
WR2100

802.11N Wireless repeater 2.4GHz

2x2:2 MIMO



Quick Installation Guide

P/N: Document Version: 1.0

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Package Contents

The following items should be included: If any of these items are damaged or missing, please contact your service provider immediately.

1. The WR2100 Unit



2. Quick Installation Guide



Chapter 1

Introduction



This Chapter provides details of the WR2100's features, components and capabilities.

Overview

This WR2100 is designed to enhance the connectivity between the Wireless Access Point and wireless client device (ex. IP camera) while increasing the coverage of the existing wireless network. With its easy setup operation, this high-speed 802.11n device works seamlessly with most routers and access points.

Features

- **Easy Setup.** Use your WEB browser from anywhere on the LAN for configuration.

Wireless Features

- **Supports 11n Wireless Stations:** The 802.11n standard provides for backward compatibility with the 802.11b standard, so 802.11n, 802.11b and 802.11g wireless stations can be used simultaneously.
- **WPS Support.** WPS (Wi-Fi Protected Setup) can simplify the process of connecting any device to the wireless network by using the press button configuration on the device.
- **Security Support:** Full WEP (64/128 Bit), WPA and WPA2 Personal standards are supported on the wireless interface, allowing advanced encryption of wireless data.

Chapter 2 Basic Setup

2

This Chapter provides details on how to setup the WR2100.

System Requirement

- To use the wireless interface on the wireless model, other wireless devices must be compliant with the IEEE802.11b, IEEE802.11g or IEEE 802.11n specifications. All wireless stations must use compatible settings.

Physical Details

Front Panel

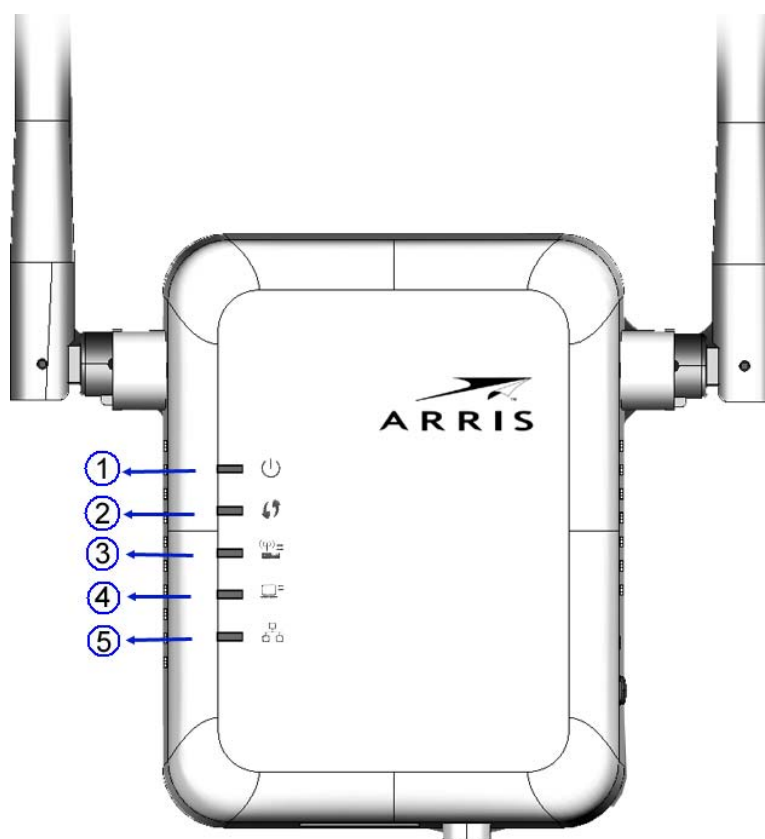







Figure 1: Front Panel

<p>1.  Power LED (Green/Amber)</p>	<p>On (Green) - Power on. Off - No power. Blinking - The <i>Power LED</i> will blink during start up. This will take 15 to 20 seconds. On (Amber) - System failure.</p>
<p>2.  WPS LED (Green)</p>	<p>On (Green) - When WPS button is pressed, the LED will be on for 2 minutes. Off - WPS feature is not in use. Slow Blinking (Green) - WPS is activating. Quick Blinking (Green) - WPS failure.</p>
<p>3.  AP/Repeater LED (Green/Red)</p>	<p>On (Green) - AP connection is available and the signal strength is good. Off - AP connection is not established. On (Amber) - The signal strength is normal. On (Red) - The signal strength is poor. Note: if the LED indicator shows red, you need to install the device in a better location.</p>
<p>4.  Repeater/Client LED (Green/Red)</p>	<p>On (Green) - Client connection is available and the signal strength is good. Off - Client connection is not established. On (Amber) - The signal strength is normal. On (Red) - The signal strength is poor. Note: if the LED indicator shows red, you need to install the device in a better location.</p>
<p>5.  Ethernet LED (Green)</p>	<p>On (Green) - LAN connection is available. Off - LAN is not connected. Blinking (Green) - Data is being transmitted or received via the LAN connection.</p>

