PENTAX PocketJet 3
PENTAX PocketJet 3 Plus

Printer User's Guide

The Future of Portable Printing . . . Today!

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Contents

Chapter 3 Tips on Using Paper

Chapter 4 Maintaining the Printer

Chapter 5 Reference

Chapter 6 Troubleshooting

Chapter 7 Technical Information

Chapter 8 Ordering Information

Index

Safety Information

Use Recommendations
• Because the printer uses a thermal printing method, it produces heat during operation. Be sure to place it where it will receive adequate ventilation.

• Don't allow moisture to come in contact with the printer, the AC adapter, or the AC power cord.

Outdoor Use Warning
To reduce the risk of electric shock, do not expose this printer, its AC adapter, or the power cord to rain or moisture.

Caution: Using AC Power
To use AC power (with or without the battery installed), you must use the AC adapter supplied with the printer.

The AC adapter allows you to connect to worldwide (100-240 volt) power outlets. The power cord supplied with the PocketJet 3 / 3 Plus AC adapter is designed to fit many 115 volt outlets and is shown below. The AC adapter automatically adjusts to the correct voltage when connected.

Check the power plug configurations and voltages that are used in your country. If you need a different plug or power cord, you can either purchase a plug adapter locally, or contact your local reseller or Pentax for assistance in procuring a proper cord set.
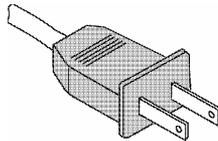
Unplug AC Cable when Printer is Not in Use

Always unplug the AC cable from the AC power outlet when you stop using the printer or finish charging the battery. The transformer inside the AC adapter generates heat while it is plugged in. Unplugging the AC adapter extends its life.

Battery Recycling/Disposal Information

This printer can run on an optional rechargeable Nickel-Metal Hydride (NiMH) battery. The battery is recyclable. At the end of its useful life, please consider recycling options (contact your local solid waste officials) or proper disposal (see the paragraphs below). It may be illegal under various state and local laws to dispose of the battery in your solid waste collection.

The RBRC seal on the NiMH battery pack supplied for the PocketJet 3 / 3 Plus printers indicates that Pentax is voluntarily participating in an industry program to collect and recycle these battery packs at the end of their useful life, when taken out of service within the United States. The RBRC program provides a convenient alternative to putting spent NiMH battery packs into the trash or municipal waste stream, which is illegal in some areas.

Pentax payments to RBRC makes it easy for you to drop the spent battery pack at local retailers of replacement NiMH batteries or at authorized Pentax product service centers. You may also contact your local recycling center for information on where to return the spent battery packs. The involvement of Pentax in this program is part of its commitment to protecting our environment and conserving natural resources.

For users outside the United States, please contact your local reseller or local solid waste official for information on recycling your used batteries.

Printer Features

The Pentax PocketJet® ultra-portable printers have been specifically designed to meet the growing demands of mobile workers.

The Pentax PocketJet printer features include:
• The printer can be driven directly from Windows® (95, 98, ME, 2000, XP, CE, CE.NET), Symbian/EPOC OS, Linux, and MAC OSX operating systems and other handheld devices such as software applications with the supplied drivers. Most PocketPC, Windows Mobile, and Palm units require third party software.
  Note: Refer to the Pentax website (www.pentaxtech.com) and click on Technical Support for the most current driver solutions.

• High-quality images with a resolution of 203 by 200 dpi (for PocketJet 3) or 300 by 300 dpi (for PocketJet 3 Plus).

• Print speed of up to three pages per minute.

• Operation via AC adapter (that automatically senses and adjusts between 100 and 240 volt power), 12 Volt DC vehicle power, or an internal battery.

• Interface via USB cable or built-in wireless infrared. For both PocketJet 3 and 3 Plus models, a 3-foot (1 meter) USB cable is supplied. The printers may also be used with IrDA capable hosts.

• Direct thermal technology — no toner, ribbons, or ink are needed.

• Selectable paper sources: cut sheet (US Letter, US legal, A4, or user-defined), roll (continuous or perforated), and fanfold.

• "Infinite" paper size selection to allow printing of very long continuous streams of data on roll paper without a page break.
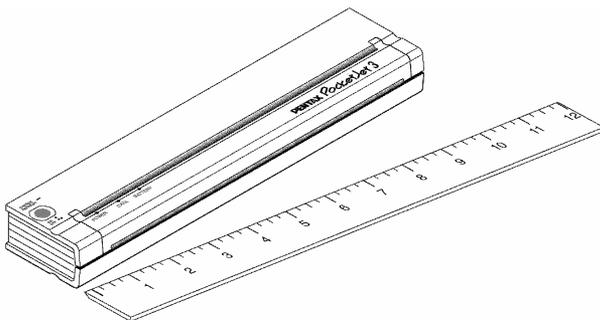
Warranty Information

Standard Warranty
Pentax provides, free of charge, a one-year limited warranty for your new PocketJet printer. For one year from the date of original purchase, Pentax will repair or replace a failed unit with a new or rebuilt unit when it is returned postpaid to an authorized Pentax service center. A return material authorization number (RMA) and proof of purchase are required—in the United States and Canada call Pentax Customer Support at **1-800-543-6144, ext. 1820**.

Outside the United States and Canada, see the driver CD supplied with this product for contact information and warranty details. You can also contact your local dealer for information.

See the warranty information on the driver CD supplied with the unit for details or you can log onto the Pentax web site at

www.pentaxtech.com/TechSupport/faxmailwarrantyform.htm

If the NiMH battery pack or the Pentax Quality Paper fails due to defects in material or workmanship within the first 90 days of ownership, it will be replaced. Contact Pentax or your local reseller for further information.

Pentax makes no other warranty, either expressed or implied, with respect to this product. Some states or provinces do not allow limitations, so the above limitation may not apply to you.

Extended Warranty
See the information on the CD included with your PocketJet printer for extended warranty information, or contact Pentax at 1-303-460-1820 (in Europe, +32.2.306.1194) and ask for Customer Support.

Warranty Registration
We recommend that you register your printer so that we can contact you with product update information if necessary. Please use the driver CD that came with your printer or register directly on-line at: www.pentaxtech.com/onlinewarranty/online_warranty.htm.
Note: Failure to return warranty cards or complete on-line warranty information will not diminish your warranty rights.

Chapter 1 - Setting Up the Printer

Unpacking the Printer

Read and follow any instructions on any *Read Me First* sheet that may be included in your kit.

A typical printer kit contains the items shown in Figure 1.
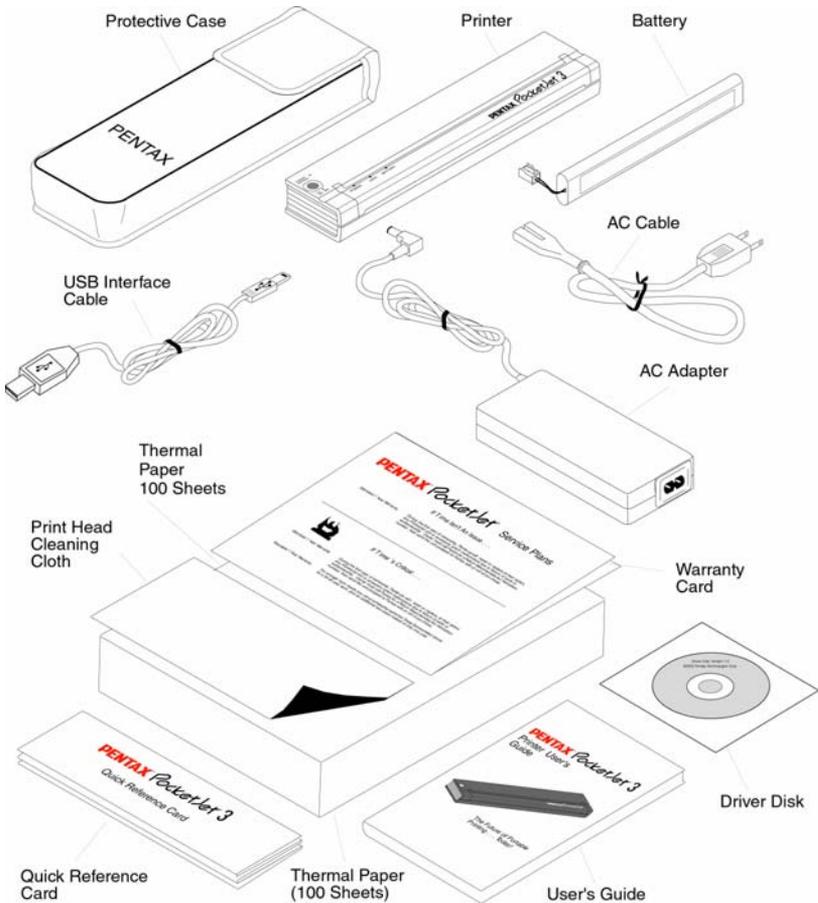
FIGURE 1. The contents of your printer kit

Connecting to an AC Outlet

Connect the printer to a nearby AC power outlet to run it on AC power or to charge the battery (see Charge the Battery, page 4).

1. Connect the AC adapter to the printer as shown in Figure 2.

2. Connect the AC power cord to the AC adapter.

3. Plug the AC power cord into a nearby AC power outlet (100~240 VAC, 50-60 Hz).
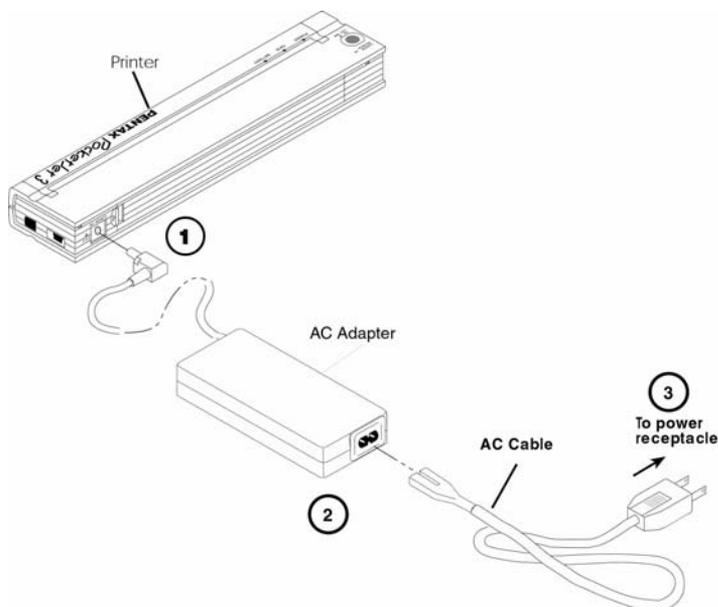
FIGURE 2. Connecting the printer to an AC power outlet

The PocketJet works from DC sources from 10 to 17V, and can require as much as 2.6A. Operation below 14 volts may slow printing somewhat.

> **NOTE**: *The plug on the AC power cord shown in Figure 2 is compatible with AC power outlets in the U.S.A., Canada, and some Central and South American countries. A plug adapter may be necessary for AC power in other countries or you can contact your local reseller or Pentax for further assistance.*

Connecting to a DC Supply

The PocketJet can be powered from its internal NiMH battery or from a vehicle DC supply. To install the battery, see page 32. To connect your PocketJet to a "12-volt" vehicle DC supply to print or maintain the battery charge, follow the steps below.

