



User's Guide

RTA1900

TITAN
HIGHPOWER™ AC1900
WI-FI® ROUTER

CONTENTS

INTRODUCTION	3
GETTING STARTED	4
Package Contents	4
LED Indicators	5
Back Panel Description	7
BASIC SETUP GUIDE	9
Setup Preparations	9
Welcome to the Setup Wizard	14
5GHz WI-FI SETTINGS	20
Basic Settings (5.0GHz)	20
Basic Settings: Guest Networks (5.0GHz)	22
Security Settings (5.0GHz)	23
Advanced Settings (5.0GHz)	23
Wireless Coverage Controls (5.0GHz)	25
Access Schedule (5.0GHz)	25
Wi-Fi Protected Setup – WPS (5.0GHz)	27
2.4GHz WI-FI SETTINGS	28
Basic Settings (2.4GHz)	28
Basic Settings: Guest Networks (2.4GHz)	30
Security Settings (2.4GHz)	31
Advanced Settings (2.4GHz)	32
Wireless Coverage Controls (2.4GHz)	33
Access Schedule (2.4GHz)	33
Wi-Fi Protected Setup – WPS (2.4GHz)	35
NETWORK SETTINGS	36

Local Network (LAN)	36
Internet Network (WAN)	38
Bridge Mode	40
Network Settings: Advanced Settings	41
SECURITY FEATURES	43
Block Websites	43
User Access (MAC Address Filtering)	44
User Access (IP Address Filtering)	45
USB STORAGE	46
USB Storage: Local Sharing	46
USB Storage: FTP Server	50
FIREWALL SETTINGS	51
Port Filtering	52
Port Forwarding	53
DMZ (Demilitarized Zone)	54
Denial of Service	55
QUALITY OF SERVICE	56
ROUTING SETUP	57
MANAGEMENT FEATURES	58
System Status	59
Network Statistics	60
Dynamic DNS Settings	61
System Clock	62
System Logs	63
Upgrade Firmware	64

Password Settings	67
TECHNICAL SPECIFICATION	68
DEFAULT SETTINGS.....	69
TROUBLESHOOTING & SUPPORT INFORMATION.....	70

WARRANTY AND REGULATORY INFORMATION	85
LEGAL NOTICES AND DISCLAIMERS.....	93

INTRODUCTION

Thank you for purchasing The *TITAN* High Power 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

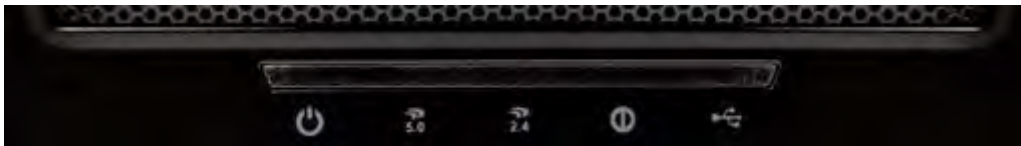
GETTING STARTED

Package Contents

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

- *TITAN* – High Power AC1900 Wi-Fi Router
- Four Detachable High Gain Antennas
- RJ-45 Ethernet Cable
- Power Adapter
- Setup Guide
- CD: User's Guide, Installation Video, Setup Guide, Wi-Fi Analytics Android/Windows App

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.

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

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

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

USB Connection: Indicates when a USB storage device is connected to either of the USB ports.



Gigabit Wired Ports 1-4: 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.

Back Panel Description



From Left to Right

Antenna Connectors: RJ-SMA antenna connectors. Attach the included high gain antennas to these connectors.

Power On/Off: Push to turn the Router on or off.

Power: Power adapter port. Output: 12V 2.5A, Input: 100-240v.

USB Port: Attach USB storage devices, such as USB flash drives and external hard drives, for file sharing. A USB 3.0 port is located on the right side panel of the Router for faster connections.

Wired Devices: Gigabit RJ-45 ports for connecting to wired computers or network devices.

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

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

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

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

BASIC SETUP GUIDE

Setup Preparations

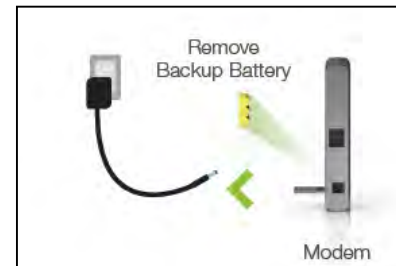
Disconnect and power off your existing router.

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

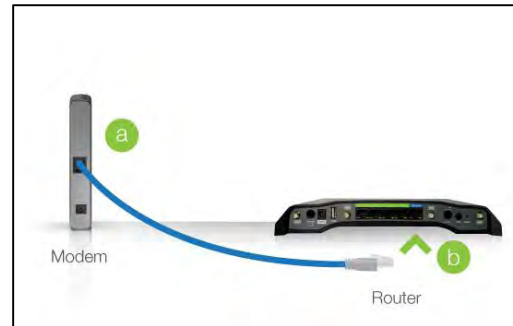
Power off the modem by disconnecting the modem's power adapter from the power outlet. If your modem has a backup battery, remove the backup battery from your modem. Do NOT power on the modem until prompted at a later step.



Connect the Router to your Modem

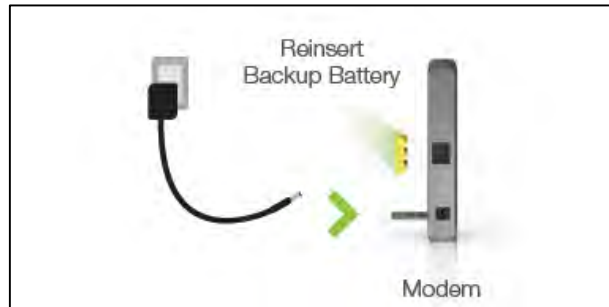
Do NOT connect the power adapter to the Router at this time.

- 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):

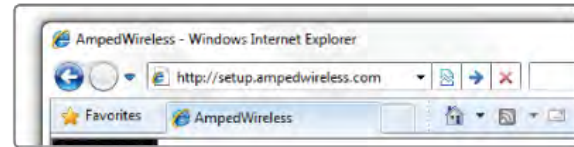


Attach Antennas, Power On & Connect to your Computer

- a) Attach the antennas to the antenna connectors on the Router.
- b) Attach the Power Adapter to the Router's **PWR** port and a power outlet.
- c) Connect an Ethernet cable to an available port on your computer or connect to the Router's Wi-Fi Network: **Amped_Titan_2.4** or **Amped_Titan_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.

