

Honeywell

THE POWER OF **CONNECTED**

PM42

Industrial Label Printer



User Manual

Disclaimer

Honeywell International Inc. (“HII”) reserves the right to make changes in specifications and other information contained in this document without prior notice, and the reader should in all cases consult HII to determine whether any such changes have been made. The information in this publication does not represent a commitment on the part of HII.

HII shall not be liable for technical or editorial errors or omissions contained herein; nor for incidental or consequential damages resulting from the furnishing, performance, or use of this material. HII disclaims all responsibility for the selection and use of software and/or hardware to achieve intended results.

This document contains proprietary information that is protected by copyright. All rights are reserved. No part of this document may be photocopied, reproduced, or translated into another language without the prior written consent of HII.

Copyright © 2015–2017 Honeywell International Inc. All rights reserved.

Web Address: www.honeywellaidc.com

Trademarks

Microsoft, Windows, and the Windows logo are either registered trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

Zebra, Zebra Programming Language (ZPL), and ZPL II are trademarks of ZIH Corp.

Other product names or marks mentioned in this document may be trademarks or registered trademarks of other companies and are the property of their respective owners.

For patent information, refer to www.hsmpats.com.

Contents

Customer Support	ix
Product Service and Repair	ix
Limited Warranty	ix
Send Feedback	ix

1 About the Printer

About the PM42 Printer	2
Printer Features	2
About the Front Panel	4
About the Ready-to-Work Indicator	4
About the Print Button	5
About the Navigation Buttons	5
About the Ready Screen	6
About the Main Menu	7
About the Onscreen Keypads	8
About the Printer Wizards	9
About Printer Command Languages	10
About Fingerprint	10
About Direct Protocol	10
About IPL	11
About ZSim	11
About DSim	11
About Smart Printing	11
How to Set the Printer Command Language	11
Set the Command Language from the Main Menu	12
Set the Command Language from the Printer Web Page	12
Printer Options and Accessories	13

2 Set Up the Printer

About Media	16
About Tear-Off Printing	16
Load Media for Tear-Off Printing	16
Load Media from an External Supply	18
About Ribbon	19
Load Ribbon	20

Connect the Printer to Power	22
Print a Test Label	22
How to Create and Print Labels	22

3 Connect the Printer 23

About Printer Drivers	24
Install Printer Drivers	24
How to Connect the Printer to Your PC	24
Connect the Printer with a Serial Cable	25
Connect the Printer with a USB Cable	25
Connect the Printer with an IEEE 1284 Cable	25
Connect the Printer to an Ethernet Network	26
About the USB Ports	26
Connect a USB Storage Device	27

4 Configure the Printer 29

About the Printer Configuration Menus	30
How to Configure the Printer	35
Configure the Printer from the Main Menu	35
Restrict Access to the Main Menu	35
Configure the Printer from the Web Page	36
Configure the Printer with PrintSet 5	37
How to Configure the Printer with Programming Commands	37
How to Configure the Printer with SmartSystems	38
About Printer Profiles	38
Save a Printer Profile from the Web Page	38
Load a Printer Profile from the Web Page	39
Save a Printer Profile from the Main Menu	39
Load a Printer Profile from the Main Menu	39
How to Load a Printer Profile with Programming Commands	40
How to Upload Files to the Printer	40
Upload Files from the Web Page	41
How to Set Up a USB Storage Device to Upload Files to the Printer	42
Upload Files from a USB Storage Device	43

Export a Configuration File to a USB Storage Device	44
Import a Configuration File from a USB Storage Device	44
Change the Background Image for the Ready Screen	45
Create Menu Shortcuts	45
Customize the Printer Web Page	46
5 Troubleshoot the Printer	47
Contact Support	48
About Printer System Information	48
About Printer Statistics	49
View Printer Statistics	49
Check Printhead Usage	50
About Alerts	50
Set Error, Warning, and Information Alerts	50
About Maintenance Alerts	51
Set Maintenance Alerts from the Main Menu	51
Set Maintenance Alerts from the Web Page	51
How to Configure Error Alert Notifications	52
Configure Error Alert Notifications from the Main Menu	52
Configure Error Alert Notifications from the Web Page	52
Maintenance and Error Alerts	53
Problems and Possible Solutions	55
How to Restore Default Settings	58
Restore Default Settings from the Main Menu	58
Restore Default Settings from the Printer Web Page	58
Restore Default Settings with a Hardware-Based Reset	59
How to Upgrade the Printer Firmware	59
Download the Printer Firmware Update	60
Upgrade Firmware from the Printer Web Page	60
Upgrade Firmware from a USB Storage Device	60
6 Maintain the Printer	63
How to Clean the Printer	64
Clean the Printhead	64
Clean the Media Guides	65
How to Clean the Exterior of the Printer	65

Contents

Replace the Printhead	66
Replace the Platen Roller	67
How to Adjust the Printer	68
Adjust Ribbon Tension	69
Adjust the Printhead Balance	70
Adjust the Printhead Pressure	71
Adjust the Label Gap and Black Mark Sensor	72
A Specifications	73
Printer Specifications	74
Interface Specifications	80
RS-232 Serial Interface	80
USB Device Interface	81
USB Host Interface	81
Ethernet Interface	82
B Default Settings	83
Default Configuration	84
Serial Port Settings	84
Ethernet Settings	85
Media Settings	85
Print Quality Settings	88
General System Settings	89
Display Settings	90
Manage I/O Settings	90
Manage Services Settings	91
C Print Labels with INPrint	93
About the INPrint Page	94
Print INPrint Labels	94
Predefined INPrint Label Formats	95

Customer Support

If you need assistance installing or troubleshooting your product, contact us by using one of these methods:

Knowledge Base: www.hsmknowledgebase.com

Our Knowledge Base provides thousands of immediate solutions. If the Knowledge Base does not help you solve your problem, log into the Technical Support Portal to submit your problem or ask your question.

Technical Support Portal: www.hsmsupportportal.com

Log into the Technical Support Portal to search our Knowledge Base, submit your problem or question, request a call back, or provide feedback. When filling out one of the forms, provide as much detail as possible. You can even include attachments.

Telephone: www.honeywellaidc.com/locations

For our latest contact information, please check our website.

Product Service and Repair

Honeywell International Inc. provides service for all of its products through service centers throughout the world. To find your service center, go to www.honeywellaidc.com and select **Support > Contact Support > Service and Repair**. Contact your service center to obtain a Return Material Authorization number (RMA #) before you return the product.

To obtain warranty or non-warranty service, return your product to Honeywell (postage paid) with a copy of the dated purchase record.

Limited Warranty

For warranty information, go to www.honeywellaidc.com and click **Resources > Warranty**.

Send Feedback

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



Warning: Moving parts are exposed when the cover is open. Make sure the cover is closed before you operate the printer.

Warning: The printhead/motor may be hot. Allow the printhead/motor to cool.

Warning: Do not put your fingers inside the print mechanism when the power is on.

Warning: The tear bar contains sharp edges. Keep fingers and other body parts away from the tear bar.



Caution: Read and review the warnings in this manual carefully before connecting the printer.

Caution: Observe all safety and accident prevention regulations applicable to your specific region and application.

Caution: Do not spray the printer with water. If you are using a host to clean the premises in an industrial environment, remove the printer or protect it carefully from spray and moisture.

Caution: You must implement both hardware and software safety precautions to prevent the possibility of undefined system states.

Caution: You must make sure that dangerous conditions cannot occur under any circumstances, even for a brief period of time.

Caution: Carefully read the warning text on the envelope before using a cleaning card.

Caution: To reduce the risk of electric shock or fire, keep the cover closed and turn off the printer when not in use. No user-serviceable parts inside.

1

About the Printer

This chapter introduces the PM42 printer and describes printer features and basic printer operation.

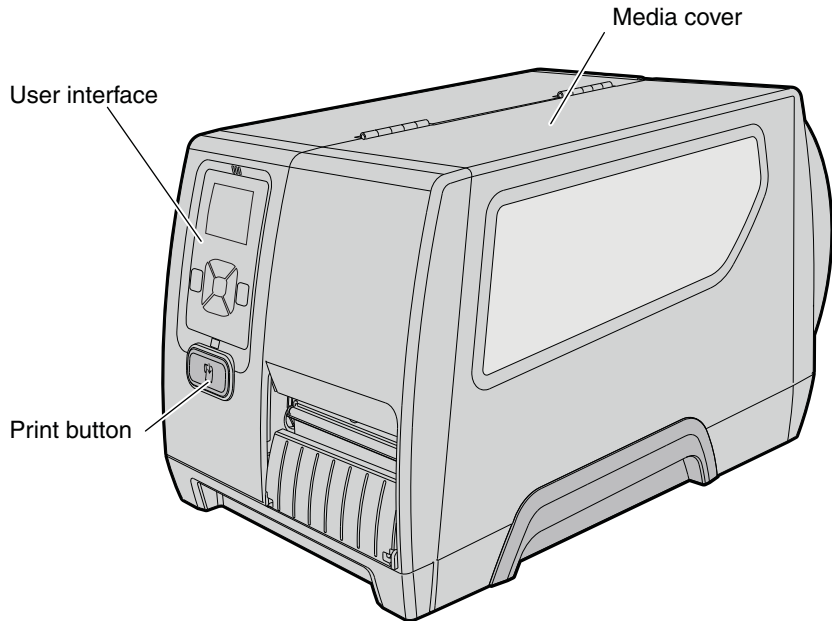
About the PM42 Printer

The PM42 printer is a rugged label printer that include integrated Ethernet, RS-232, and USB interfaces. The printer includes these features:

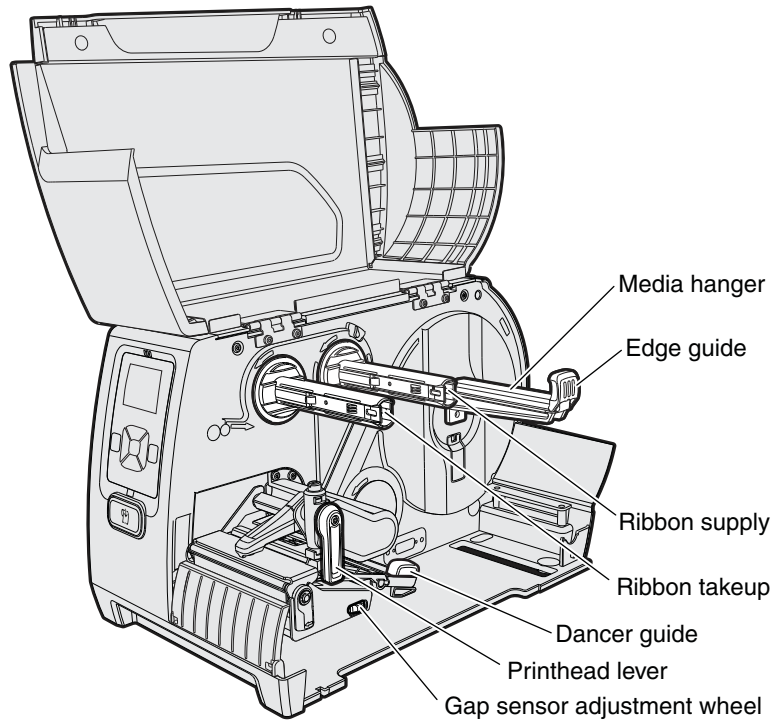
- Print speeds of up to 10 ips (406 dpi printhead) and 12 ips (203 and 300 dpi printhead)
- USB host port to connect storage devices, scanners, or keyboards
- USB device port to connect to a desktop PC
- Support for these printer programming languages: Fingerprint, Intermec Printer Language (IPL), Direct Protocol, DSim, ZSim, and Smart Printing.

Printer Features

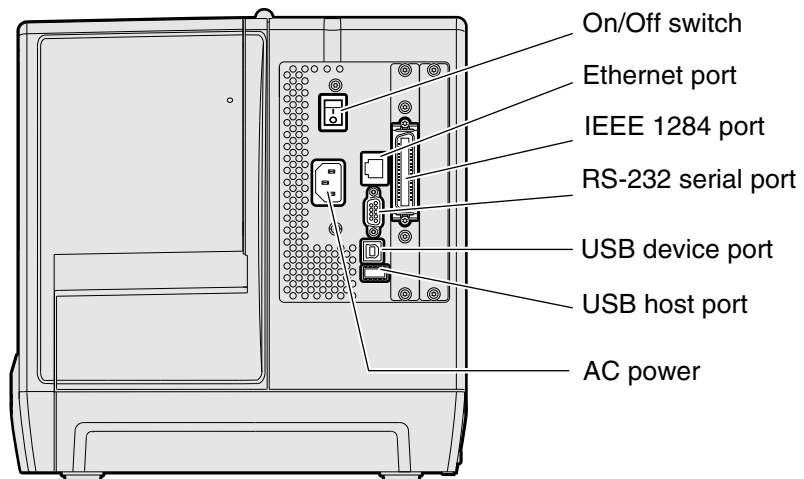
Use these illustrations to familiarize yourself with the printer features.



