



Portico Virtual Terminal

Peripheral Guide

FOR HEARTLAND MERCHANT USERS

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Overview

Heartland Portico Virtual Terminal (Portico VT) is a "virtual terminal" that processes credit and debit cards over a secure internet connection. Portico Virtual Terminal records the card information and dollar amount, then transmits this information to Heartland Payment Systems for further processing. Heartland then contacts the credit card issuer, receives an authorization, and displays the issuer's authorization response. Additionally, Heartland Portico Virtual Terminal provides easy-to-use reporting.

Document purpose

The purpose of this document is to instruct Heartland merchants in the use of the Portico Virtual Terminal.

System requirements

The following is a list of required hardware and software components to run Portico VT Desktop Application.

Type	Compatible
Hardware	Laptop Internet connection PC Internet connection Keyboard Mouse Monitor
Operating Systems	Windows 7, 8.1, or 10 Mac OS X El Capitan or higher
Browsers	Internet Explorer 9, 10, or 11 Google Chrome MS Edge Safari

Supported peripherals (desktop and online)

The following is a list of supported peripherals for the Portico VT Desktop application.

Type	Compatible
Peripherals	<p>Card readers</p> <ul style="list-style-type: none">Magtek USB Card ReaderE3 Wedge USB Card Reader <p>PIN pads</p> <ul style="list-style-type: none">Ingenico EMV PIN Pad iPP320 (USB)Ingenico EMV PIN Pad iPP250 (USB) <p>Receipt printers</p> <ul style="list-style-type: none">Epson Receipt PrinterStar Receipt Printer

General tasks

Once you have access to Portico VT per the Welcome email and/or Peripheral Guide, you will be able to log in and begin using the service.

Log in

1. Launch Portico VT.
2. Type your Heartland InfoCentral user name and password in the fields.
3. Click Login.

Install Windows Drivers

To install the Windows drivers needed for the supported hardware, such as Epson printers and Star printers:

1. Click Admin > Settings > Hardware Drivers.
2. Click the red link of the desired driver.
3. Follow the prompts.

Card Readers

Heartland Portico supports Magtek and E3 Wedge card readers which attach to the computer via USB connection. The USB and Wedge card readers require no special setup; Windows automatically recognizes these devices and installs the necessarily software. To install a USB card reader, simply plug the cable into any available USB slot on your computer. Once Portico identifies the device, you can start to use it.

Supported PIN pads

Heartland Portico Virtual Terminal supports the following PIN Pads:

- Ingenico iPP230
- Ingenico iSC250

Install and set up the Ingenico EMV PIN Pad

Note:

The PIN pad should not be connected to the computer until after the driver is installed. Please leave the device disconnected until Step 8.

To install the Ingenico EMV PIN Pad:

1. Click Admin > Settings, and then the Hardware Drivers tab.
2. Click the Windows link next to the EMV PinPad iPP320/iSC250 Driver label. Depending on your browser, you may be asked if you want to Open, Save, Save As, or Keep the file; if so, select Open or Keep.

3. Open the zip file
4. Double-click the IngenicoUSBDrivers_setup.exe file. This will run the setup script.
5. If prompted, click Yes to launch the setup wizard. Follow the wizard by clicking Next through the prompts. When you get to the COM port page, leave all the fields blank and click Next. Click Install. Result: The drivers are installed.
6. Click Finish.
7. Connect the Ingenico EMV PIN Pad to a USB port. Wait until the PIN Pad displays "Welcome".
8. [Open Device Manager](#).
9. Click Ports to expand the list.
10. Note the COM port number for the Ingenico iPP3xx/iPP4xx Comm.Port.
Note: It may take several minutes for the PIN Pad to be recognized on the computer and receive a COM port number.
11. Return to Portico VT. Download the [Heartland Peripheral Manager](#) and configure the settings.
12. Close and re-launch Portico VT in a new browser.
13. Click Admin > Settings, and then the Hardware tab.
14. Click the PIN Pad tab, then click Check Connectivity.
15. When the connection is established, click Admin > Settings, and then the Hardware tab.
16. Click the PIN Pad tab, then click Apply Settings.
Result: Updates to the software are applied. Please wait until the device displays "Welcome".

Note: Make sure the Local Port matches in the VT Online Admin > Settings > Hardware Drivers and the Heartland Peripheral Manager for the device. See [Local port consistency](#) for more information.

Apply settings

Occasionally, software updates for EMV devices, also called PDL updates and/or settings updates, are made available. When updates are available, a notification displays after you log in. These are required updates. These should not be applied in the middle of a batch. It is recommended that any open batch be closed before applying updates.

The screenshot shows the Heartland Admin interface. At the top, there is a navigation bar with the Heartland logo, a menu icon, and several status indicators: signal strength (iPP320), location (Butlers Cabin - 2595 pkwy), and device ID (90255035 - device 9). Below the navigation bar, the 'Admin' section is active, with 'Settings' selected. The 'Hardware' tab is selected, and the 'PIN Pad' sub-section is visible. Under 'PIN Pad', there is a 'PDL Download' section with a blue button labeled 'PDL Download'. Below this is a 'Local Port Setup' section with a dropdown menu for 'Local Port' set to '60000'. A 'Cancel' button is located at the bottom left of the settings panel.