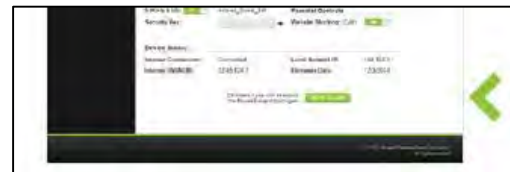
If you wish to manually configure your router you can also choose to skip the Setup Wizard.

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

Check that your antennas are all attached firmly to the antenna connectors.

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.



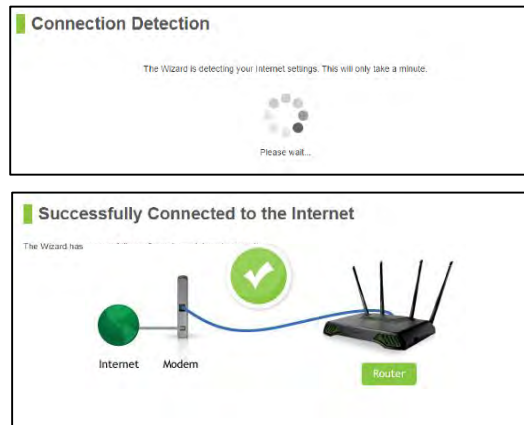
Internet Connection Detection

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 network and 2.4GHz Wi-Fi network is:

[Amped_Titan_5.0](#)

[Amped_Titan_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 both 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 screenshot shows a web page titled "Create a Password for Your Router". Below the title is a warning message: "This password is NOT your Wi-Fi connection password. This password is to access the web menu of the router for access to additional router settings. Leave this blank if you do not wish to have a login and password." There are three input fields: "New Login:" followed by a text box, "New Password:" followed by a text box, and "Confirmed Password:" followed by a text box. At the bottom right, there are two green buttons: "BACK" and "APPLY".

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

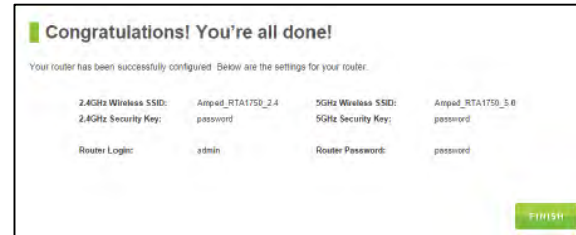
Once the Router has rebooted, it will load the Setup Summary page and provide you with the details of your setup. It is recommended that you print this page for your records.

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!

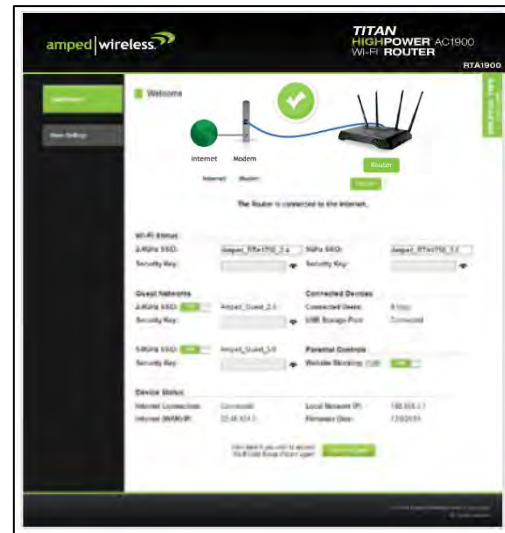


WEB MENU DASHBOARD

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.

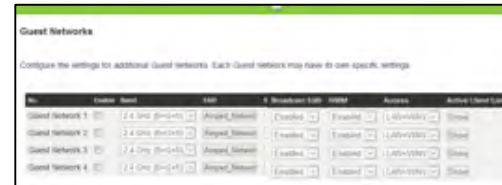
Associated Clients: Shows the active users connected wirelessly to your 5GHz network.

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

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

Guest Networks: You may add additional names (SSID) to your Wireless Network with different characteristics for each SSID.

Each additional Network or SSID can have its own unique security key that can be configured from the Security settings page.



Guest Networks may also be set with restrictions so that guests can only access the Internet and not the local network.

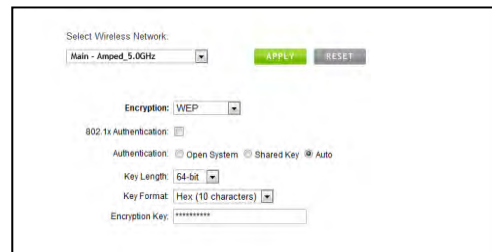
Associated Clients: View all computers and network devices that are connected to your network wirelessly.

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

The Security page allows you to change the type of wireless security settings for your 5.0GHz wireless network.

Using the drop down menu, you can select which network you wish to configure and may adjust the security settings below.

If you are using the Guest Network feature, you will be able to adjust the security settings for your additional SSIDs as well. (For 2.4GHz Guest Networks, view the 2.4GHz Wi-Fi Settings menu)



The screenshot shows the 'Security Settings' page for a 5.0GHz wireless network. At the top, there is a 'Select Wireless Network:' section with a dropdown menu currently set to 'Main - Amped_5.0GHz'. To the right of the dropdown are 'APPLY' and 'RESET' buttons. Below this, the 'Encryption:' dropdown is set to 'WEP'. Underneath, there is a checkbox for '802.1x Authentication' which is unchecked. The 'Authentication:' section has four radio buttons: 'Open System' (unchecked), 'Shared Key' (unchecked), and 'Auto' (checked). Below these are two dropdown menus: 'Key Length:' set to '64-bit' and 'Key Format:' set to 'Hex (10 characters)'. At the bottom, there is an 'Encryption Key:' field with a masked key represented by ten asterisks.

Encryption Types:

WEP is rated as a low level encryption and is compatible with all wireless devices and operating systems. Using WEP may slow down your wireless performance.

WPA is a medium level encryption and is supported by most wireless devices and operating systems.

WPA2 is a high level encryption and is supported by most wireless devices and operating systems.

WPA Mixed Mode allows the use of both WPA and WPA2 at the same time.

If you are not sure which encryption type to use, we recommend you choose WPA/WPA2 Mixed Mode.

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.

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

IAPP: Inter-Access Point Protocol.

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

Advanced Settings (5.0GHz)

These settings apply to your 5.0GHz wireless network. Advanced wireless settings are for technically advanced users. It is recommended that these settings not be changed unless it is understood what the effects will be on your local wireless network.

