

**ADSL Router (MODEL RTA1435VW)  
USER GUIDE**



## TABLE OF CONTENTS

1.	PRODUCT DESCRIPTION.....	3
2.	SAFETY INSTRUCTIONS .....	4
3.	HARDWARE FEATURES .....	5
	3.1 LED Indicators.....	5
	3.2 Connector Descriptions.....	7
4.	INSTALLING THE HARDWARE.....	8
	4.1 Installation Requirements .....	8
	4.2 Before You Begin .....	8
	4.3 Microfilters .....	8
	4.4 Hardware Installation.....	9
5.	CONFIGURING THE ROUTER FOR INTERNET CONNECTION .....	10
	5.1 Accessing the Router for the First Time .....	10
	5.2 Confirming a DSL Sync.....	12
	5.3 Establishing a PPP Session .....	13
	5.4 Establishing a Routed IP Connection.....	16
	5.5 Establishing a WAN Ethernet Session using VersaPort™2.....	18
6.	CONFIGURING WIRELESS OPERATIONS.....	19
	6.1 Basic Wireless Configuration .....	19
	6.2 Simple Config - Wi-Fi Protected Setup (WPS) .....	20
	6.3 Wireless Security .....	21
	6.4 Connecting PCs via Wireless.....	23
	6.5 Using MAC Filtering .....	24
	6.6 Advanced Wireless Settings .....	25
7.	PUBLICATION INFORMATION.....	26

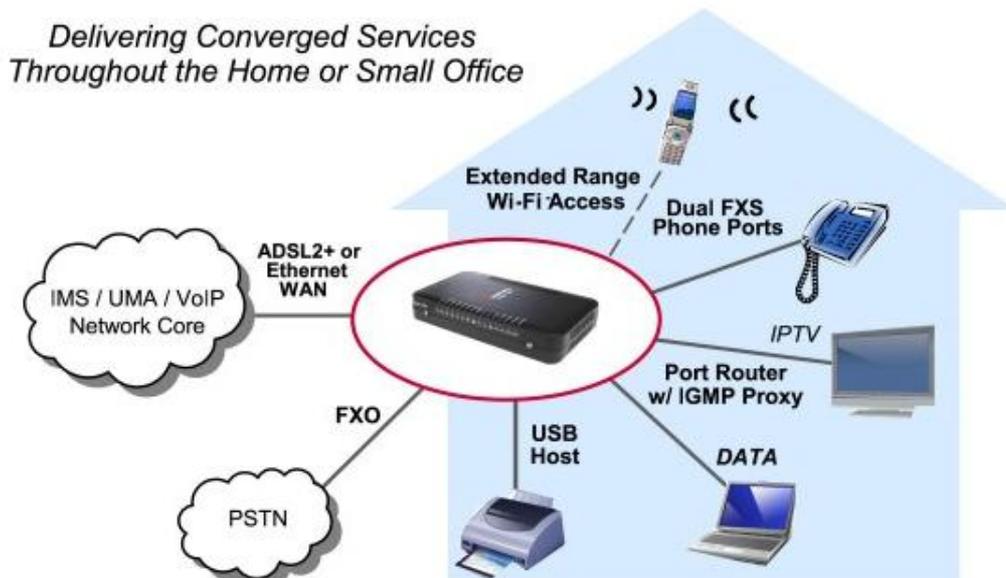
## 1. PRODUCT DESCRIPTION

The ADSL Router combines the functionality of a Voice over (VoIP) Analog Terminal Adapter with that of a Westell ADSL Router. The Router enables you to connect analog phones or dual-mode Wi-Fi/GMS phones to the Router to make or receive phone calls over the Internet, and supports a variety of networking interfaces such as wireless 802.11b/g, ADSL 2/2+, and Ethernet. The Router also functions as a 4-port Router and enables you to connect multiple PCs on your LAN to the Internet. The Router's VersaPort™2 interface enables you to uplink your Router to other ADSL network devices, and the 802.11 wireless interface enables you to establish a secure wireless connection with your ISP's wireless network equipment.

With the ADSL Router, you can use the same phone line for simultaneous voice/fax communications and high-speed Internet access, eliminating the need for dedicated phone lines for voice and data needs. ADSL connection is "always-on," ending the hassles of dial-up modems and busy signals, and installation is easy ... no tools ... no headaches. Simply connect the hardware, apply power, and perform the simple software configuration for Router and you are on the Internet.

Hereafter, the ADSL Router will be referred to as the "Router."

### ADSL Multiple PC Setup



## 2. SAFETY INSTRUCTIONS

The following important safety instructions should be followed when using your telephone equipment.

**WARNING:** Please save these instructions.

Do not use this product near water, for example, near a bathtub, washbowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool.

Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.

Do not use the telephone to report a gas leak in the vicinity of the leak.

Do not connect this equipment in an environment that is unsuitable. The voice over IP (VoIP) ports of the equipment are suitable for connection to intra-building or non-exposed wiring only.

Never install any telephone wiring during a lightning storm.

Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.

Never touch non-insulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.

Use caution when installing or modifying telephone lines.



**Risk of electric shock. Voltages up to 140 Vdc (with reference to ground) may be present on telecommunications circuits.**

### 3. HARDWARE FEATURES

#### 3.1 LED Indicators

This section explains the LED States and Descriptions of your Router. LED indicators are used to verify the unit's operation and status.

Figure 1. Front View of IMS Router



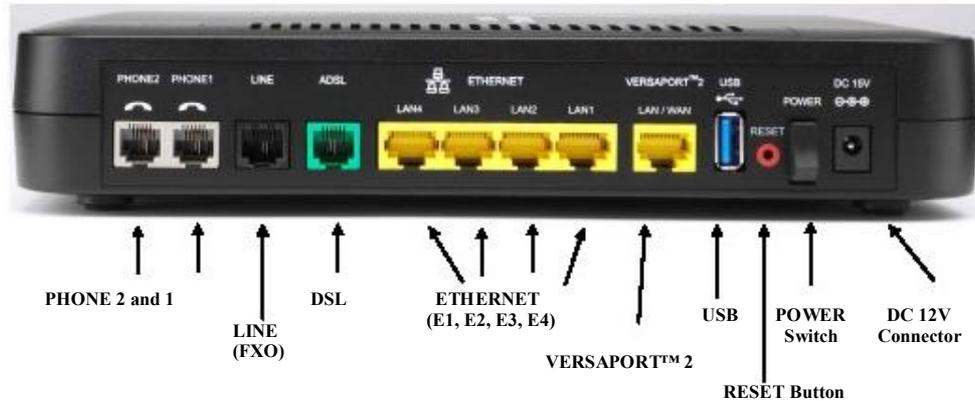
LED States and Descriptions

LED	State	Description
POWER	Solid Green	Router power is ON.
	OFF	Router power is OFF.
	Solid Red	POST (Power On Self Test), Failure (not bootable) or Device Malfunction. Note: The Power LED should be red no longer than two seconds after the power on self test passes.
VERSAPORT™2 (LAN/WAN)	Solid Green	Powered device is connected to the associated port (includes devices with wake-on LAN capability where slight voltage is supplied to an Ethernet connection).
	Flashing Green	10/100 Base-T Ethernet WAN activity is present in either direction.
	Off	Router power is OFF, no cable, or no powered device is connected to the associated port.
ETHERNET (LAN 1-4)	Solid Green	Powered device is connected to the associated port (includes devices with wake-on LAN capability where slight voltage is supplied to an Ethernet connection).
	Flashing Green	Ethernet LAN activity is present (LAN traffic in either direction).
	OFF	Router power is OFF, no cable or no powered device is connected to the associated port.
WIRELESS	Solid Green	Wireless is enabled and functioning.
	Flashing Green	Wireless LAN activity present (traffic in either direction).
	Solid Amber	Wi-Fi Protected Setup in progress
	Off	Wireless is disabled or not functioning.



