

Operating Instructions

Impact Dot Matrix Printer

Model No. KX-P1131E



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

Introduction

Thank you for purchasing the Panasonic KX-P1131E 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

Power consumption:	Ready 3W
Printer Emulation:	Epson [®] LQ-300 without color and IBM [®] Proprinter [®] X24E
Font:	3 Draft (Pica, Elite, Micron)
	7 LQ (Courier, Bold PS, Prestige, Script, Sans Serif, Roman, OCR-B)
Printing speed:	Draft—240 characters per second (12 cpi) LQ—80 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, parallel, serial

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.
- Epson is a registered trademark of Seiko Epson Corporation (SEC), registered in the U.S. and other countries.
- 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)

<u>Note</u>

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-P1131E
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.



order to operate the unit safely.

For Users



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.

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.

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: 10 °C to 35 °C (50 °F to 95 °F)].
- The unit should not be exposed to extremely high or low humidity (humidity range: 30 % 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 35 °C (95 °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-P1131E)
	Ribbon Cassette ^{*1}
	Platen Knob
	Extension Plate
\bigcirc	CD-ROM
	Installation Manual

^{*1} Model No.: KX-P180 (USA and Canada), KX-P181 (Outside USA and Canada)

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 21)
- 2 Top cover
- **③** Paper feed selector
 - "[]" (Friction) Single sheets and envelopes
 - "

④ Head gap lever

Adjusts the gap between the platen and the printhead.

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

- **(5)** Parallel interface connector (Page 16)
- **(6)** USB connector (Page 16)
- **⑦** Serial interface connector (Page 16)
- (8) Smoked plastic cover

Rear View



- ① Tractors
- ② Power switch (Page 17)
- ③ Platen knob (Page 11)
- ④ Power cord (Page 17)
- **5** Serial No. Label
- 6 Nameplate

Control Panel



(1) FONT indicators

These indicators show the Font being selected. (Page 28)

2 FONT switch

Pressing this switch will select the character fonts. (Page 28)

③ PITCH indicators

These indicators show the current character pitch selected.

④ PITCH switch

Pressing this switch will select any one of the character pitches.

(5) ON LINE indicator

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

6 ON LINE switch

This switch opens and closes the communication line with the computer.

⑦ 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 29)

(8) TEAR OFF switch

Pressing this switch will advance or reverse the paper for tearing off. (Page 24)

⑨ LOAD/PARK switch

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

10 HIGH SPEED indicator

This indicator is lit when HIGH SPEED is activated by pressing ONLINE and LF/FF together.

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), RS-232C serial

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-P1131E (except for customers in Thailand).
 - For customers in Thailand, select KX-P1131E (Thailand).



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

ABSONIC Printer CD Dot Matrix Printer KX-P1131E	
Installation	Manuals
Driver & Utility	Opereting Instructions Command Reference Manual
	Download Adobe(R) Reader(R) http://www.adobe.com/

- **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, parallel cable or serial cable. (Page 16) 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 15)".

<u>Note</u>

- If you do not have a USB cable, parallel interface cable or serial interface cable, you will need to purchase one or contact your dealer.
- 1. Turn off the power switch of both the printer and the computer.
- 2. Connect an interface cable.
 - 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.



When connecting with a serial interface cable: Attach the serial interface cable (2) from your computer to the serial interface connector (1) and turn the screw clockwise to tighten.

Notice

• Use a RS-232C serial interface cable.



<u>Note</u>

 When using a serial interface cable, do not also connect a USB cable. You cannot print using a serial interface if a USB cable is also connected.

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.



<u>Note</u>

• If the printer is not going to be used for an extended period, unplug the power cord.

Installing the Ribbon Cassette

Mounting the Ribbon Cassette

- 1. **①** Turn the power on.
 - **2** Open the smoked plastic cover (1).



2. Move the head gap lever (①) to position "6".



 Install the ribbon cassette (2) and push down 4 arrows (1) until they click into place.



<u>Note</u>

• Do not take off the blue ribbon guide from the ribbon cassette.

4. ① Lift the blue ribbon guide (①) from the ribbon cassette.

