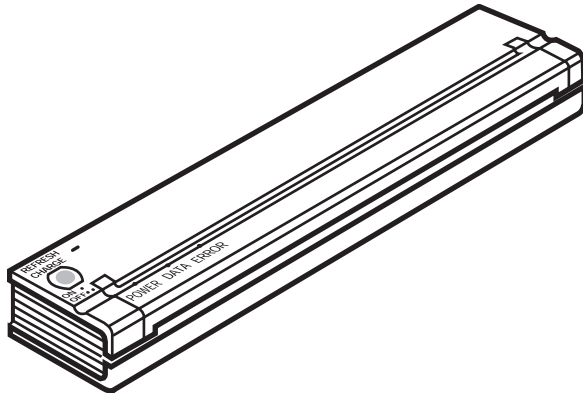




User's Guide

PocketJet
PJ-522/523/562/563
Mobile Printer



- Before using this printer, be sure to read this User's Guide.
- We suggest that you keep this manual in a handy place for future reference.

Thank you for your purchasing Brother mobile printer PocketJet PJ-522 / PJ-523 / PJ-562 / PJ-563. The printers (hereafter PJ-522, PJ-523, PJ-562 or PJ-563 called “the printers”) are ultra mobile thermal printers.

Before using the printer, be sure to read this User’s Guide.

We suggest that you keep this manual in a handy place for future reference.

Printer driver name	Shorter name	Model name
Brother PocketJet 3	PJ3	PJ-522
Brother PocketJet 3B	PJ3 w/BT	PJ-562
Brother PocketJet 3Plus	PJ3Plus	PJ-523
Brother PocketJet 3PlusB	PJ3Plus w/BT	PJ-563

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Chapter 1 - Setting Up the Printer

Connecting to an AC Outlet (Optional)

Connect the printer to a nearby AC power outlet to run it on AC power or to charge the battery (See “Charging the Battery”, page 37).

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).

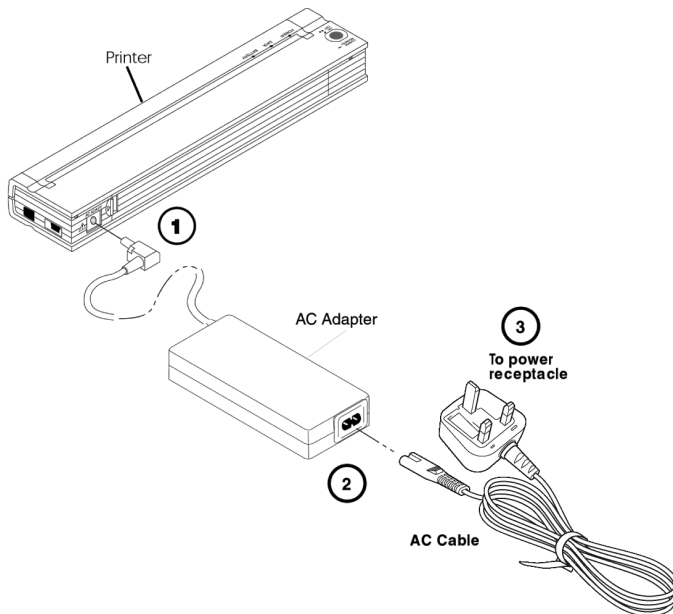


Figure 2. Connecting the printer to an AC power outlet

NOTE: *AC power cord and AC Adapter are optional.
Please purchase appropriate adapter.*

Connecting to a DC Supply (Optional)

The PocketJet can be powered from its internal Ni-MH battery or from a vehicle DC supply. To install the battery, See page 34. To connect your PocketJet to a “12-volt” vehicle DC supply to print or maintain the battery charge, follow the steps below.

1. Connect a PA-AD-500CG / WR (either with a cigarette plug or direct wired) to the vehicle 12VDC supply as shown in Figure 3. (These items are available as options)
2. Connect the power cord to the PocketJet.
3. Turn on the vehicle power, and then turn on the PocketJet.

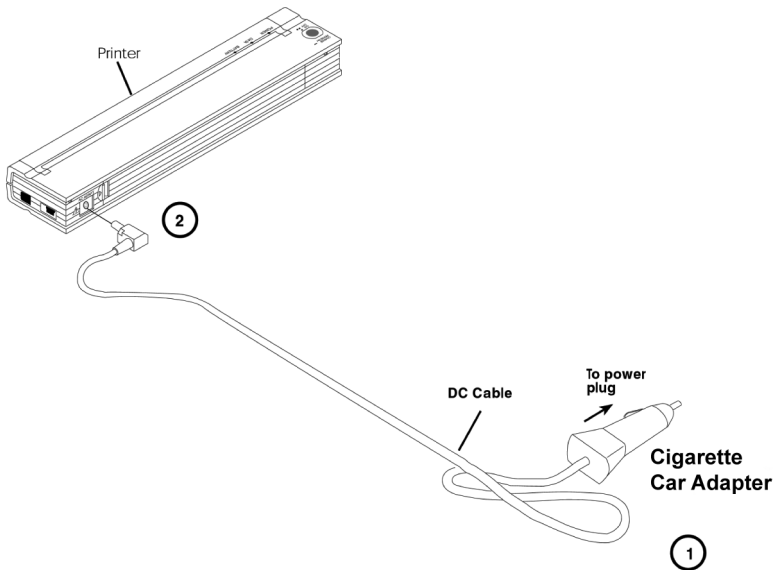


Figure 3. Connecting the printer to DC power

Using the Operation Panel

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

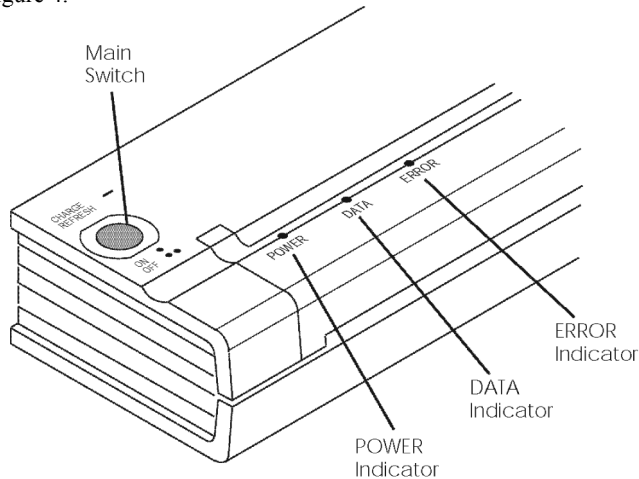


Figure 4. Operation panel

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 (See Chapter 5) or head cleaning (See Chapter 4).

NOTE: *Additional functions such as Auto On, Auto Off, and Pre-Feed are available for your printer through the PocketJet 3 Utility or PocketJet 3Plus Utility. See pages 16-33 for details.*

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.

