

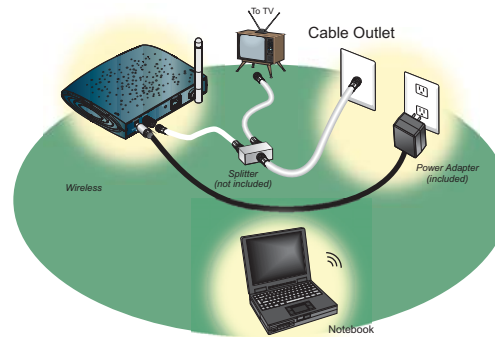


Hitron Technologies

## Cable Modem Gateway Installation Poster

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## Wireless Installation



## Check the LEDs

After installation is complete, the cable modem is operating properly if the **Power**, **Cable** and **Status** LED lights are solid green.

LED LABEL	COLOR	DESCRIPTION
Power	Green	Cable modem is plugged in to an electrical outlet and is receiving power
Cable	Orange-Blinking	The modem is searching for the DOWNSTREAM frequency
	Orange	Downstream frequency is locked. Searching for UPSTREAM frequency
Status	Green-Blinking	Modem is registering with the cable company's head-end
	Green	Modem is ready for data transfers
Ethernet	Green	Valid Ethernet link status
	Green-Blinking	Cable modem is transmitting/receiving data through the Ethernet port
Wireless	Green	Wireless interface is connected
	Green-Blinking	Data is being sent/received through the Wireless port

## Package Contents

The Broadband Residential Cable Modem Gateway ("cable modem") package contains:

- 1 cable modem
  - 1 power adapter, (5VDC/1.5A)
- Caution: Be sure to use only the power adapter that came with the cable modem. Using the wrong power adapter can damage the cable modem or cause unstable while operating.**
- 1 180 cm (6') CAT.5 UTP Ethernet cable.
  - This Installation Poster.

## Before Installing the Cable Modem

### Local Cable Network Service

Before installing the cable modem, contact your local cable service provider to check the availability of Internet/cable network access.

Read the front and back panels of this Installation Poster thoroughly before attempting to install the cable modem.

### Requirements

- RF coaxial cable:
  - One piece of coaxial cable if you are not using a cable line-splitter.
  - Three pieces of coaxial cable if you are using a cable line-splitter.
- A cable line-splitter, if you wish to connect the cable modem and a television to the same wall cable outlet (optional).
- An active two-way cable line installed by your local cable operator.

### Computer System Requirements:

- Pentium processor equivalent (Pentium 166MHz or higher recommended).
- The original Windows 95, Windows 98, Windows ME, Windows 2000, or Windows XP CD-ROM or diskettes.
- TCP/IP protocol installed (see the "Configuring the TCP/IP Protocol on Your PC" section for more information about TCP/IP installation).
- An active Ethernet port or network interface card (NIC) installed in your computer. The cable modem is OS-independent and can be connected to any computer equipped with an active standard RJ-45 10/100 Ethernet port.
- For USB connectivity:
  - A computer running Windows 98, Windows ME, Windows 2000, or Windows XP operating system.
  - An active USB port on your computer.
- For Ethernet connectivity:
  - A PC running Windows 95, Windows 98, Windows ME, Windows NT, Windows 2000, or Windows XP operating system.

## Ethernet NIC Installation Process

### 1 Configure the TCP/IP Protocol on Your PC

Before installing the cable modem in the Ethernet mode, you must verify that your computer has the TCP/IP protocol installed. Follow the procedure for your computer operating system to verify or install the TCP/IP protocol.

