

User's Guide

**High Power 700mW Dual Band AC
Wi-Fi Access Point
APA20**

CONTENTS

INTRODUCTION	2	2.4GHz WIRELESS SETTINGS	26
GETTING STARTED	3	Basic Settings	26
Package Contents	3	Basic Settings: Guest Networks	28
LED Indicators	4	Security Settings	29
Back Panel Description	5	Wi-Fi Protected Setup – WPS	30
PLUG AND PLAY SETUP GUIDE	6	User Access	31
ADDITIONAL SETTINGS	10	Wireless Coverage Controls	32
Accessing the Settings Menu	10	Access Schedule	33
Welcome to the Dashboard	12	Advanced Settings	34
Set the System Clock	13	NETWORK SETTINGS	35
Wireless Settings	14	USB STORAGE	37
Setup Summary	16	USB Storage: Local Sharing	37
5.0GHz WIRELESS SETTINGS	17	MANAGEMENT FEATURES	41
Basic Settings	17	System Clock	42
Basic Settings: Guest Networks	19	System Logs	43
Security Settings	20	Upgrade Firmware	44
Wi-Fi Protected Setup – WPS	21	Save/Reload Settings	45
User Access	22	TECHNICAL SPECIFICATIONS	47
Wireless Coverage Controls	23	DEFAULT SETTINGS	48
Access Schedule	24	TROUBLESHOOTING AND SUPPORT INFORMATION	49
Advanced Settings	25	WARRANTY AND REGULATORY INFORMATION	60

INTRODUCTION

Thank you for purchasing this Amped Wireless product. 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:

- High Power 700mW Dual Band AC Wi-Fi Access Point
- Three Detachable High Gain Antennas
- Power Adapter (100-240v)
- RJ-45 Ethernet Cable
- Setup Guide
- CD: User's Guide
- Desktop Stand / Cable Organizer

LED Indicators



Power: Indicates when the Access Point is powered on. The LED will remain on.

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

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

Gigabit Wired Ports 1-4: Indicates when a networking device is connected to a wired port on the back of the Access Point. The LED blinks rapidly when wired data traffic is transmitted or received.

Network Connection: Indicates when the Access Point is connected to an available network switch or a router's LAN port.

USB Connection: Indicates when a USB storage device is connected to the USB port.

WPS: Wi-Fi Protected Setup activity. When the WPS mode is activated the WPS LED blinks as it awaits a connection.

Back Panel Description



Antenna Connectors (1-3): RJ-SMA antenna connectors. Attach the included high gain antennas to these connectors according to their respective numbers. **(Mismatching the antennas with the wrong antenna connector port will negatively impact wireless performance.)**

USB Port: Attach USB storage devices, such as USB flash drives and external hard drives, for file sharing.

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

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

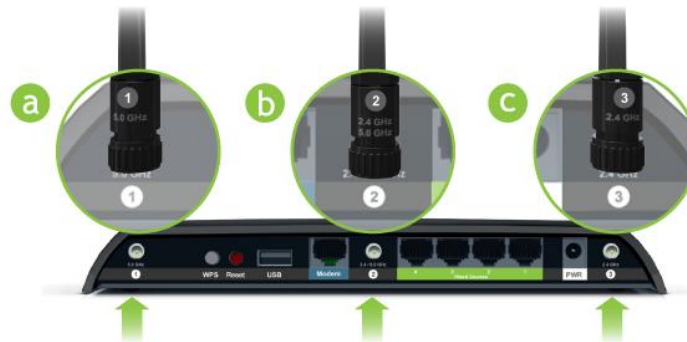
Wired Devices: Gigabit RJ-45 ports for connecting to wired computers or network devices.

Network: Gigabit RJ-45 port for connecting to an available port on your network.

Power: Power adapter port. Output: 12V 1.5A, Input: 100-240v.

PLUG AND PLAY SETUP GUIDE

Attach the Antennas to their Specific Connectors on the Access Point

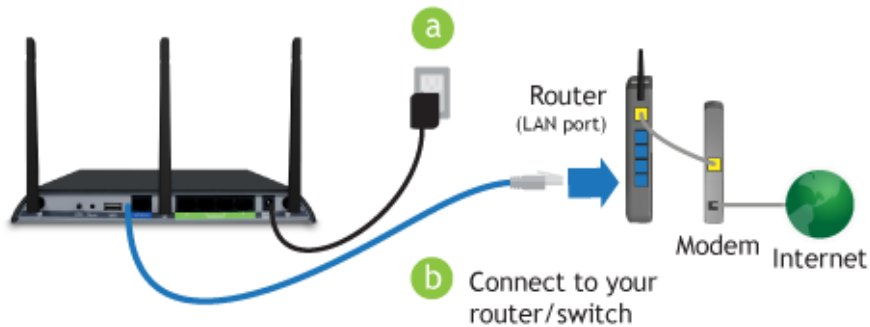


Attach the three included Antennas to their corresponding numbers:

