Navini
NETWORKS™

Internet at the speed of thought™

Ripwave™ Modem User Guide

For use with all Ripwave Modem models

Part Number 40-00097-00
Revision E, Version 1.0
July 30, 2003

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Safety

When using Navini Ripwave electronic equipment, always follow basic safety precautions to reduce the risk of electrical shock, fire, and injury to people and/or property. Follow all warnings and instructions that come with the equipment.

1. Do not use the equipment while you are in a bathtub, shower, pool, or spa. Exposure of the equipment to water could cause severe electrical shock or serious damage to the equipment.
2. Do not immerse the equipment in any type of liquid. Use a damp cloth and if needed, water and a mild detergent to clean the plastic shell. Unplug the equipment from the power source before cleaning.
3. Follow all airport and FAA regulations when using the equipment on or near aircraft.
4. Only operate the equipment from the type of power source(s) indicated in this manual (110 VAC adapter or Navini supplied battery). Any other type of input power source may cause damage to the equipment.
5. Power the equipment using only the battery or the AC adapter cable provided, and in accordance with the instructions specified in the user manual.
6. Do not use a frayed or damaged power cord. Do not place the power cord where it can be stepped on or tripped over.
7. Do not touch wires where the insulation is frayed or worn unless the equipment has been disconnected from its power source.
8. Do not overload wall outlets, power strips, or extension cords. This can cause serious electrical shock or fire.
9. Do not place the equipment on an unstable surface. It can fall and cause injury or damage to the equipment.
10. Do not disassemble the equipment. Removing covers exposes dangerous voltages or other risks and also voids the warranty. Incorrect reassembly can cause equipment damage or electrical shock. Only an authorized repair technician should service this product.
11. Do not expose the equipment to extreme hot or cold temperatures.
12. Do not use the equipment under the following conditions:
13. When the equipment has been exposed to water or moisture.
14. When the equipment has been damaged.
15. When the power cord is damaged or frayed.
16. When the equipment does not operate properly or shows a distinct change in performance.

Regulatory Information

FCC Notice

CAUTION: This device is a Radio Frequency transmitter. It is required to comply with FCC RF exposure requirements for transmitting devices. A minimum separation distance of 8 inches (20 cm) or more must be maintained between the antenna and all persons during device operations to ensure compliance with the FCC's rules for Radio Frequency Exposure. If this minimum distance cannot be maintained, exposure to RF levels that exceed the FCC's limits may result.

FCC Compliance and Advisory Statement

Tested To Comply
With FCC Standards
FOR HOME OR OFFICE USE

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. The operation is subject to the following two conditions:

(1)   This device may not cause harmful interference, and

(2)   This device must accept any interference received, including interference that may cause undesired operation.

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 or 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:

1)   Reorient or relocate the receiving antenna;

2)   Increase the separation between the equipment and the receiver;

3)   Connect the equipment to an outlet on a circuit different from that to which the receiver is connected;

4)   Consult the dealer or an experienced radio/TV technician for additional suggestions.

INFORMATION TO USER

This device has been authorized as a radio frequency transmitter under the appropriate rules of the Federal Communications Commission. Any changes or modifications not expressly approved by Navini Networks could void the user's authority to operate the equipment.

Battery Precautions

CAUTION! To reduce risk of injury or fire, follow these instructions when handling the battery.

1. Risk of explosion is possible if the battery is replaced with one not supplied by Navini Networks.

2. Do not dispose of the battery in a fire. They may explode. Check with the local codes for battery disposal guidelines.

3. Do not open or mutilate the battery. The battery contains substances that are toxic, corrosive, or harmful to humans. If battery substances come in contact with the skin, seek medical help immediately.

4. Do not attempt to recharge the battery by any means except per the instructions in this manual.

5. Remove the battery from the equipment if the equipment is not going to be used for a long period of time. The battery could leak and cause damage to the equipment.

6. Exercise care when handling the battery to prevent shorting the battery with conducting materials such as bracelets, rings, and keys.

7. Store the battery pack in a dry place, 0 to +40 degrees Celsius.

8. Dispose of used batteries according to environmental guidelines.

Introduction

Congratulations! The Ripwave™ Modem is a user-friendly, easy-to-install device that helps you connect wirelessly to the Internet. It provides complete broadband Internet access to residential and small office/home office (SOHO) customers without the necessity of professional hardware installation. The Ripwave Modem also provides nomadic service availability as a computer with this device is moved from room to room, location to location, or even city to city as long as there is coverage in the area.

Package Inventory

Please verify the contents of your Ripwave Modem package. If you do not find all of these items in your package, notify the supplier from whom you obtained it.

- Ripwave Modem
- Ripwave Modem AC power adapter
- PC-to-Ripwave Modem cable (USB or Ethernet straight cable)
- Ripwave Modem User Guide
- Ripwave Modem Quick Installation Guide
- Navini Monitor Installation CD

Ripwave Models

Your Ripwave Modem will be a 2.3 GHz, 2.4 GHz, 2.5 GHz, or 2.6 GHz version. The difference is due to each one's operating band frequency range, described on the next page. The 2.4 GHz model varies slightly in appearance as well.

2.4 GHz Model   **2.3, 2.5 & 2.6 GHz Models**

Operating
Frequencies

Model	Frequency Range	Operating Band	Port Connection
2.3 GHz E	2.305 GHz to 2.360 GHz	WCS	Ethernet
2.3 GHz U	2.305 GHz to 2.360 GHz	WCS	USB
2.4 GHz E	2.400 GHz - 2.48 GHz	ISM	Ethernet
2.4 GHz U	2.400 GHz - 2.48 GHz	ISM	USB
2.5 GHz E	2.50 GHz - 2.596 GHz	MMDS/ITFS	Ethernet
2.5 GHz U	2.50 GHz - 2.596 GHz	MMDS/ITFS	USB
2.6 GHz E	2.596 GHz – 2.686 GHz	MMDS/ITFS	Ethernet
2.6 GHz U	2.596 GHz – 2.686 GHz	MMDS/ITFS	USB

The "E" in the model name stands for Ethernet, and the "U" in the model name stands for Universal Serial Buss (USB). Your computer will have one of these two types of ports for connecting the Modem.

Computer
Connections

- An **Ethernet** connection will function with any Win32 Operating System (Windows® 95 or later).
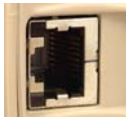
- A **USB** connection will function only with Windows 98, Windows 98SE, Windows 2000, Windows ME, or Windows XP. It will not work with Windows 95 or Windows NT.

You must have the Ripwave Modem model with the appropriate connection for your computer port.

Minimum Computing Requirements

(See, also, Addendum 1)

Operating System[1]:	**Ethernet Modems**: Any Win32® Operating System (OS) - Windows® 95, Windows 98[2], Windows 98SE[2], Windows 2000, Windows ME[2], Windows XP, or later version. Windows XP must be Service Pack Level 1 or higher. Internet Explorer 3.0 or higher is required for installation on Windows 95 Operating Systems. **USB Modems**: Windows® 98[2], Windows 98SE[2], Windows 2000, Windows ME[2], Windows XP, or later version. USB will not work with Windows 95 or Windows NT. Windows XP must be Service Pack Level 1 or higher. **General Information:** ▪ Ensure that the pc network port is enabled. ▪ MacIntosh systems and Lynx/Unix systems are not supported.
CPU:	Pentium level or higher
RAM:	32 MB or the Operating System minimum, whichever is greater
Hard Drive:	10 MB free disk space for Navini Monitor software
Monitor:	256 colors, 800 x 600 resolution

[1]NOTE: If you are going to upgrade your Operating System after loading the Navini Monitor software, you must first uninstall Navini Monitor prior to upgrading the OS. Otherwise, Navini Monitor will not work. See Uninstall instructions in this Guide.

