amped|wireless

User's Guide

AC1900
WI-FI® ROUTER

B1900RT

CONTENTS

INTRODUCTION

Thank you for purchasing The AC1900 Wi-Fi Router. At Amped Wireless, we strive to provide you with the highest quality products through innovation and advanced technology. We pride ourselves on delivering products that outperform the competition and go beyond your expectations. If you have any questions please feel free to contact us. We'd love to hear from you and thank you for your support!

Email: sales@ampedwireless.com

Call: 888-573-8830

Web: www.ampedwireless.com

GETTING STARTED

Package Contents

Check to make sure you have all the contents within your package:

- AC1900 Wi-Fi Router
- Power Adapter
- RJ-45 Ethernet Cable
- Setup Guide

LED Indicators

Power/WPS: Indicates when the Router is powered on. The LED will remain on. Blinks when Wi-Fi Protected Setup (WPS) is activated and the Router awaits a connection.

Internet Connection: Indicates when the Router is connected to a broadband modem. The LED will blink rapidly when Internet traffic is transmitted or received.

5.0GHz Wireless Activity: Blinks rapidly when wireless data traffic is transmitted or received over the first 5GHz wireless network.

2.4GHz Wireless Activity: Blinks rapidly when wireless data traffic is transmitted or received over the 2.4GHz wireless network.

Wired Port Activity: The LED will light up when data is being transmitted or received through the wired ports.

Back Panel Description

From Left to Right

Reset: Push down once to reboot the Router. Hold down for 5-10 seconds to reset the router back to factory settings.

Gigabit Wired Ports 1-3: Indicates when a networking device is connected to a wired port on the back of the Router. The LED will blink rapidly when wired data traffic is transmitted or received. The green LED displays when a there is an active gigabit connection.

Modem Port: Gigabit RJ-45 port for connecting to your Broadband Modem.

WPS: Hold down for 3 seconds to enable WPS push button configuration.

LED On/Off: Push to turn LED indicators on or off.

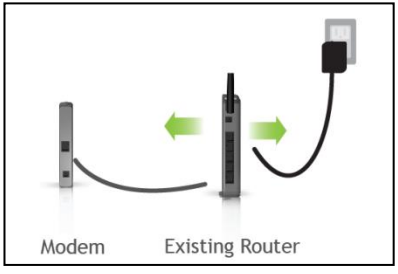
Power: Power adapter port. Output: 12V 2A, Input: 100-240v.

BASIC SETUP GUIDE

Setup Preparations

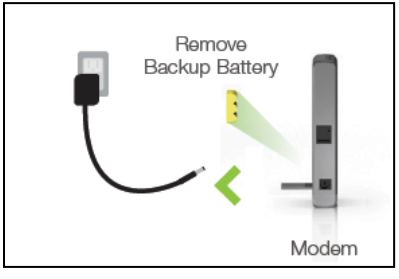
Disconnect and power off your existing router.

Disconnect your existing router from your computer, your broadband modem and its power outlet. If you do not have an existing router please continue to the next step.



Power off your Modem

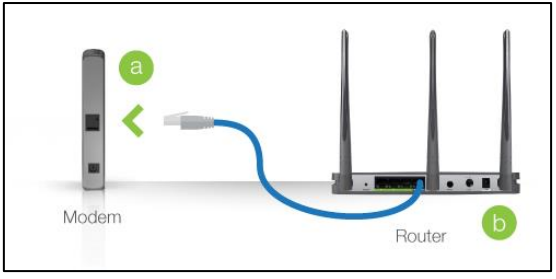
Power off the modem by disconnecting the modem's power adapter from the power outlet. If your modem has a backup battery, remove the backup battery from your modem. Do NOT power on the modem until prompted at a later step.



Connect the Router to your Modem

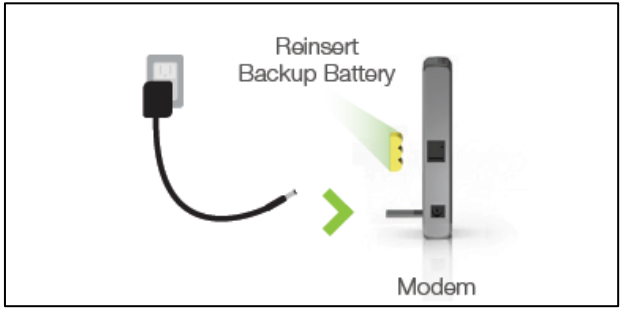
Do NOT connect the power adapter to the Router at this time.

a) Use the included Ethernet cable and connect one end of the cable to your modem.
b) Connect the other end of the cable to the blue **Modem** port on the Router.



Power on your Modem

Plug in your modem's power adapter and backup battery (if available):

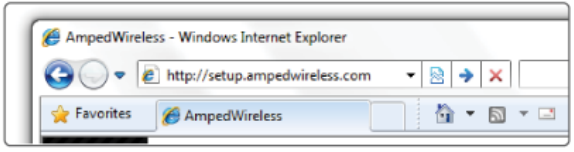


Power On & Connect to your Computer

a) Attach the Power Adapter to the Router's **PWR** port and a power outlet.
b) Connect an Ethernet cable to an available port on your computer ***or*** connect to the Router's Wi-Fi Network: Amped_B1900RT_2.4, or Amped_B1900RT_5.0. Password: wireless

Open your Web Browser to Access the Setup Wizard

a) Open your web browser.
b) Type http://setup.ampedwireless.com into the web address bar.
c) If the web menu fails to open, type the following IP address into your web address bar: http://192.168.3.1



http://setup.ampedwireless.com

Welcome to the Setup Wizard

If this is your first time setting up the Router, the Setup Wizard should automatically load. Click Begin Setup to start.

If you wish to manually configure your router you can also choose to skip the Setup Wizard.

Double check that the modem is connected to the Router's **Modem** port.

Click Next to continue.

If the Dashboard loads (see right image) instead of the Setup Wizard, scroll to the bottom and click the Setup Wizard button to access the Wizard.

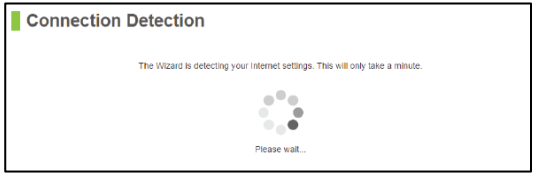
Internet Connection Detection

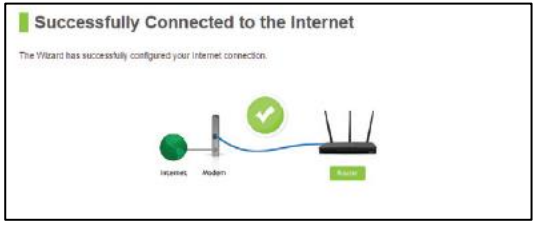
The Wizard will try to detect your Internet settings and configure the router. Please be patient.

If there is a problem with the Automatic Configuration, the wizard will notify you of the issue. If you continue to have problems, contact our Elite Support department at 888-573-8820.

If the Internet connection detection was successful, you will see a green check mark.

Click Next to continue.



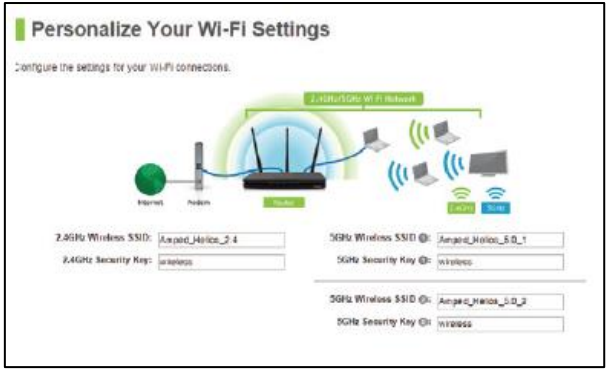


Personalize your Wi-Fi Settings

The default ID of your 5GHz Wi-Fi networks and 2.4GHz Wi-Fi network is:

Amped_B1900RT_5.0
Amped_B1900RT_2.4

To change it, enter a new name in the SSID field. Users connecting wirelessly to the Router will use these IDs to identify your wireless network.



The default Security Key (WPA/WPA2) of your Wi-Fi networks is: **wireless**

To change them, enter a new key in the Security Key field for the 2.4GHz and 5GHz networks. The keys must be at least 8 characters long.

Click Next to apply your settings.

Create a Password for your Router

This password is NOT your Wi-Fi network password. This password is to access the web menu of the Router to access additional router settings. Leave this blank if you do not wish to have a password.

Click Apply to save your settings.

The Router will reboot. This process may take up to 1 minute. The page will automatically reload after the countdown. If it does not, you may need to manually refresh the page or check your connection to the Router.

Setup Summary

Once the Router has rebooted, it will load the Setup Summary page and provide you with the details of your setup. It is recommended that you print this page for your records.

Open a new web browser window and check that you have access to the Internet.

At this time, you may disconnect from the Router and start a wireless connection.

If you have any wired devices that you would like to attach to the Router you may do so now as well.