PM42 Front View



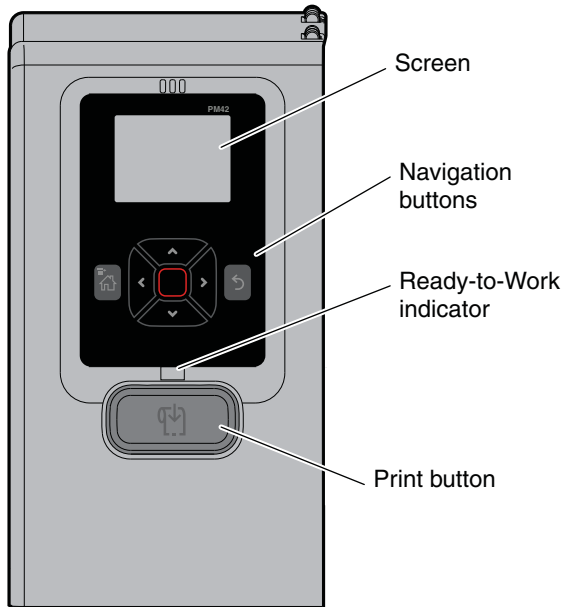
PM42 Internal View



PM42 Back View

About the Front Panel

The front panel includes the Ready-to-Work indicator, the Print button, navigation buttons, and a screen.



PM42 Front Panel

About the Ready-to-Work Indicator

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

Ready-to-Work Indicator Status

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 Print Button

Use the Print button to start and stop print jobs and feed media.




Print Button Behavior

Printer State	Print Button Behavior
Starting	<ul style="list-style-type: none"> Press the Print button to enter Calibration mode. If the printhead is lifted, press the Print button to restore default settings.
Ready	<ul style="list-style-type: none"> Press the Print button to advance media. Press and hold the Print button for more than two seconds to perform a test feed. If the print key feature is enabled, press the Print button to reprint the last print job.
Printing	Press the Print button to stop or pause printing. The printer will stop after it completely prints one label.
Paused	Press the Print button to resume printing.
Error	Press the Print button to advance media if possible.

About the Navigation Buttons

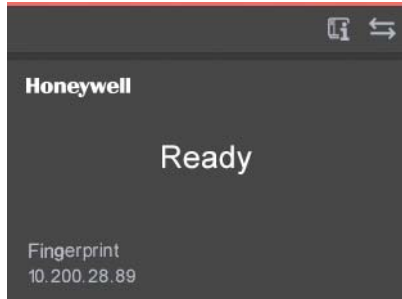
Use the navigation buttons to move through the screen.

Navigation Buttons

Button	Description
	Menu/Home button. Toggles between the Ready screen and the Main Menu. If you create menu shortcuts, the Main Menu is replaced by the Quick Choices menu. The Main Menu appears as the first item in the Quick Choices list. For help, see “Create Menu Shortcuts” on page 45 .
	Directional pad. Use the arrow buttons (▲, ▼, ◀, or ▶) to highlight an item on the screen. Press the Enter (■) button to select the highlighted item or save settings in a menu or list.
	Back button. Returns to the previous menu or page, or stops a running Fingerprint application.

About the Ready Screen



After the printer completes the startup process, the Ready screen appears. By default, the screen displays the printer command language. You can customize the screen to display different kinds of information.



Ready Screen

The status bar at the top of the screen displays information and status icons.

Information and Status Icons

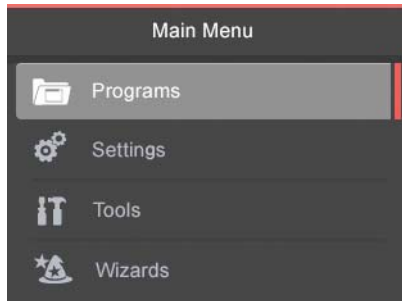
Icon	Description
	Printer Information. Select this icon to view basic printer information.
	Connectivity. Blinks when data is moving through a wired connection to the printer.

About the Main Menu





The Main Menu contains features to help you configure and manage your printer.



Note: The printer cannot print while the Main Menu is on the screen.

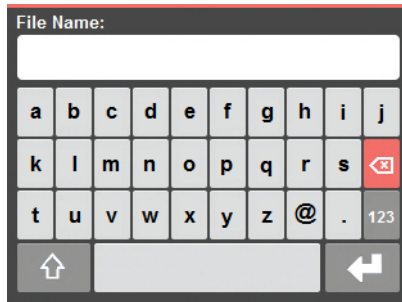


Main Menu Items

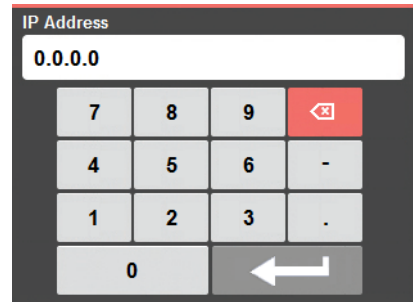
Item	Description
	Programs. Lists the programs installed on the printer. This list includes utility programs provided as part of the printer firmware, as well as programs you installed on the printer. The Programs menu item only appears if the printer command language is set to Fingerprint.
	Settings. Lets you view and change printer settings.
	Tools. Lets you print test labels, manage a connected USB storage device, restore printer default settings, save and load printer profiles, and configure menu item shortcuts.
	Wizards. Lists the wizards you can use to configure printing, communications, and calibration.

About the Onscreen Keypads

When you select a setting that requires you to type characters, an alphanumeric or numeric keypad appears.



Alphanumeric Keypad



Numeric Keypad

To access the extended numeric keypad, select the 123 key on the alphanumeric keypad.



Extended Numeric Keypad

About the Printer Wizards

The printer wizards can help you quickly configure printing and communications settings.



Printing Wizards

Name	Description
Media Setup	Select media and printing type (DT or TTR), media width, length, media margin (X), 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.
Loading Ribbon	(TTR printers only) Shows how to load a roll of ribbon.

Communications Wizard

Name	Description
Line Analyzer	Logs all incoming data on all communications channels and saves the data to a log file.

Calibration Wizards

Name	Description
Media	Calibrates the label stop sensor and displays current print settings.
Date & Time	Calibrates date and time settings, such as time zone. Lets you set the date and time and specify the format.

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 (default)
- Direct Protocol
- IPL (Intermec Printer Language)
- ZSim (Zebra Programming Language, 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 [Fingerprint Command Reference](#).

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](#).

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](#).

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](#).

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.





How to Set the Printer Command Language

Use one of these methods to change the printer command language:

- Main Menu
- Printer Web page
- PrintSet 5. For help, see [“Configure the Printer with PrintSet 5” on page 37](#).

Set the Command Language from the Main Menu

You can use the Settings option from the Main Menu to change the printer command language.

- 1 From the Main Menu, select **Settings > System Settings > General**.
- 2 Press  to scroll down to Command Language.
- 3 Press  or  to select a different command language.
- 4 Press  to save your changes.

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

- 5 Turn the printer off and then on. The printer starts up in the command language you selected.

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 network.

- 1 Make sure that the printer has media and ribbon (if necessary) installed.
- 2 On your PC, open a Web 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`.

Honeywell PM42:PM42-1526783286

Home Configure Manage Reboot System Information Services Contact

Ready

Printer Information

PM42	S/N: 1526783286
Printer Configuration Number	PM420001
Command Language	Esperanto
USB Flash Drive	Disconnected

Communications

Serial	115200 8 None 1
Ethernet	129.235.57.179 80:10:40:92:76:07

Media Settings

Media Type	Media With Gaps
Print Method	No Ribbon (DT)
Media Margin (X)	24 dots
Media Width	840 dots

- 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.

Printer Options and Accessories

You can use these printer options and accessories (sold and ordered separately) with the PM42 printer. Most options are either installed at the factory or by factory service technicians in the field. Accessories are designed to be installed by the customer.

PM42 Options and Accessories

Option or Accessory	Description
Collapsible Core	Use the collapsible core accessory to easily remove ribbon from the takeup hub.
Large Edge Guide	Use the large edge guide to make sure that large rolls of media stay on the hanger.

PM42 Options and Accessories

Option or Accessory	Description
Parallel Port (IEEE 1284) Interface Board	Use the parallel port interface board option to add a parallel port to the back of the printer. The parallel port supports Universal Plug and Play (UPnP), compatibility, nibble, byte, ECP, and additional status reporting through IEEE 1284 nibble ID mode.
Ribbon Module	Use the ribbon module option for thermal transfer ribbon (TTR).

2

Set Up the Printer

This chapter describes how to set up the printer and includes information about how to load media and ribbon, print a test label, and calibrate and adjust the printer.

About Media

The PM42 can print on labels, tickets, tags, and continuous media stock.

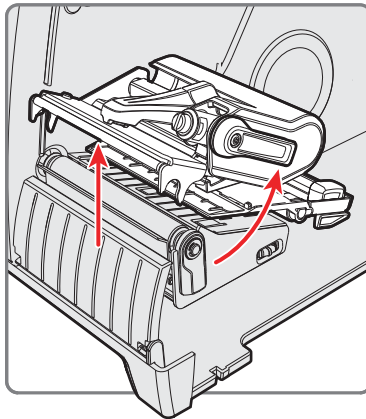
About Tear-Off Printing

For tear-off printing, you manually tear printed labels, tickets, and other printed media from the front of the printer. You can use these types of media for tear-off printing:

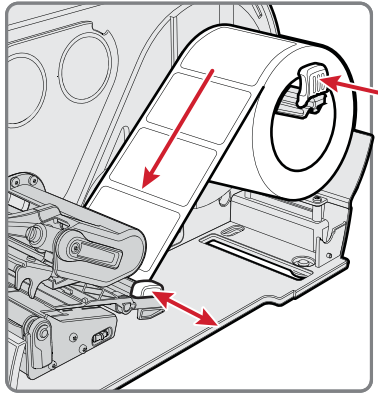
- Non-adhesive continuous stock
- Self-adhesive continuous stock with liner
- Self-adhesive labels with liner
- Tickets with gaps, with or without perforations
- Tickets with black marks, with or without perforations

Load Media for Tear-Off Printing

- 1 Open the media cover.
- 2 Turn the printhead lift lever counterclockwise to raise the printhead.



- 3 Load a media roll onto the media supply hub. Make sure you push the roll all the way against the inner wall of the printer and adjust the edge guide and the dancer guide to hold the media in place.

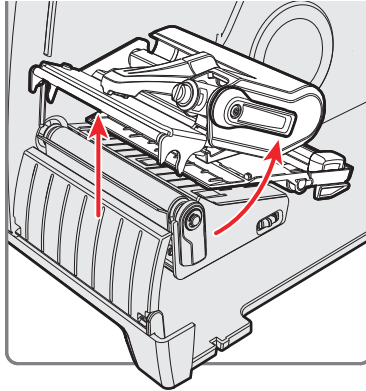


- 4 Route the media through the print mechanism.
- 5 Adjust the printhead balance. For help, see [“Adjust the Printhead Balance” on page 70](#).
- 6 Turn the printhead lift lever clockwise to close the printhead.
- 7 Adjust the label gap and black mark sensor. The sensor LED should line up with the center of the media. For help, see [“Adjust the Label Gap and Black Mark Sensor” on page 72](#).
- 8 Close the media cover.
- 9 Press the **Print** button to advance the media.
- 10 Configure the printer for the correct media type (media with gaps, black mark, continuous fixed length, or continuous variable length).
- 11 Calibrate the sensors:
 - From the printer Main Menu select **Wizards > Calibration > Media**.
 - From the printer web page select **Services > Media Calibration**.
- 12 Configure the start and stop adjust settings.

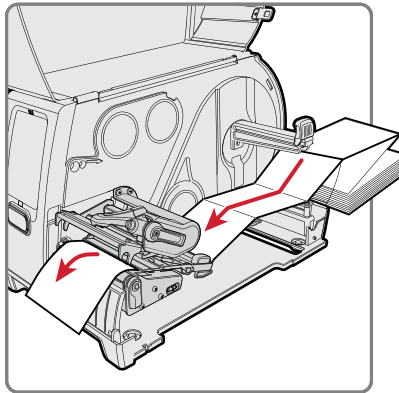
Load Media from an External Supply

You can place the media supply, such as fanfold tickets or tags, behind or underneath the printer.

- 1 Open the media cover.
- 2 Turn the printhead lift lever counterclockwise to raise the printhead.



- 3 Feed media through the slot in the back of the printer (or from the slot in the bottom of the printer) and route it through the print mechanism.



- 4 Turn the printhead lift lever clockwise to close the printhead.
- 5 Close the media cover.
- 6 Press the **Print** button to advance the media.
- 7 Configure the printer for the correct media type: media with gaps, black mark, continuous fixed length, or continuous variable length.

