

User's Guide

High Power Wireless-N 600mW Smart Repeater
SR10000

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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 Smart Repeater
- Two Detachable 5dBi High Gain Antennas
- RJ-45 Ethernet Cable
- Setup Guide
- CD: User's Manual, Installation Video
- Vertical Mounting Base

LED Indicators



(From Top to Bottom)

Power: Indicates when the High Power Smart Repeater is powered on. The LED will stay lit when power adapter is plugged into repeater.

Wireless Activity: Blinks rapidly when wireless data traffic is passing through the Smart Repeater. When there is a problem with the Wi-Fi connection this LED will remain off or blink steadily.

Wired Devices (1-5): Indicates when a networking device is connected to a wired port on the back of the High Power Smart Repeater. The LED blinks rapidly when wired data traffic is transmitted or received.

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 (1-2): RJ-SMA antenna connectors. Compatible with all antennas that have RP-SMA connectors. Upgradable to high gain antennas for more range.

Reset: Push down once to reboot the High Power Repeater. Hold down for 5-10 seconds to reset the repeater back to factory settings.

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

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

Power: Power adapter port. DC 12V 1A.

SETUP GUIDE

Find a Setup Location

The location of where you install the Smart Repeater is very important to how it will function. The optimal setup location should be somewhere no more than halfway between your wireless router and your wireless dead zone.



Connect your PC to the Smart Repeater

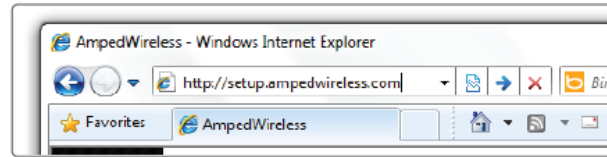


- a. Connect the two included high gain antennas by screwing them into the antenna connectors.
- b. Use the included Ethernet cable to connect one end into any Wired Port on the Smart Repeater and use the other end to connect to the network port on your laptop or desktop computer.
- c. Connect the power adapter to the power port on the back of the Smart Repeater.

Do NOT attempt to connect to the Smart Repeater with a wireless connection at this time.

Open your Web Browser to Access the Setup Wizard

- 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://192.168.1.240>



<http://setup.ampedwireless.com>

NOTE: IF YOU HAVE PROBLEMS ACCESSING THE WEB MENU

- a. Disconnect your PC from all wireless networks, open your browser and try again.
- b. If you continue to have problems accessing the Web Menu, disconnect the cable from your computer to the Repeater. Connect wirelessly (SSID: Amped_SR and Password: wireless) and try again.

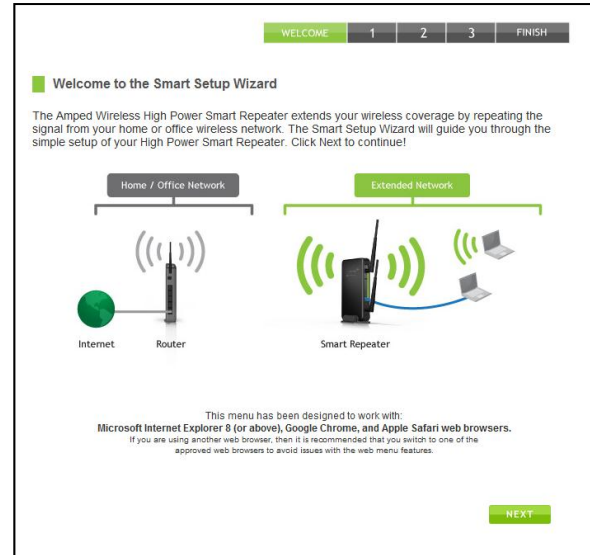
Welcome to the Smart Setup Wizard

When the web menu appears, click **Next** to proceed with the Smart Setup Wizard.

The diagram on this page displays the terms used to describe:

- 1) The network you are trying to repeat (Home Network).
- 2) The network that is rebroadcasted and extended (Extended Network).

Study this diagram carefully as the terms used in the following instructions will refer to these names.



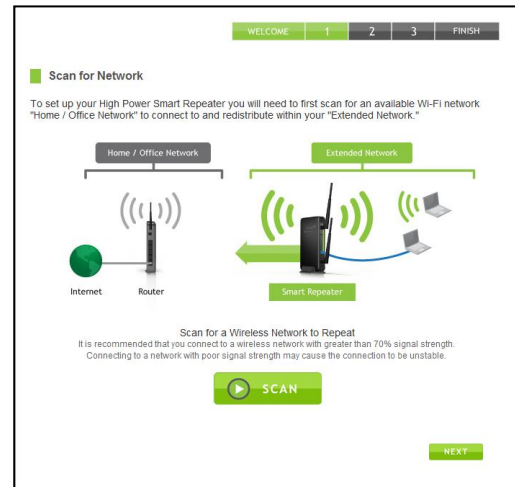
Scan for a Wireless Network

Click **SCAN** to begin searching for available wireless networks to repeat.

