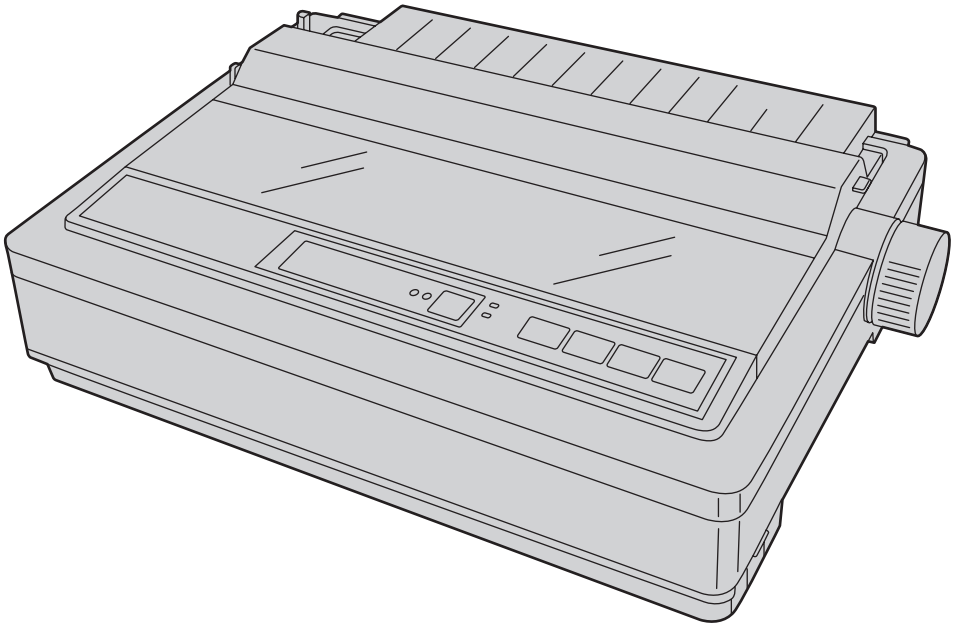
Panasonic

Operating Instructions

Impact Dot Matrix Printer

Model No. KX-P1121E



Please carefully read this manual, and keep this documentation in a safe place for future reference.

Introduction

Thank you for purchasing the Panasonic KX-P1121E Impact Dot Matrix Printer.

This printer is a versatile, high quality 24-pin dot matrix printer which is designed to meet the needs of your office.
This printer has been factory set to operate with the most popular software packages. Your application software should control the printer's functions. In most cases, there will be no need to change the factory settings.
For optimum performance and safety, please read these instructions carefully.

Feature Highlights

Printer Emulation:	Epson® LQ-850 and IBM® Proprinter® X24E
Font:	3 Draft (Pica, Elite, Micron)
	3 LQ (Courier, Bold PS, Prestige)
Printing speed:	Draft—192 characters per second (12 cpi) LQ—64 characters per second (12 cpi)
Paper Feeding:	Friction and Tractor
Tear Off:	Advances fanfold paper's perforation to tear position
Paper Parking:	Allows to use single sheets/envelopes without removing/wasting fanfold paper
Interface:	USB 2.0 and parallel

About the documentation

The printer's documentation consists of 2 manuals.

Operating Instructions (this manual)	The Operating Instructions explain part names, installation, operations, maintenance and specifications of the unit.
Installation Manual (printed documentation)	The Installation Manual explains installation procedures.

Abbreviations

Windows® refers to the Microsoft® Windows® operating system.
Windows® 2000 refers to the Microsoft® Windows® 2000 operating system.
Windows® XP refers to the Microsoft® Windows® XP operating system.
Windows Vista® refers to the Microsoft® Windows Vista® operating system.
Windows® 7 refers to the Microsoft® Windows® 7 operating system.

Trademarks

- Microsoft, Windows, Windows Vista are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- IBM, AT and Proprinter are trademarks of International Business Machines Corporation in the United States, other countries, or both.
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- All other trademarks identified herein are the property of their respective owners.

International ENERGY STAR Program

As an ENERGY STAR® Partner, Panasonic has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

Federal Communications Commission Requirements (For United States only)

Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

The user may find the booklet "Something About Interference" available from FCC local regional offices helpful.

FCC Warning: To assure continued FCC emission limit compliance, the user must use the recommended shielded interfacing cable when connecting to a host computer. Also, any unauthorized changes or modifications to this equipment would void the user's authority to operate this device.

FCC Declaration of Conformity

Trade Name:	Panasonic
Model Number:	KX-P1121E
Responsible Party:	Panasonic Corporation of North America One Panasonic Way Secaucus, NJ 07094 U.S.A.
Telephone No.:	1-800-726-2797

This device complies with Part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Technical Support Calls (For United States only)

If you have read this manual and tried the troubleshooting procedures and you are still having difficulty, please contact the reseller from which the unit was purchased. You may also call the end user technical support telephone number which is operational during East Coast business hours (9:00 AM to 7:00 PM).
The end user technical support number is 1-800-726-2797.

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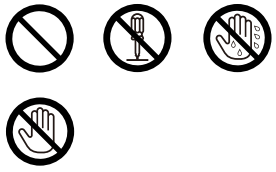
For Your Safety

To prevent severe injury and loss of life, read this section carefully before using the unit to ensure proper and safe operation of your unit.

- This section explains the graphic symbols used in this manual.

WARNING	Denotes a potential hazard that could result in serious injury or death.
CAUTION	Denotes hazards that could result in minor injury or damage to the unit.

	This symbol is used to alert operators to a specific operating procedure that must be performed carefully.
	These symbols are used to alert operators to a specific operating procedure that must not be performed.
	These symbols are used to alert operators to a specific operating procedure that must be emphasized in order to operate the unit safely.

For Users

WARNING

Power and Ground Connection

The power source voltage of this unit is listed on the nameplate.
Only plug the unit into an AC outlet with the proper voltage.
If you use a cord with an unspecified current rating, the unit or plug may emit smoke or become hot to the touch.

When you operate this product, the power outlet should be near the product and easily accessible.

To ensure safe operation the power cord supplied must be inserted into a standard three-prong AC outlet which is effectively grounded (earthed) through the normal wiring.

The fact that the equipment operates satisfactorily does not imply that the power point is grounded (earthed) and that the installation is completely safe. For your safety, if in any doubt about the effective grounding (earthing) of the power point, consult a qualified electrician.

If the plug cannot be inserted into the AC outlet, contact a licensed electrician to replace the AC outlet with a properly grounded (earthed) one.

Do not defeat the grounding (earthing) plug (ex. do not use a conversion plug).

Plug the power cord firmly into an AC outlet. Otherwise, it can cause fire or electric shock.

Do not pull, bend, rest objects on, or chafe the power cord and plug. Damage to the power cord or plug can cause fire or electric shock.

Do not attempt to repair the power cord, or plug. If the power cord or plug is damaged or frayed, contact an authorized service representative for a replacement.

Ensure that the plug connection is free of dust. In a damp environment, a contaminated connector can draw a significant amount of current that can generate heat, and eventually cause fire if left unattended over an extended period of time.

Never touch the plug with wet hands. Danger of electric shock exists.

Stop operation immediately if the unit emits smoke, excessive heat, abnormal smell or unusual noise. These conditions can cause fire or electric shock. Immediately turn the unit off, and unplug the power cord, and contact your dealer for service.

When disconnecting the unit, grasp the plug instead of the cord. Pulling on a cord forcibly can damage it, and cause fire or electric shock.

Operating Safeguards

If metal fragments or water gets into the unit, turn the unit off and unplug the unit immediately. Contact your dealer for service. Operating the contaminated unit can cause fire or electric shock.

Do not open covers, and do not attempt to repair the unit yourself. Contact your dealer for service.

Do not alter the unit or modify any parts.
Alteration or modification can cause fire or electric shock.

During thunderstorms, do not touch the unit and plug. It may cause an electric shock.

⚠ CAUTION

Power

When the unit is not used over an extended period of time, switch it off, and unplug it. If an unused unit is left connected to a power source for a long period, degraded insulation may cause electric shock, current leakage, or fire.

Installation and Relocation

Do not position the unit in a location where it is unstable.

To prevent fire or shock hazard, do not expose this unit to rain or any type of moisture.

Do not place the unit in a hot humid or dusty environment.
Prolonged exposure to these adverse conditions may cause fire or electric shock.

Do not block the air vents. Doing so can cause heat to build up, and may result in fire.

When moving the unit, be sure to unplug the power cord from the AC outlet. If the unit is moved with the power cord attached, it can cause damage to the cord which could result in fire or electric shock.

Operating Safeguards

If the unit falls down or gets damaged, turn the unit off, and unplug the power cord. Otherwise, it may cause fire or electric shock.

Do not place any liquids or heavy items on the unit.
Accidental spillage of liquid into the unit may cause severe damage. If this occurs, turn the unit off, unplug the power cord, and contact your dealer for service.

When the smoked plastic cover is open, moving parts are exposed. Take care to avoid contact with the moving parts, including fingers, hair, jewelry, neckties, etc. Personal injury or damage to the unit could result.

Do not touch the printhead, as it becomes hot, even when not printing. Otherwise, it may cause burns.

Safety Information (For United Kingdom only)

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5 amp fuse is fitted in this plug. Should the fuse need to be replaced, please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS1362. Check for the ASTA mark or the BSI mark on the body of the fuse. If the plug contains a removable fuse cover, you must ensure that it is refitted when the fuse is replaced. If you lose the fuse cover, the plug must not be used until a replacement cover is obtained. A replacement fuse cover can be purchased from your local Panasonic Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR PREMISES, THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.
If a new plug is to be fitted, please observe the wiring code as shown below. If in any doubt, please consult a qualified electrician.

WARNING

This appliance must be earthed.