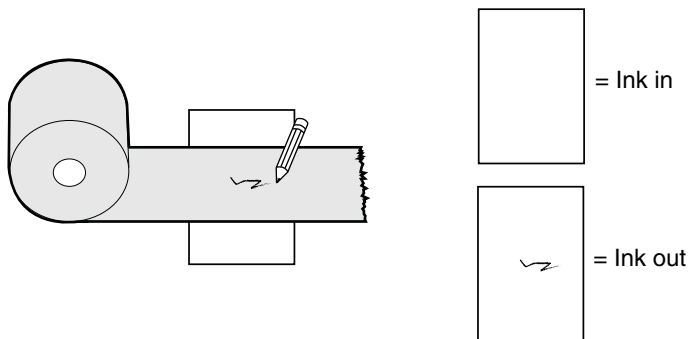
8 Calibrate the sensors:

- From the printer Main Menu select **Wizards > Calibration > Media**.
- From the printer web page select **Services > Media Calibration**.

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.

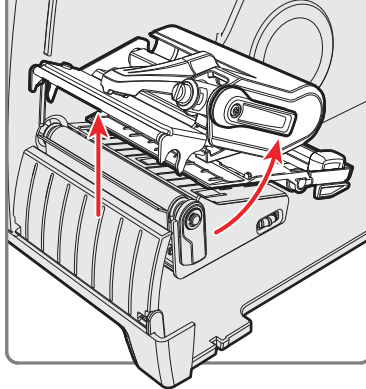
The printer supports thermal transfer ribbon rolls with the ink-coated side facing either inward or outward. To determine which type of ribbon you have, use a pen or other sharp object to scratch through the ribbon against a piece of paper. If you see a mark on the paper, your ribbon is wound ink out.



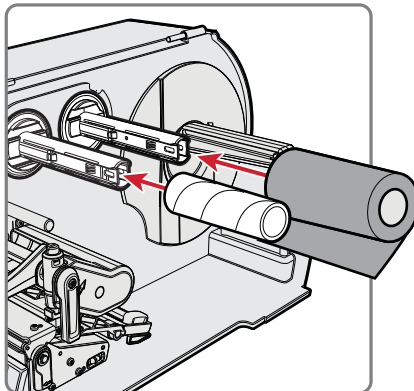
How to Determine if Your Ribbon is Wound Ink In or Ink Out

Load Ribbon

- 1 Open the media cover.
- 2 Turn the printhead lift lever counterclockwise to raise the printhead.

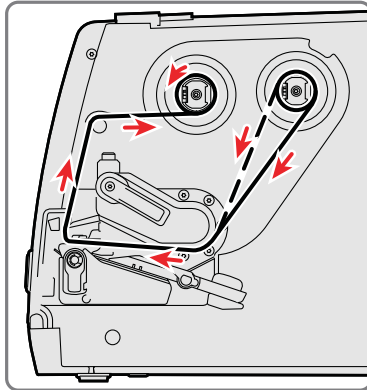


- 3 Slide the ribbon roll onto the ribbon supply hub and slide the empty ribbon core onto the ribbon takeup hub:
 - For ribbon that has the ink wound out, place the ribbon on the supply hub with the ribbon wound clockwise.
 - For ribbon that has the ink wound in, place the ribbon on the supply hub with the ribbon wound counterclockwise.



The ribbon in this illustration has the ink wound out.

- 4 Route the ribbon through the print mechanism and pull out approximately 20 cm (8 inches) of ribbon leader.



The dashed line shows how to load ribbon with the ink wound in.

- 5 Turn the ribbon takeup hub counterclockwise until the ribbon becomes tight and runs wrinkle-free through the print mechanism.
- 6 Load media.
- 7 Turn the printhead lift lever clockwise to lower the printhead.
- 8 Close the media cover.
- 9 Press the **Print** button to advance the media.
- 10 Configure the printer for the correct media type: media with gaps, black mark, continuous fixed length, or continuous variable length.
- 11 Set the print method to ribbon (TTR).
- 12 Calibrate the sensors:
 - From the printer Main Menu select **Wizards > Calibration > Media**.
 - From the printer web page select **Services > Media Calibration**.

Connect the Printer to Power


The first time you turn on the printer, the Startup Wizard appears.

- 1 Connect one end of the power cord to the back of the printer and connect the other end to AC power.
- 2 Press the power switch. When the printer starts, a progress bar appears on the screen, and then the Startup Wizard appears.
- 3 Follow the instructions to configure basic printer settings.
- 4 Run another wizard to configure more printer settings, or go to the Ready screen.

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

Print a Test Label

After you load media and ribbon, print a test label to verify that everything is installed correctly and to get printer information.

- 1 From the Main Menu, select **Tools > Test Labels**.
- 2 Select the label you want to print and press . The printer prints your test label.

How to Create and Print Labels

Use one of these methods to create and print labels:

- Use Honeywell printer software. You can download label design software and printer drivers from <http://www.honeywellaidc.com>.
- Use the Fingerprint or IPL printer command language. For help, see the [Fingerprint Command Reference](#) or the [IPL Command Reference](#).

3

Connect the Printer

You can connect your printer to a PC or 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 still need to install printer drivers on the PC for the printer to operate correctly.

Install Printer Drivers

Use InterDriver to install printer driver software on your PC.

- 1 Open a web browser and go to www.honeywellaidc.com.
- 2 Select **Products > Printers and Media > PM42**.
- 3 Click the **Software** tab.
- 4 In the Drivers list, click the link to install the latest version of **InterDriver**.
- 5 Follow the instructions to install InterDriver.

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

- Honeywell > InterDriver > InterDriver Wizard
- Honeywell > InterDriver > Check for Updates

How to Connect the Printer to Your PC

Use one of these cables to connect the printer to your PC:

- Serial cable
- USB cable
- IEEE 1284 parallel printer adapter cable (optional)

Connect the Printer with a Serial Cable

You can use a serial connection to communicate with your PC and to run PrintSet or InterDriver. You can also use the serial port to send commands directly to the printer through a terminal connection.

- 1 Connect one end of the DB9 to DB9 RS-232 cable to the back of your printer and connect the other end of the cable to a serial COM port on the PC.
- 2 If necessary, change the PC serial port configuration to match your printer.

Connect the Printer with a USB Cable

Honeywell recommends that you only connect one printer to your PC, either directly or through a hub. You do not need to set up any parameters for USB communications.

- 1 Download and install the InterDriver software on your PC.
- 2 Connect one end of the USB Type A cable to the back of the printer and connect the other end to your PC.

Connect the Printer with an IEEE 1284 Cable

If you have the parallel port option installed, you can connect to your PC with an IEEE 1284 parallel cable.



Note: You must configure all printer settings through the printer Main Menu, the printer web page, or with PrintSet 5 and a USB connection before you use the parallel port connection.

- 1 Connect one end of an IEEE 1284 cable to the parallel port interface adapter on the back of the printer.
- 2 Connect the other end of the cable to the parallel port on your PC.

Connect the Printer to an Ethernet Network

When the printer is connected to your network, you can send commands directly to the printer through a terminal connection (Telnet) or send instructions through FTP. When you turn on the printer, it automatically retrieves an IP address from the network (DHCP).

- Connect the Ethernet cable to the Ethernet port on the back of the printer and connect the other end of the cable to your network:
 - If your network uses a DHCP server to assign IP addresses, the IP address appears in the lower left corner of the screen.
 - If your network does not use a DHCP server to assign IP addresses, you need to set a static IP address and other network information manually. From the Main Menu, select **Settings** > **Communications** > **Ethernet** > **IPv4** or **IPv6** and configure the necessary settings.

About the USB Ports

The printer has a USB host port and a USB device port. You can connect peripheral devices to either USB port.

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 Honeywell 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 to the printer memory, or to perform firmware upgrades. You can also save configuration files to a USB storage device to upload to a printer. The USB storage device must have a single partition and be formatted as FAT16 or FAT32.

Connect a USB Storage Device

You can insert a USB storage device into the USB host port on the back of the printer.

- 1 Make sure the device has a single partition and is formatted as FAT16 or FAT32.
- 2 Connect the device to the USB host port.
- 3 From the Main Menu, select **Tools > USB Menu** for more options.

4

Configure the Printer

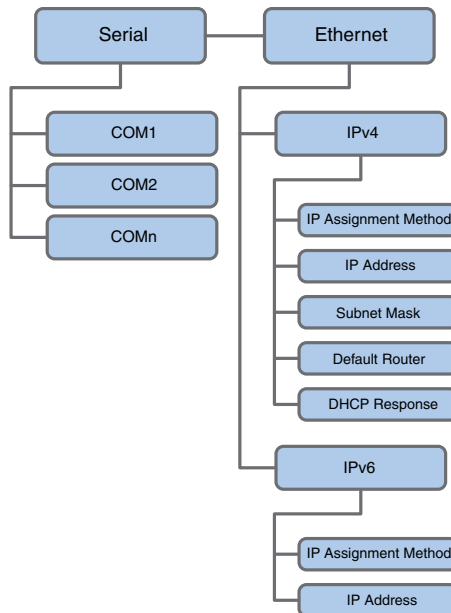
This chapter describes the configuration menu on the printer and the different methods you can use to configure the printer.

About the Printer Configuration Menus

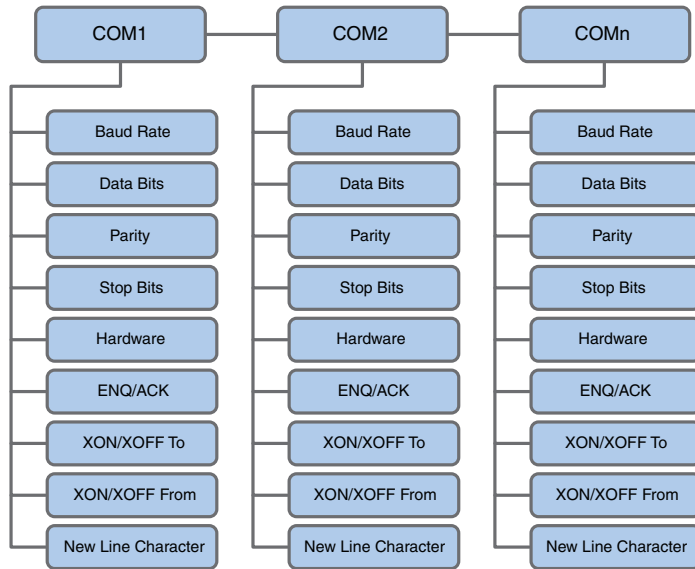
Whether you access the printer configuration menus from the printer web page or the printer Main Menu, the structure of the menus is the same:

- Communications
- Printing
- System Settings
- Network Services

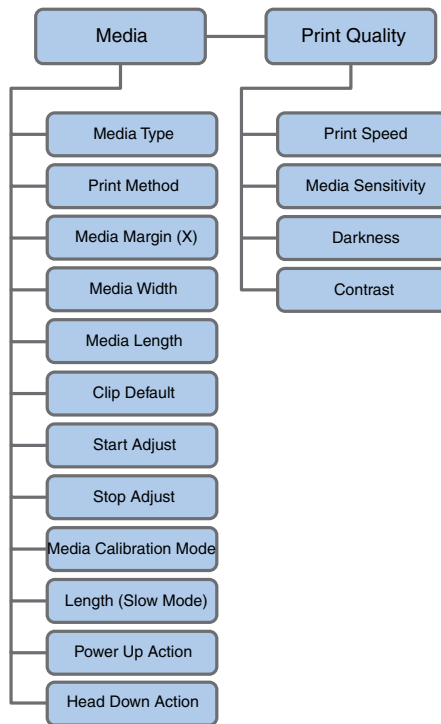
Use the next illustrations to learn where information is located in the printer configuration menus. Not all configuration items appear in each interface.