Some of the more common indications follow:

- POWER light is steady green: The printer is operating on external power.
- POWER light is red or orange: The printer is operating on battery power. Colour and blink/solid indicates approximate charge remaining.
- POWER light is alternately blinking green/yellow: Battery is being discharged prior to charging.
- 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 colour (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.

Chapter 2 - Using the Printer

Printing Solutions

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

Device types include:

- Windows systems

For most printer applications, your printer requires driver software to communicate with your computer. A CD with drivers and installation information is provided with your PocketJet. The supplied CD and the Brother Solutions Center website both list driver version numbers. If the website version is newer (with a higher version number), we recommend that you install the website version. Browse to the Brother Solutions Center web site.

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

- Windows 2000 Professional / XP / Vista

Driver Installation

NOTE: 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.

Using a Bluetooth Interface - Be sure to install a Bluetooth driver on the host computer before installing the PocketJet driver and PocketJet Utility if you are going to use the Bluetooth interface.

CD Install

1. Insert the CD in your PC's CD drive.
2. Select the model.
3. Select the install item you wish to install.
4. Follow all on-screen instructions to install the software. Your Windows operating system will be selected by automatically. They will run one-by-one until all have been installed.
5. Click “Finish” to close the CD or browse the CD to learn about additional solutions available for your PocketJet printer.

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

Manual Install

You may want to manually install a Windows version. View the “Readme.txt” file on the CD for more information. Note that every driver can be installed manually if necessary.

1. Place the installation CD into the host CD drive.
2. Browse the CD to find the directory for your printer model.
3. Browse the CD to find the proper operating system folder (for Windows, either “<CD Drive>:\<printer>\Win2000-XP” or “<CD Drive>:\<printer>\Vista”).
4. For Vista only, browse the “x86” directory if you have 32-bit Vista or the “amd64” directory if you have 64-bit Vista.
5. Double-click on the appropriate file. For Windows, “PJ3-Install-2KXP.exe”, “PJ3-Install-Vista32.exe” or “PJ3-Install-VistaXP64.exe” according to your printer.
6. Follow the on-screen instructions. Be sure to select the appropriate communication interface during installation, since this will provide helpful hints.

Accessing Advanced Software Features

Text Mode:

The Printers (PJ-522 / PJ-523 / PJ-562 / PJ-563) can print either Raster Graphics or Text Mode. The choice is determined automatically by the data stream sent from the host device to the printer.

Raster Graphics is the most common form of usage for the PocketJet. The printer uses bit-mapped graphics as opposed to text. What you will see is WYSIWYG – what you see is what you get – meaning that what is on your computer screen is what is printed.

In Text Mode, the Printers will print only the characters contained in the resident character set. For the Printers this character set is the Epson® ESC/P emulation in native serif and sans serif fonts in 10, 12, 15 cpi and proportional sizes.

The following three features (Modes) can be accessed using the software dialog boxes and methods discussed below.

In Windows Vista, permanently change the advanced features using “Start:Control Panel:Printers: Brother PJ-522: Printing Preferences: Advanced or the settings may be temporarily changed using the “Print Setup” from your application.

In Windows XP / 2000 Professional, permanently change the advanced features using “Start:Settings:Printers: Brother PJ-522:Printing Preferences:Advanced” or the settings may be temporarily changed using the “Print Setup” from your application.

As above, “Brother PJ-522” should be changed to your printer model (“Brother PJ-523”, “Brother PJ-562” or “Brother PJ-563”).

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.

- **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 356 mm (14”). Use this with perforated paper.
- **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 PJ-522 or PJ-562 or 300-dpi for PJ-523 or PJ-563) after the end of a document.

NOTE: *The “Extra Feed” mode only affects the last page of a document. 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.*

Selecting Media

Cut Sheet Paper

1. Select “Fixed Page” mode.
2. Select the appropriate paper size (Letter, A4, or Legal).
3. In Windows Vista / XP / 2000 Professional, set the Paper Type to “Cutsheet”.

Non-Perforated Roll Paper

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 Vista / XP / 2000 Professional, 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 Windows Vista / XP / 2000 Professional 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.

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 has recently been added to the Windows Vista / XP / 2000 Professional driver.

Select “Roll Paper Pause” for Windows Vista / XP / 2000 Professional 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

1. Select “End of Page” mode.
2. Select “Perf Letter” or “Perf A4” paper size. This is very important because the printable area is smaller when using perforated paper compared to cut sheet paper.

Windows Vista / XP / 2000 Professional 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.

Windows Advanced Features Using PocketJet 3 Utility (Configuration Utility)

- Auto-On
- Auto-Off
- Pre-feed

These features can be accessed through Windows by using the PocketJet 3 Utility (Configuration Utility). Please see specific definitions of Auto-On, Auto-Off, and Pre-feed on pages 22 and 23.

Windows-Specific Operating System Features

Windows Vista Notes:

- 1) The “Roll Paper Pause” feature is not available in Vista.
- 2) This system supports both 32-bit and 64-bit Vista.

Windows XP / 2000 Professional Notes:

- 1) Paper Type Control – Select Cut Sheet, Roll, or Perforated Roll. This modifies the printable area of all paper sizes (Letter, Legal, A4, and 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 = 102 mm (4”)
 - Maximum width = 216 mm (8.5”)
 - Minimum height = 51 mm (2”)
 - Maximum height = 8.23 m (PJ-522 / PJ-562), 5.49 m (PJ-523 / PJ-563) , 65,535 print lines.
 - d. All forms created within these specifications will be displayed as paper size options.

Connecting to Your Computer

There are two ways to connect your PocketJet to your computer, via USB cable and via Infrared (IrDA). For PJ-562 and PJ-563, you can connect via a wireless Bluetooth.

Via USB Cable

CAUTION: Install the driver software before connecting the printer to the computer via the USB cable.

1. Install the printer driver. See page 6.
2. Make sure your printer is off before installing the interface cable.
3. Insert the printer end of the cable into the interface connector on the side of the printer. See example, Figure 7.

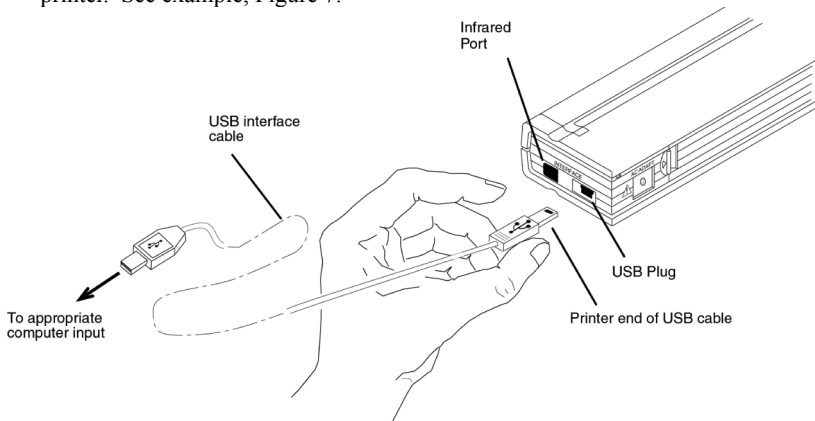


Figure 7. Connecting the PocketJet to your computer

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

Via Infrared (IrDA)

If a USB cable is not 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 each other, and proceed to print.

