PW50

Workboard Printer

User's Guide

Placeholder for PW50 illustration

Intermec®

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Before You Begin

This section provides you with safety information, technical support information, and sources for additional product information.

Safety Information

Your safety is extremely important. Read and follow all warnings and cautions in this document before handling and operating Intermec equipment. You can be seriously injured, and equipment and data can be damaged if you do not follow the safety warnings and cautions.

This section explains how to identify and understand warnings, cautions, and notes that are in this document.

 A warning alerts you of an operating procedure, practice, condition, or statement that must be strictly observed to avoid death or serious injury to the persons working on the equipment.

 A caution alerts you to an operating procedure, practice, condition, or statement that must be strictly observed to prevent equipment damage or destruction, or corruption or loss of data.

 Note: Notes either provide extra information about a topic or contain special instructions for handling a particular condition or set of circumstances.

Global Services and Support

Warranty Information

To understand the warranty for your Intermec product, visit the Intermec web site at **www.intermec.com** and click **Support** > **Returns and Repairs** > **Warranty**.

Disclaimer of warranties: The sample code included in this document is presented for reference only. The code does not necessarily represent complete, tested programs. The code is provided "as is with all faults." All warranties are expressly disclaimed, including the implied warranties of merchantability and fitness for a particular purpose.

Web Support

Visit the Intermec web site at **www.intermec.com** to download our current manuals (in PDF). To order printed versions of the Intermec manuals, contact your local Intermec representative or distributor.

Visit the Intermec technical knowledge base (Knowledge Central) at **www.intermec.com** and click **Support** > **Knowledge Central** to review technical information or to request technical support for your Intermec product.

Telephone Support

In the U.S.A. and Canada, call **1-800-755-5505**.

Outside the U.S.A. and Canada, contact your local Intermec representative. To search for your local representative, from the Intermec web site, click **About Us** > **Contact Us**.

Service Location Support

For the most current listing of service locations, click **Support** >**Returns and Repairs** > **Repair Locations.**

For technical support in South Korea, use the after service locations listed below:

AWOO Systems
102-1304 SK Ventium
522 Dangjung-dong
Gunpo-si, Gyeonggi-do Korea, South 435-776
Contact: Mr. Sinbum Kang
Telephone: +82-31-436-1191
Email: **mjyun@awoo.co.kr**

IN Information System PTD LTD
6th Floor
Daegu Venture Center Bldg 95
Shinchun 3 Dong
Donggu, Daegu City, Korea
E-mail: **jmyou@idif.co.kr** or **korlim@gw.idif.co.kr**

Who Should Read This Manual

This user's guide is for the person who is responsible for installing, configuring, and maintaining the PW50 Workboard Printer.

This user's guide provides you with information about the features of the PW50, and how to configure, operate, maintain, and troubleshoot it.

Before you work with the PW50, you should be familiar with your network and general networking terms, such as IP address.

Related Documents

The Intermec web site at **www.intermec.com** contains our documents (as PDF files) that you can download for free.

To download documents

1 Visit the Intermec web site at **www.intermec.com**.

2 Click **Support** > **Manuals**.

3 In the **Select a Product** field, choose the product whose documentation you want to download.

To order printed versions of the Intermec manuals, contact your local Intermec representative or distributor.

1 Using the PW50 Workboard Printer

Use this chapter to familiarize yourself with the PW50 Workboard Printer. This chapter contains these sections:

- Learning About the PW50 Workboard Printer
- Using the Batteries
- Loading Media
- Printing a Testprint
- Inserting a Handheld Computer
- Using the Card Reader Option

Learning About the PW50 Workboard Printer

The PW50 is a rugged direct thermal label and receipt printer that is designed for use with the CN3, CN3e, and CK61 mobile computers. The PW50 provides:

- print resolution of 203 dpi.

- print speeds of up to 100 mm per second (4 ips).

- a Bluetooth radio.

Identifying the Parts of the Printer

Use this illustration to familiarize yourself with some of the features of the PW50.
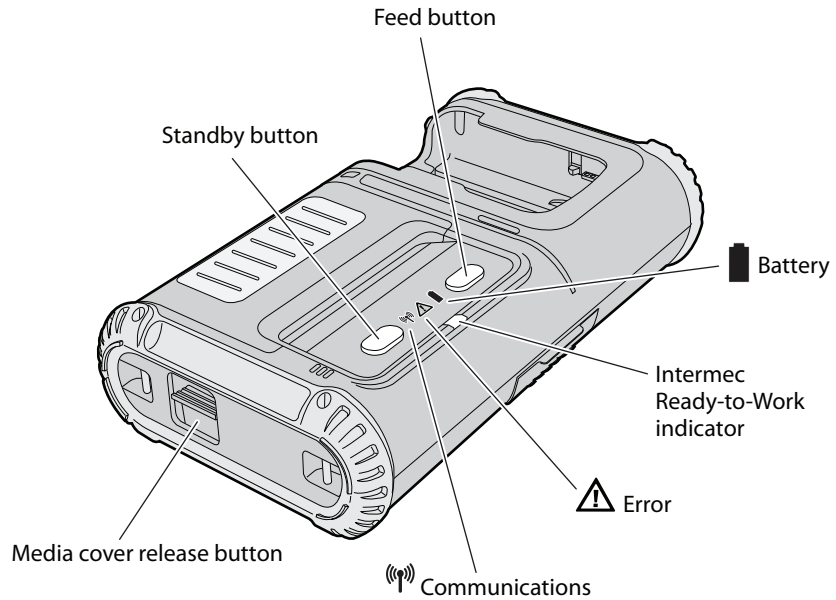
PW50 Printer: *This illustration shows the important features of the PW50 printer. A weather-resistant flap protects the communcations ports and the external power connector.*

Understanding the Control Panel

The PW50 control panel contains two buttons and four LED indicators. Use the two buttons to perform functions on the PW50 printer. See the following tables to understand the buttons and LED indicators.
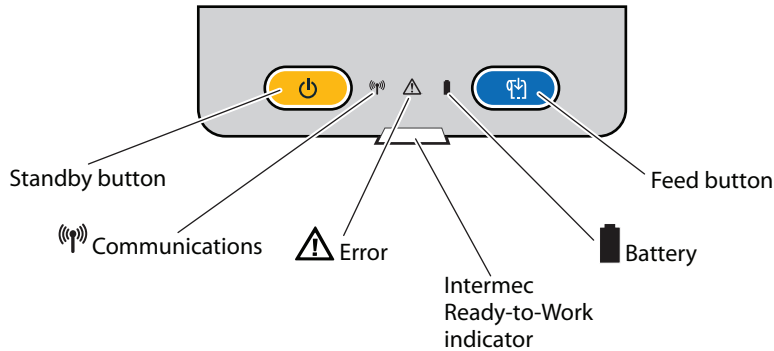
PW50 Control Panel: Use this illustration to familiarize yourself with the buttons and LEDs on the PW50.

