



C110 Cable Modem Access Point Quick Setup Guide

This Quick Setup Guide provides step-by-step instructions on how to set up your Ruckus Wireless C110 Dual Band 802.11ac Wall Plate Cable Modem Access Point. After completing the steps described in this Guide, you will be able to access the C110 and begin providing wired and wireless network access to your users.

NOTE: The C110 requires a minimum firmware revision of SmartZone 3.4.1 or later, or ZoneDirector 9.13.3 or later to operate.

The C110 has many options:

- Includes DOCSIS (or EuroDOCSIS) 3.0 cable modem
- It can be mounted on a standard USA- or EU-style single-gang wall outlet box.
- It has bottom 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 C110 to the mounting base.
- It can have a low-power (0.5W or less) USB device plugged in.

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.

- Release Notes and other user documentation are available at <http://support.ruckuswireless.com/documents>.
- Software upgrades are available at <http://support.ruckuswireless.com/software>.
- Software license and limited warranty information are available at <http://support.ruckuswireless.com/warranty>.

Before deploying your Ruckus Wireless Access Point, verify that all items listed in *Package Contents* are included in the package. If any item is damaged or missing, notify your authorized Ruckus Wireless sales representative. Also, make sure that you have the required hardware and tools.

Package Contents

- C110 Cable Modem Access Point
- AC/DC power supply
- Mounting bracket
- Two 6mm M3 Torx screws (white)
- Four 1" 6-32 thread Phillips pan head machine screws
- Two 4" long cable ties
- Product warranty statement
- Regulatory flyer
- Declaration of Conformity, if required
- This *Quick Setup Guide*

Required Tools and Setup Requirements

- No. 2 Phillips screwdriver and T10 Torx driver for the mounting bracket screws
- Coaxial cable for backhaul
- A standard USA- or EU-style single-gang wall outlet box

NOTE: If a standard wall outlet box is not available, Ruckus offers a C110 Spacer Bracket (part #902-0124-0000) as an optional accessory.

About Peripheral Devices

The C110 can supply power to USB devices through its USB port on the bottom of the unit.

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.

Step 1: Configuring the Cable Modem (Optional)

NOTE: The C110 normally receives its latest WLAN AP and CM firmware and initial configuration settings from the Ruckus WLAN controller and cable modem termination system (CMTS) high speed data services equipment, respectively, when it powers up; if this is the case, then skip the following steps and continue with Step 6: Attaching the Mounting Bracket to an Outlet Box.

If the WLAN AP in the C110 does not receive its latest firmware and initial configuration settings from the Ruckus WLAN controller when the AP powers up, or if the WLAN AP will be operating in a standalone mode, then continue with these procedures:

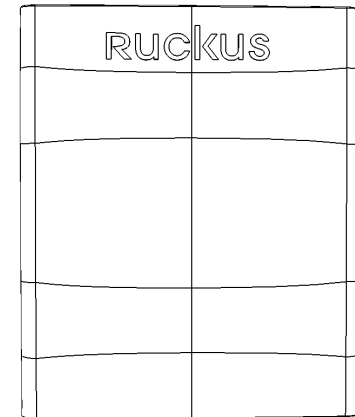
- Step 2: Connecting the Computer to the C110
- Step 3: Preparing Your Computer for C110 Setup
- Step 4: Logging Into the C110 Access Point
- Step 5: Customizing the Wireless Settings

STEP 2: CONNECTING THE COMPUTER TO THE C110

NOTE: The following instructions are for configuring the C110's wireless interfaces. If your C110 will receive its configuration settings from the CMTS/Ruckus WLAN controller, then skip these steps and proceed to Step 6: Attaching the Mounting Bracket to an Outlet Box.

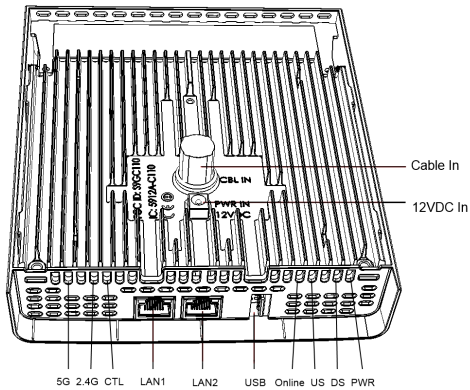
NOTE: For this step you will need a computer with an Ethernet port, wireless card and a web browser.

FIGURE 1 Front view



1. After removing your C110 from its package, place it next to your computer.
2. Using an Ethernet cable, connect your computer's network port to either of the Ethernet ports on the bottom of the C110.
3. Using an AC adapter (included), connect the C110 12VDC port to a protected power source.

