac OS X 10.1 - Mac OS X 10.2

- (1) Open a document to print.
- (2) Select **Page Setup...** from the application's **File** menu.
- (3) Select your printer from the **Format for** menu.
- (4) Specify the paper size (Page Attributes) and click **[OK]**.
- (5) Select **Print...** from the application's **File** menu.
- (6) Select your printer from the **Printer** menu.
- (7) Select **Manual Feed** from **All pages from** of the **Paper Feed** menu and specify the media type (Printer Features).
- (8) Click **[Print]** to print the document.
 - If you opened the rear cover at step 1, be sure to remove the media every time the media is printed out.

- 5** When printing multiple pages using the manual feed, and the page has been ejected from the printer, insert the next media into the manual feed.
- If you delay inserting media into the manual feed when doing a multiple print job, a media empty error may occur. In that case, just insert the media into the manual feed.



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Remote Control Panel

The Remote Control Panel can be used for the following.

1. Used to display the option information installed in the printer (see “Information” on page 43).
2. Used to change the printer’s setting (see “Changing the Settings” on page 31).
3. Used to print the demo page, configuration page or fonts list (see “Tool menu” on page 32).
4. Used to change the network setting (see “Network (KX-P7310 only)” on page 40).

The setting of the Remote Control Panel will be taken over by the setting of the printer driver.

NOTE

- When using the Remote Control Panel for the printer on the network, you cannot specify the greyed setting. The printer’s setting is only displayed or not displayed (N/A).

■ Available Operating System

The Remote Control Panel is available in the following operating system.

Windows 95*¹, Windows 98*², Windows Me*³, Windows NT® 4.0*⁴,
Windows 2000*⁵ or Windows XP, Windows Server 2003

*¹ Microsoft® Windows® 95 operating system (hereafter Windows 95)

*² Microsoft® Windows® 98 operating system (hereafter Windows 98)

*³ Microsoft® Windows® Millennium Edition operating system (hereafter Windows Me)

*⁴ Microsoft® Windows NT® operating system Version 4.0 (hereafter Windows NT 4.0)

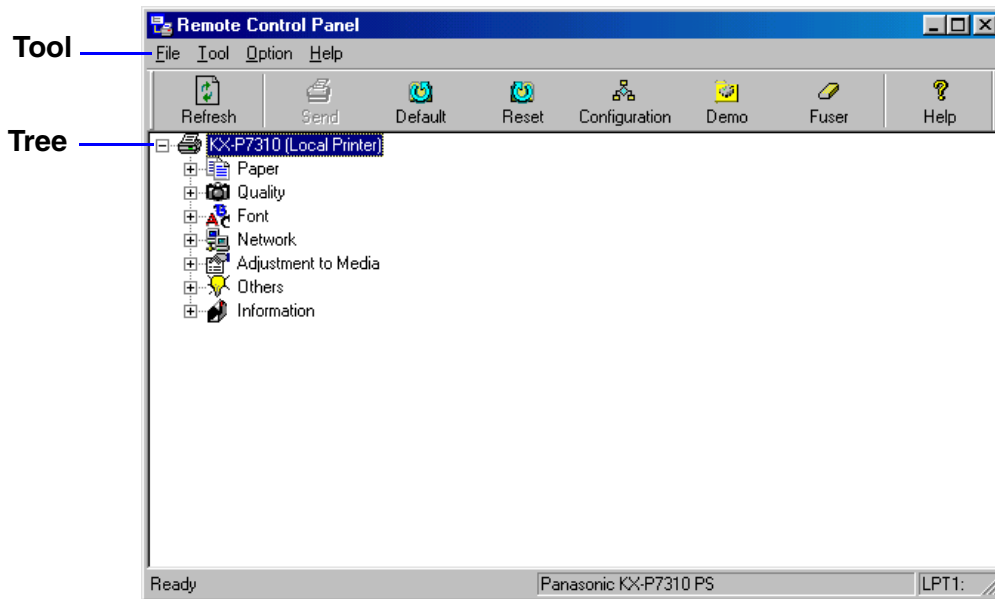
*⁵ Microsoft® Windows® 2000 operating system (hereafter Windows 2000)



Displaying the Remote Control Panel Window

1 Click [Start], move the pointer to **Programs** or **All Programs**, **Panasonic** and **Panasonic KX-P7305 and KX-P7310**, then click **Remote Control Panel**.

- If more than one printer is connected to your computer, the screen prompts to select the printer. Click the desired printer, then click **[OK]**.





2 For information on the following menus, see the page indicated.

■ Tool Menus

File menu	(see page 32)
Tool menu	(see page 32)
Option menu	(see page 33)
Help menu	(see page 33)

■ Tree Menus

Paper	(see page 38)
Quality	(see page 39)
Font	(see page 39)
Network* ¹	(see page 40)
Adjustment to Media	(see page 41)
Others	(see page 42)
Information	(see page 43)

*¹ If your printer is KX-P7305, the Network menu is not displayed. (KX-P7310 only)

Displaying the Firmware Version and Installed Options

- 1** Display the Remote Control Panel window (see “Displaying the Remote Control Panel Window” on page 29).
- 2** Click the **+** button on the **Information** menu from the tree menu.
Or
Double click the **Information** menu.



Changing the Settings

- 1 Display the Remote Control Panel window ([see page 29](#)).
- 2 Click the **+** button on the main menu from the tree menu.
Or
Double click the main menu.
- 3 Click the 2nd menu.
- 4 Click the **▼** button to display the pull down list and click the desired selection.
Or
Click the or button to select the value.
Or
Type the value.
- 5 Click **Tool** menu and select **Send** to transfer the changed setting to the printer.



Tool Menus (Tool Bar Icons)

■ File menu

Refresh ()

Updates the Remote Control Panel setting by loading the printer settings.

Exit

Exits the Remote Control Panel.

■ Tool menu

Send ()

Transfers the changed settings to the printer.

Factory Default ()

Resets the printer's settings to the factory default settings.

Reset ()

Restarts the printer.

Print Configuration ()

Prints the current printer's settings.

Print Demo Page ()

Prints the demo page.

Print PCL Font List

Prints the font list for PCL.

Print PS Font List

Prints the font list for PostScript.

Fuser Cleaning ()

Prints the 5 blank sheets to clean the fuser unit.



■ Option menu

Interface

If more than one printer are connected to the computer, this menu is activated. You can select the printer to use with Remote Control Panel.

■ Help menu

About

Displays the version of the Remote Control Panel software.

Help (?)

Displays the help menu how to use the Remote Control Panel.



Tree Menus

Before you attempt to change any settings, check the factory default settings in the following table. For the information of each menu, see [“Outline for Menus” on page 38](#).

*Indicates the default setting.

Menu	Selection 1 / Information	Selection 2
Paper	Paper Source	AutoSelect Tray*
		Manual Feed
		Media tray / Upper* ¹
		Lower* ¹
	Media Type	Plain Paper*
		Thick Paper
		Transparency
		Label
		Cotton Paper
		Envelope
	Media Size	Letter*
		Legal
		Executive
		A4
		A5
		Com-9 Env
		Com-10 Env
		Monarch Env
		B5
		A6
DL Env		
C5 Env		

*¹ If an optional 2nd feeder is installed on the printer, the Media tray is changed to Upper and Lower selection is added.



Menu	Selection 1 / Information	Selection 2
Paper	Upper Tray* ¹	No assignment*
		Letter
		Legal
		Executive
		A4
		A5
		Com-9 Env
		Com-10 Env
		Monarch Env
		B5
		A6
		DL Env
		C5 Env
	Lower Tray* ¹	No assignment*
		Letter
		Legal
		Executive
		A4
		B5
	Lines per page	Letter: 60* / A4: 64 (5 – 128)
	Copies	1* (1 – 999)
	Orientation	Portrait*
		Landscape
	Duplex	None*
		Flip on long edge
		Flip on short edge
	Front Top Calibration	60* (0 – 120)
Front Left Calibration	60* (0 – 120)	
Back Top Calibration	60* (0 – 120)	
Back Left Calibration	60* (0 – 120)	

*¹ If an optional 2nd feeder is installed on the printer, these menus are displayed.



Menu	Selection 1 / Information	Selection 2
Quality	Density	Normal* (Lightest – Darkest)
Font	Font Number	0* (0 – 54)
	Font pitch	10.00* (0.44 – 99.99)
	Font height	12.00* (4.00 – 999.75)
	Symbol set	PC8*
Network (KX-P7310 only)	MAC address	xx:xx:xx:xx:xx:xx
	Printer name	KX-P7310-XXXXXX
	Protocol (TCP/IP)	On*
		Off
	DHCP	On*
		Off
	IP address	0.0.0.0
	Subnet mask (TCP/IP)	0.0.0.0
	Gateway address	0.0.0.0
	Protocol (Apple talk)	On*
		Off
	Protocol (Netware)	On*
		Off
	Protocol (SMB)	On*
Off		
Adjustment to Media	Plain paper front side	0* (-3 – +3)
	Plain paper back side	0* (-3 – +3)
	Thick paper	0* (-3 – +3)
	Cotton paper	0* (-3 – +3)
	Transparency	0* (-3 – +3)
	Label	0* (-3 – +3)
	Envelope #10	0* (-3 – +3)
	Envelope C5	0* (-3 – +3)



Menu	Selection 1 / Information	Selection 2
Others	Power save mode	5* (2, 5, 10, 15, 30, 60)
	Auto continues	Off*
		On
	Page Protection	Off*
		On
	I/O timeout setting	60* (5 – 300)
	Printer Emulation	Auto*
		PCL
	Language	English
		French
		German
Italian		
Spanish		
Information	Controller FW	x.xx.xx
	Engine FW	Vxxx
	Page Styler2	x.xx.xx
	Memory Size	16 MB (installed memory)
	Option Cassette	Not installed / Installed



Outline for Menus

■ Paper

Paper Source

Selects the source feeding media. If the optional 2nd feeder is installed, Media tray will be changed to Upper and Lower selection is added.

Media type

Selects the type of media loaded in the media tray, manual feed and 2nd feeder (option).

Media size

Selects the different media sizes.

Upper Tray / Lower Tray

Assigns the media size to the tray. The media can be fed from the tray corresponding to the paper size of the document. **AutoSelect Tray** must be selected for paper source to use the feature.

If an optional 2nd feeder is installed on the printer, these menus are displayed.

Lines per page

Sets the maximum number of text lines that are enabled to print on each page.

Copies

Sets the number of copies to be printed.

Orientation

Selects the print orientation.

Duplex

Selects either to Flip on long edge or to Flip on short edge when printing a document on both sides of paper.

**Front Top Calibration**

Adjusts the top margin of printing.

Front Left Calibration

Adjusts the left side margin of printing.

Back Top Calibration

Adjusts the back top margin of printing.

Back Left Calibration

Adjusts the back left side margin of printing.

■ Quality**Density**

Adjusts the density of printing.

■ Font**Font number**

Selects a font to print by selecting the font number.

Font pitch

Selects the font pitch.

Font height

Selects the font height.

Symbol set

Selects a symbol set used for the selected font. A symbol set is a collection of alphabetic characters, punctuation marks, numeric and special symbols.



■ Network (KX-P7310 only)

The network menu is displayed for the KX-P7310 only.

MAC address

Displays the MAC address. MAC address is a private number assigned to each network device.

Printer name

Displays the printer name.

Protocol (TCP/IP)

Enables TCP/IP by selecting On.

DHCP

Enables DHCP by selecting On. The printer's IP address is assigned by the DHCP server on the network when the DHCP is enabled.

IP address / Subnet mask (TCP/IP) / Gateway address

Enables to manually set each item to use with TCP/IP.

Protocol (AppleTalk)

Enables AppleTalk by selecting On.

Protocol (Netware)

Enables Netware by selecting On.

Protocol (SMB)

Enables SMB by selecting On.



■ Adjustment to Media

Print quality may vary do to moisture in the media. It enables adjustment to the printer's setting corresponding to the condition of media.

To get better print quality,

If media has high moisture, set it for + value (+1, +2 or +3).

If media has low moisture, set it for – value (–1, –2 or –3).

When performing duplex printing, set up **Plain paper front side** (side that prints first) and **Plain paper back side** (side that prints last).



■ Others

Power save mode

To conserve energy and operating cost, this printer is provided with a programmable power save feature. The printer is factory set with the power save feature turned on to comply with ENERGY STAR[®] requirement. The printer enters the Power Save mode when the printer is idle for 5 minutes by default.

Auto continues

With this feature turned on, the printer automatically continues the current print job in the case of certain non-fatal errors.

Page Protection

With this feature turned on, the printer does not begin printing until the processor has finished imaging the entire page. The page then prints correctly, although it takes slightly longer to print.

I/O timeout setting

Automatically prints the remaining data in memory when the computer does not send data to the printer during the set time.

Printer Emulation

Selects PCL or PostScript to print data.

- **Auto:** PCL or PostScript is Automatically selected depending on the print data.
- **PCL:** PCL is selected for printing.

NOTE

- If the PostScript emulation is not used, select PCL for the Printer Emulation. It will become difficult that the memory overflow error occurs.

Language

Selects the language when printing the configuration page [[see “Tool Menus \(Tool Bar Icons\)” on page 32](#)].



■ Information

Controller FW

Displays the controller firmware version.

Engine FW

Displays the engine firmware version.

Page Styler2

Displays the software version for PostScript.

Memory Size

Displays the total memory size installed in the printer.

Option Cassette

Displays whether the optional 2nd feeder has been installed.



Setting the Printer Driver

Displaying the Printer Properties Window

It is possible to set the printer by using the printer properties window. It can be displayed from **Windows** (see below) or from **an application** (see page 46).

■ **A** Setting the Printer from Windows:

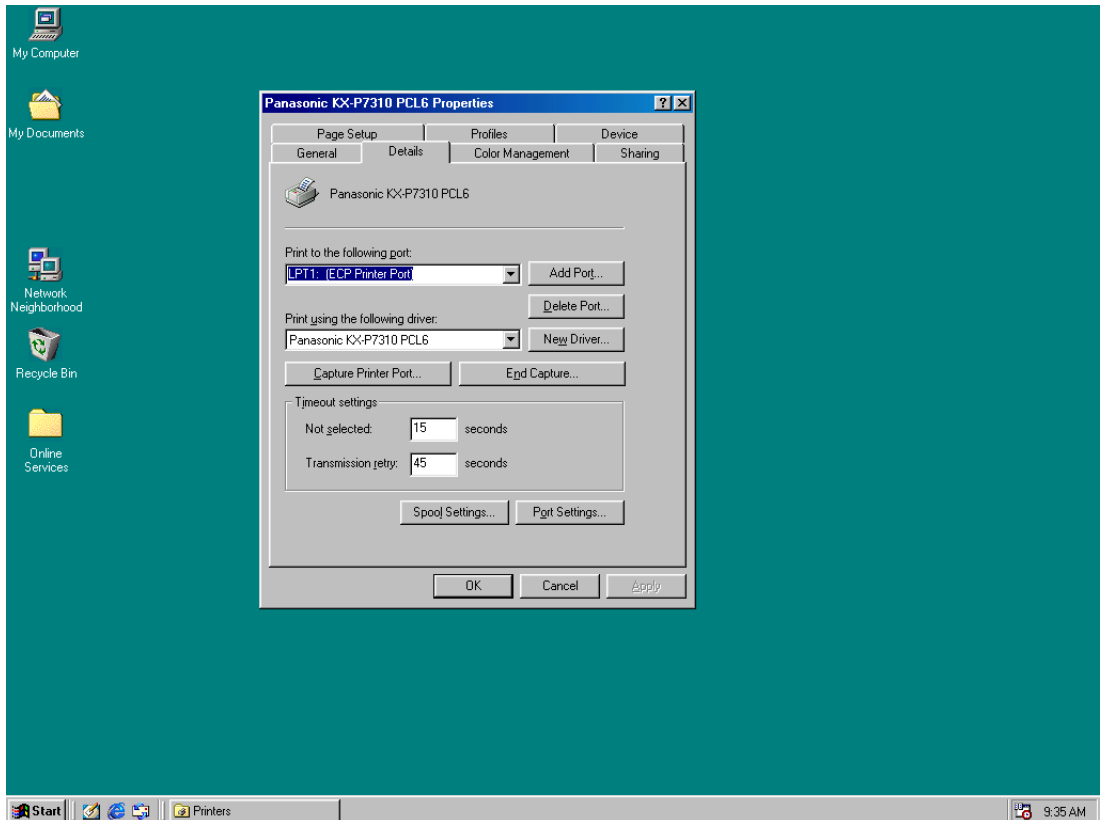
When setting the printer by using printer properties window under **Windows**, the setting is retained even if Windows is shutdown and restarted.

- 1** Click [**Start**], move the pointer to **Settings**, then click **Printers**.
The Printers window is displayed.
 - For Windows XP Professional / Windows Server 2003, click [**Start**], then click or double click **Printers and Faxes**.
 - For Windows XP Home, click [**Start**], click **Control Panel**, click **Printers and Other Hardware** icon, then click **Printers and Faxes** icon.
- 2** Click the **Panasonic KX-P7305 PCL6**, **Panasonic KX-P7305 PS**, **Panasonic KX-P7310 PCL6** or **Panasonic KX-P7310 PS** icon.
- 3** Click the **File** menu, then click the following menu depending on the operating system.
 - **Properties** (Windows 95 / Windows 98 / Windows Me)
 - **Document Defaults...** (Windows NT 4.0)
 - **Printing Preferences...** (Windows 2000 / Windows XP / Windows Server 2003)The printer properties window is displayed.



4 Click a tab to view the features.

The explanation of the driver's setting menu can be read by clicking it with the right mouse button.



(tab in Windows 98)

- Tabs are different in Windows NT 4.0 / Windows 2000 / Windows XP / Windows Server 2003.
- For Windows NT 4.0 / Windows 2000 / Windows XP / Windows Server 2003, it enables you to set another items by selecting **Properties** of the **File** menu.



■ **B** Setting the Printer from an Application:

When setting the printer using the printer properties window from **an application**, the setting is returned to the default setting if the application is closed.

For example, to print a document created in Microsoft WordPad in Windows 98, perform the following steps.

- 1** Click **[Start]**, select **Programs** or **All Programs**, select **Accessories**, then click **WordPad**.
The WordPad window is displayed.
- 2** Click the **File** menu, then click **Print....**
The Print window is displayed.
- 3** Select **Panasonic KX-P7305 PCL6**, **Panasonic KX-P7305 PS**, **Panasonic KX-P7310 PCL6** or **Panasonic KX-P7310 PS** in the Name : box.
- 4** Click **Properties** (**[Preferences]** for Windows XP / Windows Server 2003).
The printer properties window is displayed.
- 5** Click a tab to view the features.

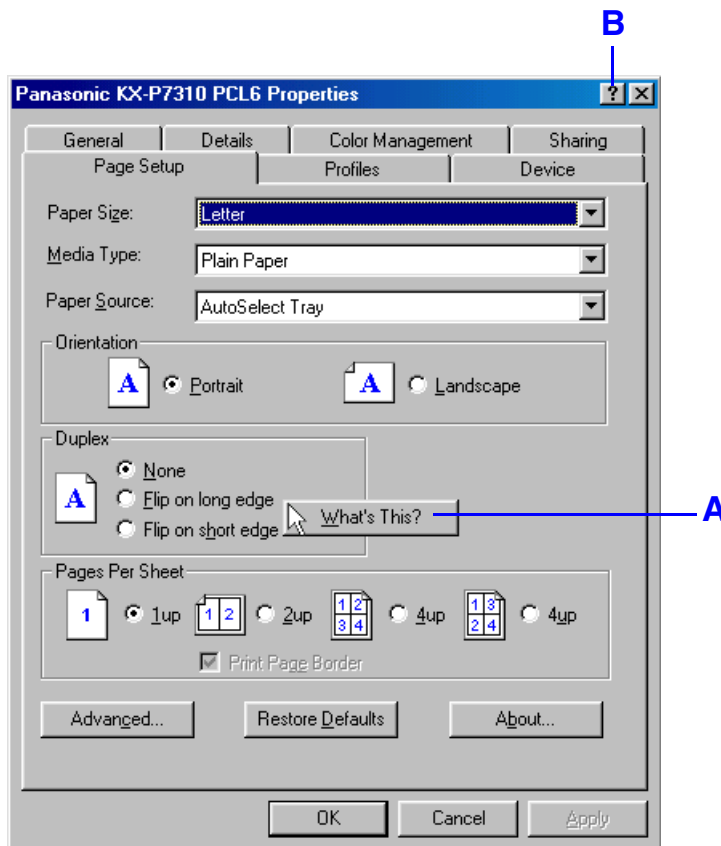
NOTE

- The print options in the File menu depend on the Windows application. Refer to the application manual.



Displaying Help of the Printer Properties Window

- 1 Display the printer properties window (see page 44).
- 2 Perform the method [A] or [B].
[A] Click the desired menu with the **right mouse button** and click the displayed menu.
Or
[B] Click [?] button and click the desired menu.





Defining the Installed Options

The printer driver cannot automatically detect that an option has been installed in the printer. After installing an option in the printer, you must define it whether an option is installed or not.

- 1** Click **[Start]**, move the pointer to **Settings**, then click **Printers**.
The Printers window is displayed.
 - For Windows XP Professional / Windows Server 2003, click **[Start]**, then click or double click **Printers and Faxes**.
 - For Windows XP Home, click **[Start]**, click **Control Panel**, click **Printers and Other Hardware** icon, then click **Printers and Faxes** icon.
- 2** Click the **Panasonic KX-P7305 PCL6**, **Panasonic KX-P7305 PS**, **Panasonic KX-P7310 PCL6** or **Panasonic KX-P7310 PS** icon.
- 3** Click the **File** menu, then click **Properties**.
- 4** Specify the installed options.
 - **For Panasonic KX-P7305 PCL6 or Panasonic KX-P7310 PCL6**

[In Windows 95 / Windows 98 / Windows Me]

- (1) Click the **Device** tab.
- (2) Click the installed option in the Available Options box and then click **[Add]**.
The option is moved from **Available Options** box to the **Installed Options** box.
 - If an option in the **Installed Options** box is needed to be removed, click it and then click **[Remove]**.

[In Windows NT 4.0]

- (1) Click the **Device Settings** tab.
- (2) Click the option in the **Install Options** and then select **Installed**, **Not Installed** or installed memory in the **Change Setting** box.

[In Windows 2000 / Windows XP / Windows Server 2003]

- (1) Click the **Device Settings** tab.
- (2) Click the underlined selection (ex. **Not Installed** of the 2nd Feeder) of the **Install Options**.
The selection box is displayed.
- (3) Click the selection box and select **Installed**, **Not Installed** or installed memory.



■ For Panasonic KX-P7305 PS or Panasonic KX-P7310 PS

[In Windows 95 / Windows 98 / Windows Me]

- (1) Click the **Device Options** tab.
- (2) Click the option in the **Installable options** and then select **Installed**, **Not Installed** or installed memory in the **Change setting for** box.

[In Windows NT 4.0]

- (1) Click the **Device Settings** tab.
- (2) Click the option in the **Installable Options** and then select **Installed**, **Not Installed** or installed memory in the **Change Setting** box.

[In Windows 2000 / Windows XP / Windows Server 2003]

- (1) Click the **Device Settings** tab.
- (2) Click the underlined selection (ex. **Not Installed** of the 2nd Feeder) of the **Installable Options**.
The selection box is displayed.
- (3) Click the selection box and select **Installed**, **Not Installed** or installed memory.

5 Click **[OK]**.



Setting the Form To Tray Assignment

The media can be fed from the tray corresponding to the paper size of the document by assigning the media size to the tray.

AutoSelect Tray must be selected for paper source to use the feature.

The setting of the Remote Control Panel will be taken over by the setting of the printer driver.

■ Using the Remote Control Panel

- 1** Click **[Start]**, move the pointer to **Programs** or **All Programs**, **Panasonic** and **Panasonic KX-P7305 and KX-P7310**, then click **Remote Control Panel**.
 - If more than one printer is connected to your computer, the screen prompts to select the printer. Click the desired printer, then click **[OK]**.
- 2** Click the **+** button on the **Paper** menu from the tree menu.
Or
Double click the **Paper** menu.
- 3** Click the **Upper Tray** or **Lower Tray** menu.
 - If the optional 2nd feeder is installed, these menus are displayed.
- 4** Click the **▼** button to display the pull down list and click the desired media size.
- 5** Click **Tool** menu and select **Send** to transfer the changed setting to the printer.



■ Using the Printer Driver

- 1** Click **[Start]**, move the pointer to **Settings**, then click **Printers**.
The Printers window is displayed.
 - For Windows XP Professional / Windows Server 2003, click **[Start]**, then click or double click **Printers and Faxes**.
 - For Windows XP Home, click **[Start]**, click **Control Panel**, click **Printers and Other Hardware** icon, then click **Printers and Faxes** icon.

- 2** Click the **Panasonic KX-P7305 PCL6** or **Panasonic KX-P7310 PCL6** icon.

- 3** Click the **File** menu, then click **Properties**.

- 4** Assign the media size to the tray.

[In Windows 95 / Windows 98 / Windows Me]
 - (1) Click the **Device** tab.
 - (2) Click the desired tray in the **Form To Tray Assignment** box.
 - (3) Click the **Paper Size** box to display the pull down list and select the media size.
[In Windows NT 4.0]
 - (1) Click the **Device Settings** tab.
 - (2) Click the tray of the **Form To Tray Assignment** and select the media size.
[In Windows 2000 / Windows XP / Windows Server 2003]
 - (1) Click the **Device Settings** tab.
 - (2) Click the underlined selection of the tray in the **Form To Tray Assignment**.
The selection box is displayed.
 - (3) Click the selection box and select the media size.

- 5** Click **[OK]**.



Sharing the Printer

Enables to share the printer over the network.

■ For Windows 95 / Windows 98 / Windows Me

- 1** Click [**Start**], move the pointer to **Settings**, then click **Printers**.
- 2** Click the **Panasonic KX-P7305 PCL6**, **Panasonic KX-P7305 PS**, **Panasonic KX-P7310 PCL6** or **Panasonic KX-P7310 PS** icon.
- 3** Click the **File** menu, then click **Properties**.
- 4** Click the **Sharing** tab.
- 5** Click the **Shared As** check button, then enter the printer name in the **Share Name** box.
 - If needed, enter a comment and password.
- 6** Click [**OK**] to close the window.
 - If you entered the password at step 5, you are prompted to enter the password again. Enter the password, then click [**OK**].

NOTE

- If the Sharing tab does not appear, follow the steps below.
 - (1) Click [**Start**], select **Settings** and click **Control Panel**.
 - (2) Double click the **Network** icon.
 - (3) Click [**File and Print Sharing...**].
 - (4) Confirm **I want to be able to give others access to my files** and **I want to be able to allow others to print to my printer(s)** check box are checked. If the check mark is removed, click the check box.
 - (5) Click [**OK**].
 - (6) Click [**OK**].
 - (7) If the setting is changed, restart Windows.



■ For Windows NT 4.0 / Windows 2000 / Windows XP / Windows Server 2003

- 1** Click [**Start**], move the pointer to **Settings**, then click **Printers**.
The Printers window is displayed.
 - For Windows XP Professional / Windows Server 2003, click [**Start**], then click or double click **Printers and Faxes**.
 - For Windows XP Home, click [**Start**], click **Control Panel**, click **Printers and Other Hardware** icon, then click **Printers and Faxes** icon.
- 2** Click the **Panasonic KX-P7305 PCL6**, **Panasonic KX-P7305 PS**, **Panasonic KX-P7310 PCL6** or **Panasonic KX-P7310 PS** icon.
- 3** Click the **File** menu, then click **Properties**.
- 4** Click the **Sharing** tab.
- 5** Click the check button depending the operating system.
 - Shared (Windows NT 4.0)
 - Shared as (Windows 2000)
 - Share this printer (Windows XP / Windows Server 2003)
- 6** Type the printer name (for example: KX-P7310) in the **Share name** or **Shared as** box.
NOTE
 - If the shared printer is used through Windows 95, Windows 98 or Windows Me, the printer name must not exceed 12 characters.
- 7** Click [**OK**].
Or
If you want to install the alternate driver, proceed to the next steps.
The following is the example of installing an alternate driver for Windows 95 or Windows 98 in Windows 2000.
- 8** Click [**Additional Drivers...**].
- 9** Click on the **Windows 95 or 98** check box, then click [**OK**].
The Insert Disk window is displayed.



- 10** Click **[OK]**.
The Windows 95/Windows 98 Printer Drivers window is displayed.
- 11** Click **[Browse]**.
The Locate File window is displayed.
- 12** Insert the supplied printer CD-ROM into the CD-ROM drive.
- 13** Select CD-ROM drive.
- 14** Open **Win9x** and open **English**, then select **PCL** file. Click **[Open]**.
- 15** Click **[OK]**.



Assigning Multiple Pages per Sheet

Specifies how many pages of a document to print on one piece of paper.

- 1** Open a document and display the print window in your application.
- 2** Select **Panasonic KX-P7305 PCL6**, **Panasonic KX-P7305 PS**, **Panasonic KX-P7310 PCL6** or **Panasonic KX-P7310 PS** printer and click **Properties** (**[Preferences]** for Windows XP / Windows Server 2003).

The printer **Properties** (**[Preferences]** for Windows XP / Windows Server 2003) window appears.

 - The operation for displaying the printer properties window may be different depending on the application software.
- 3** Set the printer driver.
 - **For Panasonic KX-P7305 PCL6 or Panasonic KX-P7310 PCL6**
 - (1) Click on the desired check button for **Pages Per Sheet** menu in the **Page Setup** tab.
 - The page border will be printed by clicking on the **Print Page Border** check box when selecting 2up or 4up.
 - **For Panasonic KX-P7305 PS or Panasonic KX-P7310 PS**

[In Windows 95 / Windows 98 / Windows Me]

 - (1) Click the desired check button for the **Layout** menu in the **Paper** tab.

[In Windows 2000 / Windows Server 2003]

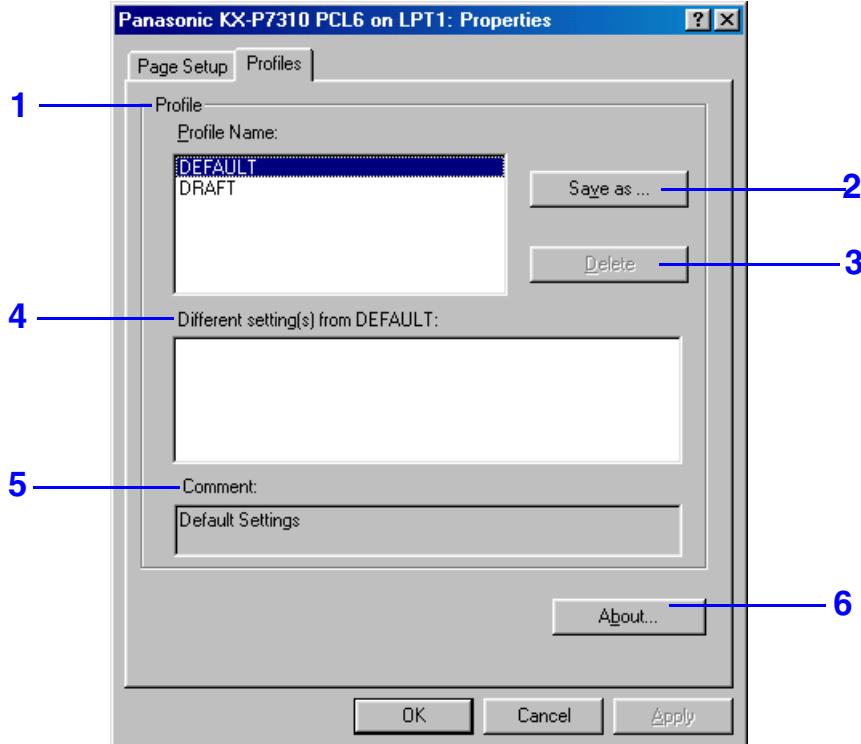
 - (1) Select the desired selection from the **Pages Per Sheet** menu in the **Layout** tab.
- 4** Click **[OK]**.



Setting Profiles

You can save the settings of the PCL printer driver (for example, printing on a label or envelope etc.) using the Profile tab and retrieve it when necessary.

- 1 Open a document and display the print window in your application.
- 2 Select **Panasonic KX-P7305 PCL6** or **Panasonic KX-P7310 PCL6** printer and click **Properties** ([**Preferences**] for Windows XP / Windows Server 2003).
The printer properties window appears.
 - The operation for displaying the printer properties window may be different depending on the application software.
- 3 Click the **Profiles** tab.





1 Profile Name

Displays the saved profile names. Profiles (DEFAULT and DRAFT) are registered by default and cannot be changed or deleted. You can set the driver by selecting the profile name saved in advance.

2 Save as...

Enables to register a new profile or change the saved profile.

(1) Change the driver settings.

(2) Click the Profiles tab.

(3) Click [**Save as...**].

(4) Enter a profile name and comment.

- If you enter the same profile name that existed in the Profiles Name box, the profile is changed.

(5) Click [**OK**].

- If you will change the profile, the confirmation window appears to overwrite the profile. Click [**Yes**].

3 Delete

Enables to delete a profile selected in the Profile Name box except DEFAULT and DRAFT.

(1) Click the profile, then click [**Delete**]. Click [**Yes**].

4 Different settings(s) from DEFAULT

Displays the difference between the default settings and the selecting profile.

5 Comment

Displays a comment you entered when registering a new profile. The comment is displayed when selecting a profile.

6 About

Displays the program version and copyright information.



Duplex Printing

When performing automatic duplex printing, paper must be fed from the media tray / upper tray or lower tray (option). Manual feed cannot be used for automatic duplex printing.

NOTE

- The following paper must be used. Otherwise, it may cause wrinkles or paper jam.

Plain paper 75 – 90 g/m² (20 – 24 lb.)

- 1** Load paper [75 – 90 g/m² (20 – 24 lb.)] into the media tray / upper tray or lower tray (option).
 - Letter, Legal, A4, B5 or Executive size paper is available.
 - Lay the paper straight if the paper is curled.
- 2** Open a document to perform duplex printing and display the print window in your application.
- 3** Select **Panasonic KX-P7305 PCL6**, **Panasonic KX-P7305 PS**, **Panasonic KX-P7310 PCL6** or **Panasonic KX-P7310 PS** printer and click **Properties** ([**Preferences**] for Windows XP / Windows Server 2003).

The printer properties window appears.

 - The operation for displaying the printer properties window may be different depending on the application software.
- 4** Change to the correct paper loaded in the media tray / upper tray or lower tray (option).


Paper Size: Select the loaded paper size (Letter, Legal, A4, B5 or Executive).
Media Type: Select **Plain Paper**.
Paper Source: Select **Media Tray / Upper** or **Lower** (option).




5 Turn the duplex print feature on depending on the printer driver.

■ **For Panasonic KX-P7305 PCL6 or Panasonic KX-P7310 PCL6**

- (1) Click on the **Flip on long edge** or **Flip on short edge** check button for **Duplex** menu in the **Page Setup** tab.

 : Flip on long edge

 : Flip on short edge

■ **For Panasonic KX-P7305 PS or Panasonic KX-P7310 PS**

[In Windows 95 / Windows 98 / Windows Me]

- (1) Click **[More Options...]** in the **Paper** tab.
The More Paper Options window is displayed.
- (2) Click the **Flip on long edge** or **Flip on short edge** check button.
- (3) Click **[OK]**.

[In Windows NT 4.0]

- (1) Click on the **Long Side** or **Short Side** check button in the **Page Setup** tab.

[In Windows 2000 / Windows XP / Windows Server 2003]

- (1) Click on the **Flip on Long Edge** or **Flip on Short Edge** check button in the **Layout** tab.

6 Click **[OK]**.

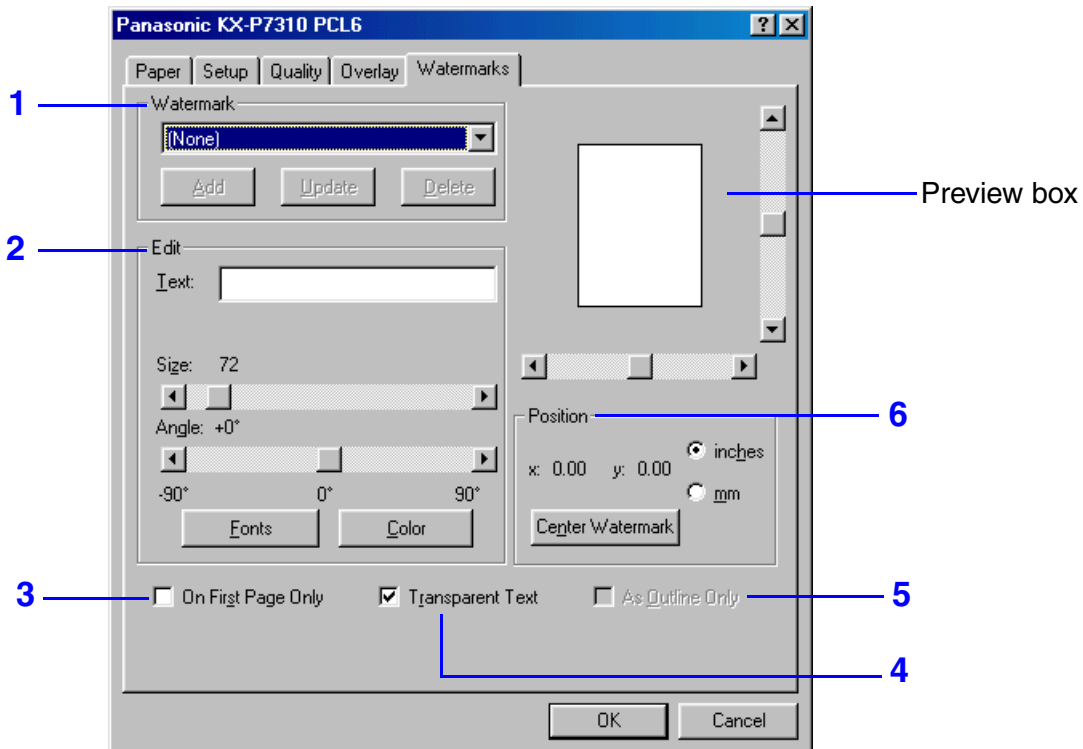
7 Print the document.



Watermark Printing

■ Setting Watermarks

- 1 Open a document to perform watermark printing and display the print window in your application.
- 2 Select **Panasonic KX-P7305 PCL6** or **Panasonic KX-P7310 PCL6** printer and click **Properties** ([**Preferences**] for Windows XP / Windows Server 2003).
The printer properties window appears.
 - The operation for displaying the printer properties window may be different depending on the application software.
- 3 Click [**Advanced...**] in the Page Setup tab, then click the **Watermarks** tab.





1 Watermark

Enables the selected watermark in the box. The selected watermark is printed over a document. Click the Watermark box and select the desired one. TOP SECRET, CONFIDENTIAL, DRAFT, ORIGINAL and COPY are registered by default. You can also create a new watermark. To perform watermark printing, see [“Printing a Watermark”](#) on page 63.

• Add

Enables to create a new watermark. To add a new watermark.

- (1) Enter a watermark text in the Text box.
The text is displayed in the preview box.
- (2) Click **[Add]**.
The entered text is registered in the Watermark box.
- (3) Specify the font, font size, angle, font color, etc.
- (4) Click **[OK]**.
- (5) Click **[Yes]** to save the setting.

• Update

Enables to edit the registered watermark. To edit a watermark,

- (1) Select a desired watermark from Watermark box.
- (2) Edit font, size, etc. of the watermark.
- (3) Click **[Update]**.
- (4) Click **[Yes]** to overwrite the setting.

• Delete

Enables to delete a registered watermark. To delete a watermark,

- (1) Select the name from the Watermark box and clicking **[Delete]**.
- (2) Click **[Yes]** to delete the watermark.





2 Edit



- **Text:**

Enables to create/edit a watermark text by entering/editing the text in the Text box.

- **Size:**

Enables to set the font size of the watermark. Drag each slider left or right or click  or .

- **Angle:**

Enables to angle the watermark. Drag each slider left or right or click  or .

- **Fonts**

Enables to select the font for the watermark text.

- **Color**

Enables to select the gray scale level for the watermark text.

3 On First Page Only

The watermark is printed on the first page only by checking on the check box.



4 Transparent Text

The watermark is printed with transparent text (shaded text) by clicking on the check box.

5 As Outline Only

The watermark is printed with outline text. It can be selected if the check of Transparent Text is removed.

6 Position

The watermark is printed in the center of page by default. The position can be adjusted by dragging the slider left or right or clicking  or . To specify the position of watermark, it enables to select the unit inch or mm by clicking on the check button.

- **Center Watermark**

Enables to reset the position of the watermark to the center of the page by clicking [**Center Watermark**].



■ Printing a Watermark

The following is the example to print the watermark COPY on all pages.

- 1** Open a document to print with the watermark and display the print window.
- 2** Select the **Panasonic KX-P7305 PCL6** or **Panasonic KX-P7310 PCL6** printer.
- 3** Click **Properties** (**[Preferences]** for Windows XP / Windows Server 2003) to display the printer properties window.
- 4** Click **[Advanced...]** in the Page Setup tab, then click the **Watermarks** tab.
- 5** Click the **Watermark** box and select **COPY**.
 - If needed, you can change the watermark setting (see “Setting Watermarks” on page 60.)
- 6** Click **[OK]**.
- 7** Print the document.



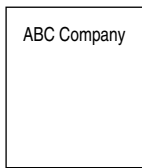
Overlay Printing

You can use the Overlay feature to:

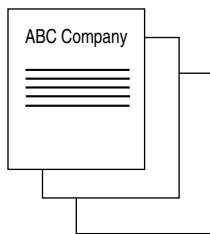
- Incorporate your letterhead on the first page of a business letter.
- Print your logo at the bottom of each page of a set of presentation slides.
- Overlay the word “Confidential” on every page of an important document.
- Print a special cover page or trailer page for each print job.

■ Main steps for overlay printing

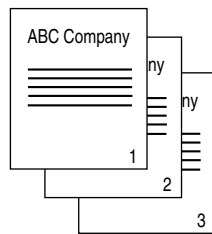
1. Create an overlay file and store it.



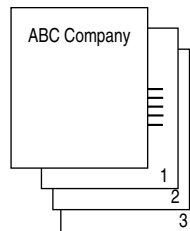
2. Select overlay option.