Via Bluetooth (Bluetooth Models Only)

1. Follow the recommendations of the manufacturer of your Bluetooth equipped host computer or adapter to install any necessary hardware and software.
2. If “pairing” is necessary using a PIN code, use the PocketJet Utility that accompanies your PocketJet3 Bluetooth printer to set the printer’s PIN password. See information on PIN setting in “Bluetooth Menu”, page 18.

NOTE: The default PIN code is “default”.

3. Connect to the printer according to the instructions supplied with your Bluetooth equipped host or adapter.

Printing

1. Make sure that you have installed a charged battery, have connected the printer to an AC power outlet, or have the DC adapter plugged in.
2. Turn the printer on by pressing the main switch once quickly. The POWER indicator lights up. See Figure 8.

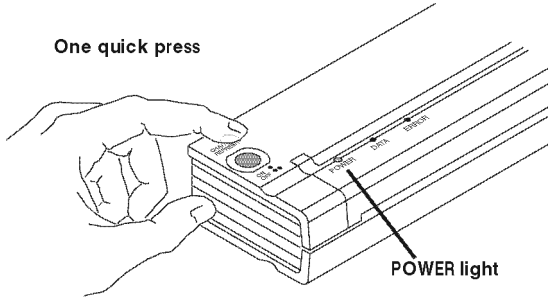


Figure 8. Turning the printer ON

3. Insert a sheet of Brother Genuine (PA-C-410) 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".*

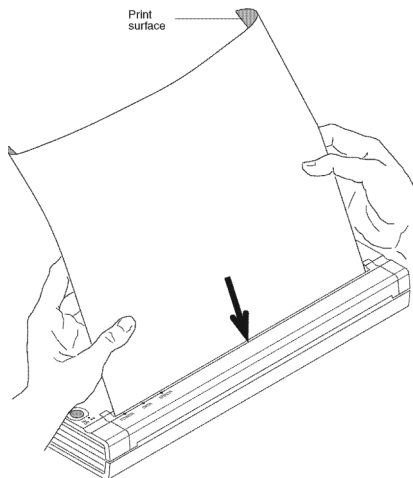


Figure 9. Inserting a sheet of paper

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

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 “Accessing Advanced Software Features”, on page 7. If you are not using a driver, you may save a lighter or darker setting using the PocketJet 3 Utility.

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

PocketJet Utility (Configuration Utility)

The CD supplied with the printers (PJ-522, PJ-523, PJ-562 and PJ-563) contains a PocketJet Utility, a printer setup program, that allows the user to modify storable configuration options for the printer. Changes to the default configuration options are in most cases relevant only where the host computer will be sending simple text data and it does not have a Brother-supplied driver.

This utility provides access to printer features through a Windows-based program.

Controllable Printer Features:

For Windows systems (for systems with the driver provided on the CD):

- Auto- On
- Auto-Off
- Pre-Feed

For Bluetooth Printers:

- PIN Code Setting

Installing the PocketJet 3 Utility:

When using the CD Installation program to install drivers for Windows Vista, XP, 2000 Professional, you should select “Install Configuration Utility” Button. You must follow the onscreen instructions to complete the installation (See “Driver Installation”, page 6).

To install the PocketJet 3 Utility independently on a Windows host, browse the CD into the <CD-Drive>:\<PJ3, PJ3BT, PJ3PLUS or PJ3PLUSBT> \Config folder, and then double-click the PJ3CONFIGSETUP.EXE (or PJ3PLUSCONFIGSETUP.EXE), and follow the onscreen instructions.

Using the PocketJet 3 Utility :

- 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 “Brother” and “Brother PocketJet 3” or “PocketJet 3Plus”, and then select “PocketJet 3 Utility (or PocketJet 3Plus Utility)”.

The application will load and the active window will appear as follows:

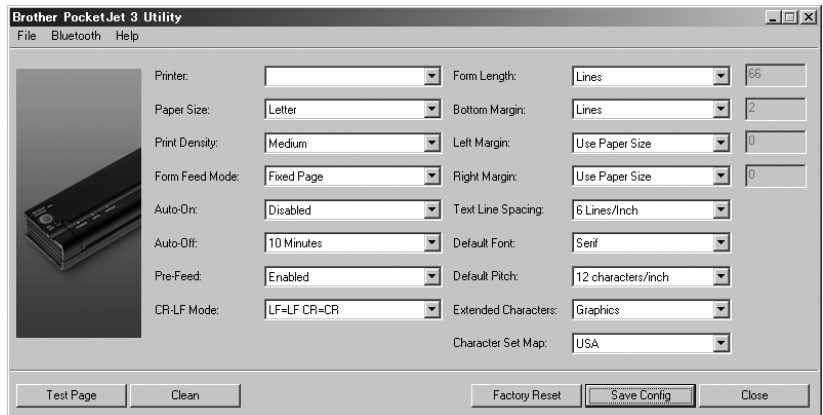


Figure 5. Configuration Utility

Then you may choose the appropriate PocketJet printer using either the ‘File’ pull-down, or the ‘Printer’ selector.

The display above shows the parameters for the printers as default. These parameters may be different in other countries or may have been specially configured for some customers.

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

Menu Bar

File Menu:

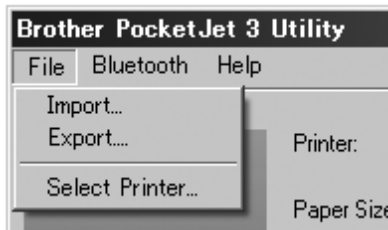
- Import – Load a configuration file that was saved previously using the Export feature.

NOTE: *You must then Save Config to set the printer to this configuration.*

- Export – Save a configuration to a file.

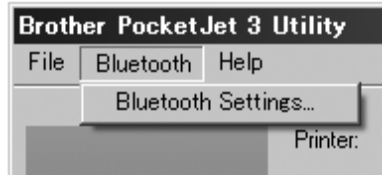
NOTE: *Bluetooth information is no longer stored in this file. If an old file has been loaded, the Bluetooth information will be written to the default configuration file.*

- 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.