- a) Antenna 1 (5.0GHz only) to Antenna Port 1
- b) Antenna 2 (2.4 and 5.0GHz) to Antenna Port 2
- c) Antenna 3 (2.4GHz only) to Antenna Port 3

Attaching the Antennas incorrectly may cause the Access Point to not perform optimally

Connect the Access Point to your Router



- a) Plug in the Power Adapter
- b) Using the included RJ-45 Ethernet cable, attach one end to the Access Point's **NETWORK** port and the other to your router's network port (or any available port on a network switch)

Connect your PC to the Access Point

Connecting Wirelessly:

With your PC or Mac, scan for available wireless networks and locate the wireless networks for the Access Point:

By default the Access Point will have SSIDs with the names:

[Amped_APA20_2.4](#) and [Amped_APA20_5.0](#)

The default WPA security key is: wireless



Wired Connections:

Attach any wired devices to the Access Point using Ethernet cables.

Your Plug and Play setup is now complete. You may now use the Access Point to access your network.

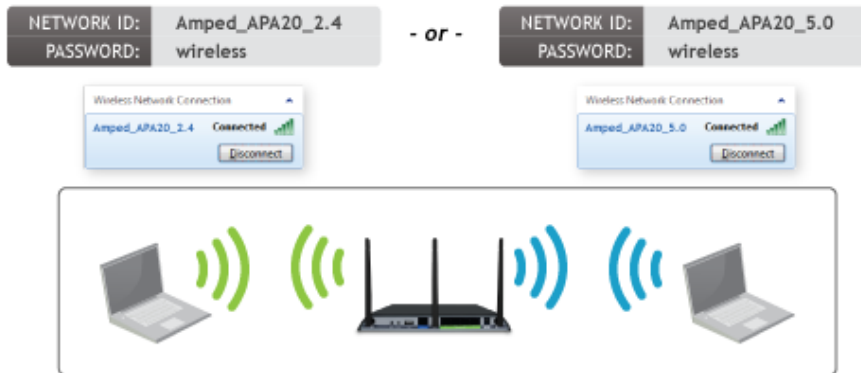


ADDITIONAL SETTINGS

Accessing the Settings Menu

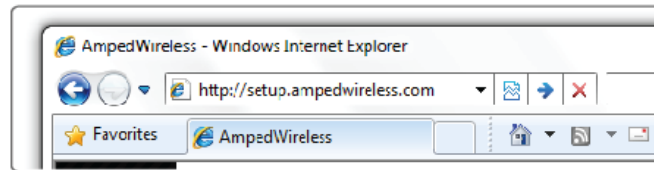
To access the settings menu for additional changes to the configuration of your Access Point, you will need to access the settings menu. The settings menu will allow you to change all features and settings for the Access Point. To access the settings menu follow the instructions below:

- a) Scan for available wireless networks on your PC and connect to one of the following networks:



Open your Web Browser

- a. Open your web browser
- b. Type in: <http://setup.ampedwireless.com> into the web address bar
- c. If the web menu fails to open, type in the following IP address into your web address bar:
<http://192.168.80.240>



Enter the setup web address into your browser:

<http://setup.ampedwireless.com>

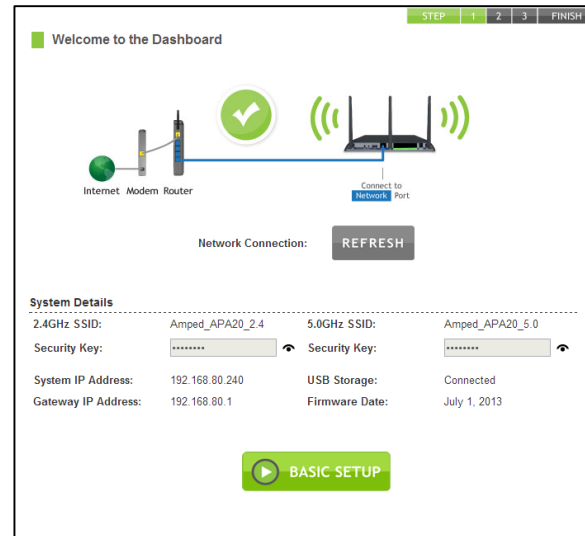
If the URL fails to open, then try: <http://192.168.80.240>

Welcome to the Dashboard

The Dashboard provides you with a quick glance at your system status.

Click on [Basic Setup](#) to configure:

- 1) System Clock
- 2) Wireless Network SSID
- 3) Wireless Network Security Key



Set the System Clock

The System Clock is used for system logs and setting schedules for Internet access. Click **Sync** to synchronize the System Clock with the time on your computer.

Click **Next** to Continue.

STEP 1 2 3 FINISH

System Clock

Update the System Clock for the Access Point by clicking the Sync button below.

Current Time: Month Day Year
 Hour Minute Sec

Sync with your computer:

Click Next to confirm your settings and continue.

