

PD43 | PD43c

Commercial Printer



User Manual

Intermec by Honeywell

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Document Change Record

This page records changes to this document. The document was originally released as Revision 001.

Version Number	Date	Description of Change
002	9/2014	Added new sections : <ul style="list-style-type: none">• Using the Label Dispenser• Calibrating the Label Taken Sensor• Exporting a Configuration File to a USB Device• Installing a Configuration File from a USB Device

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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.



Warning

Warning: 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.



Caution

Caution: 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.

Safety Precautions

- Read and review this manual carefully before connecting the printer.
- Because moving parts are exposed when the cover is open, ensure that the cover is closed before you operate the printer.
- Do not put your fingers inside the print mechanism when the power is on.
- Place the printer on an even surface which can safely support its weight and supplies.

Before You Begin

- Do not spray the printer with water. If you are using a hose to clean the premises in an industrial environment, remove the printer or carefully protect it from spray and moisture.
- You must implement both hardware and software safety precautions to prevent the possibility of undefined system states.
- You must ensure that dangerous conditions cannot occur under any circumstances, even for a brief period of time.
- Observe all safety and accident prevention regulations applicable to your specific region and application.
- Before you use a cleaning card, carefully read the warning text on the envelope.
- Replace only with same type and rating of fuse to ensure continued protection against risk of fire.



Note: This equipment may be used on an IT power system.

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 website at www.intermec.com to download our current manuals (in PDF).

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.

Send Feedback

Your feedback is crucial to the continual improvement of our documentation. To provide feedback about this manual, please contact the Intermec Technical Communications department directly at ACSHSMTechnicalCommunications@Honeywell.com.

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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**.

Who Should Read This Manual

This user manual is for the person who is responsible for installing, configuring, operating, and maintaining the PD43 and PD43c printers.

This document provides you with information about the features of the printer, and how to install, configure, operate, maintain, and troubleshoot it.

Before you work with the printer, you should be familiar with your printer command language and general printing setup. If you are going to use the printer in a network, you should be familiar with your network and general networking terms, such as IP address.

Related Documents

The Intermec website at www.intermec.com contains our documents (as .pdf files) that you can download for free.

To download documents

- 1 Visit the Intermec website at www.intermec.com.
- 2 Click the **Products** tab.

Before You Begin

3 Using the **Products** menu, navigate to your product page. For example, to find the PD43 product page, click **Printers** > **Industrial Printers** > **PD43**.

4 Click the **Manuals** tab.

If your product does not have its own product page, click **Support** > **Manuals**. Use the **Product Category**, the **Product Family**, and **Product** to find your documentation.

Patent Information

For patent information, see <http://www.hsmpats.com>.

1

About the Printers

This chapter introduces the PD43 printers, and includes descriptions of printer features and basic operation.

About the PD43

The PD43 and PD43c printers are compact, rugged industrial printers intended for use in commercial or warehouse applications. The printers can be connected to a single desktop PC for stand-alone operation, or to a wired or wireless network for ease of connectivity.

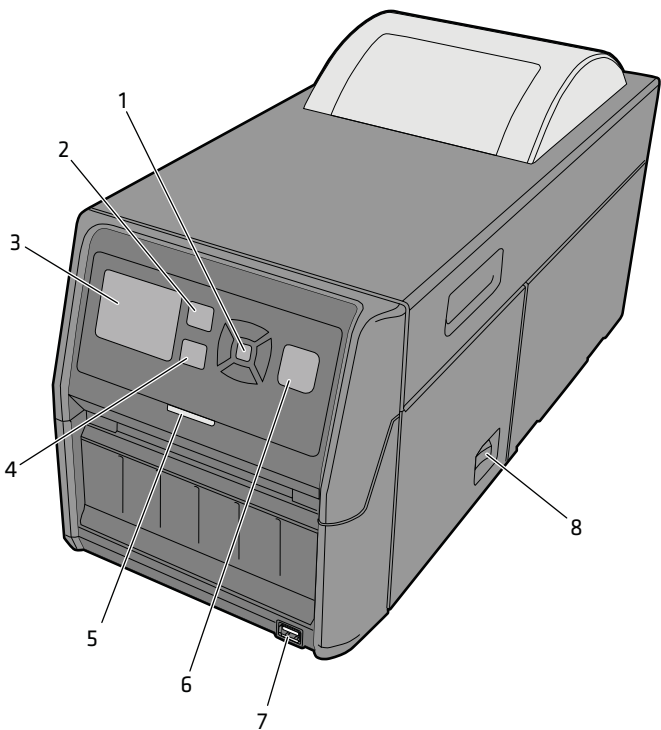
Both printers are available in direct thermal (DT) models. The PD43 is also available in a thermal transfer (TTR) model for printing with a ribbon.

Features of both printers include:

- Print speeds of up to 8 ips (with 203-dpi printhead) or 6 ips (with 300-dpi printhead)
- Multiple selectable printer languages including Intermec Smart Printing, Fingerprint, Direct Protocol, Intermec Printer Language (IPL), DSim, ESim, and ZSim
- Ethernet option
- Wi-Fi/Bluetooth and RFID options (PD43 only)
- USB port for storage devices, keyboards, or scanners, and for connections to a PC (including serial or parallel connections with appropriate adapters)
- LCD or Icon interface
- Complete range of accessories

Printer Features

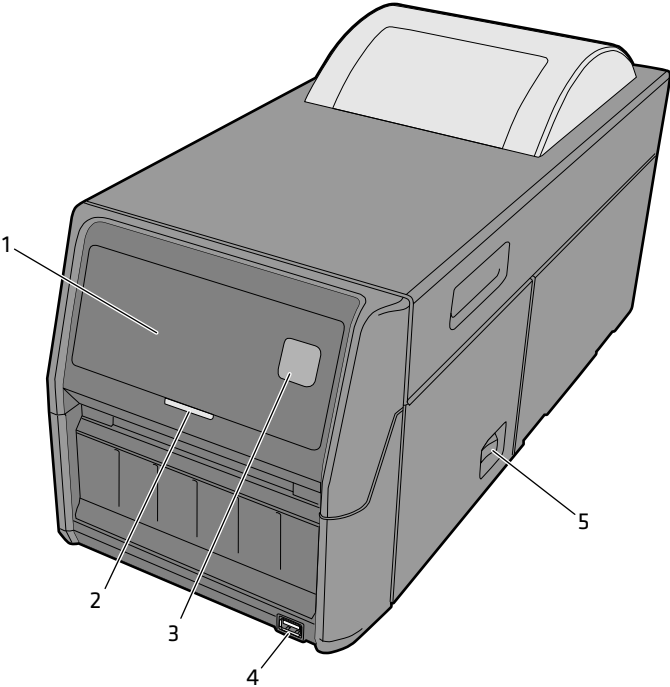
Use the next illustrations to locate printer features.



PD43 and PD43c Front Panel

PD43 and PD43c Front Panel and Side Feature Descriptions (LCD Model)

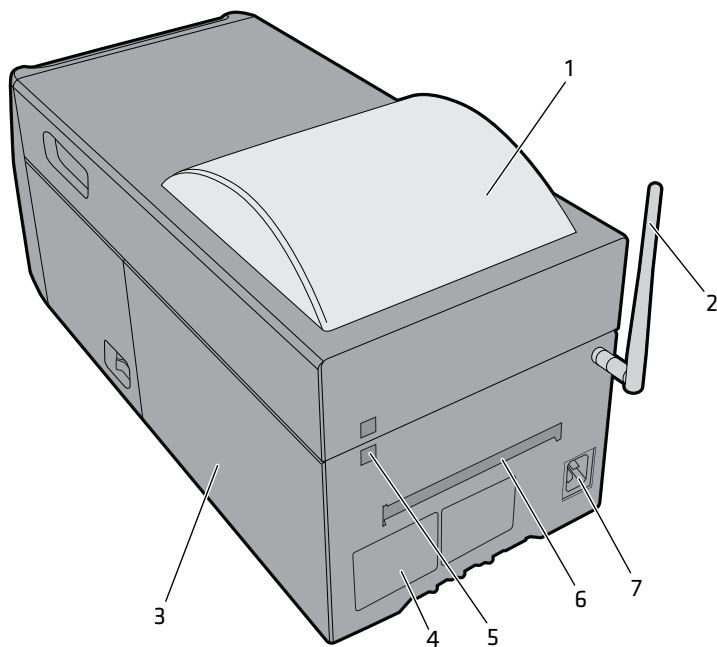
Feature	Description
1	Directional pad
2	Home button
3	LCD screen
4	Back button
5	Ready-to-Work LED
6	Print/Feed button
7	USB host port
8	Power switch



PD43 and PD43c Front Panel Features and Descriptions (Icon Model)

PD43 and PD43c Front Panel and Side Feature Descriptions (Icon Model)

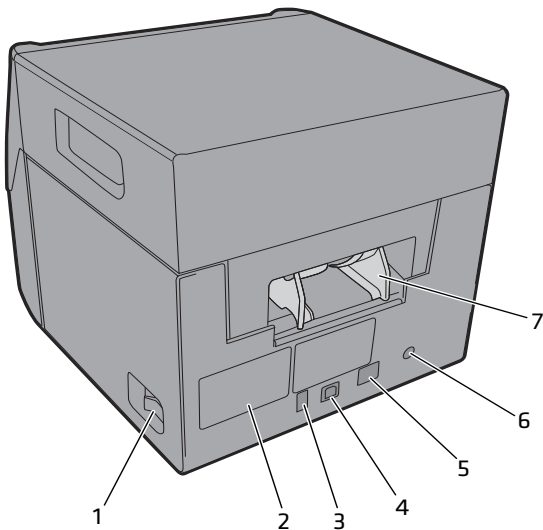
Feature	Description
1	Icon front panel
2	Ready-to-Work LED
3	Print/Feed button
4	USB host port
5	Power switch



PD43 Rear Panel

PD43 Rear Panel Feature Descriptions

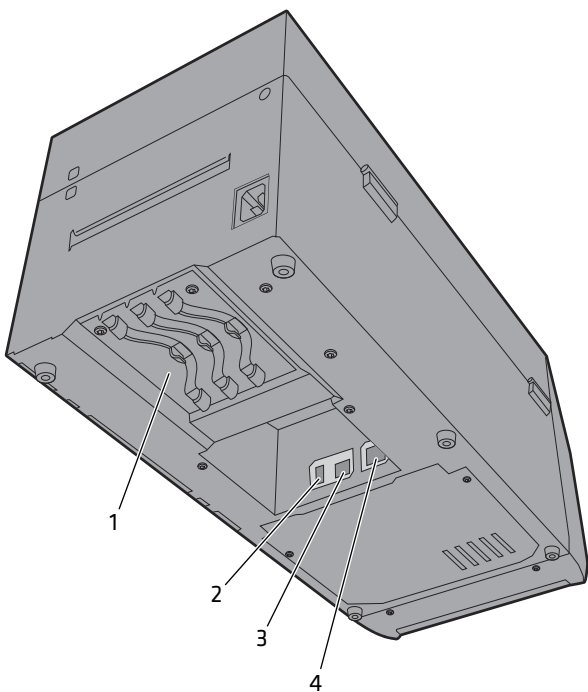
Feature	Description
1	Dome top window
2	Wi-Fi antenna (optional)
3	Media compartment door
4	Configuration label
5	Media lock location
6	External media feed slot
7	AC power connector



PD43c Rear Panel

PD43c Rear Panel Feature Descriptions

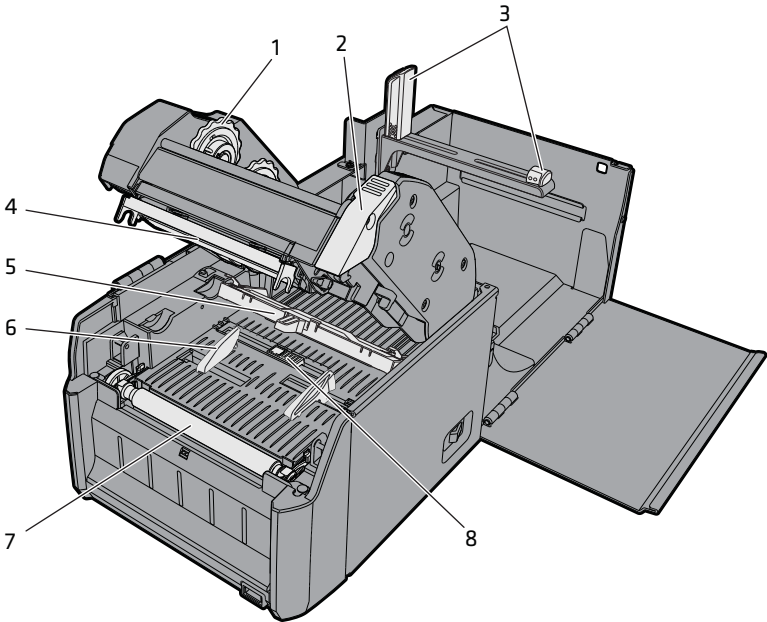
Feature	Description
1	Power switch
2	Configuration label
3	USB host port
4	USB device port
5	Ethernet port (optional)
6	Power connector
7	Rear media feed guides (optional)



PD43 Bottom Panel

PD43 Bottom Panel Feature Descriptions

Feature	Description
1	Cable guide
2	USB device port
3	USB host port
4	Ethernet connector (optional)



PD43 Media Compartment Features

PD43 Media Compartment Feature Descriptions

Feature	Description
1	Ribbon takeup roller (PD43 TTR models only)
2	Print mechanism release button
3	Media holder guides
4	Printhead
5	Sensor bar
6	Media guides
7	Platen roller
8	Label stop sensor

About the Front Panel

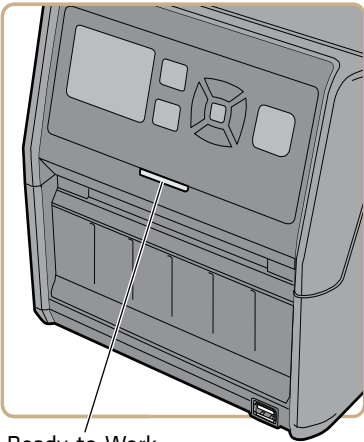
There are two front panels available for the printers:

- LCD (liquid crystal display)
- Icon (no display)

Both versions of the front panel include the Print button and the Ready-to-Work™ indicator. All printers include a USB host port on the front panel.

About the Ready-to-Work Indicator

The Ready-to-Work indicator on the front of the printer turns on when the printer is ready to print.



Ready-to-Work indicator

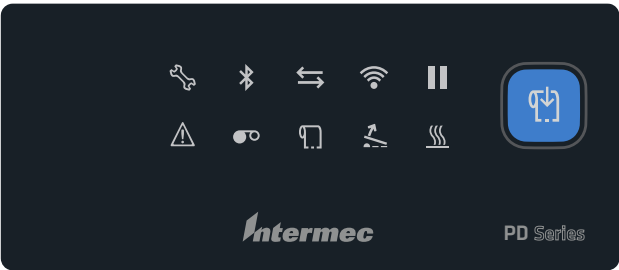
Ready-to-Work Indicator Location

Ready-to-Work Indicator Status

Ready-to-Work Indicator Status	Description
On	Printer is ready for a print job.
Blinking	Printer is not ready for a print job.
Off	Printer is turned off, not communicating, or not ready to print. For example, the printer may still be starting up, or a firmware upgrade is underway.

About the Icon Front Panel

The icon front panel includes a graphical panel and a Print button.







As you use the printer, the icons turn on or off to indicate printer status.

Icon Front Panel - Status Icons

Icon	Color and Description	Printer Models
	Steady: Maintenance needed; odometer setting reached; Firmware upgrade in progress Flashing: Firmware is currently resetting all defaults, or printer in calibration mode	All
	On: Bluetooth is enabled Off: Bluetooth is not enabled, or Wi-Fi/Bluetooth module is not installed	With Wi-Fi/Bluetooth module
	Flashing: Sending or receiving data Steady: No data in motion through the network connection Off: No connection	All
	On: Wi-Fi is enabled Off: Wi-Fi is not enabled, or Wi-Fi/Bluetooth module is not installed	With Wi-Fi/Bluetooth module
	On: Printer is paused Off: Printer is not paused	All
	On: General error Off: No errors	All

Icon Front Panel - Status Icons (Continued)










Icon	Color and Description	Printer Models
	On: Ribbon is jammed or empty Off: No error	TTR only
	On: Media is jammed or empty Off: No error	All
	On: Print mechanism is open or not latched properly Off: Print mechanism is closed correctly	All
	On: Printhead too hot Off: Printhead temperature OK	All

About the LCD Front Panel

The printer LCD interface includes a screen, navigation buttons, and a Print button.

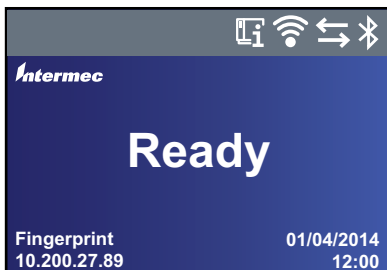


LCD Interface Navigation Button Descriptions

Button	Description
	Menu/Home button. Press to toggle between the Ready screen and the printer Main Menu.
	Directional pad: Press  ,  ,  , or  to move the selection highlight to another item. Press  to select the highlighted item and to save settings in a menu or list.
	Back button. Press to return to the previous menu or page, or to break from a running Fingerprint application.
	Print button. Press to begin printing, or to feed a single label.

About the Ready Screen

After you turn the printer on, the Ready screen appears when the printer finishes starting up.



Ready Screen



Note: Icons for Wi-Fi and Bluetooth status appear only when the optional Wi-Fi/Bluetooth module is installed. The IP address appears when the printer is connected to an Ethernet or wireless network and the Idle Information parameter is set to IPv4 address.











By default, the bottom of the screen shows the printer command language, the IP address, and the time and date. You can customize the screen as necessary to show different kinds of information.

The status bar at the top of the screen includes these information and status icons:

Information and Status Icon Descriptions

Icon	Description
	Printer Information icon. Select this icon to view basic printer information.

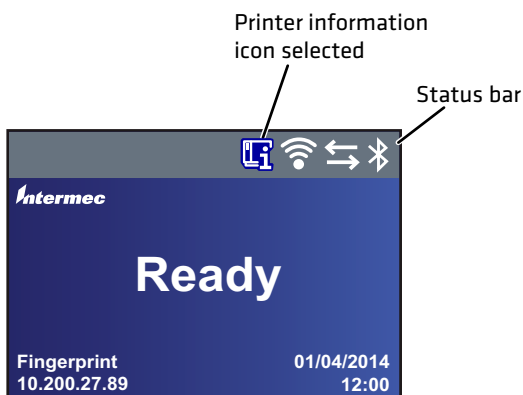
Information and Status Icon Descriptions (Continued)

Icon	Description
	Wi-Fi Connection icon. This icon appears when the Wi-Fi/Bluetooth module is installed in the printer and shows the strength of the Wi-Fi connection: <ul style="list-style-type: none"> - Strong. - Good. - Weak. - No signal. - Wi-Fi is disabled.
	Connectivity icon. Blinks when data is moving through a wired or wireless connection to the printer.
	Bluetooth icon. This icon appears when the Wi-Fi/Bluetooth module is installed: <ul style="list-style-type: none"> - Bluetooth is enabled. - Bluetooth is disabled.

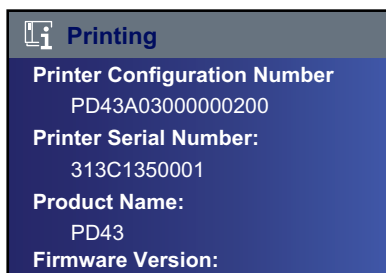
View Basic Printer and Connection Information

In the Ready screen, use the control panel buttons to select an icon in the status bar at the top of the screen to view printer or connection information.

- 1 Press any arrow key to select the one of the icons in the status bar at the top of the Ready screen.




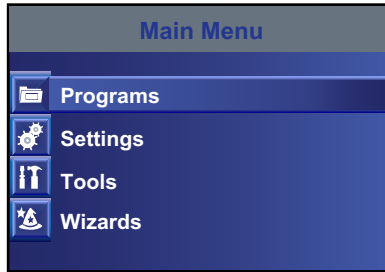
- 2 Press . A list of basic printer or connection information appears.



- 3 Press or to scroll through the list.
(Optional) Press or to view information for one of the other icons.
- 4 Press or to return to the Ready screen.

About the Main Menu

In the printer Ready screen, press  to view the Main Menu.



Press ▼ and ▲ to highlight Main Menu items, and then press  to select that item:

- Select **Programs** to see a list of programs installed on the printer. This list includes utility programs provided as part of the printer firmware, and programs you have installed on the printer.
The **Programs** item appears in the Main Menu only if the printer is using Fingerprint or Direct Protocol as the command language.
- Select **Settings** to view and change printer settings.
- Select **Tools** to print test labels, manage a connected USB storage device, restore printer default settings, or save and load printer profiles.
- Select **Wizards** to see a list of wizards that help you configure printing or communication settings, or calibrate the media sensors.





Note: The printer cannot print while the Main Menu is on the screen. You need to exit the Main Menu and return to the Ready screen to begin printing.






Navigate in the Main Menu




Use the navigation buttons to select menus and menu items.






In the Main Menu:

- Press  to toggle between the Main Menu and the Ready screen.
- Press  to return to the Ready screen.

In the Programs, Settings, Tools, or Wizards menus:

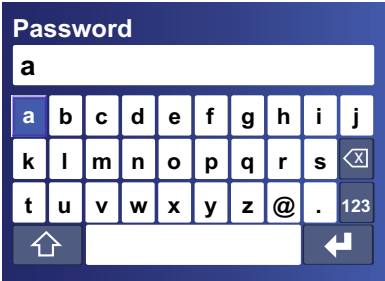
- Press  and  to change the item in the list, and then press  (the center of the directional pad) to select the item. Another menu or a list of items appears.
- Press  to return to the previous screen or menu.
- Press  to return to the Ready screen.

In any list of items, press  or  to select another item in the list, and then press .

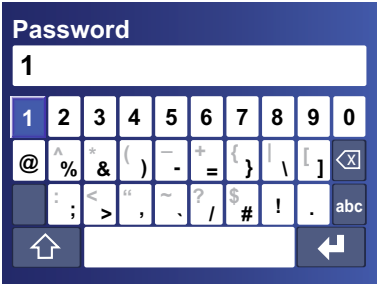
- If the item you selected requires you to select an option from a preset list, press  or  to scroll through the list items.
- If the item you selected requires alphabetic or numeric input, such as Network Name, press  and use the alphanumeric or numeric keypad on the screen to type a value.
- If you changed the value for an item, press  to save your changes. A “Saving...” message briefly appears to confirm that your changes have been saved.
- Press  to return to the previous screen. If you made changes without saving them, you are prompted to save your changes:
 - Select **Yes** to save your changes and return to the previous screen.
 - Select **No** to abandon your changes and return to the previous screen.
 - Select **Cancel** to abandon your changes and remain on the current screen.

About the Onscreen Keypads

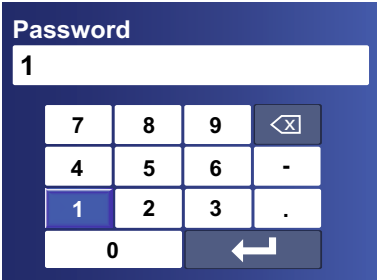
When you are changing settings, you may need to use the alphanumeric or numeric keypads on the screen.