Highlight your network and click **Next** to continue. Check that your Wireless Network has a signal strength of 70% or greater.

If you fail to find any wireless networks, or your signal strength is below 70%, the Smart Repeater may be placed too far from the wireless network that you are trying to repeat. Move your Smart Repeater closer to the wireless network that you are trying to repeat and click **SCAN** again.

The Scan results page will display information regarding the name of the network (SSID), the channel which the wireless network is operating on and the type of network that it is. AP stands for Access Point and is the standard type of wireless network. The results page will also display whether or not your network has security and what the signal strength is coming from each specific network detected.

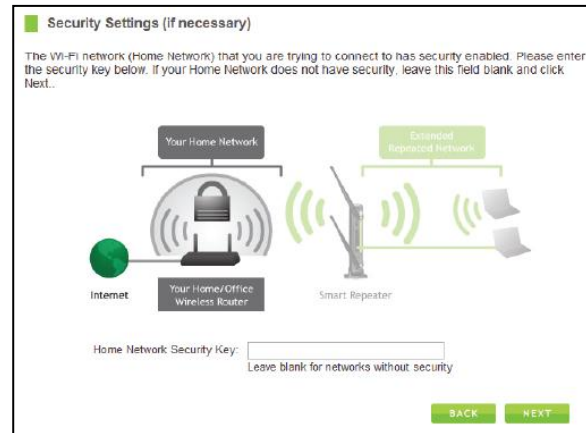


Connecting to a Secure Network

If the wireless network you are trying to repeat has wireless security enabled, you will be prompted to enter a security key. If you did not select a secure network, continue to the next step.

Enter the security key in the space provided. You do not need to select what type of security it is, just simply type in the key and click **Next**.

The Smart Setup Wizard will automatically detect your home network's security settings. If you do not know the key to the network you are trying to repeat, then click **Back** and select another network.

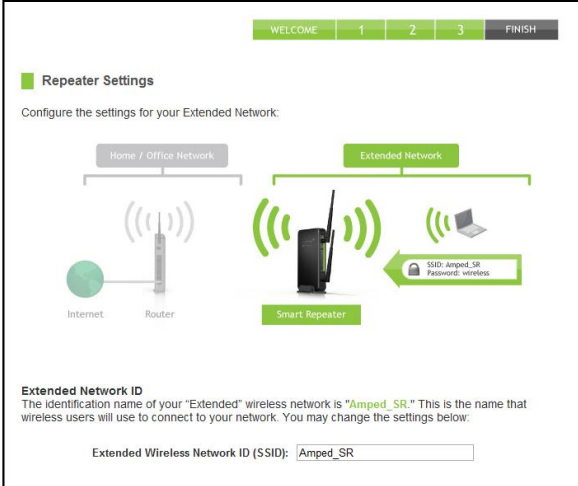


Repeater Settings (SSID)

The default SSID of the Smart Repeater is “Amped_SR”
This SSID for the Extended Network may be changed by adjusting the name in the field for the Extended Wireless Network ID.

This ID will be used by wireless users connecting to the Smart Repeater to identify the Smart Repeater's Extended Network.

It is recommended to use the default settings.



WELCOME 1 2 3 FINISH

Repeater Settings

Configure the settings for your Extended Network:

The diagram illustrates the network setup. On the left, a green circle labeled 'Internet' is connected to a 'Router' (Home / Office Network). The Router is connected to a 'Smart Repeater' (Extended Network). The Smart Repeater is shown with wireless signals extending to a laptop and a smartphone. A callout box points to the Smart Repeater with the text: 'SSID: Amped_SR Password: wireless'.

Extended Network ID
The identification name of your "Extended" wireless network is "Amped_SR." This is the name that wireless users will use to connect to your network. You may change the settings below.

Extended Wireless Network ID (SSID):

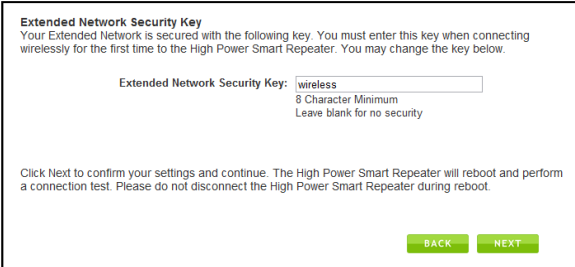
Repeater Settings (Security)

By default, the Extended Network has security enabled. The WPA security key is “**wireless**.” Users trying to connect to the Smart Repeater wirelessly will be prompted to enter this key. It is recommended that you use the default settings for the wireless security key.

