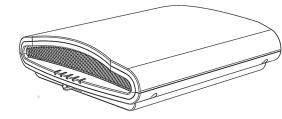


R710 Access Point Quick Setup Guide

This *Quick Setup Guide* provides step-by-step instructions on how to set up your Ruckus Wireless ZoneFlex R710 Dual Band 802.11ac Multimedia Wi-Fi Access Point (AP). After completing the steps described in this Guide, you will be able to place the R710 at your site and provide wireless network access to users. The rest of this document refers to the R710 as an AP.

Note: The minimum software revision for the AP is base image 100.2.0 or later, SmartZone software 3.1.1 or later, or ZoneFlex 9.12 or later.

Figure 1. Ruckus Wireless R710 Access Point



This Guide in Other Languages

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

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

- R710 Access Point
- One T-bar mounting assembly kit, including:
- One T-bar bracket (2 separate plastic parts)
- Two each 1.0" L x No. 8 steel Phillips panhead mounting screws and plastic wall anchors
- Regulatory flyer
- Product warranty statement
- Declaration of Conformity, if required
- This Quick Setup Guide

CONFIGURING THE AP

Continue with the following steps:

- Step 1: Collecting Setup Requirements, Hardware, and Tools
- Step 2: Connecting Your Computer to the AP
- Step 3: Preparing Your Computer for AP Setup
- Step 4: Logging Into the AP
- Step 5: Customizing the Wireless Settings
- Step 6: Placing the AP in Your Site
- Step 7: Verifying the Installation

Step 1: Collecting Setup Requirements, Hardware, and Tools

- A computer running Windows 7 (procedures for common operating systems are similar).
- One Cat 5e (or better) Ethernet cable.
- A Ruckus Wireless 12VDC 902-1169-xx00 AC power adapter (sold separately) --OR--

an 802.3at-compliant Power over Ethernet (PoE) switch or PoE injector. --OR--

an 802.3af-compliant PoE switch or PoE injector. **Note:** The AP can operate off of 802.3af power, but the feature set is reduced: the USB port is disabled, the second (eth1) Ethernet port is disabled, and the 2.4 GHz transmit power is reduced from 28dBm to 25dBm (aggregate of spatial streams), and country limits apply.

Note: The PoE switch port must run link layer discovery protocol (LLDP) power over Ethernet/MDI (PoE+) in order for the R710 to operate in full-power mode. This may require enabling both LLDP and Power via MDI (dot3) on the switch, if available.

Optional hardware and tools:

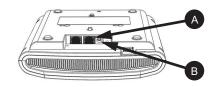
- Customer-supplied small padlock with a 3.5mm (0.14") or smaller shackle diameter, used to fasten the AP to the secure mounting bracket or the T-bar bracket.
- Customer-ordered Ruckus Wireless 902-0120-0000 secure mounting bracket kit:
 - If you are mounting the AP on a flat surface using the secure mounting bracket kit, then you need an electric drill with 4.75mm (3/16") drill bits.
 - If you are mounting the AP on a pipe or pole using the secure mounting bracket kit, then you will also need a 38.1mm to 63.5mm (1.5" to 2.5") pipe or pole, two included stainless steel clamps, and hand tools to tighten the clamps.

Continue with Step 2: Connecting Your Computer to the AP.

Step 2: Connecting Your Computer to the AP

- A After removing your AP from its package, place it next to your computer.
- B Using an Ethernet cable, connect your computer's network port to the 10/100/1000 POE In port on the AP (A in Figure 2).
- C Using an AC adapter (sold separately), connect the AP 12VDC port (B in Figure 2) to a convenient (and protected) power source.
 Alternatively, connect the 10/100/1000 POE In port to a PoE injector or switch for both power and network connectivity.

Figure 2. AP ports



D Verify that the **PWR** LED on the AP is a steady green. Continue with **Step 3: Preparing Your Computer for AP Setup**.

Step 3: Preparing Your Computer for AP Setup

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

- A 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
- **B** 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).

- C 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: 192.168.0.1

Leave the DNS server fields empty.

D Click OK to save your changes.

Your changes are put into effect immediately. Continue with Step 4: Logging Into the AP.

Step 4: Logging Into the AP

As specified in <u>Step 3: Preparing Your Computer for AP Setup</u>, the computer should be directly connected to your AP through one of the Ethernet ports and powered on, ready for setup.

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

Continue with Step 5: Customizing the Wireless Settings.