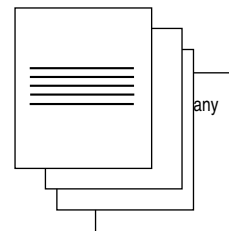
Overlay 1st Page



Overlay All Pages



Print Cover Page

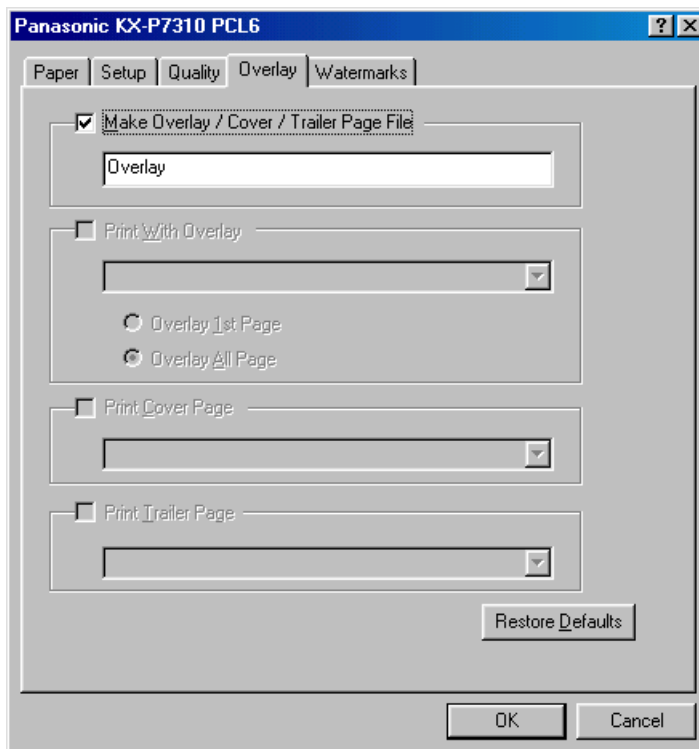


Print Trailer Page

3. Print a document you want to overlap an overlay file.



- 1 Using an application such as Paintbrush or CorelDRAW, create and save the overlay file that you want to overlap on a document.
- 2 Verify the overlay data by printing it.
- 3 Display the print window and select the **Panasonic KX-P7305 PCL6** or **Panasonic KX-P7310 PCL6** printer.
- 4 Click **Properties** ([**Preferences**] for Windows XP / Windows Server 2003) to display the printer properties window.
- 5 Click [**Advanced...**] in the Page Setup tab, then click **Overlay** tab.
- 6 Click on the **Make Overlay / Cover / Trailer Page File** check box.





- 7** Enter a new file name or the same file name (Max. 8 characters) as used at step 1 in the file name box.
The file is saved in the following directory.
Windows 95 / Windows 98 / Windows Me: Windows (OS System)\System\Kme
Windows NT 4.0 / Windows 2000 / Windows XP / Windows Server 2003:
Winnt (OS System)\system32\Kme
- 8** Click **[OK]**.
- 9** Print the overlay file to the printer.
The confirmation window to make an overlay file is displayed.
- 10** Click **[Yes]**.
The printer will not print the overlay file at this time. The file will be saved on your computer as an overlay file.
- 11** Minimize or close the application.
- 12** Open a document to print with the overlay file and display the print window.
- 13** Select the **Panasonic KX-P7305 PCL6** or **Panasonic KX-P7310 PCL6** printer.
- 14** Click **Properties** (**[Preferences]** for Windows XP / Windows Server 2003) to display the printer properties window.
- 15** Click **[Advanced...]** in the Page Setup tab, then click the **Overlay** tab



16 Click on the check box of your desired selection.

Print With Overlay: The overlay file is overlapped only on the first page (**Overlay 1st Page**) or all pages (**Overlay All Pages**) of a document.

Print Cover Page: The overlay file is printed as the cover page before the document.

Print Trailer Page: The overlay file is printed as the trailer page after the document.

NOTE

- If the Make Overlay/Cover/Trailer Page File check box is checked, remove the check.

17 Click the box under the selection and select the overlay file named at step 7.

18 Click **[OK]**.


19 Print the document.




Status Display

The Status Display will show the following informations. When using the KX-P7310 and the printer is directly connected to the network with the network interface, the Status Display shows the network setting information.

- Error messages
- Recovery information
- Printer general information
- Network setting information (KX-P7310 only)

When an error has occurred, the Status Display icon () is blinking on the task bar or a Printer Status Display window is displayed. The Status Display icon is different depending on the printer error.

Status Display Icon on the Task Bar

If the startup setting is set to **Stay**, the Status Display icon () is blinking on the task bar when the system is started (see [“Setup for Status Display Window” on page 76](#)). When a printer error has occurred, the Status Display icon is blinked on the task bar. To display the Status Display window, click the blinking icon.

If you want to exit the Status Display program, click the Status Display icon with the right mouse button, then select **Exit**.



Displaying the Status Display Window

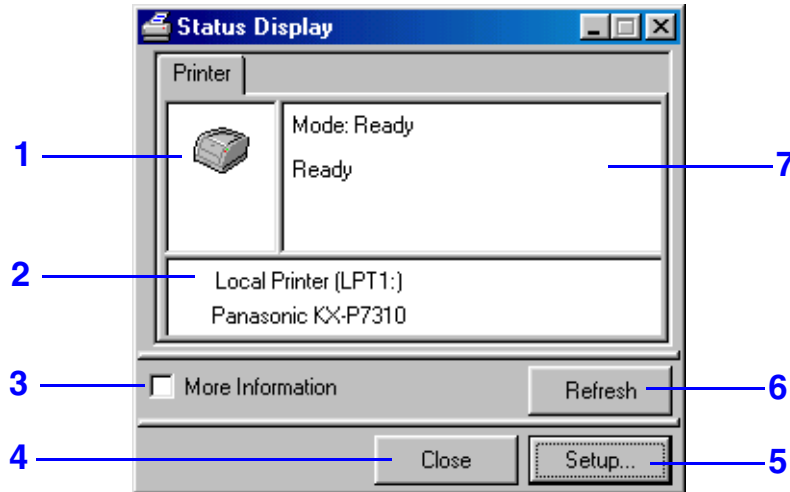
- 1 Turn the printer on.
- 2 Click **[Start]**, move the pointer to **Programs** or **All Programs**, **Panasonic** and **Panasonic KX-P7305 and KX-P7310**, then click **Status Display**.

When starting the Status Display program **for the first time**, the Search Device window is displayed. Proceed to the following steps. For the detailed information of the window, see [“Selecting the Printer to Get the Status” on page 78](#).

- 3 Click **[Search]**.
The search Result is displayed.
- 4 Click the printer you want to get the printer information for, then click **[Apply]**.
The Status Display window is displayed.
 - When displaying the Status Display window next time, the processes to search printers (steps 3 and 4) will be skipped.



Function of the Status Display



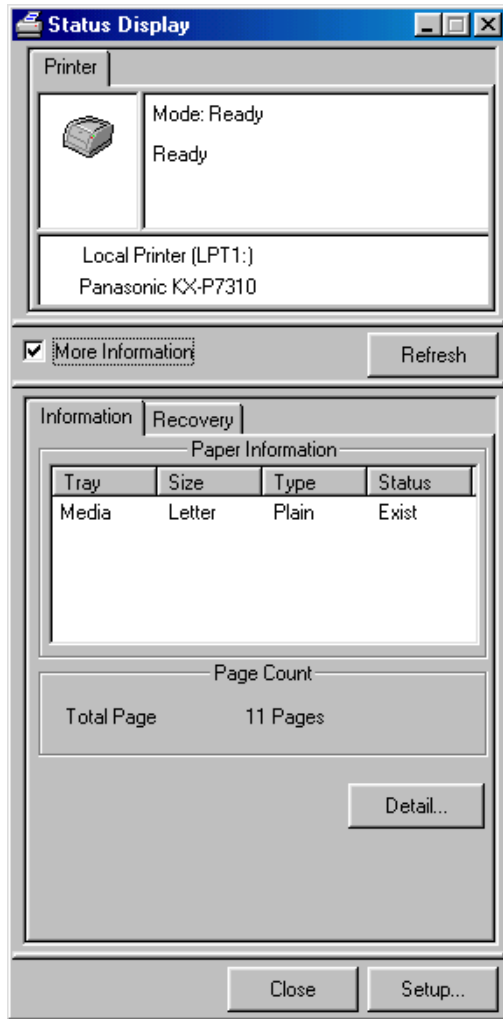
- 1 This box shows the printer status.
- 2 This box shows the printer is connected to local or network. If the printer is connected to the network, the printer's IP address or server name will be displayed.
- 3 The loaded media, printer's information, error recovery and network information (KX-P7310 only) are displayed by clicking on the **More Information** check box (see [“More Information Window” on page 71](#)).
- 4 The status display is closed by clicking [**Close**].
- 5 Setup window appears by clicking [**Setup...**] (see [“Setup for Status Display Window” on page 76](#)).
- 6 The printer status is updated by clicking [**Refresh**].
- 7 This box shows the print mode, warning or error message.



More Information Window

To display the More Information window, click on the **More Information** check box in the **Status Display** window.

More Information window consists of two tabs: **Information** and **Recovery Information**.



Information tab

Shows the media information that set with the Remote Control Panel (see “Remote Control Panel” on page 28).

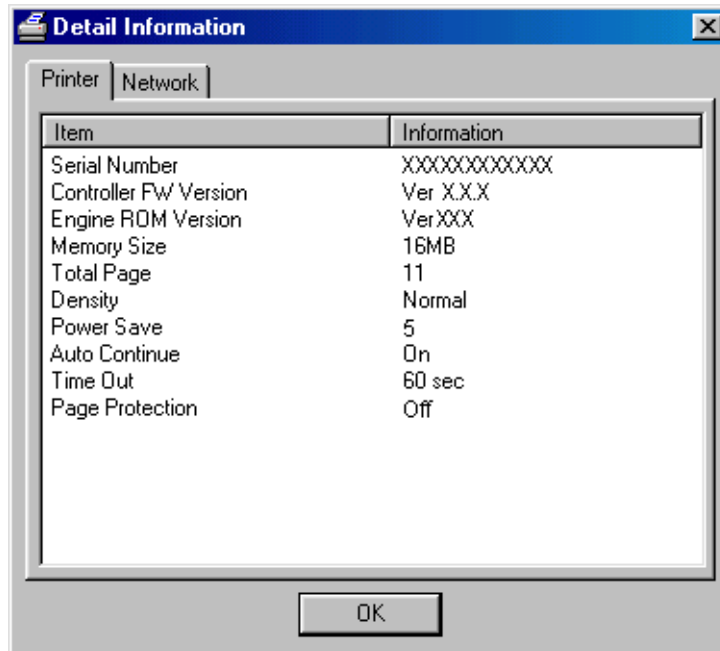
Opens the window to display the following information by clicking [**Detail...**].

- **Printer Information** (see page 72)
- **Network Information** (see page 73)



■ Printer Information Tab

Shows the firmware version and the information of the installed options.



Serial Number

Displays the printer's serial number.

Controller FW Version

Displays firmware version of the printer's controller board.

Engine ROM Version

Displays version of the engine ROM.

Memory Size

Displays memory size installed in the printer.

Total Page

Displays the total number of printed pages.

Density

Displays the density setting.

Power Save

Displays the setting of the Power Save feature.

Auto Continue

Displays the Auto continues setting is turned on or off.

Time Out

Displays the time of I/O time out setting.

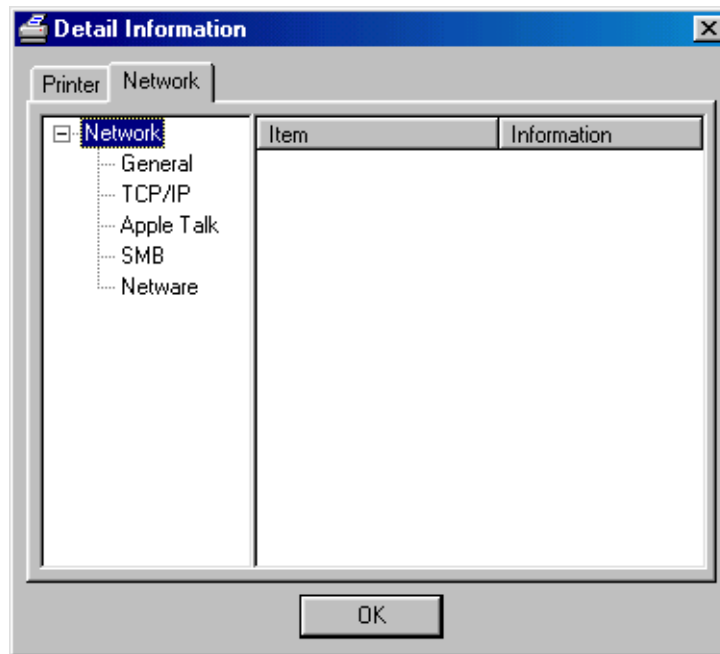
Page Protection

Displays the Page Protection setting.



■ Network tab (KX-P7310 only)

Shows the network information of the printer: IP address, MAC address, etc. Option menus appear by clicking the + button of the Network Information in the left pane. The information appears in the right pane by clicking the option menu.



General

MAC Address

Mac address of the network card.

TCP/IP

Protocol

TCP/IP protocol is enabled or disabled.

IP Address

IP address of the network card.

Subnet Mask

Subnet mask for the TCP/IP setting.

Default Gateway

Default gateway of the TCP/IP setting.

DHCP

DHCP is enabled or disabled.

Banner Page

Separator page is inserted (Enable) or not inserted (Disable).

**AppleTalk**

Protocol	AppleTalk protocol is enabled or disabled.
Printer Name	Printer name (KX-P7310-#####) on the AppleTalk. ##### indicates the last 3 byte of MAC address of the printer.
Zone Name	Zone name of the AppleTalk.

SMB Information

Protocol	NetBEUI protocol is enabled or disabled.
Computer Name* ¹	Printer name displayed in Windows.
WorkGroup Name* ¹	Workgroup name displayed in Windows.

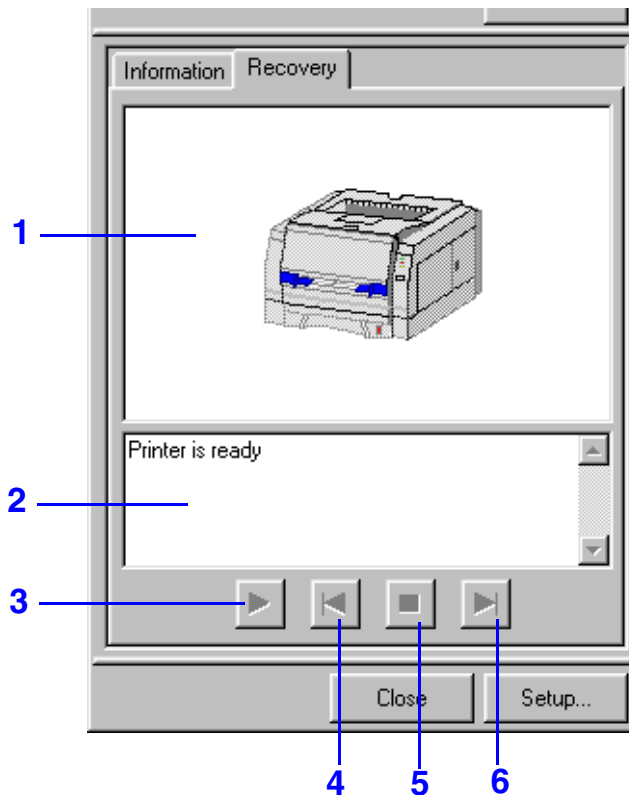
*¹ To display the computer name and workgroup name, "Client for Microsoft Networks" and NetBEUI or TCP/IP protocol must be installed in Windows.






Netware Information

Protocol	IPX/SPX protocol is enabled or disabled.
Frame Types	Type of layer for data link.
Poling Interval Timer	Transmission interval time between the printer and the Netware server.
Bindery	Enables or disables to print in Bindery mode.
Tree	Tree that the printer belongs.
Context	Context that the printer belongs.



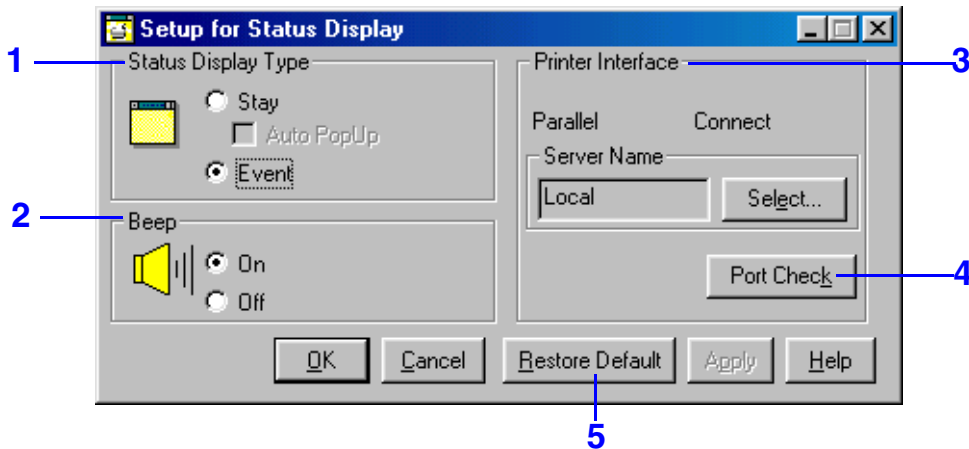
■ Recovery Information tab



- 1 Shows corrective action for the printer error with animation.
- 2 Shows corrective instructions or status.
- 3 Clicking this button starts the animation. When the animation is started, the start button is changed to  button. Clicking  button will stop the animation.
- 4 Clicking the  button steps backwards.
- 5 Clicking the  button exits the animation.
- 6 Clicking the  button steps forward.



Setup for Status Display Window



1 Status Display Type

Stay: Clicking on the **Stay** check button runs the Status Display program and places the icon on the task bar when starting Windows. The icon is blinking on the task bar when a printer error has occurred. To display the Status Display window, click the blinking icon. The Status Display window is automatically displayed when a printer error has occurred by clicking on the **Auto PopUp** check button.

Event: The Status Display window is displayed when a printer error has occurred. After the error has recovered, the window is closed.

NOTE

- If the printer is connected to the network, certainly set the Status Display Type to **Stay**.

2 Beep

Checking on the **On** check button beeps when a printer error has occurred.



3 Printer Interface

Enables the printer status by clicking [**Select...**] (see “[Selecting the Printer to Get the Status](#)” on page 78). If the printer is connected with the network interface cable, the printer’s IP address or computer name is entered in the Server Name box.

NOTE

- If the printer is not selected to get the printer status by using the Setup for Status Display window, the Search Device window will be displayed to select the printer when the status display is displayed for the first time.

4 Port Check

Updates the port information by clicking [**Port Check**].

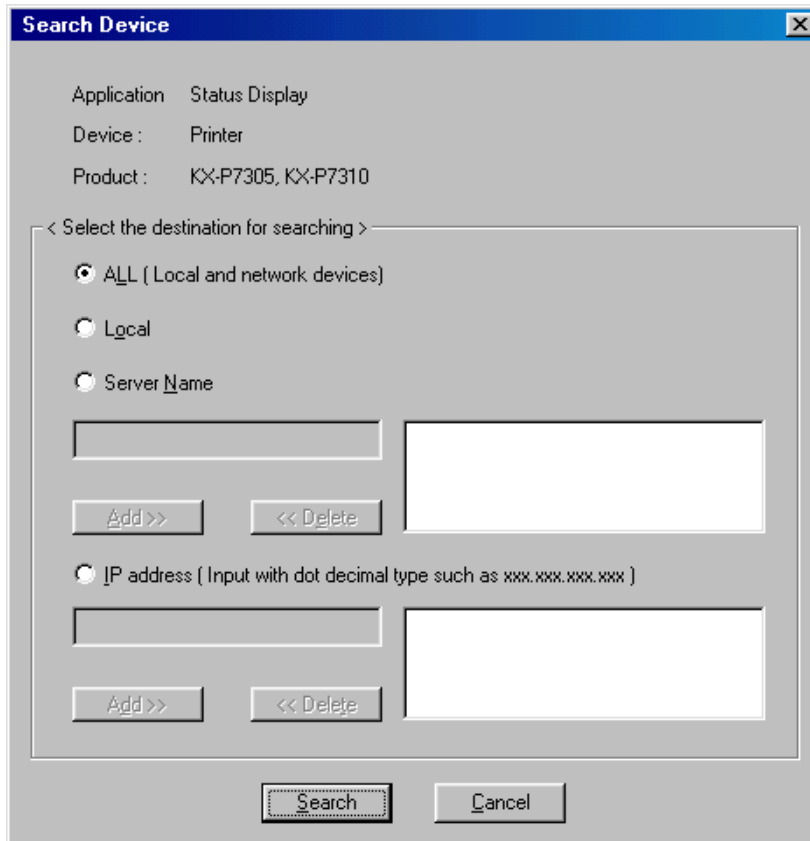
5 Restore Default

Resets the Status Display’s settings to the factory default settings.



Selecting the Printer to Get the Status

- 1 Click [**Select...**] in the Setup for Status Display window. Search Device window appears.





2 Specify the destination for searching by clicking on the check button.

ALL:

Searches all KX-P7310 printers, local and network.

Local:

Searches the local printers connected to your computer.

Server name:

Searches the name of the server computer sharing a printer.

(1) Click on the Server name check button and type the computer name in the box.

(2) Click **[Add>>]** to enter the name in the right box.

(To cancel the selection, select the name in the right box and click **[Delete].**)

It enables you to enter computer names to search by performing the above steps.

IP address:

Searches printers by entering the IP address of the server or printer.

(1) Click on the IP address check button and type the IP address in the box.

(2) Click **[Add>>]** to enter the name in the right box.

(To cancel the selection, select the name in the right box and click **[Delete].**)

It enables you to enter IP address to search for.

3 Click **[Search]**.

The search result is displayed.

- It may take a long time to search printers depending on the network condition.

4 Click the printer you want to get the printer status, then click **[Apply]**.

If the printer is connected to the network, the server name or the printer's IP address is entered in the Server Name box of the Setup for Status Display window.



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Setting the Printer Driver (Mac OS 8.5 - Mac OS 9.2)

Once you have installed the printer driver for PostScript, select the printer as the current printer in the Chooser desktop accessory or printer icon on the desktop screen.

- [A]** If the printer is connected to the network with the network interface, select the printer in the Chooser.
- [B]** If the printer is connected to your computer with the USB interface, select the printer icon on the desktop screen.

[A] Selecting the Printer in the Chooser

- 1** Select **Chooser** from the Apple menu.
- 2** Ensure AppleTalk is active.
- 3** Click the **LaserWriter 8** printer icon.
- 4** Select the correct AppleTalk zone if necessary.
- 5** Select the name of KX-P7310 from the scroll list.
 - If an icon is not displayed on the left of the printer name you selected, follow the instructions below:
 - (1) Click **[Create]**.
 - (2) Select **Panasonic KX-P7310** and click **[Select]**.
 - (3) Specify the installed options.
 - (4) Click **[OK]**.
 - (5) Confirm an icon appears to the left of the printer name.
- 6** Close the Chooser.



[B] Selecting the Printer Connected with USB

After the setting for USB is completed, KX-P7305 or KX-P7310 icon is created on your desktop screen.

To select the printer connected with USB,

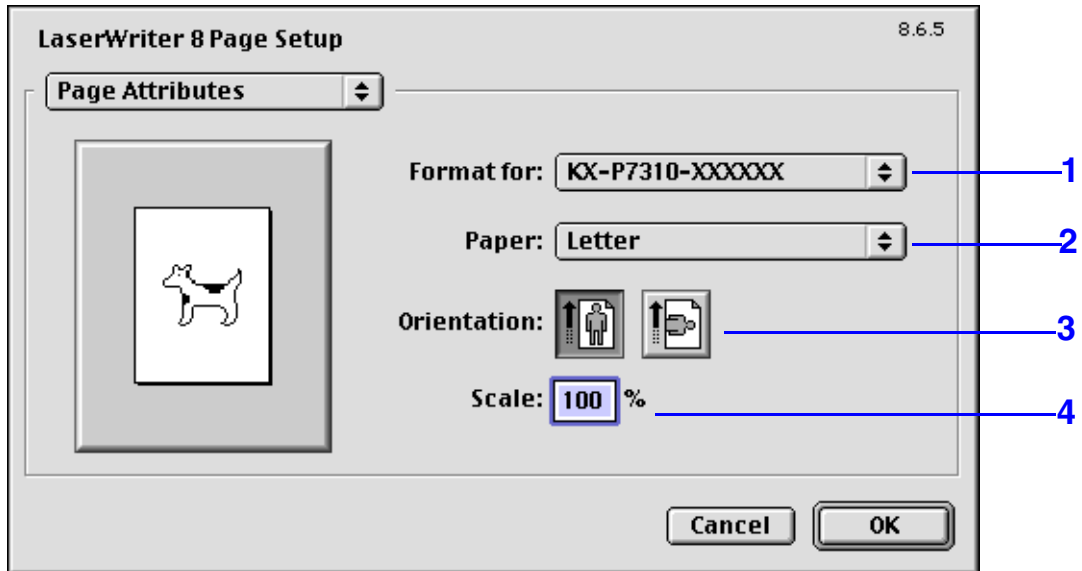
- 1** Click the **KX-P7305** or **KX-P7310** icon.
- 2** Click **Printing** menu and select **Set Default Printer**.

Displaying the Page Setup Window

- 1** Open the file you want to print from within the application.
- 2** Select **Page Setup...** from your application's **File** menu.



Setting the Printer Driver (Mac OS 8.5 - Mac OS 9.2)



3 Select your printer from the **Format for**.**1** **Format for**

Select the printer to specify the printer driver.

2 **Paper**

Selects a different paper size Letter, Legal, A4, B5 (ISO), Executive, A5, A6, Com9 (Envelope #9), Com10 (Envelope #10), Monarch, DL (International DL) or C5 (International C5).

3 **Orientation**

Selects  (Portrait) or  (Landscape).

4 **Scale**

Enables to reduce or enlarge output on the printed page from 25% to 400%.

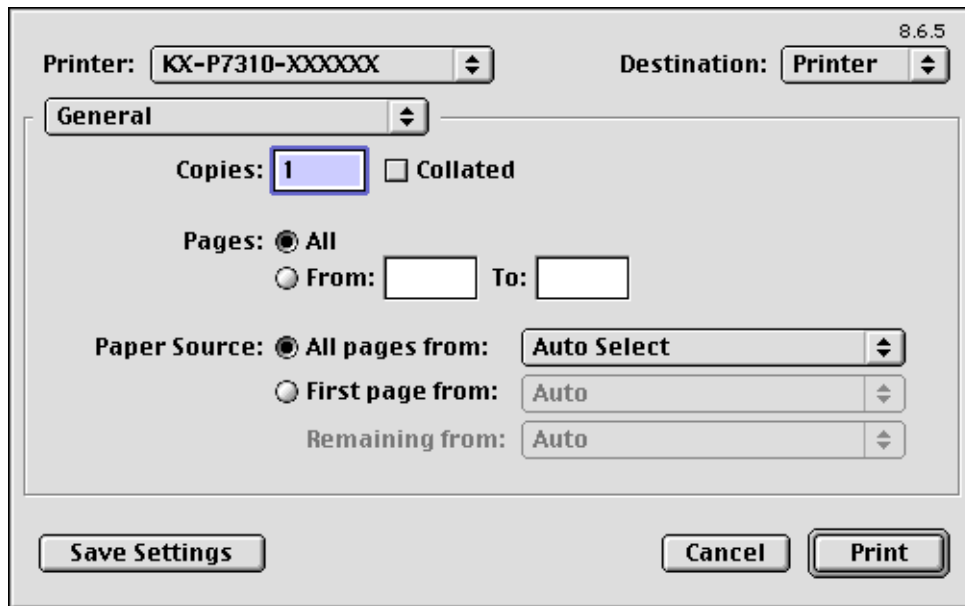
NOTE

- Screen shots in Mac OS 8.6 are used in this Operating Instructions. They may be different depending on the version of Mac OS.



Displaying the Print Window

- 1 Open the file you want to print from within the application.
- 2 Select **Print...** from the application's **File** menu.



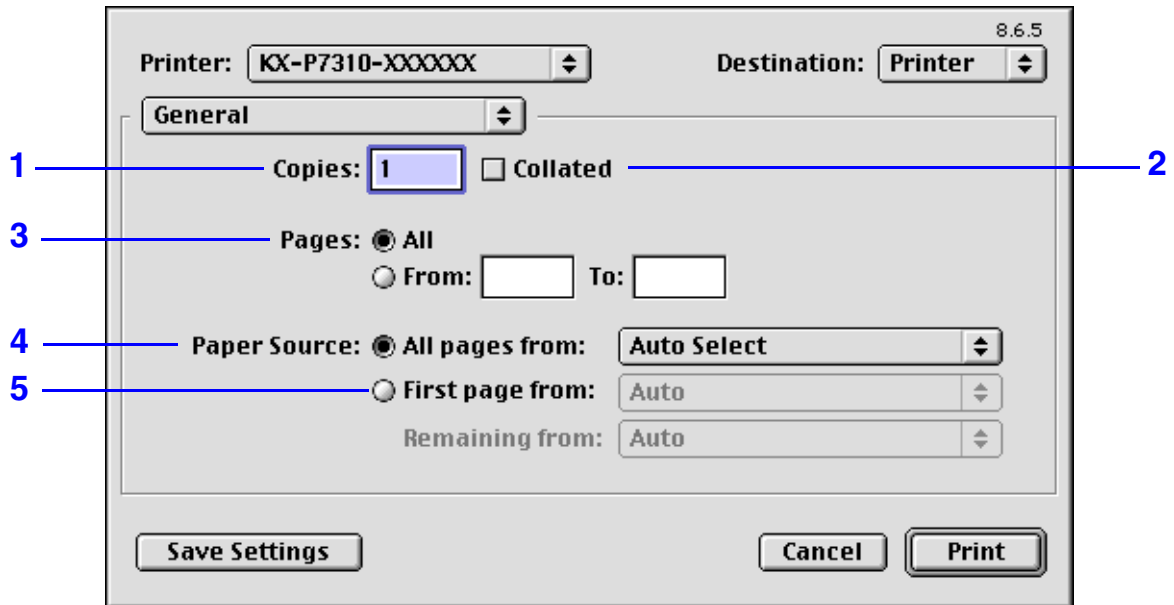
- 3 Select the KX-P7305 or KX-P7310 printer from the **Printer** menu.
- 4 Click **General** menu and select the desired menu.

General menu (see page 87)
Layout menu (see page 89)
Printer Specific Options menu (see page 91)

For other menus, refer to the balloon help.



Setting the General Menu



1 Copies

Determines the number of copies of the document will be printed.

2 Collated

Clicking on this check box prints the copies of the entire document a number of times, from 1st page to the last page. If you print 3 copies of a 5 pages document, printer prints page 1 through page 5 three times.

Removing the check prints the copies of the 1st page, then the copies of the next page and so on.

3 Pages

Specifies the range of pages.



Setting the Printer Driver (Mac OS 8.5 - Mac OS 9.2)

4 Paper Source

- **All pages from**

Enables to select the tray feeding media. If the optional 2nd feeder is installed in your printer and defined it in the Installable Options menu (see “Setting the Installable Options” on page 93), Option Cassette can be available.

- **Auto Select**

Auto Select is the invalid selection.

- **Auto**

The printer picks media from the tray loaded with the media. The printer automatically feed media in the order of Manual Feed, Media Tray (standard), Lower (2nd feeder).

The media can be fed from the tray corresponding to the paper size of the document by assigning the media size to the tray using the Remote Control Panel (“Upper Tray / Lower Tray” on page 38 or “Setting the Form To Tray Assignment” on page 50).

- **Manual Feed**

Enables to print on any type of media one by one from the manual feed. It cannot be selected when performing the duplex printing.

- **Media Tray**

Enables to print on media loaded in the standard tray of the printer. Thick paper [106 – 165 g/m² (29 – 44 lb.)] or label cannot be printed with the media tray. Their media can be printed with the manual feed.

- **Option Cassette** (option)

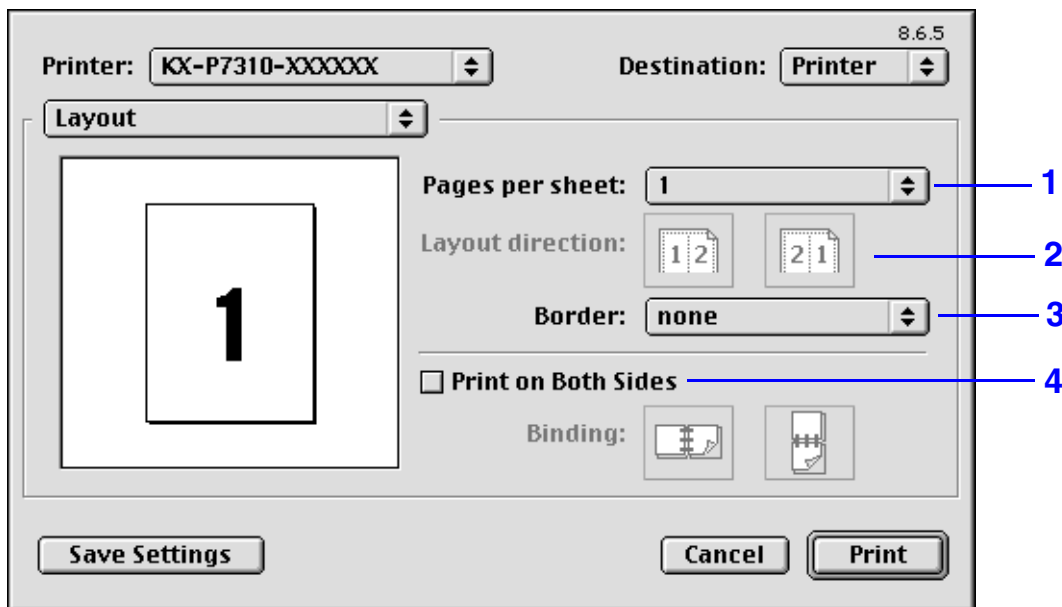
Only enables printing on plain paper in the tray of the optional 2nd feeder.

5 First page from / Remaining from

Enables to select the paper source of the first page separately from the remaining pages. This option is effective when the optional 2nd feeder is available.



Setting the Layout Menu



- 1 Pages per sheet**
Specifies number of pages of your document to print on one piece of paper.
- 2 Layout direction**
Specifies the layout of the pages per sheet.
- 3 Border**
Sets the type of line to appear around the page.



Setting the Printer Driver (Mac OS 8.5 - Mac OS 9.2)

4 Print on Both Sides

Enables to print on both sides of paper by clicking on the check box and selecting the binding style. To perform the duplex printing, the following media and paper source must be set. To perform duplex printing, [see “Performing Duplex Printing” on page 96](#).

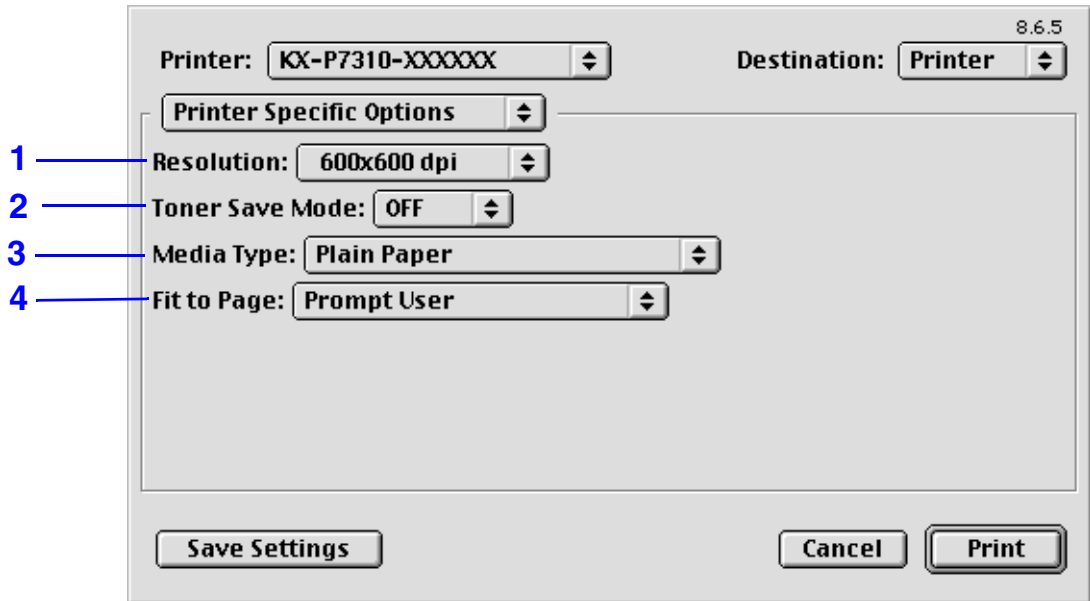
Paper size: Letter, Legal, A4, B5 or Executive in the **Page Setup** window
([see page 84](#))

Media Type: Plain Paper in the **Printer Specific Options** menu
([see page 91](#))

Paper Source: Media Tray or Option Cassette in the **General** menu
([see page 87](#))



Setting the Printer Specific Options



1 Resolution

Selects a quality setting. **300x300 dpi**, **600x600 dpi** or **1200x600 dpi** can be selected. A higher resolution provides better print quality. However, the throughput speed is diminished.

2 Toner Save Mode

Enables to reduce the amount of toner used to print.

Off: The toner save feature is turned off. This is the default setting and is recommended for the high print quality.

On: The toner save feature is turned on. Black areas and text are replaced by light gray shading.



Setting the Printer Driver (Mac OS 8.5 - Mac OS 9.2)

3 Media Type

Selects the type of media.

Paper Source	Media Type
Media Tray	Plain Paper, Cotton Paper* ¹ , Transparency, Envelope
Manual Feed	Plain Paper, Transparency, Thick Paper, Cotton Paper, Label, Envelope
Option Cassette	Plain Paper

*¹ Cotton Paper cannot be used for duplex printing.

4 Fit to Page

Document is printed in the size fitted to the media size.

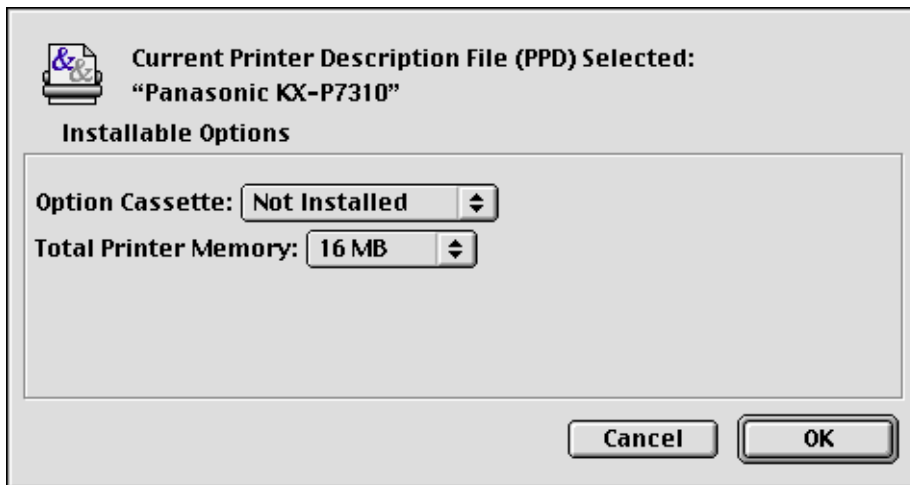


Setting the Installable Options

The printer driver installed on the computer cannot automatically detect that an option has been installed in the printer. After installing an option in the printer, you must define whether an option is installed or not with **Chooser** or **printer icon** for USB.

A Setting the options with Chooser

- 1 Select **Chooser** from the Apple menu and ensure AppleTalk is **Active**.
- 2 Click the **LaserWriter 8** printer icon.
- 3 Select the name of KX-P7310 from the scroll list.
- 4 Click [**Setup...**].
- 5 Click [**Configure**] in this window.





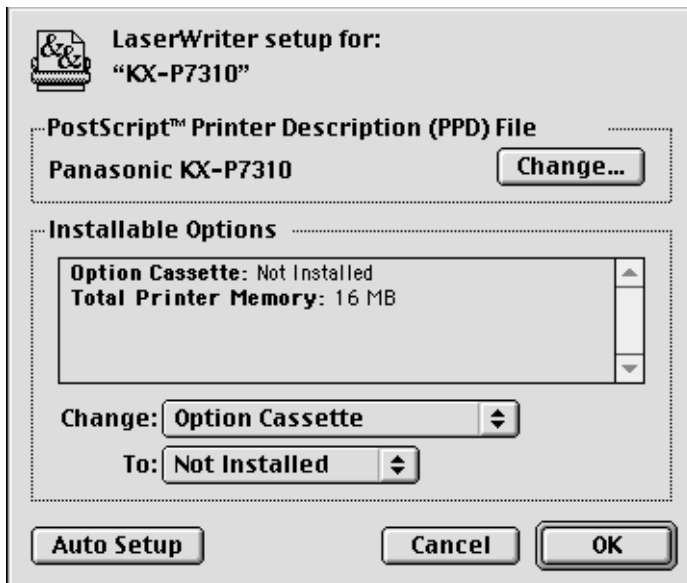
Setting the Printer Driver (Mac OS 8.5 - Mac OS 9.2)

- 6** Click the option installed in your printer and select **Installed** or total installed memory.
- 7** Click **[OK]**.
- 8** Click **[OK]**.



B Setting the options with printer icon for USB

- 1 Click the printer icon for USB on the desk top screen.
- 2 Click the **Printing** menu and select **Change Setup...**
 - If Change Setup... menu does not appear, see the note below.
- 3 Select the installed option from **Change**.



- 4 Select **Installed** or installed memory from **To**.
- 5 Click **[OK]**.

NOTE

• If **Change Setup...** menu does not appear in the **Printing** menu, follow the instructions below.

- (1) Click **Edit** menu and select **Preferences...**
- (2) Remove the check of the **Simple Finder** check box on the **General** tab.
- (3) Close the **Preferences** window.



Performing Duplex Printing

- 1 Load paper into the Media Tray or Option Cassette*¹.
 - The following paper must be used. Otherwise, it may cause wrinkles or paper jam.
Media Type: Plain paper [75 – 90 g/m² (20 – 24 lb.)]
Paper Size: Letter, Legal, A4, B5 or Executive
 - Lay the paper straight if the paper is curled.