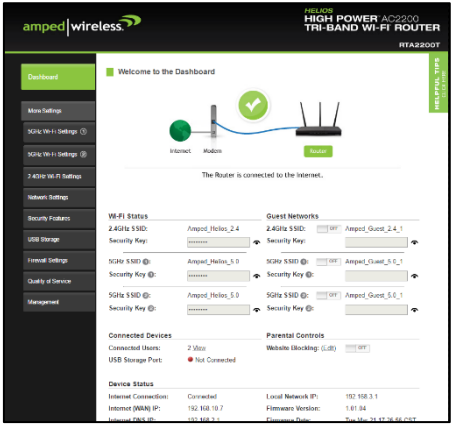
Enjoy your new Amped Wireless network!

WEB MENU DASHBOARD

Welcome to the Dashboard

Once you have completed the Router Setup Wizard, going to http://setup.ampedwireless.com will now bring you to the Router's Dashboard.

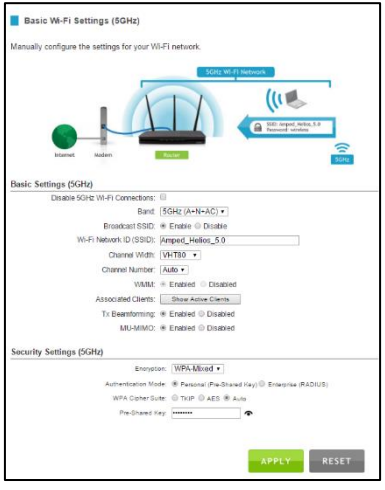
The Dashboard provides you with information regarding your internet connection and basic router settings. From here you can enable or disable guest networks, have a quick glance at what devices are connected to your Router and enable or disable website blocking features. For more advanced settings click on More Settings to navigate through the configuration menu.



5GHz WI-FI SETTINGS

5GHz Wi-Fi Settings: Basic Settings (5.0GHz)

The Basic Settings page allows you to adjust settings for your 5GHz local wireless network.



Disable 5.0GHz Wireless Connections: Disabling will turn off all 5GHz Wi-Fi activity. Users will no longer be able to connect wirelessly to your 5GHz network.

Band: Select the compatible Wi-Fi standard and speed for your wireless network.

Broadcast SSID: Selecting Disable Broadcast SSID will hide the visibility of the router's 5GHz network SSID. Users must manually enter the SSID to connect.

Wi-Fi Network ID (SSID): The name of your 5GHz wireless network

Channel Number: Wi-Fi networks operate on specific wireless channels. Some network channels may have more interference than others. If your performance is unstable, try a different channel number. If you are using a repeater with this network, it is recommended you set a static channel, instead of using "Auto".

WMM: Prioritizes multimedia data over the wireless network.

Associated Clients: Shows the active users connected wirelessly to your 5GHz network.

Tx Beamforming: Enable or disable Beamforming capabilities with Beamforming capable devices to increase Wi-Fi connection reliability and range.

MU-MIMO: Enable or disable Multi-User MIMO. MU-MIMO enables the router to send data to multiple devices (devices must be MU-MIMO capable) simultaneously thereby increasing overall network performance and speed.

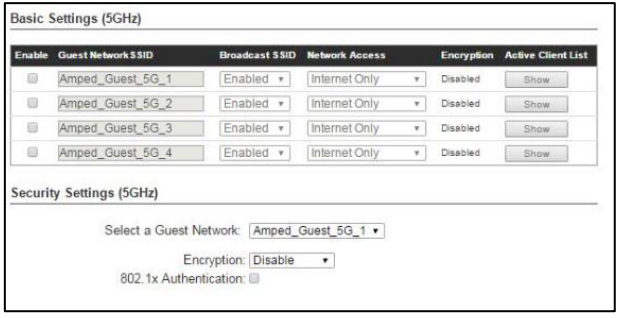
Security Settings: Change the type of wireless security settings for your 5.0GHz Wi-Fi Network.

Encryption: Select the encryption type for your Wi-Fi Network.

Pre-Shared Key: The password for your Wi-Fi Network. This is the key used by devices connecting to your Extended Network.

5GHz Wi-Fi Settings: Guest Networks (5.0GHz)

Click "Enable" to create a Guest Network. Guest Networks provide a separate wireless network, with unique settings for users to connect to.



SSID: This is the name of your Guest Network.

Broadcast SSID: Disable to hide your SSID from public view. Users will need to manually enter the SSID into their wireless software interface to connect.

Network Access: Restrict users connecting to your Guest Network to Internet access only or both local network and Internet access.

Active Client List: View all computers and network devices that are connected to your Guest Network wirelessly.

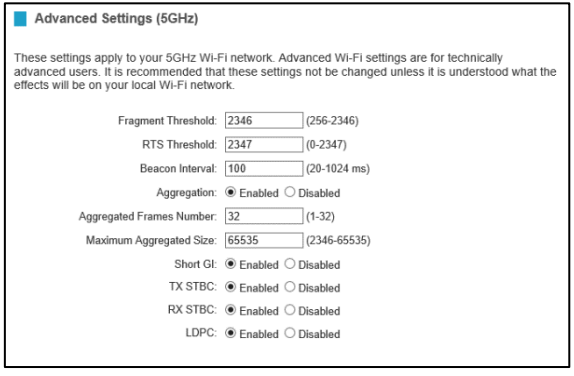
Security Settings: Change the type of wireless security settings for your Guest Networks by selecting the specific Guest Network SSID from the drop-down menu.

Encryption: Select the encryption type for your Guest Network.

Pre-Shared Key: The password for your Guest Network. This is the key used by devices connecting to your Guest Network.

5GHz Wi-Fi Settings: Advanced Settings (5.0GHz)

Advanced Wireless Settings should only be adjusted by technically advanced users. It is not recommended that novice users adjust these settings to avoid degrading wireless performance.



Fragment Threshold: The default and recommended setting is at 2346, meaning the Router will never fragment any frames that it sends to wireless users.

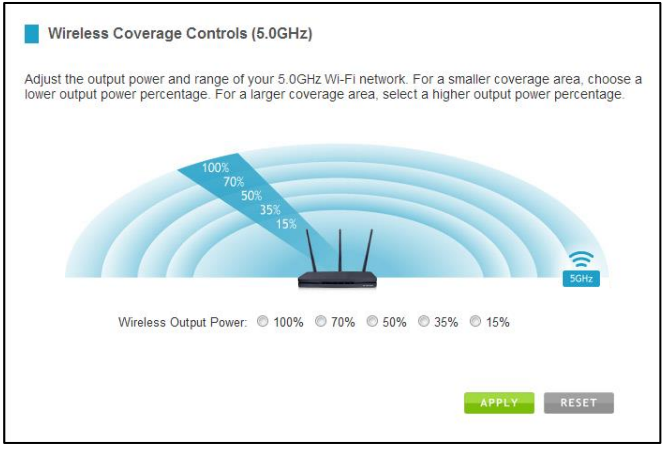
RTS Threshold: Adjusts the size of RTS data packets. Lower values reduce throughput, but allow the system to recover quicker from interference/collisions. Higher values provide the fastest throughput.

Beacon Interval: Indicates the frequency interval of the beacon. A beacon is a packet broadcast by the router to synch the wireless network.

STBC: Space Time Block Coding improves reception by coding the data stream in blocks.

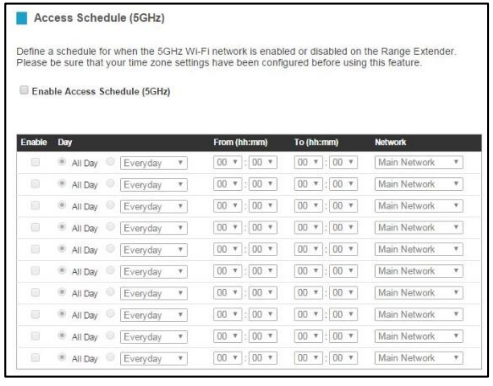
5GHz Wi-Fi Settings: Wireless Coverage Controls (5.0GHz)

Adjust the output power of the Router to control the coverage distance of your 5GHz wireless network. For a smaller coverage area, you can select a lower output power. For the maximum wireless coverage, select the 100% selection.



5GHz Wi-Fi Settings: Access Schedule (5.0GHz)

Access Schedules will enable or disable your 5.0GHz wireless access at a set time based on your predefined schedule. This feature is often used for restricting access to all users (such as children, employees, guests) during specific times of the day for parental control or security reasons.



a. Enable Access Schedule.
b. Select which days you wish for your Wi-Fi to be available.
c. Select the time frame during that day that you wish for Wi-Fi to be available.
d. Select the Network that you wish to apply these settings to.
e. Apply Changes.

Note: Make sure you have already configured your System Clock in order for your schedule to work correctly. Time Zone Settings can be adjusted from the web menu under Management > Time Zone Settings.

5GHz Wi-Fi Settings: Wi-Fi Protected Setup – WPS (5.0GHz)

WPS is a Wi-Fi feature created to make Wi-Fi setup simple and easy. Some wireless routers and adapters support this feature with varying names (i.e. one touch setup or WPS).

You may enable WPS setup here by selecting the type of WPS setup you wish to use. The Router supports all types of WPS setup:

Option A: Push button: You may push the WPS button on the web menu or use the physical button on the back of the Router.

Option B: PIN: Some wireless devices use PIN number to access wireless network. If your wireless device requests for a PIN number, use the PIN code located here.

Option C: Enter PIN: Some wireless devices require that you use a PIN number to add them to the wireless network. If your wireless device has a PIN number locate the number and enter in the field, then press Start Pin.