Step 5: Customizing the Wireless Settings

Default AP Settings (for your reference)

. ,	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

- A On the Web interface menu, click Configuration > Radio 2.4G or Configuration > Radio 5G. The Configure > Wireless > Common page appears.
- **B** 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.
- C Click Update Settings if you made any changes.
- D Click any of the Wireless # (Wireless LAN Number) tabs at the top of the page.
- E In Wireless Availability, click Enabled.
- F Delete the text in the SSID field, then type a name for your network that will help your users identify this AP in their wireless network application.
- G Click Update Settings to save your changes.
- H Repeat <u>Step D</u> through <u>Step G</u> for each *Wireless* # (Wireless LAN Number) interface that you want to enable.

Optional: In a default R710 AP configuration, the AP uses a DHCP-assigned IP address.

If you anticipate logging into the AP 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 AP.

- a On the menu, click Configuration > Internet.
- b Click the Static IP option.
- $\textbf{c} \quad \text{Fill in the IP Address and Mask fields.}$
- d Click Update Settings to save your changes.

E Click Logout to exit the Web interface.

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

Note: You can use a Ruckus Wireless controller for bulk AP provisioning and performing other commands. Refer to the controller documents for instructions.

Note: The AP can use link aggregation control protocol (LACP) to bond the two physical Ethernet ports together to form a single logical channel. Refer to the *Configuring Link Aggregation (LACP) Using CLI* section in the *Indoor AP User Guide*.

Continue with Step 6: Placing the AP in Your Site.

Step 6: Placing the AP in Your Site

- A Move the AP to its permanent location (accessible to both power and network connections). Refer to <u>Mounting Instructions</u> for physical installation.
- **B** Use an Ethernet cable to connect the PoE In port to the appropriate device:
 - The ISP's or carrier's network device --or--
 - 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 PoE switch.

- **C** Connect the AP power adapter (or PoE power supply) to the AP, and then to a convenient power source.
- $\label{eq:def_D} \textbf{D} \quad \mbox{Verify that the 10/100/1000 port LED is lit.}$

After a short pause to re-establish the Internet connection, you can test the AP. Continue with Step 7: Verifying the Installation.

Step 7: Verifying the Installation

- A Using any wireless-enabled computer or mobile device, search for and select the wireless network you previously configured.
- **B** When you can connect, open a browser and link to any public Web site. *Congratulations!* Your wireless network is active and ready for use.

MOUNTING INSTRUCTIONS

The AP can be mounted to a drop-ceiling T-bar, flat surface, or a pole using Ruckus Wireless AP mounting kits. Refer to the following sections:

- Mounting on a Drop-Ceiling T-Bar
- Mounting on a Flat Surface
- Mounting on a Flat Surface or Pole Using the Optional Secure Mounting Bracket

Mounting on a Drop-Ceiling T-Bar

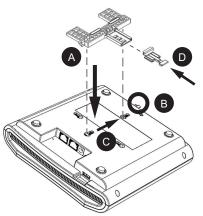
The factory-supplied T-bar mounting assembly kit allows you to attach the AP to recessed and flush drop-ceiling T-bars.

A Position the studs on the bottom of the T-bar bracket (A in Figure 3) in the keyholes on the AP enclosure.

Note: There is a second set of keyholes that are for optional sideways mounting on a drop-ceiling T-bar. Physical security is not supported when mounting the AP with this set of keyholes.

B Slide the T-bar bracket away from the Ethernet ports on the bottom of the AP until the AP retainer tab (B in <u>Figure 3</u>) snaps into place, trapping the T-bar bracket studs in the keyholes (C in <u>Figure 3</u>).





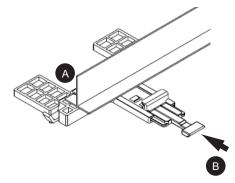
- A Insert the locking tab (D in Figure 3) so it is in the first position on the T-bar bracket (A in Figure 3).
- ${\ensuremath{\textbf{B}}}$ ${\ensuremath{\mbox{ Gently push the ceiling tiles, if present, up and out of the way.}$
- C Position the T-bar bracket so its two clasps grip one edge of the T-bar (A in Figure <u>4</u>). Make sure that both clasps are gripping the T-bar.

Note: For clarity, $\underline{\text{Figure 4}}$ only shows the T-bar bracket and the T-bar, and does not show the AP.

D Hold the AP in place and gently push the locking tab (B in <u>Figure 4</u>) in until its clasp grips the other edge of the T-bar.

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

Figure 4. Attaching the T-bar bracket to the T-bar

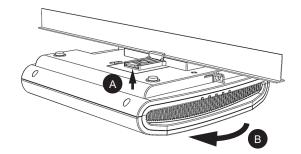


E (Optional) Attach a customer-supplied padlock through the bracket AP retainer tab (B in Figure 3) to lock the AP to the T-bar bracket studs.

When you are done, the AP is mounted.