To change the security key, simply retype your new key in the field and click **Next**. Write your security key down somewhere safe for future reference.

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

After clicking **Next**, the Smart Repeater will reboot and apply your settings. Be patient and do not make any changes or adjustments to the Smart Repeater at this time.



Extended Network Security Key
Your Extended Network is secured with the following key. You must enter this key when connecting wirelessly for the first time to the High Power Smart Repeater. You may change the key below.

Extended Network Security Key:
8 Character Minimum
Leave blank for no security

Click Next to confirm your settings and continue. The High Power Smart Repeater will reboot and perform a connection test. Please do not disconnect the High Power Smart Repeater during reboot.

BACK **NEXT**

Setup Summary

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

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

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

Enjoy your Extended network!

WELCOME 1 2 3 FINISH

Setup Summary

Congratulations, the High Power Smart Repeater is now successfully connected to your Home Network. You may disconnect from the High Power Smart Repeater and connect wirelessly or attach additional computers and devices to the wired network ports on the back of the High Power Smart Repeater.

Home Network Settings:

SSID: Network 1
Channel Number: 11
Encryption: WPA2
BSSID: Network 1
Connection State: Connected

Extended Network Settings:

SSID: Amped_SR
Encryption: WPA2

IP Address of the Repeater: 192.168.2.240
Subnet Mask: 255.255.255.0
Default Gateway: 192.168.2.240
DHCP Server: Auto
MAC Address: 00:00:00:00:00:00

FINISH REFRESH

If the Home/Office Network connection fails try the following...

- a. Check to see that your Home Network security settings are correct.
- b. Check on the SCAN page that your Home Network is showing a signal of 70% or greater. If not, move the Smart Repeater closer to your Home Network router and try again.
- c. Check that your Home Network router's DHCP server is enabled.
- d. Try changing the channel of the Home Network router to a higher channel number (5-11) and run the Setup Wizard again.
- e. If possible, check the Internet connection for your Home Network wireless router. Connect directly to your Home Network wireless router. If you are unable to access the internet through the Home Network wireless router, you must first fix this problem. The Smart Repeater will not be able to obtain internet access through a router that does not have internet access. Once Internet access is restored, connect to the Smart Repeater again and retry the Smart Setup Wizard.
- f. Return to the Smart Setup Wizard and attempt to connect to another Home Network known to have Internet access.
- g. Try to reboot (unplug the power from the Smart Repeater and plug it back in) the Smart Repeater and check to see if the connection is established (some networks may be very slow and take longer than the allotted time for the Smart Repeater to successfully connect).

WIRELESS SETTINGS

Home Network Settings

The Home Network Settings page allows you to adjust settings for your Home Network connection. These settings are for adjusting the Smart Repeater after you have already gone through the Smart Setup Wizard and wish to adjust your current configurations.

Home Network SSID: Manually enter the Identification name of the Home Network you wish to connect to.

Channel Number: Enter the channel number of the Home Network. If the channel number does not match, a connection will not be established.

Channel Width: Wi-Fi operates in two separate channel widths, 20Hz and 40Hz. 20Hz allows operation on channels 1-11, while 40Hz is 5-11. 40Hz allows for faster speeds. Select the channel width you wish to use for your network. This setting must match that of your Home Network for a successful connection.

Home Network Settings
Manually configure the settings for your Home Network connection.

Home Wireless Connection

Home Network SSID

Channel Number Must be same as your Home Network router

Channel Width

Control Sideband

If you are manually setting your Home/Office Network connection, you will need to enter the security settings in the Security page for your Home Network. After clicking apply on this page, click Reboot Later and go to the Security page to set your security settings. Click Reboot Now after all settings are applied. (The Smart Repeater cannot connect to your Home/Office network until all settings have been set and applied.)

APPLY RESET

Extended Network Settings

The Extended Network Settings page allows you to adjust settings for your Extended Network.

Band: Allows you to setup access under a specific combination of Wi-Fi speed standards.

Broadcast SSID: Selecting Disable Broadcast SSID will hide the visibility of the repeater's SSID. Users must manually enter the SSID to connect.