1. Connect an appropriate power adapter cord (either with a cigarette plug or direct wired) to the vehicle 12VDC supply as shown in Figure 3. (These items are available as options - See Ordering Information, Chapter 8.)

2. Connect the power cord to the PocketJet.

3. Turn on the vehicle power, then turn on the PocketJet.
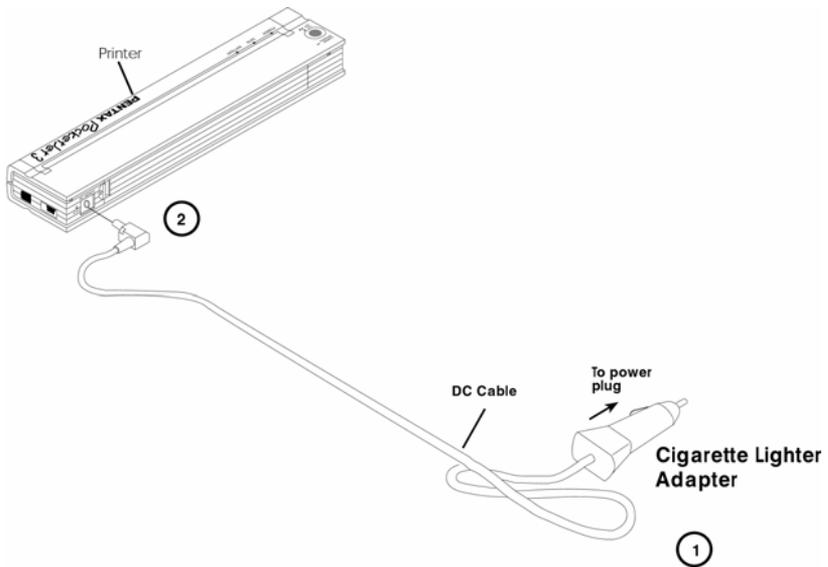
FIGURE 3. Connecting the printer to DC power

The PocketJet printer works from DC sources from 10V to 17V. Operation below 14 volts may slow printing somewhat.

Using the Operation Panel

The operation panel consists of the main switch and three indicator lights. See Figure 4.
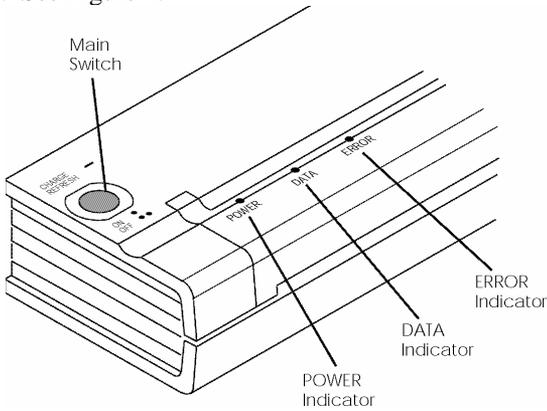
FIGURE 4. Operation panel

Main Switch Functions

Power ON: Push once while the printer is OFF.

Power OFF: Push twice quickly.

Manual Form Feed: With power ON and paper inserted, press and hold the main switch to feed (or eject) paper. In order to assure that printing is complete before permitting a form feed, manual form feeds cannot be performed for five seconds after the printer has received any data. The button must then be held down for 1-1/2 seconds to start the form feed.

Charge the Battery: With the printer off, push the main switch and hold it down for two or more seconds until the POWER indicator begins to blink. The POWER indicator light continues to blink until charging is complete.

To Power Off During Charge Mode: Push the main switch twice quickly (same as when in normal operating mode).

Service Mode: After powering the unit on, press and hold for 2 seconds until the DATA LED turns red. In this mode you may initiate self test printing or head cleaning. See Chapter 5 for further details.

Program Mode: After powering the unit on, press and hold for 2 seconds until the DATA LED turns red. Press and hold again for 6 seconds until the DATA and ERROR LEDs blink red. This mode allows uploading font files or upgrading firmware files. See page 21 for further information.

NOTE: *The printer may be configured for "auto off" operation. In this mode, when the printer is operated under battery power, inactivity for a period of a user-selected multiple of 10 minutes will cause the printer to shut itself down to conserve battery power. By default, this feature is enabled and set for 10 minutes. The printer may also be configured for "Auto-on" operation where connecting it to an external power source causes it to power on without using the Main Switch. See page 11 for further information.*

Indicator Lights

The three indicator lights—POWER, DATA, and ERROR— show both normal operation and error conditions. Each light may appear as green, red, or orange, and may either stay lit continuously or blink. The meaning of the many possible indications of these lights is explained in more detail in Chapter 5.

POWER   DATA   ERROR

Some of the more common indications follow:

• POWER light is steady green: Power is on, external power.
• POWER light is red or orange: The printer is operating on battery power. Color and blink/solid indicates approximate charge remaining.
• POWER light is blinking green: Battery is charging.

• DATA light is steady green: Unprinted data is in the printer buffer or a command has been received from the computer.
• DATA light is blinking green: Printer is receiving data.

• ERROR light is steady or blinking in any color: Except when sending new flash code or fonts, an error has occurred.

Please refer to the table in Chapter 5 that contains all combinations of indicator lights and their meanings.

Notes:

Chapter 2 - Using the Printer

Printing Solutions

Pentax provides printing solutions for many different operating systems and device types.

Device types include:

- PDA Systems (Windows Mobile [Pocket PC] systems, Palm systems, Psion/Symbian EPOC systems, and Windows CE systems)
- Windows systems, Mac OS X, and Linux

Drivers that can be underlined installed automatically, once selected from the Installation CD's main setup program, are:

- Windows 95/98/Me
- Windows 2000/XP
- PocketPC* applets – time trials only
- Palm OS* applets – time trials only *(Stevens Creek)*
- Psion/Symbian (EPOC – V. 5 and V. 6)
- Windows CE

* These operating systems do not support printing without the addition of a printing applet. Trial versions of the printing applet are supplied on the driver CD and on the Pentax website. Contact the applet provider to purchase the one you want after the trial period. PocketPC 200 and higher systems may use the WinCE driver if using application software that is enabled to use it.

Drivers that must be installed manually from the CD are:

- Linux – see Read Me instructions in CD directory.
- Mac OSX – see Read Me instructions in CD directory.

Please take time to fill out the warranty registration information before installing any drivers to ensure you the best technical support, should you need it.

The printer's configuration, its use of selections about print density, paper type, margins, etc., can be adjusted by using the Configuration Utility, explained later in this chapter. A default set of configuration data is programmed into the printer at the factory and may be suitable for many users.

Driver Installation

CAUTION: *Please do NOT connect your PocketJet printer to your computer via the USB cable UNTIL you have performed the driver installation. If you accidentally do so, cancel the "New Hardware Wizard", disconnect the printer, and begin the driver installation described below.*

Your printer requires software drivers to communicate with your computer and print properly. A CD with drivers and installation information is provided with your PocketJet kit. **The newest information and drivers are available from the Pentax web site, <u>www.pentaxtech.com</u> by selecting "Technical Support."** The supplied driver CD and the website both list the latest driver version numbers. If the website version is newer (with a higher version number), we recommend that you install the website version.

<u>CD Install</u>
1. If you are installing PDA software, connect your PDA to your PC now (PDA means a WinCE, PocketPC, Palm OS, or Symbian OS device).
2. Insert the Driver CD in your PC's CD drive.
3. Select "Installation," select your printer type, and click "Continue."
4. Complete the Registration Information.
5. Select ALL operating systems you wish to install drivers for, and then click "Continue." Note: Your Windows operating system will be selected by default.
6. Follow all on-screen instructions to install all the software you selected. Each option selected has its own installer. They will run one-by-one until all have been installed.
7. If installing PDA software, it may be necessary to "HotSync" with your PDA now.
8. Complete any additional warranty information requested and then submit it using your preferred method.
9. Click "Exit" to close the CD or feel free to browse the CD to learn about additional solutions available for your PocketJet printer or other Pentax products.

Note: If the automatic CD installation does not proceed as explained above, use the manual install procedure below.

<u>Manual Install</u>
Some operating systems require installing the driver manually, including Mac OS X and Linux. View the "Readme.txt" file on the CD

for more information. Note that every driver can be installed manually if necessary.

Browse the CD to locate the "Setup" or "Install" program for your operating system, then double click on the ".exe" program icon and follow the on-screen instructions.

If the installation does not proceed as explained above, contact Pentax Customer Service.

Configuration Utility

The disk supplied with the PocketJet3 and 3Plus printers contains a printer setup program that allows the user to modify the storable configuration parameters of the printer.

While some features will be of potential benefit to all users, those whose host devices are capable of sending only text and not special commands will find this especially helpful in presetting margins, page sizes and the like.

This program, PJ3CONFIG.EXE (and PJ3plusCONFIG.EXE), is accompanied by the file PJ3FACTORY.CFG (and PJ3plusFACTORY.CFG). The PJ3FACTORY.CFG file contains the information that matches the printer configuration as it was shipped.

As you modify this information for your preferences and save them to the printer, the file PJ3DEFAULT.CFG will be created with your preferences. The PJ3CONFIG.EXE and any *.CFG files should be located in the same folder when running the program.

Installing the Configuration Program:
When using the CD Installation program to install drivers for Windows XP, 2000, Me, 98, and 95, the Configuration Program's SETUP utility will be launched at the same time automatically. You must follow the onscreen instructions to complete the installation.

To install the Configuration Program independently, browse the CD into the <CD-Drive>:\<PJ3 or PJ3plus>\Config folder, and then double-click the PJ3ConfigSETUP.EXE (or PJ3plusConfigSETUP.EXE), and follow the onscreen instructions.

<u>Using the Configuration Program:</u>

- Connect an external power source, or be sure that the battery is freshly charged.
- Assure that the Printer Driver has been installed and is functional.
- Connect the supplied USB cable between the printer and host computer, or align the computer and printer Infrared ports.
- From the Start Menu, select Programs, select Pentax PocketJet 3, and then select "PocketJet 3 (or 3plus) Configuration"

The application will load and will appear as follows:

<u>FIGURE 5. Configuration Utility</u>

If you prefer a language other than English, you may select this first. Then, using either the 'File' pull-down, or the 'Printer' selector, you may choose the appropriate PocketJet printer.

The display above shows the parameters for the printers as they are typically shipped in the U.S. market. These parameters may be different in other countries or may have been specially configured for some customers.

Configuration Options

Note: These configuration options are in some cases relevant only where the host computer will be sending simple text data to the printer and cannot send commands to perform these configuration changes. Others affect the printer in all modes. The first two items below are common to all modes.

Page 10
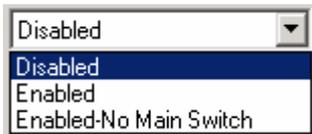
Auto-On:

When external power is applied to the printer, there are three possible actions that the printer may take.

If Auto-On is set to 'Disabled', the printer will place itself in a "sleep" state where minimal power is used. The printer's internal processor is kept alive, but no LEDs are lit and no printing is possible. The Main Switch must be pressed to wake the printer up for printing.

If Auto-On is set to 'Enabled', the printer will power up as soon as an external power source is connected to the printer. This can be useful in certain mobile installations where access to the Main Switch is difficult or unavailable.

If Auto-On is set to 'Enabled-No Main Switch', the printer will power up as soon as an external power source is connected, and furthermore, the Main Switch cannot be used to turn the printer off. This may be useful in some mobile installations where the button could be accidentally pressed. Power must be disconnected to shut off the printer.