Alphanumeric Keypad - Alphabetic Characters



Alphanumeric Keypad - Numeric Characters and Punctuation



Numeric Keypad

For either keypad:

- Press **^**, **▼**, **◀**, or **▶** to select a character, and then press **■** to enter that character.
- Press **ⓧ** to delete the last character you entered.

For the alphanumeric keypad only:

- Select **123** or **ABC** and then press **■** to toggle between the alphabetic and numeric keys.
- In the alphabetic keypad, select **⬆** and then press **■** to toggle between uppercase and lowercase letters.
- In the numeric keypad, select **⬆** and then press **■** to toggle between shifted and unshifted key characters. For example, do this to toggle between \$ and # in the numeric keypad.

When you are finished typing characters, press **⬅** to return to the list of items.

About the Printer Wizards

The printer firmware includes several wizards you can use to quickly set up printing and communications. You can start the wizards from the Main Menu.



Printing Wizards

Name	Description
Media Setup	Select media and printing type (DT or TTR), media width, length, and X-margin, Start and Stop Adjust values, and print speed.
Print Quality	Prints a series of labels to test print quality.
Loading Media	Shows how to load media.

Printing Wizards (Continued)

Name	Description
Loading Ribbon	(TTR printers only) Shows how to load a roll of ribbon.

Communications Wizards










Name	Description
Line Analyzer	Logs all incoming data on all communications channels and saves the data to a log file. For experienced users.
Wireless 802.11	Looks for wireless networks and sets up Wi-Fi communications. This item appears in the Communications wizards list when the optional Wi-Fi/Bluetooth module is installed.
Bluetooth	Looks for discoverable Bluetooth devices and sets up Bluetooth communications. This item appears in the Communications wizards list when the optional Wi-Fi/Bluetooth module is installed.

Calibration Wizard

Name	Description
Media	Calibrates the label stop sensor and shows current print settings.
RFID	Calibrates the RF power setting for the RFID module and adjusts RFID tag media settings for best performance. This item appears in the Calibration wizards list when the optional RFID module is installed in the printer.
Label Taken Sensor	Calibrates the label taken sensor. This item appears in the Calibration wizards list when the label dispenser or cutter accessory is installed.

Use a Wizard

The available wizards depend on the hardware you have installed in the printer.

- 1 From the Ready screen, press . The Main Menu appears.
- 2 Select **Wizards** and press .
- 3 Select a category and press .
- 4 Select a wizard from the list and press . The wizard begins.
- 5 In a wizard:
 - Use  or  to select items in a list.
 - Press  to select the highlighted item.
 - Select  and press  to continue to the next screen.

About Printer Command Languages

A printer command language is a set of instructions that controls printer functions:

- Configure the printer.
- Return the status of the printer.
- Control peripheral devices.
- Format a label or receipt for printing.

The printer supports these command languages and language simulator support options:

- Fingerprint
- Direct Protocol (DP)
- IPL (Intermec Printer Language)
- ZSim (ZPL command language simulator)
- DSim (DPL command language simulator)
- Smart Printing

About Fingerprint

Fingerprint is a BASIC-inspired general purpose printer language. Use Fingerprint to design custom label formats and write printer application software. If you plan to run Smart Printing applications directly on the printer, without connecting to a PC, select Fingerprint as your printer command language. For more information, see the [**Intermec Fingerprint Command Reference Manual**](#).

The printer uses the Fingerprint printer command language by default.

About Direct Protocol

Direct Protocol (DP) is a subset of Fingerprint that uses a more intuitive English-like syntax. This flexible host-based printer command language can also be used with Smart Printing applications. Direct Protocol lets you combine predefined layouts and variable data to create labels, tickets, and tags. If you are using bar code software, like BarTender, select Direct Protocol as your printer command language.

About IPL

IPL (Intermec Printer Language) is a host-based printer command language. Use IPL to design, modify, and download label formats; write printer application software; and configure the printer. If you are sending IPL label files to the printer, select IPL as your printer command language. For more information, see the [**IPL Command Reference Manual**](#).

About ESim

ESim (EPL command language simulator) interprets Eltron® programs without requiring any host programming changes. If you are sending EPL label files to the printer, select ESim as your printer command language. For more information, see the [**ESim Command Reference Manual**](#).

About ZSim

ZSim (ZPL command language simulator) interprets Zebra™ programs (ZPL II or later) without requiring any host programming changes. If you are sending ZPL label files to the printer, select ZSim as your printer command language. For more information, see the [ZSim Command Reference Manual](#).

About DSim

DSim (DPL command language simulator) interprets Datamax™ data streams without requiring any host programming changes. If you are sending DPL label files to the printer, select DSim as your printer command language. For more information, see the [DSim Command Reference Manual](#).

About Smart Printing

Smart Printing refers to the ability of the printer to independently run printing operations without being connected to a host computer. If you are running printer-based applications written in C#, select Smart Printing as your printer command language.

For help creating Smart Print applications, go to the Intermec Developer Center at www.intermec.com/developer.

About ESim/ZSim Auto-Configuration

Use the ESim/ZSim auto-configuration feature when you are replacing another printer whose command language is unknown.

When the printer command language is set to ESim/ZSim, on its first run the printer automatically calibrates the media, identifies the command language of the first incoming print job, configures the printer for the appropriate language (ESim or ZSim), and prints the label.



Note: Load media before you turn the printer on, since the printer automatically calibrates the media when it starts in ESim/ZSim auto-configuration mode.

The data stream must be at least 10 bytes long. Command language identification is activated after a 2-second timeout, or when the data buffer is full (1 MB).

The printer command language is saved to memory, and remains set to ESim/ZSim until you change this setting.

How to Set the Printer Command Language

You can use one of these methods to change the printer command language:

- Printer web page
- Main Menu
- PrintSet 5. For more information, see the PrintSet 5 online help.





Set the Command Language from the Printer Web Page

To set the command language from the printer web page, you need to turn on the printer and connect to your Ethernet or Wi-Fi network.

- 1** Make sure that the printer has media and ribbon (if necessary) installed.
- 2** On your PC, open a browser.
- 3** In the **Location** or **Address** bar, type the printer IP address and press **Enter**. The printer web page appears.
- 4** Click **Login**. The Login page appears.
- 5** Type your **Username** and **Password** and click **Login**. The default username is `itadmin` and the default password is `pass`.
- 6** Click the **Configure** tab.
- 7** Click **System Settings > General**.
- 8** Select a different printer command language from the **Command Language** list, and then click **Save**.
- 9** Click the **Services** tab.
- 10** Click **Reboot Printer**, and then click **Reboot**. The printer restarts in the command language you selected.

Set the Command Language from the Main Menu



If you have an LCD printer, you can change the printer command language from the Main Menu.


- 1 Make sure that the printer has media and ribbon (if necessary) installed.
- 2 From the Ready screen, press . The Main Menu appears.
- 3 In the Main Menu, select **Settings > System Settings > General**.
- 4 In the **General** settings list, press ▼ to scroll to **Command Language**.
- 5 Press ► or ◀ to select a different command language.
- 6 Press  or .
- 7 Press  to save your changes.

If you are prompted to enter a password for DSim or ZSim, the password is 1138. To return to the Fingerprint menu system from DSim or ZSim, the password is 8311.

Set the Command Language with the Print Button

If you have an icon printer, you can use the **Print** button to set the printer command language.

- 1 Make sure that the printer has media and ribbon (if necessary) installed.
- 2 Turn off the printer.
- 3 Turn the printer back on. All the LEDs light up. As the printer starts up, the LEDs turn off one by one, starting with the bottom right LED.
- 4 When the last two LEDs (Maintenance and Bluetooth) are lit, press and hold . The printer feeds a few labels as it automatically adjusts the media feed, and then the test labels start to print.
- 5 Continue to hold . The available printer command languages start to print.

- 6
- When you see the language you want to use, release .
- 7
- The printer automatically reboots and starts in the command language you selected.

Printer Options and Accessories

You can use these printer options and accessories (sold and ordered separately) with the PD43 and PD43c printers. Most options are either installed at the factory or can be installed by factory service technicians in the field. Accessories are designed to be installed by the customer.



Note: Some printer configurations do not support all accessories. For more information, contact your local sales representative.

PD43 Printer Options and Accessories

Option or Accessory	Description
Ethernet (Factory-installed only)	Factory-installed option. Provides IEEE 802.3 Ethernet connection. Supports 10BaseT and 100BaseTx. Ethernet and Wi-Fi/Bluetooth modules can be installed at same time.
Wi-Fi/Bluetooth (Factory-installed only)	Radio module provides Wi-Fi and Bluetooth connectivity. Wi-Fi/Bluetooth and Ethernet modules can be installed at same time. <ul style="list-style-type: none">• Wi-Fi supports static and dynamic WEP, WPA, WPA2, EAP-PEAP, EAP-TTLS, LEAP, EAP-FAST, and EAP-TLS security protocols• Bluetooth v2.1+EDR supported
UHF RFID (Factory-installed only)	Adds capability of printing on RFID media. Supports EPCglobal Class 1 Gen 2 and ISO 18000-6C V1 2.0 protocols.
HF RFID (Factory-installed only)	Adds capability of printing on RFID media. Supports ISO 15693 protocol.
Rear media guides (Factory-installed only)	Supports auto-feed feature for airline media such as boarding passes. For PD43c only.

PD43 Printer Options and Accessories (Continued)

Option or Accessory	Description
Cutter	Provides automatic cutting as labels are printed.
Cutter Tray	Holds up to 20 labels as they are cut. Installs on Cutter.
Boarding Pass Tray	Holds airline boarding pass media. Installs on Cutter.
Label Dispenser	Removes paper backing and presents labels one at a time for pickup. Includes Label Taken Sensor.
Label Taken Sensor	Detects when a label is printed and pauses printing until the printed label is removed.
Linerless Media Roller	Non-stick platen roller dispenses printed labels when you use linerless media stock.
Thick Media Springs	Heavier-gauge springs increase printhead pressure for best results when printing on tag media.
Notchless Ribbon Core Adapter	Enables use of ribbon with notchless core of less than 2.5 mm (1 in) diameter or 10.16 cm (4 in) wide. For thermal transfer printing.
USB-to-Serial Adapter	USB to RS-232 adapter. Connects to printer USB Host port and provides serial connectivity to a PC.
USB-to-Parallel Adapter	USB to IEEE 1284 adapter. Connects to printer USB Host port and provides DB25 connectivity to a PC or other equipment.
Extension cables	Cables provide access to the USB Host, USB Device, and Ethernet ports without the need to access the PD43 bottom panel.
Flat top window	Replaces the PD43 dome window for use with 12.5 cm (5 in) media. For PD43 only.
External media holder	Provides support for media up to 21.27 cm (8.375 in) for the PD43c.

PD43 Printer Options and Accessories (Continued)

Option or Accessory	Description
Ticket shelf	Shelf holds fanfold boarding pass media (up to 500). Installs on external media holder for PD43c.
Replacement parts	Replacement parts include: <ul style="list-style-type: none">• 203-dpi printhead• 300-dpi printhead• Platen roller• Dome window

2

Set Up the Printer

This chapter explains how to load media and ribbon, print test labels, and adjust the print quality.

About Media

The printers can print on labels, tickets, tags, and continuous stock. The procedure you use to load media depends on how you are operating the printer and the options you have installed.

About Linerless Media

If you are printing on linerless media, follow these guidelines for best results:

- You must install the linerless roller accessory before printing. For more information on this accessory, contact your local sales representative.
- When removing printed labels on linerless media, tear the label up towards the top of the printer to prevent media jams.
- Do not use linerless media with the cutter accessory.

About Tag Media

If you are printing on tag media, follow these guidelines for best results:

- Install the optional thick media springs before printing. For more information on this accessory, contact your local sales representative.
- After you install the thick media springs, adjust the Media Sensitivity and Darkness settings for best print quality.
- To extend the life of the printhead, Intermec recommends that you install the original springs when printing on other types of media.

About Tear-Off Printing

In tear-off printing, you manually tear printed labels, tickets, wristbands, and other printed media from the front of the printer.

After you load media, you need to configure the feed adjust settings. These settings allow for printing from the top edge of the label. You may need to adjust the recommended values slightly depending on your media type, supply method, and roll sizes, or because of individual differences between printers.



Note: Feed adjust values for simulator command languages like ESim, ZSim, and DSim are preset.

Recommended Feed Adjust Values for Tear-Off Printing

Printer	Setting	203 dpi	300 dpi	Distance
PD43	Start Adjust	-133	-197	-16.7 mm (0.66 in)
	Stop Adjust	0	0	0 mm (0 in)
PD43c	Start Adjust	-133	-197	-16.7 mm (0.66 in)
	Stop Adjust	0	0	0 mm (0 in)

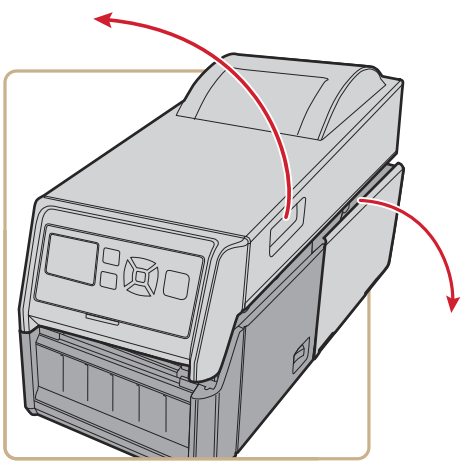
Load Media for Tear-Off Printing

Depending on the type of media you use, you may also need to install a printer accessory. If you need to print on tag media, Intermec recommends installing the optional thick media springs before printing. If you need to print on linerless media, you must install the linerless media roller accessory before printing.

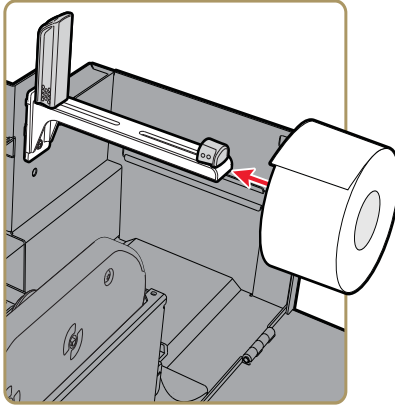


Note: When removing printed labels on linerless media, tear the label up towards the top of the printer to prevent media jams.

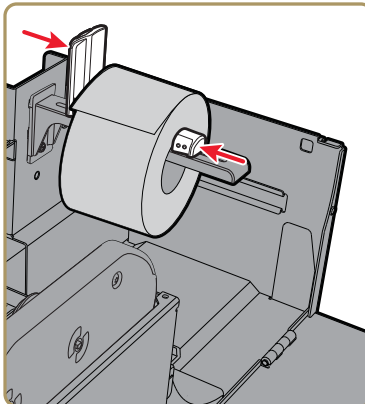
- 1 Open the top of the printer first and then open the media compartment door.



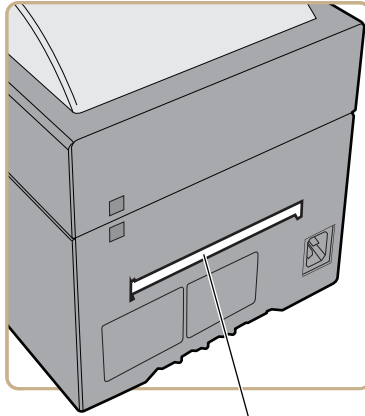
- 2 If there is an empty media core in the media compartment, remove and discard the core.
- 3 Place the media between the guides on the media bar. If necessary, slide the guides apart to adjust for the media width.



- 4 Slide the guides to the sides of the media roll. The guides move together automatically to center the roll on the media bar.

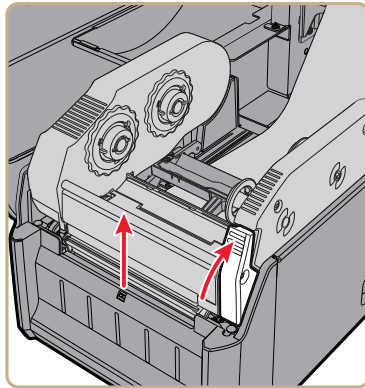


If you are using media stored outside the printer, feed the media through the external media feed slot.

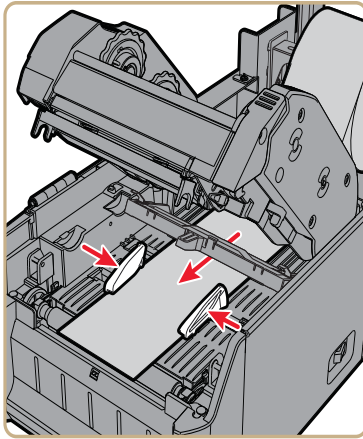


External media feed slot

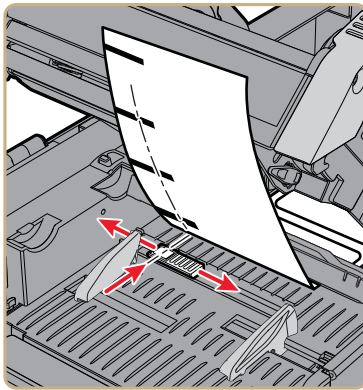
- 5 Press the release button and raise the print mechanism.



- 6** Slide the media below the sensor bar and between the media guides.



- 7** If necessary, adjust the label stop sensor to line up with the marks on the media.



- 8** Slide the guides to the side edges of the media.
- 9** Press the print mechanism down to lock it in place.
- 10** Close the media compartment door and then close the top of the printer.

- 11 Press the **Print** button to advance the media.
If you have not yet calibrated the media feed, press and hold the **Print** button. The printer feeds one label and then prints a media configuration test label. If you are using small labels, the printer may feed more than one before printing the configuration label.
- 12 Configure the feed adjust settings.

About Cut-Off Printing

In cut-off printing, each label is automatically cut from the media roll immediately after the label is printed. You can print on non-adhesive, continuous label stock. You can also use self-adhesive labels with a liner, but you must cut only the liner.



Caution: You must not use the cutter to cut through any kind of adhesive, or other soft material, that may stick to the cutting parts and render the cutter inoperable or even damage the electric motor.

The cutter module includes the top of form sensor. You can also install the optional cutter tray accessory, which holds up to 20 labels or tickets.

After you load media, you need to configure the cutter and the feed adjust settings. You may need to adjust the recommended values slightly depending on your media type, supply method, and roll sizes, or because of individual differences between printers.

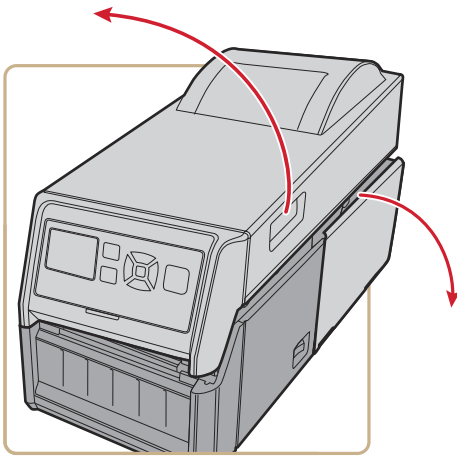
Recommended Feed Adjust Values for Cut-Off Printing

Printer	Setting	203 dpi	300 dpi	Distance
PD43	Start Adjust	-280	-414	-35.1 mm (-1.38 in)
	Stop Adjust	147	217	18.4 mm (0.72 in)
PD43c	Start Adjust	-280	-414	-35.1 mm (-1.38 in)
	Stop Adjust	147	217	18.4 mm (0.72 in)

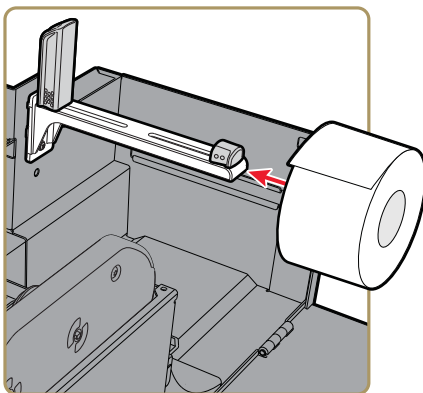
Load Media for Cut-Off Printing

Cut-off printing is supported when the optional media cutter accessory is installed in the printer.

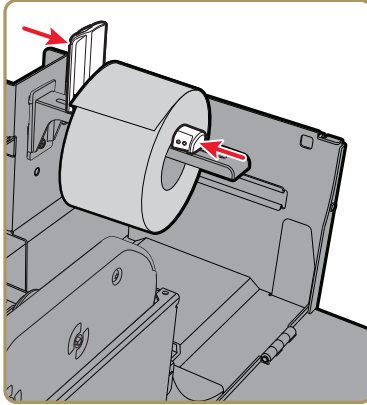
- 1** Open the top of the printer first and then open the media compartment door.



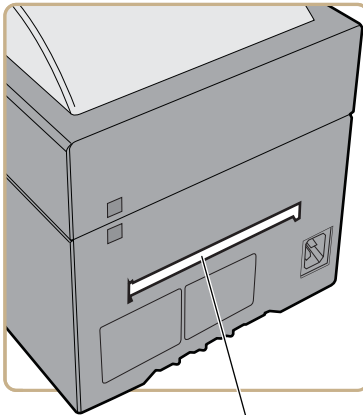
- 2** If there is an empty media core in the media compartment, remove and discard the core.
- 3** Place the media between the guides on the media bar. If necessary, slide the guides apart to adjust for the media width.



- 4 Slide the guides to the sides of the media roll. The guides move together automatically to center the roll on the media bar.

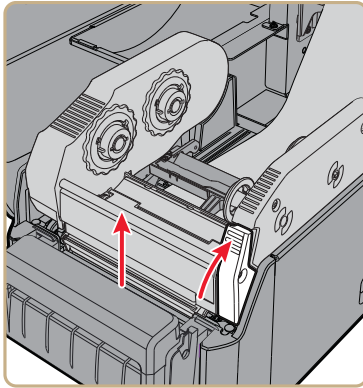


If you are using large rolls of media stored outside the printer, such as in an external media holder, feed the media through the external media feed slot.

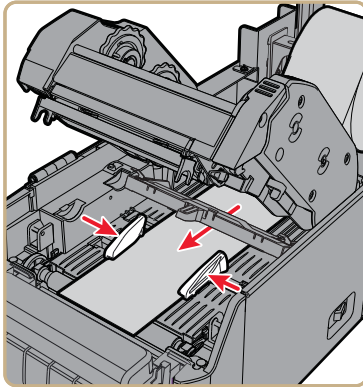


External media
feed slot

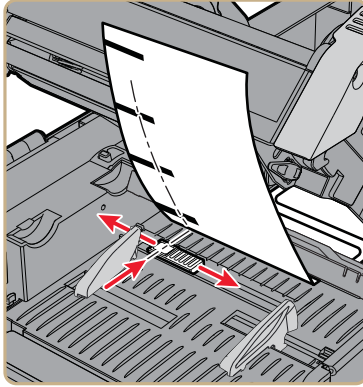
- 5** Press the release button and raise the print mechanism.







- 6** Slide the media below the sensor bar and between the media guides.



- 7** If necessary, adjust the label stop sensor to line up with the marks on the media.



