



PC45 Series Printer

Desktop Printer

PC45d, PC45t*



User Guide

* Additional model names may exist for specific countries.

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Customer Support

Technical Assistance

To search our knowledge base for a solution or to log into the Technical Support portal and report a problem, go to honeywell.com/PSSTechnicalsupport.

Product Service and Repair

Honeywell International Inc. provides service for all of its products through service centers throughout the world. Go to automation.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 automation.honeywell.com and select **Support > Productivity Solutions > Warranties**.

Safety Warnings



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

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. Pack the printer in the original package.

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

GET STARTED

The PC45 series printers are compact, easy-to-use barcode label printers built on Honeywell's Printer Edge™ platform that fit easily on a desktop. The printers include integrated USB, Ethernet, and optional such as Bluetooth, RS232, and Wi-fi interfaces. You can connect the printers to a single PC, a wired network, or a wireless (optional) network.

The printers are available in direct thermal (DT) model and Thermal transfer (TTR) model for printing with a ribbon.



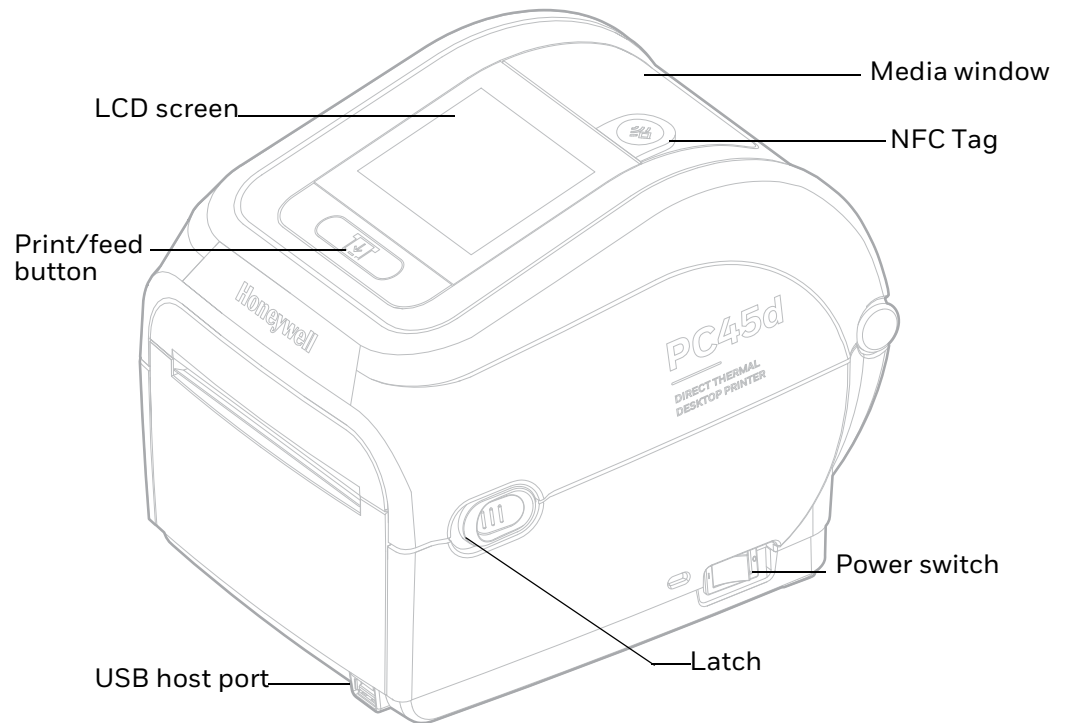
Caution: Read and review the warnings in this manual carefully before connecting the printer.

Features

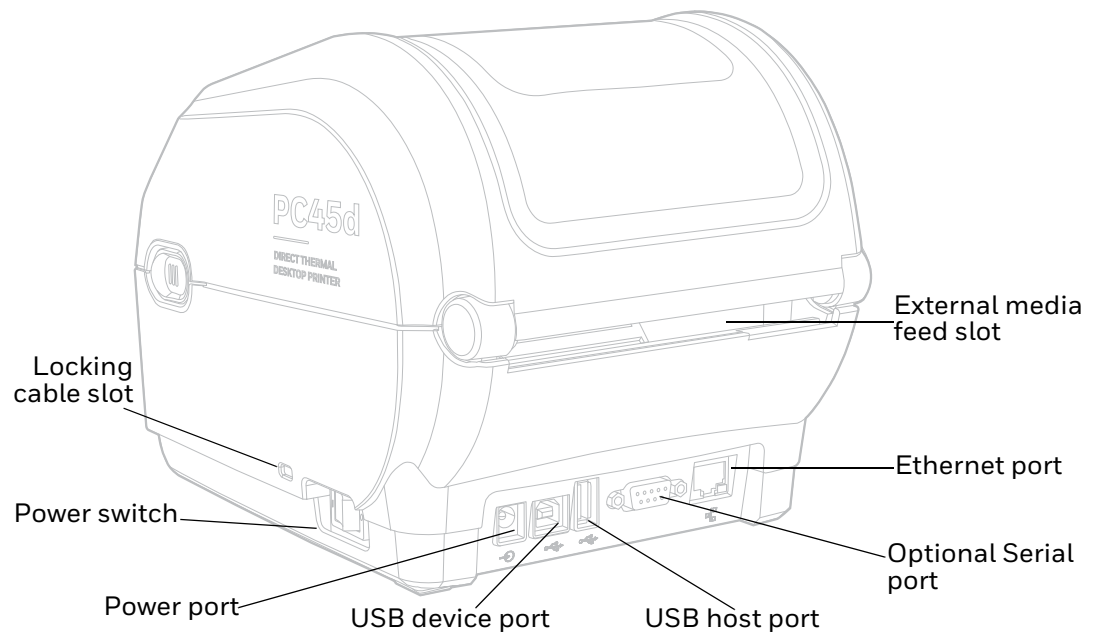
- Print speed of up to 8 ips (203dpi) or 6ips (300dpi)
- Graphical User Interface with full touch 3.5"LCD display.
- LCD User Interface with multiple language support.
- Enhanced security with secured flashing, secured booting.
- Smart Media calibration.
- NFC support.
- USB host port for connecting storage devices, scanners, or keyboards.
- USB device port to connect to a PC.
- Honeywell PrintSet 6 and Print Set MC support.
- RFID Capabilities
- PC45d with Linerless Cutter Support
- Honeywell Operational Intelligence support for print optimization.
- Multiple printer languages support including Fingerprint (FP), Direct Protocol (DP), Eltron Simulation (ESim), Intermec Printer Language (IPL), Zebra Simulation (ZSim), Datamax Printer Language (DPL), Smart Printing (C#) and Direct PDF printing.

- Wide range of printer accessories.

PC45 Printer Front View



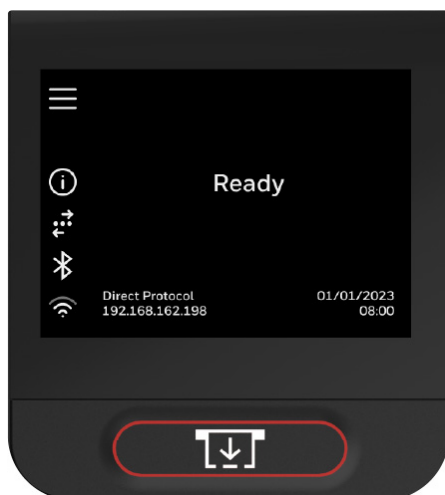
Back View (Ports and Power)



Note: NFC Tag is model dependent.

About the Display

The front panel has 3.5 inch full-touch screen that supports touch input with fingers, gloved hand, or a stylus.



Sleep Timer

The printer is equipped with a Sleep Timer setting that automatically turns off the display and puts the printer into a low-power state when the printer is inactive for a defined period of time. The printer is shipped with a default setting to go into Sleep mode after 15 minutes of idle time. The printer will automatically wake up when a print job is sent. Refer to [System Settings](#) for more information.



Caution: Honeywell recommends keeping the Sleep Timer setting enabled and not changing the default setting. Changing this setting to either disable screen timeout or extend the time before screen timeout may reduce the lifespan of the LCD display and is considered improper use of the device. Honeywell will not cover any resulting damages under warranty or otherwise.

Print/Feed Button

Use the Print/Feed Button to feed media, pause print jobs, calibrate, test feed, and print.



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

Ready Screen

The ready screen appears when the printer is powered on and has completed its startup process.

By default, the information bar at the bottom of the screen shows the printer command language and the printer IP address. You can customize the screen to show different types of information.

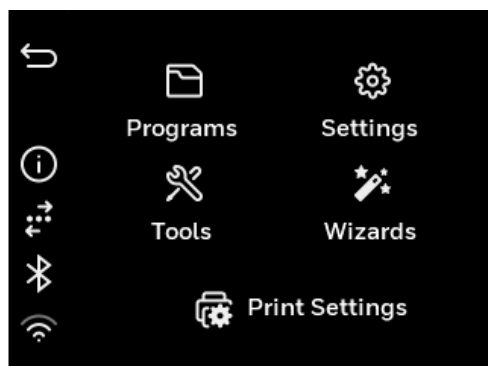
The status bar at the top of the screen includes these icons:

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.
	Printer Information	Press the icon to view specific printer information.
	Wireless 802.11	Press the icon to view Wi-Fi connectivity information.
	Bluetooth	Press the icon to view Bluetooth/Bluetooth LE information for your printer.

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.

Select the **Programs**, **Settings**, **Tools**, **Wizards**, or **Print Settings** 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, Direct Protocol, or DPL as the command language.
- Select **Settings** to view and change printer settings (communication, printing, system settings, network services, and printer language).
- 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.
- Select **Print Settings** to view and change print settings.

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

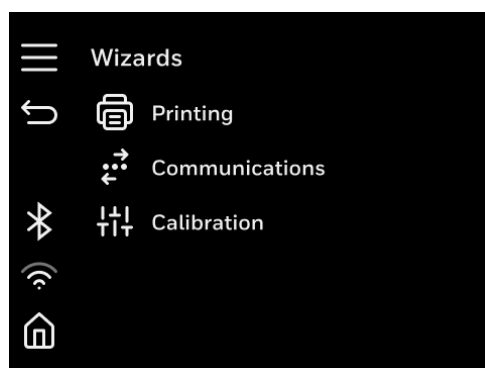
Use the status bar buttons to navigate between menus in the Main Menu and save changes.

Button	Description
	Returns to the Main Menu.
	Goes back one level in the menu.
	Returns to the Ready screen.
 	Moves to additional options not viewable in the menu.
	Wi-Fi: Gives the Wi-Fi connectivity information and available Wi-Fi networks.
	Bluetooth: Gives the device name and device address.
	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 full touch display 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 (for PC45t Printer)	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.
Wireless 802.1x	Looks for wireless networks and sets up Wi-Fi communications. Available when Wi-Fi module is installed.
Bluetooth	Looks for discoverable Bluetooth devices and sets up Bluetooth communication.

Calibration Wizard

Wizard	Description
Media	Calibrates all media sensors and shows current print settings.
Media Low Sensor	Calibrates the media low sensor. Available when the media low sensor is installed.
Label Taken Sensor	Calibrates the label taken sensor used with the label dispenser. Available when the label taken sensor is installed.
RFID (for RFID SKU)	Calibrates the optimal label adjustment and output power setting for the RFID media loaded in the printer. Available when the RFID module is installed.
Date and Time	Configures 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:

- [Direct Protocol](#)
- [ESim](#)
- [Fingerprint](#)
- [IPL](#)
- [ZSim](#)
- [DPL](#)
- [Smart Printing \(C#\)](#)
- [Direct PDF Printing](#)

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.

ESim

ESim (EPL command language simulator) interprets Eltron printer command language. If you send EPL label documents to the printer, you should select ESim 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, 300dpi, and 406dpi 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 (C#)

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.

Direct 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.

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 your desired language. For details on how to use Smart Printing directly on the printer, see the Fingerprint Command Reference Manual.*

Access the Printer Web Page

1. Open a browser window on your PC.
2. In the location or address bar, type **https://** followed by the printer IP address and press **Enter**.

Note: The default printer web page is set to HTTPS protocol.

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.

Note: You can also enter **User** in the Username field without the need of a password to login. This will allow you to access limited features in the printer web page.

Set the Printer Command Language

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

- Printer web page
- Main Menu
- PrintSet 6
- Print Set MC

Set the Command Language from the Printer Web Page

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

1. Follow the directions to [Access the Printer Web Page](#).
2. Once you are logged in to the printer web page, click **Configure**.
3. Click **System Settings > General**.
4. Select the printer command language you want to use from the Command Language list, and then click **Save**. A restart button will appear at the top of the page.
5. Click **Restart**.

Set the Command Language 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

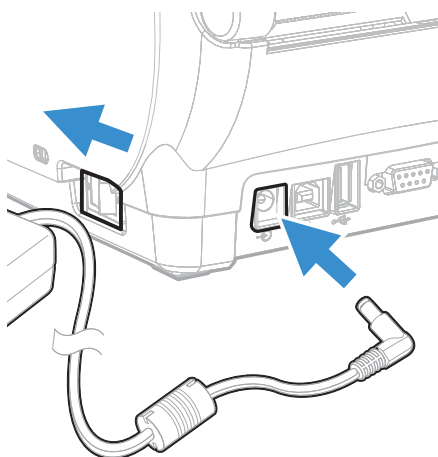
The printer goes through a startup wizard the first time you turn on the power.