[2]NOTE: The Ripwave Modem must be left powered ON whenever you shut down or restart any Windows 98 or ME platforms. If the Modem is off, a blue screen appears on the monitor. In the event that happens you will most likely have to power cycle the PC.

The Ripwave Modem installation sections include instructions for both Ethernet and USB connections. Be sure to use the instructions that apply to your Ripwave model. The Navini Monitor software installation procedure is the same for any of the Ripwave models.
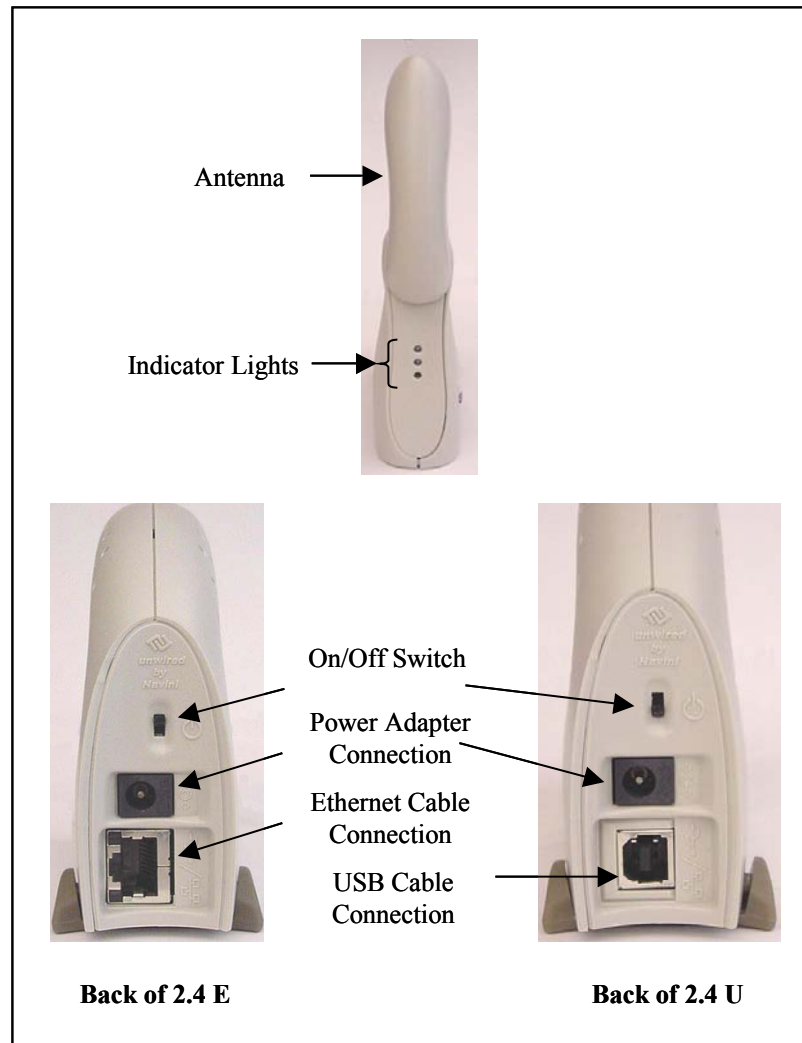
This manual will guide you through the simple process of installing the Ripwave Modem and software, which has been developed to optimize the ease and convenience for you, our valued customer. The 2.6 GHz model is used in most of the illustrations in this manual where there are no differences in the 2.3, 2.4, 2.5, and 2.6 GHz models.

If you experience any difficulties with your unit, please contact your Service Provider or the vendor from whom you obtained your Ripwave Modem.
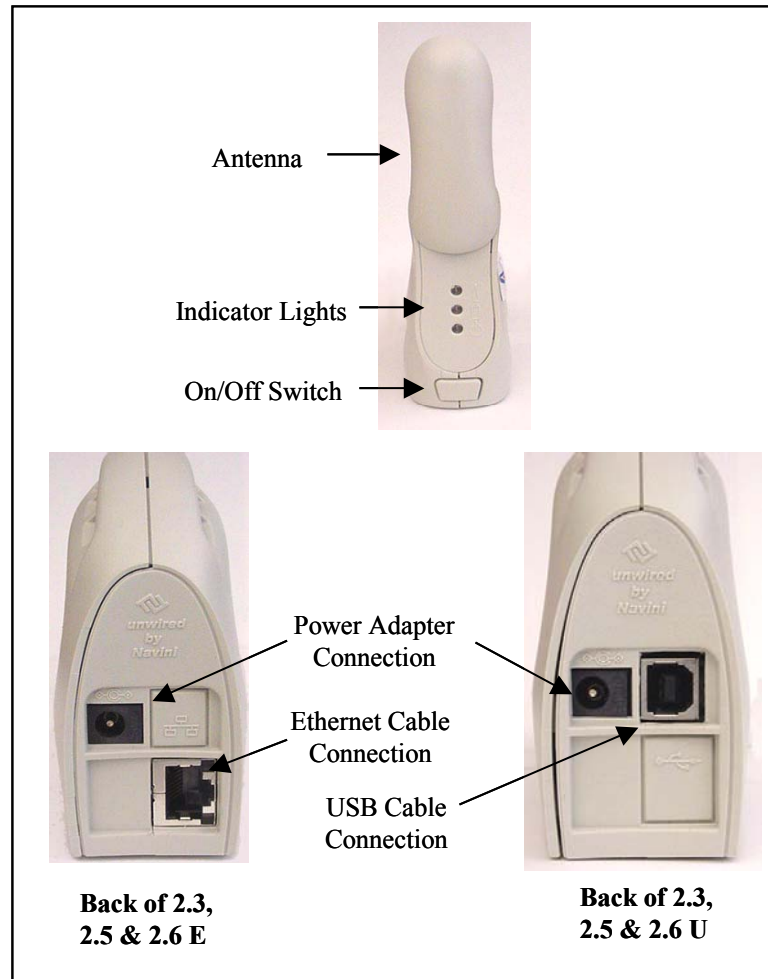
Physical Characteristics

The 2.4 GHz Ripwave Modem varies in some aspects from the 2.3, 2.5, and 2.6 models. As well, the Ethernet connection on any model varies from a USB connection. Notice the differences highlighted in the photos below and on the following page.

2.4 GHz Ripwave Modem

Antenna

Indicator Lights

On/Off Switch

Power Adapter Connection

Ethernet Cable Connection

USB Cable Connection

Back of 2.4 E   **Back of 2.4 U**

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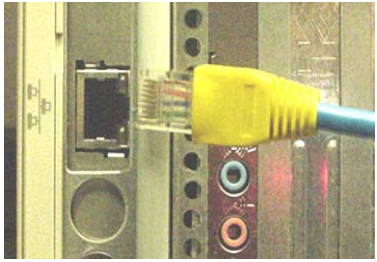
Physical
Characteristics,
Continued