To apply the update, click the PDL Download button. A confirmation prompt will appear stating that any open batch should be closed before applying the updates.

PDL Updates



It is recommended that any open batch be closed before applying the updates.

Would you like to proceed with the download ?

If you click Yes, updates will be applied immediately.

If you click No, updates will not be applied. To apply the updates later:

1. Ensure the EMV device is connected to the computer.
2. Log in to Portico VT Online.
3. Click Admin > Settings > Hardware > PIN Pad.
4. Click Apply Settings. Step Result: The updates are applied. This may take a few minutes.

Best practices for using PIN pads with Portico VT

- To function correctly, the device must be connected to VT before you log in. If connected after logging in to VT, you will need to close and reopen the browser.
- The [Heartland Peripheral Manager](#) must always be running in the background.
- When disconnecting the PIN pad, always click Stop or Exit on the Heartland Peripheral Manager before disconnecting the device.
- Users may not have more than one PIN pad connected to a single computer simultaneously
- Users may have a PIN pad and a wedge reader connected to a single computer simultaneously
- If the device loses connectivity, follow steps in [Check PIN pad connectivity](#) to troubleshoot and re-establish communication.

Additional recommendations for EMV Pin pads:

- If software updates are available for this device, they will be downloaded when the device is installed. Your device will be ready to use when the Welcome message displays.
- If you remove the EMV device from your computer after it has been successfully installed, VT may continue to behave as if the EMV device is attached until you close and re-open the browser.
- If you remove the EMV device and reconnected it to a different USB port, you should validate the COM port settings, as seen in steps 8-12. Make sure the Local port numbers are the same in both the Heartland Peripheral Manager and VT.

Open Device Manager

Windows 10

1. Click Start.
2. In the Search field, type "Device Manager" and press Enter

Windows 7, 8.1

1. Click Start
2. Right-click Computer, and click Manage
3. Under System Tools, click Device Manager

Heartland Peripheral Manager

Each user will need to download the Heartland Peripheral Manager. All users on a machine will share the settings.

Microsoft .NET Framework

Please note that the Heartland Peripheral Manager requires Microsoft .NET Framework 3.5 or higher. This is standard on Windows 7 or higher. If you receive an error indicating that you need to install this, first validate whether it is already installed, but not enabled on your machine.

1. Go to Programs and Features.
2. Click Turn Windows features on or off.
3. Scroll down to find Microsoft .NET and make sure the check box is selected.

Install the Heartland Peripheral Manager

Each user will need to download the Heartland Peripheral Manager. To install the Heartland Peripheral Manager:

1. Click Admin > Settings.
2. Click the Hardware Drivers tab.
3. Click the Heartland Peripheral Manager link which is located to the right of the PIN Pad Communication label. If asked if you would like to allow the download, always select Run/Yes/Allow Access. You may see a warning about .msi files. Click Actions, then Run Anyway.

Result: The Heartland Peripheral Manager is downloaded. The installer should run automatically. If it does not, you may need to find the file name and double click it to initiate the installation.

Note 1: After installation, you should see a certificate to run HPM. Click yes to install the certificate.


Note 2: If you see a firewall alert the first time you run the program, allow access for the Heartland Peripheral Manager. If you get an "Access Denied" error, you may have to add HeartlandPeripheralManager.exe to your firewall exception list manually.

Note 3: If you receive an error stating that the Heartland Peripheral Manager is currently running, you do not need to launch it from the Start menu. Heartland Peripheral Manager is running and can be accessed from the system tray (click the arrow by the system clock). If the Heartland Peripheral Manager is not in the System Tray, your antivirus software could be blocking it from running. Add HeartlandPeripheralManager.exe to the exception list in your antivirus software. Heartland Peripheral Manager is located in the Program Files on the computer.

Note 4: When the install is complete, the Settings page may display automatically.

Configuration settings

To configure the Heartland Peripheral Manager to communicate with a PIN Pad:

1. Open the Heartland Peripheral Manager Settings page. If the page did not display automatically, then it can be launched from the Start menu or the  icon in the system tray. You may have to allow the application to make changes on the computer; always select Yes/Allow Access.
2. Under Type, select the desired peripheral from the drop down list.
Result: The Advanced Settings are populated with the defaults for the device.
3. Select the [COM Port](#) number for the PIN pad.
NOTE: This is the same COM port that was noted when the PIN pad was installed.
4. Note the Local Port number in the lower section. This number, by default, will match the Local Port in VT under Admin>Settings>Hardware> PIN Pad>Local Port. These two values must always match.
5. Click Save.
6. If you have an EMV PIN Pad, return to Portico VT (see [Install and set up the Ingenico EMV PIN Pad](#), steps 13-16) to apply the settings.

Result: Updates to the software are applied. Please wait until the device displays "Welcome".