Understanding How to Use the PW50 Buttons

Button	Name	Functions
⏻	Standby (Power)	Press to put the printer in Standby mode. In Standby mode, power to the radio is turned off.
		Press to turn the printer back on and put the printer in Ready mode.
⏏	Feed	Press to advance label or receipt paper. The amount of media that feeds depends on the type of media you are using. Media advances by 5 mm (0.2 inch), feeds out an entire label, or feeds a configured length of media based on your media and settings.
		If the printer is printing, pressing this button causes pauses printing. Press the button again to resume printing.

Understanding the Communications, Error, and Battery Indicators

Indicator	Name	State	Description
((ŗ))	Communications	Off	The Bluetooth radio is off. The Bluetooth radio turns off when you connect a serial cable.
		Steady green	The Bluetooth radio is on and the printer is not connected to a serial cable.
⚠	Error	Off	The PW50 is off.
		Steady green	Ready/Data
		Steady red	Error
▮	Battery	Off	• The battery is installed and working properly. • There is no battery installed.
		Steady green	Battery is fully charged in the PW50 with an external power supply connected.
		Steady red	Battery is charging in the PW50 with an external power supply connected.
		Blinking red	Battery is low.

Understanding the Intermec Ready-to-Work Indicator

State	Description
Off	The PW50 is in Standby mode.
On	The PW50 is powered on and operating.
Blinking	A blinking light can mean one of several conditions: • The printer is out of paper. • The media cover is open. • There is a printer error that requires you to perform an action. For a list of possible problems, see Chapter 3, **"Troubleshooting and Maintaining the PW50."**

Understanding the Printer Sounds

The PW50 plays sounds in response to several actions that you can take with the printer. Use the following table to understand when the sounds occur and what they mean.

Understanding the Printer Sounds

Sound	Occurs When:
Power	• You insert a battery in the printer. • The PW50 starts charging the battery. • You plug in the AC adapter.
Hardware	You open the media door, close the media door, or insert a cable.
Button	You press one of the PW50 buttons.
Error	• The printer cannot feed paper or print a job because of a hardware issue such as the media door open, a paper jam, or there is no media. • An error occurs such as a paper jam, a print error, or the printer is out of range.

Using the Batteries

The PW50 uses a rechargeable 2200 mAh lithium-ion battery (Model AB13) for power. You must fully charge the battery before you can use the PW50. A fully charged battery can last up to one week without needing to be recharged when the printer is in Standby mode.

Use Intermec Model AB13 battery only. Use of another battery may present a risk of fire or explosion.

The Model AB13 battery may present a fire or chemical burn hazard if mistreated. Do not disassemble, heat above 100°C (212°F), or incinerate.

Dispose of used batteries promptly. Keep away from children.

Installing the Battery

Make sure you fully charge the battery before you use your PW50. You can charge the battery before or after you install them into the PW50.

To install the battery

1 Lay the PW50 upside down on a flat surface.

2 Insert the battery with the tab facing away from the front control panel.
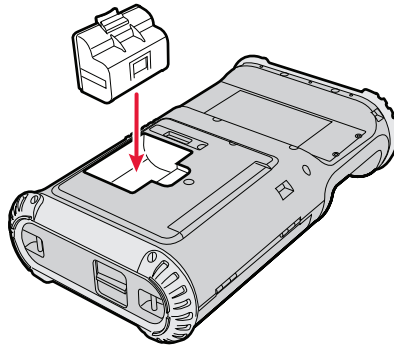
3 Insert the edge of the battery under the lip of the PW50 and then push down until you hear the battery latch click.
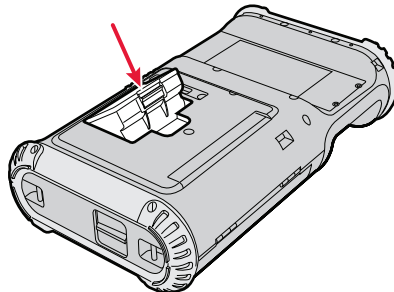
Charging the Batteries

There are two ways to charge the PW50 battery:

- Connect AC power to the printer and charge the battery while it is in the PW50.

- Charge the battery in the AC18 4-bay battery charger.

For information on charging your battery in the 4-bay battery charger, see the *AC18 4-Bay Battery Charger Instructions* (P/N 943-128-xxx).

It takes approximately 6 hours to charge the battery while it is installed in the PW50 printer. To charge the battery inside the PW50, you need:

- an Intermec 12 VDC power supply (Model 073573 or Model AE19).
- an AC power cord.

To charge the battery inside the PW50

1 Install the battery in the PW50. For help, see the previous section, **"Installing the Battery" on page 6**.

2 Connect the power supply to the DC power connector on the printer.

3 Connect one end of the power cord to the power supply, and then plug the other end into an AC outlet.

Understanding the Battery LED

The easiest way to tell the status of your battery is to look at the battery LED on the control panel of the PW50.

Battery LED Status

LED State	Status
Steady green	Battery is fully charged in the PW50 with an external power supply connected.
Steady red	Battery is charging in the PW50 with an external power supply connected.
Blinking red	Battery is low.
Off	The battery is installed and working properly.
	There is no battery installed.

Extending Battery Life

Here are some tips for extending the overall life of your battery:

- Never expose the battery to direct sunlight or temperatures over 40°C (104°F).
- Only charge the battery inside the PW50 using a power supply or in the 4-bay battery charger (Model AC18).

Here are some tips for extending the life of your battery between charges:

- Press the **Standby** button to put the printer in Standby mode.
- Remove the battery from the printer if you are not going to use it for three or more days.
- Do not operate the PW50 in extremely cold temperatures. Using the PW50 in temperatures below freezing reduces the overall battery life.

Remember that any rechargeable battery loses its ability to maintain a charge over time. You can only recharge it a finite number of times before you must replace it.

Loading Media

You can use roll or fanfold receipt media with the PW50 printer. The PW50 ships with a small amount of media loaded and a test page printed to verify that the printer works. For information on media specifications, see **"Specifications" on page 32**.

To load media

1 Press down on the blue media cover release button until the cover releases.
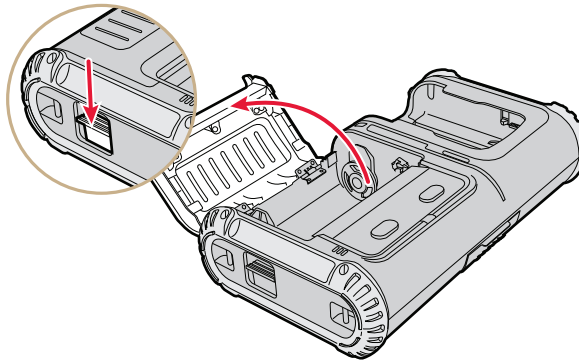
2 Insert a roll of media. Make sure you load the media clockwise so that it pulls off the core from the bottom of the printer.
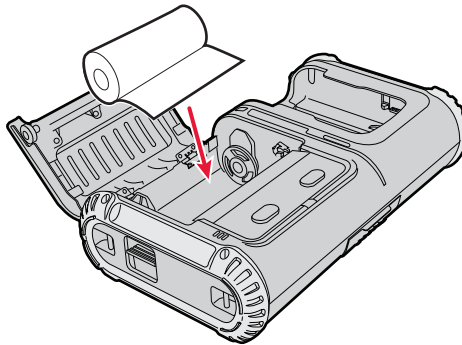
3 Pull out approximately 8 cm (3 inches) of the media.