Fragment Threshold: (256-2346)

RTS Threshold: (0-2347)

Beacon Interval: (20-1024 ms)

Preamble Type: ☒ Long Preamble ☐ Short Preamble

IAPP: ☒ Enabled ☐ Disabled

Protection: ☒ Enabled ☐ Disabled

Aggregation: ☒ Enabled ☐ Disabled

Short GI: ☒ Enabled ☐ Disabled

WLAN Partition: ☒ Enabled ☐ Disabled

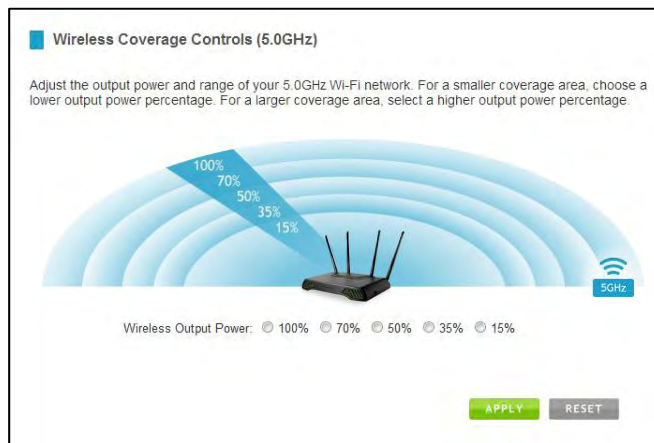
STBC: ☒ Enabled ☐ Disabled

20/40MHz Coexist: ☒ Enabled ☐ Disabled

TX Beamforming: ☒ Enabled ☐ Disabled

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: 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.

Enable Wi-Fi Protected Setup

Option A: If your wireless user has a Wi-Fi Protected Setup button, click or press the WPS PBC (Push Button Configuration) button here:

Option B: If your wireless device requires a WPS PIN number to join the wireless network, use this PIN: **88888888**

Option C: If your wireless user has a Wi-Fi Protected Setup PIN number, enter that number here:

and then click

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."

Basic Wi-Fi Settings (2.4GHz)

Manually configure the settings for your Wi-Fi network:

Internet Modem Router 2.4GHz Wi-Fi Network SSID-secured, Max. 2.4 Personal devices 2.4GHz

Basic Settings (2.4GHz)

Disable 2.4GHz Wi-Fi Connections ☐

Band: 2.4 GHz (B+G+H) ▼

Broadcast SSID ☐ Enable ☐ Disable

Data Rate: Auto ▼

Wi-Fi Network ID (SSID): Amped_2.4GHz GuestNetworks

Channel Number: 11 ▼

WMM: Disabled ▼

Associated Clients: Show Active Clients

APPLY RESET

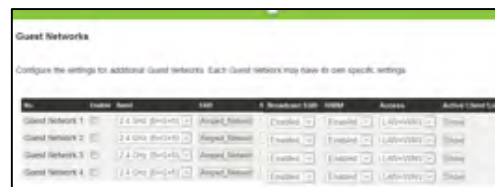
WMM: Prioritizes multimedia data over the wireless network.

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

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

Guest Networks: You may add additional names (SSID) to your Wireless Network with different characteristics for each SSID.

Each additional Network or SSID can have its own unique security key that can be configured from the Security settings page



Guest Networks may also be set with restrictions so that guests can only access the Internet and not the local network.

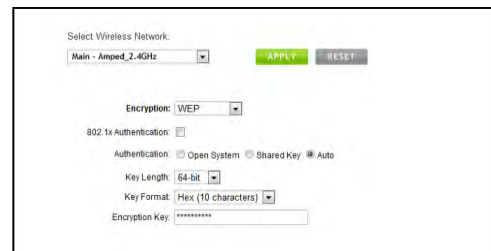
Associated Clients: View all computers and network devices that are connected to your network wirelessly.

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

The Security page allows you to change the type of wireless security settings for your 2.4GHz wireless network.

Using the drop down menu, you can select which network you wish to configure and may adjust the security settings below.

If you are using the Guest Network feature, you will be able to adjust the security settings for your additional 2.4GHz SSIDs as well.



Encryption Types:

WEP is rated as a low level encryption and is compatible with all wireless devices and operating systems.

Using WEP may slow down your wireless performance.

WPA is a medium level encryption and is supported by most wireless devices and operating systems.

WPA2 is a high level encryption and is supported by most wireless devices and operating systems.

WPA Mixed Mode allows the use of both WPA and WPA2 at the same time.

If you are not sure which encryption type to use, we recommend you choose WPA/WPA2 Mixed Mode.

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.

IAPP: Inter-Access Point Protocol.

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

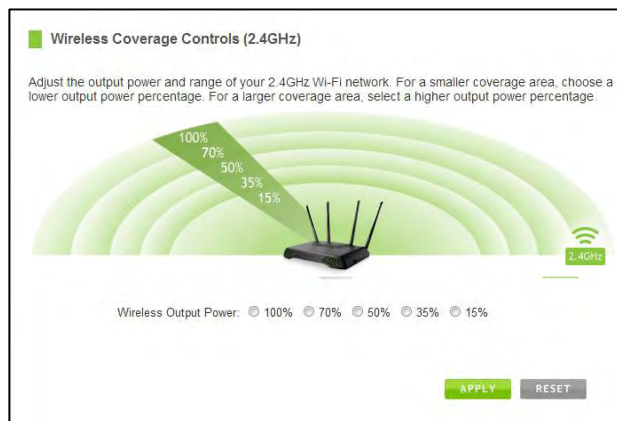
Advanced Settings (5.0GHz)

These settings apply to your 5.0GHz wireless network. Advanced wireless settings are for technically advanced users. It is recommended that these settings not be changed unless it is understood what the effects will be on your local wireless network.

Fragment Threshold: (256-2346)
RTS Threshold: (0-2347)
Beacon Interval: (20-1024 ms)
Preamble Type: ☒ Long Preamble ☐ Short Preamble
IAPP: ☒ Enabled ☐ Disabled
Protection: ☒ Enabled ☐ Disabled
Aggregation: ☒ Enabled ☐ Disabled
Short GI: ☒ Enabled ☐ Disabled
WLAN Partition: ☒ Enabled ☐ Disabled
STBC: ☒ Enabled ☐ Disabled
20/40MHz Coexist: ☒ Enabled ☐ Disabled
TX Beamforming: ☒ Enabled ☐ Disabled

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.

