



cradlepoint
TECHNOLOGY

PS6U1UHE USB-Host to Ethernet Adapter



User Guide

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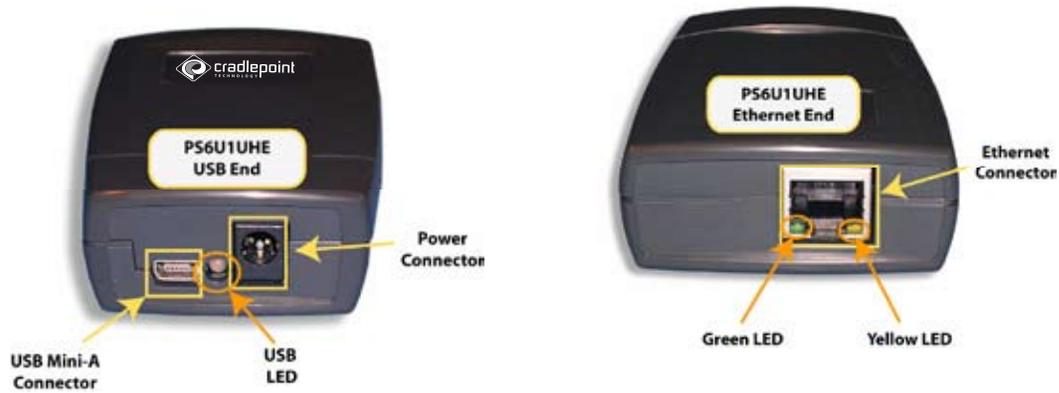
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Introduction

The **CradlePoint PS6U1UHE** serves as an essential data communications device, enabling you to synchronize the information on your Symbol® MC1000 and a host computer across a standard Ethernet network.

There are 3 connection ports on the PS6U1UHE. These are described below:



Ports	Function	
5VDC 1A (Power)	A standard barrel port used for connecting the included Power Adapter.	
USB Mini-A	Used to connect to the M1000 USB port for ActiveSync, or other communications, to other computers on the Ethernet networks. The special USB Mini-A to Mini-B adapter cable is included.	
Ethernet (RJ45 Ethernet Port)	Used to connect to your Ethernet network for ActiveSync, or other communications, to other computers on the networks, using a standard RJ45 Ethernet cable <i>(The standard Ethernet cable is not provided)</i> .	
Lights	Function	
USB LED	Flashing yellow (slow)	Start up, acquiring IP address
	LED off	IP address acquired, no terminal connected (no PPP connection), no other problems
	Solid Red	IP address acquired, terminal connected but no PPP connection established
	Solid Green	IP address acquired, terminal connected (PPP connection established)
	Flashing Green (slow)	PPP traffic, active communication
	Flashing Red (rapid)	Unable to acquire IP address, Timeout, general error
Ethernet Green LED (left)	Solid Green	Link established
	Flashing Green	Link activity
	Off	No link established
Ethernet Yellow LED (right)	Off	10 Mb connection
	Solid Yellow	100 Mb connection (not available this model)

Getting Started

Before You Begin



Before you can successfully connect your Symbol MC1000 to your network with your PS6U1UHE, you must have successfully configured your device for ActiveSync operations. For assistance with ActiveSync operations, please refer to your Symbol Integrator Guide.

Only after you have successfully created an ActiveSync partnership between your MC1000 and your host computer, and completed an ActiveSync operation, should you attempt to connect your device to your network. This is important even if you plan to use other 3rd Party synchronization software, because using ActiveSync allows you to validate your software/hardware installation. Then, if you have problems later making your 3rd Party software work, you can focus on the 3rd Party software configuration because you know everything else works fine.

Connecting to the PS6U1UHE

Setting up the MC1000

Before you can successfully synchronize your MC1000 across your network using the PS6U1UHE USB-Host to Ethernet Adapter, you will need to confirm the following information:

- That your network has an active DHCP server to provide dynamic IP addresses



If your network, or custom synchronization application, requires the use of static IP addresses, after you finish Step 5 below you will have to configure PS6U1UHE using information contained in the Cradle Manager Software User Guide. The Cradle Manager Software and the User Guide can be downloaded from www.cradlepoint.com.

Installing eConnect™ on the MC1000

The MC1000 requires the installation of eConnect™ software to enable it to communicate through your network to complete ActiveSync, or other synchronization operations. By design, the MC1000 functions as a USB client device. With the installation of this software, your MC1000 will be able to connect to your host computer using the PS6U1UHE as a USB host device for that connection.