Slide the blue ribbon guide between the printhead nose (②) and the ribbon mask (③), and push it down.



<u>Note</u>

- If the ribbon cassette does not insert easily between the printhead nose and the ribbon mask, rotate the knob on the ribbon cassette to reduce the slack.
- 5. Make sure the ribbon cassette is not twisted and rotate the knob (①) to remove any slack.



- 6. Close the smoked plastic cover.
- 7. Adjust the head gap lever for the thickness of paper you are using.

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

Handling Paper

Your Panasonic printer offers two paper feed choices:

- Fanfold paper (Push tractor mode)
- Single sheets and envelopes (Friction mode)

Fanfold Paper (Push Tractor Mode)

1. **1** Turn the power on.

The PAPER OUT indicator will flash indicating that no paper is installed in the printer.

Adjust the head gap lever 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 "



3. Lift off the top cover (①).



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

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



5. Raise the tractor covers (1).



 Place the paper with the printed side face down and align the paper sprocket holes (2) with the tractor pins (3), then close the tractor cover (1).



7. **1** Adjust the tractors (**1**) to remove any slack.



<u>Note</u>

• Make sure the paper is straight.

8. Press LOAD/PARK.

This will load the paper to the first print line.

9. Raise the top cover (①). This is done by inserting the side pins of the top cover into the slots in the upper cabinet.



10. Raise the paper support (①).



11. Insert the paper support into the slot of the extension plate (①) until it stops.



12. If the ON LINE indicator is not lit, press ON LINE to get ready to print.

Single Sheets and Envelopes (Friction Mode)

1. **1** Turn the power on.

The PAPER OUT indicator will flash indicating that no paper is installed in the printer.

2 Adjust the head gap lever 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). 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).



<u>Note</u>

 If the extension plate is already installed (Page 22), it does not need to be removed. 5. • Separate the paper guides to the approximate width of your paper or envelope.

<u>Note</u>

• To predetermine your left most print position, move the left paper guide until it clicks into place.

2 Insert a sheet of paper through the paper guides (①).

The paper will be automatically loaded to the first print line.



<u>Note</u>

- You can disable Auto load through the Control Panel Software program (Page 25) or by using the Control Panel (Page 33).
- If Auto load is disabled, you must press **LOAD/PARK** to load paper.
- If you need to align the paper horizontally or vertically, set the paper feed selector to
 "[...]". This releases the paper and allows the paper to be positioned manually as
 required. Set the selector back to "[_]"
 before printing.
- 6. If the ON LINE indicator is not lit, press ON LINE to get ready to print.

Tearing off Paper

With fanfold paper installed, this function allows you to advance your paper to the tear position. After tearing off the page you can return your paper to the first printer line by pressing **TEAR OFF** again.

If **TEAR OFF** is not pressed a second time, the

printer will automatically reverse to the first print line upon receiving data from the computer.

- 1. Press **TEAR OFF** to advance the paper to the tear position.
- 2. Tear off the page.



3. Press **TEAR OFF** to reverse the paper back to the first print line.

Self Test

The printer has a self test feature which allows you to test the printer. When activated, this feature will print 5 lines of each resident font. When complete, it will return to the draft font and continue for approximately 20 minutes.

- 1. Install the ribbon cassette and paper, then turn the power off (Page 18–24).
- 2. While pressing LF/FF turn the power on, then release.



A sample printout will begin, which serves as a self test.

3. Once you see that the printer is functioning properly, you may turn the power off during the self test, or you may run the entire test.

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] \rightarrow [Panasonic] \rightarrow [Panasonic KX-P1131E] \rightarrow [Control Panel Software].

Control Panel Software				\mathbf{X}		
Menu						
Print Style	Eont :	Draft	-	Send Settings		
Emulation				Restore Default		
Page Format	Pitch :	10 CPI	-	Trestore Delaur		
Text Enhancement	Point size :	10.5		Character table		
- Character set	roun ogo .	1.000		Citardotor 3doto		
Install				About		
Serial Interface						
- TOF Setting				Exit		
1						

You can change the following items:

Print Style

Font

Draft, Bold PS, Courier, OCR-B, Prestige, Roman, Sans Serif, Script, Bold PS-SC, Courier-SC, Prestige-SC, Roman-SC, Sans Serif-SC, Script-SC

Note

• "-SC" sequences are displayed only when one of the following Code pages is selected: USA, Multilingual, Portugal, Canada-French, Norway, Turkey.