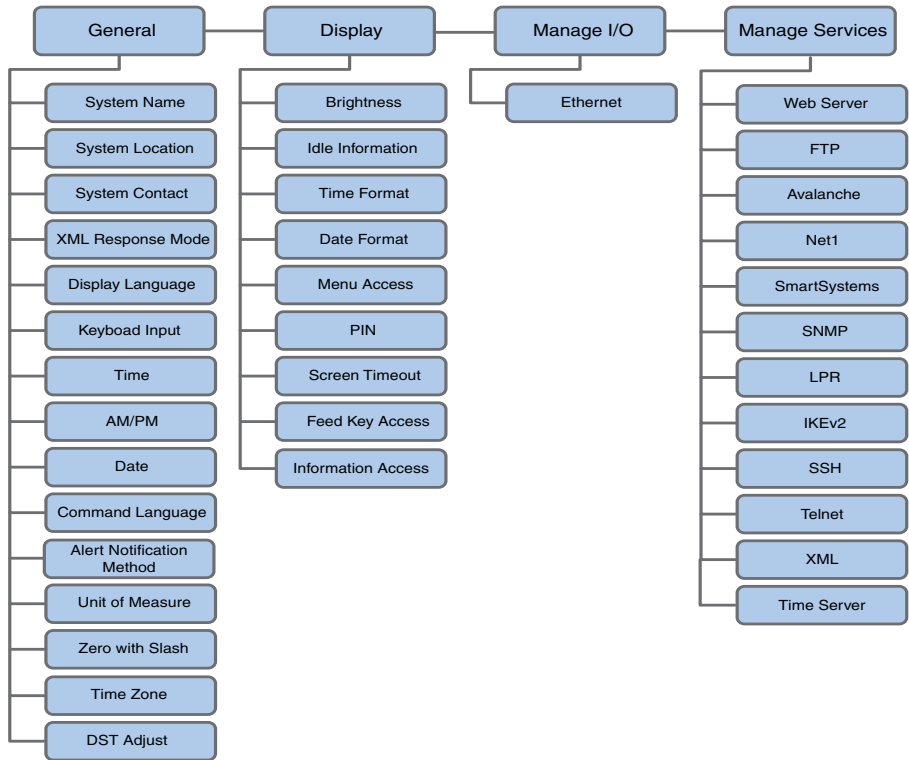
Communications Menu



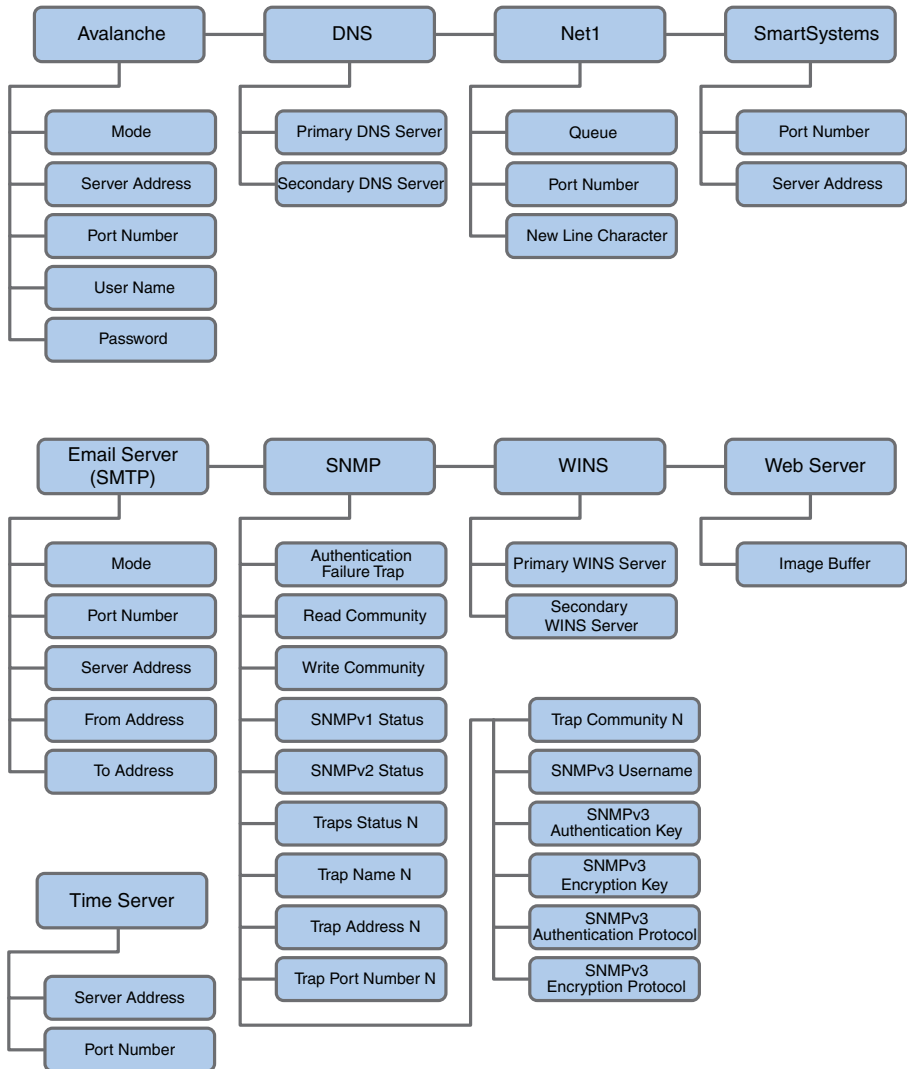
Serial Communications Menu



Printing Menu



System Settings Menu



Network Services Menu


How to Configure the Printer

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

- Main Menu
- Printer Web page
- PrintSet 5
- Programming commands
- SmartSystems

Configure the Printer from the Main Menu

You can view or change settings from the Settings menu on the printer.

- 1 From the Main Menu, select **Settings** and press . The Settings menu appears.
- 2 Select the settings you want to configure and make your changes.
- 3 When prompted, save your changes.

Restrict Access to the Main Menu

The first time you turn on the printer, all menus are available from the Main Menu. You can restrict access to the Main Menu, as well as menus on a USB flash drive by requiring a PIN to access menus, or you can disable access to all menus.

- 1 From the Main Menu, select **Settings > System Settings > Display**.
- 2 Select a **Menu Access** option:
 - **Enable** (default): All users can access menus from the Main Menu and from a USB flash drive menu.
 - **Enable with PIN**: Users need to enter a PIN to access the Main Menu or a USB flash drive menu.
 - **Disable**: Users cannot access menus from the Main Menu or from a USB flash drive menu.
- 3 If you select **Enable with PIN**, type in a **PIN**.
- 4 Save your changes.

Configure the Printer from the Web Page

If you are using Ethernet communications, you can change configuration settings from the printer Web page.

- 1 Connect your printer to your network and obtain an IP address.
- 2 On your PC, open a Web browser.
- 3 In the **Location** or **Address** bar, type the printer IP address and press **Enter**. The printer web page appears.



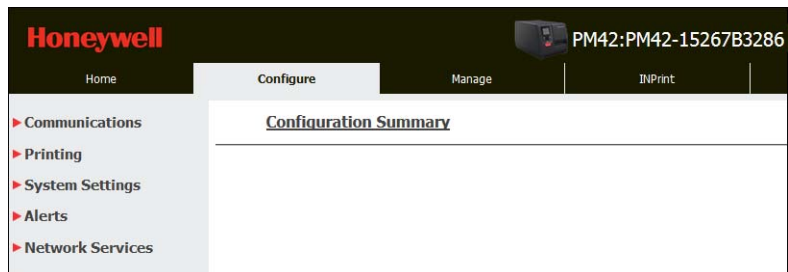
The screenshot shows the Honeywell PM42 printer web interface. The top navigation bar includes links for Home, Configure, Manage, Status, System Information, Services, and Contact. The main content area is divided into three sections: Printer Information, Communications, and Media Settings. A green checkmark and the word 'Ready' are visible on the left side of the Printer Information section.

Printer Information		
PM42	S/N: 15267B3286	
Printer Configuration Number	PM420001	
Command Language	Pclscript	
USB Flash Drive	Disconnected	

Communications		
1000	Serial	115200 8-NONE-1
1000	Ethernet	128.235.57.179 800.10.40.92.76.87

Media Settings	
Media Type	Media With Gaps
Print Method	Its Ribbon (DT)
Media Margin (X)	24 dots
Media Width	840 dots

- 4 Click **Login**. The Login page appears.
- 5 Type your **Username** and **Password**. The default username is `itadmin` and the default password is `pass`.
- 6 Click **Login**.
- 7 Click the **Configure** tab.



The screenshot shows the Honeywell PM42 printer web interface with the 'Configure' tab selected. The left sidebar contains a list of configuration categories: Communications, Printing, System Settings, Alerts, and Network Services. The main content area displays the 'Configuration Summary' page, which is currently empty.

- 8 (Optional) To see a complete list of your printer settings, click **Configuration Summary**.

- 9 Configure printer settings:
 - a Click a menu item in the navigation pane on the left.
 - b To change settings, type information in the fields or select an item from a list.
- 10 Click **Save**.
- 11 (Optional) To create a configuration profile that you can load at any time, click **Save As Profile**, type a name for the profile, and click **Save**.
- 12 (Optional) To reset all values and options on the page the their default settings, click **Default Settings**.

Configure the Printer with PrintSet 5

PrintSet 5 is a printer configuration tool that lets you easily change printer settings.

- 1 Make sure that you have Windows XP or later running on your PC.
- 2 Download PrintSet 5 from to www.honeywellaidc.com.
- 3 Connect your printer to your PC using a serial, USB, or Ethernet connection.
- 4 Use PrintSet to add your printer to PrintSet and configure printer settings.

How to Configure the Printer with Programming Commands

You can send programming commands 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, this Fingerprint command 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. For more information, see the [Fingerprint Command Reference](#).

- If your printer uses the IPL programming language, include commands between the start of text character <STX> and end of text character <ETX>. For example, this IPL command changes your media setting to labels with gaps:

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

For more information, see the [IPL Command Reference](#).

How to Configure the Printer with SmartSystems

SmartSystems is a device management tool that you can use to configure printer settings. The printer ships loaded with the SmartSystems client. The console is part of SmartSystems and is available from 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.

These 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 printer settings as a profile that you can load from the printer memory at any time.

- 1 Log in to the printer Web page. For help, see [“Configure the Printer from the Web Page” on page 36](#).
- 2 Click the **Configure** tab.
- 3 Select **System Settings > General**.
- 4 Click **Save As Profile**.

- 5 In the **Profile** field, type a name for the profile and click **Save**. The profile is saved to the printer memory.

Load a Printer Profile from the Web Page




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

- 1 Log in to the printer Web page. For help, see [“Configure the Printer from the Web Page” on page 36](#).
- 2 Click the **Manage** tab.
- 3 Click **Profiles**. The printer profiles that are saved in the printer memory appear in the Resident list.
- 4 Load a profile to the printer:
 - To load a profile from the printer memory, select the profile from the Resident list and click **Activate**.
 - To load a profile from another location; click **Browse** and browse to the location of the file, double-click the file, and click **Upload**.

When the upload is finished, a “Complete” message appears on the screen.


Save a Printer Profile from the Main Menu

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

- 1 From the Main Menu, select **Tools > Profiles**.
- 2 Select **Create** and press .
- 3 Select the **File Name** box and press .
- 4 Use the onscreen keypad to enter a file name (up to 16 characters). When you are finished, select on the keypad to return to the Create Profile screen.
- 5 Select the arrow at the bottom of the screen and press . The profile is saved to the printer memory.

Load a Printer Profile from the Main Menu

You can load a saved profile from the Main Menu.

- 1 From the Main Menu, select **Tools > Profiles**.
- 2 Select **Load**.
- 3 Select the profile you want to load, and press . When the upload is finished, a “Complete” message appears on the screen.

How to Load a Printer Profile with Programming Commands

You can load a 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: You may need itadmin rights to change some communication settings. To load printer profiles that modify these settings, you must log in as an itadmin: RUN “su -p pass itadmin”.

Programming Commands to Load a Printer Profile

Connection	Command
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

How to Upload Files to the Printer

You can upload these types of files to the printer:

- Fonts
- Images
- Applications
- Formats
- Web forms

You can only delete fonts, images, applications, and web forms that you upload to the printer. You cannot delete files that are installed as part of the printer firmware.

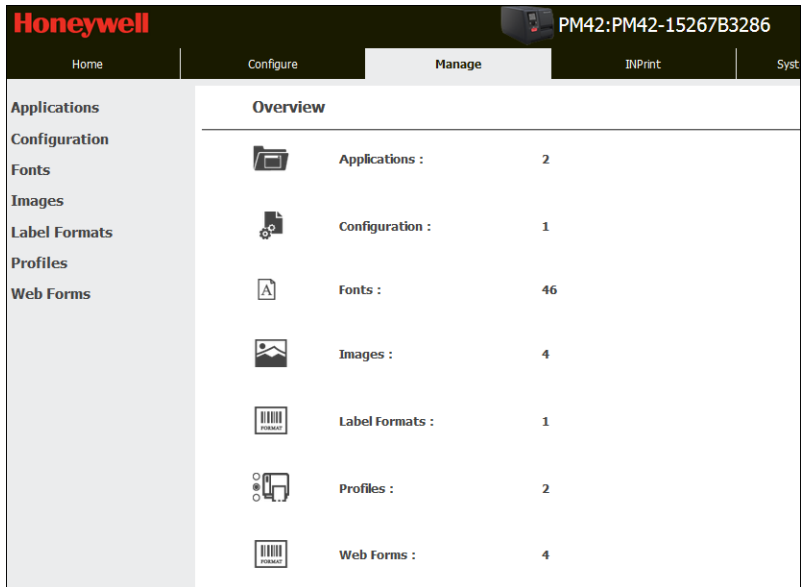
Use one of these methods to upload files to the printer:

- Printer Web page
- USB Storage Device
- PrintSet 5. For help, see the user guide that ships with the software.

