

# Lighthouse™

## Wireless Adapter Instructions

### Introduction

The Lighthouse Wireless adapter let you connect your Lighthouse Controller to any standard wireless network. The adapter supports the 802.11 b/g wireless standard which is used in virtually all narrow band wireless networks. In order for the adapter to connect to your network, you need to perform a one-time setup procedure. If you ever change or replace your wireless modem, router, or server, you may have run the setup procedure again.

The Wireless Adapter is set up independent from the Lighthouse Controller. If possible, we highly recommend that you first get your Lighthouse Controller working on a wired Ethernet connection (you may need to temporarily move the controller closer to your network equipment). If you can access your Lighthouse on a Web Browser through a wired connection, then setting up the wireless adapter is easier, especially when it comes to troubleshooting.

### Setup

You must first configure the Wireless Adapter so that it can connect to your wireless network. If you have more than one network, the configuration will also allow you to choose which wireless network to use.

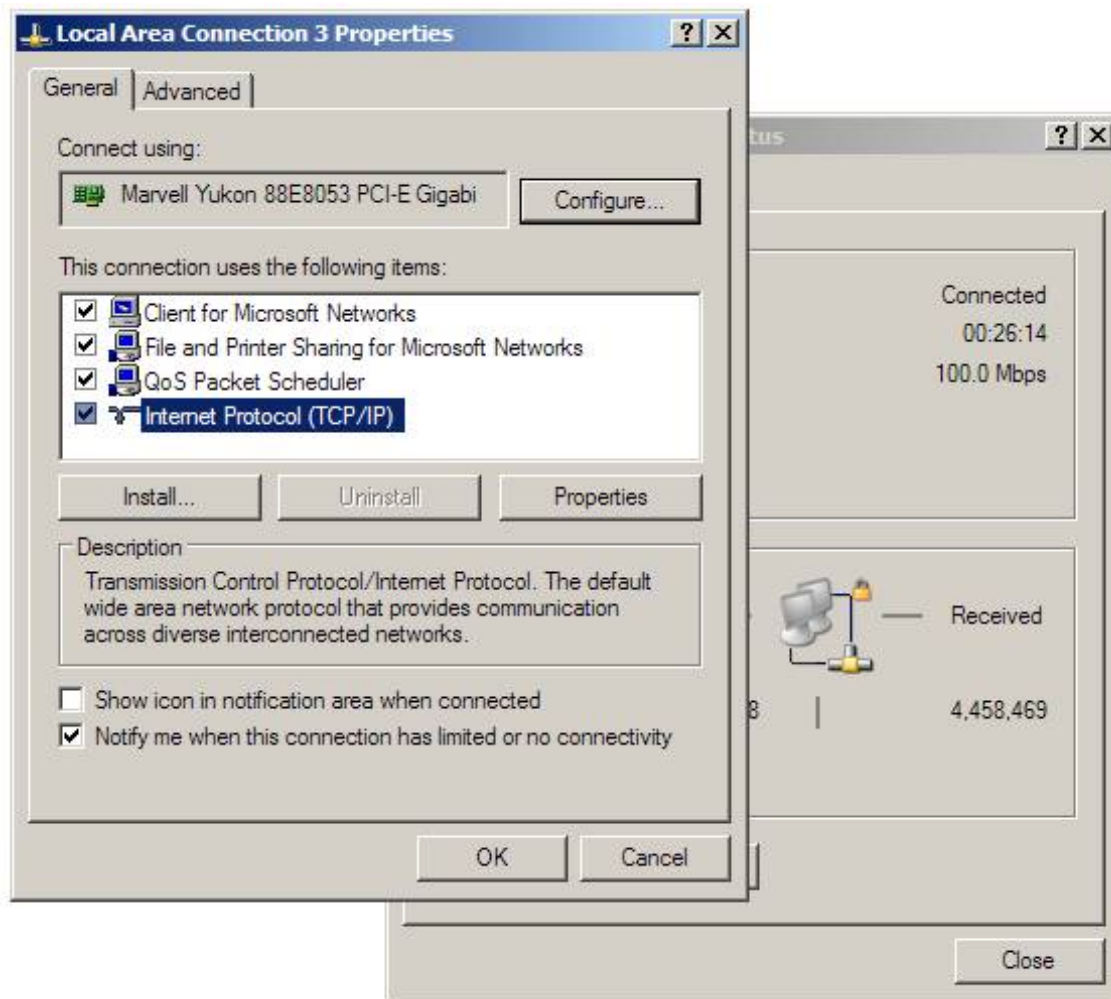
NOTE: If your network was set up for you and you have no knowledge of how to configure computer network equipment, you should contact the person or company who configured your network to help you follow this procedure.