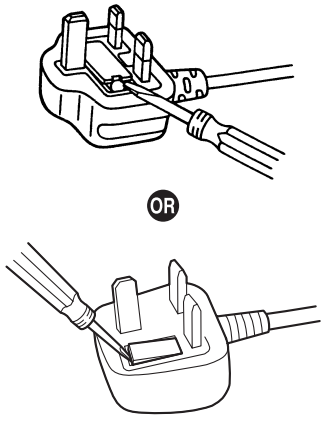
IMPORTANT

The wires in this mains lead are coloured as follows:

Green-and Yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colours of the wire in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.
The wire that is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked with the letter E or by the Earth symbol ⏚ or coloured GREEN or GREEN-AND-YELLOW.
The wire that is coloured BLUE must be connected to the terminal in the plug that is marked with the letter N or coloured BLACK.
The wire that is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

How to replace the fuse:
Open the fuse compartment with a screwdriver and replace the fuse and fuse cover.



Precautions

Installation

- Do not place the unit in direct sunlight and near hot equipment.
- The unit should not be exposed to extremely high or low temperatures [temperature range: 5 °C to 40 °C (41 °F to 104 °F)].
- The unit should not be exposed to extremely high or low humidity (humidity range: 20 % to 80 % RH).
- Avoid condensation resulting from rapid changes in temperature.
- Do not place the unit in areas with poor ventilation.
- Do not place the unit in areas with high concentrations of dust or chemical fumes, solvents, etc.
- Do not place books, paper or other items on top of the printer.

Operation

- Do not operate the printer without installing paper and a ribbon cassette.
- Do not obstruct printhead movement while the printer is operating.
- Protect the unit from static electricity.

CD-ROM

- Do not write or stick paper on the front and/or back of CD-ROM.
- Do not touch the data side of the CD-ROM. When handling the CD-ROM, be careful not to leave fingerprints or otherwise damage the CD-ROM.
- Do not leave the CD-ROM where it is directly exposed to sunlight or near a heater for extended periods.
- Do not throw or bend the CD-ROM.

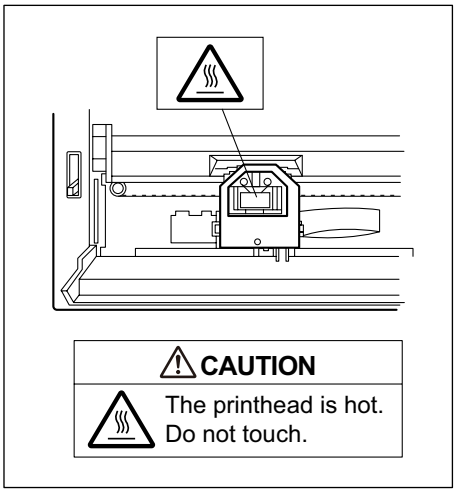
Ink Ribbon

- Do not store the ink ribbon in direct sunlight or in a place with a temperature over 40 °C (104 °F).
- For details about the ink ribbon, please refer to the Material Safety Data Sheet (MSDS).
  Please ask your Panasonic sales company about obtaining the Material Safety Data Sheet.

Others

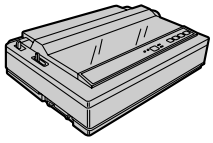
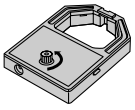
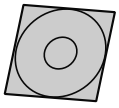
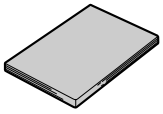
- Do not use thinner, benzine, or cleaners containing abrasives or surfactants, for cleaning the outside of printer.
- Plug the power cord into an outlet form which you can easily unplug it.

Caution Labels

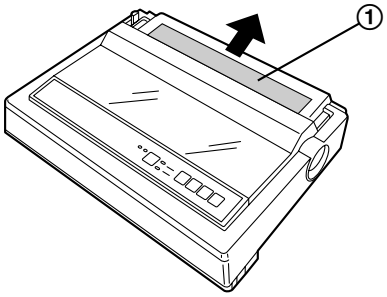


Unpacking

Having unpacked the printer, make sure none of the contents shown below is missing or damaged.
Report damage or shortages to the store from which the unit was purchased.

	**Printer (KX-P1121E)**
	**Ribbon Cassette (KX-P145)**
	Platen Knob
	**CD-ROM**
	**Installation Manual**

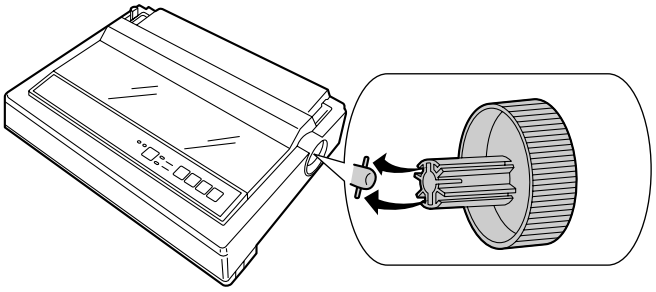
Removing the Protective Paper



① Protective paper

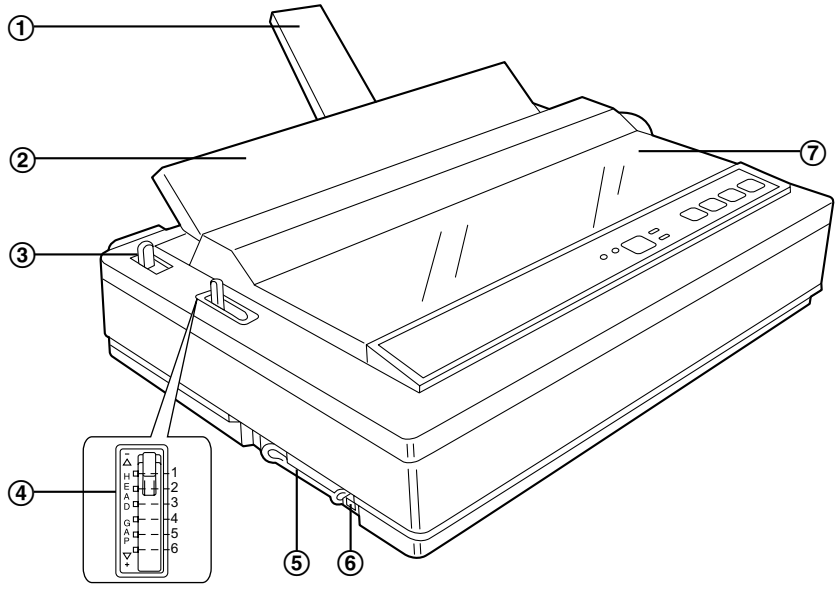
Installing the Platen Knob

Insert the platen knob into the hole on the right side of the printer and rotate it slowly until it slips onto the shaft. Push the platen knob onto the platen shaft to secure.



Parts of the Printer

Front View



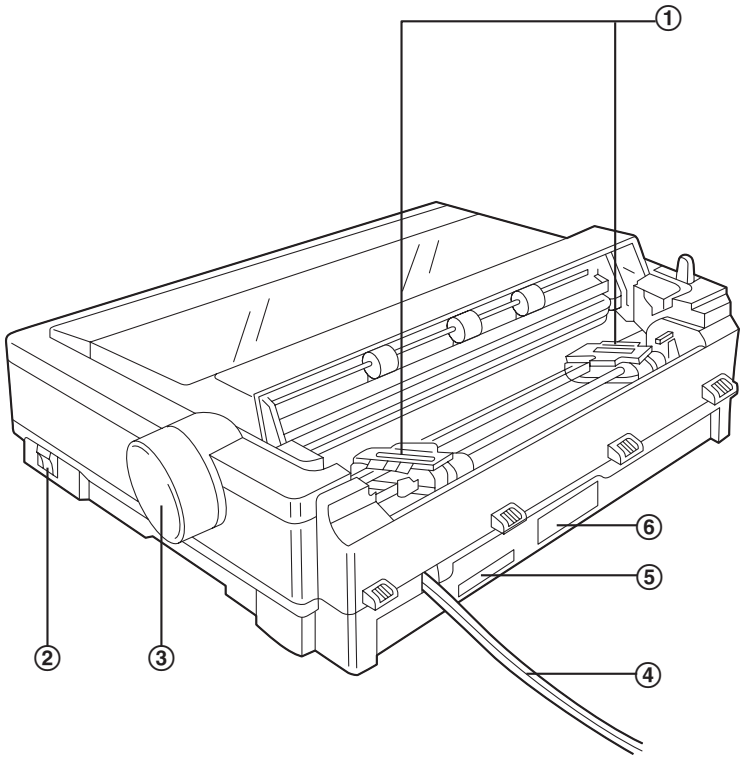
① **Paper support (Page 23)**
② **Top cover**
③ **Paper feed selector**
- "" (Friction) Single sheets and envelopes
- "" (Tractor) Fanfold paper

④ **Head gap lever**
Adjusts the gap between the platen and the printhead.
The lever moves in increments of 0.07 mm (0.0028 in.).

