



MagnoliaWave Internet Start Up Guide:

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Chapter 1

HARDWARE INSTALLATION

*You must have a network interface card (NIC) installed in your computer in order to connect your computer to the Wireless End User Modem (EUM). If you do not have a network interface card, you must purchase and install one in your computer before you can continue with the installation.

CHOOSING THE BEST LOCATION FOR THE ANTENNA

1. The antenna should be indoors
2. Near an outside entrance or window
3. As high off the floor as possible
4. On the side of the house that is closest to the tower that you are assigned to.
5. A minimum of 8 inches (20 cm) from personnel.

DO NOT MOUNT YOUR ANTENNA AT THIS TIME. MOUNTING ISTRUCTIONS WILL FOLLOW LATER IN CHAPTER 1.

WARNING: YOU MUST CONNECT THE ANTENNA TO THE MODEM BEFORE CONNECTING IT TO POWER SUPPLY!!!

FAILURE TO DO SO MAY RESULT IN PERMANENT EQUIPMENT DAMAGE. THE CITY OF SOUTHAVEN ASSUMES NO LIABILITY FOR PROBLEMS RESULTING FROM FAILURE TO ADHERE TO THESE INSTALLATION PROCEDURES.

TO CONNECT ANTENNA TO THE EUM

1. Finger tighten the antenna cable to the back of the Modem. Do not use wrenches or pliers. Do not cross thread or over tighten.

TO CONNECT THE EUM TO YOUR COMPUTER

1. Attach the crossover Ethernet cable that is included to the Ethernet port on your computer and on your Modem.

APPLYING POWER TO THE EUM

REMEMBER: NEVER APPLY POWER TO THE EUM UNLESS AN APPROVED ANTENNA HAS BEEN PROPERLY ATTACHED TO THE

EUM FIRST.

1. Connect the AC/DC power adapter to the EUM. To do this, press firmly at the base of the DC connector on the power cord, and attach to the corresponding DC connector on the EUM.
2. Connect the AC-power cord between the AC/DC adapter and an AC outlet. Your Modem will power-up; there is no ON/OFF switch.

VERIFYING PROPER EUM FUNCTION

The middle light (RSSI LED) is a rough indicator of signal strength. The top light indicates traffic passing between your Modem and our transmission towers. If this light is on or flashing it ensures that data is being transmitted.

MOUNTING YOUR EUM

(May need to be moved to find optimal signal, see troubleshooting-Step 3 Chapter 7.)
(Kit includes suction cups, drywall plugs, and screws.)

1. Antennas can be mounted horizontally (wire coming out of either side) or vertically (wire coming out of top or bottom) depending on your polarization. Refer to Chapter 8 for your antenna polarization
2. Either way the dish portion (concave) should face the tower that you are assigned.
3. Thread the pre-attached antenna cable through the guides in the back of the antenna bracket (if required).

WARNING: Bending the antenna cable too sharply can degrade EUM performance. If a quarter (25 cent piece) fits into the curve, the bend is acceptable.

Insert the suction cups or screws into the base of the antenna bracket, and then mount the bracket onto the desired surface. If you mount the antenna bracket on a vertical surface, orient the bracket so that the spring clip is closest to the ceiling.

Examples of the RSSI LED:

OFF No signal is detected. The antenna is disconnected or is not aligned properly with your wireless internet service provider's antenna.

SLOW FLASH The signal strength is poor.

FAST FLASH The signal strength is good.

SOLID ON The signal strength is very good.

Once power is applied to the EUM all three front lights will come on during the start up process. After a few seconds the power light will continue to stay on.

Chapter 2

BASIC COMPUTER CONFIGURATION

Our DHCP servers will automatically assign IP addresses for your computer, gateway, and DNS. Your computer's network settings are typically already configured to this type of automatic addressing. If your computer is **NOT** already set up for DHCP addressing, follow the instructions below for configuration of network settings.