- 8** Slide the guides to the side edges of the media.
- 9** Slide the media through the cutter.
- 10** Press the print mechanism down to lock it in place.
- 11** Close the media compartment door and then close the top of the printer.
- 12** Turn the printer on and configure the cutter:
- If you have an icon printer, use PrintSet 5 to configure the cutter. If you already know the printer IP address, you can configure the cutter using the printer web page.
 - If you have an LCD printer, continue with the next step.
- 13** After the printer finishes starting up, press .
- 14** Select **Settings > Printing > Cutter**.
- 15** In the Cutter Control options, select **Automatic**.
- 16** Press  or . A “Save Changes?” message appears.
- 17** Press  to save your changes and exit the Settings menu.
- 18** Configure the feed adjust settings.

About the Label Dispenser

The label dispenser accessory, which includes the Label Taken Sensor, removes the liner from self-adhesive label stock as each label is printed. You manually remove the label at the front of the printer.

After you load media, you need to configure the feed adjust settings. You may need to adjust the recommended values slightly depending on your media type, supply method, and roll sizes, or because of individual differences between printers.

Recommended Feed Adjust Values for the Label Dispenser

Printer	Setting	203 dpi	300 dpi	Distance
PD43	Start Adjust	-109	-161	-13.7 mm (0.54 in)
	Stop Adjust	-24	-35	-3.0 mm (0.19 in)
PD43c	Start Adjust	-109	-161	-13.7 mm (0.54 in)
	Stop Adjust	-24	-35	-3.0 mm (0.19 in)

Load Media for the Label Dispenser

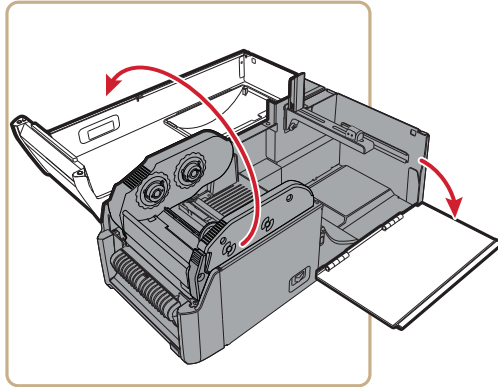
To use the label dispenser accessory for printing, you print labels on self-adhesive label stock with a liner. As each label is printed, the label is automatically peeled from the liner and is presented at the front of the printer for manual removal.

The label dispenser includes a label taken sensor. After you load media, perform a test feed or calibrate the sensor before you begin printing.

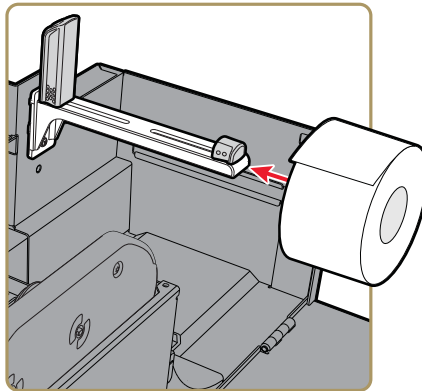


Note: Some media types will not work successfully with the label dispenser. For best results, use media types with high label stiffness and low liner release force. High heat and high temperature can degrade media performance when used with the label dispenser.

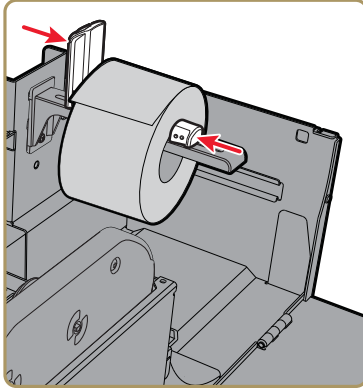
- 1** Open the top of the printer first and then open the media compartment door.



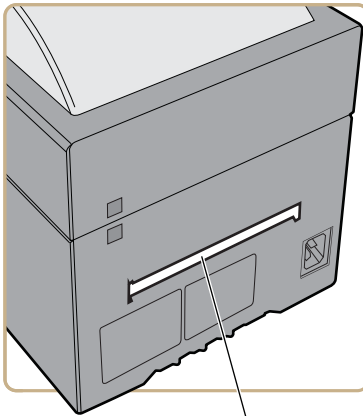
- 2** If there is an empty media core in the media compartment, remove and discard the core.
- 3** Place the media between the guides on the media bar. If necessary, slide the guides apart to adjust for the media width.



- 4 Slide the guides to the sides of the media roll. The guides move together automatically to center the roll on the media bar.

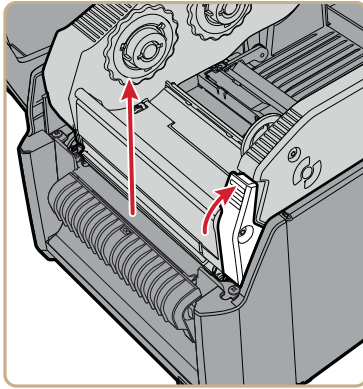


If you are using media stored outside the printer, feed the media through the external media feed slot.

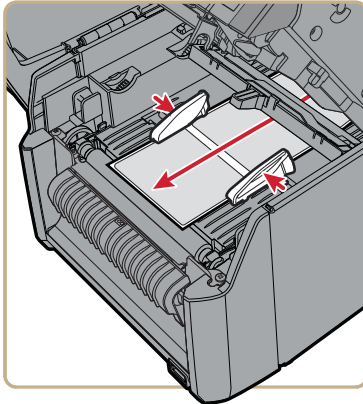


External media
feed slot

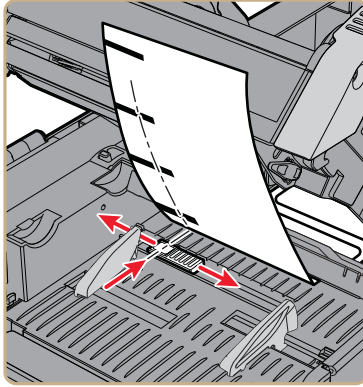
- 5** Press the release button and raise the print mechanism.



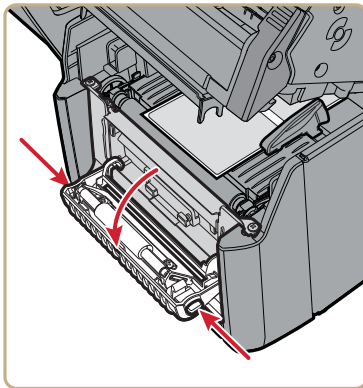
- 6** Slide the media below the sensor bar and between the media guides.



- 7** If necessary, adjust the label stop sensor to line up with the marks or gaps on the media.

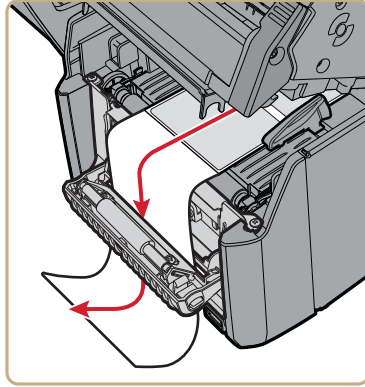



- 8** Slide the guides to the side edges of the media.
- 9** Press the side buttons on the label dispenser to open the front door.



- 10** Remove the label closest to the end of the liner.

- 11** Route the liner through the slot in the front door of the label dispenser. Do not pull on the media to take up the slack. The liner should be over the roller in the printer and under the roller in the front door of the label dispenser.



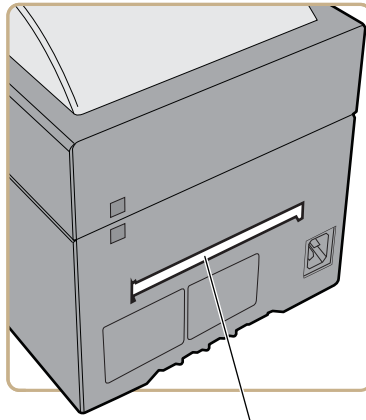
- 12** Close the label dispenser front door.
- 13** Press the print mechanism down to lock it in place.
- 14** Close the media compartment door and then close the top of the printer.
- 15** Press and hold  for two seconds to begin a test feed. The printer dispenses two labels at the front of the printer as it calibrates the media feed.
- 16** If necessary, adjust media settings . You can also use the Main Menu wizards to help calibrate the media feed and the label taken sensor.

In the Main Menu, select **Wizards > Calibration** and then select **Media** or **Label Taken Sensor**.

Load External Media for the PD43

To use large rolls of media or tag stock, you can load the media from outside the printer.

- 1** Place the media behind the printer and feed the media into the printer through the external media feed slot.



External media
feed slot

- 2** Thread the media through the media guides as you would for media installed inside the printer.

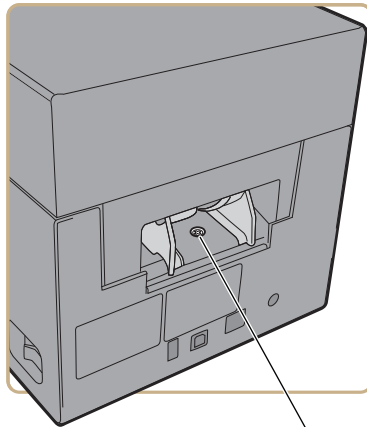
Set the PD43c Rear Feed Guides



Note: This section applies to the PD43c printer with the rear feed guides option installed.

If you use the same media width all the time in the PD43c printer, you can lock the rear feed guides in place to make loading media easier. To lock the feed guides in place, you need a #1 Phillips screwdriver.

- 1** Open the printer lid.
- 2** Slide the feed guides to adjust them to the width of your media.
- 3** Tighten the adjustment screw in the center of the guide plate to lock the guides in place. Do not overtighten.



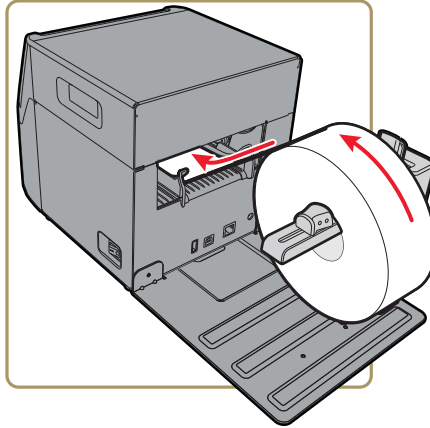
Locking screw
for guides

- 4** If necessary, adjust the printer media guides to the width of your media.
- 5** If necessary, press the release button to raise the print mechanism, and adjust the label stop sensor.

Load External Media Rolls for the PD43c

If you have the external media roll holder for the PD43c, follow this procedure to load media rolls on the holder.

- 1** Place the media on the bar between the guides, and then slide the guides to the sides of the media roll.
- 2** Slide the media into the external media feed slot.

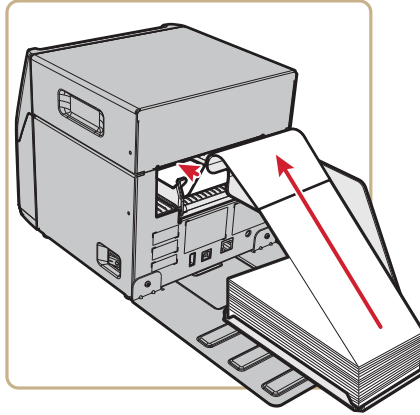


- 3** Thread the media through the printer as usual.

Load Boarding Passes for the PD43c

If you have the ticket shelf accessory, follow this procedure to load boarding pass media for the PD43c printer.

- 1** Place the media in the ticket shelf.
- 2** Feed the media over the top guide of the ticket shelf and into the printer external media feed slot.



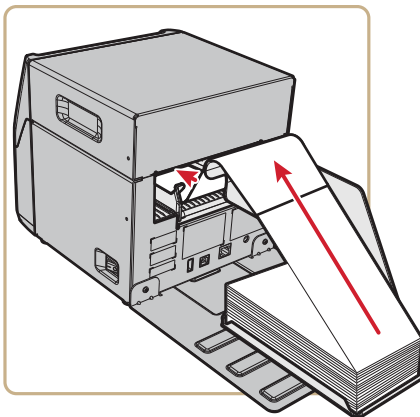
- 3** Thread the media through the printer as usual.

Load Airline Media

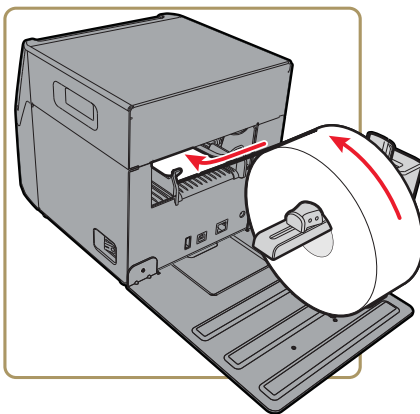
If your PD43c printer includes the optional rear feed guides, follow this procedure to load media for airline use such as bag tags or boarding passes.

- 1 Position the media at the rear of the printer.

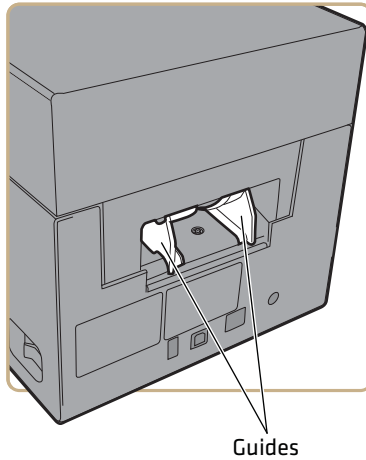
If you have the optional boarding pass ticket shelf, place the media on the shelf and feed it over the top of the guide into the printer.



If you have the optional external media holder, place the media on the bar between the guides, and then slide the guides to the sides of the roll to hold it in place.



- 2** Adjust the feed guides by sliding the guides to match the width of your media.

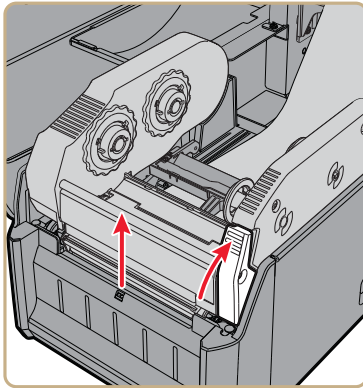


- 3** Slide the media into the printer.
- 4** If this is the first time you have used this media width, open the printer top and slide the media guides to match the media width. You do not need to raise the print mechanism to adjust the guides.
- 5** Thread the media all the way through the printer as usual.
- 6** Close the printer top and press the **Feed** button.

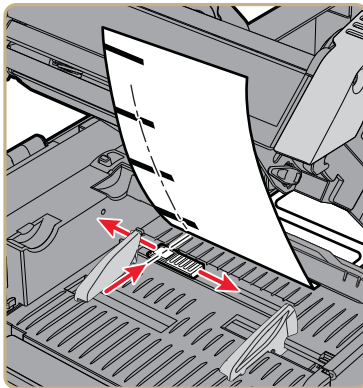
Adjust the Label Stop Sensor

For best performance, adjust the label stop sensor to line up with the black marks on your media.

- 1** Open the top of the printer.
- 2** Press the release button and raise the print mechanism.



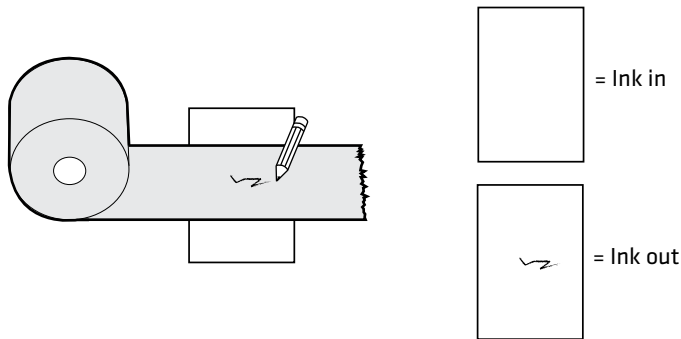
- 3** Slide the label stop sensor to line up with the black marks on your media.



About Ribbon

Thermal transfer printing provides a durable printout that is less vulnerable to chemicals, heat, and sunlight than direct thermal printing. Make sure you select a ribbon type that matches the media you are using and that you configure the printer for thermal transfer media.

The printer supports thermal transfer ribbon rolls with the ink-coated side facing either inward or outward. To determine which type of ribbon you have, use a pen or other sharp object to scratch through the ribbon against a piece of paper. If you see a mark on the paper, your ribbon is wound ink out.

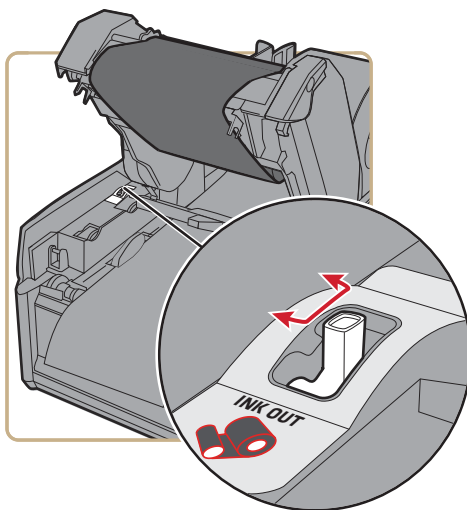


Determining Whether Your Ribbon is Wound Ink In or Ink Out

Load Ribbon

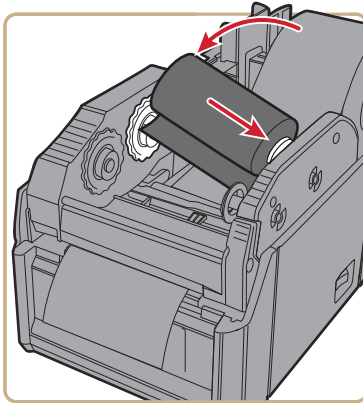
- 1** Open the top of the printer and the media compartment door.
- 2** Press the release button and raise the printhead.

By default, the printer is set to “ink out” operation when you use ribbon. To change the printer to “ink in” operation, use a ballpoint pen or other tool to slide the ink direction switch towards the rear of the printer.



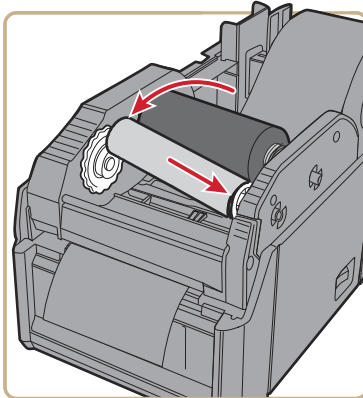
- 3** If there is an empty ribbon core in the media supply position, remove the core and set it aside.
- 4** Remove and discard the full ribbon takeup core.

- 5** Place the new ribbon roll between the rear ribbon holders.

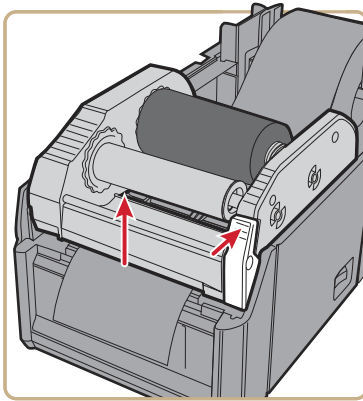


- For “ink out” operation (default), the ribbon should come off the back of the roll.
- For “ink in” operation, the ribbon should come off the front of the roll.

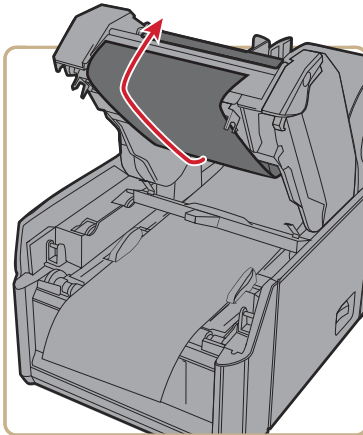
- 6** Place the takeup core between the front takeup core holders.



- 7** Press the release button and raise the print mechanism.

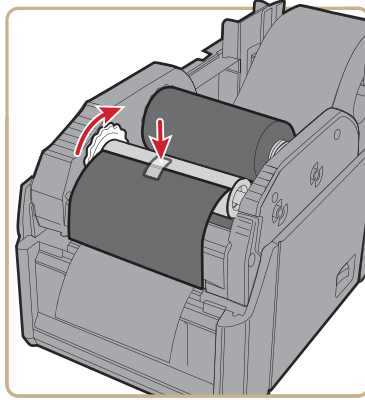


- 8** Route the ribbon under the print mechanism and up to the takeup core.



- 9** Press the printhead down to lock it in place.

- 10** Attach the end of the ribbon to the takeup core and turn the slack-wheel to take up slack in the ribbon.



- 11** Close the media door and the top of the printer.
- 12** If you have already configured the printer for thermal transfer printing, continue with the next step. Otherwise, from the printer Main Menu, select **Settings > Printing > Media > Print Method > Ribbon (TTR)**.

For an icon printer, you must use the printer web page or Intermec PrintSet 5 to configure print settings. You can also hold the **Print** button as the printer starts up to automatically calibrate the media and ribbon feed, and print test labels.

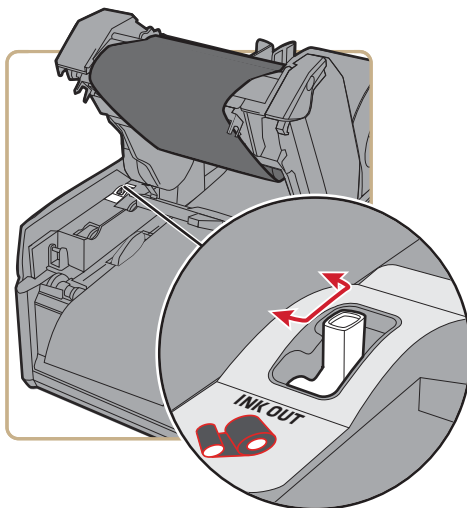
- 13** Save your changes.

Change the Ink Direction

By default, the printer is set to “ink out” operation. Follow this procedure to set the printer to “ink in” operation.

- 1** Open the top of the printer.
- 2** Open the media compartment door.
- 3** Press the release button and raise the print mechanism. The ink direction switch is located under the print mechanism.

By default, the printer is set to “ink out” operation when you use ribbon. To set the printer to “ink in” operation, use a ballpoint pen or other tool to slide the ink direction switch towards the rear of the printer.

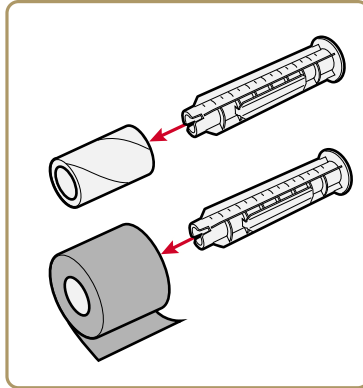


To set the printer to “ink out” operation, slide the ink direction switch towards the front of the printer.

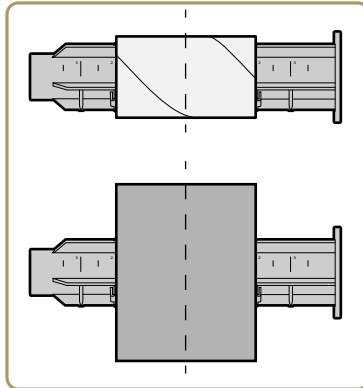
Use the Notchless Ribbon Core Adapter

Use the optional ribbon core adapter to load media without notches in the core. The ribbon core adapter is sold separately. For information on purchasing this accessory, contact your local sales representative.