Position	Used for
1 or 2	Thinner sheets
3, 4, 5 and 6	Thick or multiple sheets, envelopes

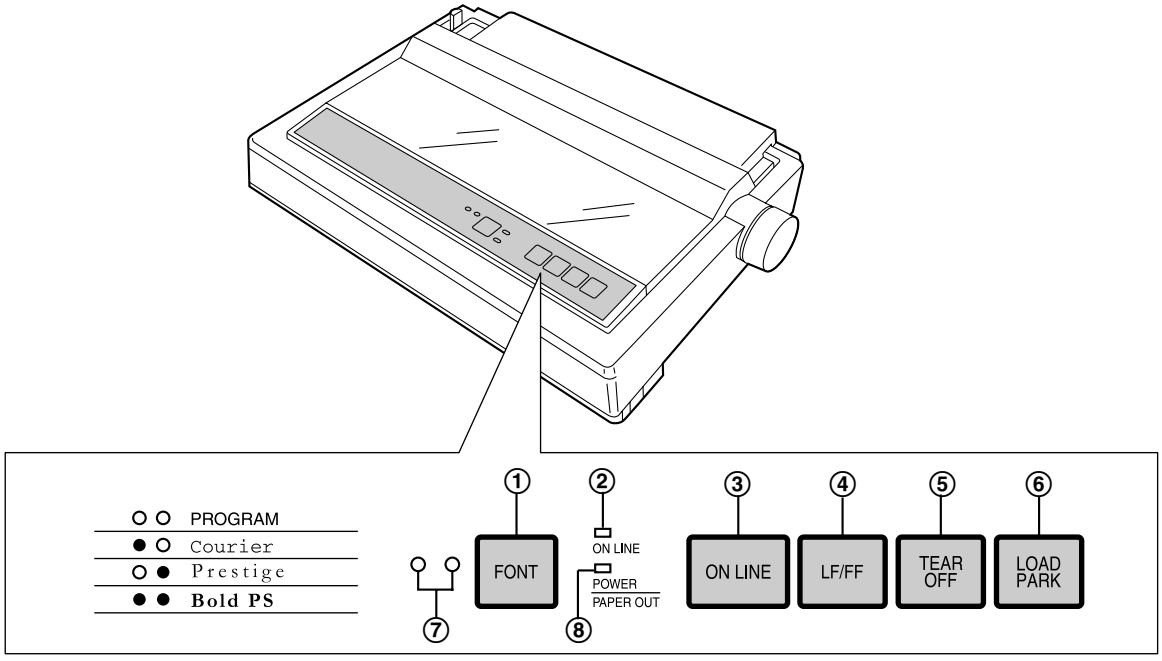
⑤ **Parallel interface connector (Page 17)**
⑥ **USB connector (Page 17)**
⑦ **Smoked plastic cover**

Rear View



① **Tractors**
② **Power switch (Page 17)**
③ **Platen knob (Page 12)**
④ **Power cord (Page 17)**
⑤ **Serial No. Label**
⑥ **Nameplate**

Control Panel



① FONT switch
Pressing this switch will select the character fonts. (Page 31)

② ON LINE indicator
This indicator is lit when the printer is in the ON LINE mode, and is out in the OFF LINE mode.

③ ON LINE switch
This switch opens and closes the communication line with the computer.

④ LF/FF switch
Pressing this switch advances the paper one line at a time. Holding this switch advances the paper to the first print line of the next page. (Page 31)

⑤ TEAR OFF switch
Pressing this switch will advance or reverse the paper for tearing off. (Page 31)

⑥ LOAD/PARK switch
Pressing this switch will load/park the paper. (Page 31)

⑦ FONT indicators
These indicators show the Font being selected. (Page 31)

⑧ POWER/PAPER OUT indicator
This indicator is lit when the power is on and paper is installed. It blinks when no paper is installed.

Installing the Software

System Requirements

Computer	IBM PC/AT® or compatible machine with a CD-ROM drive
Operating System	Windows 2000 / Windows XP / Windows Vista / Windows 7
Interface	USB 2.0 Full speed, Centronics parallel (IEEE1284 standard)

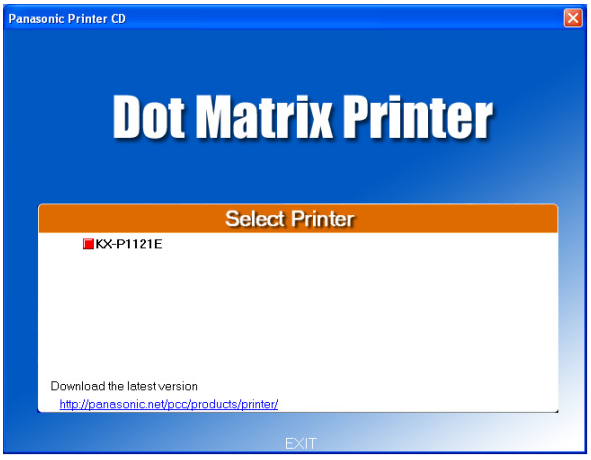
Software Installation

The software on the enclosed CD-ROM can be installed on your computer.

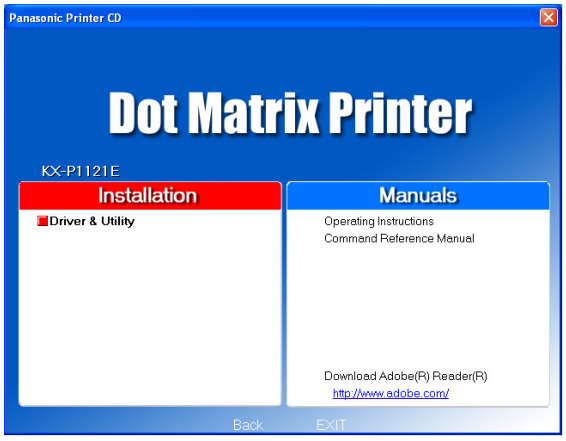
Notice

- Make sure to install the software before connecting your computer to the printer.

1. Turn on your computer and start Windows operating system.
   - Log into an account with Administrator privileges.
2. Insert the included CD-ROM into the CD-ROM drive.
   - The setup screen will be displayed.
   - If the setup screen does not appear, select your CD-ROM drive in Explorer and double-click [CDRun.exe].
   - In Windows Vista and Windows 7, if the Autoplay dialog box is displayed, click [Run CDRun.exe].
3. Select KX-P1121E.



4. Select [Driver & Utility] from the "Installation" list on the left side of the screen.



5. Follow the instructions on the screen.
   - In Windows Vista and Windows 7, if a window appears with the message "Windows can't verify the publisher of this driver software", continue with the installation by selecting "Install this driver software anyway".
6. Connect the computer to the printer with a USB cable or a parallel cable. (Page 17)
   Once Plug and Play detects the printer and starts, follow the operating system's on-screen instructions.

Connecting to a Computer

Before you connect the printer for the first time, install the USB and Printer driver on to your computer. For more information see "Installing the Software (Page 16)".

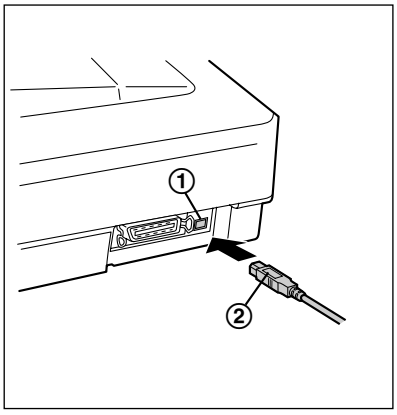
Note

- If you do not have a USB or a parallel interface cable, you will need to purchase one from your local computer store or dealer.

1. **Turn off the power switch of both the printer and the computer.**
2. **When connecting with a USB cable: Attach the USB cable (②) from your computer to the USB connector (①).**

   Notice

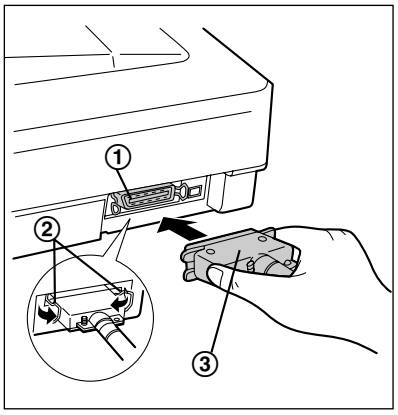
   - Use a shielded USB cable that is certified with a logo by USB-IF.



When connecting with a parallel interface cable: Attach the parallel interface cable (③) from your computer to the parallel interface connector (①) and secure the printer clips (②).

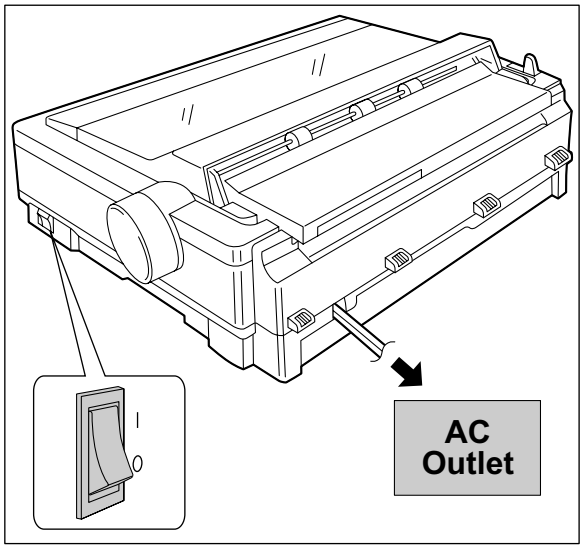
Notice

- Use a shielded parallel cable 1.95 m (6 ft. 5 in.) or less in length. An IEEE 1284-compatible parallel cable is recommended.



Power Supply

1. **Connect the power cord to a grounded AC outlet.**
   - Plug the power cord into an outlet of the proper rating listed on the nameplate located in the rear of the printer.
   - The power switch is located on the right side of the printer toward the front.
     When the power is supplied to the printer, the power indicator on the control panel will light up.



Installing the Ribbon Cassette

Mounting the Ribbon Cassette

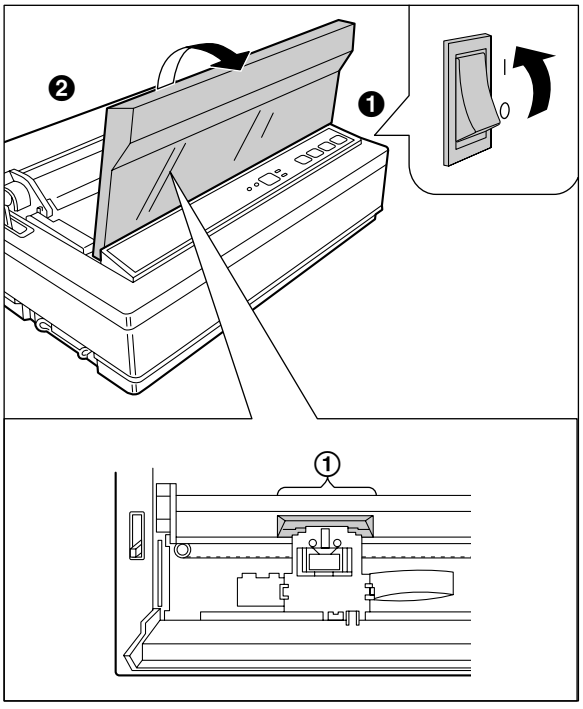
1. ❶ Turn the power on.

The carriage will move to the ribbon exchange area (①) automatically.