*¹ If the Optional 2nd Feeder has been installed, this selection can be selected.

NOTE

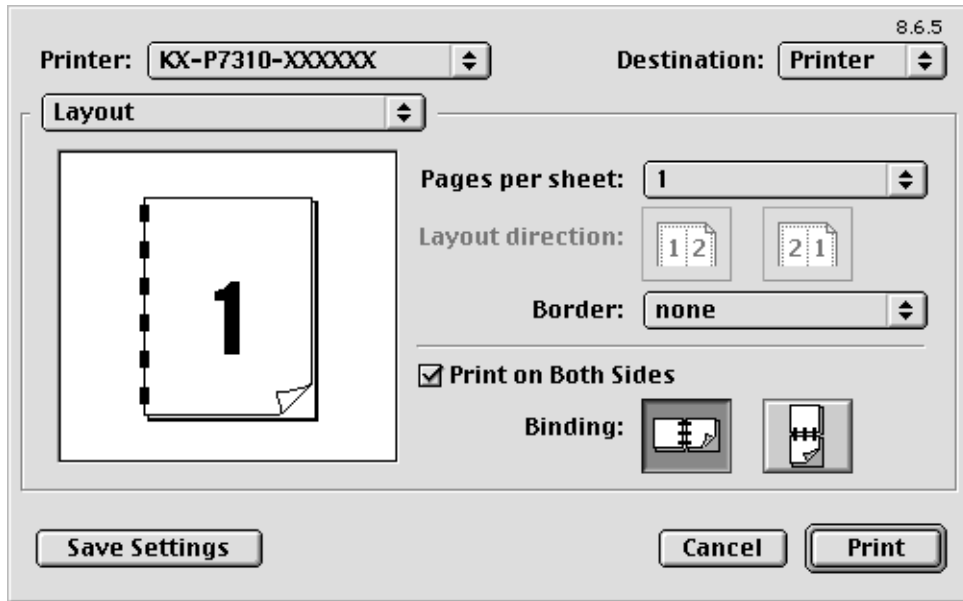
- Manual feed cannot be used for automatic duplex printing.

- 2 Open a document to perform duplex printing.
- 3 Select **Page Setup...** from your application's **File** menu.
- 4 Select your printer from the **Format for** menu.
- 5 Select the paper size (Letter, Legal, A4, B5 or Executive) from **Paper** for the proper paper loaded in the media tray.
- 6 Click **[OK]**.
- 7 Select **Print...** from the application's **File** menu.
- 8 Select **Media Tray** or **Option Cassette** (option) from **Paper Source**.
- 9 Click **General** menu and select **Printer Specific Options** menu.
- 10 Select **Plain Paper** from **Media Type**.



Setting the Printer Driver (Mac OS 8.5 - Mac OS 9.2)

- 11 Click **Printer Specific Options** menu and select **Layout** menu.
- 12 Click on the **Print on Both Sides** check box and click your desired binding style icon.



- 13 Click **[Print]**.
The document will be automatically printed on both sides of paper.



Setting the PS Printer Driver (Mac OS X 10.1 - Mac OS X 10.2)

Mac OS X intensively manages adding, deleting, searching a printer or displaying the printer status, etc. with the application Print Center.

Before you can use a printer, you must add the printer in the Print Center.

You will need to select the Page Setup window from your application's file menu to set general printing options for your printer.

Additional print options can then be specified from your application's Print selecting window.

NOTE

- The Print Center is in the Utilities folder (Macintosh HD:Applications:Utilities).
- Screen shots in Mac OS X 10.1 are used in this Operating Instructions. Menus may be different depending on the version of Mac OS X.

Adding the KX-P7310 in Print Center Connected with AppleTalk

Be sure the printer is connected to the network and turned it on.

- 1** Open the **Print Center** and choose **Add Printer...** from the **Printers** menu.
- 2** Choose **AppleTalk** as the connection type, and click **KX-P7310-XXXXXX**.
KX-P7310-XXXXXX is displayed in the Printer List.
(XXXXXX: last 3 bytes of the MAC Address)
- 3** Confirm the Printer Model is set to **Auto Select...** and click **Add**.
- 4** Close the **Print Center**.



Adding the Printer in Print Center Connected with USB

Be sure the printer is connected to the computer with the USB interface cable and turned it on.

- 1** Open the **Print Center** and choose **Add Printer...** from the **Printers** menu.
- 2** Choose **USB** as the connection type, and click **KX-P7305** or **KX-P7310**.
- 3** Confirm the Printer Model is set to **Auto Select...** and click **Add**.
KX-P7305 or KX-P7310 is displayed in the Printer List.
- 4** Close the **Print Center**.

Setting the Printer to the Default Printer

- 1** Open the **Print Center** and click **KX-P7305**, **KX-P7310** or **KX-P7310-XXXXXX**.
- 2** Select **Make Default** from the **Printers** menu.
- 3** Close the **Print Center**.

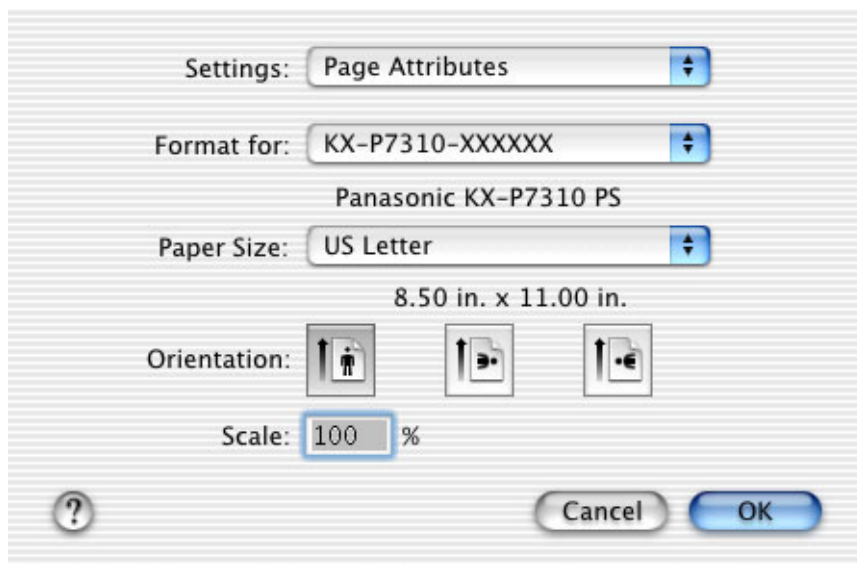
NOTE

- When you add a printer in the Print Center, the new printer becomes the default printer.



Setting the Page Setup Window

- 1 Open the file you want to print from within the application.
- 2 Select **Page Setup...** from your application's **File** menu.
- 3 Select the desired printer from the **Format for**.

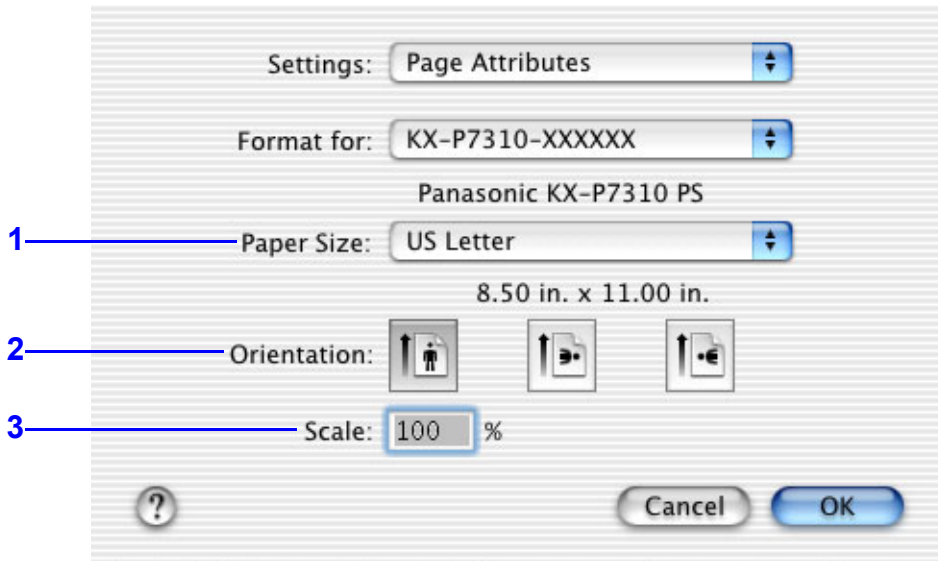


- 4 Click **Page Attributes** Menu and select the desired menu.

Page Attributes	See page 101 .
Summary	Shows the Page Setup window's settings summary.





Setting the Page Attributes Menu



1 Paper Size

Selects a different paper size. The following paper sizes can be selected. US Letter, US Legal, A4, B5 (ISO), Executive Envelope, A5, A6, Com9, #10 Envelope, Monarch Envelope, Long Envelope, C5 Envelope.

2 Orientation

Selects  (Portrait) or  (Landscape) or  (Rotated Landscape).

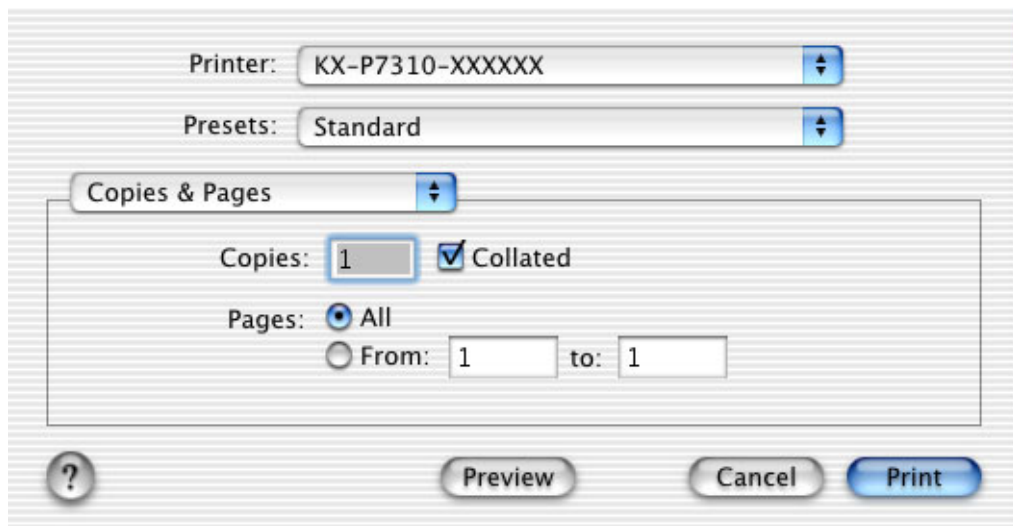
3 Scale

Reduces or enlarges output on the printed page.



Displaying the Print Window

- 1 Open a file to perform printing in your application.
- 2 Select **Print...** from your application's **File** menu.



- 3 Select your printer from the **Printer** menu.
- 4 Choose categories from pop-up menu.

Copies & Pages	Allows you to set the following general printer settings (see page 104). <ul style="list-style-type: none"> •Copies •Collated •Pages
Layout	Allows you to select the following layout options (see page 105). <ul style="list-style-type: none"> •Pages per Sheet •Layout Direction •Border

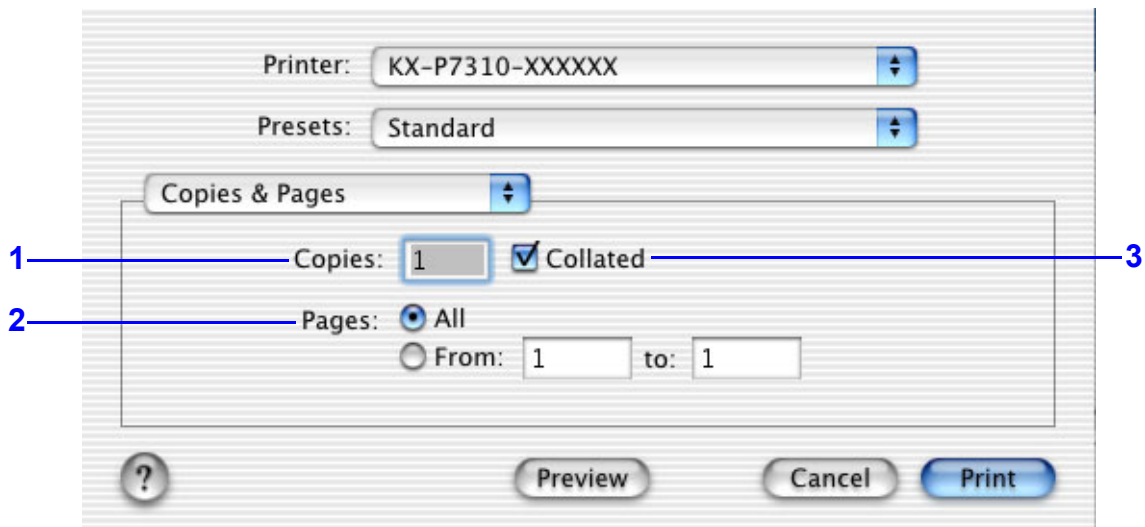


Setting the PS Printer Driver (Mac OS X 10.1 - Mac OS X 10.2)

Duplex	Allows you to set the duplex printing (see page 106). <ul style="list-style-type: none">• Print on Both Sides• Binding
Output Options	Allows you to output a document to file (see page 107). <ul style="list-style-type: none">• Save as File• Format
Paper Feed	Allows you to select the paper source (see page 108). <ul style="list-style-type: none">• All pages from• First page from• Remaining page from
Error Handling	Allows you to select the error handling when a PostScript error has occurred.
Printer Features	Allows you to set the following printer features (see page 110). <ul style="list-style-type: none">• Resolution• Toner Save Mode• Media Type• Fit To Page
Summary	Shows the Print window's settings summary.
Save Custom Setting	Allows you to set the current printer settings to the Custom in the Presets selection. You will be able to restore printer settings saved before by choosing Custom in the Presets selection.



Setting the Copies & Pages Menu



1 Copies

Determines the number of copies of a document to print.

2 Pages

Specifies the range of pages.

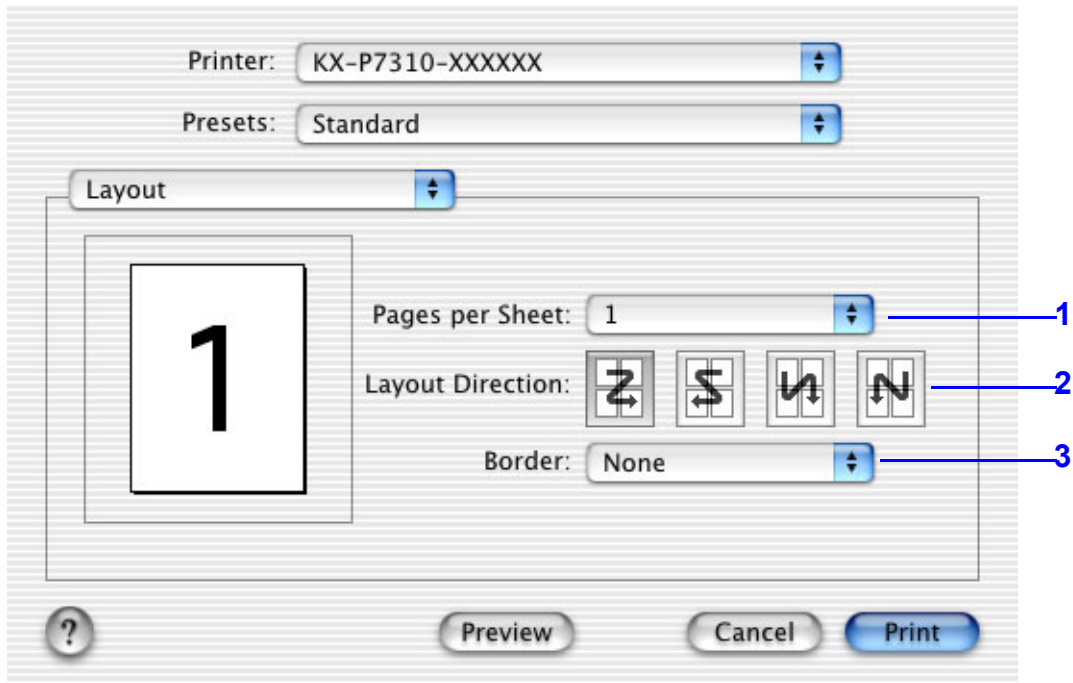
3 Collated

Clicking on this check box prints the copies of the entire document a number of times, from 1st page to the last page. If you print 3 copies of a 5 pages document, printer prints page 1 through page 5 three times.

Clicking off this check box prints 3 copies of the 1st page, then 3 copies of the next page and so on.



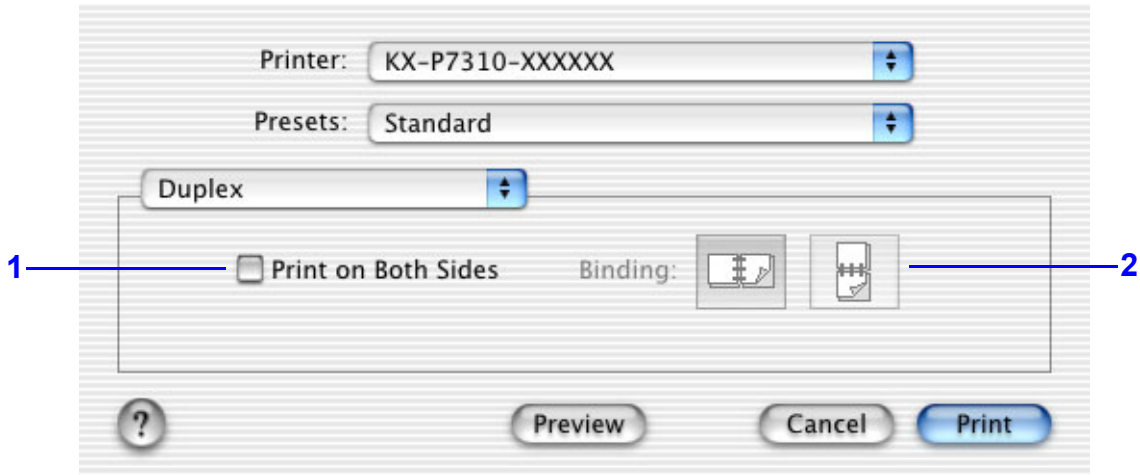
Setting the Layout Menu



- 1 Pages per Sheet**
Specifies how many pages of your document to print on one sheet of paper.
- 2 Layout Direction**
Specifies the layout of the pages per sheet.
- 3 Border**
Sets the type of line to appear around the page.



Setting the Duplex Menu



1 Print on Both Sides

Performs the automatic duplex printing by clicking on the check box and selecting the binding style.



To perform automatic duplex printing, the following media and paper source must be set. To perform duplex printing, [see "Performing Duplex Printing" on page 114](#).

Paper Size: US Letter, US Legal, A4 or B5 (ISO), Executive Envelope in the **Page Setup** window ([see page 100](#))

Media Type: Plain Paper in the **Printer Features** menu ([see page 110](#))

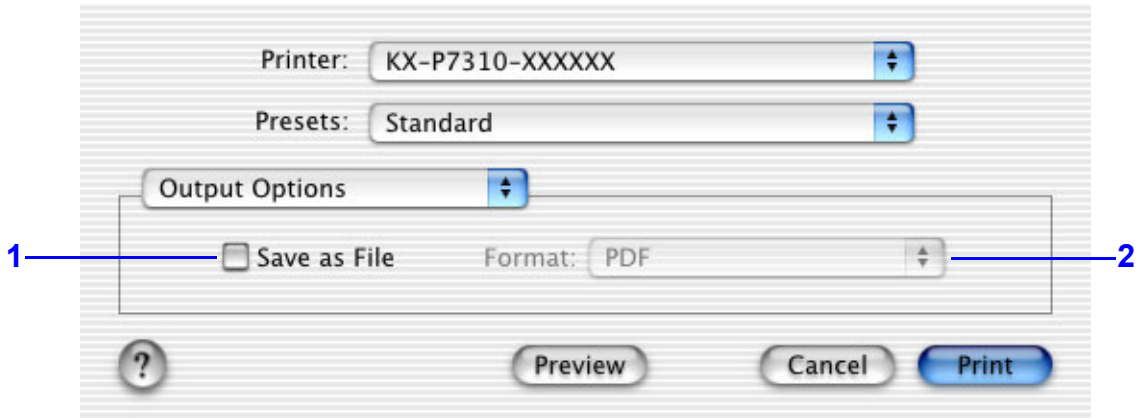
Paper Source: Media Tray or Option Cassette in the **Paper Feed** menu ([see page 108](#))

2 Binding

Selects  (vertical fold) or  (horizontal fold).



Setting the Output Options Menu



1 Save as File

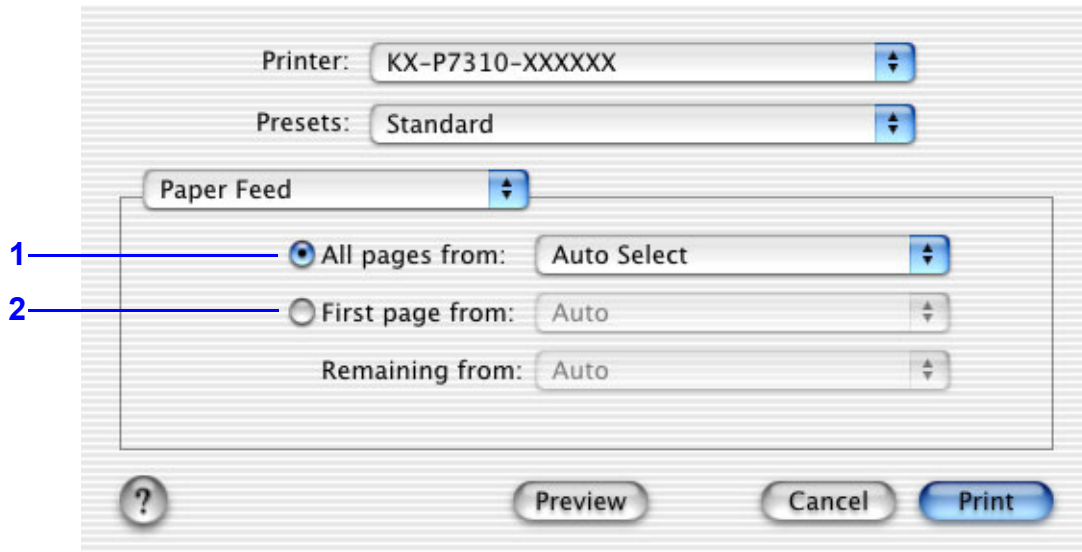
Clicking on this check box saves a document as file in the selected format. Clicking off this check box prints a document to the printer.

2 Format

Selects the file format (PDF or PostScript) when saving a document. The available formats are PDF and PostScript.



Setting the Paper Feed Menu



1 All pages from

Selects the tray feeding media. If the optional 2nd Feeder is installed in the printer, Option Cassette is available. When adding printer with the Print Center application, the computer defines options installed to the printer automatically. If you install additional options after adding printer, add the printer again (see [“Setting the Installed Options” on page 112](#)).

- **Auto Select**

Auto Select is the invalid selection.

- **Auto**

The printer picks media from the tray loaded with the media. The printer automatically feed media in the order of Manual Feed, Media Tray (standard), Option Cassette (2nd feeder).

The media can be fed from the tray corresponding to the paper size of the document by assigning the media size to the tray using the Remote Control Panel ([“Upper Tray / Lower Tray” on page 38](#) or [“Setting the Form To Tray Assignment” on page 50](#)).

- **Manual Feed**

Enables to print on any type of media one by one from the manual feed. It cannot be selected when performing the duplex printing.



Setting the PS Printer Driver (Mac OS X 10.1 - Mac OS X 10.2)

- **Media Tray**

Enables to print on media loaded in the standard tray of the printer. Thick paper [106 – 165 g/m² (29 – 44 lb.)] or label cannot be printed with the media tray. Their media can be printed with the manual feed.

- **Option Cassette** (option)

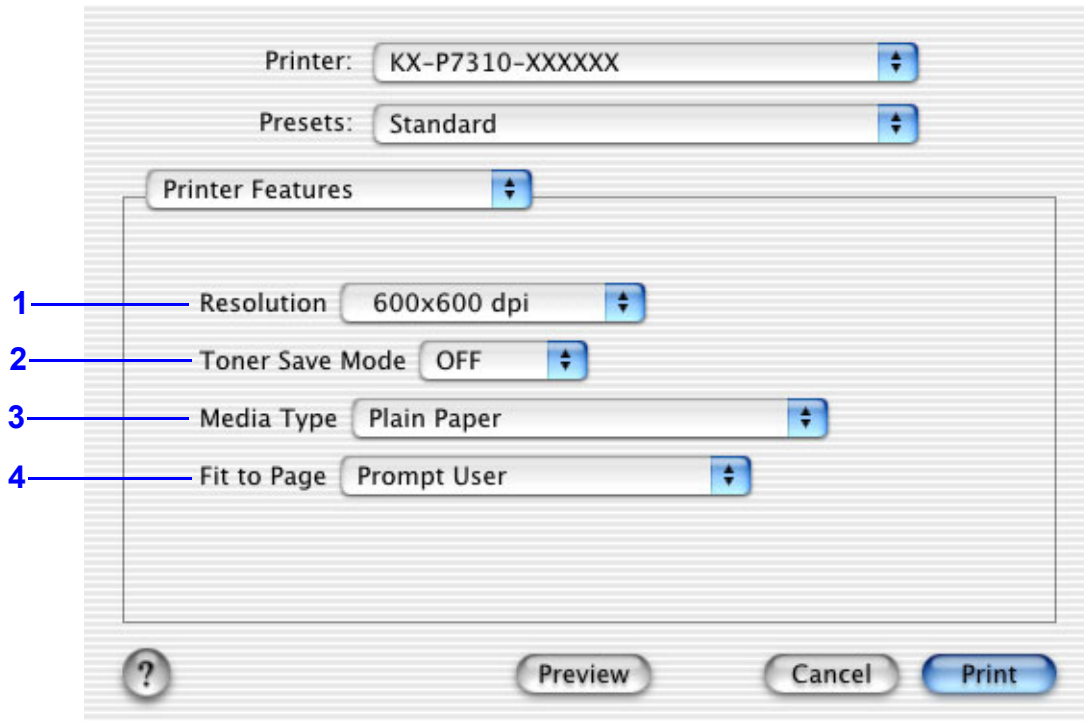
Only enables printing on plain paper in the tray of the optional 2nd feeder.

2 First page from

Allows you to select the paper source of the first page separately from the remaining pages.



Setting the Printer Features



1 Resolution

Selects a quality setting. **300x300 dpi**, **600x600 dpi** or **1200x600 dpi** can be selected. A higher resolution provides better print quality. However, the throughput speed is diminished.

2 Toner Save Mode

Enables to reduce the amount of toner used to print.

Off:The toner save feature is turned off. This is the default setting and is recommended for the high print quality.

On:The toner save feature is turned on. Black areas and text are replaced by light gray shading.



Setting the PS Printer Driver (Mac OS X 10.1 - Mac OS X 10.2)

1 Media Type

Selects the type of media.

Paper Source	Media Type
Media Tray	Plain Paper, Cotton Paper* ¹ , Transparency, Envelope
Manual Feed	Plain Paper, Transparency, Thick Paper, Cotton Paper, Label, Envelope
Option Cassette	Plain Paper

*¹ Cotton Paper cannot be used for duplex printing.

4 Fit to Page

Document is printed in the size fitted to the media size.



Setting the Installed Options

When adding printer with the Print Center application, the computer defines options installed to the printer automatically. If you install additional options after adding printer, add the printer again (see the instructions below).

- 1** Open the **Print Center** and click **KX-P7305**, **KX-P7310** or **KX-P7310-XXXXXX**.
- 2** Click [**Delete**].
- 3** Select **Add Printer...** from the **Printers** menu.
- 4** Choose **AppleTalk** or **USB** as the connection type depending on the connecting interface, and select the printer.
- 5** Confirm the Printer Model is set to **Auto Select...** and click **Add**.
- 6** Close the **Print Center**.

NOTE

- When using Mac OS X 10.2, manually define the installed options with the Print Center. The Print Center is in the Utilities folder (Macintosh HD: Applications:Utilities).

- (1) Open the **Print Center** and click the **KX-P7305** or **KX-P7310** printer.
- (2) Select **Show Info** from the **Printers** menu.
- (3) Select **Installable Options** from the **Name & Location** menu.
- (4) Click on the check box of the installed option or specify the total memory installed in the printer.
- (5) Click [**Apply Changes**].
- (6) Close the **Print Center**.



Printing from Classic Applications

To print from a Classic application, the printer driver and PPD file for Mac OS 9 must be installed in your computer, then set the computer and printer (see the “Setup Guide”).

- 1** Choose **Page Setup...** from the application's **File** menu to prepare to print.
- 2** Then choose **Print...** from the **File** menu to print your document.



Performing Duplex Printing

- 1 Load paper into the Media Tray or Option Cassette*¹.
 - The following paper must be used. Otherwise, it may cause wrinkles or paper jam.
Media Type: Plain paper [75 – 90 g/m² (20 – 24 lb.)]
Paper Size: US Letter, US Legal, A4, B5 (ISO) or Executive
 - Lay the paper straight if the paper is curled.

*¹ If the Optional 2nd Feeder has been installed, this selection can be selected.

NOTE

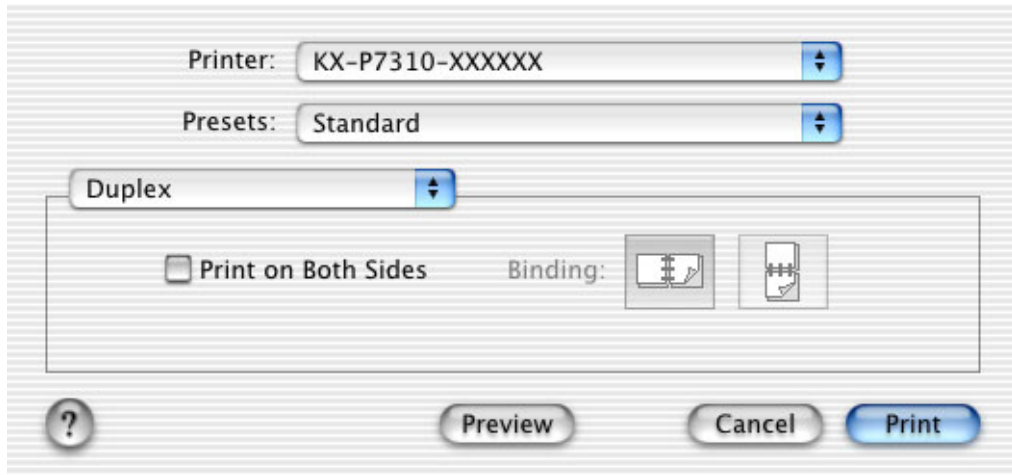
- Manual feed cannot be used for automatic duplex printing.

- 2 Open a document to perform duplex printing.
- 3 Select **Page Setup...** from your application's **File** menu.
- 4 Select your printer from the **Format for** menu.
- 5 Select the loaded paper size [US Letter, US Legal, A4, B5 (ISO) or Executive Envelope] from **Paper Size**.
- 6 Click **[OK]**.
- 7 Select **Print...** from the application's **File** menu.
- 8 Click **Copies & Pages** menu and select **Paper Feed** menu.
- 9 Select **Media Tray** or **Option Cassette** from the **All pages from**.
- 10 Click **Paper Feed** menu and select **Printer Features** menu.
- 11 Select **Plain Paper** from the **Media Type**.



Setting the PS Printer Driver (Mac OS X 10.1 - Mac OS X 10.2)

- 12** Click **Printer Features** menu and select **Duplex** menu.



- 13** Click on the **Print on Both Sides** check box and click your desired binding style icon.

- 14** Click [**Print**].

The document will be automatically printed on both sides of pages.



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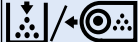








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Replaceable Components

■ Supplies

When print is faded or indicators show the following status, the replacement of a supply is needed.

Printer components	Indicators		Message of printer status display	Average life
	 ERROR	 TONER/ DRUM UNIT		
Toner cartridge			<div style="border: 1px solid black; padding: 2px;">Low Toner</div> Change the toner cartridge soon.	—
			<div style="border: 1px solid black; padding: 2px;">Toner Empty</div> Replace the toner cartridge now.	5,000 pages ^{*1*2} (6,000 pages maximum)
Drum unit			<div style="border: 1px solid black; padding: 2px;">Change Drum Unit</div> Change the drum unit soon.	—
			<div style="border: 1px solid black; padding: 2px;">Drum Unit Worn out</div> Replace the drum unit now.	20,000 pages

 : Indicator is turned off.

 : Indicator is lit.

 ,  : Indicator is blinking.

*1 Refer to the next page.

*2 The printer is shipped with a starter toner cartridge, which has half the amount of toner. (The page life expectancy is approximately 2,000 pages.)
The maximum life of the toner cartridge will not exceed 6,000 pages.

*¹ Average life is based on an average of 5% coverage of the printable area with repetitive printing of 10 pages (Letter / A4 size, single sided printing, default density) (refer to Example: 5% coverage). The life of a toner cartridge is varied depending on the coverage, temperature, humidity or media etc. So the average life cannot be assured. Continuously printing 10% coverage of the printable area will reduce the life of the toner to about half as compared to printing 5% coverage.

Example (5% coverage)

Personal Image Editing System Model No. XX-XXXX	
<u>Feature:</u> Congratulations on your purchase of the XX-XXXX, the three-in-one solution to today's office needs. This amazing little desktop unit can be used as a : Printer, Scanner, Copier.	
<u>Printer Specification</u>	
Printing Method:	Semiconductor Laser Electro-Photography
Print Speed:	X ppm maximum (A4 size paper, text mode, 5 % image area)
Resolution:	600 dpi X 600 dpi
Paper Feed:	1 Multi-purpose manual feed up to 250 sheets of paper [75 g/m ² (20 lbs.)]
Paper Outout:	Face-down paper ejection (up to 150 sheets) [75 g/m ² (20 lbs.)]
Software Emulation:	GDI + Soft XXXX
Paper Size/Weight:	Letter, Legal, A4, Envelope, Executive, OHP, Label
Memory Capacity:	2 MB
Dimensions:	399 (W) X 390 (D) X 254 (H) mm (15.7" X 15.4" X 10")
Mass [Weight]:	Approx. 10 Kg [22 lbs.]
Consumables:	Starter toner cartridge : 2,000 pages average Toner cartridge: 4,000 pages average Drum unit: 20,000 pages average
Noise Level:	Printing: 48 dBA Standby: 27 dBA
CPU:	Intel 80C51 compatible
<u>Other Specification</u>	
Operating Environment:	10 to 32.5°C [50 to 90.5°F] 20 to 80% RH
Storing Environment:	0 to 35°C [32 to 95°F] 20 to 80% RH
<u>Feature:</u> Congratulations on your purchase of the XX-XXXX, the three-in-one solution to today's office needs. This amazing little desktop unit can be used as a : Printer, Scanner, Copier.	
* Application Soft : Text Bridge, Card Scan	

Upgrade Options

The following upgrade options can be installed in the printer.

2nd Feeder (KX-PMF3)

An additional cassette can be used by installing this option. Refer to the installation manual included in the carton box with the option.

RAM Board: 16 MB (KX-PEM12) or 32 MB (KX-PEM13)

Installed to increase the printer's memory. To install it, see the following instructions.

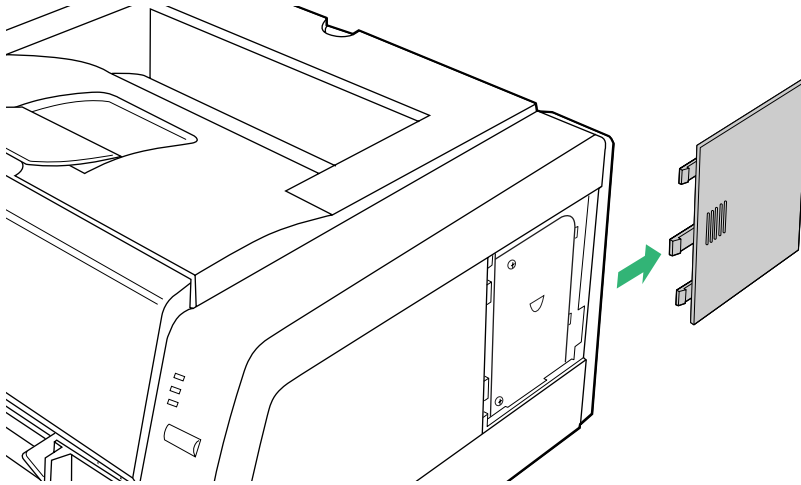
Installing the RAM Board

CAUTION

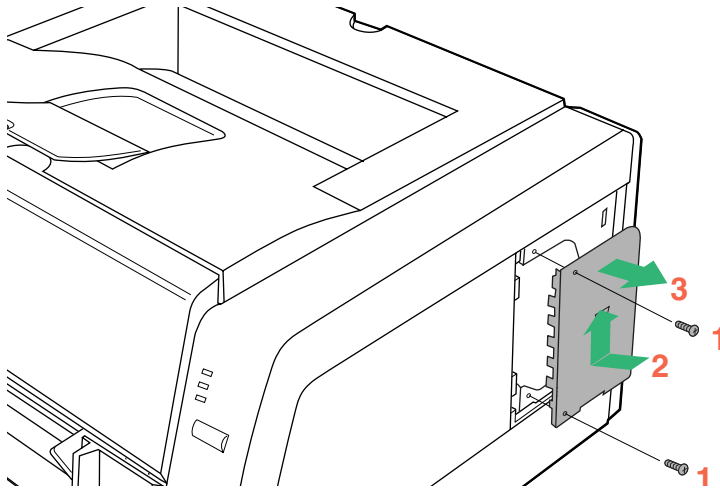
- To prevent static electricity damage to the printer or RAM board,
 - Do not touch the connector of the printer board.
 - Touch the printer's bare metal frame often to discharge static electricity from your body.
 - Handle the circuit board only by the edges.
 - Do not lay board on a metal surface.
- To prevent damage to the RAM board, avoid exposing the RAM board to direct sunlight, high temperatures or humidity.

- 1** Turn the printer off, unplug the power cord and disconnect any cables connected to the connectors on the back of the printer.

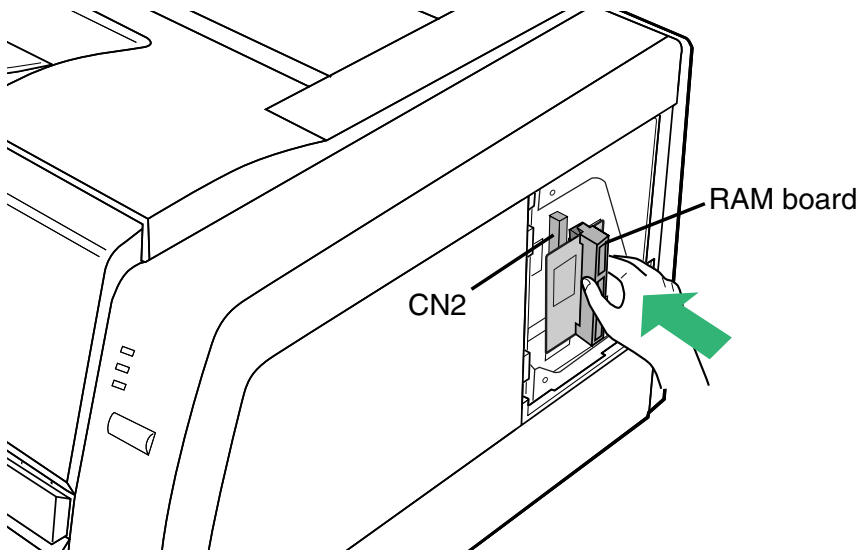
- 2** Slide the option cover and remove it.



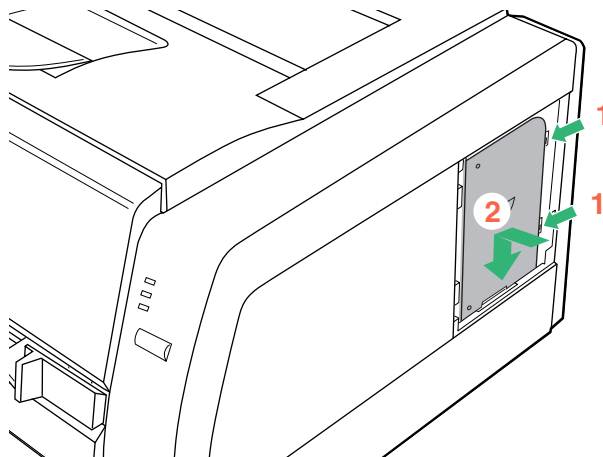
- 3** Remove the two screws (1) and slide the metal plate up while pressing it (2), then remove it (3).



- 4** Connect the RAM board to the following connector as illustrated below.



- 5** Align the fringe (1) and slide the metal plate down while pressing it (2).



- 6** Fasten the metal plate with the two screws removed earlier.
- 7** Install the option cover.
- 8** Plug in the power cord and reconnect any cables to the back of the printer.

Setting the Printer Driver

If you install the RAM board, set the printer driver for the printer's installed memory (see [“Defining the Installed Options” on page 48](#) of “Settings and Printing” in the Operating Instructions).

To set the printer driver in Macintosh, see [“Setting the Installable Options” on page 93](#) or [“Setting the Installed Options” on page 112](#) of “Settings and Printing” in the Operating Instructions.

Cleaning the Printer

Periodic cleaning of the printer is recommended. The frequency of cleaning is dependent upon the environment in which the printer is used.

You should clean the printer:

- at least once a month.
- when you replace the toner cartridge.
- when print quality has deteriorated.

CAUTION

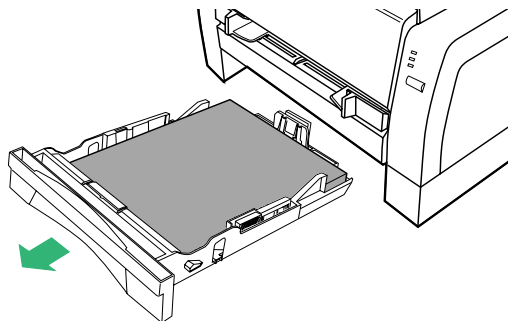
- Do not use benzene, thinner, aerosol cleaners, or any abrasive powder.