<b>Wireless Setup (WPS)</b>	<b>Solid Green</b>	Wi-Fi Protected Setup was successful (on for 300 seconds)
	<b>Flashing Green</b>	Wi-Fi Protected Setup in progress (on for 0.2 seconds off for 0.1 seconds repeating)
	<b>Flashing Green</b>	Wi-Fi Protected Setup error (on for 0.1 seconds off for 0.1 seconds repeating)
	<b>Flashing Green</b>	Wi-Fi Protected Setup session overlap detected (on for 0.12 seconds off for 0.1 seconds repeating for 0.1second, Off for 0.5 second repeating)
	<b>OFF</b>	Wi-Fi Protected Setup is not activated or modem power off
<b>USB</b>	<b>Solid Green</b>	USB device is recognized and drivers are properly installed.
	<b>Flashing Green</b>	USB is transferring data.
	<b>OFF</b>	Modem power is OFF, USB device not present, or USB device not recognized by modem.
<b>DSL</b>	<b>Solid Green</b>	Good DSL sync.
	<b>Flashing Green</b>	DSL attempting to sync.
	<b>Solid Red</b>	Device has unsuccessfully attempted DSL sync for three minutes.
	<b>Flashing Red</b>	No DSL signal.
	<b>Solid Amber</b>	Router is in safeboot mode.
	<b>Off</b>	Router power is OFF.
<b>INTERNET</b>	<b>Solid Green</b>	Internet link established.
	<b>Flashing Green</b>	IP connection established and IP Traffic is passing through device (in either direction). Note: If the IP or PPP session is dropped due to an idle timeout, the light will remain solid green, if an ADSL connection is still present. If the session is dropped for any other reason, the light is turned OFF. The light will turn red when it attempts to reconnect and DHCP or PPP fails).
	<b>Solid Red</b>	Device attempted to become IP connected and failed (no DHCP response, no PPP response, PPP authentication failed, no IP address from IPCP, etc.).
	<b>OFF</b>	Modem power is OFF, Modem is in Bridge Mode, or the connection is not present.
<b>TELEPHONE 1</b>	<b>Solid Green</b>	SIP registration succeeded. Attached device is registered with VoIP server.
	<b>Flashing Green</b>	Attached device is attempting to establish a VoIP call.
	<b>Off</b>	Power off, line not provisioned, line not registered with VoIP server.
<b>TELEPHONE 2</b>	<b>Solid Green</b>	SIP registration succeeded. Attached device is registered with VoIP server.
	<b>Flashing Green</b>	Attached device is attempting to establish a VoIP call.
	<b>Off</b>	Power off, line not provisioned, line not registered with VoIP server.
<b>Message Waiting 1</b> (Line 1 message waiting)	<b>Flashing Green</b>	Message Waiting.
	<b>Off</b>	No Message.
<b>Message Waiting 2</b> (Line 2 message waiting)	<b>Flashing Green</b>	Message Waiting.
	<b>Off</b>	No Message.

Figure 2. Rear View of the IMS Router



### 3.2 Connector Descriptions

The following chart displays the connector types for the IMS Router.

Color	Name	Type	Function
Green	ADSL	RJ-11	Connects to an ADSL-equipped telephone jack or DSL connection of a POTS splitter.
Black	LINE	RJ-11	Connects to a PSTN telephone jack for use when power is lost.
Yellow	VERSAPORT™2	RJ-45	VERSAPORT™2 can function as a 10/100 Base-T Ethernet connection to a WAN-side networking device. (e.g., xDSL, etc.), a DMZ LAN Port, or a fifth Ethernet LAN Port, depending on the configuration.
Yellow	ETHERNET	RJ-45	10/100 Base-T Ethernet Connection to PC or Hub.
Black	POWER	Barrel connector	Connection to DC Power Adaptor.
Gray	PHONE 1 and 2	RJ-11	Telephone Port connection to phone cable.
Blue	USB	Type A	Connects a USB 2.0 Type A Host device to the router.



## 4. INSTALLING THE HARDWARE

### 4.1 Installation Requirements

To install your Router, you will need one of the following:

- A Network Interface Card (NIC) installed in your PC
- An IEEE 802.11b/g adapter

NOTE: Internet Service Provider (ISP) connection requirements may vary. Consult your ISP for installation instructions. Please wait until you have received notification from your ISP that your DSL line has been activated before installing the Router.

### 4.2 Before You Begin

Make sure your kit contains the following items:

- Westell® IMS Router
- Power Supply
- RJ-45 Ethernet cable (straight-through) (yellow)
- RJ-11 ADSL Cable (green)
- RJ-11 Line Cable (black)

### 4.3 Microfilters

ADSL signals must be blocked from reaching each telephone, answering machine, fax machine, computer modem or any similar conventional device. Failure to do so may degrade telephone voice quality and ADSL performance. Install a microfilter if you desire to use the DSL-equipped line jack for telephone, answering machine, fax machine or other telephone device connections. Microfilter installation requires no tools or telephone rewiring. Just unplug the telephone device from the baseboard or wall mount and snap in a microfilter. Next, snap in the telephone device. You can purchase microfilters from your local electronics retailer or contact the original provider of your DSL equipment. Microfilters are not required on the telephone devices attached to the voice over IP (VoIP) ports.



## 4.4 Hardware Installation

NOTE: If you are using the Router in conjunction with an Ethernet Hub or Switch, refer to the manufacturer's instructions for proper installation and configuration. When using a Microfilter, be certain that the DSL phone cable is connected to the "DSL/HPN" non-filtered jack. Please wait until you have received notification from your ISP that your DSL line has been activated before installing the Router. **Askey recommends the use of a surge suppressor to protect equipment attached to the power supply.** An additional Ethernet cable may be required depending on the installation method you are using. Ethernet cables can be purchased at your local computer hardware retailer.

IMPORTANT: Before you connect via 10/100 Base-T, you must have an available Ethernet card installed in your computer. If your Ethernet card does not auto-negotiate, you must set it to half duplex. Refer to the Ethernet card manufacturer's instructions for installing and configuring your Ethernet card.

1. Connect the green ADSL phone cable from the connector marked **ADSL** on the rear panel of the Router to the DSL-equipped telephone line jack on the wall. **IMPORTANT:** Do not use a Microfilter on this connection. You must use the phone cord that was provided with the kit.
2. Connect the black Line cable from the connector marked **LINE** on the rear panel of the Router to the DSL-equipped telephone line jack on the wall. **IMPORTANT:** You **MUST** use a Microfilter on this connection.
3. Connect the yellow Ethernet cable (provided with your kit) from any one of the Ethernet jacks marked **ETHERNET** on the rear panel of the Router to the Ethernet port on your computer. **Repeat this step to connect up to three additional PCs to your Router.**

NOTE: When using the yellow VERSAPORT™2 jack in **Private LAN** mode, you may connect either the yellow Ethernet cable (provided with your kit) or any other Ethernet cable to the VERSAPORT™2 jack as the VERSAPORT™2 jack will function as a fifth Ethernet port. You may also connect to any of the four yellow Ethernet jacks on the rear panel of the Router as they serve as an Ethernet switch.

4. Connect the power supply cord to the power connector marked **DC 12V** on the rear panel of the Router. Plug the other end of the power supply into a wall socket, and then turn on the power switch (if it is not already turned on).
5. Check to see if the DSL LED is solid green. If the DSL LED is solid green, the Router is functioning properly.
6. Check to see if the Ethernet LED is solid green. Solid/Flashing green indicates that the Ethernet connection is functioning properly.

Congratulations! You have completed the Hardware installation for your Router. You must now proceed to section 5, "Configuring the Router for Internet Connection."