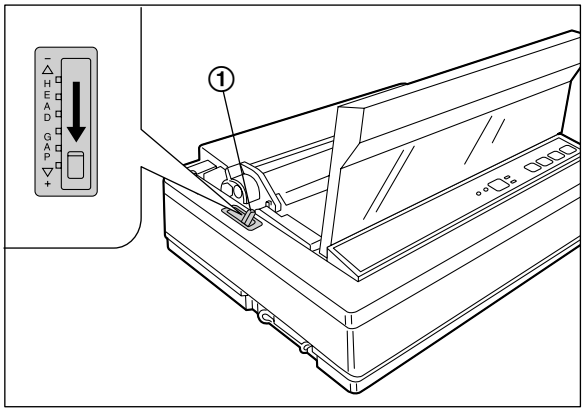
Note

- The printer allows the ribbon cassette to be mounted only in this area.

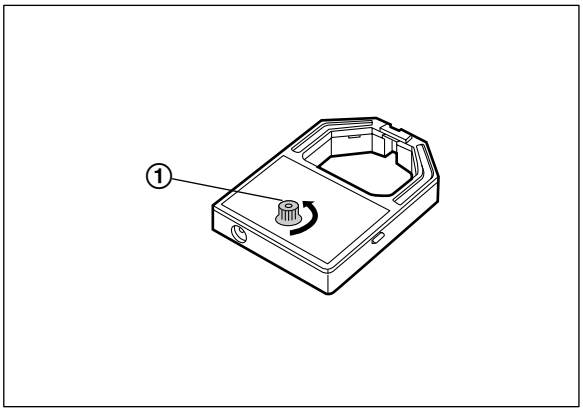
❷ Open the smoked plastic cover.



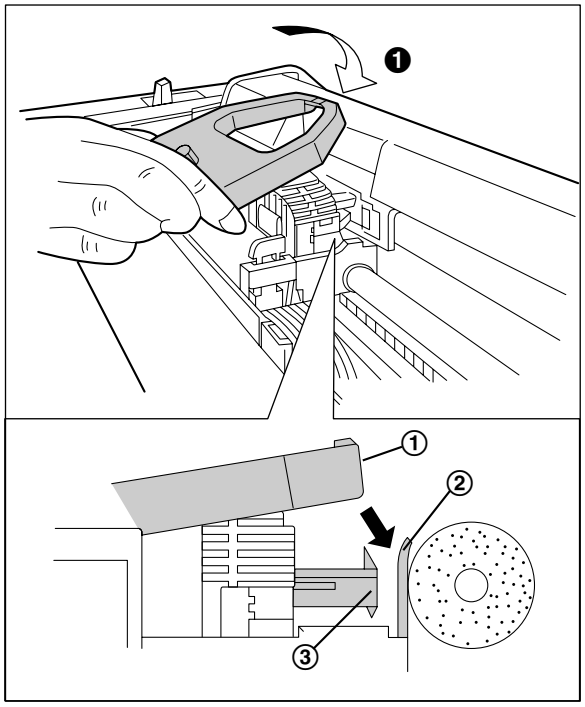
2. Move the head gap lever (①) to the (+) position.



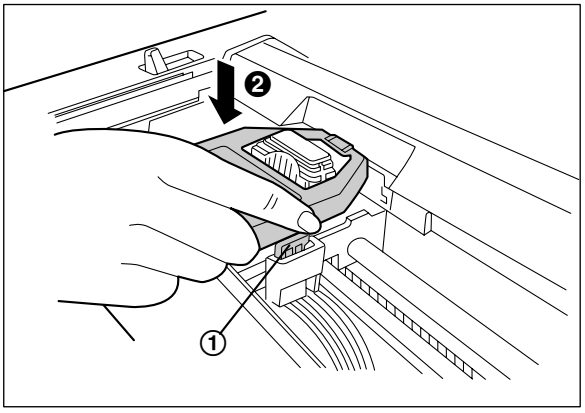
3. Rotate the knob (①) on the ribbon cassette to remove any slack.



4. ❶ Slip the ribbon (①) between the ribbon mask (②) and the printhead nose (③).

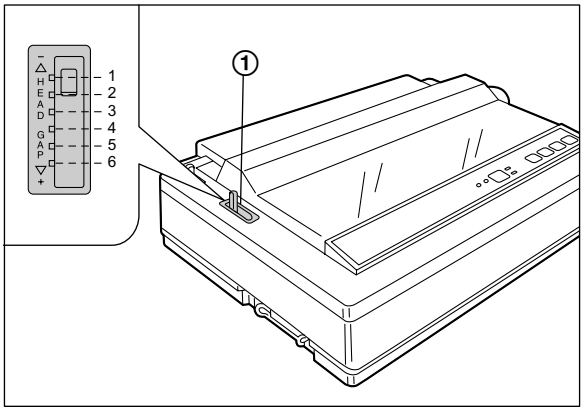


❷ Press down on rear of the ribbon cassette until the wing tab (①) snaps into place.



5. Close the smoked plastic cover.
6. Adjust the head gap lever (①) for the thickness of paper you are using.

Position	Used for
1 or 2	Thinner sheets
3, 4, 5 and 6	Thick or multiple sheets or envelopes



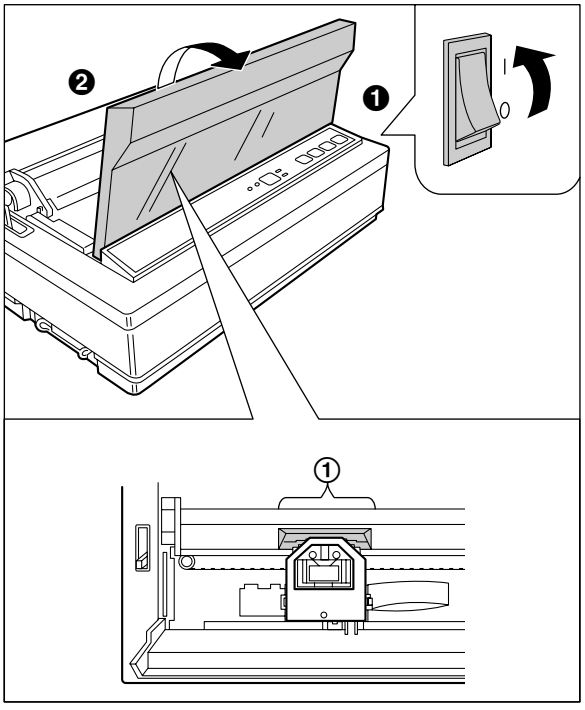
Removing the Ribbon Cassette

1. **❶ Turn the power on.**
   The carriage will move to the ribbon exchange area (①) automatically.

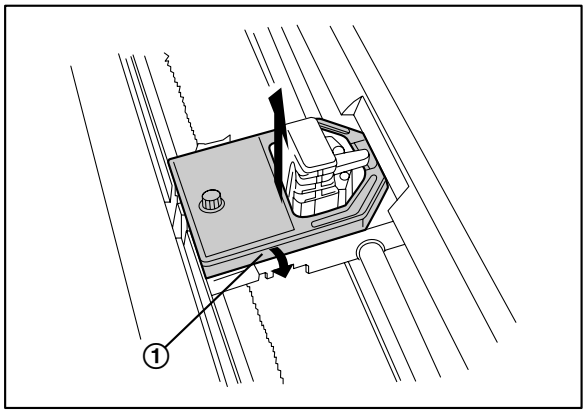
   ❷ Open the smoked plastic cover.

   CAUTION

   - The printhead may be hot, use caution when cover is open.



2. **Spread the wing tab (①) and lift up the ribbon cassette.**



Handling Paper

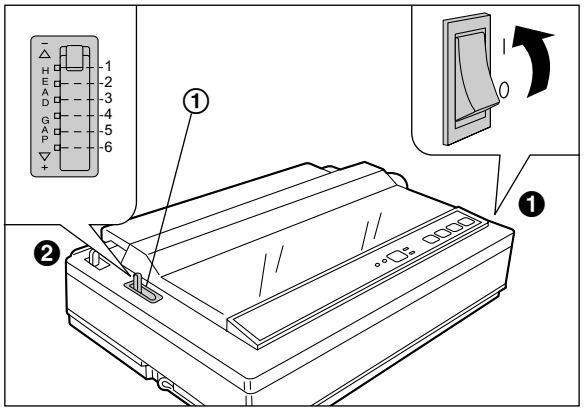
Your Panasonic printer offers two paper feed choices:
– Fanfold paper (Tractor push mode)
– Single sheets and envelopes (Friction mode)

Fanfold Paper (Tractor Push Mode)

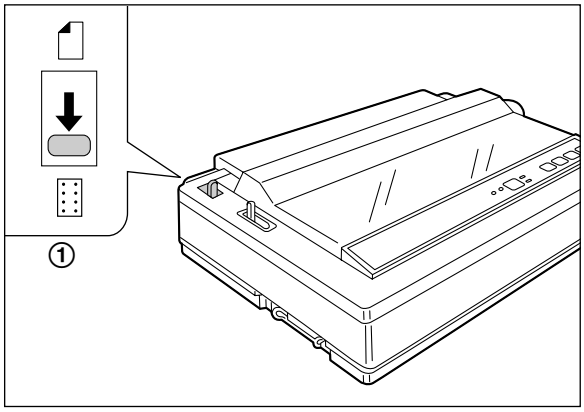
1. **❶ Turn the power on.**
   The PAPER OUT indicator will flash indicating that no paper is installed in the printer.

   ❷ Adjust the head gap lever (①) for the thickness of paper you are using.