Extended Wireless Network Settings

Disable Wireless Connections:

Band: 2.4 GHz (B+G+N) ▾

Broadcast SSID: Enable Disable

Data Rate: Auto ▾

SSID of Extended Network: Amped_SR

Channel Number: (same as Home Network)

WMM: Enabled ▾

Associated Clients:

Guest Network

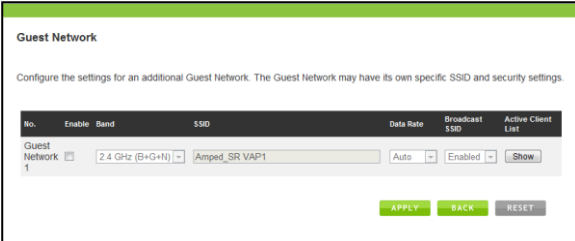
Click “Enable” to create a Guest Network. Guest Networks provide a separate wireless network, with unique settings for users to connect to.

SSID: This is the name of your Guest Network.

Data Rate: You can restrict access to the Guest Network by setting a 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 Guest Network wirelessly.

To set security settings for the Guest Network go to: Wireless Settings > Security.



The screenshot shows a web interface for configuring a Guest Network. The title is "Guest Network". Below the title is a subtitle: "Configure the settings for an additional Guest Network. The Guest Network may have its own specific SSID and security settings." The main content is a table with the following columns: No., Enable, Band, SSID, Data Rate, Broadcast SSID, and Active Client List. There is one row for "Guest Network 1". The "Enable" column has a checkbox that is checked. The "Band" column has a dropdown menu set to "2.4 GHz (B+G+N)". The "SSID" column has a text input field containing "Amped_SR_VAP1". The "Data Rate" column has a dropdown menu set to "Auto". The "Broadcast SSID" column has a dropdown menu set to "Enabled". The "Active Client List" column has a "Show" button. Below the table are three buttons: "APPLY", "BACK", and "RESET".

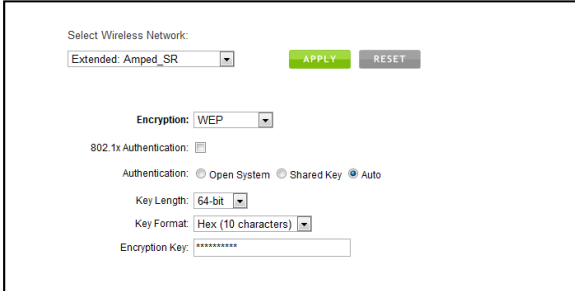
No.	Enable	Band	SSID	Data Rate	Broadcast SSID	Active Client List
Guest Network 1	<input checked="" type="checkbox"/>	2.4 GHz (B+G+N)	Amped_SR_VAP1	Auto	Enabled	Show

APPLY BACK RESET

Wireless Settings: Security

Wireless security allows you to change the type of wireless security settings for your Extended Network or your Home Network.

Note: If you adjust the security in your Home Network and it is incorrect, you will no longer have a successful connection to your Home Network.



The screenshot shows a web-based configuration interface for wireless security. At the top, there is a dropdown menu labeled "Select Wireless Network:" with "Extended: Amped_SR" selected. To the right of this menu are two buttons: "APPLY" (green) and "RESET" (grey). Below the network selection, the "Encryption:" dropdown is set to "WEP". Underneath, there is a checkbox for "802.1x Authentication:" which is currently unchecked. The "Authentication:" section has three radio button options: "Open System", "Shared Key", and "Auto", with "Auto" selected. Below these are two more 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 input (ten asterisks).

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 Multiple AP/SSID feature, you will be able to adjust the security settings for your additional SSIDs here as well.

For more information on the differences between the types of Wi-Fi security available, please check the Learning Center of the Amped Wireless website: www.ampedwireless.com

Wireless 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 Smart Repeater supports all types of WPS setup:

Push button: You may push the WPS button on the web menu or use the physical button on the back of the Smart Repeater.

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 user asks for the Smart Repeater's PIN number, use this number on the user's device: **53766960**

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

and then click

Wireless Settings: Advanced Settings

It is recommended that only experts in Wi-Fi configuration adjust the advanced wireless settings for the Smart Repeater.

These settings allow you to control the details of your wireless network configuration.

Here are a few definitions on some settings.

Fragment Threshold: The Default and Recommended setting is at 2346, meaning the High Power Repeater 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 repeater to sync the wireless network.

Advanced Settings

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 Thresold: (0-2347)

Beacon Interval: (20-1024 ms)

Preamble Type: Long Preamble Short Preamble

LAPP: Enabled Disabled

Protection: Enabled Disabled

Aggregation: Enabled Disabled

Short GI: Enabled Disabled

WLAN Partition: Enabled Disabled

STBC: Enabled Disabled

20/40MHz Coexist: Enabled Disabled

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

IAPP: Inter-Access Point Protocol

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

SMART FEATURES

The Smart Repeater provides your Extended Network with Smart Features that help to provide convenience and protection for your Extended Network.