Pitch

10 CPI, 12 CPI, 15 CPI, 17 CPI, 20 CPI, P.S, 5 CPI, 6 CPI, 7.5 CPI, 8.5 CPI

Point size

8, 10, 10.5, 12, 14, 16, 18, 20, 21, 22, 24, 26, 28, 30, 32

<u>Note</u>

 Displayed only when an "-SC" sequence is selected in Font.

Emulation

Emulation

EPSON (Epson LQ-300 without color) IBM (IBM Proprinter X24E)

Page Format

Line/in. 1, 1.5, 2, 2.5, 3, 4, 4.5, 5, 6, 7.5, 8, 9, 10, 12,

T, 1.5, 2, 2.5, 3, 4, 4.5, 5, 6, 7.5, 8, 9, 10, 12, Scalable

Page length

11 in., 12 in., 14 in., 11 $^{2}/_{3}$ in., 8 in., 8 $^{1}/_{2}$ in., 5 $^{1}/_{2}$ in., Free

Top margin

0-450 (1/180 in.)

Bottom margin

0-900 (1/180 in.)

Left margin

10 CPI or 5 CPI pitch: 0–78 characters 12 CPI or 6 CPI pitch: 0–93 characters 15 CPI or 7.5 CPI pitch: 0–117 characters 17 CPI or 8.5 CPI pitch: 0–133 characters 20 CPI pitch: 0–156 characters Proportional pitch: 0–78 characters

Right margin

10 CPI or 5 CPI pitch: 2–80 characters 12 CPI or 6 CPI pitch: 3–96 characters 15 CPI or 7.5 CPI pitch: 3–120 characters 17 CPI or 8.5 CPI pitch: 4–136 characters 20 CPI pitch: 4–160 characters Proportional pitch: 2–80 characters

Centering Position

10-45 characters

Print mode Graphic direction Bi Direction, Uni Direction **Text direction** Bi Direction, Uni Direction **Text Enhancement** Bold On. Off **Double high** On. Off **Double strike** On, Off **Double wide** On, Off Italics On, Off Outline On, Off Shadow On, Off Zero font Normal, Pointed, Slashed Character set Character set Italic Graphic 1 Graphic 2

International character

USA, France, Germany, UK, Denmark 1, Sweden, Italy, Spain 1, Japan, Norway, Denmark 2, Spain 2, Latin America, Korea, Slovenia, Legal

Code page

USA, Multilingual, Portugal, Canada-French, Norway, Turkey, BRASCII, ABICOMP, PC855, PC866, USSR GOST, Polish, Czech, PC852, ISO Latin2, Hungarian, Bulgaria, ISO 8859-2 Install A.G.M. (Alternate Graphic Mode) (IBM only) On. Off Auto CR (IBM only) On (LF, VT, ESC+"J" +CR) Off (LF, VT, ESC+"J" only) Auto LF On (CR+LF) Off (CR only) Auto load On. Off Paper out detect On. Off Tear off Manual, Auto **Buffer control** 22 KB, 8 KB, 0 KB, ALL **Auto Online** On, Off Auto feed XT On, Off Serial Interface Data length 8Bit, 7Bit **Baud rate** 150, 300, 600, 1200, 2400, 4800, 9600, 19200 Paritv None, Ignore, Odd, Even Protocol DTR, XON/XOFF **Signal Polarity** Mark, Space **TOF Setting** Tractor 0-900 (1/180 in.) Friction 0-900 (1/180 in.) Note

• Some items can also be set through the Initial Setup Mode (Page 33).

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.

<u>Note</u>

 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 15)



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-P1131 Series] to uninstall.
- 3. Follow the instructions on the screen.

Using the Control Panel

Selecting a Character Font

This printer contains resident fonts which are accessible through the Control Panel. You can select any one of the character fonts by pressing the FONT switch on the Control Panel.

■ Press FONT.