2.3, 2.5 & 2.6 GHz Ripwave Modems

Antenna

Indicator Lights

On/Off Switch

Power Adapter
Connection

Ethernet Cable
Connection

USB Cable
Connection

**Back of 2.3,
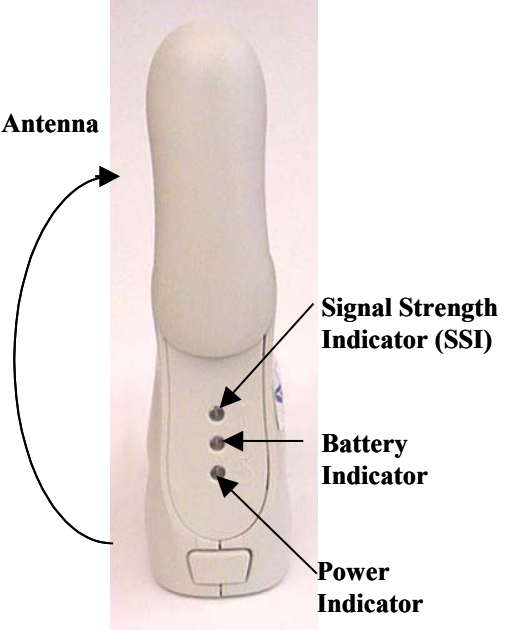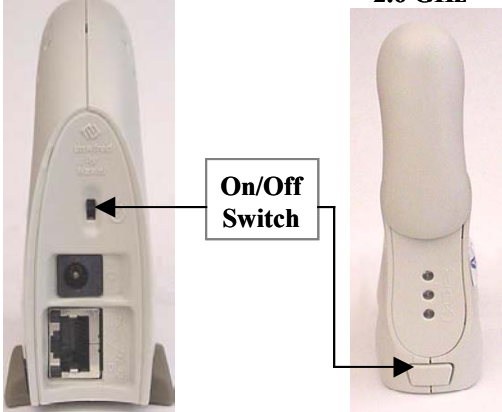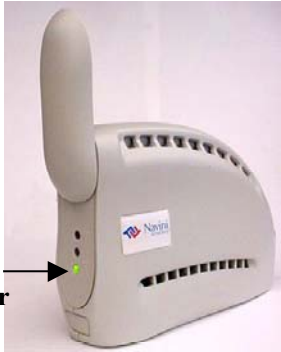2.5 & 2.6 E**

**Back of 2.3,
2.5 & 2.6 U**

Installing an Ethernet Modem
(See, also, Addendum 1)

The following instructions are for the installation of a Ripwave Modem that has a USB connection. Please read all instructions before attempting the installation. It is advisable to turn off the computer and the Ripwave Modem before performing the installation.

Step	Action	Illustration
1.	Connect the Ethernet cable to the Ethernet port on the computer.	
2.	Connect the other end of the Ethernet cable to the Ripwave Modem.	Ethernet
3.	Connect the AC power adapter to the Ripwave Modem. Plug the other end into a 110 VAC outlet. **CAUTION!** Only use the AC power adapter specifically supplied with the Ripwave Modem. Using any other adapter may cause damage to the Modem.	AC Power adapter cable jack

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Installing an Ethernet
Modem, continued

Step	Action	Illustration
4.	Rotate the antenna on the Ripwave Modem clockwise 180 degrees to the UP position. This reveals the Ripwave Modem indicator lights. **CAUTION!** Rotation or movement of the antenna in any other direction may cause damage to the Ripwave Modem.	**Antenna** **Signal Strength Indicator (SSI)** **Battery Indicator** **Power Indicator**
5.	Push the On/Off button on the Modem to ON.	**2.4 GHz** **2.3, 2.5 & 2.6 GHz** **On/Off Switch**
6.	If the Green Power indicator light comes on, proceed to Step 7. If not, there is a problem with the Modem or the AC power adapter. Check all cables for proper connection. Otherwise, contact the supplier from whom you obtained the package.	**Power Indicator**

Installing an Ethernet
Modem, continued

Step	Action	Illustration
7.	Turn your computer on and log in.	
8.	Proceed to the "Troubleshooting / Installing Navini Monitor" section of this manual.	

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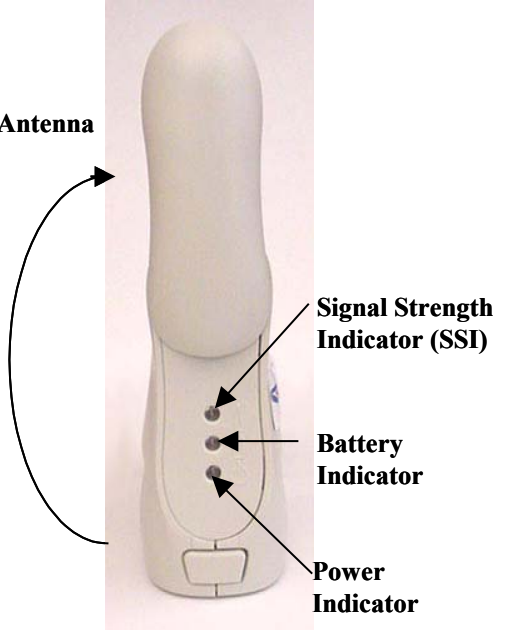   July 30, 2003
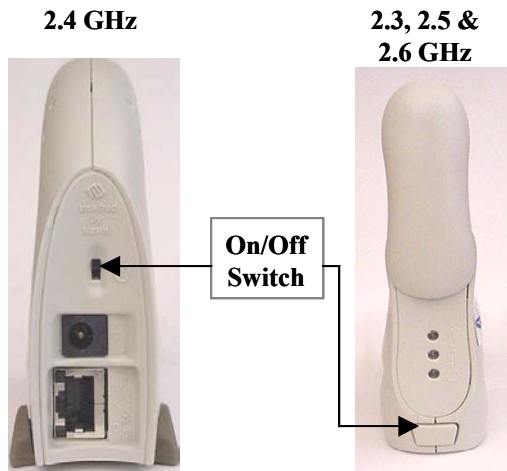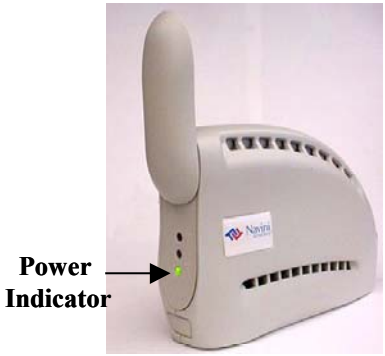
Installing a USB Modem
(See, also, Addendum 1)
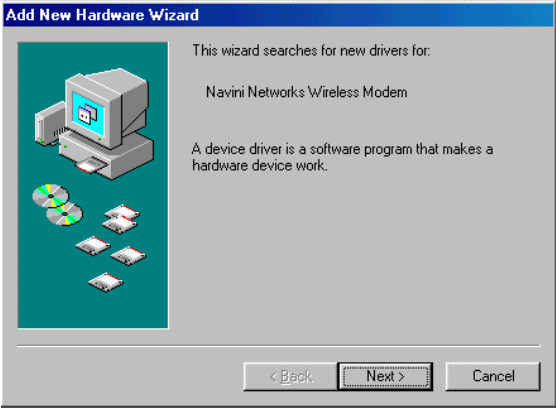
The following instructions are for the installation of a Ripwave Modem that has a USB connection. Please read all instructions before attempting the installation. It is advisable to turn off the computer and the Ripwave Modem before performing the installation.

Step	Action	Illustration
1.	Connect the USB cable to the USB port on the computer.	
2.	Connect the other end of the USB cable to the back of the Ripwave Modem.	USB Port
3.	Connect the AC power adapter cable to the back of the Ripwave Modem. Plug the other end of the cable into a 110 VAC outlet. **CAUTION!** Only use the AC power adapter specifically supplied with the Ripwave Modem. Using any other adapter may cause damage to the Modem.	AC Power adapter cable jack
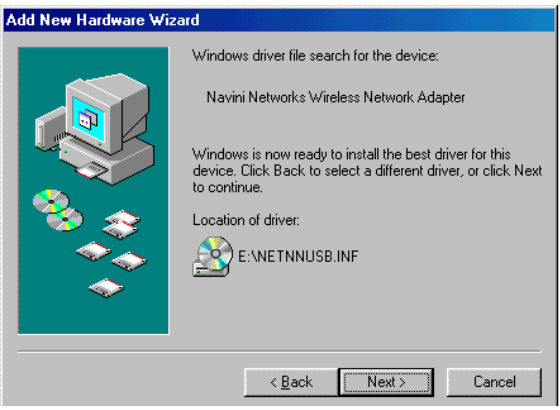
Installing a USB Modem, continued