Auto-Off:

When the printer is running on battery power, you may wish to have the printer turn off automatically to conserve the battery. You may choose to disable this feature by selecting 'None', or you may select either a 10-minute or 30-minute time-out period. If no data is received within the period selected, the printer will turn itself off.

Pre-Feed:

Enabled
- Disabled
- Enabled
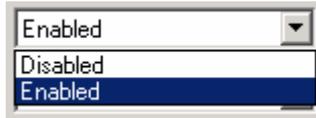
When the printer is powered on and paper is found in the infeed area, the printer will normally advance the paper a short distance. This is the default 'Enabled' operation of the printer. However, roll paper users who leave paper loaded while powering the printer up/down may find that this is inconvenient as it will misregister the top of form on pre-printed and perforated roll paper. Those users will likely wish to 'Disable' this feature.

The following configuration options will be set automatically by the Windows driver. If using text mode, they should be set by the user.

Print Density:

Medium
- Low
- Medium
- High
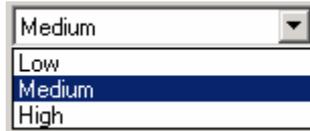
This sets the default print density (darkness) of the printing. Darker print will use more battery power, but may be easier to read if the font or other printed information is made up of very narrow lines. If battery conservation is more important, adjusting the setting for lightest print will do so. 'Low' = lighter, and 'High' = darker print.

Form Feed Mode:

Fixed Page
- No Feed
- Fixed Page
- End of Page
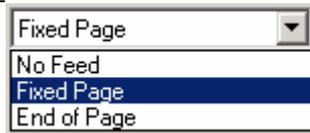
This setting effects what the printer will do in response to a Form Feed command from any source. Different modes are appropriate depending upon the type of paper being used.

'Fixed Page' mode is typically appropriate. It assumes a known page length (based upon the 'Form Length' and/or 'Paper Size' settings). It advances a new sheet to the printing position, and attempts to eject it at an appropriate distance based upon the length of the page.

'End of Page' mode makes no assumptions about page length, and will continue to feed the paper forward to a maximum page length of 14" or until the Paper Sensor detects that no paper remains in the input of the printer. Note that either the end of a cut sheet, or the black mark printed on the back of certain roll and perforated paper will be detected as the end of a page.

'No Feed' mode ignores all Form Feed commands, and does not advance the paper after printing. This can be of particular help to roll paper users who are printing only partial pages and do not wish to waste additional paper at the end of each document. The page may be manually advanced using the Main Switch.

Paper Size:

Letter ▼
Letter
Legal
A4
Custom

For standard paper sizes, this setting determines default margins and expected length for each printed page. For 'Custom' sizes, margins and length may be set using the commands 'Form Length', 'Bottom Margin', 'Left Margin' and 'Right Margin'.

'Letter' size assumes an 8-1/2 x 11" page, and sets a total printable height of 10.67", which in turn provides for a top margin of about 0.27", and a bottom margin of about 0.06". Printable width is set to 8.16" with 0.17" margins on either side.

'Legal' size assumes an 8-1/2 x 14" page, and sets a total printable height of 13.67", and top and bottom margins of

about 0.27″ and 0.06″, respectively. Printable width is set to 8.16″ with 0.17″ margins on either side.

'A4' size assumes an 8.27 x 11.7″ (210 x 297mm) in page, and sets a total printable height of 11.36″ (299.4mm), and top and bottom margins of about 0.27″ (6.8mm) and 0.06″ (1.7mm) respectively. Printable width is set to 8.0″ (203.2mm) with 0.13″ (3.4mm) margins on either side.

'Custom' size allows the setting of length of the form, bottom margin, and left and right margins using those commands.

Bottom Margin:

Bottom Margin:	Lines ▼	6

This setting will modify the bottom margin when 'Page Size' is set to 'Custom'.

'Lines' allow you to set a bottom margin equal to the height of a specific number of text lines. The actual space that is left depends upon the current setting of the 'Text Line Spacing' setting. For example, if 'Text Line Spacing' is set to 1/6″, and the 'Bottom Margin' is set to '4' lines, 2/3″ of blank space will be created at the bottom of each page.

The minimum and 'default' space between pages will depend upon the setting of the 'Text Line Spacing', but is a minimum of ½″. For 6 lines per inch, the minimum is 3 lines; for 8 lines per inch, 4 lines; for 8 lines per inch at 0.12″ spacing, 5 lines. Note that if the "Form Feed Mode" is set to "No Feed", the bottom margin will be forced to "0" lines as a reminder that no margin can be set and none will be produced.

The maximum setting is the 'Form Length' in lines – 1.

Bottom Margin:	Lines	▼	10
Left Margin:	Use Paper Size	▼	0
Right Margin:	Use Paper Size	▼	0
Text Line Spacing:	6 Lines/Inch	▼	

<u>Left Margin:</u>

Left Margin:	Columns	▼	10
	Use Paper Size		
Right Margin:	Columns		0
Text Line Spacing:	6 Lines/Inch	▼	
Default Font:	Serif	▼	
Default Pitch:	12 characters/inch	▼	

This setting can modify the left margin when the 'Custom' 'Page Size' is selected. You may choose to avoid any changes by selecting 'Use Paper Size' which will assume you wish to use the full 8" available print width. You may also choose to set a number of columns of unprinted left margin. The actual empty width created will depend upon the current character pitch as set by 'Default Pitch'. For example, if the default pitch is set to 12 characters per inch, and you set the left margin to '9', there will be a 3/4" (9 x 1/12") left margin established. If the current 'Default Pitch' is set to 'Proportional', 10 characters per inch pitch is used for this calculation. Values that cause up to 4.5" of left margin are allowed.

Right Margin:

Right Margin:	Columns	▼	10
Text Line Spacing:	Use Paper Size		
	Columns		
Default Font:	Serif	▼	
Default Pitch:	12 characters/inch	▼	

This setting can modify the right margin when the 'Custom' 'Page Size' is selected. You may choose to avoid any changes by selecting 'Use Paper Size' which will assume you wish to use the full 8" available print width. You may also choose to set a number of columns of unprinted right margin. The actual empty width created will depend upon the current character pitch as set by 'Default Pitch'. For example, if the default pitch is set to 12 characters per inch, and you set the left margin to '9', there will be a 3/4" (9 x 1/12") left margin established. If the current 'Default Pitch' is set to 'Proportional', 10 characters per inch pitch is used for this calculation. Values that cause the printable page width (the space left on the page by the difference between left and right margins) of as little as 1/5"are allowed.

Text Line Spacing:

6 Lines/Inch	▼
6 Lines/Inch	
8 Lines/Inch (0.125")	
8 Lines/Inch (0.12")	

This setting is used to modify the amount of vertical space that is used for each line of text. If you select '6 Lines/Inch', lines of text will be created every 1/6". If you select '8 Lines/Inch', lines of text will be created every 1/8". Since the "IBM graphics characters" used to create boxes and lines are 0.12" tall, when printing documents that contain these characters, you will want to select "8 Lines/Inch (0.12")" to assure that the tops and bottoms of the graphics characters touch.

Form Length:

Form Length:	Lines	66
Bottom Margin:	Lines / Inches	6
Left Margin:	Columns	10
Right Margin:	Columns	10
Text Line Spacing:	6 Lines/Inch	

This command can be used to set the form length of a 'Custom' size page. You may specify the vertical print area in text lines as defined by the 'Text Line Spacing' setting, or in inches.

If using the 'Lines' method for setting "custom" form length, the actual vertical space on the page is determined by the vertical space per line as determined by the 'Text Line Spacing' command. The minimum value allowed is the number of lines that would equal at least one inch of print because this is the minimum length of paper that will feed properly through the printer. For example, if your current 'Text Line Spacing' is set to 6 lines per inch, you must specify at least '6' lines of form length. The maximum setting is 127 lines. For 6 lines per inch, that will provide a page of a little more than 21 inches in length.

If using the 'Inches' method for setting form length, the actual vertical space on the page is rounded down if needed to create an even number of print lines as determined by the 'Text Line Spacing' command. For example, if your 'Text Line Spacing' is set to 6 lines per inch, and you specify 9.6 inches, the application will determine that 57 lines could be printed in this space, and change your inch value to (1/6 x 57) and the display a form length of 9.5 inches.

If you switch modes from 'Lines' to 'Inches', the form length will be recalculated in inches and displayed accordingly. If you switch from 'Inches' to 'Lines', the form length will also be recalculated and displayed as the number text lines that will be printed.

Form Length:	Inches ▼	11.0
	Lines	
	Inches	
Bottom Margin:		6

Default Font:

| Serif | ▼ |
| **Serif** |
| Sans Serif |

This command determines which of the two internal typefaces is
the default when printing ASCII text. From the factory, a Serif
font (similar to Courier) and Sans Serif font (similar to Letter
Gothic) are supplied.

Default Pitch:

| 12 char/inch | ▼ |
| 10 char/inch |
| **12 char/inch** |
| 15 char/inch |
| Proportional |

This command determines default horizontal size of characters
when printing ASCII text. Smaller characters (15 per inch)
allow you to print more characters across a line than larger
characters (10 per inch). Each character in '10', '12', or '15' per
inch mode will use the same amount of horizontal space. If
'Proportional' is selected, each character uses an amount of
horizontal space appropriate to the characters' intrinsic width.
For example, the letter 'i' will occupy less horizontal space
than the letter 'w'. The value supplied here will, as noted
above, affect the actual width of margin settings.

Extended Chars:

| Graphics | ▼ |
| **Graphics** |
| Italics |

This command determines what the printer's ESC/P®
emulation does when ASCII characters with values of between

128 and 255 are received. Either the graphics characters or italic versions of the lower valued characters (32 to 127) are printed.

CR-LF Mode:

```
LF=LF CR=CR              ▼
LF=LF CR=CR
LF=CR+LF CR=CR+LF
```

This command determines what the ESC/P® emulation does with ASCII characters 10 and 13. These are the 'line feed' (LF) and 'carriage return' (CR) characters. The "LF" causes the printer to move down to the next print line, and the "CR" causes the printer to move back to the left margin position. In most cases, these are sent at the ends of lines to position the printer for the next line of text.

Some host computers send one or the other of these, and some send both, each hoping to move to the left margin and down to the next line. You can determine the effect of these characters when they are received. If your host sends only a CR or LF to complete each line, you should set this to LF=CR+LF CR=CR+LF so that both a carriage return (return to left margin) and line feed are executed when just one of these control codes is received by the printer.

Printer Commands

Test Page:
You can print a test page using the Configuration Utility or you can print test pages using the Main Switch (see page 48).

Clicking on 'Test Page' will print a page showing the current printer configuration and image quality verification graphics.

Pentax PocketJet3 Firmware Version 01.01

Current Settings

AUTO POWER ON	:disable
PAGE LENGTH	:66
PAGE SIZE	:Letter
LINE FEED PITCH	:1/6
FONT	:Courier
PITCH SELECT	:12
CONDENSED MODE PRINT	:disable
FONT ATTRIBUTE	:disable
CHARACTER TABLE	;Extended Graphics
INTERNATIONAL CHAR SET	:USA
1" PERF SKIP	:disable
AUTO LINE FEED	:disable
DENSITY LEVEL	:5
PAPER EJECT MODE	:Fixed Page Mode
BATERY POWER TIME-OUT	:10min
BATTERY REFRESH TIMER	:1
PRE-HEAT	:disable
DASH LINE BETWEEN PAGES	:disable
PRE-FEED CANCEL	:disable

Samples of some of the currently stored fonts are   displayed here.