- Enable Access Schedule
- Select which days you wish for your 2.4GHz Wi-Fi to be available
- Select the time frame during that day that you wish for your 2.4GHz Wi-Fi to be available
- Apply Changes

Access Schedule (2.4GHz)

Define a schedule for when the 2.4GHz wireless network is enabled or disabled on this High Power Router. Please be sure that your time zone settings have been configured before using this feature.

☒ Enable Access Schedule (2.4GHz)

Enable	Day	From	To
☐	Sun	00:00 (Hour) 00 (Min)	00:00 (Hour) 00 (Min)
☐	Sun	00:00 (Hour) 00 (Min)	00:00 (Hour) 00 (Min)
☐	Sun	00:00 (Hour) 00 (Min)	00:00 (Hour) 00 (Min)
☐	Sun	00:00 (Hour) 00 (Min)	00:00 (Hour) 00 (Min)
☐	Sun	00:00 (Hour) 00 (Min)	00:00 (Hour) 00 (Min)
☐	Sun	00:00 (Hour) 00 (Min)	00:00 (Hour) 00 (Min)
☐	Sun	00:00 (Hour) 00 (Min)	00:00 (Hour) 00 (Min)
☐	Sun	00:00 (Hour) 00 (Min)	00:00 (Hour) 00 (Min)
☐	Sun	00:00 (Hour) 00 (Min)	00:00 (Hour) 00 (Min)
☐	Sun	00:00 (Hour) 00 (Min)	00:00 (Hour) 00 (Min)

Note: Make sure you have already configured your Time Zone Settings 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)

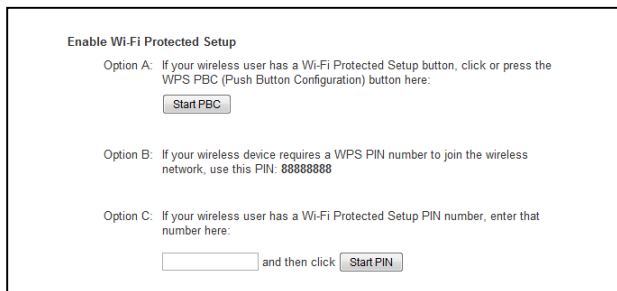
WPS is a Wi-Fi feature created to make Wi-Fi setup simple and easy. Some wireless routers and adapters support this feature with varying names (i.e. one touch setup or WPS).

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.



The screenshot shows a web interface titled "Enable Wi-Fi Protected Setup". It contains three options for enabling WPS:

- Option A:** "If your wireless user has a Wi-Fi Protected Setup button, click or press the WPS PBC (Push Button Configuration) button here:". Below this text is a button labeled "Start PBC".
- Option B:** "If your wireless device requires a WPS PIN number to join the wireless network, use this PIN: 88888888".
- Option C:** "If your wireless user has a Wi-Fi Protected Setup PIN number, enter that number here:". Below this text is a text input field followed by the text "and then click" and a button labeled "Start PIN".

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.

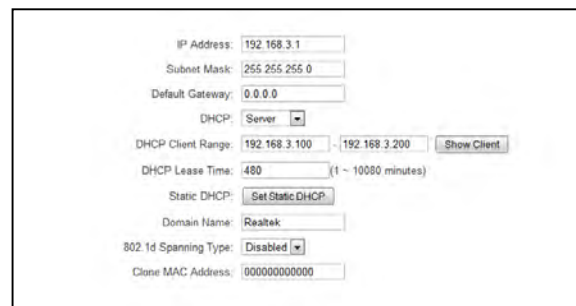
Subnet Mask: The subnet of the Router.

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.



The screenshot shows a web-based configuration interface for the RTA1900 router's LAN settings. The fields are as follows:

- IP Address: 192.168.3.1
- Subnet Mask: 255.255.255.0
- Default Gateway: 0.0.0.0
- DHCP: Server (selected from a dropdown menu)
- DHCP Client Range: 192.168.3.100 - 192.168.3.200 (with a "Show Client" button to the right)
- DHCP Lease Time: 480 (with a note "(1 ~ 10080 minutes)")
- Static DHCP: Set Static DHCP (button)
- Domain Name: Realtek
- 802.1d Spanning Type: Disabled (selected from a dropdown menu)
- Clone MAC Address: 000000000000

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.

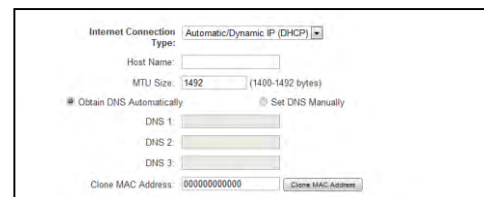
802.1d Spanning Type (STP): A network protocol that ensures a loop-free topology for networks that have Ethernet bridges. The STP prevents bridge loops and allows a network design to include redundant links to provide automatic backup paths if active links fails.

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:



The screenshot shows the 'Internet Connection Type' configuration page. At the top, there is a dropdown menu set to 'Automatic/Dynamic IP (DHCP)'. Below this, there is a 'Host Name' field. The 'MTU Size' is set to '1492' with a note '(1400-1492 bytes)'. There are two radio buttons: 'Obtain DNS Automatically' (which is selected) and 'Set DNS Manually'. Below the radio buttons are three 'DNS' fields (DNS 1, DNS 2, DNS 3). At the bottom, there is a 'Clone MAC Address' field with the value '000000000000' and a 'Clone MAC Address' button.

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.

The screenshot shows the 'Bridge Mode' configuration page. At the top, there's a diagram illustrating the setup: a 'Source Network' (Internet, Modem, AP/Router) connected wirelessly to a 'Bridge Network' (Router, PC, Server). Below the diagram, the 'Enable Bridge Mode' checkbox is checked. There are input fields for 'Enter a Wi-Fi network (SSID) to Bridge:' and 'Security Key:', with a 'Scan for a Network' button next to the SSID field. Under the 'Network Settings' section, 'Enable Auto DHCP' is checked, and 'Get IP Settings Automatically' is selected. There are also input fields for 'IP Address', 'Subnet Mask', and 'Gateway IP' under the 'Enter Manual IP Settings Below' option.

Network Settings: Advanced Settings

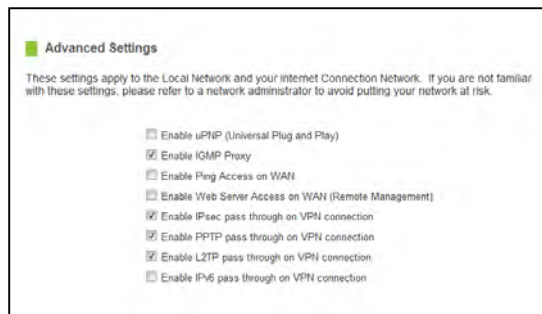
These settings apply to the Local Network and your Internet Connection Network. If you are not familiar with these settings, please refer to a network administrator to avoid putting your network at risk.