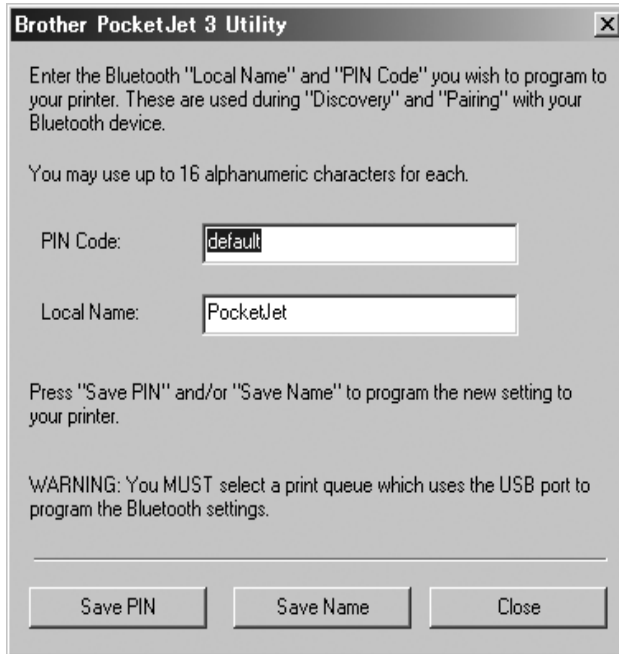


Bluetooth Menu:

If your printer is enabled with Bluetooth, you may use this menu to name our printer, create your own PIN password for your printer. Some hosts require PIN codes, and for others, this feature is optional.



Selecting “Bluetooth Settings” will display the following screen where you will have the choice of setting two parameters, the PIN code and the Local Name.

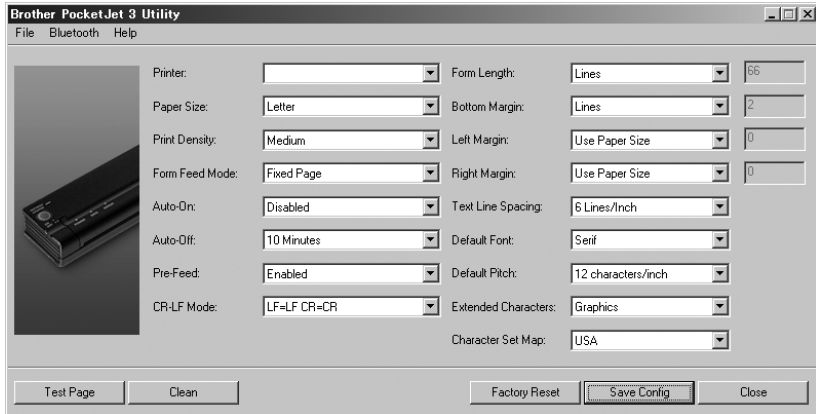


Setting a new PIN code limits access to your printer to only a host that has the correct PIN code.

Setting a new Local Name allows identification of this particular printer where multiple printers are available and discoverable.

Both the PIN code and the Local Name must use alphanumeric characters (A-Z, a-z, 0-9) only. The Local Name can contain a space character, but the PIN code cannot. If you enter a character that is not allowed, the following screen will be displayed:

Configuration Options (Dropdown Menu Selections)



NOTE: These configuration options are in most cases relevant only where the host computer will be sending simple text data to the printer and does not have a Brother-supplied driver available. The options which are common to all operating systems include Auto-On, Auto-Off, and Pre-feed.

Printer:



This selection lists print queues that exist for the printer. In most cases only one queue will be displayed. If the queue lists more than one printer, select the one that corresponds to your connected printer.

If using text mode, the following options should be set by the user. In non-text mode, they will be set automatically by a Windows driver.

Paper Size:



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) page, sets a total printable height of 11.36" (288.5mm), top and bottom margins of about 0.27" (6.9mm) and 0.06" (1.5mm) respectively. Printable width is set to 8.0" (203.2mm) with 0.13" (3.3mm) margins on either side.

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

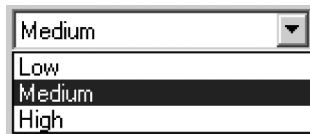
A Note about Text Mode:

The Printers can print either Raster Graphics or Text Mode. The choice is determined automatically by the data stream sent from the host device to the printer.

Raster Graphics is the most common form of usage for the PocketJet. The printer uses bit-mapped graphics as opposed to text. What you will see is WYSIWYG – what you see is what you get – meaning that what is on your computer screen is what is printed.

In Text Mode, the Printers will print only the characters contained in the resident character set. For the PocketJet 3 and PocketJet 3 Plus, this character set is the Epson® ESC/P emulation in native serif and sans serif fonts in 10, 12, 15dpi, and proportional sizes.

Print Density:



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:



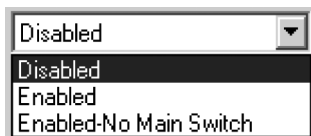
This setting affects what the printer will do in response to a Form Feed command from any source. Different modes are appropriate depending upon the type of paper being used.

‘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.

Auto-On:



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

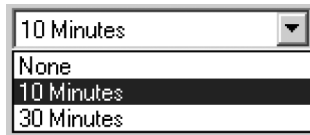
If Auto-On is set to ‘Disabled’, the printer will place itself in a “sleep” state where minimal power is used. The Main Switch must be pressed to wake the printer up for printing.

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.

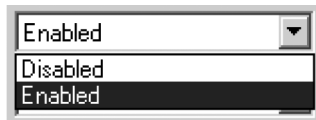
If Auto-On is set to 'Enabled-No Main Switch', the printer will power up as soon as an external power source is connected, and furthermore, the Main Switch cannot be used to turn the printer off. This may be useful in some mobile installations where the button could be accidentally pressed. Power must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

Auto-Off:



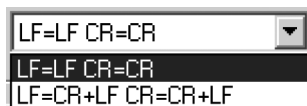
When the printer is running on battery power, you may wish to have the printer turn off automatically to conserve the battery. You may choose to disable this feature by selecting 'None', or you may select either a 10-minute or 30-minute time-out period. If no data is received within the period selected,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

Pre-Feed:



When the printer is powered on and paper is found in the paper input slot 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.

CR-LF Mode:



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.

Form Length:

Form Length:	Lines	66
Bottom Margin:	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 physical height of 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 physical height of 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 $(1/6 \times 57)$ 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 as shown in the example below.

Form Length:	Inches	11.0
Bottom Margin:	Inches	6

Bottom Margin:

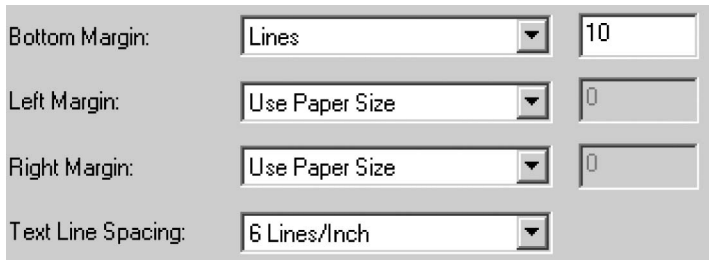


This setting will modify the bottom margin when ‘Page Size’ is set to ‘Custom’.