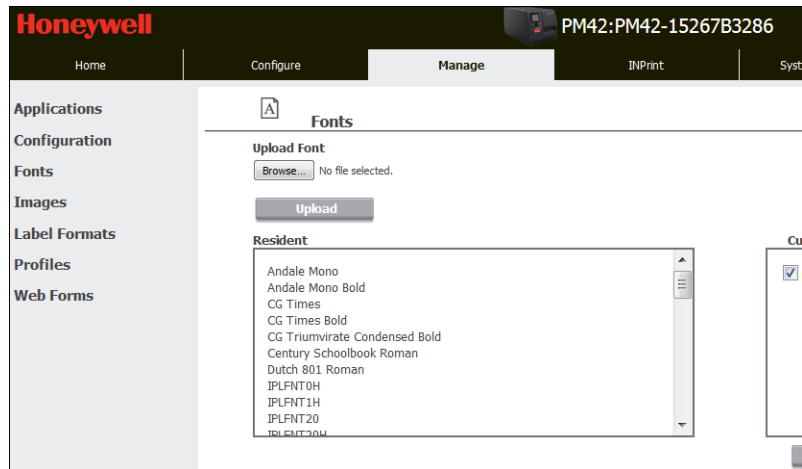
Upload Files from the Web Page

Use the printer Web page to upload files to the printer and install fonts, images, applications, formats, and Web forms.

- 1 Log in to the printer Web page. For help, see [“Configure the Printer from the Web Page” on page 36](#).
- 2 Click the **Manage** tab.



- 3 Click a menu item in the navigation pane on the left. The upload page for the item you selected appears. For example, if you click **Fonts**, this upload page appears.



- 4 Click **Browse** and navigate to the location of the file you want to upload.
- 5 Select the file and click **Open**.
- 6 Click **Upload**. The file is uploaded to the printer.

How to Set Up a USB Storage Device to Upload Files to the Printer

To upload files to your printer from a USB storage device, you need to put the files in a specific directory on the USB storage device. Make sure the USB storage device has a single partition and is formatted as FAT16 or FAT32.

File Type Directories for the USB Storage Device





File Type	Directory to Place the File	Installed in this Printer Directory
Application	/apps	/home/user/apps
Configuration	/config	
Configuration profile	/profiles	/home/user/profiles
Display images	/display	/home/user/display
Fingerprint script	/scripts	/home/user/scripts

File Type Directories for the USB Storage Device (continued)

File Type	Directory to Place the File	Installed in this Printer Directory
Firmware	/firmware	
Font	/fonts	/home/user/fonts
Form/layout	/forms	/home/user/forms
Image	/images	/home/user/images
Installation package (UFF file)	Root of USB storage device	
Start file	Root of USB storage device	
Web Form	/webforms	/home/user/webforms



Upload Files from a USB Storage Device

Use a USB storage device to upload files to the printer and install fonts, images, applications, formats, and Web forms.

- 1 Copy your files to the appropriate directory on the USB storage device.
- 2 Insert the USB storage device into the USB host port on the printer. The USB Device menu appears on the printer screen.
- 3 Select **Install Resources** and press .
- 4 Upload your files:
 - To upload all files on the USB storage device, select **Install All** and press .
 - To upload a single file, select the type of file you want to install and press , and then select the file you want to install and press .
- 5 When the upload is complete, go to the Main Menu and select **Tools > USB Menu > Remove USB**.
- 6 Remove 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 USB storage device into the printer USB host port.
- 3 From the Main Menu, select **Tools > USB Menu > Configuration > Export Configuration**. A list of available configuration files appears.
- 4 Select a file to export and press . When the file is successfully exported, a message appears.
- 5 To close the message, press .
- 6 From the Main Menu, select **Tools > USB Menu > Remove USB**.
- 7 Remove the USB storage device.

Import a Configuration File from a USB Storage Device

You install a saved .xml configuration file from a USB storage device to your printer.



Note: If there is more than one configuration file on the USB storage device, the printer imports the file that is first, alphabetically.

- 1 Insert the USB storage device into the printer USB host port.
- 2 From the Main Menu, select **Tools > USB Menu > Configuration > Install Configuration**. The printer installs the configuration file:
 - IPL configuration files are copied to /home/user/config/ipl.
 - All other configuration files are incorporated into the current configuration.

When the file is successfully imported, a message appears.

- 3 To close the message, press .
- 4 From the Main Menu, select **Tools > USB Menu > Remove USB**.
- 5 Remove the USB storage device.









Change the Background Image for the Ready Screen







You can customize the Ready screen by changing the background image.

- 1 Create a background image. The image must be:
 - 320 x 234 pixels.
 - named background_idle.png.
- 2 Copy the image to the /display directory on a USB storage device.
- 3 Insert the USB storage device into the USB host port on the printer. The USB Device menu appears on the printer screen.
- 4 Use the USB Device menu to upload the image.

Create Menu Shortcuts

You can create shortcuts for frequently used Main Menu items. Menu shortcuts are added to the Quick Choices menu, which replaces the Main Menu. The Main Menu appears as the first item in the Quick Choices list.

- 1 From the Main Menu, select **Tools > Quick Choices > Add**.
- 2 To load a profile:
 - Select **Load Profile** and press .
 - Select **Load Profile** again and press . A check mark appears in the box.
 - Press  to select the arrow at the bottom of the screen, and press .
- 3 To select test labels to print:
 - Select **Test Labels** and press .
 - To add the Test Labels menu, select **Test Labels** and press . A check mark appears in the box.
Or, select individual test labels and press  after each selection. A check mark appears in each box.
 - Select the arrow at the bottom of the screen, and press .

- 4 To select wizards to run:
 - Select **Wizards** and press .
 - To add the Wizards menu, select **Wizards** and press . A check mark appears in the box.
Or, select individual wizards and press  after each selection. A check mark appears in each box.
 - Select the arrow at the bottom of the screen, and press .
- 5 Press . The next time you press  from the Ready screen, the Quick Choices menu (containing the Main Menu and your menu shortcuts) appears.

Customize the Printer Web Page

You can customize the appearance of the printer Web page by modifying the CSS (Cascading Style Sheet). When you open the Web page, the Web page loads the default style.css and then loads the custom style.css. So, you only need to include the styles that you want to change.

- 1 Copy the default style.css from the printer at <http://<printerip>/format/style.css>.
- 2 Modify the CSS and save your changes.
- 3 Upload the modified CSS to the printer with this FTP to printer path: `/home/user/webpage/style.css`.

5

Troubleshoot the Printer

Use this chapter to troubleshoot the printer.

Contact Support

If you are having trouble using your printer and you cannot find a solution in this user manual or from the Knowledge Base (www.hsmknowledgebase.com) or Technical Support Portal (www.hsmsupportportal.com), you can contact Customer Support. For our latest contact information, go to www.honeywellaidc.com/locations.

Before you call Customer Support, have this information ready:

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

To find this information, go to the printer Web page or print a test label.

About Printer System Information

The System Information tab on the printer Web page contains useful information and statistics about the printer hardware and firmware. You may need to provide this information if you contact Support.

Honeywell		PM42:PM42-15267B3286	
Home	Configure	Manage	System Information
Odometer	Summary		
► Statistics	Printer		
XML Printing Log	Printer Serial Number 1528783556		
	Firmware		
	Command Language Fingerprint		
	Firmware Version L10.09.010791		
	Installed Options		
	Main Logic Board		
	Part Number 50124649-002		
	Serial Number 49F9210094		

About Printer Statistics

Printer statistics provide a wide range of information about the printer.

Printer Statistics

Statistic Type	Information Available
System Information	Printer uptime and CPU usage, firmware and kernel versions, printer config and serial numbers, flash and RAM memory information
Print Statistics	Total labels printed, odometer values, total distance printed (printer and current printhead)
Supply	Printhead and ribbon information
Hardware Options	Input/output devices, serial port information
Network Interfaces	MAC address, TCP/IP, and network information
Font Information	Name, type, location, and size of installed fonts
Bar Code Information	Name and type of installed bar code fonts
Image Information	Name, type, location, and size of installed images

View Printer Statistics

Use the printer Web page to view printer statistics.

- 1 Log in to the printer Web page. For help, see [“Configure the Printer from the Web Page” on page 36](#).
- 2 Click the **System Information** tab.
- 3 Select **Statistics > System Information**.

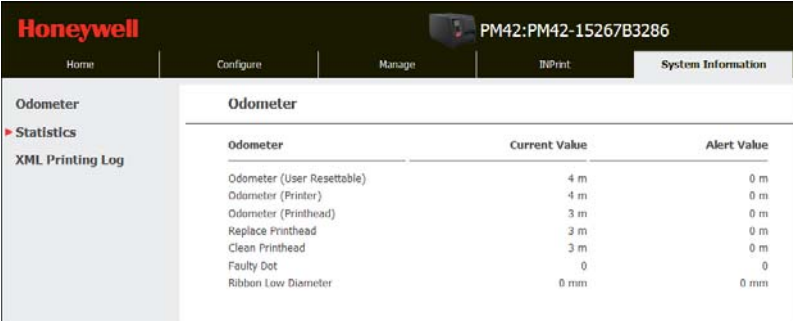
Honeywell		PM42:PM42-15267B3286	
Home	Configure	Manage	InPrint
System Information			
Odometer	System Information		
▼ Statistics			
System Information	Uptime	0 Day 1 Hour 50 Minute	
Print Statistics	Printer Uptime	6 Day 13 Hour 25 Minute	
Supply	CPU Usage	100%	
Hardware Options	Firmware Version	L10.09.010791	
Network Interfaces	Kernel Version	2.6.31 #1 PREEMPT Mon Sep 21 13:15:50 SGT 2015	
Font Information	Hardware Version	Platform version 4	
Bar Code Information	Product Name	PM42	
Image Information	Printer Configuration Number	PM420001	
XML Printing Log	Printer Serial Number	1520703556	
	Flash Memory Information		

- 4 To view more statistics, click another item in the **Statistics** list.

Check Printhead Usage

The printer odometer (available from the printer Web page) provides printhead usage information.

- 1 Log in to the printer Web page. For help, see [“Configure the Printer from the Web Page” on page 36](#).
- 2 Click the **System Information** tab.
- 3 Click **Odometer**.



Odometer	Current Value	Alert Value
Odometer (User Resettable)	4 m	0 m
Odometer (Printer)	4 m	0 m
Odometer (Printhead)	3 m	0 m
Replace Printhead	3 m	0 m
Clean Printhead	3 m	0 m
Faulty Dot	0	0
Ribbon Low Diameter	0 mm	0 mm

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

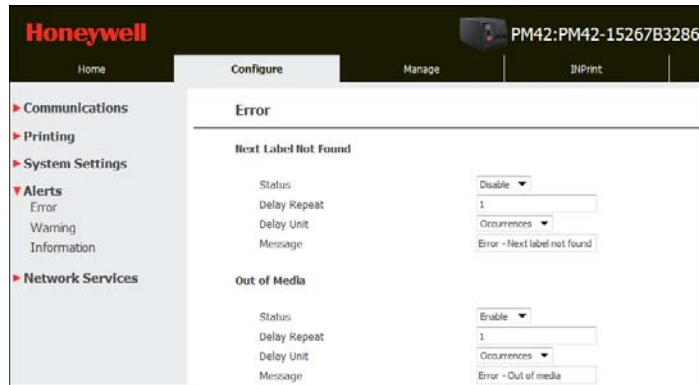
You can enable or disable each type of alert, set the number of times the alert is repeated, set the unit of measure that determines how often the alert is sent, and change the default text message for the alert.

Set Error, Warning, and Information Alerts

You configure alert settings from the printer Web page.

- 1 Log in to the printer Web page. For help, see [“Configure the Printer from the Web Page” on page 36](#).
- 2 Click the **Configure** tab.

3 Click **Alerts**.



4 Click a type of alert:

- **Error**
- **Warning**
- **Information**

5 Configure the settings for each alert.

6 When you are finished, click **Save**.

About Maintenance Alerts

You can set maintenance alerts to define the threshold or value at which an alert is sent to you. For example, you can set a value in millimeters printed at which the printer triggers an alert telling you that it is time to clean the printhead.

Set Maintenance Alerts from the Main Menu

- 1 From the Main Menu, select **Settings > System Settings > Maintenance Alerts**.
- 2 Enter the values you want to set for each maintenance alert.

Set Maintenance Alerts from the Web Page

- 1 Log in to the printer Web page. For help, see [“Configure the Printer from the Web Page” on page 36](#).
- 2 Click the **Configure** tab.

