

# **Wireless LAN Cable Modem**

## *User's Guide*



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# 1. Before You Begin

Your new wireless cable modem provides high-speed wireless access to the Internet by using IEEE 802.11b/g wireless standard and an active Internet Connection through your cable service provider. This user guide describes how to set up and use the wireless cable modem. Before installing the wireless cable modem, you should read this user guide to ensure proper wireless cable modem operation.

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## Understand the Wireless Cable Modem's Features

Your wireless cable modem has the following features to help you access and use the Internet:

- Wireless connectivity means that you can use your PC just about anywhere in your home.
- 802.11b/g compliance ensures interoperability with other 802.11b/g compliant devices
- Your wireless cable modem supports transmission rates of 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, and 1 Mbps.
- Two-way design allows the wireless cable modem to send and receive data over the cable television network.
- Cable bandwidth allows data rates of up to 38 megabits per second (Mbps)\*, which is faster than analog modems, integrated services digital network (ISDN), or asymmetric digital subscriber line (ADSL).
- Using your cable line means that the wireless cable modem is always on, always connected, and doesn't tie up your phone line.
- Plug-and-play operation through universal serial bus (USB) ensures easy setup and installation.
- Data Over Cable Service Interface Specification (DOCSIS™) compliance ensures interoperability with DOCSIS compliant cable operators.

*\*NOTE: Speeds may vary based on the following factors:*

- *Computer equipment including available RAM and processor speed*
- *Software applications utilizing your computer's resources*
- *Network traffic depending on the time of day*
- *Limitations set by your Cable Service Provider*

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## Contact Your Local Cable Operator

Before installing your new wireless cable modem, you must contact your local cable service provider to activate your Internet account. Be sure to have the wireless cable modem's MAC address available, which can be found on the underside of the wireless cable modem.

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## Prepare Your Area for Wireless Cable Modem Installation

Before installing your wireless cable modem, you should first prepare your area. To do this:

1. Locate your cable outlet and ensure that it is located within proper distance of your wireless cable modem and computer. Be sure not to bend the cable as this may strain the connector and cause damage.
2. Place wireless cable modem as high as possible. Allow sufficient airflow around the wireless cable modem to prevent overheating.
3. Place wireless cable modem and wireless clients in open areas or far away from transformers, heavy-duty motors, microwave ovens, refrigerators, fluorescent lights, and other manufacturing equipment.
4. Ensure that the temperature in the room where the wireless cable modem will be operating is between 0 and 40°C (32 and 104°F)
5. The wireless signal may be weaker after it has passed through metal, concrete, brick, walls, or floors. Also, make sure that the wireless cable modem and wireless adapters are positioned so that the signal will travel straight through a wall or ceiling for better reception. For example, a wall that is 1 foot thick, at a 45-degree angle appears to be almost 2 feet thick.

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## Gather Supplied and Required Items

You will use a variety of items to install your wireless cable modem. Some of the items are supplied with your wireless cable modem.

### Supplied

Verify that these items were included in the cable modem's package:

- Wireless cable modem
- Power adapter
- USB cable (1.5m)
- Ethernet cable (1.8m)
- CD containing USB drivers, wireless client drivers, and this user guide

### Not Supplied

Verify that these items are available before beginning the installation:

- If using the wireless cable modem's USB port:
  - A PC running Windows 98® Second Edition (SE), Windows Me, Windows 2000, or Windows XP. The cable modem's USB setup does not support the Macintosh® operating system, Windows 98 First Edition, and NT.
  - Windows 98 SE, Windows Me, Windows 2000, or Windows XP CD or diskettes.
  - An active USB port on your PC.

- If using the wireless cable modem's Ethernet port:
  - A PC running Windows 95 (or later) operating system or a Macintosh computer running system 7.6 (or later) operating system
  - An active Ethernet port on your PC or Macintosh
  
- If using the wireless cable modem's Wireless feature:
  - A PC running Windows 98 (or later) operating system or a Macintosh computer running system 7.6 (or later) operating system
  - An active wireless client on your PC or Macintosh

Be sure to follow the instructions provided for the port that you want to use.

Using the Wireless feature of your wireless cable modem is the simplest and quickest way to connect your PC or MAC to the Internet. All you need is an 802.11b/g wireless client that is connected to your PC or MAC. Depending on your cable service provider, you may be able to connect multiple wireless clients to your wireless cable modem.

Using the USB port allows you to install the wireless cable modem more quickly and easily than using the Ethernet port, because you do not have to install and configure a network interface card (NIC).

USB, however, only enables you to connect one computer to the wireless cable modem. Using the Ethernet port allows you connect multiple computers to a wireless cable modem through the use of additional equipment which is not included. Please contact your cable service provider for more information on using multiple computers.

Chapter 2 provides instructions for installing your wireless cable modem using the Wireless feature.

Chapter 3 provides instructions for installing your wireless cable modem using the USB port.

Chapter 4 provides instructions for installing your wireless cable modem using the Ethernet port.

## **2. Installing the Modem Using Wireless**

This chapter explains the process for installing your wireless cable modem using the wireless feature. First you will install the hardware (wireless cable modem, wireless client (not included), coax cable (not included), and power adapter).

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### **Installing the Hardware**

This section explains how to connect the wireless cable modem to the computer, wall cable outlet, and electrical outlet. To install the hardware:

1. Power off the computer
2. Connect one end of the coaxial cable to the wireless cable modem's cable connector. Connect the other end of the coaxial cable to the cable wall outlet. Be sure not to bend or over tighten the cables as this may strain the connector and cause damage. If you plan to connect the wireless cable modem and television to the same wall outlet, you must use a cable line splitter (not included).
3. Plug the wireless cable modem's power adapter into the wireless cable modem's power jack and into an electrical outlet or surge protector.
4. Follow the installation and configuration instructions included with your wireless client.
5. You are now ready to use your cable modem.

## Troubleshooting the Wireless Installation

### The *wlan* LED is not lit.

- Verify that your Wireless PC Card or Wireless USB client is properly connected to your computer.
- Try positioning the computer closer to the wireless cable modem. The wireless signal may be weaker after it has passed through metal, concrete, brick, walls, or floors. Make sure that the wireless cable modem and wireless adapters are positioned so that the signal will travel straight through a wall or ceiling for better reception. For example, a wall that is 1 foot thick, at a 45-degree angle appears to be almost 2 feet thick.
- Make sure PC's wireless client is connecting to right WLCM. Check the SSID of the WLCM and wireless client.
- If WEP (Wired Equivalent Privacy) is set, verify that the WEP key set in the modem matches the WEP key set in the wireless client

## 3. Installing the Wireless Cable Modem Using the USB Port

This chapter explains the process for installing your cable modem using the USB port. First, you will install the hardware (cable modem, USB cable, coax cable, and power adapter). You will then install the cable modem drivers and verify that the modem is functioning properly.

*NOTE: The cable modem's USB setup does not support the Macintosh® operating system, Windows 95 & NT.*

Using the USB port allows you to install the cable modem more quickly and easily than using the Ethernet port, because you do not have to install and configure a network interface card

(NIC).

USB, however, only enables you to connect one computer to the cable modem. Using the Ethernet port allows you to connect multiple computers to a cable modem through the use of additional equipment which is not included. Please contact your cable service provider for more information on using multiple computers.

### **Installing the Software Drivers Before Hardware Connection**

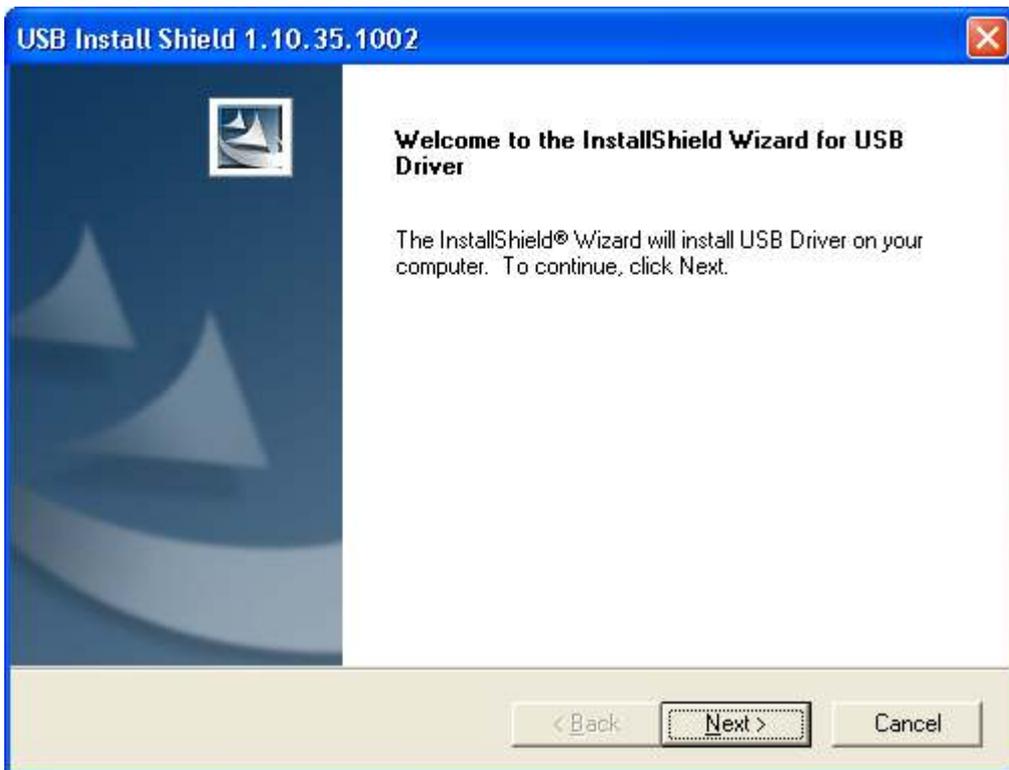
**CAUTION: You should run the “Setup.exe” program first before you connect USB cable to PC.**