External

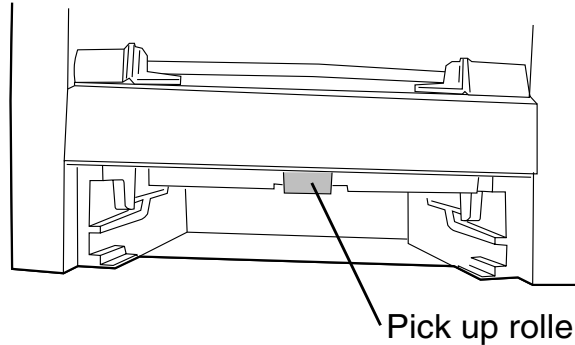
- 1** Turn the power OFF.
- 2** Clean all the covers with a soft cloth. Use any mild commercial cleaner.

Internal

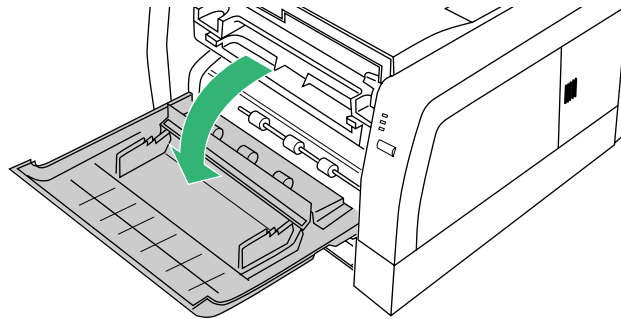
- 1** Turn the power off and remove the power cord for your safety.
- 2** Remove the media tray out of the printer.



- 3** While rotating the pick up roller, wipe it with a soft cloth that has been moistened with a mild commercial cleaner.

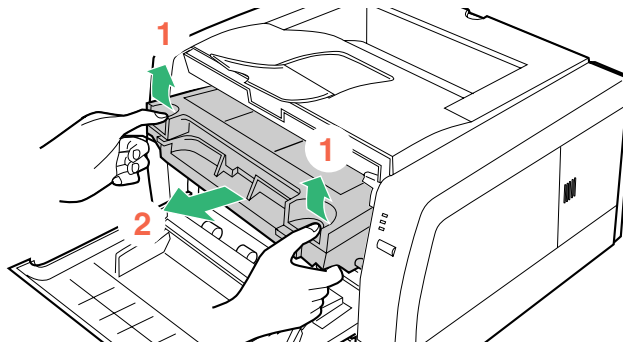


- 4** Open the front cover.



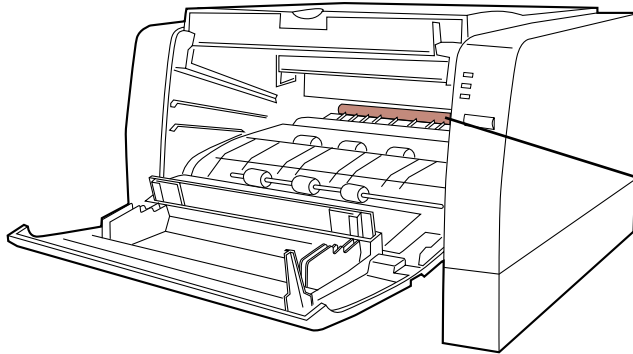
- 5** Lift the drum unit up (1) and slide it out of the printer (2).

- To avoid possible toner spillage, it is recommended to place the drum unit on a newspaper or drop cloth.



**SAFETY CAUTION**

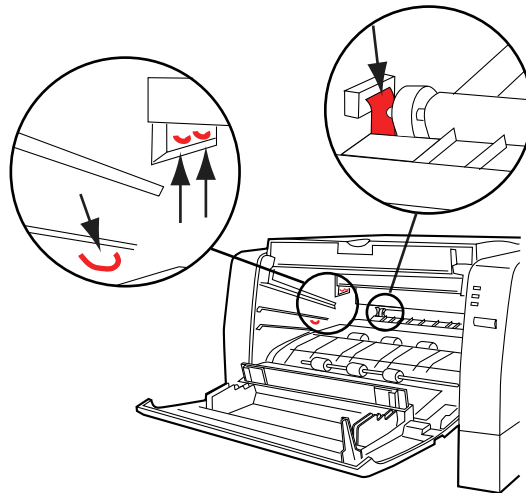
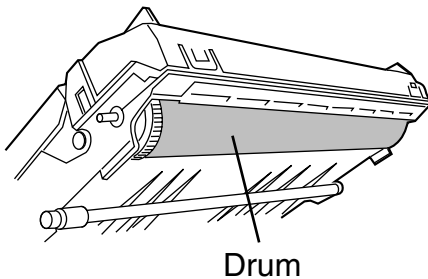
- It is very hot inside the printer; to avoid personal injury, do not touch the components illustrated below.



CAUTION:
HOT SURFACE

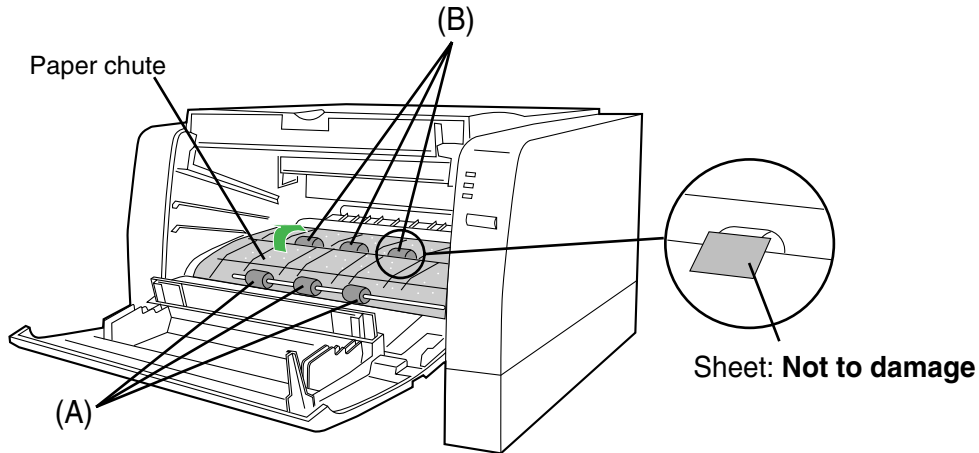
CAUTION

- To prevent any damage to the drum unit, observe the following precautions.
 - Do not touch the drum surface illustrated below.
 - Do not expose the drum unit to light for more than 5 minutes.
 - Do not expose the drum unit to direct sunlight.
 - Do not keep the drum unit near dust or dirt.
 - Do not place the drum unit in a high humid area.
- Do not touch electrodes illustrated below to prevent static electricity damage to the printer.



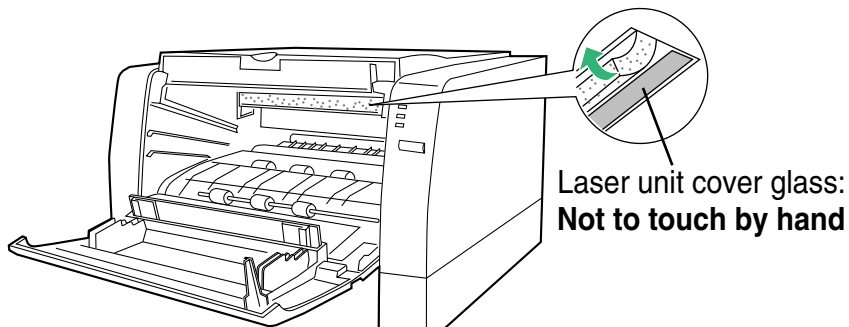
Electrodes (shown in red)

- 6** Wipe rollers (A) and (B), and paper chute with a soft cloth that has been moistened with a mild commercial cleaner.
- Be sure to remove the paper dust.

**NOTE**

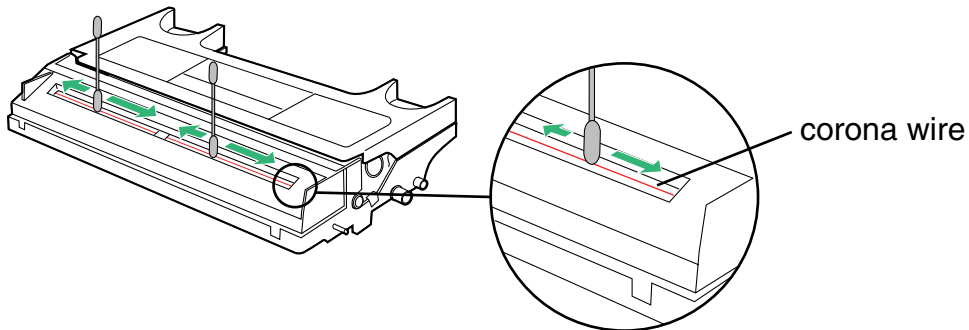
- Front rollers (A) can be rotated half. Inner rollers (B) can be rotated to the direction of the arrow. Be sure not to damage the sheets in front of the inner rollers (B).


- 7** Turn the sponge up and carefully wipe the laser unit cover glass with a dry lint-free cloth.

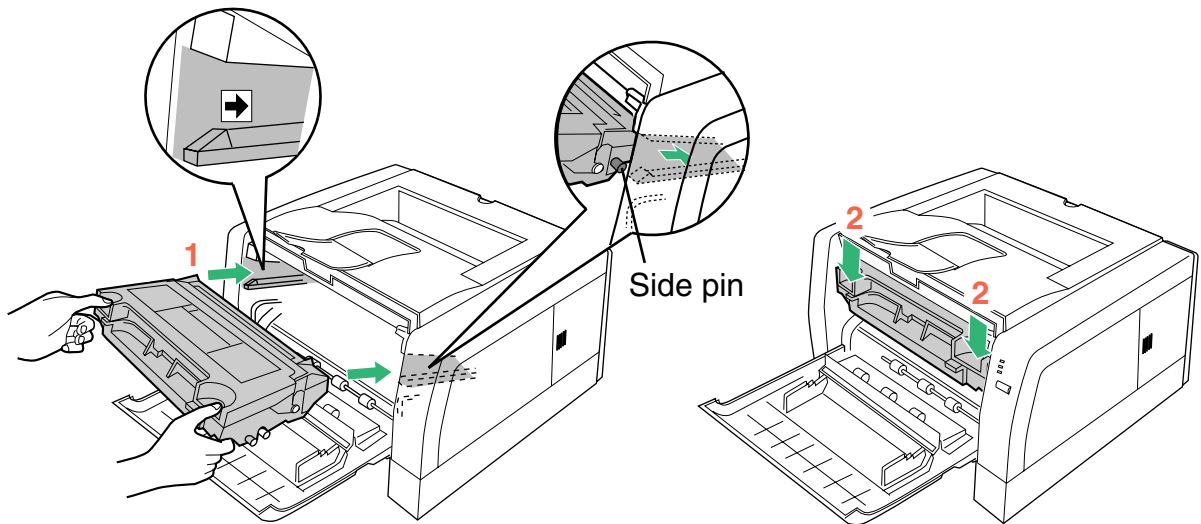
**CAUTION**

- To avoid a damage to the printer,
- Do not use rubbing alcohol to wipe the laser unit cover glass.
 - Do not touch the laser unit cover glass by hand.

- 8** Carefully wipe the corona wire of the drum unit by sliding a dry cotton swab from end to end a few times.



- 9** Firmly insert the drum unit in the slot of the printer (1) [insert the side pins of the drum unit into the groove (label )]. Push down (2).



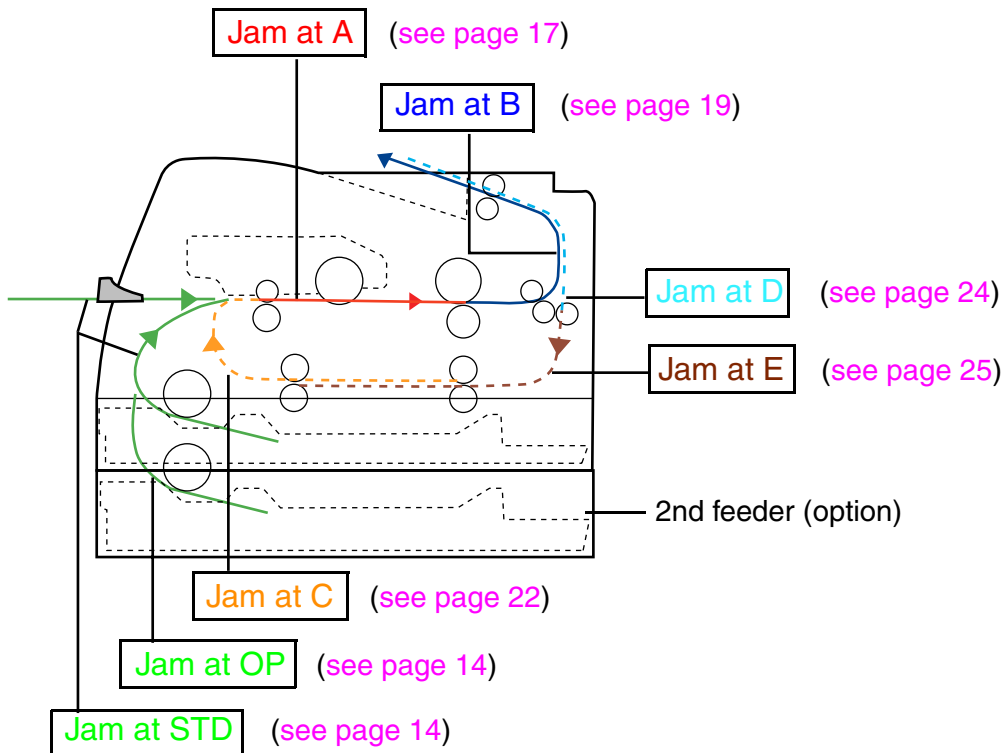
- 10** Close the front cover and replace the media tray into the printer.

Clearing a Jam

If the printer has frequent media jams, make sure that you follow these guidelines:

- Always use high-quality paper and transparencies (see “Media” on page 53).
- Make sure that you load thick paper [106 – 165 g/m² (29 – 44 lb.)] or labels only in the manual feed.

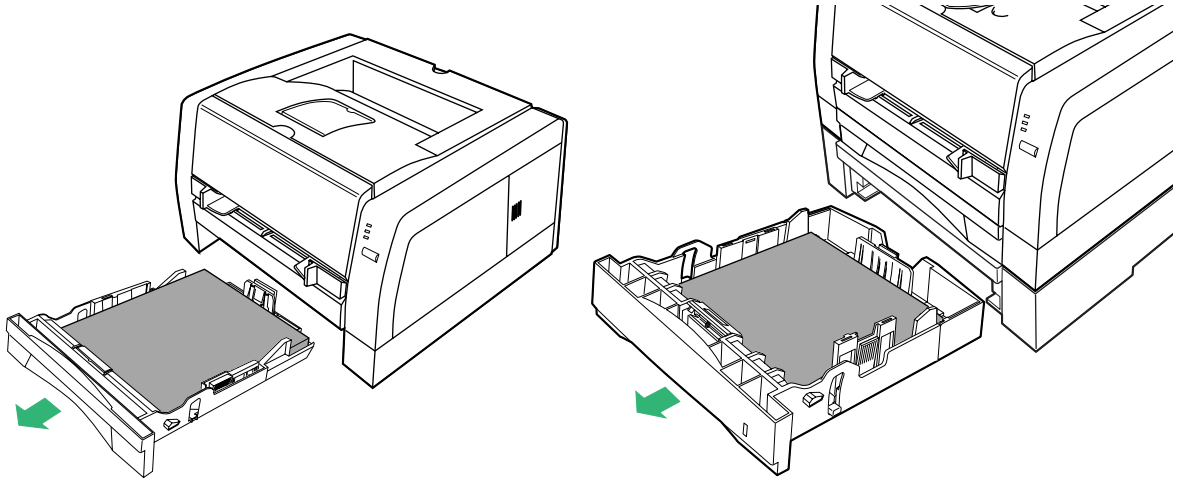
If a media jam occurs, the printer status display reports “Jam at <Location>”. The <Locations> are the various sensors throughout the paper path as illustrated below.



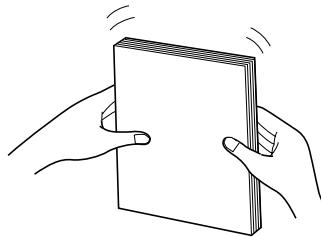
Jam at STD / Jam at OP

When a media feed error has occurred, clear the media feed error as follows:

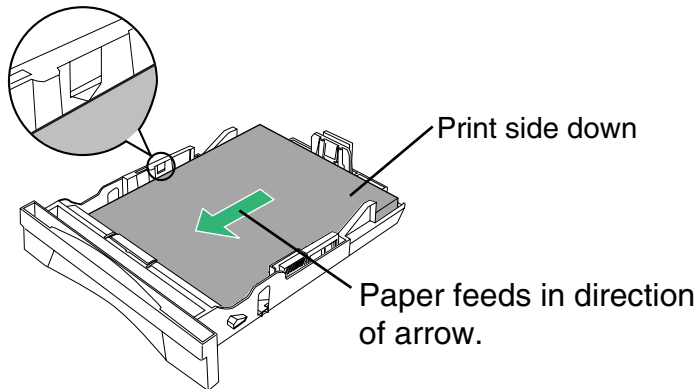
- 1** Pull the media tray out of the printer or 2nd feeder (option).



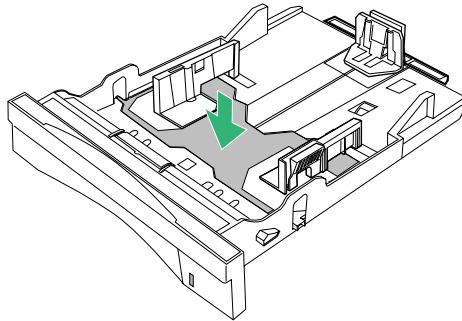
- 2** Tap the media stack on a level surface to avoid media jams or skewed printing.
 - If a media feed error has occurred, remove the media stack from the media tray and tap it.



- 3** Place the media with the print side down.
- Be sure that the media does not exceed the limit mark.

**NOTE**

- If the metal plate is in the up position by accident, the media tray cannot be inserted into the printer. Before loading the media, push down the metal plate until it clicks, locking it in place.

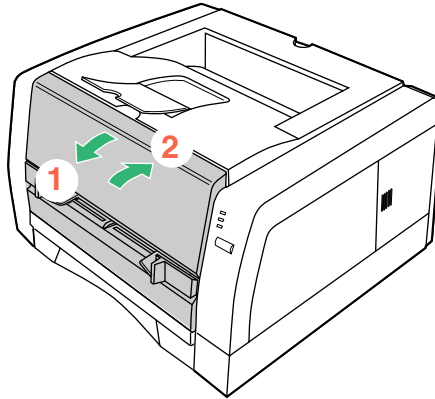


- 4** Replace the media tray into the printer or 2nd feeder (option).

CAUTION

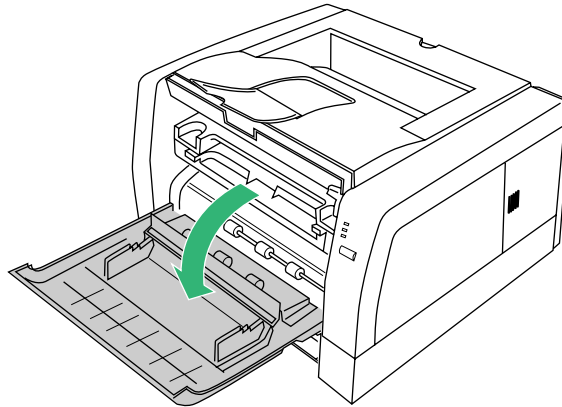
- Be sure to hold the media tray with both hands so you do not drop it especially when it is fully loaded.

- 5 Open and close the front cover to clear the error indication.

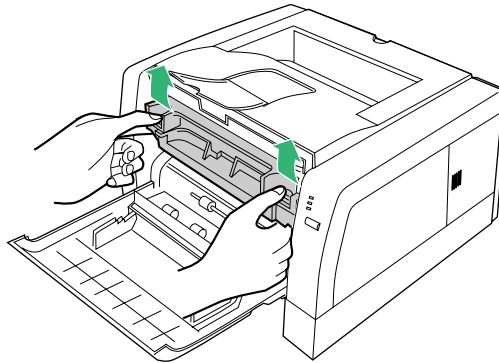


Jam at A

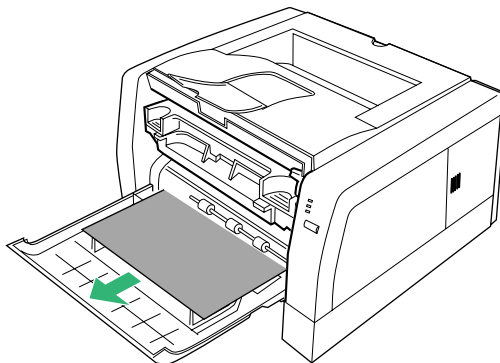
- 1 Open the front cover.



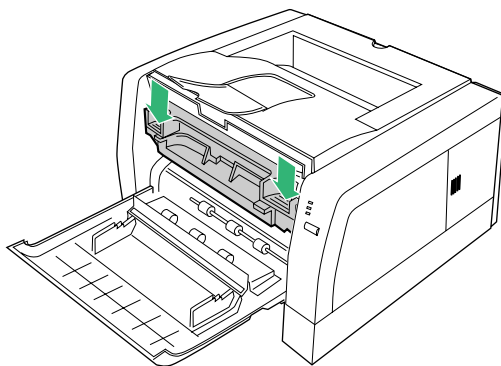
- 2 Lift the drum unit up.



- 3 Grasp both sides of the jammed media and **slowly** pull it out of the printer.



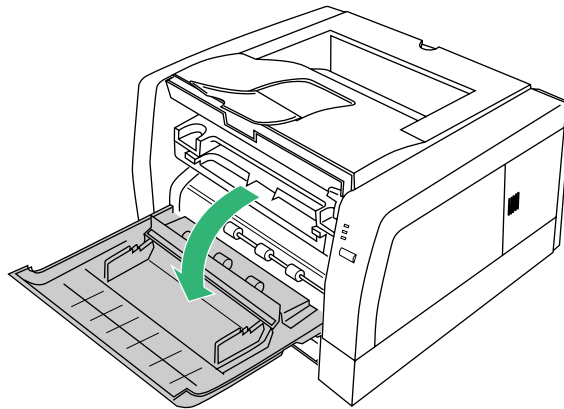
- 4 Push the drum unit down.



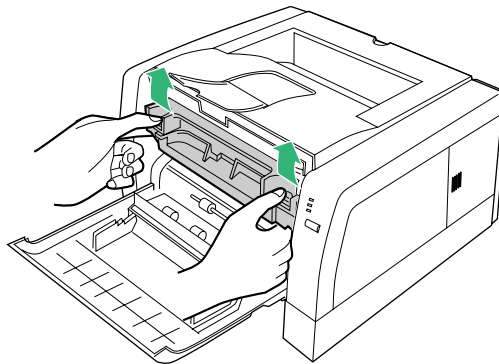
- 5 Close the front cover.

Jam at B

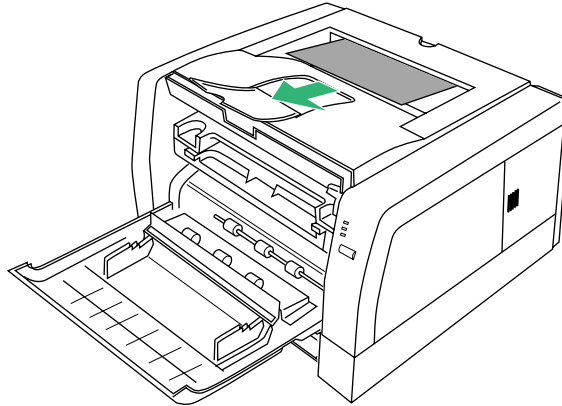
- 1 Open the front cover.



- 2 Lift the drum unit up.

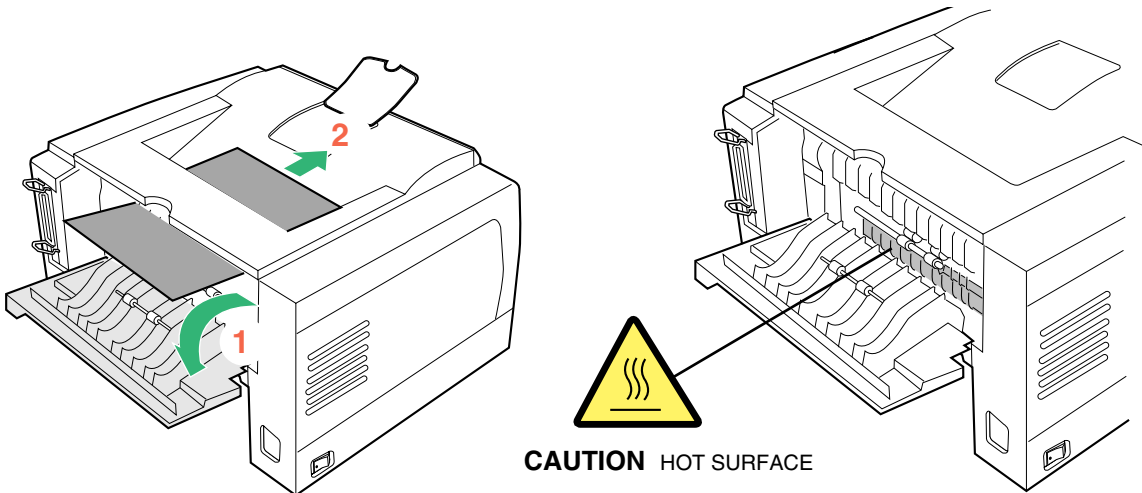


- 3** Remove the jammed media from the output tray.

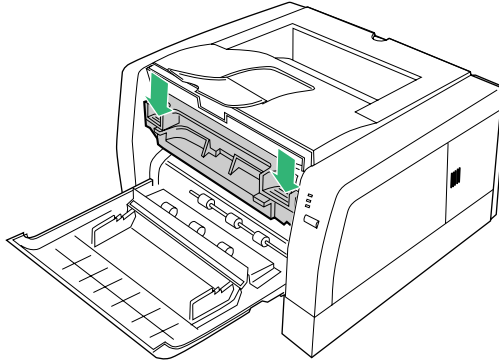


- Or -

Open the rear cover of the printer (1) and remove the jammed media (2).



- 4 Push the drum unit down.



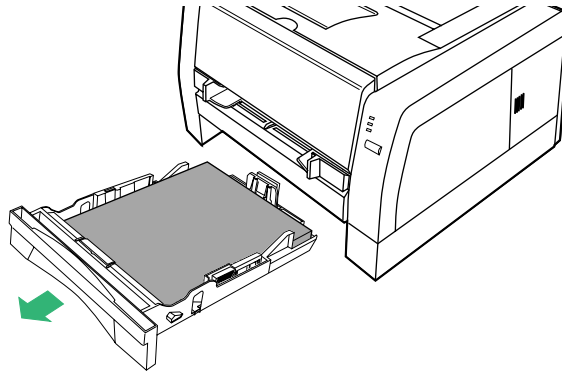
- 5 Close the front cover.

Jam at C

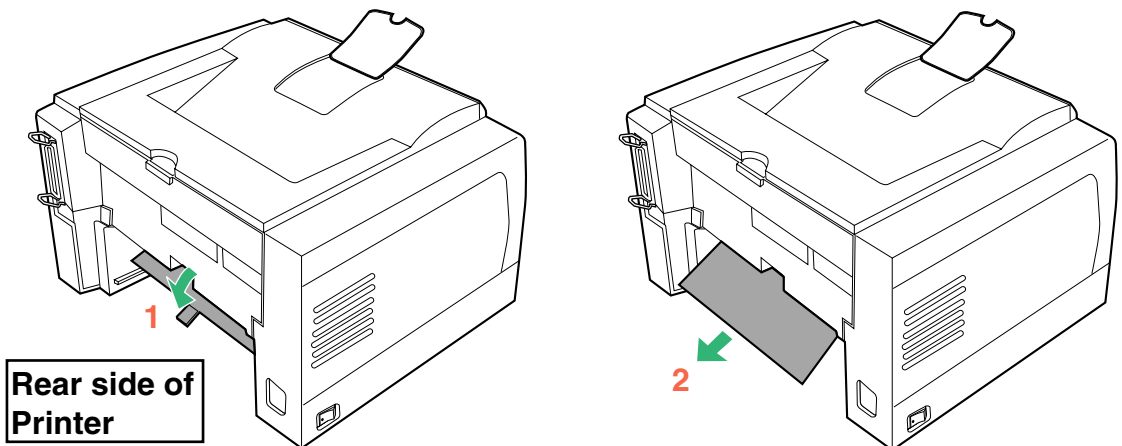
1 Perform the jam recovery steps for Jam at A (see page 17).

- Or -

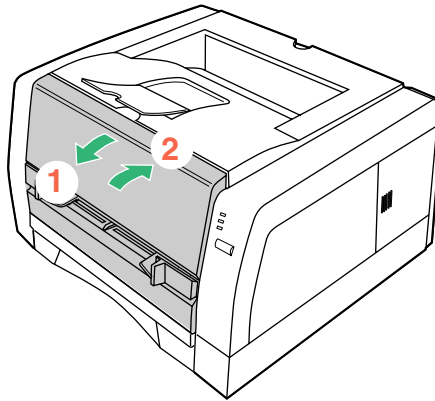
1 Pull the media tray out of the printer.



2 Slowly pull the jammed media (2) out of the printer while pushing the center tab (1) of the jam release pan down.

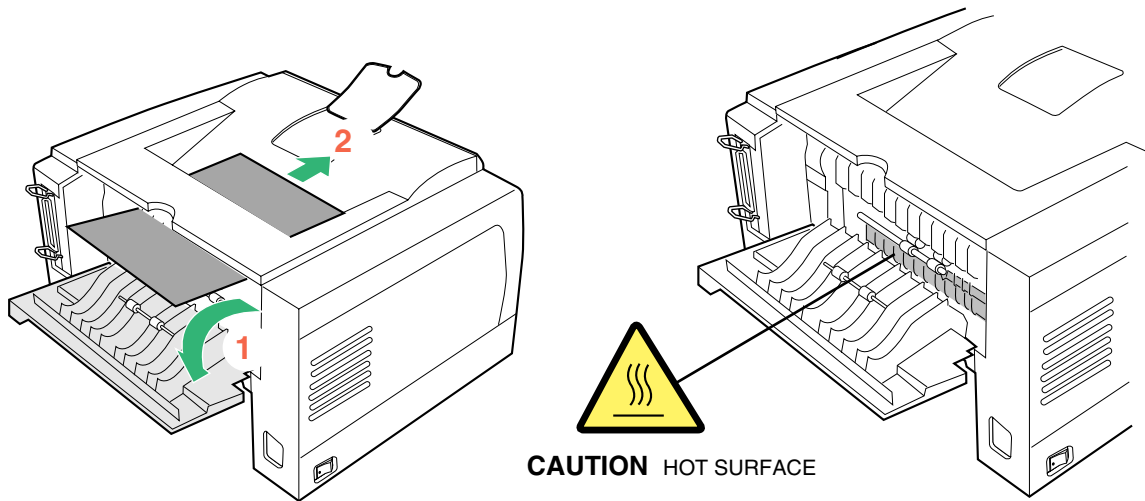


- 3 Replace the media tray into the printer.
- 4 Open and close the front cover to clear the error indication.

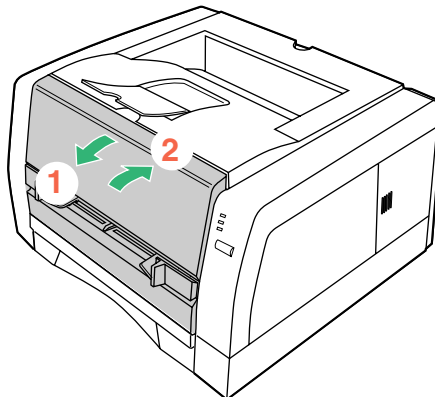


Jam at D

- 1 Open the rear cover of the printer (1) and grasp both sides of the jammed media and **slowly** pull it out of the printer (2).



- 2 Open and close the front cover to clear the error indication.

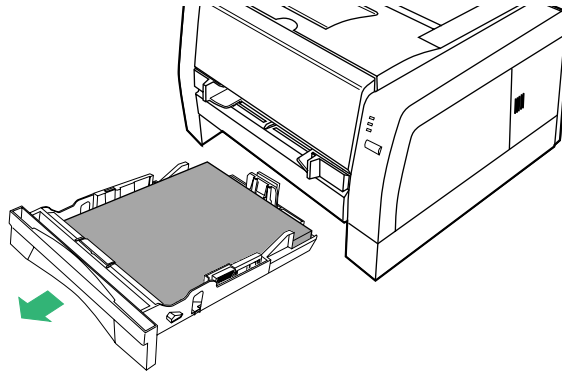


Jam at E

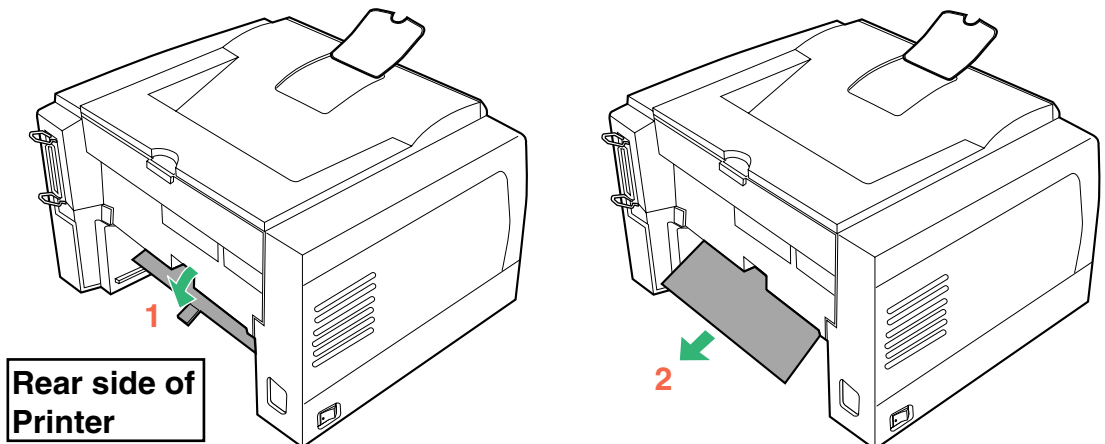
1 Perform the jam recovery steps for Jam at D (see page 24).

- Or -

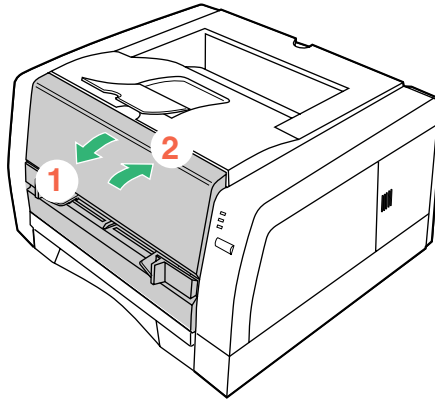
1 Pull the media tray out of the printer.



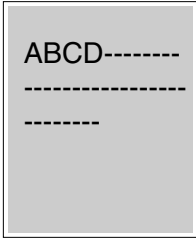

2 Slowly pull the jammed media (2) out of the printer while pushing the center tab (1) of the jam release pan down.

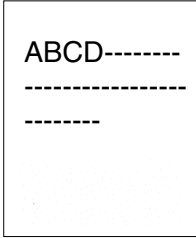
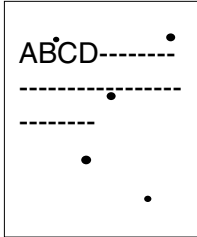



- 3 Replace the media tray into the printer.
- 4 Open and close the front cover to clear the error indication.

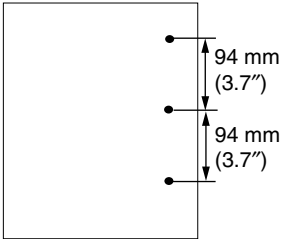
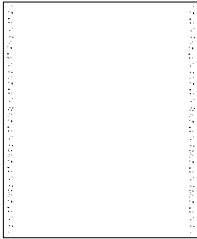
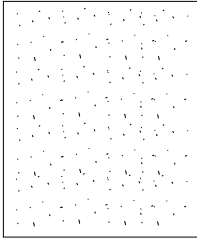


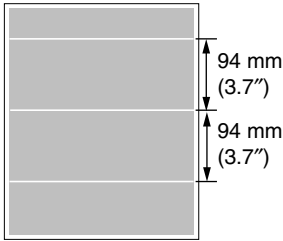
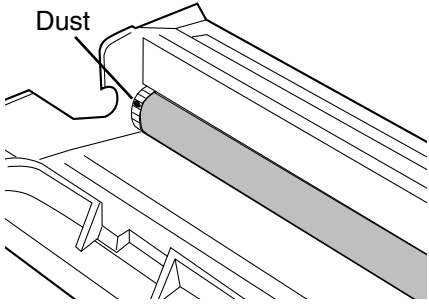
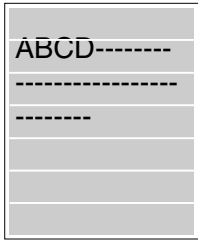
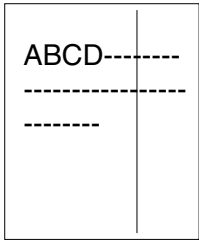
Troubleshooting

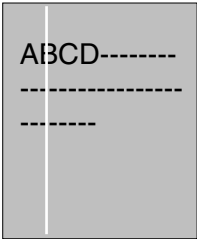
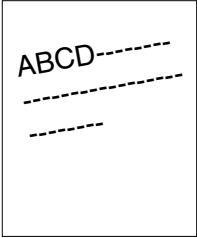
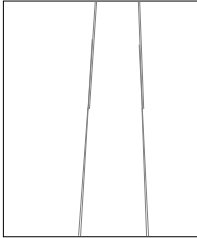
Trouble	Possible Cause	Corrective Action
<p>The background of the images is printed in gray.</p> 	The toner cartridge has reached the end of useful life.	Replace the toner cartridge.
	The drum unit has reached the end of useful life.	Replace the drum unit.
	Incorrect type of media is used.	Check the media usable or not (see “Media” on page 53).
	Your printer is in extremely high humidity.	Check the environment (see “Specifications” on page 49).
<p>Faded image is printed at the different position from the original.</p> 	Printer driver is not set correctly for paper.	Set the media type setting of the printer driver correctly (see 44 , 91 or 110 in “Settings and Printing”).
	The toner cartridge has reached the end of useful life.	Replace the toner cartridge.
	Your printer is in extremely high or low humidity.	Check the environment (see “Specifications” on page 49)
	Media is wet or dry.	Set the Adjustment to media setting for + value (+1, +2 or +3) (see “Adjustment to Media” on page 41 in “Settings and Printing”).