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.

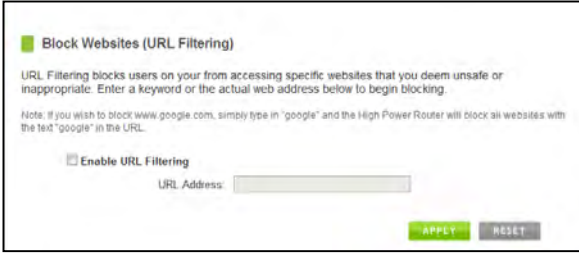
The Security Features allows you to control access of your wireless network through: on/off schedules, specific user authorizations, and wireless coverage control.

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.



Block Websites (URL Filtering)

URL Filtering blocks users on your from accessing specific websites that you deem unsafe or inappropriate. Enter a keyword or the actual web address below to begin blocking.

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

☒ Enable URL Filtering

URL Address:

APPLY **RESET**

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.



The screenshot shows a web interface for 'User Access Control (MAC Address Filtering)'. It includes a descriptive paragraph about MAC filtering, a checkbox to 'Enable MAC Filtering', input fields for 'MAC Address' and 'Comment', and 'APPLY' and 'RESET' buttons.

User Access Control (MAC Address Filtering)

Each networking device has a physical address known as a MAC address. MAC Address Filtering blocks access to your network from computers or network devices based on their unique MAC address (physical address). To begin blocking access, enable MAC Filtering and enter the MAC address below without spaces or symbols (i.e. A1B2C3D4E6F6)

☐ Enable MAC Filtering

MAC Address:

Comment:

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.



User Access Control (IP Filtering)

IP Filtering is used to block internet or network access to specific IP addresses on your local network. The restricted user may still be able to login to the network but will not be able to access the internet. To begin blocking access to an IP address, enable IP Filtering and enter the IP address of the user you wish to block.

☐ Enable IP Filtering

Local IP Address:

Protocol:

Comment:

USB STORAGE

USB Storage: Local Sharing

Share USB storage devices with computers on the local network of the Router.

Insert a USB storage device, such as a flash drive or external hard drive, to the one of USB ports on router or both USB ports and follow the directions below for your operating system. The computer must be connected to the router to access the storage device. You may also want to Map the Network Drive so it shows up as a standard drive on your computer for easier access.

USB Storage Local Sharing

Share a USB storage device, such as a USB flash drive or external hard drive, locally among network computers. Insert your USB storage device into the USB port on the back panel of the Router.

Local Network Sharing
[How to Access or Map your Network Drive](#)
Note: You may need to [Map your Network Drive](#) for it to appear in your computer's networked device list.

USB 3.0 Drive: Not Connected REFRESH

Partition	File System	Capacity	Free Space
USB Device Name:			
Work Group:			
Shared Disk IP Address (For Mapping the Network Drive):			

USB 2.0 Drive: Not Connected REFRESH

Partitions	File System	Capacity	Free Space
USB Device Name:			
Work Group:			
Shared Disk IP Address (For Mapping the Network Drive):			

APPLY RESET

Windows 7 and Vista

To access the drive from your Windows desktop:

Note: If the USB drive does not appear automatically under your Networked devices (Windows 7, Vista or Mac OS X), you will need to Map the Network Drive.

- a) Click the **Start** button.
- b) Click **Computer**.
- c) On the Computer page, the drive should appear on the left hand column under Network as **AMPED_USB**.

To Map the Network Drive:

- a) Click the **Start** button.
- b) Click **Computer**.
- c) Click **Map Network Drive** from the top bar.
- d) Select a drive letter (any), then enter in the folder field:
\\AMPED_USB\public\ or \\router's LAN IP address\public
- e) If the drive fails to open, click **browse** and locate **AMPED_USB** under Network.

Windows XP

To access the drive from your Windows desktop:

Note: If the USB drive does not appear automatically under your Networked devices (Windows 7, Vista or Mac OS X), you will need to Map the Network Drive.

- a) Click the **Start** button.
- b) Click **My Computer**.
- c) Click on **My Network Places** and locate the drive named **AMPED_USB**.

To Map the network drive:

- a) Click the **Start** button.
- b) Right Click **My Computer** and select **Map Network Drive**.
- c) Select a drive letter (any), then enter in the folder field:
\\AMPED_USB\public\ or \\router's LAN IP address\public
- d) If the drive fails to open, click **browse** and locate **AMPED_USB** under Network.

Mac OS X

To access the drive from your Mac desktop:

Note: If the USB drive does not appear automatically under your Networked devices, you will need to Map your Network Drive (Instructions below).

- a) Open **Finder**.
- b) On the left hand menu, under Shared, click **AMPED_USB**.

To Map the network drive:

- a) Open **Finder**.
- b) From the menu on the top of the desktop, select **Go**.
- c) Select **Connect To Server** from the drop down menu.
- d) Enter the address of the network drive: *smb://amped_usb/public* **or** *smb://router's LAN ip address/public*
- e) Then click **Connect**.

If the network drive does not appear on your Mac desktop, follow these steps:

- a) Open **Finder**.
- b) Select **Preferences** from the drop down menu.
- c) Check show "Connected Servers".
- d) The drive should now appear on your desktop.

USB Storage: FTP Server

Share USB storage devices with computers remotely over the Internet. A FTP server allows you to access files through the use of an FTP client remotely over the Internet.

Insert a USB storage device, such as a flash drive or external hard drive, to the one of USB ports on router or both USB ports.

From the USB Storage/FTP Server page of the web menu, enable the FTP Server feature

- Select whether you wish to have anonymous access or secured access.
- Select which USB ports you wish to enable for FTP access.
- Open your FTP client software (not provided) and create a new FTP connection.
- Enter the Internet Address for the router as the IP address for your FTP connection. When prompted enter your login information to access the USB Storage device remotely.

USB Storage FTP Server

Create a FTP server to access files remotely using a FTP client. Insert your USB storage device into the USB port on the back panel of the Router and configure your FTP settings below.

Use the Internet Address to access the FTP server over the web.

FTP Connection Internet Address:
 If your Internet connection uses a dynamic IP assignment, you may also set a DDNS service to access the FTP using a web address instead.