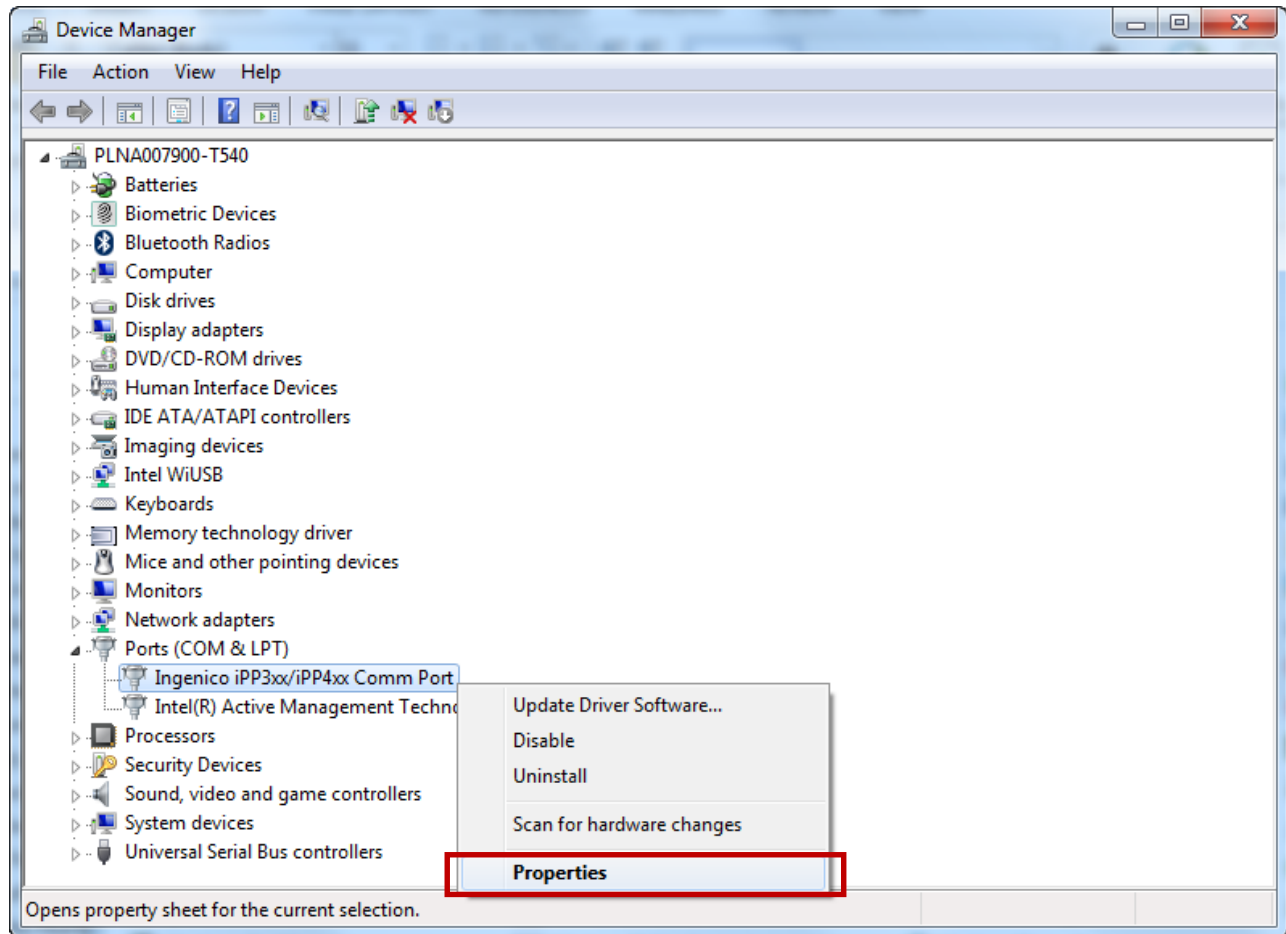
Note: The settings only need to be configured once on the machine. All users on the machine will share the settings file.