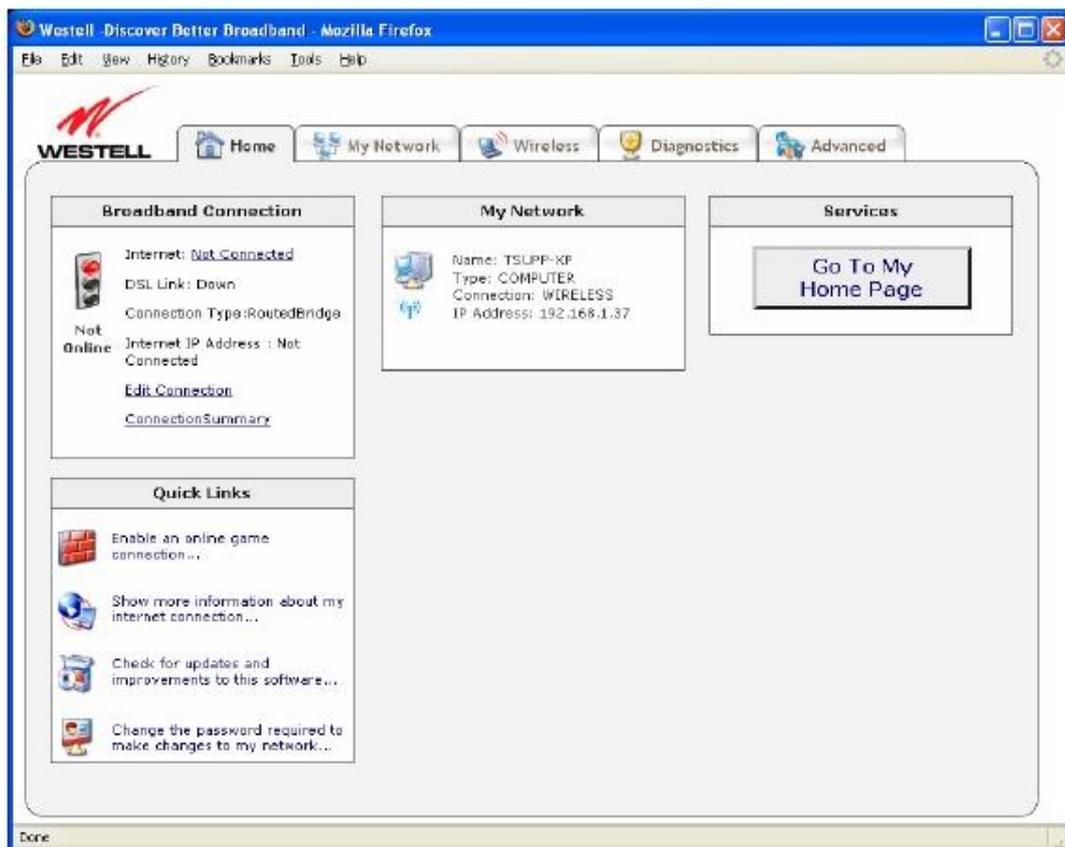
## 5. CONFIGURING THE ROUTER FOR INTERNET CONNECTION

To browse the Internet using your IMS Router, you must confirm your DSL sync, set up your account profile, and establish an Internet session with your Internet Service Provider (ISP).

### 5.1 Accessing the Router for the First Time

#### 5.1.1 Navigating the GUI

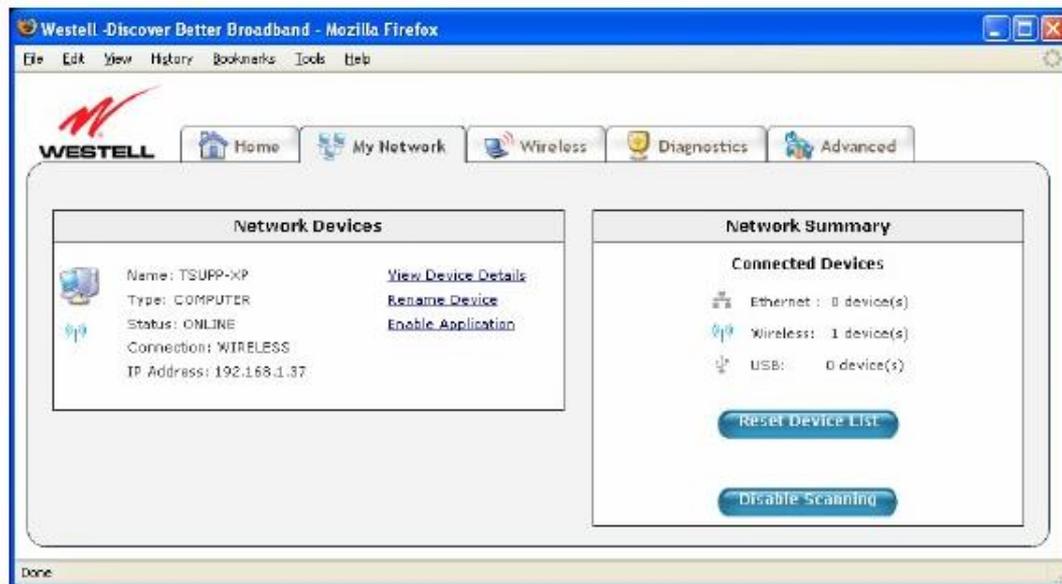
After connecting the hardware for your IMS Router, start your Internet browser and type <http://192.168.1.1/> in the browser's address bar. Next, press 'Enter' on your keyboard. The following **Password** screen will be displayed. The **User Name** is "admin" and **Password** is "password". The **Home** screen will then appear.



The **Home** screen is separated into 4 sections highlighting common applications within the router. **Broadband Connection** provides a quick link to the Internet Account Profile. **Quick Links** provide links to 4 of the most common applications performed within the router. **My Network** provides a brief description of the devices connected via the local network. **Services** provide an area for the Internet Service Provider to place links to features or services (i.e. their website).

## 5.1.2 My Network

The following screen will appear if you select My Network from the Home screen. This screen displays information about the devices connected to the local network.

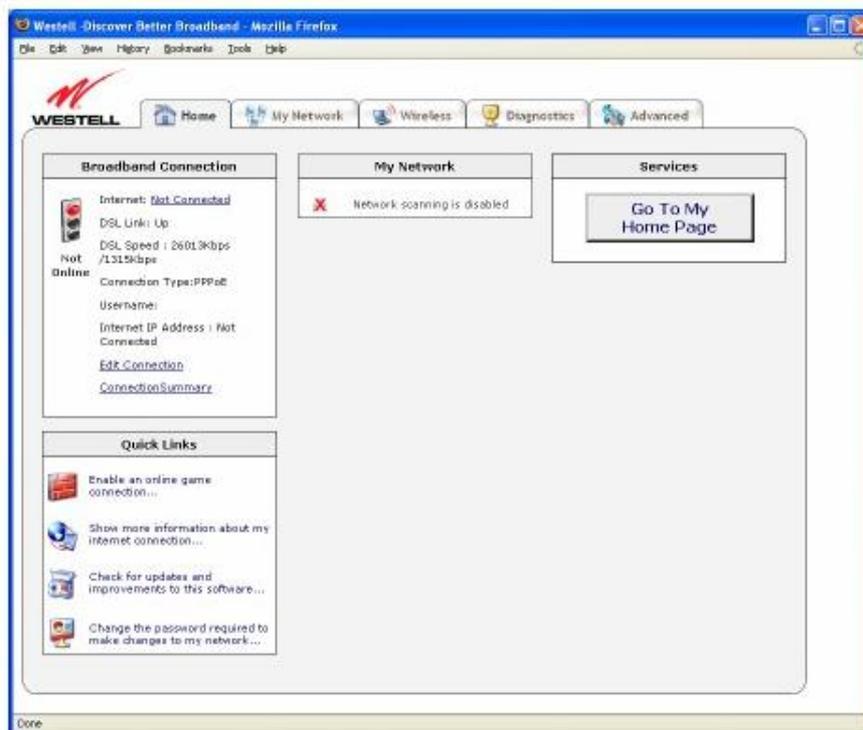


## 5.2 Confirming a DSL Sync

You must have active DSL service before the Router can synchronize with your ISP's equipment. To determine if the DSL sync is established, check the Router's DSL LED. If the DSL LED is not solid green, you do not have a DSL sync established. Contact your Internet service provider for further instructions. The Router will handle transmission rates up to 8 Mbps. Your actual DSL rates may vary depending on your Internet service provider.