To install the cable modem software drivers using the Windows operating system:

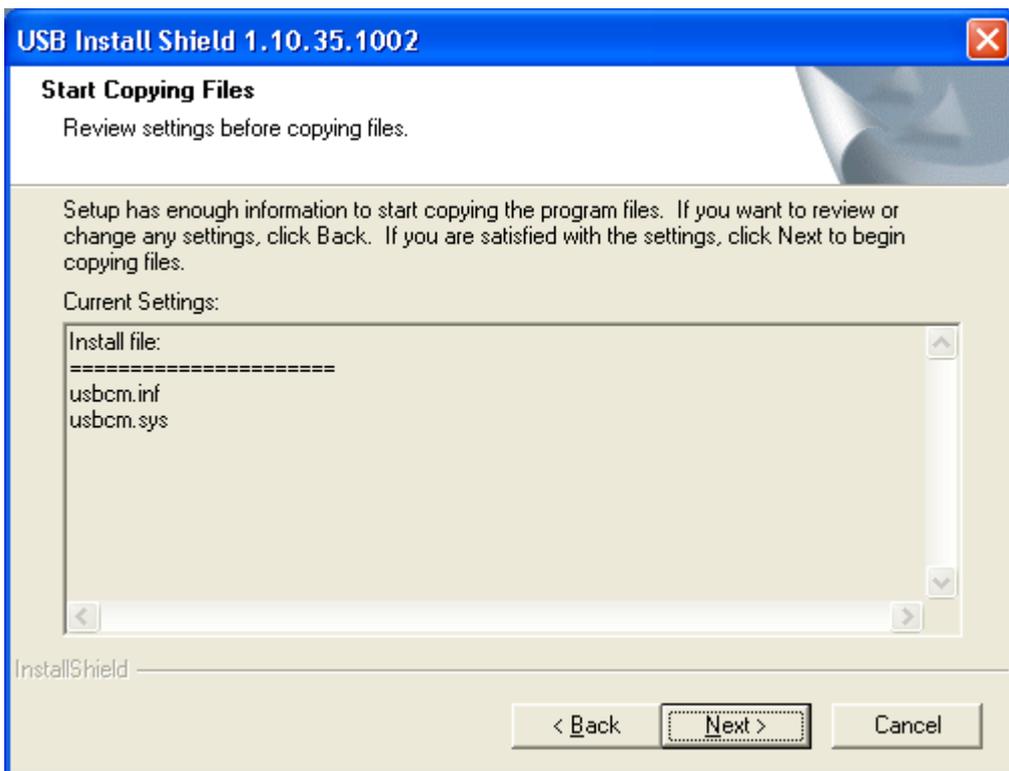
1. Double click the “Setup.exe” program in the CD.
2. Then the “Choose Setup Language” screen appears. You can choose the language you need and click “OK”.



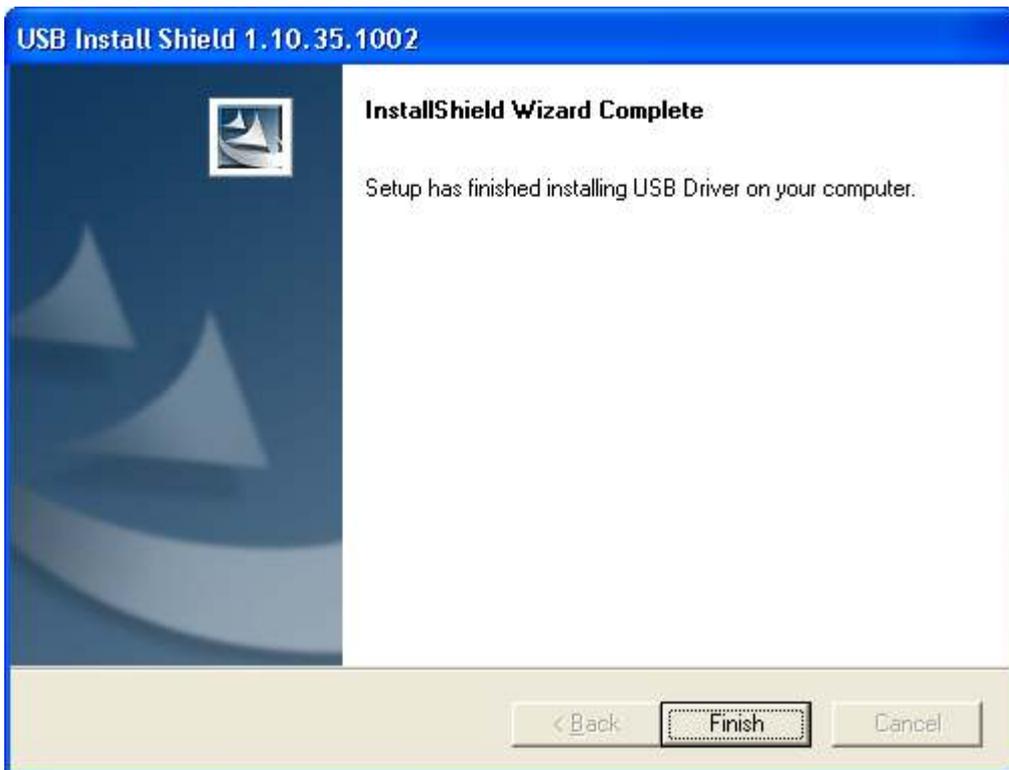
3. You will see the following Welcome screen.



4. Click “Next>”. You will see the following Start screen.



5. Click “Next>”. You will see the following ‘Complete’ screen.



6. Click “Finish”. You will see below screen, and then select ‘Yes.’ Now you can connect the USB cable to the PC by following next section instructions.

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## Installing the Hardware

This section explains how to connect the cable modem to the computer, wall outlet, and electrical outlet.

To install the hardware:

1. Power off the computer
2. Connect one end of the coaxial cable to the cable modem’s cable connector. Connect the other end of the coaxial cable to the cable wall outlet. Be sure not to bend or over tighten the cables as this may strain the connector and cause damage. If you plan to connect the cable modem and television to the same wall outlet, you must use a cable line splitter (not included).
3. Connect one end of the USB cable to the cable modem’s USB port and the other end of the cable to the USB port on the PC.
4. Plug the cable modem’s power adapter into the cable modem’s power jack and into a wall outlet or surge protector.
5. You are now ready to install the software drivers.

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## Installing the Software Drivers

This section explains how to install the software drivers that your PC requires for the cable modem to operate.

### Installing the Software Drivers in Windows 98 SE Operating System

**CAUTION: You must install the drivers located on the CD that ships with your cable modem. If you use the default Windows-supplied software drivers, you will not be able to properly install the cable modem.**

To install the cable modem software drivers using the Windows 98 operating system:

1. Power on your PC. After your computer boots, Windows detects the cable modem. The Found New Hardware screen appears, followed by the Add New Hardware Wizard screen.



2. Insert the CD into the PC's CD-ROM drive and click *Next*. You will see the following screen:



3. Select *Search for the best driver for your device (Recommended)*. Then select *Next*. You will see the following screen.



4. Check the *CD-ROM drive* check box and verify that the CD is in the CD-ROM drive. Click *Next* to have Windows search for the necessary driver files. You will see the following.