2.4GHz WI-FI SETTINGS

2.4GHz Wi-Fi Settings: Basic Settings (2.4GHz)

The Basic Settings page allows you to adjust settings for your 2.4GHz local wireless network.

Disable 2.4GHz Wireless Connections: Disabling will turn off all 2.4GHz Wi-Fi activity. Users will no longer be able to connect wirelessly to your 2.4GHz network.

Band: Select the compatible Wi-Fi standard and speed for your wireless network.

Broadcast SSID: Selecting Disable Broadcast SSID will hide the visibility of the router's 2.4GHz network SSID. Users must manually enter the SSID to connect.

Wireless Network ID (SSID): The name of your 2.4GHz wireless network.

Channel Number: Wi-Fi networks operate on specific wireless channels. Some network channels may have more interference than others. If your performance is unstable, try a different channel number. If you are using a repeater with this network, it is recommended you set a static channel, instead of using "Auto."

WMM: Prioritizes multimedia data over the wireless network.

Associated Clients: Shows the active users connected wirelessly to your 2.4GHz network.

Security Settings: Change the type of wireless security settings for your 2.4GHz Wi-Fi Network.

Encryption: Select the encryption type for your Wi-Fi Network.

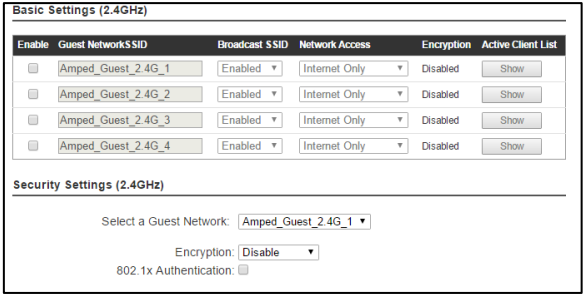
Pre-Shared Key: The password for your Extended Network. This is the key used by devices connecting to your Wi-Fi network.

2.4GHz Wi-Fi Settings: Guest Networks (2.4GHz)

Click "Enable" to create a Guest Network. Guest Networks provide a separate wireless network, with unique settings for users to connect to.

SSID: This is the name of your Guest Network.

Broadcast SSID: Disable to hide your SSID from public view. Users will need to manually enter the SSID into their wireless software interface to connect.



Network Access: Restrict users connecting to your Guest Network to Internet access only or both local network and Internet access.

Active Client List: View all computers and network devices that are connected to your Guest Network wirelessly.

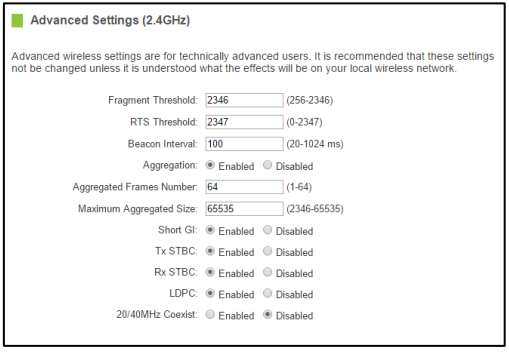
Security Settings: Change the type of wireless security settings for your Guest Networks by selecting the specific Guest Network SSID from the drop down menu.

Encryption: Select the encryption type for your Guest Network.

Pre-Shared Key: The password for your Guest Network. This is the key used by devices connecting to your Guest Network.

2.4GHz Wi-Fi Settings: Advanced Settings (2.4GHz)

Advanced Wireless Settings should only be adjusted by technically advanced users. It is not recommended that novice users adjust these settings to avoid degrading wireless performance.



Fragment Threshold: The default and recommended setting is at 2346, meaning the Router will never fragment any frames that it sends to wireless users.

RTS Threshold: Adjusts the size of RTS data packets. Lower values reduce throughput, but allow the system to recover quicker from interference/collisions. Higher values provide the fastest throughput.

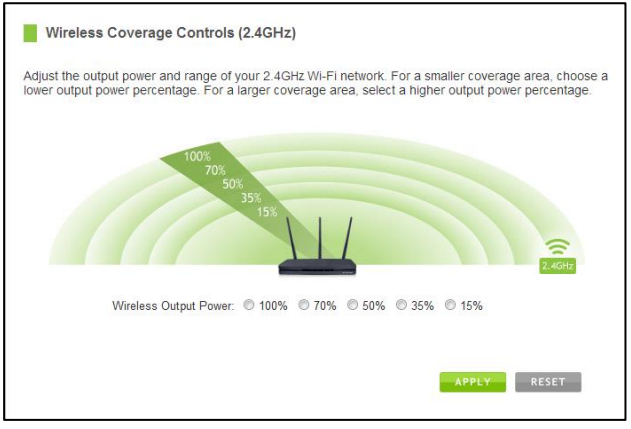
Beacon Interval: Indicates the frequency interval of the beacon. A beacon is a packet broadcast by the router to synch the wireless network.

Preamble Type: Defines the length of the Cyclic Redundancy Check for communication between the router and roaming wireless users.

STBC: Space Time Block Coding improves reception by coding the data stream in blocks.

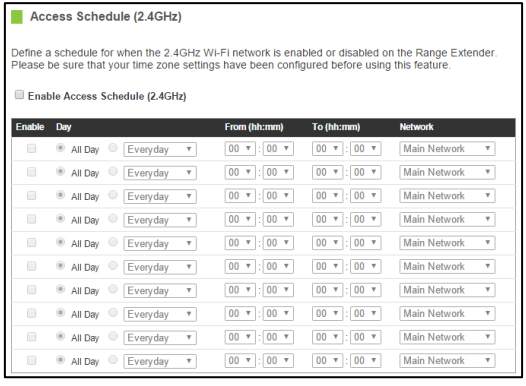
2.4GHz Wi-Fi Settings: Wireless Coverage Controls (2.4GHz)

Adjust the output power of the Router to control the coverage distance of your 2.4GHz wireless network. For a smaller coverage area, you can select a lower output power. For the maximum wireless coverage, select the 100% selection.



2.4GHz Wi-Fi Settings: Access Schedule (2.4GHz)

Access Schedules will enable or disable your 2.4GHz wireless access at a set time based on your predefined schedule. This feature is often used for restricting access to all users (such as children, employees, guests) during specific times of the day for parental control or security reasons.



a. Enable Access Schedule.
b. Select which days you wish for your Wi-Fi to be available.
c. Select the time frame during that day that you wish for Wi-Fi to be available.
d. Select the Network that you wish to apply these settings to.
e. Apply Changes.

Note: Make sure you have already configured your System Clock in order for your schedule to work correctly. Time Zone Settings can be adjusted from the web menu under Management > Time Zone Settings.

2.4GHz Wi-Fi Settings: Wi-Fi Protected Setup – WPS (2.4GHz)

WPS is a Wi-Fi feature created to make Wi-Fi setup simple and easy. Some wireless routers and adapters support this feature with varying names (i.e. one touch setup or WPS).

You may enable WPS setup here by selecting the type of WPS setup you wish to use. The Router supports all types of WPS setup:

Option A: Push button: You may push the WPS button on the web menu or use the physical button on the back of the Router.

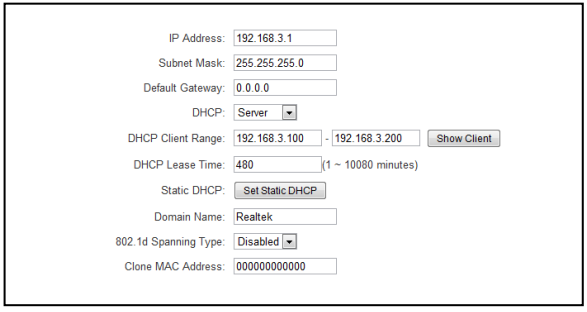
Option B: PIN: Some wireless devices use PIN number to access wireless network. If your wireless device requests for a PIN number, use the PIN code located here.

Option C: Enter PIN: If your wireless device has a PIN number, locate the number and enter it into the field. Press Start PIN when ready.

NETWORK SETTINGS

Network Settings: Local Network (LAN)

These settings are for your local network only and do not apply to your Internet / ISP connection.



IP Address: The IP address of the Router.

Subnet Mask: The subnet of the Router.

Default Gateway: The access point to another network.

DHCP: Each network device on your local network will have its own IP Address. The DHCP server automatically assigns the IP addresses to each device connected to your network. Disabling DHCP will require that each device on your network be assigned a manual or static IP address.

DHCP Client Range: The range of IP addresses provided by the DHCP server is defined by this field. You can limit how many IP addresses are used in your network by setting a smaller or larger range.

DHCP Lease Time: The amount of time each device is given a specific IP is decided by the DHCP lease time. After the Lease Time expires, the DHCP server will assign another IP address to the device.

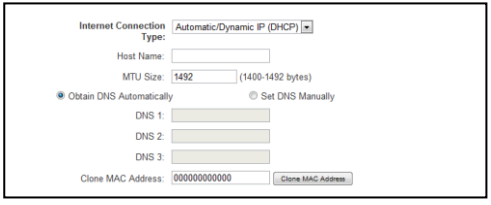
Set Static DHCP: This allows specific devices to be given a specific IP address each time the device connects to the network. The DHCP server will always assign the same IP address to the same device. This feature is often used for shared devices such as network printers or servers.

802.1d Spanning Type (STP): A network protocol that ensures a loop-free topology for networks that have Ethernet bridges. The STP prevents bridge loops and allows a network design to include redundant links to provide automatic backup paths if active links fails.