The combination of FONT indicators (1) indicates the current character font selected, as shown on the Control Panel.



 \bullet – light is lif. \bigcirc =

Note

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

Selecting a Character Pitch

This printer contains resident pitches which are accessible through the Control Panel. You can select any one of the character pitches by pressing the PITCH switch on the Control Panel.

■ Press PITCH.

The combination of PITCH indicators (1) indicates the current character pitch selected, as shown on the Control Panel.





PITCH







12 CPI

ര

PITCH

• = light is lit. \bigcirc = light is out.

● = light is blinking.

<u>Note</u>

• You must be in PROGRAM (both PITCH indicators are off) to allow your software to control your pitch selection.

High Speed Mode

The High Speed mode is a feature for doubling the print speed only when LQ Font and one of the 120 dpi, 180 dpi or 360 dpi of 24-pin bit image are selected.

<u>Note</u>

• When enabled, this feature will lower the print density.

Turning on the High Speed mode:

• While pressing ON LINE, press

```
LF/FF.
```

The HIGH SPEED indicator is on.



Turning off the High Speed mode:

• While pressing ON LINE, press

LF/FF.

The HIGH SPEED indicator is off.



Line Feed/Form Feed (LF/FF Switch)

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

- With paper installed, pressing LF/FF once advances the paper one line.
- With paper installed, holding <u>LF/FF</u> moves the printhead to the center and advances the paper to the top of the next page.



<u>Note</u>

• When pressing **LF/FF**, the amount of paper which is fed is determined by the current setting for lines per inch as specified through the Control Panel Software program, Control Panel (Initial Setup mode) or your application software.

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.

Top of Form Function (TOF SET)

This printer has a Top of Form (TOF) function which stores the first print line position and loads the paper to the designated position automatically. The first print line position will be stored even after the power is turned off. You can adjust the Top of Form position through the Control Panel Software program (Page 25), or using Micro Line Feed or Reverse Micro Line Feed from the Control Panel within 125 mm (5 in.) from the top of your paper.

Note

- Do not rotate the platen knob, otherwise the printer will not be able to count the number of lines properly.
- All adjustments must be made on the first sheet. If you decide to change the setting and save it, remove the paper from the tractors, then reset and reload the paper.
- 1. If necessary, redefine the page length of the paper you are using through the Control Panel Software program (Page 25), Control Panel (Page 28) or your application software.
- 2. Micro Line Feed:

While pressing **ON LINE**, press

TEAR OFF.

This advances the paper one micro line [0.14 mm ($^{1}/_{180}$ in.)].



Reverse Micro Line Feed:

While pressing **ON LINE**, press

LOAD/PARK .

This reverses the paper one micro line $[0.14 \text{ mm} (^{1}/_{^{180}} \text{ in.})]$. The printer cannot reverse the paper past the printable area (Page 44).



3. At your desired position within 125 mm (5 in.) from the top of your paper, release the switches. The paper position will be stored automatically as the new Top of Form position.

Paper Parking (LOAD/PARK Switch)

This function moves the fanfold paper to the park position, enabling 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 (Page 24).
- 2. Press **LOAD/PARK** to reverse the fanfold paper to the park position.



3. ① Move the paper feed selector to "[]" (Friction Mode).

2 Load single sheets or envelopes.

When you have finished printing, remove the sheet (or envelope) from the printer.



4. Move the paper feed selector to "



5. Press **LOAD/PARK** to reload the fanfold paper to the first print line.

Paper Out Detector

Your printer has a paper out detector. When an out of paper condition occurs, printing stops, the printer goes to the OFF LINE mode, and the POWER/PAPER OUT indicator starts blinking. To continue printing to the end of the current page, follow the steps below.

- 1. Press ON LINE repeatedly until the page is completed.
- 2. Insert the new paper (Page 20).
- 3. If the ON LINE indicator is not lit, press ON LINE.

<u>Note</u>

- When Paper out detect is set to ON (Page 34), printing stops at 1.26 mm (0.5 in.) from the bottom of the paper.
- The paper out detector can be disabled through the Control Panel Software program (Page 25).