3 Select **System Settings > Maintenance Alerts**.

The screenshot shows the Honeywell PM42 printer web interface. The top navigation bar includes 'Home', 'Configure', 'Manage', 'INPrint', and 'System Information'. The left sidebar lists 'Communications', 'Printing', 'System Settings' (expanded), 'Alerts', and 'Network Services'. Under 'System Settings', 'Maintenance Alerts' is selected. The main content area is titled 'Maintenance Alerts' and contains a table with the following items and input fields:

Odometer (User Resettable)	<input type="text" value="0"/>	m
Odometer (Printer)	<input type="text" value="0"/>	m
Odometer (Printhead)	<input type="text" value="0"/>	m
Replace Printhead	<input type="text" value="0"/>	m
Clean Printhead	<input type="text" value="0"/>	m
Faulty Dot	<input type="text" value="0"/>	
Ribbon Low Diameter	<input type="text" value="0"/>	mm

4 Type the values you want to set for each maintenance alert.

5 When you are finished, click **Save**.

How to Configure Error Alert Notifications

Alert messages can be sent to an email address, an SNMP trap, or both.

Configure Error Alert Notifications from the Main Menu

1 From the Main Menu, select **Settings > System Settings > General**.

2 Select an **Alert Notification Method**:

- **Email**
- **SNMP Trap**
- **SNMP Trap+Email**

Configure Error Alert Notifications from the Web Page

1 Log in to the printer Web page. For help, see [“Configure the Printer from the Web Page” on page 36](#).

2 Click the **Configure** tab.

3 Select **System Settings > General**.

4 Select an **Alert Notification Method**:

- **Email**
- **SNMP Trap**
- **SNMP Trap+Email**

5 When you are finished, click **Save**.

Maintenance and Error Alerts

Use this table to find solutions to some common maintenance and error alerts.

Maintenance and Error Alerts

Alert	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.
Ribbon Low	The diameter of the remaining roll of media is lower than the specified value in the Ribbon Low Diameter setting. Replace the ribbon.
Media Low	The diameter of the remaining roll of media is lower than the specified value in the Media Low Diameter setting. Replace the media.
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 Menu/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 (Printhead)	The printhead has reached a limit set in the Odometer (Printhead) setting in Maintenance Alerts for the amount of media to print before being alerted.

Maintenance and Error Alerts (continued)

Alert	Solution
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 to make sure the printhead is installed and that the printhead cable is firmly connected to the printhead.
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.
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.
Motor Too Hot	The printer motor has reached its maximum operating temperature limit. Let the motor cool down before you resume printing.

Problems and Possible Solutions

Use these tables to find possible solutions to printer problems you may encounter.

Print Quality Problems and Possible Solutions

Problem	Possible Solution
The printout is weak.	Try these possible solutions in order: <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. • The printhead pressure may be too low. Increase the printhead pressure. • Replace the printhead.
The printout is weaker on one side.	Adjust the printhead balance.
There are weak spots on the printout.	Try these possible solutions in order: <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.	Try these possible solutions in order: <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 pressure may be too high. Decrease the printhead pressure. • The printhead voltage may be incorrect or the energy control may be faulty. For help, contact your Honeywell representative.
There are dark lines along the media path.	The printhead may be dirty. Clean the printhead.

Print Quality Problems and Possible Solutions (continued)

Problem	Possible Solution
There are white vertical lines on the printout.	Try these possible solutions in order: <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.
Part of a dotted line is missing.	Try these possible solutions in order: <ul style="list-style-type: none"> • The printhead may be failing. Replace the printhead. • The strobe signal may be failing. For help, contact your Honeywell service representative.
The inner edge of the printout is missing.	Try these possible solutions in order: <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.	Make sure the Print Method is set to Ribbon (TTR).
The ribbon breaks.	Try these possible solutions in order: <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 Honeywell Service representative.

Print Quality Problems and Possible Solutions (continued)

Problem	Possible Solution
The ribbon wrinkles.	<p>Try these possible solutions in order:</p> <ul style="list-style-type: none"> • The ribbon tension bar may not be adjusted correctly. Use a large straight-slot screwdriver to adjust the ribbon tension bar. • You may need to adjust the media edge guide. • The printhead pressure may be too high. Decrease the printhead pressure.
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.	<p>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.</p>
The printer is connected to a serial port on my PC, but the printer is not working.	<p>Try these possible solutions:</p> <ul style="list-style-type: none"> • Make sure the serial port settings are configured correctly. • Make sure the serial cable pinouts are correct and that the cable is not damaged. • If you have the Windows driver for an RS-232 printer installed on your PC, uninstall the driver.

Networking Problems and Possible Solutions

Problem	Possible Solution
The Ethernet 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.

Networking Problems and Possible Solutions (continued)

Problem	Possible Solution
I cannot connect to the printer web page.	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.



How to Restore Default Settings

Use one of these methods to restore default settings on the printer:

- Main Menu
- Printer Web page
- Hardware-based reset

Restore Default Settings from the Main Menu

You can restore default settings from the printer Main Menu.

- 1 From the Main Menu, select **Tools > Restore Defaults**. All settings that can be restored to their default values are selected.
- 2 Clear the check box for the settings that you want to keep:
 - Network settings: Restores the current network settings.
 - User files: Restores all files you installed on the printer.
 - System Settings: Restores all system settings.
- 3 Select the right arrow and press . A message appears prompting you to restore the default settings and restart the printer.
- 4 To select **Yes**, press . The selected settings are restored to their default values, and your printer restarts.

Restore Default Settings from the Printer Web Page

You can restore default settings from the printer Web page.

- 1 On your PC, open a Web 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**. The default username is `itadmin` and the default password is `pass`.
- 5 Click **Login**.
- 6 Select **Services > Restore Defaults**.
- 7 Select the settings that you want to restore to their default values:
 - Network settings: Restores the current network settings.
 - User files: Restores all files you installed on the printer,.
 - System Settings: Restores all system settings.
- 8 Click **Restore**. A message appears prompting you to reboot the printer.
- 9 Click **OK**.
- 10 Restart your printer.

Restore Default Settings with a Hardware-Based Reset

You can perform a hardware-based reset to restore all default settings.

- 1 Turn the printer off, and open the media cover.
- 2 Turn the printhead lift lever counterclockwise to raise the printhead.
- 3 Press and hold the **Print** button and turn the printer on.
- 4 When the status bar is almost full, release the **Print** button.
All settings are restored to their default values.
- 5 Turn the printhead lift lever clockwise to lower the printhead and close the media cover.

How to Upgrade the Printer Firmware

You should check for periodic updates to the printer firmware. Updated firmware can include bug fixes and new features. The latest version of the firmware is available from the printer software tab page on www.honeywellaidc.com.



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

Use one of these methods to upgrade the printer firmware:

- Printer Web page
- USB Storage Device
- PrintSet 5. For help, see the user guide that ships with the software.

Download the Printer Firmware Update

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

- 1 Go to www.honeywellaidc.com.
- 2 Select **Products > Printers and Media > PM42**.
- 3 Click the **Software** tab.
- 4 Download the latest firmware version to your PC.

Upgrade Firmware from the Printer Web Page

You can upgrade firmware from the printer Web page.

- 1 On your PC, open a Web 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**. The default username is `itadmin` and the default password is `pass`.
- 5 Click **Login**.
- 6 Select **Services > Firmware Upgrade**.
- 7 Click **Browse**, navigate to the location of the upgrade file, select the file, and click **Open**.
- 8 Click **Upgrade**. The printer Web page upgrades your printer firmware.

Upgrade Firmware from a USB Storage Device

You can use a USB storage device to upgrade firmware. Honeywell recommends that you use a blank USB storage device.

- 1 Copy the firmware upgrade file to the root directory of the USB storage device.
- 2 Turn the printer off.
- 3 Insert the USB storage device into a USB host port.

- 4 Restart your printer. A message appears as the upgrade file is loaded into the printer memory. This process may take a few minutes.
- 5 From the Main Menu, select **Tools > USB Menu > Remove USB**.
- 6 Remove the USB storage device.

6

Maintain the Printer

This chapter describes how to clean, adjust, and replace parts of the printer.

How to Clean the Printer

To properly maintain the printer, regularly clean these printer parts:

- Printhead
- Media guides
- Exterior of the printer



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



Caution: Use only the cleaning agents specified in this section. Honeywell is not responsible for damage caused by any other cleaning materials used on this printer.



Caution: Isopropyl alcohol is a highly flammable, moderately toxic, and mildly irritating substance.

Follow these guidelines:

- Always remove the power cord before cleaning.
- Never spray the printer with water. Protect it from water when cleaning the premises.
- Never use sharp tools for removing stuck labels. The printhead and rollers are delicate.

Clean the Printhead

Clean the printhead on a regular basis to extend the life of the printhead and maintain print quality. You should clean the printhead each time you replace the media. The printer ships with a cleaning card, but you can contact your local Honeywell representative to order additional cleaning cards.



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 off the printer and disconnect the printer from power.
- 2 Open the media cover.
- 3 Remove the media and ribbon (if installed).

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

Clean the Media Guides

The upper and lower media guides are transparent to allow light to pass between the two parts of the label gap and label mark sensors. Keep these surfaces free of dust, stuck labels, and adhesive residue.

- 1 Turn off the printer and disconnect the printer from power.
- 2 Open the media cover.
- 3 Remove the media and ribbon (if installed).
- 4 Insert a cleaning card or a soft cloth soaked in isopropyl alcohol between the two media guides to clean them.
- 5 Wait approximately 30 seconds to allow the cleaning fluid to dissolve the residue.
- 6 After the parts are dry, replace the media (and ribbon).
- 7 Close the media cover, reconnect power, and turn on the printer.

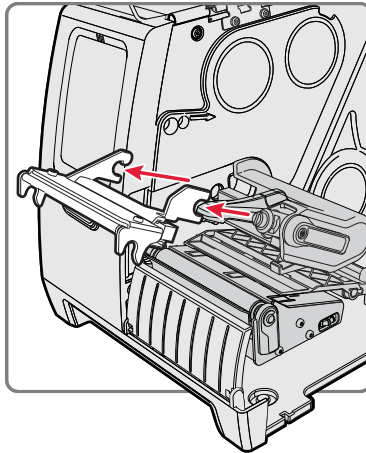
How to Clean the Exterior of the Printer

Keep the exterior of the printer clean to reduce the risk of dust or foreign particles getting inside the printer. Use a soft cloth moistened with water or a mild detergent to clean the exterior of the printer. You should also keep the surface around the printer clean.

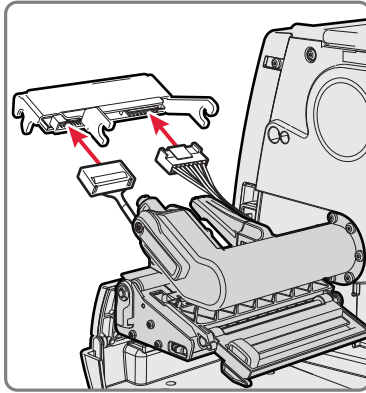
Replace the Printhead

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

- 1 Turn off the printer and disconnect the printer from power.
- 2 Open the media cover.
- 3 Remove the media and ribbon (if installed).
- 4 Turn the printhead lift lever counterclockwise to raise the printhead.
- 5 Detach the magnetic pressure arm from the printhead bracket and disconnect the two cables from the printhead as you remove it from the printer.



- 6 Connect the two printhead cables to the new printhead.



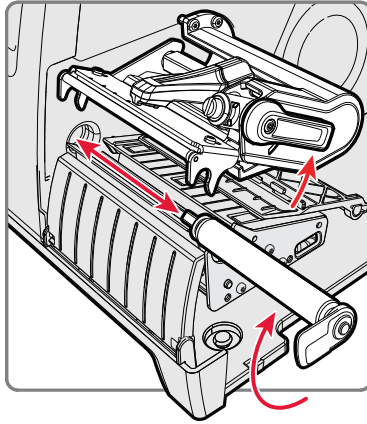
- 7 As you insert the new printhead bracket into the printer, make sure the metal arms on the printhead go around the magnetic pressure arm bar. Attach the magnetic pressure arm to the printhead.
- 8 Replace the media (and ribbon) in the printer.
- 9 Turn the printhead lift lever clockwise to lower it. Close the media cover, reconnect power, and turn on the printer.

Replace the Platen Roller

Replace the platen roller if it is damaged or worn out. You can store a spare platen roller under the media hanger. Insert the platen roller into the hole under the media hanger and turn the latch counterclockwise to secure it to the base.

- 1 Turn off the printer and disconnect the printer from power.
- 2 Open the media cover.
- 3 Remove the media.
- 4 Turn the printhead lift lever counterclockwise to raise the printhead.

- 5 Rotate the platen roller latch clockwise to detach it from the printer and pull the platen roller away from the printer.



- 6 Insert the new platen roller into the printer and turn the latch counterclockwise to secure it.
- 7 Reload media and turn the printhead lift lever clockwise to lower it.
- 8 Close the media cover, reconnect power, and turn on the printer.