Clean:

Clicking on this button places the printer in "Cleaning Mode". Refer to that maintenance procedure in this manual for further instructions.

Upload Font:

Clicking on this button will guide you through the process of uploading new fonts to the printer.

Upgrade Firmware:

Clicking on this button will guide you through the process of uploading new firmware to your printer. See Program Mode, page 5, for further information.

Factory Reset:

Clicking on this button will return the printer to its original factory settings for <u>fonts and configuration</u>. The configuration data from the file \PJ3Factory.cfg will be loaded and displayed. Since that file is expected to match the internal factory configuration of your printer, this file's properties are set to "Read Only" and it should not be modified.

Save Config:

Clicking on this button will save the configuration as you see it to the file **\PJ3Default.cfg** and then send this configuration information to the printer. Be sure that all of the settings are adjusted to your liking.

Close:

Closes this application without sending data to the printer and without saving the current settings.

File Menu:

- Import – Load a configuration file that was saved previously using the Export feature. <u>Note</u>: You must then Save Config to set the printer to this configuration.
- Export – Save a configuration to a file.
- Select Printer – Displays the currently available print queues for your printer, along with the port name, to make it easier to select the proper printer in case you have more than one print queue available. This will also modify the Printer selected on the main dialog.
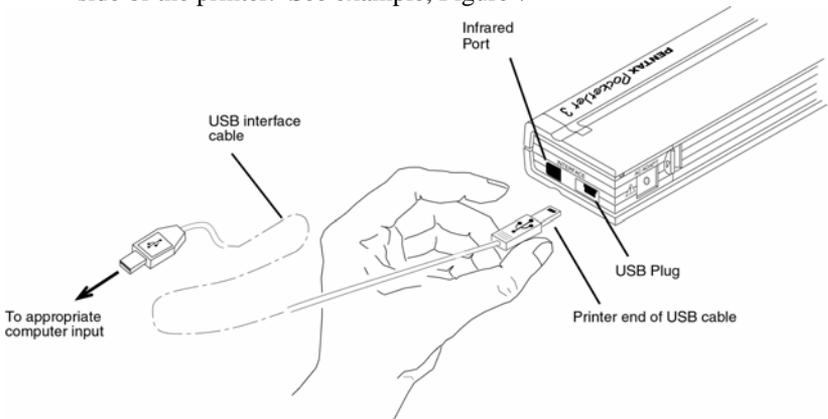
Connecting to Your Computer

There are two ways to connect your PocketJet to your computer, via USB cable and via Infrared (IrDA).

<u>Via USB Cable</u>

CAUTION: Install the driver software <u>before</u> connecting the printer to the computer via the USB cable.

1. Make sure your printer is off before installing the interface cable.

2. Take the printer end of the cable and hold it so the notched metal surface is facing up.

3. Insert the printer end of the cable into the interface connector on the side of the printer. See example, Figure 7

FIGURE 7. Connecting the PocketJet to your computer

CAUTION: *Always insert and remove the interface connector gently. Press the latching devices on each side of the interface connector when removing the cable.*

4. Connect the other end of the cable to the USB port on your computer.

Note 1: USB is not supported for Windows 95.
Note 2: For Windows 98/98-SE, USB printing requires installing Microsoft's USBPRINT solution. To install this software:
   A. Connect the USB cable to the printer and computer.
   B. The Windows Add Hardware Wizard window will open (if it does not open, the software has already been installed). Choose "Specify a

location" and browse the Pentax Driver CD into the <CD Drive>:\<Printer>\Win9xME folder.

   C.   Follow the on-screen instructions to complete the wizard installation.

<u>Via Infrared (IrDA)</u>

If a USB cable is <u>not</u> connected to the PocketJet printer when it is turned on, the infrared connection is automatically enabled. Make sure your computer is set properly to send data via its infrared port, make sure the two infrared ports are aligned, and proceed to print.

Note: Infrared is the only connection option for Windows 95.

Printing

1. Make sure that you have installed a charged battery, have connected the printer to an AC power outlet, or have a DC adapter plugged in.

2. Turn the printer on by pressing the main switch once quickly. The POWER indicator lights up. See Figure 8.
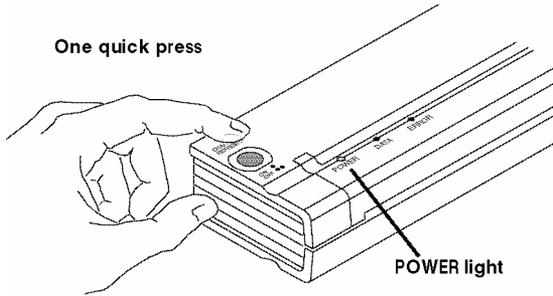

FIGURE 8. Turning on the printer

3. Insert a sheet of Pentax Quality Paper into the paper input slot. Place the print side of the paper away from you, so that it faces the rear of the printer. See Figure 9.

NOTE: *You can print only one side of the paper. This is the smooth, coated side. See Chapter 3, "Tips on Using Paper."*
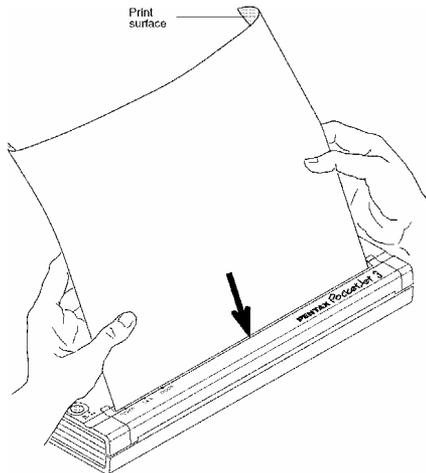

FIGURE 9. Inserting a sheet of paper

4. Print one or more pages from any software application.

Page 25

The green DATA indicator light blinks to indicate that the printer is receiving data from your computer.

NOTE: *If you have inserted paper into the input slot and the green DATA light stays on (without blinking), the printer has received insufficient data to print an entire page. Press and hold the green Power button to eject the page.*

Turning the Printer OFF

Press the main switch twice quickly to turn the printer off.

NOTE: *If a battery is powering the printer and the Auto-Off Timer feature is enabled, the printer will turn itself off automatically after the selected period of inactivity.*

Making Prints Lighter or Darker

You can make prints lighter or darker by using the Print Density Setting in the printer driver dialog. See "Advanced Software Features," on page 28. If you are not using a driver, you may save a lighter or darker setting using the Configuration Utility.

Changing the density setting may result in slight changes in the printer's speed and the number of pages that can be printed.

When printing from a <u>vehicle DC supply,</u> light print density may indicate a low voltage (less than 10 volts). Check and correct the supply voltage or be sure the vehicle engine is running.

Accessing Advanced Software Features through Windows

These features can be accessed using the software dialog boxes and methods discussed below. For more detailed information, view the "Read Me" file on the driver CD, if available.

In Windows CE, double tap on the PocketJet printer icon in the Control Panel window.

In Windows 95/98/Me, use the path "Start:Settings:Printers:Pentax PocketJet 3:Properties:Advanced"

In Windows 2000/XP, permanently change the advanced features using "Start:Settings:Printers: Pentax PocketJet3:Printing Preferences:Advanced" or the settings may be temporarily changed using the "Print Setup" from your application.

Density Modes
You can set the print density to your preference from zero to 10. 0 is the lightest, 7 is the default (medium), and 10 is the darkest.

2-Ply Mode
For special applications where 2-ply paper is needed, this setting makes prints that are darker (and print slower) than the density mode set to 10 as listed above.

Form Feed Modes
You can set how the printer ejects paper by using the following options.
- **No Feed Mode** - there is no paper feed at the end of a job. This is typically used with non-perforated roll paper to save paper.
  - **No Feed Mode Extra Feed** - this option is used in conjunction with the No Feed Mode to eject paper by setting the number of lines to be ejected (at 200-dpi for PocketJet 3 or 300-dpi for PocketJet 3 Plus) after the end of a document.

NOTE: *The "Extra Feed" mode only affects the last page of a document if it is multipage. The bottom margin as selected by the application has no effect. The top margin actually defines the total top and bottom margin between pages of a multi-page job.*

- **Fixed Page Mode** - the paper always feeds at the end of a job to complete the vertical page size specified (i.e., letter, legal, A4, or user-defined size). Use this with cut sheet paper

- **End of Page Mode** - the printer feeds paper until an "out-of-paper" condition is found, or a maximum of 14". Use this with perforated paper.

Windows CE

Windows CE Notes:
1) Serial Handshake – Not used at this time.
2) Port Buffer Size – Controls the largest block of data sent to the printer port at one time. Set this to the largest value that works <u>reliably</u> on your CE device (larger=faster).
3) Perforated Paper – Modifies the printable area to assure proper function when using perforated paper.
4) Display This Dialog When Printing – If "on", settings may be changed for every print job. To be sure the same settings are always used, set this to "off." It may be turned "on" again using the Control Panel.

Windows 2000/XP

Windows 2000/XP Notes:
1) Paper Type Control – Select Cut Sheet, Roll, or Perforated Roll. This modifies the printable area of all paper sizes (Letter, Legal, A4, Custom).
2) Using Custom Forms
   a. Select Start:Settings:Printers: select Server Properties.
   b. On the Forms Page, create a form for use with custom paper size.
   c. Allowed sizes:
      - Minimum width = 4"
      - Maximum width = 8.5"
      - Minimum height = 2.00 inches
      - Maximum height = 65,535 print lines.
   d. All forms created within these specifications will be displayed as paper size options.

Cut Sheet Paper Usage
1. Select "Fixed Page" mode.
2. Select the appropriate paper size (Letter, A4, Legal).
3. In Windows 2000/XP, set the Paper Type to "Cutsheet" only.

Non-Perforated Roll Paper Usage

To use roll paper, you must select from either fixed page length using "Fixed Page Mode" or variable page length using the "No Feed Mode" and selecting a page eject length using the "No Feed Mode Extra Feed" option.

When using Windows 2000/XP, for each case below, be sure to set the Paper Type to "Roll."

A. Variable Length Forms (saves paper)
    1. Select No Feed Mode.

    2. Set the value of the No Feed Mode Extra Feed to the amount of margin you wish to have between the final printed line and the end of the document. For example, 200 lines equal 1 inch. On a PocketJet 3, this allows paper advancement from the print head area inside the printer to a position outside the printer. This provides for a "tear-off" position from a continuous roll feed that will include the entire printed image.

    3. The Paper Size selected does not affect this mode except to provide a maximum number of lines per page.

B. Infinite Length Forms (such as geological recordings or polygraph charts) – (Only available in Win 9x/Me, Win NT, and Win 2000/XP drivers)
    1.   Select No Feed Mode.
    2.   Select "Infinite Paper Size."
    3.   Set the value of the No Feed Mode Extra Feed to the desired length.
    4.   Check to be sure that the Top/Bottom margins within your application software are set to zero (0).

C. Fixed Page Length
    1. Select Fixed Page Mode.

    2. If the length corresponds to one of the pre-defined paper sizes (Letter, Legal, or A4), select the desired paper size from the Advanced Features Setup using the Control Panel method instead of the application software's Print Setup in order to make it permanent (under the "Paper" property sheet in Windows 95 or the "options" under Windows 3.1).

