

PC42t

Desktop Printer



User Guide

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Customer Support

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

Knowledge Base: www.hsmknowledgebase.com

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

Technical Support Portal: www.hsmsupportportal.com

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

Telephone: www.honeywellaidc.com/locations

For our latest contact information, please check our website.

Product Service and Repair

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

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

Limited Warranty

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

The limited duration of the warranty for the PC42t printer is as follows:

- The duration of the limited warranty for printers is one year.
- The duration of the limited warranty for the printhead is six months.

Send Feedback

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



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

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

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

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



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

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

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

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

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

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

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

1

About the Printer

This chapter introduces the PC42t printer. It includes descriptions of the printer features and basic operation.

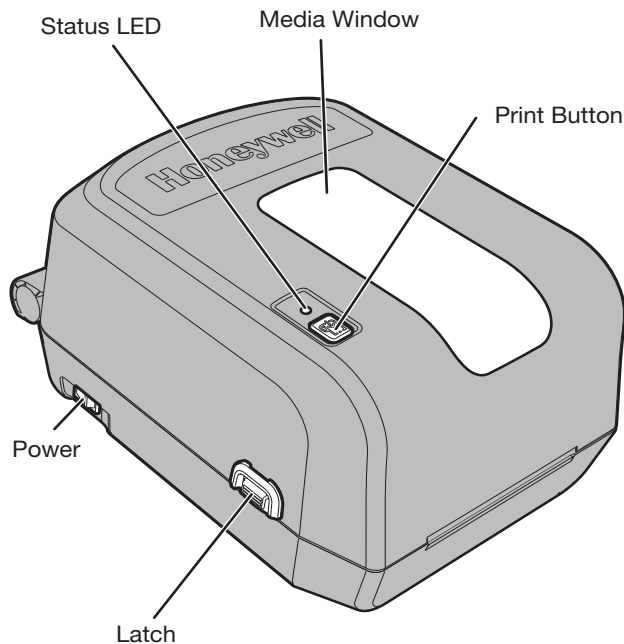
About the PC42t Printer

The PC42t printer is a lightweight, reliable printer that is easy to use. It is designed to print up to 1000 labels a day. Printer features include:

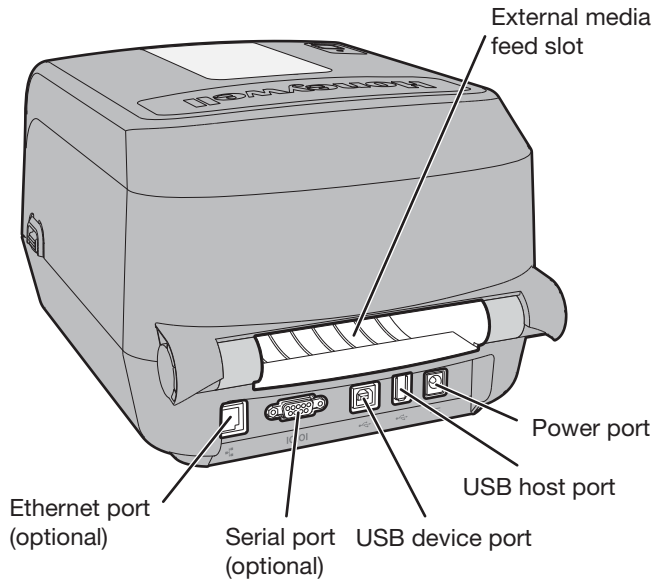
- 203 dpi (8 dots/mm) printing.
- print speeds from 2 to 4 ips (inches per second).
- USB host port for connecting storage devices, scanners, or keyboards.
- USB device port for connecting to a desktop PC.
- support for printer programming languages including Direct Protocol, ZSim, and ESim.
- optional, factory-installed Ethernet interface.
- optional, factory-installed RS-232 serial port interface.

Printer Features

Use the next illustrations to locate printer features.



PC42t Front Panel



PC42t Rear Panel

About the Print Button

Use the next table to understand the functions of the **Print** button.

How to Use the Print Button

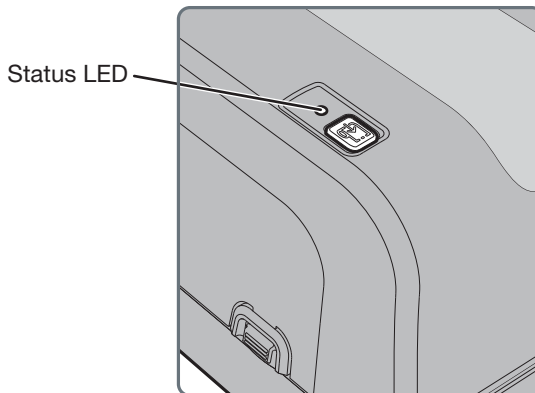
Print Button Action	Description
Press and hold the Print button (while the printer is starting up)	The printer calibrates the media, prints a configuration label, and then lets you select the printer command language: Direct Protocol, ESim, or ZSim. Release the Print button when the printer command language you want to use prints out.
Press and hold the Print button for two seconds and then release (when the printer is idle)	The printer prints out several labels to calibrate the media sensor (testfeed).
Press and hold the Print button (when the printer is idle)	The printer prints out several labels (testfeed) and then prints the configuration label.

How to Use the Print Button (continued)

Print Button Action	Description
Press and release the Print button	If the printer is idle, the printer advances media to the beginning of the next label. If the printer is printing, the printing pauses. If the printer has been paused, printing resumes.

About the Status LED

The status LED turns green, orange, or red to indicate the current status of the printer. Use the next table to understand the states of the status LED.



Status LED States

LED State	Description
Slow blinking green	The printer is just starting up. Printing is paused.
Fast blinking green	The printer is communicating. The simulator (ZSim and ESim) is starting up.
Solid green	The printer is idle and waiting for the next print job.
Blinking orange	The printer is upgrading its firmware from an inserted USB flash drive.

Status LED States (continued)

LED State	Description
Blinking red	<p>The printer is in Error mode. The printer may be out of ribbon, have ribbon installed (when configured for direct thermal), be out of media, have the printhead lifted, have a label obstructing the printing path, or you may not have performed a testfeed (hold Print button until several labels print).</p> <p>After you have fixed the error, press the Print button to restart printing.</p>

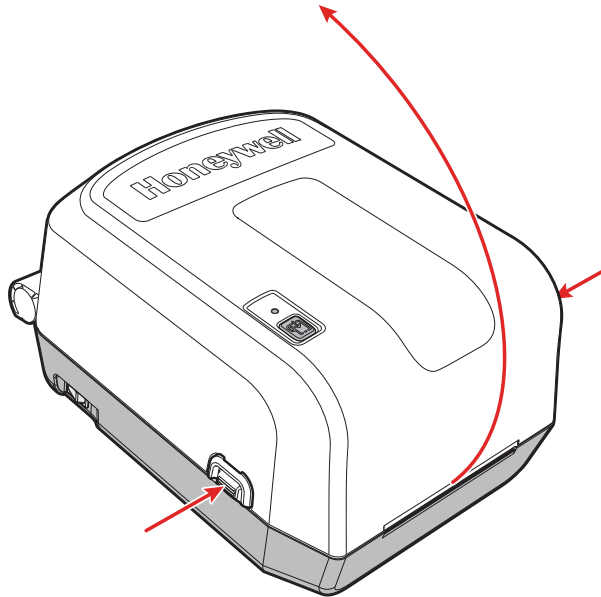
About Media

The printer can print on labels, tags, and continuous (receipt and lined) media. The printer supports both direct thermal and thermal transfer media. To use thermal transfer media, you also need thermal transfer ribbon. The PC42t printer supports media from 1 to 4.33 inches (25 to 110 mm) wide.

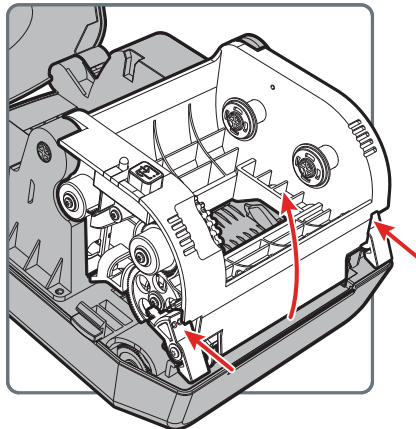
Load Tear-Off Media

In tear-off printing mode, you manually tear off the media upward against the tear bar.