Step	Action	Illustration
4.	Rotate the antenna on the Ripwave Modem 180 degrees to the UP position. This reveals the Modem's indicator lights. ⚠ **CAUTION!** Rotation of the antenna in any other direction may cause damage to the Modem.	Antenna — Signal Strength Indicator (SSI) — Battery Indicator — Power Indicator
5.	Push the ON/OFF button on the Modem to ON.	2.4 GHz · 2.3, 2.5 & 2.6 GHz · On/Off Switch
6.	If the Green Power indicator light comes on, proceed to Step 7. If not, there is a problem with the Modem or the AC Power Adapter. Check all cables for proper connection. Otherwise, contact the supplier from whom you obtained the package.	Power Indicator

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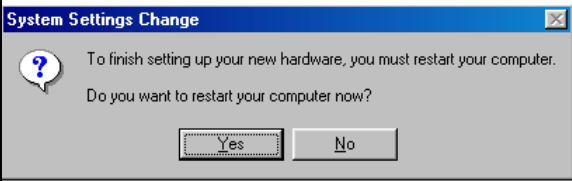
Installing a USB Modem, Continued

Step	Action	Illustration
7.	Turn your computer ON and log in. NOTE: For Windows 2000, you must be logged into an account having Administrative privileges to install the Ripwave Modem and its software.	
8.	Plug-and-Play will detect the Ripwave device now attached to the computer, and it will launch the Plug-and-Play application. If this does not happen, the problem may be due to one of the following: • Windows NT and Windows 95 do not support a USB device. • The Modem is not turned on. • The Modem is not connected properly to the computer.	
9.	The Add New Hardware Wizard dialog box appears. Click **Next** to continue.	

Installing a USB Modem, Continued

Step	Action	Illustration
10.	Insert the Ripwave Installation CD into the computer's CD-ROM drive.	
11.	Select the 'Search for the best driver for your device' option. Click **Next** to continue.	
12.	Select the 'CD-ROM drive' checkbox. Click **Next** to continue.	
13.	Confirm that the drive location is correct (it may be different than the one shown in the illustration). The file to be installed should say 'NETNNUSB.INF''. Click **Next** to continue.	

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Installing a USB Modem,
Continued

Step	Action	Illustration
14.	Windows will finish installing the software files required for the Ripwave Modem operation. Click **Finish**. NOTE: For Window 98, a window may appear asking for drivers to be installed from the Windows 98 setup disk. If so, insert the Windows 98 setup disk into the CD-ROM drive at this time and accept the defaults.	
15.	After clicking Finish, the System Settings Change window appears asking if you want to restart your computer now. Click **Yes**. You must restart your computer at this point before proceeding.	
16.	After the computer restart is complete, proceed to the "Troubleshooting / Installing Navini Monitor" section of this manual.	

Accessing the Internet

With your Modem now installed, and both the Modem and computer powered on, you should be able to surf the Internet! To access the Internet, open the web browser that is installed on your computer.

Troubleshooting

After installation, if you are experiencing difficulties with your Internet connection, please review the Minimum System Requirements and Addendum 1 to ensure your computer meets those requirements. Next, go back over the installation procedures and ensure those steps were completed properly.

Assuming the computer requirements are met and the installation steps were completed as required, you will need to observe the light indicators on the front of the Modem. You also may need to install the Navini Monitor software. This software is provided on a CD that came in your Modem package.

The Navini Monitor software assists in solving connection problems as well as providing information about the battery power (batteries are optional).

Indicator Lights

The indicator lights on the front of the Modem provide valuable information about its operation. They change appearance to designate the state of the items that they represent. Used in conjunction with the Navini Monitor software, you can troubleshoot signal issues, network connections, and power problems.

Signal Strength Indicator (SSI)

Battery Indicator

Power Indicator

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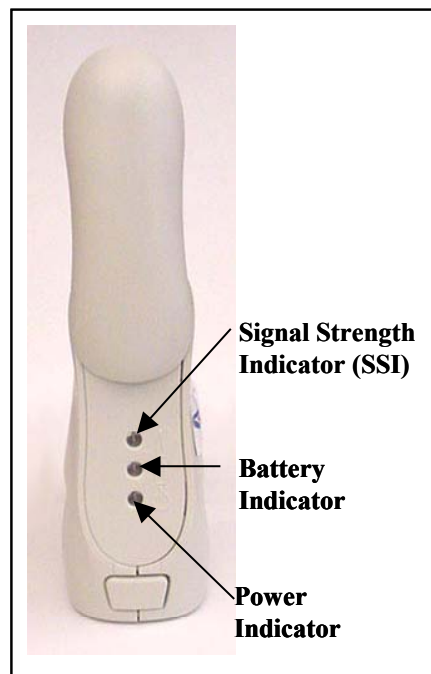
Indicator Lights,
Continued

Signal Strength Indicator (SSI)	
Constant Green :	Strong signal
Constant Yellow :	Medium signal
Constant Red :	Weak signal
Flashing Red :	No signal
Battery Indicator	
Constant Yellow :	Battery is charging
Constant Red :	Battery is less than 20% charged
Flashing Red :	Battery is less than 10% charged
Off :	Battery is fully charged or not installed
Power Indicator	
Constant Green :	The Modem is ON (AC or DC power)
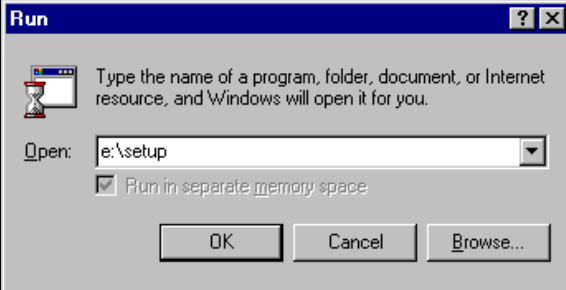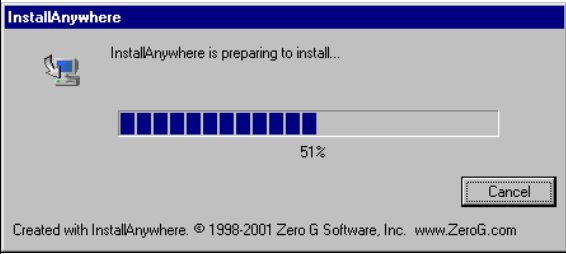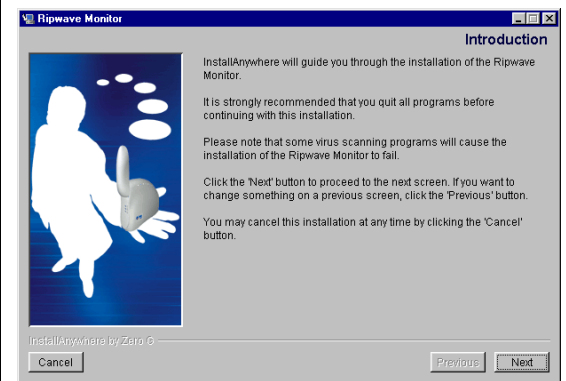
Installing Navini Monitor