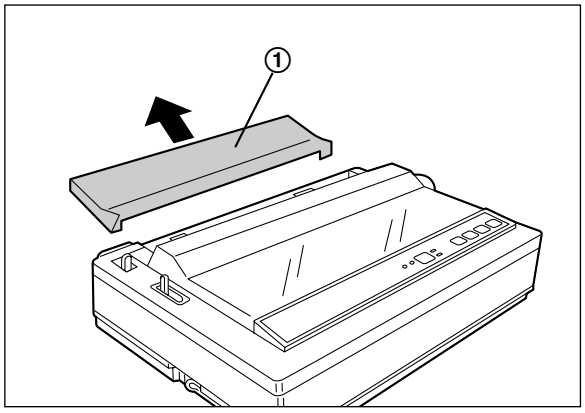
Position	Used for
1 or 2	Thinner sheets
3, 4, 5 and 6	Thick or multiple sheets



2. **Set the paper feed selector (①) to the "⋮⋮" position.**

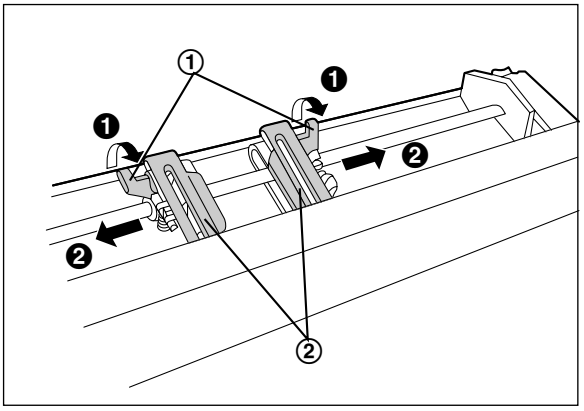


3. **Lift off the top cover (①).**

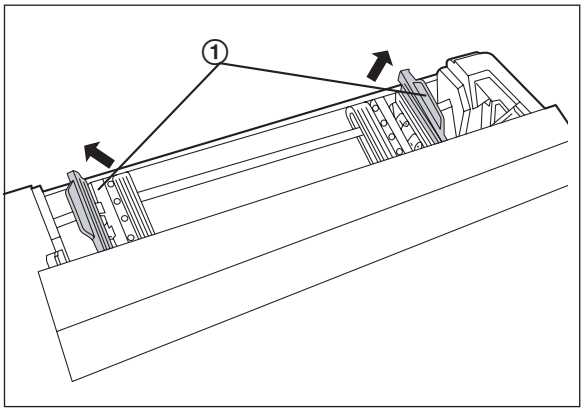


4. **❶ Unlock the tractors by pulling the tractor clamping levers (①) forward.**

   ❷ Slide the tractors (②) to accommodate the approximate width of paper being used.

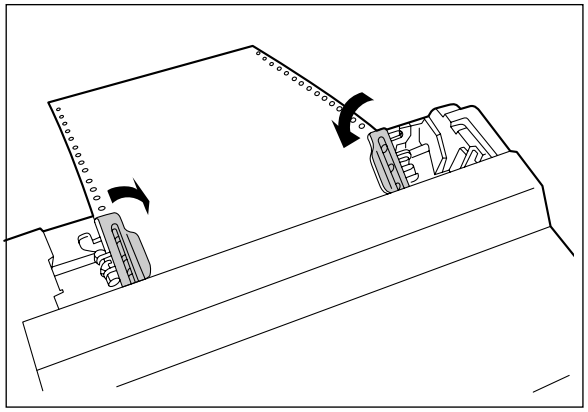


5. **Raise the tractor covers (①).**

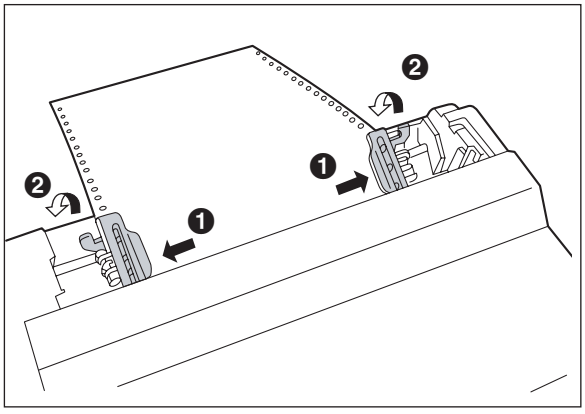


6. Place the paper with the printed side face down and align the paper sprocket holes with the tractor pins, then close the tractor covers.

Make sure the paper is straight.

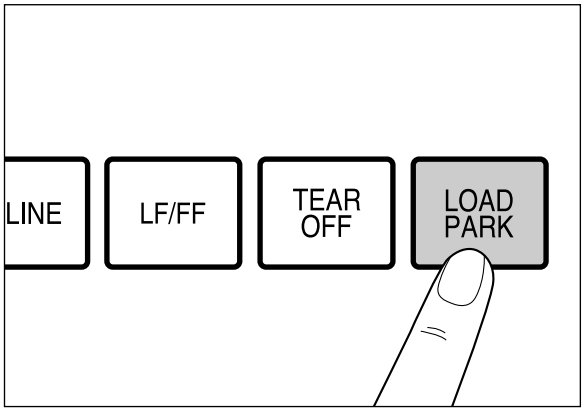


7. ❶ Adjust the tractors to remove any slack.
❷ Lock the tractor clamping levers.



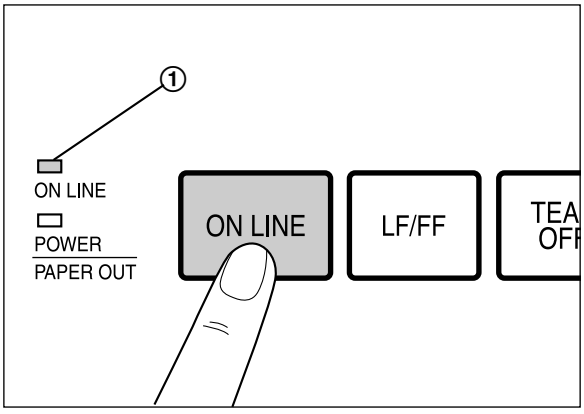
8. Press [LOAD/PARK].

This will load the paper to the first print line.



9. Replace the top cover.

10. If the ON LINE indicator (①) is not lit, press [ON LINE] to get ready to print.

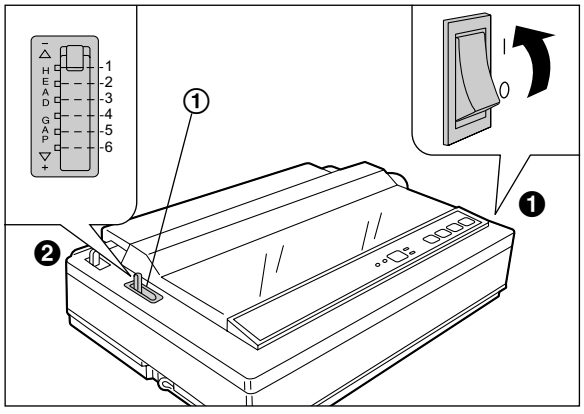


Single Sheets and Envelopes (Friction Mode)

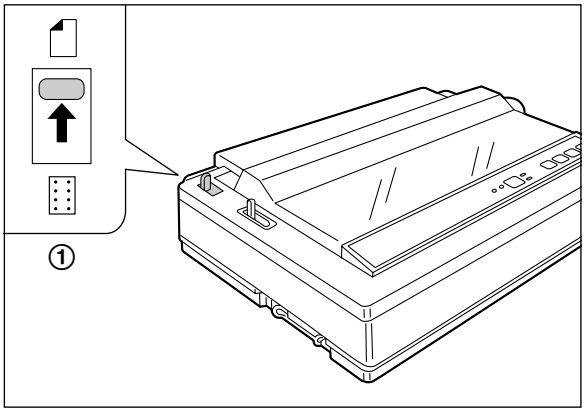
1. **❶ Turn the power on.**
   The PAPER OUT indicator will flash indicating that no paper is installed in the printer.

   ❷ Adjust the head gap lever (①) for the thickness of paper you are using.

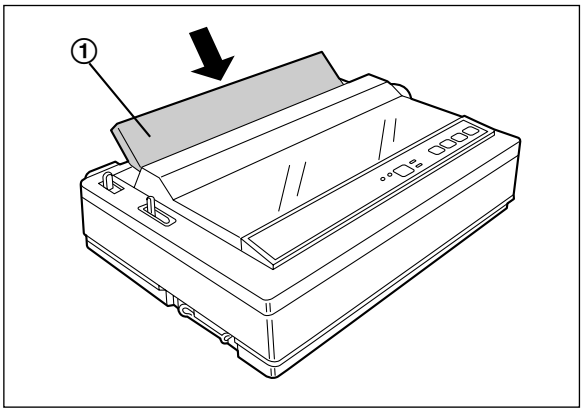
Position	Used for
1 or 2	Thinner sheets
3, 4, 5 and 6	Thick sheets or envelopes



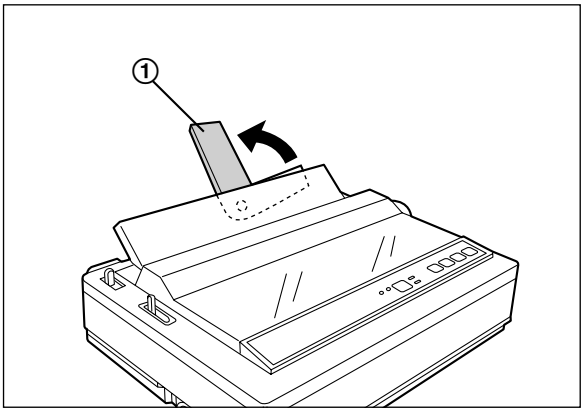
2. **Set the paper feed selector (①) to the "" position.**



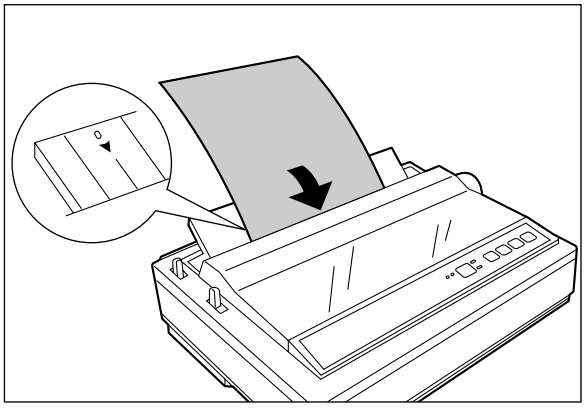
3. **Raise the top cover (①) to single sheet feed position.**
   This is done by inserting the side pins of the top cover into the slots in the upper cabinet.