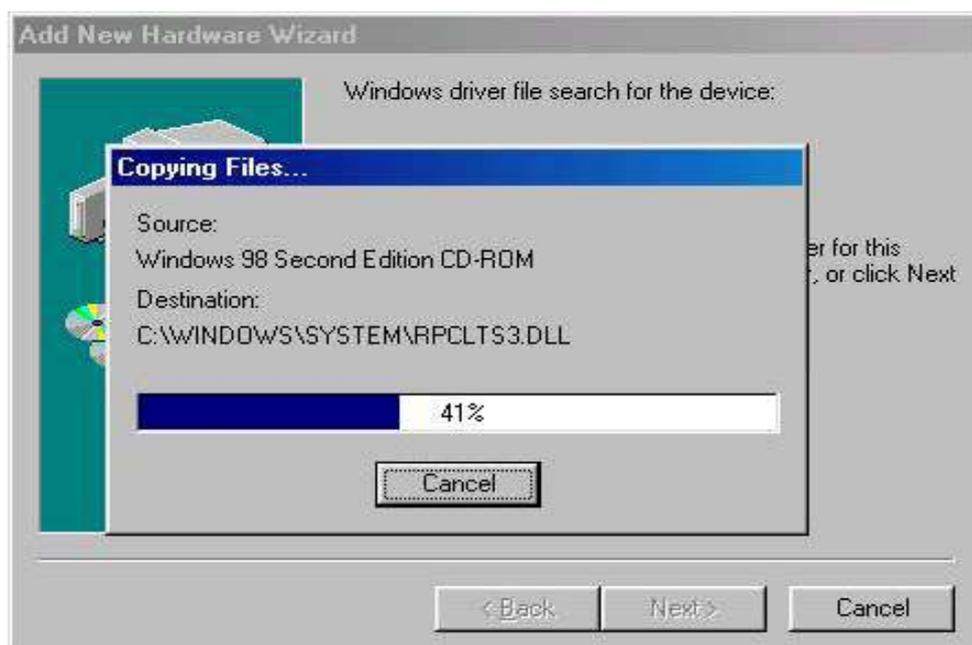
**CAUTION:** You must verify that **Ambit USB Cable Modem** appears on the screen. If **USB Composite Device** appears, you must click *Back* twice and specify the correct location of the driver files. **DO NOT** proceed if **USB Composite Device** is displayed in the above window. Contact your cable provider for further assistance.



5. Click *Next*. The computer automatically installs the necessary driver files. You may see the following screen



6. If the above screen appears, you must insert the Windows 98 CD so that Windows can copy the remaining files.



7. Wait for Windows to complete copying the remaining files.



8. Click *Finish* to complete the installation. You will see the following screen.



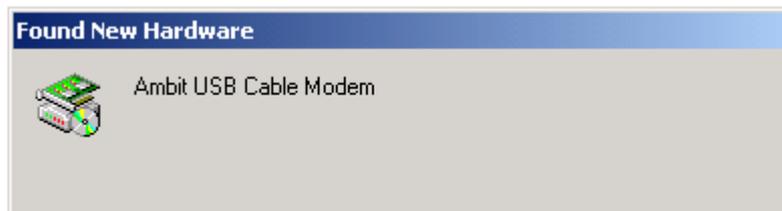
9. Choose *Yes* to restart your computer.
10. After the computer is rebooted, verify that the USB LED is lit on the front of your cable modem. If not, refer to the troubleshooting section later in this chapter.

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## Installing the Software Drivers in Windows Me Operating System

To install the cable modem software drivers using the Windows Me operating system:

1. Power on your PC. After your computer boots, Windows detects the cable modem. The Found New Hardware screen appears, followed by the Found New Hardware Wizard screen.



2. Insert the CD into the PC's CD-ROM and click *Next*. You will see the following screen.



3. Select *Automatic search for a better driver (Recommended)* and click (*Next*). The computer automatically copies the necessary driver files from the CD. You will see the following screen.



4. Check the *CD-ROM drive* check box and verify that the CD is in the CD-ROM drive. Click *Next* to have Windows search for the necessary driver files. You will see the following



5. Click *Finish* after the computer has copied the necessary files. You will see the following screen.



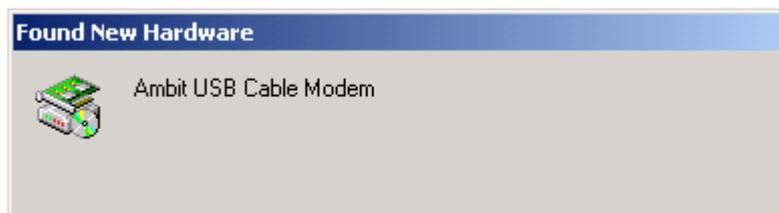
6. Click *Yes* to restart the computer

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## Installing the Software Drivers in Windows 2000 Operating System

To install the cable modem software drivers using the Windows 2000 operating system:

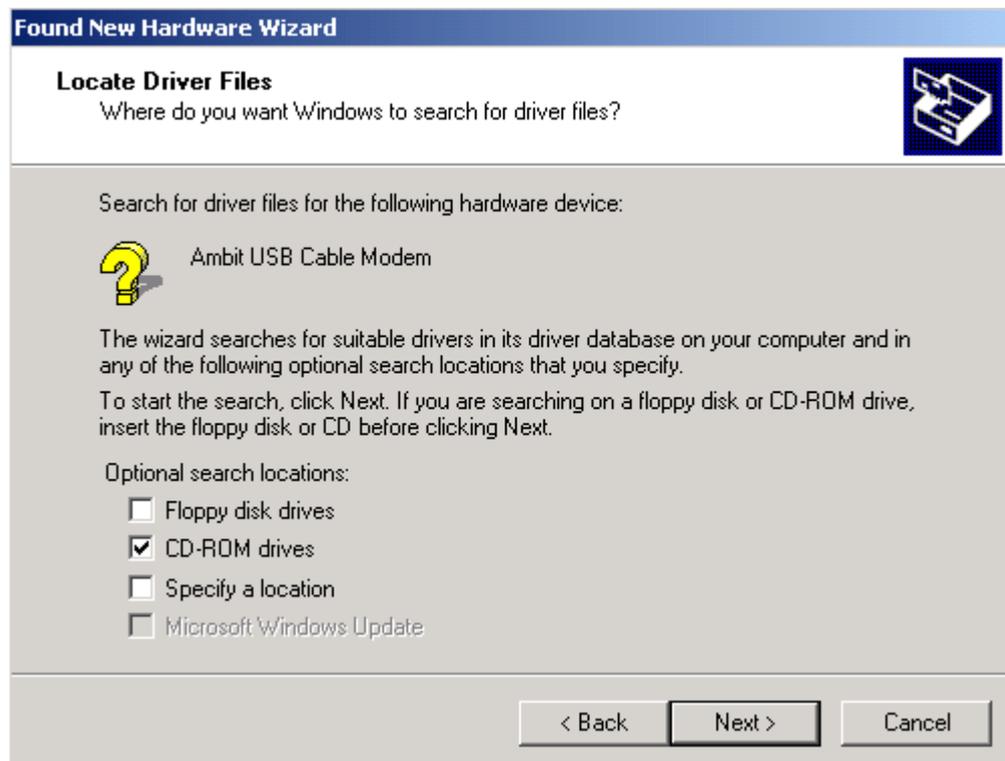
1. Power on your PC. After your computer boots, Windows detects the cable modem. The Found New Hardware screen appears, followed by the Found New Hardware Wizard screen.



2. Insert the CD into the PC's CD-ROM Drive and click *Next*. You will see the following screen.



3. Select *Search for a suitable driver for my device (recommended)*. Then select *Next >*. You will see the following screen



4. Check the *CD-ROM drive* check box and verify that the CD is in the CD-ROM drive.

Click *Next* to have Windows locate the necessary driver files. You will see the following screen.



5. Click *Next* to install the driver files for the cable modem. You will see the following screen.



7. Click *Finish* to complete the installation.
8. After the installation is completed, verify that the USB LED is lit on the front of you cable modem. If not, refer to the troubleshooting section later in this chapter.

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## Installing the Software Drivers in Windows XP Operating System

1. Power on your PC. After your computer boots, Windows detects the cable modem. The Found New Hardware screen appears, followed by the Found New Hardware Wizard screen.