Step 1 – Download the software

Access www.cradlepoint.com support page and download the latest PS6U1UHE eConnect™ software. Download the file to your computer to a folder where it can be easily accessed.

Step 2 – Verify MC1000 Configuration

Before you start to install the MC1000 driver software, you must ensure you have successfully completed an ActiveSync between the MC1000 and your computer via the MC1000's USB cable.

If you have not already configured ActiveSync, please do so now and ensure that you can successfully synchronize between the MC1000 and your PC before you continue. If you need help, refer to your MC1000 Integrator's Guide, or contact Symbol Technical Support for assistance.



Step 3 – eConnect™ Installation

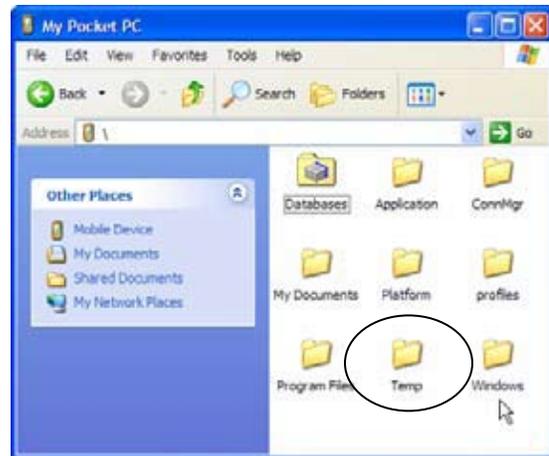
To install eConnect™ directly onto the MC1000, follow these simple steps:

- ❑ Connect the MC1000 USB cable to a USB port on your computer.
- ❑ Open your Windows Explorer and browse to the folder eConnect™ was downloaded to and locate **eConnectCE4.03.02.cab**.



- ❑ Next, open ActiveSync and click on the **Explore** button.

- ❑ Then "drag & drop" the eConnectCE4.03.02.cab **file** onto the **\temp** icon in the ActiveSync window. You will be prompted that the file may need conversion. Simply click **OK** to continue.



Step 4 – Install the CAB File

- ❑ Browse the MC1000 to open the **\temp** folder. You should find the **eConnectCE4.03.02.cab** file.



- ❑ Highlight the **eConnect cab file icon** and press the **Enter** button to install the file, which will bring up the Install Window.



- ❑ Do NOT choose a destination folder. Highlight the **OK** button in the top right corner of the display window and press **Enter** button.
- ❑ The CAB file is automatically removed after the installation is complete.

- After the CAB file installation completes, you will need to warm boot the MC1000 by pressing and holding the red **ON/OFF** button until the device resets. This process will add eConnect to your Applications Folder. Consult your MC1000 documentation if you need help with performing a warm boot.

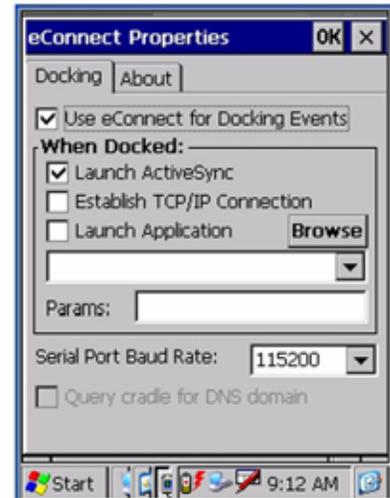


Caution

Be careful when performing a "warm boot" on the MC1000. The same activity that initiates a "warm boot" will also initiate a "cold boot." They are only a matter of seconds apart between a "warm" or "cold" boot. The results, however, can be significant. A "cold boot" will remove all data and applications and return the MC1000 to a default factory status. You can relax a little, however, because eConnect will automatically reinstall itself for you.

Step 5 – Configuring eConnect™

- Open the Applications folder, and highlight the eConnect icon. Press the **ENTER** button to display the eConnect Properties dialog.
- When eConnect Properties dialog opens, you can configure eConnect as follows:
 - **Use eConnect for Docking Events**
When checked, eConnect will automatically sense when the terminal is inserted into a cradle and will carry out the options you have selected in the **When Docked** area.
 - **When Docked**
 - **Launch ActiveSync** – If checked, the terminal will attempt synchronization when a connection is detected. This can happen only if the terminal and a PC have a previously established partnership. ActiveSync is launched with the system settings established by the user.