- 1 Insert one adapter into the media core and one adapter into the takeup core.

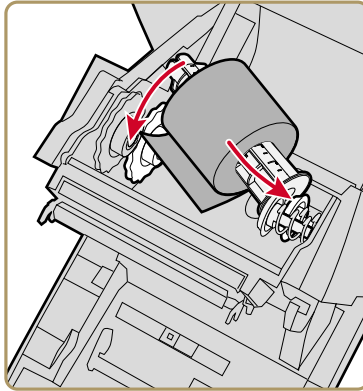


- 2 Center the media roll and takeup core on the adapter.



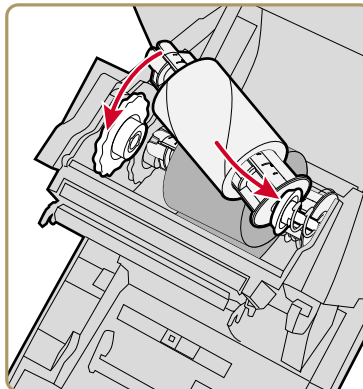
- 3 Press the release button and raise the print mechanism.

- 4** Place the ribbon roll and adapter into the rear media holders.



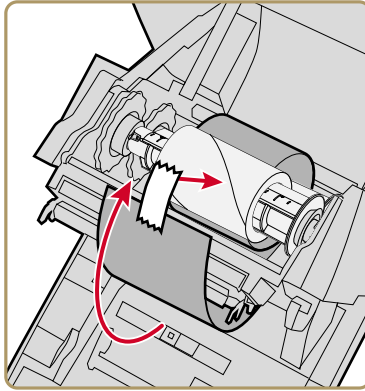
- For “ink out” operation (default), the ribbon should come off the back of the roll.
- For “ink in” operation, the ribbon should come off the front of the roll.

- 5** Place the takeup core and adapter between the front media holders.

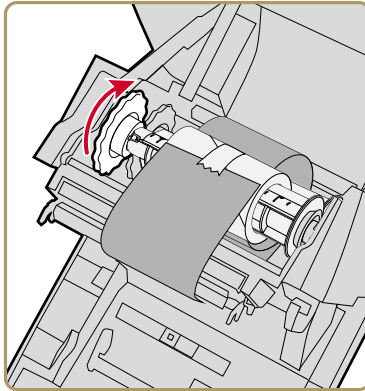


- 6** Route the ribbon under the print mechanism and up to the takeup core.

- 7** Attach the ribbon to the takeup core.



- 8** Turn the slack-wheel to take up slack in the ribbon.



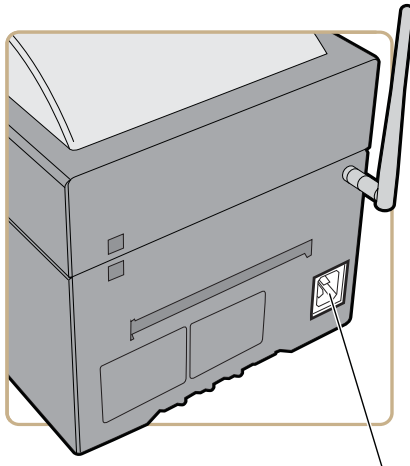
Connect the Printer to Power

The PD43 printer connects directly to AC power. The PD43c uses an external AC adapter.



Caution: Use only the AC power adapter supplied with the printer. The use of a power adapter not approved by Intermec voids the product warranty and may damage the printer.

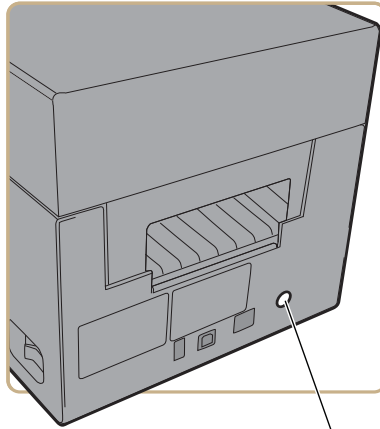
- 1 For the PD43, connect the AC power cable from the printer to an AC power source.



AC power connector

For the PD43c:

- a** Connect the AC power adapter to the power connector on the printer.










AC power connector

- b** Connect the power adapter to AC power. When the adapter is connected to AC power, the green LED in the adapter connector turns on and stays on.
- 2** Press the power switch to turn the printer on. As the printer starts up:
 - a progress bar appears on the LCD printer screen. When the printer has finished starting up, the Ready screen appears, and the blue Ready-to-Work™ indicator turns on and stays on.
 - the icons turn on and then turn off one at a time on the icon panel. When the printer has finished starting up, the blue Ready-to-Work indicator turns on and stays on.

If a condition occurs that will prevent printing, the Ready-to-Work light blinks.

Use the Setup Wizard

This section explains how to use the Setup Wizard to configure the LCD printer. You must configure the printer this way after turning it on for the first time, after upgrading the firmware, or after resetting all defaults.

- 1** Connect the printer to power and press the Power switch. When the printer is ready, the Setup Wizard starts.
- 2** Select the settings you want from the menus in the Setup Wizard.
 - Use  or  to select different items in a list.
 - If the item you selected requires you to select an option from a preset list, press  or  to scroll through the list items.
 - Press  to select a highlighted item.
 - Select  and press  to continue to the next screen.

How to Set Up an Icon Printer

If your printer has the icon front panel, follow these guidelines for connecting and setting up the printer. The way you set up an icon printer depends on whether you plan to connect the printer to your network or to a single PC.

If your network automatically assigns communications parameters (such as IP addresses) to devices, you can set up the printer through the printer web page. The printer web page allows you to configure all settings, print test labels, and perform other management and setup tasks.

If your network does not automatically assign communications parameters to devices, or if you plan to connect the printer to a single PC, you must use the PrintSet 5 application to set up the printer.

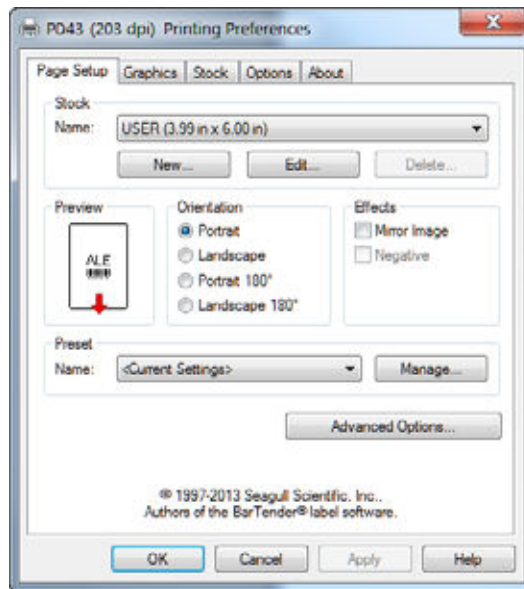
Set Up an Icon Printer without a Network Option

Follow this procedure to set up an icon printer that does not have the Ethernet or Wi-Fi network options. You configure printer settings through the Windows print driver.



Note: Before you begin, use InterDriver to install the driver for the printer on your desktop PC.

- 1 Make sure the printer is turned on and connected to your desktop PC with a USB cable.
- 2 On your desktop PC, select **Start > Devices and Printers**.
- 3 In the Printers and Faxes section, right-click the printer and select **Printing preferences**.



You can change printer settings in the Printing Preferences dialog box. For more information on the Windows print driver settings, click **Help**.

Set Up an Icon Printer with Ethernet

If your icon printer includes the Ethernet network option, follow this procedure to obtain the printer IP address and configure settings through the web page interface.



Note: Before you begin, use InterDriver to install the driver for the printer on your desktop PC.

- 1 Connect the printer to your Ethernet network and turn the printer on. Wait until all the icons turn off.
- 2 Press and hold the **Feed** button. The printer feeds one label. When the printer starts feeding a second label, release the **Feed** button. The printer prints two configuration labels.
- 3 Find the IP address on the second configuration label.
- 4 On your desktop PC, open a web browser and browse to the IP address. The printer web page appears.

You can configure printer settings through the web page interface.

Set Up an Icon Printer with Wi-Fi

If your icon printer includes the Wi-Fi network option, follow this procedure to enable Wi-Fi communications, obtain the printer IP address and configure settings through the web page interface.



Note: Before you begin, use InterDriver to install the driver for the printer on your desktop PC.

- 1 Make sure the printer is turned on and connected to your desktop PC through a USB cable.
- 2 On your desktop PC, start PrintSet 5 and use the application to determine the printer IP address.


For help, see the PrintSet online help.

- 3 Open a web browser and browse to the IP address. The printer web page appears.

You can configure printer settings using the web page interface.




Calibrate the Media Feed and Print Test Labels on the Icon Printer

For the icon printer, follow this procedure to automatically calibrate the media feed and print test labels.

- 1 Make sure that the printer has media and ribbon (if necessary) installed.
- 2 Turn off the printer.
- 3 Turn the printer back on. All the LEDs light up. As the printer starts up, the LEDs turn off one by one, starting with the bottom right LED.
- 4 When the last two LEDs (Maintenance and Bluetooth) are lit, press and hold . The printer feeds a few labels as it automatically adjusts the media feed, and then prints two test labels with media and communications settings.

Set the Command Language with the Print Button

If you have an icon printer, you can use the **Print** button to set the printer command language.

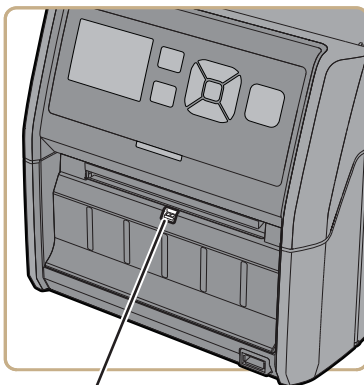
- 1 Make sure that the printer has media and ribbon (if necessary) installed.
- 2 Turn off the printer.
- 3 Turn the printer back on. All the LEDs light up. As the printer starts up, the LEDs turn off one by one, starting with the bottom right LED.
- 4 When the last two LEDs (Maintenance and Bluetooth) are lit, press and hold . The printer feeds a few labels as it automatically adjusts the media feed, and then the test labels start to print.
- 5 Continue to hold . The available printer command languages start to print.
- 6 When you see the language you want to use, release .
- 7 The printer automatically reboots and starts in the command language you selected.

Calibrate the Label Taken Sensor

If your printer has the optional label taken sensor or the label dispenser (which includes the sensor), use the wizard to calibrate the sensor for your media.

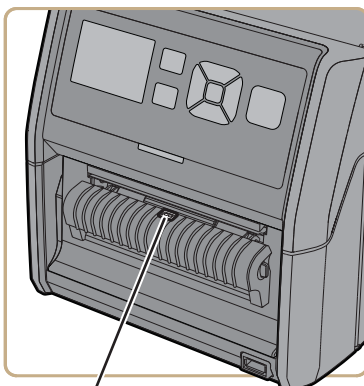


Note: For best results, calibrate the sensor each time you load media or move the printer to a different environment. If you installed the label taken sensor module or the label dispenser in the printer, calibrate the sensor before you begin printing.



Sensor

Label Taken Sensor Location



Sensor

Label Taken Sensor Location (with Label Dispenser)

Before you calibrate the sensor, load media and ribbon in the printer as necessary.

- 1 In the Main Menu, select **Wizards > Calibration > Label Taken Sensor**.
- 2 Follow the prompts to calibrate the sensor.

About Test Labels


You can print a test label to check print quality and get configuration information, including lists of the fonts, images, and applications installed on the printer. Use one of these methods to print a test label:




- In Start Up mode
- In Idle mode
- From the Main Menu
- From PrintSet 5

You can also print test labels from the printer web page, which requires a network connection to a desktop PC. You need to know the printer IP address to view the printer web page.

Print a Test Label in Start Up Mode





You can print a test label when you first turn on the printer.

- 1 Make sure that the printer has media and ribbon (if necessary) installed.
- 2 Connect the printer to power and turn on the printer.
- 3 On the icon printer, when the last two LEDs are lit (Maintenance and Bluetooth), press and hold  until the test label starts to print.

On the LCD printer, when the status bar appears, press and hold  until the Media Calibration Wizard appears. Select  and press  to print a label with the current print settings.



Print a Test Label in Idle Mode

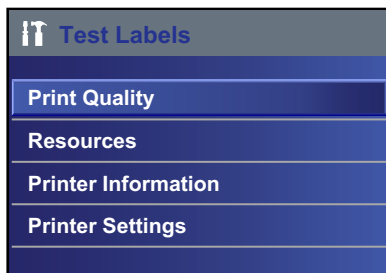
You can print a test label when the printer is in Idle mode.



- 1 Make sure that the printer has media and ribbon (if necessary) installed.
- 2 On the icon printer, press and hold  until the test label starts to print.
On the LCD printer, press and hold  until the Media Calibration Wizard appears. To print a label with the current print settings, select  and press .

Print a Test Label from the Main Menu

If you have an LCD printer, you can print a test label from the Main Menu.

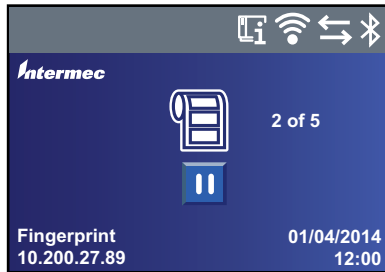
- 1 Make sure that the printer has media and ribbon (if necessary) installed.
- 2 From the Ready screen, press .
- 3 Press  to select **Tools** and then press . The Tools menu appears with **Test Labels** selected.
- 4 Press .



- 5 Select **Print Quality**, **Printer Information**, or **Printer Settings**, and then press . A list of available labels appears.
- 6 Select a label to print, and then press .

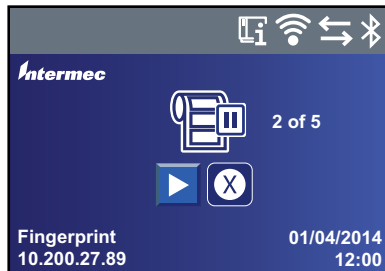
Pause or Cancel a Batch Print Job on the LCD Printer


During a batch print job, a Pause button appears on the LCD printer screen:








You can pause a batch print job by pressing the **Print** button. You can also cancel a batch print job from the front panel.

- 1 During a batch print job, press . The printer stops printing and these icons appear:



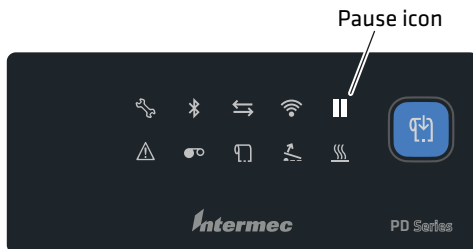
- 2 To resume printing, press .


To cancel printing, press  to select , and then press . The print job is cancelled.

To view information, press  to select a status icon, and then press .

Pause a Batch Print Job on the Icon Printer

During a batch print job, press  to pause the print job. When a print job is paused, the Pause icon flashes.



Press  to resume printing.

Cancel a Batch Print Job on the Icon Printer

There are several ways to cancel a batch print job that you sent to an icon printer:

- Cancel the job from the Windows print spooler on the PC.
- Depending on the printer command language you are using, you may be able to send a “cancel job” command to the printer. For more information, see the command information for your printer language.
- Turn off power to the printer.

How to Print on RFID Media

If you have an LCD printer with the optional RFID module installed, you can print on RFID media. Media containing RFID tags is slightly thicker where the RFID tag is located. The slight thickness of this part of the label may affect print quality. For thermal transfer labels, Intermec recommends using high-quality ink ribbon.

To achieve the best possible print quality, follow these guidelines:

- Run the RFID calibration wizard to determine the best Tag Position and Output Power for RFID media.
- If necessary, modify the Tag Position (TAGADJUST variable) to make sure the RFID labels are properly aligned with the antenna.
- Avoid printing on the thickest part of the label when possible.

For help configuring RFID parameters, see the [Intermec Fingerprint Command Reference Manual](#) or the [IPL Command Reference Manual](#).

About RFID Tag Position

Tag Position, also referred to as TAGADJUST, specifies the distance (in dots/mm/in) to move the label to align the tag with the RFID antenna. Positive values move the label forward, and negative values move the label back.

Use one of these methods to calculate Tag Position:

- Run the RFID wizard.
- Manually calculate the Tag Position.

Run the RFID Calibration Wizard

Run the RFID calibration wizard to determine the best Tag Position and Output Power (UHF inlays, only) for RFID media.



Note: After you determine the correct RFID media settings, you can save these settings to a printer profile and load the profile when you need to print on the specific RFID media.

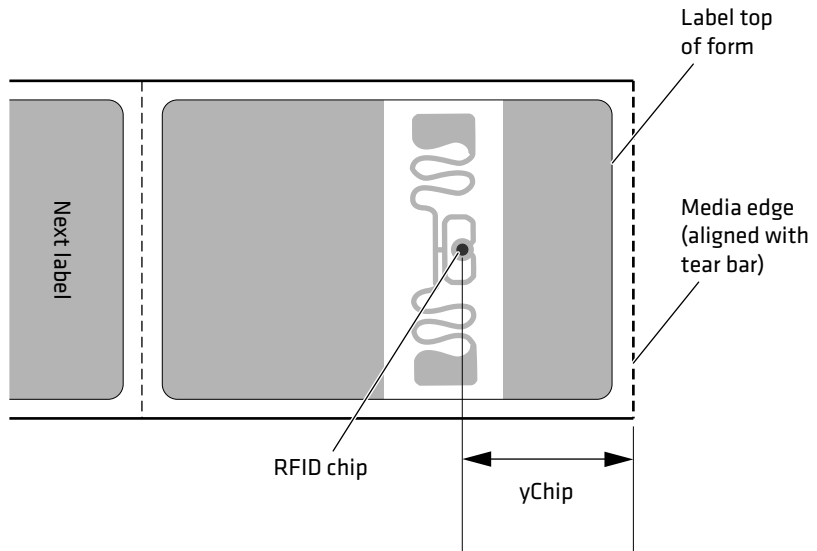
- 1** Make sure the media type and media length are properly configured.
- 2** From the Main Menu, select **Wizard > Calibration > RFID Calibration**.
- 3** To enable the RFID module, select **Enable**.
- 4** Load the RFID media.
- 5** Select **OK**.

When the calibration is complete, the printer displays the RFID Tag Position and Output Power (UHF inlays, only).

Calculate RFID Tag Position

You can perform a manual calculation to come up with an estimate of the RFID Tag Position. Because this value is an estimate, you may need to slightly adjust the calculated value to achieve the best results.

- 1 Make sure Start Adjust and Stop Adjust are set to 0.
- 2 Measure the yChip value, which is the distance between the RFID chip and the media edge aligned with the tear bar.



- 3 Note the yAntDist value for your printer:
 - UHF RFID: 277 dots, 34.6 mm, 1.362 in
 - HF RFID: 293 dots, 36.6 mm, 1.441 in
- 4 Use this formula to calculate the estimated Tag Position:

$$\text{TagPosition} = \text{yChip} - \text{yAntDist}$$

3

Connect the Printer

This chapter explains how to connect the PD43 printers to a PC and to an Ethernet or wireless network.

About Printer Drivers

Before you can use the printer with Microsoft Windows printing applications, you need to install printer driver software on the PC. Drivers enable the printer to communicate with your PC and with software applications such as Honeywell PrintSet 5.



Note: Although Windows may auto-detect the printer when you connect it to a PC through a USB port, you must still install printer drivers on the PC for correct printer operation.

Install Printer Drivers

Use InterDriver to install printer driver software on your PC. InterDriver is included on the PrinterCompanion CD that shipped with your printer. If you have not yet installed drivers on your PC, run the PrinterCompanion CD and follow the instructions to connect your printer and install the drivers.

If you do not have access to the PrinterCompanion CD but you still need to install driver software, follow this procedure to download InterDriver from the Intermec website and install the drivers.

- 1 Open a web browser and go to www.intermec.com.
- 2 Select **Support > Downloads**.
- 3 Select these items:
 - a In the Product Category list, select **Printers**.
 - b In the Product Family list, select **Fixed Printer**.
 - c In the Product list, select **PD43, PD43c Commercial Printer** and then click **Submit**.
- 4 In the downloads page, click **Intermec InterDriver X.X.X M-X ver. X.XX**. If a Security Warning dialog box appears, click **Run**.
- 5 When asked if you want the program to make changes to your computer, click **Yes**.
- 6 Follow the onscreen instructions in the InterDriver InstallShield wizard.

- 7** When you reach the InstallShield Wizard Complete page, click **Next**. The InterDriver Wizard appears.
- 8** From the Welcome to InterDriver Wizard page, make sure **Install printer drivers** is selected and then click **Next**.
- 9** Follow the onscreen instructions in the InterDriver Wizard.
- 10** When you reach the Completing the InterDriver Wizard page, click **Finish**.
- 11** When the InterDriver Wizard Completed Successfully page appears, click **Next**.
- 12** Follow the onscreen instructions to complete the Post-Setup Tasks.
- 13** When the Installation Complete! page appears, click **Finish**.

The installer unpacks and installs the InterDriver files in the Intermec\InterDriver folder in your program files directory and creates two shortcuts in the Windows Start menu:

- Intermec > InterDriver > InterDriver Wizard
- Intermec > InterDriver > Check for Updates

How to Connect the Printer to Your PC

You can connect the printer to your PC using one of these cables:

- USB cable
- USB-to-Serial adapter cable
- USB-to-Parallel adapter cable

Connect the Printer Using a USB Cable

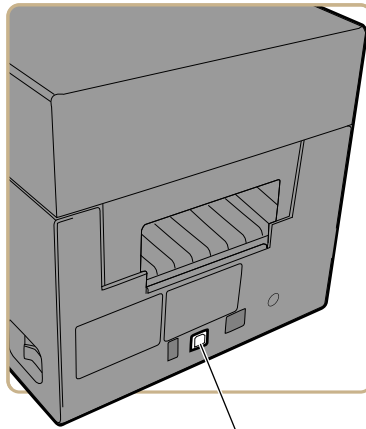
The printer supports USB connections to a desktop PC. You do not need to set up any parameters for USB communications.



Note: You must install InterDriver to use a USB connection to a Windows PC. For more information, see the PrinterCompanion CD that came with your printer.

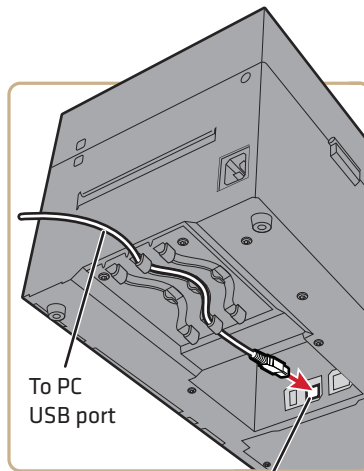
- 1** Download and install the InterDriver software on your PC.

- 2 Connect one end of the USB cable to the USB device port on the back of the printer, and connect the other end to your PC. A “USB Host Connected” message appears on the printer screen.



USB device port

For the PD43, use the cable guides on the underside of the printer for cable strain relief.