Clone MAC Address: The Router can use a MAC address that you define as its own. This is often used when an Internet Provider only authorizes one MAC address to access the Internet. Cloning the MAC address will make it so that the cloned MAC address is the only MAC address seen by the Internet Provider.

Network Settings: Internet Network (WAN)

The Basic Setup Wizard will assist you in setting up your Internet connection. However, in the case that you wish to adjust settings manually, the options on this page provides you with the tools to do this easily.



Select your Internet Connection type from the drop-down menu:

Manual IP (Static): For Internet connections where the Internet provider does not provide you with an IP address automatically. If you know the IP address and DNS settings that your Internet provider uses, select this option.

Automatic/Dynamic (DHCP): This is the configuration type most often used by Internet providers. Automatic configurations are used by both DSL and Cable as well as other providers. Under the Automatic Configuration method, the Internet provider will assign your router an Internet IP address automatically.

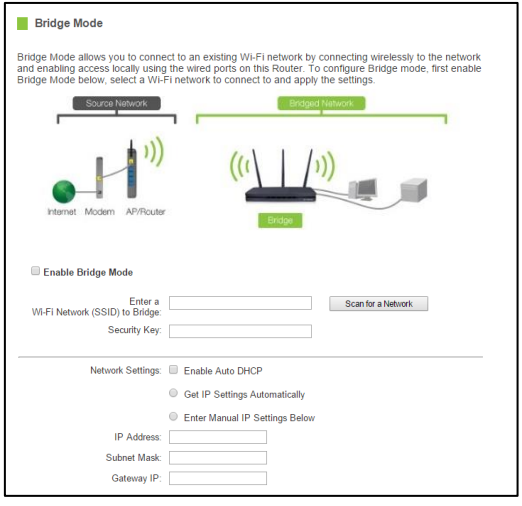
If for some reason you do not get an IP address and you know that your Internet provider uses DHCP, try resetting your modem. Remove the power adapter from the modem as well as the backup battery (if available). Wait about 30 seconds and then power the modem back on. You can run through the Basic Setup Wizard again to see if that fixes your Internet connection issues.

PPPoE connections normally requires login information. If you do not know the settings for your PPPoE connection, please contact your Internet provider.

PPTP and L2TP connections requires login information as well as IP address settings. If you do not know the settings for your PPTP / L2TP connection, please contact your Internet provider.

Network Settings: Bridge Mode

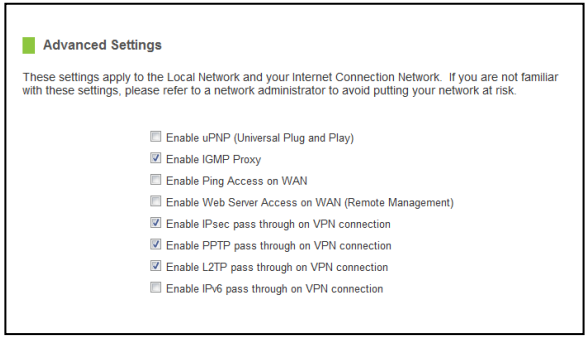
A Network Bridge creates a connection between two separate networks wirelessly. The Bridge connects to a Wi-Fi network (either 2.4 or 5GHz network) of the existing network and provides wired connections to expand the network further. All devices connected to the Bridge are on the same subnet and local network as the existing network. Note: The Network Bridge does not create another Wi-Fi network to connect to, it only provides wired connections to expand a network.



To enable Bridge mode, click the checkbox titled Enable Bridge Mode. Next select a Network (SSID) to connect to wirelessly. If the network has a security key, enter it in the Security field.

Configure the network settings for the network that you are connecting to. Most networks will have a DHCP server that will automatically assign an IP address for you. However in the case that the network you are connecting to does not, you can enter the IP settings manually. The IP must be in the same subnet as the network you are connecting to in order for Bridge mode to operate successfully.

Network Settings: Advanced Settings



These settings apply to the Local Network and your Internet Connection Network. If you are not familiar with these settings, please refer to a network administrator to avoid putting your network at risk.

Enable uPnP: Universal Plug and Play is a network feature that allows uPnP enabled devices to "just work" with each other when connected to the same network. UPnP can work across different network media, such as an Ethernet connection or wireless connection. With UPnP enabled, network devices may change security settings within the Router's firewall to allow access over the Internet. By default, UPnP is disabled to avoid exposing your network to security issues.

Enable IGMP Proxy: Internet Group Management Protocol is a communication protocol used by hosts and routers on the network to establish multicast group memberships. IGMP Proxy is typically used to implement multicast routing and commonly used when advanced protocols such as PIM is not suitable.

Enable Ping Access on WAN: Allows users to ping the WAN interface IP address from the Internet.

Enable Web Server Access on WAN (Remote Management): Allows access to the Web Menu over the Internet.

Enable IPsec pass through on VPN connection: Allows the IP security protocol suite to pass through on a VPN connection.

SECURITY FEATURES

The Router provides your network with Security Features that helps to provide convenience and protection for your wired and wireless network.

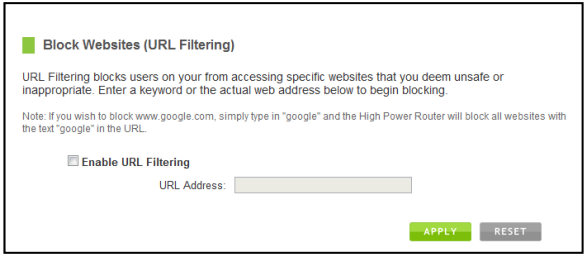
The Security Features allows you to control access of your wireless network through: on/off schedules, specific user authorizations, and wireless coverage control.

These settings apply to your local wireless and wired network. These features are not the same as your network Firewall settings.

Security Features: Block Websites

To block a website, you must first enable URL filtering. After it has been enabled, you can begin adding as many websites as you wish into the URL Address field.

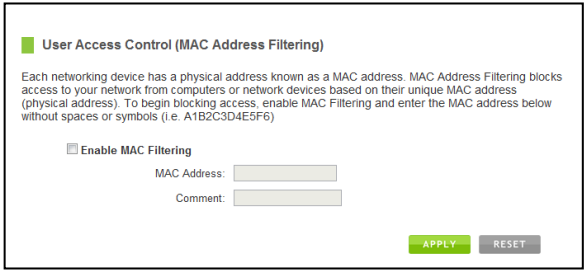
Note: If you wish to block www.google.com, simply type in "google" and the Router will block all websites with the text "google" in the URL.



Security Features: User Access (MAC Address Filtering)

User Access allows you to deny access or allow access to specific users connecting to the network. Each networking device has a unique address called a MAC address (a 12-digit hex number).

By inputting the MAC address into the field, you can define whether that device is allowed into your network or not allowed.



A MAC Address may sometimes be referred to as a Physical Address. Most networking devices have their MAC Address located on a label on the actual device.

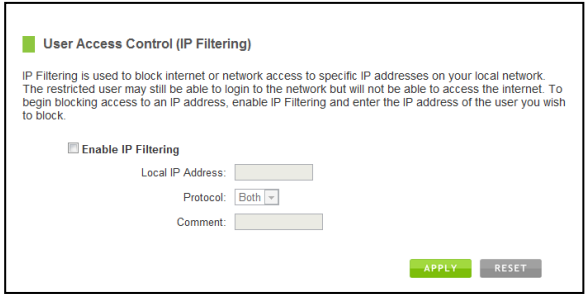
For Windows computers with internal networking adapters, the MAC Address can be found by viewing the Network Connection Details of the network adapter. The MAC Address will be listed as the Physical Address.

Be sure to enter the MAC Address without any symbols. For example, a MAC Address of 78-DD-78-AA-78-BB would be entered as 78DD78AA78BB.

Security Features: User Access (IP Address Filtering)

User Access (IP Filtering) is similar to User Access (MAC filtering) except that the Router uses the local IP address to filter the specific data from the specified network protocol. For example, if you chose to block TCP data packets from a specific computer, you would need to figure out what that device's IP address is and select TCP from the Protocol drop down menu.

If you are not sure which Protocol to filter, select "Both" as your Protocol selection.

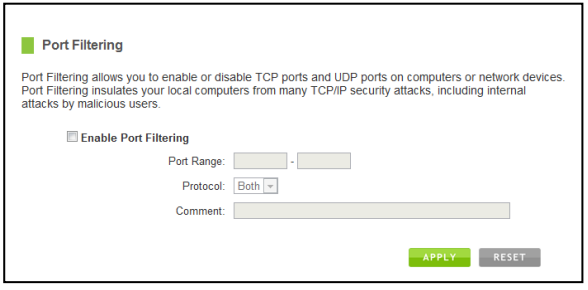


FIREWALL SETTINGS

The Router's Firewall is designed to prevent unauthorized users from accessing your network. This section will go over the different features of the Firewall and how to configure them.

Firewall Settings: Port Filtering

Port Filtering is a security measure that prevents users from using specific ports for reasons other than what those ports were originally intended for. For example, TCP port 21 is traditionally used for FTP. However, there is nothing stopping a user from using port 21 for purposes other than FTP access. By enabling Port Filtering on TCP port 21, only FTP communications would be allowed. No other types of communication would be allowed on this port.



Hackers may sometimes scan for all open ports on your network as a method of hacking into your network. Port Filtering and other firewall features help to prevent this from happening.