    3. If the fixed length desired is not one of these sizes, use the Advanced Features setup as explained in #2 above to select User Defined Paper Size. Set the width and length as desired.

D. Multipage Documents with "tear off" for EACH page
Note: This feature is only available with Win 9x/Me and has recently
been added to the Win2k/XP driver (check the Pentax website for the
latest driver).

Select "Prompt" for Win 9x or "Roll Paper Pause" for Win 2k/XP for
Paper Source on the "Paper" tab within the printer properties control
panel. This setting causes a dialog to be displayed before EVERY
printed page, including the first one.

Perforated Roll Paper Usage
1. Select "End of Page" mode.
2. Select "Perf Letter" or "Perf A4" paper size. This is <u>very</u>
   important because the printable area is smaller when using
   perforated paper compared to cut sheet paper.

WinCE Note: Check the "Perforated Paper" box.
Windows 2000/XP Note: Set "Paper Type" to "Perforated Roll."
   This modifies the printable area for any paper size including
   custom sizes. This way you are not limited to "Perfletter" and
   "PerfA4" sizes.

Protecting the Printer
When you are not using the printer or charging its battery, always take
the following precautions:

• Unplug the AC cable from the power outlet

   NOTE: *The transformer inside the AC adapter generates heat while
   it is plugged in. Unplugging the adapter extends its life.*

• Store the printer in its carrying case

Page 30

Installing the Battery

1. Open the printer's battery cover by pressing the cover latch. Push the cover away from the AC adapter receptacle. See Figure 10.
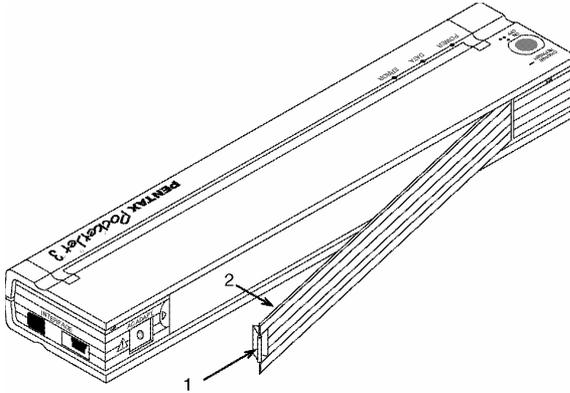
FIGURE 10. Opening the Battery Cover

2. Swing the cover open and remove it.

3. Gently push the battery connector into the terminal on the inside of the printer's battery compartment. See Figure 11.
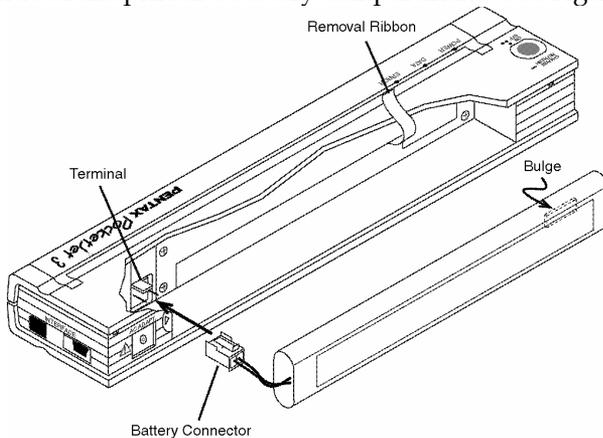

FIGURE 11. Pushing the battery connector into the terminal

CAUTION: *Do not force the battery connector into the terminal. If you are having difficulty inserting the connector, make sure the connector is not upside down. See Figure 11.*

4. Grasp the battery removal ribbon, which is attached to the inside of the battery compartment. See Figure 12.

> **CAUTION**: *If you forget to hold on to the ribbon, you may accidentally insert the battery on top of it. Then you won't be able to remove the battery by pulling the ribbon.*

Removal Ribbon
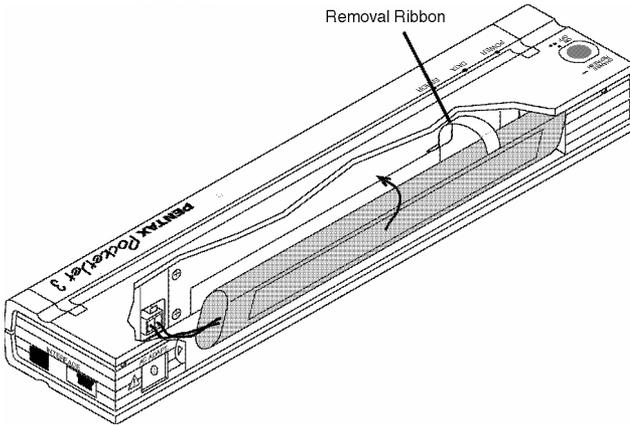
FIGURE 12. Placing the battery inside the
battery compartment

5. While holding onto the ribbon, tilt the battery and place it inside the battery compartment. Once the battery clears the outer edges of the compartment, press it securely into position.

Make sure the side of the battery with the warning label faces the outside of the battery compartment. Otherwise, the battery cover will not close properly.

> **NOTE**: *The side of the battery opposite the warning label contains a heat sensor that stops the flow of electricity if the battery overheats.*

6. Attach the battery cover to the end of the battery compartment opposite the AC adapter receptacle. Close and latch the cover. If necessary, gently push the cover latch towards the AC adapter receptacle until it latches.

Removing the Battery

1. Open the printer's battery cover by pressing the cover latch. Swing the cover open and remove it.

2. Pull out on the battery removal ribbon as shown in Figure 13 until the battery starts to tilt out of its compartment.

   NOTE: *If the battery removal ribbon is caught behind the battery, insert a thin metal object such as a flat-blade screwdriver between the battery and the case at the end away from the AC adapter receptacle and tilt it out of its compartment.*

3. Remove the battery from the compartment.

4. Gently pull the battery connector from the terminal inside the printer.
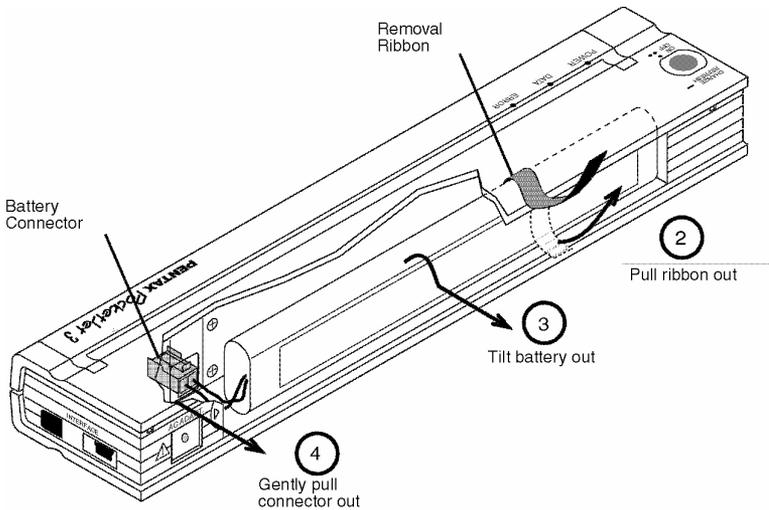
FIGURE 13. Instructions for removing the battery

Charging the Battery

Note: Batteries are shipped from the factory uncharged.

<u>Charging the Battery</u>

1. Make sure the printer is connected to an AC power outlet with the
   AC adapter and power cord or a DC power cord.

2. Make sure the printer is off.

3. Press the main switch and hold it down for a few seconds until the
   POWER indicator light begins to blink. This starts the charging of
   the battery.

The POWER indicator light blinks until charging is complete.

The maximum time to charge to 100% capacity is approximately 120
   minutes. A new battery at 100% charge will yield approximately
   100 pages of printing.

When the printer finishes charging the battery, it automatically turns
   itself off, and the POWER indicator light goes off.

Note that when the printer is connected to an external source of power,
   it will constantly draw approximately 20 mA to trickle charge the
   battery.

<u>Stopping the Charge Process</u>
If you want to stop the printer while it is in Charge mode, press the
main switch twice quickly.

Tips on Using the Battery

Darker prints discharge the battery faster than lighter prints do.
Use the density adjustment from the driver dialog on your
computer or use the Set-Up Utility to adjust lightness and
darkness. See "Advanced Software Features" on page 28.

Chapter 3 - Tips on Using Paper

Inserting Paper

1. Use both hands to hold the paper straight while you insert it into the printer's paper input slot. Make sure the bottom edge of the paper is parallel to the feed roller.

2. Press the paper gently into the printer's input slot until the roller pulls it into the starting position, then let go. See Figure 14.
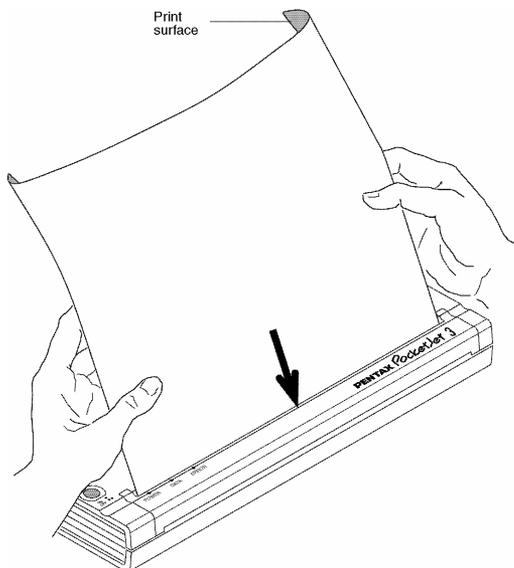

FIGURE 14. Inserting paper

If the paper is skewed after the printer pulls it into the starting position, you can correct the situation as follows:

- If the printer *does not* start to print immediately, open the release cover as far back as it will go. See Figures 15 and 16, pages 37 and 38. Pull the paper out, close the cover, and reinsert paper.

- If the printer *does* start to print, wait for the page to be printed and then reprint that page if necessary.

NOTE: *If you insert paper into the printer* before *you start the print job, you will have time to adjust the paper if it is skewed after the printer pulls it into the starting position.*

See "Advanced Software Features:Form Feed Modes", "Advanced Features: Non-Perforated Roll Paper Usage", and "Advanced Features: Perforated Roll Paper Usage" in Chapter 2.

Use Pentax Quality Paper

Pentax guarantees optimum compatibility with your PocketJet printer when you use Pentax Quality Paper. This paper is a thermal paper, which eliminates the use of toner, ribbons or ink. It has been specifically designed and tested for optimal support for the PocketJet printer family. To order paper, see your dealer or order direct from Pentax. Refer to Chapter 8, "Ordering Information."

Usage and Handling Instructions

- When loading paper, make sure the smooth, coated side faces the back of the printer.

- To avoid wrinkling and tearing, keep paper in its box or bag until ready to use.

- Do not fold, crease, or wrinkle paper prior to loading it into the printer.

- When storing paper, avoid high temperatures and humidity.

- Avoid prolonged exposure to intense ultraviolet light.

- Avoid contact with Diazo (blueprint), carbonless, or castcoated papers.

- Avoid contact with vinyl or acetate materials, such as many notebook or report covers.

- Avoid contact with organic solvents, oils, and ammonia.

- When using a colored marker, be sure to use one with a water-based ink. If you use a solvent-based marker, it may darken the paper.