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

Note: Make sure the power switch of the printer is turned off before connecting the power cord.



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.

Note: During the startup process, you are requested to select **Menu Access** method. By default all menus are available from the Main Menu the first time you turn on your printer. You can select **Enable by PIN** to restrict access to menus or disable access to all menus. For more information, see [Restrict Access to the Main Menu](#).

Calibrate the Touchscreen

You can calibrate the touchscreen using the printer website followed by performing touch sequence on the touch panel of the printer.

You can also calibrate the touchscreen from the touch panel on the printer.

To calibrate the touchscreen

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

1. Open your browser and type **https://** followed by 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**.

Note: Once you are logged in, you have option to change the username and password.

3. Click on the **Screen Calibration** button. This will engage the touch panel on the printer to start screen calibration.
(or)
On the touch panel of the printer, tap on the **Main Menu** icon > **Wizards > Calibration > Screen**. Tap **Yes** to start screen calibration.
 - When the small square appears on the front touch panel of the printer, **touch the square** and continue to touch the square until the printer beeps.
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.

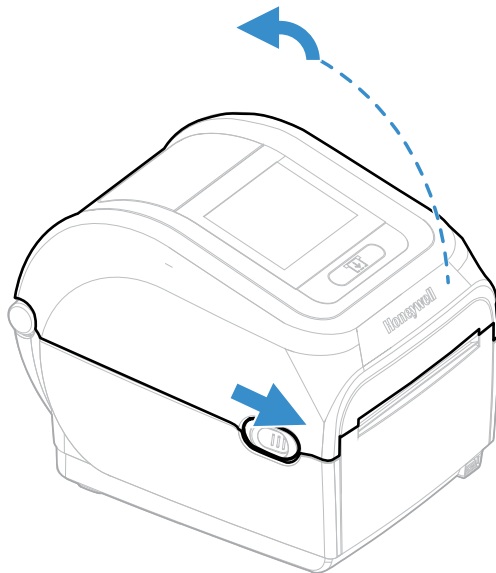
Load Media for Tear-Off Printing

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 types of media can be used for tear-off printing:

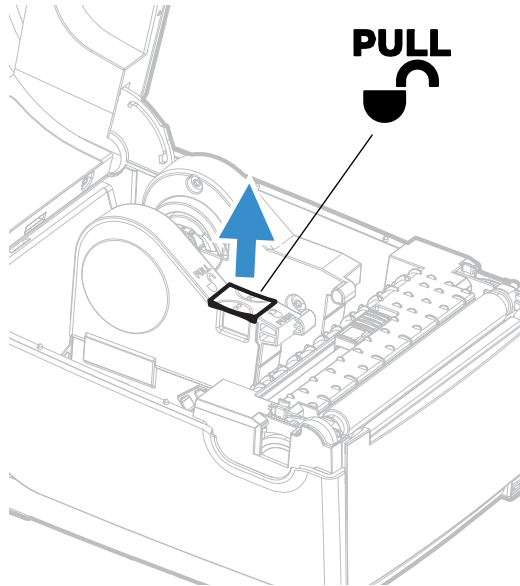
- Non-adhesive continuous stock.
- Self-adhesive continuous stock with liner.
- Self-adhesive labels with liner.
- Tickets with gaps, with or without perforations.
- Tickets with black marks, with or without perforations.

To load media for tear-off printing:

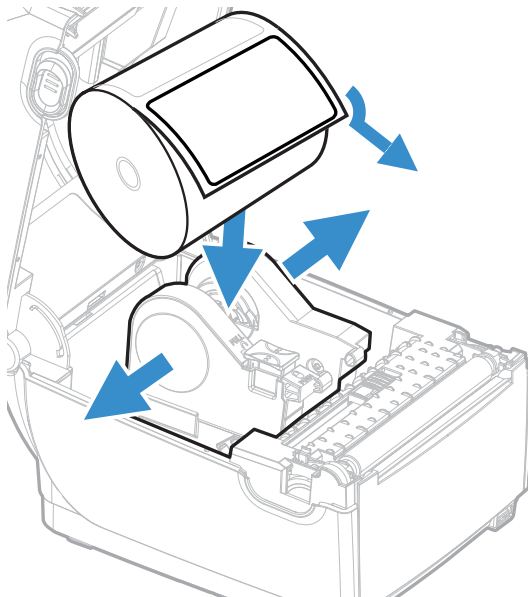
1. Pull one or both of the printer latches toward the front of the printer and lift the printer lid.



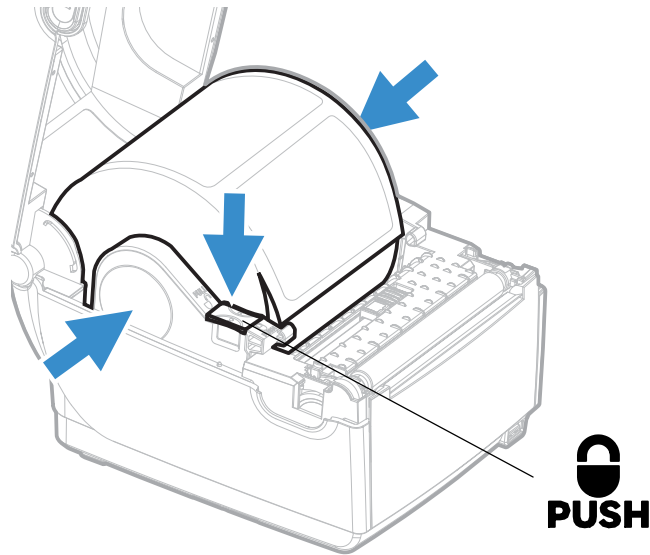
2. Pull the locking tab up.



3. Slide the media holders to adjust the distance between them, and place the media roll between the holders.

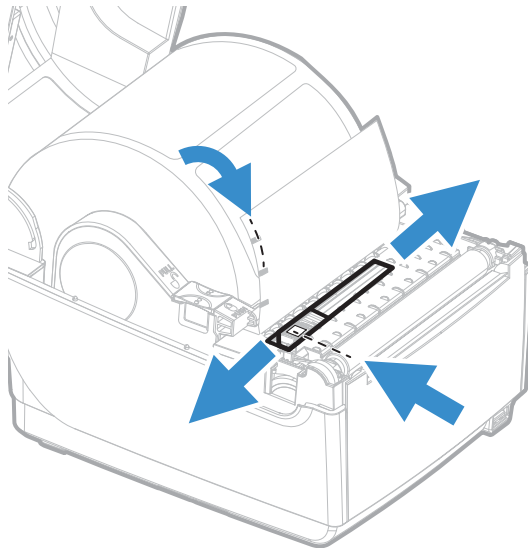


4. Make sure the holders are snug against the sides of the media roll, and then press the locking tab down to lock the media holders in place.

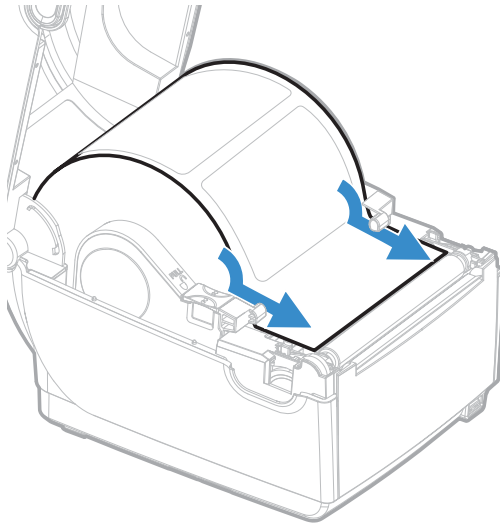


Note: Pull the media forward to make sure the media rotates and is not resting at the base.

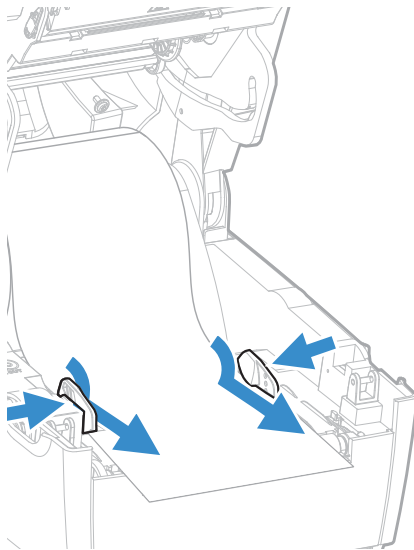
5. If you are using notched or black mark stock, slide the label stop sensor so the notches or marks pass over the sensor.



6. For **PC45d** printer, thread the media under the tip guides on the media holders and past the front of the printer.



For a **PC45t**, thread the media through the media guides and past the front of the printer. To adjust the width of the media guides, slide the guides as needed to fit your media.



7. Close the printer lid until it snaps shut.
8. Turn the printer on and configure the feed adjust settings.

Cut-Off Printing

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



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

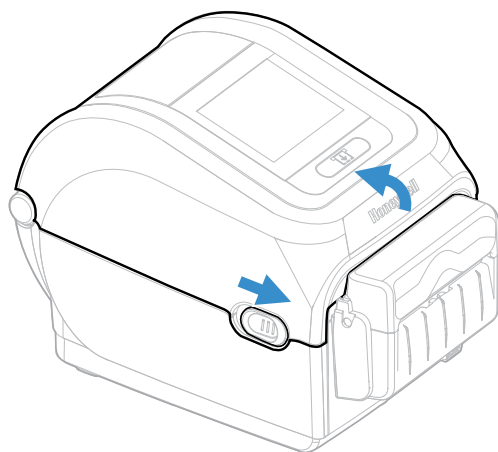
The cutter module includes the top of form sensor. You can also install the optional cutter tray accessory which holds up to 20 labels or tickets.

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

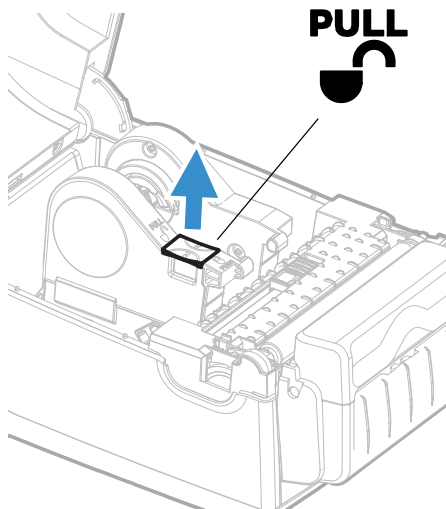
Load Media for Cut-off Printing

Cut-off printing is supported by PC45 series printers with the cutter installed.

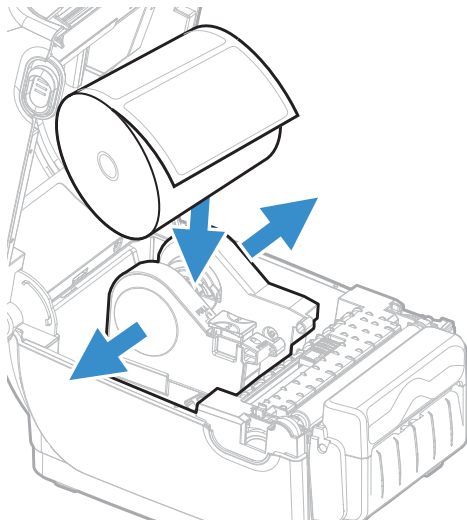
1. Pull one or both of the printer latches toward the front of the printer and lift the printer lid.



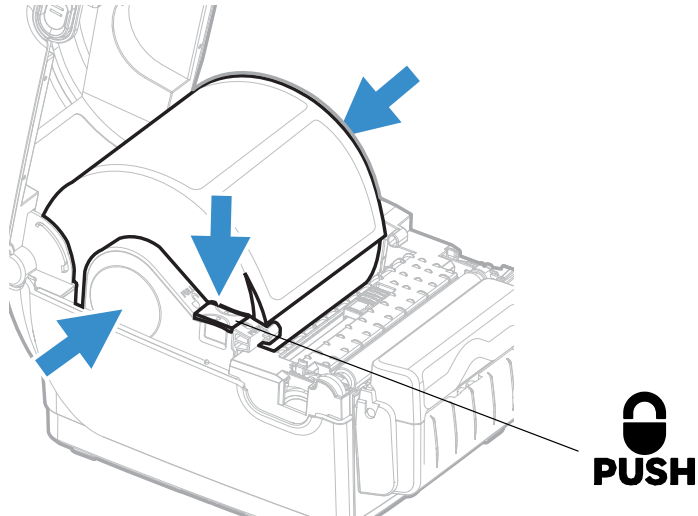
2. Pull the locking tab up.



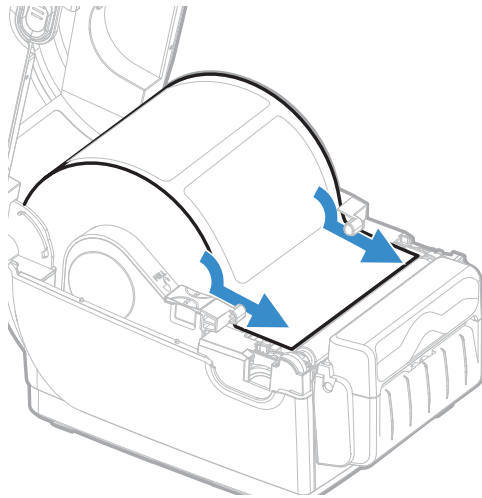
3. Slide the media holders to adjust the distance between them, and place the media roll between the holders.