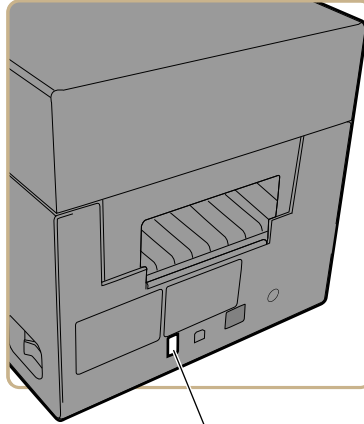


USB device port

Connect the Printer Using a Serial or Parallel Cable

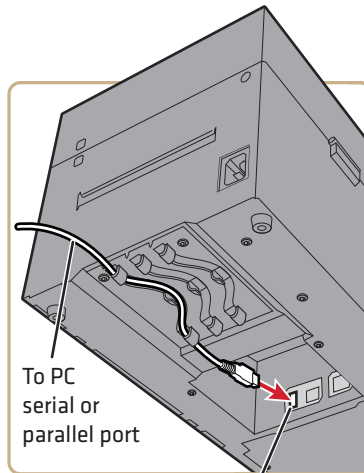
If you have the optional USB-to-Serial adapter cable or USB-to-Parallel adapter cable for the printer, you can connect the printer to the serial or parallel port on a PC.

- 1 Connect the adapter cable to the USB host port on the printer.



USB host port

For the PD43 printer, use the cable guides on the underside of the printer for cable strain relief.



To PC
serial or
parallel port

USB host port

- 2** For a USB-to-Serial adapter, connect the adapter cable to the serial port on your PC. Continue with the next step.

For a USB-to-Parallel adapter, connect the adapter cable to the parallel port on your PC. The printer is ready to communicate with your PC.

- 3** If you are using an LCD printer, from the printer Main Menu select **Settings > Communications > Serial** and change settings as necessary.

If you are using an icon printer, you need to configure settings through an application such as PrintSet 5.

How to Connect the Printer to Your Network

You can connect the printer to your network using the:

- Ethernet interface.
- Wi-Fi + Bluetooth wireless interface.

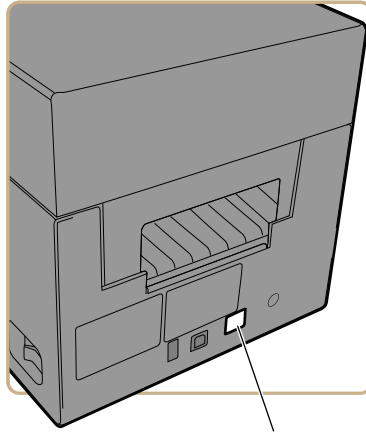
These network interfaces provide features such as security, FTP server, web page, and Alert handling.

Connect the Printer to an Ethernet Network

If your printer has an Ethernet module, you can connect it to your wired network.

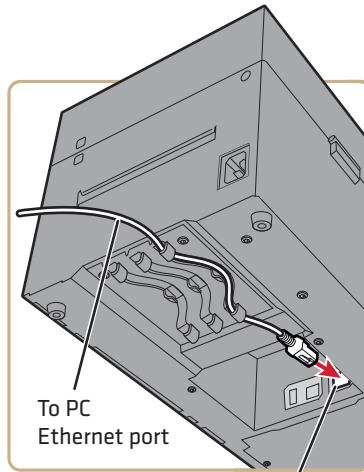
By default, the printer supports DHCP networks. If you are not using a DHCP network, you need to configure wired Ethernet settings by using Intermec PrintSet 5 through a USB connection to the printer.

- 1 Connect an Ethernet cable to the Ethernet port on the rear of the printer and to your network.




Ethernet port

For the PD43, use the cable guides on the underside of the printer for cable strain relief.



Ethernet port

- 2 Get the IP address for your printer:
 - For an LCD printer, from the Main Menu select **Settings > Communications > Ethernet** and find the IP address.
 - For an icon printer, press and hold  until the test label with the IP address starts to print.
- 3 Configure the necessary Ethernet settings:
 - For an LCD printer, from the Main Menu select **Settings > Communications > Ethernet**.
 - For an icon printer, configure the Ethernet settings through PrintSet 5 or the printer web page.

About Wi-Fi Communications

The printer supports Wi-Fi communications when the optional Wi-Fi/Bluetooth module is installed.

You can configure Wi-Fi communications:

- by using the wireless wizard in the printer Main Menu.
- from the printer web page. You need to know the printer IP address.
- from the printer Main Menu if your printer has a graphical interface.

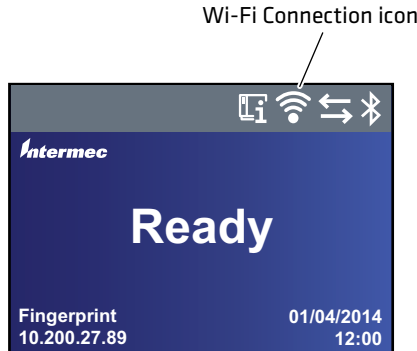
By default, the printer supports DHCP networks. If you are not using a DHCP network and you do not know the printer IP address, you need to configure Wi-Fi settings by using PrintSet 5 through a USB connection to the printer, or by sending commands through a serial connection.

Connect the Printer to a Wireless Network

Before you begin, you should be familiar with the settings you need for your network.

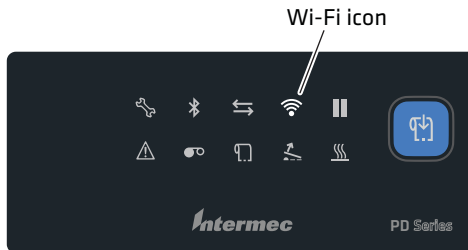
If you are using a DHCP network, turn the printer on. The printer automatically connects to the wireless network.

For a printer with the LCD interface, the Wi-Fi Connection icon shows the status of the connection.



Wi-Fi Connection Icon on LCD Interface

For a printer with the icon interface, the Wi-Fi icon turns on to show that Wi-Fi is enabled.




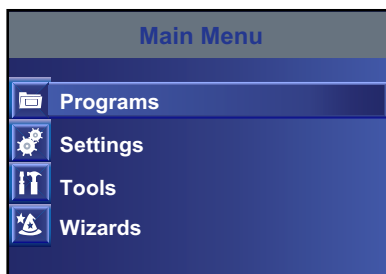
Wi-Fi Icon on Icon Interface

If you are not using a DHCP network, follow the next procedure to manually assign network settings (such as the printer IP address) to a printer with the LCD interface.

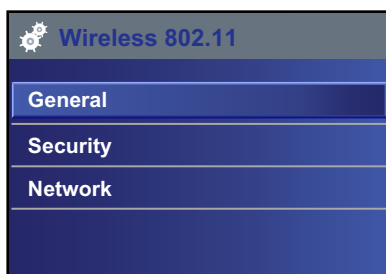


Note: If you are using an icon printer and you do not know the printer IP address, you need to use PrintSet 5 with a USB connection to a PC to configure wireless network settings for a non-DHCP network.

- 1 From the printer Ready screen, press . The Main Menu appears.



- 2 Select **Settings** > **Communications** > **Wireless 802.11**.



- 3 Select **General** to configure these wireless network settings:

- Network Name (SSID)
- Network Type
- Roaming
- Power Mode
- Channel (for Ad Hoc mode only)
- Hidden SSID

Select **Network** to configure these settings:

- IP Assignment Method (for IPv4 or IPv6 networks)
- IP address
- Subnet mask and default router

Select **Security** to configure all wireless network security settings.

- 4 Change settings as needed for your network.
- 5 When you are finished, save your changes. The printer immediately attempts to connect to your network.

Configure Wi-Fi Communications from the Printer Web Page

You can use the printer web page to configure wireless communications on the printer.



Note: To configure the printer from the web page, the printer must be turned on and connected to your Wi-Fi or Ethernet network.

- 1 On your PC, open a browser.
- 2 In the **Location** or **Address** bar, type the printer IP address and press **Enter**. The printer web page appears.
- 3 Click **Login**. The Login page appears.
- 4 Type your **Username** and **Password** and click **Login**. The default username is `itadmin` and the default password is `pass`.
- 5 Click the **Configure** tab.
- 6 Click **Communications** > **Wireless 802.11**. The Wireless 802.11 page appears.

The screenshot shows the Intermec PD43c printer web interface. The top navigation bar includes 'Home', 'Configure', 'Manage', 'Print', 'System Information', 'Services', and 'Contact'. The left sidebar lists 'Communications' (Ethernet, Wireless 802.11, Bluetooth), 'Printing', 'System Settings', 'Alerts', and 'Network Services'. The main panel is titled 'Wireless 802.11' and has buttons for 'Default Settings', 'Save', and 'Save As Profile'. It is divided into 'General' and 'Security' sections. The General section includes: Network Name (SSID) set to 'TechCommAP', Network Type set to 'Infrastructure', Roaming set to 'Off', Power Mode set to 'Constant Awake', Channel set to '1', and Hidden SSID set to 'Disable'. The Security section includes: Security Type set to 'None', Association set to 'Open/WEP', Pre-Shared Key (masked with ****), Network Key Index set to '1', and four Network Key fields (1-4), each masked with ****.

- 7 Change settings as needed, or click **Default Settings** to restore all default Wireless 802.11 settings.
- 8 Click **Save** when you are done.

About Bluetooth Communications

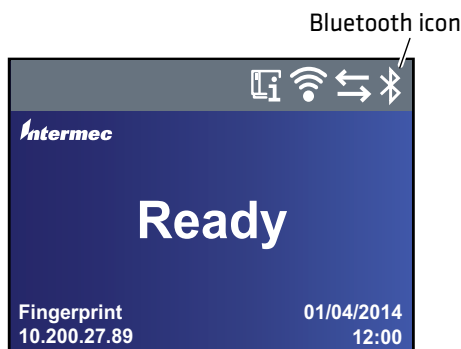
The printer supports Bluetooth communications when the optional Wi-Fi/Bluetooth module is installed. When Bluetooth is enabled, you can connect the printer to other Bluetooth devices, such as bar code scanners and keyboards. You can also make the printer discoverable by Bluetooth-enabled devices such as mobile computers.



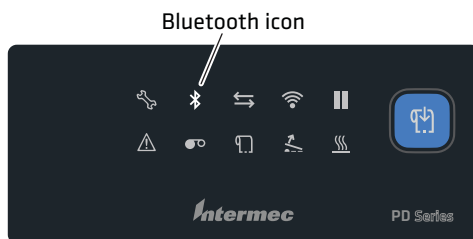
Note: To connect to the printer from a Bluetooth-enabled mobile computer, you may need to configure Bluetooth settings on the printer before you try to discover the printer from the mobile computer.

When the Wi-Fi/Bluetooth module is installed:

- the Bluetooth icon appears in the status bar on the LCD printer screen.
- the Bluetooth icon turns on in the icon printer interface.



Bluetooth Icon in LCD Interface



Bluetooth Icon in Icon Front Panel

The icon is white when the Bluetooth connection is active, and gray when the connection is inactive or disabled.


Connect to a Bluetooth Device by Reading a Bar Code

To connect a Bluetooth-enabled bar code scanner to the printer, use the scanner to read the “Scan to Connect” bar code.

- 1 Make sure your printer is ready to print.
- 2 On your desktop PC, start a web browser.
- 3 In the address field, type the printer IP address and then press **Enter**. The printer web page appears.
- 4 Click **Services** and then select **Print Test Labels > Printer Settings**.
- 5 In the Printer Settings screen, locate the Bluetooth Settings label and click **Print**. The printer prints the Bluetooth Settings label.
- 6 Make sure your Bluetooth scanner is turned on and discoverable, and that the device is in range of the printer.
- 7 Use the scanner to read the “Scan to Connect” bar code on the Bluetooth Settings label. The printer attempts to connect to the scanner.

Connect to a Bluetooth Device Using a Wizard


If your printer has the LCD interface, you can also use the Bluetooth wizard to discover and connect to a Bluetooth device, such as a keyboard.

- 1 Make sure your Bluetooth device is turned on and discoverable, and that the device is in range of the printer.
- 2 From the printer Ready screen, press . The Main Menu appears.
- 3 Select **Wizards > Communications > Bluetooth**.
- 4 Follow the instructions to discover and connect to your Bluetooth device.

If you are unable to connect to the Bluetooth device, change the printer Bluetooth settings or move the Bluetooth device closer to the printer.

Configure Bluetooth Communications from the Main Menu

This section explains how to configure Bluetooth settings from the printer Main Menu. You may need to configure these settings if you want to connect to a mobile computer through Bluetooth.

- 1 From the Ready screen, press . The Main Menu appears.
- 2 Select **Settings** > **Communications** > **Bluetooth**.
- 3 Change settings as needed for your Bluetooth device.
- 4 When you are finished, save your changes and restart the printer.

Configure Bluetooth Communications from the Web Page

Use this procedure to configure Bluetooth from the printer web page. The printer must be connected to an Ethernet or wireless network and you must know the printer IP address.

- 1 On your PC, start a browser.
- 2 In the **Location** or **Address** bar, type the printer IP address and press **Enter**. The printer web page appears.
- 3 Click **Login**. The Login page appears.
- 4 Type your **Username** and **Password** and then click **Login**. The default value for Username is `itadmin` and the default value for Password is `pass`.
- 5 Click the **Configure** tab. The Configuration Summary page appears.
- 6 Click **Communications** > **Bluetooth**. The Bluetooth settings page appears.
- 7 Change Bluetooth settings as needed. You can also click **Default Settings** to restore all default Bluetooth settings.
- 8 Click **Save** when you are finished.

About the USB Host Port

You can use the USB host interface port on the printer to connect these peripheral devices:

USB Peripheral Devices

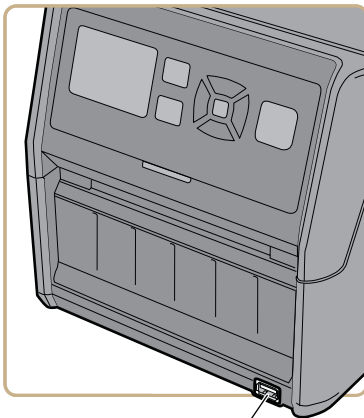
Device	Description
Keyboard	Use a standard USB keyboard to send Fingerprint printer language commands directly to the printer or to enter information if you are running a Smart Printing application.
Bar code scanner	Use Intermec USB bar code scanners for data input with a Smart Printing application. The printer also supports other USB scanners that use a generic keyboard driver.
USB storage device	Use a USB storage device to load applications, configuration files, fonts, and images into the printer memory, or to perform firmware upgrades. You can also save configuration files to a USB storage device for upload to a printer. The USB storage device must have a single partition and be formatted as FAT16 or FAT32.

You can also connect a peripheral device through the USB-to-Serial or USB-to-Parallel adapter cable accessories. For information, contact your local sales representative.

Connect a USB Device

The printer has two USB host ports that you can connect a USB device to.

- 1 If you are connecting a USB storage device, make sure the device has a single partition and is formatted as FAT16 or FAT32.
- 2 Connect the device to one of the USB host ports.



USB host port

- 3 If you connected a USB storage device to an LCD printer, select **Tools > USB Menu** for more options.

4

Configure the Printer

This chapter explains how to view and change printer settings by using the Main Menu or the printer web pages.

About Printer Configuration Settings

Printer configuration settings determine how the printer operates.

Printer Configuration Settings

Setting Type	Description
Communications	<p>All communications and network settings:</p> <ul style="list-style-type: none">• Serial (appears when using serial connection to PC. Includes virtual COM port settings.)• Ethernet (appears when Ethernet module is installed)• Wireless 802.11 (appears when Wi-Fi/Bluetooth module is installed)• Bluetooth (appears when Wi-Fi/Bluetooth module is installed)
Printing	<p>Configuration settings for media (such as media width and length), print quality, and performance.</p>
System Settings	<p>Global system settings including printer name, location, and contact information, display and keyboard input languages, date and time, unit of measure, audio volume, and printer command language.</p> <p>Display settings including brightness, time and date format, menu access permissions, and screen timeout.</p> <p>Enable and disable Wi-Fi, Bluetooth, Ethernet, or virtual COM port communications.</p> <p>Enable and disable services including Intermec SmartSystems, FTP, Telnet, and others.</p> <p>Set maintenance alert values for the printer odometer and other alerts.</p>
Network Services	<p>Enable or disable network services including Intermec SmartSystems, the web or email servers, and others.</p>

How to Configure the Printer

Use one of these methods to view and change printer settings:

- Printer web page
- Main Menu (LCD printers)
- PrintSet 5
- Programming commands
- SmartSystems

View the Configuration Summary

If you are using Ethernet or Wi-Fi communications, you can view a complete summary of all printer configuration settings from the printer web page. You should have already connected your printer to your network and obtained an IP address.



Note: This process may take several minutes depending on the options in your printer and your network connection.

- 1** Open a web browser on your PC.
- 2** In the **Location** or **Address** bar, type the printer IP address, and then press **Enter**. The printer web page appears.
- 3** Click the **Configure** tab.

- 4 Click **Configuration Summary**. The configuration summary appears.



Configure the Printer from the Web Page

If you are using Ethernet or Wi-Fi communications, you can change printer configuration settings from the printer web page. You should have already connected your printer to your network and obtained an IP address.

- 1 Open a web browser on your PC.
- 2 In the **Location** or **Address** bar, type the printer IP address, and then press **Enter**. The printer web page appears.



- 3** Click **Login** in the upper right corner of the screen. The Login page appears.
- 4** Type your **Username** and **Password** in the entry fields, and then click **Login**. The default username is itadmin and the default password is pass.
- 5** Click **Configure**. The Configuration Summary page appears.
- 6** To see a complete list of printer settings, click **Configuration Summary**.

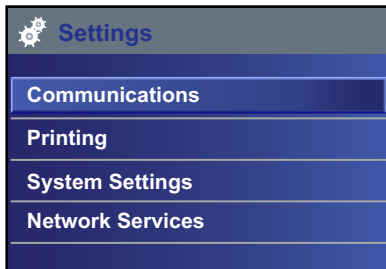
To configure printer settings, use the links in the navigation pane:

- For serial port, Wi-Fi, or Bluetooth settings, click **Communications**.
 - For media, print quality, or performance settings, click **Printing**.
 - For display, audio, service, and general settings, maintenance alert message triggers, or to enable and disable 802.11 and Bluetooth or the virtual COM port, click **System Settings**.
 - To set conditions that trigger error, warning, and information alert messages, click **Alerts**.
 - For network-related settings such as web and email server information, or if you are using a network management application such as Intermec SmartSystems, click **Network Services**.
- 7** Change settings by typing in the fields or by selecting an item from a list.
 - 8** To save your changes on this page, click **Save**. After your changes are saved, you can click **Save As Profile** to create a configuration profile including your changes that you can load at any time.
- To reset all values and options on the page to the default settings, click **Default Settings**.

Configure the Printer from the Main Menu

If you have an LCD printer, you can view or change configuration settings from the Main Menu.

- 1 From the Ready Screen, press .
- 2 Select **Settings** and press . The Settings menu appears with **Communications** selected.



- 3 Select the settings you want to configure and make your changes.
- 4 Save your changes when prompted.

Configure the Printer with PrintSet 5

PrintSet 5 is a printer configuration tool that enables you to easily change your configuration settings. You can also use the setup wizards in PrintSet 5 to guide you through common configuration tasks.

- 1 Make sure that you have Windows XP or later running on your PC.
- 2 Download PrintSet 5 from the Downloads page of the Intermec website at www.intermec.com/products/printers_media/software/index.aspx.
- 3 Connect your printer to your PC using a serial, USB, or network (Ethernet or Wi-Fi) connection.

How to Configure the Printer with Programming Commands

You can change configuration settings by sending programming commands directly from your PC to the printer through a terminal program (such as HyperTerminal), a serial connection, or a network connection.

If your printer uses the Fingerprint programming language, use the SETUP GET command followed by the node, subnode, and parameter setting. For example, here is a Fingerprint example that changes your media setting to labels with gaps:

```
SETUP GET "MEDIA, MEDIA TYPE, LABEL (W GAPS) "
```

You must log in as an itadmin to perform a SET operation, but you do not need to log in to perform a GET operation.

If your printer uses the IPL programming language, this example changes your media setting to labels with gaps:

```
<STX><SI>T1<ETX>
```

For more information on how to change configuration settings with a programming language, see either the [Intermec Fingerprint Command Reference Manual](#) or the [IPL Command Reference Manual](#).

How to Configure the Printer with SmartSystems

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

About Printer Profiles

After you change printer default settings to meet your needs, you can save those settings as a printer profile. The printer supports multiple profiles that you can save and load at any time. For example, you can create one profile to use when you are printing on continuous label stock, and a different profile to use when you are printing on label stock with gaps.

The following printer settings are not saved in a profile:

- IP address for either IPv4 or IPv6 networks
- Media calibration settings for the label stop sensor
- Remote port or remote host values for a remote computer accessing the printer through raw TCP

Save a Printer Profile from the Web Page

From the printer web page, you can save the current settings as a profile that you can load from the printer memory at any time.



Note: This procedure assumes you have already logged in to the printer web page.

- 1 In the printer web page, click the **Configure** tab.
- 2 Click **System Settings > General**.
- 3 Click **Save As Profile**. The Save As Profile screen appears.
- 4 Enter a name in the **Profile** field, and then click **Save**.

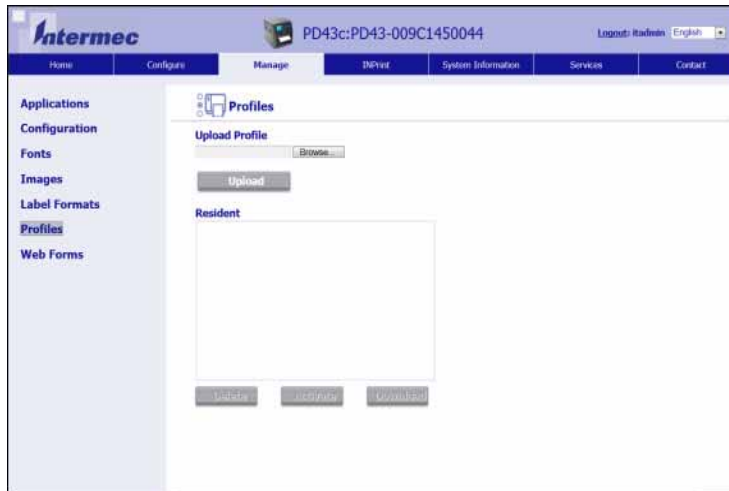
Load a Printer Profile from the Web Page

You can load a saved profile from the printer web page.



Note: This procedure assumes you have already logged in to the printer web page.

- 1 In the printer web page, click the **Manage** tab.
- 2 Click **Profiles**.



The **Resident** list includes profiles that are saved in the printer memory.

- 3 To load a profile from the printer memory, select the profile in the **Resident** list and then click **Activate**. The profile is loaded.

To load a profile from another location:

- a Click **Browse** and browse to the location of the file.
- b Double-click the file.
- c Click **Upload**. The profile is uploaded to the printer.

