

**Honeywell**

# PD45S

Industrial Printer

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**User Guide**

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# TABLE OF CONTENTS

Customer Support .....	ix
Technical Assistance .....	ix
Product Service and Repair .....	ix
Limited Warranty .....	ix
Safety Warnings .....	x
Caution Statements .....	x
Shipping the Printer .....	x
<b>Chapter 1 - About the Printers .....</b>	<b>1</b>
Features .....	1
About the Displays .....	1
Front View .....	2
Back View .....	3
Inside the Printer .....	3
Print Button.....	4
Front Panel - PD45SOC.....	4
About the Ready Screen.....	5
Front Panel - PD45SOF .....	5
Main Menu .....	6
Navigate the Main Menu .....	7
Wizards .....	7
Printing Wizard .....	7
Communications Wizard .....	8
Calibration Wizard.....	8
Printer Command Languages and Simulator Support Options .....	8

Autosense.....	9
Direct Protocol.....	9
Fingerprint.....	9
IPL.....	9
ZSim.....	9
DPL.....	9
Smart Printing.....	10
PDF Printing.....	10
Access the Printer Web Page.....	10
Set the Printer Command Language.....	10
From the Printer Web Page.....	10
From the Main Menu.....	11

## **Chapter 2 - Set Up the Printer ..... 13**

Power Up the Printer.....	13
Calibrate the Touch Screen.....	14
To calibrate the screen from the website:.....	14
About the Media.....	14
Load Media for Tear-Off Printing.....	14
To load media for tear off printing:.....	15
Load Media for Peel and Rewind Printing.....	17
Loading with the Cutter.....	21
Load Fanfold Media.....	23
About the Ribbon.....	24
Load Ribbon.....	24
Ribbon Removal.....	26
Print a Test Label.....	26
Printhead Pressure and Toggle Position.....	27
Pressure Adjustment.....	27
Toggle Position Adjustment.....	28
Toggle Settings.....	28

## Chapter 3 - Connect the Printer.....29

Connect the Printer to Your PC.....	29
Connect the Printer Using a Serial Cable .....	29
Connect the Printer Using a USB Cable .....	29
Connect the Printer to Your Network.....	29
Connect the Printer to an Ethernet Network .....	30
Connect the Printer via Wi-Fi.....	30
Configure Wi-Fi Communications from the Web Page .....	31
Configure Wi-Fi Communications from the Main Menu .....	31
Install Authentication Certificates .....	31
Printer Drivers.....	32
Install Honeywell Windows Driver .....	32
USB Host Port.....	33
Connect a USB Device .....	33

## Chapter 4 - Configure the Printer.....35

Printer Configuration Menus .....	35
Printer Configuration .....	36
Restrict Access to the Main Menu .....	36
Access the Printer Web Page .....	36
Printer Webpage User Name and Password.....	37
Configure the Printer from the Web Page.....	37
Configure the Printer with PrintSet 5.....	37
Configure the Printer with Programming Commands.....	38
Uploading from the Web Page .....	38
Uploading from a USB Storage Device .....	39
Change Background Image for the Ready Screen.....	39
Printer Profiles.....	40
Save a Printer Profile from the Web Page.....	40
Load a Printer Profile from the Web Page .....	40
Save a Printer Profile from the Main Menu.....	41
Load a Printer Profile from the Main Menu .....	41
Load a Printer Profile Using Programming Commands.....	41

Install a Configuration File from a USB Storage Device.....	42
Export a Configuration File to a USB Storage Device.....	42
Menu Shortcuts.....	43
Create Menu Shortcuts.....	43
Customize the Printer Web Page.....	44

## **Chapter 5 - Troubleshooting ..... 45**

System Information .....	45
Statistics .....	45
Printer Odometer .....	46
Maintenance Alerts.....	46
Set Alerts.....	46
Alert Notifications .....	47
Error Alerts and Solutions.....	48
Troubleshoot Printer Problems and Find Solutions .....	49
Print Problems.....	49
Networking Problems .....	50
Restore Printer Defaults.....	50
Restore Defaults from the Printer Web Page .....	50
Restore Defaults from the Main Menu .....	51
Restore Defaults with a Hardware-Based Reset.....	51
Upgrade the Printer Firmware.....	52
Upgrade Firmware from a USB Storage Device .....	52
Upgrade Firmware from the Printer Web Page .....	52

## **Chapter 6 - Maintenance ..... 55**

Clean the Printer .....	55
Clean the Printhead .....	56
Clean the Front Sensor .....	57
Clean the Media Path .....	57
Clean the Exterior of the Printer.....	57
Replace the Printhead .....	57
Replace the Platen Roller .....	60

Label Taken Sensor Calibration.....	62
Label Gap and Black Mark Sensor Adjustments .....	62
<b>Chapter 7 - Product Specifications .....</b>	<b>65</b>
Printer and Environmental Specifications.....	65
Command Languages and Simulator Support Features.....	65
Print Sensors.....	65
Network Services .....	66
Fonts.....	66
Resident Fonts.....	66
Downloadable Fonts.....	67
Supported Font Types.....	68
Printed Barcode Symbologies .....	68
1D Barcode Symbologies.....	68
2D Barcode Symbologies.....	68
Graphic File Types .....	69
<b>Appendix A - Default Settings .....</b>	<b>71</b>
Communications Settings.....	71
Serial Port .....	71
Ethernet.....	72
Media Settings .....	72
Print Quality Settings .....	75
System Settings .....	76
General System .....	76
Display Settings .....	77
System I/O.....	77
System Network Services .....	78
Maintenance Alerts .....	79
<b>Appendix B - Print Labels with INPrint.....</b>	<b>81</b>
The INPrint Page .....	81
Print INPrint Labels .....	81

**Appendix C - Accessories and Options..... 83**

Printer Accessories and Options .....83



# Customer Support

## Technical Assistance

To search our knowledge base for a solution or to log in to the Technical Support portal and report a problem, go to [sps.honeywell.com](https://sps.honeywell.com).

For our latest contact information, go to [sps.honeywell.com](https://sps.honeywell.com).

## Product Service and Repair

Honeywell International Inc. provides service for all of its products through service centers throughout the world. Go to [sps.honeywell.com](https://sps.honeywell.com) and select Support to find a service center near you or to get a Return Material Authorization number (RMA #) before returning a product.

## Limited Warranty

For warranty information, go to [sps.honeywell.com](https://sps.honeywell.com) and click **Support > Warranties**.

## Safety Warnings

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



**Do not touch ribbon hub and ribbon rewind hub with bare hands.**

**Warning:** This printer contains a coin battery and is NOT user replaceable. Keep children away from the printer when the printer is in service.



**Never put batteries in your mouth as swallowing may lead to serious injury or death. If swallowed, seek medical attention immediately from a physician or local poison control center.**

## Caution Statements



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



**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:** To reduce the risk of electric shock or fire, keep the cover closed and turn off the printer when not in use. There are no user-serviceable parts inside the power supply unit.

## Shipping the Printer

To avoid printer damage during transit:

1. Power off the printer and remove all cables.
2. Remove media and ribbon (if installed) from the printer.
3. Lower the printhead and front arm.
4. Pack the printer in the original container.

**Note:** Honeywell is not responsible for any damage caused during shipment/transit.

# ABOUT THE PRINTERS

The PD45S printers include integrated USB, RS-232, and Ethernet. You can connect the printers to a single PC, a wired network, or a wireless (optional) network.

The PD45S printer series includes:

- PD45SOC
- PD45S0F
- PD45S1F

## Features

- USB host port for connecting storage devices, scanners, or keyboards.
- USB device port to connect to a PC.
- Support for printer command languages including Fingerprint (FP), Direct Protocol (DP), Intermec Printer Language (IPL), Zebra Simulation (ZSim), Datamax Printer Language (DPL), and Smart Printing.

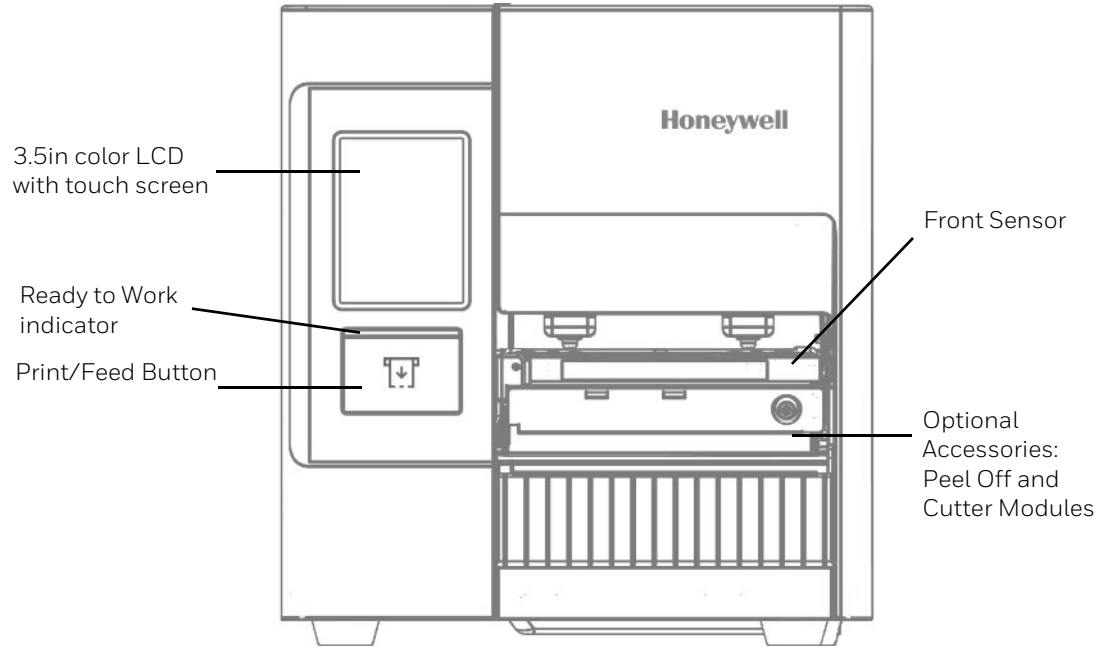
## About the Displays

The table below gives a description of each model's display type.

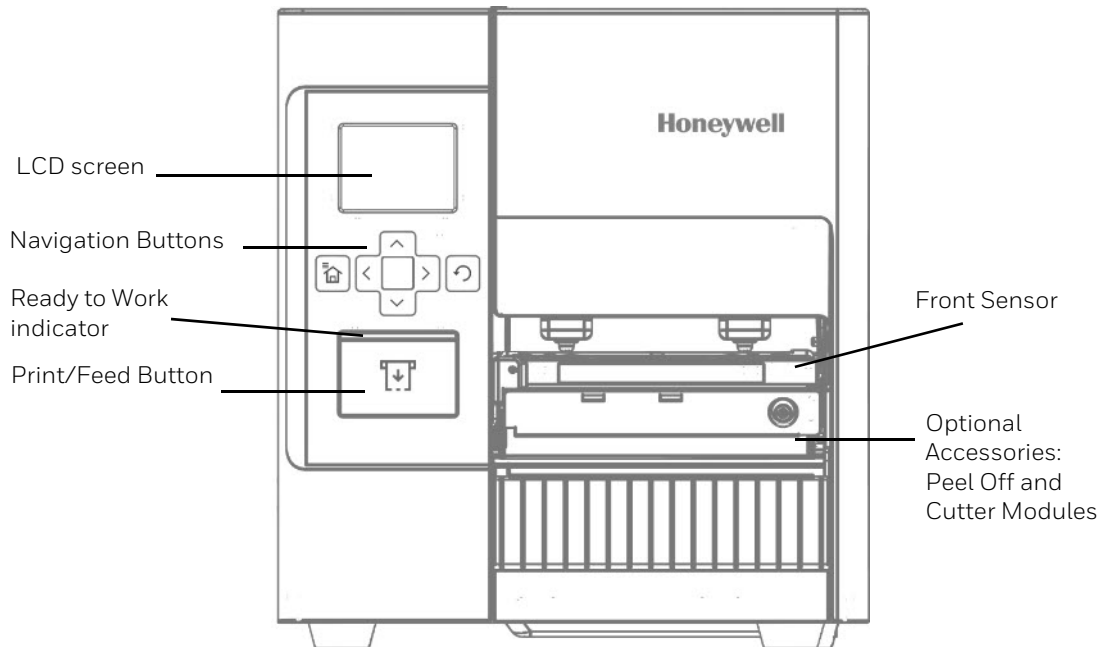
Printer	Display Type
PD45SOC	2.36" LCD
PD45S0F	3.5" LCD
PD45S1F	3.5" LCD with no Front Sensor