Smart Features allow you to control access to your Extended Network through on/off schedules, specific user authorizations as well as through the size of your wireless coverage for your Extended Network.

These settings are ONLY for your Extended Network and do not apply to your Home Network.

Wireless Settings: Access Schedule

You can set a schedule for when your Wi-Fi is enabled or disabled (both Home Network and the Extended Network) through the Access Schedule feature. To do so:

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

Access Schedule

Define a schedule for when Wi-Fi is enabled or disabled on the High Power Smart Repeater. Please be sure that your time zone settings have been configured before using this feature. Note: When Wi-Fi is disabled, wired users will no longer have access to the internet.

Enable Access Schedule

Wi-Fi Enabled Days:

Everyday Sun Mon Tue Wed Thu Fri Sat

Hours of Each Day:

24 Hours From : To :

Enabling Access Schedule will also disable internet access for wired connections on specified days.

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

Wireless Settings: User Access Control

User Access allows you to deny access or allow access to specific users connecting wirelessly to the Extended 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.

User Access Control

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. (i.e. 1A2B3C4F5A6D)

Wireless Access Control Mode:

MAC Address:

Comment:

Current Access Control Table

MAC Address	Comment	Select

Wireless Settings: Wireless Coverage Controls

Adjust the output power of the Smart Repeater to control the coverage distance of your Extended Wireless Network. For a smaller coverage area you can select a lower output power. For the maximum wireless coverage select the 100% selection. Note that if you select a lower output power, your connection to your Home Network will also decrease in range. So be careful and test your signal strength after each adjustment.

Wireless Coverage Controls

Adjust the output power and range of your Extended Wireless Network. For a smaller coverage area, choose a lower output power percentage. For a larger coverage area, select a higher output power percentage.

Wireless Output Power: 100% 70% 50% 35% 15%

APPLY **RESET**

IP SETTINGS

IP Address: The IP address of the Smart Repeater.

Subnet Mask: The subnet of the Smart Repeater.

Default Gateway: The access point to another network, normally the Smart Repeater or your router.

DHCP: The Smart Repeater includes a complex AUTO DHCP feature to help manage the IP addresses within your Extended network and with your Home Network. When connected to a Home Network, the Repeater will obtain an IP address from your Home Network's router and act as a DHCP Client. However, when there is no connection available, the Repeater will act as a DHCP Server. You may also manually control the IP settings of the Smart Repeater by choosing Client, Server or Disabled from the DHCP drop down menu. This is only for advanced users.

The screenshot shows the IP Settings configuration page. The fields are as follows:

- IP Address: 192.168.1.240
- Subnet Mask: 255.255.255.0
- Default Gateway: 0.0.0.0
- DHCP: Auto (dropdown menu)
- DHCP Client Range: 192.168.1.100 - 192.168.1.200 (with a Show Client button)
- Static DHCP: Set Static DHCP (button)
- Auto-Load Menu (Auto-DNS): Enabled Disabled
Note: Disabling Auto-DNS will require that you access the web menu using the IP address of this device. It is recommended that you note your IP address before changing this mode. If you are no longer able to access the web menu, you will need to perform a hardware reset.
- Domain Name: ampedwireless (text input)
- 802.1d Spanning Type: Disabled (dropdown menu)
- Clone MAC Address: 000000000000 (text input)

At the bottom right, there are two buttons: APPLY (green) and RESET (grey).

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

Static DHCP: You may set a static IP address within your DHCP network. The Smart Repeater will track the device via its MAC address and assign it a pre-defined IP address each time the device logs into the network. Obtain IP settings from the Home router or manually enter your IP settings.

Auto-Load Menu (Auto-DNS): When the Smart Repeater loses connection to your Home Network it will automatically redirect your web browser to the web menu. To turn this feature off, you can disable Auto-DNS. **Note:** Disabling Auto-DNS will require that you access the web menu using the IP address of this device. It is recommended that you note your IP address before changing this mode. If you are no longer able to access the web menu, you will need to perform a hardware reset.

Domain Name: The Domain Name allows you to change the URL which is used to access the Setup Menu for the Smart Repeater. For example, entering <http://setup.ampedwireless.com> into your web browser while connected to the Smart Repeater, will guide you to the Web menu for the Smart Repeater. 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 Smart Repeater to default settings by holding down the reset button on the back panel for 5-10 seconds.

MANAGEMENT FEATURES

The Management features on the Smart Repeater allow you to view the status of your Smart Repeater and adjust other settings such as your System Clock, Passwords, and Firmware Upgrades among other administrative functions.

