



H510 Access Point Quick Setup Guide

This Quick Setup Guide provides step-by-step instructions on how to set up your Ruckus Wireless H510 Dual Band 802.11ac Multimedia Wi-Fi Access Point Wall Switch. After completing the steps described in this guide, you will be able to access the Wi-Fi Wall Switch and begin providing wired and wireless network access to users. The rest of this document refers to the H510 Access Point Wall Switch as the **H510**.

The H510 has many options:

- It can be mounted on a standard USA- or EU-style single-gang wall outlet box.
- It can be powered by a customer-supplied IEEE 802.3af- or 802.3at-compliant PoE switch or injector, or can be powered by an optional customer-ordered DC power adapter.
- It has side cutouts for one or two bypass cables. The mounting bracket has locating hooks to keep the bypass cables aligned with the cutouts when attaching the H510 to the mounting base.
- It can have a low-power (0.5W or less) customer-supplied USB device plugged in. The USB device is very difficult to remove after the H510 is attached to the mounting base.

Note: The H510 requires Ruckus Wireless base image 104.0 firmware or later. Managed H510 deployments require SmartZone 3.4 or later, or ZoneFlex (ZF) 9.13.1 or later.

ABOUT PERIPHERAL DEVICES

The H510 can supply power to USB devices and PoE-powered devices, and the power supplied depends on the PoE power supplied to the H510.

- The USB port is intended for low-power devices such as BLE (Bluetooth low energy) beacons. The maximum power that the USB port can supply is 0.5W.
- The **LAN1+PoE** port is intended for PoE-powered peripheral devices such as IP telephones.

H510 Power Options and Available Power Out for PoE Out and USB

H510 Power Source	Power Available for PoE Out and USB
802.3af PoE	5W total
802.3at PoE	12.95W PoE Out (802.3af Class 3) and 0.5W USB
DC power adapter (sold separately)	12.95W PoE Out (802.3af Class 3) and 0.5W USB

THIS GUIDE IN OTHER LANGUAGES

- 请从以下网站获得该指南的简体中文版 <https://support.ruckuswireless.com>
- Vous trouverez la version française de ce guide à l'adresse suivante <https://support.ruckuswireless.com>
- このガイドの日本語版は <https://support.ruckuswireless.com> をご覧ください
- 이 가이드의 한국어 버전은 웹 사이트 (<https://support.ruckuswireless.com>) 에서 확인하시기 바랍니다
- Veja a versão em português (Brasil) deste guia em <https://support.ruckuswireless.com>
- Puede ver la versión en español (América Latina) de esta guía en <https://support.ruckuswireless.com>

BEFORE YOU BEGIN

Before deploying Ruckus Wireless products, please check for the latest software and the release documentation.

- User Guides and Release Notes are available at <http://support.ruckuswireless.com/documents>
- Software Upgrades are available at <http://support.ruckuswireless.com/software>
- Open Source information is available at <http://opensource.ruckuswireless.com>
- Software License and Limited Warranty are available at <http://support.ruckuswireless.com/warranty>

PACKAGE CONTENTS

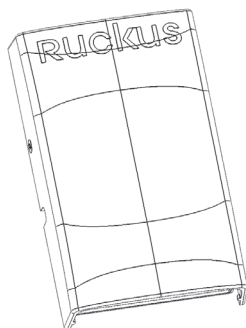
- H510 Access Point Wall Switch
- Mounting bracket
- Two 6mm M3x0.5 thread Torx flat head machine screws
- Two 1" 6-32 thread Phillips pan head machine screws
- Product warranty statement
- Regulatory flyer
- Declaration of Conformity, if required
- This *Quick Setup Guide*

STEP 1: COLLECTING TOOLS AND SETUP REQUIREMENTS

- No. 2 Phillips screwdriver and T10 Torx driver for the mounting bracket screws
- A standard USA- or EU-style single-gang wall outlet box
- One of the following:
 - Customer-supplied IEEE 802.3af/at-compliant PoE switch and customer-supplied Ethernet cable
 - Customer-supplied IEEE 802.3af/at-compliant PoE injector and customer-supplied Ethernet cable
 - Customer-ordered DC power adapter (Ruckus part number 902-0170-XX10, sold separately)
- An Ethernet cable with or without PoE run through the wall from your LAN through the wall outlet box
- A computer with an Ethernet port and a wireless card with customer-supplied Cat 5e or better Ethernet cable
- (optional) One or two separate bypass cables run through the outlet box