CONFIGURATION OF NETWORK SETTINGS

Configure your network settings to allow for communication between the EUM and your computer using **WINDOWS 95/98/ME**

- 1) Click Start. Click Settings, and choose Control Panel from the menu.

- 2) From the control panel, double-click the icon for Network.
 - 3) Make sure there is an Internet Protocol in the list for TCP/IP for your network adapter.
 - 4) Select TCP/IP->*Network adaptor* from the list by clicking on it once. Then click the Properties button.
 - 5) Select the radio button for the option "Obtain an IP Address Automatically"
 - 6) Click on the Gateway tab. Remove any Gateway addresses in that list.
 - 7) Click on the DNS Configuration tab.
 - 8) Select the radio button for the option "Disable DNS:"
- Click OK to close the window. Close all other windows that are open. Your network interface card is now configured for using the Wireless Internet Network.**

Configure your network settings to allow for communication between the EUM and your computer using **WINDOWS 2000/WINDOWS XP***

- 1) Click Start. Click Settings, and choose Control Panel from the menu.
 - 2) From the control panel, double-click the icon for Network and Dial-up Connections.
 - 3) Right-click the Local Area Connections icon, and left click the properties menu option.
 - 4) Make sure there is an Internet Protocol in the list for TCP/IP and the box is checked next to it.
 - 5) Select Internet Protocol (TCP/IP) from the list by clicking on it once. Then click the Properties button.
 - 6) Select the radio button for the option "Obtain an IP Address automatically"
 - 7) Select the radio button for the option "Obtain DNS server address automatically"
 - 8) Click OK to close the window. Close all other windows that are open. Your network interface card is now configured for using the Wireless Internet Network.
- *NOTE: These steps may vary slightly with Windows XP.**

CONFIGURE YOUR INTERNET BROWSER SETTINGS TO CONNECT THROUGH THE LOCAL AREA NETWORK (LAN).

- 1) Click Start. Click Settings, and choose Control Panel from the menu.
- 2) Double-click Internet Options
- 3) Click on the Connection tab
- 4) Choose the option for Dial whenever a network connection is not present or never dial a connection.
- 5) Click the LAN Settings button
- 6) On the LAN Settings page, check the box next to Automatically Detect Settings.
- 7) Click OK, then close the Internet Options dialog box.

Chapter 3

ADVANCED COMPUTER CONFIGURATION

This section is for users that have specifically requested static IP addressing from us. Unless you have requested a static IP address you do not need to read this chapter. Private static IP addressing may be useful to people that have inbound network traffic or it may be required for firewall and router configuration.

*Note: the static addresses assigned to you can be found on Chapter 8.

PRIVATE STATIC IP ADDRESSING

Configure your network settings to allow for communication between the EUM and your computer using **WINDOWS 95/98/ME.**

- 1) Click Start. Click Settings, and choose Control Panel from the menu.
- 2) From the control panel, double-click the icon for Network.
- 3) Make sure there is an Internet Protocol in the list for TCP/IP for your network adapter.
- 4) Select TCP/IP->*Network adaptor* from the list by clicking on it once. Then click on the properties button.
- 5) Select the radio button for the option "Specify an IP address"
- 6) Enter the Computer IP address provided in the box "IP address"
- 7) Enter the Subnet Mask provided in the box "Subnet Mask"
- 8) Click on the Gateway tab.
- 9) Enter the Gateway IP address in the box "New Gateway", then click the Add button
- 10) Click on the DNS Configuration tab.
- 11) Select the radio button for the option "Enable DNS:"
- 12) Enter a name to label your computer in the Host box.
- 13) Enter the first DNS server address in the box "DNS server search order", and then click the Add button. Then add the second DNS server address.
- 14) Click OK to close the window. Close all other windows that are open. Your network interface card is now configured for using the Wireless Internet Network.