**STEP 1:** Using the yellow Ethernet cable, connect one end of the cable to the back of the Wireless Adapter and the other end to your computer. *Do not connect the cable to the Lighthouse at this time.* You may have to unplug any existing Ethernet jack to disconnect your computer from your network. If your computer normally connects wirelessly, then disable your wireless connection as well.

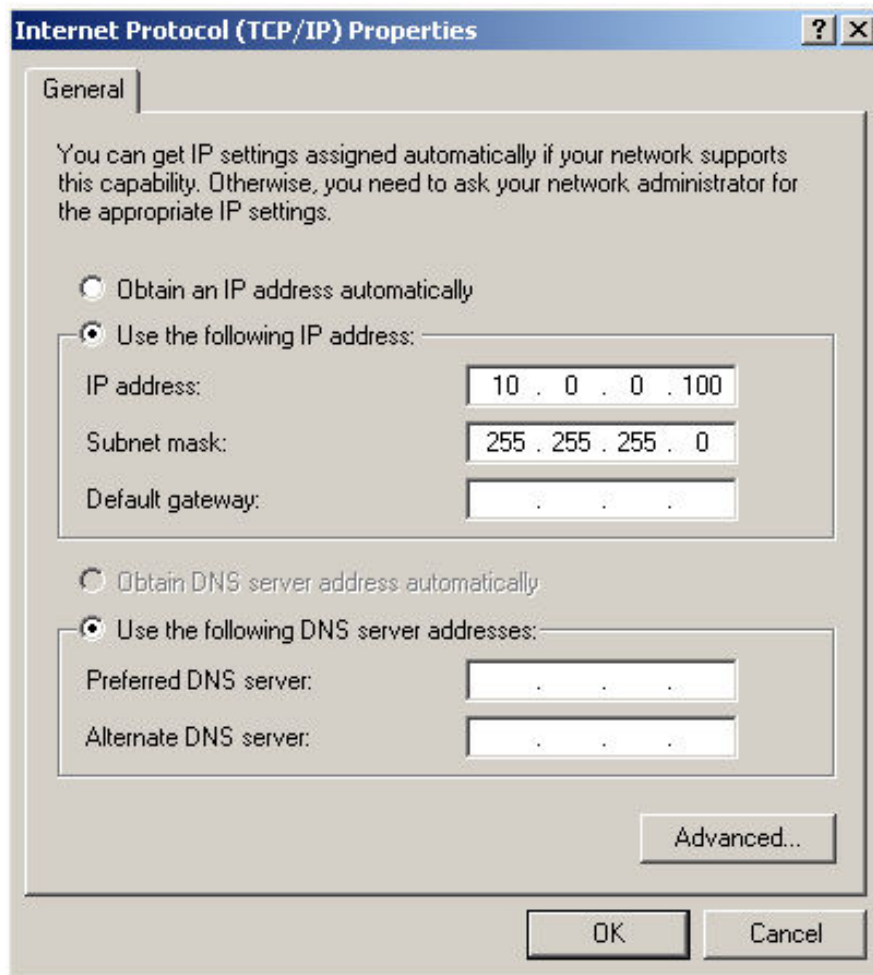
**STEP 2:** Plug the jack of the wall transformer into the back of the Wireless Adapter and then into a wall socket. After a few seconds you should see the green POWER LED light up and the yellow LINK/ACT LED also lit up. Adjust the two antennas so they are pointing straight up.

**STEP 3:** Go to your computer and start your Web browser. The default IP address of the Wireless Adapter is 10.0.0.200. If your computer is already on the 10.0.0.xxx subnet, then skip ahead to STEP 5.

**STEP 4:** You need to temporarily change the IP address of your computer in order to view the Wireless Adapter web pages. For Windows, go to the *Control Panel* and click on *Network Connections*. There will be item in the list called *Local Area Connection* followed by a number (depending upon your computer, the name may be slightly different). Click the connection and another window will open. Now click the Properties button. On the next window, highlight Internet Protocol (TCP/IP) and click the properties button.



On the *Internet Protocol (TCP/IP) Properties* page the *Obtain an IP address automatically* button is most likely selected. If not, write down any numbers in the text fields so that you can restore them later. Select the *Use the Following IP address* button and enter 10.0.0.100. In the *Subnet mask* enter 255.0.0.0. Leave the *Default Gateway* and all other fields blank. Now click the *OK* button then close all the windows.