2. Choose *the software automatically (Recommended)*. Click *Next* to continue. You will see the following screen.



3. Click *Finish* to complete the installation.

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## Troubleshooting the USB Installation

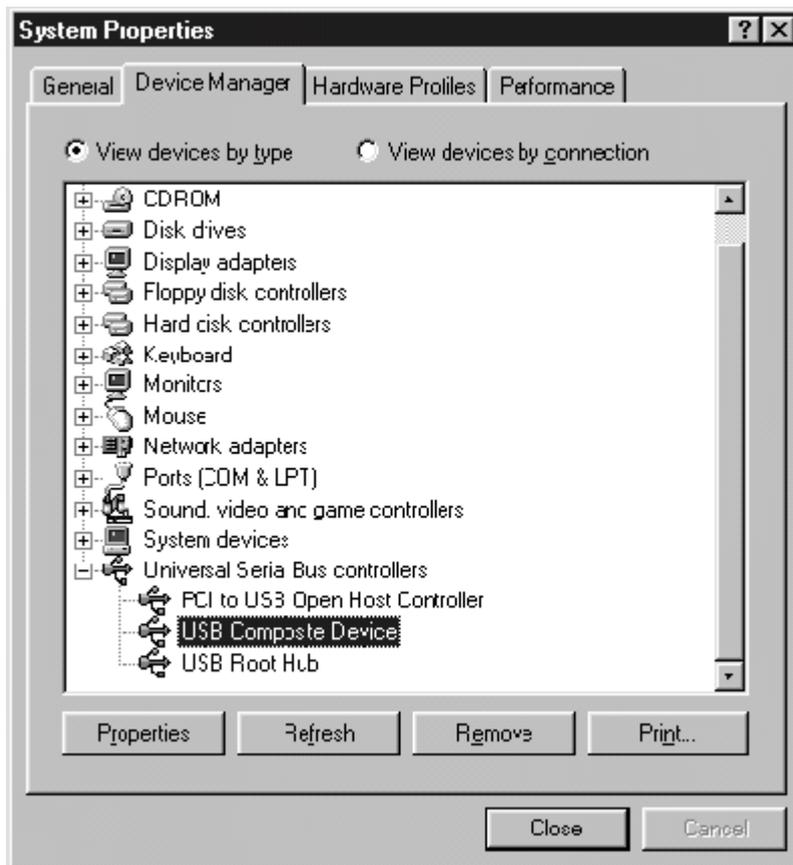
### **None of the LEDs are on when I power on the Wireless LAN Cable Modem.**

Check the connection between the power adapter and the cable modem. Power off the Wireless LAN Cable Modem and wait for 5 Seconds and power on the modem again. If the problem still exists, you may have a hardware problem.

### **When attempting to install the USB driver in Windows 98 SE, I receive the following error message: Device not installed at this time. Driver not found.**

This usually occurs when the wrong driver has been installed. To remove the wrong driver and install the correct driver:

1. Right-click on the *My Computer* icon on your desktop and choose *Properties*.
2. Click the *Device Manager* tab
3. Click the plus sign next to *Universal Serial Bus controllers* to view the list of installed USB device drivers



4. Select *USB Composite Device* and click *Remove*
5. Click *Refresh*

The Add New Hardware Wizard window appears, displaying the device name *USB Composite Device*. Refer to the proper operating system instructions in this chapter for information on reinstalling the driver properly.

**All of the LEDs on the front of my modem look correct, but I cannot access the Internet.**

- If the POWER, USB, SYNC, and READY are solidly lit, the cable modem is working properly. Use the following procedures to verify connectivity between the PC and the cable modem:
  - Launch Your PC's Internet Browser (e.g., Netscape, IE)
  - Enter <http://192.168.0.1> into your browser. This URL connects you directly to the web server within your cable modem. A successful connection indicates that the PC is able to communicate with the cable modem. The next step is to enter a public URL to ensure connectivity between the cable modem and your cable service provider. If this fails, please contact your cable service provider for further assistance.
- Try restarting the computer so that it could re-establish a connection with the cable modem.
- Power cycle the cable modem by removing the power adapter from the electrical outlet and plugging it back in. Wait several minutes for the cable modem to

re-establish communications with your cable service provider.

- Remove any other USB devices from your computer and connect the cable modem's USB cable directly to the USB port on your computer.
- If you are using a cable splitter, try removing the splitter and connect the cable modem directly to the cable wall outlet. Wait several minutes for the cable modem to re-establish communications with your cable service provider.
- Your USB or coaxial cable may be damaged. Try using another cable.
- If none of these suggestions work, contact your cable service provider for further assistance.

## Uninstalling the USB Driver

1. Insert the supplied CD into your CD-ROM drive
2. Click on the *My Computer* icon on your desktop. Then click on the icon that belongs to your CD-ROM Drive.

Locate the file called “**setup.exe**” and click on the file. This program will remove all the necessary files from you computer.

## 4. Installing the Modem Using the Ethernet Port

This chapter explains the process for installing your wireless cable modem using the Ethernet port. Using the Ethernet port allows to you connect multiple computers to a wireless cable modem through the use of additional equipment which is not included. Please contact your cable service provider for more information on using multiple computers.

See Chapter 2 “Installing the Wireless Cable Modem Using the USB Port” for instructions on installing the wireless cable modem using the USB port.

You can use the wireless cable modem's Ethernet port if you have:

- A PC running Windows 95 (or later) operating system or a Macintosh computer running system 7.6 (or later) operating system
- An active Ethernet port on your PC

Before you begin, verify that your Network Interface Card (NIC) has been installed and configured for use with your wireless cable modem. The wireless cable modem requires TCP/IP to be installed. Contact your cable service provider for assistance with installing and configuring TCP/IP. After installed the hardware, your computer can connect the wireless cable modem directly by using Network Interface Card. Unlike USB installation, there is no needed for software installation for the Ethernet connection.

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## Installing the Hardware

This section explains how to connect the wireless cable modem to the computer, wall cable

outlet, and electrical outlet.

To install the hardware:

1. Power off the computer
2. Connect one end of the coaxial cable to the wireless cable modem's cable connector. Connect the other end of the coaxial cable to the cable wall outlet. Be sure not to bend or over tighten the cables as this may strain the connector and cause damage. If you plan to connect the wireless cable modem and television to the same wall outlet, you must use a cable line splitter (not included).
3. Connect one end of the Ethernet cable to the wireless cable modem's Ethernet port and the other end of the cable to the Ethernet port on the PC or network interface card (NIC).
4. Plug the wireless cable modem's power adapter into the wireless cable modem's power jack and into a wall outlet or surge protector.
5. If the **pwr**, **sync**, **ready**, and **ethernet** LEDs are solidly lit, the wireless cable modem is working properly.

---

## Troubleshooting the Ethernet Installation

### **None of the LEDs are on when I power on the Wireless LAN Cable Modem.**

Check the connection between the power adapter and the cable modem. Power off the Wireless LAN Cable Modem and wait for 5 seconds and power on the modem again. If the problem still exists, you may have a hardware problem.

### **The ethernet 1 or 2 or 3 or 4 LED on my wireless cable modem is not lit.**

- Try restarting the computer so that it could re-establish a connection with the wireless cable modem.
- Check for a resource conflict (Windows users only). To do this:
  - 1) Right-click on the *My Computer* icon on your desktop and choose *Properties*.
  - 2) Click the *Device Manager* tab and look for a yellow exclamation point or red X over the NIC in the *Network Adapters* field. If you see either one, you may have an IRQ conflict. Refer to the manufacturer's documentation or your cable service provider for further assistance.
- Verify that TCP/IP is the default protocol for your network interface card (NIC)
- Power cycle the wireless cable modem by removing the power adapter from the electrical outlet and plugging it back in. Wait several minutes for the wireless cable modem to re-establish communications with your cable service provider.
- Your Ethernet cable may be damaged. Try another cable.

### **All of the LEDs on the front of my modem look correct, but I cannot access the Internet.**

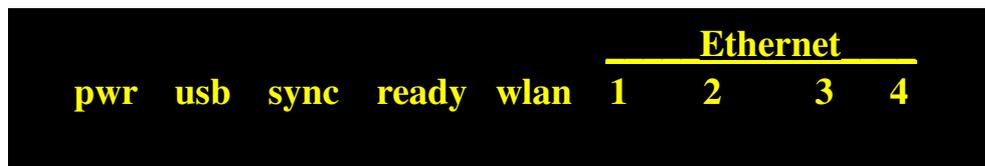
- If the **pwr**, **sync**, and **ready** LEDs are solidly lit, the wireless cable modem is working properly. Try restarting the computer so that it could re-establish a connection with the wireless cable modem.
- Power cycle the wireless cable modem by removing the power adapter from the electrical outlet and plugging it back in. Wait several minutes for the wireless cable modem to re-establish communications with your cable service provider.
- If your PC is connected to a hub or gateway, try connecting the PC directly into the wireless cable modem.
- If you are using a cable splitter, try removing the splitter and connect the wireless cable modem directly to the cable wall outlet. Wait several minutes for the wireless cable modem to re-establish communications with your cable service provider.
- Your Ethernet or coaxial cable may be damaged. Try using another cable.
- If none of these suggestions work, contact your cable service provider for further assistance.

## 5. Wireless Cable Modem LEDs and Connectors

This chapter describes the functions of the wireless cable modem's LEDs and connectors. When the **pwr**, **sync**, and **ready** LEDs are lit, the wireless cable modem is working properly. The **usb** or **enet 1, 2, 3, 4** LEDs should also be lit depending on what port is being used. The following provides an overview of the LED indicator lights on the front of the wireless cable modem and what the LEDs mean.

---

### LEDs on the Front of the Modem



- **pwr**: Indicates that the wireless cable modem has successfully completed internal power-on tests.
- **usb**: Indicates connectivity between the USB port on the wireless cable modem and a PC's USB port.
- **sync**: Indicates the connection status between the wireless cable modem and the cable network. The LED is lit when the wireless cable modem has established a downstream channel with the cable service provider's Cable Modem Termination System (CMTS).