FTP Server Setup

FTP Server: ☐ Disabled ☒ Enabled

FTP Port:

Anonymous FTP: ☐ Disabled ☒ Enabled

Anonymous View: ☐ Disabled ☒ Enabled

Enable FTP Access to: ☒ USB 2.0 Port ☐ USB 3.0 Port ☒ Not Connected ☐ Not Connected

System Account List

Username	Password	Access Type
admin		Read & Write
guest		Read Only

Note: Login and password are case sensitive.

Add Additional User Accounts

User:

Password:

Access Type: ☐ Read Only ☒ Read & Write

User Account List

User Account	Password	Access Type	Status

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.



Port Filtering

Port Filtering allows you to enable or disable TCP ports and UDP ports on computers or network devices. Port Filtering insulates your local computers from many TCP/IP security attacks, including internal attacks by malicious users.

☐ Enable Port Filtering

Port Range: -

Protocol:

Comment:

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.



The screenshot shows the 'Port Forwarding' configuration page. At the top, there is a title 'Port Forwarding' with a green icon. Below the title is a descriptive paragraph: 'Port Forwarding allows you to automatically redirect common network services to a specific network device or computer on your local network. These settings are useful for hosting web servers, mail servers, network cameras and other specific network server devices behind your network firewall.' Below this text is a checkbox labeled 'Enable Port Forwarding'. Underneath the checkbox are four input fields: 'IP Address' (a text box), 'Protocol' (a dropdown menu currently showing 'Both'), 'Port Range' (two text boxes separated by a hyphen), and 'Comment' (a text box). At the bottom right of the form are two buttons: 'APPLY' (green) and 'RESET' (grey).

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: DMZ (Demilitarized Zone)

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.



The screenshot shows the 'Demilitarized Zone (DMZ)' configuration page. At the top, there is a green header with the title 'Demilitarized Zone (DMZ)'. Below the header, a descriptive paragraph states: 'A Demilitarized Zone is used to provide unrestricted access for a single IP address on your network. The DMZ enabled IP address will have an unrestricted path directly through the firewall of the High Power Router.' Below this text, there is a checkbox labeled 'Enable DMZ'. Underneath the checkbox is a text input field labeled 'DMZ Host IP Address:'. At the bottom right of the page, there are two buttons: a green 'APPLY' button and a grey 'RESET' button.

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.

Denial of Service

The High Power Router can prevent specific DoS attacks from entering your network. A Denial of Service (DoS) attack is characterized by an explicit attempt by malicious users to prevent legitimate users from use of a specific internet service. To activate your protection, enable the DoS Prevention below and configure the specific settings.

Enable Denial of Service (DoS) Prevention

☐ Whole System Flood SYN

☐ Whole System Flood FIN

☐ Whole System Flood UDP

☐ Whole System Flood ICMP

☐ Per-Source IP Flood SYN

☐ Per-Source IP Flood FIN

☐ Per-Source IP Flood UDP

☐ Per-Source IP Flood ICMP

☐ TCP/UDP PortScan

☐ ICMP Smurf

☐ IP Land

☐ IP Spoof

☐ IP Teardrop

☐ PingOfDeath

☐ TCP Scan

☐ TCP SynWinGate

☐ UDP Bomb

☐ UDP EchoChargen

Packet/Second

Packet/Second

Packet/Second

Packet/Second

Packet/Second

Packet/Second

Packet/Second

Packet/Second

Sensitivity

☐ Enable Source IP Blocking

Block Time (sec)

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 automatically 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.

Routing Setup

This page is used to setup dynamic routing protocol or edit static route entry.

☐ **Enable Dynamic Route**

NAT: ☒ Enable ☐ Disable

Transmit: ☐ Disabled ☒ RIP 1 ☐ RIP 2

Receive: ☐ Disabled ☒ RIP 1 ☐ RIP 2

APPLY RESET

☐ **Enable Static Route**

IP Address:

Subnet Mask:

Gateway:

Metric:

Interface: LAN

APPLY RESET Show Route Table

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

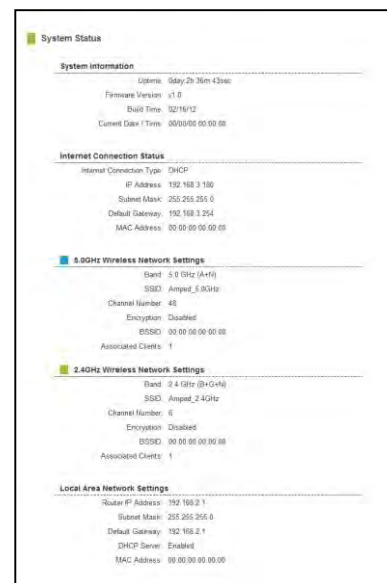
The System Status provides you with a snapshot of your Router's current connections and settings.

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 both the 2.4GHz and 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.



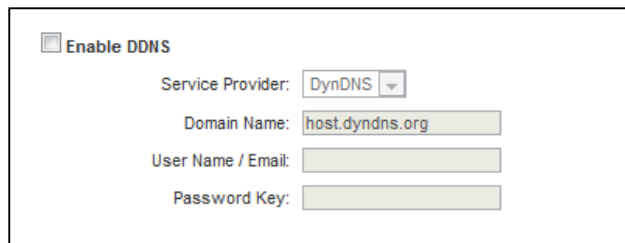
Network Statistics	
5GHz Wireless Connection:	Send Packets: 8122062 Received Packets: 2084105
2.4GHz Wireless Connection:	Send Packets: 8910818 Received Packets: 10767160
Wired Connection:	Send Packets: 6167287 Received Packets: 8198722
Internet Connection:	Send Packets: 8185813 Received Packets: 2191980

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.

A screenshot of a web-based configuration interface for Dynamic DNS (DDNS). At the top, there is a checkbox labeled "Enable DDNS". Below this, there are four fields: "Service Provider:" with a dropdown menu showing "DynDNS", "Domain Name:" with a text box containing "host.dyndns.org", "User Name / Email:" with an empty text box, and "Password Key:" with an empty text box.

☐ Enable DDNS

Service Provider: DynDNS

Domain Name: host.dyndns.org

User Name / Email:

Password Key:

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.

System Clock

Maintain the system clock settings by syncing the system time with the time on your computer. The Router's clock is used to make sure your Access Schedules and logs function correctly and on time.