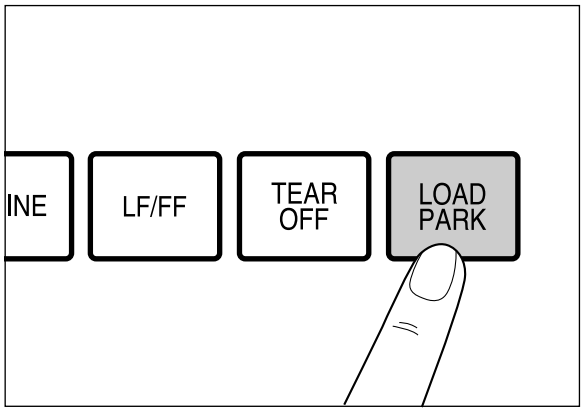
4. **Raise the paper support (①).**



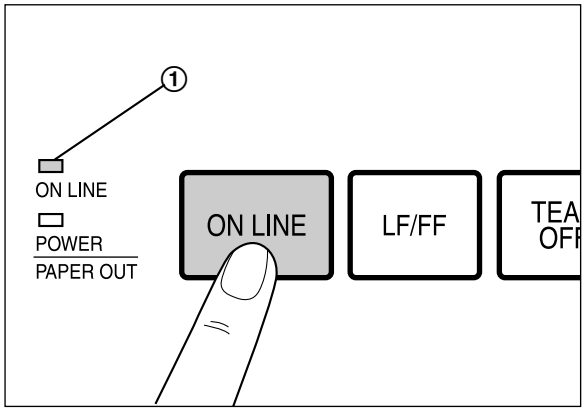
5. **Insert a sheet of paper with the printed side face down behind the platen by aligning its left edge with 0 on the top cover.**



6. **Press LOAD/PARK.**
   The paper will be loaded to the first print line.



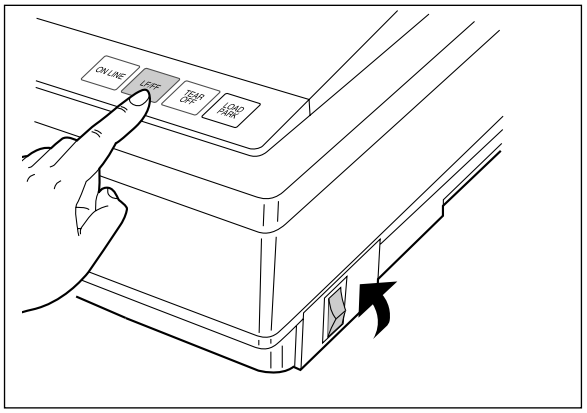
7. **If the ON LINE indicator (①) is not lit, press ON LINE to get ready to print.**



Self Test

The printer has a self test feature which allows you to test the printer.

1. **Load a sheet of paper, and turn the power off. (Page 20)**
2. **Turn the power on while pressing LF/FF.**

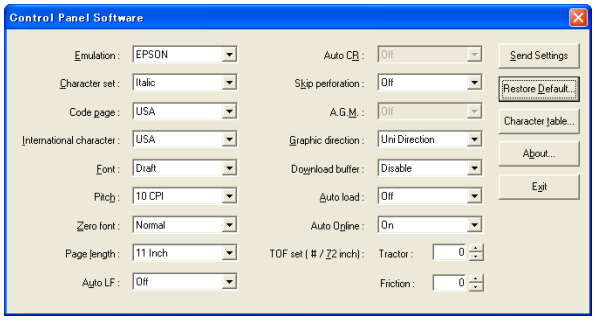


   A sample printout will begin, which serves as a self test.
3. **Turn the power off.**

Control Panel Software Program

This software is used to change the configuration of the printer. Using this software, you can also print out the printer's character table.
It is necessary to install the printer driver to use this software.
When using the Windows driver, these settings are rarely used.
When using the Windows driver, make sure Emulation is set to "EPSON".
The printer is compatible with most popular software packages. If no changes are required, you should be ready to print. In most cases there will be no need to change the initial setup items.

To start the Control Panel Software program, from [Start], select [All programs] → [Panasonic] → [Panasonic KX-P1121E] → [Control Panel Software].



You can change the following items:

Emulation
EPSON (Epson LQ-850)
IBM (IBM Proprinter X24E)

Character set
Italic (Epson only)
Graphic 1
Graphic 2

Code page
USA (PC-437)
Multilingual (PC-850)
Portugal (PC-860)
Canada-French (PC-863)
Norway (PC-865)
Turkey (PC-857)

International character
USA, France, Germany, UK, Denmark1, Sweden, Italy, Spain1, Japan, Norway, Denmark2, Spain2, Latin America, Korea, Legal

Font
Draft, Courier, Prestige, Bold PS

Pitch
10 CPI, 12 CPI, 15 CPI, 17 CPI, 20 CPI, P.S

Zero font
Normal (0)
Slashed (Ø)

Page length
11 Inch, 12 Inch, 14 Inch, 11 2/3 Inch, 8 Inch, 8 1/2 Inch, 5 1/2 Inch

Auto LF
On (CR+LF)
Off (CR only)

Auto CR (IBM only)
On (LF, VT, ESC+"J" +CR)
Off (LF, VT, ESC+"J" only)

Skip perforation
On (1 inch skip)
Off (No skip)

A.G.M (Alternate Graphic Mode) (IBM only)
On, Off

Graphic direction
Uni Direction, Bi Direction

Download buffer
Enable, Disable

Auto load
On (Available)
Off (Not available)

Auto Online
On (Available)
Off (Not available)

TOF set (# / 72 inch)
Tractor: 0–360
Friction: 0–360

Note

- The following items can also be set through the Control Panel (Page 27):
  Emulation, Page length, Auto LF, Graphic direction and Download buffer

About the buttons

Send Settings

Sends the settings to the printer.

Restore Default

Returns the settings to default.
After pressing this button, the screen to select your country is displayed. Select your country. If your country is not displayed here, select [Other country].

Character Table

Prints out the character table of the built-in font in the printer.
After pressing this button, the screen to select the emulation and character table is displayed. Select the desired table.

About

Displays the version of the software.

Exit

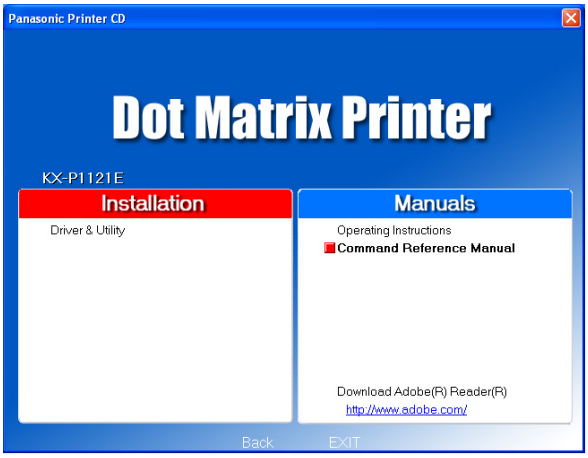
Exits the software.

Note

- The screen to select your country is only displayed when activating the software for the first time. When you activate the software from the second time, the screen to select your country is not displayed.

Viewing the Command Reference Manual

To refer to the Command Reference Manual, select [Command Reference Manual] from the "Manuals" list on the right side of the screen. (Page 16)



Uninstalling the Software

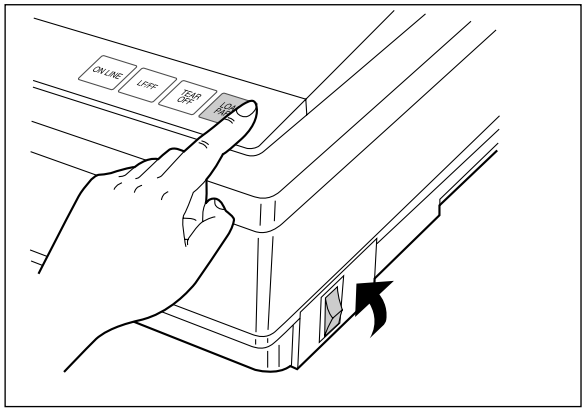
If you want to remove the software that is installed on your computer, follow the procedure below to uninstall them.

1. In Control Panel, open [Add or Remove Programs].
   - In Windows 2000, select [Add/Remove Programs], and in Windows Vista and Windows 7, select [Uninstall a program].
2. Select [Panasonic KX-P1121 Series] to uninstall.
3. Follow the instructions on the screen.

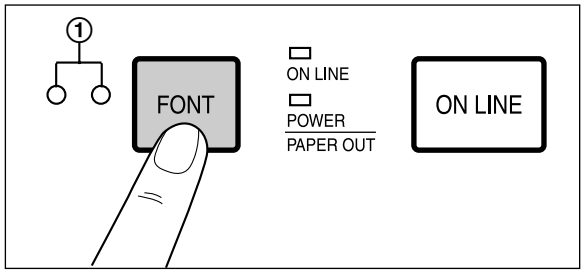
Using the Control Panel

The Control Panel allows you to set only Auto LF, Graphic Direction, Page Length, Emulation and Download buffer.
If there is any paper loaded, you will get a print out of the current settings automatically.

1. **Turn the power on while pressing LOAD/PARK.**
   Both font indicators will be blinking.
   You have entered the Initial Setup mode.

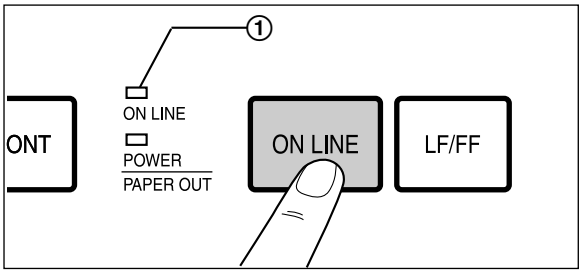


2. **Press and release FONT.**
   Select the desired item according to the FONT indicators (①) condition. The item will switch each time you press FONT.
   Refer to the table on the next page.