4 Close the media cover and press down on the cover until it latches. The printer emits the hardware sound to tell you that the media door closed correctly.
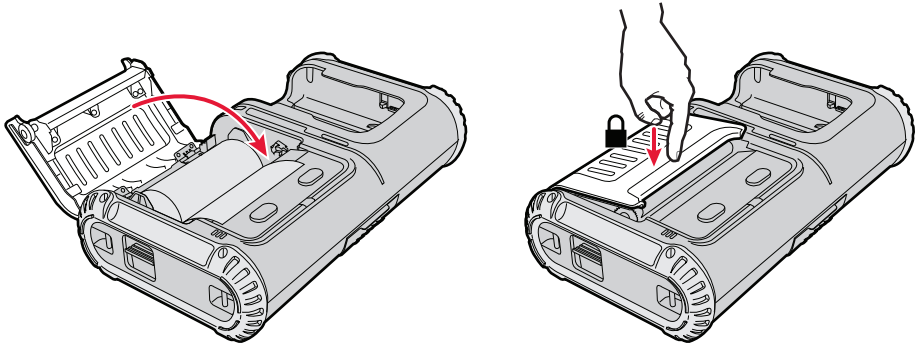
5 Press the **Feed** button to advance the media.

Printing a Testprint

After you load media in the printer, you are ready to print a testprint. If you cannot get the testprint information to print, see Chapter 3, **"Troubleshooting and Maintaining the PW50."**

To print a testprint

1 Press and hold the **Standby** and **Feed** buttons until the PW50 beeps.
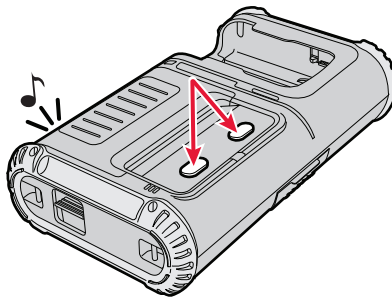
2 Release the buttons.

3 The PW50 prints a testprint.

Inserting a Handheld Computer

The PW50 is designed for use with the CN3, CN3e, and CK61 mobile computers.

To insert a handheld computer

- Slide the computer into the slot on the PW50 until the computer snaps into place.
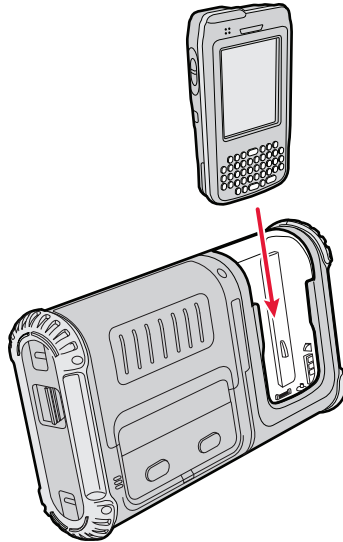
This illustration shows inserting a CN3. However, the PW50 is also designed for use with the CN3e and CK61 mobile computers.

Using the Card Reader Option

You can order the PW50 with a card reader option.

I need information about the card reader option.

2 Configuring the PW50

This chapter describes how to configure the PW50 and contains these sections:

- Configuring the PW50
- Establishing Communications With a Host
- Upgrading the Firmware
- Downloading Fonts and Graphics

Configuring the PW50

You can change the configuration settings of the PW50 printer by sending commands from your PC or remotely from the SmartSystems console.

Understanding the Printer Modes

The PW50 has seven modes to help you effectively interact with the printer: Ready, Paused, Error, Test, and Upgrade. Use the following sections to understand the different printer modes

Understanding Ready Mode

The printer is in Ready mode when the printer is on and ready to print.

Understanding Pause Mode

Use Pause mode to momentarily stop printing or to cancel a current print job. Use the **Feed** button to both pause and resume printing.

To enter Pause mode

• Press the **Feed** button while the printer is printing.

To resume printing

• Press the **Feed** button while the printer is paused.

To cancel a print job

 1 Press the **Feed** button to pause printing.

 2 Press the **Feed** button again to cancel the print job.

Understanding Error Mode

The printer enters Error mode when it detects an error condition such as a low battery or a paper fault.

Understanding Test Mode

Use Test mode to verify printer settings, print test labels, restore factory default settings, or enter Dump mode for troubleshooting purposes. Two test modes are available: Test mode and Extended Test mode.

Using Test Mode

Test mode is a simple sequence of events which requires little user interaction. Extended Test mode requires more user interaction and lets you choose which actions you want the printer to perform.

To enter Test mode

1 Make sure the printer is in Ready mode and is loaded with media.

2 Press and hold the **Standby** and **Feed** buttons until the PW50 beeps.

3 Release the buttons. The printer performs a test feed (sensor calibration), prints a series of test labels, and then enters Dump mode.

   While the printer is in Dump mode, it scans the communication ports. Any characters received on the communication ports are printed.

4 Press **Feed** to exit Dump mode.

After you exit Dump mode, the printer returns to Ready mode. For more information on Dump mode, see **"Troubleshooting Communication Problems" on page 27**.

Using Extended Test Mode

Use Extended Test mode to run additional diagnostic tests, including printing specific test labels, entering Dump mode, and resetting to factory defaults.

To enter Extended Test mode

1 Make sure that the printer is loaded with media.

2 Press the media cover release button to open the media cover.

3 Press the **Standby** button to turn the printer off.

4 Press and hold the **Standby** and **Feed** buttons until the PW50 beeps.

5 Close the media cover. You are now in Extended Test mode.

- Press and hold the **Feed** button for at least 2 seconds to cycle through the Extended Test mode option.

- Press and release the **Feed** button select an Extended Test mode option.

Options in Extended Test Mode

Option	Description
Select Media	This option is similar to the process in Test mode, except that the printer performs a slow test feed in Extended Test mode. The slow test feed enables the printer to perform a slow sensor calibration, which can help resolve gap or mark detection problems.
Test Labels	This option allows you to print test labels one at a time. Press the **Feed** button to print the next label.
Dump Mode	This option enters Dump mode. For more information on Dump mode, see **"Troubleshooting Communication Problems" on page 27**.
Factory Default	This option restores the factory default settings. Press the **Feed** button to select this option.
Setup and Exit	This option exits Extended Test mode and puts the printer in Setup mode.
Exit	This option exits Extended Test mode.