Sync with your Computer

Current Time: Month Day Year
 Hour Minute Sec

Sync with your computer:

Sync with the Internet

Select a Time Zone:

☒ Enable Network Time Protocol (NTP) Updates
☒ Automatically Adjust for Daylight Saving

NTP server : ☒ ☐ (Manual IP Setting)

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.

The screenshot shows the 'Upgrade Firmware' page. At the top, it says 'Upgrade Firmware'. Below that, a paragraph explains that the router uses software (firmware) to operate and that a new firmware file may be available for update. It advises not to power off the device during the upgrade process. Below this, there are two lines of text: 'Current Firmware Version: <% getinfo("fwVersion"); %>' and 'Build Time: <% getinfo("buildTime"); %>'. A green box with white text says 'Important: Before upgrading firmware, always save your current settings from the Save/Reload Settings page.' Below this, there is a section titled 'Check for New Firmware Updates: (Internet connection required.)' with a green 'CHECK NOW' button. Below that, a link says 'Searching online for new Firmware updates.' At the bottom, there is a section titled 'Or Manually Upgrade Firmware from a File:' with a note to check the Support Webpage for updates. Below this, there is a 'Select File:' label, a 'Choose File' button, and 'No file chosen' text. At the bottom, there are 'Upload' and 'Reset' buttons.

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.

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.



The screenshot shows a web interface titled "Save/Reload Settings". Below the title is a descriptive paragraph: "Save your current High Power Router configurations to a file or reload previously saved configurations. If needed, you may also reset your High Power Router to factory default settings." There are three main sections of controls: 1. "Save Settings to File" with a "Save" button. 2. "Load Settings from File:" with a "Choose File" button, followed by the text "No file chosen" and an "Upload" button. 3. "Reset Settings to Default:" with a "Reset" button.

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.

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.

Password

Prevent unauthorized access to your High Power Router's web-based configuration menu by providing a user name and password. If no protection is necessary, leave these fields blank and you will not be prompted for a login and password when accessing this web menu.

New Login:

New Password:

Confirmed Password:

APPLY

RESET

TECHNICAL SPECIFICATIONS

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)

Amplifier: 3 x 2.4GHz Amplifiers
3 x 5.0GHz Amplifiers
8 x Low Noise Amplifiers

Memory: 128MB DDR3

Processor: 1GHz Dual Core Processor

Antennas: 4 x Detachable High Gain Antennas
4 x Reverse SMA Connector

Ports: 4 x RJ-45 10/100/1000 LAN ports
1 x RJ-45 10/100 /1000 WAN ports
1 x USB 2.0 Port for Storage Devices
1 x USB 3.0 Port for Storage Devices

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_Titan_2.4

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

5.0GHz Wireless SSID: Amped_Titan_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 your 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 that your antennas are securely fastened to the Router.
- b) 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.
- c) Avoid placing the Router near or around Microwaves and 2.4GHz wireless phones.
- d) Avoid using wireless channels that are crowded. Change the wireless channel on the Router.
- e) Place the Router in a higher location near the center of your desired coverage location.
- f) 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 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.

Troubleshooting: USB Storage Issues

I cannot access my USB storage device after I plug it into the router.

Follow the instructions below for your operating system.

Windows 7 and Vista

To access the drive from your Windows desktop:

Note: If the USB drive does not appear automatically under your Networked devices (Windows 7, Vista or Mac OS X), you will need to Map the Network Drive.

- a) Click the **Start** button.
- b) Click **Computer**.
- c) On the Computer page, the drive should appear on the left hand column under Network as **Amped_USB**.

To Map the Network Drive:

- a) Click the **Start** button.
- b) Click **Computer**.
- c) Click **Map Network Drive** from the top bar.
- d) Select a drive letter (any), then enter in the folder field: **\\Amped_USB** or **\\shared disk IP address**
- e) If the drive fails to open, click **browse** and locate **Amped_USB** under Network.

Windows XP

To access the drive from your Windows desktop:

Note: If the USB drive does not appear automatically under your Networked devices (Windows 7, Vista or Mac OS X), you will need to Map the Network Drive.

- a) Click the **Start** button.
- b) Click **My Computer**.
- c) Click on **My Network Places** and locate the drive named **Amped_USB**.

To Map the network drive:

- a) Click the **Start** button.
- b) Right Click **My Computer** and select **Map Network Drive**.
- c) Select a drive letter (any), then enter in the folder field: **\\Amped_USB** or **\\sharedisk IP address**
- d) If the drive fails to open, click **browse** and locate **Amped_USB** under Network.

Mac OS X

To access the drive from your Mac desktop:

Note: If the USB drive does not appear automatically under your Networked devices (Windows 7, Vista or Mac OS X), you will need to Map the Network Drive.

- a) Open **Finder**.
- b) On the left hand menu, under Shared, click **Amped USB**.

To Map the network drive:

- a) Open **Finder**.
- b) From the menu on the top of the desktop, select **Go**.
- c) Select **Connect To Server** from the drop down menu.
- d) Enter the address of the network drive: **Amped_USB** or *shared disk IP address*, then click **Connect**

I cannot access my USB storage device remotely.

- a) Insert a USB storage device, such as a flash drive or external hard drive, to the USB port on the back of the Router.
- b) From the USB Storage/FTP Server page of the web menu, enter a FTP server name.
- c) Select whether you wish to have an open or secured access to your FTP server.
- d) Open your FTP client software (not provided) and create a new FTP connection.
To find a FTP client software, go to downloads.com and search for FTP client software. Download a FTP software suitable for your needs and continue with the next step.
- e) Enter the Internet Address for the router as the IP address for your FTP connection. When prompted enter your login information to access the USB Storage device remotely.

The Router freezes or I cannot access the web when a USB storage device is connected.

- a) Remove the USB storage device from the Router and reboot it by unplugging the power adapter. Once rebooted, try inserting the USB storage device again.
- b) Make sure your UBS storage device is not corrupted and is working properly and try again.

Additional USB Storage troubleshooting tips may be available online at the Amped Wireless Elite Support Center. Please check the Elite Support Center for the latest updates and features for USB Storage support.

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.

This device is restricted to **indoor** use.

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

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.

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

This device is restricted to **indoor** use.

This radio transmitter (IC: 10233A-RTA1900) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain 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.

Antenna General Information							
Group	Port No.	Ant. Cat.	Ant. Type	Connector	Ant. Model Name	Gain (dBi)	Remark
1	1/2/3	External	Dipole	Reverse SMA	AN2450-5010BRS	5.03	2.4G
2	1/2/3	External	Dipole	Reverse SMA	ET2430DBKRPSMA	1.5	2.4G
1	1/2/3	External	Dipole	Reverse SMA	AN2450-5010BRS	5.01	5G
2	1/2/3	External	Dipole	Reverse SMA	ET2430DBKRPSMA	3.7	5G

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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 20 cm qui sépare l'élément rayonnant de votre corps.