# Front View

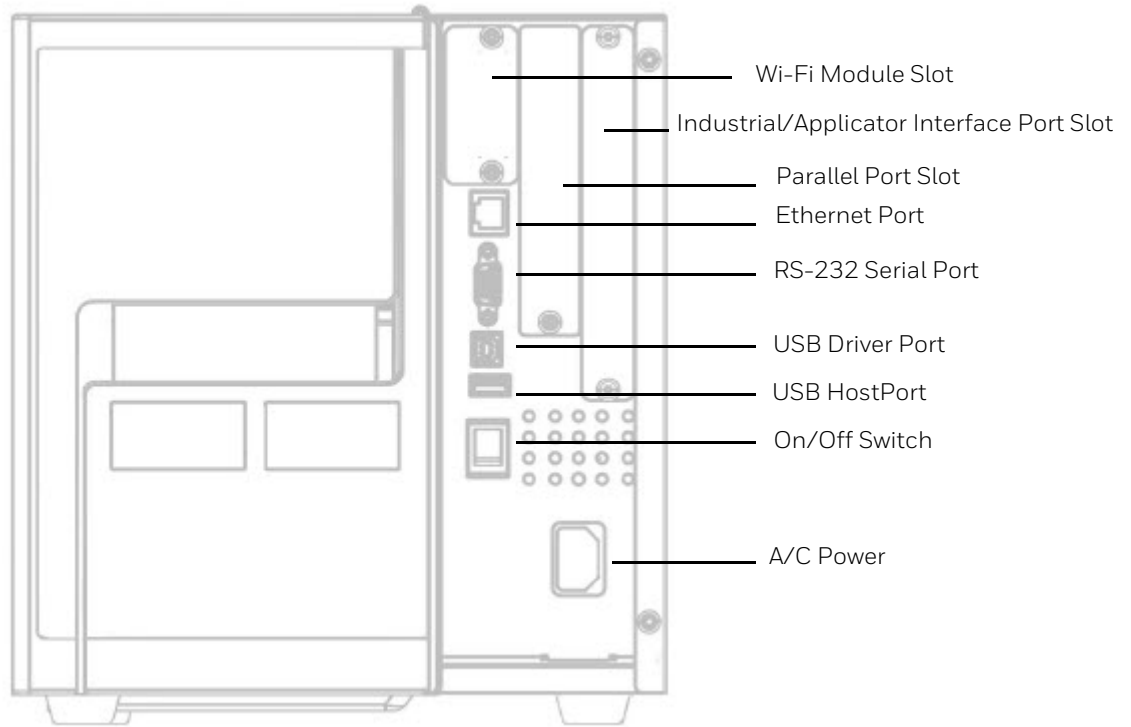
## Touch Panel Front View and Features



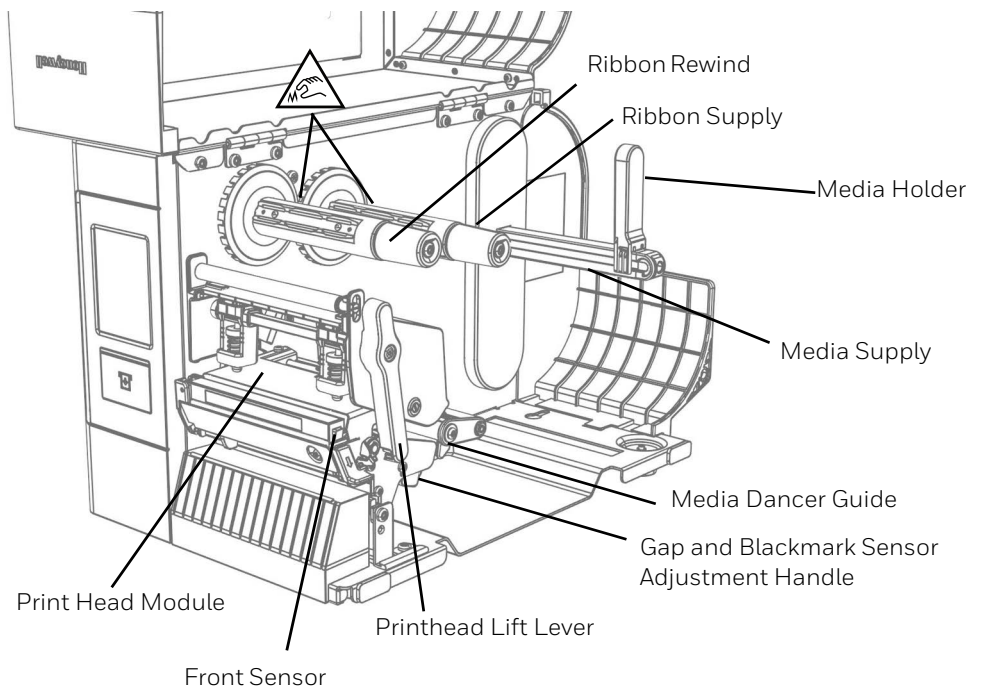
## LCD Front View and Features



# Back View



# Inside the Printer



# Print Button

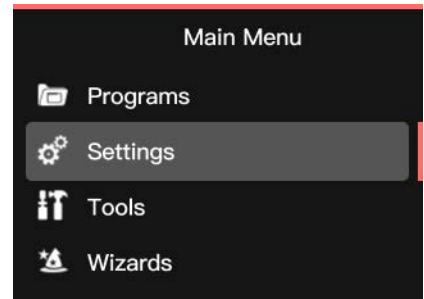
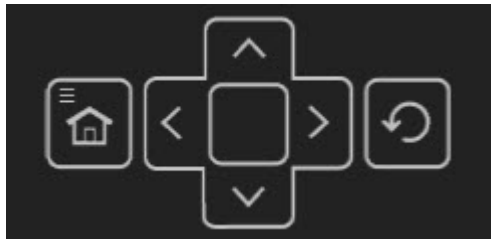
Use the **Print** button to feed media, pause print jobs, calibrate, test feed, and print.



Printer State	Print Button Action
Startup	Press the <b>Print</b> button during startup to enter Calibration mode or to restore defaults if the printhead is lifted.
Ready	Press the <b>Print</b> button to advance the media.
	If the print key feature is on, press the <b>Print</b> button to reprint the last job.
	Press and hold the <b>Print</b> button to calibrate the media sensors.
Printing	Press the <b>Print</b> button to stop or pause printing. The printer stops after completing the current label.
Paused	Press the <b>Print</b> button to resume printing.
Error	Press the <b>Print</b> button to advance the media.

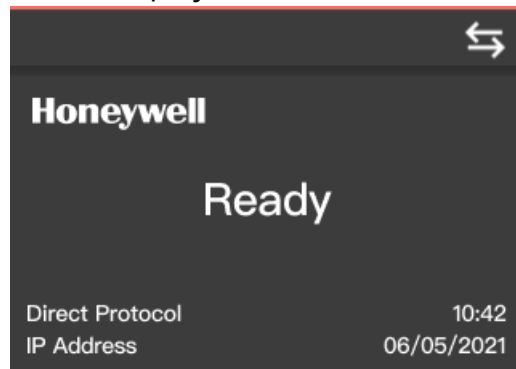
# Front Panel - PD45SOC

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





## 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.



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

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




## Front Panel - PD45S0F


The Ready Screen appears when the printer is powered on and has completed its startup process.

**Note:** The icon for Wi-Fi status appears only when the optional Wi-Fi module is installed.


By default, the information bar at the bottom of the screen shows the printer command language and the printer IP address. You will see the time and current date only if the real time clock (RTC) is installed. You can customize the screen to show different types of information.

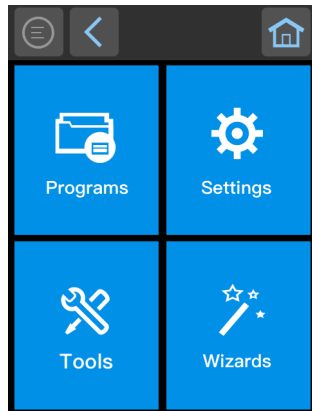
The status bar at the top of the screen includes these icons:

Icon	Name	Description
	Main Menu	Press the icon to view the main menu for your printer.
	Communications	Press the icon to view communications information for your printer.
	Printing	Press the icon to view specific printer information.

Icon	Name	Description
	Back	Press this icon to navigate back through the printer menus.

## Main Menu

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



**Note:** If you create menu shortcuts, the Main Menu is replaced by the Quick Choices menu.

Press a button to select the **Programs**, **Settings**, **Tools**, or **Wizards** menu.








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

**Note:** The printer cannot print while the Main Menu is showing. Exit the Main Menu and return to the Ready screen to begin printing.



# Navigate the Main Menu

Use the status bar buttons to navigate between menus in the Main menu and save changes.

Icon	Description
	Returns to the Main menu
	Goes back one level in the menu
	Returns to the Ready screen
	Moves between options in a settings menu
	Moves to additional options not viewable in the menu
	Information: Gives Communications information such as Ethernet, Serial, and USB.
	Printer Information

**Note:** Use the horizontal scroll bar for settings with additional options.

# Wizards

The printer includes several wizards you can use to quickly set up your printer. You can start all of the wizards from the Main menu except for the startup wizard. The startup wizard appears the first time you turn on the printer and after the printer has been reset to the factory default state.

# Printing Wizard

Wizard	Description
Media Loading Guide	Shows how to load media.
Ribbon Loading Guide	Shows how to load ribbon.
Media Setup	Select media and printing type (DT or TTR), media width, length, and X-margin, Label Reset and Label Top Adjust values, and print speed.
Print Quality	Prints a series of labels to determine the best print quality setting.

## Communications Wizard

Wizard	Description
Line Analyzer	Logs all incoming data on all communications channels and saves the data to a log file. For advanced users.

## Calibration Wizard

Wizard	Description
Media	Calibrates all media sensors and shows current print settings.
Label Taken Sensor	Calibrates the label taken sensor used with the label dispenser. Available when the label taken sensor is installed.
Date and Time	Calibrates the date and time.
Screen	Calibrates the touch screen.

## Printer Command Languages and Simulator Support Options

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:

- [Autosense](#)
- [Direct Protocol](#)
- [Fingerprint](#)
- [IPL](#)
- [ZSim](#)
- [DPL](#)
- [Smart Printing](#)
- [PDF Printing](#)

## Autosense

Autosense allows the printer to automatically sense from label to label, the incoming data stream and its language, and print each label accordingly.

**Note:** *Autosense is the default printer configuration and does not support an IPL data stream.*

## Direct Protocol

Direct Protocol (DP) uses a more intuitive English-like syntax. Direct Protocol lets you combine predefined layouts and variable data to create labels, tickets, and tags. If you are using barcode software, select Direct Protocol as your printer command language.

## 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.

## IPL

IPL 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.

**Note:** *IPL can be supported on 200dpi and 300dpi printers only.*

## ZSim

The ZSim (Zebra Printer 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.

## DPL

The DPL command language interprets Datamax™ data streams without requiring any host programming changes. If you are sending DPL label files to the printer, select DPL as your printer command language.

## 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.

## PDF Printing

PDF printing refers to the ability of the printer to directly print PDF files without additional middleware or smart device with generated PDF. If you are sending PDF files to the printer, select PDF printing as your printer command language.

## Access the Printer Web Page

1. Open a browser window on your PC.
2. In the location or address bar, type the printer IP address and press **Enter**.
3. Click **Login**. The Login page appears.

You will be prompted for a user name and password. The defaults are:

- User Name: **itadmin**
- Password: **pass**

After logging in, you will be prompted to change your password.

## Set the Printer Command Language

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

- From the printer web page
- From the Main Menu
- PrintSet 5

## 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 network.

1. Make sure that the printer has media and ribbon installed (if necessary).
2. Follow the directions to [Access the Printer Web Page](#).
3. Once you are logged in to the printer web page, click the **Configure** tab.
4. Click **System Settings > General**.

5. select the printer command language you want to used from the Command Language list, and then click **Save**. A restart button will appear at the top of the page.
6. Click **Restart**.

## From the Main Menu

You can use this procedure to change the printer command language from the main menu on the printer.

1. From the Ready screen, press the **Main Menu** button.
2. From the Main Menu, press **Settings > System Settings > General**.
3. Scroll down until you reach **Command Language**, and make your selection.
4. **Restart** the printer: the printer starts up in the command language that you selected.



## SET UP THE PRINTER

This section contains information about loading media and ribbon, printing a test label, calibrating the screen, and adjusting the printer.

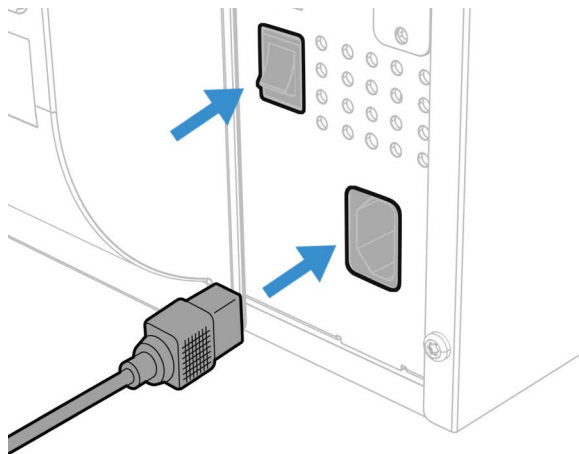
## Power Up the Printer

The printer goes through a startup wizard the first time you turn on the power.

1. Connect one end of the power cord to the back of the printer and plug the other end to AC power.



**Warning: Installing the printer requires a power cord connected to a socket-outlet with an earthing connection.**



2. Press the power switch to turn on the printer.
3. As the printer starts up, a progress bar appears, then the startup wizard appears.
4. Follow the steps on the touch screen to complete the startup wizard.

# Calibrate the Touch Screen

You can calibrate the screen from the printer website or from the touch panel on the printer.

## To calibrate the screen from the website:

To access the website, make sure your printer is connected to the same network as your computer.

1. Open your browser and type the printer IP address into the web address bar.
2. In the menu section, click on **Services > Screen Calibration**. If you are prompted to login, the temporary username is **itadmin** and the password is **pass**.
3. Click on the blue **Screen Calibration** button, this will engage the touch panel to start screen calibration.
  - When the small square appears on the front touch panel of the printer, **touch the square**.
4. Once calibration is complete, your touch screen will automatically return to the **Ready** screen.

**Note:** *Typical screen calibration consists of five touches (one in each corner and one in the middle of the screen)*

## About the Media

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

## Load Media for Tear-Off Printing

Tear-off printing is applicable to media with perforation. Printed labels, tickets, and other printed media are manually torn from the front of the printer. These of media can be used 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.



## To load media for tear off printing:

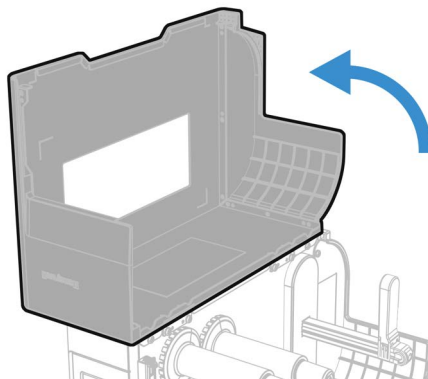


**Warning:** The tear bar contains sharp edges. Keep fingers and other body parts away from the tear bar.

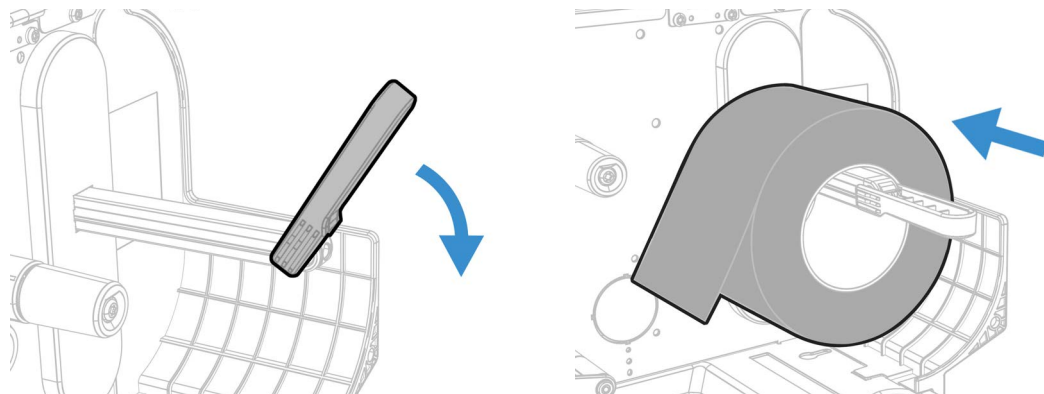


**Warning:** Moving parts are exposed when the cover is open. Make sure the cover is closed before operating the printer.