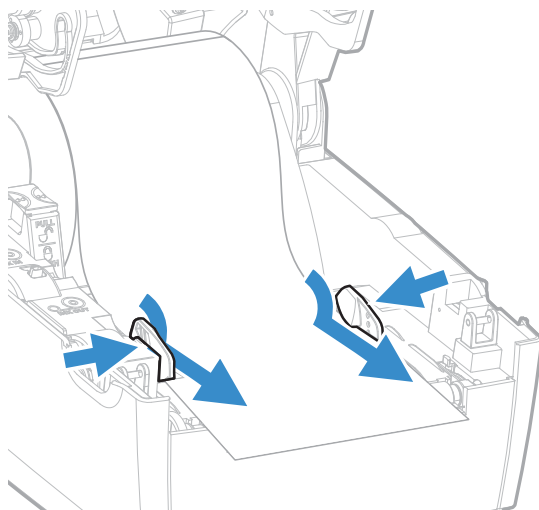
4. Make sure the media holders are snug against the sides of the media roll, and press the tab down to lock the holders in place.



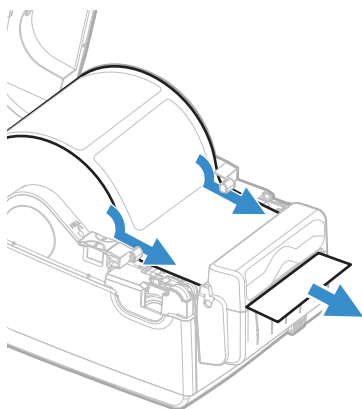
5. For the **PC45d**, thread the media under the tip guides on the media holders.



For the **PC45t** printer, thread the media through the media guides. To adjust the width of the media guides, slide the guides as needed to fit your media.



6. Thread the media into the slot in the cutter accessory and out through the front of the cutter.

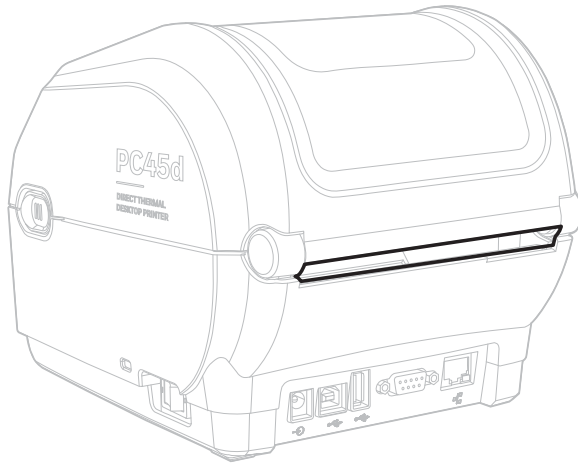


7. Close the printer lid until it snaps shut.
8. Turn the printer on and configure the cutter.
9. After the printer finishes starting up, press .
10. Select **Settings > Printing > Cutter**.
11. In the Cutter Control options, select **Automatic**.
12. Press  to save your settings.
13. Configure the Label top Adjust and Label Rest Adjust settings.

Load Media from an External Supply

To use large rolls of media or tag stock (up to 8in diameter), you can load the media from outside the printer.

1. Place the media behind the printer.
2. Feed the media into the printer through the external media feed slot.

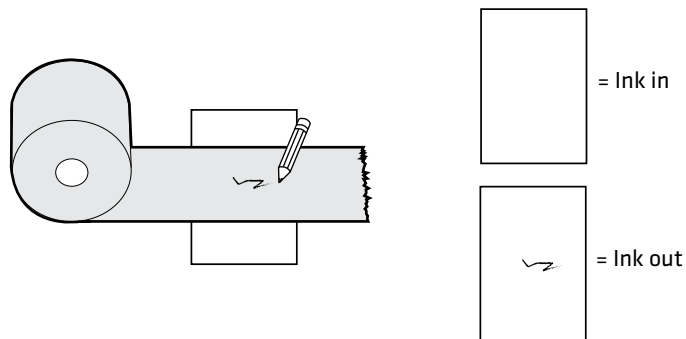


3. Place an empty paper core on the media holder. Thread the media on top of the empty core and through the media guides as you would for the media installed inside the printer.

About the Ribbon

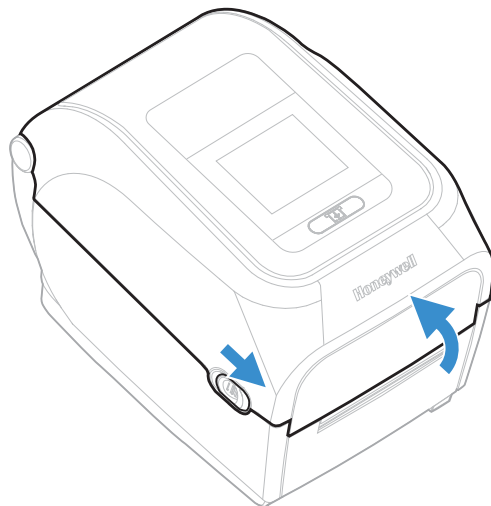
Thermal transfer printing provides a durable printout that is less vulnerable to chemicals, heat, and sunlight than direct thermal printing. Select a ribbon type that matches the media you are using and configure the printer for thermal transfer media.

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.

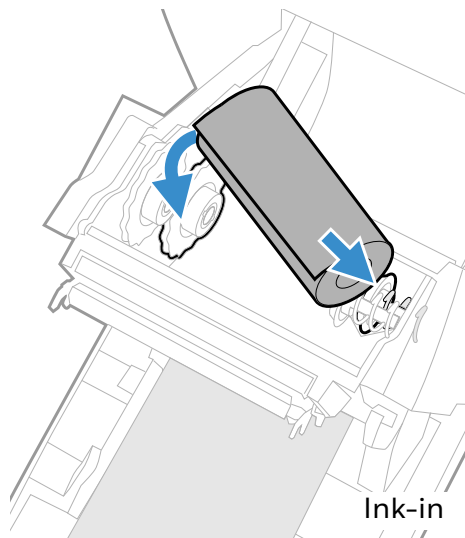
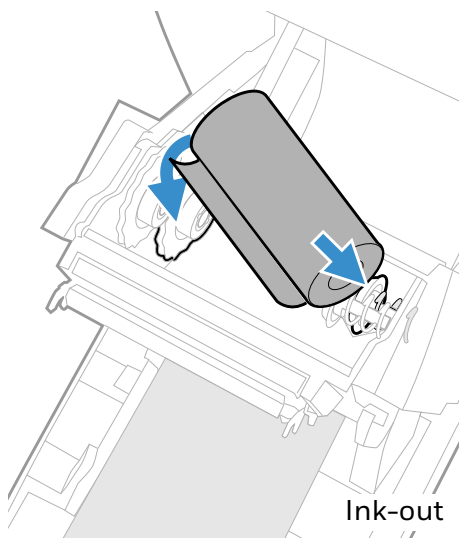


Load Ribbon

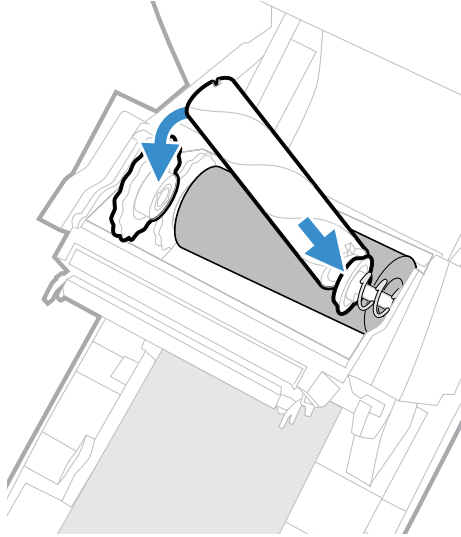
1. Press the printer latches toward the front of the printer and open the printer lid.



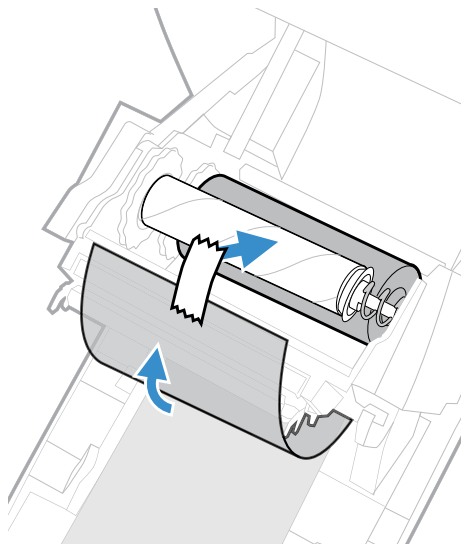
2. Place ribbon roll between the rear ribbon holders. The ribbon should come off the roll.



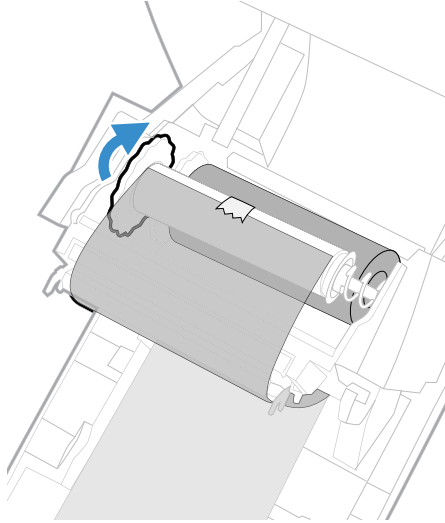
3. Place the takeup core between the front takeup core holders.



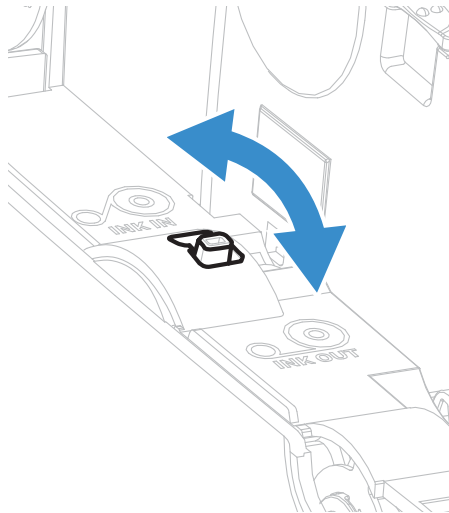
4. Attach the end of the ribbon to the takeup core.



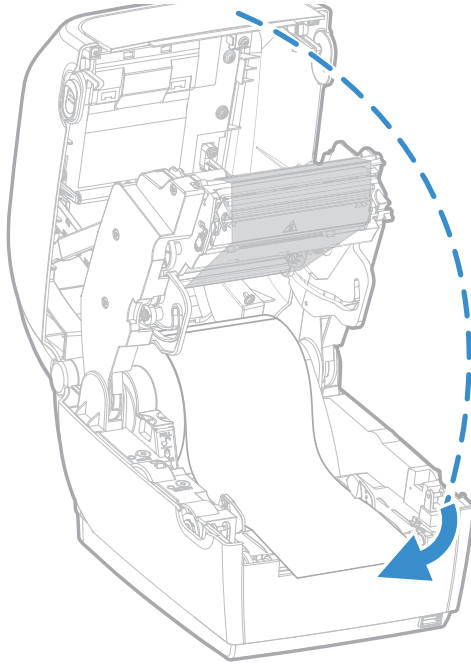
5. Turn the slack-wheel to take up slack in the ribbon.



6. Set the ribbon selector switch to **Ink-in** or **Ink-out**.



7. Close the printer lid until it snaps shut.



8. To configure for thermal transfer printing, from the printer Main Menu select **Settings > Printing > Media > Print Method > Ribbon (TTR)**.
9. Save your changes.

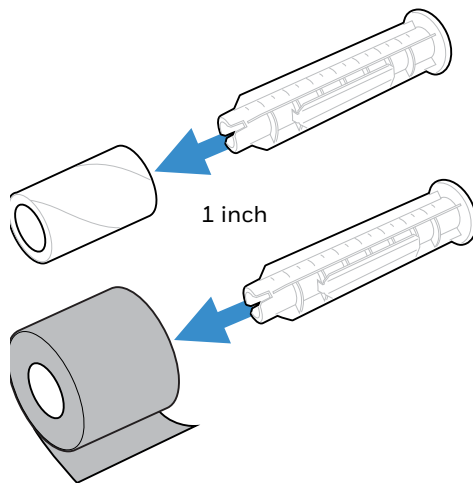
Notchless Ribbon Core Adapter

Use the optional ribbon core adapter to load media without notches in the core and to load smaller width ribbon. The ribbon core adapter is sold separately.

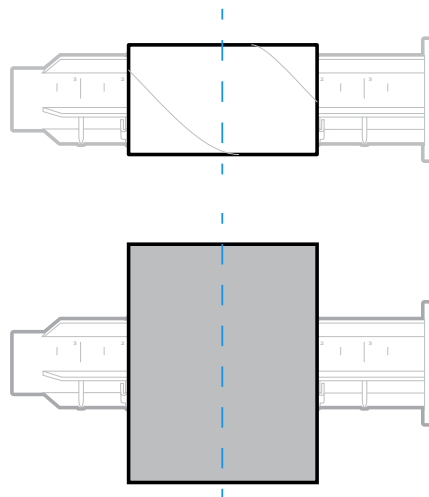
For detailed instructions on installing the .5-inch ribbon core adapter, refer to the PC45 Accessories User Guide available for download at automation.honeywell.com.