Initial Setup Mode

The 18 features (items) can be set in the Initial Setup mode through the Control Panel. For the features and the indicators condition, refer to Page 34. These features can also be set through the Control Panel Software program (Page 25).

- 1. Load a sheet of paper (Page 20), and turn the power off.
- 2. While pressing LOAD/PARK, turn the

power on to enter the Initial Setup mode. Both FONT indicators and the HIGH SPEED indicator will be blinking. The current settings will be printed automatically.



3. Press FONT and ON LINE to select the item.

Each time you press **FONT** and **ON LINE**, you will advance to the next item. Select an item and confirm the selection with the FONT indicators (①) and ON LINE indicator (②) (on, off, blinking) (Page 34).



Press PITCH to set the item's status. The item's status will change each time you press
PITCH (Page 34). To change additional settings, repeat step 3 and 4.



5. Press **LOAD/PARK** to exit the Initial Setup mode.

The FONT indicators will go off and the current conditions will print.



<u>Note</u>

- To return all current settings to the factory settings, follow the steps below.
 - 1. While pressing **LOAD/PARK**, turn the power on, then release.
 - 2. Press **TEAR OFF**.
 - **3.** Press **LOAD/PARK** to exit the Initial Setup mode.

Control Panel



(1) FONT indicators: Press FONT. ② PITCH indicators: Press PITCH. ③ ON LINE indicator: Press ON LINE.

ltem	l		Setting							
	3	1	2							
			0 0	0	• 0	••	○ `⊎́	`⊎́ O		
Emulation		•	EPSON	IBM	_		—			
G.direction		• 0	Bi	Uni	_		—			
Tear off		••	Manual	Auto	_	_	—			
Page length		○ ₩	11 in.	12 in.	11.66 in.	14 in.	8 in.	8.5 in.		
Line/in.		`₩ 0	6 LPI	8 LPI	3 LPI	4 LPI	7.5 LPI	12 LPI		
Font		• \	Draft	Courier	Roman	Sans Serif	Prestige	Script		
Pitch		` ₩ ●	10 CPI	12 CPI	15 CPI	17 CPI	20 CPI	P.S		
Auto LF		00	Off	On	_	—	_	_		

Item	1		Setting							
A.G.M. (IBM only)		•	Off	On	_	_	_	_		
Auto CR (IBM only)		• •	Off	On	_	_	_	_		
Auto load		••	Off	On			_	_		
Paper out detect		○ ₩	Off	On	_	_		_		
Auto Online		₩ 0	Off	On	_	_	—	—		
Buffer control		• `	22 KB	8 KB	0 KB	ALL*1	_	_		
Zero font		₩•	Normal	Pointed	Slashed	_	—			
Character set		00	Italic	Graphic 1	Graphic 2	_	_	_		
International	International character ^{*2}	•	USA	France	Germany	UK	Denmark 1	Sweden		
character ²		• 0	Italy	Spain 1	Japan	Norway	Denmark 2	Spain 2		
		••	Latin America	Korea	Slovenia	Legal	_	_		
Code page ⁻²				○ ₩	USA	Multilingual	Portugal	Canada- French	Norway	Turkey
		₩ 0	BRASCII	ABICOMP	PC855	PC866	USSRGOST	Polish		
		• ¥	Czech	PC852	ISO Latin2	Hungarian	Bulgaria	ISO 8859-2		

Indicators condition:

 \blacksquare , \bullet = light is lit. \Box , \circ = light is out.

 \doteq , \doteq = light is blinking.

^{*1} Download font function is disabled when ALL is selected.

^{*2} If the current International character/Code page setting is located under the other condition of FONT indicators, the both PITCH indicator will blink.

Serial Interface Setup Mode

The following items can be set in the Interface Setup mode through the Control Panel: Data length, Baud rate, Parity, Protocol and Signal polarity.

You can select and change the desired item according to the status of the FONT/PITCH indicators.

- 1. Load a sheet of paper (Page 20), and turn the power off.
- 2. While pressing **PITCH**, turn the power on to enter the Interface Setup mode.

Both FONT indicators and the HIGH SPEED indicator will be blinking. The current settings will be printed automatically.