‘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 1/2”. 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.

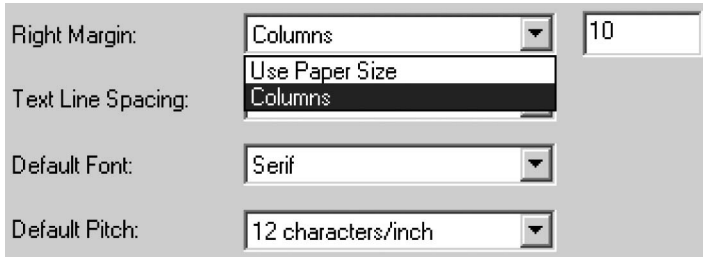


Left Margin:

Left Margin:	Columns	10
Right Margin:	Use Paper Size 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 character pitch per inch, and you set the right margin to '9', there will be a 3/4" (9 x 1/12") right margin established. If the current 'Default Pitch' is set to 'Proportional', 10 character per inch pitch is used for this calculation. Values that cause up to 4.5" of left margin are allowed.

Right Margin:



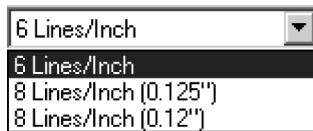
The image shows a dialog box for setting the right margin. It has four rows of controls:

- Right Margin:** A dropdown menu set to 'Columns' and a text box containing the number '10'.
- Text Line Spacing:** A dropdown menu with 'Use Paper Size' selected and 'Columns' visible below it.
- Default Font:** A dropdown menu set to 'Serif'.
- Default Pitch:** A dropdown menu set to '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:



The image shows a dropdown menu for text line spacing. The menu is open, showing four options:

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

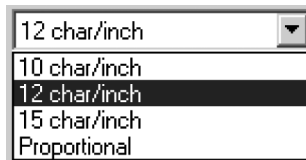
This setting is used to modify the amount of vertical space that is used for each line of text. If you select '6 Lines/Inch', lines of text will be created every 1/6". If you select '8 Lines/Inch', lines of text will be created every 1/8". Since the "IBM graphics characters" used to create boxes and 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.

Default Font:



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 a Sans Serif font (similar to Letter Gothic) are supplied.

Default Pitch:



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 Characters:



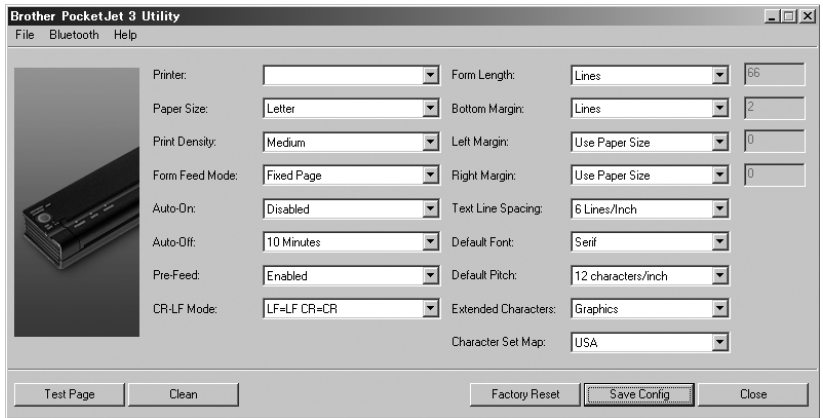
This command determines what the printer's ESC/P® emulation does when ASCII characters with values of between 128 and 255 are received. Either the graphics characters or italic versions of the lower valued characters (32 to 127) are printed. See chart in Appendix I.

Character Set Map:



This menu allows you to select the use of special characters appropriate for one of the languages selected. See Appendix I for a chart of the special characters available.

Printer Commands (Function Buttons)



See the buttons across the bottom of the window.

Test Page:

You can print a test page using the Configuration Utility or you can print test pages using the Main Switch (See “Self -Test Feature”, page 52).

Clicking on ‘Test Page’ will print a page showing the current printer configuration and image quality verification graphics. See illustration below.

Current Settings

AUTO POWER ON :Disabled
PAGE LENGTH :66
1" PERF SKIP :Disabled
BOTTOM MARGIN LINES :None
PAGE SIZE :Letter
LINE FEED PITCH :1/6
FONT :Serif
PITCH SELECT :12cpi
CONDENSED MODE PRINT :Disabled
FONT ATTRIBUTE :Disabled
CHARACTER TABLE :Extended Graphics
INTERNATIONAL CHAR SET :USA
AUTO LINE FEED :Disabled
DENSITY LEVEL :5
PAPER EJECT MODE :Fixed Page Mode
BATTERY POWER TIME-OUT :10 Minutes
BATTERY REFRESH INTERVAL :Never Discharges Before Charging
BT PIN CODE :7 Bytes = 'default'
USB SERIAL # :29157 is Sent on USB Connect
DASH LINE BETWEEN PAGES :Disabled
PRE-FEED ON POWER UP :Enabled
UPGRADE CODE :CJABFH

Courier10 ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789
Courier12 ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789
Courier15 ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789
CourierProp ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789
Sans Serif10 ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789

END_OF_PAGE

Clean:

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

Factory Reset:

Clicking on this button will return the printer to its original factory settings for fonts and configuration. The configuration data from the file “PJ3Factory.cfg” or “PJ3PlusFactory.cfg” on the same directory as exe file. 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” or “PJ3PlusDefault.cfg” on the same directory as exe file. and then send this configuration information to the printer. Be sure that all of the settings are adjusted to your liking. Once sent to the printer, these settings will become the power-on default settings.

Close:

This selection closes this application without sending data to the printer and without saving the current settings.

Installing the Battery (Optional)

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

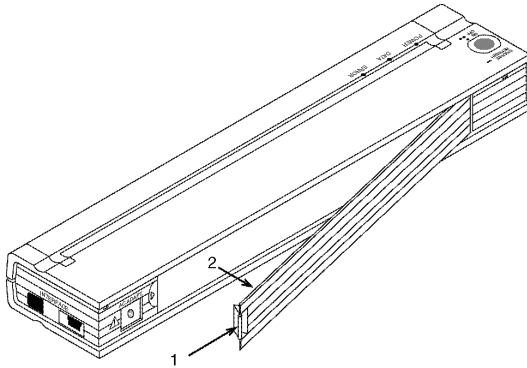


Figure 10. Opening the Battery Cover

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.