Changing Configuration Settings

There are several ways you can change the configuration settings of the printer. You can change the configuration settings:

- from the host PC using PrintSet.

- from the host PC using the command line.

- from the SmartSystems Console.

Changing Configuration Settings From PrintSet

PrintSet Version 4.2 (or later) is a printer configuration tool that you can download from the Intermec web site. PrintSet can communicate with your printer through a serial cable or a network connection. It works on all PCs running Windows 98 (or later). PrintSet allows you to easily change all of the setup parameters. It also includes setup wizards to guide you through some common configuration tasks.

Does PrintSet version 4.2 support the PW50? When will it be released?

Changing Configuration Settings Using the Command Line

You can change configuration parameters by sending commands directly to the printer using your terminal program (HyperTerminal) and a serial or network connection.

What ESC-P command do you send? Does ESC-P automatically send feedback to HyperTerminal?

For more information on how to change configuration settings, see the *ESC-P Programmer's Reference Manual* (P/N 937-005-xxx), available from the Intermec web site at **www.intermec.com**.

Changing Configuration Settings From SmartSystems Console

You can use the SmartSystems Console to change configuration settings on your printer. The PW50 ships with the SmartSystems client loaded on it. The console is part of SmartSystems Foundation and is available from the Intermec web site. To download SmartSystems Foundation, go to **www.intermec.com/products/smrtsysfoundation/index.aspx**.

Establishing Communications With a Host

The PW50 must establish communications with a host that will send the data for the printer to print. The PW50 provides four ways to communicate with a host:

- Bluetooth radio communications

- USB communications

- Serial communications through a serial cable or directly to an Intermec computer inserted in the PW50

Setting Up Bluetooth Communications

The PW50 contains a Bluetooth radio that allows wireless communications with a remote device from distances up to 100 meters (approximately 328 feet) depending on the Bluetooth range capabilities of the remote device, environmental conditions, and obstructions. For the Bluetooth-enabled devices to exchange data, both devices must establish a connection. Bluetooth software is always running in the background.

The PW50 cannot initiate a Bluetooth connection. One of the devices, such as a CN3 mobile computer, must request a connection with the printer. The PW50 then accepts or rejects the connection. Use Intermec Settings on the mobile computer to enable the Bluetooth settings on the PW50.

The PW50 can also connect to Bluetooth scanners such as the SF51 and the SR61. You can create the bar code labels you need to connect the printer to a Bluetooth scanner using EasySet software. If you are going to create the bar code labels using EasySet, you will need to know the Bluetooth Device Address and the PIN of the PW50. You can download EasySet at no charge from the Intermec web site at **www.intermec.com**.

Each PW50 equipped with a Bluetooth radio has a unique Bluetooth Device Address (BDA) loaded into its module when manufactured. You can find the BDA on the certification label located on the bottom of the printer.

To set up Bluetooth communications with a mobile computer

• Follow the procedure to discover and connect to Bluetooth devices in your mobile computer user's manual.

Note: For maximum security, you need to configure a Bluetooth passcode for the PW50. The default passcode for the PW50 is "1234."

To set up Bluetooth communications with a scanner

1 Download and install EasySet.

2 Create the following bar code labels using EasySet:

• Administrator reset factory defaults

• Bluetooth parameters - security - not active

• Bluetooth parameters - connect/disconnect - compose BT address

• Bluetooth parameters - security - compose PIN:

3 Scan the bar code labels with the Bluetooth scanner.

Understanding the Communications Indicator

State	Description
Off	The Bluetooth radio is off. The Bluetooth radio turns off when you connect a serial cable.
Steady green	The Bluetooth radio is on and the printer is not connected to a serial cable.

Setting Up USB Communications

To set up USB communications with your PC, you need:

• a USB cable.

• Intermec InterDriver® software.

You can download the InterDriver software from the Intermec web site at **www.intermec.com**.

Setting Up Serial Communications

Use a serial cable (P/N 075497-001) to connect the PW50 to a PC, or insert a CN3, CN3e, or CK61 mobile computer.

Before you can establish a serial connection, you need to make sure that the settings on the PC or mobile computer match the settings on the PW50.

Serial Port Default Settings on the PW50

Parameter	Default Setting
Baud rate	115200
Data bits	8
Parity	None
Stop bits	1
Flow control	Hardware

To connect the PW50 to a PC

1 Connect the 8-pin circular DIN connector to the serial port on the PW50.

2 Connect the other end of the serial cable to a serial port on the back of your PC or to a serial adapter on your mobile computer.

Serial cable

Serial port
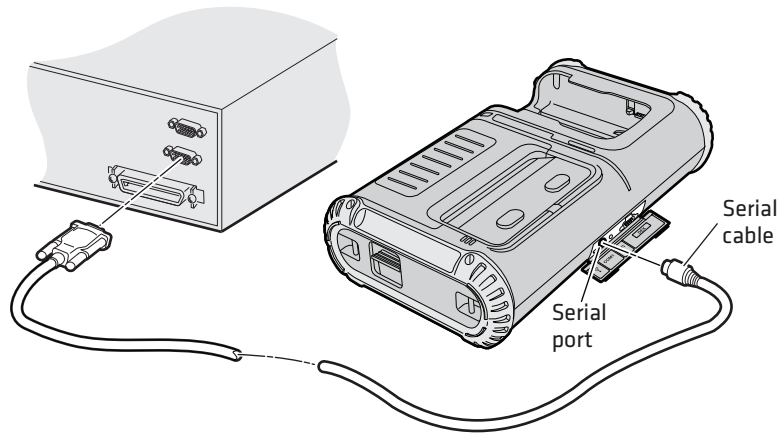
Upgrading the Firmware

The latest firmware and software is always available for download from the Intermec web site at **www.intermec.com**.

To download firmware updates

1 Go to the Intermec web site at **www.intermec.com**.

2 Click **Support** > **Downloads**.

3 In the **Select a Product** field, choose PW50 mobile printer. The latest available software displays on the page.

4 Download the latest firmware version to your computer. Make sure you choose the correct firmware upgrade for your printer.

5 Extract the .zip file to a folder on your computer.

You use PrintSet to upgrade the printer firmware. Your printer should reboot after you finish upgrading the firmware. If it does not reboot, you need to cold boot the printer. For help, see **"Cold Booting the PW50" on page 28**.

To upgrade your printer firmware

1 Download the latest version of PrintSet from the Intermec web site at **www.intermec.com**.

2 Select **File** > **Add Printer** to start the Add Printer Wizard which guides you through the process of adding your printer.

3 Select your printer under My Printers and then go to **Printer** > **Firmware Wizard**.

The Firmware Wizard guides you through the necessary steps to upgrade your firmware.

To upgrade your printer using a serial connection

1 Make sure you have established a serial communications between your PC and the PW50. For help, see **"Setting Up Serial Communications" on page 20**.

2 Use ESC-P commands to send the upgrade file to the printer.

For help with ESC-P commands, see the *ESC-P Programmer's Reference Manual* (P/N 937-005-xxx) available from the Intermec web site at **www.intermec.com**.