- **ready:** Indicates that the wireless cable modem has completed the ranging/registration process and is ready to send/receive data.
- **wlan:** Indicates that at least one wireless client is linked to the wireless cable modem.
- **Enet 1, 2, 3, 4:** Indicates connectivity between the Ethernet port on the wireless cable modem and the Ethernet port on a PC or Mac. This LED blinks when the wireless cable modem is transferring or receiving data over the Ethernet cable.

Installation problems with the wireless cable modem are commonly due to the cable network and its topography. LEDs on the front panel of the wireless cable modem reveal operational status and help you determine problem areas.

---

## Connectors on the Back of the Modem

This list of connectors describes where to connect the cables and power adapter when installing the wireless cable modem.



1. **PWR:** This is where you plug the included power adapter. Remember to use only the power adapter that came with the wireless cable modem.
2. **Ethernet 10/100 Port 1, 2, 3, 4:** This is where you plug the Ethernet cable. The other end connects to the Ethernet port on the PC or NIC
3. **USB Port:** This is where you plug the included USB cable. The other end connects to the USB port on your PC.
4. **Cable Connector:** This is where you connect the coaxial cable (not included) that leads to the cable splitter (not included) or the cable wall outlet.

## 6. Web User Interface

### Accessing the Web User Interface

1. The PC connected to the wireless cable modem must support TCP/IP connection and dynamic DHCP IP address acquisition, and must have a web browser installed.
2. Open the web browser and set the URL location to: <http://192.168.0.1>



3. Click LOGIN. Input user for User name and user for Password, and then click **OK**.



4. If the user inputs an incorrect user name and/or password, the web user interface displays "401Unauthorized".

## Web User Interface Home Page

A main menu is shown at the top of the pages and the user can select different options to view wireless cable modem information. The main menu contains 4 categories of wireless cable modem information. They include:

### CABLE MODEM

#### Cable Modem Information



## Cable Modem Status

The screenshot shows a web browser window titled "Ambit - Cable Modem - Microsoft Internet Explorer". The address bar displays "http://192.168.0.1". The page content includes the "AMBIT" logo and a "Cable Modem" header. A left sidebar contains navigation links: "LOGOUT", "CABLE MODEM INFORMATION", "CABLE MODEM" (with sub-links for Information, Status, Downstream, Upstream, Upstream Event, Operation Config, and Event Log), "FIREWALL", "PARENTAL CONTROL", and "DIAGNOSTICS". The main content area is titled "Cable Modem Status" and features a table with the following data:

Task	Status	Comments
Acquire a Downstream Channel	561,000,000 Hz	Locked
Connectivity State	OK	Operational
Spot State	OK	Operational
Security	Disabled	Disabled

The browser's status bar at the bottom shows the URL "http://192.168.0.1/ambit\_P\_status.html" and a "Parent" icon.

## Downstream

The screenshot shows a web browser window titled "Ambit - Cable Modem - Microsoft Internet Explorer". The address bar shows "http://192.168.0.1". The page has an orange header with the "AMBIT" logo and "Cable Modem". A left sidebar contains navigation links: LOGOUT, CABLE MODEM INFORMATION, CABLE MODEM (with sub-links for Information, Status, Downstream, Upstream, Upstream Burst, Operation Config, and Event Log), FIREWALL, PARENTAL CONTROL, and DIAGNOSTICS. The main content area is titled "Downstream" and lists the following parameters:

- Downstream Lock : Locked
- Downstream Frequency : 561000000 Hz
- Downstream Modulation : QAM64
- Downstream Interleave Depth: 32
- Downstream Receive Power Level: -6.9 dBmV
- Downstream SNR: 33.4 dB

The browser's status bar at the bottom shows the URL "http://192.168.0.1/ambit\_P\_status.html" and a "Parent" icon.

## Upstream

The screenshot shows a web browser window titled "Ambit - Cable Modem - Microsoft Internet Explorer". The address bar shows "http://192.168.0.1". The page has an orange header with the "AMBIT" logo and "Cable Modem". A left sidebar contains navigation links: LOGOUT, CABLE MODEM INFORMATION, CABLE MODEM (with sub-links for Information, Status, Downstream, Upstream, Upstream Burst, Operation Config, and Event Log), FIREWALL, PARENTAL CONTROL, and DIAGNOSTICS. The main content area is titled "Upstream" and lists the following parameters:

- Upstream Channel ID: 2
- Upstream Transmit Power Level: 36.3 dBmV
- Upstream Symbol Rate: 256.0 Ksym/sec
- Upstream Frequency: 20700000 Hz
- Upstream Min-Slot Size : 2

The browser's status bar at the bottom shows the URL "http://192.168.0.1/ambit\_P\_status.html" and a "Parent" icon.

## Upstream Burst

The screenshot shows the AMBIT Cable Modem web interface. The main content area is titled "Upstream Burst" and contains a table of configuration parameters for five different data rates. The table has the following structure:

	request(1)	initialRanging(3)	periodicRanging(4)	shortData(5)	longData(6)
Modulation Type	QPSK	QPSK	QPSK	QPSK	QPSK
Differential Encoding	Off	Off	Off	Off	Off
Preamble Length	64	128	128	72	80
Preamble Value Offset	55	0	0	48	40
FEC Error Correction (T)	0	5	5	5	8
FEC Codeword Information Bytes (k)	16	34	34	78	220
Scrambler Seed	338	338	338	338	338
Maximum Burst Size	2	0	0	12	0
Guard Time Size	6	48	48	6	8
Last Codeword Length	Fixed	Fixed	Fixed	Short	Short
Scrambler on/off	On	On	On	On	On

The interface also includes a left sidebar with navigation links for "CABLE MODEM INFORMATION", "CABLE MODEM", "FIREWALL", "PARENTAL CONTROL", and "DIAGNOSTICS". The "CABLE MODEM" section is expanded, showing sub-links for "Information", "Status", "Downstream", "Upstream", "Upstream Burst", "Operation Config.", and "Event Log".

## Operation Configuration

The screenshot shows a web browser window titled "Ambit - Cable Modem - Microsoft Internet Explorer". The address bar shows "http://192.168.0.1". The page header features the "AMBIT" logo and "Cable Modem". The left sidebar contains navigation links: "LOGOUT", "CABLE MODEM INFORMATION", "CABLE MODEM" (with sub-links for Information, Status, Downstream, Upstream, Upstream Burst, Operation Config, and Event Log), "FIREWALL", "PARENTAL CONTROL", and "DIAGNOSTICS". The main content area is titled "Operation Configuration" and displays the following settings:

- Network Access : Allowed
- Maximum Downstream Data Rate : 3000000
- Maximum Upstream Data Rate : 250000
- Maximum Upstream Channel Burst : 0
- Modem Capability : Concatenation Disabled, Fragmentation Disabled, PHS Disabled
- Maximum Number of CPEs : 1

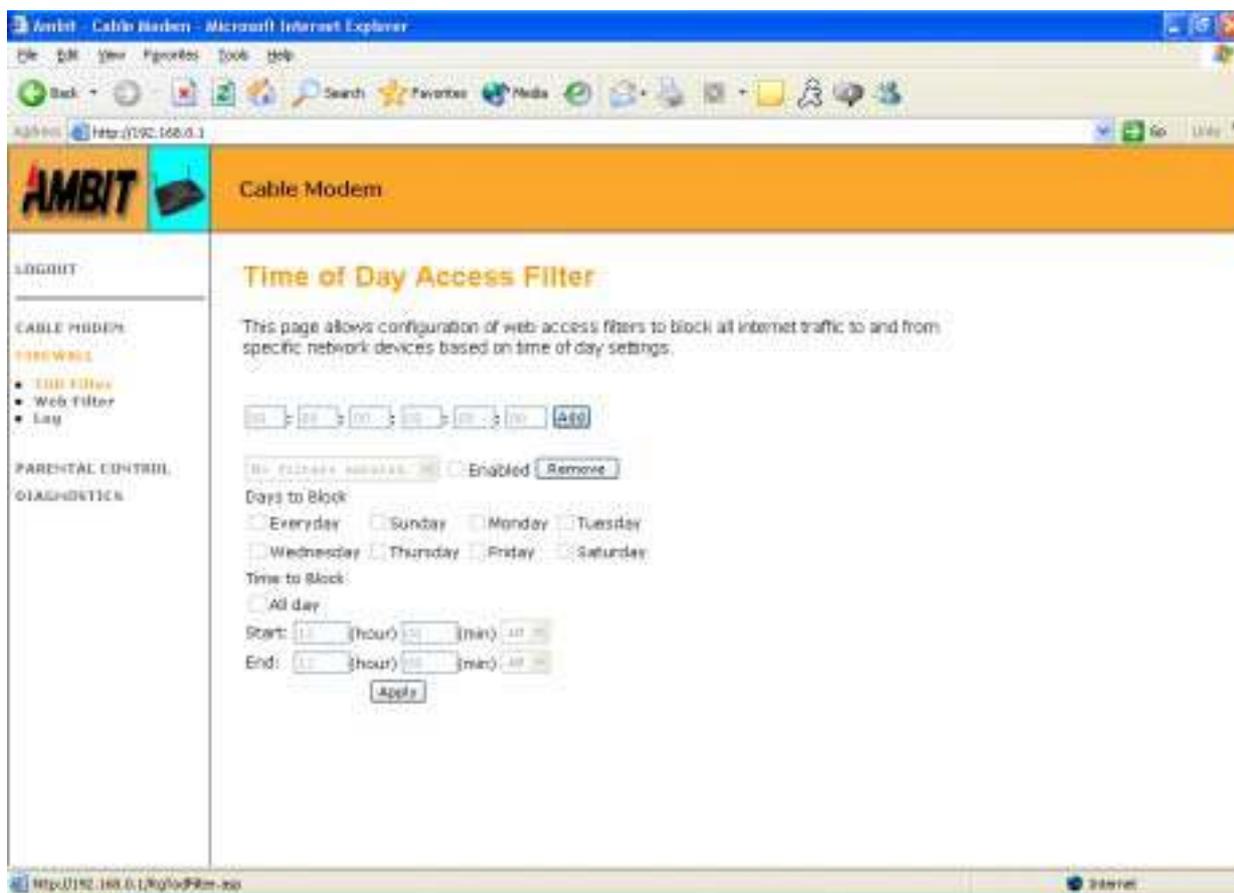
The status bar at the bottom shows the URL "http://192.168.0.1/ambit\_P\_operation.html" and a "Status" indicator.