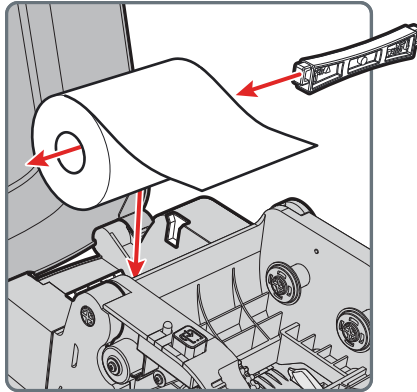
- 1 Press in on the cover latches on both sides of the printer and open the cover.



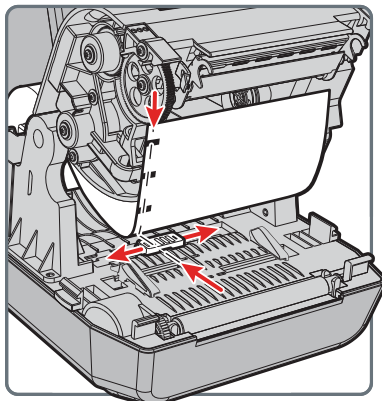
- 2 Press in on the top of both locking tabs to open the print and ribbon mechanism.



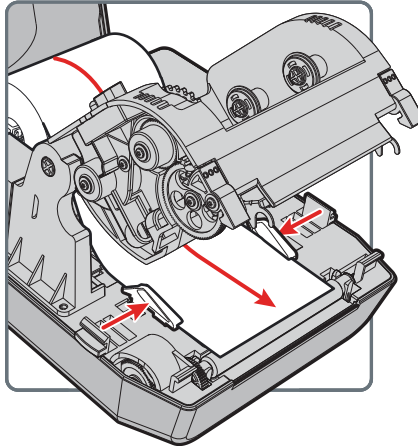
- 3 Insert the media spindle into the media roll. If there is an empty media core in the media compartment, remove it.
 - If you have a 1.0-inch core, insert the media spindle so that the 1" is facing upward.
 - If you have a 1.5-inch core, insert the media spindle so that the 1.5" is facing upward.



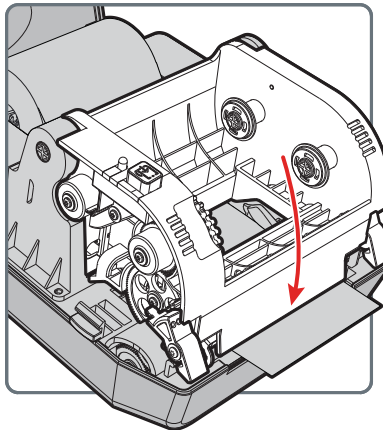
- 4 Remove the Mylar[®] film from the black mark sensor.
- 5 Adjust the black mark sensor:
 - If you are using black mark media, slide the black mark sensor so that the marks pass over the sensor.
 - For all other media types, make sure the black mark sensor is in the center of the media path.



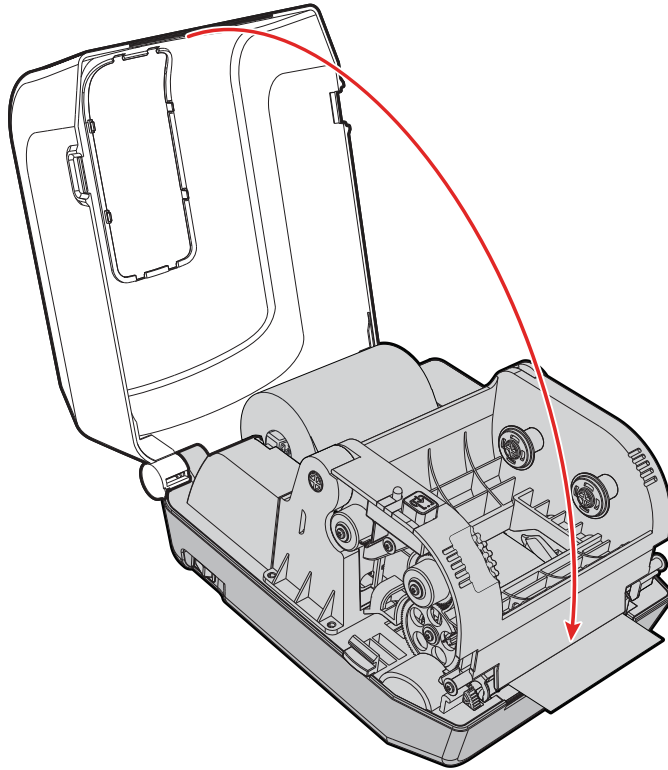
- 6 Feed the media underneath the print and ribbon mechanism and to the front of the printer.



- 7 Adjust the media holders to the width of the media or liner. Make sure the media lays flat.
- 8 Lower the print and ribbon mechanism and press down until both locking tabs snap into place.



9 Close the cover.



10 Press the **Print** button to feed media out to the first label in the roll.

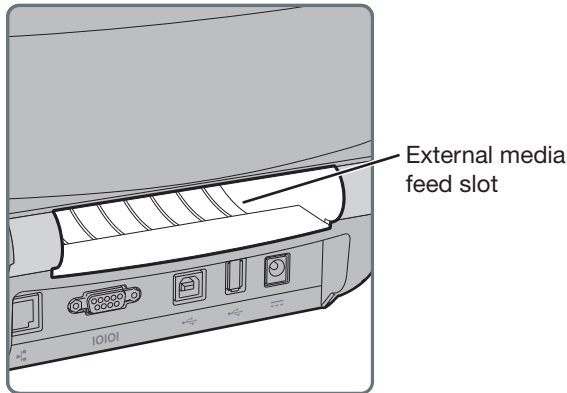
Load External Media

You can place the media supply, such as fanfold tickets or tags, behind the printer. You need to purchase an external media holder separately.



Note: Make sure to protect the media from direct sunlight and from dust, dirt, or other foreign particles that can impair the printout quality or cause unnecessary wear to the printhead.

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



- 3 Thread the media through the printer and adjust the media holders and sensor as you would for media that loads inside the printer.

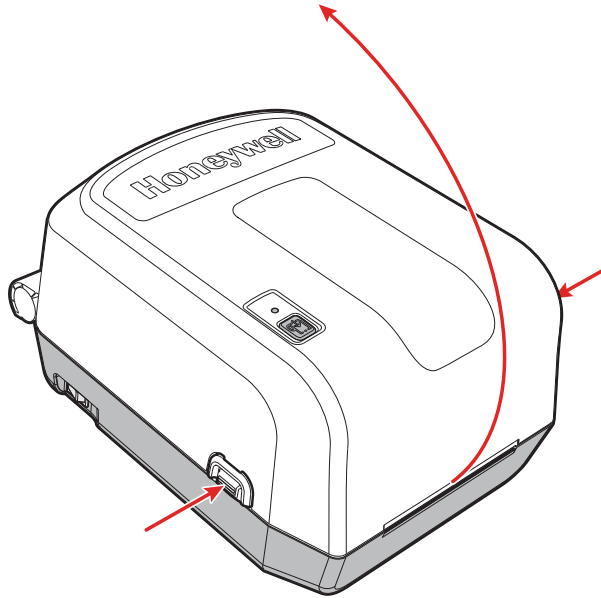
Load Ribbon

You need to use thermal transfer ribbon to print on thermal transfer media. Make sure to select ribbon that matches the face materials of the media to obtain the best durability and print quality.

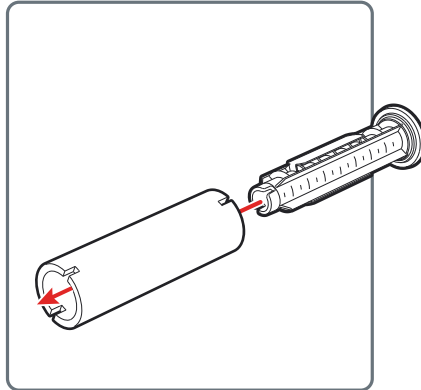


Note: The PC42t can only use ribbon that is “ink out,” which means that the ribbon is loaded with the inked side (the dull side) facing out.