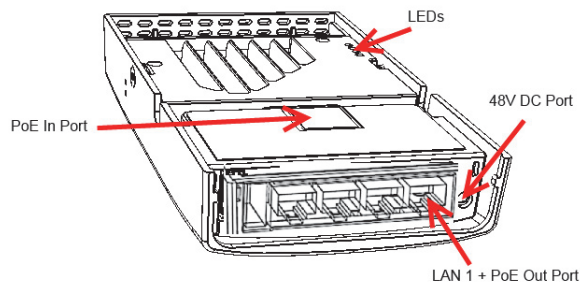
STEP 2: CONNECTING THE COMPUTER TO THE H510

Figure 1: Front view



- 1 After removing your H510 from its package, place it next to your computer.
- 2 Using an Ethernet cable, connect your computer's network port to the **PoE In** port on the rear of the H510.
- 3 Using an AC adapter (sold separately), connect the H510 **48VDC** port to a protected power source.
Alternatively, connect the **PoE In** port to a PoE injector or PoE switch for both power and network connections.
- 4 Verify that the **PWR** LED on the rear of the enclosure is a steady green.

Figure 2: Rear and bottom view



STEP 3: PREPARING YOUR COMPUTER FOR H510 SETUP

Note: The following procedures assume that Windows 7 is the operating system. Procedures for other OS's are similar.

- 1 On your Windows 7 computer, configure your network adapter from the *Local Area Connection* settings as follows:
 - **Start > Control Panel > Network and Sharing Center > Change Adapter Settings**
- 2 Edit the TCP/IPv4 address settings as follows:
 - **Local Area Connection > Properties > Internet Protocol Version 4 (TCP/IPv4) > Properties**

The *Internet Protocol Version 4 (TCP/IPv4) Properties* dialog box appears.

Important! Write down all of the currently active settings so you can restore your computer to its current configuration later, when this process is complete.

- 3 Select **Use the following IP address** (if it is not already selected) and then make the following entries:
 - **IP address:** 192.168.0.22 (or any available address in the 192.168.0.x network, except 192.168.0.1)
 - **Subnet mask:** 255.255.255.0
 - **Default gateway:** 192.168.0.1Leave the **DNS server** fields empty.
- 4 Click **OK** to save your changes.

Your changes are put into effect immediately.

STEP 4: LOGGING INTO THE H510 ACCESS POINT

As specified in [Step 3: Preparing Your Computer for H510 Setup](#), the H510 should be directly connected to your computer (through the **PoE In** Ethernet port on the back of the H510) and powered on, ready for setup.

- 1 On your computer, open a Web browser window.
- 2 In the browser, type this URL to connect to the H510:
<https://192.168.0.1>
- 3 Press **<Enter>** to initiate the connection. When a security alert dialog box appears, click **OK/Yes** to proceed.
- 4 When the *Ruckus Wireless Admin* login page appears, enter the following:
 - **Username:** super
 - **Password:** sp-admin
- 5 Click **Login**.

STEP 5: CUSTOMIZING THE WIRELESS SETTINGS

Default H510 Access Point Settings (for your reference)

Network Names (SSIDs)	Wireless1-Wireless8 (2.4GHz radio) Wireless9-Wireless16 (5GHz radio)
Security (Encryption method)	Disabled for each wireless interface
Default Management IP Address	192.168.0.1

- 1 On the Web interface menu, click **Configuration > Radio 2.4G** or **Configuration > Radio 5G**. The *Configure > Wireless > Common* page appears.
- 2 Verify that the following options are active:
 - **Channel:** SmartSelect.
 - **Country Code:** If you are not located in the United States of America, select your current country.
- 3 Click **Update Settings** if you made any changes.
- 4 Click any of the “Wireless #” (Wireless LAN Number) tabs at the top of the page.
- 5 In *Wireless Availability*, click **Enabled**.
- 6 Delete the text in the **SSID** field, then type a name for your network that will help your users identify the H510 access point in their wireless network connection applications.
- 7 Click **Update Settings** to save your changes.
- 8 Repeat Steps 4-7 for each Wireless # (Wireless LAN Number) interface that you want to enable.
- 9 Click **Logout** to exit the Web interface.

Optional: In a default H510 configuration, the H510 uses a DHCP-assigned IP address. If you anticipate logging into the H510 regularly to perform monitoring or maintenance once it is in place, then you may want to consider switching from DHCP and instead assigning a static IP address to the H510.