## Event Log

The screenshot shows the same web browser window, but the main content area is titled "Event Log". It features a table with the following columns: "Index", "First Time", "Last Time", "Counts", "Level", "ID", and "Text". Below the table is a "Clear Log" button. The left sidebar navigation is identical to the previous screenshot, with "Event Log" highlighted in the "CABLE MODEM" section. The status bar at the bottom shows the URL "http://192.168.0.1/ambit\_P\_event.html" and a "Status" indicator.

# FIREWALL

## TOD Filter



### ADD

- You can block internet traffic of a particular network device based on MAC address.

### Enable

- You can enable blocking of internet traffic of a particular network device based on the MAC address.

### Remove

- You can remove blocking of internet traffic of a particular network device based on the MAC address.

### Days to Block

- You can specify by day(s) when blocking should apply to a specify network device based on the MAC address.

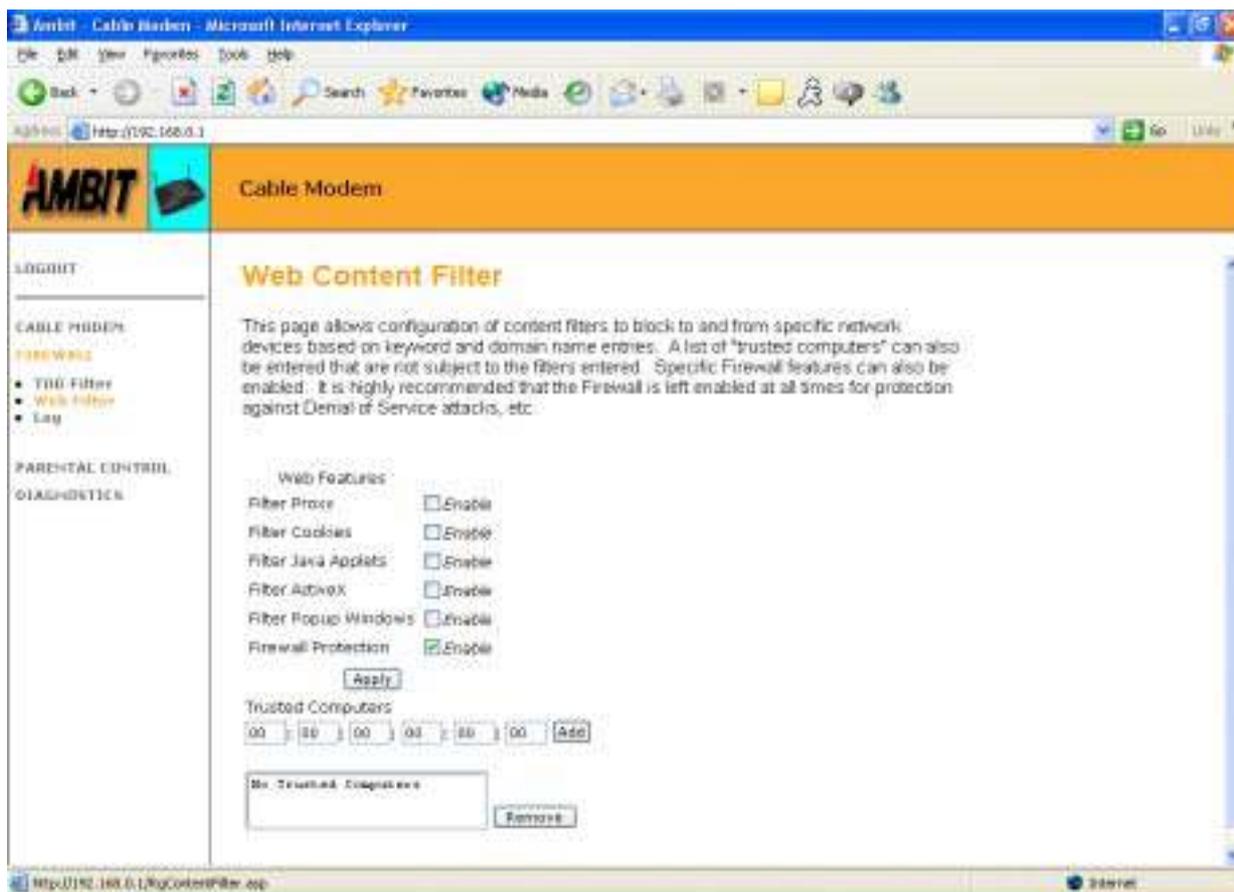
### Time to Block

- You can specify by hour when blocking should start and end to a specify network device based on the MAC address.

### Apply

- Any configuration changes must be followed by “**Apply**” before changes will occur.

## WEB Filter



### Filter Proxy

- You can enable/disable blocking of Proxy.

### Filter Cookies

- You can enable/disable blocking of Cookies.

### Filter Java Applets

- You can enable/disable blocking of Java Applets.

### Filter ActiveX

- You can enable/disable blocking of ActiveX.

### Filter Popup Windows

- You can enable/disable blocking of Popup Windows.

### Firewall Protection

- You can enable/disable firewall protection.

*\*\*\* It is highly recommended that you keep the Firewall protection enabled at all times for protecting against Denial of Service attacks, etc....*

### Apply

- Any configuration changes must be followed by “**Apply**” before changes will occur.

### Trusted Computers

- You can specify network device by MAC address to be excluded from any filtering.