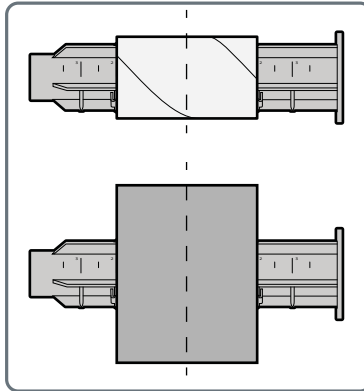
- 1 Press in on the cover latches on both sides of the printer and open the cover.



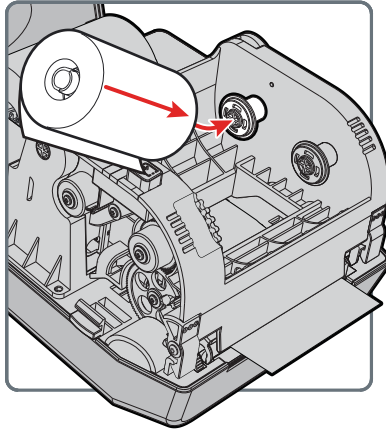
- 2 Insert one ribbon adapter into the thermal transfer ribbon roll and insert the other ribbon adapter into the empty ribbon takeup core.



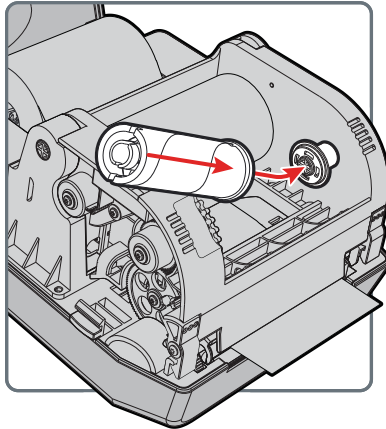
If your media is not very wide, center the media and the empty ribbon takeup core on the ribbon adapter.



- 3 Place the thermal transfer ribbon roll between the rear ribbon holders. The ribbon should come off of the roll as shown in the illustration.

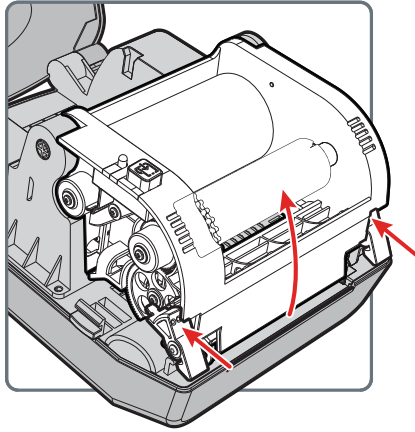


- 4 Place the empty ribbon takeup core between the front takeup core holders.

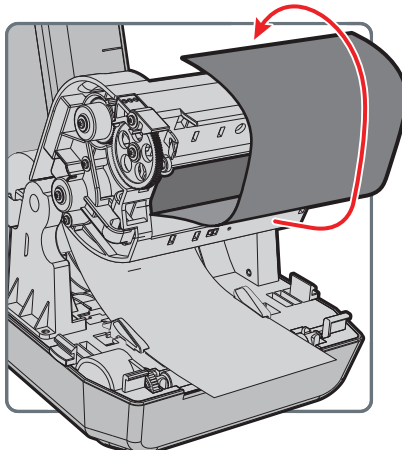


- 5 Make sure both ribbon adapters are “locked” into the ribbon wheels on the left side of the print and ribbon mechanism.

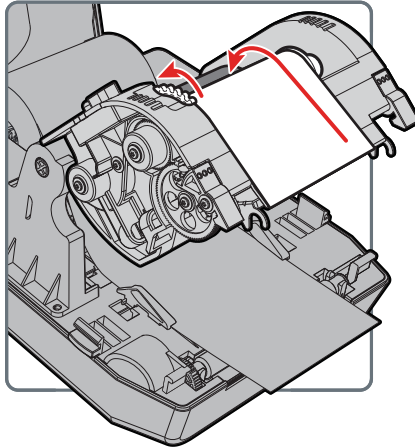
- 6 Press in on the top of both locking tabs to open the print and ribbon mechanism.



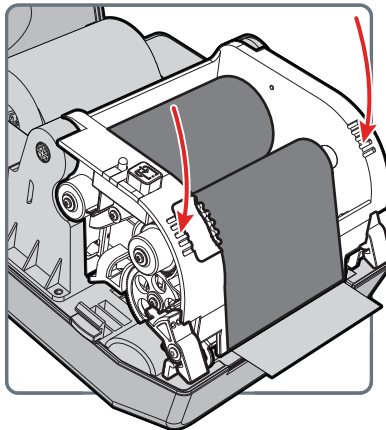
- 7 Feed the ribbon down through the opening in the bottom of the print and ribbon mechanism, over the printhead and the front of the mechanism, and attach it to the empty takeup core.



- 8 Turn the slack wheel to take up slack in the ribbon. Make sure the ribbon surface is smooth and that the ribbon is winding correctly.



- 9 Close the print and ribbon mechanism.



- 10 Close the printer cover.

Connect the Printer to Power



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

Caution: Turn the printer off when not in use.

- 1 Connect the power adapter to the power port on the rear of the printer.
- 2 Connect the power adapter to AC power. When the adapter is connected to AC power, the green LED in the adapter connector turns on and stays on.
- 3 Press the Power switch to turn the power on. As the printer starts up, the green LED turns on and blinks.

The green LED turns on solid green when the printer is ready to print.

You can now set the printer command language or print a configuration label. For help, see [“How to Set the Printer Command Language” on page 17](#) or [“About Test Labels” on page 19](#).

About Printer Command Languages

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

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

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

- Direct Protocol (DP)
- ESim (EPL command language simulator)
- ZSim (ZPL command language simulator)

About Direct Protocol

Direct Protocol (DP) is a flexible printer language that uses an intuitive English-like syntax. Direct Protocol lets you combine predefined layouts and variable data to create labels, tickets, and tags. If you are using bar code software, like BarTender, select Direct Protocol (the factory default) as your printer command language.

About ESim

ESim (EPL command language simulator) interprets Eltron® printing language commands. If you are sending EPL label files to the printer, select ESim as your printer command language. For more information, see the [ESim Command Reference Manual](#).

About ZSim

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

How to Set the Printer Command Language

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

- **Print** button
- Printer web page (with Ethernet option installed)
- Printset. For more information, see “[Configure the Printer with PrintSet](#)” on page 27.

You may need to configure the media type and print method when you set the command language through the printer web page or the printer configuration software (not applicable when setting the printer command language with the **Print** button).

Set the Command Language with the Print Button

- 1 Make sure the printer has media and ribbon (if necessary) installed.
- 2 Turn off the printer.
- 3 Press and hold the **Print** button.
- 4 Turn the printer on. The green LED turns on and blinks.

The printer calibrates the media, prints out a configuration label, and then it prints labels with the different command languages one at a time at two second intervals.

- 5 When the label prints out with the command language you want to use, release the **Print** button.

Set the Command Language from the Printer Web Page

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

- 1 Make sure that the printer has media and ribbon (if necessary) installed.
- 2 On your PC, open a browser.
- 3 In the **Location** or **Address** bar, type the printer IP address and press **Enter**. The printer web page appears.

The screenshot shows the Honeywell printer web interface for model PC42t-PC42-14295B1F48. The page has a dark header with the Honeywell logo and navigation tabs: Home, Configure, Manage, IP/Net, System Information, Services, and Contact. A 'Print Job Complete' notification with a warning icon is visible on the left. The main content is divided into three sections: Printer Information, Communications, and Media Settings.