Wireless Settings

The default SSID of the Access Point is “Amped_APA20_2.4” and “Amped_APA20_5.0”
 To change it, enter a new name in the SSID field. Users connecting wirelessly to the Access Point will use this ID to identify your wireless network.

Depending on the capabilities of your wireless adapter, you may connect to either the 2.4 or 5.0GHz wireless networks.

STEP 1 2 3 FINISH

Wireless Settings

Internet Modem Router Access Point

2.4/5.0GHz Wireless Network

SSID: Amped_AP_2.4GHz
Password: wireless

SSID: Amped_AP_5.0GHz
Password: wireless

Network Names
 The identification name of your wireless network is **Amped_APA20_2.4** or **Amped_APA20_5.0**. This is the name that wireless users will use to connect to your wireless network. You may change the settings below.

<p>5.0GHz Wireless Network</p> <p>Wireless Network ID (SSID):</p> <input type="text" value="Amped_APA20_2.4"/>	<p>2.4GHz Wireless Network</p> <p>Wireless Network ID (SSID):</p> <input type="text" value="Amped_APA20_5.0"/>
---	---

The default Security Key (WPA/WPA2 Mixed Mode) of your wireless network(s) is: **wireless**

To change it, enter a new key in the Security Key field. The key must be a minimum of 8 characters.

No security key is necessary for computers connecting to the Point using a wired connection to the LAN ports.

Network Security
 Your wireless network is secured with the following (WPA) security password/key. You must enter this key when connecting wirelessly for the first time to the Access Point. You may change the key below.

Note: To specify the use of another type of encryption please view the More Settings > Wireless Settings > Security menu for more security options after your setup is complete.

<p>5.0GHz Wireless Security Key:</p> <div style="border: 1px solid #ccc; padding: 2px; width: 100%;">wireless</div> <p><small>8 Character Minimum Leave blank for no security</small></p>	<p>2.4GHz Wireless Security Key:</p> <div style="border: 1px solid #ccc; padding: 2px; width: 100%;">wireless</div> <p><small>8 Character Minimum Leave blank for no security</small></p>
---	---

Click Next to confirm your settings and continue. The Access Point will reboot and apply your settings.

BACK
NEXT

Click **Next** to complete the setup process. The Access Point will reboot and apply your settings. Be patient and do not make any changes or adjustments to the Access Point at this time.

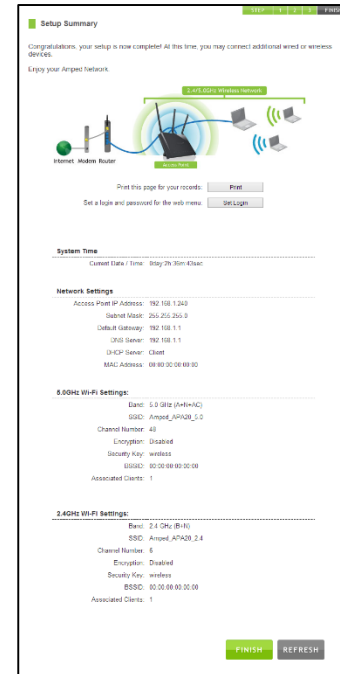
Setup Summary

Once the Access Point has rebooted, it will load the Setup Summary page and provide you with the details of your setup.

Print the Setup Summary details and save it for future reference.

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

Enjoy your Amped Wireless network.



5.0GHz WIRELESS SETTINGS

5.0GHz Wi-Fi Settings: Basic Settings

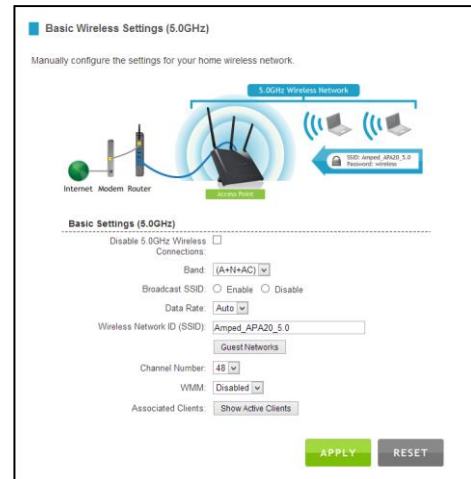
The Basic Settings page allows you to adjust settings for your 5.0GHz local wireless network.

Disable 5.0GHz Wireless Connections: Disabling will turn off all 5.0GHz Wi-Fi activity. Users will no longer be able to connect wirelessly to your 5.0GHz 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 Access Point's 5.0GHz network SSID. Users must manually enter the SSID to connect.

Data Rate: Sets the maximum wireless data rate that your network will operate on.



Wireless Network ID (SSID): The name of your 5.0GHz 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".

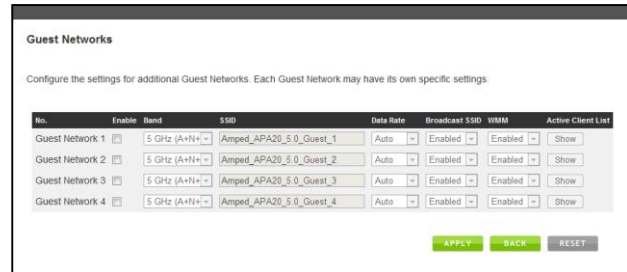
WMM: Prioritizes multimedia data over the wireless network.