After connecting the hardware for your IMS Router, start your Internet browser and type <http://192.168.1.1/> in the browser's address bar. Next, press 'Enter' on your keyboard. The following **Home** screen will be displayed.

View the DSL Speed at the **Broadband Connection** field. If the status reads **Down**, check the DSL physical connection. The following screen shows the DSL connection rate with values that indicate a successful DSL SYNC has been established. The connection rate values represent the transmission speed of your DSL line. (The Router may take time to report these values.)

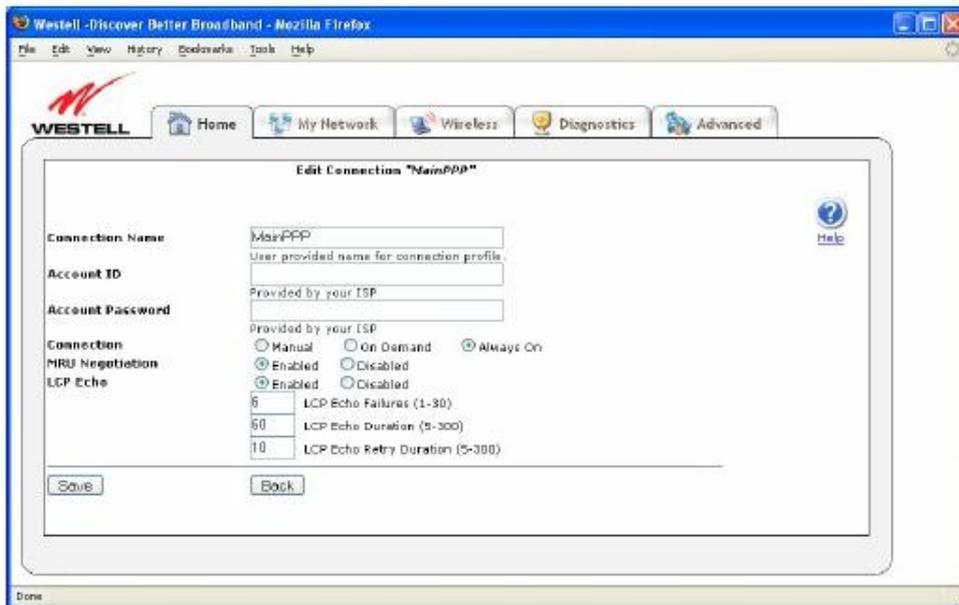


## 5.3 Establishing a PPP Session

Important: Before you set up a connection profile, you must obtain your **Account ID** and **Account Password** from your Internet service provider. You will use this information when you set up your account parameters. If you are at a screen and need help, click the **Help** link located at the right of the screen.

After you have confirmed your DSL sync, click **Edit Connection** in the **Broadband Connection** section of the **Home** screen to set up your connection profile. The following **Edit** screen enables you to add new connection profiles to or edit existing connection profiles. Connection profiles can be associated with specific service settings, such as connection settings or NAT services, enabling you to customize your Router for specific users.

1. Click on the **Edit** button to the right of the Connection Name.



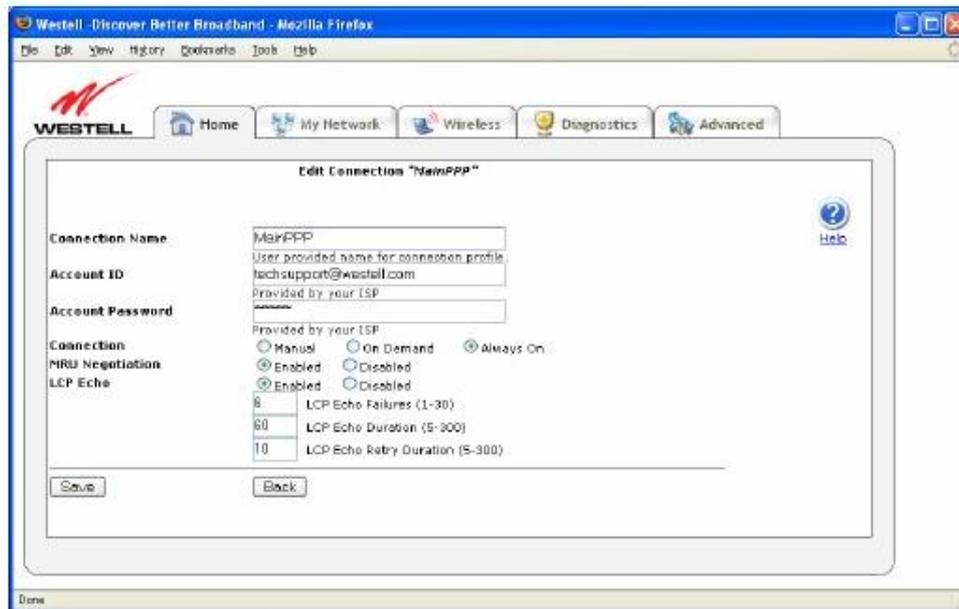
2. Type in a **Connection Name** to identify the account profile.  
The Connection Name field allows you to enter the desired name that you wish to use for each profile that you set up. You may create and store up to eight unique connection profiles in your Router, which you can use once you establish a PPP session with your Internet Service Provider (ISP). This field allows a maximum of 64 characters.



**IMPORTANT:** When you first establish a PPP session, you must use the factory default connection name “MainPPP” to connect to your ISP. Then, if you want set up additional profiles, you may use connection names of your choice. The Connection Name is the name associated each connection profile. The Account ID and Account Password are provided by your Internet service provider and must be used for each connection profile that you set up.

3. Type in the **Account ID** as provided by the Internet Service Provider.  
The Account ID allows a maximum of 255 characters.
4. Type in the **Account Password** as provided by the Internet Service Provider.  
The Account Password will be masked with asterisks for extra security. This field allows a maximum of 255 characters.
5. At the field labeled **Connection**, select the connection type (Manual, On Demand, or Always On) that you want to use with this connection name. The factory default connection type is “Always On.”
6. Select the **MRU Negotiation** and **LCP Echo** settings that you want to use with this connection name. For details on these settings, click on the **Help** link on the right side of the screen.
7. Click **Save** to save any changes that you have made to this screen.
8. Click **Back** to return to the main **Connection** screen.

**NOTE:** If you click **Back** before you click **Save**, the previously saved settings will remain active, and any recent changes that you have made to this screen will not take effect. You must click **Save** to save the settings.

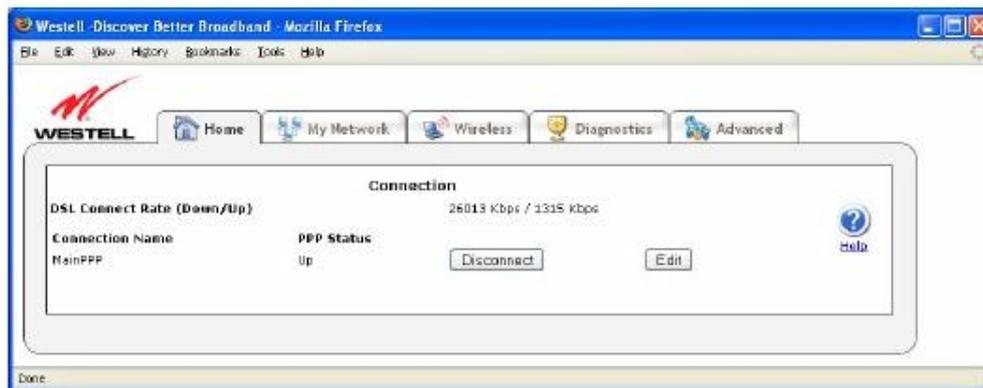


9. After you have set up your connection profile and clicked **Save**, click the **Connect** button to establish a PPP session.