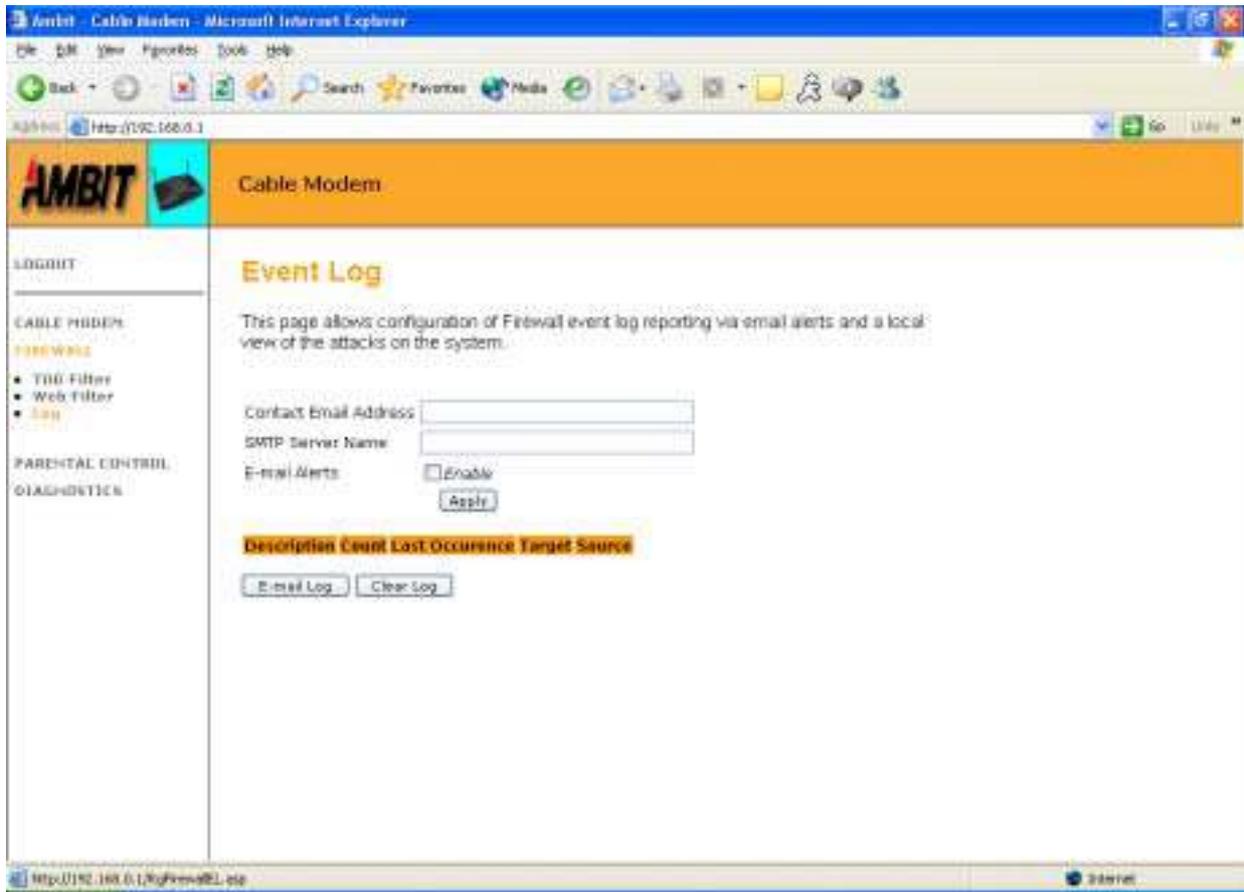
### ADD

- You can add the network device MAC address into the Trusted Computers list.

### Remove

- You can remove the network device MAC address from the Trusted Computers list by selecting the MAC address from the list, and click “**Remove**”.

## LOG



### E-mail Alerts

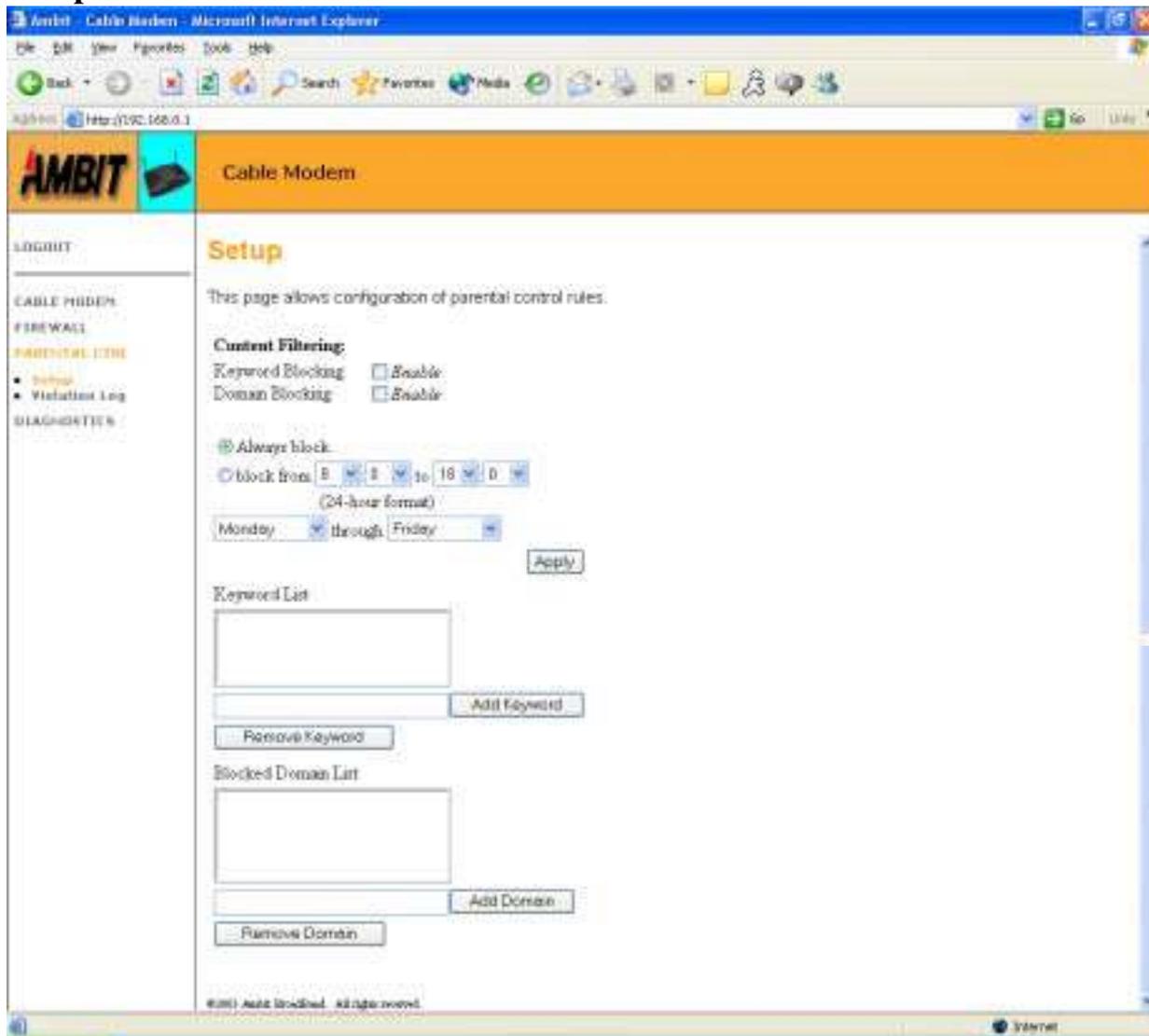
- You can enable/disable sending E-mail Alerts with Contact E-mail Address and SMTP Server Name.

### Apply

- Any configuration changes must be followed by “**Apply**” before changes will occur.

# PARENTAL CONTROL

## Setup



### Keyword Blocking

- You can enable/disable blocking based on the Keyword List.

### Domain Blocking

- You can enable/disable blocking based on the Domain List.

### Always block

- You can specify blocking by 24-hour format and day(s), or always.

### Apply

- Any configuration changes must be followed by “**Apply**” before changes will occur.

### Add Keyword

- You can add keyword to the list by clicking” **Add Keyword**”.

### Remove Keyword

- You can remove keyword by selecting the keyword in the list, and click” **Remove Keyword**”.

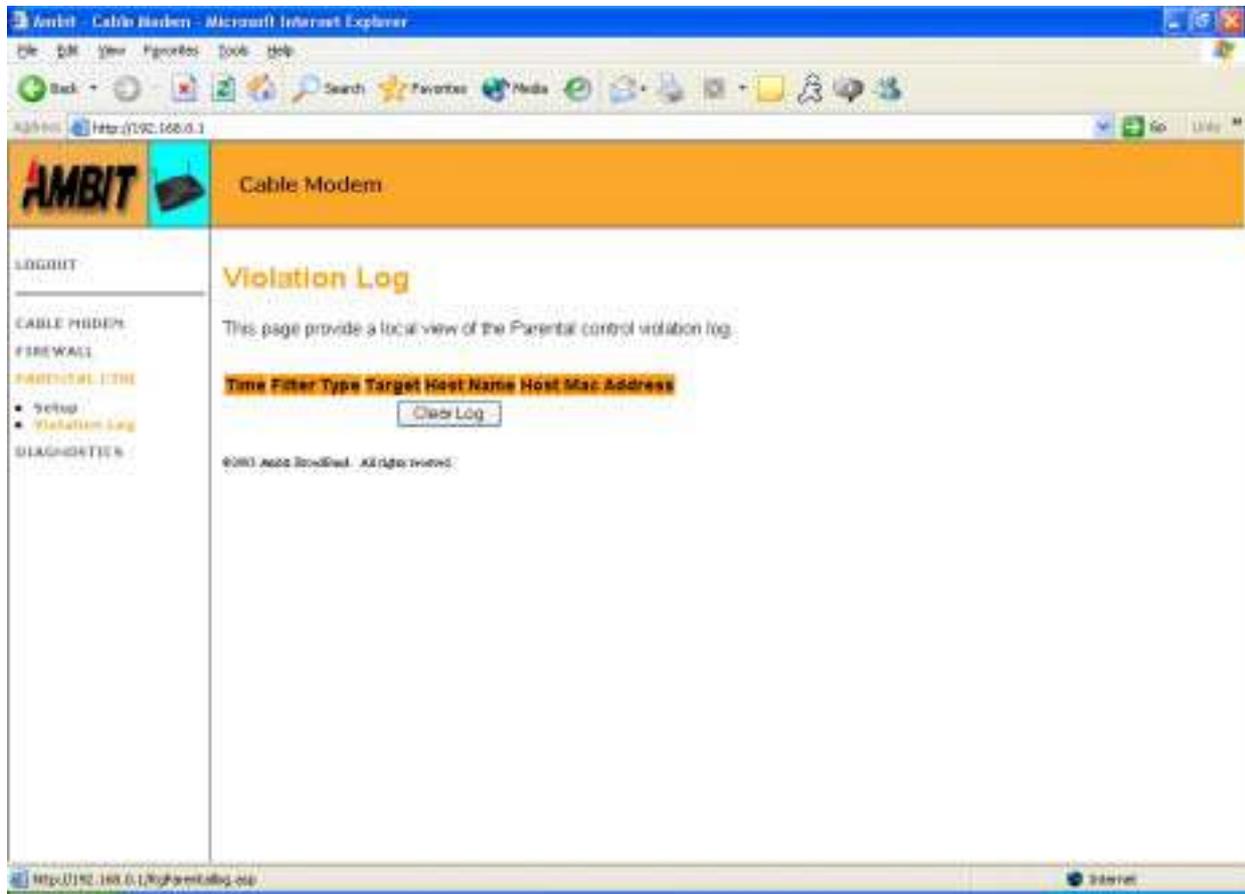
### Add Domain

- You can add Domain to the list by clicking” **Add Domain**”.