Associated Clients: Shows the active users connected wirelessly to your 5.0GHz network.

5.0GHz Wi-Fi Settings: Basic Settings: Guest Networks

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 security, band and data rate settings. You may restrict users to specific SSIDs or provide access only to some users with lower bandwidth by changing the band (i.e. only allow 802.11b access to specific users).



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

5.0GHz Wi-Fi Settings: Security Settings

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.)



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.

5.0GHz Wi-Fi Settings: Wi-Fi Protected Setup – WPS

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 Access Point supports all types of WPS setup:

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

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

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.

5.0GHz Wi-Fi Settings: User Access

User Access allows you to deny access or allow access to specific users connecting wirelessly to your wireless 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.

When entering the MAC address, only enter alpha-numerical characters (i.e., A1B233C45566).

User Access Control (5.0GHz)

Allow or deny wireless access to specific users by entering the MAC address of the device below. The MAC address of a networking device is a 12 digit hex number normally found on a label on the bottom of the device (e.g. 1A2B3C4F5A6D).

Wireless Access Control Mode: Disable ▾

MAC Address:

Comment:

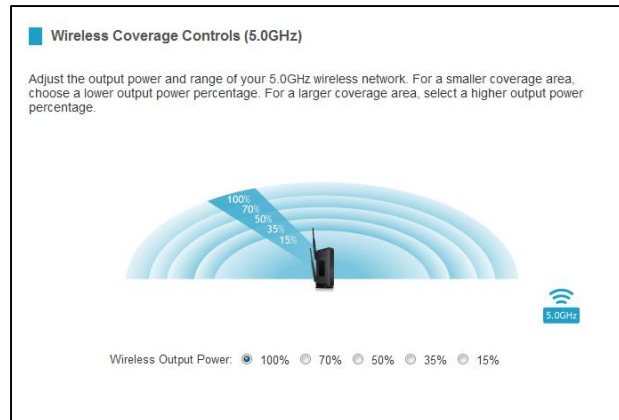
APPLY RESET

Current Access Control Table

MAC Address	Comment	Select
<input type="button" value="Delete Selected"/> <input type="button" value="Delete All"/> <input type="button" value="Reset"/>		

5.0GHz Wi-Fi Settings: Wireless Coverage Controls

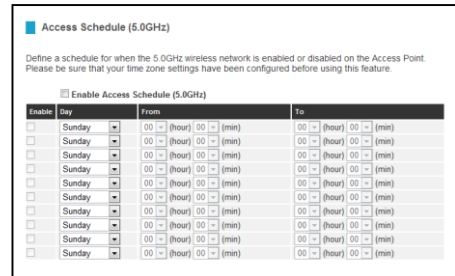
Adjust the output power of the Access Point to control the coverage distance of your 5.0GHz wireless network. For a smaller coverage area, you can select a lower output power. For the maximum wireless coverage, select the 100% selection.



5.0GHz Wi-Fi Settings: Access Schedule

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

- a. Enable Access Schedule
- b. Select which days you wish for your 5.0GHz Wi-Fi to be available
- c. Select the time frame during that day that you wish for your 5.0GHz Wi-Fi to be available
- d. Apply Changes



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.

5.0GHz Wi-Fi Settings: Advanced Settings

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 Access Point will never fragment any frames that it sends to wireless users.

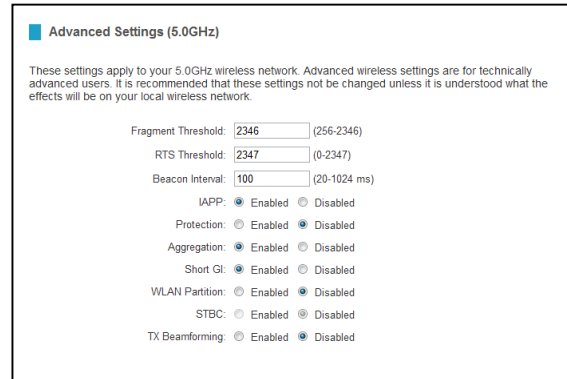
RTS Threshold: Adjusts the size of RTS data packets. Lower values reduce throughput, but allow the system to recover quicker from interference/collisions. Higher values provide the fastest throughput.

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

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

IAPP: Inter-Access Point Protocol

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



2.4GHz WIRELESS SETTINGS

2.4GHz Wi-Fi Settings: Basic Settings

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 Access Point's 2.4GHz network SSID. Users must manually enter the SSID to connect.

Data Rate: Sets the maximum wireless data rate that your network will operate on.



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

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

WMM: Prioritizes multimedia data over the wireless network.