Printer Information	
PC42t	S/N: 14295B1F48
Printer Configuration Number	DP600002
Command Language	Direct Protocol
USB Flash Drive	Disconnected

Communications		
<input checked="" type="checkbox"/> Ethernet	129.235.165.75	00:10:40:B1:40:11

Media Settings	
Media Type	Black Mark
Print Method	No Ribbon (DT)
Media Margin (X)	0 dots
Media Width	81.2 dots
Media Length	236 dots

- 4 Click **Login**. The Login page appears.
- 5 Type your **Username** and **Password** and click **Login**. The default username is `itadmin` and the default password is `pass`.
- 6 Click the **Configure** tab.
- 7 Click **System Settings > General**.
- 8 Select the desired printer command language from the **Command Language** list, and then click **Save**.
- 9 Click the **Services** tab.
- 10 Click **Restart Printer**, and then click **Restart**. The printer restarts in the command language you selected.

About Test Labels

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

- when you turn on the printer.
- when the printer is ready to print.
- with the printer configuration software.

You can also print test labels from the printer web page, which requires a network connection to a desktop PC. You need to know the printer IP address to view the printer web page. It takes around 10 seconds to acquire the IP address when you connect the printer through Ethernet. If the test label shows the IP address as 0.0.0.0, wait 10 seconds and then print another test label.

Print a Test Label When You Turn on the Printer

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

- 1 Make sure that the printer has media and ribbon (if necessary) installed.
- 2 Connect the printer to power and turn on the printer.
- 3 Press and hold the **Print** button until the printer calibrates the media, prints a configuration label, and then lets you select the printer command language.

Print a Test Label When the Printer is Ready to Print

You can print a test label when the printer is sitting idle and ready to print.

- 1** Make sure that the printer has media and ribbon (if necessary) installed.
- 2** Press and hold the Print button until the printer advances media to the beginning of the next label. The printer will then print out a Configuration label.

2

Connect the Printer

This chapter explains how to download the Windows® printer drivers and connect the PC42t printer to your PC and an Ethernet network.

Install Printer Drivers

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

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

- 1 Open a web browser and go to www.honeywellaidc.com.
- 2 Select **Support > Downloads**.
- 3 Select these items:
 - a In the Product Category list, select **Printers**.
 - b In the Product Family list, select **Fixed Printer**.
 - c In the Product list, select **PC42t Desktop Printer** and then click **Submit**.
- 4 In the downloads page, select the latest version of InterDriver. If a Security Warning dialog box appears, click **Run**.
- 5 When asked if you want the program to make changes to your computer, click **Yes**.
- 6 Follow the onscreen instructions to install InterDriver.

How to Connect the Printer to Your PC

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

- USB cable
- Serial cable

Connect the Printer with a USB Cable

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



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

- 1 Download and install InterDriver on your PC.
- 2 Connect one end of the USB cable to the USB device port on the back of the printer and when prompted during the InterDriver installation, connect the other end to your PC.

Connect the Printer with a Serial Cable

If you have the optional factory-installed serial port on your printer, you can connect the printer to the serial port on a PC.

- 1 Connect one end of the serial cable to the connector on the back of the printer and connect the other end to your PC.
- 2 Configure the serial port settings with the printer web page or with PrintSet.

Connect the Printer to Your Network

If your printer has a factory-installed optional Ethernet port, you can connect the printer to your network. By default, the printer is configured to obtain an IP address through DHCP. If your network uses a different method to assign IP addresses, you need to configure the IP address assignment method by using your printer configuration software through a USB or an optional serial connection.

- 1 Turn on the printer.
- 2 Connect one end of the Ethernet cable to the printer and the other end to the network.
- 3 Print a configuration label to find the IP address for the printer. For help, see [“About Test Labels” on page 19](#).

It takes approximately 10 seconds after the printer LED turns steady green to obtain an IP address. If the configuration label prints an IP address of 0.0.0.0, wait 10 seconds and print another label.

- 4 Configure any necessary Ethernet settings through the printer web page or PrintSet.

Connect a USB Device

You can use the USB host interface port on the printer to connect keyboards, bar code scanners, or a USB storage device.

- 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 the USB host port.

Configure the Printer

You can configure your printer:

- from the printer web page.
- with PrintSet. PrintSet is available on the PrinterCompanion CD. The latest version is available from the Honeywell web site at www.honeywellaidc.com.

Configure the Printer from the Printer Web Page

You can configure most network settings from the printer web page.

- 1 Start a web browser on your PC.
- 2 In the address field, type the IP address of your printer and press **Enter**. The printer web page appears.



Note: If you do not know the IP address of your printer, you can print a configuration label. For more information, see “[About Test Labels](#)” on page 19.

The screenshot shows the Honeywell printer web interface. At the top, there is a navigation bar with tabs for Home, Configure, Manage, IPPrint, System Information, Services, and Contact. The printer model is identified as PC42t:PC42-14295B1F48. A 'Print Job Complete' notification is visible on the left. The main content area is divided into three sections: Printer Information, Communications, and Media Settings.

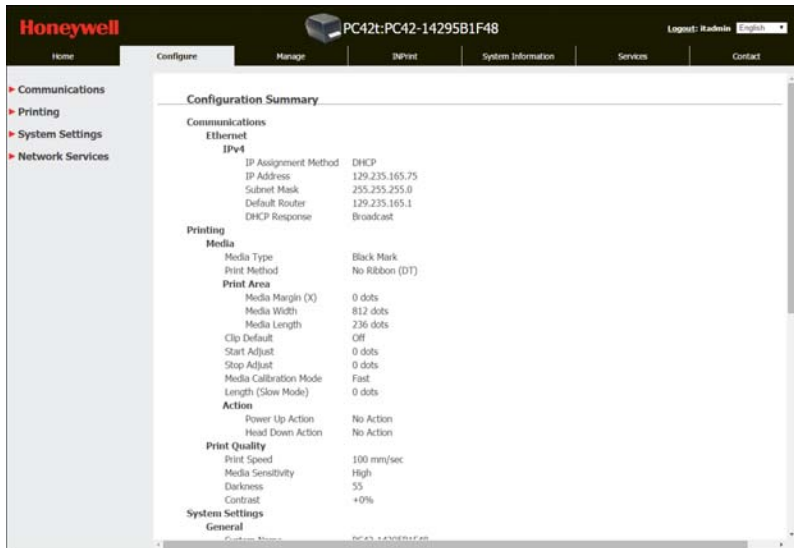
PC42t	S/N: 14295B1F48
Printer Configuration Number	DP600002
Command Language	Direct Protocol
USB Flash Drive	Disconnected

<input checked="" type="checkbox"/> Ethernet	129.235.165.75	00:10:40:81:40:11
--	----------------	-------------------

Media Type	Black Mark
Print Method	No Ribbon (DT)
Media Margin (X)	0 dots
Media Width	812 dots
Media Length	236 dots

- 3 Click **Login**.
- 4 Type your **Username** and **Password** in the entry fields, and then click **Login**. The default username is `itadmin`, and the default password is `pass`.

- 5 Click **Configure**. The Configuration Summary page appears.
- 6 To see a list of printer settings, click **Configuration Summary**.



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

- For serial port settings, click **Communications**.
- For media, print quality, or performance settings, click **Printing**.
- For display, service, and general settings, and maintenance alert message triggers, click **System Settings**.
- To set conditions that trigger error, warning, and information alert messages, click **Alerts**.

Configure the Printer with PrintSet

You can use PrintSet to easily change your printer configuration settings. You can also use the setup wizards in PrintSet to guide you through common configuration tasks.

- 1 Make sure that you have Windows XP or later running on your PC.
- 2 Install PrintSet from the PrinterCompanion CD.
- 3 Connect your printer to your PC using a serial, USB, or network connection.
- 4 Launch PrintSet and start configuring your printer. For help, see the PrintSet online help.

Upgrade the Firmware

You should check for periodic updates to the printer firmware. Updated firmware can include bug fixes or additional features that you might find useful. The latest version of the firmware is available from the PC42t printer Downloads page on www.honeywellaidc.com.

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

Download the Printer Firmware Update

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

- 1 Go to the Honeywell website at www.honeywellaidc.com.
- 2 Click **Support > Downloads**.
- 3 Use **Product Category**, **Product Family**, and **Product** to select the PC42t.
- 4 Click **Submit**. The latest software appears on the page.
- 5 Download the latest firmware version to your PC.