NOTE: Whenever the PPP Status displays **Down**, you do not have a PPP session established. If your Router's connection setting is set to "Always On" or "On Demand," after a brief delay, the PPP session will be established automatically and the PPP Status will display **Up**. If the connection setting is set to "Manual," you must click on the **Connect** button to establish each PPP session. Once the PPP session has been established (PPP Status displays **UP**), you may proceed with your Router's configuration.

When the **Connection** screen displays **Up** in the **PPP Status** field, this indicates that you have established a PPP session with your ISP. As shown in the following screen, **MainPPP** is the factory default connection name used to establish a PPP session with your ISP. After you have established your PPP session, you may now use other connection profiles that you have created via the **Edit** button. The name of the profile will be displayed in the **Connection Name** field. If needed, refer to section 5.3 Establishing a PPP session for details on setting up a connection profile.

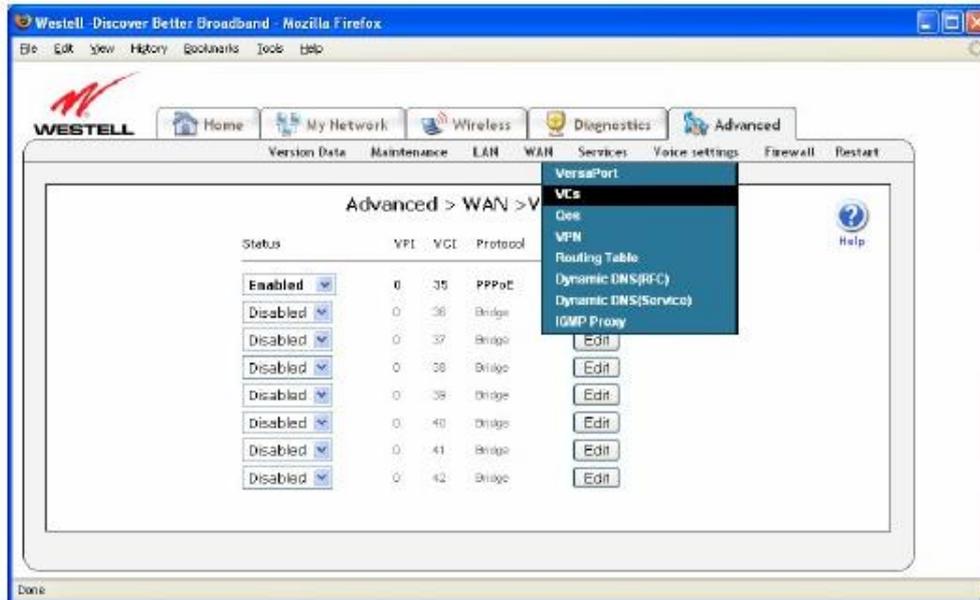
NOTE: If you experience problems establishing a PPP session, contact your ISP for further instructions.



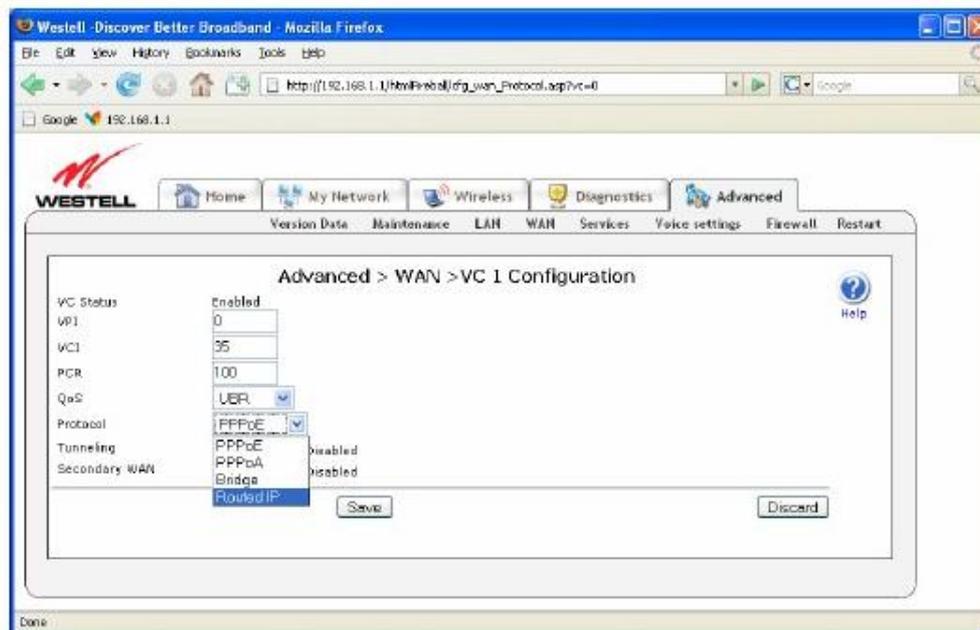
After you have established a PPP session with your ISP, you are ready to browse the Internet.

## 5.4 Establishing a Routed IP Connection

After you have confirmed your DSL sync, click on the **Advanced** tab. Hold the mouse over **WAN** and select **VCs** to set up your connection profile.



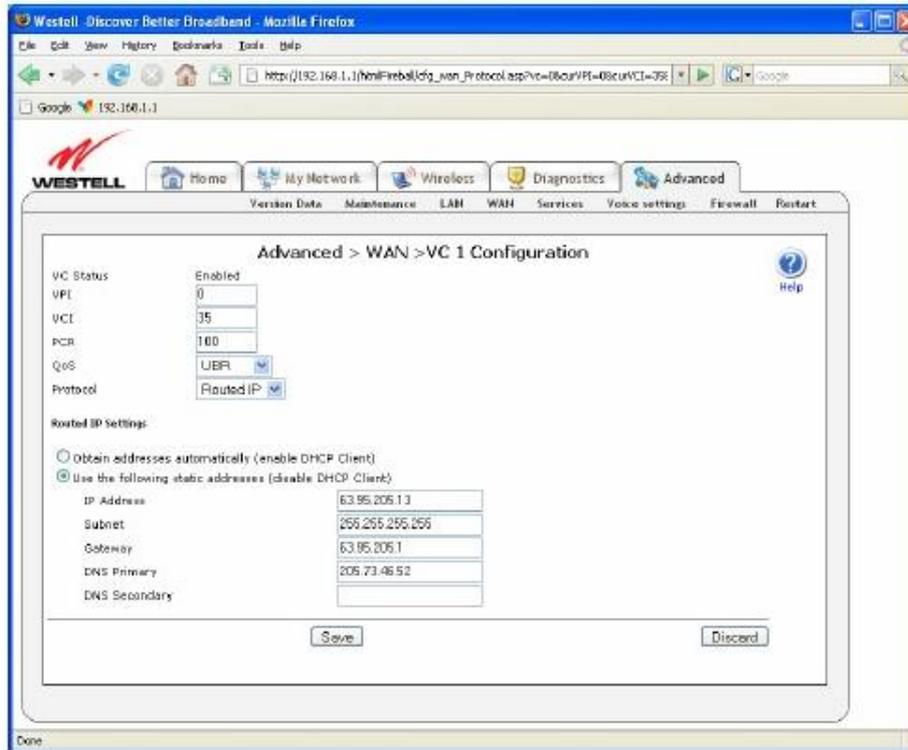
1. Click on the first **Edit** button to the right of PPPoE.
2. Click on the down arrow next to **Protocol** and select **Routed IP**.