Downloading Fonts and Graphics

The easiest way to download fonts and graphics is to use the free Intermec printer application called PrintSet. You can download PrintSet from the downloads page for the PW50 printer on the Intermec web site at **www.intermec.com**. Follow the procedures in the PrintSet online help to download fonts and graphics.

You can also use ESC/P commands to send fonts and graphics to the printer. For help with commands and information, see the *ESC-P Programmer's Reference Manual* (P/N 937-005-xxx) available from the Intermec web site at **www.intermec.com**.

3 Troubleshooting and Maintaining the PW50

This chapter contains information to help you solve problems you may encounter while using the PW50 and contains these sections:

- Troubleshooting the PW50
- Cold Booting the PW50
- Cleaning the PW50

Troubleshooting the PW50

You may have printer operation, print quality, or printer communication problems at some time during the life of the PW50 printer. It is easy to fix most of the problems and you will find solutions in **"Troubleshooting Printer Problems and Finding Solutions" on page 25**. If you cannot find the answer to your problem, you may need to contact Product Support.

Contacting Product Support

Before you call Intermec Product Support, you may want to visit the Intermec technical knowledge base (Knowledge Central) at **intermec.custhelp.com** to review technical information or to request technical support. If you still need help after visiting Knowledge Central, you may need to call Product Support.

To talk to an Intermec Product Support representative in the U.S.A. or Canada, call:

1-800-755-5505

Outside the U.S.A. and Canada, go to **www.intermec.com** and click Contact to find your local Intermec representative.

Before you call Intermec Product Support, make sure you have the following information ready:

•   Printer serial number

•   Firmware type and version

•   Bluetooth, wireless, or serial port settings

You can find all of the information listed above in the printer menu system or on a test print page.

Understanding Error Messages

Use the following tables to troubleshoot common errors. To receive error messages, you need to tunrn on the Allow Messages From Printer command. For help, see the *ESC-P Programmer's Reference Manual* (P/N 937-005-xxx).

PW50 Error Message Descriptions

Error Message	Description
Lid_Open	The media cover is open. Close the media cover and press down until it latches. If Lid_Open=Y, the printer detected an error condition and canceled any pending print jobs.
Paper_Out	The printer is out of media. Load a new roll of media. If Lid_Open=Y, the printer detected an error condition and canceled any pending print jobs.
Voltage	This message indicates the power status of the printer: • If Voltage=H, the printer is fully powered by either an external power supply or a fully charged battery. • If Voltage=L, the printer has detected a low voltage condition. Connect the printer to external power, or insert a fully charged charged battery.

Troubleshooting Printer Problems and Finding Solutions

Use the following tables to troubleshoot some common problems you may encounter with the PW50 printer.

Printer Problems and Possible Solutions

Problem	Possible Solution
The printer does not turn on when you press **Standby**.	• Replace the battery with a charged battery. • Connect external power to make sure the printer works correctly and to charge the battery.
The blue light (Intermec Ready-to-Work™ indicator) is blinking.	• Make sure media is loaded and the media cover is closed. For help, see **"Loading Media" on page 8**. • There is a printing error. • The printer is paused. The printer is canceling a print job.

Printer Problems and Possible Solutions (continued)

Problem	Possible Solution
Printer keeps printing or feeding when it should stop.	• Check media settings. • Make sure the label gap sensor is clean. For help, see **"Cleaning the PW50" on page 28**.
The printout is not in the desired position.	• Check for errors in the software application. • Make sure the label gap sensor and platen roller are clean. For help, see **"Cleaning the PW50" on page 28**.
The printer is not printing with a Bluetooth connection.	• Re-establish a Bluetooth connection with the mobile computer or scanner. For help, see **"Setting Up Bluetooth Communications" on page 18**, or see your mobile computer user's manual. • Make sure the mobile computer can print to a known good printer. • Print a Bluetooth test print page to make sure that the mobile printer discovered your printer. For help, see **"Printing a Testprint" on page 10**. • Make sure the printer is in Ready mode.
When printing, the printer is skipping labels.	• Perform a testfeed by pressing and hold the **Standby** and **Feed** buttons until the PW50 beeps. • Make sure the label gap sensor is clean. For help, see **"Cleaning the PW50" on page 28**.
Printout is faded or weak.	• Modify the Set Media Sensitivity command or the Set Dark Adjust command. For help, see the *ESC-P Programmer's Reference Manual* (P/N 937-005-xxx). • Check to see if the printhead needs cleaning. For help, see **"Cleaning the PW50" on page 28**.
The battery charge is not lasting as long as it should.	• Check the battery date. If the battery is a few years old, the shortened life may be due to normal aging. • Replace the battery.
The test pages do not print.	• Make sure that the blue light is not blinking. If it is, make sure your printer has media and that the media cover is closed. • Make sure that you can advance media by pressing the **Feed** button.

Printer Problems and Possible Solutions (continued)

Problem	Possible Solution
Print quality is poor.	• Clean the printhead. For help, see **"Cleaning the PW50" on page 28**. • Check the battery and charge or replace as necessary. For help, see **"Charging the Batteries" on page 6**. • Check the quality of the media. Use only Intermec media to ensure superior print quality and product performance. • Check that the printer is configured to the appropritae Set Media Sensitivity value for the media you are using.

Troubleshooting Communication Problems

Use Dump mode to verify that the printer is receiving data from the host correctly.

Is this true for the PW50?

Cold Booting the PW50

You rarely need to cold boot the PW50 printer, unless you are upgrading the firmware. If your printer occasionally locks up, you should cold boot it. A cold boot clears the working memory.

Note: The Setup menu is not affected by a cold boot. Your printer retains all of your configuration settings after the printer powers back up.

To reset the PW50

1 Disconnect the PW50 from power if externally powered.

2 Remove the battery from the PW50 for at least one second.

3 Insert the battery back into the PW50.

4 Reconnect external power if your PW50 is externally powered.

Cleaning the PW50

To properly maintain your PW50,you should clean it at the recommended intervals.

Warning

To avoid possible personal injury or damage to the printer, never insert any pointed or sharp objects into the printer.

Caution

Use only the cleaning agents specified in this section. Intermec is not responsible for damage caused by any other cleaning materials used on this printer. Clean the printer with a cotton swab saturated with alcohol.

Placeholder for illustration of PW50 parts to clean.

PW50 Workboard Printer: *Identifying the parts of the PW50 to clean regularly.*

Cleaning the PW50 Printer

Printer Part	Cleaning Method	Cleaning Interval
Printhead	Use 70% isopropyl alcohol on a cotton swab to clean the print elements from end to end.	After every five rolls of media or more often if necessary.
Platen roller	Rotate the platen roller and clean it thoroughly with 70% isopropyl alcohol on a cotton swab.	After every five rolls of media or more often if necessary.
Paper sensors	Clean thoroughly with 70% isopropyl alcohol and a cotton swab.	After every five rolls of media or more often if necessary.
Tear bar	Clean thoroughly with 70% isopropyl alcohol and a cotton swab.	As needed.
Exterior	Clean with a water-dampened cloth.	As needed.
Interior	Brush or air blow. Make sure the paper sensor is free of dust.	After every five rolls of media or more often if necessary.