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

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

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 security, band and data rate settings. You may restrict users to specific SSIDs or provide access only to some users with lower bandwidth by changing the band (i.e. only allow 802.11b access to specific users).

Guest Networks

Configure the settings for additional Guest Networks. Each Guest Network may have its own specific settings.

No.	Enable	Band	SSID	Data Rate	Broadcast SSID	WMM	Active Client List
Guest Network 1	<input type="checkbox"/>	2.4 GHz (B+N)	Amped_APA20_2.4_Guest_1	Auto	Enabled	Enabled	Show
Guest Network 2	<input type="checkbox"/>	2.4 GHz (B+N)	Amped_APA20_2.4_Guest_2	Auto	Enabled	Enabled	Show
Guest Network 3	<input type="checkbox"/>	2.4 GHz (B+N)	Amped_APA20_2.4_Guest_3	Auto	Enabled	Enabled	Show
Guest Network 4	<input type="checkbox"/>	2.4 GHz (B+N)	Amped_APA20_2.4_Guest_4	Auto	Enabled	Enabled	Show

APPLY BACK RESET

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

2.4GHz Wi-Fi Settings: Security Settings

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: Wi-Fi Protected Setup – WPS

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 Access Point supports all types of WPS setup:

Enable Wi-Fi Protected Setup

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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

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

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.

2.4GHz Wi-Fi Settings: User Access

User Access allows you to deny access or allow access to specific users connecting wirelessly to your wireless 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.

When entering the MAC address, only enter alpha-numerical characters (i.e., A1B233C45566).

User Access Control (2.4GHz)

Allow or deny wireless access to specific users by entering the MAC address of the device below. The MAC address of a networking device is a 12 digit hex number normally found on a label on the bottom of the device (e.g. 1A2B3C4F5A6D).

Wireless Access Control Mode:

MAC Address:

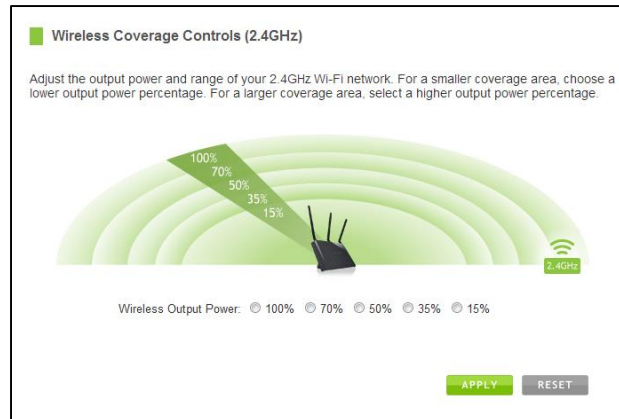
Comment:

Current Access Control Table

MAC Address	Comment	Select
<input type="button" value="Delete Selected"/>	<input type="button" value="Delete All"/>	<input type="button" value="Reset"/>

2.4GHz Wi-Fi Settings: Wireless Coverage Controls

Adjust the output power of the Access Point 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.

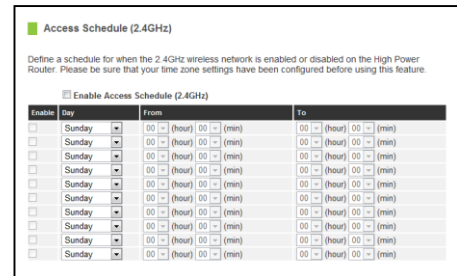


2.4GHz Wi-Fi Settings: Access Schedule

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

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

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: Advanced Settings

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.

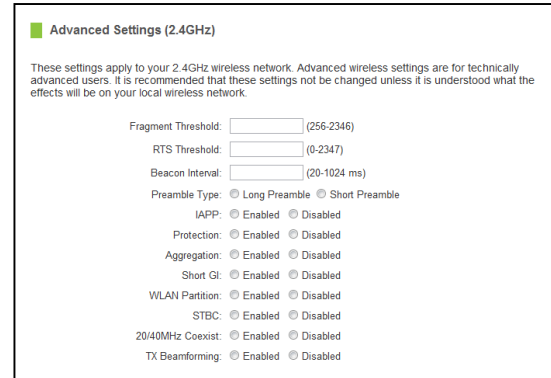
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RTS Threshold: Adjusts the size of RTS data packets. Lower values reduce throughput, but allow the system to recover quicker from interference/collisions. Higher values provide the fastest throughput.

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

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

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



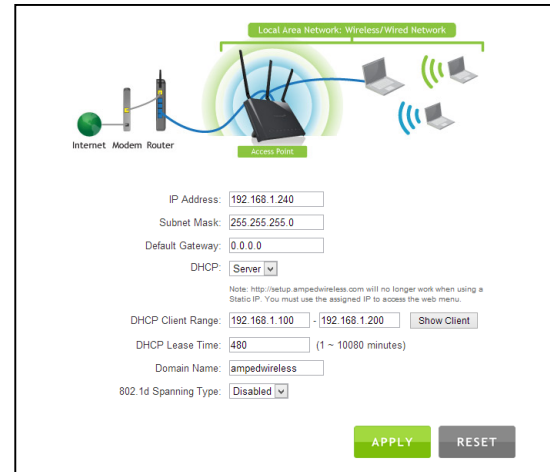
NETWORK SETTINGS

IP Address: The IP address of the Access Point.