How to Adjust the Printer

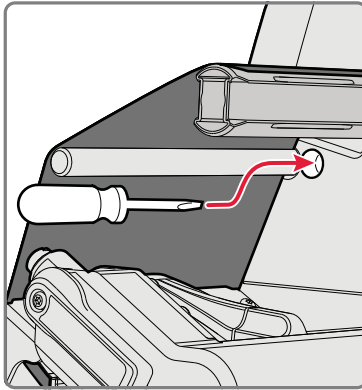
You may need to adjust the printer to improve performance or accommodate your method of printing. You can make these adjustments:

- Ribbon tension
- Printhead balance
- Printhead pressure
- Label gap and black mark sensor

Adjust Ribbon Tension

If your thermal transfer ribbon is wrinkling, you may need to adjust the ribbon tension bar.

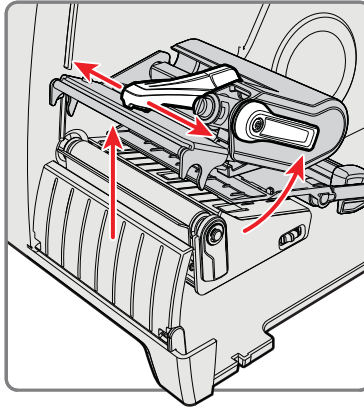
- 1 Open the media cover.
- 2 Use a large straight-slot screwdriver to adjust the ribbon tension bar:
 - To decrease the tension, turn the screw clockwise and move the bar backward.
 - To increase the tension, turn the screw counterclockwise and move the bar forward.



Adjust the Printhead Balance

The printhead is adjusted for full-width media. If you are using media that is less than full-width (4 inches or 102 mm), adjust the position of the printhead balance arm so that the printhead is correctly pressured against the media.

- 1 Open the media cover.
- 2 If you have ribbon installed, remove the ribbon.
- 3 Turn the printhead lift lever counterclockwise to raise the printhead.
- 4 Press down on the blue part of the printhead balance bar and move it:
 - outward for wider media.
 - inward for narrower media.

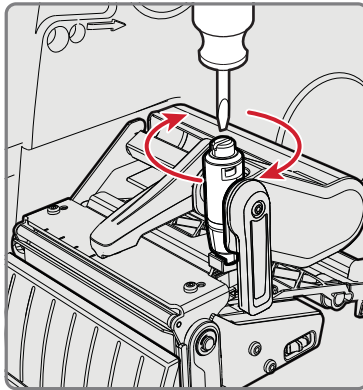


- 5 Close the printhead and load the ribbon.
- 6 Test and readjust the printhead balance if necessary.
- 7 Close the media cover.

Adjust the Printhead Pressure

You may need to adjust the printhead pressure if you change to thicker or thinner media, your ribbon starts to crease, or if your labels are printing light on one side. Do not use a higher printhead pressure than necessary. It may increase wear on the printhead and shorten its life.

- 1 Open the media cover.
- 2 Use a large straight-slot screwdriver to adjust the pressure screw:
 - To increase the pressure and create a darker print, turn the screw clockwise.
 - To decrease the pressure and create a lighter print, turn the screw counterclockwise.

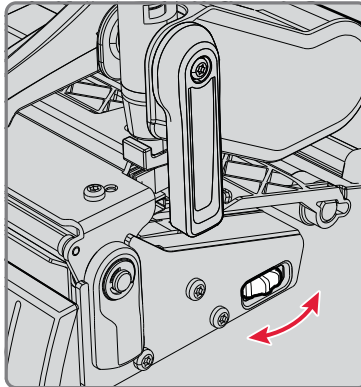


- 3 Test and readjust the printhead pressure if necessary.
- 4 Close the media cover.

Adjust the Label Gap and Black Mark Sensor

The label gap sensor is a transmissive sensor that controls how the printer feeds media by detecting gaps between the labels. The black mark sensor is a reflective sensor that detects black marks on continuous media.

- 1 Open the media cover.
- 2 Adjust the label gap and black mark sensor. Use the blue LED, which can be seen through the media, to help determine the proper location:
 - To move the sensor toward the outside of the printer, turn the sensor adjustment knob counterclockwise.
 - To move the sensor toward the inside of the printer, turn the sensor adjustment knob clockwise.



- 3 Test and readjust the printhead pressure if necessary.
- 4 Close the media cover.

A

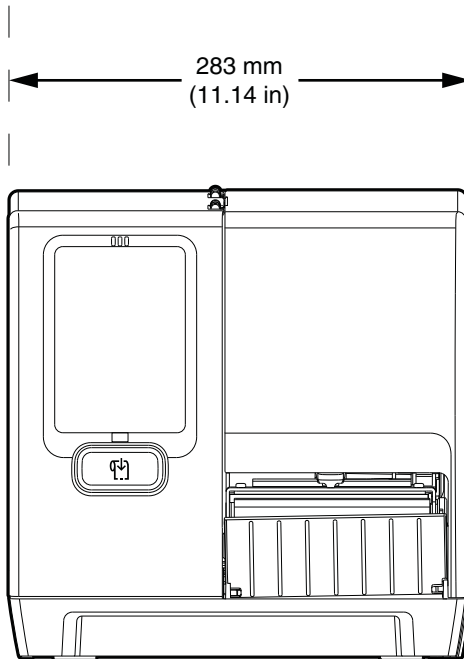
Specifications

Printer Specifications

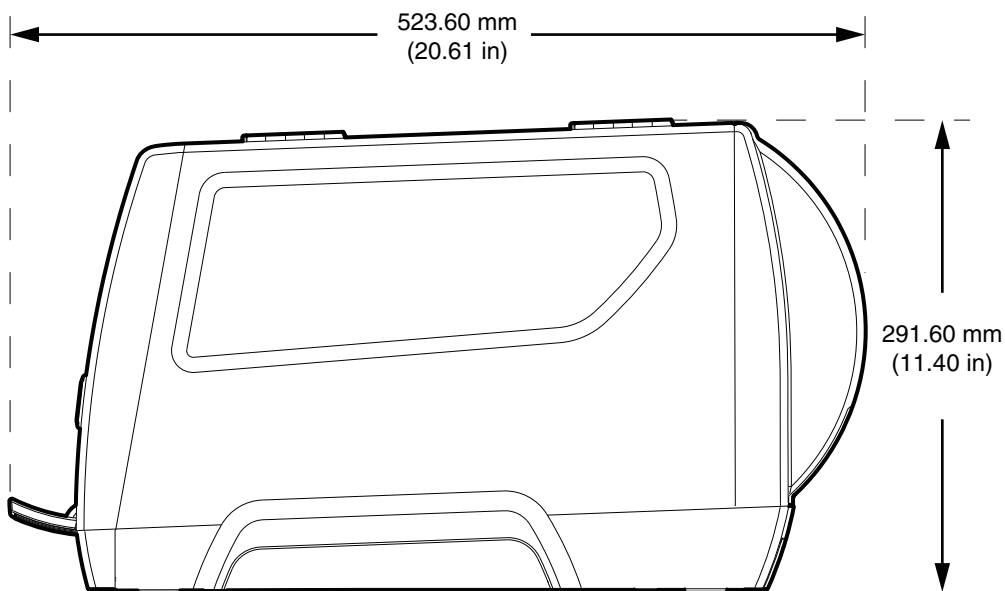
Physical Specifications

Dimensions: 523.60 x 283.00 x 291.60 mm
(20.61 x 11.14 x 11.40 in)

Weight: 12.2 kg (26.6 lbs)



PM42 Width



PM42 Length and Height

Power Specifications

Power Supply Requirements: 100-240 V, 4 A 50/60 Hz

Temperature and Humidity Specifications

Operating Temperature:	5 °C to 40 °C (41 °F to 104 °F)
Storage Temperature:	-20 °C to 60 °C (-4 °F to 140 °F)
Relative Humidity:	20 to 80% non-condensing

Print Speed, Resolution, and General Media Specifications

Print Mode:	Thermal Transfer or Direct thermal
Print Speed (variable):	203 dpi: 100 to 300 mm/sec (4 to 12 ips) 300 dpi: 100 to 300 mm/sec (4 to 12 ips) 406 dpi: 100 to 250 mm/sec (4 to 10 ips)
Print Resolution:	203 dpi: 8 dots/mm 300 dpi: 11.8 dots/mm 406 dpi: 16 dots/mm
Print Width:	203 dpi: 108 mm (4.25 in) max 300 dpi: 106 mm (4.17 in) max 406 dpi: 104 mm (4.09 in) max
Media Width:	19.05 to 114.3 mm (0.75 to 4.50 in)
Label Roll Diameter (maximum):	212.70 mm (8.38 in)
Label Roll Core (ID):	76.20 mm (3 in) or 38.1 mm (1.50 in)
Label Length (minimum):	6.35 mm (.25 in)
Gap Length Between Labels:	1.2 to 26 mm (0.05 to 1.02 in)
Black Mark Length:	3 to 25 mm (0.12 to 0.98 in) centered between tickets, 15% maximum reflectance
Media Thickness:	61 to 264 µm (2.40 to 10.40 mil)
Media Density:	57.60 to 250 g/m ²
Liner Opacity (maximum):	76% (TAPPI T425)
Ribbon Width:	21.59 to 110 mm (0.85 to 4.33 in)
Ribbon Roll Diameter (maximum):	80 mm (3.15 in)
Ribbon Core (I.D.):	25.40 mm (1.00 in)
Ribbon Core Length:	21.59 to 110 mm (0.85 to 4.33 in)
Gap and Black Mark Sensor:	Adjustable from left edge to 101.6 mm (4.00 in)

Memory

- 128 MB Flash
- 128 MB SDRAM
- USB memory device (optional)

Supported Command Languages

- Fingerprint
- Direct Protocol
- Intermec Printer Language (IPL)
- ZSim
- DSim
- Smart Printing

Media Sensors

- Label gap/end
- Black mark
- Printhead lift
- Ribbon present/end (thermal transfer models only)
- Ribbon low

Network Services

- FTP
- HTTP Server
- SNMP v1/2c/3
- SNMP client support for IPv4 and IPv6
- WINS for IPv4
- BOOTP for IPv4
- DNS client support for IPv4 and IPv6
- LPR (Line Printer Remote Protocol)
- Raw TCP (Telnet in/out)
- DHCP client for IPv4 and IPv6 network (dual stack)
- IPv4 and IPv6
- Ping
- IPSEC/IKEv2 over IPv4/IPv6
- SSH

Resident Fonts

- Andale Mono
- Andale Mono Bold
- Century Schoolbook Roman
- CG Times
- CG Times Bold
- Letter Gothic
- OCR-A
- OCR-B
- Univers
- Univers Bold
- Univers Condensed Bold
- Univers Extra Condensed

Downloadable Fonts

For broader language and character support, you can download fonts to the printer and store them in volatile memory.

Honeywell recommends fonts from Monotype Imaging to address global languages. The WTLE (World Type Layout Engine) from Monotype makes it possible to support additional font faces, as well as complex languages and right to left scripting.

These fonts have been tested and are available for purchase and download at www.fonts.com. WorldType Collection fonts support all global languages, while the other fonts listed support specific languages:

- Angsana New Regular
- Helvetica World
- MSung PRC Medium
- MSung HK Medium
- HYGothic-Medium
- TBMinPro-Light
- NarkisClassicMF
- WorldType Collection J
- WorldType Collection K
- WorldType Collection S
- WorldType Collection T

Supported Font Types

- TrueType
- OpenType
- ATF
- Bitmap

Supported Bar Code Symbolologies

1D Bar Code Symbolologies	2D Bar Code Symbolologies
Codabar	Aztec
Code 11	Code 16K
Code 39	Code 49
Code 93	Data Matrix
Code 128	Dot Code
DUN-14/16	Grid Matrix
EAN	MaxiCode
HIBC 39	MicroPDF417
HIBC 128	MSI (modified Plessey)
Industrial 2 of 5	PDF417
Interleaved 2 of 5	Planet
ISBT-128	Plessey
Matrix 2 of 5	Postnet
Straight 2 of 5	QR Code
UPC	RSS-14
	USPS 4-State Customer Bar Code

Supported Graphic File Types

- PCX
- PNG
- GIF
- BMP

Windows Drivers

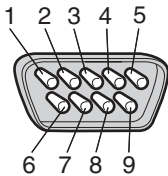
- Support for Windows XP, Vista, Windows 7, Windows 8, Server 2003, and Server 2008
- Supports 32-bit and 64-bit editions

Interface Specifications

These interfaces are available on the printer.

RS-232 Serial Interface

The printer end of the serial cable is a DB9 pin. The PC end depends on the model of the desktop computer.