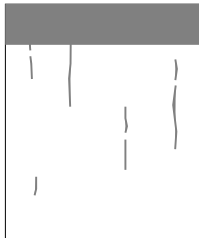
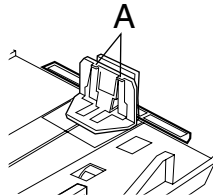
Trouble	Possible Cause	Corrective Action
<p>Small dots are printed at the different position from the original</p> 	<p>Media is wet or dry.</p>	<p>Set the Adjustment to media setting for – value (–1, –2 or –3) (see “Adjustment to Media” on page 41 in “Settings and Printing”).</p>
<p>Toner spots appear on the page.</p> 	<p>Toner spots put on the photosensitive drum.</p>	<p>Wipe the photosensitive drum with soft cloth (refer to “Cleaning the Photosensitive Drum” on page 37).</p>
	<p>The drum unit is damaged.</p>	<p>Replace the drum unit.</p>
	<p>The corona wire in the drum unit is dirty.</p>	<p>Clean the corona wire in the drum unit (see “Cleaning the Printer” on page 8).</p>
<p>The entire page prints in black.</p> 	<p>The drum unit is damaged.</p>	<p>Replace the drum unit.</p>

Troubleshooting

Trouble	Possible Cause	Corrective Action
<p>A white or black spots appear in intervals of 94 mm (3.7").</p> 	<p>Paste/Glue of a label or dust is attached to the photosensitive drum.</p> <p>The photosensitive drum is dirty or scratched.</p>	<p>Wipe the photosensitive drum (see "Cleaning the Photosensitive Drum" on page 37).</p> <p>Replace the drum unit.</p>
<p>Edge(s) of the sheet is stained.</p> 	<p>The photosensitive drum is stained.</p>	<p>Wipe the photosensitive drum (see "Cleaning the Photosensitive Drum" on page 37).</p>
<p>White or black dots appear entirely.</p> 	<p>The photosensitive drum is stained.</p> <p>The inside of the printer or dust scraper is dusty.</p>	<p>Wipe the photosensitive drum (see "Cleaning the Photosensitive Drum" on page 37).</p> <p>Clean the inside of the printer or dust scraper ("Cleaning the Dust Scraper" on page 41).</p>

Trouble	Possible Cause	Corrective Action
<p>Horizontal lines appear in intervals of 94 mm (3.7").</p> 	<p>A small dust is bitten in the gear of the photosensitive drum.</p> 	<p>Remove the dust from the gear (see "Cleaning the Photosensitive Drum" on page 37).</p>
<p>White and horizontal lines appear on the page.</p> 	<p>The drum unit is damaged.</p>	<p>Replace the drum unit.</p>
	<p>The toner cartridge is damaged.</p>	<p>Replace the toner cartridge.</p>
	<p>The toner cartridge is stored for a long period. (Try shaking to loosen toner.)</p>	<p>Print several blank pages until the lines disappear. Try shaking to loosen toner.</p>
<p>A black and vertical line appears on the page.</p> 	<p>Corona wire of the drum unit is dirty.</p>	<p>Clean the corona wire in the drum unit (see "Cleaning the Printer" on page 8).</p>
	<p>The toner cartridge is damaged.</p>	<p>Replace the toner cartridge.</p>
	<p>The drum unit is damaged.</p>	<p>Replace the drum unit.</p>
	<p>The fuser unit is damaged.</p>	<p>Display the Remote Control Panel and select Fuser Cleaning from the Tool menu to print a cleaning data (see "Remote Control Panel" on page 28 in "Settings and Printing"). If it is not recovered, call for service to replace the fuser unit.</p>

Trouble	Possible Cause	Corrective Action
<p>A white vertical line appears on the page.</p> 	<p>The laser unit cover is dirty.</p>	<p>Clean the laser unit cover (see “Cleaning the Printer” on page 8).</p>
	<p>A small matter is mixed with the roller of the toner cartridge.</p>	<p>Replace the toner cartridge.</p>
<p>The printer prints aslant.</p> 	<p>The media is not installed correctly.</p>	<p>Install media correctly in the media tray. Adjust media guides correctly.</p>
	<p>Too much media is loaded in the media tray.</p>	<p>Decrease the media stack so that the height of media does not exceed the limit mark.</p>
	<p>Incorrect type of media is used.</p>	<p>Check the media usable or not (see “About Media” on page 9 in “Settings and Printing”), (see “Media” on page 53).</p>
<p>The print out media is wrinkled.</p> 	<p>The media is not installed correctly.</p>	<p>Install media correctly in the media tray. Adjust media guides correctly.</p>
	<p>The media is moist.</p>	<p>Use fresh paper.</p>
	<p>Incorrect type of media is used.</p>	<p>Check the media usable or not (see “About Media” on page 9 in “Settings and Printing”), (see “Media” on page 53).</p>

Trouble	Possible Cause	Corrective Action
<p>The back of the printed page appears dirty.</p> 	<p>The transfer roller or fuser unit is contaminated after clearing a jam.</p>	<p>Display the Remote Control Panel and select Fuser Cleaning from the Tool menu to print a cleaning data (see “Remote Control Panel” on page 28 in “Settings and Printing”).</p>
	<p>The toner cartridge has reached the end of useful life.</p>	<p>Replace the toner cartridge.</p>
	<p>Incorrect type of media is used.</p>	<p>Use a correct media (see “About Media” on page 9 in “Settings and Printing”), (see “Media” on page 53).</p>
<p>Frequent media-picking errors occur.</p>	<p>The length media guide of the media tray is not set correctly.</p>	<p>Check the length media guide is set to the groove indicating the media size.</p>
	<p>The media is not set correctly in the media tray.</p>	<p>Check the loaded media is not curled.</p> <p>Check the media is not set on the media height stopper (A) of the length media guide.</p> 
	<p>Pick up roller is dirty.</p>	<p>Clean the pick up roller (see “Cleaning the Printer” on page 8).</p>
<p>Image is cut.</p>	<p>Image size is bigger than print area.</p>	<p>Adjust the image within the print area (see “Margins and Print Area” on page 12 in “Settings and Printing”).</p>

■ If you can't make a print

Trouble	Possible	Corrective Action
Printer not operating.	The printer may not be plugged into an AC outlet or turned on.	Make sure that you plugged in the printer and turned it on.
	The interface cable(s) may not be connected properly.	Make sure that you connected the interface cable(s) properly (see “Parallel (IEEE1284) Interface” on page 59), [see “USB (Universal Serial Bus) Interface” on page 61]. Ensure the correct printer port is selected in the printer driver for cable used (see “Setting the Printer Driver” on page 44 in “Settings and Printing”).
	The printer driver is not set correctly.	
The printer does not print correctly.	Appropriate driver may not be installed or correct printer may not be selected.	If the communication link between your computer and the printer is working but the printer ejects a blank page when printing from your application or through Windows, make sure that the appropriate driver is installed and that you have selected the printer correctly.
	When parallel interface is used and computer is set up in high-speed transfer mode (ECP mode), some computer cannot transfer data normally.	Change the parallel interface of computer's BIOS for compatible mode.
	The interface cable is not connected correctly.	Connect the interface cable correctly.
	The data is sent to the printer when the printer is turned off.	Press PRINT / RESET button until the ERROR indicator is lit, then release it.
The setting for printing is not effective.	Some applications may not allow you to change the settings through the printer driver's setting window.	Change the application's settings.

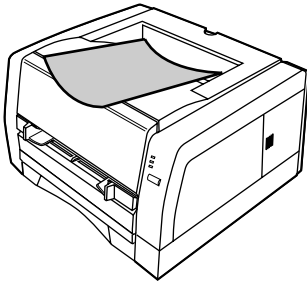
Trouble	Possible	Corrective Action
RAM Overflow occurs.	Printer's memory is insufficient in high resolution setting.	Change the resolution for lower setting in the printer driver (see “Setting the Printer Driver” on page 44, “Setting the Printer Specific Options” on page 91 or “Setting the Printer Features” on page 110 in “Settings and Printing”).
		Install the optional RAM board in the printer.
		If data is printed in PCL, set the printer emulation for PCL (see “Remote Control Panel” on page 28 in “Settings and Printing”).
Overrun error occurs.	The printer cannot manage printing because the complex images are in the document.	Turn on the Page Protection of the Others tree menu with the Remote Control Panel (“Remote Control Panel” on page 28 in “Settings and Printing”).
		Change the resolution for lower setting in the printer driver (see “Setting the Printer Driver” on page 44, “Setting the Printer Specific Options” on page 91 or “Setting the Printer Features” on page 110 in “Settings and Printing”).

Trouble	Possible	Corrective Action
<p>The Web Administrative Tool does not work correctly after installing it in Windows Server™ 2003*¹.</p>	<p>As IIS security setting is added to Windows Server 2003, CGI application cannot run on this server by default settings. The Web Administrative Tool is one of the CGI applications. For the detailed information of CGI, refer to the help menu in Windows.</p>	<p>Change the IIS security settings as follows.</p> <ol style="list-style-type: none">1. Click [Start], move the pointer to [Administrative Tools], then click [Internet Information Services (IIS) Manager]. The Internet Information Services (IIS) Manager window is displayed.2. Click Web Service Extensions in the left pane of the window and click All Unknown CGI Extensions in the right pane.3. Click [Allow]. The message box is displayed.4. Click [Yes].

*¹ Microsoft® Windows Server™ 2003 operating system (hereafter Windows Server 2003)

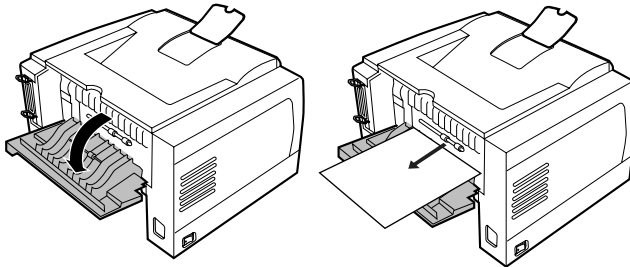
■ If the print out is ragged

If the print out is curled as illustrated, this can occur because of the natural curl of the paper, remove the media tray from the printer and turn the stack of paper over, then install the media tray.



■ A tip when printing on transparency

When you notice some straight lines on the projected image on the screen (OHP), it is recommended to open the rear cover, so the media is printed straight out.



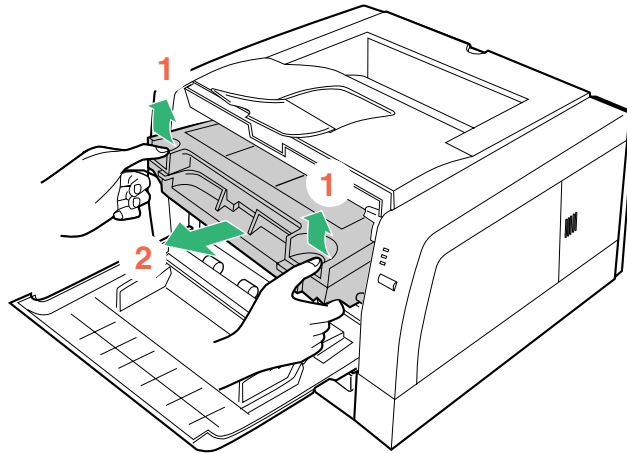
■ If you cannot install the printer driver in Microsoft® Windows NT® operating system Version 4.0

The printer driver cannot be installed with Add Printer Wizard in Windows NT 4.0. Install the printer driver with **Setup.exe** [see “Installing the Printer Software (For Windows)” in the Setup Guide].

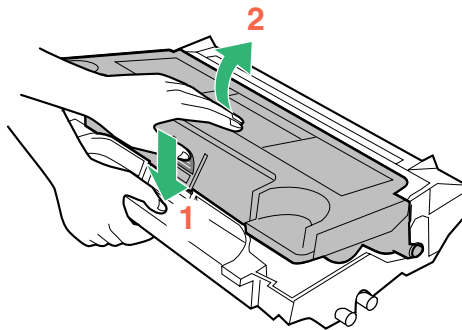
Cleaning the Photosensitive Drum

If the paste or glue of a label is attached to the photosensitive drum of the drum unit, clean it following the steps below.

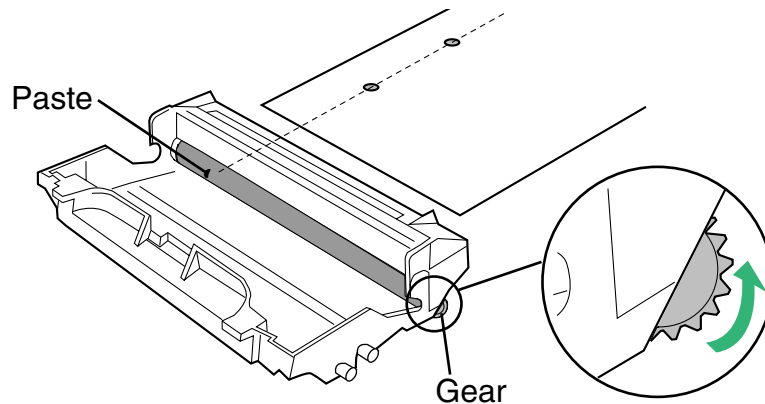
- 1** Open the front cover of the printer.
- 2** Lift the drum unit up (1) and slide it out of the printer (2).



- 3** While pushing the drum unit as illustrated below (1), lift the toner cartridge up (2).



- 4 Remove the toner cartridge from the drum unit.
- 5 If a paste/glue of a label is attached, find the portion that it is attached while rotating the gear of the photosensitive drum in the direction of the arrow.
 - The paste will be attached the portion that white or black spots of the print appear.

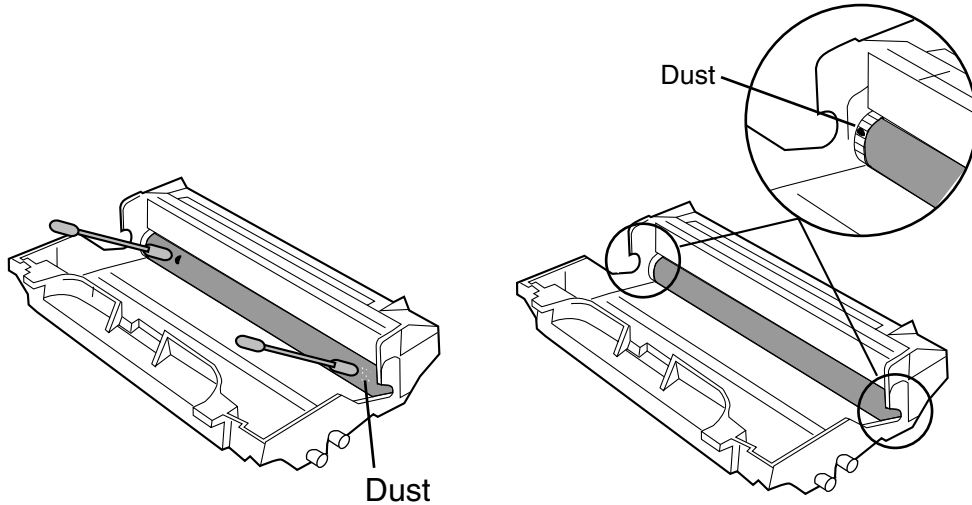


CAUTION

To prevent any damage to the drum unit, observe the following precautions.

- Do not rotate the photosensitive drum in the opposite direction of the above illustration, otherwise the drum unit may be damaged.
- Do not touch the drum surface.
- Do not expose the drum unit to light for more than 5 minutes.
- Do not expose the drum unit to direct sunlight.
- Do not keep the drum unit near dust or dirt.
- Do not place the drum unit in a high humidity area.

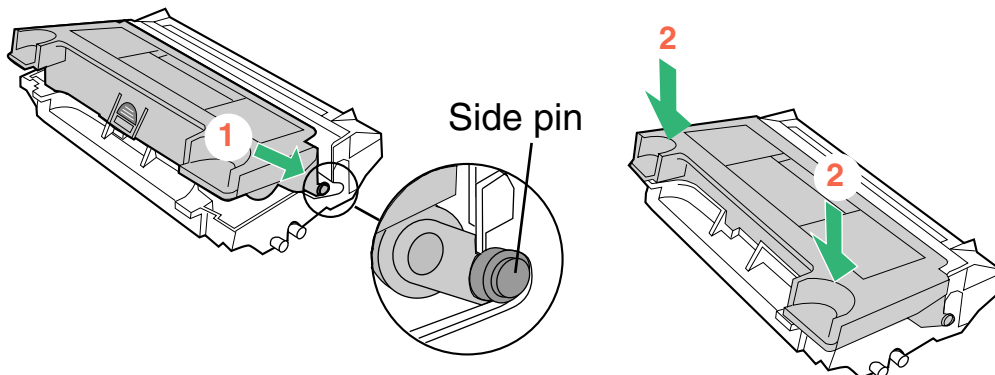
- 6** Wipe the photosensitive drum with a dry cotton swab.




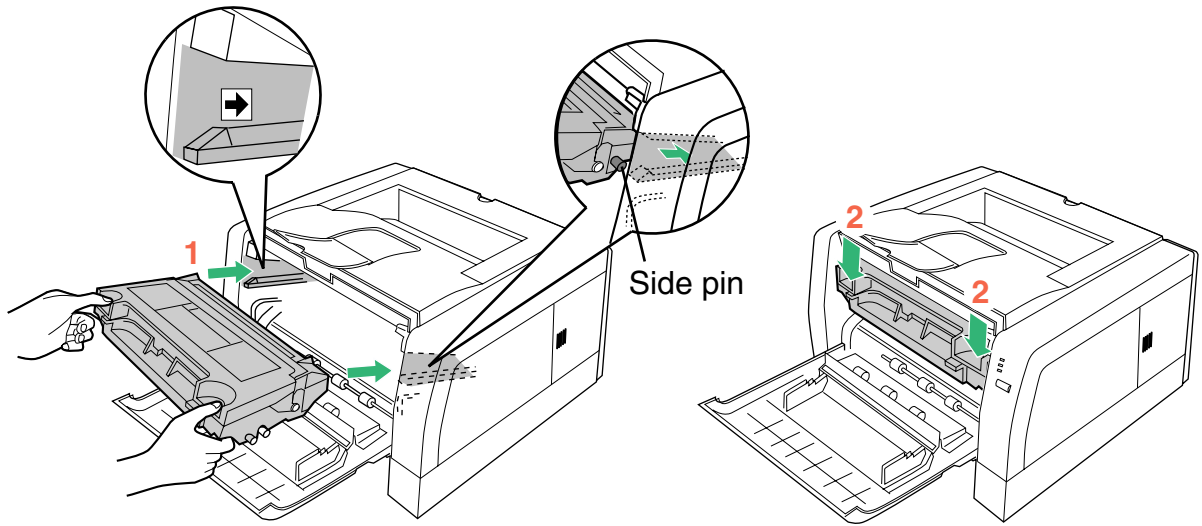
CAUTION

- Do not use a sharp-pointed something like a ball-point pen to prevent the damage to the drum unit when removing the paste.

- 7** Insert the side pins of the toner cartridge into the slots of the drum unit (1). Push the toner cartridge in the drum unit (2).



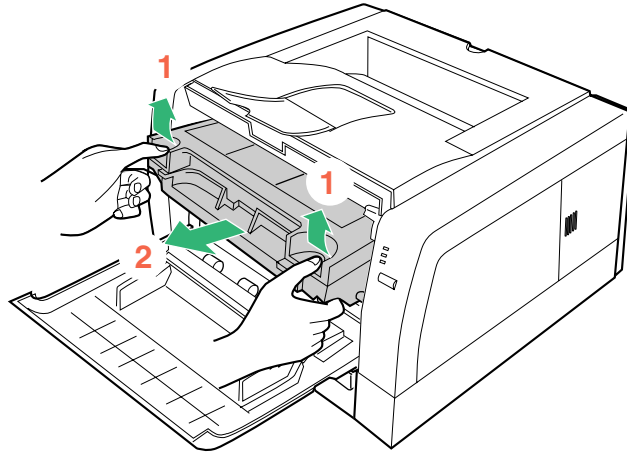
- 8** Firmly insert the drum unit in the slot of the printer (1) [insert the side pins of the drum unit into the groove (label )]. Push down (2).



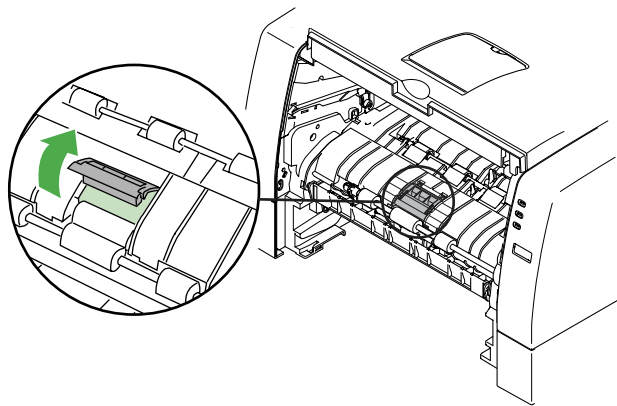
- 9** Close the front cover.

Cleaning the Dust Scraper


- 1 Open the front cover of the printer.
- 2 Lift the drum unit up (1) and slide it out of the printer (2).

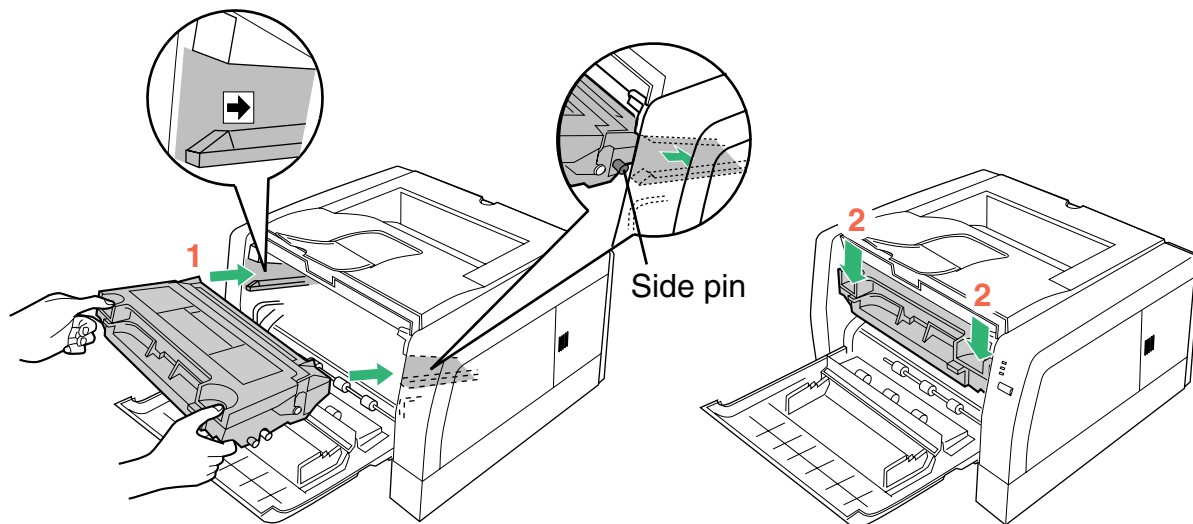


- 3 Open the cover of the dust scraper.

































- 4 Clean the inside with the vacuum cleaner, then close the cover of the dust scraper.

- 5** Firmly insert the drum unit in the slot of the printer (1) [insert the side pins of the drum unit into the groove (label )]. Push down (2).



- 6** Close the front cover.

Error Indication

Indicators		Error LED	Possible Cause	Recovery
  	 READY  ERROR  TONER/ DRUM UNIT	On: 0.5 sec. Off: 0.5 sec.	Front cover is open.	Close the front cover.
		On: 0.5 sec. Off: 0.5 sec.	RAM overflow or overrun has occurred.	Press the PRINT/RESET button (less than 5 seconds).
		On: 0.5 sec. Off: 2 sec.	Media jam has occurred.	Remove the jammed media, then open the front cover and close it.
		On: 1 sec. Off: 0.5 sec.	Manual feed is empty.	Load media in the manual feed.
  	 READY  ERROR  TONER/ DRUM UNIT	On: 1 sec. Off: 1 sec.	Media tray (standard) or lower tray (2nd feeder) is empty.	Load media in the media tray (standard) or lower tray (2nd feeder).
		On: 1 sec. Off: 1 sec.	Media tray (standard) is not installed.	Install the media tray (standard).
		Off	Toner is low.	Replace the toner cartridge soon.
  	 READY  ERROR  TONER/ DRUM UNIT	Off	Drum unit is wearing out.	Replace the drum unit soon.
		Off	Toner is low.	Replace the toner cartridge soon.
  	 READY  ERROR  TONER/ DRUM UNIT	On: 0.5 sec. Off: 0.5 sec.	Drum unit is not installed.	Install the drum unit.
		On: 0.5 sec. Off: 0.5 sec.	Toner is empty.	Replace the toner cartridge now.
		On: 0.5 sec. Off: 0.5 sec.	Drum unit is worn out.	Replace the drum unit now.
  	 READY  ERROR  TONER/ DRUM UNIT	On	Internal error has occurred.	Turn the power off for a few seconds then on again. If the error continues, call for service.

  : Indicator is lit.

  : Indicator is blinking.

 : Indicator is turned off.

*1 The status is varied depending on the condition.

Repacking Instructions

Repacking

It is highly recommended that you **keep the original carton** and ALL packing materials. Should you need to transport or ship your printer, please follow these instructions.

SAFETY CAUTION

The printer weighs about 10 kg {22 lbs.}.

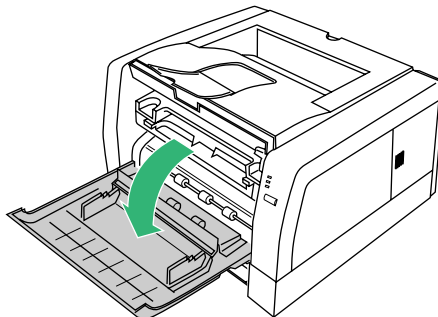
NOTE

- Should you need to send your printer for service, consult your reseller first or Panasonic.
- Please use the original carton and all of the original packing materials.
- Do not ship printer with drum unit installed.
- Improper repacking of the printer may result in a service charge to remove spilled toner.
- Since the printer uses dry toner, extreme care must be taken when handling. The printer should be handled in the upright (vertical) position.

Material required:

- Original cartons and packing materials
- Newspaper or drop cloth
- Shipping tape and scissors

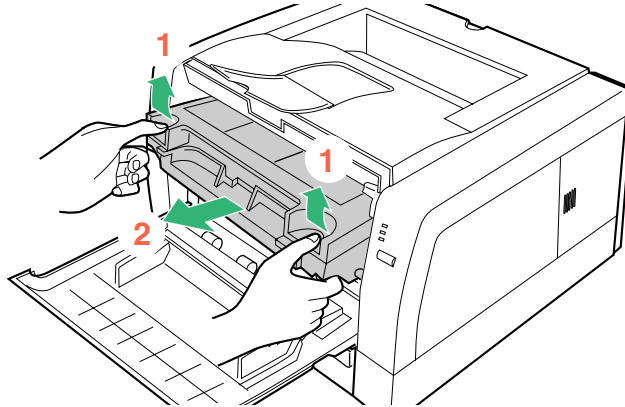
- 1** Turn off the printer; remove the power cord and all interface cables.
- 2** Open the front cover.



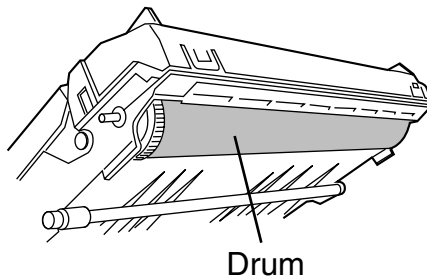
Repacking Instructions

3 Lift the drum unit up (1) and slide it out of the printer (2).

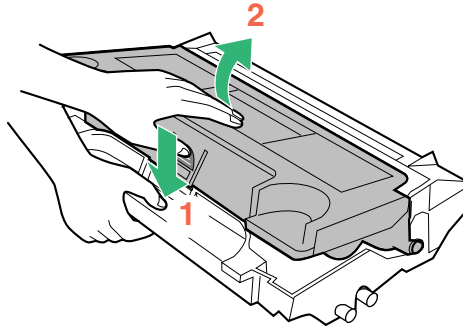
- To avoid possible toner spillage, it is recommended to place the drum unit on a newspaper, drop cloth or best to place back in original (Black) shipping bag.

**CAUTION**

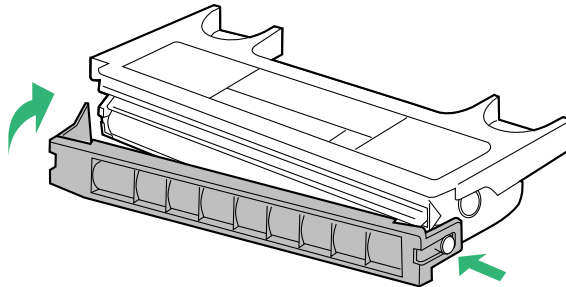
- To prevent any damage to the drum unit, observe the following precautions.
 - Do not touch the drum surface illustrated below.
 - Do not expose the drum unit to light for more than 5 minutes.
 - Do not expose the drum unit to direct sunlight.
 - Do not keep the drum unit near dust or dirt.
 - Do not place the drum unit in a high humid area.



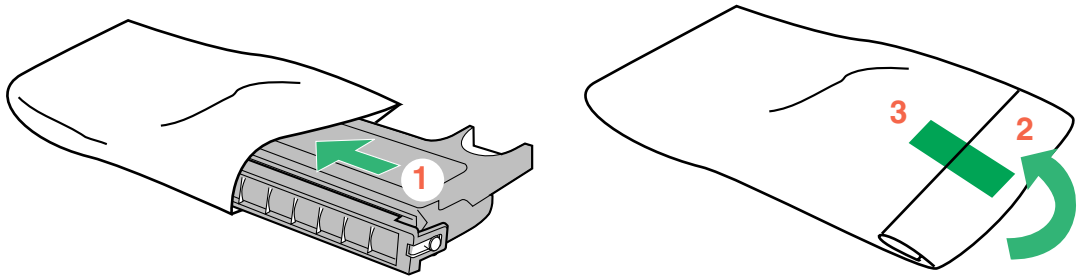
- 4** While pushing the drum unit as illustrated below (1), lift the toner cartridge up (2).



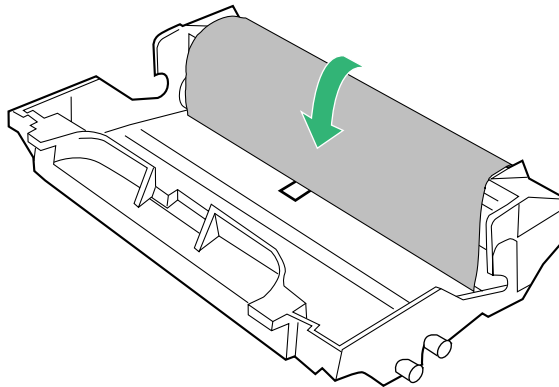
- 5** Replace the shipping cover on the toner cartridge.



- 6** Insert the toner cartridge into a plastic bag and certainly seal the end of the bag tightly.



- 7** Wrap the drum unit with the protective sheet to protect the drum surface.



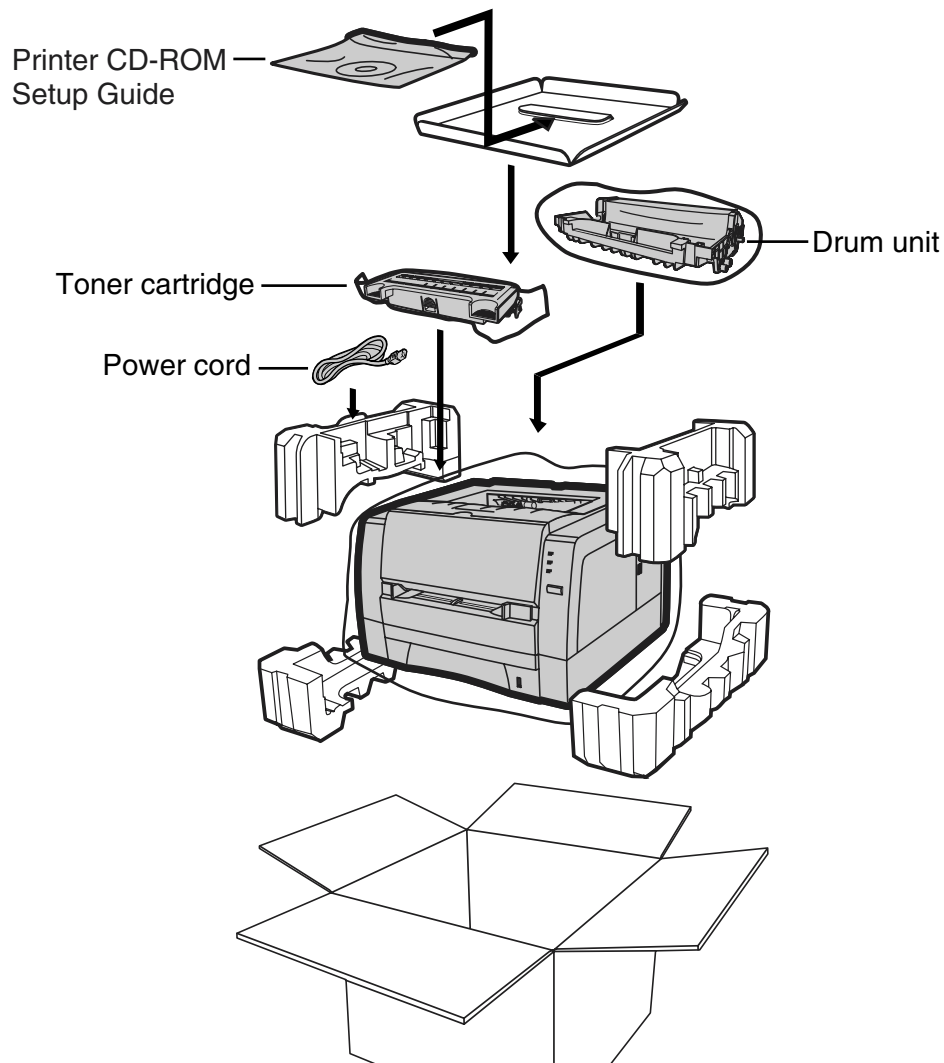
- 8** Insert the drum unit into a plastic bag and seal the end of the bag tightly.
- 9** Close the front cover.

10 Wipe off any loose toner in and around the printer.

NOTE

- If a toner vacuum is available, it is the best tool for cleaning spilled toner. Do not use a standard office vacuum; the toner will not be retained by typical vacuum dust collectors.

11 Repack the printer.



Specifications

Printer

Printing Method:

Semiconductor Laser

Print Speed:

18 ppm (pages per minute) maximum (A4 size plain paper, simplex printing, 5% image area)

19 ppm maximum (Letter size plain paper, simplex printing, 5% image area)

9 ppm (pages per minute) maximum (A4 size plain paper, duplex printing, 5% image area)

9.5 ppm maximum (Letter size plain paper, duplex printing, 5% image area)

Resolution:

300 x 300 dpi (dots per inch), 600 x 600 dpi, 1200 x 600 dpi

NOTE

- It is recommended to install the memory board option KX-PEM12 or KX-PEM13 if printing in 1200 x 600 dpi.

Paper Feed:

Media tray (universal cassette): up to 250 sheets of paper [75 g/m² (20 lb.)]

Manual feed: 1 sheet

2nd feeder (option): up to 550 sheets of paper [75 g/m² (20 lb.)]

Paper Output:

Up to 150 sheets of paper [75 g/m² (20 lb.)]

Power Source:

Refer to the nameplate on the rear of the unit

Memory:

16 MB

Emulation:

PCL 6 Emulation*¹, PostScript® 2 Emulation*¹

*¹The available fonts or print may differ from the genuine software because they are not genuine software of HP or Adobe.

Interface:

Parallel (IEEE1284), USB (Hi-Speed USB 2.0),
Ethernet (100Base-TX / 10Base-T) - KX-P7310 only

Warm Up Time

15 seconds [at 22°C (71.6°F), 50% RH]

Operating Environment:

10 to 32.5°C (50 to 90.5°F), 20 to 80% RH

Storage Environment:

0 to 35°C (32 to 95°F), 10 to 80% RH

Dimensions:

399 (W) X 390.5 (D) X 254 (H) mm (15.7" X 15.4" X 10")

Mass {Weight}:

Approx. 10 kg {22 lbs.}

Consumables / Life:

Starter toner cartridge (provided with printer); 2,000 pages average*¹

Toner cartridge; 5,000 pages average*¹ (6,000 pages maximum)

Drum unit; 20,000 pages average*¹

*¹ Average life at 5 % image area with repetitive printing of 10 pages (Letter / A4 size, single-sided printing, default density).

The maximum life of the toner cartridge will not exceed 6,000 pages.

5% image area means that the black area within the printing area is 5%. Printing 10% image area continuously will reduce the life of the toner to about half as compared to printing 5% image area.

Power Consumption:

Printing (average)*²: 330 W

Standby (average): 70 W

Power saving (When the fan stops.): 10.5 W or less

*² Maximum print speed, duplex printing

Meets ENERGY STAR[®] power conservation requirements.

Noise Level:

Printing: 51 dBA (average)

Standby: 29 dBA (average)

CPU:

NEC V850E1

Fonts

The following fonts can be used as the printer's resident fonts. You can print the list of available fonts from the Remote Control Panel in Windows. See ["Remote Control Panel"](#) on [page 28](#) in "Windows" of "Settings and Printing".

NOTE

- All printer's resident fonts have also been included in the printer CD-ROM. For information on how to install these fonts on your computer, see the Setup Guide.

■ TrueType Font for PCL

The following 45 fonts can be available.

- Dutch™ 801 SWC, Dutch 801 Italic SWC, Dutch 801 Bold SWC, Dutch 801 Bold Italic SWC
- Swiss™ 742 SWC, Swiss 742 Italic SWC, Swiss 742 Bold SWC, Swiss 742 Bold Italic SWC, Swiss 742 Condensed SWC, Swiss 742 Condensed Italic SWC, Swiss 742 Condensed Bold SWC, Swiss 742 Condensed Bold Italic SWC
- Incised 901 SWC, Incised 901 Italic SWC, Incised 901 Bold SWC
- Zapf Humanist 601 SWC, Zapf Humanist 601 Italic SWC, Zapf Humanist 601 Bold SWC, Zapf Humanist 601 Bold Italic SWC
- Aldine 430 Original Garamond SWC, Aldine 430 Original Garamond Italic SWC, Aldine 430 Original Garamond Bold SWC, Aldine 430 Original Garamond Bold Italic SWC
- Fixed Pitch 810 Courier Roman SWC, Fixed Pitch 810 Courier Bold SWC, Fixed Pitch 810 Courier Italic SWC, Fixed Pitch 810 Courier Bold Italic SWC
- Fixed Pitch 850 Letter Gothic 12 pitch/text SWC, Fixed Pitch 850 Letter Gothic Bold 12 pitch/text SWC, Fixed Pitch 850 Letter Gothic Italic 12 pitch/text SWC
- Flareserif 821 SWC, Flareserif 821 Extra Bold SWC
- Clarendon 701 Clarendon Condensed SWC
- Ribbon 131 SWC
- Audrey Two SWC
- Swiss 721 SWM, Swiss 721 Oblique SWM, Swiss 721 Bold SWM, Swiss 721 Bold Oblique SWM
- Dutch 801 SWM, Dutch 801 Italic SWM, Dutch 801 Bold SWM, Dutch 801 Bold Italic SWM
- Symbol SWA
- Wingbats SWM

■ Fonts for PostScript

The following 35 fonts can be available.

- Dutch 801 SWA, Dutch 801 Bold SWA, Dutch 801 Italic SWA, Dutch 801 Bold Italic SWA
- Swiss 721 SWA, Swiss 721 Bold SWA, Swiss 721 Oblique SWA, Swiss 721 Bold Oblique SWA
- Fixed Pitch 810 Courier SWA, Fixed Pitch 810 Courier Bold SWA, Fixed Pitch 810 Courier Italic SWA, Fixed Pitch 810 Courier Bold Italic SWA
- Symbol SWA
- Century 702 Century Schoolbook SWA, Century 702 Century Schoolbook Italic SWA, Century 702 Century Schoolbook Bold SWA, Century 702 Century Schoolbook Bold Italic SWA
- Revival 711 ITC Bookman Light SWA, Revival 711 ITC Bookman Demi Italic SWA, Revival 711 ITC Bookman Demi Bold SWA, Revival 711 ITC Bookman Demi Bold Italic SWA
- Swiss 721 Narrow Bold SWA, Swiss 721 Narrow Bold Oblique SWA, Swiss 721 Narrow SWA, Swiss 721 Narrow Oblique SWA
- Geometric 711 ITC Avant Garde Gothic Book SWA, Geometric 711 ITC Avant Garde Gothic Book Oblique SWA, Geometric 711 ITC Avant Garde Gothic Demi SWA, Geometric 711 ITC Avant Garde Gothic Demi Oblique SWA
- Chancery 801 ITC Zapf Chancery Medium Italic SWA
- ITC Zapf Dingbats SWA
- Zapf Calligraphic 801 SWA, Zapf Calligraphic 801 Bold SWA, Zapf Calligraphic 801 Italic SWA, Zapf Calligraphic 801 Bold Italic SWA

Media

■ Paper Specifications

This printer is designed to work well with most types of paper. However, differences in paper may have significant effects on the quality of the print or the reliability of paper handling. It is strongly recommended that you always test paper before purchasing it to make sure it provides desirable performance. The following guidelines will be helpful.

Basic Weight:

60 to 105 g/m² (16 to 28 lb.)

Thickness:

3.7 to 7.5 mils (1 mil=1/1000")

Moisture Content:

4% to 6%

Smoothness:

100 to 300 Sheffield

Acid Content:

5.5 PH minimum

Fusing Compatibility:

Must not scorch, melt, offset material, or release hazardous emissions when heated to 200°C (392°F) for 0.1 second

Cutting Dimensions:

±0.0313 inch of nominal, corners 90°±4°

Grain:

Long grain

Cut Edge Conditions:

Cut with sharp blades, no paper dust

Ash Content:

Not to exceed 10%

Curl:

No allowable curl toward the side to be printed

Packing:

Polylaminated moisture proof ream wrap

NOTE

- Please store your paper according to the recommendations of the manufacturer.

■ Paper and Envelope Sizes

The following paper and envelope sizes are supported by the printer.

Medium	Name	Dimension
Paper	Letter	216 x 279 mm (8.5" x 11")
	A4	210 x 297 mm (8.27" x 11.7")
	Legal	216 x 356 mm (8.5" x 14")
	B5	176 x 250 mm (6.92" x 9.84")
	Executive	184 x 267 mm (7.25" X 10.5")
	A5* ¹	148.5 x 210 mm (5.85" x 8.27")
	A6* ¹	105 x 148.5 mm (4.13" x 5.85")
Envelope* ¹	Envelope #9	98 x 225 mm (3.87" x 8.87")
	Envelope #10	105 x 241 mm (4.12" x 9.5")
	International DL	110 x 220 mm (4.33" x 8.66")
	International C5	162 x 229 mm (6.38" x 9.01")
	Monarch	98 x 191 mm (3.87" x 7.5")

*¹ Duplex printing cannot be performed with A5, A6 size paper or envelope.

■ Types of Paper to Avoid

- Extremely smooth or shiny paper or paper that is highly textured
- Coated papers
- Acid paper
- Letterhead imprinted with low temperature or thermography. These materials may transfer onto the fusing roller and cause damage. Any pre-printed paper should use inks compatible with 200°C (392°F) for 0.1 second.
- Damaged or wrinkled paper, or paper with irregularities such as tabs, staples, etc.
- Multipart forms or carbonless paper
- Paper with a cotton and/or fiber content over 25%
- **Ink jet media** (paper, transparency, etc.) (It may transfer onto the fuser unit's roller and cause damage.)

■ Transparencies and Labels

You may also print on labels and transparencies that are made for the printer. Panasonic has tested and found that the following work satisfactorily.

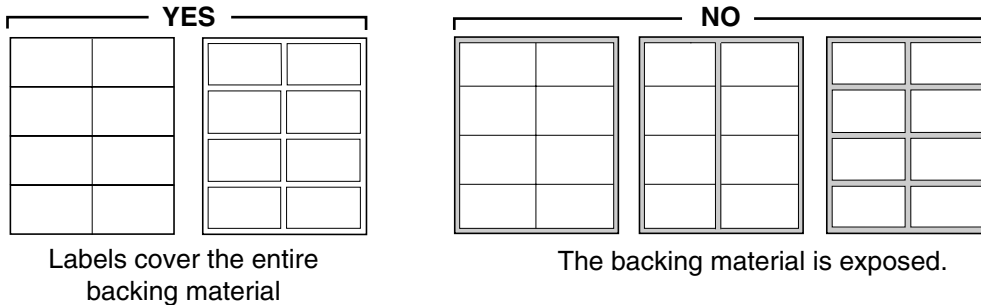
OHP transparencies 3M CG3300

Labels AVERY 5160, AVERY 5161, AVERY 5162, AVERY 5163,
AVERY 5660, AVERY 5661, AVERY 5662, AVERY 5663
Avery L7159, Avery L7160, Avery L7161, Avery L7162,
Avery L7163, Avery L7164

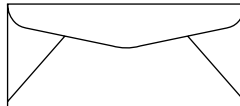
- To avoid damaging the printer, do not use ink jet transparency.
- Transparencies and adhesive material of labels should be stable at 205°C (400°F), the printer's maximum temperature.
- Re-using transparencies that have been fed through the printer once (for example, after jams or if the transparency is ejected without being printed) can reduce the life of the consumables and paper path components.
- When using transparencies, if the print quality is poor, print on the other side.

NOTE

- With any label stock, the labels must completely cover the backing material (see figure below).

