



R510 Access Point Quick Setup Guide

This Quick Setup Guide provides step-by-step instructions on how to set up your Ruckus Wireless R510 Dual Band 802.11ac Multimedia Wi-Fi Access Point. After completing the steps described in this Guide, you will be able to place the Access Point (AP) at your site and provide wireless network access to users.

Note: The R510 requires a minimum of ZoneFlex (ZF) firmware version 9.12.2 or later, or SmartZone firmware version 3.2 or later.

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> でご覧ください。
- 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

- R510 Access Point
- One wall-mount anchor kit, including two 1" No. 8 steel pan-head Phillips sheet metal screws, one 5mm M2.5 x 1.06 Torx security screw, and wall-mount anchors
- One external T-bar bracket (two unassembled parts)
- One unit removal pin
- Regulatory flyer
- Product warranty statement
- Declaration of Conformity, if required
- This *Quick Setup Guide*

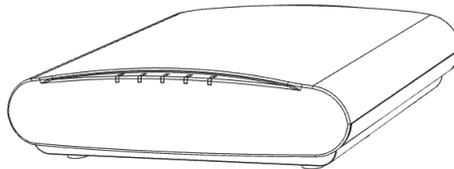
STEP 1: COLLECT TOOLS AND SETUP REQUIREMENTS

- A computer running Windows 7 (procedures for other OS's are similar)
- Two Cat 5e Ethernet cables
- No. 2 Phillips screwdriver and T8 Torx driver for wall mounting anchor kit
- An AC power adapter (sold separately), or
- an 802.3af or 802.3at -compliant Power over Ethernet (PoE) switch or PoE injector
- When mounting the R510 to a truss or pole, two customer-supplied cable ties

IMPORTANT! If the AP is deployed with a ZoneDirector, then refer to the *ZoneDirector Quick Setup Guide* and connect the AP to your local network.

STEP 2: CONNECT THE AP TO YOUR COMPUTER

Figure 1: Top view

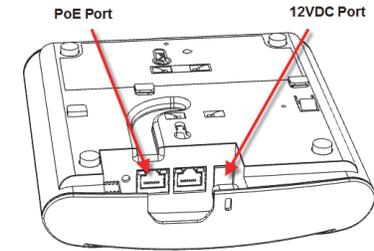


- 1 After removing your Ruckus Wireless AP from its package, place it next to your computer.
- 2 Using an Ethernet cable, connect your computer's network port to one of the two ports on the AP.
- 3 Using an AC adapter (sold separately), connect the AP 12VDC port to a protected power source.

Alternatively, connect the PoE port to a PoE injector or switch for both power and network connections.

- 4 Verify that the Power LED on the external enclosure is a steady green.

Figure 2: Bottom view



STEP 3: PREPARE YOUR COMPUTER FOR AP SETUP

Note: The following procedures assume Windows 7 as 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 *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 address in the 192.168.0.x network)
 - **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: LOG INTO THE AP

As specified earlier, the AP should be directly connected to your computer (through one of the Ethernet ports) 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 AP:
<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: CUSTOMIZE THE WIRELESS SETTINGS

Default AP 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* options appear.
- 2 Verify that the following options are active:
 - **Channel:** SmartSelect
 - **Country Code:** If you are not located in the United States, select your current country.
- 3 Click **Update Settings** if you made any changes.
- 4 Click any of the “Wireless #” 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 AP in their wireless network connection application.
- 7 Click **Update Settings** to save your changes.
- 8 Repeat Steps 4-7 for each Wireless # interface that you want to enable.

- 9 Click **Logout** to exit the Web interface.

Optional: If You Want To Switch from DHCP (Default): If you anticipate logging into the AP regularly to perform monitoring or maintenance once it is in place, you may want to consider assigning a static IP address to the AP. In a default AP configuration, the AP uses a DHCP-assigned IP address.

- 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 AP from the computer and from the current power source, and then restore your computer to its original network connection configuration.