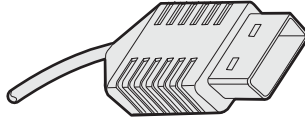


RS-232 Serial Cable DB9 Pins

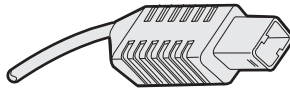
Pin	Signal	Description
1		External +5 VDC, Max 500 mA
2	TXD	Transmit data
3	RXD	Receive data
4		
5	GND	Ground
6		
7	CTS	Clear to send
8	RTS	Request to send
9		

USB Device Interface

You connect a cable with a Type A connector and a Type B connector from your PC to the printer. The Type A connector plugs into the PC and the Type B connector plugs into the printer.



USB Type A Connector

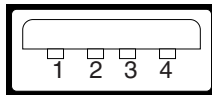


USB Type B Connector

To use the USB interface to print from a PC, you need to install the InterDriver printer driver on your PC. Honeywell recommends that you only connect one printer to each USB port on the PC, either directly or through a hub. You cannot connect other devices, such as a keyboard or a mouse, to the same hub.

USB Host Interface

Use the USB host interface to connect USB devices to the printer such as HID bar code scanners, keyboards, USB storage devices, and USB hubs.

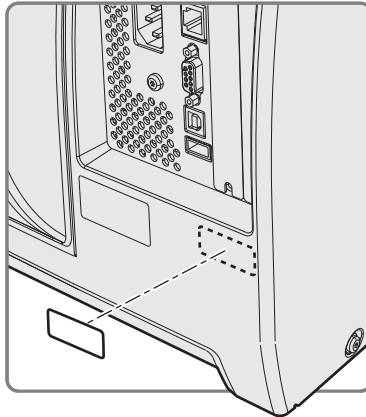


USB Host Interface

Pin	Description
1	VBUS
2	D-
3	D+
4	Gnd

Ethernet Interface

The Ethernet interface has an RJ-45 socket for use with a standard RJ-45 cable. The interface supports 10/100 Mbps Fast Ethernet (10BASE-T, 100BASE-T) and is fully compliant with the IEEE 802.3u standard. The network card MAC address is on the back of the printer.



MAC Address Label Location

B

Default Settings

Default Configuration

If you restore the printer to factory default settings, the printer will use these values. The order of the settings reflects the organization of the printer Web page and Main Menu.

Serial Port Settings

Serial port settings are accessible when the printer is serially connected 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

Ethernet Settings

Ethernet settings include IPv4 and IPv6 settings.

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

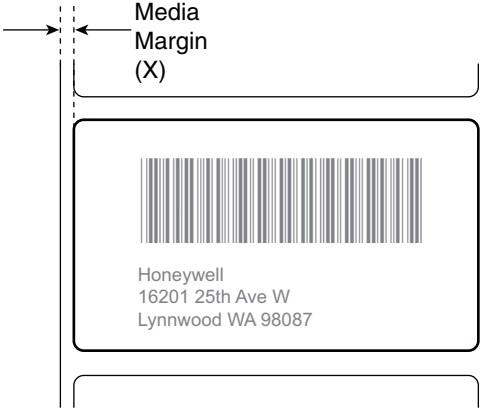
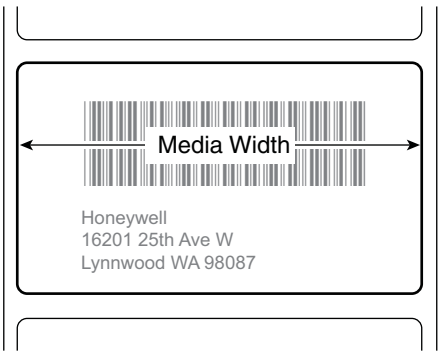
Media Settings

Configure media settings for the size, type, and position of your media.

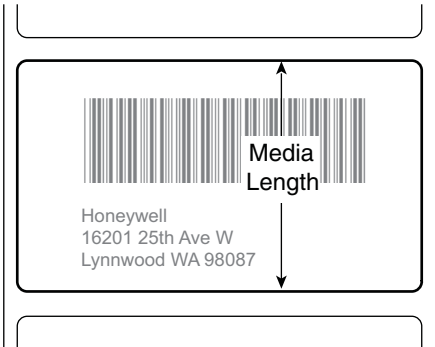
Media Settings

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 Settings (continued)

Setting	Description	Default
Media Margin (X)	<p>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.</p> 	Variable
Media Width	<p>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.</p> 	Variable

Media Settings (continued)

Setting	Description	Default
Media Length	<p>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 Measurement parameter.</p> 	Variable
Clip Default	<p>Determines if the printer prints items outside the printable area of the label.</p> <p>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.</p>	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

Media Settings (continued)

Setting	Description	Default
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 two configuration labels as it calibrates the media sensors.	No Action
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 two configuration labels as it calibrates the media sensors.	No Action

Print Quality Settings

Configure print quality settings to control print speed, media sensitivity, darkness, and contrast.

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%

General System Settings

General system settings control parameters like date, time, and printer command language.

General System Settings

Setting	Description	Default
System Name	Sets the network identification name (WINS name) of the printer.	Printer model number and serial number. For example, PM42-000000011
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	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 screen.	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
Zero with Slash	Determines how the zero character is printed and displayed on the screen. Disable (0) or Enable (Ø).	Disable
Time Zone	Sets the time zone.	(UTC 00:00) Universal Time
DST Adjust	Determines if Daylight Saving Time is automatically adjusted.	Disable

Display Settings

Display settings control options for the screen.

Display 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 Print button is enabled or disabled.	Enable
Information Access	Determines if the information bar on the Main Menu is accessible.	Enable

Manage I/O Settings

System I/O settings determine which communication methods the printer can use.

Manage I/O Settings

Setting	Description	Default
Ethernet	Determines if the printer is allowed to communicate using Ethernet communications.	Enable

Manage Services Settings

These services are available for Ethernet communications.

Manage Services Settings

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 Direct Protocol (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 to communicate with another device.	Enable
XML	Determines if the printer can use XML printing.	Enable
Time Server	Determines if the printer uses the Network Time Protocol (NTP) to synchronize its time with a network time server. The default Server Address is ntp0.cornell.edu, and the default Port Number is 123.	Disable

C

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 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 address bar, type the IP address of your printer 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 admin and the default value for Password is pass.
- 5 Click the **INPrint** tab.
- 6 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.
- 7 Type information in the web form as needed.

- 8 (Optional) To preview the label on screen, click **Preview**.
- 9 To print the label, click **Print**.

Predefined INPrint Label Formats

Predefined INPrint Label Formats

Format Name	Sample
203_returnadd_3x1.lbx	<div><div>HONEYWELL</div><div>No:221 Xinhai Street China-</div><div>Singapore Suzhou Industrial Park</div></div>
203_demo_4x6.lbx	<div><div><div><div>LADDER FIELD</div><div></div></div><div><div></div><div>HONEYWELL PRINTERS</div><div></div></div><div><div></div><div>Honeywell Scanning & Mobility</div><div>CUST SERVICE: 001 480 353 3020</div><div>www.honeywellatf.com</div></div><div><div>HONEYWELL</div><div>15266934705</div><div>Xibinning.Yuan@honeywell.com</div></div></div><div><div>CODE 39 3.0/1 15 MIL</div><div></div><div>PICKET FIELD</div><div><div>DATAMATRIX</div><div></div></div></div></div>

Predefined INPrint Label Formats (continued)

Format Name	Sample
203_shipaddr_4x6.lbx	<div><div><div>HONEYWELL No.221 Xinhai Street China- Singapore Suzhou Industrial Park</div></div></div>
203_packslip_4x6.lbx	<div><div><div><div>HONEYWELL No.221 Xinhai Street China- Singapore Suzhou Industrial Park</div><div>PACKING SLIP</div><div>Phone: 13266794755</div></div><div><div>ORDER NO:</div><div>SHIP DATE: 215.11.17</div></div><div><div>Item No.</div><div>Description</div><div>Order Qty</div><div>Pick Qty</div></div></div><div><div>TOTALS:</div></div></div>

Linux Copyright Information

This software is provided in pertinent parts by the following copyright holders:

Copyright or License Text	Link to Source Code
BlueZ - Bluetooth protocol stack for Linux	http://www.bluez.org
LPRng, IFHP, and LPRng Tool License	http://www.lprng.com
psplash - a lightweight framebuffer splashscreen for embedded devices	http://git.yoctoproject.org/cgit/cgit.cgi/psplash
udhcp DHCP client	http://busybox.net/products.html
Copyright © 1997 Warren W. Gay VE3WWG	http://sourceforge.net/projects/wavplay/
EINA-EFL data type library, Copyright © 2008 Cedric Bail	http://www.enlightenment.org
Copyright © 2008 Christian Kellner, Samuel Cormier-Iijima	http://www.gtk.org
Copyright © 2001, 2002 Brian Stafford <brian@stafford.uk.linux.net>	http://www.stafford.uklinux.net/libesmtplib/
Copyright © 1996 Markus Franz Xaver, Johannes Oberhumer	http://www.oberhumer.com/opensource/lzo/
Copyright © 2002 Nicolas Pitre Copyright © 2003 Texas Instruments, Inc. Copyright © 2003 Chris Larson. Copyright © 2004 Michael Opdenacker <michaelo@handhelds.org> Original version: Copyright © 2001 Russell King.	http://tslib.berlios.de/
Mono compilers and tools. Copyright © 2001, 2002, 2003, Ximian and contributors.	http://www.mono-project.com/Main_Page
Copyright (C) 2003 WIDE Project.	https://fedorahosted.org/dhcpv6/
Copyright (c) 2002-2008 Matt Johnston Portions copyright (c) 2004 Mihnea Stoenescu	https://matt.ucc.asn.au/dropbear/dropbear.html
Copyright (c) 2004, Jan Kneschke, incremental	http://www.lighttpd.org/

Copyright or License Text	Link to Source Code
Copyright (C) 1994-2008 Lua.org, PUC-Rio.	http://www.lua.org/
Copyright (C) 2004, 2005 WIDE Project.	http://www.racoon2.wide.ad.jp/w/
Copyright (C) 1995, 1996, 1997, 1998, and 1999 WIDE Project.	http://ipsec-tools.sourceforge.net/
Copyright 1989, 1991, 1992 by Carnegie Mellon University Derivative Work - 1996, 1998-2000 Copyright 1996, 1998-2000 The Regents of the University of California Copyright (c) 2001-2003, Networks Associates Technology, Inc Portions of this code are copyright (c) 2001-2003, Cambridge Broadband Ltd. Copyright © 2003 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. Copyright (c) 2003-2010, Sparta, Inc	http://www.net-snmp.org/
Copyright (C) 2000-2011 Carsten Haitzler and various contributors Copyright (c) 1999 - Carsten Haitzler (The Rasterman)	http://www.enlightenment.org/
Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006 Expat maintainers.	http://www.libexpat.org/
Copyright 2009 Intermec Technologies Corp. All rights reserved. Based on code from Frank Da Cruz's excellent book, <i>_Kermit: A File Transfer Protocol_</i> , Digital Press, 1986.	http://www.columbia.edu/kermit/
Copyright (c) 1997 Eric S. Raymond	http://giflib.sourceforge.net/
Copyright (C) 1991-1998, Thomas G. Lane.	http://www.ijg.org/
Copyright 2006 Richard Wilson <richard.wilson@netsurf-browser.org> Copyright 2008 Sean Fox <dyntryx@gmail.com>	http://www.netsurf-browser.org/projects/libnsbmp/

Copyright or License Text	Link to Source Code
Copyright (c) 1998-2009 Glenn Randers-Pehrson	http://www.libpng.org/pub/png/libpng.html
Copyright (c) 1998-2007 The OpenSSL Project.	http://www.openssl.org/
(C) 1995-2004 Jean-loup Gailly and Mark Adler	http://zlib.net/
Copyright (c) 2003-2009, Jouni Malinen <j@w1.fi> and contributors	
(C) Copyright 2000-2008 Wolfgang Denk, DENX Software Engineering, wd@denx.de.	http://www.denx.de/wiki/U-Boot/WebHome
Copyright © Freescale Semiconductor, Inc. 2004-2007. All rights reserved.	http://ltib.org/
Copyright (c) 1997-2002 Jean Tourrilhes <jt@hpl.hp.com>	http://www.hpl.hp.com/personal/Jean_Tourrilhes/Linux/Tools.html
Alessandro Rubini, 2008	http://www.gnudd.com/sw/fiq-engine.html

This software is provided by all copyright holders “as is” and any express or implied warranties, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose are disclaimed. In no event shall any copyright holder or contributors be liable for any direct, indirect, incidental, special, exemplary, or consequential damages (including, but not limited to, procurement of substitute goods or services; loss of use, data, or profits; or business interruption) however caused and on any theory of liability, whether in contract, strict liability, or tort (including negligence or otherwise) arising in any way out of the use of this software, even if advised of the possibility of such damage.

Honeywell
9680 Old Bailes Road
Fort Mill, SC 29707

www.honeywellaidc.com