Subnet Mask: The subnet of the Access Point.

Default Gateway: The access point to another network, normally your router.

DHCP: The Access Point includes a feature to help manage the IP addresses within your network automatically. When connected to a network, the Access Point will obtain an IP address from your router and act as a DHCP Client. However, when there is no connection available, the Access Point will act as a DHCP Server. You may also manually control the IP settings of the Access Point by choosing Client, Server or Disabled / Static IP from the DHCP drop down menu. This is only for advanced users.



The diagram shows an Internet Modem Router connected to an Access Point. The Access Point is connected to a Local Area Network (Wireless/Wired Network) which includes several laptops. Below the diagram is a configuration form for the Access Point's DHCP settings.

IP Address:

Subnet Mask:

Default Gateway:

DHCP:

Note: <http://setup.ampedwireless.com> will no longer work when using a Static IP. You must use the assigned IP to access the web menu.

DHCP Client Range: -

DHCP Lease Time: (1 ~ 10080 minutes)

Domain Name:

802.1d Spanning Type:

Note: If you choose to use a Static IP address for the Access Point, you will no longer be able to access the web menu using <http://setup.ampedwireless.com>. You must use the assigned IP address to access the web menu.

DHCP Client Range: The range of IP addresses the Access Point's DHCP server will assign to users and devices connecting to the Access Point.

Domain Name: The Domain Name allows you to change the URL which is used to access the Setup Menu for the Access Point. For example, entering <http://setup.ampedwireless.com> into your web browser while connected to the Access Point, will guide you to the Web menu for the Access Point. By changing the Domain Name, you will change the URL entered to access the Web menu. If you forget the Domain Name you entered and can no longer access the Web menu, then you will need to reset your Access Point to default settings by holding down the reset button on the back panel for 5-10 seconds.

USB STORAGE

USB Storage: Local Sharing

Share a USB storage device with computers on the local network of the Access Point.

Insert a USB storage device, such as a flash drive or external hard drive, to the USB port on the back of the Access Point and follow the directions below for your operating system. The computer must be connected to the local network 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 networked computers. Insert your USB storage device into the USB port on the back panel of the High Power Router.

Check the [Firmware Support Center](#) for new USB Storage features.

Local Network Sharing

USB Drive: ● Connected

Partition	File System	Capacity	Free Space
NTF5	NTFS	7.454 GB	2.833 GB
TOTAL	*	7.454 GB	2.833 GB

[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 Device Name:

Work Group:

Shared Disk IP Address: 192.168.3.1
(For Mapping the Network Drive).

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 OSX), 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_AP_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_AP_USB\mnt\` or `\\AP's LAN IP address\mnt\`
- e. If the drive fails to open, click browse and locate AMPED_AP_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 OSX), 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_AP_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_AP_USB\mnt\` or `\\AP's LAN IP address\mnt\`
- d. If the drive fails to open, click browse and locate AMPED_AP_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_AP_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_ap_usb/mnt or *smb://AP's LAN ip address/mnt*
 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

MANAGEMENT FEATURES

The Management features on the Access Point allow you to view the status of your Access Point and your wireless network.

System Status

The Access Point System Status page provides full information regarding the system, wireless network and configurations as well as the current IP settings of the Access Point. This page is often used to check the health of your wireless network and the link to your home router/network.

Network Statistics

The Network Statistics page provides detailed traffic data for each connection type. View this page to see the amount of traffic going through the Access Point's wired or wireless connections.

Management: System Clock

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

STEP 1 2 3 FINISH

System Clock

Update the System Clock for the Access Point by clicking the Sync button below.

Current Time: Month Day Year
 Hour Minute Sec

Sync with your computer:

Click Next to confirm your settings and continue.

Management: System Logs

System Logs are useful for viewing the activity and history of the Access Point. The System Logs are also used by Amped Wireless Elite Support Concierges to help troubleshoot your Access Point when needed.

It is recommended that you enable all logs in the event that troubleshooting is required. All log entries are deleted each time the Access Point 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. Check the Downloads page for your product frequently to see if there are any updates.

The firmware update is downloaded as a zip file from the Support Webpage link on the left. You will need to have an unzipping program to open the file. Inside the file will be a text document with details on the current firmware release and instructions on how to upgrade the firmware.



To manually upgrade your firmware:

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

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

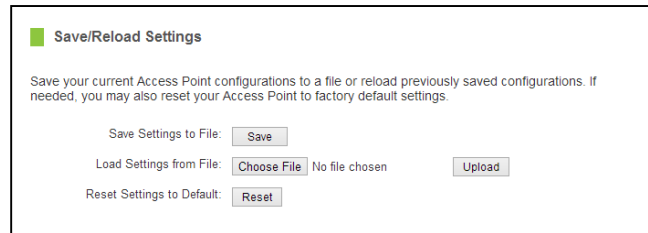
Management: Save/Reload Settings

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 Access Point's settings to factory settings by pressing Reset. By resetting the Access Point you will lose all previous configurations.