1. Open the media cover.

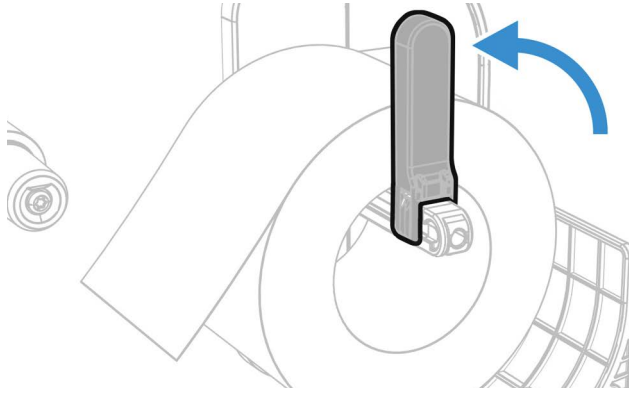


2. Pull the media roll lever down.
3. Load the media onto the media supply hub.

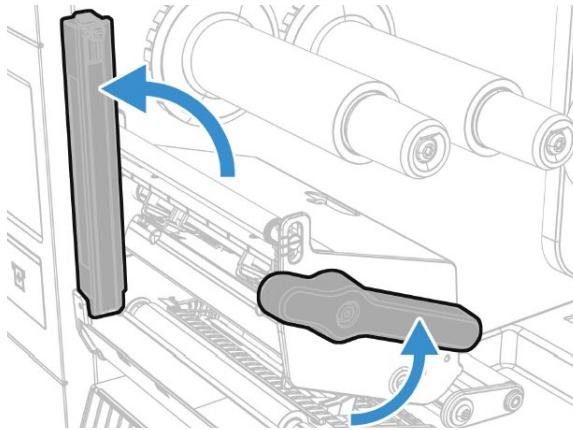


**Note:** Make sure you push the roll all the way against the inner wall of the printer.

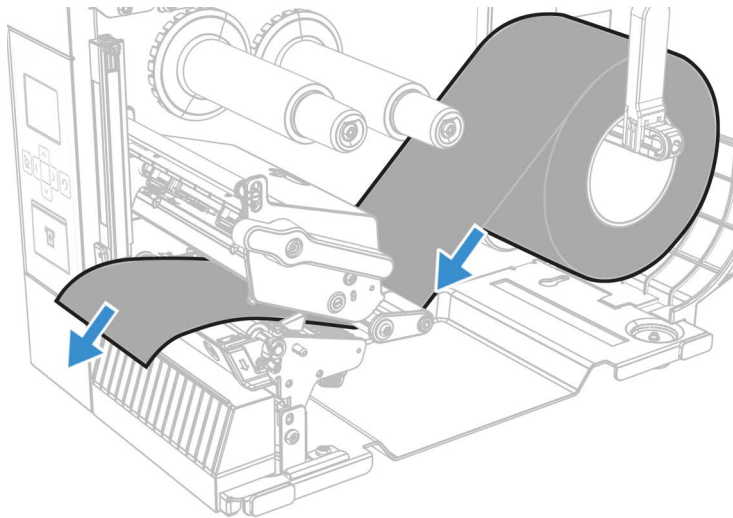
4. Move the media roll lever back to the upright position to hold the media on the supply hub.



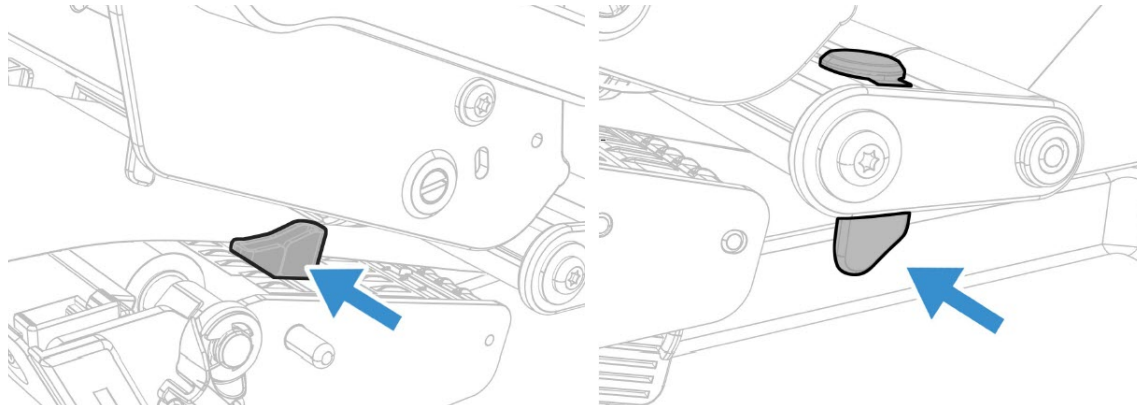
5. Turn the printhead lift lever counterclockwise to raise the printhead and lift the front arm.



6. Route the media through the print mechanism, through the front arm.

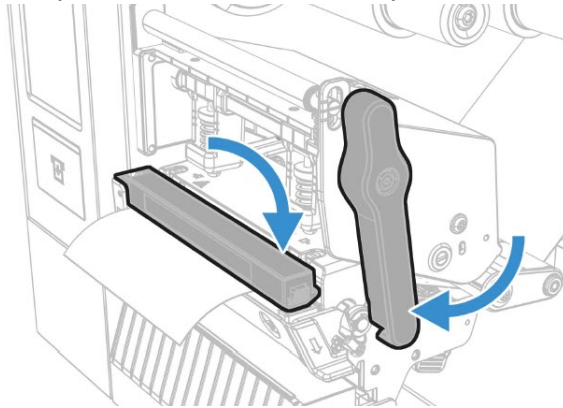


7. Adjust the media and dancer guides.



**Note:** There is a media guide that is located near the printhead. It is recommended to adjust the media guide all the way to the right in order to insert the media. If not, it can be difficult to load the media.

8. Lower the front arm and then turn the printhead lift lever clockwise to close the printhead and click into place.



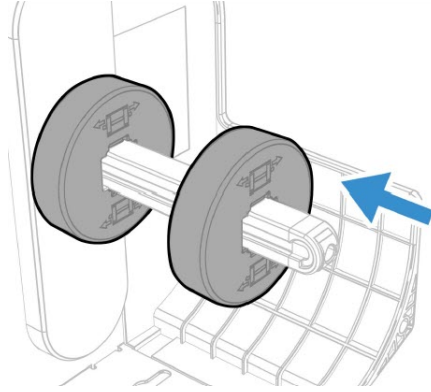
9. Press the **Print** button to advance the media.
10. Close the media cover.
- 11.

## Load Media for Peel and Rewind Printing

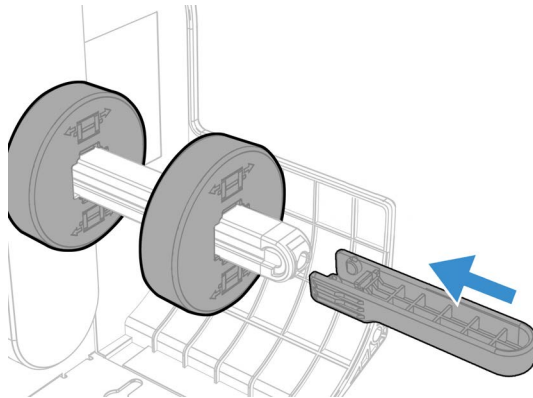
There are two options to load the media.

Follow steps 1-9 from Load Media for Tear-Off Printing, then:

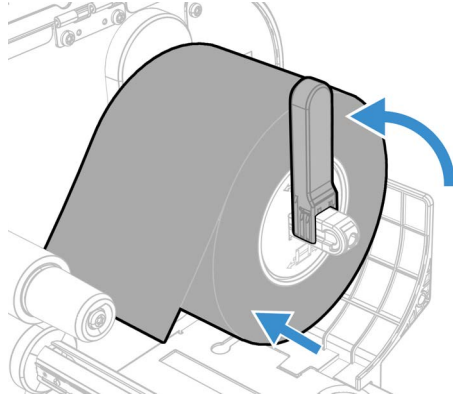
1. Secure the media holder onto the media supply hub



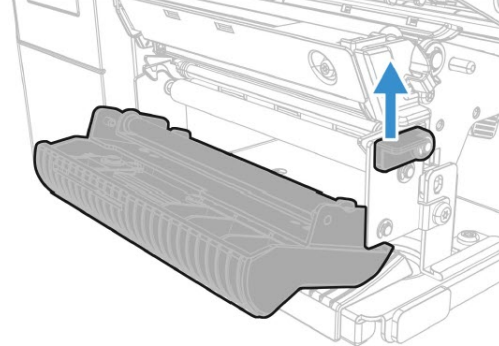
2. Reattach the media lever.



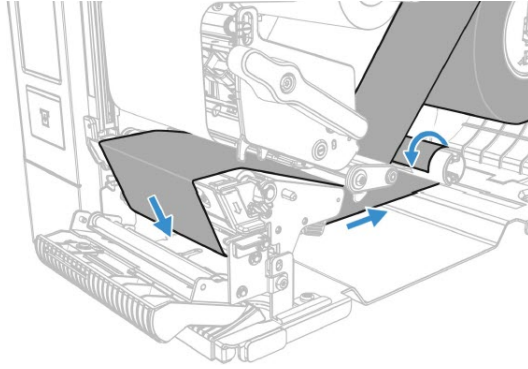
3. Ensure the media lever is in the upright position and the screw is tightened.



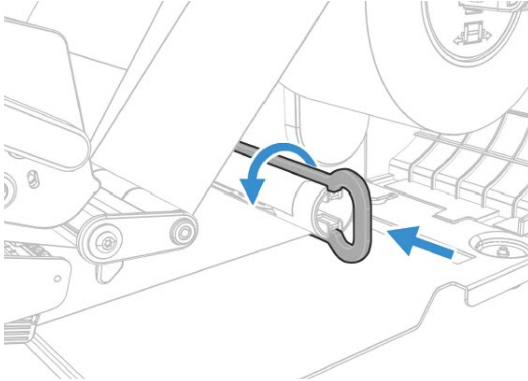
4. Lift the lever to open the peel-off module to route media to rewind hub.



5. Route the media around the media rewriter.



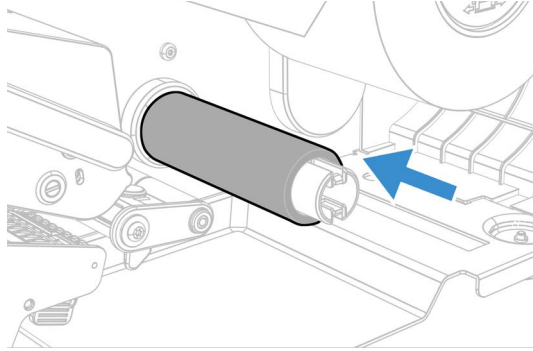
6. Lock the Rewind/Liner Take-Up knob into closed position.



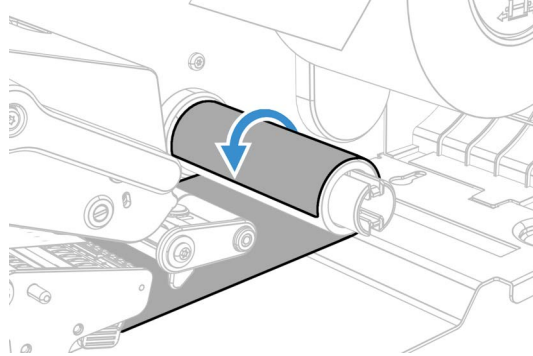
OR

Follow steps 1-9 from Load Media for Peel-Off Printing, then:

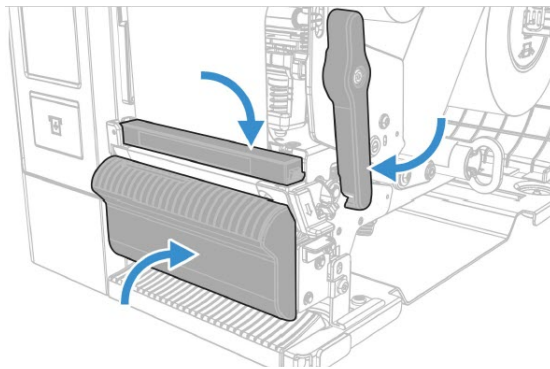
1. Slide media roll holder in place.



2. Route the media around the media supply roller.



3. Lift the rewriter batch plate into place, lower the front arm, turn the printhead lift lever clockwise to close the printhead, and click into place.



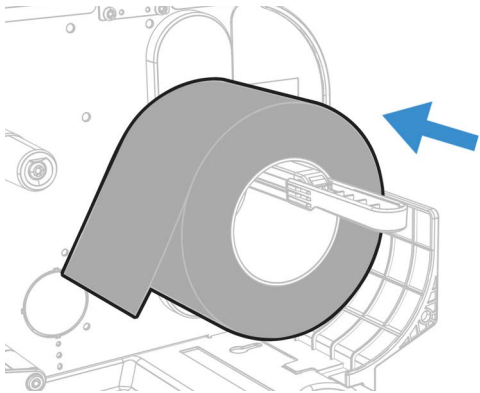
4. Go to **Main Menu > Setting > Printing > Media > Printing Mode**, select **Rewind** from the list.

**Note:** Honeywell recommends using non-perforated labels when using rewinder mode.

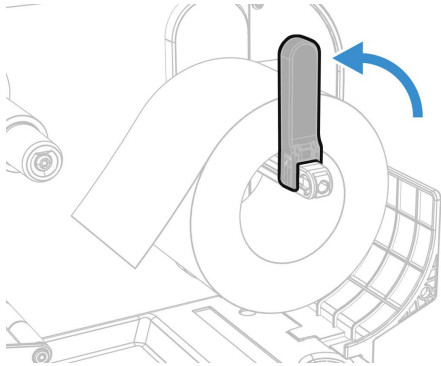
# Loading with the Cutter

Follow the steps 1-9 for tear off printing, then:

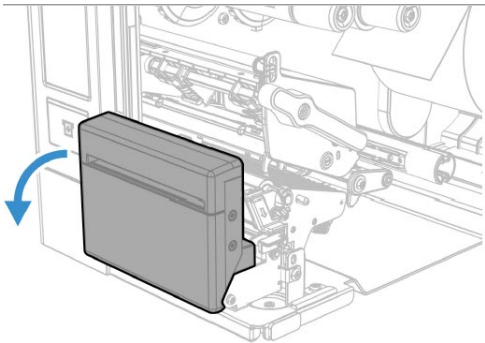
- 1. Load media onto supply hub.



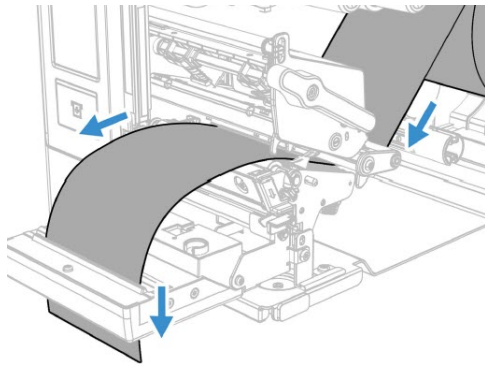
- 2. Move the media lever back to the upright position.