Configure your network settings to allow for communication between the EUM and your computer using **WINDOWS 2000/WINDOWS XP***

- 1) Click Start. Click Settings, and choose Control Panel from the menu.
- 2) From the control panel, double-click the icon for Network and Dial-up Connections.
- 3) Right-click the Local Area Connections icon, and left click the properties menu option.
- 4) Make sure there is an Internet Protocol in the list for TCP/IP and the box is checked next to it.
- 5) Select Internet Protocol (TCP/IP) from the list by clicking on it once. Then click the Properties button.
- 6) Select the radio button for the option "Use the following IP address:"
- 7) Enter the Computer IP address provided in the box "IP Address"
- 8) Enter the Subnet Mask provided in the box "Subnet Mask"
- 9) Enter the Gateway IP address in the box "Default Gateway"
- 10) Select the radio button for the option "Use the following DNS server addresses:"
- 11) Enter the first DNS server address in the box "Preferred DNS server". Enter the second DNS server address in the box "Alternate DNS server".
- 12) Click OK to close the window. Close all other windows that are open. Your network interface card is now configured for using the Wireless Internet Network.

***NOTE: These steps may vary slightly with Windows XP.**

PUBLIC STATIC IP ADDRESSING

If you require a public static IP address for inbound traffic, you will be assigned both a public and private IP address. You will need to put the private static IP address in to your computer using the instructions earlier in this chapter. The public IP address will then be linked with your private IP address through Network Address Translocation (NAT).

There is an additional monthly charge for a Public Static IP Address. Contact our help desk for more information about costs for this service.

Chapter 4

BASIC EMAIL CONFIGURATION

With your account, you get 5 email addresses (10 for business service). You must request what you want these addresses to be. The addresses must be setup by the MagnoliaWave help desk.

Each mailbox has a size limit of 10 MB.

ACCESS EMAIL USING YOUR WEB BROWSER

1. Using your web browser: enter the address of <http://mail.magnoliawave.com> to get to the website setup for you to send & receive email.

2. Enter Your User ID: Your user ID is the first part of email address (everything before @magnoliawave.com) Ex. johndoe for johndoe@magnoliawave.com, or your entire email address.

3. Enter Your Password: Your password will be the word "password" in lower case letters the first time you log into your mailbox.

4. Changing Your Password: To Change your password once your logged in, click on the drop down box that says personal account options and select "Change Password" from the list.

Chapter 5

ADVANCED EMAIL CONFIGURATION

ACCESSING YOUR EMAIL USING POP 3 CLIENT

Using a POP 3 client, such as Outlook Express, you can download your email to your computer and take advantage of some features of POP 3 client software.

To set up Outlook Express: Follow these step-by-step instructions.

1. Open Outlook Express.

2. Choose Accounts from the tools menu.

3. Click add mail account.

4. Enter display name.

5. Enter your email address.

6. Enter the incoming and outgoing mail server information as mail.magnoliawave.com.

7. Enter your account name and password, click next, then click finish.

8. After you have completed the steps above, your mail account will display in the Internet Accounts mail list. Select and double-click on your account. Click on the Servers tab, and check the box next to "My server requires Authentication." Click OK. Finally click CLOSE.

OUTLOOK EXPRESS USER IDENTITIES

If there is more than one person in your house using the same computer for e-mail, each person can have a separate mailbox in Outlook Express. This means that each person can have separate messages, contacts, and personal settings. This is made possible through the creation of multiple identities. Once the identities are created, you can switch among them without having to shut down your computer or lose your Internet connection.

To add a new identity

1. On the File menu, point to Identities, and then click Add New Identity.

2. Type the name of the new user.

3. If you want to include a password for this identity, select the **Require a password** option, and then enter a password. Click **OK**

Outlook Express asks you if you want to switch to the user now. If you answer yes, you will be prompted for information about your Internet connection. You then will have to create a new internet mail account in Outlook Express as discussed earlier. If you answer no, the current user remains logged on.