A Specifications

Specifications

Physical Dimensions

Dimension	Value
Depth	Need this information.
Height	Need this information.
Width	Need this information.
Weight	Need this information.

Power Specifications

Specification	Value
AC power adapter voltage	100 to 240V
Printer voltage	100V to 240V and 50 Hz to 60 Hz
Operating power	Rechargeable 16.8 V 2200 mAh lithium-ion battery

Temperature and Humidity Specifications

Specification	Value
Operating temperature	-15°C to 50°C (5°F to 122°F)
Storage temperature	-22°C to 70°C (-30°F to 158°F)
Charging temperature	0°C to 45°C (32°F to 113°F)
Relative humidity	0 to 95% non-condensing
Sealing	IP54

Memory

Memory	Value
RAM	16 MB
Flash	64 MB

Print Speed and Resolution

Specification	Value
Print speed	4 ips (100 mm/s)
Resolution	203 dpi (8 dots/mm)

Print Technology

Technology	Description
Printhead	Direct thermal
Maximum print width	108 mm (4.25 in)

Media Specifications

Media	Value
Core inside diameter, standard	19 mm (0.75 in)
Core inside diameter, with adapter	10.2 mm (0.4 in)
Maximum roll outside diameter	67.3 mm (2.65 in)
Media width, label with liner/receipt	111.5 mm (4.4 in)
Media length, label	25.4 mm (1.0 in) to 609.6 mm (24 in)
Media length, receipt	Continuous
Media caliper, label with liner/receipt	0.05 mm (0.002 in) to 0.165 mm (0.0065 in)
Media caliper, tag (maximum)	0.15 mm (0.006 in)
Gap length (centered on perforation)	3.17 mm (0.125 in) to 12.7 mm (0.50 in)
Notch length (centered on perforation)	6.35 mm (0.25 in)
Notch width (centered on perforation)	12.7 mm (0.50 in)
Black mark length (centered on perforation)	3.17 mm (0.125 in) to 12.7 mm (0.50 in)

Receipt roll stock media is supplied as a continuous roll. Label, tag, and fanfold media use repeat indicators for non-continuous media. Gap, notch, and black marks are used as repeat indicators:

- **Gap:** Label and fanfold media
- **Notch:** Tag media
- **Black mark:** Label, tag, and fanfold media

Here are a few things to keep in mind when ordering media for the PW50 printer:

- Black marks can only be sensed on the back side of the media.
- You can use higher caliper media in the printer, but print quality will be reduced.
- Receipt roll stock media has an end of roll indicator. The end of roll indicator is a red marking (on last 3 feet of roll) on the thermally sensitive side of the paper.

External Fanfold Media Specifications

Specification	Value
Stack height:	70 mm (2.75 in)
Page length:	152 mm (6 in) to 305 mm (12 in)

Note: A 6-inch page length is supplied in 12-inch long stacks (two 6-inch stacks of equal height with the bottom page linked).

Specialty media is required for unique customer environments, including printer operating temperature extremes. Intermec recommends that you test the media in your application.

Supported Media
The PW50 printer supports direct thermal label, tag, and receipt media. Both North American and European label media are supported in multiple label lengths. Receipt media is supported in both a top coated and an uncoated paper in continuous roll stock only.

The default media sensitivity number is: 180.

Use the following table as a guide when setting sensitivity numbers.

Recommended Media Sensitivity, Constant, Factor, and Print Speed

Sensitivity	Constant	Factor	Description	Max Print Speed
North American Label Media				
720	60	40	Duratherm Lightning Plus	4 ips
470	52	40	Duratherm Lightning	4 ips
450	48	40	Duratherm Lightning	2 ips
430	100	40	Duratherm Synthetic	4 ips
180	80	40	Duratherm II Label	4 ips
180	80	40	Duratherm III Label	4 ips
180	80	40	Duratherm Near IR	4 ips
150	50	40	Duratherm 5 mil Tag	2 ips
North America Receipt Media				
401	45	40	Duratherm TC	2 ips
102	32	40	Duratherm NTC - 2	2 ips
101	30	40	Duratherm NTC	2 ips
European Label Media				
440	47	30	Thermal Eco	2 ips
140	70	40	Thermal Top	4 ips

Accessories for the PW50

You can use these accessories (sold and ordered separately) with the PW50 printer. To order accessories, contact your local Intermec sales representative.

AB13 Battery
Use the lithium-ion 2200 mAh battery to provide power to the printer.

AC18 4-Bay Battery Charger
Use the AC18 to charge up to four batteries at a time. The battery charger is designed to sense when a battery is fully charged and not overcharge it, ensuring long and consistent battery life.

PW50 Vehicle Dock (Model AV11)
Use the vehicle dock to attach the PW50 to a truck.

Power Supply (Model AE19)
Provides power to the PW50 and the 4-bay battery charger (Model AC18).

Power Supply (Model 073573)
Provides power to the PW50 and the 4-bay battery charger (Model AC18).

Serial Cable
The serial adapter is an 8-pin DIN to DB9 connector that connects from the PW50 printer to your desktop PC.

Handstrap
Handstrap to conveniently carry your PW50 printer.

Shoulder Strap
Use the shoulder strap to easily carry the PW50 printer. The wide padded strap makes it comfortable to wear the printer for long periods of time.

PW50 Compliance Insert

For Users in the United States and Canada

⚠ Caution: This marking indicates that the user should read all included documentation before use.

Attention: Ce marquage indique que l'usager doit, avant l'utilisation, lire toute la documentation incluse.

⚠ Caution: For use with Intermec battery pack Model AB13 only. For power supply, use Intermec Model 073573 or AE19. No user-serviceable parts.

Attention: Pour utilisation seulement avec bloc-batterie Intermec modèle AB13. Pour l'alimentation, utilisez Intermec modèle 073573 ou AE19. Il ne contient aucune pièce réparable par l'utilisateur.

The users of this product are cautioned to use accessories and peripherals approved by Intermec Technologies Corporation. The use of accessories other than those recommended, or changes to this product that are not approved by Intermec Technologies Corporation, may void the compliance of this product and may result in the loss of the user's authority to operate the equipment.

FCC Digital Emissions Compliance

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

Canadian Digital Apparatus Compliance

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Conformité aux normes canadiennes sur les appareils numériques

Cet appareil numérique de la classe B respecte toutes les exigences du Réglement sur le matériel brouilleur du Canada.

Battery Information

⚠ Caution: The battery pack used in this device may ignite, create a chemical burn hazard, explode, or release toxic materials if mistreated. Do not incinerate, disassemble, or heat above 100°C (212°F). Charge only with Intermec Model AC18. Do not short circuit; may cause burns. Keep away from children.