Checking this option automatically un-checks the next two options, if either of them was checked.

- **Establish TCP/IP Connection** – Establishes a TCP/IP connection with the cradle, allowing applications to bypass ActiveSync and communicate directly with nodes on a network via TCP/IP.



Checking this option automatically un-checks the "Launch ActiveSync" option, if it was checked.

- **Launch Application** – Specifies that eConnect should automatically launch an application when you cradle the terminal. Any file that has an association with a registered program will run. You may also elect to launch a shortcut if the session needs special settings or command line parameters.

- If **Establish TCP/IP Connection** is also checked, the application is run after the connection is established.



Checking this option automatically un-checks the "Launch ActiveSync" option, if it was checked.

- Tapping **Browse** displays the **Select Application** dialog.

If necessary, you can browse for the application and enter any command-line parameters.

Pressing **OK** accepts the entries and returns to the original settings dialog with the new entries displayed.

Pressing **X** (Close) returns to the original settings dialog.



- **Application to be Launched** text box – displays the path and filename of the selected application.
- **Params** – Displays any command-line parameters associated with the application.
- **Serial Port Baud Rate** – Selects the baud rate for the serial connection between the terminal and the cradle. The default connection is 115,200 baud. Set the appropriate rate for your cradle.
- **Query cradle for DNS domain** – Some cradles have the ability to present the DNS domain name to eConnect. Checking this will direct eConnect to query the cradle for the domain name and store that in the terminal registry.



This option is enabled only if **Establish TCP/IP Connection** is checked.

When you are done, press **OK** at the top of the screen.

Step 6 – Finishing Up

- Connect the MC1000 to the PS6U1UHE device and to your network, as described in the next sections. Make sure the MC1000 cradle is also plugged into an active power outlet.
- Turn on the power to the MC1000 and place it into the cradle to start a synchronization action or launch an application (if you have it configured to do so).

Connecting the MC1000 to the PS6U1UHE

Setting up your PS6U1UHE is easy and includes only these simple steps.

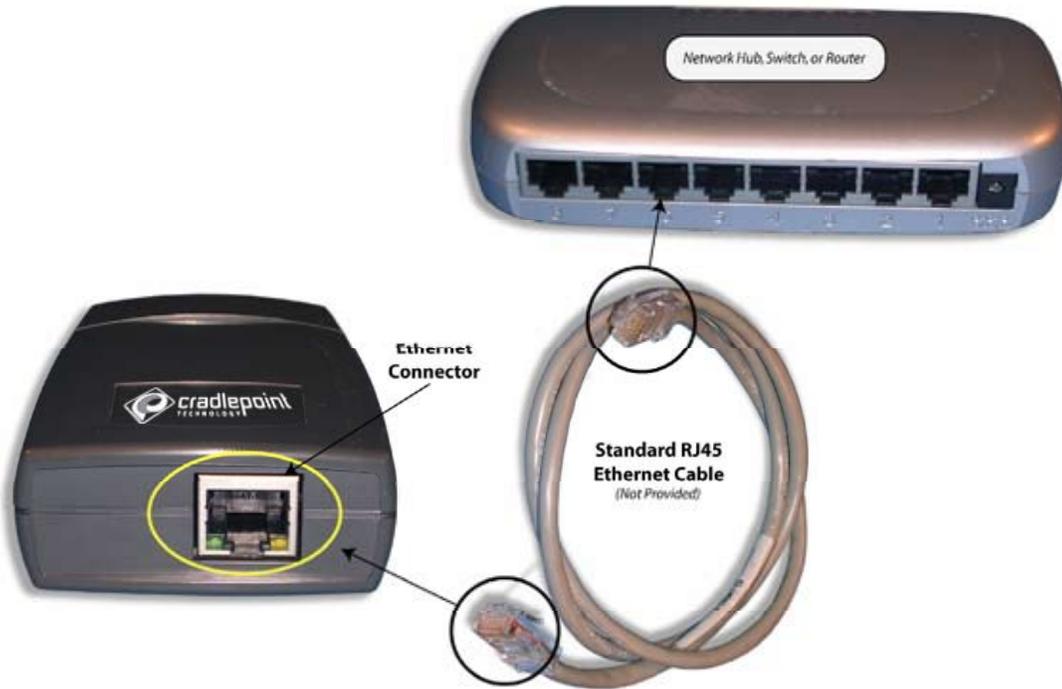
1. Connect the Power Supply (PN 170140-000), as shown below.
2. Connect the MC1000 to the PS6U1UHE using the USB Mini-A to Mini-B Cable (PN 170373-000), as shown below.
3. Connect the Ethernet Cable to the network (see the Section "Connecting the PS6U1UHE to your Network for more information.)