Note: For information on purchasing this accessory, contact your local sales representative.

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

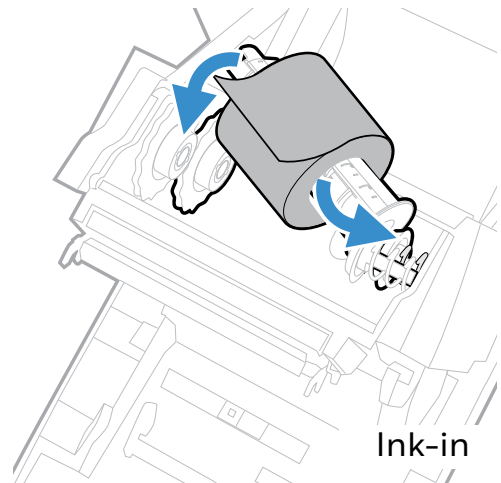
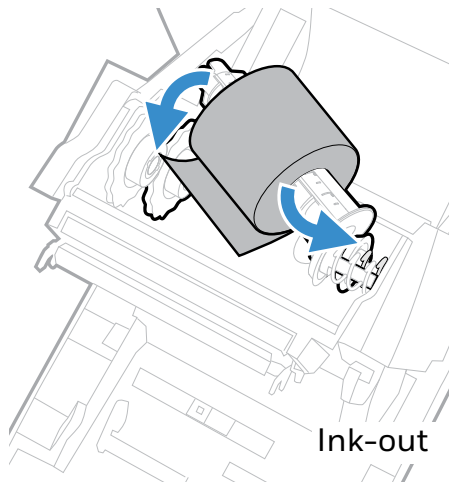


2. Center the media roll and takeup core on the adapter.

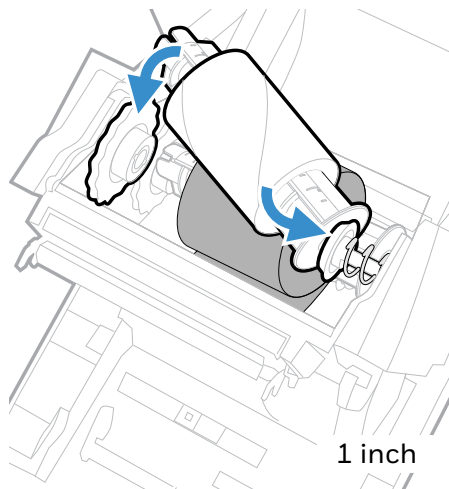


3. Press and release button and raise the print mechanism.

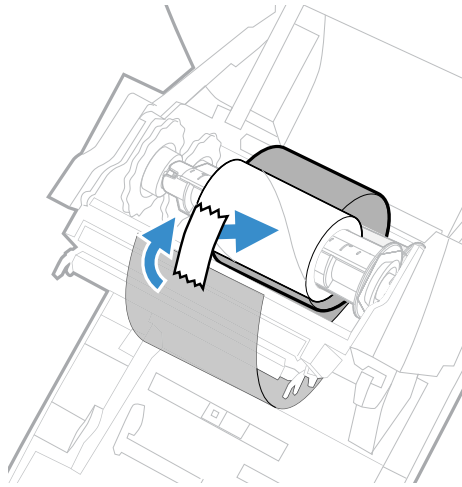
4. Place the ribbon roll and adapter into the rear media holders. For “ink out” operation (default), the ribbon should come off the back of the roll. For “ink-in” operation, the ribbon should come off the front of the roll.



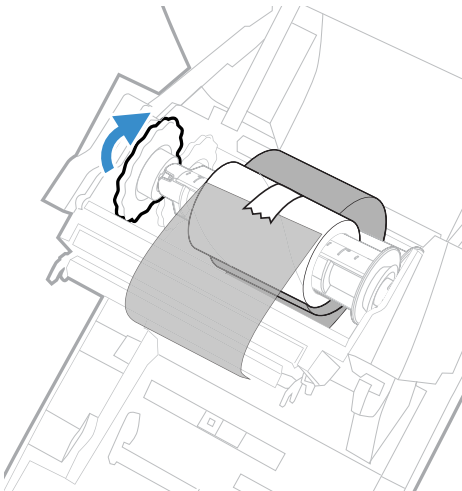
5. Place the takeup core and adapter between the front media holders.



6. Route the ribbon under the print mechanism and up to the takeup core.
7. Attach the ribbon to the takeup core.



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



About Test Label

Print a test label after you have loaded media and ribbon to verify that you have installed everything correctly and also to get some important information about your printer.

1. Connect the printer to power and turn on the printer.
2. From the Ready Screen, press  to view the Main Menu.
3. From the Main Menu, tap **Tools > Test Labels**.
4. 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 your desired language.

Printing on RFID Media

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

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

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

For help configuring RFID parameters, see the Fingerprint Command Reference, IPL Command Reference, or the ZSIM Command Reference.

About RFID Tag Position

RFID Tag Position specifies the distance (in dots/mm/in) to move the label to align the tag with the RFID antenna. Positive values move the label back.

Use one of these methods to calculate Tag Position:

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

Run the RFID Calibration Wizard

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

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

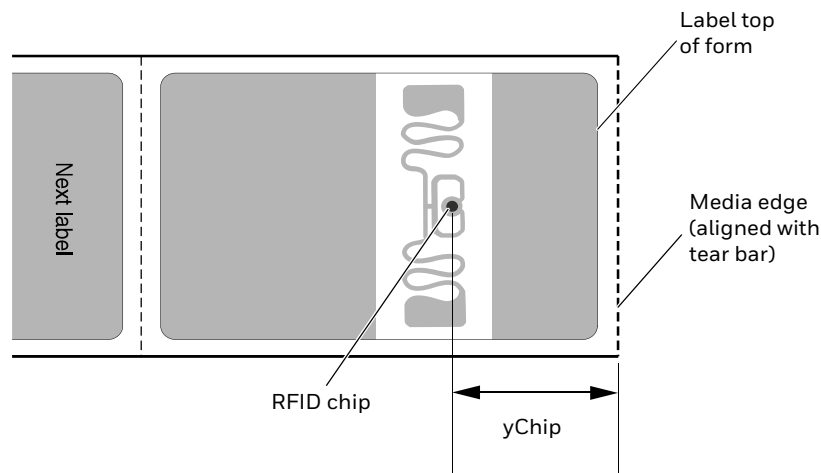
1. Make sure the media type and media length are properly configured.
2. From the Main Menu, select **Wizards > Calibration > RFID**.
3. To enable the RFID module, select **Enable**.
4. Load the RFID media and tap **OK**.

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

Calculate the RFID Tag Position

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

1. Make sure Label Top and Label Rest are set to 0.
2. Measure the yChip value, which is the distance between the RFID chip and the media edge aligned with the tear bar.



3. The yAntDist for the printers are:
 - a. 244 dots, 30.5mm, 1.20in for PC45d.
 - b. 542 dots, 31.5mm, 1.24in for PC45t.
4. Use this formula to calculate the estimated Tag Position:
Rear antenna: $\text{TagPosition} = \text{yChip} - \text{yAntDist}$

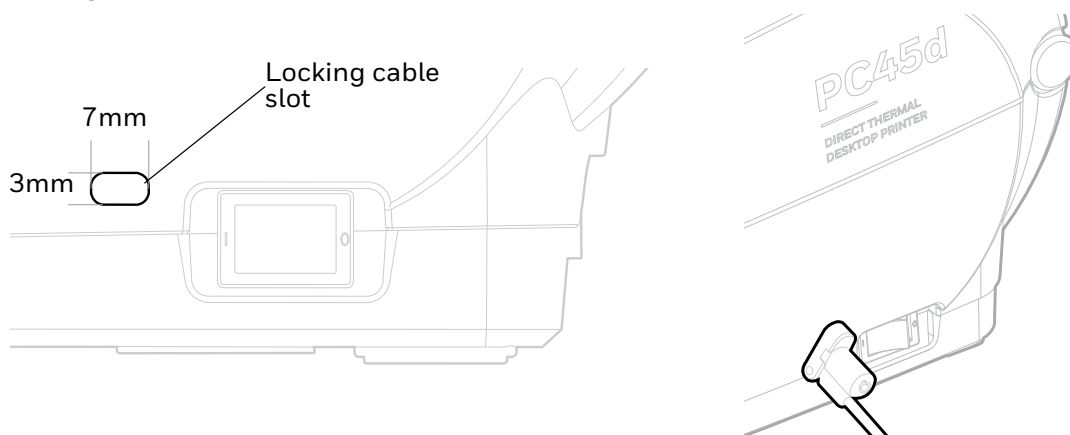
Configure RFID settings using Web Page

To configure the RFID media settings, the printer must be connected to an Ethernet or wireless network and you must know the printer IP address.

1. Open a web browser on your PC.
2. In the address bar, type **https://** followed by the printer IP address 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 **Configure > Printing > RFID**. The RFID settings page appears.
6. Change RFID settings as needed. You can also click **Default Settings** to restore all default RFID settings.
7. Click **Save**.

Secure the Printer

A cable lock can be inserted in the locking cable slot to secure the printer. The locking cable slot (7x3 mm) is compatible with Standard size lock heads.



CONNECT THE PRINTER

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

Connect the Printer to Your PC

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. Connect one end of the USB Type A cable to the back of the printer and connect the other end to your PC.
2. Your PC will recognize the printer driver and connect to the printer.

Connect the Printer using Bluetooth Communication

You can use Bluetooth connection to communicate with your PC and send commands directly to the printer through terminal connection.

To connect a host PC/Mobile to the printer:

1. Turn on Bluetooth and discover the printer in your PC/Mobile device list and connect. The Bluetooth pairing request is displayed on the printer and on your PC/mobile device.
2. Tap OK on the Printer and on your PC/Mobile device to proceed with pairing.

To connect other Bluetooth devices, for example, Bluetooth keyboard, Bluetooth scanner, etc, use the Bluetooth wizard on the Ready screen. To connect, tap on the Bluetooth wizard and select the device from the list and tap OK.

Connect the Printer to Your Network

Connect the printer to the network using,

- Ethernet Interface
- Wi-Fi Interface

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 on the printer. You can use the network connection with Honeywell Windows Print Drivers. 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 web page, 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.

- 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

Configure Bluetooth Communication

You can configure Bluetooth communication:

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

Configure Bluetooth Communication from the Web Page

The printer must be connected to an Ethernet or wireless network and you must know the printer IP address.

- Open a web browser on your PC.
- In the address bar, type **https://** followed by the printer IP address and press Enter. The printer web page appears.
- Click **Login**.
- Type your Username and Password and then click **Login**. The default value for Username is **itadmin** and the default value for Password is **pass**.
- Click **Configure**. The Configuration Summary page appears.
- Click **Communications > Bluetooth**. The Bluetooth settings page appears.
- Change Bluetooth settings as needed. You can also click **Default Settings** to restore all default Bluetooth settings.
- Click **Save**.

Configure Bluetooth Communication from the Main Menu

Use the procedure to configure Bluetooth settings from the printer Main Menu. You may need to configure these settings if you want to connect to a mobile computer through Bluetooth.

1. Press the **Main Menu** button.
2. Select **Settings > Communications > Bluetooth**.
3. Change settings as needed for your Bluetooth device.
4. Tap **Save**.

Configure Wi-Fi Communication

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 6 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 **https://** followed by the printer IP address 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 **Configure**. 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.

- 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.

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

Alternatively, you can also access the Wi-Fi wizard from the Ready Screen to select or make changes to your Wi-Fi settings.

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.

- Configure the printer for the correct date and time.
- On your PC, open an FTP/SFTP connection to the IP address of the printer.
- Transfer your certificate to /home/user/certificates/public.
- On your PC, open a Telnet session to the printer.
- Change the directory to: **/home/user/certificates/public**.
- Type the command: **ls -la**.
- You should see the certificate that you transferred in step 3.
- Use the certinstall script to install the certificate using this format:
<prompt> certinstall.sh <certificate name>

Example: itadmin@PC45-00000000073 /home/user/certificates/
public\$certinstall.sh entrust.cer

- 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, from the Main Menu or Honeywell PrintSet 6 to specify the certificate .pem file to use for security.

Printer Drivers

Drivers enable the printer to communicate with your PC and with printer software applications. The Printer driver is part of your Windows driver. Windows auto-detects the printer when you connect it to a PC through a USB port.

Note: Make sure your Windows PC is up to date before connecting to your printer.

Install Honeywell Windows Driver

Use InterDriver 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.
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 InterDriver and follow the prompts to complete the installation.

Switch USB Modes

By default, the printer uses the direct printing mode for USB connection. Follow these steps to switch to Virtual com port mode.

1. Open a web browser on your PC.
2. In the address bar, type **https://** followed by the printer IP address 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. Navigate to **Configure > System Settings > Manage I/O**.
6. For **Virtual COM**, select **Enable**.
7. Reboot the printer. A reboot is required after changing the Virtual COM setting.