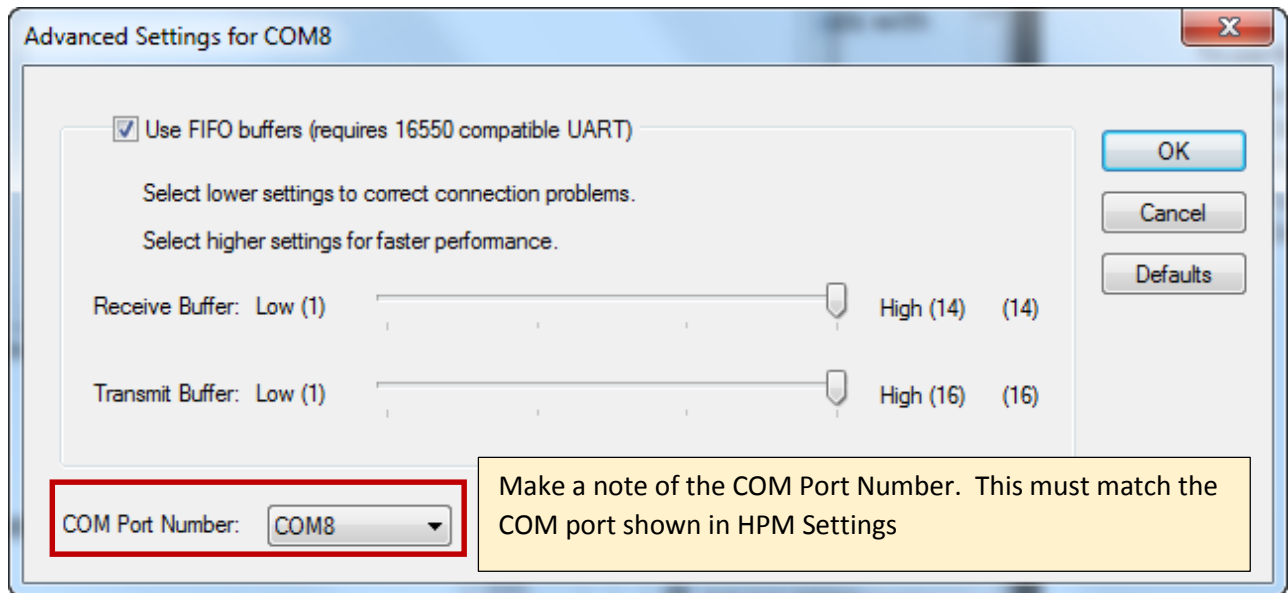
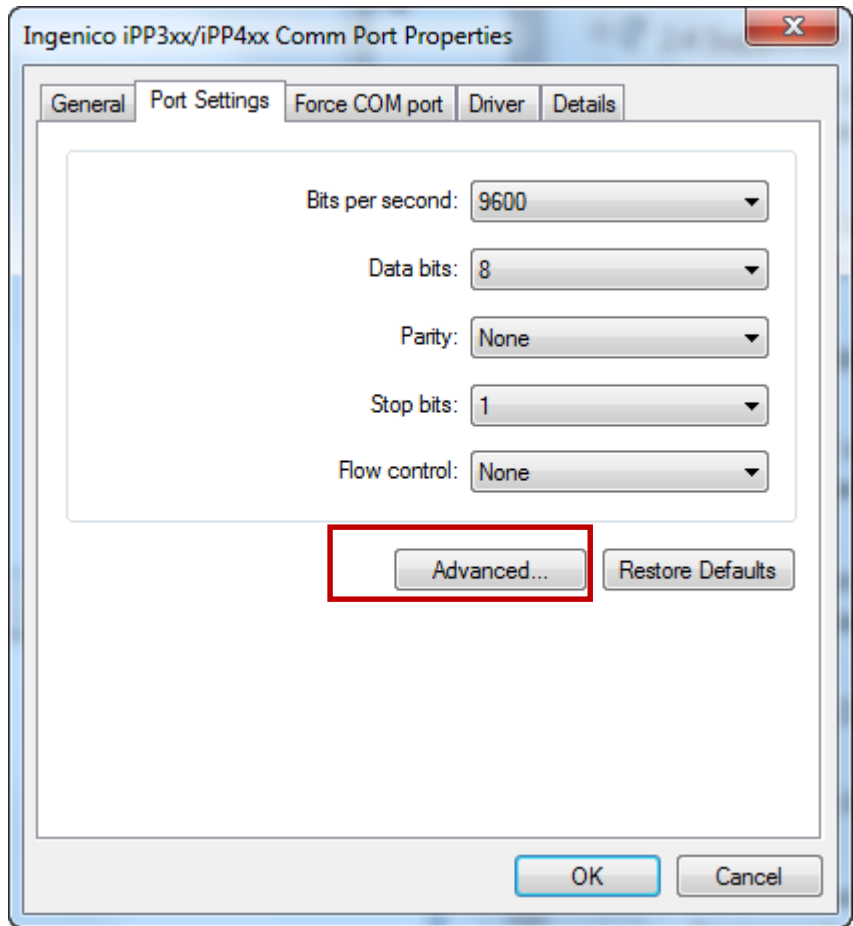
COM port on Device Manager

If you frequently unplug the PIN pad and plug it back in, the COM port may change, even if you are using the same physical USB port to connect the device.


To reconnect the device:

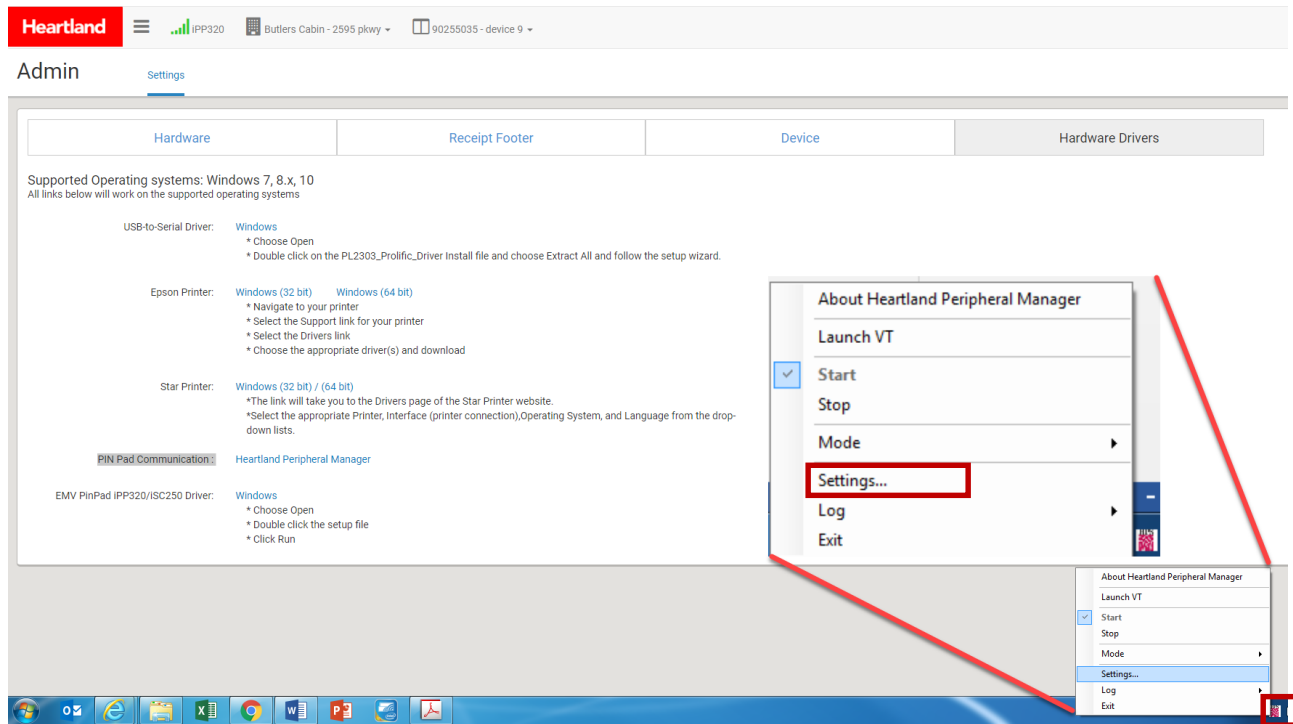
1. Connect the PINPad to computer.
2. Select Control Panel...Device Manager. If you get a Windows prompt asking if you want to allow this program to make changes on this computer, click Yes.
3. Use Device Manager to check the COM port number after plugging the PINPad back in, then update the COM port in Heartland Peripheral Manager.