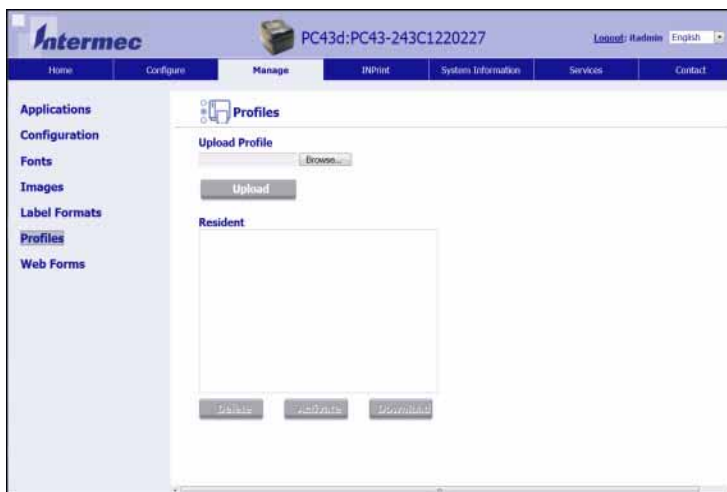
Manage Printer Profiles from the Web Page

You can activate and delete profiles or download profiles to your PC from the printer web page.



Note: This procedure assumes you have already logged in to the printer web page.




- 1 In the printer web page, click the **Manage** tab.
- 2 Click **Profiles**.



- 3 Select a profile from the **Resident** list. If you want to delete profiles, or if you want to download profiles to your PC, you can select more than one profile.
- 4 Click **Delete** to delete the profile from the printer memory.
Click **Download** to download the profiles to your PC.
Click **Activate** to load the profile.




Save a Printer Profile from the Main Menu

You can save current printer settings for an LCD printer as a printer profile and load that profile on another printer.

- 1 From the Ready screen, press . The Main Menu appears.
- 2 Select **Tools > Profiles**. The Profiles menu appears.
- 3 Select **Save**.
- 4 Select the **Filename** text box and type a name for the profile. The profiles can have up to sixteen characters with no spaces.
- 5 Press  to save your profile name and go back to the Save Profile menu.
- 6 Press  and wait until Complete appears on the screen.

Load a Printer Profile from the Main Menu

You can load a saved LCD printer profile to another printer from the Main Menu.

- 1 From the Ready screen, press . The Main Menu appears.
- 2 Select **Tools > Profiles**. The Profiles menu appears.
- 3 Select **Load**. In the Save Profile menu, select **Filename** and enter a name for the profile of up to sixteen characters (no spaces).
To load a saved profile, select **Load**. In the Load Profile menu, select the profile to load.
- 4 Select the profile you want to load on the printer and press .
- 5 When Complete appears on the screen, press  to return to the Main Menu.

How to Load a Printer Profile with Programming Commands

You can load a saved LCD printer profile to another printer by sending programming commands directly from your PC to the printer through a terminal program (such as HyperTerminal), a serial connection, or a network connection. All commands are case-sensitive.



Note: To load printer profiles that modify communication settings that require itadmin rights, you must log in as an itadmin: RUN “su -p pass itadmin”.

Programming Commands to Load a Printer Profile

Connection	Programming Commands
Printer running Fingerprint	RUN “/system/usr/bin/cfg -o xmlimportset -k /home/user/profiles/myprofile”
Printer running IPL	<STX><ESC>.x,/system/usr/bin/cfg -o xmlimportset -k /home/user/profiles/myprofile<ETX>
Telnet connection over Port 23	/system/usr/bin/cfg -o xmlimportset -k /home/user/profiles/myprofile

About USB Storage Device Directories

You can use a USB storage device to install files, such as applications and fonts on the printer. You need to copy files to specific directories on the USB storage device so that the printer can properly install them.

USB Storage Device File Directories



File Type	Place in This Directory
Application	/apps
Font	/fonts
Form/layout	/forms
Web form	/webforms
Image	/images
Display images	/display
Configuration profile	/profiles
Configuration	/config

USB Storage Device File Directories (Continued)

File Type	Place in This Directory
Fingerprint script	/scripts
Firmware	/firmware
Installation package (UFF resource file)	Root of USB storage device
Start file	Root of USB storage device


Print a File from a USB Storage Device


If you are uploading image files to the printer from a USB storage device, you can print an image file. For example, you can print a file before uploading it to be sure it is the correct file to upload.

- 1 Make sure the USB storage device has a single partition and is formatted as FAT16 or FAT32.
- 2 Insert the USB storage device into the printer USB host port.
- 3 From the Ready screen, press . The Main Menu appears.
- 4 Select **Tools > USB Menu > Print File**. A list of printable files appears.
- 5 Select the file from the list and press . The file prints.



Upload Applications and Files from a USB Storage Device

This topic explains how to upload applications and files to the printer from a USB storage device.

- 1 Copy the files to the appropriate directory on the USB storage device.
- 2 Insert the storage device into the USB host port on the printer. The USB Device menu appears.
- 3 Select **Install Resources** and then press .

- 4 To upload all files to the printer, select **Install All** and then press . All valid files are uploaded to the printer memory.

To upload only one file at a time:


- a Select the type of item you want to upload (**Applications**, **Fonts**, **Forms/Layout**, **Web Forms**, **Images**, **Fingerprint Programs**, or **Display**) and then press .
- b Select the file from the list and then press . The file is uploaded to the printer memory.

Export Applications and Files to a USB Storage Device

This topic explains how to export applications and files from the printer to a USB storage device.





Note: You can only export applications and files that you previously uploaded to the printer memory.

- 1 Make sure the USB storage device has a single partition and is formatted as FAT16 or FAT32.
- 2 Insert the storage device into the USB host port on the printer. The USB Device menu appears.
- 3 Select **Export Resources** and then press . All applications and files in printer memory are copied to the USB storage device.

Export a Configuration File to a USB Storage Device

You can save an .xml configuration file to a USB storage device and install it on other printers.

- 1 Make sure the USB storage device has a single partition and is formatted as FAT16 or FAT32.
- 2 Insert the storage device into the printer USB host port.
- 3 From the Ready screen, press . The Main Menu appears.


- 4 Select **Tools > USB Menu**.
- 5 Select **Configuration**.
- 6 Select **Export Configuration**. A list of the available files appears.
- 7 Select the file to export and then press . The file is exported to the USB memory device.

Install a Configuration File from a USB Storage Device

After you save an .xml configuration file to a USB storage device, you can install it on the printer at any time.



Note: If there is more than one configuration file on the USB storage device, the printer imports the first file found in alphabetical order by file name.

- 1 Insert the USB storage device in the printer USB host port.
- 2 From the Ready screen, press . The Main Menu appears.
- 3 Select **Tools > USB Menu**.
- 4 Select **Configuration**.
- 5 Select **Install Configuration**. The printer imports the configuration file.
 - For most printer languages, the configuration file is imported directly into the working configuration and is not copied to the /config directory.
 - An IPL configuration file is copied to /home/user/config/ipl.
 - An ESim configuration file is copied to /home/user/config/esim.

Upload or Delete Applications and Resources from the Printer Web Page

From the printer web page, use the Manage page to upload or delete applications, fonts, images, label formats, or web forms.



Note: You can only delete applications and resources you downloaded to the printer memory. You cannot delete resident applications or resources, which are installed as part of the printer firmware.

To upload or delete applications or resources from the printer web page, the printer must be turned on and connected to your Wi-Fi or Ethernet network.

- 1 On your PC, start a browser.
- 2 In the **Location** or **Address** field, type the printer IP address and press **Enter**. The printer web page appears.
- 3 Click the **Manage** tab.



- 4 In the navigation list, click the type of file you want to upload or delete: **Applications**, **Fonts**, **Images**, **Label Formats**, or **Web Forms**. The page for that type of file appears, including a list of **Resident** (Intermec-supplied) files of that type and a list of **Customer Downloaded** files of that type (if any).

- 5** To upload an application or file to the printer:
 - a** Click **Browse** to locate your application or file.
 - b** Double-click the file to select it.
 - c** Click **Upload**. The application or file uploads to the printer.

To delete an application or file, click the file name in the **Customer Downloaded** list and then click **Delete**. The file is deleted.

5

Troubleshoot the Printer

This section explains how to troubleshoot the PD43 printers.

Call Product Support

If you cannot find the answer to your problem in the “Troubleshooting” section, go to the Intermec technical knowledge base (Knowledge Central) at intermec.custhelp.com to review technical information or to request customer support. If you still need help after visiting Knowledge Central, 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 Us** to find your local Intermec representative.

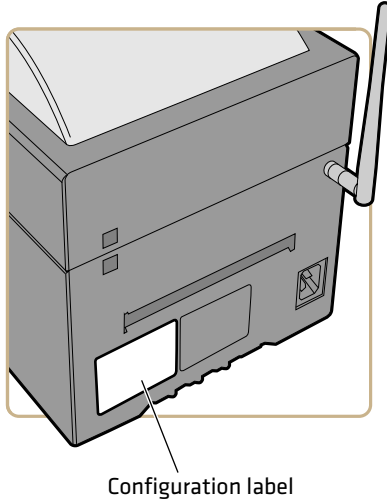
Before you call Intermec Product Support, make sure you have this information ready:

- Printer serial number
- Printer configuration number
- Firmware type and version
- Printer command language
- Wireless or serial port settings
- Installed options
- Media settings
- Ethernet settings
- Bluetooth settings

You can find all of this information on the printer web pages or on a test label.

Locate the Printer Configuration and Serial Numbers

The printer configuration and serial numbers can be found on the product label located on the back panel of the printer.



Configuration label

Problems and Possible Solutions

Use this table to understand and troubleshoot some common problems you may encounter.

Problems and Possible Solutions

Problem	Possible Solution
The printer does not feed media correctly.	Remove the media from the media compartment and reinstall the media.
The printer is connected to a serial port on my PC, but the printer is not working.	Try these possible solutions: <ul style="list-style-type: none"> • Make sure the serial port settings are configured correctly. • If you have the Intermec Windows driver for an RS-232 printer installed on your PC, uninstall the driver.

Problems and Possible Solutions (Continued)

Problem	Possible Solution
The printer is connected to my PC using a virtual COM port, and printing stops. But, there are no errors to indicate that something is wrong.	Make sure that bidirectional support is disabled. From the printer properties dialog box, click the Ports tab, and then clear the Enable bidirectional support check box.
The printout is weak.	<p>Try these possible solutions in order:</p> <ul style="list-style-type: none"> • Make sure that your media setting is appropriate for the type of media you are using. • The contrast may be too low. Increase the contrast. • Replace the printhead.
There are weak spots on the printout.	<p>Try these possible solutions in order:</p> <ul style="list-style-type: none"> • There may be foreign particles on the media. Clean or replace the media. • Make sure that your media and ribbon are compatible. • Make sure that you are using high quality media and ribbon. • The contrast may be too low. Increase the contrast.
The printout is dark or there is excessive bleeding on the media.	<p>Try these possible solutions in order:</p> <ul style="list-style-type: none"> • Make sure your media setting is appropriate for the type of media you are using. • The contrast may be too high. Decrease the contrast. • The printhead voltage may be incorrect or the energy control may be faulty. For help, contact your Intermec representative.
There are dark lines along the media path.	The printhead may be dirty. Clean the printhead.

Problems and Possible Solutions (Continued)

Problem	Possible Solution
There are white vertical lines on the printout.	<p>Try these possible solutions in order:</p> <ul style="list-style-type: none"> • The printhead may be dirty. Clean the printhead. • There may be missing dots on the printhead. Replace the printhead. • The ribbon may not be installed correctly.
Part of a dotted line is missing.	<p>Try these possible solutions in order:</p> <ul style="list-style-type: none"> • The printhead may be failing. Replace the printhead. • The strobe signal may be failing. For help, contact your Intermec service representative.
The inner edge of the printout is missing.	<p>Try these possible solutions in order:</p> <ul style="list-style-type: none"> • The media may not be properly installed or aligned. Reload the media. • The media margin or X-start parameter may be set too low. Increase the setting.
The content on my printout is compressed.	The print speed may be too high. Lower the print speed.
Nothing shows up on my thermal transfer printout.	The ink-coated side of the ribbon may not be facing the media. Reload the ribbon.
When I feed or print a label, the ribbon is not taken up. Instead, it spills out the front of the printer.	<p>Try these possible solutions in order:</p> <ul style="list-style-type: none"> • Make sure the ribbon is loaded correctly and that you are using the correct type of ribbon for the printer. • If you are using ribbon with a notchless core, you must use the ribbon core adapter for the ribbon feed to work properly.

Problems and Possible Solutions (Continued)

Problem	Possible Solution
The ribbon breaks.	<p>Try these possible solutions in order:</p> <ul style="list-style-type: none"> • Make sure your media setting is appropriate for the type of media you are using. • Make sure that the ribbon is fitted correctly. Reload the ribbon. • The energy control may be faulty. For help, contact your Intermec Service representative.
The Ethernet or wireless network connection is not working correctly.	<p>Try these possible solutions:</p> <ul style="list-style-type: none"> • Make sure your network cable is securely connected to your printer and a straight “pin-to-pin” cable, not a “crossover” cable. • Make sure your PC is correctly configured for and connected to your network. • Make sure your printer is correctly configured for your network.
I cannot connect to the printer web page.	<p>If you are connecting your printer with a crossover network cable, you may need to disable the web browser’s proxy settings on your computer to access the printer web page.</p>
The printer has RFID media loaded, but it is not writing to the tags.	<p>After you load RFID media, restart the printer to let the printer identify the RFID media type or run the RFID calibration wizard.</p>
The RFID module is installed in the printer, but “RFID” does not appear in the menu.	<p>The printer is not communicating properly with the RFID hardware. For help, contact your local Intermec representative.</p>
None of the RFID commands work.	<p>RFID is disabled. Enable RFID from the web page or the Main Menu. Go to Settings (Main Menu) or Configure tab (web page) > System Settings > Manage I/O.</p>

Problems and Possible Solutions (Continued)

Problem	Possible Solution
Printing on regular media (not RFID) is slow and halted in between labels.	RFID is enabled. Disable RFID from the web page or the Main Menu.
I am using an application to write to RFID tags and the printer is printing “VOID” labels.	Try these possible solutions: <ul style="list-style-type: none"> • The printer may not recognize the RFID media type. Restart the printer or run the media or RFID calibration wizard. • You may need to modify the Tag Position parameter. • You may need to adjust the output power (field strength) to the antenna.
I receive this message “No RFID tag found.”	Try these possible solutions: <ul style="list-style-type: none"> • Make sure you are using RFID media. • You may need to modify the Tag Position parameter. • The tag may be broken. Try printing on a different label.
When I send a TAGREAD or TAGWRITE command, I get this error message: “Tag format error.”	The TAGFORMAT defined for the operation determines the number of required parameters. You may need to modify the TAGFORMAT. For help, see the Intermec Fingerprint Command Reference Manual or the IPL Command Reference Manual . For more information, see the EPC Tag Data Standard (v1.1, revision 1.27) available from the EPCglobal website at www.epcglobalinc.org .
My icon printer uses the ZSim printer language and prints configuration labels every time I turn the power on.	Icon printers running ZSimprint configuration labels on startup by default. To prevent this, use Notepad to create a .txt file named “STLABPD41nPM43.txt”. In the file, type “0”. Copy the file to the /home/user directory on the printer.

Problems and Possible Solutions (Continued)

Problem	Possible Solution
My printer does not communicate with my desktop PC when they are connected with the USB-to-parallel adapter cable.	Windows may not have installed the driver. Follow these steps: <ol style="list-style-type: none">1 Connect the adapter cable to the printer but not to the PC.2 Turn the printer on and wait until the startup process is complete.3 Turn the printer off, and then turn the printer on.4 Connect the adapter cable to the PC. Windows auto-detects the printer and installs the driver.5 After the driver is installed, run a test print.

How to Restore Default Settings

You can restore default printer settings:

- from the printer web page.
- from the printer main menu.
- from the PrintSet 5 application. For more information, see the PrintSet online help.

Restore Defaults from the Printer Web Page




If the printer is connected to an Ethernet or wireless network, you can restore default settings from the printer web page.


- 1 On your desktop PC, start a web browser.
- 2 In the address field, type the printer IP address and then press **Enter**. The printer web page appears.
- 3 Click **Login** in the upper right corner of the screen. The Login page appears.
- 4 Type your **Username** and **Password** in the entry fields and then click **Login**. The default username is `itadmin` and the default password is `pass`.
- 5 Click the **Services** tab > **Restore Defaults**.

- 6 Select the settings you want to restore:
 - Check the **Network settings** check box to restore defaults for all network connections, such as IP address and network name.
 - Check the **User files** check box to erase all files you uploaded to the printer memory.
 - Check the **System Settings** check box to restore defaults for system settings, such as media width or maintenance alerts.
- 7 Click **Restore Defaults**.
- 8 Click **Yes** to continue. The printer restarts and the settings you selected are restored to default values.

Restore Defaults from the Main Menu

This topic explains how to reset printer settings to their default values from the Main Menu. You can choose to restore default network settings, keep or delete user-installed files, and to restore all system settings like media type or serial port settings.

- 1 From the Ready screen, press . The Main Menu appears.
- 2 Select **Tools > Restore Defaults**. The Restore Defaults menu appears with all items in the list selected by default. If you continue without changing anything, the current network and system settings will be restored to default values, and any files or programs you uploaded to the printer will be erased from the printer memory.
- 3 To restore all default settings, continue with the next step. You can also change the settings that are restored as follows:
 - To keep the current network settings, clear the **Network settings** check box.
 - To keep all applications, fonts, and other files you have installed on the printer, clear the **User files** check box.
 - To keep all current system settings, clear the **System Settings** check box.
- 4 Select  and press .

- 5 To continue, press . The default settings are restored and the printer restarts. When the printer finishes starting up, the Setup Wizard begins. Follow the instructions to complete the Wizard.

To return to the Main Menu without restoring any defaults, select **No**. To return to the Restore Defaults list without restoring any defaults, select **Cancel**.

How to Upgrade the Printer Firmware

You should check for periodic updates to the printer firmware. Updated firmware can include bug fixes or additional features that you might find useful. The latest version of the firmware is available from the printer Downloads page on www.intermec.com.

You can upgrade the printer firmware using:

- the printer web page.
- a USB storage device.
- PrintSet 5. For more information, see the PrintSet 5 online help.



Note: After you upgrade the printer firmware, Intermec recommends that you restore the default settings and calibrate the media sensors.

Download the Printer Firmware Update

Before you can upgrade the printer firmware, you need to download the upgrade file from the Intermec website.

- 1 Go to the Intermec website at www.intermec.com.
- 2 Click **Support > Downloads**.
- 3 Use **Product Category**, **Product Family**, and **Product** to select the PD43 or PD43c.
- 4 Click **Submit**. The latest software appears on the page.
- 5 Download the latest firmware version to your PC.

Upgrade Firmware from the Printer Web Page

You can upgrade the printer firmware from the printer web page. To configure the printer from the web page, the printer must be turned on and connected to your Wi-Fi or Ethernet network.

- 1 On your PC, open a browser.
- 2 In the **Location** or **Address** field, type the printer IP address and press **Enter**. The printer web page appears.
- 3 Click **Login** in the upper right corner of the screen. The Login page appears.
- 4 Type your **Username** and **Password** in the text fields and click **Login**.
- 5 Click the **Services** tab and then select **Firmware Upgrade**. The Firmware Upgrade screen appears, showing the current firmware version.
- 6 Click **Browse** to locate the upgrade file, select it, and then click **Open**.
- 7 Click **Upgrade**. The printer web page shows that it is upgrading firmware on your printer.

Upgrade Firmware from a USB Storage Device

You can upgrade the printer firmware from a USB storage device.



Note: For best results, Intermec recommends using a USB storage device that contains no other files.

- 1 Make sure the USB storage device has a single partition and is formatted as FAT16 or FAT32.
- 2 Download the printer firmware from the Intermec website.
- 3 Copy the firmware upgrade file (typically in .bin format) to the root of a USB storage device.
- 4 Insert the USB storage device into one of the USB host ports.

- 5 Restart the printer. The upgrade file is loaded into the printer memory. This may take several minutes.



For the LCD printer, after the upgrade file is loaded, the printer restarts and the Ready screen appears. The printer is ready to use.

For the icon printer, as the upgrade file is loaded, all icons in the icon panel turn on and then turn off, except for the Maintenance icon. After the upgrade file is loaded, the printer restarts and the Ready-to-Work indicator turns on:

- If the Ready-to-Work indicator turns on and stays on, the upgrade process is finished and the printer is ready to use.
- If the Ready-to-Work indicator is flashing, you need to restart the printer once again to complete the upgrade.
- If the Ready-to-Work indicator is off, there may be a condition that is preventing the printer from restarting. For example, the printer lid may not be fully closed.

Upgrade Firmware from the USB Menu

If you have an LCD printer, you can upgrade the printer firmware through the USB menu. This procedure is different from upgrading firmware from a USB storage device without going through the USB menu.

- 1 Make sure the USB storage device has a single partition and is formatted as FAT16 or FAT32.
- 2 Download the printer firmware from the Intermec website.
- 3 On your USB storage device, create a /firmware directory.
- 4 Copy the firmware upgrade file (typically .bin format) to the /firmware directory on the USB storage device.
- 5 Insert the USB storage device into the printer USB host port. The USB Menu appears.
- 6 In the USB Menu list, select **Upgrade Firmware**.
- 7 In the Upgrade Firmware list, select the firmware upgrade file and press . An “Upgrade Firmware?” message appears.
- 8 Press  to start the upgrade. When the upgrade is complete, the printer restarts and the Ready screen appears.

About Alerts

To help maintain the printer, you can configure the printer to send alert messages when certain conditions occur. For example, the printer can send a message when the odometer reaches a certain value, or if the printhead is lifted during printing.

There are three types of alerts:

- Error alerts
- Information alerts
- Warning alerts

You configure alert settings in the printer web page. Alert messages can be sent to an email address, an SNMP trap, or both. You can enable or disable each type of alert, set the number of times the alert is repeated, set the unit of measure that determines how often the alert is sent, and change the default text message for the alert.

Configure Alerts

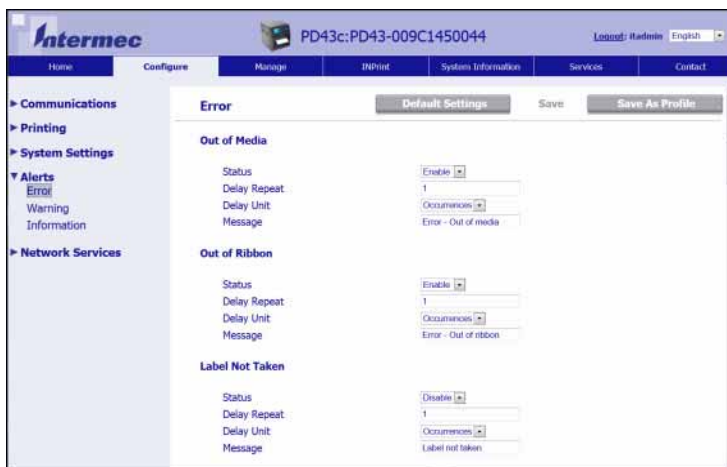
This section explains how to configure alerts and alert messages. You configure alert settings from the printer web page.



Note: To configure the printer from its web page, the printer must be turned on and connected to your Wi-Fi or Ethernet network.

- 1 On your desktop PC, start a browser.
- 2 In the **Location** or **Address** bar, type the printer IP address and press **Enter**. The printer web page appears.
- 3 Click **Login** in the upper right corner of the screen. The Login page appears.
- 4 Type your **Username** and **Password** in the entry fields, and then click **Login**.

5 Click the **Configure** tab > **Alerts**.



6 Click **Error** to configure error alerts.

Click **Warning** to configure warning alerts.