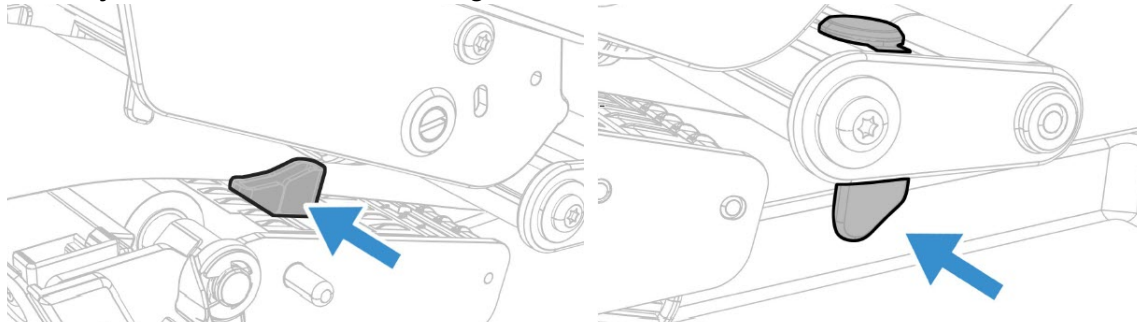
- 3. Open the cutter plate



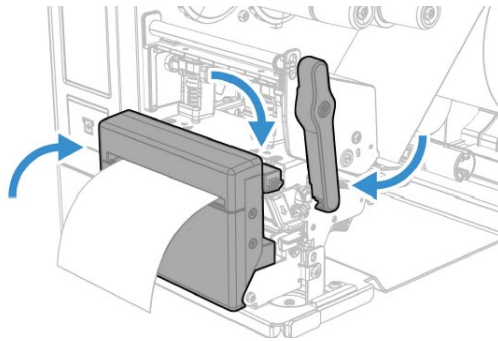
- 4. Route the media through the cutter.



5. Adjust the media and dancer guides.



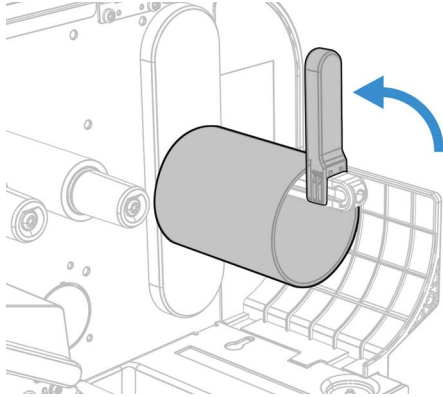
6. Lift the cutter plate into place, lower the front arm, turn the printhead lift lever clockwise to close the printhead, and click into place.



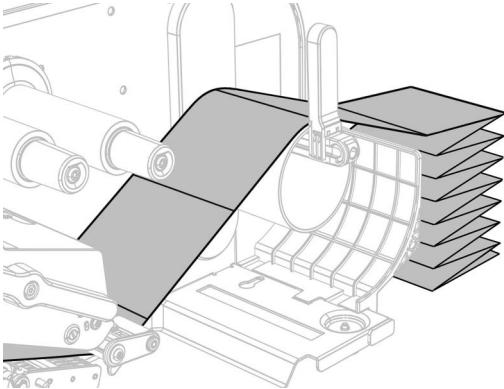


# Load Fanfold Media

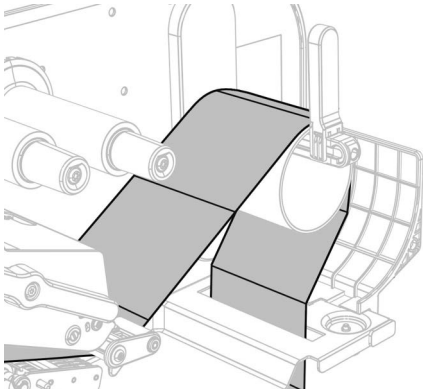
**Note:** Before loading fanfold media, insert an empty media core onto the rewinder take-up hub, and put the media supply lever in the upright position.



**From the Back**



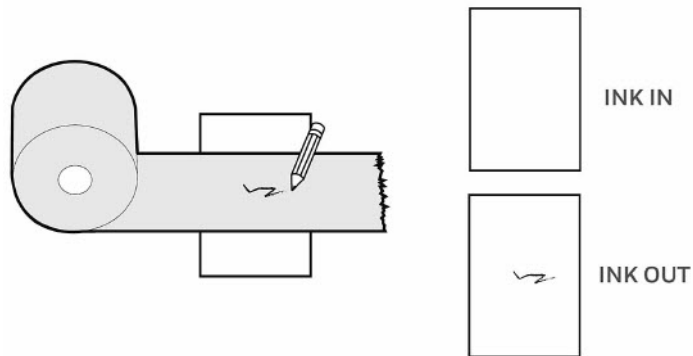
**From the Bottom**



# About the Ribbon

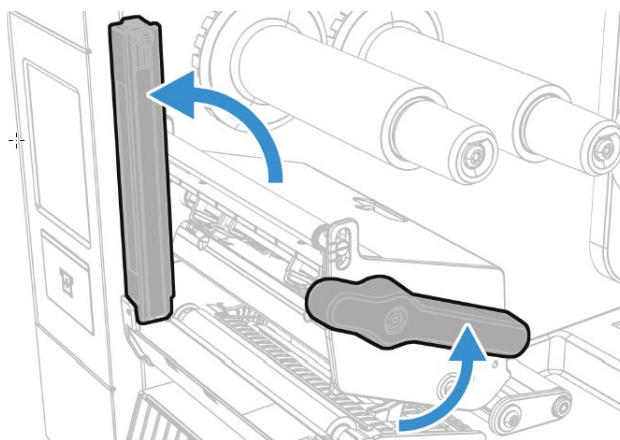
Thermal transfer printing provides a durable printout that is less vulnerable to chemicals, heat, and sunlight than direct thermal printing. Select a ribbon type that matches the media you are using and configure the printer for thermal transfer media.

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, place the ribbon on a piece of paper as shown, and use a pen or other sharp object to scratch the ribbon. If you see a mark on the paper, your ribbon is wound ink out.

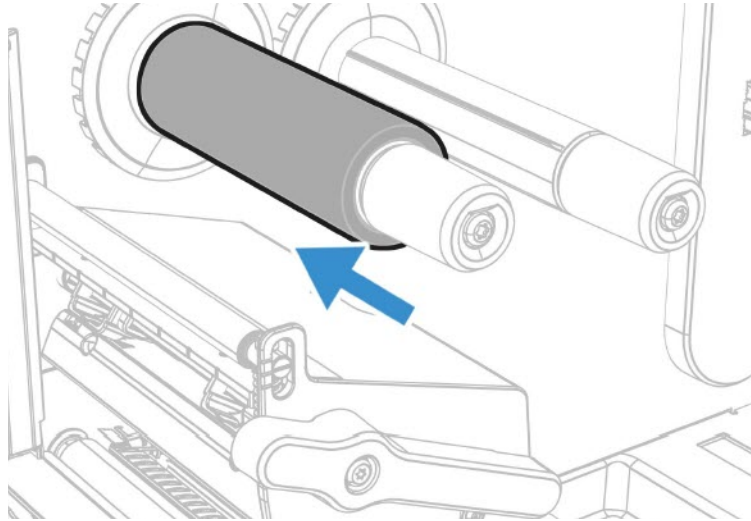


# Load Ribbon

1. Open the media cover.
2. Turn the printhead lift lever counterclockwise to raise the printhead and lift the front arm.



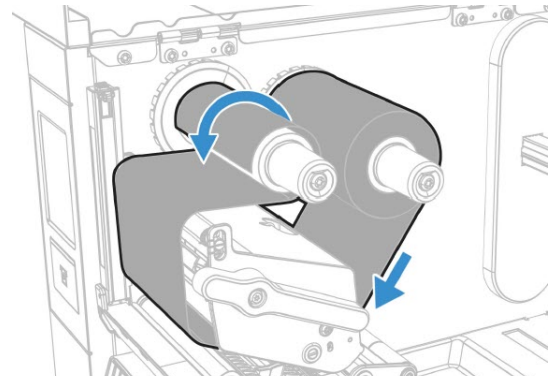
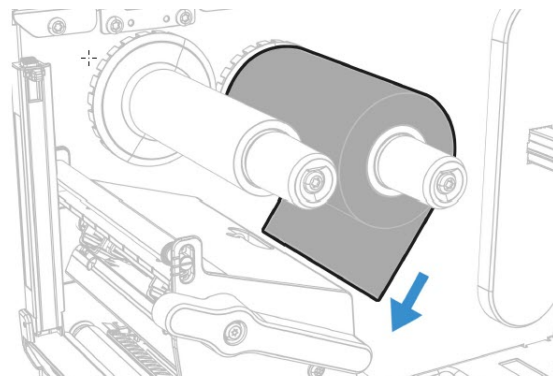
- Slide the empty core onto the ribbon rewind hub.



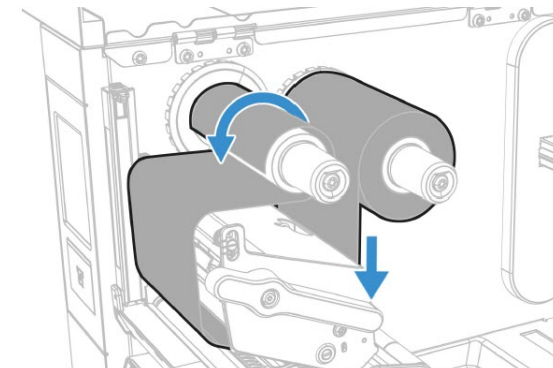
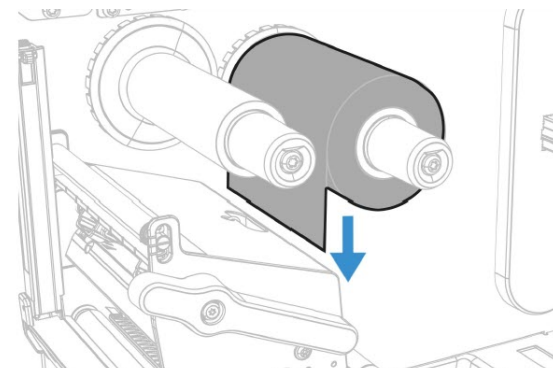
**Note:** For ribbon that has the ink wound out, place the ribbon on the ribbon rewind hub with the ribbon wound clockwise. For ribbon that has the ink wound in, place the ribbon on the ribbon rewind hub with the ribbon wound counterclockwise.

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

**Ink Out**



**Ink In**



5. Turn the ribbon take-up hub counterclockwise until the ribbon becomes tight and runs wrinkle-free through the print mechanism.
6. Lower the front arm and then turn the printhead lift lever clockwise to close the printhead and click into place.
7. Close the media cover.

## Ribbon Removal

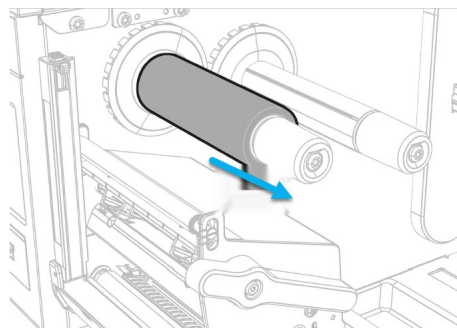
Remove used ribbon from the ribbon take-up hub when you change the roll of ribbon. Remove the used ribbon each time you change a new roll of media if the ribbon is less than the width of the printhead.

To remove the used ribbon:

1. Break/tear the ribbon before the ribbon take-up hub.


**Note:** Do not cut the ribbon on the ribbon take-up hub; doing so may result in damage to the take-up hub.

2. Slide the used ribbon from the ribbon take-up hub.



## Print a Test Label

The first time you turn on the printer or reset to factory defaults, the printer runs a startup wizard to let you enter basic setup information. After the startup wizard finishes, the printer enters Ready mode where you can access the Main Menu and print a test label.

1. Connect the printer to power and turn on the printer.
2. After the startup sequence finishes, the startup wizard begins. Enter all the information on the wizard screens then tap **No** when prompted to run other wizards.
3. From the Ready screen, press  to view the Main Menu.
4. From the Main Menu, tap **Tools > Test Labels**.

5. Select the test label you want to print and tap it.

Your test label prints. If print quality is low, go to **Wizards > Printing > Print Quality**.

**Note:** You can use command languages, like [Direct Protocol](#), and language simulators, like [ZSim](#), to create and print labels. For more information, see the command reference manual for the language.

## Printhead Pressure and Toggle Position

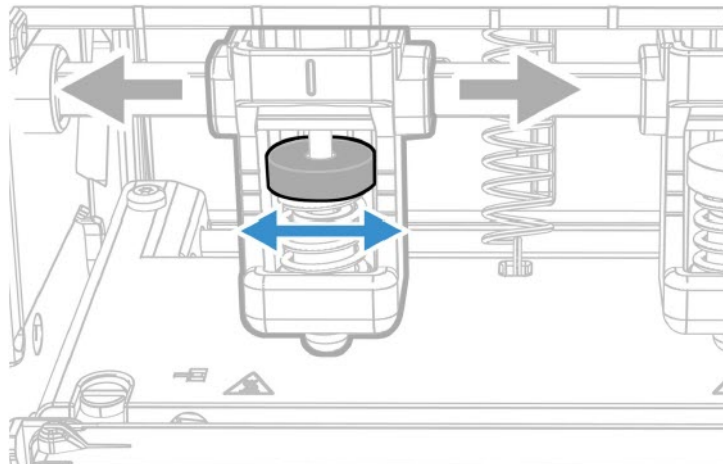
### Pressure Adjustment

You may need to adjust the printhead pressure on the printer if:

- You are using thicker or thinner media than previously.
- Your thermal transfer ribbon starts to crease.

Do not use a higher printhead pressure than necessary. It may increase the wear on the printhead and shorten its life.

1. Use your finger to turn the wheel to adjust pressure.
  - Rotate the wheel clockwise to increase the pressure resulting in darker print.
  - Rotate the wheel counterclockwise to decrease the pressure resulting in lighter print.



2. Test for Print Quality

**Note:** On the toggle, the highest mark indicates Light pressure; the middle mark indicates Middle pressure; the lowest mark indicates High pressure.

## Toggle Position Adjustment

If the toggles are not adjusted in the correct position or do not apply the correct pressure, the following issues may occur:

- Labels print lighter on one side than the other
- Media and ribbon may slip
- Ribbon may wrinkle
- Media may move from side to side during printing

If any of these things occur, you probably have an unbalanced printhead. The printer is adjusted at the factory for full-width media.

If you are using media that is less than full-width (4 inches or 102mm), adjust the position of the toggle as necessary to provide the even pressure on the media.

## Toggle Settings

Item	Scenario	Printhead Toggle Setting
1	Thin media or the media and ribbon requires lower pressure to print well or DT media	Decrease the pressure on both left and right toggles.
2	Thick media or the media requires high pressure to print well	Increase the pressure on both left and right toggles.
3	Light Printing on the left side of the label	Increase the pressure on the left toggle.
4	Light Printing on the right side of the label	Increase the pressure on the right toggle.
5	Media moves from left side to right side during printing	Increase the pressure on the left toggle or decrease the pressure on the right toggle.
6	Media moves from right side to left side during the printing	Increase the pressure on the right toggle or decrease the pressure on the left toggle.
7	Media and ribbon slippage during printing at retract mode	Increase the pressure on both left and right toggles.
8	Narrow media (less than 2inch)	Move the left toggle to the center of the media and decrease the pressure on the right toggle.

# CONNECT THE PRINTER

This section contains information about connecting the printer to a PC or to a network. Use the [From the Printer Web Page](#) or the Main Menu to configure settings.

## Connect the Printer to Your PC



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

You can connect the printer to your PC using one of the following methods.