Side Panel

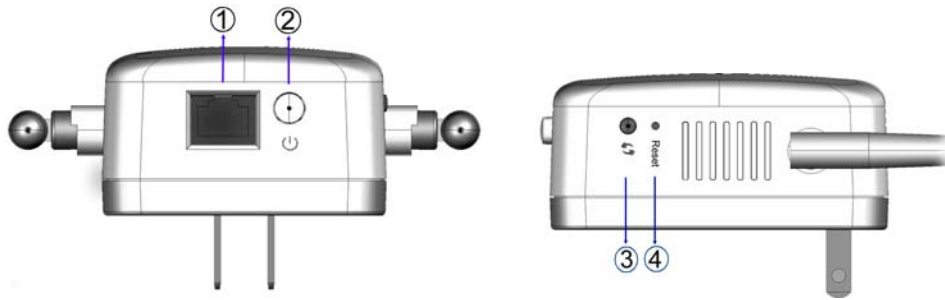




Figure 2: Side Panel

1. LAN port	Use a standard LAN cable to connect your WR2100 to a PC.
2.  Power On/Off Switch	Press this button to turn on/off the WR2100.
3.  WPS Button	Press the WPS button on the device and on your other wireless device to perform WPS function that easily creates an encryption-secured wireless connection automatically. <ul style="list-style-type: none"> • AP Connection. When pressed and held over 3 seconds, the WR2100 will perform WPS function with the AP. • Client Connection. When pressed and released (less than 3 seconds), the WR2100 will perform WPS function with the client devices.
4. Reset Button	This button is recessed; A pin or paper clip can be used to depress it. It can be activated at any time the WR2100 is in the "ready" mode. <ul style="list-style-type: none"> • Reset to manufacturer default values and reboot. When pressed and held over 10 seconds, the settings of the WR2100 will be set to their default values.

Setup the WR2100

The installation allows the WR2100 to directly connect to a wireless router (or Wireless Access Point). You can extend the range of your wireless network, or to add an extension of your network without running cables.

Configured without a PC - Using WPS



Step 1: Locate the WR2100 near the Wireless Access Point while doing the configuration.


Step 2: Make sure the Wireless Access Point is on and working properly.

Step 3: Plug the WR2100 into the power outlet and press the *Power* button to power it on.

Step 4: Wait for the *Power* LED to remain on, the WR2100 is now ready for use.

Step 5: Press the *WPS* button on the Wireless Access Point and make sure the Wireless Access Point is in WPS mode. (The LED on the AP will blink and active for 2 minutes.)

Step 6: Press and hold the *WPS* button on the WR2100 for more than 3 seconds. The *WPS* LED on the device will start blinking for 2 minutes. The WR2100 will automatically associate to the Wireless Access Point with the strongest signal and make connection. Make sure to press the button within 120 seconds (2 minutes) after pressing the Wireless Access Point WPS button.

Step 7: The connection of the WR2100 and Wireless Access Point is successfully established after the  LED remains on.



Locate the WR2100 in another place for better wireless reception and performance if the signal strength is weak (the  color is red).

Step 8: Now you can select a suitable location for the WR2100. It's preferable to place the device near the center of your wireless coverage area. Check the LED color and make sure it's not red.

Step 9: Power on the client device (ex. IP Camera) and make sure it is in wireless mode.

Step 10: Press the WPS button (less than 3 seconds) of the WR2100. The WPS LED will start blinking for 2 minutes. Then press the WPS button on the client device. Make sure to press the button within 120 seconds (2 minutes) after pressing the WR2100 WPS button.

Step 11: Wait for the WPS LEDs to be solid on both WR2100 and the client device. Check the LED color again.

Step 12: Now the client device can access to the wireless network.

Configured with a PC



Step 1: Make sure the Wireless Access Point is on and working properly.

Step 2: Plug the WR2100 into the power outlet and press the Power button to power it on.

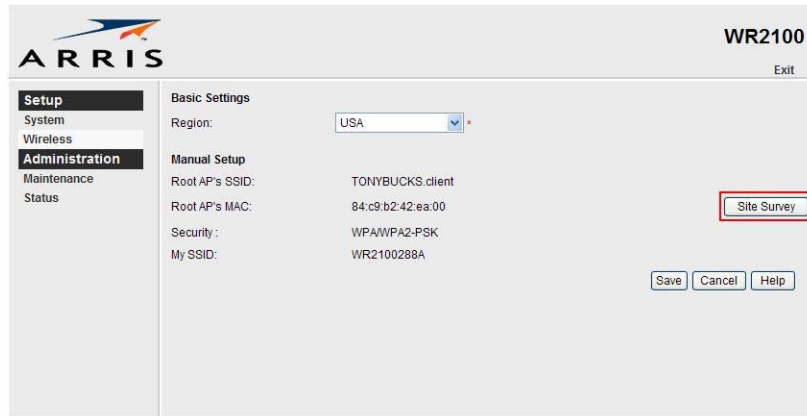
Step 3: Wait for the *Power* LED to remain on; the WR2100 is now ready for use.