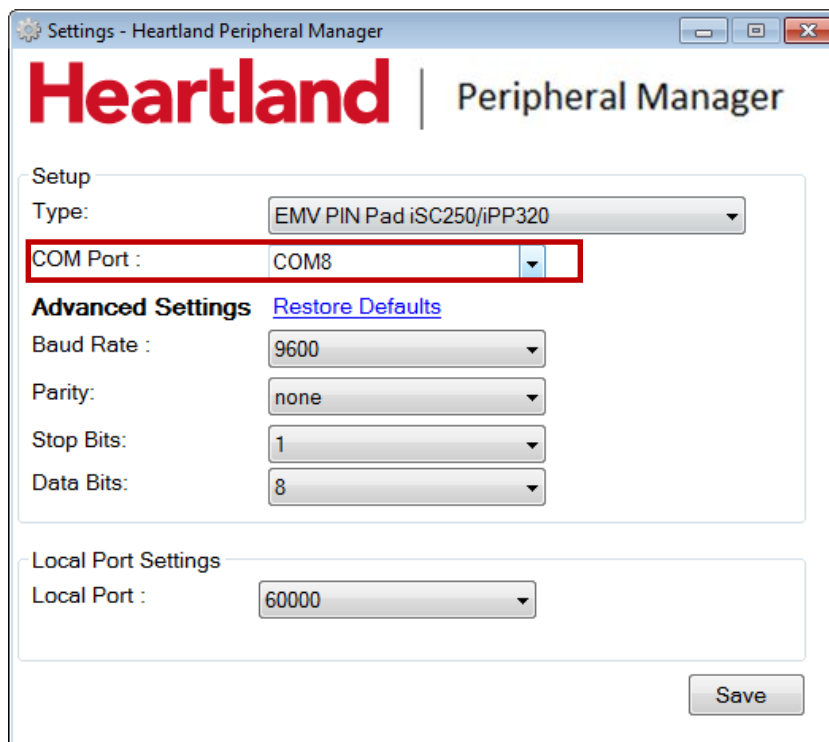


COM Port on HPM Settings

1. Right-Click the HPM icon () located in the Windows system tray at the bottom of the screen (see below)
2. Click Settings...