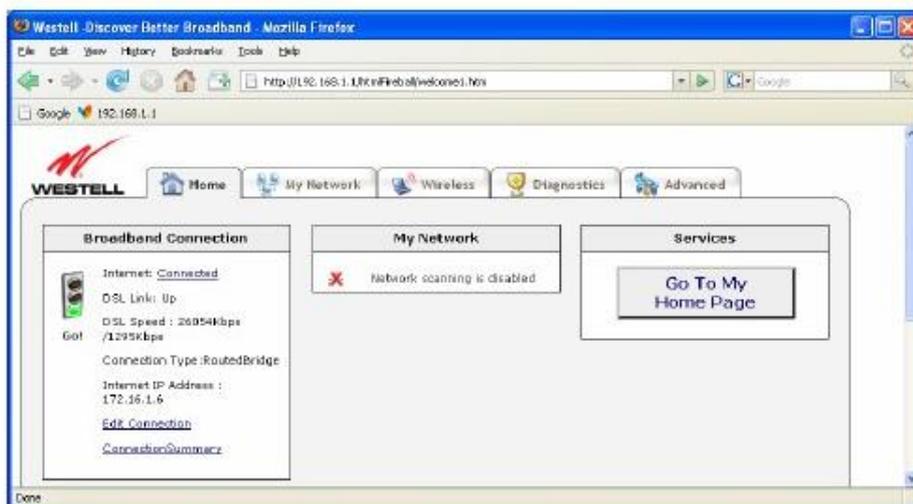


### User Guide ADSL Router (RTA1435VW)

3. If an IP Address was not assigned by the ISP, leave the radius button next to “Obtain addresses automatically”. Otherwise, click the radius button next to “Use the following static addresses” and enter the information provided by the ISP as seen below.



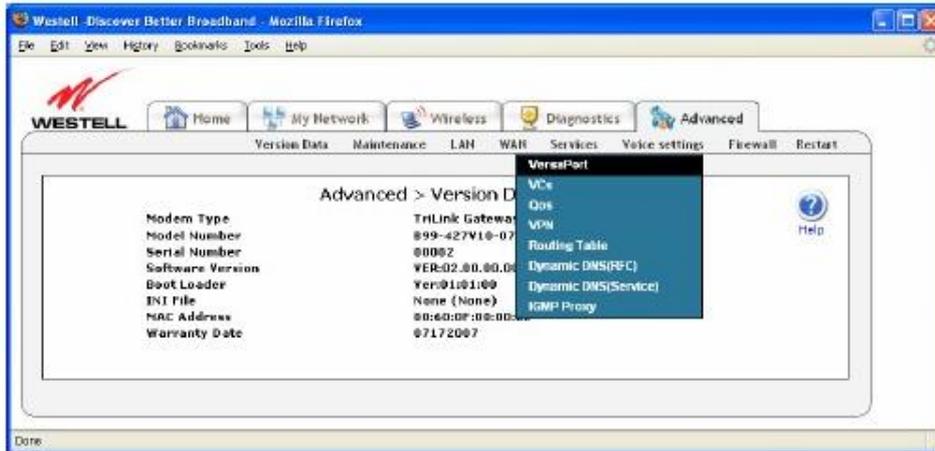
4. Click **Save** to save the configuration to the router.
5. Click on the **Home** screen to verify the Internet connection is **Up**.



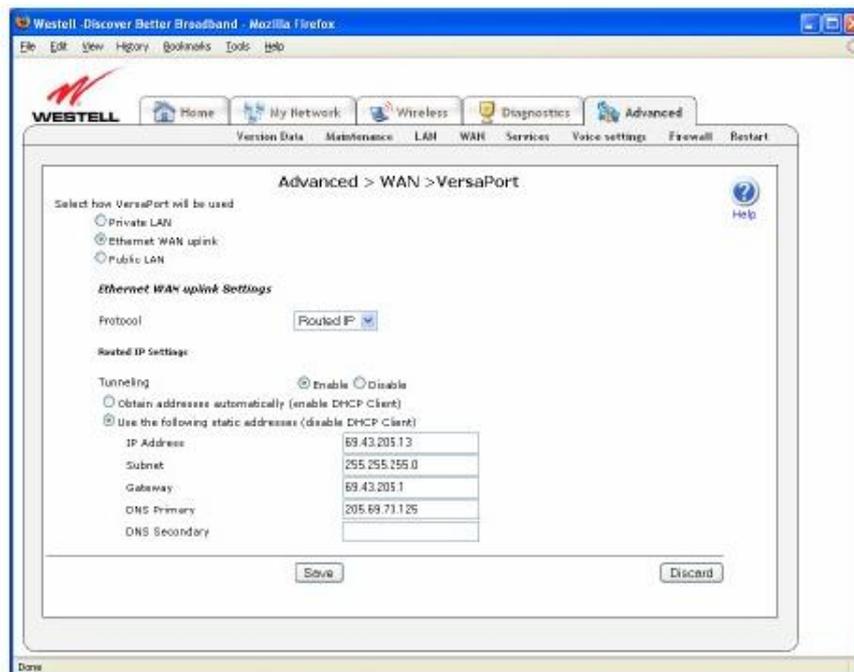
## 5.5 Establishing a WAN Ethernet Session using VersaPort™2

Important: Before you set up a connection profile, an **Account ID** and **Account Password** may be required from your Internet service provider. You will use this information when you set up your account parameters. If you are at a screen and need help, click the **Help** link located at the right of the screen.

After you have confirmed your DSL sync, click on the **Advanced** tab. Hold the mouse over **WAN** and select **VersaPort** to set up your connection profile.



1. Click the radius button next to **Ethernet WAN uplink** to configure the router for an Ethernet connection.
2. Select the **Protocol** as assigned by the Internet Service Provider. This will be either PPPoE or Routed IP.
  - If PPPoE is selected, you will be required to enter an Account ID and Account Password as described in section 5.3. This will be provided by the Internet Service Provider (ISP).
  - If Routed IP is selected you may be required to enter IP Address information.
3. If IP Address information was provided by the ISP, enter the information as seen below.



## 6. CONFIGURING WIRELESS OPERATIONS

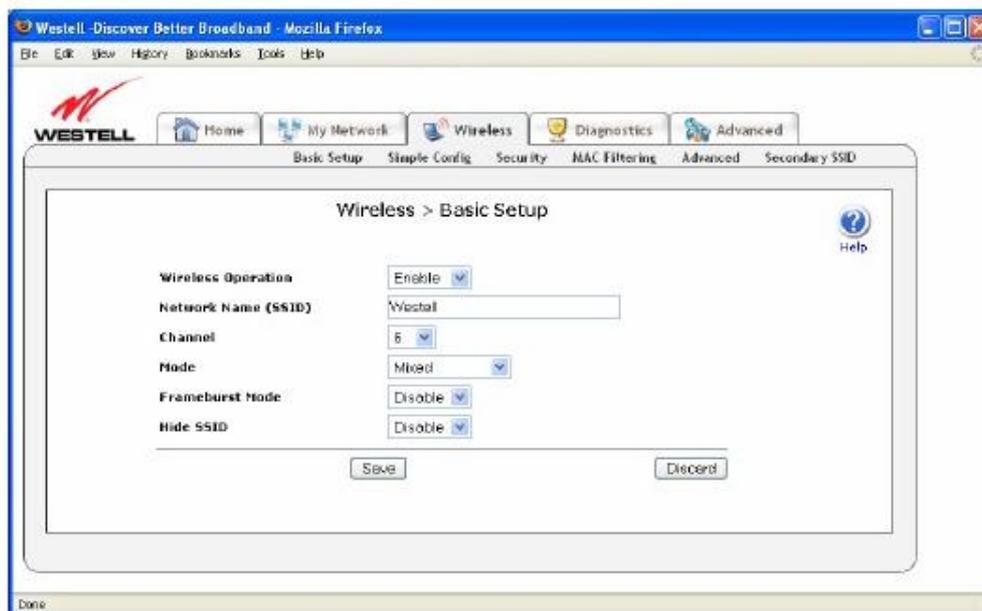
### 6.1 Basic Wireless Configuration

The following settings will be displayed if you select **Basic** from the **Wireless** tab. The router is pre-configured to allow wireless operation.