Use only Intermec battery pack Model AB13. Use of incorrect battery pack may present risk of fire or explosion. Promptly dispose of used battery pack according to the instructions.

Attention: Le bloc-piles utilisé dans cet appareil peut prendre feu, constituer un risque de brûlure chimique, exploser ou dégager des substances toxiques s'il est manipulé de façon inappropriée. Ne pas jeter au feu, démonter ou chauffer à plus de 100 °C (212 °F). Rechargez uniquement avec le chargeur Intermec modèle AC18. Ne pas court-circuiter; cela pourrait causer des brûlures. Garder hors de la portée des enfants.

N'utiliser que le modèle de bloc-piles Intermec AB13. L'utilisation d'un mauvais bloc-piles pourrait constituer un risque d'incendie ou d'explosion. Mettre rapidement au rebut tout bloc-piles usé, conformément aux instructions.

Battery Recycling Information

This product contains or uses a lithium-ion (Li-ion) main battery. When the battery reaches the end of its useful life, the spent battery should be disposed of by a qualified recycler or hazardous materials handler. Do not mix this battery with the solid waste stream. Contact your Intermec Technologies Service Center for recycling or disposal information.

Ce produit contient ou utilise une pile principale au lithium-ion (Li-ion). Lorsque la batterie atteint la fin de sa durée de vie utile, la batterie usées doivent être mises aux rebuts par un agent de recyclage ou un manipulateur de matériaux dangereux agréé. Il ne faut pas mélanger la batterie aux autres déchets solides. Pour plus d'informations sur le recyclage ou la mise aux rebuts, contacter votre centre de services Intermec Technologies.

Note: In the U.S.A., the EPA does not consider spent Li-ion batteries as hazardous waste.

IMPORTANT NOTE:
Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. To maintain compliance with FCC RF exposure compliance requirements, please follow operation instruction as documented in this manual.

For Users Outside of the United States or Canada

Caution: This marking indicates that the user should read all included documentation before use.

Caution: For use with Intermec battery pack Model AB13 only. For power supply, use Intermec Model 073573 or AE19. No user-serviceable parts.

Users of this product are cautioned to use accessories and peripherals approved by Intermec Technologies Corporation. The use of accessories other than those recommended, or changes to this product that are not approved by Intermec Technologies Corporation, may void the compliance of this product and may result in the loss of the user's authority to operate the equipment.

CE Marking: Refer to the Declaration of Conformity for a list of the EU Directives and Standards that this product complies with.

Battery Information

Caution: The battery pack used in this device may ignite, create a chemical burn hazard, explode, or release toxic materials if mistreated. Do not incinerate, disassemble, or heat above 100°C (212°F). Charge only with Intermec Model AC18. Do not short circuit; may cause burns. Keep away from children.

Use only Intermec battery pack Model AB13. Use of incorrect battery pack may present risk of fire or explosion. Promptly dispose of used battery pack according to the instructions.

Battery Recycling Information

This product contains or uses a lithium-ion (Li-ion) main battery. When the battery reaches the end of its useful life, the spent battery should be disposed of by a qualified recycler or hazardous materials handler. Do not mix this battery with the solid waste stream. Contact your Intermec Technologies Service Center for recycling or disposal information.

Akku-Informationen

⚠ **Vorsicht:** Der in diesem Gerät verwendete Akkusatz kann sich bei Missbrauch entzünden, chemische Verätzungen verursachen, expoldieren oder toxische Substanzen freisetzen. Nicht verbrennen, zerlegen oder über 100 °C (212 °F) erwärmen. Nur mit Intermec Modell AC18 aufladen. Keinen Kurzschluss verursachen; Verbrennungsgefahr. Von Kindern fern halten.

Nur Intermec Akkusatz-Modell AB13 verwenden. Wenn ein falscher Akkusatz verwendet wird, besteht Brand- oder Explosionsgefahr. Den verbrauchten Akkusatz sofort gemäß Anweisungen entsorgen.

Informationen zum Recycling von Batterien

♻ Li-ion 🗑 Li-ion   Dieses Produkt enthält oder verwendet einen Lithiumionen-Hauptakku. Wenn die Batterie ausgedient hat, sollte sie durch einen qualifizierten Recycler oder durch den Sondermüll entsorgt werden. Werfen Sie die Batterie nicht in den Abfall. Setzen Sie sich mit Ihrem Intermec Technologies Service-Zentrum in Verbindung, um weitere Informationen zum Recycling oder Entsorgen zu erhalten.

Para usuários fora do Canadá ou dos Estados Unidos

⚠ **Cuidado:** Esta identificação indica que o usuário deve ler toda a documentação fornecida antes do uso.

⚠ **Cuidado:** Para uso apenas com a bateria modelo AB13 da Intermec. Use o modelo 073573 ou AE19 da Intermec como fonte de alimentação. Este equipamento não contém peças que possam ser reparadas pelo usuário.

Se advierte a los usuarios de este producto que usen accesorios y periféricos aprobados por Intermec Technologies Corporation. El uso de accesorios aparte de los recomendados, o los cambios a este producto que no estén aprobados por Intermec Technologies Corporation, pueden anular el cumplimiento de este producto y ocasionar la pérdida de la autorización del usuario para operar el equipo.

Marcas CE: Consulte na Declaração de Conformidade a lista de Diretivas e Normas da União Européia com as quais este produto está em conformidade.

Informações sobre a bateria

⚠ **Cuidado:** A bateria utilizada neste dispositivo pode pegar fogo, criar risco de queimadura química, explodir ou exalar materiais tóxicos se abusada. Não incinerar, desmontar nem aquecer a bateria a mais de 100°C (212°F). Carregar apenas com o modelo de carregador AC18 da Intermec. Não provocar curto-circuito, pois pode causar queimaduras. Manter afastada de crianças.

Apenas a bateria da Intermec modelo AB13. O uso de uma bateria incorreta pode gerar risco de incêndio ou explosão. Descartar imediatamente as baterias usadas segundo as instruções fornecidas.

Infomações de Reciclagem de Bateria

♻ Li-ion 🗑 Li-ion   Este produto contém ou usa uma bateria principal de íon de lítio (Li-ion). Quando a bateria chega ao fim da sua vida útil, deve ser descartada por um profissional de reciclagem qualificado ou por um especialista no manuseio de materiais perigosos. Não misture a bateria com fluxo de lixo sólido. Entre em contato com seu Centro de Serviços de Tecnologia Intermec para informações de reciclagem ou descarte.

Для пользователей вне Соединенных Штатов или Канады

⚠ **Осторожно:** Эта пометка означает, что пользователь должен прочитать всю прилагаемую документацию, прежде чем начинать работу.

⚠ **Осторожно:** Для использования только с батарейным источником питания модели Intermec AB13. В качестве блока питания используйте модель Intermec 073573 или AE19. Детали, обслуживаемые пользователем, отсутствуют.