Upgrade Firmware from a USB Storage Device

Use a USB storage device to upgrade the printer firmware.

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

As the firmware upgrade file is loaded into the printer, the status LED blinks orange. This process may take several minutes.

When the printer status LED turns solid green, the printer is ready to use.

3

Troubleshoot and Maintain the Printer

Contact Product Support

If you cannot find the answer to your problem in the “[Printer Problems and Possible Solutions](#)” on page 32, try one of these options:

- To find an answer to your question yourself, you can search the database at www.hsmknowledgebase.com.
- To ask an expert a question in the U.S.A. and Canada, call **1-800-782-4263**.
- To contact an expert outside the U.S.A. and Canada, go to www.honeywellaidc.com > **Contact**.

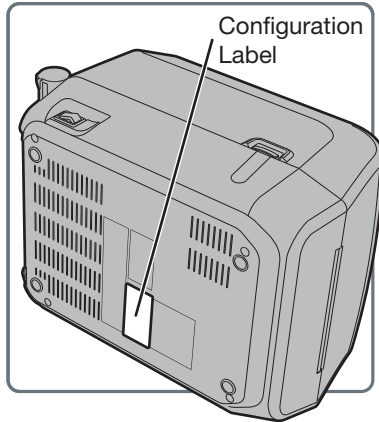
Before you call Product Support, make sure you have this information ready:

- Printer serial number
- Printer configuration number
- Firmware type and version
- Printer command language
- Serial port settings (if applicable)
- Media settings
- Ethernet settings (if applicable)

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

Locate the Printer Configuration and Serial Numbers

You can also find the printer configuration and serial numbers on the product label located on the bottom of the printer.



Printer Problems and Possible Solutions

Use this section to find possible solutions to printer problems.

Printer Problems and Possible Solutions

Problem	Possible Solution
The status LED is off, but the power is on.	Make sure the connectors on the power supply are securely plugged into the printer and an AC outlet.
The status LED is green, but the printer is not feeding media.	Make sure the correct type of interface cable is securely plugged into both the printer and computer.
Only partial labels are being printed.	Try these possible solutions: <ul style="list-style-type: none">• Make sure that the print and ribbon mechanism is fully locked. Open the printer and lower the printhead completely until both latches click into place.• Check to see if a label is caught on the printhead. If you find a caught label, remove the label and clean the printhead. For help, see “Clean the Printhead” on page 35.
The print quality is poor.	Try these possible solutions: <ul style="list-style-type: none">• Clean the printhead. For help, see “Clean the Printhead” on page 35.• Make sure the ribbon is compatible with the media.• Make sure the darkness setting is correct for the media and ribbon combination.
The printer seems to be working but nothing prints.	For direct thermal printing, try these solutions: <ul style="list-style-type: none">• Make sure that the heat-sensitive side of the media is facing the printhead.• Verify that the media is direct thermal media by firmly running your fingernail on the surface of the media. If you see a black line, the media is direct thermal.
The printing stops and status LED is red.	Try these possible solutions: <ul style="list-style-type: none">• Use PrintSet to check the printer error status.• There may be a media jam. Open the printer and check for stuck labels or ripped perforations.• If a “Printhead Lifted” error is reported and the printhead is closed, make sure the round white sticker is present on the right side of the print and ribbon mechanism.

Printer Problems and Possible Solutions (continued)

Problem	Possible Solution
The printer continues to print or feed when it should stop printing	Check to see if a stuck label is blocking the label gap sensor. Open the top cover, remove the label, and clean the printhead. For help, see “Clean the Printhead” on page 35 .

How to Restore Default Settings

If you need to restore factory defaults at any time, you can use:

- the **Print** button.
- the printer web page.
- PrintSet.

Restore Default Settings with the Print Button

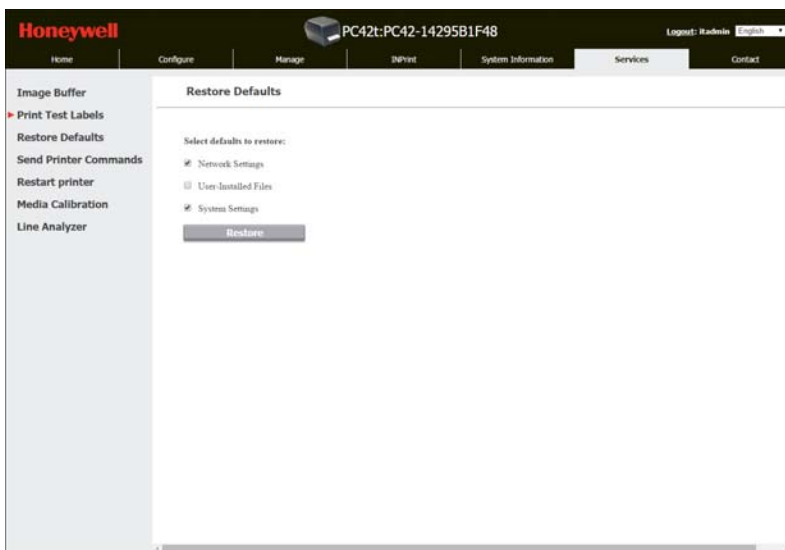
The easiest way to reset the printer to the factory default settings is with the **Print** button.

- 1 Turn off the printer.
- 2 Press in on the cover latches on both sides of the printer and open the cover.
- 3 Press in on the top of both locking tabs to open the print and ribbon mechanism.
- 4 Turn the printer on.
- 5 When the status LED starts blinking green, press and hold the **Print** button until the status LED turns off.
- 6 Make sure the media is loaded correctly.
- 7 Close the print and ribbon mechanism.
- 8 Close the cover.

Restore Default Settings from the Printer Web Page

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

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



- 6 Select the settings you want to restore:
 - Check the **Network settings** check box to restore defaults for all network connections, such as IP address and network name.
 - Check the **User-Installed Files** check box to erase all files you uploaded to the printer memory.
 - Check the **System Settings** check box to restore defaults for system settings, such as media width.

- 7 Click **Restore**.
- 8 Click **Yes** to continue. The printer restarts and the settings you selected are restored to default values.

Restore Default Settings with PrintSet

If you have PrintSet installed on your PC, you can use it to restore the default settings on your printer.

- Use the Factory Default Wizard in the Printer Tasks box.

Clean the Printhead

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



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

- 1 Turn the printer off and disconnect the printer from power.
- 2 Open the printer, open the print mechanism, and remove the media and ribbon (if installed).
- 3 Insert most of the cleaning card under the printhead, and then lower the print mechanism.
- 4 Pull out the cleaning card and raise the printhead.
- 5 Wait for approximately 30 seconds to allow the cleaning fluid to dissolve the residue.
- 6 Print a test label to check for print quality. For help, see [“Print a Test Label When the Printer is Ready to Print” on page 20](#).
- 7 Repeat Steps 3 through 5 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 printer, reconnect power, and turn on the printer.

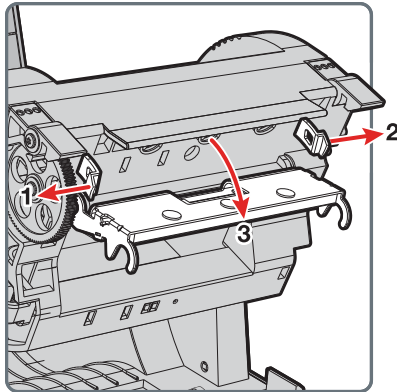
Replace the Printhead

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

- 1 Turn off the printer and disconnect the power cord.
- 2 Press in on the cover latches on both sides of the printer and open the cover.
- 3 Press in on the top of both locking tabs to open the print and ribbon mechanism.

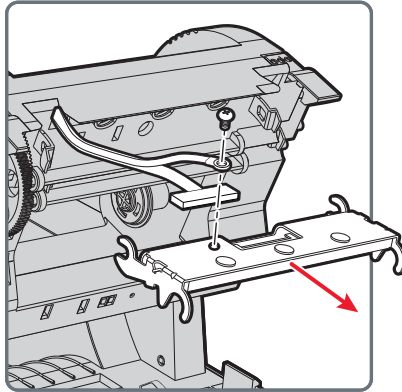
For a thermal transfer printer, remove the ribbon.