Click **Information** to configure information alerts.

7 Change alert settings as necessary. When you are finished, click **Save**.

To restore default settings for all alerts on the page, click **Default Settings**.

Maintenance and Error Alert Messages

Use these tables to understand and troubleshoot some common error alerts you may receive and how to fix them.

Maintenance and Error Alert Messages

Message	Description and Solution
Label Not Taken	Printing has been stopped because a label is obstructing the label taken sensor. Remove the label to resume printing.
Printhead Lifted	Lower the printhead.
Out of Ribbon	Load ribbon in the printer.
Out of Media	Load media in the printer.

Maintenance and Error Alert Messages (Continued)

Message	Description and Solution
Ribbon Installed	The printer is configured as a direct thermal printer and thermal transfer ribbon is installed. Remove the ribbon or configure the printer for thermal transfer media.
Printer in Pause Mode	A print job is paused from the front panel. Press the Print button to resume printing.
Printer in Menu Mode	A user entered a menu from the front panel. Press the Home button to return to the Ready screen.
Application Break	Fingerprint only. An application breaks uncontrolled.
Print Job Complete	A print job has been successfully completed.
Odometer (Printer)	The printer has reached a limit set in the Odometer (Printer) setting in Maintenance Alerts for the amount of media to print before being alerted.
Odometer (User Resettable)	The printer has reached a limit set in the Odometer (User Resettable) setting in Maintenance Alerts for the amount of media printed since the last reset.
Printhead Too Hot	The printhead is overheated and needs to cool down. Wait for printing to resume automatically.
Printhead Not Detected	The printer is not detecting the printhead. Check the printhead cable.
Faulty Dot	The printhead has reached the number of faulty dots set in the Faulty Dots setting in Maintenance Alerts. You may need to replace the printhead.
Replace Printhead	The printer has reached a limit set in the Replace Printhead setting in Maintenance Alerts for the amount of media to print before replacing the printhead. Replace the printhead.
Clean Printhead	The printer has reached a limit set in the Clean Printhead setting in Maintenance Alerts for the amount of media to print before cleaning the printhead. Clean the printhead.
No RFID Tag Found	The printer cannot find an RFID tag. You need to disable RFID on the printer.
RFID Not Installed	You are attempting to write to a tag, but the printer does not support RFID. You must install the RFID module in the printer to be able to write to RFID tags.

Maintenance and Error Alert Messages (Continued)

Message	Description and Solution
Upgrading Firmware	The printer is going to start upgrading the firmware. Do not try to send anything to the printer.
Printer is Rebooting	The printer is going to restart. Wait until the printer is ready before attempting to communicate with it.
Started	The printer is in the process of starting up.

About Printer System Information

Look in the System Information tab in the printer web pages for useful information and statistics on the printer hardware and firmware. This information can be useful when you contact Intermec Product Support for assistance or troubleshooting.



Note: The printer must be connected to an Ethernet or wireless network to view system information in the printer web page.



View Printer Statistics

If your printer is connected to an Ethernet or Wi-Fi network, you can view printer statistics in the printer web page.

- 1 On your PC, open a browser.
- 2 In the **Location** or **Address** bar, type the printer IP address and press **Enter**. The printer web page appears.
- 3 Click the **System Information** tab.
- 4 Click **Statistics**.
- 5 Click a category to see more information. For example, click **Print Statistics** to see the number of labels printed and odometer values.

Statistic	Description
System information	Printer uptime and CPU usage, firmware and kernel versions, printer configuration and serial numbers, flash and RAM memory information.
Print Statistics	Total labels printed, RFID tag success rate, odometer values, total distance printed (printer and current printhead).
Supply	Printhead, media, and ribbon information.
Hardware Options	Input/output devices, serial port information.
Administration	Failed login tries, user information.
Network Interfaces	MAC address, TCP/IP and 802.11 network information.
Font Information	Name, type, and size of installed fonts.
Bar Code Information	Name and type of installed bar code fonts.
Image Information	Name, type, and size of installed images.

Check the Printer Odometer

You can check the odometer from the printer web page to see the printhead usage and how the current values compare to the alert values. To check the printer odometer from the printer web page, the printer must be turned on and connected to your Wi-Fi or Ethernet network.

- 1** On your desktop PC, start a browser.
- 2** In the **Location** or **Address** bar, type the printer IP address and press **Enter**. The web page for the printer appears.
- 3** Click the **System Information** tab.
- 4** Click **Odometer**. The list of current odometer statistics appears.

6

Maintain the Printer

This section explains how to perform basic maintenance on the PD43 printers.

Clean the Printhead

Cleaning the printhead on a regular basis is important for the life of the printhead and for the print quality. You should clean the printhead each time you replace the media. Follow this procedure to clean the printhead using the cleaning card. If you need to clean additional residue from the platen roller or tear bar, use a cotton swab moistened with isopropyl alcohol.



Caution: Never use hard or sharp tools to peel away stuck labels or other material. The printhead is delicate and can easily be damaged.

- 1** Turn the printer off and disconnect the printer from power.
- 2** Open the printer and remove the media and ribbon (if installed).
- 3** Insert most of the cleaning card under the printhead, and then lower the printhead.
- 4** Pull out the cleaning card and raise the printhead.
- 5** Wait for approximately 30 seconds to allow the cleaning fluid to dissolve the residue.
- 6** Repeat Steps 3 through 5 if necessary.
- 7** If necessary, clean residue from the platen roller or tear bar with a cotton swab moistened with isopropyl alcohol.
- 8** Once the parts are dry, replace the media (and ribbon) in the printer.
- 9** Close the printer, reconnect power, and turn on the printer.

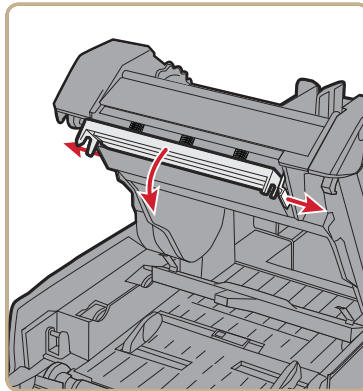
Replace the Printhead

You need to replace the printhead periodically when it wears out due to the rapid heating and cooling process used during printing. How often you need to replace the printhead depends on factors such as what type of images you print, the type of media or ribbon you use, the amount of energy to the printhead, the print speed, and the ambient temperature of the room you print in. The firmware detects the new printhead when you restart the printer.

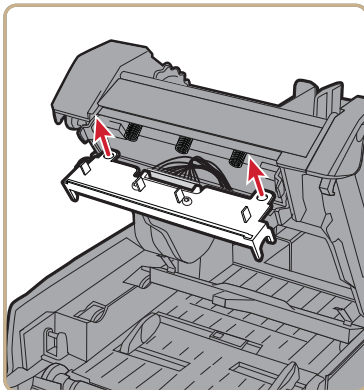
- 1** Turn off the printer and disconnect the power cord.
- 2** Open the top of the printer.
- 3** Open the media compartment door.
- 4** Press the printhead button and raise the printhead.

For a thermal transfer printer, remove the ribbon.

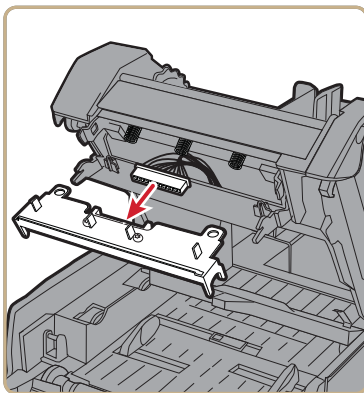
- 5** Press the printhead latches apart. The printhead holder swings down and away from the mechanism.



- 6** Carefully slide the printhead out of the mechanism. The printhead is still attached to the mechanism by a ribbon cable.



- 7** Disconnect the cable from the printhead and remove the printhead from the printer.



Warning: Do not touch the printhead surface area.

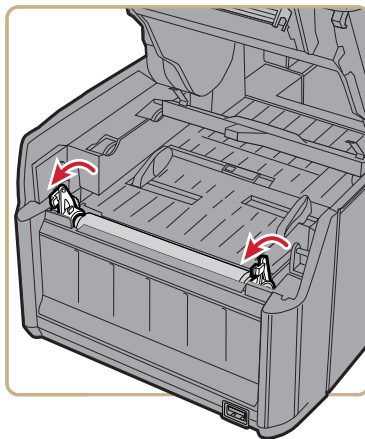
- 8** Connect the ribbon cable to the new printhead.
- 9** Slide the printhead into the holders in the print mechanism.
- 10** Press the printhead onto the locator pins in the mechanism.

- 11** Tilt the printhead up into the print mechanism and press it into place. When the printhead is in the correct position, the printhead latches snap into place on the sides of the printhead.
- 12** For a thermal transfer printer, install the ribbon.
- 13** Press the printhead down to lock it in place.
- 14** Close the media door and the top of the printer.
- 15** Print a test label.

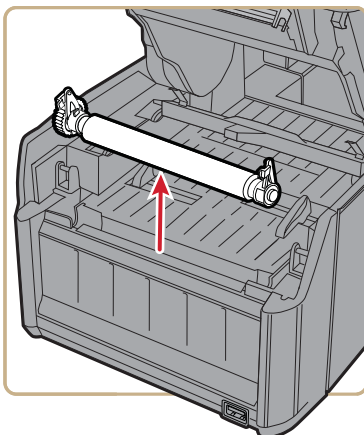
Clean the Platen Roller

Follow this procedure to remove, clean, and replace the platen roller as part of standard maintenance for the printer. Intermec recommends that you check the platen roller for debris and clean it each time you replace media.

- 1** Turn the printer off and disconnect the power cord.
- 2** Open the top of the printer.
- 3** Open the media compartment door.
- 4** Press the printhead release button and raise the printhead.
- 5** Remove the installed media.
- 6** Press the roller latches apart and tilt them up.



- 7** Pull the latches up to remove the platen roller from the printer.



- 8** Remove any adhesive residue from the roller with a cotton swab moistened with isopropyl alcohol.
- 9** Reverse Steps 6 and 7 to install the roller.
- 10** Press the latches into the printer until they snap into place.
- 11** Replace the media in the printer.
- 12** Press the print mechanism down to lock it in place.
- 13** Close the media door and printer lid.

Clean the Exterior of the Printer

Make sure to keep the exterior of the printer clean. Maintaining a clean exterior will reduce the risk of dust or foreign particles reaching the inside of the printer and affecting printer functionality.

Use a soft cloth, possibly moistened with water or a mild detergent, when cleaning the printer exterior.

Make sure to keep the surface surrounding the printer clean as well.

A

Specifications

This appendix contains specifications for the printers.

Printer Specifications

PD43 and PD43c Physical Specifications

Dimensions:

PD43c	20.5 cm x 21.1 cm x 23.6 cm (8.1 in x 8.3 in x 9.29 in)
PD43c with external media holder	20.5 mm x 21.1 cm x 43.3 cm (not including media) (8.1 in x 8.3 in x 17.0 in)
PD43 with flat top window	20.8 cm x 21.1 cm x 47.0 cm (8.2 in x 8.3 in x 18.5 in)
PD43 with dome top window	24.9 cm x 21.1 cm x 47.0 cm (9.8 in x 8.3 in x 18.5 in)
Weight:	PD43c: 5.1 kg (11.25 lbs) PD43c with external media holder: 6.0 kg (13.25 lbs) PD43: 8.3 kg (18.3 lbs)
Power Requirements:	PD43c: 24 VDC, 2.5 A (60 W) (From external power supply) PD43: 100 to 240 VAC, 60 W
Operating Temperature:	5 °C to 40 °C (41 °F to 104 °F)
Storage Temperature:	-40 deg C to 60 deg C (-40 °F to 140 °F)
Relative Humidity:	10% to 85%, non-condensing

Print Speed, Resolution, and General Media Specifications

Print Mode:	Direct thermal or thermal transfer
Print Speed (variable):	203 dpi: 50 to 200 mm/sec (2 to 8 ips) 300 dpi: 50 to 150 mm/sec (2 to 6 ips)
Print Resolution:	203 dpi: 8 dots/mm 300 dpi: 11.8 dots/mm
Print Width:	203 dpi: 104 mm (4.09 in) max 300 dpi: 106 mm (4.17 in) max
Media Width:	19 to 118 mm (0.75 to 4.65 in)
Label Roll Diameter (maximum):	213 mm (8.38 in)

Print Speed, Resolution, and General Media Specifications

Label Length (minimum):	6.35 mm (.25 in)
Gap Length Between Labels:	2 to 25.4 mm (0.08 to 1.0 in)
Black Mark Length	3 to 26 mm (0.12 to 1.02 in) centered between tickets, 15% maximum reflectance
Media Thickness:	76.2 to 221 µm (3 to 8.7 mil) 76.2 to 248.9 µm (3 to 9.8 mil) supported when thick media springs are installed Flexible wristbands up to 10 mils (maximum)
Media Density:	60 to 210 g/m ²
Liner Opacity (maximum):	76% (TAPPI T425)
Ribbon Width	25.4 to 110 mm (1 to 4.33 in)
Ribbon Roll Diameter (maximum)	68 mm (2.68 in)
Ribbon Core (I.D.)	For 12.5 mm (0.5 in) core: 12 to 14 mm (0.47 to 0.55 in) For 25.4 mm (1.0 in) core: 25.4 to 25.8 mm (1.0 to 1.016 in)
Ribbon Core Length	110 mm (4.33 in) notched
Ribbon Wound Ink Side	In or out
Label Stop Sensor	Adjustable from left media edge to 4.5 mm right of center on LCD printers (fixed at center on Icon printers)

General Specifications

Specification	Description
Memory	<ul style="list-style-type: none">• 128 MB flash• 128 MB SDRAM• (Optional) USB memory device, up to 32 GB
Supported command languages	<ul style="list-style-type: none">• Fingerprint• Direct Protocol• Intermec Printer Language (IPL)• DSim• ESim• ZSim• Smart Printing
Network services	<ul style="list-style-type: none">• FTP• HTTP Server• SNMP• Line Printer Remote Protocol (lpr)• Telnet• DHCP• Ping• IPSEC/IKEv2 over IPv6• SSH
Universal Font Scaling Technology and Standard Latin fonts	<ul style="list-style-type: none">• Monotype Century Schoolbook• CG Times• CG Times Bold• Letter Gothic• Andale Mono (WGL4)• Andale Mono Bold (WGL4)• Univers 55• Univers Bold 65• Univers Condensed Bold• Univers Extra Condensed• OCR-A• OCR-B
Supported font types	<ul style="list-style-type: none">• TrueType• OpenType• Bitmap

General Specifications (Continued)

Specification	Description
Localization fonts	<ul style="list-style-type: none"> • Simplified Chinese (optional) • Traditional Chinese (optional) • Cyrillic • Korean (Optional) • Latin • Greek • Turkish • Hebrew • Arabic • Baltic • Baltic Rim • Vietnamese • Thai
Supported graphic file types	<p>Supports 1-bit color depth (black and white) only:</p> <ul style="list-style-type: none"> • PCX • PNG • GIF • BMP
Drivers	<ul style="list-style-type: none"> • Support for Microsoft Windows XP, Vista, Windows 7, Windows 8, Server 2003, and Server 2008 • Supports 32-bit and 64-bit editions

Supported Bar Code Symbolologies

1D bar code symbolologies:

- Codabar
- Code 11
- Code 39:
 - Code 39 full ASCII
 - Code 39 with checksum
- Code 93

Appendix A – Specifications

- Code 128:
 - Code 128 Subset A
 - Code 128 Subset B
 - Code 128 Subset C
 - Code 128 UCC
- DUN-14/16
- EAN:
 - EAN-8
 - EAN-13
 - EAN 128
 - EAN 128 subset A
 - EAN 128 Subset B
 - EAN 128 Subset C
- HIBC 39
- HIBC 128
- Industrial 2 of 5:
 - Industrial 2 of 5 with checksum
- Interleaved 2 of 5:
 - Interleaved 2 of 5 with checksum
 - Interleaved 2 of 5 IATA
- ISBT-128
- Matrix 2 of 5
- Straight 2 of 5

- UPC:
 - UPC-A
 - UPC-D1
 - UPC-D2
 - UPC-D3
 - UPC-D4
 - UPC-D5
 - UPC-E
 - UPC Shipping container Code

Add-on bar code symbologies:

- Add-on 2
- Add-on 5
- UPC-5 digits Add-on code

2D bar code symbologies:

- Aztec
- Code 16K
- Code 49
- Data Matrix
- Dot Code
- Grid Matrix
- GS1 DataBar (previously called RSS-14):
 - GS1 DataBar Expanded
 - GS1 DataBar Expanded Stacked
 - GS1 DataBar Limited
 - GS1 DataBar Stacked
 - GS1 DataBar Stacked Omnidirectional
 - GS1 DataBar Truncated
- MaxiCode
- MicroPDF417
- MSI (modified Plessey)

Appendix A – Specifications

- PDF417
- Planet
- Plessey
- Postnet
- QR Code
- USPS 4-State Customer Bar Code

Composite bar code symbologies:

- EAN-8 Composite (CC-A, CC-B)
- EAN-13 Composite (CC-A, CC-B)
- GS1 Composite (previously called EAN.UCC Composite)
- UPC-A Composite (CC-A, CC-B)
- UPC-E Composite (CC-A, CC-B)

Test Labels

This section describes test label information. A typical test label looks like this:

Resident Fonts	
Andale Mono	123456789
Andale Mono Bold	123456789
CG Times	123456789
CG Times Bold	123456789
Century Schoolbook Roman	123456789
IPLFONT0	123456789
IPLFONT1	123456789
IPLFONT2	123456789
IPLFONT7	123456789
Letter Gothic	123456789
OCR A	123456789
OCR B	123456789
Univers	123456789
Univers Bold	123456789
Univers Condensed Bold	123456789
Univers Extra Condensed	123456789
Downloaded Fonts	
None	

Sample Configuration Label for Fonts

Resource Labels

Label	Description
Applications	All Intermec utility programs and user-installed applications.
Fonts	Resident and user-installed fonts.
Bar Codes(Barcodes)	Resident bar codes (partial label shown).
Images	All images, including resident and user-installed files.

Printer Information Labels

Label	Description
Installed Hardware	List of hardware modules in the printer, including: <ul style="list-style-type: none">• Main logic board configuration number• Wireless 802.11 MAC address• Ethernet• Serial Port• USB Device• USB Host• Bluetooth• Thermal Printhead• Front Panel• Ribbon• Power Supply Unit
Print Statistics	Number of labels printed, current odometer value, and total distance printed.
System Information	General product information, including: <ul style="list-style-type: none">• Firmware version• Product name, configuration number, serial number, system name, and command language• Printhead resolution• Mean printhead resistance• Total flash memory and available flash memory• Total RAM and free RAM

Printer Settings Labels

Label	Description
Media and Printing	<p>Current settings for media handling, including:</p> <ul style="list-style-type: none"> • Media width, length, and X-margin • Selected media type • Printing method (TTR or DT) and speed • Start Adjust and Stop Adjust values
Ethernet Settings	<ul style="list-style-type: none"> • MAC Address • Primary and secondary DNS servers • IPv4 settings: IP assignment method, IP address, subnet mask, default router, DHCP response type • IPv6 settings: IP assignment method, IP address
Serial Port Settings	<ul style="list-style-type: none"> • Baud rate • Data bits • Parity • Stop bits • Flow control: Hardware, ENQ/ACK, XON/XOFF To, XON/XOFF From • New Line character
Bluetooth Settings	<ul style="list-style-type: none"> • Bluetooth MAC address (human-readable and bar code formats) • Security status • Device name and discovery state • Passkey • Reserve • ScanNGo bar code

Printer Settings Labels (Continued)

Label	Description
Wi-Fi General	<ul style="list-style-type: none">• IP address and assignment method• Subnet mask• Default router• DHCP Response• IPv6 address and assignment method• 802.11 MAC address• Network name (SSID) and type• Roaming state• Power mode• Channel• Hidden SSID state• Country string• Access point MAC address• RSSI
Wi-Fi Security	<ul style="list-style-type: none">• Security Type• Association• PreShared Key• Network Key Index• Network Key 1, 2, 3, 4• User Name• Password• Anonymous Name• Inner Authentication• CA Certificate• Client Certificate• Client Key• Server Common Name 1 and 2• Validate Certificate• PAC• Acquire PAC• Fast Roaming (CKKM)• Supplicant State

Print Quality Labels


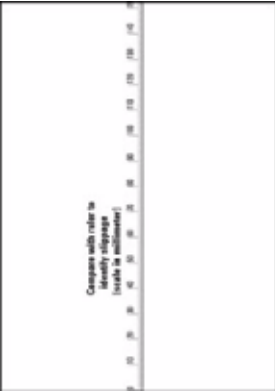



Note: Although you can print test labels on any size media, the labels are designed to be printed on 10.16 cm x 15.24 cm (4 in x 6 in) media.

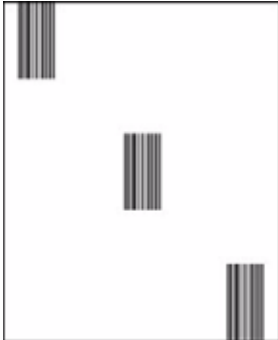
Print Quality Labels

Label	Description
Chess	
Diamond	

Print Quality Labels (Continued)

Label	Description
Pitch	
Ruler	
Bar Code(Barcode)	

Print Quality Labels (Continued)

Label	Description
Wrinkle	

B

Default Settings

This appendix contains all of the default settings for the printer.

Default Configuration

Use this appendix to view the default settings on the printer. The following tables list the default settings for the printers. If you restore the printer to factory default settings, it will use the values listed here. The order of the settings reflects the organization of the printer web page and Main Menu.

Bluetooth Settings

This section describes Bluetooth settings for the printer. To view these settings:

- From the printer Main Menu, select **Settings > Communications > Bluetooth**.
- From the printer web page, click the **Configure** tab, **Communications > Bluetooth**.

Bluetooth Settings

Setting	Description	Default
Security	Selects the level of security that is used when pairing devices to the printer. If you select Authentication , you must enter a passkey. If you select Auth + Encrypt , you must enter a passkey and traffic is encrypted.	Disable
Device Name	Sets the name that identifies the printer in the Bluetooth network. Maximum length is 16 characters.	Printer model number and serial number. For example, PD43A030000100.
Discover	Determines if other Bluetooth devices can detect the printer.	Enable
Passkey	Sets the passkey that is used when pairing Bluetooth devices to the printer. Range is 1 to 16 characters (case-sensitive).	1234
Reserve	Determines if the printer is exclusively reserved for one Bluetooth device. The first Bluetooth device that connects with the printer locks out any other connection attempts.	Disable

Display and Audio Settings

This section describes display and audio settings for the printer. To view these settings:

- From the printer Main Menu, select **Settings > System Settings > Display or Audio**.
- From the printer web page, click the **Configure** tab, **System Settings > Display or Audio**.