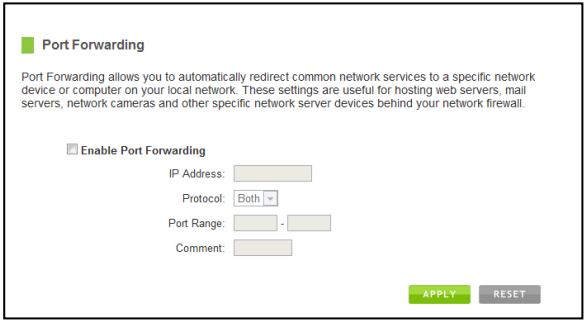
To set up Port Filtering, select a range of ports you wish to filter. If you are trying to filter a single port, enter the port number twice. (For example, Port 21: 21 – 21) Select the Protocol of the port you are filtering. If you do not know what protocol you wish to filter, select "Both."

Firewall Settings: Port Forwarding

Port Forwarding is a rule that tells the Router that if a specific type of request comes in on a specific port, then that request should be forwarded to a specific device on the private network.

Port Forwarding is often used for setting up servers, cameras and other devices that require remote access.

Enable Port Forwarding: Enables designated ports to begin forwarding.



IP Address: The IP address of the device behind the Firewall that is being designated for Port Forwarding.

Protocol: Select UDP, TCP or Both for the protocols to be forwarded.

Port Range: Select a range of ports for the designated IP address that you wish to be forwarded.

Comment: Create a name that you can use to easily identify this Port Forwarding entry.

Firewall Settings: Demilitarized Zone (DMZ)

A DMZ is a network location or IP Address that is not protected by the firewall. When enabling DMZ, it is important to note that the device on the IP Address designated as part of the DMZ does not have any protection from the Router's firewall. The device's only security would be those built into the operating system.

As a general safety rule, devices placed on the DMZ should not have any other network connections to any other devices.

Enable DMZ: Enables the Demilitarized Zone.

DMZ Host IP Address: The designated IP Address of the network device to have unrestricted access through the Router's Firewall.

Firewall Settings: Denial of Service

A Denial of Service attack is an attempt by a user (or users) to make a server's or network's services unavailable. The user sends a server multiple requests with false return addresses.

The server will attempt to respond by sending a request back to the user; however, since the address is false, the server will wait for a response before closing the connection. When multiple requests like this occur, servers may often get overloaded with too many requests and stop functioning altogether. This is a typical DoS attack, although DoS attacks may not be limited to this type of attack.

The Router can assist in preventing these types of attacks by scanning the network for patterns of activity that represent DoS attacks. If a pattern comes in frequently, the Router can attempt to block messages containing that pattern and thus protect the server from becoming overloaded and unresponsive.

QUALITY OF SERVICE

QoS prioritizes and guarantees network performance for a specific application for an IP Address range or MAC Address. You can also enter only an IP address or MAC address without selecting an application if you wish to prioritize all traffic for a specific device.

QoS is often used for applications that require steady bandwidth. Common applications include VoIP phones, video streaming applications (i.e. DVRs, network cameras, video on demand), online gaming and servers.

It is important to note that while QoS helps to prioritize and guarantee bandwidth for a specific device or application, it does not provide you with more bandwidth than you currently have.

For example, if your Internet Provider rates your internet connection speed at 5Mbps, QoS will not improve that connection. QoS helps you better manage the 5Mbps that you have so that the bandwidth is prioritized for devices on your network that may need the provided 5Mbps more than other devices. However, if you have an application that requires more than 5Mbps of steady bandwidth, the application will continue to experience "lag" with or without QoS since your available bandwidth is less than the required bandwidth of your application.

All QoS rules will be listed under the QoS Rule Table.

ROUTING SETUP

Dynamic Routing allows the Router to automtically learn network destinations for devices/networks that are directly connected to the router. RIP and RIP2 are routing protocols that may be used for the router to learn routes from other routers running those same protocols. This allows the Router to adapt to changes and failures within the network topology and find the best route.

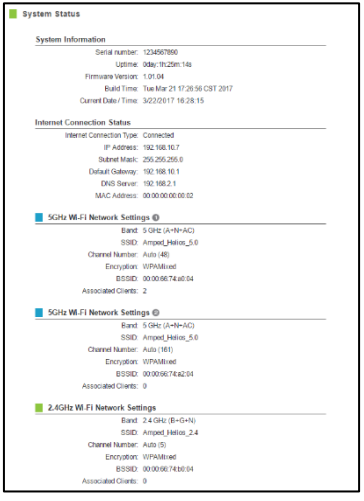
Static Routing allows the administrator to manually enter into the Router's routing table. These routes do not change and must be manually reconfigured if the route fails.

MANAGEMENT FEATURES

The Management Features on the Router allows you to view the status of the system, your Internet connection, wireless network and local area network.

The Network Statistics page provides detailed traffic data for each connection type.

Management: System Status



The System Status provides you with a snapshot of your Router's current connections and settings.

The System Information section provides you with the router's firmware version and build. This is used to help our support department determine what firmware version your device is running. The Current Date / Time is the setting for the system clock. If this time is off, go to the System Clock section and configure your system time.

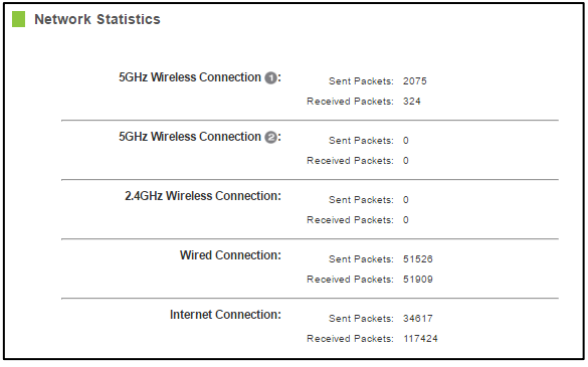
The Internet Connection Status displays the information from your Internet Provider. If for some reason your Internet connection stops working, you may try running through the Basic Setup Wizard again or contact our support department at 888-573-8820.

The Wireless Settings shows the details of the 2.4GHz and 5.0GHz wireless networks.

The Local Area Network settings displays the current configurations for local network IP address and DHCP server settings.

Management: Network Statistics

Network statistics shows the data activity for each connection type on the Router (Internet, Wireless and Wired).



The Wireless Connection statistics shows all data activity for the 2.4GHz and two 5.0GHz wireless networks separately.

The Wired Connection statistics shows all data activity for all users physically connected to the wired ports on the Router.

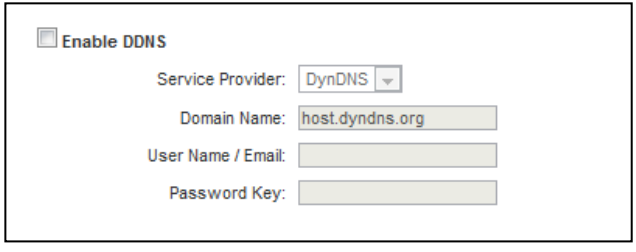
The Internet Connection statistics shows the data activity for all upload and download data over your Internet connection.

Management: Dynamic DNS Settings

The Dynamic Domain Name System (DDNS) is a method to keep a web domain name, or web address, linked to a changing IP address as most Internet Providers do not provide static IP addresses.

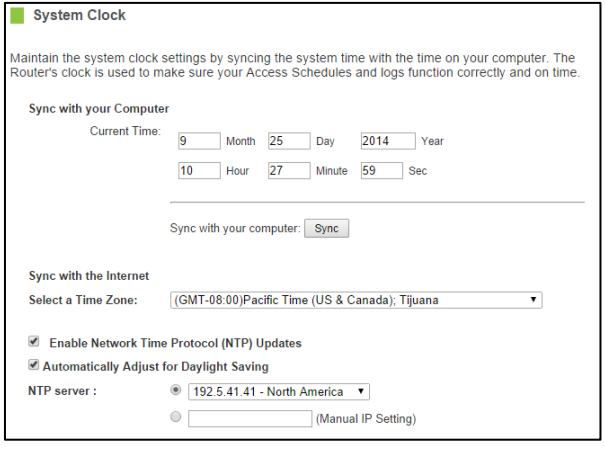
To use DDNS, you must first set up an account with a DDNS provider. The Router supports two of these providers (TZO and DynDNS). Once the DDNS service has been set up and configured correctly on the Router, the DDNS service will constantly track the IP address of your Internet connection. Each time your Internet Provider changes your IP address, the Router will inform the DDNS service and the DDNS service will update your new IP address. The DDNS web domain that you have chosen to use will then be updated to redirect to your new Internet IP address.

The DDNS service makes it so you never have to check or remember your Internet IP address. This feature is typically used for users running servers, network cameras and other devices that require remote access.



Management: System Clock

Maintain the internal clock for the Router by syncing with your computer's time or over the Internet. Your system clock settings need to be accurate in order for logs and wireless access schedules to work correctly.