### Connect the Printer Using a Serial Cable

You can use a serial connection to communicate with your PC and 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 to a serial COM port on your PC.

### Connect the Printer Using a USB Cable

Connect only 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 Honeywell Printer Driver software on your PC (see [Install Honeywell Windows Driver](#)).
2. When prompted, 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 to Your Network

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

# Connect the Printer to an Ethernet Network

Use the Ethernet port to set up your printer as a network printer. The printer is set to automatically retrieve an IP address from the network (DHCP) when you turn the printer. You can use the network connection with Honeywell Printer Driver. You can also use it to send commands directly to the printer through a terminal connection (Telnet), or through FTP/SFTP.

**Note:** To enable the FTP/SFTP from the webpage, go to **Configure > System Settings > Manage Service**.

1. Turn the printer off.
2. Connect the Ethernet cable to the Ethernet port in the rear of the printer and connect the other end of the cable to your network.
3. Turn the printer on.
4. If your printer uses a DHCP server to assign IP addresses, the IP address appears in the lower left corner of the screen.
5. If you are not using a DHCP server to automatically assign IP addresses to devices in your network, you must set a static IP address and other network information manually. Continue with the next step.
6. For a non-DHCP network:
  - From the Main Menu select **Settings > Communications > Ethernet > IPv4 or IPv6** and change the settings as needed.

Setting	Default
(IPv4) IP Assignment Method	DHCP
(IPv4) IP Address	0.0.0.0
Subnet Mask	0.0.0.0
Default Router	0.0.0.0
DHCP Response	Broadcast
(IPv6) IP Assignment Method	Automatic
(IPv6) IP Address	Automatic

# Connect the Printer via Wi-Fi

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

You can configure wireless communications:

- From the printer web page.
- From the printer Main Menu.



By default, the printer supports DHCP networks.

**Note:** *If you are not using a DHCP network, Wi-Fi settings must be configured by using Honeywell PrintSet 5 through a USB connection to the printer. Send commands through a serial connection, or use the wizards and settings menus on the printer.*

## Configure Wi-Fi Communications from the Web Page

Use this procedure to configure wireless communications from the printer web page.

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

1. Open a web browser on your PC.
2. In the address bar, type the IP address of your printer and press Enter. The printer web page appears.
3. Click **Login**.
4. Type your Username and Password and then click **Login**. The default value for Username is **itadmin** and the default value for Password is **pass**.
5. Click the **Configure** tab. The Configuration Summary page appears.
6. Click **Communications > Wireless 802.11**. The Wireless 802.11 settings page appears.
7. Change wireless settings as needed. You can also click **Default Settings** to restore all default Wireless 802.11 settings.
8. Click **Save** when you are finished.

## Configure Wi-Fi Communications from the Main Menu

You can configure wireless communications using the Wireless 802.11 wizard or from the Main Menu.

1. Press the Main Menu button.
2. Select **Settings > Communications > Wireless 802.11**.
3. Change settings as needed for your wireless connection.
4. Tap **Save** when you are finished.

## Install Authentication Certificates

If you are using Wireless 802.11 security, you may need to install authentication certificates in the printer for the highest level of security.

1. Configure the printer for the correct date and time.
2. On your PC, open an FTP/SFTP connection to the IP address of the printer.
3. Transfer your certificate to /home/user/certificates/public.
4. On your PC, open a Telnet session to the printer.

5. Change the directory to: **/home/user/certificates/public**.
6. Type the command: **ls -la**.
7. You should see the certificate that you transferred in step 3.
8. Use the certinstall script to install the certificate using this format:  
**<prompt> certinstall.sh <certificate name>**
9. When you receive confirmation that the certificate was installed, type this command to make sure you see a .pem file and another soft link to the same file: **ls -la**.

**Note:** Use the printer web page the Main Menu, or Honeywell PrintSet 5 to specify the certificate .pem file to use for security.

## Printer Drivers

Before you can use the printer with Microsoft® Windows® printing applications, you must install printer driver software on the PC. Drivers enable the printer to communicate with your PC and with printer software applications.

You can access the Honeywell Technical Support Downloads portal at: [honeywell.com/PSSsoftware-downloads](http://honeywell.com/PSSsoftware-downloads). Click on **Software > Printers > Printer Software and Drivers**.

**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 Honeywell Windows Driver

Use Honeywell Printer Driver to install printer driver software on your PC.

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

1. Access the Honeywell Technical Support Downloads portal at [honeywell.com/PSSsoftware-downloads](http://honeywell.com/PSSsoftware-downloads).
2. Download Honeywell Software Download Manager by clicking **here** in the web page. Install the Download Manager.
3. Click on the **(+)** to expand the list. Then go to **Software > Printers > Printer Drivers > Honeywell Windows Driver**.
4. Open the Honeywell Software Download Manager and follow the instructions to download the file.
5. Extract the driver files to a location on your PC.
6. Double-click the .exe file to install Honeywell Printer Driver and follow the prompts to complete the installation.

# USB Host Port

Use the USB host interface port on the printer to connect these 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.
Barcode scanner	Use USB barcode scanners for data input with a Smart Printing application. The printer also supports other USB scanners that use a generic keyboard driver.
USB storage device	Use a USB storage device to load applications, configuration files, fonts, and images into the printer memory, or to perform firmware upgrades. You can also save configuration files to a USB storage device for upload to a printer. The USB storage device must have a single partition and be formatted as FAT16 or FAT32.

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

## Connect a USB Device

A USB storage device can be inserted into the USB host port on the front of printer or into the USB host port on the back of the printer.

1. If you are connecting a USB storage device, make sure the device has a single partition and is formatted as FAT16 or FAT32.
2. Connect the device to one of the USB host ports.
3. If you connected a USB storage device to an LCD printer, select **Tools > USB Menu** for more options.



# CONFIGURE THE PRINTER

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

- Printer web page
- Main Menu
- PrintSet 5
- Programming commands

## Printer Configuration Menus

The structure of the printer configuration menus is consistent among the different interfaces. The same organization appears whether you are accessing the menus through the web page or the printer Main Menu. There are four main printer configuration menus for each interface:

- Printing
- System Settings
- Alert
- Communications

Use the following table to understand where information is located in the printer configuration menus. Not all configuration items appear in each type of interface.

Configuration Menu	Description
Printing	Media and Print Quality
System Settings	General, Display, Manage I/O, Manage Services, and Maintenance Alerts
Alerts	Error, Warning, and Information
Communications	General, Security, and Network

# Printer Configuration

Configure the Printer from the Main Menu

You can view or change the configuration settings by pressing the **Settings** button from the Main Menu.

1. From the Ready screen, press the Main Menu button.
2. From the Main Menu, press the **Settings** button. The Settings menu appears.
3. Select the settings you want to configure and make your changes.
4. Save your changes when prompted.

## Restrict Access to the Main Menu

By default, all menus are available from the Main Menu the first time you turn on the printer. If necessary, you can require a PIN to restrict access to menus or you can disable access to all menus.

Menu Access Setting	Description
Enable (default)	All users can access the menus from the Main Menu and from the USB flash drive menu.
Enable with PIN	Users need to enter a PIN to access the Main Menu or USB flash drive menu.
Disable	Users cannot access the menus from the Main Menu or from the USB flash drive menu.

1. Go to the Display menu for the printer:
  - From the web page (see [Smart Printing](#)), select **Configure > System Settings > Display**.
  - From the Main Menu screen, select **Settings > System Settings > Display**.
2. Select a Menu Access setting and save your changes.
3. If you select **Enable with PIN**, you also need to type in a PIN and save your changes.

## Access the Printer Web Page

4. Open a browser window on your PC.
5. In the location or address bar, type the printer IP address and press **Enter**. The printer web page appears.
6. Click **Login**. The login page appears.

## Printer Webpage User Name and Password

You will be prompted for a user name and password. The default username is **itadmin** and the default password is **pass**. Once you login, you have the option to change the user name and password.

## Configure the Printer from the Web Page

If you are using Ethernet or Wi-Fi communications, you can change configuration settings from the web page of the printer. Connect the printer to your network and obtain an IP address.

1. Open a web browser on your PC.
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 **itadmin** and the default value for Password is **pass**.
5. Click **Configure**. The Configuration Summary page appears.
6. To see a complete list of printer settings, click **Configuration Summary**.
7. To configure printer settings, click an item in the navigation pane:
  - For serial, Ethernet or Wireless 802.11, click **Communications**.
  - For media or print quality settings, click **Printing**.
  - For display, service, and general settings, or maintenance alert message triggers click **System Settings**.
  - To set conditions that trigger error, warning, and information alert messages, click **Alerts**.
  - For network-related settings (such as DNS, WINS, Net1), for web and email server information, or if you are using a network management application, click **Network Services**.
8. Make any changes to the settings you want to configure.
9. To save your changes, click **Save**.
10. To reset all parameters on the page to the default settings, click **Default Settings**.

## Configure the Printer with PrintSet 5

You can use PrintSet 5 to change configuration settings on your printer.

You can download Honeywell applications to extend the capabilities of the printer. You may need to purchase a license to run some applications. To learn more about licenses and other Honeywell software solutions, go to [sps.honeywell.com](https://sps.honeywell.com) > **Software**.

Support for Honeywell Safety and Productivity Solutions products is available online through the Technical Support Portal.

## Configure the Printer with Programming Commands

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

If your printer uses the Fingerprint programming language, use the SETUP command followed by the node, subnode, and parameter setting.

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

**Note:** For more information on how to change configuration settings with a programming language, see [Printer Command Languages and Simulator Support Options](#), beginning on page 8.

## Uploading from the Web Page

You can use the printer web page to install fonts, images, applications, formats, and web forms to the printer.

1. Open a web browser on your PC.
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 **itadmin** and the default value for Password is **pass**.
5. Click the **Manage** tab. The Overview page appears.
6. Click on the desired item in the Overview list. The upload page appears for the option you selected.
7. To upload a file to the printer, click **Browse** to locate your file. Double-click the file to select it, then click **Upload**. The file uploads to the printer.
8. Click **Save** when you are finished.



## Uploading from a USB Storage Device

You can use a USB storage device to install fonts, images, applications, formats, and web forms to the printer. Use this table to understand where your files need to be located on the USB storage device for the printer to install them.

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
Font	/fonts	/home/user/fonts
Form/layout	/forms	/home/user/forms
Printed images	/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

1. Copy your files to a USB storage device using the directories in the table.
2. Insert the USB storage device into one of the USB host ports on the printer.
3. The USB Device menu automatically appears:
  - a. Select **Install Resources**.
  - b. Select the file you want to install and wait until the item turns gray and a checkmark appears next to it. The file is now successfully installed in the printer.
  - c. Continue to another file if you have more files to install.

## Change Background Image for the Ready Screen

You may customize the Ready screen that appears on the printer. The background image you create must be:

- TP: 320 x 240 pixels; LCD: 320 x 234
  - named **background\_idle.png**.
1. Create a /display directory on your USB storage device.
  2. Copy your **background\_idle.png** file to the **/display** directory on the USB storage device.
  3. Insert the USB storage device into one of the USB host ports on the printer.

4. Use the USB Device menu to upload the file to the printer.
5. Restart the printer.

The new image file you uploaded appears in place of the original Ready screen.

## Printer Profiles

You can save updated printer default settings as a printer profile. The printer supports multiple profiles that can be saved and loaded at any time. For example, you can create one profile to use when you are printing on continuous label stock, and a different profile to use when you are printing on label stock with gaps.

The following printer settings are not saved in a profile:

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

## Save a Printer Profile from the Web Page

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

1. In the printer web page (see [Access the Printer Web Page](#)), click the **Configure** tab.
2. Click **System Settings > General**.
3. Click **Save As Profile**. The Save As Profile screen appears.
4. Enter a name in the Profile field, and then click **Save**.

## Load a Printer Profile from the Web Page

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




1. In the printer web page (see [Smart Printing](#)), click the **Manage** tab.
2. Click **Profiles**.
3. The Resident list includes profiles that are saved in the printer memory.
4. To load a profile from the printer memory, select the profile in the Resident list and then click **Activate**. The profile is loaded.
5. To load a profile from another location, click **Browse** and browse to the location of the file. Double-click the file to select it, then click **Upload**. The profile is uploaded to the printer.

## Save a Printer Profile from the Main Menu

Use this procedure to save the current settings as a printer profile.



1. From the Ready screen, press the Main Menu button. The Main Menu appears.
2. Select **Tools > Profiles**. The Profiles menu appears.
3. Select **Create**. The Create Profile menu appears.

**Note:** *selecting Create acts as the Save function*

4. Select the **Filename** text box and type a name for the profile. The profiles can have up to sixteen characters.
5. Press  on the SIP to save your profile name and go back to the Save Profile menu.
6. Press  and wait until **Complete** appears on the screen.
7. Press  to return to the Main Menu.

## Load a Printer Profile from the Main Menu

Use this procedure to load a saved printer profile on the printer.

1. From the Ready screen, press the Main Menu button. The Main Menu appears.
2. Select **Tools > Profiles**. The Profiles menu appears.
3. Select **Load**. The Load Profile menu appears.
4. Select the profile you want to load on the printer and press .
5. When **Complete** appears on the screen, press  to return to the Main Menu.

## Load a Printer Profile Using Programming Commands

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

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

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

## Install a Configuration File from a USB Storage Device

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

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

## Export a Configuration File to a USB Storage Device

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

1. Make sure the USB storage device has a single partition and is formatted as FAT16 or FAT32.
2. Insert the storage device into the printer USB host port.
3. From the Ready screen, press the Main Menu button. The Main Menu appears.
4. Select **Tools > USB Menu**.
5. Select **Configuration**.
6. Select **Export Configuration**. A list of the available files appears.
7. Select the file to export.
8. Press **OK** when the confirmation message appears.

# Menu Shortcuts

You can create shortcuts to access frequently used menus or items, such as profiles, applications, test labels, and wizards. These shortcuts are added to a Quick Choices menu, which replaces the Main Menu.

The Main Menu appears as the first item in the Quick Choice menu. Items in the Quick Choice menu appear in the order in which they are added. The Main Menu always appears as the first item.

Menu shortcuts can be very useful in these situations:

- You need to frequently change media. Create a profile for each media type and create shortcuts for each profile. To quickly change the printer media settings, press the Main Menu icon from the Ready screen to display the Quick Choice menu, then select the appropriate media profile.
- You frequently run Smart Printing applications. Create a shortcut for each Smart Printing application. To access these applications, press the Main Menu icon from the Ready screen to display the Quick Choice menu, and select the appropriate application.

## Create Menu Shortcuts

1. From the Main Menu, select **Tools > Quick Choices > Add**.
2. To load a profile:
  - a. Select **Load Profile**.
  - b. Select **Load Profile** again and a check mark appears in the box.
  - c. Select the arrow at the bottom of the screen.
  - d. Select the check mark icon at the bottom of the screen.
3. To select applications:
  - a. Select **Programs**.
  - b. To add a Program, select each program and a check mark appears in each box.
  - c. Select the check mark icon at the bottom of the screen.