STEP 6: PLACE THE AP IN YOUR SITE

- 1 Move the AP to its permanent location (accessible to both power and network connections). Refer to [\(Optional\) Mounting Instructions](#) for physical installation.
- 2 Use an Ethernet cable to connect the PoE port to the appropriate device:
 - The ISP’s or carrier’s network device
 - The Ethernet switch that is connected to the ISP’s or carrier’s network device

Note: If you will be using PoE, then you will need a Cat 5e (or better) Ethernet cable to connect the AP to the PoE injector or switch.

- 3 Connect the AP power adapter (or PoE power supply) to the AP, then to a convenient power source.
- 4 Verify that the PoE port LED is lit.

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

STEP 7: VERIFY THE INSTALLATION

- 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 link to any public Web site.

Congratulations! Your wireless network is active and ready for use.

FOR MORE INFORMATION

You can now use the wireless network to log into the AP’s Web interface. For information on how to configure the AP, refer to the *Ruckus Wireless ZoneFlex Indoor Access Point User Guide*.

(OPTIONAL) MOUNTING INSTRUCTIONS

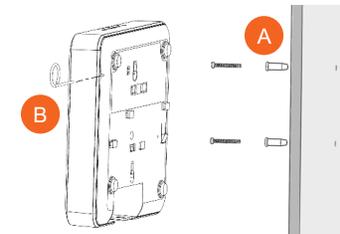
The R510 can be mounted to a T-bar, wall or ceiling using the enclosed mounting kits. Refer to the following sections:

- [Mounting on a Flat Surface](#)
- [Mounting on a Recessed Drop-Ceiling T-Bar](#)
- [Mounting on a Flush Drop-Ceiling T-Bar](#)
- [Mounting on a Truss or Pole](#)

Mounting on a Flat Surface

- 1 Use the Mounting Template on the last page of this *Quick Setup Guide* as a template to mark the locations for drill holes on the mounting surface. There are two sets of keyholes available on the AP. One allows the AP to be mounted to a wall or ceiling. The other allows the R510 to be mounted to an accessory bracket (not included).
- 2 Use a 5mm drill bit to drill holes approximately 25mm into the mounting surface (A in [Figure 3](#)).
- 3 Insert the anchors and mounting screws into the mounting surface, leaving approximately 1/4” (6 mm) of the screw heads protruding for the AP enclosure.
- 4 Insert the unit removal pin into the hole on the side of the AP to release the locking mechanism (B in [Figure 3](#)).
- 5 Place the AP onto the mounting screws so that the screw heads enter the mounting holes on the AP enclosure, and push the AP down to lock in place.
- 6 Remove the unit removal pin to release the locking mechanism and secure the AP.
- 7 To remove the AP, insert the unit removal pin into the hole on the side of the AP to unlock, then push the AP up to release the AP enclosure from the mounting screws.

Figure 3. Flat surface mounting



Mounting on a Recessed Drop-Ceiling T-Bar

Note: This mounting bracket can also be used on a flush drop-ceiling T-bar, so the four rubber feet on the bottom of the AP minimize ceiling tile displacement.

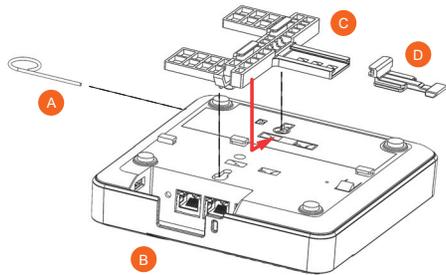
The enclosed T-bar bracket supports mounting to recessed drop ceiling T-bars.

- [Mounting an AP using the External Bracket](#)
- [Removing an External Bracket from a T-Bar](#)
- [Removing an External Bracket from an AP](#)

Mounting an AP using the External Bracket

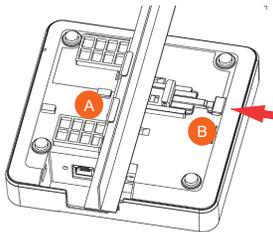
- 1 Insert the unit removal pin (A in [Figure 4](#)) into the hole on the side of the R510 (B in [Figure 4](#)) to release the locking mechanism.