Management: System Logs

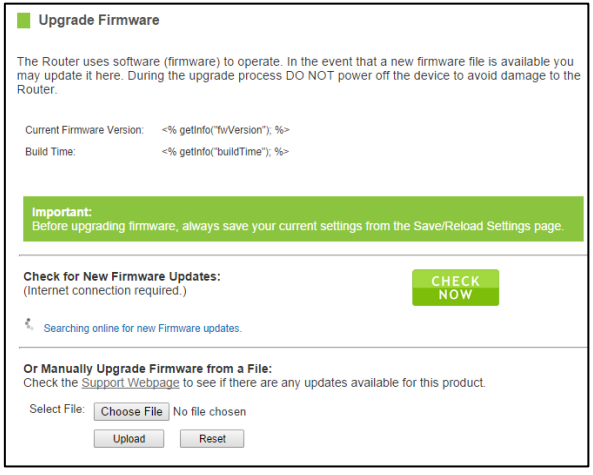
The System Log is useful for viewing the activity and history of your Router. The System Log is also used by Amped Wireless technicians to help troubleshoot your router when needed. It is recommended that you enable all logs in the event that troubleshooting is required.

All log entries will be deleted each time the Router reboots or is powered off.

Management: Upgrade Firmware

Amped Wireless continuously updates the firmware for all products in an effort to constantly improve our products and their user experiences. When connected to an active connection with Internet access, the Range Extender can automatically check for new firmware updates that are available by pressing Check Now. Follow the prompts to complete the upgrade process.

Before upgrading the firmware, remember to always save your current settings first by going to the Save/Reload Settings page. The firmware upgrade process will reset the settings of the Range Extender to default settings.



Manual Firmware Upgrade: In the case that the Range Extender does not have access to the Internet, you can manually upgrade the firmware by downloading the firmware file from the Amped Wireless Elite Support website. The firmware update is downloaded as a zip file and you will need to have an unzipping program to open the file. Inside the file will be a text document with details on the current firmware release and instructions on how to upgrade the firmware.

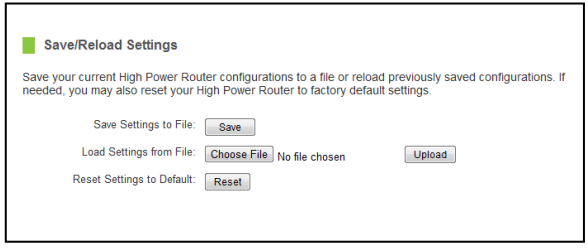
To manually upgrade your firmware:

a) Download the file from www.ampedwireless.com/support and remember the location where you saved it. Firmware files may also be provided by Amped Wireless Elite Support Concierges.
b) Click Choose File and locate the file.
c) Click Upload to begin upgrading.

Note: Firmware files normally have a .bin file extension.

Management: Save and Reload Settings

Saving your current settings allows you to back-up your current settings which may be reloaded at a later time. This feature may be useful for testing new features and settings without having to worry about returning to a stable platform.



To save current settings:

a) Click Save.
b) Select a file name and location.

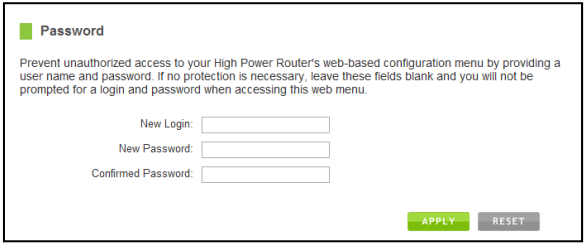
To load previously saved settings:

a) Click Browse.
b) Locate the previously saved settings file.
c) Click Upload to restore the settings to the saved file.

You may also reset the Router's settings to factory settings by pressing Reset. By resetting the Router you will lose all previous configurations and will need to run the Basic Setup Wizard again to configure the Router's Settings.

Management: Password Settings

If you wish to enable a password to protect unauthorized access to the web menu and Setup Wizard, you may enter one here.



TECHNICAL SPECIFICATION

Wireless Standard: 802.11a/b/g/n/ac
Frequency Band: 2.4 GHz, 5.0GHz
Wireless Speed: 2.4GHz: 600Mbps (Tx/Rx)
5.0GHz: 1300Mbps (Tx/Rx)

Memory: 128MB DDR3
Processor: 1GHz Processor
Antennas: 3 x High Gain Antennas
1 x Internal Antenna

Ports: 3 x RJ-45 10/100/1000 LAN ports
1 x RJ-45 10/100 /1000 WAN ports
Warranty: 1 Year
Setup Requirements:

- Wired or wireless PC/Mac
- Google Chrome, Internet Explorer (8.0 and up) or Safari web browser

DEFAULT SETTINGS

The default settings for your Router are listed here. If for some reason you need to return your Router back to default settings, hold down the Reset button on the back panel for 10 seconds. The Router will reset back to factory settings as listed below:

IP Address: 192.168.3.1

Web Menu Access: http://setup.ampedwireless.com

2.4GHz Wireless SSID: Amped_B1900RT_2.4

Wireless Security Key (WPA/WPA2 Mixed Mode): wireless

5.0GHz Wireless SSID: Amped_B1900RT_5.0

Wireless Security Key (WPA/WPA2 Mixed Mode): wireless

TROUBLESHOOTING & SUPPORT INFORMATION

We are here to help. If you have any issues with your Router please contact us.

To contact Amped Wireless' Technical Support use one of the following methods:

Phone: 888-573-8820

Email: techsupport@ampedwireless.com

Web: www.ampedwireless.com/support

Troubleshooting

The tips in this guide are listed in order of relevance. Try solution (a) before trying solution (b), etc.

Troubleshooting: Web Menu Issues

I entered setup.ampedwireless.com and it failed to open the Setup Wizard.

a) Make sure your computer is connected to the Router using the included Ethernet cable. Do not try to connect with a wireless connection. Ensure that the power on the Router is on.
b) Check that your computer IS NOT connected to any wireless networks. If it is, disable your Wi-Fi connection and disconnect from all wireless networks. Reboot the router and try again.
c) Close your current web browser and reopen it. Use Google Chrome or Internet Explorer (v8.0 and up).
d) Open your web browser and enter 192.168.3.1 into the web address bar.
e) If you can access the web menu, but not the Setup Wizard, the Router may have previously been configured. There is a link to re-access the Setup Wizard from the Dashboard. Scroll to the bottom of the Dashboard page to find the Setup Wizard link.
f) Another way to access the Setup Wizard is to reset the Router to default settings by holding the Reset Button (located on the back panel) for ten (10) seconds and try again. The Setup Wizard will always

appear if the Router has not yet been configured. After it has been configured the Dashboard will appear instead.

I entered setup.ampedwireless.com and it failed to open the Web Menu Dashboard.

a) Make sure your computer is connected to the Router using the included Ethernet cable. Do not try to connect with a wireless connection. Ensure that the power on the Router is on.
b) Check that your computer IS NOT connected to any wireless networks. If it is, disable your Wi-Fi connection and disconnect from all wireless networks. Reboot the router and try again.
c) Close your current web browser and reopen it. Use Google Chrome or Internet Explorer (v8.0 and up).
d) Open your web browser and enter 192.168.3.1 into the web address bar.
e) If the Setup Wizard appears instead of the Dashboard, the Router has not yet been configured. Complete the Setup Wizard or skip the Setup Wizard to access the Dashboard.
f) Reset the Router to default settings by holding the Reset Button (located on the back panel) for ten (10) seconds and try again. Complete the Setup Wizard or skip the Setup Wizard to access the Dashboard.

I have entered setup.ampedwiress.com, but I cannot enter the Web Menu. I am prompted for a login and password, but it does not let me continue.

a) Check that you are using the right login and password.
b) If you forgot your login and password for the Web Menu, reset the Router to default settings and try again. To reset the Router to default:
   - On the back panel of the router find the Reset button.
   - Use a pen tip to hold down the reset button for 5 to 10 seconds.
   - The router will reinitialize and restore its default settings.

I am having problems with features on the Web Menu. When clicking buttons, it does not register my action.

a) Check that you are using a supported web browser: Google Chrome, Internet Explorer (8.0 and up) and Safari. If you are using an unsupported web browser, such as Firefox, please change to one of the supported web browsers and try again.

Troubleshooting: Internet Connection Issues

The Basic Setup Wizard could not automatically configure my Internet connection.

a) Reset your modem by holding down the reset button located on the back of the modem for approximately five seconds. Try the automatic configuration again.
b) Static IP: Your Internet connection may require a static IP setting. Check with your ISP to obtain the IP settings.
c) DSL Connections: Your Internet connection may require login information. If you are using PPPoE mode, you will need to manually configure your Internet connection settings and obtain your username and password.
d) Cable Modem: Your Internet connection may require you to clone your MAC address. Go to More Settings > IP Settings > Internet Network (WAN) and select Automatic/Dynamic (DHCP) from the drop down menu. Clone your PC's MAC address under the DNS settings.

I have gone through the Setup Wizard and I do not have Internet.

a) Detach the power adapter and disconnect all computers from the Router.
Turn off the power to your modem and remove the backup battery (if available).
Wait 2 minutes and power the modem back on. Wait 2 minutes for the modem to initialize.
Power on the Router and connect your computer to the router.
Open your web browser and try to access the Internet.

b) Check that your Internet connection through the modem is working. Power off the Router and disconnect your computer from the router.
Turn off the power to your modem and remove the backup battery (if available).
Wait 2 minutes and power the modem back on. Wait 2 minutes for the modem to initialize.
Attach your computer directly to the modem and power on your computer.
Open your web browser and check to see if you can go online. If you cannot go online, there may be a problem with your Internet provider. Please contact your Internet provider to troubleshoot your connection issues.