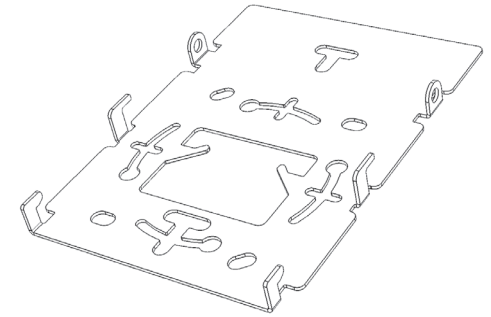
- A. On the menu, click **Configuration > Internet**.
- B. Click the **Static IP** option.
- C. Fill in the **IP Address** and **Mask** fields.
- D. Click **Update Settings** to save your changes.

- 10 When the *Ruckus Wireless Admin* login page reappears, you can exit your browser.
- 11 Disconnect the H510 from the computer and from the power source, and then restore your computer to its original network connection configuration.

Continue with [Step 6: Attaching the Mounting Bracket to an Outlet Box](#).

STEP 6: ATTACHING THE MOUNTING BRACKET TO AN OUTLET BOX

Figure 3: Mounting bracket



- 1 Use either the original wall outlet box screws or the factory-supplied 1” Phillips pan head machine screws to attach the H510 mounting bracket to a single-gang wall outlet box.

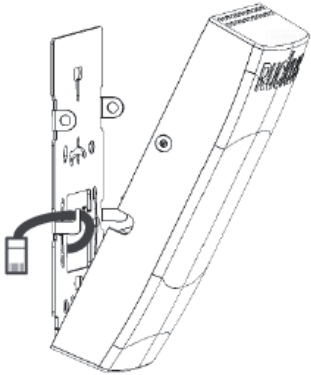
Note: The H510 mounting bracket has four hooks that face UP. Make sure that the hooks are facing up when attaching the mounting bracket to the wall outlet box.

- 2 Pull the LAN uplink Ethernet cable for the H510 through the wall outlet box.
 - 3 If you are powering the H510 with a customer-ordered DC power adapter, ensure that the power cable is able to reach the DC in port without obstructing the AP and preventing the AP from mounting flush with the wall bracket.
 - 4 When you have extra bypass cables (usually one or two) that are to bypass the H510, pull them through the wall outlet box. **Note:** *The bypass cables can be Ethernet, coax, or any other type of cable, as required.*
Drape the bypass cables across one or both of the upper hooks on either side or both sides of the mounting bracket.
- Continue with [Step 7: Attaching the H510 to the Mounting Bracket](#).

STEP 7: ATTACHING THE H510 TO THE MOUNTING BRACKET

- 1 Make sure that the mounting bracket is securely fastened as described in [Step 6: Attaching the Mounting Bracket to an Outlet Box](#).
- 2 If you have bypass cables (usually one or two, if any), then make sure that they are draped across one or both of the two upper hooks on the mounting bracket.

Figure 4: Attaching the H510 to the Mounting Bracket



- 3 If you are installing a customer-supplied USB device (such as a BLE beacon), then plug it securely into the USB jack on the bottom of the H510.
- 4 Pull the uplink Ethernet cable from your LAN through the outlet box, and plug it into the back of the H510.
- 5 The mounting bracket has two lower hooks that fit into slots on the bottom of the H510. Rest the bottom of the H510 on those hooks, and then tilt the H510 until it is up against the mounting bracket.

Note that any optional bypass cable(s) should slide smoothly into the slots on the sides of the H510.

- 6 Use a T10 Torx driver to screw the factory-supplied Torx flat head machine screws through the H510 screw holes into the threaded inserts on the sides of the mounting bracket.
- 7 After the H510 has powered on, it supplies USB power and PoE Out as described in [About Peripheral Devices](#).

Continue with [Step 8: Testing the H510 Operation](#).

STEP 8: TESTING THE H510 OPERATION

After a short pause to re-establish the Internet connection, you can test the H510.

- 1 Using any wireless-enabled computer or mobile device, search for and select the wireless network you previously configured.
- 2 If you can connect, open a browser and navigate to any public Web site.
- 3 Using any wired computer or other device and an Ethernet cable, plug into an Ethernet port on the bottom of the H510.
- 4 Open a browser and navigate to any public Web site.
- 5 Repeat [Step 3](#) and [Step 4](#) for the rest of the Ethernet ports on the bottom of the H510.
- 6 Verify that all connected PoE-powered devices and USB devices are working correctly.

Congratulations! Your H510 is active and ready for use.