Connecting the PS6U1UHE to your Network

Completing the setup of the PS6U1UHE to your network is as simple as:

1. Connect one end of a standard RJ45 Ethernet cable to the PS6U1UHE, as shown below.
2. Connect the other end of the cable to an open port on your network's hub, switch, or router, as shown below.



Partnerships with More than One Desktop/Laptop PC

If a terminal has an ActiveSync partnership with one desktop/laptop PC and you want to be able to connect to one additional PC, adjust the ActiveSync PC synchronization settings to add an ActiveSync partnership to that computer:

1. Launch eConnect as previously described. In the Properties dialog, uncheck "Use eConnect for Docking Events."
2. Press **OK**.
3. Connect the terminal to the second PC. The New Partnership wizard will start. Follow the directions on the screen.
4. On the terminal, re-check "Use eConnect for Docking Events" in eConnect Properties.
5. Press **OK**.
6. Before you connect to any desktop/laptop PC, launch ActiveSync and in **Tools-Options**, check "Include PC when synchronizing remotely and connect to:" and select the appropriate computer from the list.

When You Can't Use DHCP

For most installations, it is not necessary to manually configure the USB-Host to Ethernet Adapter. The PS6U1UHE uses DHCP to automatically configure its network settings by default. For installations on networks that do not have a DHCP server or must use static IP addresses for other reasons, it is possible to customize the Adapter's configuration (e.g. setting a static IP address, assigning specific name to the Adapter, etc.). Please download the Cradle Manager software package from www.cradlepoint.com. Installation and configuration information is contained in the setup instructions included with the download. Once the software is installed, you will use the Cradle Manager component to configure your PS6U1UHE.

Uninstall eConnect



It is extremely important that you follow these steps. Failure to do so will prevent ActiveSync from being able to detect cradle events.

If you ever cold-booted the terminal after installing eConnect via the .cab file, eConnect will not appear in the Remove Programs list in the Control Panel. To uninstall, display ActiveSync Explorer on the PC and remove the files manually using the instructions in Manual Removal below.

To uninstall eConnect from the MC1000, follow these simple steps:

1. Go to **Start | Settings** and select the eConnect icon. Press the **Enter** button to open eConnect.
2. Check **Launch ActiveSync**.
3. Uncheck **Use eConnect for Docking Events**.
4. Press the **OK** button at the top of the screen.
5. Locate the **Remove Programs** icon and press the **Enter** button.
6. Select **InVision eConnect** in the programs list.
7. Locate the **Remove** and press the **Enter** button. Then select **Yes** in the Remove Program dialog and press the **Enter** button.
8. Press the **OK** button at the top of the screen.
9. Warm boot the terminal to remove the eConnect icon from the Control Panel.

Manual Removal

If you cannot remove eConnect using the above method, you will have to remove the files manually using the following simple steps.

1. Reconnect the MC1000 directly to the Host computer using a USB cable.
2. Open ActiveSync and re-establish an active connection. Then open the ActiveSync Explorer.
3. Browse to the "\\Windows" folder on the MC1000 and then find and delete the following files: eConnect.cpl and eConnect.exe.
4. Browse to the "\\Windows\\Startup" folder and delete the eConnect.lnk file.
5. Next browse to the "\\Applications" folder and find and delete the following files: eConnect.cpl, eConnect.cpy, eConnect.exe, eConnect.reg, and eConnect.lnk.
6. Warm boot the terminal to remove the eConnect icon from the Control Panel.

Product/Technical Support

CradlePoint is committed to providing its customers with first-class customer service and technical support. For your convenience, a few troubleshooting techniques are provided below that might help you fix your problem quickly and easily. If you have a different issue, or if you have tried these and they didn't resolve your problem, please feel free to contact Technical Support at:

CradlePoint, Inc.
1199 Shoreline Ln Suite #301
Boise, ID 83702

Phone (208) 424-5054
Fax: (208) 429-6852

E-mail: support@cradlepoint.com
Web: www.cradlepoint.com

Product Registration

A product registration card is included with your PS6U1UHE product. Please fill out the registration card and drop it in the mail so that we will know who you are if you ever need to call. While registration is not required to resolve warranty claims, it will help make any warranty claim easier to complete.