**■ Envelope Specifications**

It is recommended that you purchase only high quality envelopes with diagonal seams, as shown in the diagram below:



High quality envelopes have the following characteristics:

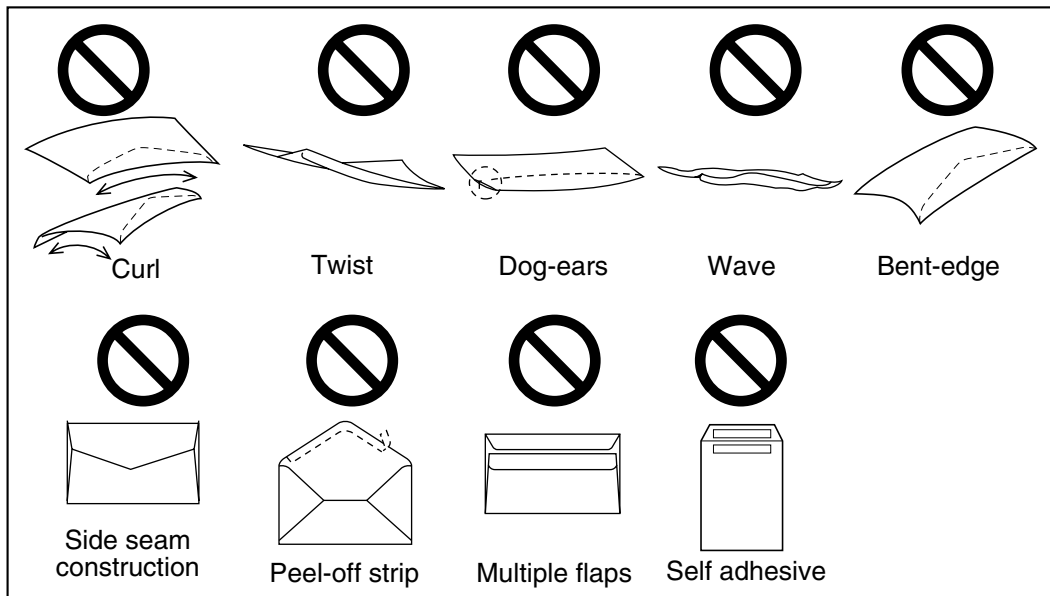
- A thin, sharply creased leading edge
- Paper weight of 90 g/m² (24 lb.)
- Flat, free of curls, wrinkles, nicks, etc.

NOTE

- Wrinkle may occur in some case, even if high quality envelopes are used.

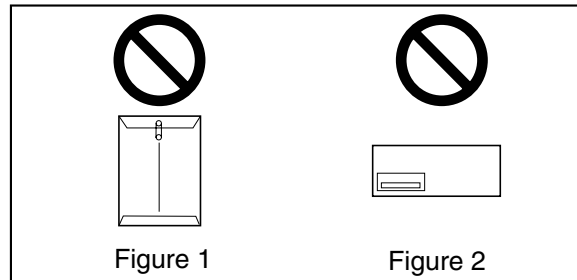
It is not recommended that you use envelopes with any of the following characteristics (using these may result in paper jams):

- Irregularly shaped envelopes
- Envelopes with curls, wrinkles, nicks, twists, dog-ears or other damage
- Envelopes with side seam construction
- Highly textured envelopes, or with extremely shiny surfaces
- Envelopes that seal by removing a peel-off strip
- Envelopes with more than one flap to be sealed
- Self-adhesive envelopes
- Envelopes that are baggy or not sharply creased
- Embossed envelopes
- Envelopes that have previously been printed with a laser printer
- Envelopes that have been previously printed inside



Do not attempt to print on any of the following types of envelopes. These may cause damage to your printer.

- Envelopes with clasps, snaps or tie strings (see Figure 1)
- Envelopes with transparent windows (see Figure 2)
- Envelopes that will melt, discolour, scorch, offset or release hazardous emissions when exposed to 200°C (392°F) for 0.1 second
- Envelopes that use encapsulated types of adhesive that do not require moistening but rely on pressure to seal them



Always test a sample of the envelopes you are thinking of buying. Confirm that the envelope performs acceptably.

For best printing results

- Avoid printing in high humidity i.e., above 70%.
High humidity may cause the envelope to curl and pick up excess toner.
High humidity may also cause the envelope to seal.
- Envelope storage is very important. Store them away from moisture and humid air, where they can lay flat and their edges won't be bent or damaged. The humidity should not exceed 70% RH.

Parallel (IEEE1284) Interface

Connector type: 36PIN Anphenole connector

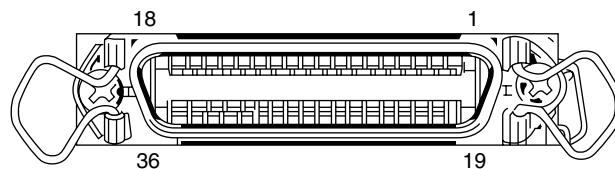
Cable: use a shielded cable 2 meters (6.6 feet) or less in length

Pin configuration

Pin	Signal
1	nStrobe
2	Data 1
3	Data 2
4	Data 3
5	Data 4
6	Data 5
7	Data 6
8	Data 7
9	Data 8
10	nAck
11	Busy
12	PError
13	Select
14	nAutoFd
15	NC
16	GND
17	FG
18	Peripheral Logic High

Pin	Signal
19	GND
20	GND
21	GND
22	GND
23	GND
24	GND
25	GND
26	GND
27	GND
28	GND
29	GND
30	GND
31	ninit
32	nFault
33	NC
34	NC
35	NC
36	nSelectIn

Parallel (IEEE1284) Interface connector (printer side)



CAUTION

- If the cable is connected to PC via printer buffer or selector, the printer may not print.
- A print server cannot be used for printing.

NOTE

- Be sure to use only a shielded cable. The printer will not operate properly if any of the pins are not connected.

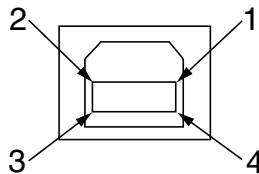
USB (Universal Serial Bus) Interface

Cable: It is recommended to use a cable 2 m (6.6 feet) or less in length.

Pin configuration

Signal pin	Signal
1	VBUS
2	-Data
3	+ Data
4	Ground

USB Interface connector (printer side)



NOTE

- Be sure to use a high- / full-speed shielded cable (12 Mbps or 480 Mbps) which the Data + and Data – cables are the twisted pair.
- When using the printer and other USB devices simultaneously, we cannot guarantee normal printing.
- Be sure to use a High-Speed USB 2.0 certified cable if your computer is equipped with the Hi-Speed USB 2.0 interface.
- Do not connect the USB cable to the front connector of the computer or keyboard connector of the iMac.

Network

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Features

This chapter explains how to configure the KX-P7310 printer on a supported network environment. The KX-P7310 printer provides Ethernet connectivity to function as a network printer. The KX-P7310 network function has the following features:

Supports 100Base-TX and 10Base-T

Supports the following network operating systems

- Windows® 95*¹ / Windows 98*² / Windows Me*³ / Windows NT® 4.0*⁴ / Windows 2000*⁵, Windows XP*⁶ / Windows Server™ 2003*⁷
- NetWare 3.x / NetWare 4.x / NetWare 5.x / NetWare 6
- UNIX (Solaris 2.3x - 2.5x, Solaris 2.6, HP-UX 9.x and 10.x, BSD UNIX, AIX 4.x.x)
- Mac OS 8.5, 8.6, 9.0, 9.1, 9.2 / Mac OS X 10.1, 10.2

Supports the following network protocol

- TCP/IP, ARP, RARP, ICMP, LPD, FTP, TELNET, BOOTP, DHCP, SNMP/MIB (MIB-2, Printer MIB, Network MIB), HTTP, POP3, SMTP, DNS, IPP, WINS
- IPX/SPX
- NetBEUI
- AppleTalk, ELAP, AARP, DDP, AEP, NBP, RTMP, ZIP, ATP, PAP

Supports the following printing protocol

- LPR Printing
- IPP Printing
- Standard TCP/IP Port Printing
- HP JetDirect Port Printing (TCP/IP, IPX/SPX)
- SMB (NetBEUI, TCP/IP) Printing
- FTP Printing
- NetWare Printing (PSERVER/RPRINTER mode in NDS/Bindery mode and NDPS)
- AppleTalk

Supports the Web Server function

- Allows monitoring and managing a printer from a standard Web Browser (see [“Using the Printer’s Web Server” on page 74](#)).

*¹ Microsoft® Windows® 95 operating system (hereafter Windows 95)

*² Microsoft® Windows® 98 operating system (hereafter Windows 98)

*³ Microsoft® Windows® Millennium Edition operating system (hereafter Windows Me)

*⁴ Microsoft® Windows NT® operating system Version 4.0 (hereafter Windows NT 4.0)

*⁵ Microsoft® Windows® 2000 operating system (hereafter Windows 2000)

*⁶ Microsoft® Windows® XP operating system (hereafter Windows XP)

*⁷ Microsoft® Windows Server™ 2003 operating system (hereafter Windows Server 2003)

Setup in Windows

This chapter explains how to set up LPR port and IPP port printing in Windows*¹ (Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, Windows XP and Windows Server 2003 environment).

When installing the KX-P7310 software, refer to “[Contents of the Printer Software](#)” on page 5.

■ Selecting the Setup Method

When setting up printing with printer software provided, you can select **Quick Printer Setup** or **Custom Printer Setup**.

Quick Printer Setup

Enables an easy set up method to print directly from each computer. It must be set up on each computer using the CD-ROM provided (refer to “[Printing directly from a computer](#)” on page 4).

Custom Printer Setup

Supports setting up printing through a shared computer (server) (refer to “[Printing through the shared computer \(server\)](#)” on page 4) or set up printing directly from each computer (refer to “[Printing directly from a computer](#)” on page 4). A shared folder can be created to set up a client or another computer when configuring the first or printer server computer. Then the client or another computers can be automatically set up using the shared folder to select the printing method: printing through a shared computer or printing directly from each computer.

*¹ Microsoft Windows operating system (hereafter Windows)

Selecting the Printing Method

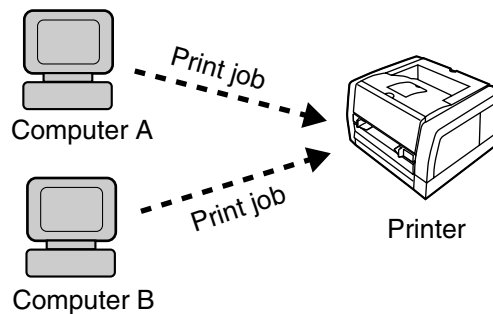
There are two methods of network printing.

- Printing directly from a computer
- Printing through a shared computer (server)

You may need to consult with your network administrator which to select.

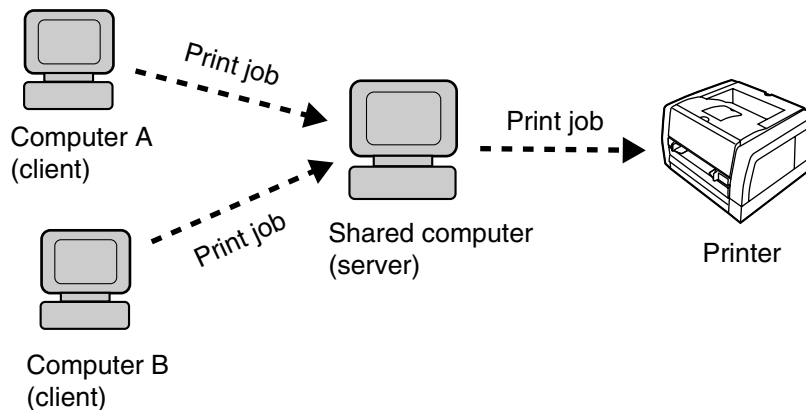
■ Printing directly from a computer

The computer's print data is transferred directly to the printer. This method is recommended for a small network and has the advantage of faster printing with less network traffic.



■ Printing through the shared computer (server)

The print data is transferred to the print server (the shared computer), then it is transferred from the print server to the printer. This method is recommended for larger networks because it lets the print server manage the data flow.



Contents of the Printer Software

The following software is included in the printer's CD-ROM disk. You can selectively install each application using the installer on the CD-ROM.

■ Printer Driver and Utilities

When installing the printer driver and manual, the following utilities and manual are installed. See "**Windows**" section of "Settings and Printing" in the Operating Instructions how to use each software utility.

- (1) PCL 6 printer driver
- (2) PostScript printer driver
- (3) Status Display
Displays the printer's condition or an error message, when one occurs.
- (4) Remote Control Panel
Changes the printer's settings or prints the configuration page, etc.
- (5) Operating Instructions
- (6) Network Port
Installs the network printer port for LPR or IPP.

■ Network Setup Tool

Used to install or make changes to printers on the network.

■ Acrobat Reader

To open and read the Operating Instructions manual on your screen, the Acrobat Reader program is required (see the Setup Guide for the installing instructions).

■ Web Administrative Tool

Manages the printer by showing the status of the device connected to the network and can change configurations. This allows an administrator to manage a printer using this tool. Before installing or using, see the help menu for Web Administrative Tool.

To see the help menu,

- (1) Insert the printer CD-ROM disk into the CD-ROM drive.
- (2) Start the browser (Microsoft Internet Explorer 4.x or later / Netscape Navigator 4.04 or later).
- (3) Type D (CD-ROM drive letter): `\NETWORK\WEBTOOL\ENGLISH\HELP\HELP.HTM`.

NOTE

- When installing the Web Administrative Tool on the computer formatted with NTFS (NT File System), the security of the installed folder is changed so everyone can access it to use the Web Administrative Tool from the client computer. The Web Administrative Tool is installed in the following folder by default:

C (System Drive):\Program Files\Panasonic\Web Administrative Tool

LPR Port Printing using TCP/IP in Windows

The following method [A] or [B] is the steps to set up an LPR Port printing using TCP/IP in Windows.

[A] Printing directly from a computer (see page 8)

Step 1: Setting up TCP/IP on the computer

Step 2: Setting up TCP/IP on the printer

Step 3: Setting up the printer driver and the printer port on the computer

Step 4: Setting up another computer

[B] Printing through the shared computer (print server) (see page 21)

Step 1: Setting up TCP/IP on the computer

Step 2: Setting up TCP/IP on the printer

Step 3: Setting up the printer driver and the printer port on the server computer

Step 4: Setting up the client computer

CAUTION

- To set up printing with the above method [B], **File and Print Sharing...** service should be installed in Windows 95, Windows 98, Windows Me. If the service is not installed, install it as follows before starting the setup.

- (1) Click **[Start]**, select **Settings** and click **Control Panel**.
- (2) Double click the **Network** icon.
- (3) Click **[File and Print Sharing...]**.
- (4) Confirm **I want to be able to give others access to my files** and **I want to be able to allow others to print to my printer(s)** check box are checked.
If the check mark is removed, click the check box.
- (5) Click **[OK]**.
- (6) Click **[OK]**.
- (7) If the setting is changed, restart Windows.

LPR Port Printing - Printing directly from a computer

Step 1: Setting up TCP/IP on the computer

If the TCP/IP protocol is already installed on your computer and it is configured, proceed to the next step. If it is not installed, you need to install TCP/IP in the operating system on the computer and configure it. Be sure to install the TCP/IP protocol as it is not installed by default in Windows 95.

If the administrator manages the IP Address, contact him/her to confirm the values before setting up. Be sure to assign the unique value for the IP Address that is not used on another device on the network. Refer to the example of “[B] Using the Network Setup Tool” on page 9. To confirm that the IP Address is set correctly, see page 14. Checking the configuration of TCP/IP, refer to the help menu or documentation for Windows.

Step 2: Setting up TCP/IP on the printer

You need to set the IP Address, Subnet Mask and Default Gateway for the printer. It can be set using one of the following two methods. You may need to contact your network administrator to select the best method to setup.

- Using the DHCP server (see page 9)
- Using the Network Setup Tool (see page 9)

NOTE

- You can also setup the printer using BOOTP or RARP.

[A] Using the DHCP server

If the administrator manages the network with DHCP server, it will automatically assign an IP Address, Subnet Mask and Default Gateway. These can be viewed by printing out the configuration page. It can be printed by pressing the **PRINT/RESET** button on the printer panel **more than 2 seconds and less than 5 seconds**.

NOTE

- If the printer receives the IP Address with unlimited lease term, the printer keeps the address permanently. The printer saves the address statically and the DHCP function becomes disable automatically.
- If the printer's LPR port is created on the computer with the IP Address leased by DHCP server (ex. Broadband Router), the printer may not print when the printer's IP Address is changed because of the time limit of lease. In that case, it is strongly recommended to assign a static IP Address to the printer using the method "[B] Using the Network Setup Tool".

[B] Using the Network Setup Tool

If the administrator manages the IP Address, contact them to confirm the values before the installation. If not, set the unique value that is not used by another device on the network. Refer to the example shown below.

Example (assigning the IP Address, Subnet Mask and Default Gateway)

IP Address: 172.16.x.x

(x: you can choose any number from 0-255 except 0.0 and 255.255)

Be sure that the IP Address is not assigned to the other devices.

Subnet Mask: 255.255.0.0

It is the same value for all devices.

Default Gateway: Not required. (0.0.0.0 or set to same as other devices on the network)

NOTE

- 0 should not be used as the initial value of IP Address. For example, if the IP Address is 5, enter the number 5 (05 or 005 is incorrect). If there are any 0's, 0 is OK, but 00 or 000 is incorrect.

First install the Network Setup Tool by using the printer CD-ROM disk and then set up TCP/IP on the printer.

If the Network Setup Tool is already installed, click **[Start]** , move the pointer to **Programs** or **All Programs**, **Panasonic** and **Panasonic KX-P7305 and KX-P7310**, then click **Network Setup Tool**.

Proceed to the step 6.

- 1** Insert the printer CD-ROM disk into the CD-ROM drive.
The CD-ROM launches automatically.

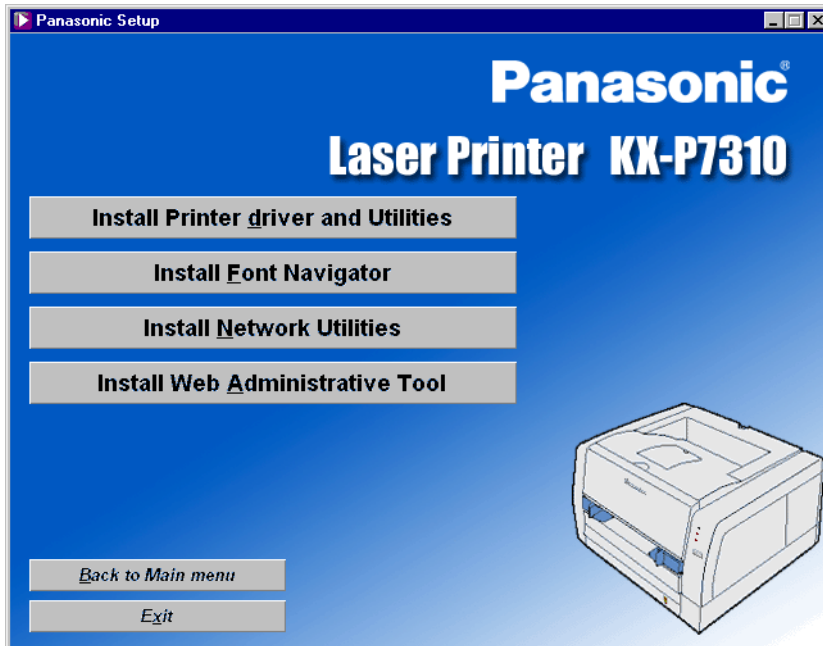
NOTE

• If the CD-ROM does not launch automatically, perform the following steps.

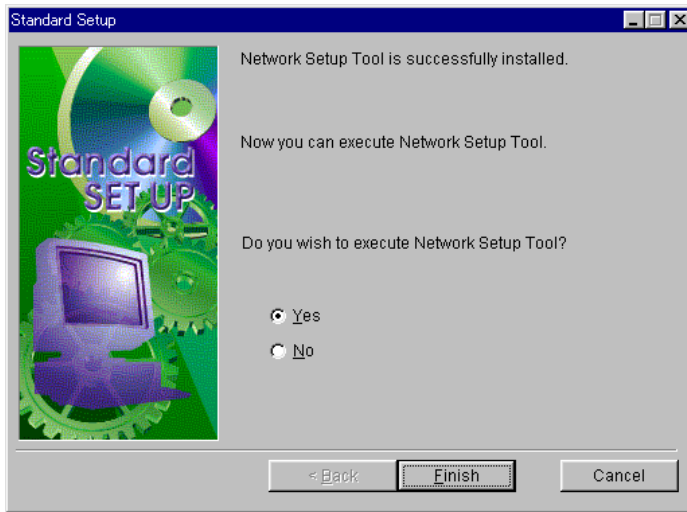
- (1) Double click **My computer** icon (Windows XP / Windows Server 2003: **Start - My Computer**).
- (2) Double click the CD-ROM icon.

- 2** (Click language and) click **KX-P7310**.

- 3** Click **Install Network Utilites**.



- 4 Follow the instructions until the screen below is displayed.

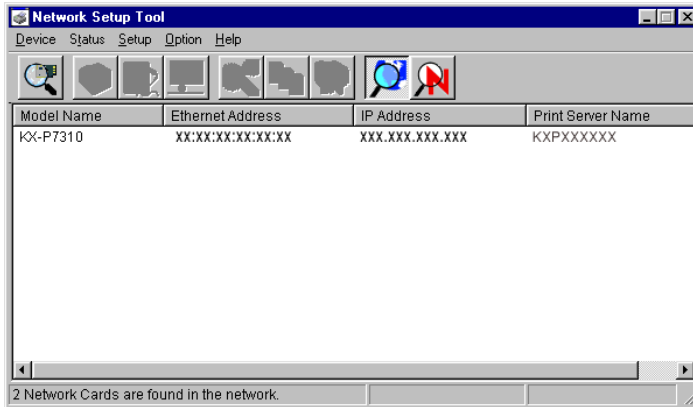


- 5 Click on the **Yes** check button, and then **[Finish]**.

The list of KX-7310 printers residing on the network is displayed.

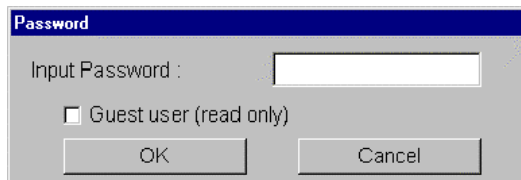
- If you want to search printers in the network again, click the **Device** menu and select **Search**.

- 6 Click the KX-P7310 printer you want to set up in the list. Then click the **Setup** menu and select **Network Setup....**



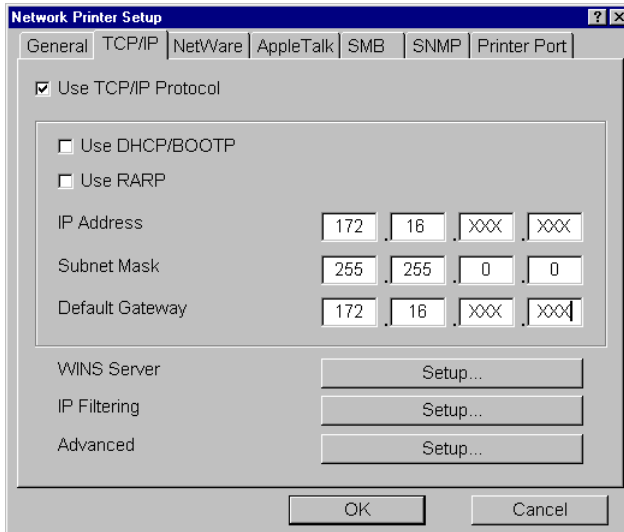
NOTE

- When several printers are listed in the Network Setup Tool window, select the printer using the Ethernet address (MAC address). You can obtain it (hexadecimal six digits number) from the label on the back of the printer or configuration page (press **PRINT/RESET** button more than 2 seconds and less than 5 seconds).
- If a password is set for the printer, you must enter the password and click **[OK]**. If the password is not entered, you can see the printer's setting by checking on the **Guest user** check box, but you cannot change it. To set a password, refer to "[Setting Password with Network Setup Tool](#)" on page 81.



- 7 Click the **TCP/IP** tab.

- 8 Remove the check of the **Use DHCP/BOOTP** and **Use RARP** check box, then enter IP address, Subnet Mask and Default Gateway. Click **[OK]**.



The screenshot shows the 'Network Printer Setup' dialog box with the 'TCP/IP' tab selected. The 'Use TCP/IP Protocol' checkbox is checked. Below it, the 'Use DHCP/BOOTP' and 'Use RARP' checkboxes are unchecked. The IP Address field is set to 172.16.XXX.XXX, the Subnet Mask is 255.255.0.0, and the Default Gateway is 172.16.XXX.XXX. There are 'Setup...' buttons for WINS Server, IP Filtering, and Advanced. At the bottom are 'OK' and 'Cancel' buttons.

- 9 Confirm the setting and click **[OK]**.
You will see the message "Update is completed. Do you wish to reset the printer?".
- 10 Click **[Yes]**.

NOTE

- You cannot search for the printer while the printer is restarting.
- To confirm that the IP Address is set correctly,
 - (1) On your computer, click **[Start]**, select **Programs** or **All Programs**, then click **MS-DOS Prompt.** (for Windows 95 / Windows 98 / Windows Me)
Or
Command Prompt. (for Windows NT 4.0)
Or
Accessories - Command Prompt. (for Windows 2000 / Windows XP / Windows Server 2003)
 - (2) At the DOS prompt, type ping followed by a space then the printer's IP Address. Then press the **ENTER** key.

For example,
ping 172.16.x.x.

If the following notation is displayed, they are set correctly.

```
Pinging 172.16.x.x with 32 bytes of data:  
Reply from 172.16.x.x: bytes=xx time<xxms TTL=xx  
Reply from 172.16.x.x: bytes=xx time<xxms TTL=xx  
.....  
.....
```

If the ping command returns a "Request timed out" message or "Reply from xxx.xxx.xxx.xxx: Destination host unreachable" message or other error messages you should recheck your settings.

Step 3: Setting up the printer driver and the printer port on the computer

- 1 Insert the printer CD-ROM disk into the CD-ROM drive.
The CD-ROM launches automatically.

NOTE

- If the CD-ROM does not launch automatically, perform the following steps.
 - (1) Double click **My computer** icon (Windows XP / Windows Server 2003: **Start - My Computer**).
 - (2) Double click the CD-ROM icon.

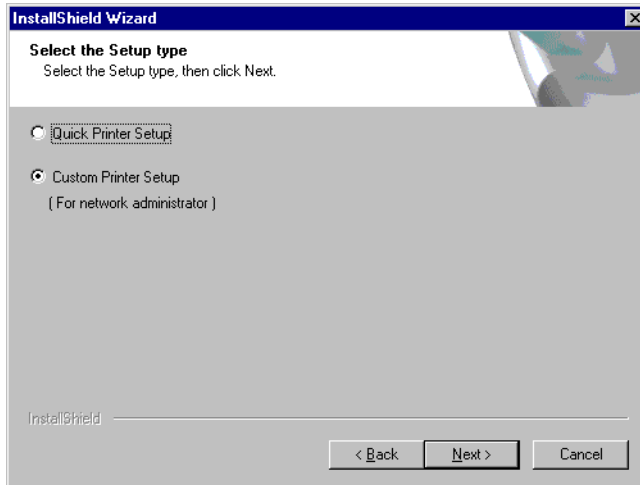
- 2 (Click language and) click **KX-P7310**.

- 3 Click **Install Printer driver and Utilities**.
The License Agreement window is displayed.

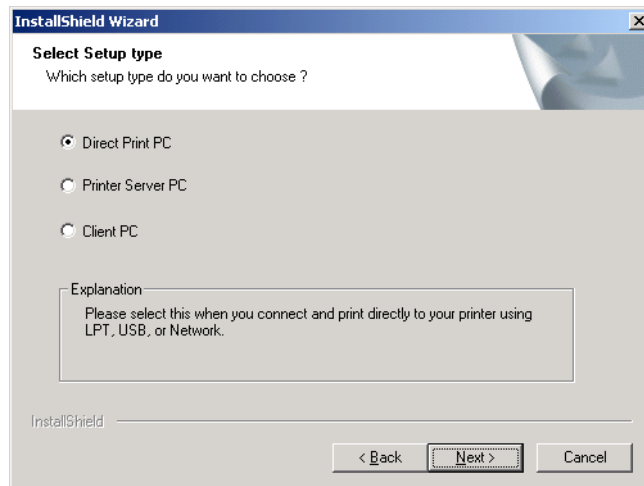


- 4 Click **[Yes]**.

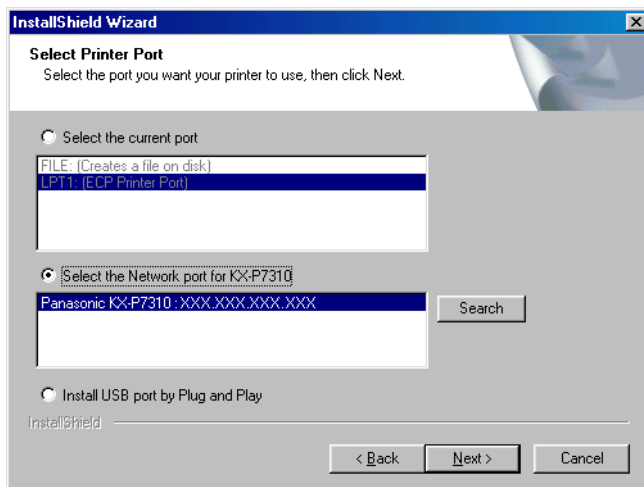
- 5 Click on the **Custom Printer Setup** check button and click **[Next >]**.
The Select Setup type window is displayed.



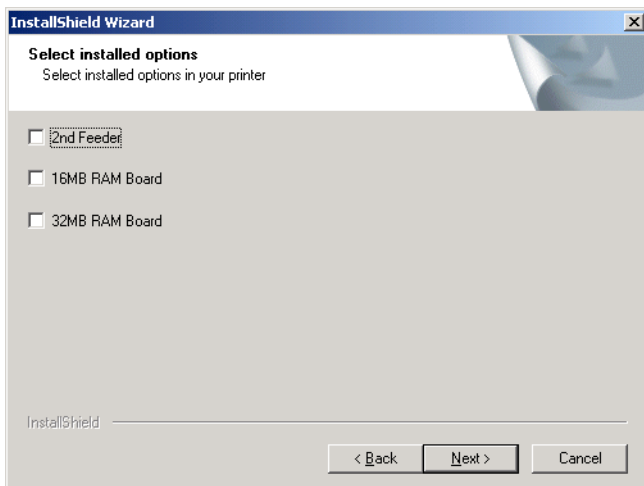
- 6 Click on the **Direct Print PC** check button and click **[Next >]**.



- 7 Click on the **Select the Network port for KX-P7310** check button and click the printer you want to use, then click **[Next >]**.
The Select installed options window is displayed.



- 8 Select the installed options in your printer. Click **[Next >]**.
The Select the default printer window is displayed.



NOTE

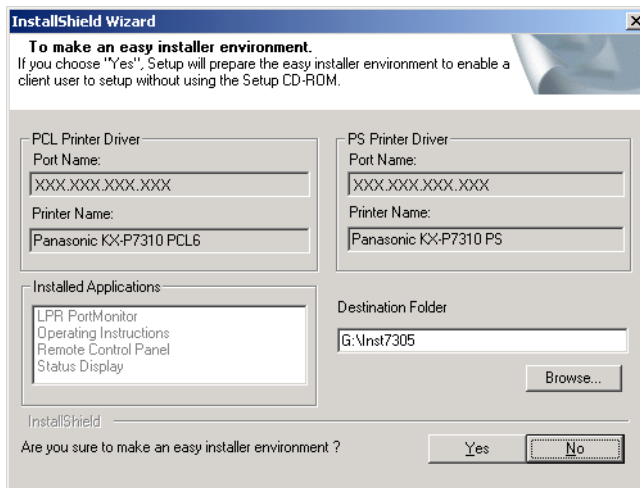
- The installed options are automatically configured in the PCL printer driver if selecting the printer on the network at the previous step. The PostScript printer driver isn't configured automatically. To configure this driver go to the properties of the driver and select the Device, Device Settings or Device Options tab and manually configure the driver.

9 Click on the desired check button for the default printer and click **[Next >]**.

10 Click **[Yes]** or **[No]**.

Yes: The easy installer that enables printing to the same printer is created in the shared folder (Inst7305 by default). The easy installer allows the setting up with the same setting on other computers without the CD-ROM. For the detailed instructions, see [“\[A\] Using the shared folder on the other computer” on page 20](#).

No: A shared folder is not created. To setup another computer, the printer CD-ROM disk is required.

**NOTE**

- If you want to change the Destination Folder to install, click **[Browse...]**. Then follow the instructions on the screen to change the destination folder.

11 (Click **[OK]** and) click **[Finish]**.

NOTE

- If another computers are set up using the shared folder through the network, share the shared folder (Inst7305 by default) created by selecting **[Yes]** at step 10 (see “[A] Using the shared folder on the other computer” on page 20).

Step 4: Setting up another computer

If the shared folder has been created at the previous step 3, another computer can be simply set up with the shared folder (see the method [A] or [B]). If the shared folder was not created, set up the computer with the printer CD-ROM following the previous step 3.

[A] Using the shared folder on the other computer

- 1 Open the shared folder of the other computer on the network.
- 2 Double click **Setup.exe** in the shared folder.
The License Agreement window is displayed.
- 3 Click **[Yes]**.
InstallShiled Wizard Complete window is displayed.
- 4 Click **[Finish]**.

[B] Using the CD-R media

The easy installer CD can be created by copying files in the shared folder on a CD-R. It excludes the time to inform the location of the shared folder on the network.

- 1 Copy all files of the shared folder (ex. C:\Inst7305) on a CD-R media.
- 2 Insert the CD-R to another computer.
The License Agreement window is displayed.
- 3 Click **[Yes]**.
The setup program starts installing the printer driver and utilities.
InstallShiled Wizard Complete window is displayed after the installation is finished.
- 4 Click **[Finish]**.

LPR Port Printing - Printing through the shared computer (print server)

Step 1: Setting up TCP/IP on the computer (see page 8)

Step 2: Setting up TCP/IP on the printer (see page 8)

Step 3: Setting up the printer driver and the printer port on the computer

The following steps must be performed on the server computer.

- 1** Insert the printer CD-ROM disk into the CD-ROM drive.
The CD-ROM launches automatically.

NOTE

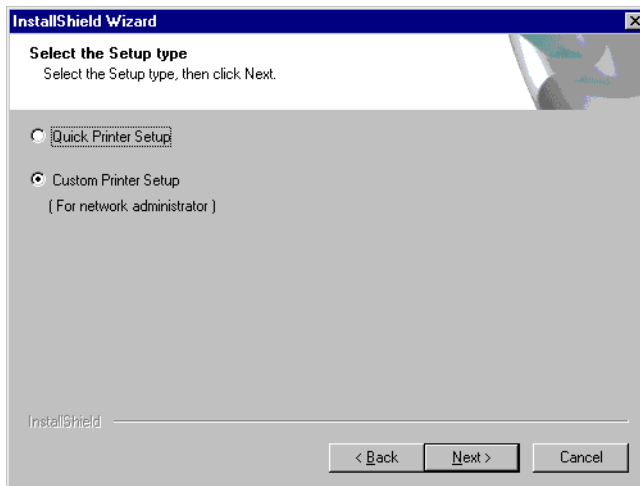
- If the CD-ROM does not launch automatically, perform the following steps.
 - (1) Double click **My computer** icon (Windows XP / Windows Server 2003: **Start - My Computer**).
 - (2) Double click the CD-ROM icon.

- 2** (Click language and) click **KX-P7310**.

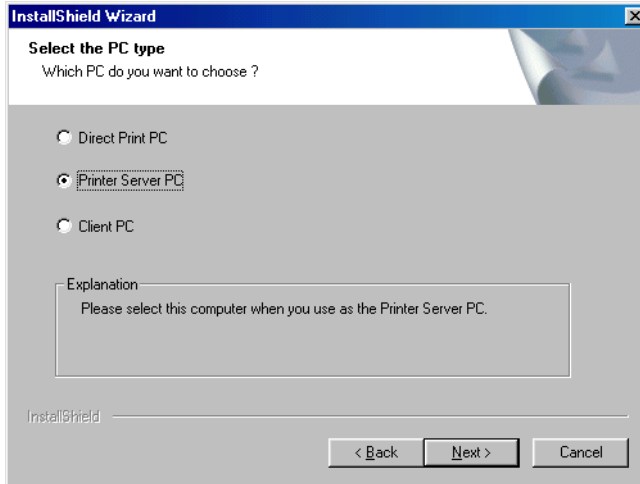
- 3** Click **Install Printer driver and Utilities**.
The License Agreement window is displayed.



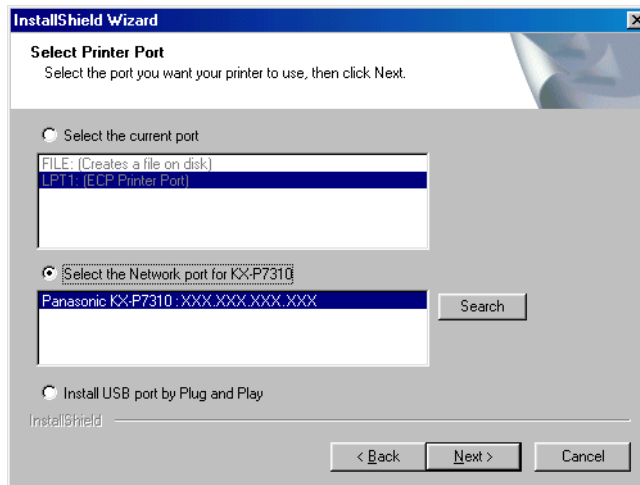
- 4** Click **[Yes]**.
- 5** Click on the **Custom Printer Setup** check button and click **[Next >]**.
The Select Setup type window is displayed.



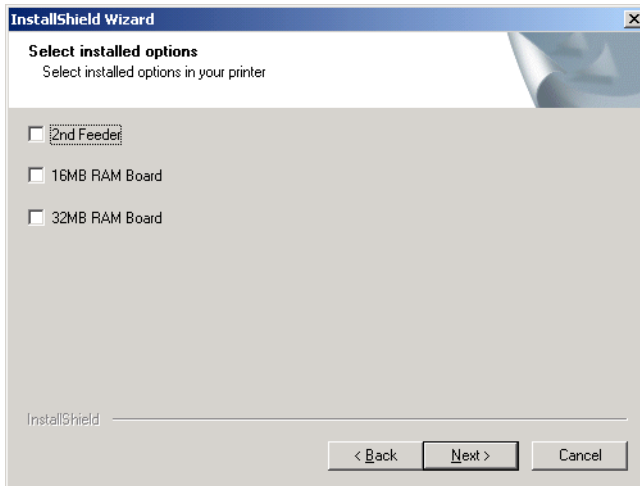
- 6 Click on the **Printer Server PC** check button and click [**Next >**].



- 7 Select the printer in the **Select the current port** or **Select the Network port for KX-P7310** list, then click [**Next >**]. The Select installed options window is displayed.



- 8** Select the installed options in your printer. Click **[Next >]**.
The Select the default printer window is displayed.



NOTE

- The installed options are automatically configured in the PCL printer driver if selecting the printer on the network at the previous step. The PostScript printer driver isn't configured automatically. To configure this driver go to the properties of the driver and select the Device, Device Settings or Device Options tab and manually configure the driver.

- 9** Click on the desired check button for the default printer and click **[Next >]**.

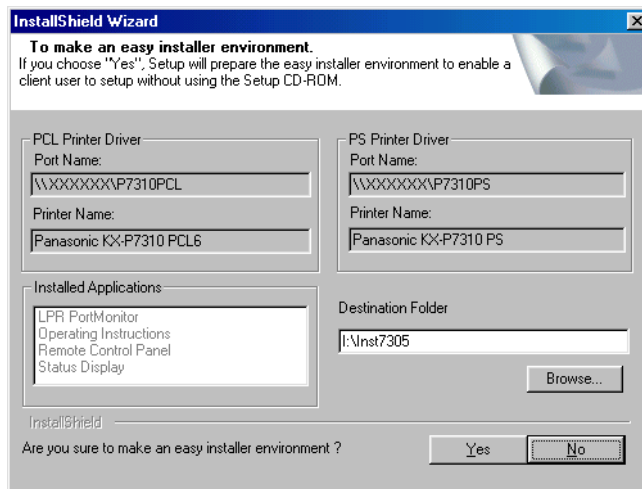
- 10** Confirm the shared printer name and change it if needed. Click [Next >].

The screenshot shows the 'InstallShield Wizard' window with the title 'Shared printer name.' and the instruction 'Please input shared printer name.' The window is divided into two columns for 'PCL Printer Driver' and 'PS Printer Driver'. Each column has three text input fields: 'Port Name' (with placeholder 'XXX.XXX.XXX.XXX'), 'Printer Name' (with 'Panasonic KX-P7310 PCL6' and 'Panasonic KX-P7310 PS' respectively), and 'Shared Name' (with 'P7310PCL' and 'P7310PS' respectively). At the bottom, there are three buttons: '< Back', 'Next >' (which is highlighted with a dotted border), and 'Cancel'.

11 Click [Yes] or [No].

Yes: The easy installer that enables printing through this server computer is created in the shared folder (Inst7305 by default). The easy installer allows the setting up on a client computer without the CD-ROM. For the detailed instructions, see “[A] Using the shared folder on the other computer” on page 27.

No: A shared folder is not created. To setup a client computer, the printer CD-ROM disk is required.



NOTE

- If you want to change the Destination Folder to install, click [Browse...]. Then follow the instructions on the screen to change the destination folder.

12 (Click [Yes] and) click [Finish].

NOTE

- If client computers are set up using the shared folder through the network, share the shared folder (Inst7305 by default) created by selecting [Yes] at step 11 (see “[A] Using the shared folder on the other computer” on page 27).

Step 4: Setting up the client computer

If the shared folder has been created at the previous step 3, the client computer can be simply set up with the shared folder (see the method [A] or [B]). If the shared folder was not created, set up the computer with the printer CD-ROM following the method [C].

[A] Using the shared folder on the other computer

- 1 Open the shared folder of the other computer on the network.
- 2 Double click **Setup.exe** in the shared folder.
The License Agreement window is displayed.
- 3 Click **[Yes]**.
InstallShiled Wizard Complete window is displayed.
- 4 Click **[Finish]**.

[B] Using the CD-R media

The easy installer CD can be created by copying files in the shared folder on a CD-R. It excludes the time to inform the location of the shared folder on the network.