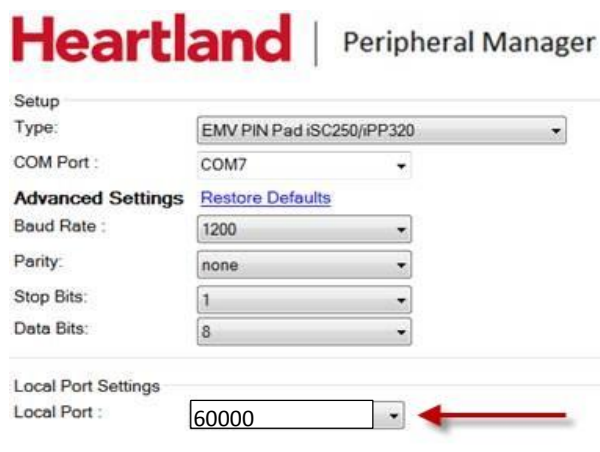
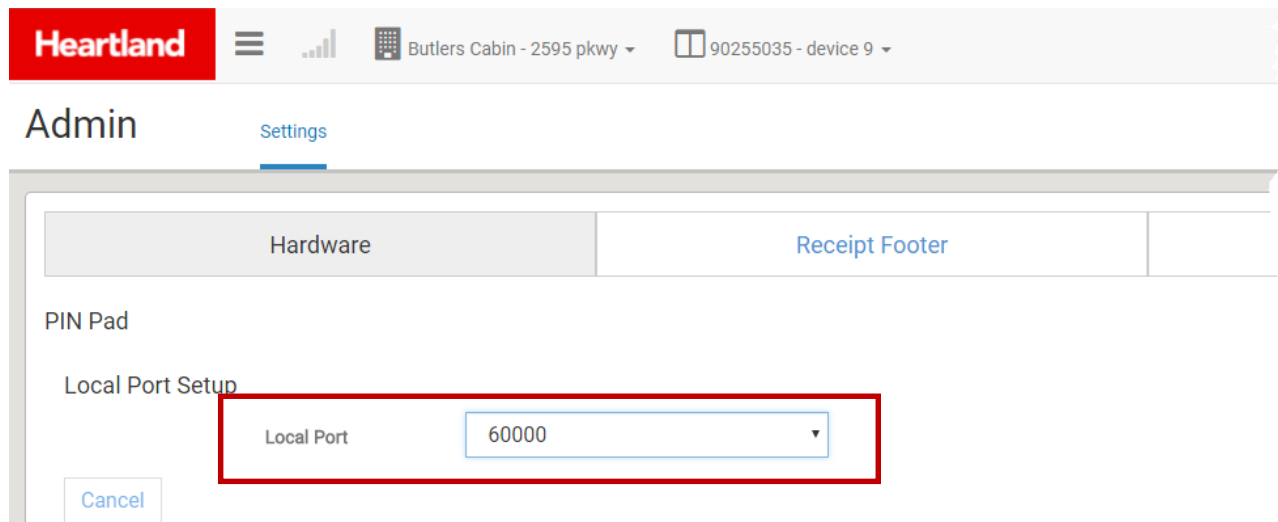


3. Make sure the COM Port number matches the COM Port Number on Device Settings for this device.



Local port consistency

The **Local Port** number in the Heartland Peripheral Manager must always match the Local Port in Portico VT. In VT, this is found under Admin > Settings > Hardware > PIN Pad > Local Port. If the value is changed in one location, it must be updated in the other as well. See the screenshots below:



View/modify settings

If you need to view or modify the settings for the Heartland Peripheral Manager, right-click the Heartland Peripheral Manager icon in the system tray and click Settings. You may have to click the arrow to "show hidden icons" to see the Heartland Peripheral Manager icon.

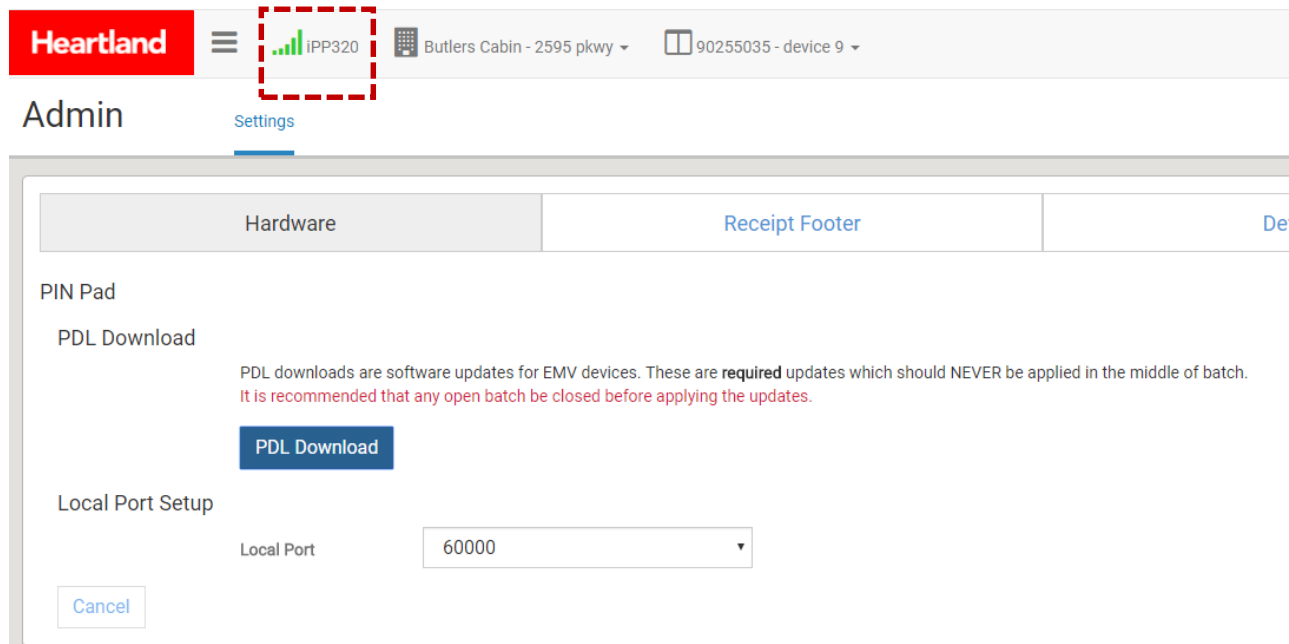
Communicate with PIN pads

To be able to use PIN Pads with Portico VT, Heartland Peripheral Manager must be running. It is set to auto-start when the computer is turned on or when a user logs on. If you have any tools that disable automatic start-up, you will need to manually start the Heartland Peripheral Manager before logging in to Portico VT.


Right-click the Heartland Peripheral Manager icon in the system tray and click Start. You may have to click the "show hidden icons" arrow to see the Heartland Peripheral Manager icon.