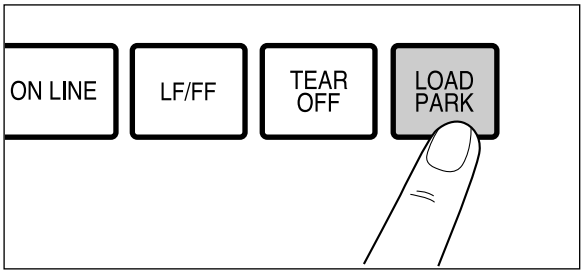


3. **Press and release ON LINE.**
   Change the setting according to the ON LINE indicator (①) condition. The setting will switch each time you press ON LINE.
   Refer to the table on the next page.

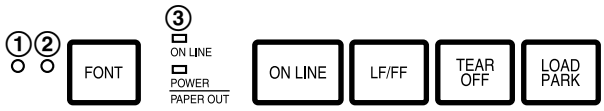
   If you want to change the settings of some more items, perform steps 2 and 3.



4. **Press LOAD/PARK.**
   You have exited the Initial Setup mode.



Control Panel



① FONT indicator
② FONT indicator
③ ON LINE indicator

ITEM	FONT indicator	
	①	②
Print current Initial Setup condition	☼	☼
Emulation	○	●
Auto LF	●	○
Download buffer	●	●
Graphic direction	○	☼
Page length	☼	○

ITEM	ON LINE indicator (③)		
	▭	▬	☼
Print current Initial Setup condition	–	–	
Emulation	Epson*1	IBM	
Auto LF	Off*1	On	
Download buffer	Disable*1	Enable	
Graphic direction	Uni*1	Bi	
Page length	11 in.*1	12 in.	11 2/3 in.

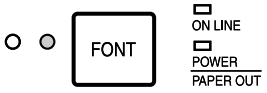
*1 is current setting.

FONT indicators condition:
○=light is lit. ☼=light is blinking. ○=light is out.

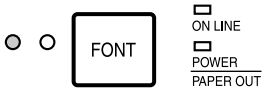
ON LINE indicator condition:
▭=light is lit. ☼=light is blinking. ▭=light is out.

EXAMPLES

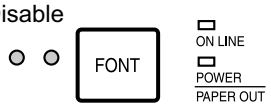
Emulation: Epson



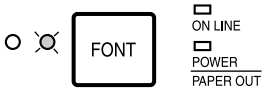
Auto LF: Off



Download buffer: Disable



G. direction: Uni



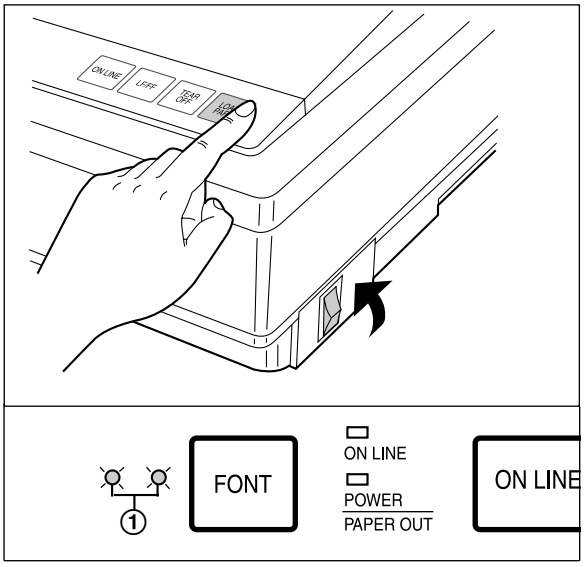
Page length: 11 in.

Resetting All Current Settings to the Factory Settings

Follow the instructions below:

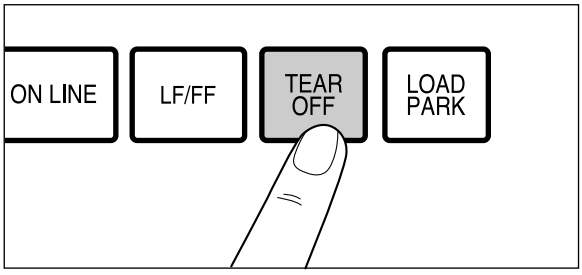
1. **Turn the power on while pressing LOAD/PARK.**

   Make sure that both FONT indicators (①) are blinking.



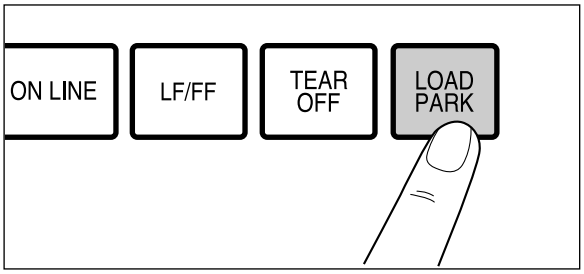
2. **Press TEAR OFF.**

   All the current settings will be reset to the Factory settings.



3. **Press LOAD/PARK.**

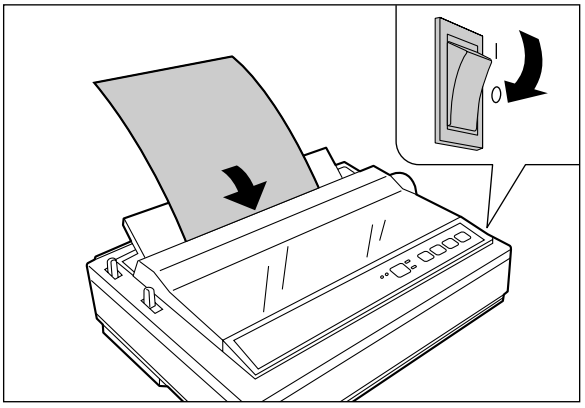
   You have exited the Initial Setup mode.



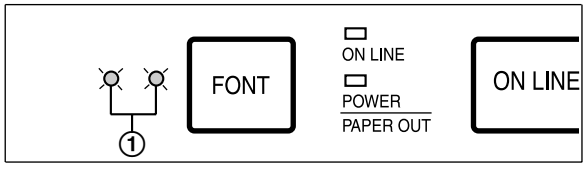
Printing Out the Current Settings

Follow the instructions below to get a print out of the current settings.

1. **Load a sheet of paper, and turn the power off. (Page 20)**



2. **Turn the power on while holding down the FONT, ON LINE and LOAD/PARK buttons.**
   Make sure that both FONT indicators (①) are blinking.
   The current settings will print out.



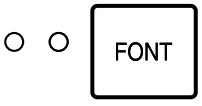
Selecting a Character Font

You can select any one of the character fonts by pressing the FONT switch on the Control Panel.
The combination of FONT indicators show the current character font status.

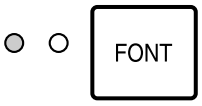
· Press and release FONT

EXAMPLES

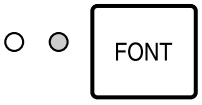
PROGRAM



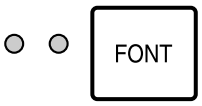
COURIER



PRESTIGE



BOLD PS



● = light is lit. ○ = light is out.

Note

- You must be in PROGRAM (both FONT indicators are off) to allow your software to control your font selection.

Feeding Paper

You can adjust the paper position by using the control panel switches when the printer is in the OFF LINE mode or when the printer is not printing in the ON LINE mode.

Line Feed/Form Feed (LF/FF Switch)

Pressing the **LF/FF** switch once advances the paper one line.
Holding this switch will move the printhead to the center and advance the paper to the first print line of next page.

Tear Off (TEAR OFF Switch)

Pressing the **TEAR OFF** switch advances your fanfold paper's perforation to the tear position, and pressing this switch again returns your paper to the first print line.

Paper Parking (LOAD/PARK Switch)

This function allows you to use single sheets or envelopes without removing or wasting your fanfold Paper.

1. Tear off the printed page(s) of the fanfold paper being used. ("Tear Off (TEAR OFF Switch)" above.)
2. Press the **LOAD/PARK** switch to park the fanfold paper.
3. Load a single sheet or an envelope. ("Single Sheets and Envelopes (Friction Mode) (Page 23)")
   When you are finished printing, remove the sheet (or envelope) from the printer.
4. Replace the top cover.
5. Move the paper feed selector to "".
6. Press the **LOAD/PARK** switch to load the fanfold paper again to the first print line.

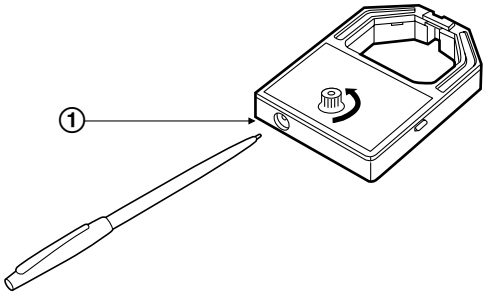
Periodic Maintenance

The printer does not require any routine maintenance. However, reasonable care of the printer will extend its life. The following periodic measures are recommended:

- Cleaning the unit is the most important action the user can perform.
  The frequency of cleaning is dependent upon the environment.
  - Turn the power OFF.
  - Clean the case and covers with a soft cloth. Use any mild commercial cleaner on the cloth, do not spray directly on the printer.
  - Remove the top and the smoked plastic covers. Vacuum or dust the inside area of the unit. Be very careful not to damage the flex ribbon cable and the carriage drive belt.
  - The platen should be cleaned with denatured alcohol only.
  - The carriage guide bar can be lubricated with a very light oil. Contact your Authorized Panasonic Service Center for advice on lubrication.

Ribbon Cassette

A single ribbon cassette permits the printing of about 3 million characters. When the printing starts to fade, gently push the counter spring in the re-ink hole (①) with the tip of a ballpoint pen or other object. Once the ribbon cassette is mounted onto the carriage and printing is performed for a short time, the characters will become darker.



Note

- Do not re-ink the ribbon cassette before printing starts to fade. If the ribbon has too much ink, the characters may smear when printed.
- Wear and tear of the printhead pins may cause serious damage to the ribbon cassette and cause the printing to fade. In such cases the printer needs servicing.

Troubleshooting

Most problems associated with the printer can be traced to improper setup, installation, or cabling. The following table will assist the user in identifying and correcting some of the more common problems. If you need additional help, contact the store from which the unit was purchased.