Step 4: Connect the Ethernet cable to the WR2100 and the PC.

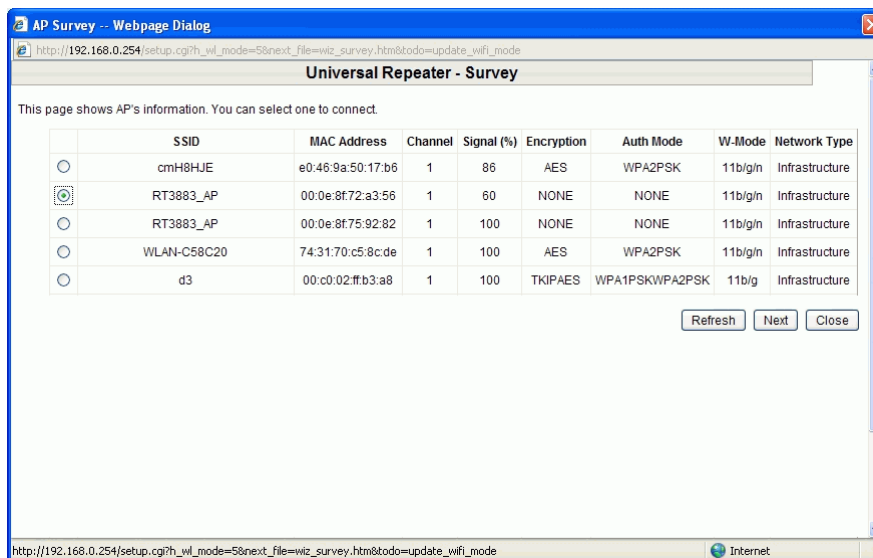
Step 5: Launch the browser and enter <http://www.mywifirepeater.net/> in the Address box.

Step 6: You will then be prompted for a username and password. If using the default values, enter `admin` for the username, and `password` for the password.

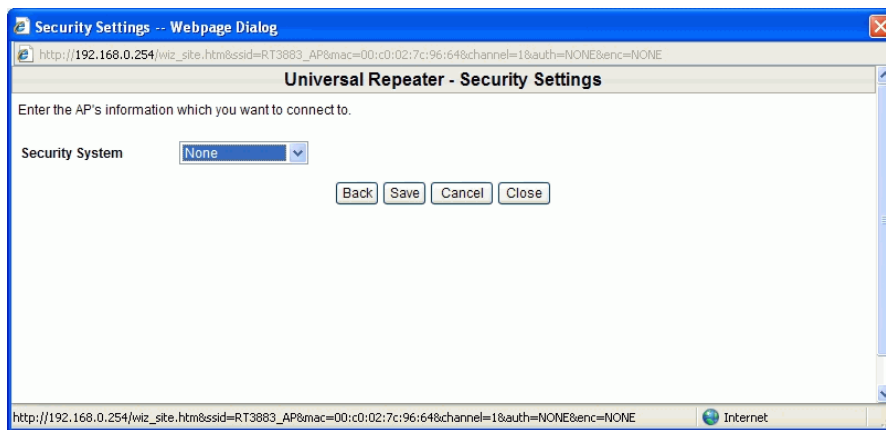
Step 7: Choose the *Wireless* page and click “Site Survey” button. The WR2100 will start to search the existing wireless network.




Step 8: Select the desired SSID that you want to connect to. Click *Next*.




Step 9: The *Security Settings* screen will be prompted automatically if the security is on. Enter the required encryption keys. Click **Save**.




Step 10: The connection of the WR2100 and Wireless Access Point is successfully established after the  LED remains on.



Note!

Locate the WR2100 in another place for better wireless reception and performance if the signal strength is weak (the  color is red).

Step 11: Configure the client device (Ex. IP Camera) with the same SSID and encryption keys.

Step 12: The connection is successfully established after the  LED remains on. Check the LED color. If it is red, then the device needs to be relocated.

Step 13: Now the client device can access to the wireless network.

Appendix A

Specifications



WR2100

Model	802.11N Wireless repeater 2.4GHz 2x2:2 MIMO
Dimensions	67mm (W) x 85mm (H) x 36mm (D)
Operating Temperature	0° C to 40° C
Antenna	External antenna x 2
Storage Temperature	-20° C to 85° C
Network Interface	1 Ethernet 10/100BaseT (RJ45) LAN connection
Wireless interface	802.11b: 20 dBm@11Mbps 802.11g: 18 dBm@54Mbps 802.11n: 18 dBm@130Mbps and 270Mbps
LEDs	5
Power	100~240V AC (Build-in Power)

Regulatory Approvals

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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- -Reorient or relocate the receiving antenna.
 - -Increase the separation between the equipment and receiver.
 - -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - -Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

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

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

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

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

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.