## Remove Domain

- You can remove Domain by selecting the Domain in the list, and click” **Remove Domain**”.

## Violation Log

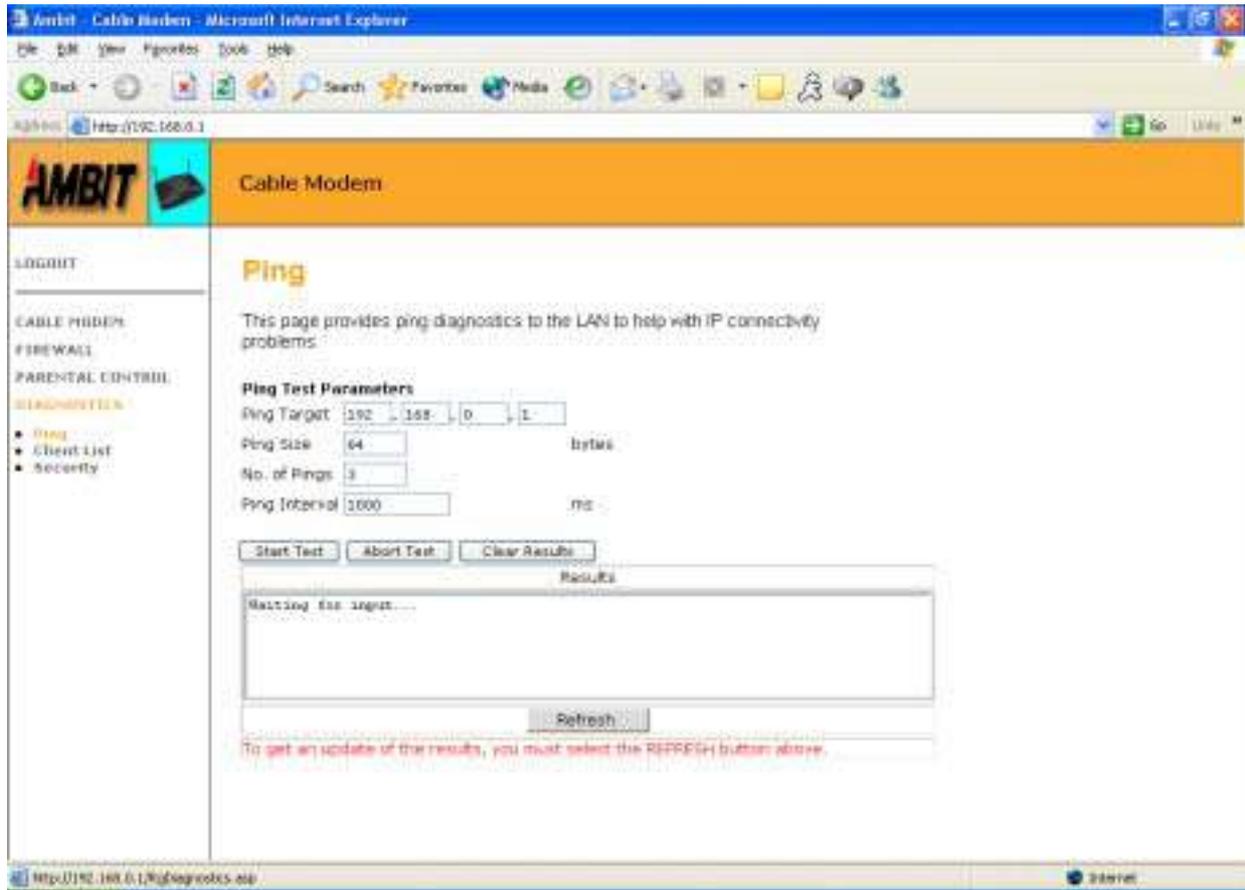


## Clear Log

- You can clear the Violation Log by clicking “**Clear Log**”.

# DIAGNOSTICS

## Ping



### Start Test

- After you enter the IP address that you want to ping, click “**Start Test**”. You must click “Refresh” to get the results.

### Abort Test

- You can terminate the Ping test by clicking “**Abort Test**”.

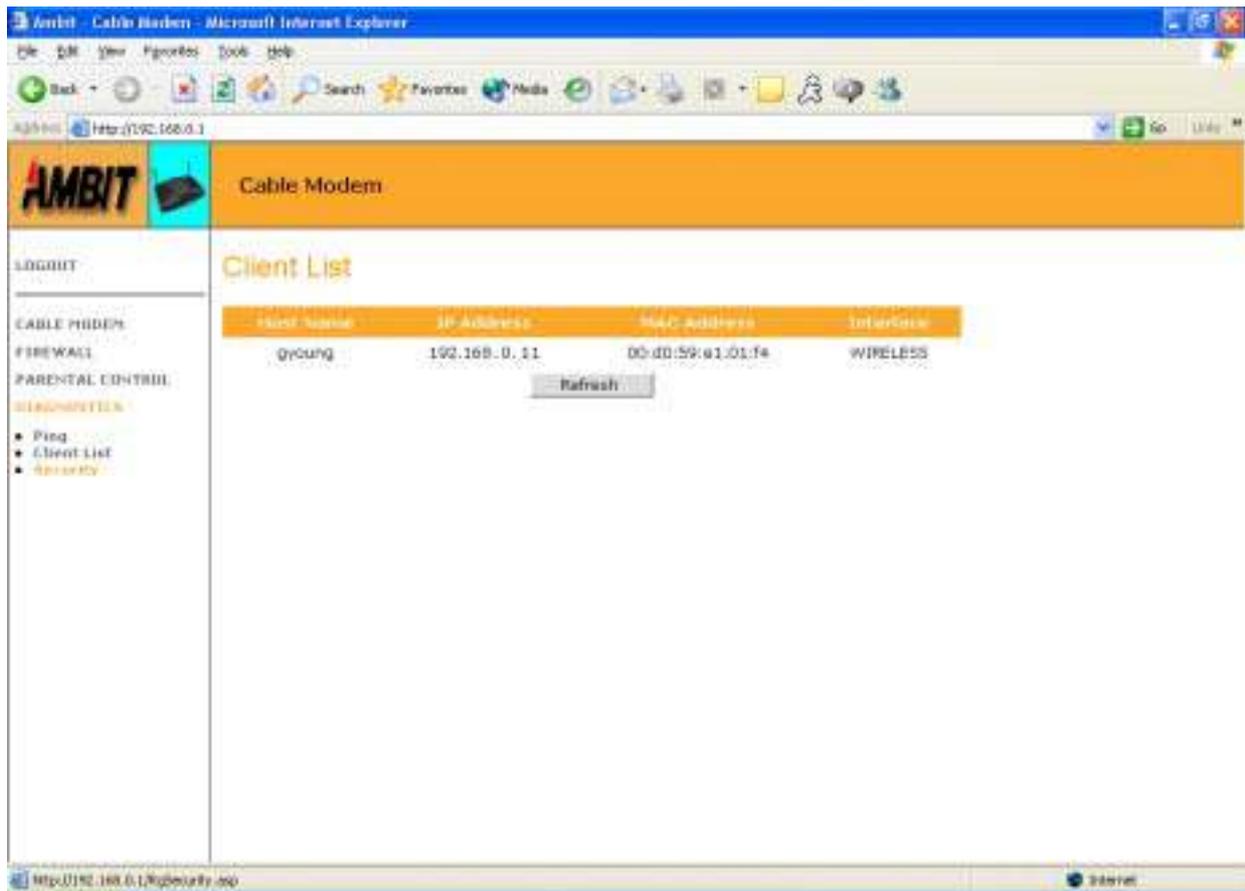
### Clear Result

- You can clear the Results display area by clicking “**Clear Results**”.

### Refresh

- You can get you Ping test results by clicking “Refresh”.

## Client List



### Refresh

- You can get an update of the clients list by clicking “Refresh”.

## Change Password



### Change Password

- You can change the “user” password by entering the new password.

### Restore Factory Defaults

- You can restore factory defaults by selecting “Yes”.

### Apply

- Any configuration changes must be followed by “**Apply**” before changes will occur.