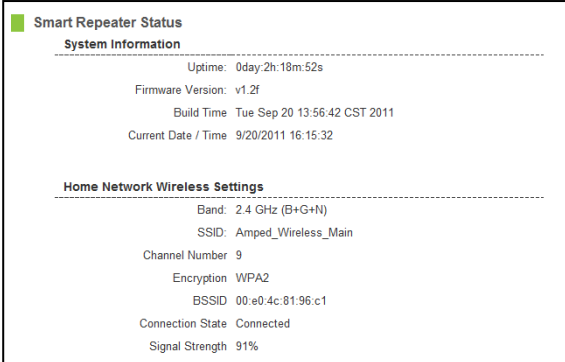
Management: System Status

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

System Information: This section provides you with information on the version and build time of your firmware. 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.

Home Wireless Network Settings: This section displays the current status of the connection between the High Power Smart Repeater and your Home Network. When viewing this section it is important to check that your Home Network SSID is correct, that the channel number matches your Home Network's channel number settings.



Smart Repeater Status

System Information

Uptime: 0day:2h:18m:52s
Firmware Version: v1.2f
Build Time: Tue Sep 20 13:56:42 CST 2011
Current Date / Time: 9/20/2011 16:15:32

Home Network Wireless Settings

Band: 2.4 GHz (B+G+N)
SSID: Amped_Wireless_Main
Channel Number: 9
Encryption: WPA2
BSSID: 00:e0:4c:81:96:c1
Connection State: Connected
Signal Strength: 91%

Connection State: The Connection State will say "Connected" when there are no problems with the connection to your Home Network.

If the Connection State shows "Waiting for Keys" then the WPA/WPA2 security key you entered is incorrect.

If the Connection State shows "Scanning" the Smart Repeater may be too far away from your home/office router.

The Signal Strength display can be updated by refreshing the page and is a good tool to use for finding the optimal installation location. A signal strength of 70% or greater is recommended for stable operation of the High Power Smart Repeater.

Extended Wireless Network Settings: Shows the current settings for your Extended Wireless Network.

Smart Repeater IP Settings: The network IP settings for your High Power Smart Repeater will change as you connect and disconnect from your Home Network. When connected to your Home Network, the network IP settings will be assigned by your Home Network. When not connected, the High Power Smart Repeater will use its own default network IP settings.

Extended Network Wireless Settings	
SSID:	Amped_SR
Encryption:	WPA
BSSID:	00:26:b8:5b:66:cc
Associated Clients:	1

Smart Repeater IP Settings	
IP Protocol:	Fixed IP
IP Address:	192.168.3.152
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.3.254
DHCP Server:	Auto
MAC Address:	00:e0:4c:81:96:c1

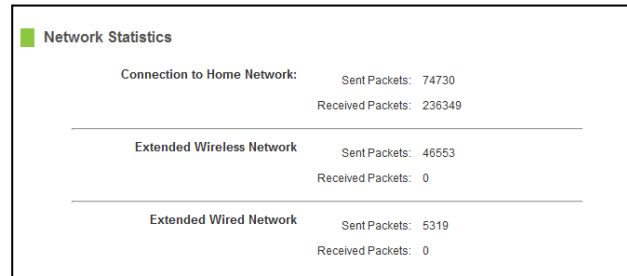
Management: Statistics

These statistics show the data activity for each network connection.

Connection to Home Network: This statistics shows the data activity for all upload and download data between the Home Network and the Smart Repeater.

Extended Wireless Network: These statistics shows all data activity for all users connected wirelessly to the Smart Repeater.

Extended Wired Network: The Wired Connection statistics shows all data activity for all users physically connected to the wired ports on the Smart Repeater.



Network Statistics	
Connection to Home Network:	Sent Packets: 74730 Received Packets: 236349
Extended Wireless Network	Sent Packets: 46553 Received Packets: 0
Extended Wired Network	Sent Packets: 5319 Received Packets: 0

Management: System Clock

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

System Clock

Update the System Clock for the High Power Router by clicking the Sync button below.

Current Time: Month Day Year
 Hour Minute Sec

Sync with your computer:

Management: System Logs

System Logs are useful for viewing the activity and history of the repeater. The System Logs are also used by Amped Wireless techs to help troubleshoot your repeater 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 repeater 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.

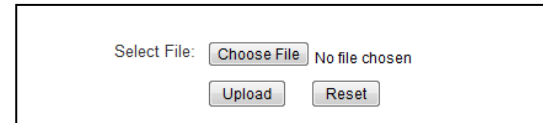
Note: Firmware files normally have a [.bin](#) file extension.