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

By default, the Access Point does not require a password to log on to the web menu. If you wish to enable a password to protect unauthorized access to the web menu, you may enter one here.

■ Password

Prevent unauthorized access to your Access Point'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:

TECHNICAL SPECIFICATIONS

Wireless Standard: 802.11a/b/g/n/ac

Frequency Band: 2.4GHz, 5.0GHz

Wireless Speed: 2.4GHz: 300Mbps (Tx/Rx)

5.0GHz: 867Mbps (Tx/Rx)

Amplifier: 2 x 2.4GHz Amplifiers

4 x 5.0GHz Amplifiers

4 x Low Noise Amplifier

Wireless Security:

- WEP, WPA, WPA2, WPA Mixed, WPS

Processor Clock Speed: 660MHz

Wireless Coverage Control:

- 15% - 100% Output Power
(2.4GHz or 5.0GHz Separately)

Antennas:

- 1 x Detachable High Gain 5.0GHz Antenna
- 1 x Detachable High Gain Dual Band Antenna

- 1 x Detachable High Gain 2.4GHz Antenna
- 3 x Reverse SMA Connectors

Ports:

- 4 x RJ-45 10/100/1000M LAN ports
(Local Ports)
- 1 x RJ-45 10/100/1000M LAN ports
(To Router / Network Switch)
- USB 2.0 Port for Storage Devices

Mounting:

- Wall, Stand or Desktop

Warranty: 1 Year

Setup Requirements:

- Wired or wireless computer or tablet
- Wired or wireless network

DEFAULT SETTINGS

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

IP Address: 192.168.80.240

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

5.0GHz Wireless SSID: Amped_APA20_5.0

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

2.4GHz Wireless SSID: Amped_APA20_2.4

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

TROUBLESHOOTING AND SUPPORT INFORMATION

We are here to help. If you have any issues with your Access Point 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 Access Issues

I entered setup.ampedwireless.com and it failed to open the web menu.

- a. Make sure your computer is connected to the Access Point wirelessly and NOT using a network cable. Ensure the power is plugged in and on. Try to access the setup menu again.
- b. Enter the following web address into your web browser instead of 'setup.ampedwireless.com':
`http://192.168.80.240`
- c. Power off (unplug the power adapter) the Access Point and power it back on. Try again.
- d. Try to open your web browser to the default IP address by putting this number into your web browser instead: 192.168.80.240
- e. Reset your Access Point to default settings by holding the Reset Button (located on the back panel) for ten (10) seconds and try again.
- f. If you are using a Static IP, you will need to enter the assigned IP Address into the web browser to access the web menu. When using a Static IP, the setup.ampedwireless.com shortcut will no longer work.

Troubleshooting: Connection Issues

I do not have Internet access when connecting to the Access Point.

- a. Your router or original network may not have Internet access. First check to see if you are able to access the Internet by connecting directly with your router. If you cannot, there is a problem with your router that needs to be fixed first. If you are able to access the internet, continue with the following troubleshooting options below.
- b. Your router may be using Static IP assignments. If so, you will need to configure a Static IP for the Access Point. Connect your PC to the Access Point using an Ethernet cable. Disconnect your PC from any wireless networks that it may be connected to. Access the web menu at setup.ampedwireless.com using a web browser. Access the IP settings menu from the left hand navigation bar. Select 'Disable' under the DHCP dropdown menu and enter an IP address that matches your router's IP settings.
- c. Detach the Access Point from your router and reset it back to default settings by holding down the reset button (red circle) on the back panel of the Access Point for 5-10 seconds. After it has reset, reattach it to your router's network port. Allow up to 2 minutes for the Access Point to reconfigure itself to your network and attempt to access the Internet through the Access Point's wired or wireless network.

My Access Point was working fine previously, but now I can no longer access the Internet through the Access Point.

- a. The settings on your router's network may have changed or you may have lost internet connection on your home router. Any changes to the DHCP settings of your home router may affect the Internet connection of the Access Point. Check the settings on your router and try again.
- b. Reboot the Access Point by unplugging the power adapter and plugging it back in. Allow up to 2 minutes for the Access Point to reconfigure itself to your network. Check to see if your connection has been reestablished by viewing a website.

I can no longer access the web menu or the Access Point no longer responds.

- a. Double check that you are connected to the Access Point and not to your home router. Use an Ethernet cable and attach it between your computer and the Access Point. Disconnect your computer from all wireless networks and try to access the web menu again.
- b. If you are advanced in networking troubleshooting, log onto your home router's web interface. Look for the DHCP client list and try to find the IP address of your Access Point assigned by your home router. Once you have it, connect to the Access Point using an Ethernet cable. Open your web browser and enter the IP address into the address bar.