- 4 Pull the printhead latches apart one at a time until the printhead falls forward away from the print mechanism.



- 5 Carefully slide the printhead out of the mechanism. The printhead is still attached to the mechanism by a ribbon cable and a grounding screw.
- 6 Unscrew the grounding screw with a #2 Phillips screwdriver.

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



Warning: Do not touch the printhead surface area.

- 8 Insert the grounding screw into the grounding cable lug and then fasten the screw to the new printhead.
- 9 Connect the ribbon cable to the new printhead.
- 10 Slide the printhead into the holders in the print mechanism.
- 11 Tilt the printhead up into the printer lid and press it into place.
- 12 When the printhead is in the correct position, the printhead latches snap into place on the sides of the printhead.
For a thermal transfer printer, install the ribbon.
- 13 Close the print and ribbon mechanism and the cover.

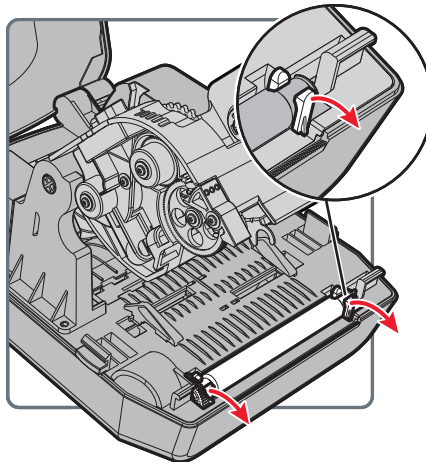
Clean the Platen Roller

Follow this procedure to remove, clean, and replace the platen roller as part of standard maintenance for the printer. You should check the platen roller for debris each time you load media and clean it if dirty.

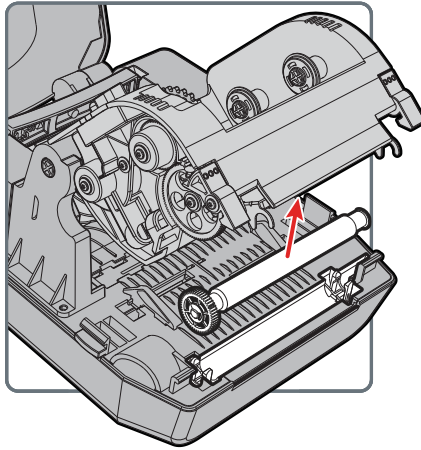


Caution: Never use hard or sharp tools to peel away stuck labels or other material. The platen roller is delicate and can easily be damaged.

- 1 Turn the printer off and disconnect the power cord.
- 2 Press in on the cover latches on both sides of the printer and open the cover.
- 3 Press in on the top of both locking tabs to open the print and ribbon mechanism.
- 4 Remove the installed media (and ribbon).
- 5 Pry up on the end of the platen roller near the gear.



- 6 Pull up on the platen roller to remove it from the printer.



- 7 Remove any adhesive residue from the roller with a cotton swab moistened with isopropyl alcohol.
- 8 Reverse Steps 5 and 6 to install the roller.
- 9 Lower the print and ribbon mechanism and press down on each side until the locking tabs snap into place.
- 10 Close the cover.

Clean the Interior of the Printer

To keep the interior of the printer clean:

- Make sure the media path is clean.
- Make sure sensor mylar covers are free of fingerprints, oil, dirt, and dust.

Clean the Exterior of the Printer

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

Honeywell has tested and recommends these cleaning products for compatibility with the exterior of the PC42t printer.

Recommended Cleaners

Manufacturer	Product
Homax	Goo Gone
Johnson	Virex TB
Metrex	Cavi Wipes
Multiple suppliers	70% isopropyl alcohol Ammonium chloride 10% Ethylene glycol screen cleaner Sodium hypochlorite 6%
Orange-Sol	Multi-Use Citrus
PDI	SANI-CLOTH HB SANI-CLOTH PLUS SUPER SANI-CLOTH
PDI and others	Alcohol Prep Pads
Quest Chemical Corporation	Grime Buster
Spartan	Super HDQL 10
Surgipath	Cloro-Wipe Towelette
Techspray Renewal	Eco-Shower
Veridien	Viraguard [®]
Vernacare	Tuffiewipes

A

Specifications

This appendix contains specifications for the PC42t printer.

Printer Specifications

PC42t Physical Specifications

Dimensions:	226 mm x 297 mm x 175 mm (8.9 in x 11.7 in x 6.9 in)
Weight:	2.5 kg (5.5 lbs)
Power Supply Requirements:	100–240 VAC, 50–60 Hz, 1.5 A
Operating Temperature:	5 °C to 40 °C (41 °F to 104 °F)
Storage Temperature:	-40 °C to 60 °C (-40 °F to 140 °F)
Relative Humidity:	15 to 80% non-condensing

PC42t Print Speed, Resolution, and General Media Specifications

Print Mode:	Direct thermal, thermal transfer
Print Speed (variable):	50, 75, and 100 mm/sec (2, 3, and 4 ips)
Print Resolution:	203 dpi: 8 dots/mm
Print Width:	104 mm (4.09 in) max
Media Width:	25.4 to 110 mm (0.99 to 4.33 in)
Label Roll Diameter (maximum):	127 mm (5 in)
Label Length (minimum):	9.60 mm (.34 in)
Gap Length Between Labels:	2 to 4.5 mm (0.08 to 0.18 in)
Black Mark Length:	3 to 5 mm (0.12 to 0.19 in) can be adjusted from center to extreme left
Media Thickness:	0.0762 to 0.254 mm (3 to 10 mil)
Liner Opacity (maximum):	76% (TAPPI T425)
Ribbon Width:	30 to 110 mm (1.18 to 4.33 in)
Ribbon Roll Diameter (maximum):	68 mm (2.68 in)
Ribbon Core (I.D.):	25.2 to 25.6 mm (0.99 to 1.01 in)
Ribbon Core Length:	30 to 110 mm (1.18 to 4.33 in) notched or notchless
Ribbon Wound Ink Side:	Out only

Memory

128 MB flash
64 MB SDRAM (printer use of memory will result in a lower value)
(optional) USB memory device, up to 32 GB

Supported Command Languages

Direct Protocol
ESim
ZSim

Sensors

Label gap sensor
Headlift sensor
Ribbon out sensor
Black mark sensor

Network Services

FTP
Line Printer Remote Protocol (LPR)
Telnet 9100
DHCP
Raw TCP
BOOTP
Web page

Universal Font Scaling Technology and Standard Latin Fonts

Andale Mono
Andale Mono Bold
Univers
Univers Bold
Univers Condensed Bold
OCR-A
OCR-B
CG Triumvirate Condensed Bold
MHeiGB18030C_Medium (Simplified Chinese GB18030)

Supported Font Types

TrueType
OpenType
Bitmap

Supported Graphic File Types

Supports 1-bit color depth (black and white) only:
PCX
PNG
GIF
BMP

Drivers

Support for Microsoft Windows XP, Vista, Windows 7, Server 2003, and Server 2008
Supports 32-bit and 64-bit editions
InterDriver also supports Windows 8 and Windows Server 2012

Supported Bar Code Symbologies

1D bar code symbologies:

- Codabar
- Code 11
- Code 39:
 - Code 39 full ASCII
 - Code 39 with checksum
- Code 93
- Code 128:
 - Code 128 Subset A
 - Code 128 Subset B
 - Code 128 Subset C
 - Code 128 UCC
- DUN-14/16
- EAN:
 - EAN-8
 - EAN-13
 - EAN 128
 - EAN 128 subset A
 - EAN 128 Subset B
 - EAN 128 Subset C
- HIBC 39
- HIBC 128
- Industrial 2 of 5
- Interleaved 2 of 5
- ISBT-128
- Matrix 2 of 5
- Straight 2 of 5
- UPC
- Add-on bar code symbologies:
 - Add-on 2

Appendix A — Specifications

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

2D bar code symbologies:

- Aztec
- Code 16K
- Code 49
- Data Matrix
- Dot Code
- Grid Matrix
- GS1 DataBar (previously called RSS-14):
 - GS1 DataBar Expanded
 - GS1 DataBar Expanded Stacked
 - GS1 DataBar Limited
 - GS1 DataBar Stacked
 - GS1 DataBar Stacked Omnidirectional
 - GS1 DataBar Truncated
- MaxiCode
- MicroPDF417
- MSI (modified Plessey)
- PDF417
- Planet
- Plessey
- Postnet
- QR Code
- USPS 4-State Customer Bar Code
- Composite bar code symbologies:
 - EAN-8 Composite (CC-A, CC-B)
 - EAN-13 Composite (CC-A, CC-B)
 - GS1 Composite (previously called EAN.UCC Composite)
 - UPC-A Composite (CC-A, CC-B)
 - UPC-E Composite (CC-A, CC-B)

B

Default Settings

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

Default Configuration

Use this appendix to view the default settings on the printer. If you restore the printer to factory default settings, it will use the values listed here. The order of the settings reflects the organization of the printer web page.