All configuration performed on the **Basic Setup** screen is optional. Changing these parameters will make your router unique within your networking environment.

**NOTE:** Upon the Router's initial configuration, the "Hide SSID" feature cannot be used until the wireless adapter being used in the PC has been configured and associated to the Router.

1. **Wireless Operation** enables or disables the wireless operation within the router. If wireless is not desired, click on the down arrow and select **Disable**.
2. The **SSID** is a unique name that identifies your router in a wireless environment. The default SSID is the serial number of the router. To change the SSID, type in a unique name of choice. The unique name must be 32 characters or less in length.
3. **Channel** is the channel number used by the router to transmit and receive data. By default, the channel is set to 6. The router can be set to any channel (1-11). The computer's wireless adapter will automatically detect the operating channel.
4. **Mode** tells the router how to communicate to the wireless adapters within the network. Possible mode types are Mixed, 802.11b, 802.11b+, and 802.11g.
5. **Frameburst Mode**, when enabled, uses special algorithms to increase data throughput. To enable, click on the down arrow and select **Enable**.
6. By default, the modem broadcasts its SSID, making your network visible to all wireless devices in the modem's range. **Hide SSID** offers some security benefits by reducing this visibility. When the SSID is hidden, each wireless station will need to be manually configured to match the modem's SSID in order to connect to the network. To enable this feature, click on the down arrow and select **Enable**.

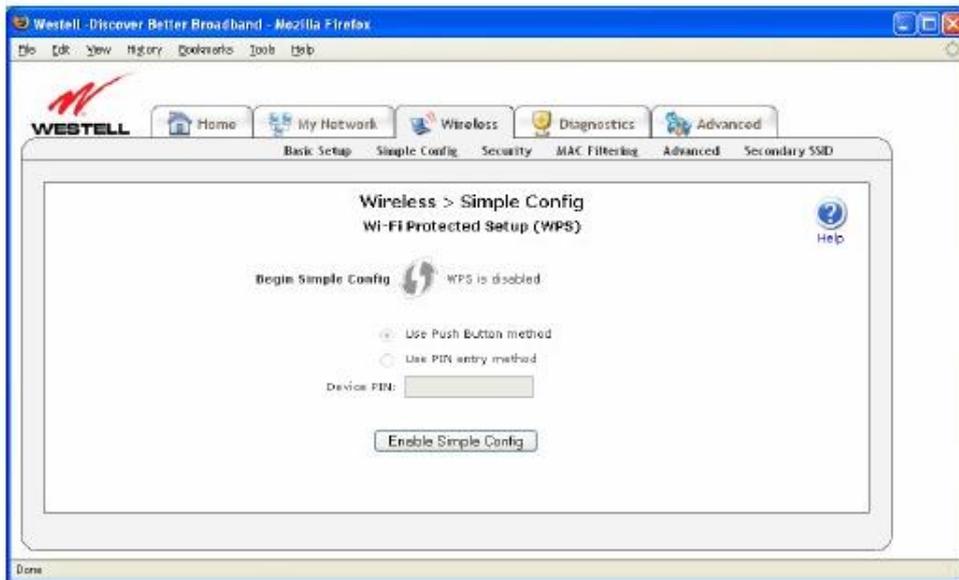


## 6.2 Simple Config - Wi-Fi Protected Setup (WPS)

The following screen will be displayed if you select **Simple Config** from the **Wireless** tab.

WPS simplifies the security and management of wireless networks. Wireless networks will be protected against unauthorized access and disclosure of private information. There are two methods to network setup: push-button and Personal Identification Number (PIN).

Note: The wireless adapter in the PC must be WPS compatible to use this function of the router.



1. Click on **Enable Simple Config** to allow automatic detection of the wireless adapter.
2. Click the radius button next to either **Use Push Button method** or **Use PIN entry method** to select the method of detection.
3. If **Use PIN entry method** is used, type in the PIN number supplied with the wireless adapter.
4. Click on the **Begin Simple Config** logo to begin the detection process.

## 6.3 Wireless Security

The following screen will be displayed if you select **Security** from the **Wireless** tab.

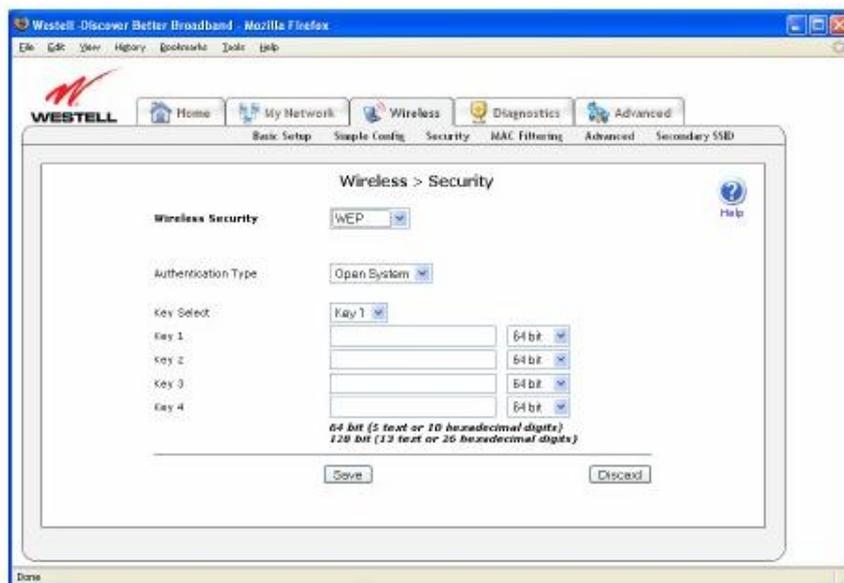
**IMPORTANT:** Client PCs can use any Wireless Fidelity (Wi-Fi) 802.11b/g/g+ certified card to communicate with the Router. The Wireless card and Router must use the same security code type. **If you use WPA or WEP wireless security, you must configure your computer's wireless adapter for the security code that you use. Consult the wireless adapter's manual for instructions on configuring the security parameters.**



### 6.3.1 WEP Security

If **WEP** is selected from the **Wireless Security** drop-down menu, the following screen will be displayed.

1. Select the Authentication Type from the drop down menu.  
Open System uses the entered Key to authenticate with the wireless adapter. Shared Key authentication uses WEP encryption during the authentication process.
2. Type in a Key to be used when connecting the router to a wireless adapter.  
64 bit Key uses 5 text letters or 10 hexadecimal digits  
128 bit Key uses 13 text letters or 26 hexadecimal digits



## 6.3.2 WPA, WPA2, WPA any Security

If **WPA** is selected from the **Wireless Security** drop-down menu, the following screen will be displayed.

1. Select the Authentication Type from the drop down menu.  
Personal (Pre-Shared Key) must use 8 to 63 text characters or 64 hexadecimal digits to authenticate the wireless adapter. Enterprise (802.1x) authentication uses a 3<sup>rd</sup> party radius server to authenticate the wireless adapter.



The screenshot shows the 'Wireless > Security' configuration page in a web browser. The 'Wireless Security' dropdown menu is set to 'WPA'. The 'Group Key Update Interval' is set to 3600. The 'Authentication method' is set to 'Personal (Pre-shared Key)'. The 'WPA Shared Key' field contains '3nPCM5nk'. A note below the key field states: 'must be 8 to 63 text characters or 64 hexadecimal digits in length'. There are 'Save' and 'Discard' buttons at the bottom.



The screenshot shows the 'Wireless > Security' configuration page in a web browser. The 'Wireless Security' dropdown menu is set to 'WPA'. The 'Authentication method' is set to 'Enterprise (802.1x)'. The 'Server IP Address' is 192.168.5.1, the 'Server Port' is 1812, and the 'Shared Secret' is RADIUS-SECRET. The 'Network Re-Authentication Interval' is set to 3600. There are 'Save' and 'Discard' buttons at the bottom.