Symptom	Possible Cause	Probable Solution
Ink smears.	Head gap lever is not in the proper position.	Move the lever toward the lower position (+) until ink does not smear. (Page 13)
Printout is faint.	Head gap lever is not in the proper position.	Set the lever to the proper position. (Page 13)
Head moves but does not print.	Ribbon cassette is not installed correctly.	Re-insert ribbon cassette. (Page 18)
	Head gap lever is not in proper position.	Set the lever to the proper position. (Page 13)
Printer does not power up.	No AC power.	Check power cord. (Page 17)
Power is on but printer does not print.	Printer is not ON LINE.	Press ON LINE switch.
	Interface cable is not properly connected.	Secure connection. (Page 17)
	Out of paper.	Install new paper. (Page 20)
	Printhead has become overheated.	Allow the printhead some time to cool down. The printer will automatically resume printing.
Carriage stops moving, all indicators start blinking.	Path of printhead is blocked.	Clear the path, turn the power off, then back on to resume printing.
Paper wrinkles when using tractor feed.	No reverse tension on paper.	Set paper supply lower than printer.
Unexpected characters appear in printing.	Emulation is set incorrectly.	Check printer driver of your software package and set emulation accordingly. (Page 25, Page 27)
"£" is printed instead of "#", or "#" is printed instead of "£".	Wrong international character selected.	**1.** Turn the power on while holding down the LF/FF and TEAR OFF buttons to switch this setting. **2.** If the left FONT LED blinks, "#" is set to print. If the right FONT LED blinks, "£" is set to print.

Symptom	Possible Cause	Probable Solution
Printout is double-spaced.	Auto LF is ON.	Set Auto LF to OFF. (Page 27)
Keeps printing on the same line.	Computer is not sending a LF command.	Set Auto LF to ON. (Page 27)
Both of the FONT LEDs are blinking just after turning on the power.	There is an electrical malfunction.	Consult your dealer.
Wrong Character Set prints.	Wrong Character Set is selected.	Set the Character Set as required. (Page 25)
When printing on custom fanfold paper, the print position shifts after the second page.	The created custom paper size (paper length) setting is incorrect.	When creating a custom size, select "English" for Units and input the size in inches. Round the value to 2 decimal places, as in the examples below: **Form size** **Input size** 8 1/2 inch 8.50 inch 11 1/3 inch 11.34 inch

Printer Specifications

Power requirements:	Refer to the nameplate located on the rear of the printer.			
Frequency:				
Current:				
Interface:	USB 2.0 Full speed, Centronics parallel (IEEE1284 standard)			
Print fonts:	3 Draft (Pica, Elite, Micron) 3 Letter Quality (Courier, Bold PS, Prestige)			
Software emulation:	Epson LQ-850 IBM Proprinter X24E			
Buffer:	64K (When Download buffer is disabled)			
Character sets:	96 ASCII characters, 96 Italic ASCII characters, 38 International characters — 14 countries, 158 IBM-PC special characters			
Dot configuration:	0.2 mm ($^{1}/_{127}$ in.) dot diameter			
			Draft	**LQ**
	Matrix	(Hor. × Ver)	9 × 24	30 × 24
	Dot pitch	(Hor.)	0.21 mm (1/120 in.)	0.07 mm (1/360 in.)
		(Ver.)	0.14 mm (1/180 in.)	0.14 mm (1/180 in.)
Maximum number of characters per line (cpl):	Pica [10 cpi (characters per in.)]		80 cpl	
	Elite (12 cpi)		96 cpl	
	Micron (15 cpi)		120 cpl	
	Compressed (17 cpi)		137 cpl	
	Elite compressed (20 cpi)		160 cpl	
	Pica elongated (5 cpi)		40 cpl	
	Elite elongated (6 cpi)		48 cpl	
	Micron elongated (7.5 cpi)		60 cpl	
	Compressed elongated (8.5 cpi)		68 cpl	
	Elite compressed elongated (10 cpi)		80 cpl	
Printing speed [characters per second (cps)]:		**Micron**	**Elite**	**Pica**
	Draft	240 cps	192 cps	160 cps
	Letter Quality	80 cps	64 cps	53 cps

Printing direction:	Text printing: Bi-Directional Bit Image printing: Uni-Directional & Bi-Directional
Line feed time:	Approx. 100 ms [with 4.2 mm (1/6 in.) line feeding]
Paper Feed:	Push Tractor feed (with fanfold paper) Friction feed (with single sheets or envelopes)
Operating environment:	Temperature: 10 °C–35 °C (50 °F–95 °F) Humidity: 30–80 % RH (Please allow the printer to stabilize at room temperature within the operating temperature range before operation)
Storage environment:	Temperature: -20 °C–60 °C (-4 °F–140 °F) Humidity 10–90 % RH
Head service life:	Approx. 200 million strokes in draft mode
Ribbon cassette:	Black seamless fabric ribbon in cassette Life expectancy in Draft mode: Approx. 3 million characters
Detectors:	Paper out detector Overheat detector
Dimensions: (Width × Depth × Height)	434 × 314 × 134.5 mm (17.1 × 12.4 × 5.3 in.)
Mass (Weight):	Approx. 5 kg (11 lbs)

Paper Specifications

Paper which may be used with this unit must be within the specifications provided below.

Fanfold Paper

Width: 102–254 mm (4–10 in.)
Quality and number of sheets:

Type of paper	Sheets	Weight	
		in lbs	in g/m²
Fine-quality paper	1	16–24	60–90
Non-carbon	2–4	11–14 (17*1)	41–53 (64*1)
Multi-layered with carbon	2	11–14 (17*1)	41–53 (64*1)

*1 Only for the last sheet

Note

- In multi-layered paper with carbon, the carbon is equivalent to a sheet of paper.
- "Weight in pounds" represents the weight of 500 [423 × 559 mm (17 × 22 in.)] sheets.
- The printer will handle multipart papers up to 0.32 mm (0.013 in.). Up to 4 copies of 14 lb. chemical release paper can be used.

Single Sheets

Width: 102–297 mm (4–11.7 in.)
Height: 127–363 mm (5–14.3 in.)
Weight in pounds (g/m²): 53–90 g/m² (14–24 lbs)

Note

- Paper should be within operating temperature and humidity ranges at least 24 hours prior to use.

Envelopes

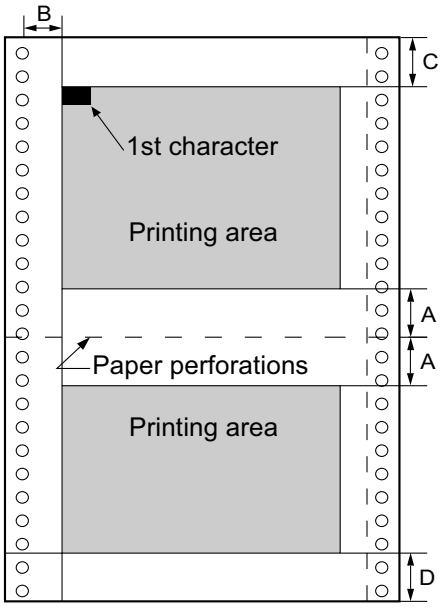
#6 and #10 size envelopes are recommended. Since envelopes vary in size, paper weight and construction, we cannot guarantee print quality and paper handling for all types of envelopes.

Note

- To optimize print quality printing should not occur in areas where the edges overlap.

Printing Area

Fanfold Paper



	Fanfold Paper
A	25.4 mm (1 in.)
B	17.8 mm (0.7 in.)
C	8.38 mm (0.33 in.)
D	25.4 mm (1 in.)

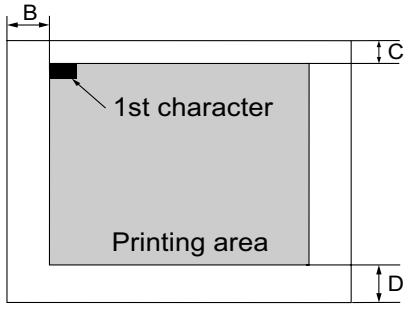
A. Value A indicates the area near the paper perforations where the quality may not be optimum.

B. Value B indicates the maximum distance between the sprockets and first printable character. (When the left tractor is set on the left end and the margin is set to 0.)

C. Value C indicates the area from the top edge of the paper to the top of the first printed character.

D. Value D indicates the position where paper out is detected and printing may not be optimum.

Single Sheets and Envelopes



	Single Sheets and Envelopes
B	38 mm (1.5 in.)
C	8.38 mm (0.33 in.)
D	25.4 mm (1 in.)

B. Value B indicates the minimum distance between the edge of the paper and the first printable character.

C. Value C indicates the area from the top edge of the paper to the top of the first printed character.

D. Value D indicates the position where paper out is detected and printing may not be optimum. (When printing on envelopes, do not print on area where edges overlap. Print quality may not be optimum.)

Supplies

Model Number	Description
KX-P145	Ribbon Cassette (black)

Note

- To purchase Ribbon Cassette, please contact your dealer.

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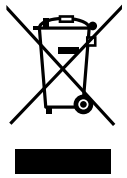
Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)



This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.
For proper treatment, recovery and recycling, please take these products to designated collection points, where they will be accepted on a free of charge basis. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product.
Disposing of this product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point.
Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union.
If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

Panasonic System Networks Company of America
Unit of Panasonic Corporation of North America
One Panasonic Way, Secaucus, New Jersey 07094

Panasonic Canada Inc.
5770 Ambler Drive, Mississauga, Ontario, L4W 2T3

Panasonic Business Systems U.K.
A Division of Panasonic U.K. Ltd.
Willoughby Road, Bracknell, Berkshire, RG12 8FP

Panasonic Marketing Europe GmbH
Hagenauer Strasse 43, 65203 Wiesbaden, Germany
For information of Compliance with EU relevant Regulatory Directives, Contact to Authorised Representative:
Panasonic Testing Centre
Panasonic Marketing Europe GmbH
Winsbergring 15, 22525 Hamburg, Germany

CE (For EU only)

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Web Site: http://www.panasonic.net/

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