Troubleshooting

Symptom: Nothing Works!

Possible Cause	Action
Poor cable connections	Check the cables to ensure you have them connected correctly and securely. For more information, see the earlier sections on how to connect the cables. When properly connected, the lights on the adapter ends will be lit. Review the various light activity descriptions in the Introduction Section for further troubleshooting assistance.
No power	The MC1000 requires a power adapter (<i>PN 170140-000</i>) to work correctly.
Network problems	Check the LEDs on both ends of the PS6U1UHE to help determine if you are having network problems. A description of each light's color and its meaning is contained in the Introduction Section.

Symptom: It won't ActiveSync!

Possible Cause	Action
ActiveSync partnership between host computer and your MC1000 is not correctly established	Reconnect the MC1000 directly to the host computer and try an ActiveSync operation. If it fails, refer to the Symbol Integrator Guide for guidance with ActiveSync problems, or contact Symbol Technical Support. If ActiveSync works OK when directly connected to the host computer, see the remaining "possible cause" items.
PS6U1UHE not configured for DHCP	Reconfigure device to accept DHCP IP address
Cannot find DHCP/WINS server(s)	Ensure PS6U1UHE adapter is connected to a router, switch, or hub that is serviced by a DHCP and a WINS server.
Missing, or improperly configured, software drivers	Reset (cold boot) the MC1000 as directed in Symbol Integrator Guide. Reinstall and reconfigure software drivers in accordance with current instructions.
Won't automatically ActiveSync when inserted into the cradle	<ol style="list-style-type: none"> 1. The eConnect™ software is not configured correctly. 2. The MC1000 is not correctly seated into the cradle.
Network problems	Check the LEDs on both ends of the PS6U1UHE to help determine if you are having network problems. A description of each light's color and its meaning is contained in the Introduction Section.

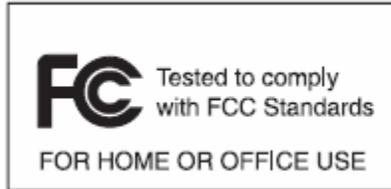
Other ActiveSync Problems

If you require more information on the ActiveSync process, please refer to the ActiveSync chapter in your *Symbol Integrator Guide* or visit www.Microsoft.com and search for ActiveSync. For help with other technical issues, contact CradlePoint Technical Support using the contact information provided at the start of this chapter.

Appendix A – Regulatory Information

Radio Frequency Interference Requirement

FCC Statement



This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with

the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio or television technician for help.

Changes or modifications not expressly approved by Mobility Electronics could void the user's authority to operate the product.

Radio Frequency Interference Requirement - Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Appendix B – Warranty

CradlePoint, Inc. warrants this product against defects in materials and workmanship to the *original* purchaser (or the first purchaser in the case of an authorized reseller) for a period of one (1) year from the date of shipment. This warranty is limited to a repair or replacement of the product. To obtain warranty service, the purchaser must first call CradlePoint, Inc. for an RMA number, then return the product to CradlePoint, Inc. for repair or replacement.

Purchaser shall prepay shipping charges for products returned to CradlePoint, Inc. CradlePoint, Inc. will pay for return of the products to purchaser, except that purchaser shall pay all shipping charges, duties, and taxes for products returned to CradlePoint, Inc. from a country other than the United States.

CradlePoint, Inc. makes no other warranty of any kind with regard to this material. CradlePoint, Inc. shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

Within thirty (30) days of receipt should the product fail for any reason other than damage due to customer negligence; purchaser has the right to return the product for a full refund of the purchase price. If the purchaser wishes to upgrade or convert to another CradlePoint, Inc. product within the thirty (30) day period, purchaser has the right to return the product and apply the full purchase price toward the purchase of the other product. Any other return will be subject to CradlePoint, Inc.'s existing restocking policy.

CRADLEPOINT, INC. WARRANTS THAT THIS PRODUCT IS NEW OR HAS BEEN REMANUFACTURED TO MEET NEW STANDARDS USING NEW OR SERVICEABLE USED PARTS. CRADLEPOINT, INC. MAKES NO OTHER WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THIS PRODUCT. CRADLEPOINT, INC. SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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