4. To select test labels:
  - a. Select **Tools**.
  - b. Select **Test Labels**.
  - c. To add individual test labels, select each test label option and a check mark appears in each box.
  - d. Select the check mark icon at the bottom of the screen.
5. To select wizards:
  - a. Select **Wizards**.
  - b. To add individual wizards, select each wizard and a check mark appears in each box.
  - c. Select the check mark icon at the bottom of the screen.
6. The next time you press the Main Menu icon from the Ready screen, the Quick Choice menu (containing the Main Menu and your menu shortcuts) appears.

## Customize the Printer Web Page

The printer web page visual presentation is specified using a CSS (Cascading Style Sheet). The printer web page loads the default style.css.

There are two ways to customize the printer web page:

- Adjusting layout style
- Replacing complete standard web pages

To adjust the style sheet:

1. Retrieve the default CSS file from the printer: `http://<printerip>/format/style.css`.
2. Modify the style sheet and save your changes.
3. Upload the style sheet to the printer via `/home/user/webpage/style.css`.

The layout and structure of the printer web page is the same throughout each of the different pages. Below is an overview of how the web page looks with three different main components that always exist:

Area	Description
Left-Menu Navigation define in mainmenu.lua	For each of the pages, this area will show links to more detailed pages depending on which section is currently shown. On the Home Page this area will show the current status of the printer.
Right Top Bar define in maintop.lua	Displays the information about the printer/login/language as well as printer's status.
Main Content	Here is where all the content is displayed to the user.

## System Information

Look in the **System Information** tab on the printer web page for useful information and statistics on the printer hardware and firmware.

## Statistics

Use the printer web page to view important statistics about your printer.

Statistic Type	Information Available
System Information	Printer uptime and CPU usage, firmware and kernel versions, printer configuration and serial numbers, flash and RAM memory information
Supply	Printhead and ribbon information
Hardware Options	Input/output devices, serial port information
Network Interfaces	MAC address and TCP/IP information
Font Information	Name, type, location, and size of installed fonts
Barcode Information	Name and type of installed barcode fonts
Image Information	Name, type, location, and size of installed images

1. Open a web browser on your PC.
2. In the address bar, type the IP address of your printer and press **Enter**. The printer web page appears.
3. Click the **System Information** tab.
4. Click **Statistics > System Information**. The System Information page appears.
5. For more detailed statistics, click another choice in the Statistics list.

# Printer Odometer

You can check the odometer from the printer web page to see the printhead usage and how the current values compare to the alert values.

**Note:** *To check the printer odometer from the web page, the printer must be turned on and connected to your network.*

1. Open a web browser on your PC.
2. In the address bar, type the IP address of your printer and press **Enter**. The printer home page appears.
3. Click the **System Information** tab.
4. Select **Odometer**. The list of current odometer statistics appears.

# Maintenance Alerts

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

There are three types of alerts:

- Error alerts
- Information alerts
- Warning alerts

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

# Set Alerts

You can set maintenance alerts to determine the threshold or value at which an alert is sent to you

1. Open a web browser on your PC.
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 **itadmin** and the default value for Password is **pass**.
5. Click the **Configure** tab. The Configuration Summary page appears.



6. Click **System Settings > Maintenance Alerts**. The Maintenance Alerts settings page appears.
7. Type the values you want to set for each maintenance alert.
8. Click **Save** when you are finished.

## Alert Notifications

The way you receive error alerts is determined by the notification method you configure. You can choose between receiving notifications by SNMP trap, email, or SNMP trap + email.

- From the printer Main Menu, select **Settings > System Settings > General > Alert Notification Method**.

Or

- From the printer web page, login and then click the **Configure tab > System Settings > General > Alert Notification Method**.

## Error Alerts and Solutions

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

Error Alert	Solution
Label Not Taken	Printing has been stopped because a label is obstructing the label taken sensor. Remove the label to resume printing or try LTS sensor calibration to clear this error.
Printhead Lifted	Lower the printhead.
Front Arm Lifted	Lower Front Arm
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.
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 <b>Print</b> button to resume printing.
Printer in Menu Mode	A user entered a menu from the front panel. Press the <b>Home</b> 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.
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.

# Troubleshoot Printer Problems and Find Solutions

Use this section to find possible solutions to printer problems.

## Print Problems

Problem	Possible Solution
The printout is weak	Try these possible solutions in order: <ul style="list-style-type: none"> <li>• Make sure that your media &gt; print quality setting is appropriate for the type of media you are using.</li> <li>• The contrast may be too low. Increase the contrast.</li> <li>• The printhead pressure may be too low. Increase the printhead pressure.</li> <li>• Replace the printhead.</li> </ul>
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"> <li>• There may be foreign particles on the media. Clean or replace the media.</li> <li>• Make sure that your media and ribbon are compatible.</li> <li>• Make sure that you are using high quality media and ribbon.</li> <li>• The contrast may be too low. Increase the contrast.</li> </ul>
The printout is dark or there is excessive bleeding on the media	Try these possible solutions in order: <ul style="list-style-type: none"> <li>• Make sure your media &gt; print quality setting is appropriate for the type of media you are using.</li> <li>• The contrast may be too high. Decrease the contrast.</li> <li>• The printhead pressure may be too high. Decrease the printhead pressure.</li> </ul>
There are dark lines along the media path	The printhead may be dirty. Clean the printhead.
There are white vertical lines on the printout	Try these possible solutions in order: <ul style="list-style-type: none"> <li>• The printhead may be dirty. Clean the printhead.</li> <li>• There may be missing dots on the printhead. Replace the printhead.</li> </ul>
Part of a dotted line is missing	Try these possible solutions in order: <ul style="list-style-type: none"> <li>• The printhead may be failing. Replace the printhead.</li> </ul>
The inner edge of the printout is missing	Try these possible solutions in order: <ul style="list-style-type: none"> <li>• The media may not be properly installed or aligned. Reload the media.</li> <li>• The media margin or X-start parameter may be set too low. Increase the setting.</li> </ul>
The content on the printout is compressed	The print speed may be too high. Lower the print speed or adjust the printhead pressure.
Nothing shows up on the thermal transfer printout.	The ink-coated side of the ribbon may not be facing the media. Reload the ribbon.
The ribbon breaks	Try these possible solutions in order: <ul style="list-style-type: none"> <li>• Make sure your media setting is appropriate for the type of media you are using.</li> <li>• Make sure that the ribbon is fitted correctly. Reload the ribbon.</li> </ul>

Problem	Possible Solution
The ribbon wrinkles	Try these possible solutions in order.: <ul style="list-style-type: none"> <li>• Darkness setting may be too high, reduce darkness setting</li> <li>• You may need to adjust the media edge guide and use/adjust the Media roll holder.</li> <li>• Incorrect or uneven printhead pressure, adjust Printhead Pressure and Toggle Position.</li> <li>• Adjust the ribbon tension bar, turn the tension bar screw clockwise to move the bar lower and decrease the tension. turn the tension bar screw counterclockwise to move the bar upper and increase the tension.</li> </ul>
The printer is connected to the PC using a virtual COM port and printing stops. There are no errors.	Make sure that bidirectional support is disabled. From the printer properties dialog box, click the <b>Ports</b> tab, and then clear the <b>Enable bidirectional support</b> check box.
The printer is connected to a serial port on the PC but the printer is not working.	Try these possible solutions: <ul style="list-style-type: none"> <li>• Make sure the serial port settings are configured correctly.</li> <li>• Make sure the serial cable pinouts are correct and that the cable is not damaged.</li> <li>• If you have the Windows driver for an RS-232 printer installed on your PC, uninstall the driver.</li> </ul>
The printer boot up time is slower than before.	Try these possible solutions: <ul style="list-style-type: none"> <li>• Remove the USB device or use a new (blank) USB</li> <li>• The printhead may be failing. If part of the dotted line is missing, replace the printhead</li> </ul>

## Networking Problems

Problem	Possible Solution
The Ethernet or wireless network connection is not working correctly	Try these possible solutions: <ul style="list-style-type: none"> <li>• Make sure your network cable is securely connected to your printer and a straight pin-to-pin cable, not a crossover cable.</li> <li>• Make sure your PC is correctly configured for and connected to your network.</li> <li>• Make sure your printer is correctly configured for your network.</li> </ul>

## Restore Printer Defaults

To restore factory defaults on the printer, use the printer web page or the Main Menu on the printer. From the printer web page and the Main Men, you can choose to restore default network settings, keep or delete user-installed files, and to restore all system settings.

### Restore Defaults from the Printer Web Page

Restore your printer's defaults from the printer web page if you are connected to a Wi-Fi or Ethernet network.

1. Start a web browser on your desktop PC.
2. In the address field, type the printer IP address and press **Enter**. The printer web page appears.
3. Click **Login** in the upper right corner of the screen. The Login page appears.
4. Type your Username and Password in the text fields and click **Login**.
5. Select **Services > Restore Defaults**. The Restore Defaults menu appears with none of the check boxes selected.
6. To restore all default settings, select all of the check boxes and then click **Restore**. You can also restore only the defaults for specific settings:
  - To restore the current network settings, select the **Network settings** check box.
  - To restore all applications, fonts, and other files you have installed on the printer, select the **User files** check box.
  - To restore all current system settings, select the **System Settings** check box.
7. When you receive a message to reboot the printer on your desktop PC, click **OK** and restart the printer.

## Restore Defaults from the Main Menu

Restore the printer's defaults from the **Tools** menu.

1. From the Ready screen, open the Main Menu.
2. Select **Tools > Restore Defaults**. The Restore Defaults menu appears with all items in the list selected by default.
3. To restore all default settings, continue with the next step. You can also change the settings that are restored as follows:
  - To keep the current network settings, clear the **Network settings** check box.
  - To keep all applications, fonts, and other files you have installed on the printer, clear the **User files** check box.
  - To keep all current system settings, clear the **System Settings** check box.
4. Tap the right arrow and, when prompted, tap **Yes** to restore default settings and reboot. A confirmation message appears.
5. To return to the Main Menu without restoring the default settings, select **No**. To return to the Restore Defaults list without restoring any defaults, select **Cancel**.

## Restore Defaults with a Hardware-Based Reset

Restore the printer defaults by performing a hardware-based reset.

1. Turn the printer off and open the media cover.
2. Turn the printhead lift lever counterclockwise to raise the printhead.

3. Turn the printer on while pressing and holding the **Feed** button.
4. Release the Feed button when the status bar is nearly full.
5. All the settings are restored on the printer.
6. Turn the printhead lift lever clockwise to lower the printhead and close the media cover.

## Upgrade the Printer Firmware

Check for periodic updates to the printer firmware. The latest version of the firmware is available from the Honeywell Technical Support Downloads portal ([honeywell.com/PSSsoftware-downloads](http://honeywell.com/PSSsoftware-downloads)). Go to **Software > Printers > Industrial**, select your printer, then click **Current > Firmware**.

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

## Upgrade Firmware from a USB Storage Device

Place the upgrade file in the root directory on the USB storage device.

**Note:** *For best results, use a USB storage device that contains no other files besides the upgrade file.*

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. An upgrading firmware message appears as the upgrade file is loaded into the printer memory. This process may take a few minutes.
5. Remove the USB storage device.

## Upgrade Firmware from the Printer Web Page

**Note:** *This is only supported when the DDR size is 256M.*

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

1. Start a web browser on your desktop PC.
2. In the address field, type the printer IP address and press **Enter**. The printer web page is displayed.
3. Click **Login** in the upper right corner of the screen. The Login page is displayed.
4. Type your **Username** and **Password** in the text fields and click **Login**.

5. Click the **Services** tab and then select **Firmware Upgrade**.  
The Firmware Upgrade screen is displayed showing the current firmware version.
6. Click **Browse** to locate the upgrade file, select it, and then click **Open**.
7. Click **Upgrade**.  
The printer web page shows that it is upgrading the firmware on your printer.





## Clean the Printer



**Warning:** Disconnect the power cord from the socket-outlet before installing user-service parts in the printer.

To properly maintain the printer, you should clean it regularly. You can clean these parts of the printer:

- Printhead
- Platen roller
- Media guides
- Media path
- 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 for cleaning the printer:

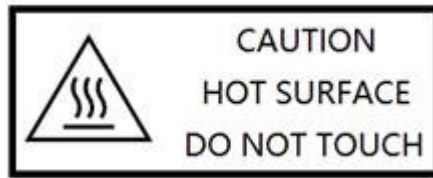
- Always remove the power cord before cleaning.
- Never spray the printer with water. Protect it from water when cleaning the premises.



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

# Clean the Printhead

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



Cleaning the printhead on a regular basis is important for the life of the printhead and for the print quality.

**Note:** *Honeywell recommends cleaning the printhead each time you replace the media.*

Follow this procedure to clean the printhead using the cleaning card. If you need to clean additional residue from the platen roller or tear bar, use a cotton swab moistened with isopropyl alcohol.



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



**Caution: Never use any sharp tools for removing stuck labels. The printhead and rollers are delicate.**

1. Turn the printer off 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 for 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. Once the parts are dry, replace the media (and ribbon) in the printer.
10. Close the media cover, reconnect power, and turn on the printer.

## Clean the Front Sensor

Both the upper and lower of front sensor are transparent to allow light to pass between the two parts of the label gap and label mark sensors. It is important to keep these surfaces free of dust, stuck labels, and adhesive residue.

1. Turn the printer off and disconnect the printer from power.
2. Open the media cover.
3. Lift the front sensor arm and clean both the upper and lower of front sensor with a soft, lint-free cloth soaked in isopropyl alcohol.
4. Once the parts are dry, close the front sensor.

## Clean the Media Path

Both 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. It is important to keep these surfaces free of dust, stuck labels, and adhesive residue.

1. Turn the printer off 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 for approximately 30 seconds to allow the cleaning fluid to dissolve the residue.
6. Once the parts are dry, replace the media (and ribbon) in the printer.
7. Close the media cover, reconnect power, and turn on the printer.

## Clean the Exterior of the Printer

Keep the exterior of the printer clean. Maintaining a clean exterior will reduce the risk of dust or foreign particles reaching the inside of the printer and affecting printer function.

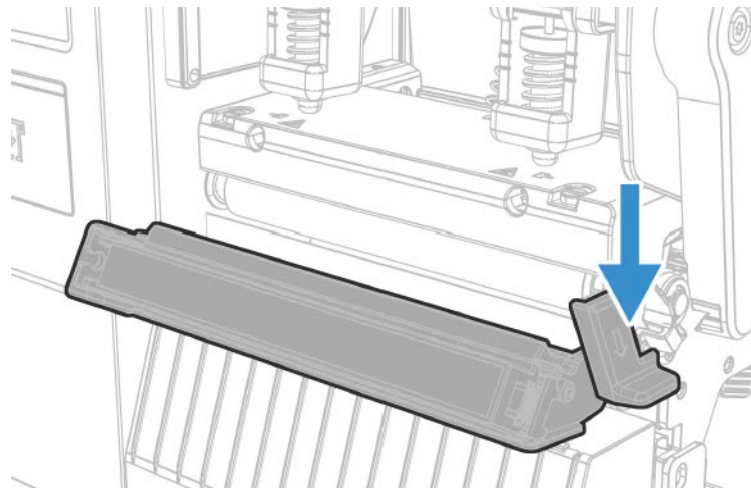
Use a soft cloth moistened with water or a mild detergent when cleaning the printer exterior. Keep the surface surrounding the printer clean as well.