The Navini Monitor software provides two types of information: signal strength and quality of the incoming signal, and battery strength (batteries are optional). It can also provide information about the connectivity to the Service Provider's network. These displays may be required when troubleshooting Modem problems.
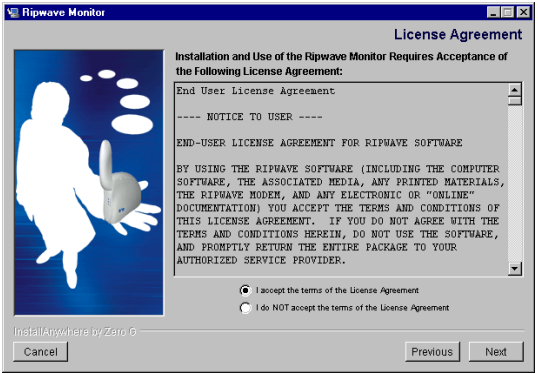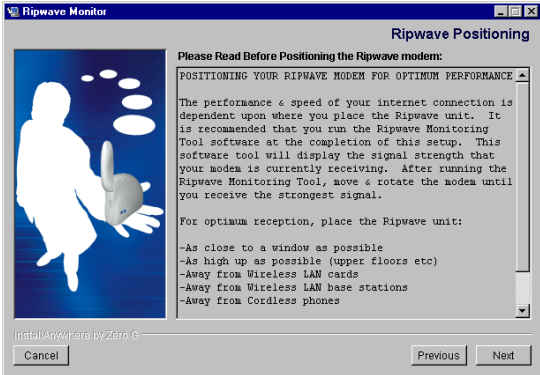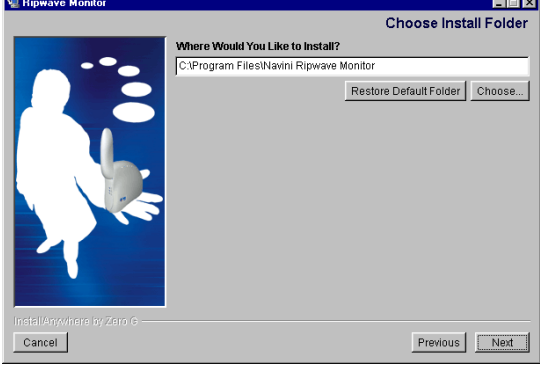
Before you install, please note:

- For Windows NT and Windows 2000 you must be logged into an account having Administrative privileges in order to install the Navini Monitor software.

- For Windows 95, Windows 98, and Windows 98SE Operating Systems (OS), the OS CD may be required to complete this installation. If prompted, insert the OS CD into the CD-ROM drive and accept the defaults.

- If you are going to upgrade your PC Operating System after loading the Navini Monitor software, you must first uninstall Navini Monitor prior to upgrading the OS. Otherwise, Navini Monitor will not work. See Uninstall instructions in this Guide.
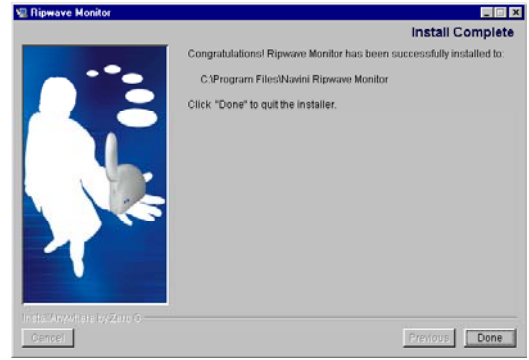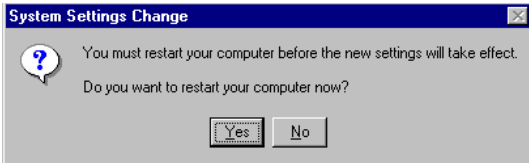
Installing Navini
Monitor, continued

Step	Action	Illustration
1.	Shut down all programs, including anti-virus software programs, before installing the Navini Monitor software.	
2.	Insert the Navini Monitor Installation CD into the CD-ROM drive.	
3.	At the bottom left-hand corner of your screen, click **Start > Run**. In the Run window, enter **e:\setup** in the Open field (where "e" represents the CD drive). Use whatever letter represents your CD drive. Click **OK** to continue.	
4.	The InstallAnywhere window appears. The progress bar indicates that InstallAnywhere has initialized.	
5.	The Navini Monitor Introduction screen appears. Click **Next** to continue.	

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Installing Navini
Monitor, continued

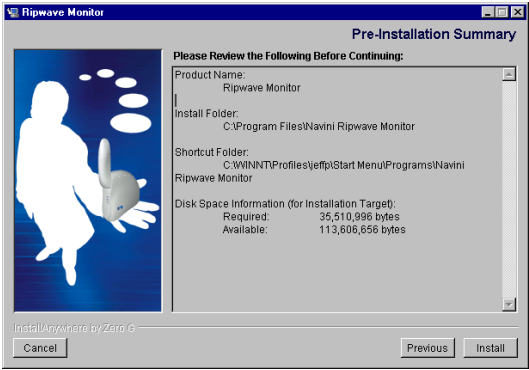| Step	Action	Illustration
6.	The License Agreement screen appears. Read the Licensing Agreement. Select the **I Accept** option, and click **Next** to continue. NOTE: If the License Agreement is not accepted, you cannot install the software.	
7.	The Ripwave Positioning screen appears. Read the screen for positioning the Ripwave Modem for optimum performance. Click **Next** to continue.	
8.	The Choose Install Folder screen appears. Enter the name of the folder where you wish to install the software. Click **Next** to continue. The default installation folder provided by the software is shown in the illustration.	

Installing Navini
Monitor, continued

Step	Action	Illustration
9.	The Pre-Installation Summary screen appears. Review the contents for accuracy. Click **Install** to continue. For your installation and computer, this screen may have different information than what is shown in the illustration.	
10.	The Installing screen will display as the application files are loaded.	
11	At the Install Complete screen, click **Done** to close the window.	
12.	After clicking Done the System Settings Change window appears, asking if you want to restart your computer now. Click **Yes**. NOTE: You must restart your computer at this point before proceeding.	

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Using Navini Monitor

To open the Navini Monitor software application, right-click on the icon of the Ripwave Modem in the toolbar tray of your computer. Select Maximize.
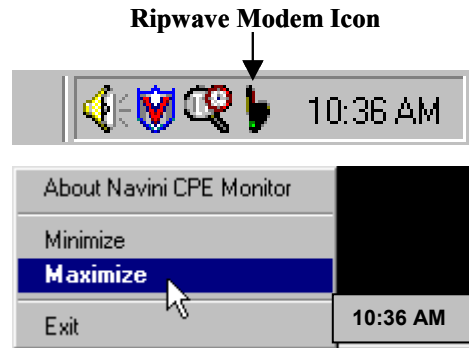
Ripwave Modem Icon

A window with icons and, provided your Modem is on, bar graphs, will pop up. Notice the bottom right corner of the window shows the Equipment Identification (EID) for your specific Ripwave Modem. If you talk with a Service Technician while troubleshooting, you may be asked for this number.
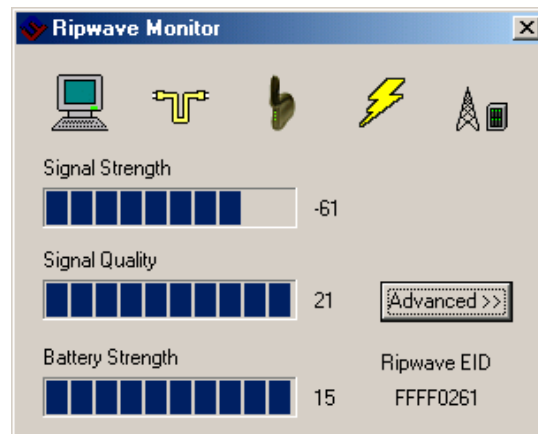
The icons represent each of the components and connections throughout the network.

Computer	Computer to Ripwave connection	Ripwave Modem	Ripwave to Base Station wireless connection	Base Station
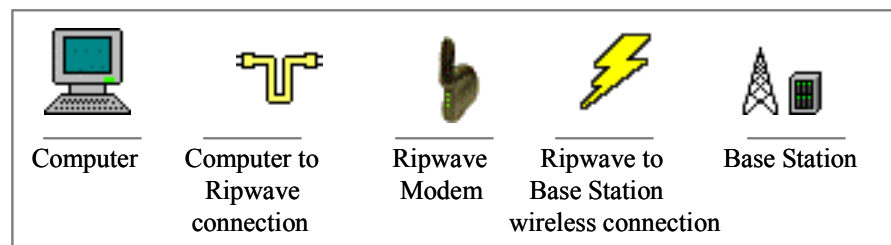
Using Navini
Monitor, continued

The Signal Strength and Signal Quality are dynamic bar graphs that indicate how well your Modem is receiving signals from the Base Station. To increase the strength and quality of the signal, change the location of the Ripwave Modem. Try moving it closer to a window, to a higher location, away from other wireless devices (microwave ovens, cordless phones), and away from metal objects (shelves, file cabinets). As the Ripwave Modem is repositioned, observe the Signal Strength and Signal Quality bar graphs. Position the Modem for maximum signal strength and quality.