Windows 95, Windows 98, or Windows ME Operating System:

- Click Start, point to **Settings**, and then click **Control Panel**.
  - Double-click the **Network** icon. The screen displays a list of installed network components.
  - Search for an entry containing TCP/IP, followed by the NIC hardware device installed in your computer. If you see TCP/IP listed next to your Ethernet hardware device, you may now go to "**Install the Cable Modem**." If TCP/IP is NOT listed, you must complete the following steps:
    - Click **Add**...
    - Click **Protocol**, and then click **Add**...
    - Click **Microsoft** in the "**Manufacturers:**" list and then click the "**Network Protocols:**" list. Click **OK**.
- You are prompted to restart your computer.
- Click **Yes**. You can now go to "**Install the Cable Modem**."

Windows 2000, Windows XP Operating System:

- Right-click **My Network Places** icon on the Windows desktop.
- Right-click **Local Area Connection** and click **Properties**. Search for an entry containing TCP/IP. If you see TCP/IP listed next to your Ethernet hardware device, you can now go to "**Install the Cable Modem**." If TCP/IP is not listed, however, you must complete the following steps:
  - Scroll to the **Internet Protocol (TCP/IP)** option.
  - Click to mark the **Internet Protocol** check box with a check ✓
  - Click **OK**. You can now go to "**Install the Cable Modem**."

### 2 Install the Cable Modem

Refer to the Ethernet NIC illustration, above, when making the following connections:

- Power off the computer and television.
- Unplug the computer and television.
- Connect the coaxial cable from the wall cable outlet to the CATV connector on the back of the cable modem.
 

**Note: If you are using a cable line-splitter (not included)** to connect the computer and a television to the same wall cable outlet, you will use three lengths of coaxial cable. As shown in the Ethernet NIC illustration, a cable line-splitter has three connectors. Use the illustration to make the appropriate coaxial cable connections.
- Connect one end of the Ethernet cable to the cable modem and the other end to the computer.
- Connect the 5VDC/1.5A power adapter to the back of the cable modem.
 

**Caution: Be sure to use only the power adapter that came with the cable modem. Using the wrong power adapter can damage the cable modem.**
- Power on the modem by plugging the power adapter to a grounded electrical outlet or surge protector plugged into a grounded electrical outlet.
- Plug in and turn on the computer and television.
- You can now go to "**Check the LEDs**."

Note: Dark: Wireless is disabled

## Back Panel Interface

ETH	RJ-45 female socket for connection of Ethernet cable
USB	USB 'B'-type socket. Connects through USB cable to computer's USB 'A'-type port. (BRG-35302 only)
CATV	RF connector to attach the cable for broadband Internet access
Power	Socket to connect the power adapter included in the product package
Reset	Restores factory default settings

## Product Specifications

Dimensions:	142 x 120 x 30mm 5.6 x 4.7 x 1.2in
Net Weight:	220g +/- 10g
DC Input Voltage:	5V/1.5A
Power Dissipation (Max):	Max 9.9 Watts
Operating Temperature:	0° C ~ 40° C 32° F ~ 104° F
Operating Humidity:	10%~90%
Cable Network Interface:	F Type RF Connector
LAN Access Point:	10/100 Mbps Ethernet MAC
Downstream transmission speed (MAX):	38Mbps
Upstream transmission speed (MAX):	30Mbps (SCDMA/128QAM)

## Troubleshooting

If the cable modem is not working properly, please follow the procedures below to solve the problem.

1. Check to verify that all equipment is powered on and the cable connections are secure.
2. Check the cable modem to see if the LED lights function properly.

### ■ Power LED not lit

**Action:** Check both ends of the power adapter to make certain that they are securely connected to the power jack on the cable modem and the power outlet.

If both ends of the power adapter are properly connected and there is still no power, the cable modem might have a faulty power adapter or electrical outlet. Try plugging the power adapter into a different electrical outlet.

**Caution: Be sure to use only the power adapter that came with the cable modem. Using the wrong power adapter can damage the cable modem. If you must replace the power adapter, contact your local cable provider for assistance.**

### ■ Cable LED is not lit or keeps blinking Orange

**Possible reason:** The cable modem cannot detect any carrier or valid data channel from the coaxial cable.

**Action:** Make sure the connectors at each end of the coaxial cable are securely seated. If the problem persists, please contact your cable modem service provider for further assistance. The quality of CATV coaxial cable and installation can affect the connection dramatically.