## Replace the Printhead

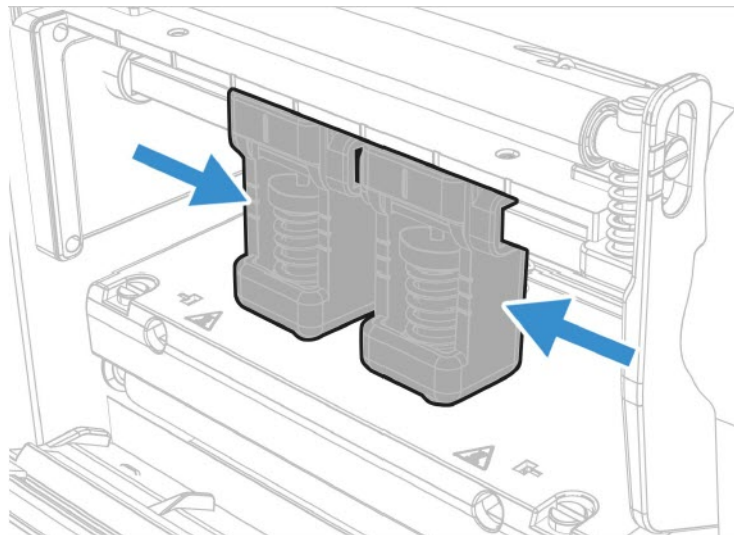
You need to replace the printhead periodically when it wears out due to the rapid heating and cooling process used during printing. How often you need to replace the printhead depends on factors such as what type of images you print, the type

of media or ribbon you use, the amount of energy to the printhead, the print speed, and the ambient temperature of the room you print in. The firmware detects the new printhead when you restart the printer.

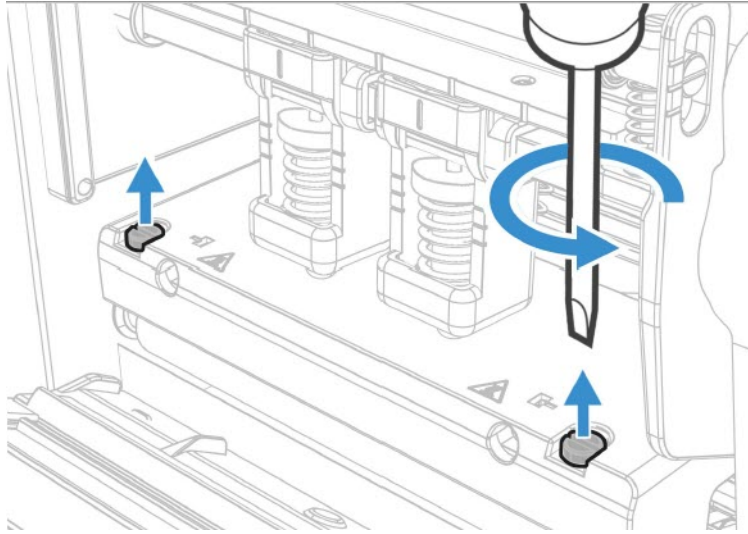
1. Turn the printer off and disconnect the printer from power.
2. Open the media cover.
3. Remove the media and ribbon (if installed).
4. Turn the printhead lift lever counterclockwise to raise the printhead.
5. Pull down the Front Sensor.



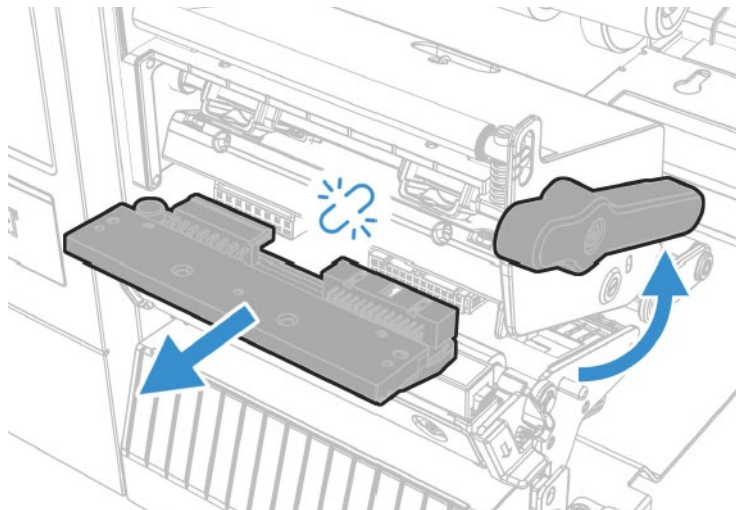
6. Move the inside toggle and outside toggle to the center of printhead.



7. Use a screwdriver to loosen the left and right screw.



8. Turn the printhead lift lever counter clockwise and put the printhead toward you to remove.



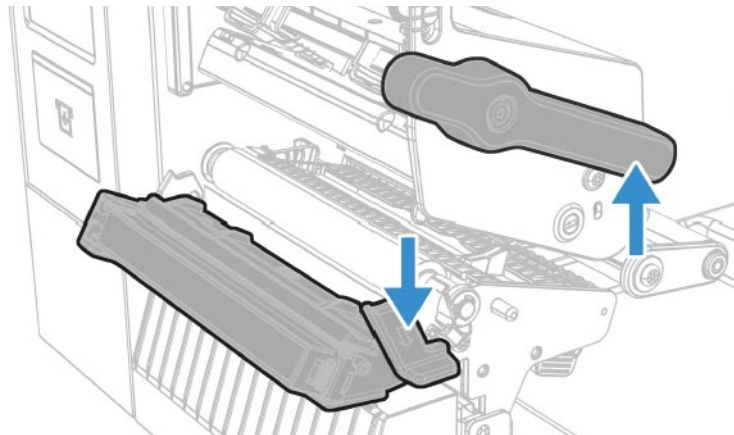
**Note:** Use a long screwdriver and the guiding holes to access the screws.

9. Disconnect the two cables from the printhead as you remove it from the printer.
10. Connect the two printhead cables to the new printhead.
11. Insert the new printhead to the bracket into the printer.
12. Turn the printhead lift lever clockwise to close it.
13. Fasten the left and right screw.
14. Lock the Front Sensor module back to the printer.
15. Replace the media (and ribbon) in the printer.
16. Close the media cover, reconnect power, and turn on the printer.

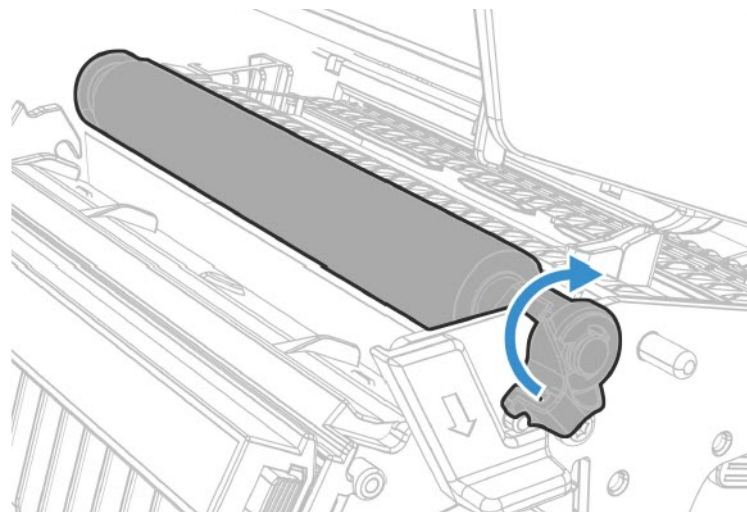
# Replace the Platen Roller

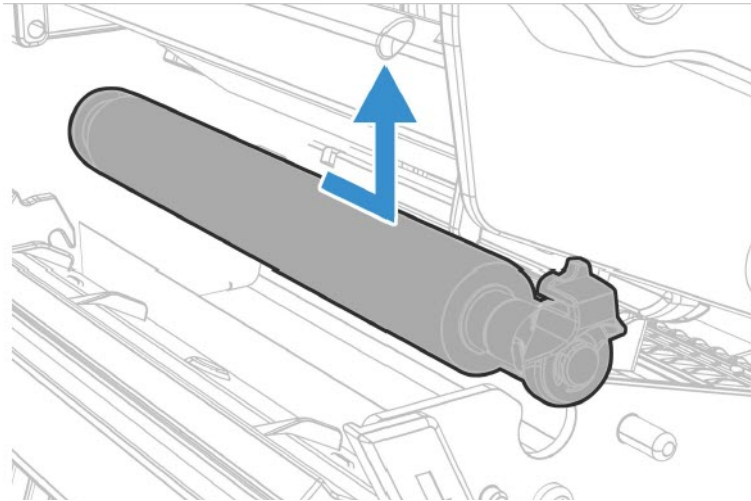
If the printer platen roller gets damaged or wears out, it may need to be replaced.

1. Turn the printer off 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.

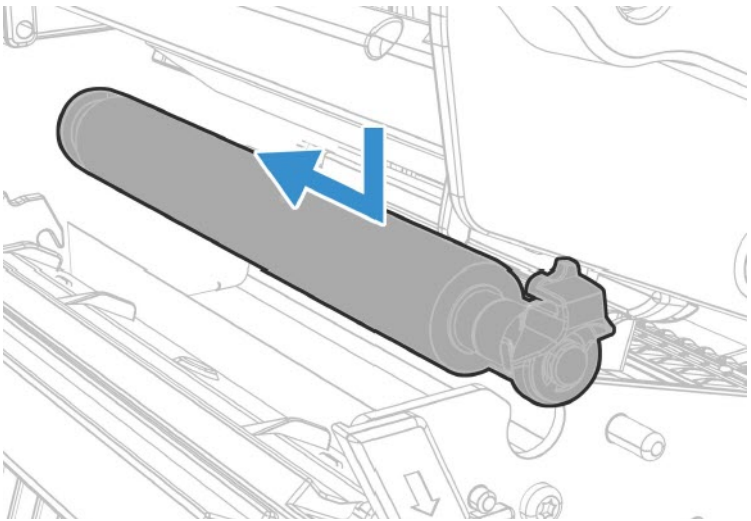


5. Pull the front sensor knob toward the outside.
6. Pull down the front sensor toward the front side.
7. Rotate the platen roller latch clockwise to detach it from the printer and pull the platen roller away from the printer.

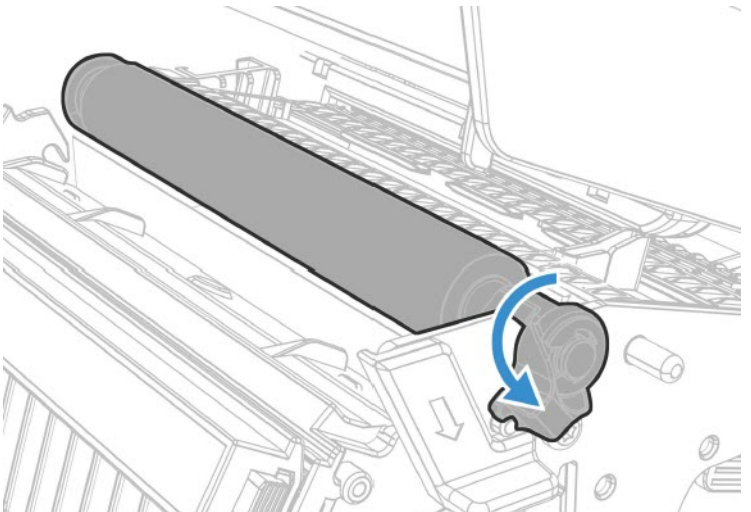




8. Insert the new platen roller and slide it into the printer.



9. Lock the platen roller by rotating the latch counter clockwise.



# Label Taken Sensor Calibration

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

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

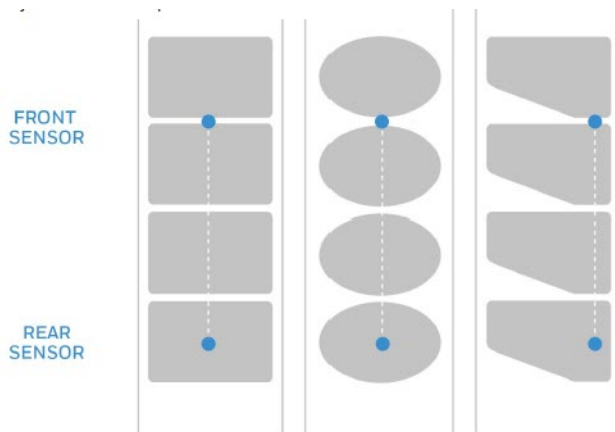
Before you calibrate the sensor, load media and ribbon in the printer as necessary.

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

# Label Gap and Black Mark Sensor Adjustments

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.

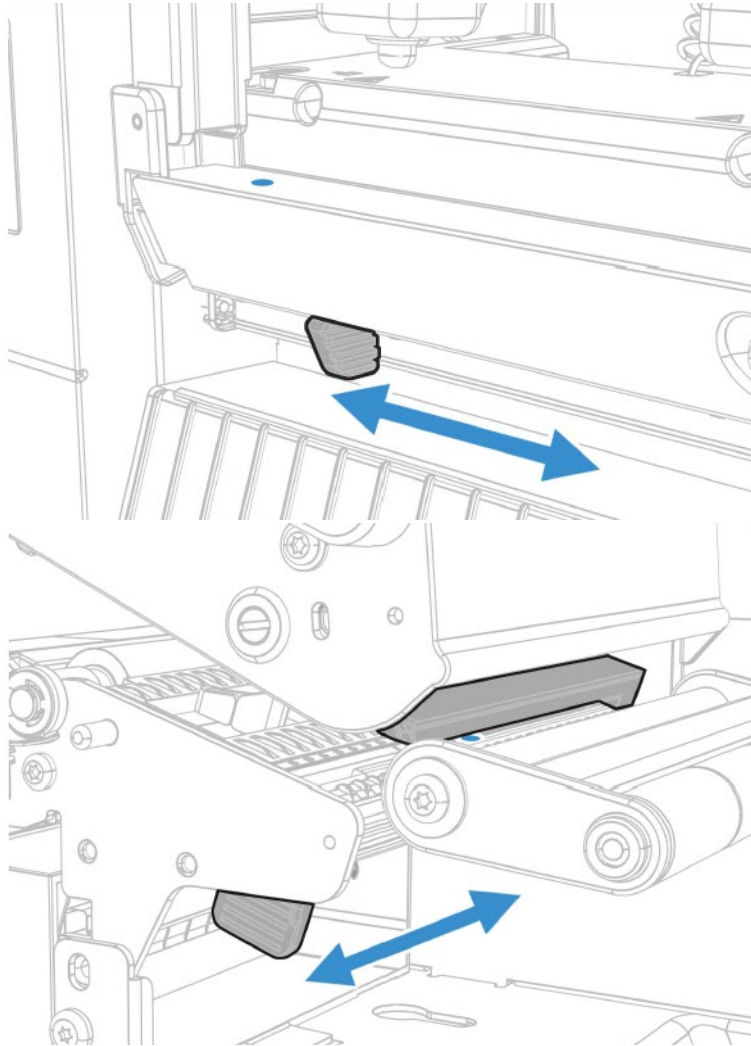
### Sensor Overview



The sensor contains a blue LED that is strong enough to see through media. You can use the blue LED to help determine the proper location for the sensor.