- Removing the AP from the T-bar:
- A Move the ceiling tiles out of the way, if present.
- B Gently lift up the locking tab (A in Figure 5) by sliding your finger under the tab.
- C Rotate the AP- and-T-bar bracket assembly (B in Figure 5). The AP- and-T-bar bracket assembly comes away from the T-bar.

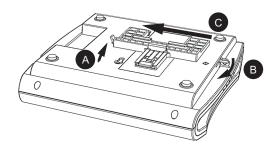
Figure 5. Removing the AP and T-bar bracket from the T-bar



Removing the T-bar bracket from the AP:

- **A** If the AP is locked to the T-bar bracket, then remove the lock.
- B Gently lift up the T-bar bracket locking tab (A in <u>Figure 6</u>) and push the AP retainer tab (B in Figure 6) to the side at the same time.
- **C** While lifting up the T-bar bracket locking tab and pushing the AP retainer tab to the side, gently push the T-bar bracket (C in Figure 6) toward the Ethernet ports on the bottom of the AP until the bracket detaches from the AP.

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

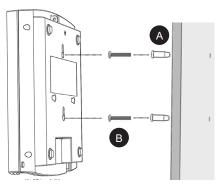


Mounting on a Flat Surface

The factory-supplied mounting screws and plastic wall anchors allow you to attach the AP to a wall or ceiling.

- A Use the Mounting Template on the last page of this *Quick Setup Guide* to mark the locations for two drill holes on the mounting surface. **Note:** *There is a second set of keyholes that are for optional sideways mounting on a flat surface. Physical security is not supported when mounting the AP with this set of keyholes.*
- **B** Use a 4.75mm (3/16") drill bit to drill holes approximately 25mm (1") deep into the mounting surface.
- C Insert the factory-supplied anchors (A in Figure 7) and mounting screws (B in Figure 7) into the mounting surface, leaving approximately 6 mm (1/4") of the screw heads protruding for the AP enclosure.

Figure 7. Flat surface mounting



- A Place the AP onto the mounting screws so the screw heads enter the keyholes on the AP enclosure, and push the AP down until the AP retainer tab (B in Figure 6) snaps into place.
- B (Optional) Attach a customer-supplied padlock through the integral AP retainer tab (B in Figure 6) to lock the AP to the mounting screw heads.
- C To remove the AP from the factory-supplied mounting screws, push sideways on the AP retainer tab (B in Figure 6), to unlock, then push the AP up to release the AP enclosure from the mounting screws.

Mounting on a Flat Surface or Pole Using the Optional Secure Mounting Bracket

Note: For more complete instructions, refer to the Mounting Guide that comes with the secure mounting bracket.

The customer-ordered Ruckus Wireless secure mounting bracket kit (ordering part number 902-0120-0000) includes a metal mounting bracket and provides greater security when attaching the AP to flat surfaces (walls and ceilings) and to poles.

- If you are mounting the AP on a flat surface, then you will also need an electric drill with a 4.75mm (3/16") drill bit, and the four No. 6 zinc plated screws and plastic wall anchors included with the kit.
- If you are mounting the AP on a truss or pole, then you will also need the two pipe clamps included with the kit.

Continue with the following:

- A If you are mounting the AP on a flat surface, then use the secure mounting bracket as a template to mark the locations for four drill holes on the mounting surface. There are four screw holes available on the secure mounting bracket.
 Fasten the bracket to the flat surface using four mounting screws and plastic wall anchors and continue with <u>Step D</u>.
- **B** If you are mounting the AP on a pipe or pole, then feed the two stainless steel clamps included with the kit through the slots on the secure mounting bracket. Use common hand tools to tighten the clamps around the pipe or pole.
- C After the bracket is attached, continue with <u>Step D</u>.
- D Insert the two studs on the secure mounting bracket into the keyholes on the bottom of the AP, as shown in Figure 3. Note: There is a second set of keyholes that are for optional sideways mounting on a flat surface. Physical security is not supported when mounting the AP with this set of keyholes.
- **E** Slide the AP toward the Ethernet ports on the AP. The AP has a built-in lock for the secure mounting bracket studs, and snaps into the locked position when the studs are fully in the keyholes.
- F (Optional) Attach a customer-supplied padlock through the integral AP retainer tab (B in Figure 6) to fasten the AP to the secure mounting bracket studs.

Removing the AP from the secure mounting bracket:

- A If the AP is locked to the secure mounting bracket, then remove the lock.
- B Gently push and hold the AP retainer tab (B in <u>Figure 6</u>) to the side to release the secure mounting bracket.
- **C** While holding the AP retainer tab to the side, slide the AP away from the Ethernet ports on the bottom of the AP.

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 *R710 Access Point User Guide*, or refer to the appropriate Ruckus Wireless AP controller or AP manager user documents.