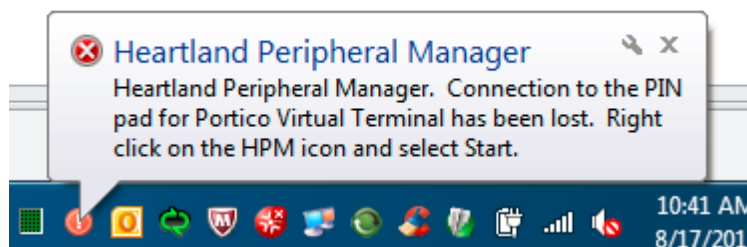
Check PIN pad connectivity

If you experience a problem with the PIN pad, you can check the device connectivity using Portico VT Online. Communication problems can occur if the device is disconnected and reconnected, or attached after login. Click on the check connectivity icon located on the menu/device header on VT (see below).



Communication failure

If the Heartland Peripheral Manager cannot communicate with the PIN pad and the COM port connection is lost, the program will alert the user. A balloon message will display briefly and the application icon in the System Tray will change to display an exclamation mark . Then, HPM will automatically attempt to reconnect. In most cases, that automatic reconnect will be successful.



If the Heartland Peripheral Manager repeatedly shows the communication error and subsequent automatic reconnects are unsuccessful, then follow the steps below:

1. In the System Tray, right-click the Heartland Peripheral Manager icon.
2. Click Exit.
3. Unplug the PIN pad.

4. Close VT (if running) and close the browser.
5. Connect PIN pad to a different COM Port. Use Device Manager to note the new COM port number (refer to PIN pad installation instructions for your device type as needed).
6. In the System Tray, right-click the Heartland Peripheral Manager icon.
7. Click Settings.
8. Update the COM port to the new number.
9. Click Save.
10. In the System Tray, right-click the Heartland Peripheral Manager icon.
11. Click Start.
12. Re-launch VT.

Multiple users

If you have multiple users sharing a computer, each user will have their own instance of Heartland Peripheral Manager installed.

Heartland Peripheral Manager will auto-start when the computer starts or when a user logs in.

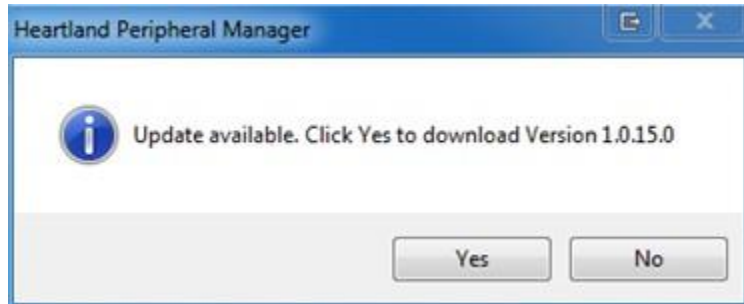
Windows allows the option to "Switch User". If this feature is used, the original user's Heartland Peripheral Manager is closed, but the new user will need to manually start the Heartland Peripheral Manager from the Start menu.



Software updates

Occasionally, software updates for the Heartland Peripheral Manager may be made available. These are required updates. *These should not be applied in the middle of a batch. It is recommended that any open batch be closed before applying updates.*

Each user must download and install any updates. When updates are available, a notification will be displayed when you reboot your computer and/or when you exit and then restart the tool.



If you click Yes, you will be prompted to save the new .msi file. Go to step 5.

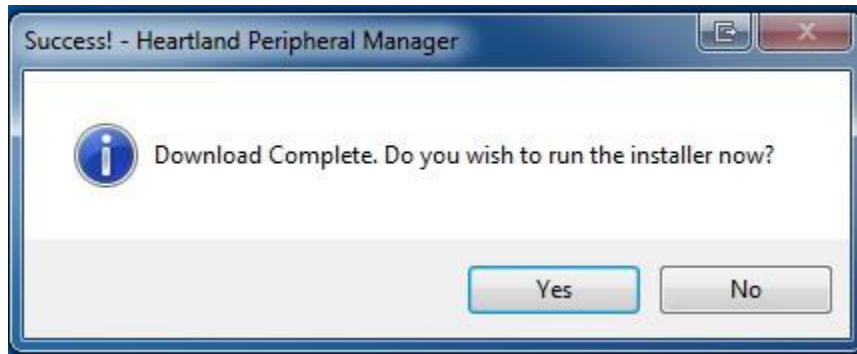
If you click No, the new file is not downloaded. To download the updates later:

1. Right-click on the Heartland Peripheral Manager icon.
2. Click About Heartland Peripheral Manager.
3. The page will indicate whether there is an updated version, with the option to download the file.



4. You can:

- a. Click the X to close the dialog box. Step Results: Heartland Peripheral Manager continues in the background; the new .msi file is not downloaded.
 - b. Click Download Now. Step Results: You are prompted to save the new msi file.
5. Click Save. Step Result: The file is downloaded. Note the location of the file download, or select a new location, if preferred. A dialog box will appear when the update is complete, with the option to install the update.



- a. Click Yes. Step Result: The update will install. This may take a few minutes. Then Heartland Peripheral Manager is shut down and re-started. You may need to check PIN pad connectivity when the process is complete.
- b. Click No. Step Result: Heartland Peripheral Manager continues in the background; updates are not applied. To install updates later, find the location where you downloaded the .msi file. Double-click the file name to install the updates.