Le présent émetteur radio IC: 10233A-RTA1900 a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Antenna General Information							
Group	Port. No.	Ant. Cat.	Ant. Type	Connector	Ant. Model Name	Gain (dBi)	Remark
1	1/2/3	External	Dipole	Reverse SMA	AN2450-5010BRS	5.03	2.4G
2	1/2/3	External	Dipole	Reverse SMA	ET2430DBKRPSMA	1.5	2.4G
1	1/2/3	External	Dipole	Reverse SMA	AN2450-5010BRS	5.01	5G
2	1/2/3	External	Dipole	Reverse SMA	ET2430DBKRPSMA	3.7	5G



LEGAL NOTICES AND DISCLAIMERS

Copyright Information and Trademark Usage Guidelines

© 2015 Amped Wireless / Newo Corporation. All rights reserved. Amped Wireless, Newo Corporation, and the Amped Wireless logo are registered trademarks or trademarks of Newo Corporation. All non-Amped Wireless trademarks, logos, brands and products are trademarks or registered trademarks of their respective owners. Amped Wireless does not claim any relation. Mention of non-Amped Wireless products and brands are for information purposes only and does not constitute an endorsement or affiliation.

Amped Wireless authorizes you to copy materials published by Amped Wireless solely for non-commercial use within your organization in support of Amped Wireless products. No other use of this information is authorized. Any copy of these materials which you make shall retain all copyright and other proprietary notices in the same form and manner as on the original. Except as specified above, nothing contained herein shall be construed as conferring by implication, estoppel or otherwise any license or right under any patent, trademark or copyright of Amped Wireless or any third party.

All contents of this product, including Software, are protected by copyright, except as permitted herein. No portion of the information may be reproduced without prior written permission from Amped Wireless. The distribution, modification, publication and transmission of any content of this product for public or commercial purposes is strictly prohibited.

The Amped Wireless logo requires permission for use. For use of the Amped Wireless logo, please email legal@ampedwireless.com. Use of Amped Wireless' trademarks requires the use of the proper trademark symbol in all usage cases.

The guidelines for trademark usage apply to all Amped Wireless customers, employees, vendors, consultants, licensees and any other third party.

Disclaimers

Amped Wireless makes all attempts in providing accurate information on all media. However, Amped Wireless makes no warranty as to the accuracy of the information, including representations and warranties about the accuracy of product specifications, marketing material, product availability, new product launch dates and all other content herein. Amped Wireless reserves the right to update and change information without prior notice. All information provided is provided "AS IS" with all faults without warranty of any kind. Either expressed or implied. Amped Wireless and its suppliers disclaim all warranties, expressed or implied including, without limitation. Amped Wireless and its suppliers shall not be liable for any indirect, special, consequential, or incidental damages including, without limitation, lost profits or revenues, cost of replacement goods, loss or damage to data arising out of the use or inability to use any Amped Wireless product, damages resulting from use of or reliance on information present, even with prior notice to Amped Wireless.

All non-Amped Wireless trademarks, logos, brands and products are trademarks or registered trademarks of their respective owners. Amped Wireless does not claim any relation. Mention of non-Amped Wireless products and brands are for information purposes only and does not constitute an endorsement or affiliation.

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.

Software Licenses / Disclaimers

This product contains Software (including firmware), licensed to you, the purchaser, by Amped Wireless. This also includes Software downloaded from an authorized website, such as www.ampedwireless.com or from an authorized application market such as Google Play or Apple's App Store.

This license allows you to operate the Software in the manner described in the user's manual for the purchased product. You can make as many copies of the Software as needed for your personal use. Modifying or tampering of the Software, including but not limited to any Open Source Software, is solely at your own risk. Amped Wireless is not responsible for any such modification or tampering. Amped Wireless will not support or warrant any product in which you have or have attempted to modify the Software provided by Amped Wireless. You may not lease, sublicense, resell, redistribute or otherwise transfer the Software without written consent from Amped Wireless.

The Software is provided to you "as is" with all faults and without warranties of any kind. In particular, Amped Wireless does not guarantee that the Software will be error-free or that the Software will be free from system threats or attacks from viruses. Amped Wireless does not warrant that the Software will meet your expectations or that the software will be suitable for your particular situation. Amped Wireless warrants that any media (such as an included CD) on which the Software is provided to be free from defects. If you have an eligible warranty claim for defective media, Amped Wireless will replace the Software media.

IT IS YOUR RESPONSIBILITY TO BACK UP YOUR SYSTEM INCLUDING, WITHOUT LIMITATION, ANY DATA THAT YOU MAY USE OR POSSESS IN CONNECTION WITH THE PRODUCT. ANY MATERIAL, INFORMATION OR DATA DOWNLOADED OR OTHERWISE OBTAINED IS ACCESSED AT YOUR OWN DISCRETION AND RISK, AND YOU WILL BE RESPONSIBLE FOR ANY DAMAGE TO YOUR COMPUTER SYSTEM OR PRODUCT, OR LOSS OF DATA THAT RESULTS FROM THE DOWNLOAD OF SUCH MATERIAL, INFORMATION OR DATA.

AMPED WIRELESS IS NOT RESPONSIBLE FOR ANY DAMAGE TO THE PURCHASER'S COMPUTER SYSTEM OR DATA.

All title and copyrights in and to the Software and any copies thereof are owned by Amped Wireless or its partners/suppliers. All title and intellectual property rights in and to the content which may be accessed through use of the Software is the property of the respective content owner and may be protected by applicable copyright or other intellectual property laws and treaties. This license grants you no rights to use such content. You may not delete any copyright, trademark or other proprietary notices from the Software or documentation.

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 by mail to us at: 13089 Peyton Dr. #C307, Chino Hills, CA 91709; Attn: Legal Department.

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).

Mailing Address Only

Amped Wireless 13089 Peyton Dr. #C307 Chino Hills, CA 91709

Email: legal@ampedwireless.com



tech support 888-573-8820
e-mail techsupport@ampedwireless.com
web www.ampedwireless.com

Amped Wireless
A Division of Newo Corporation
Copyright © 2015 Amped Wireless / Newo Corporation. All rights reserved.
Amped Wireless, Newo Corporation, and the Amped Wireless Logo are registered trademarks or trademarks of Newo Corporation.