Serial Port Settings

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

- From the printer web page, click the **Configure** tab > **Communications** > **Serial**.



Note: These settings are not accessible unless you have the optional serial port installed and a connection to a PC.

Serial Port Settings

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

Serial Port Settings (continued)

Setting	Description	Default
New Line Character	Defines the characters that the printer echoes to the host to indicate that it has moved to a new line.	CR/LF

Ethernet Settings

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

- From the printer web page, click the **Configure** tab > **Communications** > **Ethernet**.

Ethernet Settings

Setting	Description	Default
IP Assignment Method	Specifies how the printer obtains an IP address.	DHCP
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.	Br

Media Settings

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

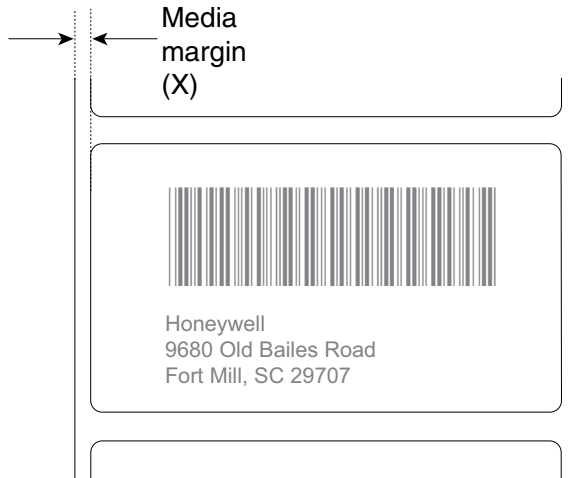
- From the printer web page, click the **Configure** tab > **Printing** > **Media**.



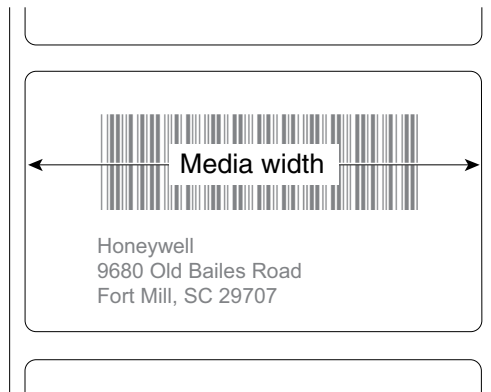
Note: If the printer is not connected to a network, you need to use PrintSet 5 through a USB connection to configure the media settings.

Media Settings

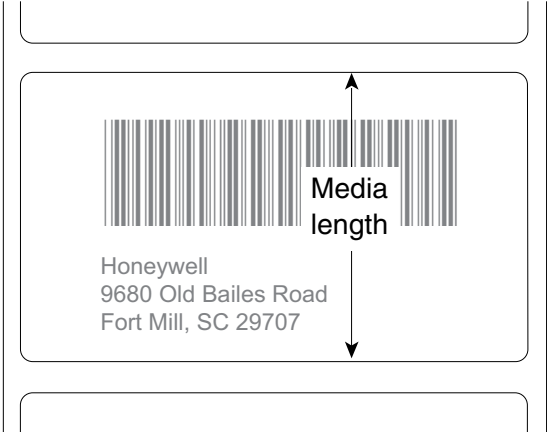
Setting	Description	Default
Media Type	Selects the type of media that is loaded in the printer.	Media with Gaps
Print Method	Selects the method of printing that the printer is using.	Thermal Transfer
Media Margin (X)	Sets the width of the margin from the left edge of the label along the printhead to the edge of the printable area. Unit of measurement is defined in the Unit of Measurement parameter.	0



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
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Media Settings (continued)

Setting	Description	Default
Media Length	<p>Sets the length of the printable area measured from one edge of the label to the edge that is closest to the printhead. Unit of measurement is defined in the Unit of Measurement parameter.</p> 	1200 dots
Clip Default	<p>Determines if the printer prints items outside the printable area of the label.</p> <p>When this is set to Off, the printer returns an error if any part of a bar code label cannot be printed because that part extends beyond the printable area. When this is set to On, the printer prints all bar code labels, but may also print unreadable, incomplete labels.</p>	Off
Start Adjust	<p>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.</p>	0 dots
Stop Adjust	<p>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.</p>	0 dots
Media Calibration Mode	<p>Selects the mode the printer uses to calibrate media. Use Slow if the printer has trouble identifying gaps or marks in media</p>	Fast

Media Settings (continued)

Setting	Description	Default
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 80 to 3200.	0 dots
Power Up Action	Sets the action when you turn the printer on: <ul style="list-style-type: none">• No Action• Formfeed - The printer feeds one label.• Testfeed - The printer prints two configuration labels as it calibrates the media sensors.	No Action
Head Down Action	Sets the action when you close the print mechanism after opening it: <ul style="list-style-type: none">• No Action• Formfeed - The printer feeds one label.• Testfeed - The printer prints two configuration labels as it calibrates the media sensors.	No Action

Print Quality Settings

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

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

Print Quality Settings

Setting	Description	Default
Print Speed	Sets how fast the printer prints labels. The unit of measure is defined in the Unit of Measure parameter.	100
Darkness	Sets the image darkness for media and ribbon. Adjust this parameter with the Media Sensitivity parameter. Range is 1 to 100.	Variable

General System Settings

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

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

General System Settings

Setting	Description	Default
System Name	Sets the network identification name (WINS name) of the printer.	Printer model number plus the serial number. For example, PC42-14295B1F48
System Location	Sets the location of the printer.	Empty string
System Contact	Sets the name of the printer administrator.	Empty string
Display Language	Selects the language the printer uses to print text on the test labels.	Simplified Chinese
Display Language (Web Page)	Selects the language the printer uses to display text on the web page.	Simplified Chinese
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
Command Language	Sets the printer command language. If changed, it requires a restart of the printer.	Direct Protocol
Unit of Measure	Selects the unit of measure that is used to define several printing parameters.	Dots
Zero with Slash	Determines how zero is printed or displayed on the screen. Disable is zero (0), Enable is (Ø).	Disable (0)

Manage I/O Settings

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

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

Manage I/O Settings

Setting	Description	Default
Ethernet	Allows the printer to communicate using Ethernet.	Enable

Manage Services Settings

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

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

Manage Services Settings

Setting	Description	Default
Web Server	Determines if the web server is enabled in the printer.	Enable
FTP	Determines if the printer can use FTP (File Transfer Protocol).	Enable
Net1	Determines if the printer can use Telnet to communicate with Direct Protocol (Fingerprint).	Enable
LPR	Determines if the printer can use the LPR (Line Printer Server) daemon.	Enable
Telnet	Determines if the printer can use Telnet to communicate with another device.	Enable

DNS Network Services

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

- From the printer web page, click the **Configure** tab > **Network Settings** > **DNS**.