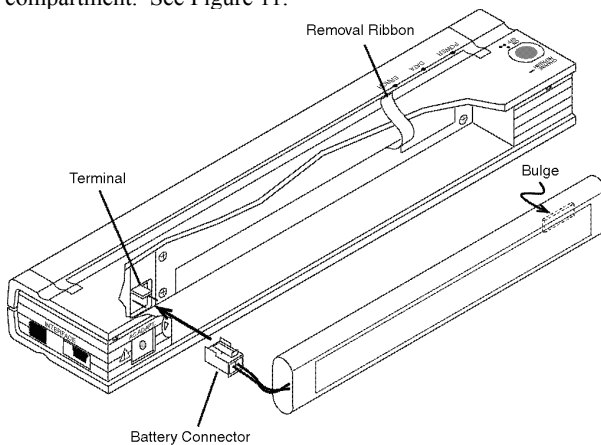


Figure 11. Pushing the battery connector into the terminal

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

NOTE: *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.*

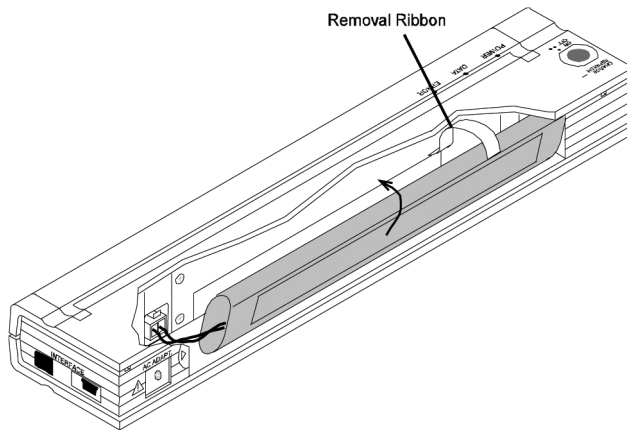


Figure 12. Placing the battery inside the battery compartment

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 Ni-MH marked face 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.

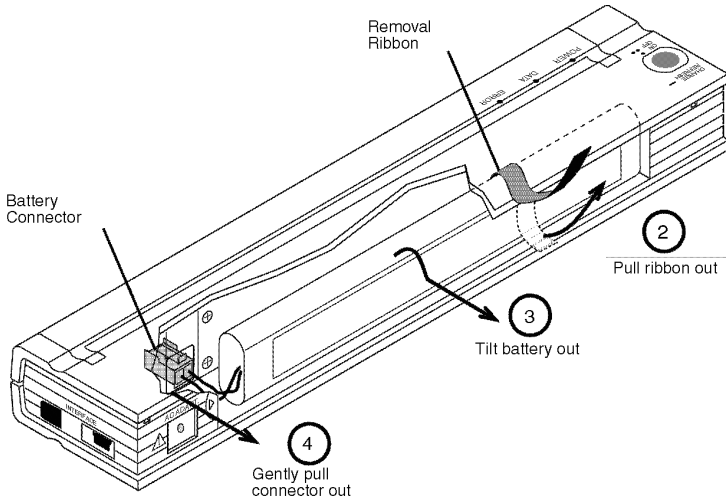


Figure 13. Instructions for removing the battery

Charging the Battery

NOTE: *Batteries are shipped from the factory uncharged. Brother recommends that a complete charging cycle (following steps 1 through 3 below) be completed before using the battery for the first time.*

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 puts the printer in Charge Mode and 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 70 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.

Stopping the Charge Process

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 “Accessing Advanced Software Features” on page 7.

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.

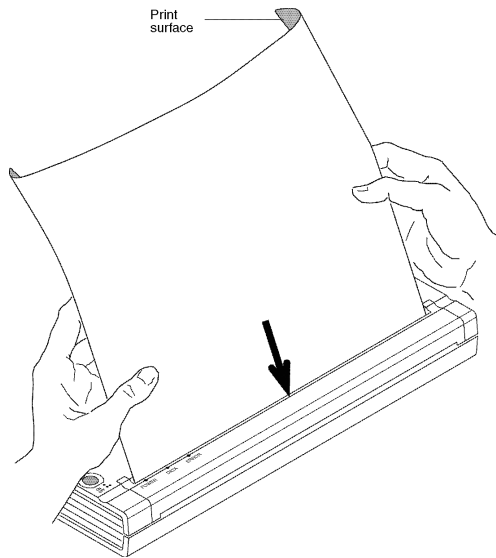


Figure 14. Inserting paper

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 41 and 42. 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 “Form Feed Modes”, page 8 and “Non-Perforated Roll Paper”, page 9 and “Perforated Roll Paper”, page 10.

Use Brother Genuine Thermal paper

Brother guarantees optimum compatibility with your PocketJet printer when you use Brother Genuine Thermal 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.

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 coloured 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.

Method 2

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

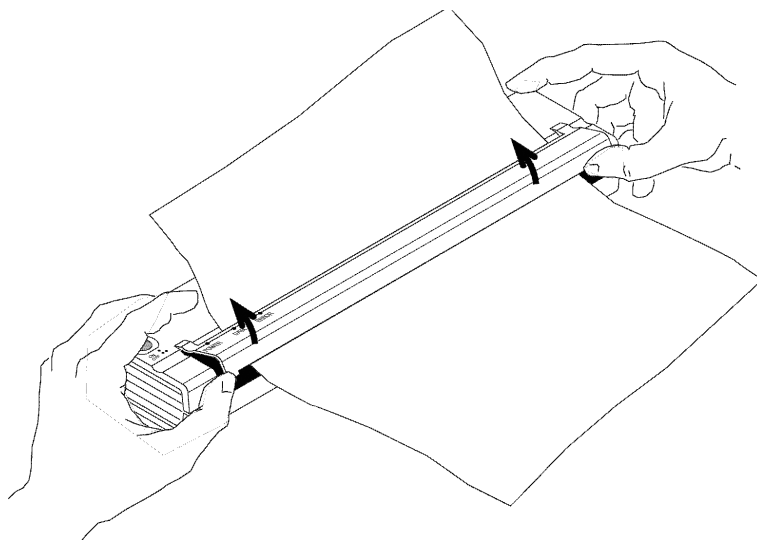


Figure 15. Opening the release cover

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

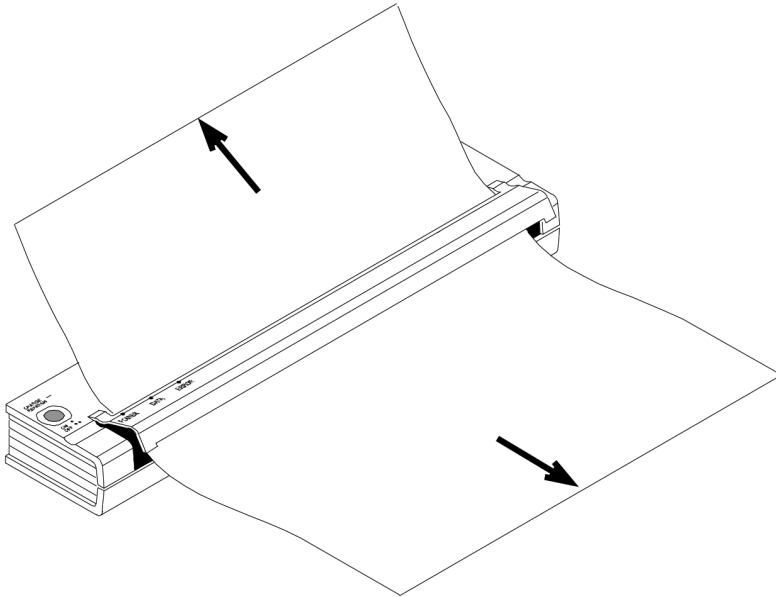


Figure 16. Pulling jammed paper out of the printer

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 without paper loaded.