If you make a service call to your Service Provider, the Technician may ask you to read the numbers to the right of the signal bar graphs. These will help the Technician to evaluate the best position for your Ripwave Modem. The Battery Strength bar graph and the number to the right of it indicate how much charge is left in the battery (batteries are optional). Without a battery in the Modem, the Battery Strength bar graph and number will be disabled (grayed out).

If a problem is detected with one of the components, or if a connection goes down, a red circle with a slash 🚫 will be positioned over the icon.
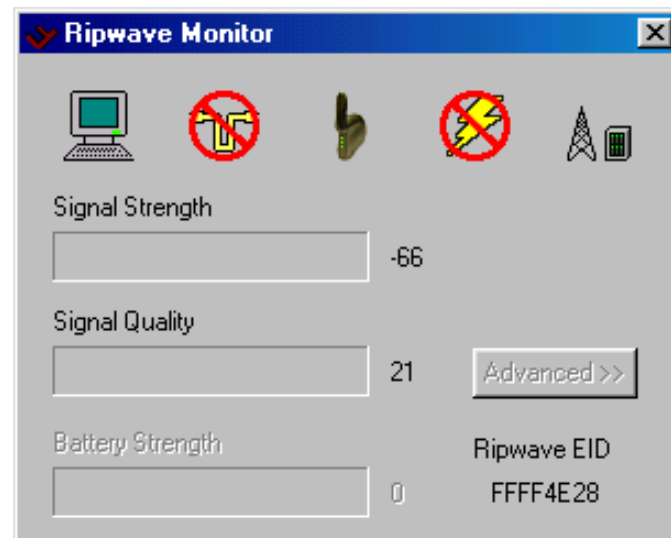
In this example, the cable connecting the computer and Modem is not operational; the wireless signal between Modem and Base Station is down; and there is no battery being used.

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Using Navini
Monitor, continued

To check connectivity to the Service Provider's network, you will click the Advanced button on the Navini Monitor. The Advanced section of the window appears and displays all of the connections throughout the network. The names of the network component will vary with each Operator's network. Note that if the connection between the Ripwave Modem and the Base Station is down, the Advanced button will be disabled (grayed out).
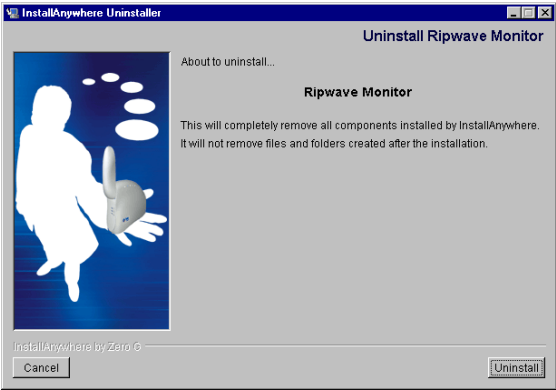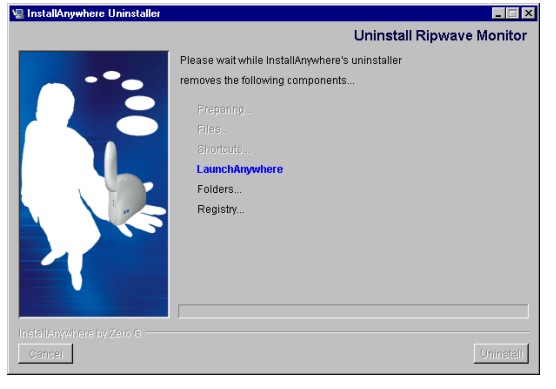
The blue question marks on the right side of the Advanced section indicate that all connections are untested. Now click on the Run Tests button at the bottom of the window. The blue question marks will change to either a blue checkmark or a red slash mark. A blue checkmark indicates that the connection is valid. A red slash mark indicates there is a problem with that connection.
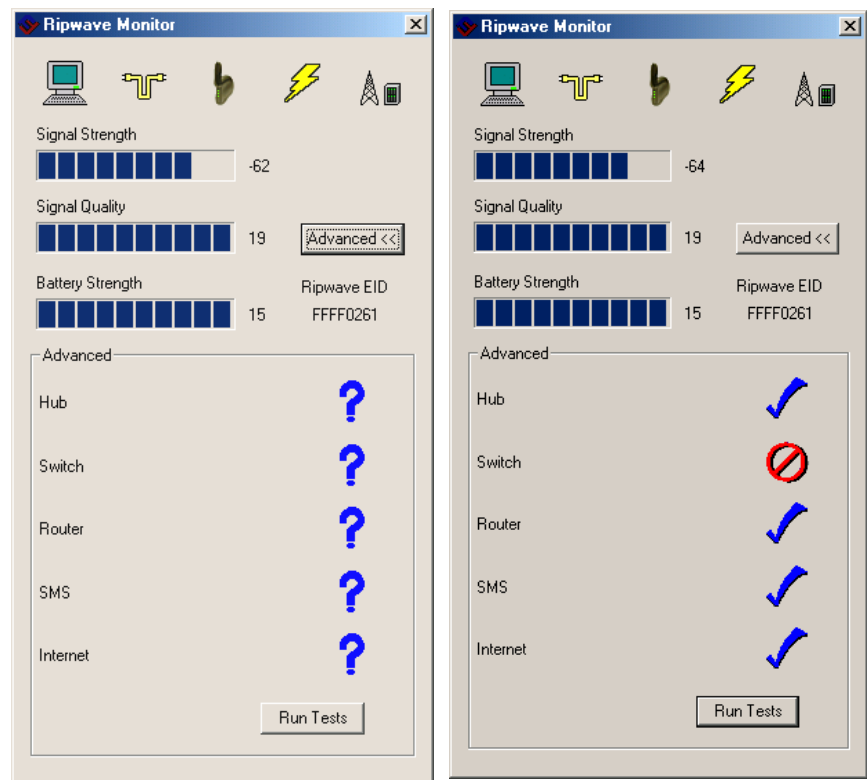
The features of the Advanced and Run Tests buttons are to be used in conjunction with your Service Provider Technician to resolve problems. There is no need to use these features unless you are experiencing problems with the Modem.

Uninstalling Navini Monitor

If for some reason you need to uninstall the Navini Monitor software, e.g., to upgrade your Operating System software, follow the procedure below.
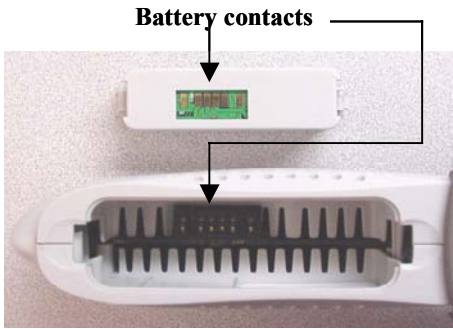
Step	Action	Illustration
1.	On your computer screen lower left corner, click on **Start > Programs > Navini Navini Monitor > Uninstall Navini Monitor**. The Install-Anywhere Uninstaller screen appears. Click **Uninstall**.	
2.	The screen will cycle through as the application files are uninstalled.	
3.	The Uninstall Complete screen appears when finished. Click on **Quit** to close the Uninstall screen.	
4.	Restart the pc to complete the uninstall process. This will ensure it functions properly after uninstalling.	