**STEP 5:** Open your web browser, and type in `http://10.0.0.200` which is the default address of the Wireless Adapter. You should see the Wireless Adapter Web page come up, asking you for a password. DO NOT ENTER A PASSWORD- just click the *Login* button.

Now click the *Wireless* button on the left side of the page, then click *Site Survey*. After a few moments, a list of all wireless networks in the area will be displayed. Click the name of your network listed under the SSID title.

**STEP 6:** If you do not use wireless security on your network, skip ahead to Step 7.

The Wireless Adapter works with networks that have WEP or no security set, but does NOT work with WPA security. If your wireless network has WEP security enabled, click the *WEP Configuration button*. Most users should then click *64-Bit Manually* and enter the 5 sets of two digit numbers/letters of your WEP key. Click the *Save Changes* button.

**STEP 7:** Now click the *LAN* button then click *LAN Settings*. On this screen you can change the IP Address of your wireless adapter if needed.

If your LAN is already on the 10.0.0.xxx subnet, you don't need to change the IP address. If it is not, change the address to match your network. For example, if you network is on the 192.168.0.xxx subnet, then change the IP address to 192.168.0.251. See the "Connecting to

an Existing Network" section in the Lighthouse manual for basic information on IP addresses. Click the *Save Changes* button.

The screenshot shows a 'LAN Settings' window with the following fields:

- Game Point! Name :** Lighthouse1 (optional)
- IP Address :** 192 . 168 . 0 . 251
- Subnet Mask :** 255 . 255 . 255 . 0

At this point, the wireless adapter page will no longer respond because you changed the IP address it was using for communications. This is normal.

Now unplug the cable from the back of your computer. Restore the *Internet Protocol (TCP/IP) Properties* settings at your computer that were originally there. In most cases, all you need to do is click the *Obtain an IP address automatically* button and the *Obtain DNS Server Address Automatically*. Then click the OK button.

**STEP 8:** Remove the power cable from the wireless adapter. Move the adapter to your Lighthouse Controller, and connect the yellow cable to the back of the Lighthouse. You should now be able to enter the IP address of your Lighthouse and see its web pages on your Web browser.

### Macintosh Setup (Mac OS X)

- 1) From the DOCK, choose SYSTEM PREFERENCES then NETWORK to display the Network pane.
- 2) Be sure AUTOMATIC is selected from the Location list box.
- 3) Under the SHOW drop down tab, choose "Built-in Ethernet".
- 4) Under CONFIGURE, specify that you want to use static IP addressing and enter 10.0.0.100 as the IP address and 255.255.255.0 as the subnet mask.
- 5) Close the TCP/IP window. Click the SAVE button.

Go to STEP 5 on the previous page to setup the wireless adapter.

### Troubleshooting

SYMPTOM	REMEDY
The green power light does not come on.	-Make sure the wall transformer jack is pushed all the way into the back of the unit and the transformer is plugged in.

<p>The yellow ACT/LINK light does not come on.</p>	<ul style="list-style-type: none"> <li>- The Ethernet cable is not plugged into your computer (during setup).</li> <li>- The cable is not fully inserted into the back of the Lighthouse.</li> </ul>
<p>During setup, the Wireless Adapter Web page is not found and does not display.</p>	<ul style="list-style-type: none"> <li>- Review the setup procedure: Your computer is not set up with the proper IP address.</li> <li>- The yellow cable is not plugged into your computer with the other end plugged into the wireless adapter.</li> </ul>
<p>I can't view the Lighthouse Web pages through the Wireless Adapter.</p>	<ul style="list-style-type: none"> <li>- You failed to click on the SSID link to select your network during the setup procedure.</li> <li>- Your network is encrypted and you need to set the Wireless Adapter WEP security parameters.</li> <li>- The wireless adapter is too far away from your wireless router. Try moving the unit closer to see if this is a range problem. Repositioning the antennas may also help.</li> </ul> <p>Check the IP address of the Lighthouse. Try to connect the Lighthouse directly to your modem or router to verify it is working properly. If so, the problem is in the wireless adapter- go through the setup procedure again.</p>

Factory Reset: If you cannot communicate with the wireless adapter or forgot the IP address, unplug power and insert a paper clip into the *Reload* hole in the bottom of the unit. Plug power in while holding the Reload button down until the two LEDs come on and then go off. The IP address will reset to 10.0.0.200.

For technical support contact:

MCU Research, LLC  
 276 Jones Cove Blvd  
 Asheville, NC 28805  
 Email: [support@mcuresearch.com](mailto:support@mcuresearch.com)