- 1 Copy all files of the shared folder (ex. C:\Inst7305) on a CD-R media.
- 2 Insert the CD-R to a client computer to set up.
The License Agreement window is displayed.
- 3 Click **[Yes]**.
The setup program starts installing the printer driver and utilities.
InstallShiled Wizard Complete window is displayed after the installation is finished.
- 4 Click **[Finish]**.

[C] Using the printer CD-ROM

- 1 Insert the printer CD-ROM disk into the CD-ROM drive.
The CD-ROM launches automatically.

NOTE

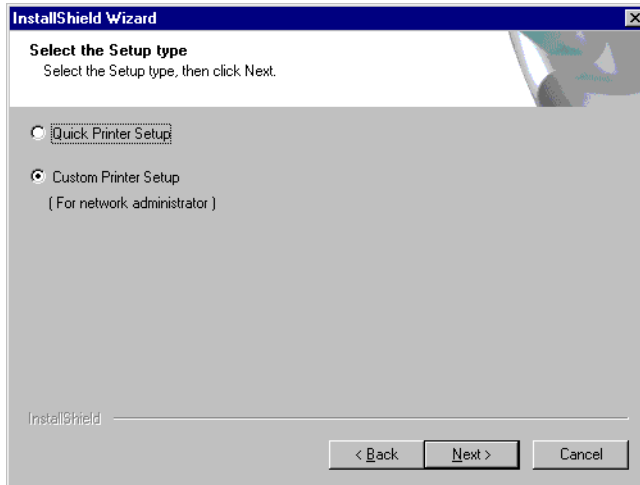
• If the CD-ROM does not launch automatically, perform the following steps.

- (1) Double click **My computer** icon (Windows XP / Windows Server 2003: **Start - My Computer**).
 - (2) Double click the CD-ROM icon.
- 2 (Click language and) click **KX-P7310**.
 - 3 Click **Install Printer driver and Utilities**.
The License Agreement window is displayed.

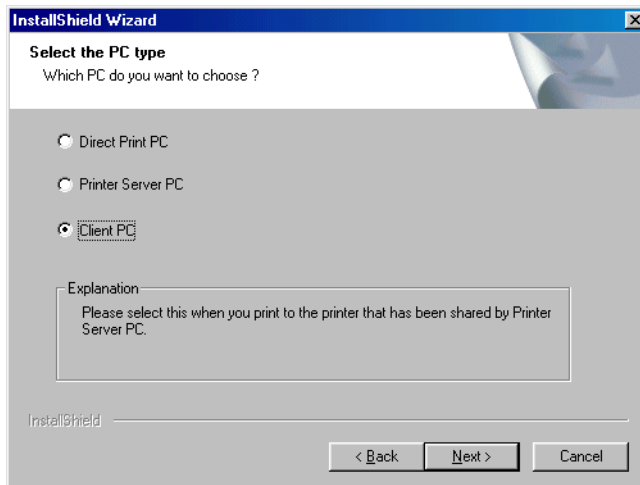


- 4 Click **[Yes]**.

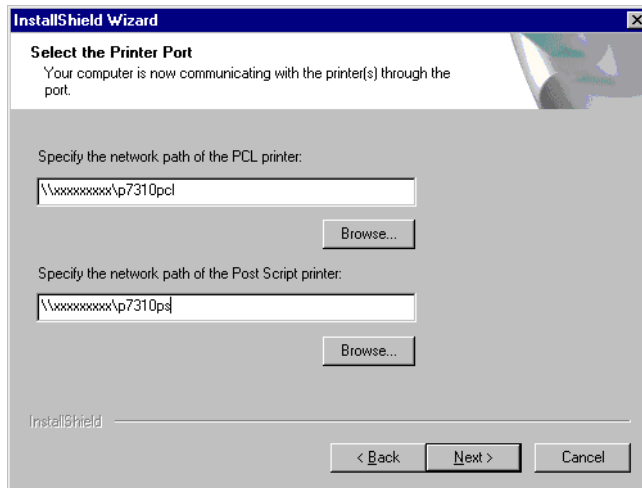
- 5 Click on the **Custom Printer Setup** check button and click **[Next >]**.
The Select Setup the PC type window is displayed.



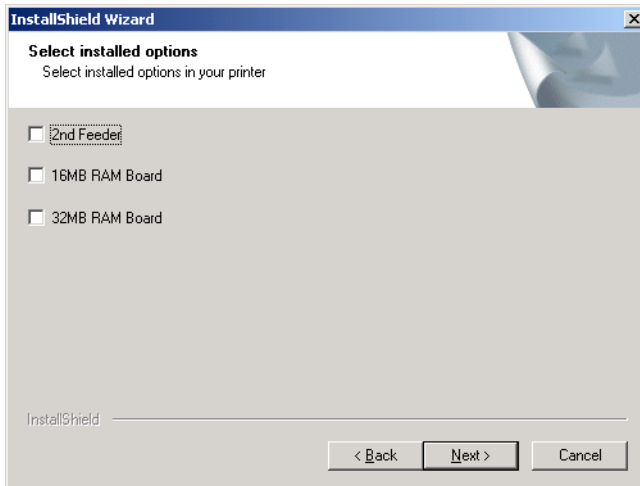
- 6 Click on the **Client PC** check button and click **[Next >]**.



- 7** Enter the network path of the shared printer (\\server name\printer name) in the **Specify the network path of the PCL printer** and **Specify the network path of the PostScript printer** box, then click [**Next >**].
The Select installed options window is displayed.
- You can also click [**Browse...**] and select the printer.



- 8** Select the installed options in your printer. Click **[Next >]**.
The Select the default printer window is displayed.

**NOTE**

- The installed options are automatically configured in the PCL printer driver if selecting the printer on the network at the previous step. The PostScript printer driver isn't configured automatically. To configure this driver go to the properties of the driver and select the Device, Device Settings or Device Options tab and manually configure the driver.

- 9** Click on the desired check button for the default printer and click **[Next >]**.
- 10** Click **[Finish]**.

IPP Port Printing using TCP/IP

IPP port printing allows you to print a document via the Internet. The following are the steps to setup IPP port printing using the TCP/IP protocol.

NOTE

- If a firewall, etc. intercepts the communication between the printer and your computer, you will not be able to use this printing method.

Step 1: Setting up TCP/IP on the computer (see page 8)

Step 2: Setting up TCP/IP on the printer (see page 8)

Step 3: Installing the printer driver and utilities

- 1** Insert the printer CD-ROM disk into the CD-ROM drive.
The CD-ROM launches automatically.

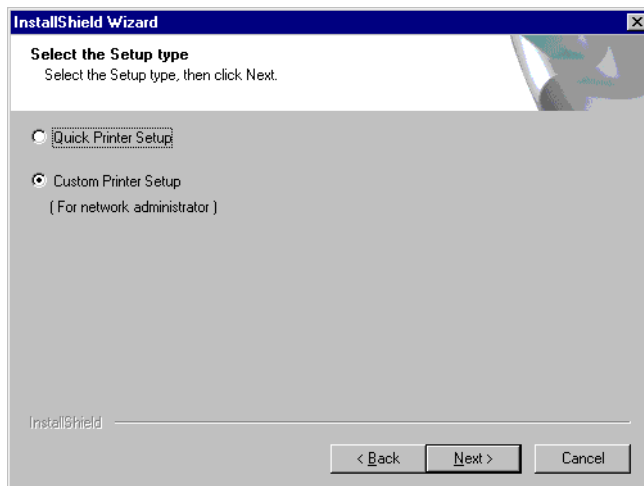
NOTE

- If the CD-ROM does not launch automatically, perform the following steps.
 - (1) Double click **My computer** icon (Windows XP / Windows Server 2003: **Start - My Computer**).
 - (2) Double click the CD-ROM icon.

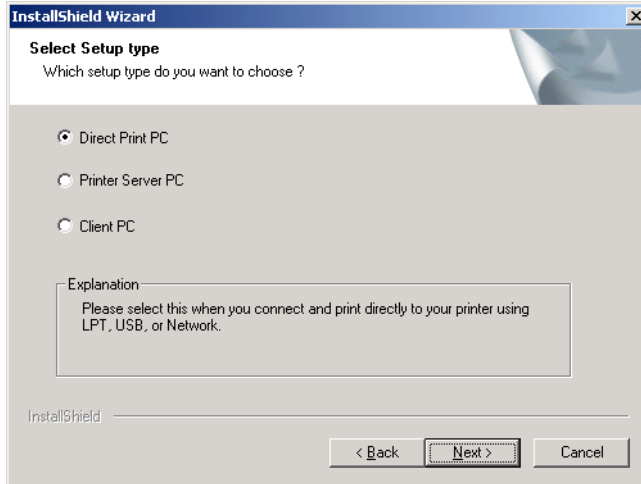
- 2** (Click language and) click **KX-P7310**.

3 Click **Install Printer driver and Utilities**.

The License Agreement window is displayed.

**4** Click **[Yes]**.**5** Click on the **Custom Printer Setup** check button and click **[Next >]**.

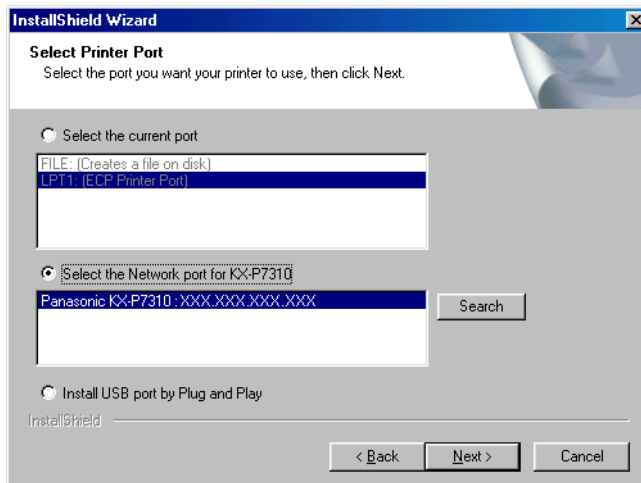
- 6 Click on the **Direct Print PC** check button and click [**Next >**].



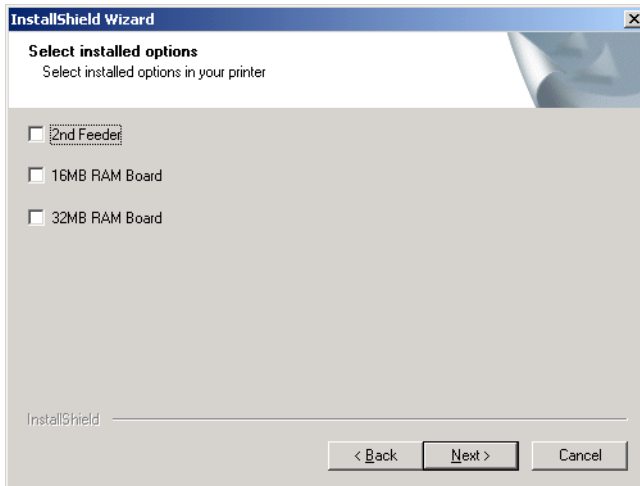
- 7 Select the printer in the **Select the current port** or **Select the Network port for KX-P7310** list, then click [**Next >**].

The Select installed options window is displayed.

- If the printer is not listed, select **LPT1:** to install the printer driver.



- 8** Select the installed options in your printer. Click **[Next >]**.
The Select the default printer window is displayed.



NOTE

- The installed options are automatically configured in the PCL printer driver if selecting the printer on the network at the previous step. The PostScript printer driver isn't configured automatically. To configure this driver go to the properties of the driver and select the Device, Device Settings or Device Options tab and manually configure the driver.

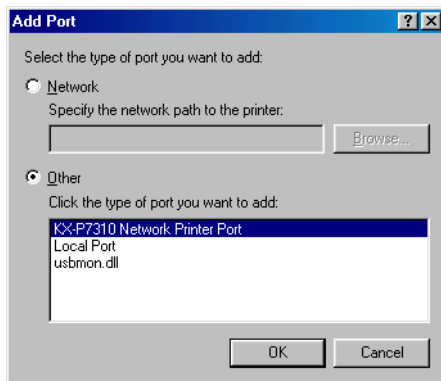
- 9** Click on the desired check button for the default printer and click **[Next >]**.
- 10** Click **[Finish]**.

Step 4: Setting up IPP port on the computer

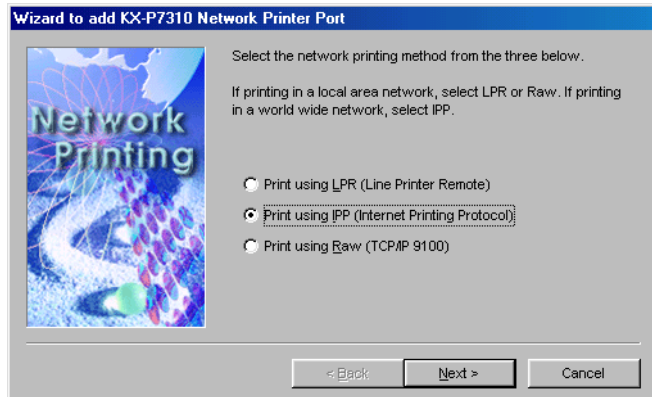
The following is the steps for Windows 95 / Windows 98 / Windows Me. For Windows NT 4.0 / Windows 2000 / Windows XP / Windows Server 2003, see [page 38](#).

[For Windows 95 / Windows 98 / Windows Me]

- 1** Click [**Start**], move the pointer to **Settings**, then click **Printers**.
- 2** Click the **Panasonic KX-P7310 PCL6** or **Panasonic KX-P7310 PS** icon.
- 3** Click the **File** menu and click **Properties**.
- 4** Click the **Details** tab.
- 5** Click [**Add port...**].
- 6** Click the **Other** check button and click **KX-P7310 Network Printer Port**, then click [**OK**].



- 7** Click on the **Print using IPP** check button and click [**Next >**].



- 8** Click either the **Connect using a modem and telephone line** or **Connect using a local area network** check button. Click [**Next >**].
- If you select Connect using a modem and telephone line, proceed to step 10.
 - If your computer is not equipped with a dial-up adapter, this selection window is not displayed. Proceed to step 9.
- 9** Click either the **Do not print using a proxy server** or the **Print using a proxy server** check button. Click [**Next >**].
- If you select Print using proxy server, enter the IP Address and port number of the proxy server.
- 10** Enter the URL of the printer according to the following form:
http://IP Address/ipp or **http://host name/ipp**.
- 11** Click [**Next >**].
- 12** Click [**Next >**].

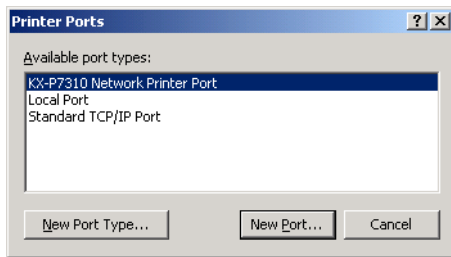
NOTE

- Enter a unique name into the “**Destination print port name**”; this name is used as the printer port name.

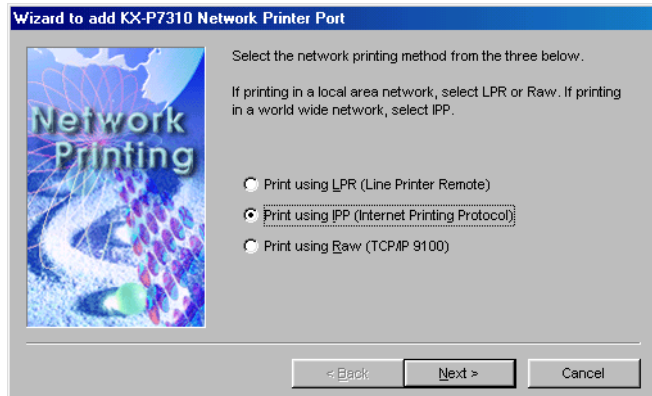
- 13** Click [**Finish**].

[For Windows NT 4.0 / Windows 2000 / Windows XP / Windows Server 2003]

- 1** Click **[Start]**, move the pointer to **Settings**, then click **Printers**.
The Printers window is displayed.
 - For Windows XP Professional / Windows Server 2003, click **[Start]**, then click or double click **Printers and Faxes**.
 - For Windows XP Home, click **[Start]**, click **Control Panel**, click **Printers and Other Hardware** icon, then click **Printers and Faxes** icon.
- 2** Click the **Panasonic KX-P7310 PCL6** or **Panasonic KX-P7310 PS** icon.
- 3** Click the **File** menu and click **Properties**.
- 4** Click the **Ports** tab.
- 5** Click **[Add port...]**.
- 6** Click **KX-P7310 Network Printer Port** and click **[New Port...]**.



- 7** Click on the **Print using IPP** check button and click [**Next >**].



- 8** Click either the **Connect using a modem and telephone line** or **Connect using a local area network** check button. Click [**Next >**].
- If you select **Connect using a modem and telephone line**, proceed to step 10.
 - If your computer is not equipped with a dial-up adapter, this selection window is not displayed. Proceed to step 9.
- 9** Click either the **Do not print using a proxy server** or the **Print using a proxy server** check button. Click [**Next >**].
- If you select **Print using proxy server**, enter the IP Address and port number of the proxy server.
- 10** Enter the URL of the printer according to the following form:
http://IP Address/ipp or **http://host name/ipp**.
- 11** Click [**Next >**].
- 12** Click [**Next >**].
- NOTE**
- Enter a unique name into the “**Destination print port name**”; this name is used as the printer port name.
- 13** Click [**Finish**].

HP JetDirect Port Printing using TCP/IP or IPX/SPX in Windows

This enables you to use the HP JetDirect port printing using the HP JetAdmin software. TCP/IP or IPX/SPX protocol is used for printing.

Setup in Macintosh

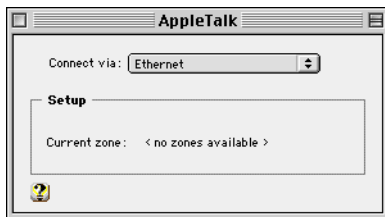
KX-P7310 Setup Utility uses TCP/IP. You need to set up AppleTalk and TCP/IP on your computer and printer. The printer does not work with AppleTalk Phase1.

Step 1: Setting up AppleTalk and TCP/IP on your computer

[For Mac OS 8.5 - Mac OS 9.2]

See [page 42](#) for Mac OS X 10.1 - Mac OS X 10.2.

- 1 Select **Control Panels** from the **Apple** menu, then double click **AppleTalk** icon.
- 2 Select **Ethernet** from the **Connect via** box.



- 3 Close the dialog.
- 4 Double click the **TCP/IP** icon in the **Control Panels**.
- 5 Assign the IP Address to your computer or use the DHCP server for TCP/IP setting.
 - To setup the TCP/IP, check with your network administrator.
- 6 Close the dialog.

[For Mac OS X 10.1 - Mac OS X 10.2]

- 1** Click **System Preference...** from the **Apple** menu and click **Network** icon.
The Network window is displayed.
- 2** Select **Built-in Ethernet** from **Show** menu.
- 3** Click the **TCP/IP** tab.
- 4** Assign the IP Address to your computer or use the DHCP server for TCP/IP setting.
 - To setup the TCP/IP, check with your network administrator.
- 5** Click the **AppleTalk** tab.
- 6** Be sure the **Make AppleTalk Active** check box is checked.
- 7** Click [**Apply Now**].
- 8** Close the window.

Step 2: Setting up TCP/IP on the printer

You need to set the IP Address, Subnet Mask and Default Gateway for the printer. Set them by using one of the following two methods. You may need to contact your network administrator to select the best way.

- Using the DHCP server (see below)
- Using the Network Setup Tool (see [page 44](#))

NOTE

- You can also setup the printer using BOOTP or RARP.

[A] Using the DHCP server

If the administrator manages the network with DHCP server, it is possible to assign IP Address, Subnet Mask and Default Gateway automatically from DHCP server by default. These can be viewed by printing out the configuration page. It can be printed by pressing the **PRINT/RESET** button on the printer panel **more than 2 seconds and less than 5 seconds**.

NOTE

- If the printer receives the IP Address with unlimited lease term, the printer keeps the address permanently. The printer saves the address statically and the DHCP function becomes disable automatically.
- If the printer's LPR port is created on the computer with the IP Address leased by DHCP server (ex. Broadband Router), the printer may not print when the printer's IP Address is changed because of the time limit of lease. In that case, it is strongly recommended to assign a static IP Address to the printer using the method "[\[B\] Using the Network Setup Tool \(Mac OS 8.5 - Mac OS 9.2\)](#)".

[B] Using the Network Setup Tool (Mac OS 8.5 - Mac OS 9.2)

Network Setup Tool can operate in the Classic environment only. When using it in Mac OS X 10.1 or Mac OS X10.2, use it in the Classic environment.

If the administrator manages the IP Address, contact them to confirm the values before the installation. If not, set the unique value that is not used by another devices on the network. Refer to the example shown below.

Example (assigning the IP Address, Subnet Mask and Default Gateway)

IP Address: 172.16.x.x

(x: you can choose any number from 0-255 except 0.0 and 255.255)

Be sure that the IP Address is not assigned to the other devices.

Subnet Mask: 255.255.0.0

It is the same value for all devices.

Default Gateway: Not required. (0.0.0.0 or set to same as other devices on the network)

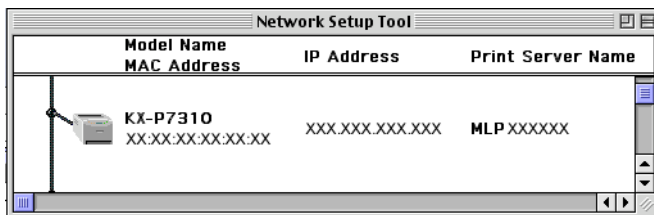
NOTE

- 0 should not be used as the initial value of IP Address. For example, if the IP Address is 5, enter the number 5 (05 or 005 is incorrect). If there are any 0's, 0 is OK, but 00 or 000 is incorrect.

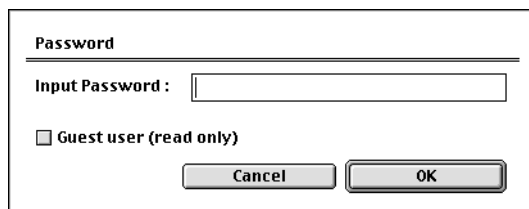
First install the Network Setup Tool by using the printer CD-ROM disk and then set up TCP/IP on the printer. If the Network Setup Tool is already installed, proceed to the step 8.

- 1** Insert the printer CD-ROM disk into the CD-ROM drive, and then double-click the **KXP7305_KXP7310** icon, the **Mac OS** and **English** folder.
- 2** Double click the **Network Setup Tool Installer** icon.
- 3** Click **[Continue]** if you agree with the software license agreement.
- 4** Click **[Install]**.
- 5** Click **[Quit]**.
- 6** Double click **Network Setup Tool**
(it is located in Panasonic:KX-P7305 and KX-P7310 folder).
KX-P7310 printers on the network will be displayed.

- 7 Click the KX-P7310 printer you want to set up, click **Setup** menu and then select **Network Setup....**

**NOTE**

- When several printers are listed, select the printer using the MAC address. You can obtain the number (hexadecimal six digits) from the label near the network interface connector or by printing a configuration page (press **PRINT/RESET** button more than 2 seconds and less than 5 seconds).
- If a password is set in the printer, you must enter the password and click **[OK]**. If a password is not entered, you can still see the printer's setting by checking on the **Guest user** check box, but you cannot change it. To set a password, refer to ["Setting Password with Network Setup Tool"](#) on page 81.



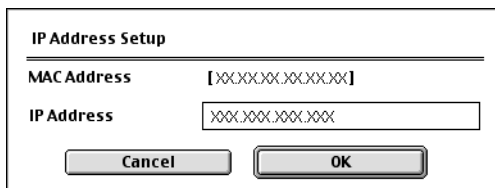
The screenshot shows a dialog box titled "Password". It has a label "Input Password:" followed by a text input field. Below the input field is a checkbox labeled "Guest user (read only)". At the bottom of the dialog box are two buttons: "Cancel" and "OK".

- 8 If an IP Address has been assigned to the printer, proceed to the step 16.
Or

If it is not, a warning message is displayed. Click **[OK]**.

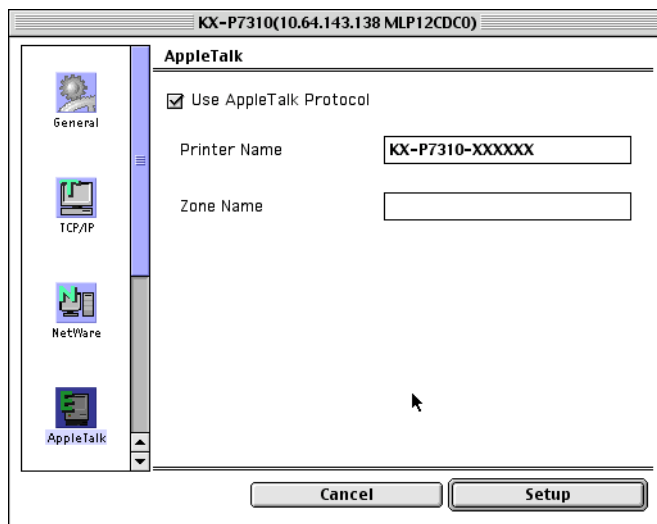
- 9 Enter the IP Address and click **[OK]**.

The confirmation window is displayed.



The screenshot shows a dialog box titled "IP Address Setup". It has a label "MAC Address" followed by a text input field containing "[XXXXXXXXXXXXXXXX]". Below that is a label "IP Address" followed by a text input field containing "XXXXXXXXXXXX". At the bottom of the dialog box are two buttons: "Cancel" and "OK".

- 10 Click **[OK]**.
- 11 Click **Setup** menu and click **Restart the printer**.
- 12 Click **[OK]** to restart the printer.
- 13 Click the printer assigned the IP Address and click **Network Setup...** from the **Setup** menu.
 - If a password is set, you must enter the password and click **[OK]**.
- 14 Click the **AppleTalk** icon.
- 15 Confirm the **Use AppleTalk Protocol** check box is checked.
 - If needed, change the Printer Name and enter the Zone Name.



- 16 Click **[Setup]**.
 - If the setting is changed, proceed to the next steps. If the setting is not changed, click **[OK]** to exit the setting window.
- 17 Click **[OK]** to send the setting to the printer.

The confirmation window is displayed.
- 18 Click **[OK]**.
- 19 Click **Setup** menu and click **Restart the printer**.
- 20 Click **[OK]** to restart the printer.

Setup in NetWare

This chapter explains how to setup a client computer to print via a NetWare server.

In NetWare 4.x / NetWare 5.x / NetWare 6

Perform the following steps:

Step 1: Setting up the printer and server

Step 2: Setting up the client

Step 1: Setting up the printer and server

There are four ways of setup.

- **[A] Using NDS (Novell Directory Service) - PSERVER mode** (see page 48)
- **[B] Using NDS - RPRINTER (NPRINTER) mode** (see page 53)

You may need to check with your network administrator which to select. For detailed information on these modes, refer to the NetWare manual or the Novell web site.

Setting the NetWare server is almost performed on the client. You must log on the server using the supervisor privilege. Novell Client software must be installed in your computer prior to setting up.

[A] Using NDS - PSERVER mode

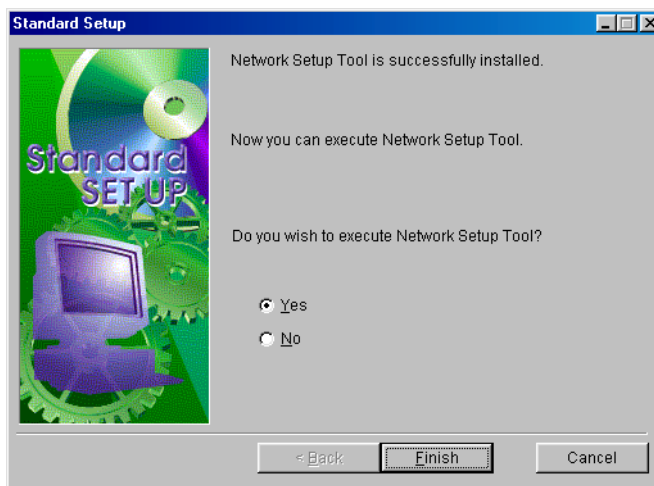
The following are the steps for setting up the printer. First install the Network Setup Tool from the printer CD-ROM disk and then set up the printer.

- 1** Start the server system.
- 2** Start the client system and log on the network in the NDS mode.
 - If the Network Setup Tool is already installed, click **[Start]**, move the pointer to **Programs** or **All Programs**, **Panasonic** and **Panasonic KX-P7305 and KX-P7310**, then click **Network Setup Tool**. Proceed to step 7.
- 3** Insert the printer CD-ROM disk into the CD-ROM drive.

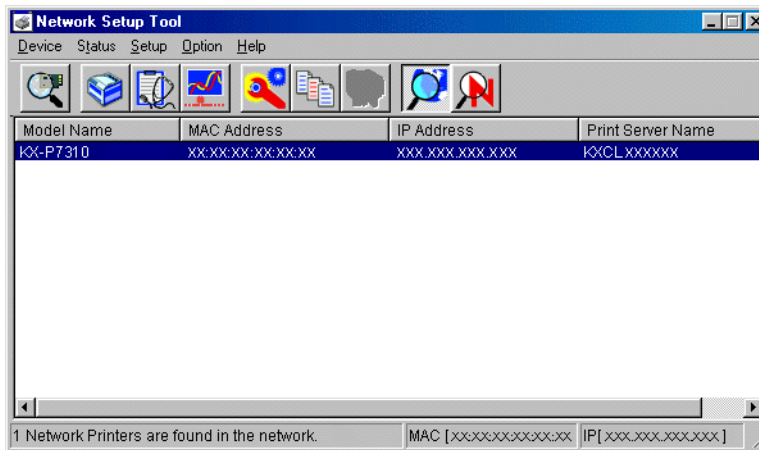
The CD-ROM launches automatically.

NOTE

 - If the CD-ROM does not launch automatically, perform the following steps.
 - (1) Double click **My computer** icon (Windows XP / Windows Server 2003: **Start - My Computer**).
 - (2) Double click the CD-ROM icon.
- 4** (Click language and) click **KX-P7310**.
- 5** Click **Install Network Utilites**.
- 6** Follow the instructions until the screen below is displayed.

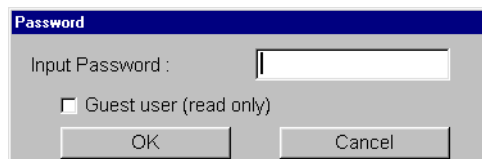


- 7 Click on the **Yes** check button, and then **[Finish]**.
A list of printers residing on the network is displayed.
 - If you want to search the network for printers again, click the **Device** menu and select **Search**.
- 8 Select the printer you want to set up from the list. Then click the **Setup** menu and select **Network Setup....**

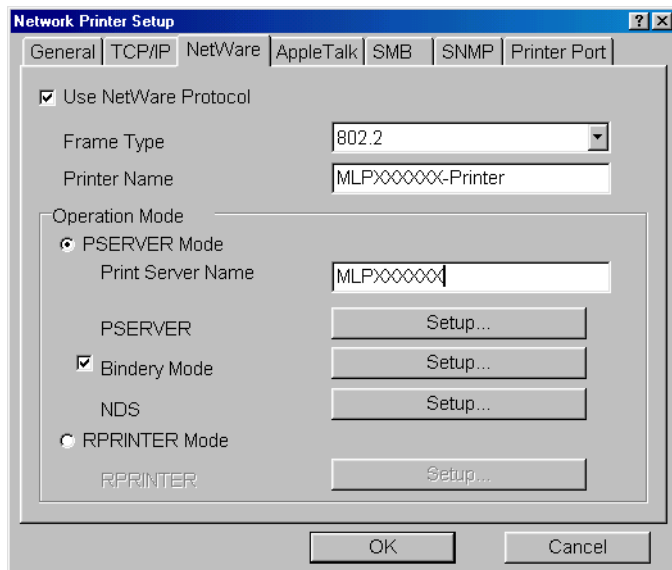


NOTE

- When several printers are listed in the Network Setup Tool window, select the printer using the MAC address. You can obtain the number (hexadecimal six digits) from the label near the network interface connector or by printing a configuration page (press **PRINT/RESET** button more than 2 seconds and less than 5 seconds).
- If a password is set in the printer, you must enter the password and click **[OK]**. If a password is not entered, you can still see the printer's setting by checking on the **Guest user** check box, but you cannot change it. To set a password, refer to [“Setting Password with Network Setup Tool” on page 81](#).



9 Click the **NetWare** tab.



NOTE

- You can change the Print Server Name and Printer Name. After changing, click **[OK]**. Then go back to the step 8.

10 Click on the **PSERVER Mode** check button.

11 Click **[OK]**.

12 If you change the setting, click **[OK]**, then click **[Yes]**.

The following are the steps to set up the server.

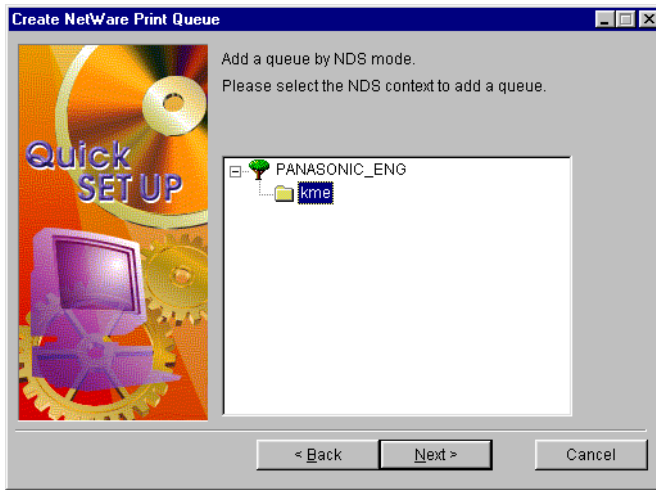
13 Select the printer you want to configure in the Network Setup Tool window.

14 Click the **Setup** menu and select **Create NetWare Queue**.

15 Follow the instructions on the screen.

When asked to select NDS mode or Bindery mode, select **NDS Mode** and click **[Next >]**.

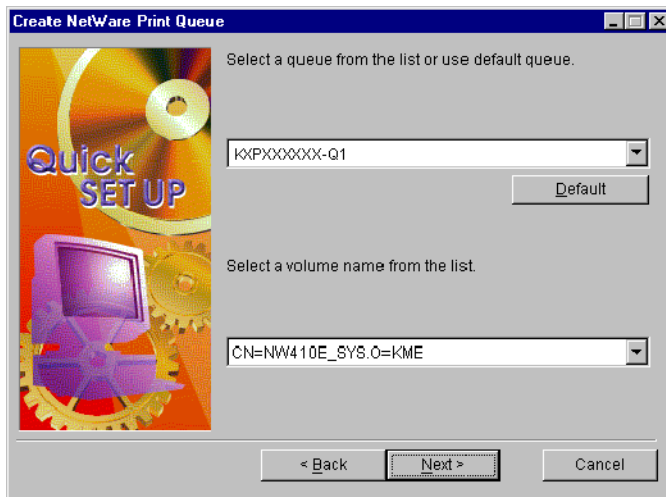
- 16** Expand the Tree and select the context where the Queue will be added, and click [**Next >**].



- 17** Click on the **Print Server Mode** check button and click [**Next >**].



- 18** Change the queue name if needed. The print jobs are temporarily stored on the selected volume; if there is different volumes required select it from the list, then click [**Next >**].



- 19** Follow the instructions on the screen.

NOTE

- When the setting is finished, the printer is automatically restarted.

[B] Using NDS - RPRINTER (NPRINTER) mode

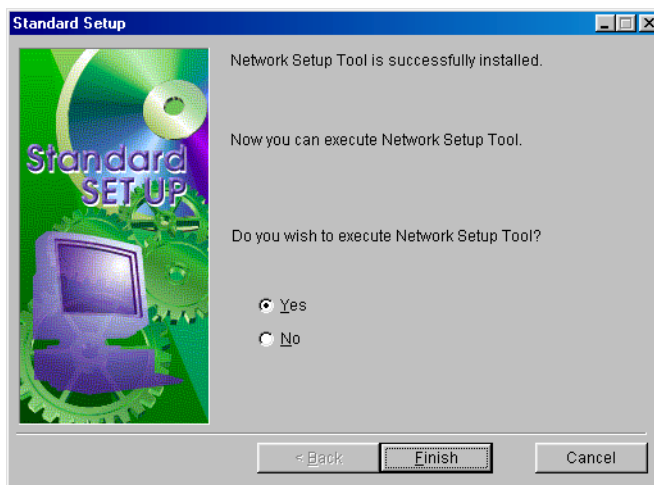
The following are the steps to set up the printer. First install the Network Setup Tool by using the printer CD-ROM disk and then set up the printer.

- 1** Start the server system.
- 2** Start the client system and log on the network in the NDS mode.
 - If the Network Setup Tool is already installed, click **[Start]**, move the pointer to **Programs** or **All Programs**, **Panasonic** and **Panasonic KX-P7305 and KX-P7310**, then click **Network Setup Tool**. Proceed to step 7.
- 3** Insert the printer CD-ROM disk into the CD-ROM drive.

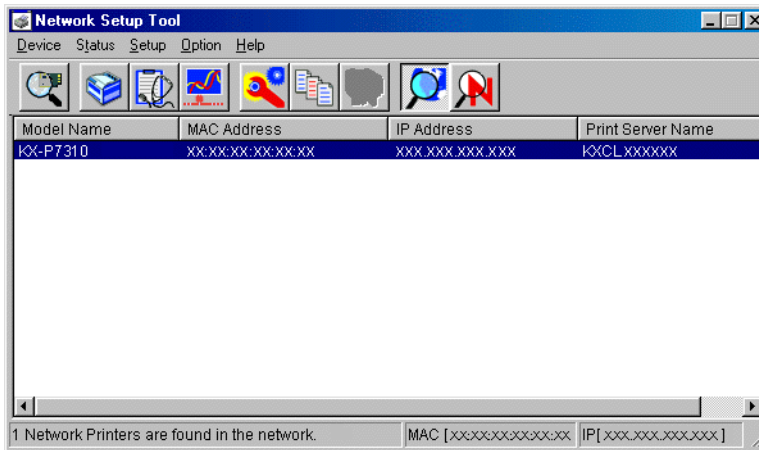
The CD-ROM launches automatically.

NOTE

 - If the CD-ROM does not launch automatically, perform the following steps.
 - (1) Double click **My computer** icon (Windows XP / Windows Server 2003: **Start - My Computer**).
 - (2) Double click the CD-ROM icon.
- 4** (Click language and) click **KX-P7310**.
- 5** Click **Install Network Utilites**.
- 6** Follow the instructions until the screen below is displayed.

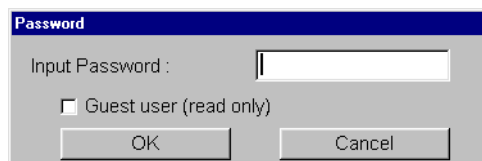


- 7 Click on the **Yes** check button, and then click **[Finish]**.
The list of printers residing on the network is displayed.
 - If you want to search the network for printers again, click the **Device** menu and select **Search**.
- 8 Select the printer you want to set up from the list. Then click the **Setup** menu and select **Network Setup....**

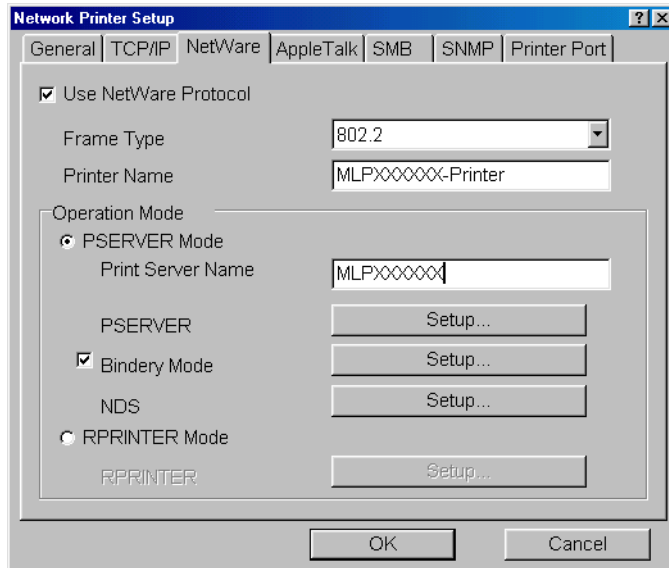


NOTE

- When several printers are listed in the Network Setup Tool window, select the printer using the MAC address. You can obtain the number (hexadecimal six digits) from the label near the network interface connector or by printing a configuration page (press **PRINT/RESET** button more than 2 seconds and less than 5 seconds).
- If a password is set in the printer, you must enter the password and click **[OK]**. If a password is not entered, you can still see the printer's setting by checking on the **Guest user** check box, but you cannot change them. To set a password, refer to "Setting Password with Network Setup Tool" on page 81.



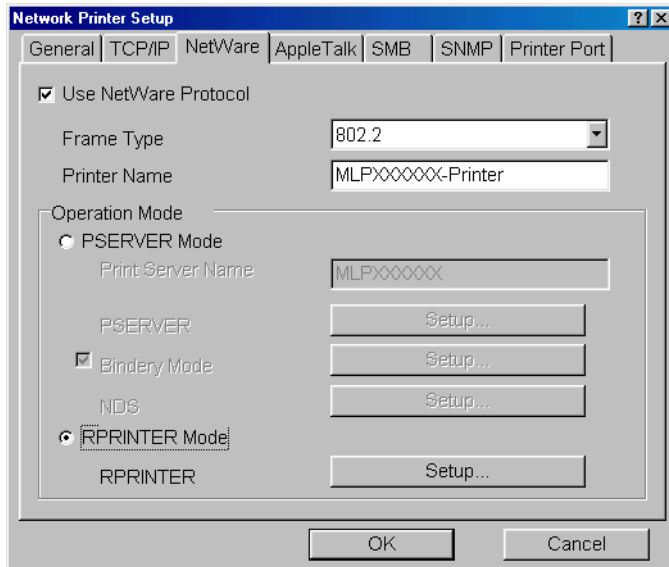
9 Click the **NetWare** tab.



NOTE

- You can change the Print Server Name and Printer Name. After changing, click **[OK]**. Then go back to the step 8.

- 10** Click on the **RPRINTER Mode** check button.