1. Open the media cover.
2. Adjust the label gap and black mark sensor:
  - Push the sensor adjustment knob to move the sensor toward the outside of the printer.
  - Push the sensor adjustment knob to move the sensor toward the inside of the printer.





3. Close the media cover.



## Printer and Environmental Specifications

1. Go to [sps.honeywell.com](https://sps.honeywell.com).
2. Navigate to the printer product page.
3. Locate the **Products** tab.
4. Click on your printer model.
5. Select one of the following tabs:
  - **Specifications**  
Printer specifications are listed here.
  - **Documents**  
Download the Data Sheet, Quick Start Guide, User Guide, Regulatory Information, and other product documentation.

## Command Languages and Simulator Support Features

- Autosense
- Fingerprint
- Direct Protocol
- IPL
- ZSim
- DPL
- Smart Printing C#
- PDF Printing

## Print Sensors

- Dual label gap/tag notch
- Black mark

- Printhead lift
- Ribbon low
- Front arm lift
- Label taken (optional)

## Network Services

- FTP
- SFTP
- HTTP/HTTPS
- SNMP v1/2c
- SNMP client support for IPv4 and IPv6
- WINS for IPv4
- BOOTP for IPv4
- DNS client support for IPv4 and IPv6
- Line Printer Protocol
- Raw TCP (Telnet in/out)
- DHCP client for IPv4 and IPv6 network (dual stack)
- IPv4 and IPv6
- Ping
- IPSEC/IKEv2 over IPv6
- SSH
- NTP
- Supports 10/100Mbps Ethernet (10BASE-T, 100BASE-T)

## Fonts

### Resident Fonts

- Andale Mono
- Andale Mono Bold
- CG Times
- CG Times Bold
- CG Triumvirate Condensed Bold
- Century Schoolbook Roman
- Dutch 801 Roman

- Honeywell Sans TT Bold
- Letter Gothic
- MHeiGB18030C-Medium
- Monospace 821
- Monospace 821 Bold
- OCR A
- OCR B
- Univers
- Univers Bold
- Univers Condensed Bold
- Univers Extra Condensed

## Downloadable Fonts

For broader language and character support, any Unicode TrueType or TrueType-based OpenType font may be downloaded. Fonts from Monotype Imaging are recommended to address global languages. The fonts below have been tested and are available for purchase and download at [www.fonts.com](http://www.fonts.com).

WorldType Collection fonts support all global languages whereas 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
- Bitmap

## Printed Barcode Symbologies

### 1D Barcode Symbologies

- Codabar
- Code 11
- Code 39
- Code 93
- Code 128
- DUN-14/16
- EAN
- HIBC 39
- HIBC 128
- Industrial 2 of 5
- Interleaved 2 of 5
- ISBT-128
- Matrix 2 of 5
- Straight 2 of 5
- UPC

### 2D Barcode Symbologies

- Aztec
- Code 16K
- Code 49
- Data Matrix
- DotCode
- Grid Matrix
- MaxiCode
- MicroPDF417
- MSI (modified Plessey)
- PDF417

- Planet Code
- Plessey Code
- Postnet
- QR Code
- RSS-14
- USPS 4-State Customer barcode

## Graphic File Types

- PCX
- PNG
- GIF
- BMP





# DEFAULT SETTINGS

Use this appendix to view the printer's factory default settings.

## Communications Settings

### Serial Port

The printer must be connected to the PC through a serial port to view the settings:

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

Serial Port 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

To view these settings:

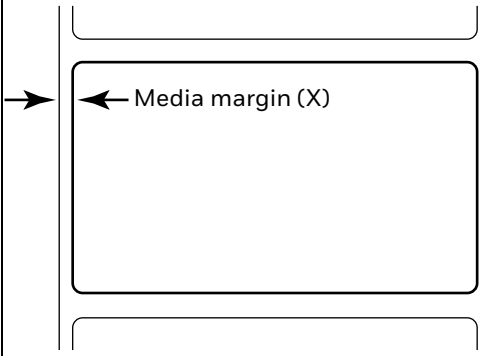
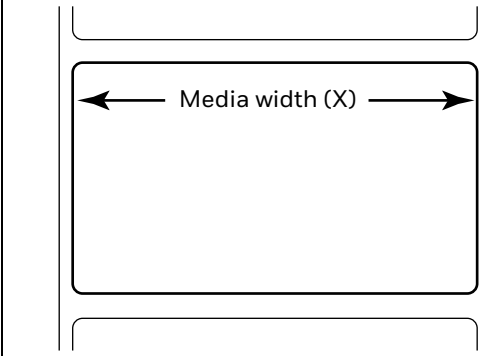
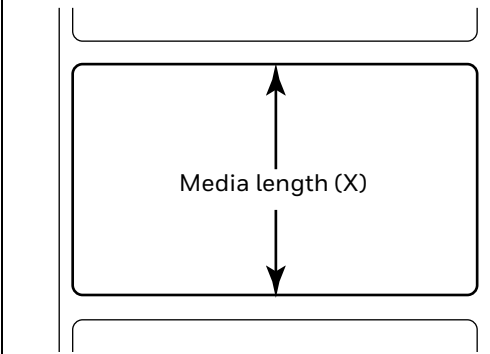
- From the printer Main Menu, select **Settings > Communications > Ethernet**.
- From the printer web page, click the **Configure** tab. Go to **Communications > Ethernet**.

<b>Ethernet Setting</b>	<b>Description</b>	<b>Default</b>
(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

To view these settings:

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

Media Setting	Description	Default
Media Type	Selects the type of media that is loaded in the printer.	Media With Gaps
Print Method	Selects the method of printing that the printer is using.	Ribbon (TTR) for thermal transfer printers, or No Ribbon (DT) for direct thermal printers
Media Margin (X)	<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>  <p>The diagram shows a rectangular label on a media strip. A horizontal line is drawn from the left edge of the label to the left edge of the printable area. A double-headed arrow labeled 'Media margin (X)' indicates this distance. An external arrow points to the left edge of the label.</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>  <p>The diagram shows a rectangular label on a media strip. A horizontal double-headed arrow labeled 'Media width (X)' spans the width of the printable area, starting from the left margin and ending at the right margin.</p>	Variable
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>  <p>The diagram shows a rectangular label on a media strip. A vertical double-headed arrow labeled 'Media length (X)' spans the height of the printable area, from the top edge to the bottom edge.</p>	Variable

Media Setting	Description	Default
Clip Default	Determines if the printer prints items outside the printable area of the label. When this is set to <b>Off</b> , the printer returns an error if any part of a barcode label cannot be printed because that part extends beyond the printable area. When this is set to <b>On</b> , the printer prints all barcode labels, but may also print unreadable, incomplete labels.	Off
Print Mode	Selects the printer tear off, peel off, or rewind media mode	Tear Off
Peel Strength	Selects strength the printer uses to peel the label off from liner. Use Medium or High if the printer has trouble to peel certain types of media.	Low
Label Top 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
Label Reset 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. Use Fast with Retraction or Slow with Retraction to retract the media and ribbon fed for calibration back to the printer.	Slow
Length (Slow Mode)	If Media Calibration Mode is set to Slow, the printer prints the media length plus 10 mm. This value sets an additional amount of media to be printed. Unit of measurement is defined in the Unit of Measurement parameter. Range is 0 to 3200.	0
LTS Sensitivity Level	Sets the sensitivity of the label taken sensor.	0
Power Up Action	Sets the action when you turn the printer on: <b>No Action</b> <b>Form feed:</b> The printer feeds one label. <b>Test feed:</b> The printer prints two configuration labels as it calibrates the media sensors. <b>Smart Calibration:</b> Detects media type (gap, black mark, or continuous, detects printing method (ribbon or no-ribbon), and calibrates media length.	Smart Calibration
Head Down Action	Sets the action when you close the print mechanism after opening it: <b>No Action</b> <b>Form feed:</b> The printer feeds one label. <b>Test feed:</b> The printer prints two configuration labels as it calibrates the media sensors. <b>Smart Calibration:</b> Detects media type (gap, black mark, or continuous, detects printing method (ribbon or no-ribbon), and calibrates media length.	Smart Calibration

Media Setting	Description	Default
Hold Feed Button Action	Sets the action when you press and hold the Print button for more than 2 seconds: <b>Test feed:</b> The printer prints two configuration labels as it calibrates the media sensors. <b>Smart Calibration:</b> Detects media type (gap, black mark, or continuous, detects printing method (ribbon or no-ribbon), and calibrates media length.	Smart Calibration
Label Counter	Specifies a label counter (from 1 to 49) that SNMP uses to report media counts.	0 (off)
Media Out Immediate Stop	Immediately stops feeding media when no media is detected.	Disable
Front Media Sensor	Enable or Disable front media sensor	Enable
Force Retract	Enable or Disable Force Retract Mode	Disable

**Note:** If no action is selected for Head Down Action, then you need to align the media gap, black mark, hole, and notch with the tear bar before you close the printhead at Thermal Transfer printing mode. Otherwise, the first label may be printed by the used ribbon.

## Print Quality Settings

To view these settings:

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

Print Quality Setting	Description	Default
Print Speed	Sets how fast the printer prints labels. The unit of measure is defined in the Unit of Measure parameter.	200dpi:100 300dpi:100
Media Sensitivity	Sets the level of sensitivity of the media to the printhead heat for media and ribbon.	High
Darkness	Sets the image darkness for media and ribbon. Adjust this parameter with the Media Sensitivity parameter. Range is 1 to 100.	55
Contrast	Adjusts the blackness of the printing on the label in 2% increments from -10% to +10%.	+0%
Label Rotation	Rotate the label in 0 (no rotation),90,180, and 270 degrees in clockwise	0°

# System Settings

## General System

To view these settings:

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

General System Setting	Description	Default
System Name	Sets the network identification name (WINS name) of the printer.	Printer model number and serial number.
System Location	Sets the location of the printer.	Empty string
System Contact	Sets the name of the printer administrator.	Empty string
XML Response Mode	Determines if the printer provides XML responses to printing requests (over Telnet and HTTP).	False
Display Language	(LCD printers only.) Selects the language the printer uses to display text on the screen.	English
Display Language (Web Page)	Selects the language the printer uses to display text on the web page.	English
Keyboard Input	Selects the language of the external keyboard that is connected to the printer.	U.S./U.K.
Time	Sets the current time.	System time
Date	Sets the current date.	System date
Command Language	Sets the printer command language. If changed, requires restart.	Autosense
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
Legacy Mode	Enable or Disable Legacy EasyCoder PF/PM/PX Comparability Mode	Disable

## Display Settings

To view these settings:

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

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

## System I/O

To view these settings:

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

System I/O Setting	Description	Default
Ethernet	Determines if the printer is allowed to communicate using Ethernet communications.	Enable
Wireless 802.11	Determines if the printer is allowed to communicate using its 802.11 radio. Supported only if the optional Wi-Fi module is installed.	Enable

## System Network Services

**Note:** You will only see **Manage Services** from the menus if you have an Ethernet or Wireless module installed in the printer.

**Note:** The printer supports 10/100 Mbps Ethernet (10BASE-T, 100BASE-T)

To view these services:

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

System Network Service Setting	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.	Disable
SFTP	Determines if the printer can use Secure File Transfer Protocol	Enable
Net1	Determines if the printer can use Telnet to communicate with Fingerprint.	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).	Disable
Telnet	Determines if the printer can use Telnet.	Disable
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 <b>ntp0.cornell.edu</b> , and the default Port Number is <b>123</b> .	Disable
Device Management	Determines if the printer can use 9300 TCP/IP port to communicate with HCD.	Enable
Connectivity Agent	Determines if the printer can communicate with Honeywell Cloud on port 10000.	Disable



# Maintenance Alerts

To view these settings:

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

Maintenance Alerts Setting	Description	Default
Odometer (User Resettable)	Sets the length of media (in meters) that the printer prints before the Odometer (User Resettable) alert is sent, if this alert is configured. Unit of measurement is defined in the Unit of Measure parameter. Range is 0 to 4294967295.	0
Odometer (Printer)	Sets the length of media (in meters) that the printer prints before the Odometer (Printer) alert is sent. Unit of measurement is defined in the Unit of Measure parameter. Range is 0 to 4294967295.	0
Odometer (Printhead)	Sets the length of media (in meters) that the printer prints before the Odometer (Current Printhead) alert is sent, if this alert is configured. Unit of measurement is defined in the Unit of Measure parameter. Range is 0 to 4294967295.	0
Replace Printhead	Sets the length of media (in meters) that the printer prints before the Replace Printhead alert is sent, if this alert is configured. Unit of measurement is defined in the Unit of Measure parameter. Range is 0 to 4294967295.	0
Clean Printhead	Sets the length of media (in meters) that the printer prints before the Clean Printhead alert is sent, if this alert is configured. Unit of measurement is defined in the Unit of Measure parameter. Range is 0 to 4294967295.	0
Faulty Dot	Sets the number of faulty dots on the printhead before the Faulty Dot alert is sent, if this alert is configured. Range is 0 to 4294967295.	0
Ribbon Low Diameter	Sets the minimum diameter of the ribbon roll before the Ribbon Low alert is sent, if this alert is configured. Range is 0 to 200 mm.	0



# PRINT LABELS WITH INPRINT

## The INPrint Page

The INPrint page features sample web forms you can use to print single labels if you are using the Fingerprint or Direct Protocol Language on your printer. 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 the INPrint page.

## Print INPrint Labels

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

1. Open a browser window on your PC.
2. In the location or address bar, type the printer IP address and press **Enter**. The printer web page appears.
3. Click the **INPrint** tab.
4. Select the web form you want to print:
  - If you created the web form yourself, click **Customer Downloaded** and then select the web form in the list.
  - To use one of the Honeywell resident web forms, click **Resident** and then select the web form in the list.
5. Type information in the web form as needed.

To preview the label on screen, click **Preview**. To print the label, click **Print**.



## ACCESSORIES AND OPTIONS

## Printer Accessories and Options

Option/Accessory	PD45S	Description
Wi-Fi Module	Yes	Customer installed accessory. Use the Wi-Fi module to communicate with the printer wirelessly.
Parallel IEEE1284 Interface Board	Yes	Service technician installed accessory. Use the parallel interface board to make an applicator port on the back of the printer.
Applicator Interface Board	Yes	Service technician installed accessory. Use the applicator interface board to make an applicator port on the back of the printer.
Industrial Interface+UART	Yes	Service technician installed accessory. Use the industrial interface+UART board to make a UART port and GPIO port on the back of the printer.
Accessory Cutter	Yes	Service technician installed accessory
Peel/Rewind Module	Yes	Service technician installed accessory

**Note:** To view the accessory manuals, visit your printer product page at [sps.honeywell.com](https://sps.honeywell.com).





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