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Installing & Charging the Battery
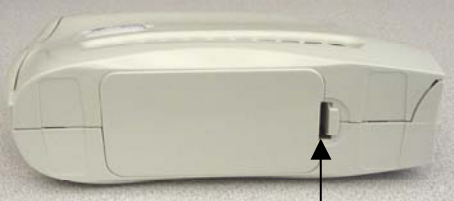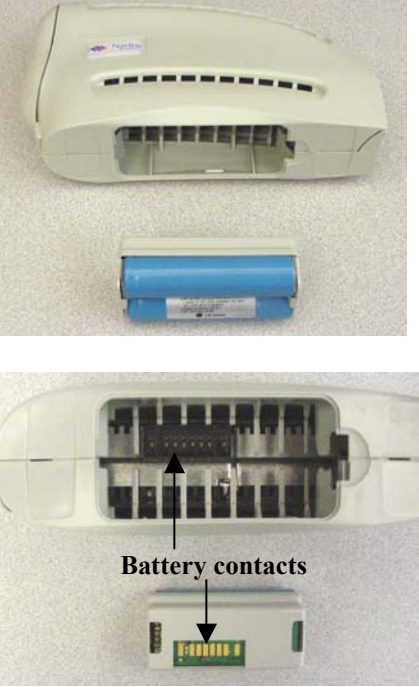
The battery pack is an option and is not included with the unit. To order a battery for the Ripwave Modem, contact your Service Provider or the vendor from whom you purchased the Modem.

The battery pack is installed in the bottom of the Ripwave Modem. The battery compartment of the 2.4 GHz Ripwave Modem varies from the 2.3, 2.5, and 2.6 GHz models. To install and charge or remove the battery pack, follow the steps based on your model.

2.4 GHz Battery

Step	Action	Illustration
1.	Squeeze both tabs to remove or install the battery pack cover. Note that the cover is not used when the battery pack is installed in the Modem.	**Battery Pack Cover tabs**
2.	Install the battery pack into the Ripwave Modem, ensuring that the contacts on the battery pack mate with the contacts in the Modem and that both slides snap down securely.	**Battery contacts**
3.	To charge the battery, connect the AC adapter to the Modem and to an AC power source. The battery will begin charging immediately regardless of whether the On/Off switch is on. However, the pack will charge faster if the on/off switch is in the OFF position. If the on/off switch is ON, the light indicator will be constant yellow. When fully charged, the light will go off.	**Battery Indicator**

2.3 GHz, 2.5 GHz & 2.6 GHz Battery

Step	Action	Illustration
1.	Applying light pressure, push the tab on the battery pack cover to remove it from the bottom of the Modem.	**Battery Pack Cover tab**
2.	Install the battery pack into the Modem, ensuring that the contacts mate and that both sides snap down securely. Reinstall the battery pack cover on the Modem.	**Battery contacts**
3.	To charge the battery, connect the AC adapter to the Modem and to an AC power source. The battery will begin charging immediately regardless of whether the On/Off switch is on. However, the pack will charge faster if the on/off switch is in the OFF position. If the on/off switch is ON, the light indicator will be constant yellow. When fully charged, the light will go off.	**Battery Indicator**

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Care & Maintenance

The Ripwave Modem is designed to give years of trouble-free service. To ensure operation, read the following care and maintenance instructions.

- Keep the Modem free of dust and moisture. If the Modem gets wet, use a towel to dry it immediately.

- Handle the Modem gently. Dropping it or mishandling it can cause damage to the plastic shell or the electronic circuitry.

- Keep the Modem away from high temperatures. Heat can cause damage to the plastic shell or the electronic circuitry.

- Use only a mild detergent and a soft, damp cloth to clean the Modem. Do not use any chemicals or abrasives to clean the plastic shell.

- If there is a problem with the Modem, do not attempt to repair it yourself. Report the problem to your Service Provider.

- If you are going to upgrade your Operating System after loading the Navini Monitor software, you must first uninstall Navini Monitor prior to upgrading the OS. Otherwise, Navini Monitor will not work. See Uninstall instructions in this Guide.

- The Ripwave Modem must be left powered ON whenever you shut down or restart any Windows 98 or ME platforms. If the Modem is off, a blue screen appears on the monitor. In the event this happens you will mostly likely have to power cycle the PC.

Upgrading the Modem

There are two different ways to upgrade the software that makes the Modem and Navini Monitor work. Your Service Provider may perform an over-the-air (OTA) upgrade, where the up-to-date software files are transferred wirelessly from the Base Station to your Modem; or provide a downloadable web file or CD-ROM with software that is installed on your PC and used to upgrade the Navini Monitor and Modem.

The latter method is used only if the Modem was not powered on during the OTA upgrade process. The OTA upgrade is normally transparent to the user; in other words, there should be no noticeable service interruption. The web or CD upgrade comes with instructions and takes a minimal amount of time to complete.

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ADDENDUM 1: Ripwave™ Modem - PC Troubleshooting

- For Use With All Ripwave Modems & Navini Monitor Software -

PC Operating Systems

Prior to installing the Navini Monitor software, please check to insure that the PC Operating System meets the criteria given in the table below. If these criteria are not met, unpredictable problems may occur as a result of installation. It is recommended that the user have the latest Windows[c] updates installed prior to installing the Navini Monitor software.

Operating System	Ethernet interface	USB interface	Notes
Win95	Supported	Not Supported	1, 2
Win98	Supported	Supported	2
Win98, 2nd ed.	Supported	Supported	2
WinME	Supported	Supported	2
Win 2000	Supported	Supported	2, 4
Win NT 3.0/4.0	Supported	Not Supported	2, 4
Win XP	Supported	Supported	3, 4

Note 1: USB was not supported in this software release
Note 2: Internet Explorer 3.0 or higher is required
Note 3: Requires Service Pack 1
Note 4: To load the Navini Monitor software, the user MUST have Administrative privileges.

USB Interface

The USB Modem allows for a single PC to be connected to the Ripwave Modem via a USB interface, or multiple PC's connected via a USB hub. The Modem conforms to USB 1.1 standards. The Ethernet packets generated by the PC are encapsulated within the USB protocol and transferred to the Modem. The packets are then sent over-the-air. The USB Modem is fully supported for PC's using Windows 98, Windows ME, Windows 2000, and Windows NT 5.0.

To install the Modem using a USB interface, you must connect the Modem to the PC first and insert the Navini Monitor CD to load the drivers. This will load the Miniport driver. After installing the USB Miniport driver, the PC may or may not need to be restarted, depending upon the type of Operating System and the particular installation. The system will prompt if a reboot is necessary.

Run the setup on the Navini Monitor CD. This will now load the Navini Monitor software.You must ALWAYS reboot the PC after installing the Navini Monitor software. Also, you must ALWAYS reboot after UNinstalling the Navini Monitor software. Failure to do so under either circumstance may gravely affect PC operation.

Ethernet Interface

The Ethernet Modem may be connected to a PC via an Ethernet connection. This configuration also allows multiple PC devices to be connected to a single Modem. The multi-PC configuration is transparent to the PC users and is analogous to a multi-PC configuration on a normal Ethernet LAN. The distinct advantage of the Ethernet Modem is that it connects to any device that has an Ethernet interface. This makes it ideal for small businesses that have a mix of devices, such as Unix machines, Apple Computers, etc. IP addresses can be assigned to the devices dynamically via a DHCP server, or as Fixed IP assignments, or Point-to-Point Protocol Over Ethernet (PPPoE).

Routers & Hubs

The Navini Monitor software will not work if going through a router or if going through some USB or Ethernet hubs. Doing so may cause Navini Monitor software not to operate.

Battery

The Ripwave Modem comes with an optional 1800 mAh Li-Ion battery that allows the user to be nomadic. The user can be connected to the Internet anytime and anywhere there is RF coverage without the need for a power outlet. The current Modem battery is rated to provide up to 4 hours of use without recharging (depending on activity). The Modem can be configured by the Service Provider as sleep or standby mode, which allows the Modem to conserve battery power when not in use.