Figure 4. Attaching the external bracket to the AP



- 2 Position the studs on the bottom of the T-bar bracket (C in [Figure 4](#)) in the mounting holes on the R510 enclosure, and then slide the T-bar bracket until the studs are in the narrow parts of the R510 mounting keyholes (arrow).
- 3 Remove the unit removal pin (A in [Figure 4](#)) to engage the locking mechanism and secure the T-bar bracket to the R510.
- 4 Make sure that the locking tab (D in [Figure 4](#)) is in the first position on the T-bar bracket (C in [Figure 4](#)).
- 5 Gently push the ceiling tiles up and out of the way.
- 6 Position the T-bar bracket so its two clasps grip one edge of the T-bar (A in [Figure 5](#)). Make sure that both clasps are gripping the T-bar.

Figure 5. Attaching the external bracket to the T-bar



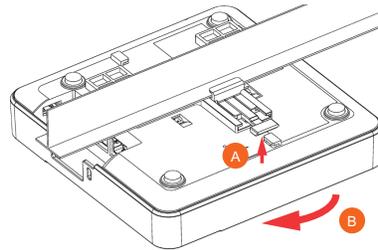
- 7 Hold the R510 in place and gently push the locking tab (B in [Figure 5](#)) until its clasp grips the other edge of the T-bar.

CAUTION: Make sure that all three clasps are gripping the T-bar!

Removing an External Bracket from a T-Bar

- 1 Move the ceiling tiles out of the way.
- 2 Gently lift up the locking tab (A in [Figure 6](#)) by sliding your fingers under the tab.
- 3 While lifting up on the locking tab, rotate the R510-and-T-bar bracket assembly (B in [Figure 6](#)). The R510-and-T-bar bracket assembly comes away from the T-bar.

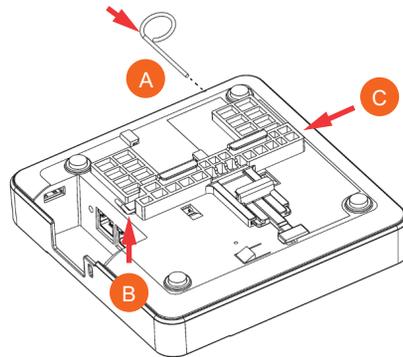
Figure 6. Removing the external bracket from the T-bar



Removing an External Bracket from an AP

- 1 Insert the unit removal pin (A in [Figure 7](#)) into the hole on the side of the R510.
- 2 Gently lift up the retainer tab (B in [Figure 7](#)).
- 3 Gently push the T-bar bracket (C in [Figure 7](#)) until it detaches from the R510.

Figure 7. Removing the external bracket from an AP



Mounting on a Flush Drop-Ceiling T-Bar

- [Mounting an AP using the Integrated Bracket](#)
- [Removing an AP Integrated Bracket from a T-Bar](#)

Mounting an AP using the Integrated Bracket

- 1 Orient the AP so that the T-bar is positioned between the T-bar clips as shown in [Figure 8](#), then rotate the AP until the third T-bar clip catches the T-bar and the latch locks the T-bar in place ([Figure 9](#)).

Figure 8. Attaching the integrated bracket to the T-bar

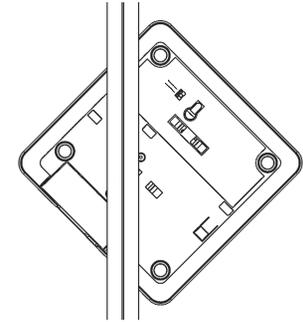
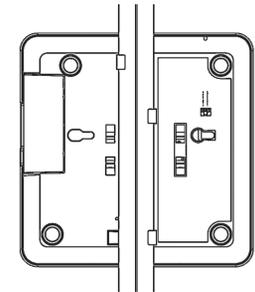


Figure 9. Locking the integrated bracket to the T-bar



- 2 Insert the Torx security screw into the hole near the latch to lock the AP in place.

Removing an AP Integrated Bracket from a T-Bar

- 1 To remove the AP from a T-bar, first remove the security screw, then depress the latch while rotating the AP so that the T-bar clips disengage the T-bar.

Mounting on a Truss or Pole

- 1 Feed the customer-supplied cable ties through the two slots on the back of the R510.
- 2 Fasten the R510 to the truss or pole using the cable ties.

Mounting Template