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 PC45 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. 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 6
- Print Set MC
- 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:

- Communications
- Printing
- System Settings
- Alerts
- Network Services
- Languages

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
Communications	General, Security, and Network
Printing	Media and Print Quality
System Settings	General, Display, Audio, Manage I/O, Manage Services, and Maintenance Alerts
Alerts	Error, Warning, and Information
Network Services	Network services related configurations
Languages	Printer command language specific settings

Printer Configuration

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

1. From the Ready screen, press the Main Menu.
2. From the Main Menu, tap on **Settings**. 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 [Access the Printer Web Page](#)), click **Configure > System Settings > Display**.
 - From the Main Menu screen, select **Settings > System Settings > Display**.
2. Select the 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

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

Printer Web page 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 **https://** followed by the printer IP address and press Enter. The printer web page appears.
3. Click **Login**. The Login page appears.
4. Type your Username and Password and then click **Login**. The default value for Username is **itadmin** and the default value for Password is **pass**.
5. Click **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, Bluetooth or Wireless 802.11 settings, click **Communications**.
 - For media or print quality settings, click **Printing**.
 - For display, audio, 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**.

Note: For Network related settings, user needs to login as itadmin and the default value for password is pass.

- To change printer command language specific print settings, click **Languages**.
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 6 or Print Set MC

You can use PrintSet 6 or Print Set MC to change configuration settings on your printer. Download Print Set MC from the App Store on iOS or Google Play Store on Android devices. For PrintSet 6 you may download from honeywell.com/PSSsoftware-downloads.

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 automation.honeywell.com > **Software** > **Productivity**.

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 **https://** followed by the printer IP address and press Enter. The printer web page appears.
3. Click **Login**. The Login page appears.
4. Type your Username and Password and then click **Login**. The default value for Username is **itadmin** and the default value for Password is **pass**.
5. Click the **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.

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
Firmware	/firmware	
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. You can:
 - a. Insert the USB storage device and then restart the printer. The resources will be automatically installed after printer startup.(or)
 - a. Once the USB storage device is inserted, the USB device menu automatically appears.
 - b. Select **Install Resources**.
 - c. 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.
 - d. 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:

- 320 x 240 pixels.
 - 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 **Configure**.
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, 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 wait until **Filename.xml** appears on the screen.
6. 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 automatically load on the printer.
5. **Load Complete** appears on the screen once the loading is successful.
6. 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 admin rights, you must log in as an itadmin: RUN “su- p pass itadmin” for FD/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 and restart the printer. The configuration files are automatically installed.

(or)

1. From the Ready screen, press the Main Menu button. The Main Menu appears.
2. Select **Tools > USB Menu**.
3. Select **Configuration**.
4. 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.
5. 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.

Remote Control

The remote control feature in the printer web page displays the following information that is automatically refreshed:

- Printer information in the header (name, serial number, version, language, resolution)
- Remote view of user interface on the printer
- Image Buffer

The remote control in the printer web page also allows users to:

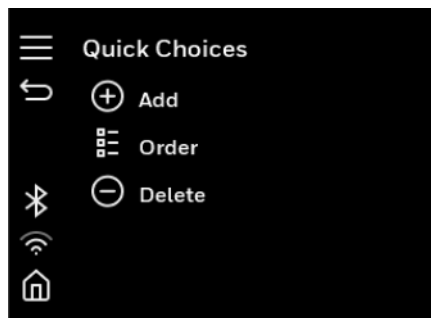
- Control the user interface on the printer
- Reboot the printer

To access the remote control feature:

1. Open a web browser on your PC. In the address bar, type **https://** followed by your printer IP address and press Enter. The printer Web Page appears.
2. Type your Username and Password and click **Login**. The default value for Username is **itadmin** and the default value for Password is **pass**.
3. Click **Remote Control**. The remote view of the printer and the image buffer is displayed.

Quick Choice Menu (Shortcuts)

You can create shortcuts to access frequently used menus or items, such as profiles, applications, test labels, and wizards to the full touch printer. 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

You can create shortcuts for frequently used menus or items.

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. If there are multiple pages, use the arrow at the bottom of the screen to scroll.
 - d. Select the check mark icon at the bottom of the screen.
3. To select applications:
 - a. Select **Fingerprint Programs** or **C# 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 **Test Labels**.
 - b. To add individual test labels, select each test label option and a check mark appears in each box.
 - c. 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 Lua Script(.lua), Lua Pages (.lp), or Cascading Style Sheet (.css).

There are two ways to customize the printer web page:

- Adjusting layout style (font, color, etc.)
- Replacing standard web pages

Enable Webpage Customization

Webpage Customization must be enabled in the printer before beginning to upload any customized files. Check first if the Web Server is enabled in the printer web page and then proceed to enable Webpage Customization. The web server setting is enabled by default.

To check,

1. Go to **Configure > System Settings > Manage Services**. Once enabled, proceed to enable Webpage Customization.
2. Go to **Configure > Network Services > Web Server**. From the **Webpage Customization** settings, select **Enable**.

Adjust the Layout Style

1. Make an FTP connection to the printer and retrieve the default CSS file from: **/srv/www/htdocs/assets/css/wcss.css**
2. Modify the **wcss.css** style sheet with your desired font, color, etc, and save the file as **style.css** in your local directory.

Example:

```
home_title{
    font-family:HoneywellSans-Bold;
    font-size:16px;
    color:#0090e8;
    letter-spacing:-0.01px;
    text-align:left;
    height:40px;
    margin-top: 10px
}
```

3. Upload the **style.css** to the printer via **/home/user/webpage/**

Replace Standard Web Page

Three of the pages can be replaced by user pages, enabling content customization. The layout and structure of the printer web page is the same throughout each of the different pages. Below table gives the description of the three different main components that always exist:

Filename	Description
Index.*	The starting page. (* can be lua, html, or lp)
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.
remotecontrol.lua	Displays the printer information, remote view of the user interface on the printer, image buffer, etc.

Save and Upload the Customized file

Create your own printer web page and save the file name as Index.lua to virtually replace the complete web page.

1. Create a customized web page and save the file name as Index.lua in your local directory.
2. Make an FTP connection to the printer and upload the **Index.lua** file via **/home/user/webpage/**

For left navigation menu or header changes, you can create your own page and upload the file with the same name as original file in the file system.

Or you can make changes to the existing page and upload them.

1. Make an FTP connection to the printer and retrieve the file (mainmenu.lua or maintop.lua) from **srv/www/htdocs/main**.
2. Modify the files with your desired changes and save the files in your local directory.
3. Upload the saved file to the printer via **/home/user/webpage/**.

You can refresh your printer web page to see the changes.

System Information

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

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 **https://** followed by the printer IP address and press Enter. The printer home page appears.
3. Click the **System Information** tab.
4. Select **Odometer**. The list of current odometer statistics appears.

Statistics

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

Statistic Type	Information Available
Bluetooth	Name of paired devices, connected devices, and device address 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 **https://** followed by the printer IP address 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.

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
- Warning alerts
- Information 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 **https://** followed by the printer IP address and press Enter. The printer web page appears.
3. Click **Login**. The Login page appears.
4. Type your Username and Password and then click Login. The default value for Username is **itadmin** and the default value for Password is **pass**.
5. Click **Configure**. 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 **Configure > System Settings > General > Alert Notification Method**.

Error Alerts and Solutions

Use this table to understand and troubleshoot some common error alerts you may receive.

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.
Out of Ribbon	Load ribbon in the printer.
Out of Media	Load media in the printer.
Ribbon Low	The diameter of the remaining roll of media is lower than the specified value in the Ribbon Low Diameter setting. Replace the ribbon.
Media Low	The diameter of the remaining roll of media is lower than the specified value in the Media Low Diameter setting. Replace the media.
Ribbon Installed	The printer is configured as a direct thermal printer and thermal transfer ribbon is installed. Remove the ribbon or configure the printer for thermal transfer media.
Printer in Pause Mode	A print job is paused from the front panel. Press the Print/feed button to resume printing.
Printer in Menu Mode	A user entered a menu from the front panel. Press the Home button to return to the Ready screen.
Application Break	Fingerprint only. An application breaks uncontrolled.
Print Job Complete	A print job has been successfully completed.
Odometer (Printer)	The printer has reached a limit set in the Odometer (Printer) setting in Maintenance Alerts for the amount of media to print before being alerted.
Odometer (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.

Error Alert	Solution
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: - Make sure that your media > print quality setting is appropriate for the type of media you are using. - The contrast may be too low. Increase the contrast. - The printhead pressure may be too low. Increase the printhead pressure. - Replace the printhead.
The printout is weaker on one side	Adjust the printhead balance.
There are weak spots on the printout.	Try these possible solutions in order: - There may be foreign particles on the media. Clean or replace the media. - Make sure that your media and ribbon are compatible. - Make sure that you are using high quality media and ribbon. - The contrast may be too low. Increase the contrast.
The printout is dark or there is excessive bleeding on the media	Try these possible solutions in order: - Make sure your media > print quality setting is appropriate for the type of media you are using. - The darkness might be too high. Decrease the darkness. - The media sensitivity might be too low. Increase the media sensitivity. - The contrast might be too high. Decrease the contrast. - The printhead pressure may be too high.
There are dark lines along the media path	The printhead or the paper path that media is contact with might be dirty. Clean the printhead and the paper path.

Problem	Possible Solution
There are white vertical lines on the printout	Try these possible solutions in order: - The printhead may be dirty. Clean the printhead. - There may be missing dots on the printhead. Replace the printhead.
Part of a dotted line is missing	The printhead may be failing. Replace the printhead.
The inner edge of the printout is missing	Try these possible solutions in order: - The media may not be properly installed or aligned. Reload the media. - The media margin or X-start parameter may be set too low. Increase the setting.
The content on the printout is compressed	Try these possible solutions in order: - The print speed may be too high. Lower the print speed. - The darkness might be too high. Decrease the darkness. - The media sensitivity might be too high. Decrease the media sensitivity.
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: - Make sure your media setting is appropriate for the type of media you are using. - Make sure that the ribbon is fitted correctly. Reload the ribbon.
The ribbon wrinkles	Try these possible solutions in order: - It is possible that the ribbon was not loaded correctly. Check the Ribbon and load correctly. - You may need to adjust the media edge guide.
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 Ports tab, and then clear the Enable bidirectional support check box.
The printer is connected to a serial port on the PC but the printer is not working.	Try these possible solutions: - Make sure the serial port settings are configured correctly. - Make sure the serial cable pinouts are correct and that the cable is not damaged. - If you have the Windows driver for an RS-232 printer installed on your PC, uninstall the driver.
The printer boot up time is slower than before.	Try these possible solutions: - Remove the USB device or use a new (blank) USB - The printhead may be failing. If part of the dotted line is missing, replace the printhead

Networking Problems

Problem	Possible Solution
The Ethernet or wireless network connection is not working correctly	Try these possible solutions: - Make sure your network cable is securely connected to your printer and a straight pin-to-pin cable, not a crossover cable. - Make sure your PC is correctly configured for and connected to your network. - Make sure your printer is correctly configured for your network.

RFID Problems

Problem	Possible Solution
The printer has RFID media loaded, but it is not writing to the tags.	After you load RFID media, restart the printer to let the printer identify the RFID media type or run the RFID calibration wizard.
None of the RFID commands work.	RFID is disabled. Enable RFID from the web page or the Main Menu. Go to Settings (Main Menu) or Configure tab (web page) > System Settings > Manage I/O .
Printing on regular media (RFID) is slow and halted in between labels.	RFID is enabled. Disable RFID from the web page or the Main Menu.
I am using an application to write to RFID tags and the printer is printing "VOID" labels.	Try these possible solutions: • The printer may not recognize the RFID media type. Restart the printer or run the media or RFID calibration wizard. • You may need to modify the RFID Tag Position parameter. • You may need to adjust the output power (field strength) to the antenna.
I receive this message "No RFID tag found".	Try these possible solutions: • Make sure you are using RFID media. • You may need to modify the RFID Tag Position parameter. • The tag may be broken. Try printing on a different label.
When I send a TAGREAD or TAGWRITE command, I get this error message: "Tag format error".	The TAGFORMAT defined for the operation determines the number of required parameters. You may need to modify the TAGFORMAT. For help, see the Fingerprint Command Reference.

Restore Printer Defaults

To restore factory defaults on the printer, use the printer web page, or the Main Menu on printer. From the printer web page and the Main Menu, 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 **https://** followed by 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-installed 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-installed 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

You can restore the printer defaults on the printer by performing a hardware-based reset.

1. Turn the printer off and open the media cover.
2. Turn the printer on while pressing and holding the Feed button.
3. Release the Feed button when the status bar is nearly full.
4. All the settings are restored on the printer.

About Software Updates

Cyber security best practices include keeping your device apps and OS up to date. To help, Honeywell offers maintenance patches, security updates and operating system upgrades through our Honeywell Edge services.

Availability and cost depend on the following:

- Date of purchase of the device or software app.
- Warranty status.
- Service agreement status (devices) or Maintenance plan status (apps).

To learn more about Honeywell Edge Services, go to <https://automation.honeywell.com/us/en/services/productivity/support-services>.

Software Downloads

Product support is available online through [Technical Support](#). Software updates can be accessed through the [Software Downloads](#) portal. You will need to create a login account for portal access. Additional information such as purchased date, service agreement number, maintenance plan number, or software license number may be required for downloads.

1. Go to honeywell.com/PSSsoftware-downloads.
2. Create a login account if you have not already created one.
3. Install the Honeywell Download Manager tool. See “Note” on the portal page. This tool is required for downloads.
4. Locate the app or upgrade you want to download in the Software directory.
5. If prompted, enter additional information, and click **Submit**.
6. Select **Download**. Follow the prompts to download the file.