## 6.4 Connecting PCs via Wireless

**IMPORTANT:** If you are connecting to the Router via a wireless network adapter, the SSID must be the same for both the Router and your PC's wireless network adapter. The default SSID for the Router is the serial number of the unit (located below the bar code on the bottom of the unit and also on the shipping carton). Locate and run the utility software provided with your PC's Wireless network adapter and enter the SSID value. The PC's wireless network adapter must be configured with the SSID (in order to communicate with the Router) before you begin the account setup and configuration procedures. Later, for privacy you can change the SSID by following the procedures outlined in section 6, "Configuring Wireless Operations."

Client PCs can use any Wireless Fidelity (Wi-Fi) 802.11b/g/+ certified card to communicate with the Router. The Wireless card and Router must use the same security code type. **If you use WPA-PSK or WEP wireless security, you must configure your computer's wireless adapter for the security code that you use. Consult the wireless adapter's manual for instructions on configuring the security parameters.**

To network the Router to additional computers in your home or office using a wireless installation, you will need to confirm the following:

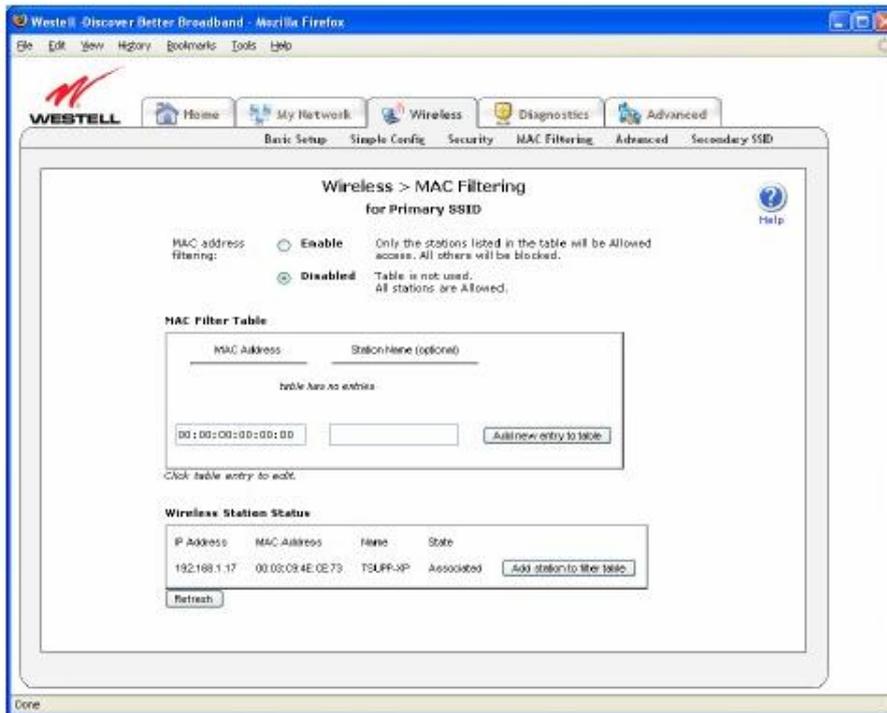
1. Ensure that an 802.11b/g wireless network adapter has been installed in each PC on your wireless network.
2. Verify the Wireless Operation is enabled on the router. Refer to section 6.1 for instruction.
3. Using the wireless adapter utility, establish connection to the router. Refer to the wireless adapter's manual for instruction.

Congratulations! You have completed the Wireless installation for your Router.

## 6.5 Using MAC Filtering

The following screen will be displayed if you select **MAC Filtering** from the **Wireless** tab. This feature allows only wireless stations in the table to be allowed access to the router. All other users will be blocked. The table must be populated with all the allowable wireless stations before it can be enabled.

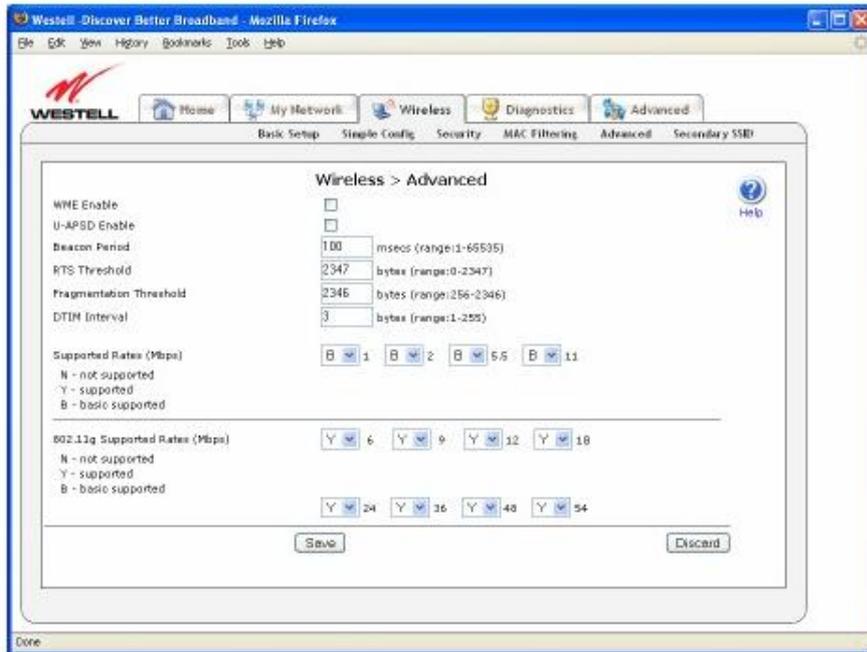
1. The Wireless Station Status displays a list of wireless devices connected to the router. If the station(s) in this list are to be added to the filter table, click the **Add station to filter table** button to add the station.
2. Add the stations currently not connected to the router to the table by entering their MAC Address and Station Name. Click the **Add new entry to table** button to add the station.
3. When all stations are added to the filtering table, click the radius button next to **Enable** to activate the filtering table.



## 6.6 Advanced Wireless Settings

The following screen will be displayed if you select **Advanced** from the **Wireless** tab.

**WARNING:** Any changes made to this screen will severely affect the wireless operation of the router



**WME (Wireless Multimedia Extensions) Enable**, when checked, will prioritize traffic according to Access Category. This feature is used primarily with Voice over IP.

**UPASD (Unscheduled Automatic Power Save Delivery) Enable**, when checked, enables wireless power save mode.

**Beacon Period:** The time interval between beacon frame transmissions. Beacons contain rate and capability information and are used to identify the access points in the area.

**RTS Threshold:** RTS/CTS handshaking will be performed for any data or management packet containing a number of bytes greater than the threshold. If this value is larger than the packet size (typically set by the fragmentation threshold), no handshaking will be performed. A value of zero will enable handshaking for all MPDUs (MAC Protocol Data Unit).

**Fragmentation Threshold:** Any packet larger than this value will be fragmented into multiple packets of the specified size or smaller.

**DTIM Interval:** The number of Beacon intervals between DTIM transmissions. Multicast and broadcast frames are delivered after every DTIM.

**Supported Rates (Mbps):** These are the allowable communication rates the modem will attempt to use. The rates are also broadcast within the connection protocol as the rates supported by the modem.

N - not supported: This rate is not supported for transmit.

Y - supported: This rate is supported.

B - basic supported: This rate is supported. Only stations that support all of these basic rates will associate with the modem.



## 7. PUBLICATION INFORMATION

ADSL Router (RTA1435VW)  
User Guide Part Number 530-300547 Rev. 2

Copyright © 2008 Westell, Inc.  
All rights reserved.

All trademarks and registered trademarks are the property of their respective owners.

### **Federal Communication Commission Interference Statement**

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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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 undesired operation.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

**IMPORTANT NOTE:**

**FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.