3. Press **FONT** to select the item.

Each time you press **FONT**, you will advance to the next item. Select the desired item according to the status of the FONT indicators (on, off, blinking).

4. Press [PITCH] to set the item's status.

The item's status will change each time you press **PITCH**. See the table below to verify desired status. To change additional settings, repeat steps 3 and 4.

① FONT indicators:② PITCH indicators:Press FONTPress PITCH

ltem		Setting								
	6		2							
	1	0 0	○ ●	• 0	• •	○ ₩	Ŭ O	• \		
Data length	0 •	8Bit	7Bit							
Baud rate	• 0	300	600	1200	2400	4800	9600	19200		
Parity	••	None	Ignore	Odd	Even			—		
Protocol	○ \	DTR	XON/XOFF	—				—		
Signal Polarity	₩ 0	Mark	Space	—	—	—	—	—		

FONT/PITCH indicators condition:

• = light is lit. \bigcirc = light is out. \checkmark = light is blinking.

5. Press LOAD/PARK to exit the Interface Setup mode.

The FONT indicators will go off and the current conditions will print.

<u>Note</u>

- To return all current settings to the factory settings, follow the steps below.
 - **1.** While pressing **LOAD/PARK**, turn the power on, then release.
 - 2. Press TEAR OFF.
 - **3.** Press **LOAD/PARK** to exit the Initial Setup mode.
Resetting All Current Settings to the Factory Settings

Follow the instructions below:

1. Turn the power on while pressing the ON LINE and LOAD/PARK.



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 pressing the ON LINE and PITCH.



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 and unplug the AC power cord.
 - Clean the case and covers with a soft cloth. Use any mild commercial cleaner on the cloth, do not spray directly on the printer.
 - Raise the top cover and pull up the roller cover. Vacuum or dust the inside area of the unit. Be very careful not to damage the printhead ribbon cable or the carriage drive belt.

CAUTION

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

<u>Note</u>

• If the ribbon cassette begins to catch, snag, or tear from the printhead, your printer requires 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 or the Panasonic technical support number found in Page 4.

Symptom	Possible Cause	Probable Solution	
Ink smears.	Head gap lever is not in the proper position.	Move the lever toward the position "6" until ink does not smear. (Page 18)	
Printout is faint.	Head gap lever is not in the proper position.	Set the lever to the proper position. (Page 12)	
Printhead moves but there is no printing.	Ribbon cassette is not installed correctly.	Re-insert ribbon cassette. (Page 18)	
	Head gap lever is not in the proper position.	Set the lever to the proper position. (Page 12)	
Paper out detector inoperative.	Paper out detect is OFF.	Set Paper out detect to ON. (Page 25, 32)	
Printer does not power up.	No AC power.	Check AC 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 16)	
	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.	
Printer cannot load single sheet through the top.	Paper feed selector is set to	Set paper feed selector to "[]".	
Unexpected characters appear in printing.	Emulation is set incorrectly.	Check printer driver of your software package and set emulation accordingly. (Page 25, Page 28)	