NOTE: *If paper is loaded and detected by the 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.

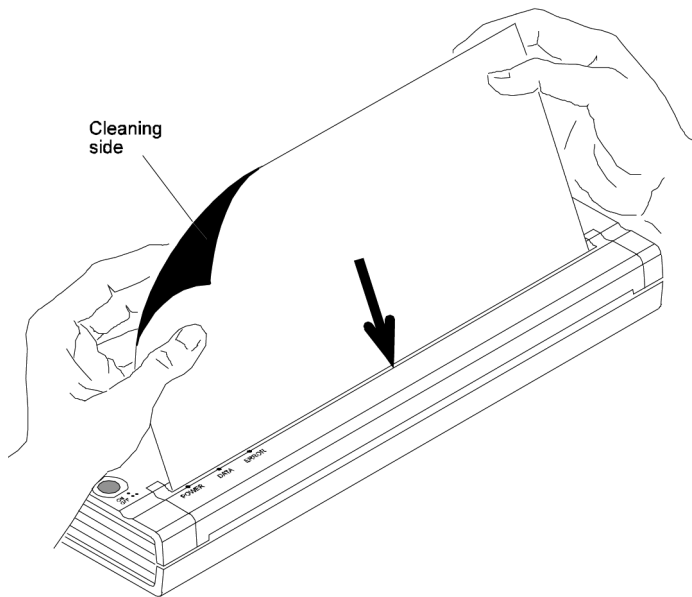


Figure 17. Inserting the cleaning cloth

NOTE: *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.*

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 by the 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.

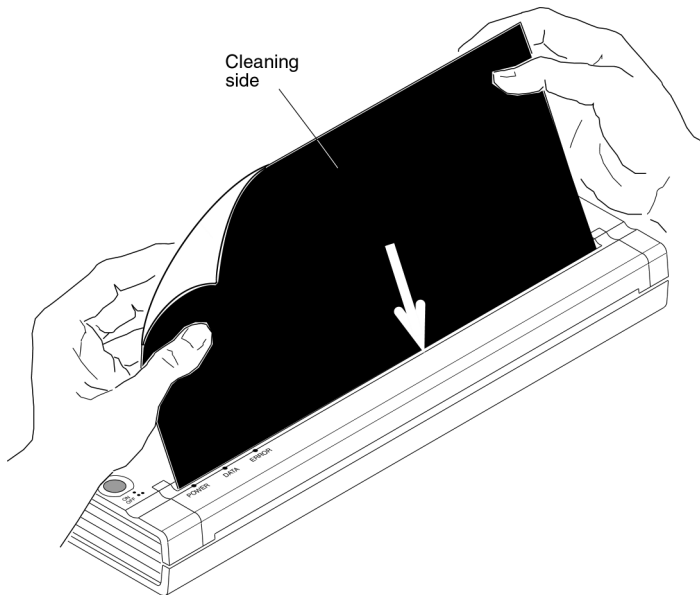


Figure 18. Cleaning the platen roller.

NOTE: *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.

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 dry cloth.

NOTE: *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
				= Doesn't matter
POWER	DATA	ERROR		
↓	↓	↓		
				External power in use
				Battery in use, > 14.0 Volts
				Battery in use, > 13.1 Volts
				Battery in use, > 10.0 Volts
				Battery in use, > 6.6 Volts
				Battery is discharging
<hr/>				
				Battery is charging
				Printer is receiving data
				Unprinted data remains in buffer
				Printer is receiving flash upgrade
				Printer is in "service" mode

POWER	DATA	ERROR	
↓	↓	↓	
			Bad checksum of flash data
			No battery found when charging
			Time-Out when charging
			Low Thermal Head temperature
			High Thermal Head temperature
			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 1, “Connecting to an AC Outlet (Optional)”. 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.

No Battery Found When Charging

If this indication occurs immediately when attempting to charge the battery, the printer did not detect 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 34, “Installing the Battery (Optional)”.

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 0°C (32°F)). 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 worse 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 page 32) 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 not 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 Brother Genuine Thermal 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 CD.

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.

Paper Problems

The paper is jammed in the printer

See page 41, “Clearing a Paper Jam”.

Paper moves through the printer, but nothing appears on the paper

Make sure you are using Brother Genuine Thermal paper and that you are loading it properly with the print side away from you. See page 39, “Inserting Paper”. Also, check the Print Density setting using the “Accessing 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 Brother Genuine Thermal paper only. Heavy paper may not feed through the printer.

If the release cover is closed and you are using Brother Genuine Thermal 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 Brother Genuine Thermal paper.

Make sure you are inserting the paper correctly. See page 39, “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 45.

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 15, “Making Prints Lighter or Darker”.

Make sure you are using recommended Brother Genuine Thermal paper.

The image is compressed 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 Brother Genuine Thermal 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 43.

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

Clean the print head. Follow the instructions in “Cleaning the Print Head”, page 43.

If the pages continue to have white vertical lines, the print head may need maintenance. Call technical support.

All pages have a black vertical line

Clean the print head. Follow the instructions in “Cleaning the Print Head”, page 43.”

If the pages continue to have black vertical lines, 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 Brother Genuine Thermal 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 15, “Making Prints Lighter or Darker”.

Clean the print head. Follow the instructions in “Cleaning the Print Head”, page 43.

If using the 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.

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 12, "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.