- c. Reset the Access Point back to default settings and try the Basic Setup again. To reset the Access Point back to default settings, hold the Reset Button (on the back panel) down for five (5) to ten (10) seconds. After the Access Point has fully reset, use an Ethernet cable and connect to the Access Point. Log in to the web menu at <http://setup.ampedwireless.com> and reconfigure the settings for your Access Point.

The connection through the Access Point seem slow. File transfers take a long time to transfer.

- a. You may be too far away from the wireless network. Wireless data transfer speeds degrade as distances increase between your computer and the Access Point.
- b. You may be downloading from the Internet and not within your local network. Files transferred through the Internet are limited by your ISP speed and the data download speeds from the website that you are downloading from.
- c. Your computer may be using an older Wi-Fi adapter with lower speed limits (802.11b/g/n). For maximum speeds, use 802.11ac Wi-Fi adapters.
- d. You may have interference on the wireless channel that the Access Point is currently using. Try changing the channel of your wireless 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 Access Point.

- a. Step back at least 10 feet from the Access Point and check your signal again. The Access Point 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. Check that your antennas are connected to their corresponding antenna connectors. The number designated on the antenna (1-3) should match the number on the antenna connector (1-3).
- c. The wireless channel that your network is running on may be congested. Change the wireless channel on your Access Point.

The range from the Access Point seems low.

- a. Check to see that your wireless output settings are at 100%. Go to the web menu, Wireless Settings and check the Advanced Settings. Make sure the output power is at 100%.
- b. Check that your antennas are connected to their corresponding antenna connectors. The number designated on the antenna (1-3) should match the number on the antenna connector (1-3).

- c. Your Access Point may be installed in a poor location. Avoid setting up your Access Point in areas with high interference, such as near fridges, microwaves, metallic objects and low surfaces. Install the Access Point in a higher location if possible.
- d. Adjust the Antennas of the Access Point in different angles.

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 Access Point. To achieve maximum wireless speeds, it is required that you have a 802.11n (2.4GHz) or 802.11ac (5.0GHz) adapter.
- 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 Access Point'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 Access Point.
- e. Check that the wireless channel set on the Access Point is not crowded. Try changing the wireless channel to another channel and test the speed again.

Troubleshooting: USB Storage and Web Menu Feature Issues

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

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_AP_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_AP_USB or **\\AP's IP address**
- e. If the drive fails to open, click **browse** and locate **AMPED_AP_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_AP_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_AP_USB or **\\AP's IP address**
- d. If the drive fails to open, click **browse** and locate **AMPED_AP_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_AP_USB** or *AP's IP address*, then click **Connect**.

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

- a. Remove the USB storage device from the Access Point and reboot it by unplugging the power adapter. Once rebooted, try inserting the USB storage device again.
- b. Make sure your USB 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.

My Wireless Access Schedule is being erratic and not working at the correct times.

- a. You need to adjust your Time Zone Settings from the Management web menu page.

Wi-Fi Protected Setup (WPS) is not working. Push button configuration does not detect the connection.

- a. The Access Point supports WPS connections however some companies may use proprietary code for their own push button configurations. Try connecting using the Windows wireless utility or Mac wireless utility instead.

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' Customer Service or visit www.ampedwirleess.com/support to 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' Technical 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 lightning. 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.

Industry Canada Statement: This Class B digital apparatus complies with RSS-210 and ICES-003 of the Industry Canada Rules. Operation of this device is subject to the following two (2) conditions:

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

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

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

Caution: The device for the band 5150-5250 is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems.

Because high power radars are allocated as primary users (meaning they have priority) in 5250-5350 MHz and 5650-5850 MHz, these radars could cause interference and/or damage to license exempt LAN devices.

Déclaration d'Industrie Canada : Cet appareil numérique de classe B est conforme aux réglementations RSS-210 et ICES-003 d'Industrie Canada. Le fonctionnement de cet appareil est sujet aux deux conditions suivantes:

- (3) Cet appareil ne peut pas causer de brouillage préjudiciable
- (4) Cet appareil doit accepter toute interférence reçue, y compris les interférences pouvant provoquer un dysfonctionnement.

Déclaration d'exposition à la radiation : Cet équipement respecte les limites d'exposition aux rayonnements IC définies pour un environnement non contrôlé. Cet équipement doit être installé et mis en marche à une distance minimale de 20 cm qui sépare l'élément rayonnant de votre corps.

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

Mise en garde : L'appareil conçu pour la bande 5150-5250 est utilisé seulement à l'intérieur afin de réduire le danger des interférences préjudiciables et de porter les canaux des systèmes satellites mobiles.

Ces radars de haute puissance sont des utilisateurs principaux (ils ont la priorité) des bandes 5250-5350 MHz et 5650-5850 MHz. Ils peuvent causer des interférences et/ou endommager des appareils réseau qui ne possèdent pas de licence.



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

Amped Wireless

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