Symptom	Possible Cause	Probable Solution	
Fanfold paper is jamming.	Paper is not installed correctly in tractor. Set paper feed selector rotate platen knob to rer jammed paper. Reinstal correctly into tractor. (Page 1997)		
Printout is double-spaced.	Auto LF is ON. Set Auto LF to OFF. (Page 28)		
Keeps printing on the same line.	Computer is not sending a LF command.	Set Auto LF to ON. (Page 28)	
Wrong Character Set prints.	Wrong Character Set is selected.	Set the Character Set as required. (Page 25)	
The FONT indicator is blinking, or the FONT and PITCH indicators are blinking just after turning on the power.	There is an electrical malfunction.	Consult your dealer.	
Cannot print ASCII characters with code above 127.	Data length is set incorrectly.	Set Data length as required. (Page 25, 36)	
When using a serial interface, the printer does not print or data loss occurs.	Baud rate, Parity, Protocol or Data length does not match with the computer.	Set Baud rate, Parity, Protocol and Data length to match the computer. (Page 25, 36)	
	A USB cable is connected.	When a USB cable is connected, the serial interface does not operate. Disconnect the USB cable. (Page 16)	
When printing is completed, paper is not advanced automatically.	Tear off, Page length, Top margin and Bottom margin are set incorrectly.	Set Tear off to Auto and set Page length, Top margin and Bottom margin to meet your software package. (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:				
Frequency:	Refer to the nameplate located on the rear of the printer.			
Current:				
Interface:	USB 2.0 Full speed, Centronics parallel (IEEE1284 standard), RS-232C Serial interface			
Print fonts:	 3 Draft (Pica, Elite, Micron) 7 Letter Quality (Courier, Bold PS, Prestige, Script, Sans Serif, Roman, OCR-B) 6 Scalable Fonts⁻¹ (Courier, Bold PS, Prestige, Script, Sans Serif, Roman) 			
Software emulation:	Epson LQ-300 without color			
	IBM Proprinter X24E			
Buffer:	Selectable [0 KB / 8 KB / 22 KB (default) / All (54 KB max.)]			
Character sets:	EPSON mode ONE Italic and 18 characters set tables 15 International characters and Legal set IBM mode 18 character set tables			
Dot configuration:	0.2 mm (¹ / ₁₂₇ in.) dot diameter			
			Draft	LQ
	Matrix	(Hor. × Ver.)	9 × 24	30 imes 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	Pica [10 cpi (ch	aracters per in.)]	80 cpl	
characters per line (cpl):	Elite (12 cpi)		96 cpl	
	Micron (15 cpi)		120 cpl	
	Compressed (1	Compressed (17 cpi)		
	Elite compress	ed (20 cpi)	160 cpl	
Printing speed [characters per second (cps)]:		Micron	Elite	Pica
	Draft	300 cps	240 cps	200 cps
	Letter Quality	100 cps	80 cps	66 cps
Printing direction:	Uni-directional / Bi-directional (user selectable)			
Line feed time:	Approx. 65 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.)
Power consumption:	Max: 180 W Ready: 3 W Self Test: 55 W
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 fabric ribbon in cassette Life expectancy in Draft mode: Approx. 6 million characters
Detectors:	Paper out detector Printhead overheat detector Overload detector
Dimensions: (Width \times Depth \times Height)	434 × 326 × 140 mm (17.1 × 12.8 × 5.5 in.)
Mass (Weight):	Approx. 5.4 kg (12 lbs)

^{*1} Scalable Fonts are available only when one of the following Code pages is selected: USA, Multilingual, Portugal, Canada French, Norway, Turkey.

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:

Tune of peper	Shooto	Weight	
Type of paper	Sheets	in lbs	in g/m²
Fine-quality paper	1	16–24	60–90
Non-carbon	2–5	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

<u>Note</u>

- To insure optimum print quality, 60-82.5 g/m² (16-22 lbs.) is recommended for graphic printing.
- 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 forms up to 0.36 mm (0.014 in.) thick. Up to 5 copies of 14 lbs. 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.
- Due to letter head varying in paper weight and construction, we cannot guarantee print quality and paper handling for all types.

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.

<u>Note</u>

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

Printing Area

Fanfold Paper



	Fanfold Paper	
Α	25.4 mm (1 in.)	
В	17.8 mm (0.7 in.)	
С	2 mm (0.08 in.)	
D	15 mm (0.6 in.)	

- **A.** The area near the paper perforations where the print quality may not be optimum.
- **B.** The minimum 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.** The area from the top edge of the paper to the top of the first printed character.
- **D.** The area from the bottom edge of the paper where the print quality may not be optimum.

Single Sheets and Envelopes



	Single Sheets and Envelopes	
В	3 mm (0.12 in.)	
С	2 mm (0.08 in.)	
D	15 mm (0.6 in.)	

- **B.** The minimum distance between the edge of the paper and first printable character. (When the left paper guide is set to the 0 position and the margin is set to 0.)
- **C.** The area from the top edge of the paper to the top of the first printed character.
- **D.** 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-P180 (USA and Canada)	Dibbon Consette (black)	
KX-P181 (Outside USA and Canada)	Ribbon Cassette (black)	

<u>Note</u>

• To purchase Ribbon Cassette, please contact your dealer.

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