### ■ Cable LED not lit or stays Orange

**Possible reason:** The cable modem can not range the upstream signal properly with the Cable Headend system .

**Action:** Please make sure the connectors at each end of the coaxial cable are securely seated. If the problem still persists, contact your cable modem service provider for further assistance.

### ■ Status LED is on, but the computer fails to get the IP address and cannot connect to the Internet

**Possible reasons:**

The driver for the network interface card has not been installed or was not installed properly. Please refer to the instruction of the operating system (Windows 95, Windows 98, Windows NT, Windows 2000, Windows Me, Windows XP, etc.) and the user documentation of the network interface card to have the network interface card installed properly.

In order to access the Internet through the CATV Headend, which acts as an ISP (Internet Service Provider), your computer must have the right TCP/IP setting. Set the TCP/IP setting of the network interface card to get the IP address from the ISP automatically using DHCP protocol. For more information, please contact your local cable modem service provider

### ■ The Ethernet port LED of the connected device is not lit

**Action:** Check if the device being connected is powered on, operating correctly and properly connected. Also check if the cable is [straight-through] for an end device like a PC/notebook. If the cable is for a hub or switch port, you should use [crossed] wire instead. Make sure the connectors at both ends of the cable are securely seated. If the problems continue, it is possible that the cable you are using is not compliant with specifications, or is improperly connected or damaged.

### ■ Can not connect with wireless LAN

**Possible reasons:**

- a. SSID mismatch: Check the SSID from Control Panel -> Network Settings to see if the SSID match is defined in this device.
- b. Encryption mismatch: If the encryption type of the wireless client on the PC/Notebook doesn't match the WEP/WPA setting, the traffic would be dropped. Please make sure to use the same encryption type and key.
- c. MAC Address was not in the trusted PC list: The MAC Filtering were enabled, but did not configure your Pc's MAC address into the trusted MAC address lists.
- d. Wireless Function Disabled: Please check the LED from the front panel to see if the LED of Wireless is lit on. If not, goes into Web Management Interface to enable it.

## Troubleshooting (cont.)

### ■ Forget the login and password

Press and hold the Reset button on the rear panel for more than 10 seconds and release. The device will be reset and clear to factory default value. Then use the login and password in page 1 to configure the device again.

## Improve Wireless Security

To improve the wireless LAN, you can use web Management Interface to:

- a. Enable hidden SSID, so others cannot find your AP.



- b. Turn On WEP or WPA (see User Manual for more detail)



## Factory Defaults

**Login:** admin

**Password:** password

## Safety Issues & Warnings



**WARNING:** Risk of electric shock. Do not expose the cable modem to water or moisture.

- The Broadband Residential Cable Modem is a high-performance communications device designed for home and office environments.
- Do **NOT** use the cable modem outdoors. Keep the cable modem in an environment that is between 0°C and 40°C (between 32°F and 104°F). See **Product Specifications** for more information.
- To avoid overheating the cable modem, do **NOT** place any object on the top of the cable modem.
- Do not restrict the flow of air around the cable modem.
- The manufacturer assumes no liabilities for damage caused by any improper use of the cable mode

## Disclaimer

Assumes no liabilities with respect to the contents of this document. Also reserves the right to revise this document or update occasionally the content hereof without any obligation to notify any person of such revisions or amendments. Specifications subject to change without notice.

## Notices

### FCC

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. 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 UNDESIRE OPERATION.

### UL Listing

This product is UL-Listed for use with UL-listed PCs containing instructions specifying user installation of accessories.

### Support/Technical Information

Contact your local cable operator for technical support.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

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

The equipment complies with FCC RF exposure limits set forth for an uncontrolled environment.

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and consider removing the no-collocation statement.