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). Go to **Software > Printers > Desktop > PC45 > Current > Firmware**

You can upgrade the printer firmware using:

- The printer web page, a USB storage device, PrintSet 6, or by using Honeywell Operational Intelligence.

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

Note: To learn more about OpIntel, see the Honeywell Cloud Connect User Guide available for download from the Operational Intelligence Software product page at automation.honeywell.com.

Upgrade Firmware from the Printer Web Page

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

Upgrade Firmware from a USB Storage Device

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.

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 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.

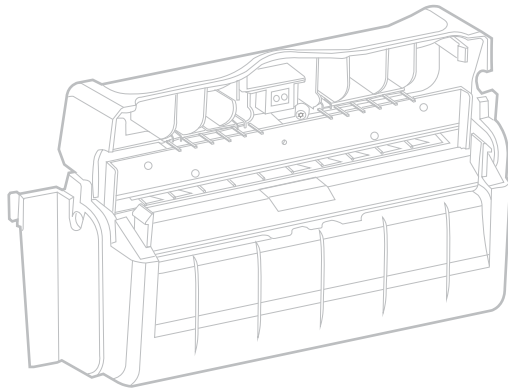
Use a soft cloth moistened with water or a mild detergent when cleaning the printer exterior. Keep the surface surrounding the printer clean as well.

Clean Cutter

Keep the cutter clean free of dust, stuck labels, and adhesive residue. Use this cleaning procedure for both standard cutter and Linerless cutter.

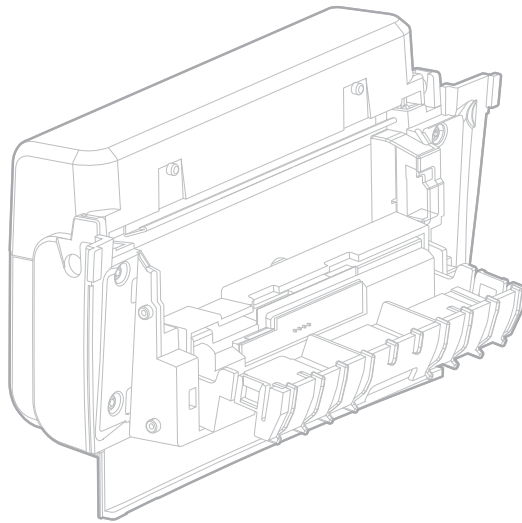
1. Turn the printer off and disconnect the printer from power.
2. Remove the cutter from the printer.

3. To access the upper blade, open the front upper cover of the cutter.

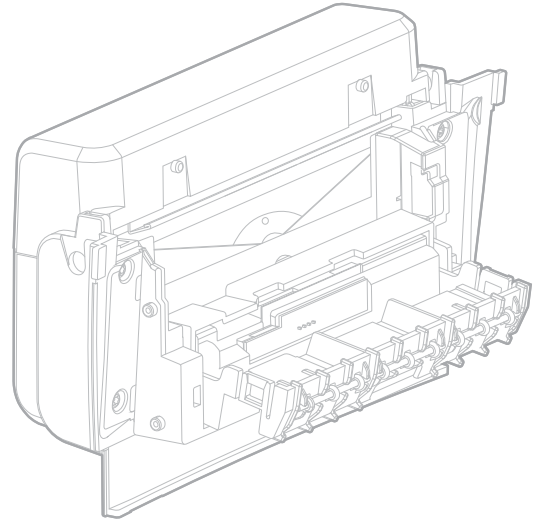


Caution: Pay attention to sharp edges of the cutter blade and clean with several layers of cloth.

4. To access the lower blade, open the rear-door of the cutter.



Standard Cutter



Linerless Cutter

5. Clean the blades using a soft cloth soaked in isopropyl alcohol.
6. Once the blades are dry, close the cutter door and install it back on the printer.

About Disinfectant Ready Models

Some configurations of the PC45 series printers are available with external plastic housings that are designed to resist the effects of harsh chemicals. These specialty printer configurations are equipped with disinfectant-ready housings (DRH) for healthcare and/or general-purpose markets.

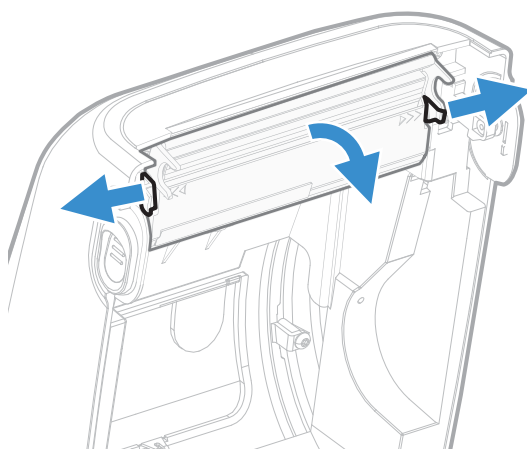
Please refer to the Honeywell Safety and Productivity Solutions website for specific details on how to clean the PC45 series model with disinfectant-ready housings. Helpful information on the care of these specialty products can be found in the following articles:

- [Learn to Clean Honeywell Healthcare Disinfectant-Ready Products](#)
- [Honeywell Instructions for Cleaning General Purpose Disinfectant-Ready Housing Devices](#)
- [Disinfectant-Ready Housing Application Brief](#)

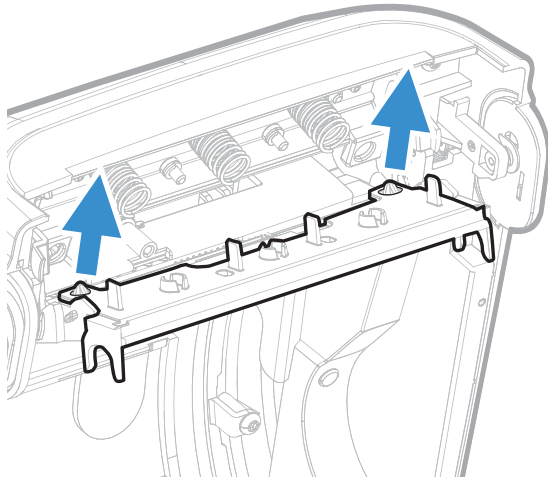
Replace the Printhead

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.

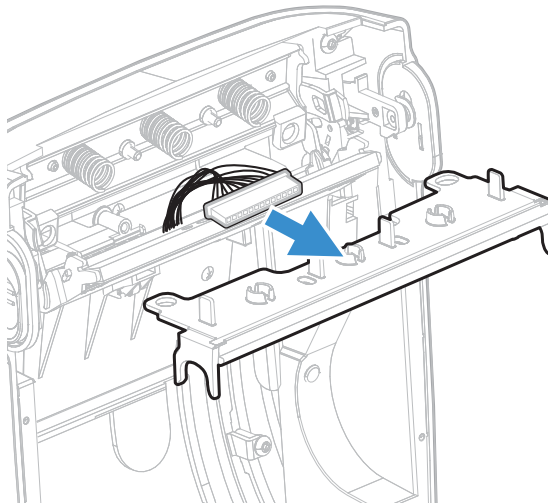
1. Turn the printer off and disconnect the printer from power.
2. Pull one or both of the printer latches toward the front of the printer and lift the printer lid.
3. Remove the media and ribbon (if installed).
4. Press the printhead latches apart until the peripheral slides forward.



5. Carefully slide the printhead out of the mechanism. The printhead is still attached to the mechanism by ribbon cable.

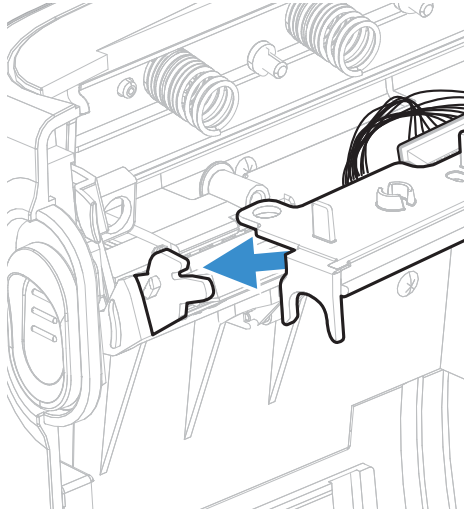


6. Disconnect the cable from the printhead and remove the printhead from the printer.

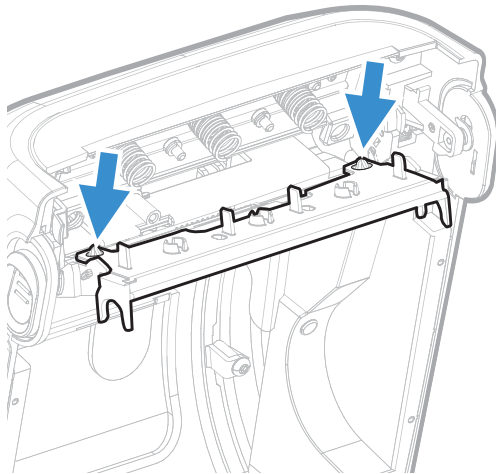


7. Connect the ribbon cable to the new printhead.

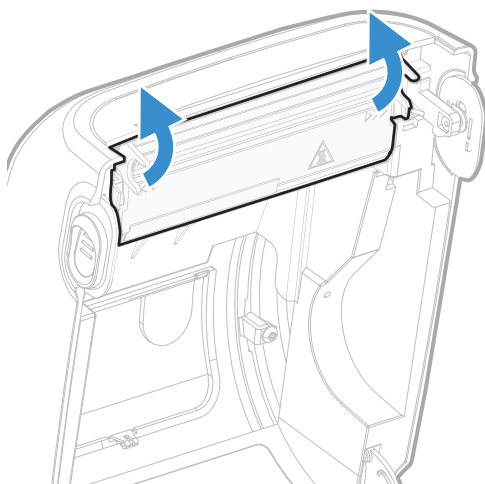
8. Slide the printhead into the holders in the print mechanism.



9. Press the printhead onto the locator pins.



10. Tilt the printhead up and make sure it is aligned with the printer lid and press into place.

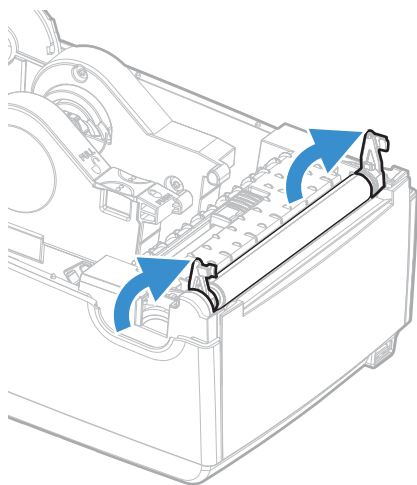


11. Close the printer lid until it snaps shut.

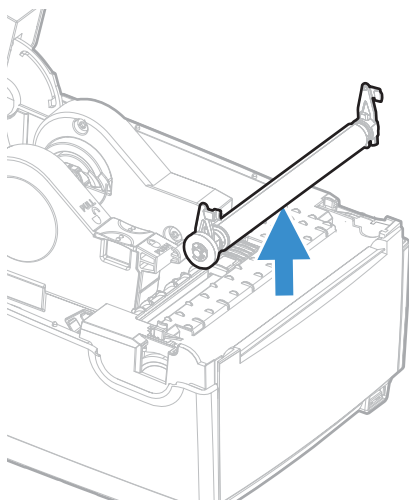
Replace the Platen Roller

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. Pull one or both of the printer latches toward the front of the printer and lift the printer lid.
3. Press the roller latches apart and tilt them up.



4. Pull the latches up to remove the platen roller from the printer.



5. Insert the new platen roller and press the latches into the printer until they snap shut.

Sensor Calibration

If your printer has the optional media low sensor or label taken sensor, use the wizard to calibrate the sensor for your media.

To Calibrate the Media Low Sensor

If your printer has the optional media low sensor, use the wizard to calibrate the sensor for your media.

Note: *For best results, calibrate the sensor before you begin printing each time you move the printer to a different environment or change to another type of media. When you calibrate the sensor, use the specified 20mm diameter roller for calibration as necessary.*

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

To Calibrate the Label Taken Sensor

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

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

- When you calibrate the sensor, use the specified 20mm diameter roller for calibration as necessary.
1. In the Main Menu, select **Wizards > Calibration > Label Taken Sensor**.
 2. Follow the prompts to calibrate the sensor.

SPECIFICATIONS AND ADDITIONAL RESOURCES

Specifications and Resources

1. Go to automation.honeywell.com.
2. Type PC45 in the search box and then press **Enter**.
3. Click on the product link in the search results.
4. Select one of the following tabs:
 - **Specifications**
View Printer features, Software, Hardware information, and environmental specifications.
 - **Resources or Documents**
View and download available product documentation. For example, Data Sheet, Accessory Guide, Quick Start Guide, User Guide, Regulatory Information, and other product documentation.