DNS Network Services Settings

Setting	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 addresses and routing information for the TCP/IP network.	0.0.0.0
Secondary DNS Server	Sets the IP address of the secondary server to which the printer sends DNS requests. The DNS server retains IP addresses and routing information for the TCP/IP network.	0.0.0.0

Net1 Network Services

This section describes the Net1 settings for the printer. To view these settings:

- From the printer web page, click the **Configure** tab > **Network Settings** > **Net1**.

Net1 Network Services Settings

Setting	Description	Default
Queue	Selects how the printer handles multiple Net1 connections.	On
Port Number	Sets the port number that defines the Net1 TCP port. The range is from 0 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

WINS Network Services

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

- From the printer web page, click the **Configure** tab > **Network Settings** > **WINS**.

WINS Network Services Settings

Setting	Description	Default
Primary WINS Server	Sets the IP address of the primary server to which the printer sends WINS requests. The WINS server retains IP addresses and routing information for the TCP/IP network.	0.0.0.0
Secondary WINS Server	Sets the IP address of the secondary server to which the printer sends WINS requests. The WINS server retains IP addresses and routing information for the TCP/IP network.	0.0.0.0

Web Server Network Services

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

- From the printer web page, click the **Configure** tab > **Network Settings** > **Web Server**.

Web Server Network Services Settings

Setting	Description	Default
Image Buffer	Determines if the image buffer appears in the printer web page.	Enable

C

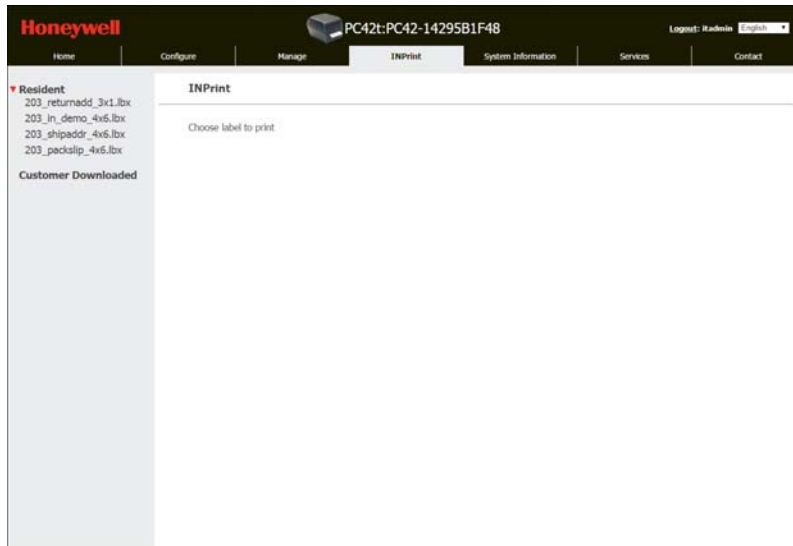
Print Labels with INPrint

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

About the INPrint Page

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

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



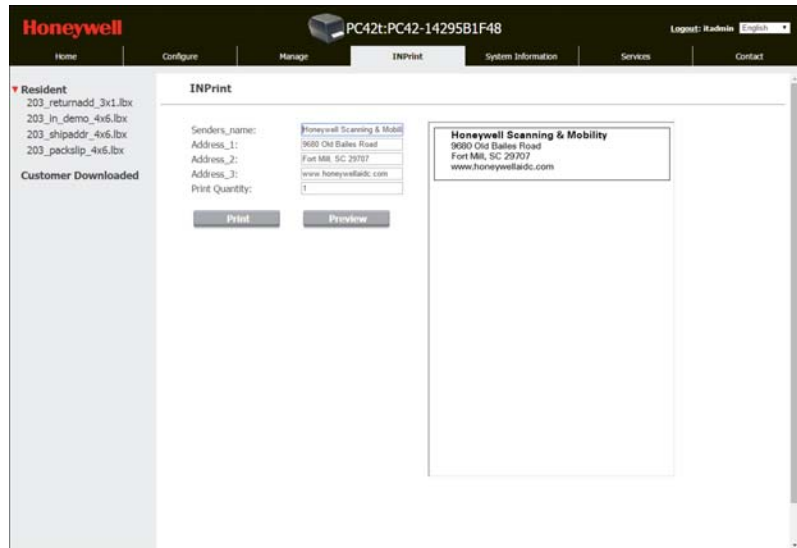
PC42t INPrint Web Page

Print INPrint Labels

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

- 1 On your desktop PC, start a browser.
- 2 In the address bar, type the IP address of your printer and press **Enter**. The printer web page appears.
- 3 Click **Login**. The Login page appears.

- 4 Type your **Username** and **Password** and then click **Login**. The default value for Username is `itadmin` and the default value for Password is `pass`.
- 5 Click the **INPrint** tab.
- 6 Select the web form you want to print:
 - If you created the web form yourself, click **Customer Downloaded** and then select the web form from the list.
 - If you want to use one of the Resident web forms, click **Resident** and then select the web form from the list.
- 7 Type information in the web form as needed.
- 8 (Optional) To preview the label on the screen, click **Preview**.





An Example of a Resident Return Address Label

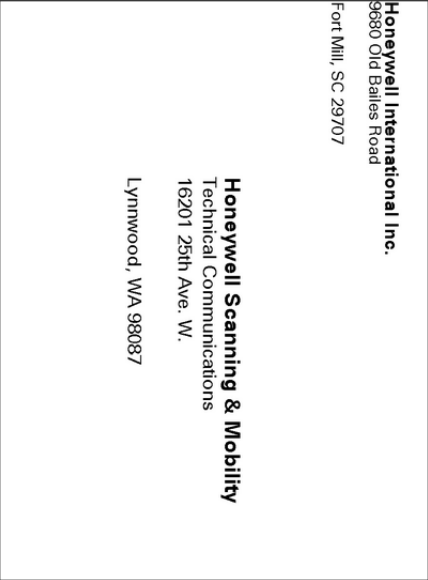
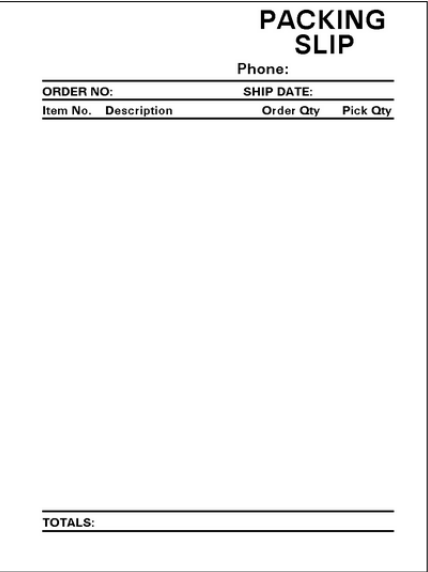
- 9 To print the label, click **Print**.

Predefined INPrint Label Formats

Predefined INPrint Label Formats and Sample Illustrations

Format Name	Sample
203_returnadd_3x1.lbx	 <p>Honeywell Scanning & Mobility 16201 25th Ave. W. Lynnwood, WA 98087</p>
203_in_demo_4x6.lbx	 <p>MAIL PICKET FIELD</p> <p>LASER FIELD</p> <p>HONEYWELL PRINTERS</p> <p>Honeywell Scanning & Mobility CUST. SERVICE: 001 4869 353 3020 www.honeywellads.com</p> <p>CODE 39 3.0/1 15 MIL</p> <p>PICKET FIELD</p> <p>DATAMATRIX</p>

**Predefined INPrint Label Formats and Sample Illustrations
(continued)**

Format Name	Sample
203_shipaddr_4x6.lbx	 <p>A 4x6 shipping address label. The text is arranged in two columns. The right column contains: Honeywell International Inc., 9690 Old Ballies Road, Fort Mill, SC 29707. The left column contains: Honeywell Scanning & Mobility, Technical Communications, 16201 25th Ave., W., Lynnwood, WA 98087.</p>
203_packslip_4x6.lbx	 <p>A 4x6 packing slip label. At the top right, it says PACKING SLIP. Below that is a line for Phone:. Then two lines for ORDER NO: and SHIP DATE:. Below these is a table with four columns: Item No., Description, Order Qty, and Pick Qty. At the bottom left, there is a line for TOTALS:.</p>

Honeywell Scanning & Mobility

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