REGISTERED DOMAINS

If you have a registered domain and would like us to host your email, please contact our help desk to have this service set up. There is a one time set up charge as well as monthly hosting fees depending on your needs. Other fees related to domain name registration are the responsibility of the applicant. We will not relay mail for mail accounts hosted by other ISP's. Contact customer service for more details.

Chapter 6

TROUBLESHOOTING

To test the signal, open a DOS prompt or command prompt by clicking on the start button, clicking run, and typing either command or cmd (depending on your version of windows), then follow these steps below.

1. Verify Network Card Installations:

To make sure network card is properly installed check the loop back by pinging the network card with the command **Ping 127.0.0.1** If the command replies, go to step 2. If the command displays "request timed out," there is a problem with your network card installation.

2. Verify DHCP Addressing

Test to make sure your computer is receiving a DHCP address. At the DOS prompt type **IPCONFIG**. If you receive an address that starts with 172.16., you are receiving a DHCP address correctly. If not, then follow these steps:

a. Check to make sure modem is on.

b. Make sure that the crossover cable provided with your kit is being used.

Are the connection lights on the back of the network card & modem on?

c. Is your antenna in a good location (refer to chapter 1)? Is antenna pointed in the correct direction- towards the tower you are assigned to? Is your antenna polarized correctly (refer to chapter 1)?

If you still receive no address, try moving the antenna to another location and renewing the IP address again. To renew the IP address go to DOS prompt and type **ipconfig /renew** if using WINDOWS 2000/XP. If using WINDOWS 95/98 type **ipconfig /renew_all**

If you still are not getting an address, and you have tried moving your antenna to several locations, and are sure your antenna is in a good position, contact the help desk for support.

3. Signal Optimization

Ping the Gateway IP address found on page _____. Ping by typing in ping followed by the gateway IP address at the command prompt.

For example: ping 127.0.0.1

(Substitute the gateway IP address for 127.0.0.1 in the above example.)

Note: You can perform a continuous ping using the following example:

Ping 127.0.0.1 -t -l 1472

(Use the gateway IP address. Note: l is the lowercase L)

If you are receiving consistent replies with response times in the range of 100ms, your antenna has been properly oriented.

Chapter 7

TECHNICAL SUPPORT

Website: www.magnoliawave.com

Email: support@magnoliawave.com

Help Desk: 662.393.5931

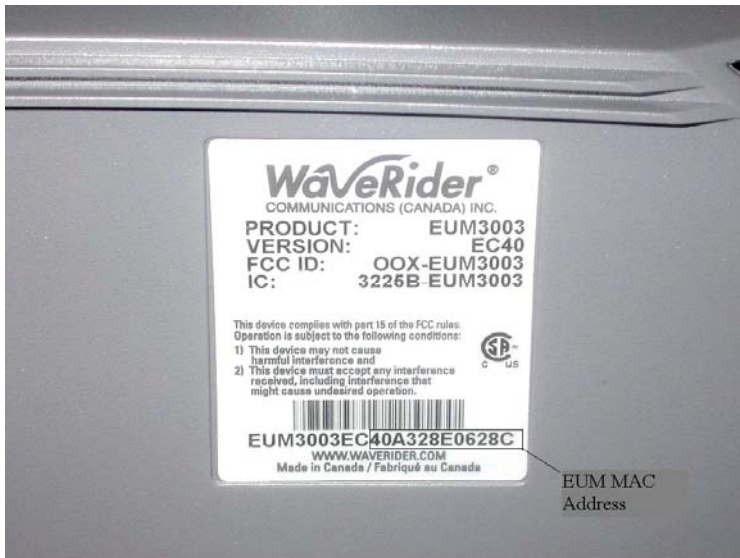
Hours: 8am-5pm Monday-Friday

ANTENNA Polarization:

Vertical (Cable comes out top or bottom of antenna.)

Horizontal (Cable comes out either side of antenna.)

Modem MAC Address: _____



Only the last 6 digits.

Tower Location: _____