Configuration Options

| Modem connected to a single computer (USB or Ethernet) | Modem shown as one of many devices on a USB hub | Modem providing access to the Internet via an Ethernet HUB | Host Computer used as router to a network (USB or Ethernet) |
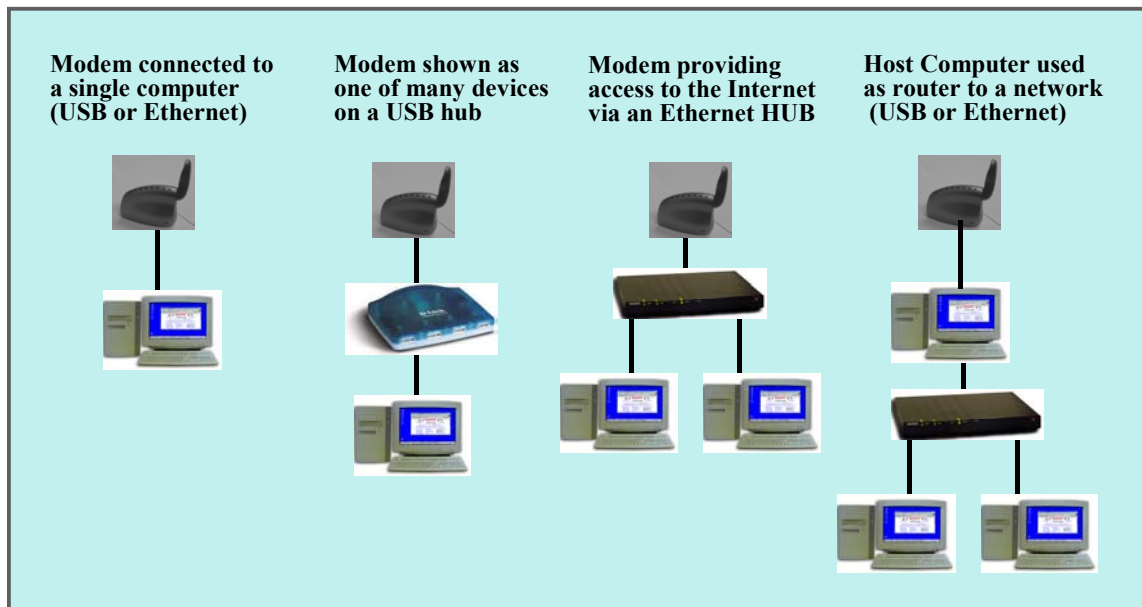
Results of Correct Navini Monitor Installation

For more experienced PC users, you can check the results of the Navini Monitor installation. When installed correctly, you should see the installation log on the PC as it appears below. The log will be located under **c:\Program Files\Navini Ripwave Monitor**. The name of the log is "Ripwave_Monitor_InstallLog.log".

Install Begin: Wed Feb 26 13:30:09 EST 2003
Install End: Wed Feb 26 13:30:29 EST 2003

Created with Zero G's InstallAnywhere 4.5.3 Enterprise Build 1394

Summary

Installation: Successful.
34 SUCCESSES
0 WARNINGS
0 NONFATAL ERRORS
0 FATAL ERRORS

Action Notes:
None.
Install Log Detail:
Custom Action: com.navini.iatool.KillMon
                Status: SUCCESSFUL

Check Disk Space: D:\Program Files\Navini Ripwave Monitor
                Status: SUCCESSFUL
                Additional Notes: NOTE - Required Disk Space: 23,243,991; Free Disk Space: 3,977,043,968

Install Directory: D:\Program Files\Navini Ripwave Monitor\jre
                Status: SUCCESSFUL
                Additional Notes: NOTE - Directory already existed

Install Directory: D:\Program Files\Navini Ripwave Monitor\
                Status: SUCCESSFUL
                Additional Notes: NOTE - Directory already existed

Install Directory: D:\Program Files\Navini Ripwave Monitor\UninstallerData\
                Status: SUCCESSFUL
                Additional Notes: NOTE - Directory already existed

Custom Action: com.navini.iatool.KillMon
                Status: SUCCESSFUL

Install Uninstaller: Ripwave Monitor (Install All Uninstaller Components)
                Status: SUCCESSFUL

Install File: D:\Program Files\Navini Ripwave Monitor\UninstallerData\Uninstall inst.exe
                Status: SUCCESSFUL
Install File: D:\Program Files\Navini Ripwave Monitor\UninstallerData\Uninstall inst.lax
                Status: SUCCESSFUL

Install Directory: D:\Program Files\Navini Ripwave Monitor\UninstallerData\resource\
                   Status: SUCCESSFUL
                   Additional Notes: NOTE - Directory already existed

Install File: D:\Program Files\Navini Ripwave Monitor\UninstallerData\resource\iawin32.dll
                   Status: SUCCESSFUL

Install File: D:\Program Files\Navini Ripwave Monitor\UninstallerData\resource\remove.exe
                   Status: SUCCESSFUL

Make Registry Entry: Key:
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\Ripwave Monitor, Value Name:
DisplayName, Value Data: Ripwave Monitor
                   Status: SUCCESSFUL

Make Registry Entry: Key:
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\Ripwave Monitor, Value Name:
UninstallString, Value Data: "D:\Program Files\Navini Ripwave Monitor\UninstallerData\Uninstall inst.exe"
                   Status: SUCCESSFUL

Install Uninstaller: Ripwave Monitor (Install All Uninstaller Components)
                   Status: SUCCESSFUL

Install File: D:\Program Files\Navini Ripwave Monitor\instpro5.exe
                   Status: SUCCESSFUL

Install File: D:\Program Files\Navini Ripwave Monitor\NAVMON.exe
                   Status: SUCCESSFUL

Install File: D:\Program Files\Navini Ripwave Monitor\navpro5.inf
                   Status: SUCCESSFUL

Install File: D:\Program Files\Navini Ripwave Monitor\NAVPRO5.sys
                   Status: SUCCESSFUL

Registry Entries: Create the InstallDir Key
                   Status: SUCCESSFUL

Set Environment Variable: PATH = D:\Program Files\Navini Ripwave Monitor
                   Status: SUCCESSFUL

Install File: D:\Program Files\Navini Ripwave Monitor\reboot.exe
                   Status: SUCCESSFUL

Install Directory: D:\Documents and Settings\All Users\Start Menu\Programs\
                   Status: SUCCESSFUL
                   Additional Notes: NOTE - Directory already existed

Install Directory: D:\Documents and Settings\All Users\Start Menu\Programs\Navini Ripwave Monitor\
                   Status: SUCCESSFUL
                   Additional Notes: NOTE - Directory already existed

Create Shortcut: D:\Documents and Settings\All Users\Start Menu\Programs\Navini Ripwave Monitor\Ripwave
Monitor.lnk
                   Status: SUCCESSFUL

Create Shortcut: D:\Documents and Settings\All Users\Start Menu\Programs\Navini Ripwave Monitor\Uninstall
Ripwave Monitor.lnk
           Status: SUCCESSFUL

Install Directory: D:\WINDOWS\System32\DRIVERS\
           Status: SUCCESSFUL
           Additional Notes: NOTE - Directory already existed

Install Directory: D:\Documents and Settings\All Users\Start Menu\Programs\Startup\
           Status: SUCCESSFUL
           Additional Notes: NOTE - Directory already existed

Create Shortcut: D:\Documents and Settings\All Users\Start Menu\Programs\Startup\Ripwave Monitor.lnk
           Status: SUCCESSFUL

Install Directory: D:\WINDOWS\
           Status: SUCCESSFUL
           Additional Notes: NOTE - Directory already existed
Install File: D:\WINDOWS\killmon.exe
           Status: SUCCESSFUL

Execute Target File: reboot.exe
           Status: SUCCESSFUL

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