Media Specifications

For PC45d Printer

Parameter	Specification
Media Roll Width	0.59in to 4.65in (15mm to 118mm)
Maximum Print Width	203dpi: 4.25 in(108mm) 300dpi: 4.12 in (106mm)
Label Roll Diameter (max.)	5in (127mm)
Label Length (min.)	Printer only: 0.25in (6.35mm) With Cutter Module: 1in (25.4mm) With Self-Strip Module: 0.5in (12.7mm)
Media Thickness	2.5mil to 8mil (0.06mm to 0.2mm)

For PC45t Printer

Parameter	Specification
Media Roll Width	0.59 to 4.65in (15 to 118mm)
Maximum Print Width	203dpi: 4.25 in(108mm) 300dpi: 4.12 in (106mm)
Label Roll Diameter (max.)	5in (127mm)
Label Length (min.)	Printer only: 0.25in (6.35mm) With Cutter Module: 1in (25.4mm) With Self-Strip Module: 0.5in (12.7mm)
Media Thickness	2.5 to 8mil (0.06 to 0.2mm)
Media Roll Width	0.59in to 4.65in (15 to 118mm)
Ribbon Width	1 to 4.33 in (25.4 to 110 mm)
Ribbon Roll Max. Diameter	2.68 in (68 mm)
Ribbon Core Width	4.37 in (111 mm)

Command Languages and Simulator Support Features

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

Print Sensors

- Dual label gap/tag notch
- Black mark
- Printhead lift
- Ribbon present/end
- Ribbon low
- Label taken (optional)

Network Services

- FTP/SFTP
- HTTP/HTTPS
- SNMP v1/v2/v3
- 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
- TELENET/SSH
- NTP
- OpIntel
- Net1
- XML Printing
- Device Management
- SOTI Agent

Fonts

Resident Fonts

- Andale Mono
- Andale Mono Bold
- CG Times
- CG Times Bold
- CG Triumvirate Condensed Bold
- Century Schoolbook Roman
- Dutch 801 Roman
- HeiseiKakuGothW5
- Honeywell Sans TT Bold
- Letter Gothic

- MHeiGB18030C-Medium
- Monospace 821
- Monospace 821 Bold
- OCR A
- OCR B
- SST Thai
- 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 download at 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 Symbolologies

1D Barcode Symbolologies

- Codabar
- Code 11
- Code 39
- Code 93
- Code 128
- DUN-14/16
- EAN
 - EAN-8
 - EAN-8 Composite with CC-A or CC-B
 - EAN-13
 - EAN-13 Composite with CC-A or CC-B
 - EAN 128
 - EAN 128 subset A
 - EAN 128 subset B
 - EAN 128 subset C
 - EAN.UCC 128 Composite with CC-A or CC-B
 - EAN.UCC 128 Composite with CC-C
- HIBC 39
- HIBC 128
- Industrial 2 of 5
- Interleaved 2 of 5
- ISBT-128
- Matrix 2 of 5
- Straight 2 of 5
- UPC
 - UPC-5 digits Add-On Code
 - UPC-D1
 - UPC-D2
 - UPC-D3
 - UPC-D4
 - UPC-D5
 - UPC Shipping Container Code

2D Barcode Symbologies

- Aztec
- Code 16K
- Code 49
- Data Matrix
- DotCode
- Grid Matrix
- Han Xin Code
- 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

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 **Configure > 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 **Configure > Communications > Ethernet**.

Ethernet Setting	Description	Default
(IPv4) IP Assignment Method	Specifies how the printer obtains an IP address.	DHCP
(IPv4) IP Address	Specifies the unique network-level address that is assigned to each device in a TCP/IP network (IPv4).	0.0.0.0
Subnet Mask	Specifies a number that defines the range of IP addresses that can be used in a TCP/IP network.	0.0.0.0
Default Router	Specifies the IP address of a router that is used when a device sends a packet to another subnet or to an unknown destination.	0.0.0.0
DHCP Response	Specifies if the printer receives DHCP responses by broadcast or unicast.	Broadcast
(IPv6) IP Assignment Method	Specifies how the printer obtains an IP address (for IPv6 networks).	Automatic
(IPv6) IP Address	Specifies the unique network-level address that is assigned to each device in a TCP/IP network (IPv6).	Automatic
802.1xSecurity	Enables 802.1x security	Disable
EAP Type	Selects the protocol that the radio uses to verify its identity and makes sure that it is authorized to communicate on the wireless network.	PEAP
Username	Specify Username for 802.1x Authentication	-
Password	Password for PEAP authentication or private-key password for TLS	-
CA Certificate	Sets the name of the Certificate Authority (CA) that verifies the server certificate. This CA should be the same one that was used to sign the server certificate.	-
Client Certificate	Sets the name of the client certificate the printer uses to authenticate to the network using EAP-TLS. Maximum length is 128 characters.	-
Private Key	Sets the full path to the private key file the printer uses for EAP-TLS. Maximum length is 128 characters. If using pfx file here, the Client Certificate should not be specified.	-

Wireless 802.11

To view these settings:

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

802.11 Wireless Setting	Description	Default
Band	Sets the frequency band for 802.11 Radio.	2.4 GHz
Network Name (SSID)	Defines the wireless network. To communicate, all access points and wireless devices must have the same network name, which is case-sensitive.	-
Network Type	Selects the radio behavior of the printer.	Infrastructure
Roaming	Controls the roaming inclination of the printer. The higher the level, the less inclined the printer is to switch access points. Based on the printer RSSI (received signal strength). Level 1 = -65dBm Level 2 = -75dBm Level 3 = -85dBm	Level 2
Power Mode	Selects the power management setting for the radio. Constant Awake provides the highest throughput, but draws the most power. Power Saving conserves the most power, but provides the lowest throughput.	Constant Awake
Channel	Sets the common channel that radios in the Ad Hoc mode use to transfer data.	1
Security Type	Selects the protocol that the radio uses to verify its identity and makes sure that it is authorized to communicate on the wireless network.	-
Association	Selects the security method that the radio uses to get access to the wireless network.	-
Pre-Shared Key	Defines the passphrase that allows the radio to authenticate over the wireless network (for both WPA and WPA2 security). Range is 8 to 64 characters.	-
Network Key Index	Selects the active network key to use for WEP security. Range is 1 to 4.	-
Network Key (1-4)	Defines a network key that is used for WEP security. Keys are entered in ASCII or hexadecimal (preceded by 0x) format	-
User Name	Sets the name that the printer uses when logging in to the network. Range is 1 to 96 characters.	-
Password	Sets the password that the printer uses when logging in to the network. Range is 1 to 96 characters.	-
Anonymous Name	Sets the outer EAP user name that the printer uses for logging in to the network. Maximum length is 96 characters.	-

802.11 Wireless Setting	Description	Default
Inner Authentication	Selects the authentication method that is used when the EAP type is EAP-FAST, PEAP, or TTLS	MSCHAPv2
CA Certificate	Sets the name of the Certificate Authority (CA) that verifies the server certificate. This CA should be the same one that was used to sign the server certificate.	honeywell.pem
Client Certificate	Sets the name of the client certificate the printer uses to authenticate to the network using EAP-TLS. Maximum length is 128 characters.	-
Client Key	Sets the private key the printer uses for EAP-TLS. Maximum length is 128 characters. Use the certinstallsh script to install the certificate correctly.	-
Validate Certificate	Determines if the identity of the authentication server is verified using its certificate when using EAP-TTLS, PEAP, or EAP-TLS. Honeywell recommends that you set Validate Certificate to Yes.	No
PAC	Sets the name of the PAC (Protected Access Credential) file that is used for EAP-FAST authentication. The printer uses this file if Acquire PAC is ON and the current installed PAC fails to authenticate the printer to the network.	eap-fast.pc
Acquire PAC	Determines if automatic PAC file provisioning is on for EAP-FAST authentication.	On
(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 (IPv4).	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).	-

Bluetooth

To view these settings:

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

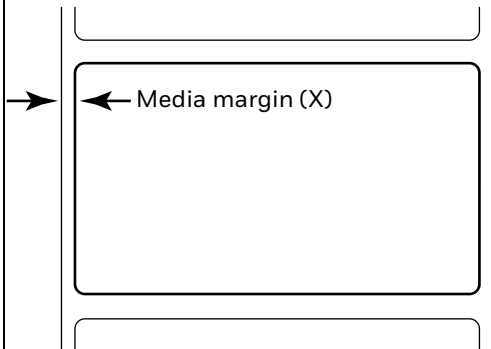
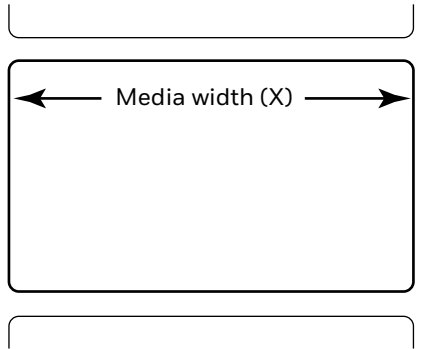
Bluetooth Setting	Description	Default
Device Name	Sets the name that identifies the printer in the Bluetooth Network. Maximum length is 16 characters.	-
Discover	Determines if other Bluetooth devices can detect the printer.	Enable
Passkey	Sets the passkey that is used when pairing Bluetooth devices to the printer. Range is 1 to 16 characters (case-sensitive).	-
Reserve		Disable

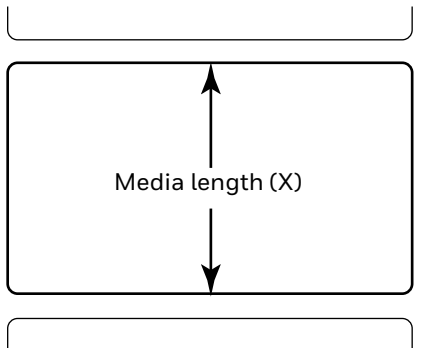
Printing

Media

To view these settings:

- From the printer Main Menu, select **Settings > Printing > Media**.
- From the printer web page, click **Configure > 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)	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. 	0 dots
Media Width	Sets the width of the printable area measured from the media margin (X) across the printhead. Unit of measurement is defined in the Unit of Measure parameter. 	812 dots

Media Setting	Description	Default
Media Length	Sets the length of the printable area measured from one edge of the label to the edge that is closest to the printhead. Unit of measurement is defined in the Unit of Measurement parameter. 	1226 dots
Clip Default	Determines if the printer prints items outside the printable area of the label. When this is set to Off, the printer returns an error if any part of a barcode label cannot be printed because that part extends beyond the printable area. When this is set to On, 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
Power Up Action	Sets the action when you turn the printer on: No Action Form feed: The printer feeds one label. Test feed: The printer prints two configuration labels as it calibrates the media sensors. Smart Calibration: Detects media type (gap, black mark, or continuous, detects printing method (ribbon or no-ribbon), and calibrates media length.	No Action

Media Setting	Description	Default
Head Down Action	Sets the action when you close the print mechanism after opening it: No Action Form feed: The printer feeds one label. Test feed: The printer prints two configuration labels as it calibrates the media sensors. Smart Calibration: Detects media type (gap, black mark, or continuous, detects printing method (ribbon or no-ribbon), and calibrates media length.	No Action
Hold Feed Button Action	Sets the action when you press and hold the Print/feed button for more than 2 seconds: Test feed: The printer prints two configuration labels as it calibrates the media sensors. Smart Calibration: 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	Determine if stop feeding the media immediately once no media is detected.	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

To view these settings:

- From the printer Main Menu, select **Settings > Printing > Print Quality**.
- From the printer web page, click **Configure > 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.	102mm/sec
Media Sensitivity	Sets the level of sensitivity of the media to the printhead heat for media and ribbon.	High (TTR) Very Low (DT)
Darkness	Sets the image darkness for media and ribbon. Adjust this parameter with the Media Sensitivity parameter. Range is 1 to 100.	55 (TTR) 75 (75)
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, 270 degree in clockwise direction.	0 deg

Cutter

To view these settings:

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

Cutter Setting	Description	Default
Cutter Control	Determines if the cutter automatically cuts labels or partially cuts or if you must manually send a command each time you want to cut a label.	Manual
Cut Interval	Sets the interval (number of labels) after which cut operation has to be performed, enabled only in automatic cutter control mode.	1
Cut After Feed	Enables the cutter to cut after feeding the media.	Disable

RFID

To view these settings:

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

RFID Setting	Description	Default
Retries	Sets the number of RFID Labels the printer tries to access after it fails to read or write to an RFID Tag. Range is 1 to 10.	0
Void Texts	Sets the text that is printed on each label that has a faulty RFID tag. Range is 1 to 16 characters.	VOID
RFID Tag Position	Sets the distance the label is moved to align the RFID tag over the antenna to allow a successful read and write operation. Unit of measurement is defined in the Unit of Measure parameter. Range is -10000 to +10000	0 dots
Output Power	Sets the amount of field strength the antenna applies to communicate with the RFID tag.	18
RFID Tag Type	Select the type of RFID tag used in the printer.	Read and Write

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

General System Setting	Description	Default
Sleep Timer	Selects how long the printer power stays on before going into Sleep mode. Note: Honeywell recommends keeping the Sleep Timer setting enabled and not changing the default setting. Changing this setting to either disable Sleep Timer or extend the time before screen timeout may reduce the lifespan of the LCD display and is considered improper use of the device. Honeywell will not cover any resulting damages under warranty or otherwise.	15 Minutes
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	Selects the EasyCoder PF/PM/PX Compatibility 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

Display Setting	Description	Default
Screen Timeout	Selects how long the printer screen stays on before the screen saver starts. The Screen Timeout setting will override the Sleep Timer if the Screen Timeout setting selection is a lower amount of time than the time setting for Sleep Timer. Note: Honeywell recommends keeping the Screen Timeout setting enabled and not changing the default setting. Changing this setting to either disable screen timeout or extend the time before screen timeout may reduce the lifespan of the LCD display and is considered improper use of the device. Honeywell will not cover any resulting damages under warranty or otherwise.	15 minutes
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

Audio Settings

To view these settings:

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

Audio Setting	Description	Default
Volume	Sets the printer volume.	Medium

Manage 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
Bluetooth	Determines if the printer is allowed to communicate using its 802.11 radio. Supported only if the optional Wi-Fi+Bluetooth module is installed.	Enable
RFID	Determines if the printer is allowed to communicate using its RFID radio. Supported only if the RFID module is installed.	Enable

System I/O Setting	Description	Default
Virtual COM	Determines if you can enable the USB port to be used as a virtual serial port. When you change this setting, you must restart the printer to enable the new setting.	Disable

Manage Services

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

To view these services:

- From the printer Main Menu, select **Settings > System Settings > Manage Services**.
- From the printer web page, 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
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.	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 ntp0.cornell.edu , and the default Port Number is 123 .	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 **Configure > 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

Alerts

System alerts include error and warning.