Clearing a Paper Jam

Method 1

Press and hold the green Main Power switch. The drive motor will start and move slowly for a few seconds, then move faster as long as you hold the switch down. This can be repeated as many times as necessary. If this does not move the jammed paper out of the printer, use Method 2 below.

NOTE: *This method can also be used to finely position a sheet of paper for printing, for instance on a pre-printed form.*

Method 2

1. Gently open the release cover as far back as it will go. See Figure 15.
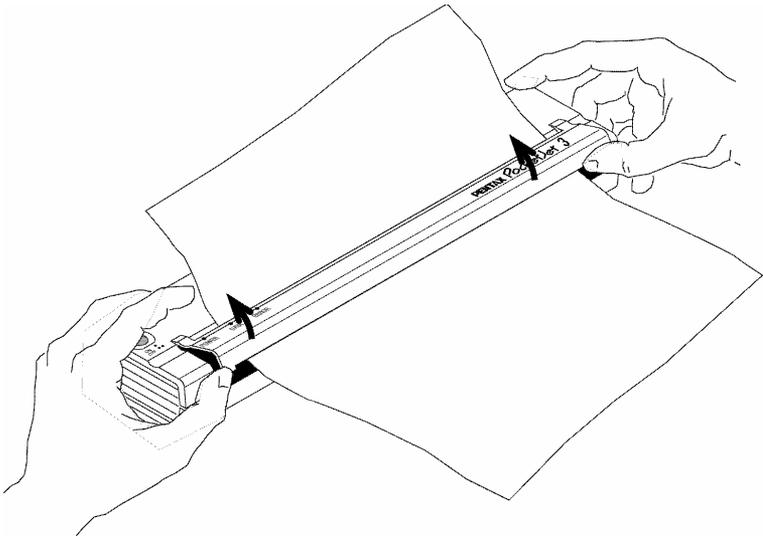
FIGURE 15. Opening the release cover

2. Gently pull the paper out of the printer. Pulling in either direction is acceptable. See Figure 16.
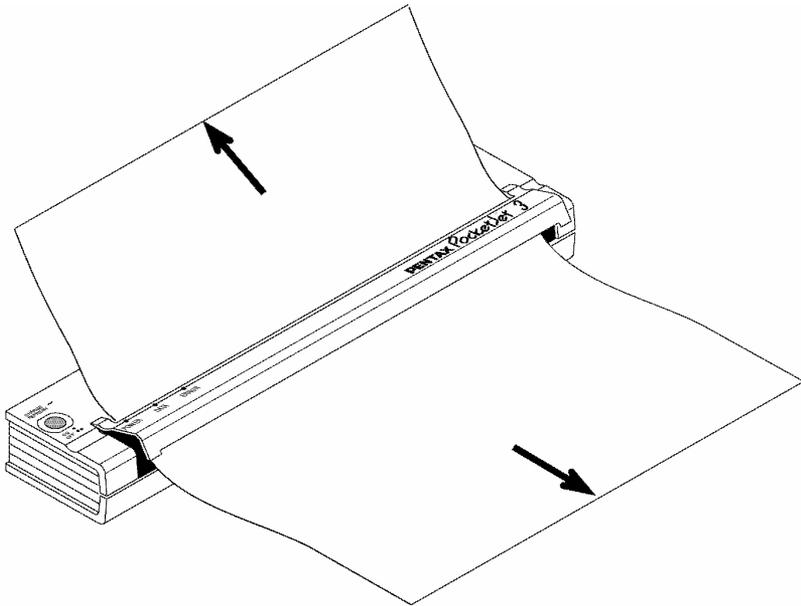

FIGURE 16. Pulling jammed paper out of the printer

3. Close the release cover.

4. Reinsert a new sheet of paper in the printer and restart the job.

# *Chapter 4 - Maintaining the Printer*

Cleaning the Print Head

To maintain high print quality, clean the print head after 500 prints or whenever you detect broken or light characters on the page.

> **NOTE**: *Defective or wrinkled paper can also cause broken or light characters. If the problem does not go away after you clean the print head, try a different sheet of paper or a higher density setting.*

1. Make sure the printer is powered on <u>without</u> paper loaded.

   > **NOTE**: *If paper is loaded and detected printer when you attempt to initiate Cleaning Mode, a Form Feed will be executed instead.*

2. Press the main switch for about two seconds. The "Data" LED will illuminate.

3. Press the main switch again for less than 2 seconds. The feed motor will begin to turn.

4. Insert the black cleaning cloth that came with the printer into the printer's paper input slot with the rough black side, which contains the cleaning material, towards the rear of the printer. See Figure 17. The printer pulls the cleaning cloth through.

5. The roller movement will stop automatically after about 60 seconds, and the printer returns to an idle state. If you press the main switch before 60 seconds has elapsed, this will toggle the feed motor on and off. Pressing the main switch twice quickly will shut off the printer.
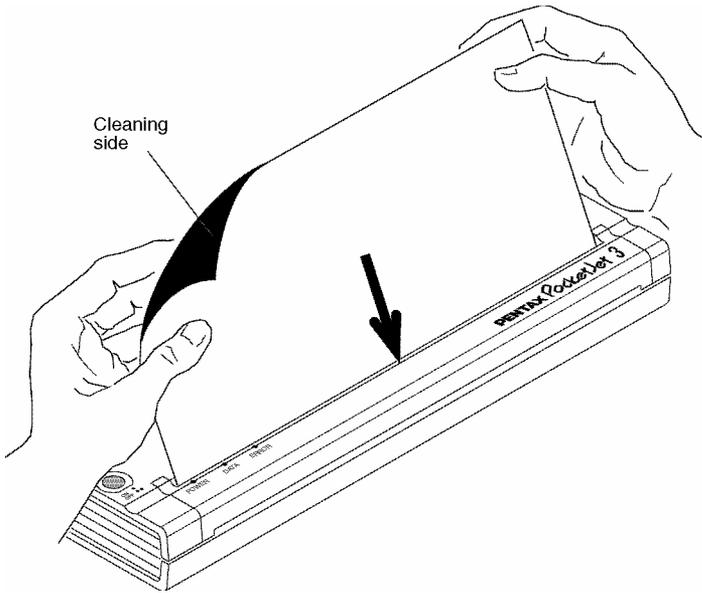
FIGURE 17. Inserting the cleaning cloth

CAUTION: *Do not attempt to clean the print head with any material other than the cleaning cloth.*

The cleaning cloth is for head and roller cleaning only. Do not use it to clean any other part of the printer.

NOTE: Don't throw the cleaning cloth away after you clean the print head. It should last for the life of the printer. Keep the cleaning cloth with your printer supplies and use it whenever you need to clean the print head.
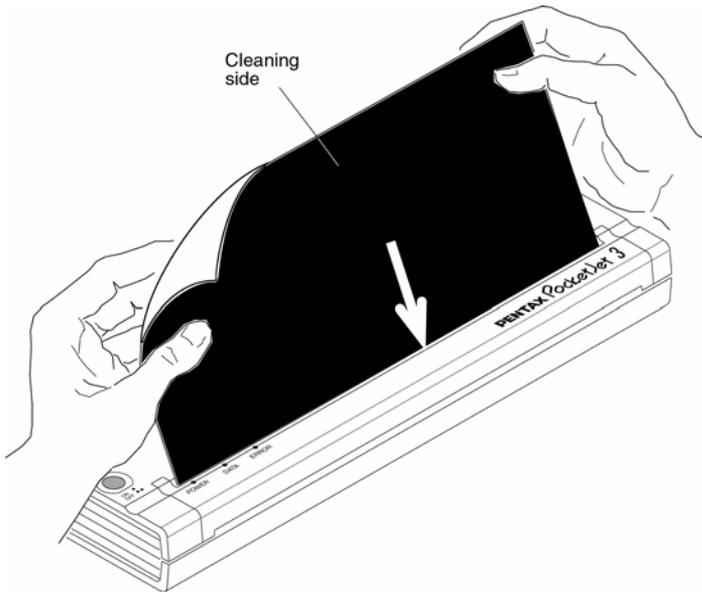
Cleaning the Platen Roller

Dirt and debris on the platen roller can make the roller feed paper into the printer at an angle, degrade the quality of the printed image, or both.

1. Make sure the printer is powered on without paper loaded.

   NOTE: *If paper is loaded and detected printer when you attempt to initiate Cleaning Mode, a Form Feed will be executed instead.*

2. Press the main switch for about two seconds. The "Data" LED will illuminate.

3. Press the main switch again for less than 2 seconds. The feed motor will begin to turn.

4. Insert the black cleaning cloth that came with the printer into the printer's paper input slot with the rough black side, which contains the cleaning material, towards the front of the printer. See Figure 18. The printer pulls the Cleaning Cloth through.

5. The roller movement will stop automatically after about 60 seconds, and the printer returns to an idle state. If you press the main switch before 60 seconds has elapsed, this will toggle the feed motor on and off. Pressing the main switch twice quickly will shut off the printer.

FIGURE 18. Cleaning the platen roller.

CAUTION: *Do not attempt to clean the platen roller with any material other than the cleaning cloth.*

The cleaning cloth is for head cleaning and platen roller cleaning only. Do not use it to clean any other part of the printer.

NOTE: *Don't throw the cleaning cloth away after you clean the platen roller. It should last for the life of the printer. Keep the cleaning cloth with your printer supplies and use it whenever you need to clean the platen roller or the print head.*

Cleaning the Printer's Exterior

Should the outside of the printer become dirty, clean it using a soft cloth moistened with water. If necessary, add a very small amount of a mild soap such as a liquid dishwashing detergent.

> **CAUTION:** *Avoid saturating the cloth. Do __not__ allow water to get inside the printer.*
>
> *Avoid the use of benzene, alcohol, paint thinner, or cleaners that are abrasive, alkaline, or acidic. Such cleaners may damage the printer's case.*

Notes:

Chapter 5 - Reference

Indicator Lights

The indicator lights tell you about the current status of the printer.

Indicator Light Table   = Solid   =Blinking

= Alternating Blinking

POWER	DATA	ERROR	= Doesn't matter
(green solid)			External power in use
(orange solid)			Battery in use, > 14.0 Volts
(orange blinking)			Battery in use, > 13.1 Volts
(red solid)			Battery in use, > 10.0 Volts
(red blinking)			Battery in use, > 6.6 Volts
(green blinking) (orange blinking)			Battery is discharging
(green blinking)			Battery is charging
(doesn't matter)	(green blinking)		Printer is receiving data
(doesn't matter)	(green solid)		Unprinted data remains in buffer
(doesn't matter)	(red blinking)		Printer is receiving flash upgrade
(doesn't matter)	(red solid)		Printer is in "service" mode
(doesn't matter)	(red blinking)	(red blinking)	Printer ready to receive flash data
(doesn't matter)	(red solid)	(red solid)	Printer is receiving flash data
(doesn't matter)	(orange solid)		Printer storing flash data to flash

Page 45

POWER	DATA	ERROR	
○ (white)	● (green)		Flash data storage is complete
◎ (red)	◎ (red)	◎ (red)	Bad checksum of flash data
◎ (red)		◎ (orange)	No battery found when charging
◎ (red)		◎ (green)	Time-Out when charging
○ (white)	◎ (red)	◎ (green)	Low Thermal Head temperature
○ (white)	◎ (red)	◎ (orange)	High Thermal Head temperature
○ (white)	◎ (orange)	◎ (orange)	Data Receive Error

Indicator Light Warnings

The POWER indicator light does not light

The printer is receiving no power. If you are using the AC adapter, make sure it is connected properly. See page 2, "Connecting to an AC Outlet." Make sure the AC power outlet is "live." If you are using a DC adapter, make sure power is connected and that the fuse is good.