Management: Save and Reload Settings

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

To save current settings:

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



To load previously saved settings:

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

You may also reset the Smart Repeater's settings to factory settings by pressing Reset. By resetting the Smart Repeater you will lose all previous configurations and will need to run the Smart Setup Wizard again to reconnect to a Home Network.

Management: Password Settings

By default, the Smart Repeater does not require a password to login to the web menu. If you wish to enable a password to protect unauthorized access to the web menu and Smart Setup Wizard, you may enter one here.

Password

Prevent unauthorized access to your Smart Repeater'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: 802.11n, 802.11b/g

Frequency Band: 2.4 GHz

Wireless Speed: 300Mbps (Rx), 300Mbps (Tx)

Amplifier: Dual 600mW High Power Amplifiers

Dual Low Noise Amplifiers

Wireless Sensitivity: -95dBm

Wireless Output Power: Up to 28dBm

Wireless Security:

- WEP, WPA, WPA2, WPA Mixed, WPS

Wireless Access Control:

- MAC address filtering

Wireless AccessScheduling:

- Specific day and time

Wireless Coverage Control:

- 15% - 100% Output Power

Antennas:

- 2 x Detachable High Gain 5dBi Antennas
- 2 x Reverse SMA Connector

Ports:

- 5 x RJ-45 10/100 LAN ports

Mounting:

- Wall, Stand or Desktop

Warranty: 1 Year

Setup Requirements:

- Wired or wireless PC/Mac and an available 802.11b/g/n wireless network
- Google Chrome, Internet Explorer (8.0 and up) or Safari web browser

DEFAULT SETTINGS

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

IP Address: 192.168.1.240

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

SSID: Amped_SR

Security Key (WPA2/WPA/AES): wireless

TROUBLESHOOTING AND SUPPORT INFORMATION

We are here to help. If you have any issues with your Smart Repeater 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.

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

- a. Make sure your computer is connected to the Smart Repeater using the included Ethernet cable. Do not try to connect with a wireless connection. Ensure that the power on the Smart Repeater is on.
- b. Make sure your computer is NOT connected to any wireless networks. If it is, disconnect and try again.
- c. Try to use a different web browser. We recommend the Google Chrome web browser.
- d. Try to open your web browser to the default IP address by putting this number into your web browser instead: 192.168.1.240
- e. Power off (unplug the power adapter) the Smart Repeater and power it back on. Try again.
- f. Reset your Smart Repeater to default settings by holding the Reset Button (located on the back panel) for ten (10) seconds and try again.

I cannot connect to my Home Network. I received an Error when running the Smart Setup Wizard.

- a. Your Home Network may be secured. Double check that you have the correct security key to connect to the Home Network.
- b. Your Smart Repeater may be located too far from your Home Network. Run through the Setup Wizard again. On the SCAN page, your Home Network should show a signal strength of 70% or greater. If it does not, move the Smart Repeater closer to your Home Network and try again.
- c. Check to see that your Home Network router's DHCP server is enabled. The Smart Repeater needs to obtain an IP from your Home Network router.

I cannot find my Home Network when scanning for wireless networks in the Smart Setup Wizard

- a. The Smart Repeater may be out of range. Move the Smart Repeater closer towards the wireless router and try the Setup Wizard again from the Web Menu. It is recommended that your Home Network shows a signal strength of 70% or greater in the Smart Setup Wizard SCAN results.
- b. The Home Network may be a dual band wireless router. The Smart Repeater supports 802.11b/g/n 2.4GHz routers. If your Home Network uses a dual-band router, it will not work with the Smart Repeater. Adjust the dual-band router's configuration to disable the 5GHz band.
- c. Go to the Smart Features tab in the web menu and access the Wireless Coverage Controls. Make sure the setting is at 100% and try again.

- d. Make sure that your Home Network's wireless SSID is broadcasting and not hidden. If your Home Network SSID is hidden, you will need to manually setup the Smart Repeater through the Wireless Settings > Home Network Settings menu.

My Smart Repeater was working fine previously but now I can no longer access the Internet through the Smart Repeater. Or, I had a **POWER OUTAGE and now the Smart Repeater no longer works.**

- a. The connection to your Home Network has been dropped. This can be caused by several events to your home wireless connection. When this occurs you may rescan for another network by accessing <http://setup.ampedwireless.com> to connect to and repeat or you may try to fix the issues with your Home Network and your home wireless router.
- b. Check to see that your home wireless router settings have not changed. Any changes to the SSID, security, or channel number from the original settings will disconnect the Smart Repeater's connection to the home network. **A power outage can cause a change in the channel of your router.** To solve this simply run the Smart Setup Wizard again from the web menu and reconfigure your Home Network connection. You can also set a static channel number on your router to prevent this from happening again in the future.
- c. If you cannot access the setup menu, check to see that your Smart Repeater is still on. Reboot the Smart Repeater by unplugging the power adapter and plugging it back in. Check to see if your

connection has been reestablished by viewing a website. If you do not have a connection, logon to <http://setup.ampedwireless.com> and configure a new Home Network connection.