Chapter 7 - Technical Information

Product Specifications (PJ-522 / PJ-523)

Printer specifications

Model Name	PJ-522	PJ-523
Dimensions	255 (W) x 55 (D) x 30 (H) mm / 10.04 x 2.17 x 1.18 in.	
Weight	Approximately 390g (excluding Battery, paper) 0.80 lb.	
Printing		
Method	Direct thermal printing	
Print Speed	Average: 24 sec./page or 12.4 mm/sec. (under our standard environment *1)	
Resolution	203 x 200 dpi	300 x 300 dpi
Printable Area	Configure with printer driver (min. 105 mm x 25.4 mm / 4.13" x 1.00" ~ max. 216 mm x 8.23 m / 8.5" x 27 feet)	Configure with printer driver (min. 105 mm x 25.4 mm / 4.13" x 1.00" ~ max. 216 mm x 5.49 m / 8.5" x 18 feet)
Paper Size	A4 (210 x 297 mm / 8.27" x 11.69"), Letter (216 x 279mm / 8.5" x 11"), Legal (216 x 356 mm / 8.5" x 14")	
Power (optional)		
Battery	Rechargeable Ni-MH Battery 14.4V(Optional)	
Adapter	AC adapter (15 V)	
Car adapter	2 types (Cigarette Car Adapter or Wired type)	
Battery Yield	Approximately 70 sheets (printing duty 5% with density 5 and using fully charged new battery)	
Interface		
USB	USB Ver.2.0 (Full Speed) (A - mini-B=Printer, Peripheral)	
IrDA	Ver.1.0 (IrCOMM and IrOBEX)	
Bluetooth	No	

Software	
Printer font size	10 cpi, 12 cpi, 15 cpi and Proportional sizes.
Printer font face	Serif and Sans Serif
Barcode generation	No
Operating environment	Windows 2000 Professional / XP / Windows Vista (USB, Bluetooth, IrDA)
ENVIRONMENTAL	
Operation temperature:	5 - 35 °C / 41 - 95 °F
Operation humidity:	30 - 80 % (No condensation)
Storage temperature:	-15 - 50 °C / 5 - 122 °F
Storage humidity:	30 - 85 % (No condensation)

Product Specifications (**PJ-562 / PJ-563**)

Printer specifications

Model Name	PJ-562	PJ-563
Dimensions	255 (W) x 55 (D) x 30 (H) mm / 10.04 x 2.17 x 1.18 in.	
Weight	Approximately 395g (excluding Battery, paper) 0.86 lb.	
Printing		
Method	Direct thermal printing	
Print Speed	Average: 24 sec./page or 12.4 mm/sec. (under our standard environment *1)	
Resolution	203 x 200 dpi	300 x 300 dpi
Printable Area	Configure with printer driver (min. 105 mm x 25.4 mm / 4.13" x 1.00" ~ max. 216 mm x 8.23 m / 8.5" x 27 feet)	Configure with printer driver (min. 105 mm x 25.4 mm / 4.13" x 1.00" ~ max. 216 mm x 5.49 m / 8.5" x 18 feet)
Paper Size	A4 (210 x 297 mm / 8.27" x 11.69"), Letter (216 x 279mm / 8.5" x 11"), Legal (216 x 356 mm / 8.5" x 14")	
Power (optional)		
Battery	Rechargeable Ni-MH Battery 14.4V(Optional)	
Adapter	AC adapter (15 V)	
Car adapter	2 types (Cigarette Car Adapter or Wired type)	
Battery Yield	Approximately 70 sheets (printing duty 5% with density 5 and using fully charged new battery)	
Interface		
USB	USB Ver.2.0 (Full Speed) (A - mini-B=Printer, Peripheral)	
IrDA	Ver.1.0 (IrCOMM and IrOBEX)	
Bluetooth	Ver. 2.0 Class 2, Serial Port Profile supported	

Software	
Printer font size	10 cpi, 12 cpi, 15 cpi and Proportional sizes.
Printer font face	Serif and Sans Serif
Barcode generation	No
Operating environment	Windows 2000 Professional / XP / Windows Vista (USB, Bluetooth, IrDA)
ENVIRONMENTAL	
Operation temperature:	5 - 35 °C / 41 - 95 °F
Operation humidity:	30 - 80 % (No condensation)
Storage temperature:	-15 - 50 °C / 5 - 122 °F
Storage humidity:	30 - 85 % (No condensation)

1) These figures are depending on its environment.

“Our standard environment” is as follows:

JEITA J1 pattern on A4 size paper and continuous printing.

USB interface and AC adapter power.

Temperature: 25 °C

Appendix I - Character Set Tables

Extended Graphics Character Table

MSB>	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
LSB 0				0	@	P	`	p	ç	É	á	█	⊥	⊥	α	≡
1			!	1	A	Q	a	q	ü	æ	í	█	⊥	⊥	β	±
2			“	2	B	R	b	r	é	Æ	ó	█	⊥	⊥	Γ	≥
3			#	3	C	S	c	s	â	ô	ú	|	|	⊥	π	≤
4			\$	4	D	T	d	t	ä	ö	ñ	|	-	⊥	Σ	∫
5			%	5	E	U	e	u	à	ò	Ñ	≠	+	⊥	σ	∫
6			&	6	F	V	f	v	â	û	a	|	|	⊥	μ	÷
7			`	7	G	W	g	w	ç	ù	o	⊥	|	⊥	τ	≈
8			(	8	H	X	h	x	ê	ÿ	¿	⊥	⊥	≠	Φ	°
9			)	9	I	Y	i	y	ë	Ö	¬	|	⊥	⊥	⊙	•
A			*	:	J	Z	j	z	è	Ü	¬	|	⊥	⊥	Ω	•
B			+	;	K	[	k	{	ï	ç	¼	⊥	⊥	█	δ	√
C			,	<	L	\	l	|	î	£	¼	⊥	⊥	█	∞	ⁿ
D			-	=	M	]	m	}	ì	¥	;	⊥	=	█	∅	²
E			.	>	N	^	n	~	Ä	£	«	⊥	⊥	█	€	▪
F			/	?	O	_	o		Ä	f	»	⊥	⊥	█	∩	

International Character Set Table

	23	24	40	5B	5C	5D	5E	60	7B	7C	7D	7E
USA	#	\$	@	[	\	\]	^	`	{	|	}	~
France	#	\$	à	°	ç	§	^	`	é	ù	é	¨
Germany	#	\$	§	Ä	Ö	Ü	^	`	ä	ö	ü	β
UK	£	\$	@	[	\	\]	^	`	{	|	}	~
Denmark I	#	\$	@	Æ	Ø	Å	^	`	æ	ø	å	~
Sweden	#	¤	É	Ä	Ö	Å	Ü	é	ä	ö	å	ü
Italy	#	\$	@	°	\	é	^	ù	à	ò	è	ì
Spain I	Pts	\$	@	;	Ñ	¿	^	`	¨	ñ	}	~
Japan	#	\$	@	[	¥	]	^	`	{	|	}	~
Norway	#	¤	É	Æ	Ö	Å	Ü	é	æ	ø	å	ü
Denmark II	#	\$	É	Æ	Ö	Å	Ü	é	æ	ø	å	ü
Spain II	#	\$	á	;	Ñ	¿	é	`	í	ñ	ó	ú
Latin America	#	\$	á	;	Ñ	¿	é	ü	í	ñ	ó	ú
Korea	#	\$	@	[	₩	]	^	`	{	|	}	~
Legal	#	\$	§	°	`	“	¶	`	©	®	†	™