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

Error

To view these settings:

- From the printer web page, click **Configure > Alerts > Error**.

Errors Alerts	Default Values			
	Status	Delay Repeat	Delay Unit	Message
Next Label Not found	Disable	1	Occurrences	Error-Next label not found
Out of Media	Enable	1	Occurrences	Error-Out of media
Out of Ribbon	Enable	1	Occurrences	Error-Out of ribbon
Printer in Pause Mode	Disable	1	Occurrences	Error-Printer in pause mode
Printer in Menu Mode	Disable	1	Occurrences	Error-Printer in menu mode
Application Break	Disable	1	Occurrences	Error-Application break
RFID Not Installed	Disable	1	Occurrences	Error-RFID not installed
Printhead Lifted	Enable	1	Occurrences	Error-Printhead lifted
Printhead Not Detected	Disable	1	Occurrences	Error-Printhead not detected
Printhead Too Hot	Disable	1	Occurrences	Error-Printhead too hot
Motor Too Hot	Disable	1	Occurrences	Error-Motor too hot
Power Supply Too Hot	Disable	1	Occurrences	Error-Power supply too hot
Cutter Not Responding	Enable	1	Occurrences	Error-Cutter not responding
Cutter Jammed	Enable	1	Occurrences	Error-Cutter jammed
Memory Full	Disable	1	Occurrences	Error-Memory full
Flash Memory Full	Disable	1	Occurrences	Error-Flash Memory full

Warning

To view these settings:

- From the printer web page, click **Configure > Alerts > Warning**.

Warning Alerts	Default Values			
	Status	Delay Repeat	Delay Unit	Message
Media Low	Enable	1	Occurrences	Warning-Media low
Upgrading Firmware	Disable	1	Occurrences	Warning-Upgrading firmware
Odometer (User Resettable)	Disable	1	Occurrences	Warning-Odometer (User Resettable) has reached a preset value.
Odometer (Printhead)	Disable	1	Occurrences	Warning-Odometer (Printhead) has reached a preset value.

Warning Alerts	Default Values			
	Status	Delay Repeat	Delay Unit	Message
Odometer (Printer)	Disable	1	Occurrences	Warning-Odometer (Printer) has reached a preset value.
Replace Printhead	Disable	1	Occurrences	Warning-Replace printhead
Clean Printhead	Disable	1	Occurrences	Warning-Clean printhead
Faulty Dot	Disable	1	Occurrences	Warning-Faulty dot is detected
Memory Low	Disable	1	Occurrences	Warning-memory low
Flash Memory Low	Disable	1	Occurrences	Warning-Flash Memory low

Information

To view these settings:

- From the printer web page, click **Configure > Alerts > Information**.

Warning Alerts	Default Values			
	Status	Delay Repeat	Delay Unit	Message
Print Job Complete	Disable	1	Occurrences	Print Job Complete
Started	Disable	1	Occurrences	Printer is started
Printer is Rebooting	Disable	1	Occurrences	Printer is Rebooting

Network Services

DNS

To view these settings:

- From the printer Main Menu, select **Settings > Network Services > DNS**.
- From the printer web page, click **Configure > Network Services > DNS**.

DNS Network Service	Description	Default
Primary DNS Server	Sets the IP address of the primary server to which the printer sends DNS requests. The DNS server retains IP address and routing information for the TCP/IP network.	-
Secondary DNS Server	Sets the IP address of the secondary server to which the printer sends DNS requests. The DNS server retains IP address and routing information for the TCP/IP network.	-

Net1

To view these settings:

- From the printer Main Menu, select **Settings > Network Services > Net1**.
- From the printer web page, click **Configure > Network Services > Net1**.

Net1 Network Service	Description	Default
Queue	Selects how the printer handles multiple Net1 connections.	On
Port Number	Sets the port number that defines the Net1 TCP port. Range is 1024 to 65535.	9100
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
Timeout	Sets the timeout value in seconds that printer uses to check the existing connection when the connection is terminated from other end. Range is 60 to 700 seconds.	700
Secure Communication	Determines if TLS encryption is used for data communication.	Enable

Email Server

To view these settings:

- From the printer Main Menu, select **Settings > Network Services > Email Server**.
- From the printer web page, click **Configure > Network Services > Email Server**.

Email Server	Description	Default
Mode	Selects the mode the printer uses to communicate with the email server.	Manual
Port Number	Sets the port number the printer uses to communicate with email server. Range is 1 to 65535.	25
Server Address	Sets the IP address of the email server	0.0.0.0
From Address	Sets the email address of the person who will receive the alert messages.	-
To Address	Sets the email address that appears as the sender of the alert messages.	-
Email Password	Sets the password the printer uses to communicate with SMTP SSL service.	-

SNMP

To view these settings:

- From the printer Main Menu, select **Settings > Network Services > SNMP**.
- From the printer web page, click **Configure > Network Services > SNMP**.

SNMP	Description	Default
Authentication Failure Trap	Determines if the printer sends a trap to its management station when a request is received from an unauthorized source.	Disable
Read Community	Sets the name of the community that has rights to read the SNMP MIBs.	-
Write Community	Sets the name of the community that has rights to write the SNMP MIBs. Range is 1 to 32 characters.	-
SNMPv1	Determines if the printer supports SNMPv1 functionality.	Enable
SNMPv2	Determines if the printer supports SNMPv2 functionality.	Enable
Trap Status 1 - 4	Determines if the trap is enabled or disabled	Enable
Trap Name1 -4	Sets a descriptive name for the trap.	-
Trap Address 1 -4	Sets the IP address of this trap.	0.0.0.0
Trap Port Number 1-4	Sets the port number of this Trap address. Range 1 to 65535.	162
Trap Community 1 - 4	Sets the name of the trap community. Range 1 to 32 characters	Public
SNMPv3 Username	Sets the username that the printer uses when communicating with its management station. Range is 1 to 32 characters.	-
SNMPv3 Authentication Key	Sets the password that is used to generate a key that verifies that the printer is authorized to communicate with the management station. Range is 8 to 32 characters.	-
SNMPv3 Encryption Key	Sets the password that is used to generate a privacy key that is used for encryption. Range is 8 to 32 characters.	-
SNMPv3 Authentication Protocol	Selects the algorithm that the printer uses to determine that the messages are from valid source.	SHA256/512
SNMPv3 Encryption Protocol	Selects the type of encryption that the printer uses to prevent messages from being seen by an unauthorized user.	AES

WINS

To view these settings:

- From the printer Main Menu, select **Settings > Network Services > WINS**.
- From the printer web page, click **Configure > Network Services > WINS**.

WINS	Description	Default
Primary WINS server	Sets the IP address of the primary server to which the printer sends WINS requests. The WINS server IP address and routing information for the network.	-
Secondary WINS server	Sets the IP address of the secondary server to which the printer sends WINS requests. The WINS server IP address and routing information for the network.	-

Web Server

To view these settings:

- From the printer Main Menu, select **Settings > Network Services > Web Server**.
- From the printer web page, click **Configure > Network Services > Web Server**.

Web Server	Description	Default
Image Buffer	Determines if the image buffer appears in the printer web page.	Enable
Web Server Protocol	Selects web server protocol. Auto (HTTP+HTTPS) or HTTPS only.	HTTPS only
Webpage Customization	Determine whether the web server will run user's customized webpage.	Disable

Time Server

To view these settings:

- From the printer Main Menu, select **Settings > Network Services > Time Server**.
- From the printer web page, click **Configure > Network Services > Time Server**.

Time Server	Description	Default
Server Address	Sets the address the printer uses to communicate with time server.	ntp0.cornell.edu
Port Number	Sets the port number the printer uses to communicate with the time server.	123

Connectivity Agent

To view these settings:

- From the printer Main Menu, select **Settings > Network Services > Connectivity Agent**.
- From the printer web page, click **Configure > Network Services > Connectivity Agent**.

Connectivity Agent	Description	Default
Server Address	Sets the IP address of the connectivity server.	0.0.0.0
Server Hostname	Sets the Hostname of the connectivity server.	hostname.dns.com
Port Number	Sets the port number printer uses to communicate with the connectivity server.	10000
Telemetry Frequency (Seconds)	Sets the telemetry frequency (in seconds) of the connectivity agent at which telemetry data has to be sent to the connectivity server.	2160
Unique Id	Sets the unique ID from the connectivity server.	-
Fingerprint Validation	Sets the fingerprint ID from the connectivity server.	-
Update Request Interval (Minutes)	Sets the interval (in minutes) to send the auto update request to connectivity server.	60
Buzzer	Sets the buzzer to beep while downloading/updating the file.	Disable

XML Printing

To view these settings:

- From the printer Main Menu, select **Settings > Network Services > XML Printing**.
- From the printer web page, click **Configure > Network Services > XML Printing**.

Time Server	Description	Default
Port Number	Sets the port number that defines the TCP port of XML printing. Range is 1024 to 65535.	9200
Secure Communication	Determines if TLS encryption is used for data communication.	Disable

Device Management

To view these settings:

- From the printer Main Menu, select **Settings > Network Services > Device Management**.
- From the printer web page, click **Configure > Network Services > Device Management**.

Time Server	Description	Default
Secure Communication	Determines if TLS encryption is used for data communication.	Disable

SOTI Agent

To view these settings:

- From the printer Main Menu, select **Settings > Network Services > SOTI Agent**.
- From the printer web page, click **Configure > Network Services > SOTI Agent**.

SOTI Agent	Description	Default
MQTT Broker Hostname	Sets the Hostname/IP Address of the SOTI Connect MQTT Broker.	hostname.dns.com
MQTT Port Number	Sets the port number the printer uses to communicate with the SOTI MQTT Broker	1883
MQTT QoS	Sets the Quality of Service (QoS) the printer uses to communicate with the SOTI MQTT Broker.	1
MQTT Tenant ID	Sets the Tenant ID that will be used in the MQTT Topics.	-
MQTT TLS Communication	Sets the TLS Secure Communication while connecting with MQTT Broker.	One-Way
MQTT Keep Alive	Sets the Keep Alive frequency (In Seconds) the printer uses while connecting with the SOTI MQTT Broker.	60
MQTT Clean Session	Sets the Clean Session flag the printer uses while connecting with the SOTI MQTT Broker.	Enable
MQTT Broker Username	Sets the User Name the printer uses while connecting with the SOTI MQTT Broker.	-
MQTT Broker Password	Sets the Password the printer uses while connecting with the SOTI MQTT Broker.	-

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.

Create and Save a Web Form

1. Create a webform using Fingerprint or Direct Protocol commands. (See [Sample Code](#)).
2. Save the file as .lbx
3. Create a Webforms folder in the USB thumbdrive and save the .lbx file in the folder.
4. Upload the Web Form to the printer. (See [Uploading from a USB Storage Device](#)).

Sample Code

```
input on

qVendor$= "Honeywell"
qModel$ = "PC45"
qSerial$ = "12345678"
qDpi% = 203 \ sysvar(45)
qLen% = len(qVendor$)+len(qModel$)+len(qSerial$)
qMag%=2

if qLen% < 50 then qMag%=3
if qLen% < 40 then qMag%=4
if qLen% < 30 then qMag%=5
if qLen% < 20 then qMag%=6
if qLen% < 10 then qMag%=7
AN 1
PP 20,20
PX 160,360,4
AN 5
PP 100,100
BT "DATAMATRIX"
BM qMag%
PB "@"+qVendor$+"@"+qModel$+"@"+qSerial$
AN 5
FONT "Univers Bold", 14
PP 260,110
PT qVendor$
AN 5
FONT "Univers", 14
PP 260,70
PT qModel$
PF
```

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 **https://** followed by 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

Options are either installed at the factory or by factory service technicians in the field. Accessories are designed to be installed by the customer. Options and accessories are sold separately.

Option/Accessory	Description
Option	
Wi-Fi/BT Module	Use the Wi-Fi/Bluetooth module to communicate with the printer wirelessly.
Accessory	
Label Dispenser	Use the label dispenser to remove the liner from the self-adhesive label stock.
Cutter Module	Use the cutter module to cut media into individual labels.
Cutter Tray	Use the cutter tray with the cutter module to collect the cut-off labels.
Linerless Cutter	Use the cutter module to cut media into individual labels. Only PC45d printer supports linerless cutter.
External Media Holder	Use this accessory to hold larger rolls of media outside the printer.
Heavier Spring	Use the heavier spring for thick media types.

Note: To view the Accessory User Guide, visit the PC45 product page at automation.honeywell.com.

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