Bad Checksum of Flash Data

The firmware or font that was sent to the printer was either corrupt or was corrupted during transmission. Disconnect printer power to shut down the printer, and try sending the file again. If it continues to fail in the same way, it is likely that the file itself is corrupt and should be replaced with a clean copy of the file.

In rare cases, when the printer is not being flashed, this error may indicate bad memory components or other problems that require printer service.

No Battery Found When Charging

If this indication occurs immediately when attempting to charge the battery, the printer did not "see" a battery when you tried to initiate a battery charging cycle. Make sure the battery has been installed and connected properly and that there are no broken wires at the battery or connector. See page 31, "Installing the Battery."

If the battery is connected properly, you may have attempted to charge the battery and it has become overheated during the charge cycle. An internal thermal breaker will open when overheated, and after cooling, will close again. Allow the battery to cool before continuing to charge it. If the problem occurs again, replace the battery.

Time-Out When Charging

The printer believes that too much time was required to bring the battery up to a normal charge voltage. A maximum of 150 minutes is allowed for the charging cycle. This is an indication that the battery should be replaced.

Low Thermal Head Temperature

The temperature of the thermal head is too low for reliable printing (less than -10°C). You need to use the printer in a warmer environment.

If this condition occurs in relatively warm environment (for example, at room temperature), the printer should be returned for service.

High Thermal Head Temperature

The temperature of the thermal head is too high. If allowed to become even hotter, the thermal head would begin imaging the paper in areas not intended to be printed. The printer will stop while the head cools down and then will resume printing. This condition is normal when printing documents with a great deal of "black" content.

To avoid or delay the onset of this condition, you can print using a lighter density setting, reduce the amount of "black space" being printed by removing background shading and colors (for example, background on Excel graphs or PowerPoint documents) and make sure that the printer is not enclosed and has adequate ventilation.

Note: This condition may be exacerbated by use at high altitude (>10,000 feet) due to a lower air density available to cool the printer.

Data Receive Error

Data is being received but errors are causing the printer to request that it be re-transmitted. This will slow printing speed and is almost always associated with the quality of an IrDA connection. Try repositioning the printer or host IrDA until the errors cease.

Self-Test Feature

The Self-Test Feature can be used to print a letter-size page test page without connection to a host computer. The test page (see the sample in the Set-Up Utility section) contains firmware level, image quality, and configuration information.

1. To print a test page, the printer must be turned on and idle, and paper must <u>not</u> be loaded in the printer.

2. Press the main switch for two seconds and release to place the printer in "Service Mode". The red DATA light will illuminate.

3. Insert a piece of Pentax Quality paper in the printer. The test page will print automatically. After the print is complete, the printer will return to an idle state.

4. To print multiple pages, repeat steps 1~3.

Note: Test pages can also be printed from the Windows based Configuration Utility provided on the Installation Disk.

Chapter 6 - Troubleshooting
Overview

If you have difficulty getting your printer to work properly, first check to make sure you have done the following tasks correctly (See Chapter 1, "Setting Up the Printer").

• Installing the battery or connecting the printer to an AC outlet

• Connecting the printer to your computer

Make sure you have installed and selected the proper printer driver as explained in Chapter 2, "Using the Printer."

Look through the troubleshooting tips in this chapter for help correcting the problem.

If none of these suggestions works:

• <u>If you are in the U.S.</u>, call Pentax Technical Support at 1-800-543-6144 (extension 1820) from 8 AM to 5 PM Mountain Time, Monday through Friday.

• <u>If you are outside the U.S.</u>, contact your local reseller or any of the Authorized Service Centers.

Paper Problems

The paper is jammed in the printer
See page 37, "Clearing a Paper Jam."

Paper moves through the printer, but nothing appears on the paper
Make sure you are using Pentax Quality paper and that you are loading it properly with the print side away from you. See page 35, "Inserting Paper." Also, check the Print Density setting using the "Advanced Software Features," Chapter 2.

Paper does not move through the printer even though the motor is running
If the release cover has been left open, close it completely.

Use Pentax Quality paper only. Heavy paper may not feed through the printer.

If the release cover is closed and you are using Pentax Quality paper, the printer may have a damaged drive system. Call technical support.

Printed Image Problems

The printed image is out of alignment
Make sure you are using the Pentax Quality paper.

Make sure you are inserting the paper correctly. See page 35, "Inserting Paper."

Check to see whether the platen roller is dirty. If it is, clean it. Follow the instructions for "Cleaning the Platen Roller," page 41.

The print quality is poor, and the image is too light or dark
Raise or lower the density setting using the printer driver. See page 26, "Making Prints Lighter or Darker."

Make sure you are using recommended Pentax Quality Paper.

The image is squashed and stretched in many places

Make sure the release cover was not left open during printing. If it is open, close it completely.

Make sure the paper is not slipping in the printer. If it is, make sure the print head and platen roller are clean. See Chapter 4, "Maintaining the Printer."

Make sure the paper is not wrinkled prior to inserting it. Also, make sure you are using Pentax Quality paper.

The image has light or white vertical lines

Make sure the release cover was not left open during printing. If it is open, close it completely.

Clean the print head. Follow the instructions in "Cleaning the Print Head," page 38.

If cleaning the print head does not correct the problem, the print head may need maintenance. Call technical support.

All pages have a white vertical line

The print head may need maintenance. Call technical support.

All pages have a black vertical line

The print head may need maintenance. Call technical support.

Light patches of print appear on the image

The printer requires smooth paper to work properly. Make sure the paper does not have any dents or wrinkles. It should lie flat and it should not have a defective or uneven surface coating. Use Pentax Quality paper and make sure it does not have any obvious deformities.

Check the density setting using the printer driver. If the setting is too low, raise it. See page 26, "Making Prints Lighter or Darker."

Clean the print head. Follow the instructions in "Cleaning the Print Head," page 37.

If using a DC power adapter, make sure the voltage from the vehicle is high enough. Try starting the engine if necessary.

The top margin is incorrect

Make sure the correct margins have been set in the configuration utility and your software application. If not, set the margins for the top and bottom of the page as needed.

Make sure you are not inserting the paper into the paper input slot with excessive force. Always insert the paper gently.

The image for one page requires more or fewer sheets than you expected

Make sure the software application, the printer, and printer driver have been set to print the same size paper that you are loading into the printer. If the application or printer driver has been set to print legal-size paper and you insert letter-size paper, the image will require two sheets. Adjust the application or printer driver settings as needed or reduce the print image within your application to fit on the letter-size page.

The data light will remain lit green to indicate that data is still in the printer after the page has completed printing.

Certain colors of text do not print

Choose a different color of text. The Windows 3.1 "Universal Print Driver" is limited to 8 colors (specific colors, not total colors).

The side margins are incorrect

Check to make sure the correct margins have been set in the configuration utility and your software application. Adjust the left margin as needed.

Make sure the software application or the printer driver has been set to print the same size paper that you are loading into the printer. If the application or printer driver has been set to print a different width paper, the image will not print in the proper horizontal position. Adjust the application or printer driver as needed.

The print does not contain the proper characters

Make sure you have defined the proper character set (font) in the software application. If it is not correct, you must change it.

Trying another font may tell you if the original font was in error.

The print contains random dots

Check the printer driver to make sure it is set correctly. Check the interface cable to make sure it is connected firmly and correctly. If

possible, replace the interface cable with another and permanently replace it if it is defective.

Pages Don't Print

The green DATA indicator remains lit but does not blink

The print buffer contains unprinted data from the software application.

If you have already inserted paper in the printer, take the paper out and re-insert it to make sure the printer knows paper is ready. If that doesn't work, you may need to turn the printer off, turn it back on, and restart the print job.

If paper has not already been inserted into the printer, insert a new sheet of paper and the print job should proceed.

An ASCII text application has not finished a text line with a CR/LF or form feed, and the printer does not know the line is complete. Printing another page or manually form feeding using the main switch may finish the page correctly

The application should be sending data to the printer, but the green DATA indicator is not lit

Make sure the interface cable is properly connected to both the printer and the host computer, or that the infrared unit is properly connected and oriented toward the infrared unit on the computer. See page 23, "Connecting to your Computer."

Pages Are Partially Printed

The green DATA indicator light goes out while a page remains in the printer

The software application may not have sent a full page of data. Restart the print job.

The application may have sent the wrong information about page size or you may have put in the wrong paper size. Check the application and the print driver for the proper page size. Check to be sure the application and the page you are inserting in the printer are the same. Adjust one or the other if necessary.

Make sure the printer driver is not inadvertently set to "No Feed Mode."

You may advance the paper position by pressing and holding the main switch while paper is loaded.

The printer ejects a partially printed page, and the green DATA indicator light remains lit or blinking

Make sure the Paper Size selection is correct using the application's dialog box.

Windows CE-related Problems

I get an error message on my WinCE HPC when I try to print

Make sure the correct printer and port are selected. Make sure the printer cable is connected or the IrDa ports are aligned (if using infrared).   Make sure the WinCE HPC is not connected to a PC. Try resetting the WinCE HPC according to the manufacturer's directions.

There seems to be no way to print from my application

Your application may not support printing under Windows CE. Call the application vendor and request an update.

The printing is VERY slow

Some WinCE HPCs print more quickly with infrared than cable. Try both methods to determine the best for you.

I have to wait for a period of time after the last line of a print job for the paper to eject.

This is normal. Each WinCE HPC has a different wait time after a print job completes before it sends an eject signal to the printer.

Chapter 7 - Technical Information

Specifications
Physical

	Height: 1.18 in. (30 mm)
	Width: 10.04 in. (255 mm)
	Depth: 2.17 in. (55 mm)
	Weight: 1.12 lb. (513 g) including battery

Printing

Method	Direct thermal printing
Resolution	PocketJet 3 - 203 (H) by 200 (V) dpi PocketJet 3 Plus – 300 (H) by 300 (V) dpi
Density	11 levels – 0 (lightest) to 10 (darkest) (Adjustable by both driver and Configuration Utility)
Speed	Up to three pages per minute at normal (5% density) page coverage
Emulation	Epson® ESC/P® for 24 wire matrix, similar to that of an LQ-500 printer. PocketJet 3 emulates a PocketJet 200. PocketJet 3 Plus emulates a PocketJet II
Fonts	Native fonts are Serif and Sans Serif (similar to Courier and Letter Gothic) in 10, 12, 15 and Proportional sizes. User may define alternate font(s). When running as a raster printer, no fonts are sent to the printer, but instead, are supplied by the application in bit image form.
Paper Sizes	*Letter* 8.5" x 11" (216 mm x 279 mm) *Legal* 8.5" x 14" (216 mm x 356 mm) *A4* 8.27" x 11.69" (210 mm x 297 mm) *Infinite* This can allow up to 100 feet or more, depending on the size of the roll.

	Custom
	4.13" (105mm) x 1.00" minimum
	8.6" (218.5mm) x 27 feet (at 200 dpi) max.
	8.6" (218.5mm) x 18 feet (at 300 dpi) max.
	(14" maximum length recommended)
Paper Type	Thermal—Cut Sheet, Roll Paper, Perforated Roll, or Fanfold Paper
Paper Loading	Manual—Single Sheet or Roll
Form Feed Modes	No Feed Mode
	Fixed Page Mode
	End of Page Mode

Interfaces

USB	Printer: USB "Mini-B" and IrDA
	(Using USB 1.1 "High Speed")
	Host: USB "A" and IrDA
IrDA	Tiny TP extension to IrLMP, IrCOMM (COM port emulation using 3 wire "cooked" serial mode [IrLPT]), and IrOBEX, vCard, vCal and vMSG (text portions only).