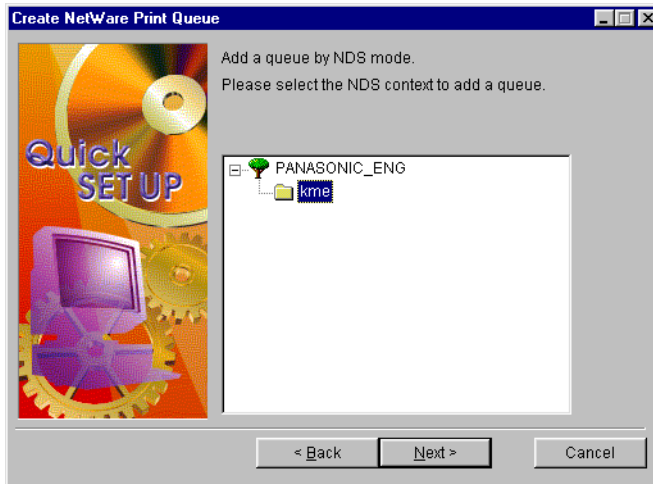


- 11** Click **[OK]**.
- 12** If you change the setting, click **[OK]**, then click **[Yes]**.
The printer is restarted.

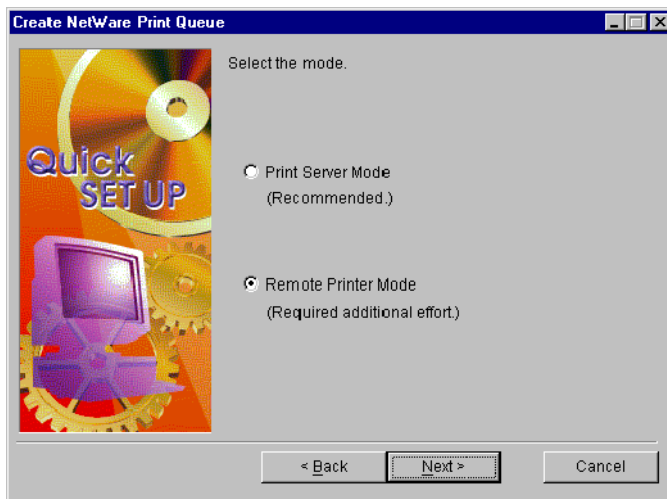
The following are the steps to set up the server.

- 13** Select the printer you want to configure from the list. Click the **Setup** menu and select **Create NetWare Queue**.
- 14** Follow the instructions on the screen.
- When asked to select NDS or Bindery mode, select **NDS Mode** and click **[Next >]**.

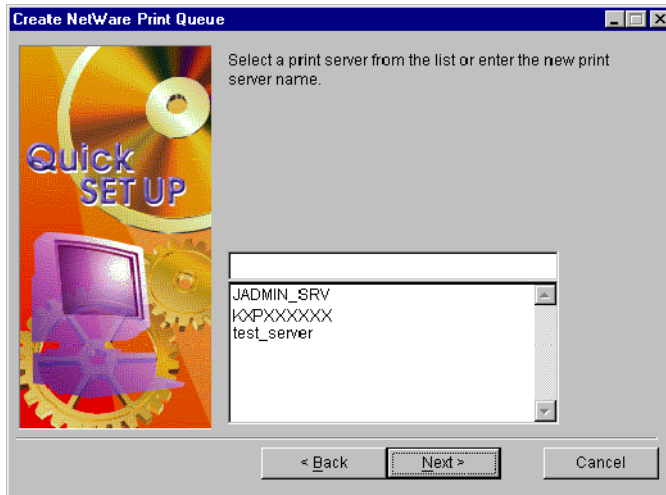
- 15** Expand the Tree and select the context where the Queue will be added, and click [**Next >**].



- 16** Click on the **Remote Printer Mode** check button and click [**Next >**].



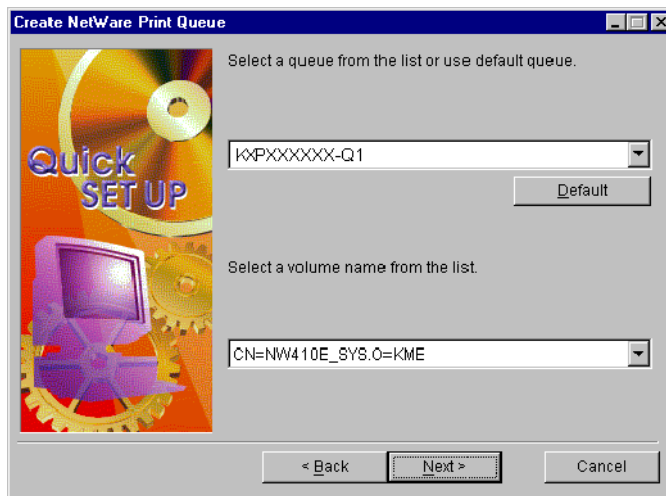
- 17** Select the print server name in the list or enter the print server name you want to use for printing. Click **[Next >]**.



NOTE

- If the print server is on the NetWare server, the printer server can be selected from the list.

- 18** Change the queue name if needed. Click **[Next >]**.



- 19** Follow the instructions on the screen.
- 20** On the NetWare server type **LOAD PSERVER xxxxxxxx**, then press the Enter key. (xxxxxxx : print server name).
- 21** Turn the printer off and on before printing.

In NetWare 3.x

Perform the following steps:

Step 1: Setting up the printer

Step 2: Setting up the Server

Step 3: Setting up the client

There are two printing modes.

[A] Print server (PSEVER) mode

[B] Remote printer (RPRINTER) mode

Before setting up, select a printing mode. For detailed information on these modes, refer to the NetWare manual or Novell web site. You may need to check with your network administrator which to select.

Setting the NetWare server is almost performed on the client. You must log on the server using the supervisor privilege. Novell Client software must be installed in your computer prior to setting up.

Step 1: Setting up the printer

When printing in Print Server mode, refer to procedures 1 to 12 of “[A] Using NDS - PSEVER mode” on page 48 in “In NetWare 4.x / NetWare 5.x / NetWare 6”. However, click on the **Bindery Mode** check box at step 10.

When printing in Remote Print mode, refer to procedures 1 to 12 of “[B] Using NDS - RPRINTER (NPRINTER) mode” on page 53 in “In NetWare 4.x / NetWare 5.x / NetWare 6” .

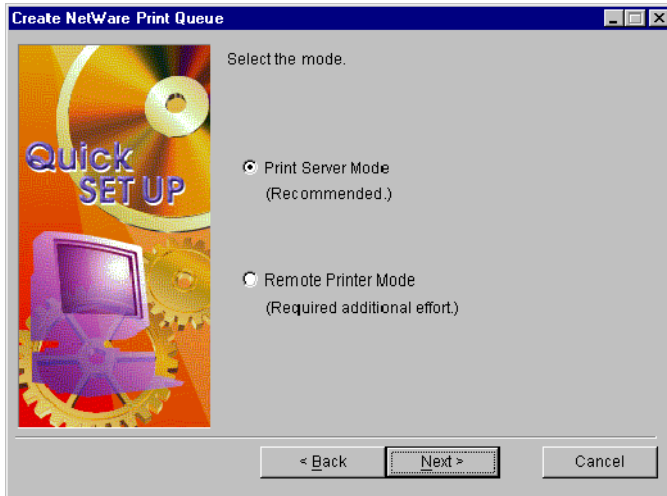
Step 2: Setting up the Server

[A] Using Print Server (PSERVER) mode

- 1 Select the printer you want to configure in the Network Setup Tool window.
- 2 Click the **Setup** menu and select **Create NetWare Queue**.
- 3 Follow the instructions on the screen.
 - When asked to select NDS mode or Bindery mode, select **Bindery Mode** and click **[Next >]**.
- 4 Select a file server from the list and click **[Next >]**.



- 5 Click on the **Print Server Mode** check button and click [**Next >**].



- 6 Change the queue name if needed, then click [**Next >**].



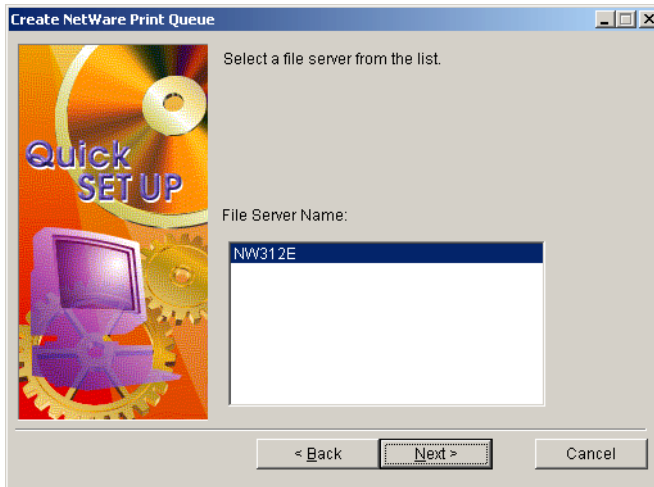
- 7 Follow the instructions on the screen.

NOTE

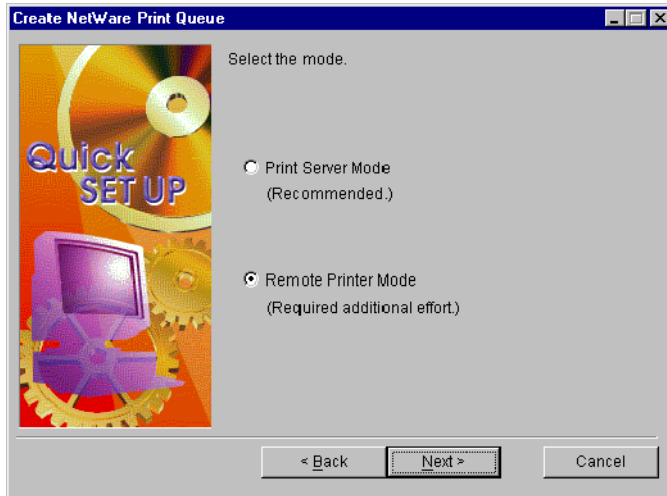
- When the setting is finished, the printer is automatically restarted.

[B] Using the Remote Printer (RPRINTER) mode

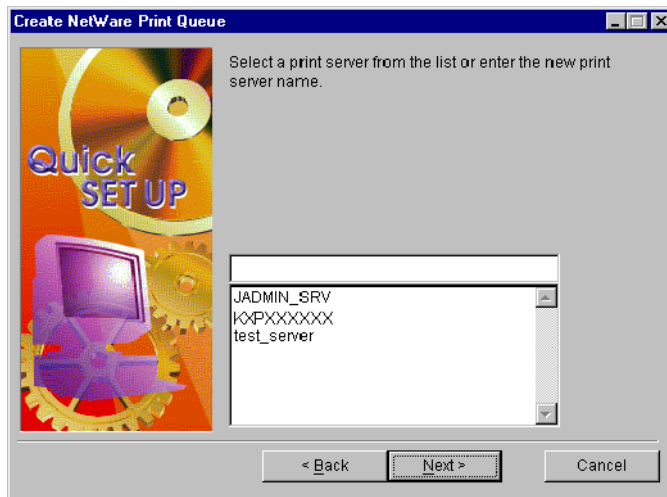
- 1** Select the printer you want to configure in the Network Setup Tool window.
- 2** Click the **Setup** menu and select **Create NetWare Queue**.
- 3** Follow the instructions on the screen.
 - When asked to select NDS or Bindery mode, select **Bindery Mode** and click **[Next >]**.
- 4** Select a file server from the list and click **[Next >]**.



- 5 Click on the **Remote Printer Mode** check button and click **[Next >]**.



- 6 Select the print server name in the list or enter the print server name you want to use for printing. Click **[Next >]**.



NOTE

- If the print server is on the NetWare server, the printer server can be selected from the list.

- 7 Change the queue name if needed. Click [**Next >**].



- 8 Follow the instructions on the screen.
- 9 Type **LOAD PSERVER xxxxxxxx**, then press the Enter key. (xxxxxxx : print server name).
- 10 Turn the printer off and on before printing.

Step 3: Setting up the client

See “[C] Using the printer CD-ROM” on page 28 in “Step 4: Setting up the client computer”.

NOTE

- If using the Novell Client Software in Windows NT 4.0 / Windows 2000 / Windows XP / Windows Server 2003, add the printer using Add Printer.

Setup in UNIX

This chapter explains how to set up printing in various UNIX environments. Supported UNIX variants are as follows:

- Solaris 2.6
- Solaris 2.3x - 2.5x
- HP-UX 9.x and 10.x
- AIX 4.x.x
- BSD UNIX

There are two ways of printing.

- Printing using LPD
- Printing using FTP

Printing using LPD

LPD (Line Printer Daemon) is a network printing protocol and programs associated with printer spooling service installed on TCP/IP systems.

Perform the following steps to set up.

Step 1: Setting up TCP/IP on the printer

Step 2: Adding the printer to UNIX systems

Step 3: Setting up print queues

Step1: Setting up TCP/IP on the printer

Refer to “[Step 2: Setting up TCP/IP on the printer](#)” on page 8.

Step 2: Adding the printer to UNIX systems

Perform the following steps to add the printer as a network printer to a UNIX systems. When editing the hosts file, contact your network administrator.

- 1** Log in as root.
login root
- 2** Edit your /etc/hosts file to add the printer as a network printer to your system.

(Example)

The printer's IP Address is "172.16.xxx.xxx" and the host name is "kxp7310".

```
172.16.xxx.xxx kxp7310 # KX-P7310 Printer
```

- 3** Confirm the connection to the network by using ping command.
ping kxp7310

Step 3: Setting up print queues

Set up a print queue to use the network printer depending on your system environment.

[For Solaris 2.6]

- 1** Create Printer Queue.
 - (1) Log in as root.
login root
 - (2) Add print server name.
Example: adding printer queue name as "kxp7310lp"
lpadmin -p kxp7310lp -m netstandard -o protocol=bsd
-o dest=kxp7310:lp -v /dev/null

The "lp" after ":" is the remote printer queue name.

- (3) Enable printer queue:
usr/sbin/accept kxp7310lp
usr/bin/enable kxp7310lp

2 Print

- Print using "lp" command. For details, refer to the Solaris manual.

```
# lp -d kxp7310p <file name>
```

[For Solaris 2.3x - 2.5x]**1** Create Print Queue.

(1) Log in as root.

```
# login root
```

(2) Stop print scheduler.

```
# /usr/sbin/lpshut
```

(3) Add print server.

Example: Add host name "kxp7310"

```
# /usr/sbin/lpsystem -RO -t bsd kxp7310
```

(4) Set up print queue.

Example: Add print queue name "kxp7310lp"

```
# /usr/sbin/lpadmin -p kxp7310lp -s kxp7310!lp
```

If you use csh, use "\!". "lp" after "!" is the printer queue name.

(5) Start print scheduler.

```
# /usr/bin/sh /etc/init.d/lp start
```

(6) Enable print queue.

```
# /usr/sbin/accept kxp7310lp
```

```
# /usr/bin/enable kxp7310lp
```

2 Print

- Print using "lp" command.

```
# lp -d kxp7310lp <file name>
```

[For HP-UX 9.x and 10.x]**1** Set up remote spooler.

- (1) Log in as root.
login root
- (2) Disable printer spooler.
/usr/lib/lpshut
- (3) Add the following line to the /etc/inetd.conf.
printer stream tcp nowait root /usr/lib/rldpd daemon -i
- (4) Restart inetd.
/etc/inetd -c

2 Create print queue.

- (1) Log in as root.
login root
- (2) Create print queue "kxp7310lp".
Example: Create print queue "kxp7310lp".
/usr/lib/lpadmin -pkxp7310lp -mrmodel -ormkxp7310
-orlp -ocmrcmodel -osmrsmodel -ob3 -v/dev/null
The "lp" after "-orp" is the remote printer queue name.
- (3) Enable print queue.
/usr/lib/accept kxp7310lp
/usr/bin/enable kxp7310lp
- (4) Start print scheduler.
/usr/lib/lpsched

3 Print

- Print using "lp" command.
lp -d kxp7310lp <file name>

[For AIX 4.x.x]

1 Create print queue.

- (1) Log in as root.
login root
- (2) Add print server.
Example: Add hostname "kxp7310".
ruser -a -p kxp7310
- (3) Start remote printer daemon.
startsrc -s lpd
mkitab 'lpd:2:once:startsrc -s lpd'

2 Add print queue with smit command.

- (1) Perform smit. Move to "Add Print Queues".
smit mkrque
- (2) From the list, select "remote" (printer connected to remote host).
- (3) From the list, select "Standard processing from the list".
- (4) Setup the following item at "Add a Standard Remote Print Queue".
For items other than the ones below, change according to your system.
Example: Add print queue "kxp7310lp".
Name of QUEUE to add [kxp7310lp]
HOSTNAME of remote server [kxp7310]
Name of QUEUE on remote server [lp]
TYPE of print spooler on remote server [BSD]
DESCRIPTION of printer on remote server[comments]

The "lp" on "Name of QUEUE to add" is the printer queue name.

3 Print.

- Print using "lp" command.
lp -d kxp7310lp <file name>

[For BSD UNIX]

The following is an example for Sun OS4.1.3. The command and paths may differ depending on the OS version. Please refer to the workstation manual.

1 Create printer queue.

- (1) Log in as root.
login root
- (2) Add an entry for the printer in /etc/printcap file.
Registering printer queue port as "kxp7310lp".

```
kxp7310lp:\
:lp=:\
:rm= kxp7310:\
:rp=lp:\
:sd=/usr/spool/kxp7310lp:\
:lf=/usr/spool/kxp7310lp/kxp7310lp_errs:
```

<Description of each parameter>

lp : device name to open. Not required.

rm : remote printer host name. Enter host name added to /etc/hosts file.

rp : printer name of remote printer. Enter "lp" in this case.

sd : spool directory.

lf : error log file.

For more information, refer to your UNIX manual.

- (3) Create and set up the spool directory and error log file.
mkdir /usr/spool/kxp7310lp
touch /usr/spool/kxp7310lp/kxp7310lp_errs
chown -R daemon /usr/spool/kxp7310lp
chgrp -R daemon /usr/spool/kxp7310lp
- (4) Check lpd function.
pa aux | grep lpd
- (5) Validate created printer queue.
lpc restart kxp7310lp

2 Print

- Print using "lpr" command.
lpr -P kxp7310lp <file name>

Printing using FTP

FTP (File Transfer Protocol) is a protocol for transferring files installed on TCP/IP systems.

Perform the following steps.

- 1** Log on the printer.
ftp PANA (or ftp 172.16.xxx.xxx)
Connected to PANA.
220 KX-P7310 Network Ver xxxx FTP server.
User(PANA:root): root
331 Password required.
Password:
230 User Logged in.
ftp>
- 2** Change the directory to remote print directory using "cd" command.
ftp>cd /lp
250 Command ok.
ftp>
- 3** Change transfer mode.
There are two transfer mode. The "ASCII mode" changes LF code to CR+LF code and the "Binary mode" outputs the file contents as binary data.
Example: Change the transfer mode to Binary mode and display current mode.
ftp>type binary
200 Type set to I.
ftp>type
Using binary mode to transfer files.
ftp>
- 4** Use put command to send print data to the printer.
Example: Transfer print data "test.prn".
ftp>put test.prn
- 5** Log out.
ftp>quit

Using the Printer's Web Server

If an IP Address has been assigned to a printer, you can access the printer's Web Server (Embedded Web Server). It allows monitoring or setting the printer.

To display the printer's Web Server, there are one or two methods.

- **From the Network Setup Tool (Windows only)** (see below)
- **From the Browser** (see page 75)

NOTE

- For Windows, use the Internet Explorer 4.x or later / Netscape Navigator 4.04 or later. For Macintosh, use the Internet Explorer 5.x or later / Netscape 6.x or later. Some versions of the browser may not display the printer's Web Server screen correctly.

Displaying the Printer's Web Server Screen from Network Setup Tool (Windows only)

- 1** Display the **Network Setup Tool (Start - Programs or All Programs - Panasonic - Panasonic KX-P7305 and KX-P7310 - Network Setup Tool)**.
- 2** Click the KX-P7310 printer you want to set up from the list.
- 3** Click the **Setup** menu and select **Setup by HTTP**.
The printer's Web Server screen is displayed.

Displaying the Printer's Web Server Screen from a Browser

- 1 Open the browser (Internet Explorer or Netscape).
- 2 Enter the printer's IP Address in the Address box and press the **Enter** key.

The printer's Web Server screen is displayed.

(Example)

http://172.16.xxx.xxx/

Panasonic

"KX-P7310"
Version:"Ver 2.00.08.00"
MAC ADDRESS:"XXXXXXXXXX"

Printer Status

"Ready"

Server Configuration

- Network Status
- Network Setup
- Restart the Printer
- Network Factory Default

Network Status

TCP/IP	Enable
IP Address	"XXX.XXX.XXX.XXX"
Subnet Mask	"XXX.XXX.XXX.XXX"
Gateway Address	"XXX.XXX.XXX.XXX"

NetWare	Enable
Operation Mode	PSERVER Mode
Frame Type	Ethernet 802.2
File server to be connected	"
Print server to be connected	"

AppleTalk	Enable
Printer Name	"KX-P7310-XXXXXX"
Zone Name	"*"

NetBEUI	Enable
---------	--------

(screen in Windows)

Changing the Printer's Settings

To change the printer's setting,

- 1** Display the Web Server screen (see [page 74, 75](#)).
- 2** Click **Network Setup** in the left pane.
The Enter Network Password window is displayed.
- 3** Type **root** in the **User name** box and click **[OK]**.
 - If the password is already set, the password must be entered in the Password box.
- 4** Click the menu item (TCP/IP, NetWare...) and change the setting.
- 5** Click **[Submit Query]**.
- 6** Click **[OK]**.
- 7** Click **Restart the Printer** in the left pane.
- 8** Click **[Restart]**.

Changing the Password

It is recommended that the password is set so only the network administrator can change the configuration. To set the password, proceed to the following steps.

- 1** Perform step 1 - 3 of [“Changing the Printer's Settings” on page 76](#).
- 2** Click **General** in the right pane.
- 3** Enter the password in the Value box (Max. 7 characters) and click **[Submit Query]**.
- 4** Click **[OK]**.
- 5** Click **Restart the Printer** in the left pane.
- 6** Click **[Restart]**.

NOTE

- Be sure to store the password not to forget.

Using the Web Administrative Tool

Web Administrative Tool enables the ability to manage the device connected to the network. For the installation, see Readme as follows.

- (1) Insert the printer CD-ROM disk in your CD-ROM drive.
- (2) Double click the Readme.txt.
[D (CD-ROM drive letter):\Network\WebTool\English\Readme.txt]
- (3) See the system requirement and installation instruction. (To install the Web Administrative Tool, Web server is required. Refer to the help menu of Windows to install the Web server.)

For the usage of the Web Administrative Tool, see the help menu.

NOTE

- The Web Administrative Tool can be installed on a server computer (Windows NT 4.0, Windows 2000, Windows XP Professional or Windows Server 2003). It cannot be installed on a Macintosh computer. However, the Web Administrative Tool can be used from the following client computer through the server computer.

Client computer:

Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, Windows XP, Windows Server 2003

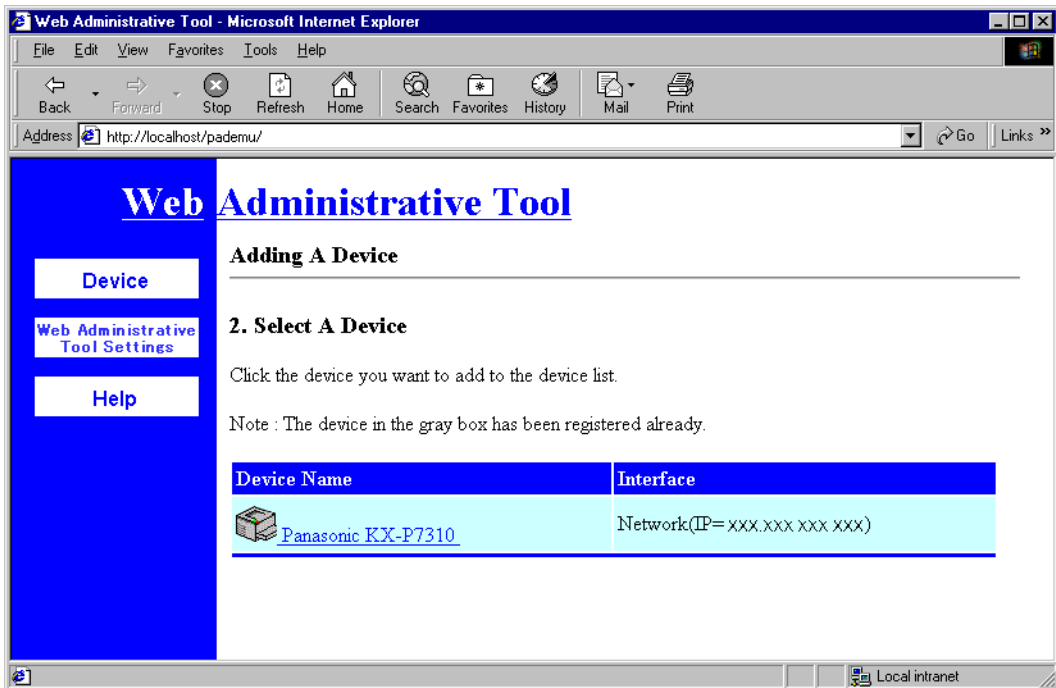
Mac OS 8.5, 8.6, 9.0, 9.1, 9.2 / Mac OS X 10.1, 10.2

- If the Web Administrative Tool does not work correctly after installing it in Windows Server 2003, refer to the troubleshooting on [page 35](#) in “Maintenance and Specifications” and change the IIS security setting.

Displaying the Web Administrative Tool Screen

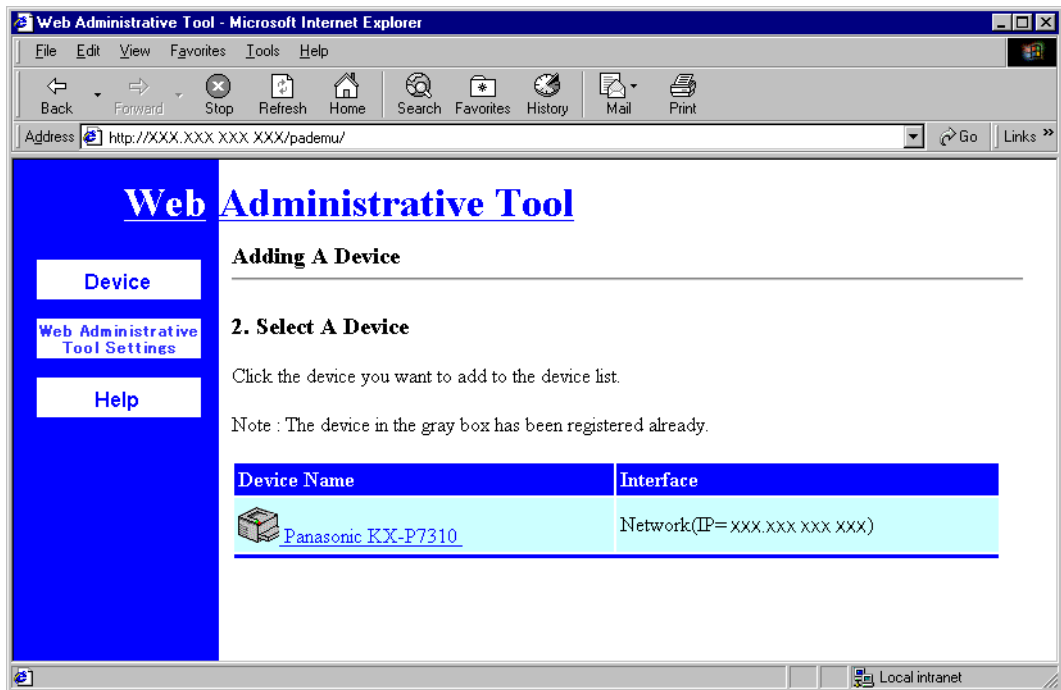
■ On the server computer

- 1 Open the browser (Internet Explorer or Netscape).
- 2 Enter the URL (**http://localhost/pademu/**) in the Address box and press the **Enter** key.
The Web Administrative Tool screen is displayed.
Or
- 1 Click [**Start**], select **Programs** or **All Programs**, **Panasonic** and **Web Administrative Tool**, then click **Web Administrative Tool**.
The Web Administrative Tool screen is displayed.



■ On the client computer

- 1 Open the browser (Internet Explorer or Netscape).
- 2 Enter the URL [**http://(the address of the server)/pademu/**] in the Address box and press the **Enter** key.
The Web Administrative Tool screen is displayed.

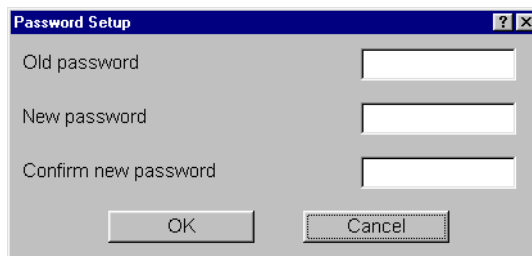


Appendix

Setting Password with Network Setup Tool

Entering the password is required to change the printer's setting, when a password is set in the printer.

- 1** Display the **Network Setup Tool** Window
 - To display the Network Setup Tool window, refer to “[Step 1: Setting up TCP/IP on the computer](#)” on page 8 for Windows or “[Step 2: Setting up TCP/IP on the printer](#)” on page 43 for Macintosh.
- 2** Click the printer to set the password.
- 3** Click **Setup** menu and click **Network Setup....**
 - If a password is already set in the printer, you must enter the password and click [OK].
- 4** Click **General** tab (Windows) or **General** icon (Mac) and click [**Change root password...**].
- 5** Enter the same password in the **New password** box and **Confirm new password** box.
 - If a password is already set, the current password must be entered in the **Old password** box.



(Screen in Windows)

- 6** Click [OK].
- 7** Click [OK].

8 Click **[OK]** to send the setting to the printer.

9 Windows:

Click **[Yes]** to restart the printer.

Or

Mac:

Click **[OK]**, then click **Setup** menu, click **Restart the printer** and click **[OK]**.

NOTE

- The printer's password of the printer's Web Server is same as that of the Network Setup Tool.

Printing a Configuration Page

- 1** Press **PRINT/RESET** button on the printer panel **more than 2 seconds and less than 5 seconds**.

Resetting the Printer Settings to Factory Default

It enables to reset the printer's network settings to the factory default settings.

- 1** Display the **Network Setup Tool**.
 - To display the Network Setup Tool window, refer to “[B] Using the Network Setup Tool” on page 9 for Windows or “[B] Using the Network Setup Tool (Mac OS 8.5 - Mac OS 9.2)” on page 44 for Macintosh.
- 2** Click the printer you want to set up in the list.
- 3** Click the **Setup** menu, then click **Network Factory Default**.
- 4** Click **[Yes]**.

The Password window is displayed.
- 5** Enter the password and click **[OK]**.
- 6** Click **[Yes]** to restart the printer.

Troubleshooting

This section explains how to resolve the common problems you may have with the KX-P7310. If KX-P7310 does not operate properly or you are unable to set up with Network Setup Tool, we recommend that you print the diagnostic/configuration pages first.

- **How to Diagnose Problems** (see below)
- **Trouble in Windows Environment (TCP/IP)** (see page 85)
- **Trouble in Windows Environment (NetBEUI)** (see page 85)
- **Trouble in NetWare Environment** (see page 86)
- **Trouble in Macintosh Environment** (see page 87)

■ How to Diagnose Problems

Use the following list to determine the cause of printing problems:

- 1** Verify that the printer is working properly.
 - Is the printer working? First check that the printer can generate a diagnostic/configuration page. See [“Printing a Configuration Page” on page 82](#).
 - Is the printer online? Verify that the printer is online (ready) or nothing will print.
 - Does a printer error occur?
- 2** Check the ERROR LED on the printer panel is not lit or not blinked.
- 3** Check the configuration page to see what protocols are enabled and active.
 - See the appropriate chapter to confirm that you have installed and configured your network protocol correctly for the printer.
- 4** If you added any new software applications, make sure that the program is compatible and installed correctly on the network. See your network protocol documentation to confirm.

■ Trouble in Windows Environment (TCP/IP)

Unable to search KX-P7310 printer using Network Setup Tool.

- Check that the printer is connected to the network correctly.
- In Option of the menu bar in Network Setup Tool, make sure **Use TCP/IP Protocol** is selected.
- Initialize the configuration and set up KX-P7310 again.
- Check the printer is in the same segment with the computer in the network.

Unable to print.

- Check that the printer is connected to the network correctly.
- Try to ping the printer.
- Check whether the printer port name is "lp" if you are using LPR.
- Check the **Use HP JetAdmin** check box is checked of the **General** tab in the **Network Printer Setup** window if performing the Standard TCP/IP Port printing in Windows 2000, Windows XP or Windows Server 2003.

■ Trouble in Windows Environment (NetBEUI)

Unable to find "MLP-Printer" in the Workgroup or "Entire Network".

- Check that the KX-P7310 printer is connected to the network correctly.
- Check network configuration in Windows.
- It may take several minutes to be found on the network.
- Check NetBEUI is installed in Windows 2000.

■ Trouble in NetWare Environment

Unable to search KX-P7310 using Network Setup Tool.

- Check that the printer is connected to the network correctly.
- In the Option menu bar in Network Setup Tool, make sure **Use NetWare Protocol** is selected.
- Initialize the configuration and set up KX-P7310 again.

Unable to connect to NetWare Server in Remote Printer mode.

- Check the frame type is set correctly.
- KX-P7310 can switch between PSERVER and RPRINTER modes automatically, but it may take extra time depending on the environment.
- Ensure the Print Server is loaded correctly on NetWare server.
- Check the correct print server name is assigned to the KX-P7310. If the print server name is the same as the KX-P7310, then make sure it is the same as print server name.
- If there are more than one KX-P7310 on the network, ensure the assigned port name is unique.

Unable to connect to NetWare Server in Print Server mode.

- Check the frame type is set correctly.
- KX-P7310 can switch to PSERVER and RPRINTER modes automatically, but it may take extra time depending on the environment.
- If file server is defined to the KX-P7310, check the file server name is correct.
- Ensure the printer port name is correct, then make sure the same port name is assigned to the KX-P7310 and NetWare server. If there are more than one KX-P7310 on the network, ensure the assigned port name is unique.
- Check the same NetWare login password is set to the KX-P7310 and the file server.
- Check the machine name and print server name are the same.

Unable to Print.

- Check that the KX-P7310 is connected to the network correctly.

■ Trouble in Macintosh Environment

Unable to detect KX-P7310.

- Check that the KX-P7310 is connected to the network correctly.
- If the KX-P7310 is on the assigned zone, make sure the zone name is selected from "Chooser" .
- Make sure the correct printer driver is loaded.
- Ensure that AppleTalk is checked and is available from the Chooser.
- Check in the AppleTalk control panel that the correct environment being used.

NOTE

- Print out a Configuration page to ensure the AppleTalk protocol is ENABLED.
- Print out the Configuration page to ensure that an AppleTalk Printer name is assigned.

Shows "Not enough Memory" and unable to print.

- Application memory may not be enough. Click the application icon, select Information from file menu, and increase memory size.
- Close any other running applications.
- Increase the available space of the hard disk drive of your computer, by defragging.

■ Troubleshooting when installing the printer software

Trouble	Possible Cause	Corrective Action
Printer software cannot be installed in a computer.	You do not log on the computer as an Administrator in Windows NT 4.0, Windows 2000, Windows XP or Windows Server 2003.	Log on the computer as an Administrator.
A document is not printed through the server computer.	You have no authority to print.	Contact the administrator to register you.
	You are not registered in the server.	
The administrator's password is required when restarting the computer.	You cannot install the printer software.	Install the printer software as an Administrator.
The printer CD-ROM disk may be required when modifying or repairing the installed printer software after installing the printer software with the shared folder of the server computer.	The server computer is turned off.	Turn on the server computer to share the folder for the installation program.
	The server computer is disconnected from the network.	Connect the server computer to the network.
	Network problems occur.	Consult with the network administrator.

Configuration Parameters

- **General** (see below)
- **TCP/IP** (see page 90)
- **NetWare** (see page 91)
- **AppleTalk** (see page 92)
- **SMB** (see page 92)
- **SNMP** (see page 93)
- **Printer Port** (see page 94)

■ General

Name	Factory Default	Description
Change root password	NULL	Password for Administrator. It is used for authentication when entering Network Setup Tool.
Use HP JetAdmin	ENABLE	Enables or disables to use HP's utility JetAdmin/Web JetAdmin.

■ TCP/IP

Name	Factory Default	Description
Use TCP/IP Protocol	ENABLE	Enables or disables TCP/IP protocol.
Use DHCP/BOOTP	ENABLE	Enables or disables DHCP/BOOTP. When enabled, KX-P7310 gets an IP Address from the DHCP/BOOTP server while booting. To use this function DHCP/BOOTP server must exist on the network.
Use RARP	ENABLE	Enables or disables RARP. RARP is a protocol which obtains IP Address from RARP server. When using this function, a RARP server must exist on the same network.
IP Address	0.0.0.0	IP Address for the network in which the KX-P7310 is installed.
Subnet Mask	0.0.0.0	Subnet mask for the network in which the KX-P7310 is installed.
Default Gateway	0.0.0.0	IP Address of the default gateway through which systems on other networks can be reached.
WINS Server - Primary (Preferred) WINS Server	0.0.0.0	Sets the WINS server (primary) address. The Computer Name of the NetBEUI/NetBIOS is used for NETBIOS name.
WINS Server - Secondary (Alternate) WINS Server	0.0.0.0	Sets the WINS server (secondary) address. The Computer Name of the NetBEUI/NetBIOS is used for NETBIOS.
WINS Server - Scope ID	NULL	Sets Scope ID.
Use IP Filtering	DISABLE	Enables or disables IP Filtering.
Filter Mode	ACCEPT	Sets the mode of the IP Filtering: DENY or ACCEPT.
Filter1 / Filter2 / Filter3 / Filter4	0.0.0.0	Sets the range of IP addresses for IP Filtering.
Use IPv6 Protocol	DISABLE	Enables or disables IPv6 protocol.
Use FTP/LPD Banner	DISABLE	Prints a banner page when using LPR printing.

■ NetWare

Name	Factory Default	Description
Use NetWare Protocol	ENABLE	Enables or disables NetWare printing.
Frame Type	802.2	Sets default Frame type used by KX-P7310. If KX-P7310 does not work with the frame type, it will be automatically changed to different type.
Printer Name	MLPxxxxxx-Printer	Sets printer name registered to the NetWare server. This name must be same as the printer name registered to the NetWare server.
Operation Mode	PSERVER	Sets operation mode (PSERVER or RPRINTER). If KX-P7310 does not work with the current operation mode, it will be automatically changed to different mode.
Print Server Name	MLPxxxxxx	Sets a print server name for PSERVER mode.
Password	NULL	Sets a password to log on the file server.
Job Polling Time	4 seconds	Sets the interval to log on the file server.
Bindery Mode	ENABLE	Enables or disables Bindery mode.
File Server Name	NULL	You may set the name of the file server (up to 8 servers).
NDS Tree	NULL	Sets the NDS tree. Normally, KX-P7310 will automatically detect the tree name. However, when there are several trees within the network, you must set the name.
NDS Context	NULL	Sets the context used by NDS in the print server name.
Print Server Name	NULL	You may set the print server name (up to 8 servers) to which the KX-P7310 is connected.
Time Out	10 seconds	A time for KX-P7310 to recognize the end of a job in remote printer mode.

■ AppleTalk

Name	Factory Default	Description
Use AppleTalk Protocol	ENABLE	Enables or disables AppleTalk protocol for KX-P7310.
Printer Name	KX-P7310-xxxxxx	Sets the AppleTalk printer name. The name set here can be seen from Chooser.
Zone Name	*	Sets zone name to which KX-P7310 belongs. If blank, KX-P7310 will automatically belong to the zone name where the AppleTalk router is set.

■ SMB

Name	Factory Default	Description
Use NetBEUI Protocol	ENABLE	Enables or disables NetBEUI protocol.
Use NetBIOS over TCP/IP	ENABLE	Enables or disables NetBIOS protocol.
Computer Name	MLPxxxxxx	Sets Computer name. This name is shown as the computer in Windows Explorer.
Workgroup	MLP-Printer	Sets the workgroup the KX-P7310 belongs to.
Comment	NULL	This comment is shown as the computer in Windows Explorer.
Activate Master Browse Function	ENABLE	Enables or disables master browse function.

■ SNMP

Name	Factory Default	Description
Authentic Community	*****	Sets SNMP authentic community name. This community name is authenticated when receiving SNMP Set Request.
Use Authentic Trap	DISABLE	Enables or disables authentic TRAP.
TRAP Community	public	Enters TRAP community name. This name will be used when the printer executes a TRAP.
TRAP Address	0.0.0.0	Enters the TRAP address. The TRAP address is disabled if the IP Address is set 0.0.0.0.
SysContact	NULL	Enters SysContact for MB-II object. Normally enter the administrator's mail address.
SysName	NULL	Enters SysName for MB-II object. Normally enter the host name or domain name.
SysLocation	NULL	Enters SysLocation for MB-II object. Normally enter where the printer is located.

■ Printer Port

Name	Factory Default	Description
Ip Port		
BOJ String (MJL String)	NULL	Sets the MJL String that will be sent before sending a print job to the direct output port (lp).
EOJ String (MJL String)	NULL	Sets the MJL String that will be sent at the end of a print job to the direct output port (lp).
euc/sjis Port		
BOJ String	NULL	Sets the string sent before sending the printing job to the output port via Kanji filter (sjis, euc).
EOJ String	\f	Sets the string that will be sent at the end of the printing job to the output port via Kanji filter (sjis, euc).
Printer Emulation	ASCII	Sets printer emulation (PDL). Changes to appropriate code when printing via Kanji filter (sjis, euc).
Tab Size	8 char	Sets the number of spaces that correspond to 1 tab. All tab codes will be converted to the spaces according to the number set here. This feature will not be available when this is set to "0" or when the job is directly sent to the printer.
Page Width	0 char	Sets the number of characters for the auto line feed feature of the Kanji filter. The auto line feed feature is not available when this is set to "0".
Page Length	0 line	Sets the number of lines for auto page feed feature of the Kanji filter between the number 0-255. The auto page feed feature is not available when this is set to "0".