My Internet connection is unstable and drops intermittently.

a) Power off your computer, the Router and your modem.
Power on your modem and wait 2 minutes.
Power on the Router and wait 1 minute for the router to initialize.
Power on your computer and try again.

b) Check to see if other computers are also having this problem. If they are not, check to see if your anti-virus software or firewall software is conflicting with your Internet connection. You may also try temporarily disabling all firewalls or anti-virus software to see if that is what is causing the problem.

c) If you have a PPPoE or another Internet connection requiring login credentials, you may need to adjust the reconnection or time out settings. Go to the IP Settings > Internet Connection (WAN) page and configure your Internet connection to automatically reconnect.

d) If you are using Windows XP, check that your computer is using Service Pack 2 or greater. Windows XP users with Service Pack 1 may experience intermittent wireless connections.

My Internet connection is abnormally slow.

a) Check with your Internet provider to ensure that they are not experiencing system wide issues.
b) Check with speedtest.net to see the speed of your Internet provider. Connect directly to your modem with your computer and check speedtest.net again. If the speed results are the same, the issue is with your Internet provider. Please contact your provider to troubleshoot the issue.
c) Check the Internet connection speed on another computer that is connected to the Router. If the other computer does not have Internet speed problems, the networking equipment or operating system on your original computer may be outdated or may be experiencing problems. Viruses and other software may slow down a computer's overall speed significantly.
d) If you are using a wireless connection to the Router, check that your wireless signal strength is above 3 bars. If not, you may need to move closer to the Router.

Troubleshooting: Local Network Issues

My computer is getting an IP address of 169.254.x.x and Windows says "Limited or no Connectivity".

a) Make sure the Router is powered on.
b) Check that your computer's network adapter is enabled and is set to "Obtain IP Address Automatically".
c) Release and Renew your IP Address on your computer. To do this on a Windows computer:
   - Click Start > Run and type CMD.
   - When the command prompt appears, type ipconfig/release and press enter.
   - Type ipconfig/renew and press enter.
   - Check that your computer's network adapter has an IP address of 192.168.3.x
d) Restart your computer and check again.
e) Restart the Router and check again.
f) Make sure DHCP is enabled in the Router's Web Menu (Go to More Settings > IP Settings > Local Area Network (LAN) > DHCP Settings.
g) Check that your Firewall or Anti-Virus software is not preventing you from accessing shared devices on you network.

Troubleshooting: Wireless Issues

I am only getting 3 or 4 wireless signal bars on my wireless computer and I am within 10 feet of the wireless router.

a) Step back at least 10 feet from the Router and check your signal again. The Router emits high power, long range Wi-Fi signals that may confuse your wireless adapter signal reading at close range. The speed and signal are at 100%, however your readout may not be displaying the data correctly.
b) Change the wireless channel on your Router to find a channel with less interference. Do this for both 2.4GHz and 5.0GHz wireless networks. To assist in finding the right channel, download the Amped Wireless Wi-Fi Analytics Tool for your Android or PC.

I am not getting a strong wireless connection from all distances from the wireless router.

a) Check if other computers are experiencing the same issue. If not, the wireless adapter in your computer may be experiencing problems or maybe older and have poor wireless performance.
b) Avoid placing the Router near or around Microwaves and 2.4GHz wireless phones.
c) Avoid using wireless channels that are crowded. Change the wireless channel on the Router.
d) Place the Router in a higher location near the center of your desired coverage location.
e) Position the antennas on the Router in opposite orientations.

My wireless adapter does not connect at the maximum wireless speed.

a) Your wireless network adapter may be outdated and have older wireless technology not capable of achieving the wireless network speeds of the Router. To achieve maximum wireless speeds, it is required that you have a 802.11n (2.4GHz) or 802.11ac (5.0GHz) adapter. To obtain a data rate of 1733Mbps on the 5GHz band or 800Mbps on the 2.4GHz band the network adapter used to connect to the Router must support the same data rates.

b) Check that you are using the latest Wi-Fi security type: WPA or WPA2
WEP security may slow down your wireless speeds.

c) Check that the Router's wireless data rate is set to AUTO or 11N (2.4GHz) and 11AC (5.0GHz) data rate speeds.

d) Wireless speeds degrade as you get further away from the wireless router.

e) Check that the wireless channel set on the Router is not crowded. Try changing the wireless channel to another channel and test the speed again.

f) Do not use Internet websites (i.e. speedtest.net or other websites) to test your wireless speeds. Speed test websites measure your Internet connection speed, which is controlled by your Internet provider. Wireless speeds are for your local network and not your Internet connection. To test wireless speeds, a local test or file transfer will be required to test the true wireless speed.

I cannot tell if MU-MIMO simultaneous data transfers are enabled and functioning.

a) Check that the connected devices support MU-MIMO technology. All connected devices must also support MU-MIMO to enable the MU-MIMO function. If the connected device does not support MU-MIMO it will function as a SU-MIMO (single-user MIMO) device.

I cannot connect my Windows Vista computer to the wireless network. I enter my wireless password and I see an error.

a) Manually add a wireless network to your Vista computer:
   - Click Start, and then click Network.
   - Select Network and Sharing Center.
   - Click Manage Wireless Networks.
   - Click Add and select Manually create a network profile.
   - Type in the SSID, and select the type of security and enter your security key.
   - Select "Start this connection Automatically" and click Next.
   - Go to Network and Sharing Center and select Manage Network Connections.
   - Right click Wireless Network Connection and then select Status.
   - Click details and check to see that your IPv4 IP address is correct (192.168.3.x).

b) Disable IEEE 802.1x authentication on your computer.

I cannot connect my Windows XP computer to the wireless network. I enter my wireless password and I see an error.

a) Make sure your computer has the latest Windows Service Pack. Windows Service Pack 1 does not support WPA security. Upgrade to the latest Service Pack to support the latest wireless encryption.
b) Manually add a wireless network to your XP computer.
c) Disable IEEE 802.1x authentication.

WARRANTY AND REGULATORY INFORMATION

The Amped Wireless (A division of Newo Corporation, Inc.) Limited Warranty

Warranty Period: The Amped Wireless Limited Warranty is for one (1) year from the date of purchase for new products. Refurbished products carry the Limited Warranty for thirty (30) days after the date of purchase.

Guarantee: Amped Wireless warrants to the original purchaser that the hardware of this Amped Wireless product shall be free of defects in design, assembly, material, or workmanship.

Conditions: The Amped Wireless Limited Warranty is for repair or replacement only at the sole discretion of Amped Wireless. Amped Wireless does not issue any refunds for purchased product. In the event that Amped Wireless is unable to repair or replace a product (i.e. discontinued product), Amped Wireless will offer a credit toward the purchase of a similar product of equal or lesser value direct from Amped Wireless. Any repaired or replacement products will be warranted for the remainder of the original Warranty Period or thirty (30) days, whichever is longer. Amped Wireless reserves the right to discontinue any of its products without notice, and disclaims any limited warranty to repair or replace any such discontinued product. Amped Wireless reserves the right to revise or make changes to this product, its documentation, packaging, specifications, hardware, and software without notice. If any portion of the Amped Wireless Limited Warranty is found to be unenforceable, its remaining provisions shall remain in effect. All costs of shipping the product to Amped Wireless shall be borne solely by the purchaser.

Limitations: IN NO EVENT SHALL AMPED WIRELESS' (NEWO CORPORATION'S) LIABILITY EXCEED THE AMOUNT PAID BY YOU FOR THE PRODUCT FROM DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT, ITS ACCOMPANYING SOFTWARE, ACCESSORIES OR ITS DOCUMENTATION. The Amped Wireless Limited Warranty does not apply if: (a) the product assembly has been opened or damaged, (b) the product or its software or firmware has been altered or modified, (c) the product has not been used and installed in accordance to Amped Wireless' instructions, (d) the product has been subjected to misuse, or negligence. Amped Wireless does not guarantee the continued availability of a third party's service for which this product's use or operation may require. The Amped Wireless Limited Warranty does not protect against acts of God, vandalism, theft, normal wear and tear, obsolescence and environmental damages such as, but not limited to, weather and electrical disturbances. The Amped Wireless Limited Warranty is the sole warranty for this product. There are no other warranties, expressed or, except required by law, implied, including the implied warranty or condition of quality, performance merchantability, or fitness for any particular purpose.

How to Claim Warranty: In the event that you have a problem with this product, please go to www.ampedwireless.com/support to find help on solving your problem. In the event that you cannot and need to file a warranty claim, please call Amped Wireless' Elite Support or visit http://www.ampedwireless.com/support/center.html#rma to obtain a Support Ticket Number (obtained from Technical Support Reps), fill out a Return Authorization (RMA) form and obtain a Return Authorization (RMA) number. A dated proof of original purchase and the RMA number is required to process warranty claims. You are responsible for properly packaging and shipping the product at your cost and risk to Amped Wireless. The

bearer of cost related to shipping repaired or replaced product back to the purchaser will be at the sole discretion of Amped Wireless and determined based on the details of each RMA case. Customers outside of the United States of America are responsible for all shipping and handling costs including custom duties, taxes and all other related charges.

Technical Support: The Amped Wireless Limited Warranty is not related to the terms, conditions and policies of Amped Wireless Elite Support offerings. For questions regarding support, please contact techsupport@ampedwireless.com

Regulatory Information

FCC Statement and Declaration: Amped Wireless declares that this device complies with Part 15 of the FCC Rules and Regulations. Operation of this device is subject to the following two (2) conditions:

(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Notice: 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 and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and the receiver.