Environmental

Temperature	Operating: 41° to 95 F (-10° to 35° C)
	Note: Operation at low temperatures may slow the printer or cause it not to print at all.
	Storage: 5° to 122° F (-15° to +50° C)
Humidity	Operating: 30-80% RH, non-condensing
	Storage: 30-85% RH, non-condensing

Electrical

Pentax AC Power Supply	Input: 100~240 VAC, 50~60 Hz
	1 A Maximum
	Output: 15 VDC
Alternate Power Sources	DC: 10.0~14.4V from NiMH battery
	DC: 10~17 VDC from an external source
Printer Power Connector	EIAJ RC-6705 Type A (2.1mm barrel connector)
Power Usage @ 14.4 VDC	Operating: 3.5A peak, 2.6A continuous

	Standby: "Sleep" (externally powered, printer powered off): 20mA @ 14.4VDC (approx 1.15W).
Battery Type and Rating	NiMH, 14.4 VDC, 360mAH
Battery Yield print	Over 100 pages per full 100% charge, tested at 68 degrees F (20 degrees C) with 5% density per page. (Depending on page density setting)
Battery Charging Circuit	250mA charge (on demand), otherwise, continuous 20mA trickle charge

Regulatory

EMI	FCC Class B and CE EN50081 EN50082 Class B
Safety (Power Supply)	CE EN60950 ERL (European UL Testing) to UL1950 See Declarations of Conformity for additional details.

For PocketJet 3 units sold in the U.S.A., the following document applies.

Declaration of Conformity
According to 47CFR, Parts 2 and 15 for
Class B Personal Computers and Peripherals

We: Pentax Imaging Company, a division of Pentax of America, Inc

Located at: 600 12ᵗʰ Street, Suite 300
Golden, CO 80401
Phone: (303)460-1600 Fax: (303)460-1628

Declare under sole responsibility that the product identified herein, complies with 47CFR Parts 2 and 15 of the FCC rules as a Class A digital device. Each product marketed, is identical to the representative unit tested and found to be compliant with the standards. Records maintained continue to reflect the equipment being produced can be expected to be within the variation accepted, due to quantity production and testing on the statistical basis as required by 47CFR §2.909. 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 my cause undesired operation. The above named party is responsible for ensuring that the equipment complies with the standards of 47CFR §§ 15.101 to 15.109.

Trade Name: PocketJet 3

Model Number: 205525-501

Signature of Party Responsible: James Kast
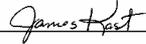
Printed name of Party Responsible: James Kast

Executed on (Date), at (Place):   09/17/04, at Pentax Imaging
Company, a division of Pentax
of America, Inc.

Page 58

For PocketJet 3 units sold in the Europe, the following document applies.

Declaration of Conformity

Product Identification

Product Type: **Thermal Printer**
Product Name: **PocketJet 3**

Means of Conformity

The above product has been tested to be in conformity with the Electromagnetic Compatibility Directives, 89/336/EEC, 92/31/EEC based on test results using harmonized standards in accordance with Article 10-1 of the Directive.

Standards Used: EN 55022:1998 +A2:2003, Class B
EN 61000-3-2:2000
EN 61000-3-3:1995 +A1:2001
EN 55024:1998 +A1:2001 +A2:2003

EC Representative

Pentax Technologies Europe
Weiveldlaan 3-5
1930 Zaventem, Belgium

Title: **Martin Mogendorff General Manager**

Signature: _____ **17 September 2004**

Page 59

For PocketJet 3 Plus units sold in the U.S.A., the following document applies.

Declaration of Conformity
According to 47CFR, Parts 2 and 15 for
Class B Personal Computers and Peripherals

We: Pentax Imaging Company, a division of Pentax of America, Inc

Located at: 600 12th Street, Suite 300
             Golden, CO 80401
             Phone: (303)460-1600 Fax: (303)460-1628

Declare under sole responsibility that the product identified herein, complies with 47CFR Parts 2 and 15 of the FCC rules as a Class A digital device. Each product marketed, is identical to the representative unit tested and found to be compliant with the standards. Records maintained continue to reflect the equipment being produced can be expected to be within the variation accepted, due to quantity production and testing on the statistical basis as required by 47CFR §2.909. 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 my cause undesired operation. The above named party is responsible for ensuring that the equipment complies with the standards of 47CFR §§ 15.101 to 15.109.

Trade Name: PocketJet 3Plus

Model Number: 205537-501

Signature of Party Responsible: James Kast

Printed name of Party Responsible: James Kast

Executed on (Date), at (Place):   09/17/04, at Pentax Imaging
                                     Company, a division of Pentax
                                     of America, Inc.

For PocketJet 3 Plus units sold in the Europe, the following document applies.

<div style="border: 2px solid black;">

Declaration of Conformity

Product Identification

Product Type: **Thermal Printer**
Product Name: **PocketJet 3Plus**

Means of Conformity

The above product has been tested to be in conformity with the Electromagnetic Compatibility Directives, 89/336/EEC, 92/31/EEC based on test results using harmonized standards in accordance with Article 10-1 of the Directive.

Standards Used: EN 55022:1998 +A2:2003, Class B
                     EN 61000-3-2:2000
                     EN 61000-3-3:1995 +A1:2001
                     EN 55024:1998 +A1:2001 +A2:2003

EC Representative
    Pentax Technologies Europe
    Weiveldlaan 3-5
    1930 Zaventem, Belgium

Title: **Martin Mogendorff General Manager**

Signature: _____ **17 September 2004**

</div>

For PocketJet 3 Power Supply units sold in the U.S.A., the following
document applies.

Declaration of Conformity
According to 47CFR, Parts 2 and 15 for
Class B Personal Computers and Peripherals

We: Pentax Imaging Company, a division of Pentax of America, Inc

Located at: 600 12th Street, Suite 300
             Golden, CO 80401
             Phone: (303)460-1600 Fax: (303)460-1628

Declare under sole responsibility that the product identified herein, complies with
47CFR Parts 2 and 15 of the FCC rules as a Class B digital device. Each product
marketed, is identical to the representative unit tested and found to be compliant
with the standards. Records maintained continue to reflect the equipment being
produced can be expected to be within the variation accepted, due to quantity
production and testing on the statistical basis as required by 47CFR §2.909.
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 my cause undesired operation. The above
named party is responsible for ensuring that the equipment complies with the
standards of 47CFR §§ 15.101 to 15.109.

Trade Name: PocketJet AC adapter

Model Number: PT-1101A

Signature of Party Responsible: *James Kast*

Printed name of Party Responsible: James Kast

Executed on (Date), at (Place):   09/17/04, at Pentax Imaging
                                Company, a division of Pentax
                                of America, Inc.

For PocketJet 3 Power Supply units sold in the Europe, the following document applies.

Declaration of Conformity

Product Identification

Product Type: **Thermal Printer AC Adapter**
Product Name: **AC adapter PT-1101A**

Means of Conformity

The above product has been tested to be in conformity with the Electromagnetic Compatibility Directives, 89/336/EEC, 92/31/EEC, 93/68/EEC based on test results using harmonized standards in accordance with Article 10-1 of the Directive.

Standards Used: EN50082-1:1992
IEC 801-2:1991, IEC 801-3:1984, IEC 801-4:1988

Standard Used: EN50081-1:1992
EN55022:1994 Class B

The above product has been tested to be in conformity with the Low Voltage Directive, 73/23/EEC, Amended by 93/68/EEC Directive.

Standards Used: EN60950:1992+A1_A2:1993
IEC 950:1992+A1_A2:1993 modified

EC Representative

Pentax Technologies Europe
Weiveldlaan 3-5
1930 Zaventem, Belgium

Title: General Manager

Signature: _____ **Martin Mogendorff** 29 September, 1999

Page 63

Radio & Television Interference

United States FCC Regulations

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 the receiver.

• Connect the equipment to 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 use of a shielded cable is required to comply with Class B limits of FCC rules.

Any changes or modifications not expressly approved by Pentax could void the user's authority to operate this equipment.

You may purchase a booklet prepared by the FCC entitled "Interference Handbook," stock number ISBN 0-16-041736-8, from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Canadian Regulations

This digital device does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Cet appariel numérique respecte les limites de bruit radioélectrique applicables aux appariels numériques de Classe B préscrites dans le Règlement sur le brouillage radioélectrique du Ministère des Communications.

European Regulations
Bescheinigung des Herstellers/Importeurs
Hiermit wird bescheinigt, dab der/die/das

. . . . . . PENTAX Thermodrucker PT-A4202 ('PocketJet 200') . . . . .
. . . . . . PENTAX Thermodrucker PT-A4303 ('PocketJet II') . . . . .

In Übereinstimmung mit Bestimmungen der BMPT-AmbtsblVfg 243/1991 funk-entstört ist. Der vorschriftmäßige Betrieb mancher Geräte (z.B. Meßsender) kann allerdings gewissen Einschräkungen uterliegen. Beachten Sie deshalb die Hinweise in der Bedienungsanleitung.

Dem Bundesambt Für Zulassungen in der Telekommunikation wurde das inverkehrbringen dieses Gerätes angezeigt und die Berechtigug zur Überprüfung der Serei auf die Einhaltung der Bestimmungen eingeräumt.

PENTAX TECHNOLOGIES EUROPE N.V. - Zaventem, Belgium

Notes:

Chapter 8 - Ordering Information

You can order the following supplies, accessories and replacement parts for your printer.

Supplies
• Cut sheet Pentax Quality Paper (100-sheet boxes):
- Letter size
- Legal size
- A4 size

• Rolls of Pentax Quality Paper (100 ft.):
- Letter width
- A4 width
- Perforated paper

• Fanfold Pentax Quality Paper
- 1000 sheets per box

Accessories/Replacement Parts
Note: Depending on the kit, these items may be included, not optional.

• USB cable
• NiMH battery
• Car Adapter
• Carrying case with room for a spare battery
• Vehicle Mount (printer and roll paper)
• Desktop Caddy
• Cleaning cloth
• AC Adapter and power cable
• Installation Disk

You can order the items above on the Pentax online store at:
http://www.pentaxtech.com

For the name of the closest dealer, call the following numbers:

• If you are in the U.S., call Pentax at 1-800-543-6144 from 8 a.m. to 5 p.m. Mountain Time, Monday through Friday, and ask for Mobility Products Sales.

• If you are outside the U.S., contact the dealer where you purchased your printer for information about ordering supplies, accessories and replacement parts.

Notes:

Index

Page 70

PENTAX® PocketJet® 3
PENTAX® PocketJet® 3 Plus

User's Guide

PENTAX Imaging Company
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Fax: +32.2.306.1199
E-mail: info.europe@pentaxtech.be

Technical Support

In US: 1-800-453-6144, ext. 1820
8 a.m. to 5 p.m. Mountain Time, M-F

Outside US: Contact your local reseller or any of the
Authorized Service Centers

Ordering Supplies, Accessories or Replacement Parts

In US: 1-800-543-6144, 8 a.m. to 5 p.m. Mountain Time, M-F

Outside US: Contact your printer dealer