- d. Check to see that your home wireless router is still on. If it has been turned off please turn it back on. The Smart Repeater should automatically reconnect to your Home Network within 10 minutes.

I have a dual-band router and I cannot repeat it.

- a. Log into the Web Menu for your dual-band wireless router and adjust the wireless settings. Change the wireless band to 2.4GHz single band mode only. Disable the 5GHz wireless band.

I cannot find any wireless networks (Home Networks) to repeat.

- a. The Smart Repeater may be out of range. Move the Smart Repeater closer towards the wireless router and try the Setup Wizard again from the Web Menu.
- b. The antenna on your Smart Repeater may be loose. Tighten the antenna connection and try again.
- c. The wireless Home Network may not be a compatible wireless network (802.11b/g/n).

I am connected to a Home Network however I do not have Internet Access.

- a. The Home Network itself may not have Internet access. Check to see that you have internet access by connecting directly to the Home Network first. If you are able to go online then this is not a problem. If you cannot go online, then the Home Network's Internet connection must first be resolved.
- b. You may have a DNS issue and the Smart Repeater is not obtaining the IP settings from your Home Network. Try to reboot the Smart Repeater and then accessing a website. If that fails, then reboot the Home Router to see if that fixes it.
- c. There may be an IP conflict with your Home Network and your Extended Network. Try to adjust the IP Settings of your Extended Network using IP values that are different from your Home Network.

I can no longer connect to the Smart Repeater wirelessly.

- a. Power on and off the Smart Repeater and try again.
- b. The connection to the Home Network may be down. Use an Ethernet cable and connect directly to the Smart Repeater. Access <http://setup.ampedwireless.com> and run through the Smart Setup Wizard again. After you have successfully reset the Home Network connection, try connecting wirelessly again.

I could NEVER log onto the Smart Repeater wirelessly.

- a. Check that your wireless adapter supports WPA2 wireless security. If it does not then you will need to change the wireless security on the Smart Repeater. Go to the Web Menu, select Wireless Settings and then Wireless Security. Select the Extended Network from the drop down menu and either disable security or downgrade the security to WEP. Try connecting again.
- b. The connection to the Home Network may be down. Use an Ethernet cable and connect directly to the Smart Repeater. Access <http://setup.ampedwireless.com> and run through the Smart Setup Wizard again. After you have successfully reset the Home Network connection, try connecting wirelessly again.

I can no longer access the Web Menu or the Smart Repeater no longer responds.

- a. Connect to your Smart Repeater and try to access <http://setup.ampedwireless.com> using your web browser.
- 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 Smart Repeater assigned by your home router. Once you have it, connect to the Smart Repeater using an Ethernet cable. Open your web browser and enter the IP address into the address bar.

- c. Reset the Smart Repeater back to default settings and try the Smart Setup Wizard again. To reset the Repeater back to default settings, push the Reset Button (on the back panel) down for five (5) to ten (10) seconds then let go. After the Smart Repeater has fully reset, use an Ethernet cable and connect to the Smart Repeater. Login to the Web Menu at <http://setup.ampedwireless.com> and run through the Wizard.

The connection to the Home Network seems slow. File transfers take a long time to transfer.

- a. You may be too far away from your Home Network. The closer the Smart Repeater is to your Home Network, the better its connection will be. The Smart Repeater must have a strong signal in order to repeat the signal with fast speeds and further range. Move the Smart Repeater closer to your Home Network and try again.
- b. You may be downloading from the Internet and not within your Home Network or Extended 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).

The range from the Smart Repeater 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. Your Smart Repeater may be installed in a poor location. Avoid setting up your Smart Repeater in areas with high interference, such as, near fridges, microwaves, metallic objects and low surfaces. Install the Smart Repeater in a higher location if possible.
- c. Check the connections of the Antennas to the Smart Repeater. Tighten them if necessary.
- d. Adjust the Antennas of the Smart Repeater in different angles.

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.

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

- a. The Smart Repeater 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.ampedwireless.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.

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:

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

Déclaration d'exposition à la radiation : Cet équipement respecte les limites d'exposition aux rayonnements IC définies pour un environnement non contrôlé. Cet équipement doit être installé et mis en marche à une distance minimale de 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.



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

Amped Wireless

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