- Connect the equipment to 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 and Safety Notices: Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter. Avoid use of this product near water or during an electrical storm as there may be a remote risk of electrical shock from lighting. This product may contain lead, known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling. This device must always be used with a Listed Computer or device.

For product available in the USA/Canada market, only channel 1-11 can be operated. Selection of other channels is not possible. This device is restricted to indoor use when operated in the 5.15 to 5.25 GHz frequency range.

FCC requires this product to be used indoors for the frequency range 5.15 to 5.25 GHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems.

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 23cm between the radiator & your body.

The antennas used for this transmitter must be installed to provide a separation distance of at least 23cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

This device is restricted for indoor use.

Industry Canada Statement: This Class B digital apparatus complies with RSS-247 and ICES-003 of the Industry Canada Rules. This device complies with Industry Canada license-exempt RSS standard(s). Operation of this device is subject to the following two (2) conditions:

(1) This device may not cause harmful interference
(2) This device must accept any interference received, including interference that may cause undesired operation.

Radiation Exposure Statement: This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 23cm between the radiator and your body.

The transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

The maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the EIRP limits specified for point-to-point and non-point-to-point operation as appropriate.

This device has been designed to operate with an antenna having a maximum gain of 4.03 dBi and 4.58 dBi at 2.4 GHz and 5 GHz respectively. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

This radio transmitter has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Ant.	Brand	Model Name (Product Number)	Antenna Type	Connector	Gain (dBi)
1	Cortec	AN2450-5010BRS	Dipole Antenna	Reversed-SMA	Note 1
2	Cortec	AN2450-5010BRS	Dipole Antenna	Reversed-SMA	
3	LYNwave	ALA110-091021-000000	PIFA Antenna	I-PEX	
4	Cortec	AN2450-5010BRS	Dipole Antenna	Reversed-SMA	

Note 1:

Ant.	Gain (dBi)			Cable loss			True Gain (dBi)		
	2.4GHz	5GHz Band 1	5GHz Band 4	2.4GHz	5GHz Band 1	5GHz Band 4	2.4GHz	5GHz Band 1	5GHz Band 4
1	5.03	5.59	-	0.8	1.3	-	4.23	4.29	-
2	5.03	5.59	-	0.8	1.3	-	4.23	4.29	-
3	-	-	2	-	-	1.3	-	-	0.7
4	-	-	5.59	-	-	1.3	-	-	4.29

Déclaration d'Industrie Canada : Cet appareil numérique de classe B est conforme aux réglementations RSS-247 et ICES-003 d'Industrie Canada. Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. Le fonctionnement de cet appareil est sujet aux deux conditions suivantes:

(1) Cet appareil ne peut pas causer de brouillage préjudiciable

(2) Cet appareil doit accepter toute interférence reçue, y compris les interférences pouvant provoquer un dysfonctionnement.

Déclaration d'exposition à la radiation : Cet équipement respecte les limites d'exposition aux rayonnements IC définies pour un environnement non contrôlé. Cet équipement doit être installé et mis en marche à une distance minimale de 23cm qui sépare l'élément rayonnant de votre corps.

L'émetteur ne doit ni être utilisé avec une autre antenne ou un autre émetteur ni se trouver à leur proximité.

Pour les produits disponibles aux Etats-Unis / Canada du marche, seul le canal 1 a 11 peuvent etre exploites. Selection d'autres canaux n'est pas possible.

Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont reserves uniquement pour une utilisation a l'interieur afin de reduire les risques de brouillage prejudiciable aux systemes de satellites mobiles utilisant les

memes canaux.

Le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5725-5850 MHz) doit se conformer a la limite de PIRE specifiee pour l'exploitation point a point et non point a point, selon le cas.

De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Cet appareil a été concu pour fonctionner avec une antenne ayant un gain maximum de 4,03 dBi et 4,58 dBi sur les bandes 2.4GHz et 5 GHz respectivement. L'utilisation d'antenne ayant un gain supérieur est strictement interdit par le règlement d'Industrie Canada. L'impédance d'antenne requise est 50 ohms.

Le present emetteur radio a ete approuve par Industrie Canada pour fonctionner avec les types d'antenne enumeres ci-dessous et ayant un gain admissible maximal et l'impedance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est superieur au gain maximal indique, sont strictement interdits pour l'exploitation de l'emetteur.

Ant.	Marque	Nom du modèle (Numéro de produit)	Type d'antenne	Connecteur	Gain (dBi)
1	Cortec	AN2450-5010BRS	Antenne dipôle	RPSMA	Note 1
2	Cortec	AN2450-5010BRS	Antenne dipôle	RPSMA	
3	LYNwave	ALA110-091021-000000	Antenne PIFA	I-PEX	
4	Cortec	AN2450-5010BRS	Antenne dipôle	RPSMA	

Note 1:

Ant.	Gain (dBi)			Perte de câble			Vrai gain (dBi)		
	2.4GHz	5GHz Bande 1	5GHz Bande 4	2.4GHz	5GHz Bande 1	5GHz Bande 4	2.4GHz	5GHz Bande 1	5GHz Bande 4
1	5.03	5.59	-	0.8	1.3	-	4.23	4.29	-
2	5.03	5.59	-	0.8	1.3	-	4.23	4.29	-
3	-	-	2	-	-	1.3	-	-	0.7
4	-	-	5.59	-	-	1.3	-	-	4.29

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Product wireless range specifications are based on performance test results. Actual performance may vary due to differences in operating environments, building materials and wireless obstructions. Performance may increase or decrease over the stated specification. Wireless coverage claims are used only as a reference and are not guaranteed as each wireless network is uniquely different.

Maximum wireless signal rates are derived from IEEE 802.11 standard specifications. Actual data throughput may vary as a result of network conditions and environmental factors.

Wi-Fi Range Extenders may not work with non-standard Wi-Fi routers or routers with altered firmware or proprietary firmware, such as those from third party sources or some Internet service providers. May not work with routers that do not comply with IEEE or Wi-Fi standards.

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Dispute Resolution / Arbitration

This section describes how you agree to resolve any disputes with Amped Wireless regarding these Terms of Use or your purchase of any product from Amped Wireless and your use of that product. You and Amped Wireless agree to the following resolution process.

To begin with, you agree that any claim that you might have against us regarding these Terms of Use or your purchase of any Amped Wireless product or use of that product must be resolved through binding arbitration before the American Arbitration Association using its Commercial Arbitration Rules. The arbitrator shall have exclusive authority to the extent permitted by law to resolve all disputes arising out of or relating to the interpretation, applicability, enforceability, or formation of our agreement, including, but not limited to, any claim that all or part of this agreement is void or voidable. The arbitrator shall also have exclusive authority to the extent permitted by law to decide the arbitrability of any claim or dispute between you and Amped Wireless.

Because we prefer to resolve our issues with you directly, you agree to arbitrate with Amped Wireless only in your individual capacity, not as a representative or member of a class. As such, your claims may not be joined with any other claims and there shall be no authority for any dispute to be arbitrated on a class-action basis or brought by a purported class representative.

It is important that you understand that the arbitrator's decision will be binding and may be entered as a judgment in any court of competent jurisdiction. If the arbitrator rules against Amped Wireless, in addition to accepting whatever responsibility is ordered by the arbitrator, we will reimburse your reasonable attorneys' fees and costs.

It's important to us that we address any issues you might have promptly. To help us do that, you agree to begin any arbitration within one year after your claim arose; otherwise, your claim is waived.

Unless you and Amped Wireless agree otherwise, any arbitration hearings will take place in the county where you reside. If your claim is for $10,000 or less, you may choose whether the arbitration will be conducted solely on the basis of documents submitted to the arbitrator, through a telephonic hearing, or by an in-person hearing as established by the AAA Rules. If your claim exceeds $10,000, the right to a hearing will be determined by the AAA Rules.

If your claim against Amped Wireless is for less than $10,000, Amped Wireless will pay all arbitration fees. If your claim against Amped Wireless is for $10,000 or more, you are responsible for paying your own portion of the fees set forth in the AAA's fee schedule for consumer disputes, and Amped Wireless will pay all remaining arbitration fees. If you believe you cannot afford the AAA's fee, you may apply to the AAA for a waiver.

As an exception to this arbitration agreement, Amped Wireless is happy to give you the right to pursue in small claims court any claim that is within that court's jurisdiction as long as you proceed only on an individual basis.

We would hope that our customer service agents could resolve any disputes you have with us without resorting to arbitration. Before initiating any arbitration proceeding, you agree to first discuss the matter informally with Amped Wireless for at least 30 days. To do that, please send your full name and contact information, your concern and your proposed solution to the contact listed below.

This Agreement and the rights of the parties hereunder shall be governed by and construed in accordance with the laws of the State of California, exclusive of conflict or choice of law rules.

The parties acknowledge that this Agreement evidences a transaction involving interstate commerce. Notwithstanding the provision in the preceding paragraph with respect to applicable substantive law, any arbitration conducted pursuant to the terms of this Agreement shall be governed by the Federal Arbitration Act (9 U.S.C., Secs. 1-16).

Contact:
Email: legal@ampedwireless.com

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tech support 888-573-8820
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web www.ampedwireless.com