Display and Audio Settings

Setting	Description	Default
Brightness	Selects the brightness of the printer screen.	Medium
Idle Information	Selects the information that appears on the printer screen when it is in Idle mode.	IPv4 address
Time Format	Selects the format used to display time on the printer.	24 Hour
Date Format	Selects the format used to display date on the printer.	dd/mm/yyyy
Menu Access	Determines if the Menu button on the printer web page is accessible.	Enable
PIN	Sets the password that allows access to the Menu button on the printer web page, if the Menu Access parameter is set to Enable With PIN. Range is 4 to 16 characters.	1234
Screen Timeout	Selects how long the printer screen stays on before the screen saver starts.	Disable
Feed Key Access	Determines if the Feed button on the printer keypad is enabled or disabled.	Enable
Volume	Sets the printer volume.	Off

Error, Information, and Warning Alert Settings

This section describes error, information, and warning alerts and settings.

To view these settings, from the printer web page, click the **Configure** tab, **Alerts > Error, Warning, or Information**.



Note: These alert settings cannot be configured from the printer Main Menu.

Alert settings apply to each of the error, information, or warning alerts and are configured individually by alert.

Alert Setting Descriptions

Setting	Description
Status	Determines if an alert is sent out for a specific printer event.
Delay Repeat	Sets how often the alert is sent out for a specific printer event. Range is 1 to 65535.
Delay Unit	Selects the unit of measure that determines how often the alert is sent out.
Message	Sets the message that is sent out with each alert for a specific printer event.

Error Alert Default Settings

Error Alert	Status	Delay Repeat	Delay Unit	Message
Out of Media	Enable	1	Occurrences	Error - Out of media
Out of Ribbon	Enable	1	Occurrences	Error - Out of ribbon
Printer in Pause Mode	Disable	1	Occurrences	Printer in pause mode
Printer in Menu Mode	Disable	1	Occurrences	Printer in menu mode
Application Break	Disable	1	Occurrences	Error - Application Break
RFID Not Installed	Disable	1	Occurrences	Error -RFID not installed

Error Alert Default Settings (Continued)

Error Alert	Status	Delay Repeat	Delay Unit	Message
Printhead Lifted	Enable	1	Occurrences	Error - Printhead lifted
Printhead Not Detected	Disable	1	Occurrences	Error - Printhead not detected

Information Alert Default Settings

Information Alert	Status	Delay Repeat	Delay Unit	Message
Print Job Complete	Disable	1	Occurrences	Print job complete
Started	Disable	1	Occurrences	Printer is started
Printer is rebooting	Disable	1	Occurrences	Printer is rebooting

Warning Alert Default Settings

Warning Alert	Status	Delay Repeat	Delay Unit	Message
Ribbon Installed	Disable	1	Occurrences	Warning - Ribbon installed
Upgrading Firmware	Disable	1	Occurrences	Warning - Upgrading firmware
Odometer (User Resettable)	Disable	1	Occurrences	Warning - Odometer (User resettable) has reached a preset value.
Odometer (Printer)	Disable	1	Occurrences	Warning - Odometer (Printer) has reached a preset value.
Replace Printhead	Disable	1	Occurrences	Warning - Replace printhead
Clean Printhead	Disable	1	Occurrences	Warning - Clean printhead
Faulty Dot	Disable	1	Occurrences	Warning - Faulty dot is detected

Error Alerts

Error alerts are sent when a condition occurs that prevents the printer from printing, such as running out of media. These alerts include:

- Out of Media
- Out of Ribbon
- Printer in Pause Mode
- Printer in Menu Mode
- Application Break
- RFID Not Installed
- Printhead Lifted
- Printhead Not Detected

Information Alerts

Information alerts are sent when a print job is started or completed, or when the printer is rebooting. These alerts include:

- Print Job Complete
- Printer is Rebooting
- Started (Sent when a print job has begun)

Warning Alerts

Warning alerts are sent when the printer may need attention shortly, such as when the printhead needs maintenance, or when the odometer has reached a present value. A warning alert is also sent when the printer firmware is being upgraded. Warning alerts include:

- Ribbon Installed (Sent when the printer is set for direct thermal printing but has ribbon installed for thermal transfer printing)
- Ribbon Low
- Upgrading Firmware
- Odometer (User Resettable)
- Odometer (Printer)
- Replace Printhead
- Clean Printhead

- Faulty Dot (Sent when a faulty dot is detected in the printhead, which can lead to lower print quality)

Ethernet Settings

This section describes the Ethernet IPv4 and IPv6 settings. To view these settings:

- From the printer Main Menu, select **Settings > Communications > Ethernet**.
- From the printer web page, click the **Configure** tab, **Communications > Ethernet**.

Ethernet Settings

Setting	Description	Default
(IPv4) IP Assignment Method	Specifies how the printer obtains an IP address.	DHCP
(IPv4) IP Address	Specifies the unique network-level address that is assigned to each device in a TCP/IP network (IPv4).	0.0.0.0
Subnet Mask	Specifies a number that defines the range of IP addresses that can be used in a TCP/IP network.	0.0.0.0
Default Router	Specifies the IP address of a router that is used when a device sends a packet to another subnet or to an unknown destination.	0.0.0.0
DHCP Response	Specifies if the printer receives DHCP responses by broadcast or unicast.	Broadcast
(IPv6) IP Assignment Method	Specifies how the printer obtains an IP address (for IPv6 networks).	Automatic
(IPv6) IP Address	Specifies the unique network-level address that is assigned to each device in a TCP/IP network (IPv6).	Automatic

General System Settings

This section describes general system settings. To view these settings:

- From the printer Main Menu, select **Settings > System Settings > General**.
- From the printer web page, click the **Configure** tab, **System Settings > General**.

General System Settings

Setting	Description	Default
System Name	Sets the network identification name (WINS name) of the printer.	Printer model number and serial number.
System Location	Sets the location of the printer.	Empty string
System Contact	Sets the name of the printer administrator.	Empty string
XML Response Mode	Determines if the printer provides XML responses to printing requests (over Telnet and HTTP).	False
Display Language	(LCD printers only) Selects the language the printer uses to display text on the screen.	English
Display Language (Web Page)	Selects the language the printer uses to display text on the web page.	English
Keyboard Input	Selects the language of the external keyboard that is connected to the printer.	U.S./U.K.
Time	Sets the current time.	System time
AM/PM	Sets AM or PM.	AM
Date	Sets the current date.	System date
Command Language	Sets the printer command language. If changed, requires restart.	Fingerprint
Alert Notification Method	Selects how you want the printer to notify you of printer alerts.	SNMP Trap + Email
Unit of Measure	Selects the unit of measure that is used to define several printing parameters.	Dots

Media Settings

This section describes media settings for the printer. To view these settings:

- From the printer Main Menu, select **Settings > Printing > Media**.
- From the printer web page, click the **Configure** tab, **Printing > Media**.



Note: If you are using an icon printer that is not on a network, you need to use PrintSet 5 through a USB connection to configure media settings.


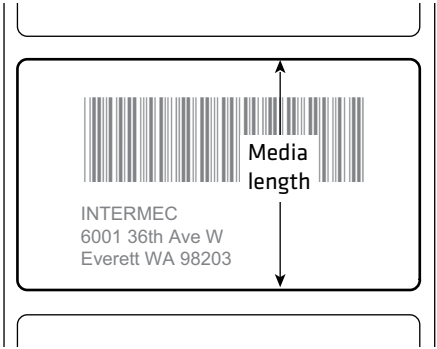
Media Settings

Setting	Description	Default
Media Type	Selects the type of media that is loaded in the printer.	Media With Gaps
Print Method	Selects the method of printing that the printer is using.	Ribbon (TTR) for thermal transfer printers, or No Ribbon (DT) for direct thermal printers
Media Margin (X)	Sets the width of the margin from the left edge of the label along the printhead to the edge of the printable area. Unit of measurement is defined in the Unit of Measurement parameter.	Variable

Media margin (X)

INTERMEC
6001 26th Ave W

Media Settings (Continued)

Setting	Description	Default
Media Width	Sets the width of the printable area measured from the media margin (X) across the printhead. Unit of measurement is defined in the Unit of Measure parameter.	Variable
		
Media Length	Sets the length of the printable area measured from one edge of the label to the edge that is closest to the printhead. Unit of measurement is defined in the Unit of Measure parameter.	Variable
		

Media Settings (Continued)

Setting	Description	Default
Clip Default	Determines if the printer prints items outside the printable area of the label. When this is set to Off, the printer returns an error if any part of a bar code label cannot be printed because that part extends beyond the printable area. When this is set to On, the printer prints all bar code labels, but may also print unreadable, incomplete labels.	Off
Start Adjust	Sets the length of media the printer feeds (positive value) or retracts (negative value) before printing a label. Unit of measurement is defined in the Unit of Measure parameter. Range is -9999 to +9999.	0
Stop Adjust	Sets the length of media the printer feeds (positive value) or retracts (negative value) after printing a label. Unit of measurement is defined in the Unit of Measure parameter. Range is -9999 to +9999.	0
Media Calibration Mode	Selects the mode the printer uses to calibrate media. Use Slow if the printer has trouble identifying gaps or marks in media.	Fast
Length (Slow Mode)	If Media Calibration Mode is set to Slow, the printer prints the media length plus 10 mm. This value sets an additional amount of media to be printed. Unit of measurement is defined in the Unit of Measurement parameter. Range is 0 to 3200.	0
LTS Sensitivity Level	Sets the sensitivity of the label taken sensor. Range is 0 to 14. Supported when the Cutter or Label Dispenser accessories are installed.	0
Power Up Action	Sets the action when you turn the printer on: <ul style="list-style-type: none"> No Action Formfeed - The printer feeds one label. Testfeed - The printer prints a configuration label. 	No Action

Media Settings (Continued)

Setting	Description	Default
Head Down Action	Sets the action when you close the print mechanism after opening it: <ul style="list-style-type: none">• No Action• Formfeed - The printer feeds one label.• Testfeed - The printer prints a configuration label.	No Action

Print Quality Settings

This section describes print quality settings. To view these settings:

- From the printer Main Menu, select **Settings > Printing > Print Quality**.
- From the printer web page, click the **Configure** tab, **Printing > Print Quality**.

Print Quality Settings

Setting	Description	Default
Print Speed	Sets how fast the printer prints labels. The unit of measure is defined in the Unit of Measure parameter.	100
Media Sensitivity	Sets the level of sensitivity of the media to the printhead heat for media and ribbon.	Variable
Darkness	Sets the image darkness for media and ribbon. Adjust this parameter with the Media Sensitivity parameter. Range is 1 to 100.	Variable
Contrast	Adjusts the blackness of the printing on the label in 2% increments from -10% to +10%.	+0%

Serial Port Settings

This section describes the serial port settings. To view these settings:

- From the printer Main Menu, select **Settings > Communications > Serial > COM1**.
- From the printer web page, click the **Configure** tab, **Communications > Serial**.



Note: These settings are not accessible unless the printer has a serial connection to a PC.

Serial Port Settings

Setting	Description	Default
Baud Rate	Transmission speed in bits per second (bps) for the serial port.	115200
Data Bits	Number of bits that define a character or byte.	8
Parity	Specifies how the printer checks the integrity of the transmitted data.	None
Stop Bits	Number of bits sent at the end of every character to allow the receiving signal hardware to detect the end of a character and to resynchronize with the character stream.	1
Hardware	Specifies if hardware flow control (RTS/CTS) is used to manage the rate of data transmission between the device and the host.	Disable
ENQ/ACK	Specifies if software flow control (ENQ/ACK) is used to manage the rate of data transmission between the device and the host.	Disable
XON/XOFF To	Specifies if software flow control (XON/XOFF) is used to manage the rate of data transmission to the host.	Disable
XON/XOFF From	Specifies if software flow control (XON/XOFF) is used to manage the rate of data transmission from the host.	Disable
New Line Character	Defines the characters that the printer echoes to the host to indicate that it has moved to a new line.	CR/LF

Virtual COM Settings

This section describes the virtual COM port settings. To view these settings:

- From the printer Main Menu, select **Settings > Communications > Serial > Virtual COM**.
- From the printer web page, click the **Configure** tab, **Communications > Serial**.



Note: These settings are not accessible unless the virtual COM port is enabled.

Virtual COM Settings

Setting	Description	Default
Baud Rate	Transmission speed in bits per second (bps) for the serial port.	115200
Data Bits	Number of bits that define a character or byte.	8
Parity	Specifies how the printer checks the integrity of the transmitted data.	None
Stop Bits	Number of bits sent at the end of every character to allow the receiving signal hardware to detect the end of a character and to resynchronize with the character stream.	1
Hardware	Specifies if hardware flow control (RTS/CTS) is used to manage the rate of data transmission between the device and the host.	Disable
ENQ/ACK	Specifies if software flow control (ENQ/ACK) is used to manage the rate of data transmission between the device and the host.	Disable
XON/XOFF To	Specifies if software flow control (XON/XOFF) is used to manage the rate of data transmission to the host.	Disable
XON/XOFF From	Specifies if software flow control (XON/XOFF) is used to manage the rate of data transmission from the host.	Disable

Virtual COM Settings (Continued)

Setting	Description	Default
New Line Character	Defines the characters that the printer echoes to the host to indicate that it has moved to a new line.	CR/LF
RS-485 Printer Address	Sets the RS-485 protocol address of the printer. This address is used with point-to-point or multidrop communications.	0

System I/O Settings

This section describes system I/O settings for the printer. To view these settings:

- From the printer Main Menu, select **Settings > System Settings > Manage I/O**.
- From the printer web page, click the **Configure** tab, **System Settings > Manage I/O**.

System I/O Settings

Setting	Description	Default
Wireless 802.11	Determines if the printer is allowed to communicate using its 802.11 radio. Supported only if the optional Wi-Fi+Bluetooth module is installed.	Enable
Bluetooth	Determines if the printer is allowed to communicate using its Bluetooth radio. Supported only if the optional Wi-Fi+Bluetooth module is installed.	Enable
RFID	Determines if the printer is allowed to communicate using its RFID radio. Supported only if the RFID module is installed.	Enable
Virtual COM	Determines if you can enable the USB port to be used as a virtual serial port. When you change this setting, you must restart the printer to enable the new setting.	Disable

System Network Services

This section lists the network services you can manage from the printer. You will only see **Manage Services** from the menus if you have an Ethernet or Wireless module installed in the printer. To view these services:

- From the printer Main Menu, select **Settings > System Settings > Manage Services**.
- From the printer web page, click the **Configure** tab, **System Settings > Manage Services**.

System Network Services

Service	Description	Default
Web Server	Determines if the web server is enabled in the printer.	Enable
FTP	Determines if the printer can use File Transfer Protocol (FTP).	Enable
Avalanche	Determines if the printer can be managed by Wavelink Avalanche.	Enable
Net1	Determines if the printer can use Telnet to communicate with Fingerprint.	Enable
SmartSystems	Determines if the printer can be managed by Intermec SmartSystems Foundation.	Enable
SNMP	Determines if the printer can use SNMP.	Enable
LPR	Determines if the printer can use the line printer server (LPR) daemon.	Enable
IKEv2	Determines if the printer can use IKEv2.	Disable
SSH	Determines if the printer can use Secure Socket Handling (SSH).	Enable
Telnet	Determines if the printer can use Telnet.	Enable
XML	Determines if the printer can use XML printing.	Enable

System Maintenance Alert Settings

This section describes the system maintenance alert settings, such as the odometer distance. To view these settings:

- From the printer Main Menu, select **Settings > System Settings > Maintenance Alerts**.
- From the printer web page, click the **Configure** tab, **System Settings > Maintenance Alerts**.

System Maintenance Alert Settings

Setting	Description	Default
Odometer (User Resettable)	Sets the length of media (in meters) that the printer prints before the Odometer (User Resettable) alert is sent, if this alert is configured. Unit of measurement is defined in the Unit of Measure parameter. Range is 0 to 4294967295.	0
Odometer (Printer)	Sets the length of media (in meters) that the printer prints before the Odometer (Printer) alert is sent. Unit of measurement is defined in the Unit of Measure parameter. Range is 0 to 4294967295.	0
Replace Printhead	Sets the length of media (in meters) that the printer prints before the Replace Printhead alert is sent, if this alert is configured. Unit of measurement is defined in the Unit of Measure parameter. Range is 0 to 4294967295.	0
Clean Printhead	Sets the length of media (in meters) that the printer prints before the Clean Printhead alert is sent, if this alert is configured. Unit of measurement is defined in the Unit of Measure parameter. Range is 0 to 4294967295.	0
Faulty Dot	Sets the number of faulty dots on the printhead before the Faulty Dot alert is sent, if this alert is configured. Range is 0 to 4294967295.	0

Wireless 802.11 General Settings

This section describes the 802.11 general settings. To view these settings:

- From the printer Main Menu, select **Settings > Communications > Wireless 802.11 > General**.
- From the printer web page, click the **Configure** tab, **Communications > Wireless 802.11**.

Wireless 802.11 General Settings

Setting	Description	Default
Network Name (SSID)	Defines the wireless network. To communicate, all access points and wireless devices must have the same network name, which is case-sensitive.	INTERMEC
Network Type	Selects the radio behavior of the printer. Ad Hoc mode allows the printer to communicate directly with another printer. Infrastructure mode allows the printer to communicate through an access point.	Infrastructure
Roaming	Controls the roaming inclination of the printer. The higher the level, the less inclined the printer is to switch access points based on the printer received signal strength (RSSI).	Off
Power Mode	Select the power management setting for the radio. Constant Awake provides the highest throughput but draws the most power. Power Saving conserves the most power but provides the lowest throughput. Fast Power Saving turns off components when they are not being used to draw less current.	Constant Awake
Channel	Sets the common channel that radios in Ad Hoc mode use to transfer data. Range is 1 to 13 (1 to 11 for FCC only).	1
Hidden SSID	Determines if the radio is allowed to look for SSIDs that have been hidden to prevent unauthorized devices from connecting to the wireless network.	Disable

Wireless 802.11 Network Settings

This section describes the 802.11 IPv4 and IPv6 settings. To view these settings:

- From the printer Main Menu, select **Settings > Communications > Wireless 802.11 > Network > IPv4 or IPv6**.
- From the printer web page, click the **Configure** tab, **Communications > Wireless 802.11**.

Wireless 802.11 Network Settings

Setting	Description	Default
(IPv4) IP Assignment Method	Sets how the printer obtains an IP address (for IPv4 networks).	DHCP
(IPv4) IP Address	Sets the unique network-level address that is assigned to each device in an IPv4 network.	0.0.0.0
Subnet Mask	Sets a number that defines the range of IP addresses that can be used in an IPv4 network.	0.0.0.0
Default Router	Sets the IP address of a router that is used when a device sends a packet to another subnet or to an unknown destination.	0.0.0.0
DHCP Response	Sets if the printer receives DHCP responses by broadcast or unicast.	Broadcast
(IPv6) IP Assignment Method	Sets how the printer obtains an IP address (for IPv6 networks).	Automatic
(IPv6) IP Address	Sets the unique network-level address that is assigned to each device in an IPv6 network.	Automatic

Wireless 802.11 Security Settings

This section describes the 802.11 security settings. To view these settings:

- From the printer Main Menu, select **Settings > Communications > Wireless 802.11 > Security**.
- From the printer web page, click the **Configure** tab > **Communications > Wireless 802.11**.

Wireless 802.11 Security Settings

Setting	Description	Default
Security Type	Selects the protocol the radio uses to verify its identity and makes sure that it is authorized to communicate on the wireless network.	None
Association	Selects the security method that the radio uses to get access to the wireless network.	Open/WEP
Pre-Shared Key	Defines the passphrase that allows the radio to authenticate over the wireless network (for both WPA and WPA2 security). Range is 8 to 64 characters.	None
Network Key Index	Selects the active network key to use for WEP security. Range is 1 to 4.	1
Network Key 1, Network Key 2, Network Key 3, Network Key 4	Defines a network key that is used for WEP security. Keys are entered in ASCII or hexadecimal (preceded by 0x) format.	Empty string
User Name	Sets the name that the printer uses when logging in to the network. Range is 1 to 96 characters.	None
Password	Sets the password that the printer uses when logging in to the network. Range is 1 to 96 characters.	None
Anonymous Name	Sets the outer EAP user name that the printer uses for logging in to the network. Maximum length is 96 characters.	Empty string

Wireless 802.11 Security Settings (Continued)

Setting	Description	Default
Inner Authentication	Selects the authentication method that is used when the EAP type is EAP-FAST, PEAP, or TTLS.	MSCHAPv2
CA Certificate	Sets the name of the Certificate Authority (CA) that verifies the server certificate. This CA should be the same one that was used to sign the server certificate.	intermec.pem
Client Certificate	Sets the name of the client certificate the printer uses to authenticate to the network using EAP-TLS. Maximum length is 128 characters.	None
Client Key	Sets the private key the printer uses for EAP-TLS. Maximum length is 128 characters. Use the certinstall.sh script to install the certificate correctly.	None
Server Common Name 1	Sets the certificate name that is on the primary authentication server. If this value is none, then the value for Server Common Name 2 is used. Range is 1 to 96 characters.	None
Server Common Name 2	Sets the certificate name that is on the secondary authentication server. If this value is none, then the value for Server Common Name 1 is used. Range is 1 to 96 characters.	None
Validate Certificate	Determines if the identity of the authentication server is verified using its certificate when using EAP-TTLS, PEAP, or EAP-TLS. Intermec recommends that you set Validate Certificate to Yes .	No
PAC	Sets the name of the Protected Access Credential (PAC) that is used for EAP-FAST authentication. The printer uses this file if Acquire PAC is on and the current installed PAC fails to authenticate the printer to the network.	eap-fast.pac

Wireless 802.11 Security Settings (Continued)

Setting	Description	Default
Acquire PAC	Determines if automatic PAC file provisioning is on for EAP-FAST authentication.	On
Fast Roaming (CCKM)	Determines if the printer can roam from one access point to another without reauthenticating with the server. CCKM only works in wireless networks using LEAP.	Disable



Print Labels with INPrint

This section explains how to use the INPrint feature to print labels.

About the INPrint Page

The INPrint page features sample web forms you can use to quickly and easily print single labels if you are using the Fingerprint or Direct Protocol language on your printer. You select a web form from the lists and enter information in the fields for that label. You can then preview and print the label.

The printer firmware includes several predefined label formats. You can also copy your own label formats to the printer and print them from this page.

Print INPrint Labels

If the printer is connected to an Ethernet or Wi-Fi network, you can print labels by entering information in a web form. You access web forms through the printer web page.

- 1** On your desktop PC, start a browser.
- 2** In the **Location** or **Address** bar, type the printer IP address and press **Enter**. The printer web page appears.
- 3** Click the **INPrint** tab.
- 4** Select the web form you want to print:
 - If you created the web form yourself, click **Customer Downloaded** and then select the web form in the list.
 - To use one of the Resident (Intermec-supplied) web forms, click **Resident** and then select the web form in the list.
- 5** Type information in the web form as needed.
- 6** (Optional) To preview the label on screen, click **Preview**.
- 7** To print the label, click **Print**.

Predefined INPrint Label Formats

Predefined INPrint Label Formats and Sample Illustrations

Format Name	Sample
203_returnadd_3x1.lbx	
203_demo_4x6.lbx	
203_shipaddr_4x6.lbx	

Predefined INPrint Label Formats and Sample Illustrations

Format Name

Sample

203_packslip_4x6.lbx

INTERMEC 8001 36th Ave W Everett WA USA 98203		PACKING SLIP Phone: 425-348-2600	
ORDER NO: 1000		SHIP DATE: 1 Feb 2012	
Item No.	Description	Order Qty	Pack Qty
PC234		100	100
PC456		250	250
PC678		500	500
TOTALS:			

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