Пользователи этого продукта предупреждаются, что они должны использовать принадлежности и периферийные устройства, утвержденные Intermec Technologies Corporation. Использование принадлежностей, не являющихся рекомендованными, или внесение в этот продукт изменений, не утвержденных Intermec Technologies Corporation, может сделать продукт не соответствующим требованиям и привести к утрате пользователем права работать с данным оборудованием.

Маркировка CE: Список директив и стандартов ЕС, которым соответствует данный продукт, см. в Декларации соответствия.
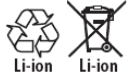
Akku-Informationen

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Informationen zum Recycling von Batterien

Dieses Produkt enthält oder verwendet einen Lithiumionen-Hauptakku. Wenn die Batterie ausgedient hat, sollte sie durch einen qualifizierten Recycler oder durch den Sondermüll entsorgt werden. Werfen Sie die Batterie nicht in den Abfall. Setzen Sie sich mit Ihrem Intermec Technologies Service-Zentrum in Verbindung, um weitere Informationen zum Recycling oder Entsorgen zu erhalten.

Para usuários fora do Canadá ou dos Estados Unidos

Cuidado: Esta identificação indica que o usuário deve ler toda a documentação fornecida antes do uso.

Cuidado: Para uso apenas com a bateria modelo AB13 da Intermec. Use o modelo 073573 ou AE19 da Intermec como fonte de alimentação. Este equipamento não contém peças que possam ser reparadas pelo usuário.

Se advierte a los usuarios de este producto que usen accesorios y periféricos aprobados por Intermec Technologies Corporation. El uso de accesorios aparte de los recomendados, o los cambios a este producto que no estén aprobados por Intermec Technologies Corporation, pueden anular el cumplimiento de este producto y ocasionar la pérdida de la autorización del usuario para operar el equipo.

Marcas CE: Consulte na Declaração de Conformidade a lista de Diretivas e Normas da União Européia com as quais este produto está em conformidade.

Informações sobre a bateria

Cuidado: A bateria utilizada neste dispositivo pode pegar fogo, criar risco de queimadura química, explodir ou exalar materiais tóxicos se abusada. Não incinerar, desmontar nem aquecer a bateria a mais de 100°C (212°F). Carregar apenas com o modelo de carregador AC18 da Intermec. Não provocar curto-circuito, pois pode causar queimaduras. Manter afastada de crianças.

Apenas a bateria da Intermec modelo AB13. O uso de uma bateria incorreta pode gerar risco de incêndio ou explosão. Descartar imediatamente as baterias usadas segundo as instruções fornecidas.

Infomações de Reciclagem de Bateria

Este produto contém ou usa uma bateria principal de íon de lítio (Li-ion). Quando a bateria chega ao fim da sua vida útil deve ser descartada por um profissional de reciclagem qualificado ou por um especialista no manuseio de materiais perigosos. Não misture a bateria com fluxo de lixo sólido. Entre em contato com seu Centro de Serviços de Tecnologia Intermec para informações de reciclagem ou descarte.

Для пользователей вне Соединенных Штатов или Канады

Осторожно: Эта пометка означает, что пользователь должен прочитать всю прилагаемую документацию, прежде чем начинать работу.

Осторожно: Для использования только с батарейным источником питания модели Intermec AB13. В качестве блока питания используйте модель Intermec 073573 или AE19. Детали, обслуживаемые пользователем, отсутствуют.

Пользователи этого продукта предупреждаются, что они должны использовать принадлежности и периферийные устройства, утвержденные Intermec Technologies Corporation. Использование принадлежностей, не являющихся рекомендованными, или внесение в этот продукт изменений, не утвержденных Intermec Technologies Corporation, может сделать продукт не соответствующим требованиям и привести к утрате пользователем права работать с данным оборудованием.

Маркировка CE: Список директив и стандартов ЕС, которым соответствует данный продукт, см. в Декларации соответствия.

Информация по батареек

⚠️ Осторожно: При неправильном обращении батарейный источник питания, используемый в этом устройстве, может воспламениться, создать опасность химического ожога, взорваться или выделять ядовитые материалы. Не сжигайте, не разбирайте, не допускайте нагрева выше 100°С (212 °F). Для зарядки используйте только устройство Intermec модели AC18. Не замыкайте контакты накоротко – это может причинить ожог. Прячьте от детей.

Используйте только батарейный источник питания Intermec модели AB13. Использование неподходящего батарейного источника питания сопряжено с опасностью возгорания или взрыва. Незамедлительно ликвидируйте использованный батарейный источник питания в соответствии с инструкциями.

Информация по утилизации батареек

В данном изделии содержится или используется литиево-ионная (Li-ion) батарейка. Ликвидацию использованной батарейки, исчерпавшей свой ресурс, должно осуществлять специализированное предприятие по утилизации или обращению с опасными материалами. Эта батарейка ни в коем случае не должна попасть в обычные твердые отходы. По вопросам утилизации или ликвидации обращайтесь в соответствующий сервис-центр компании Intermec Technologies.

Para usuarios fuera de Canada o de los Estados Unidos

⚠️ Precaución: Esta marca indica que el usuario debe leer toda la documentación incluida antes del uso.

⚠️ Precaución: Para usarse solamente con la batería Intermec Modelo AB13. Para la fuente de alimentación, use el Modelo 073573 o AE19 de Intermec. No hay piezas a las cuales pueda dar servicio el usuario.

Os usuários deste produto devem usar acessórios e periféricos aprovados pela Intermec Technologies Corporation. Usar acessórios não recomendados, ou fazer alterações neste produto não aprovadas pela Intermec Technologies Corporation, poderá anular a conformidade deste produto e resultar na perda da permissão do usuário de utilizar o equipamento.

Marcas de la CE: Remítase a la Declaración de Conformidad para ver una lista de las Directrices y Estándares de la UE con los cuales cumple este producto.

Información de la batería

⚠️ Precaución: La batería que se usa en este dispositivo puede encenderse, crear un peligro de quemadura química, explotar o expedir materiales tóxicos si se trata indebidamente. No la incinere, desarme ni caliente sobre 100°C (212°F). Cargue solamente con el Modelo AC18 de Intermec. No haga cortocircuitos porque pueden causar quemaduras. Manténgala alejada de los niños.

Use sólo la batería Intermec modelo AB13. El uso de la batería incorrecta puede presentar peligro de incendio o de explosión. Descarte rápidamente la batería usada según las instrucciones.

Información acerca del reciclaje de la batería

Este producto contiene o usa una batería principal de iones de litio (Li-ion). Cuando la batería llega al final de su vida útil, debe ser desechada por personal especializado en reciclaje de materiales o manejo de materiales peligrosos. No mezcle la batería con otros residuos sólidos. Pónganse en contacto con su Centro de servicio de Intermec Technologies para obtener información sobre reciclaje o desecho de materiales.