Printers

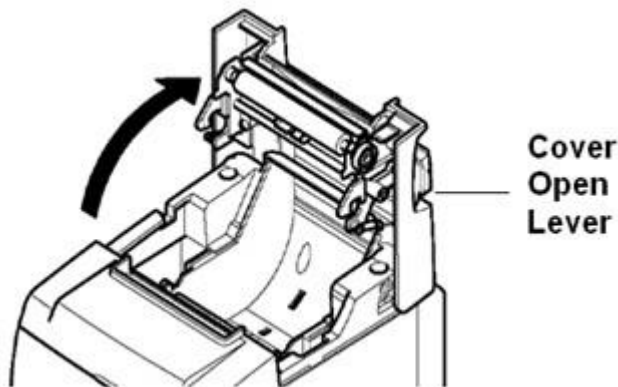
Epson Printer

1. Click Admin > Settings > Hardware Drivers.
2. Locate the drivers for the Epson Printer and click the link of the desired driver. This will take you to the Epson printer web site
3. On the Epson printer web site, click on the **For Work** menu, then choose **Point of Sale**.
4. Locate the printer you are using and then click the Support link that is associated with that printer.
5. Locate the Drivers for the selected printer and follow the download prompts.

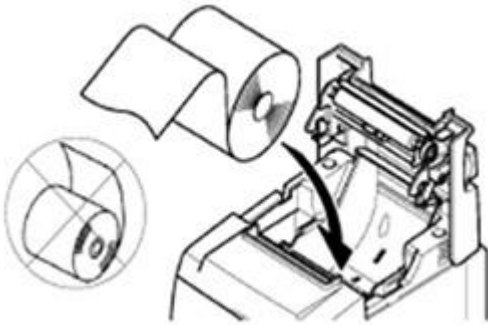
Star printer

Install Star printer

1. Make sure the printer is turned off.
2. Plug in the USB Cable to the printer. Do not plug in it to the computer at this time.
3. Plug in the required peripheral cable between the printer's peripheral connector and your computer. The peripheral cable must meet the requirements shown in the manufacturer's documentation. (The USB Cable is supplied with printer.)
4. Load the roll paper. Be sure to use roll paper that matches the printer's specification.
5. To open the printer's cover, press the cover open lever.



6. Properly orient the paper roll according the following figure.
7. Set the roll paper slot into the roll paper groove and then pull the leading edge of the paper toward the front of the printer, leaving some excess to hang over the front of the printer.



8. Close the printer's cover by pushing down on both sides. Make sure the cover is securely closed. Leave the excess roll paper for now. When the printer's power button is pressed, the paper is automatically cut.



8. Connect the USB cable from the printer to the computer.

Set up the Star printer

1. Click Printers and Faxes from the Start menu.
2. Right-click the Star Micronics TSP 100 icon.
3. Select Set as Default Printer.
4. Click Properties.
5. Click Devices.
6. Click the + (plus sign) to expand the Installable Options.
7. Select Partial Cut from the Document Cut Type list.
8. Click OK.
9. Click TSP Config.
10. Click Launch Configuration Application. Step Result: The Select a Printer window displays.
11. Click Star Line Mode (default) and OK. Step Result: The Select an Emulation window displays.
12. Click Star Line Mode (default) and OK. Step Result: The Star Micronics TSP 100 Configuration (Star Line Mode) window displays.

13. Use the following in General Settings:

- a. Zero Style: Standard (0) or Slashed (Ø)
- b. Line Spacing: 4mm adds 1 mm line between each line of characters: 3 mm omits any line spacing.
- c. Print Width: 72mm uses 4 mm left and right margins on 80 mm roll paper; 51mm uses 3.5 mm left and right margins on 58 mm roll paper.

14. Click Apply Changes.

Set up second copy printing

If applicable to your application, set up second copy printing of a receipt. This is done from the Star Printer Properties window (see the Setup in Heartland Portico section for instructions on opening the Properties window).

To set up second copy printing, from the Star Printer Properties window:

1. Click Journal in the list of choices displayed at the left of the window.
2. Click the First Copy tab.
3. Check Automatic Multiple Copies and Enable. Step Result: An original receipt is created.
4. Click the Second Copy tab.
5. Check Enable.
6. Click Apply Changes.
7. Continue with the next step or click Close.

Set up receipt printing orientation

If applicable to your printer's orientation (wall mounted/vertical printing position) and desired; set up vertical printing. This is done from the Star Printer Properties window (see the Setup in Heartland Portico section for instructions on opening the Properties window).

To set up receipt printing orientation, from the Star Printer Properties window:

1. Click Vertical Mount in the list of choices displayed at the left of the window.
2. Check Enable Vertical Mount Mode (reverse printing).
3. Click Apply Changes.
4. Click Close.

Note: You do not need to set up the margins in Heartland Portico if you already set them up.

Test the Star printer

1. Press the power button to turn off the printer.
2. Press and hold down the FEED button and press the power button to turn on the printer. Step Result: The printer runs the test print according to the version number, DIP switch settings, and character order.
3. After the printer starts printing, release the FEED button. Step Result: The printer returns to normal mode after the test.