FIGURE 2 Rear and bottom view



STEP 3: PREPARING YOUR COMPUTER FOR C110 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 Internet Protocol Version 4 (TCP/IPv4) Properties dialog box appears.

IMPORTANT-QSG: 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: 192.168.100.22 (or any available address in the 192.168.100.x network, except 192.168.100.2)
 - Subnet mask: 255.255.255.0
 - Default gateway: 192.168.100.2
 Leave the DNS server fields empty.
4. Click OK to save your changes.

Your changes are put into effect immediately.

STEP 4: LOGGING INTO THE C110 ACCESS POINT

NOTE: The CM and AP each have their own independent firmware load that are each updated independently.

1. As specified in Step 3: Preparing Your Computer for C110 Setup, the C110 should be directly connected to your computer (through the Ethernet port on the bottom of the C110) and powered on, ready for setup.
2. On your computer, open a web browser window.
3. In the browser, type this URL to connect to the C110:
 - https://192.168.100.2
4. Press <Enter> to initiate the connection. When a security alert dialog box appears, click **OK/Yes** to proceed.
5. When the **Ruckus Wireless Admin** login page appears, enter the following:
 - **Username:** super
 - **Password:** sp-admin
6. Click **Login**. On your first login, you will be prompted to change the default password.
7. When the **Change Password** dialog box displays, enter the following:
 - **New Password:** Enter a new password.
 - **Confirm Password:** Re-enter the new password.
8. Click **Submit**.
9. Log in using the new password.

STEP 5: CUSTOMIZING THE WIRELESS SETTINGS

TABLE 1 Default C110 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	192.168.100.2

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 C110 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 C110 configuration, the C110 uses a DHCP-assigned IP address. If you anticipate logging into the C110 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 C110. On the menu, click Configuration > Internet. Click the Static IP option. Fill in the IP Address and Mask fields. Click Update Settings to save your changes.

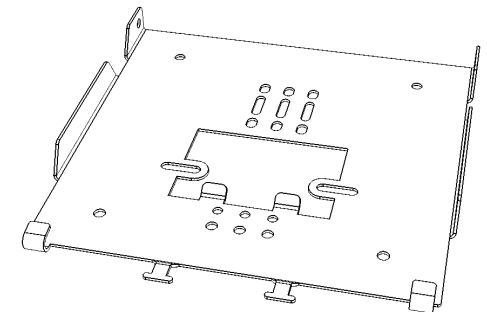
10. When the Ruckus Wireless Admin login page reappears, you can exit your browser.
11. Disconnect the C110 from the computer and from the power source, and then restore your computer to its original network connection configuration.
12. Continue with Step 6: Attaching the Mounting Bracket to an Outlet Box.

STEP 6: ATTACHING THE MOUNTING BRACKET TO AN OUTLET BOX

NOTE: If an outlet box is not available, Ruckus offers a C110 Spacer Bracket Kit (part #902-0124-0000, sold separately) that provides options for mounting to a wall without an outlet box. For mounting instructions, refer to the *C110 Spacer Bracket Quick Setup Guide*, which is included in the bracket accessory kit.

1. Remove the flat mounting bracket from the rear of the AP.

FIGURE 3 Mounting Bracket



2. Using the four 1" 6-32 Phillips mounting screws, attach the C110 mounting bracket to a single-gang wall outlet box.

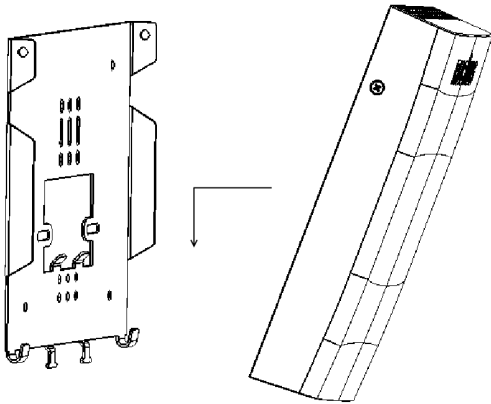
NOTE: The mounting bracket has two hooks that face UP. Make sure that the hooks are facing up when attaching the mounting bracket to the wall outlet box.

3. Pull the coaxial cable for the C110 through the wall outlet box.
4. Pull the power cable from the adapter through the wall outlet box.
5. Pull any bypass cables (up to two) through the wall outlet box. Note: The bypass cables can be Ethernet, coax, or any other type of cable, as required.

STEP 7: ATTACHING THE C110 TO THE MOUNTING BRACKET

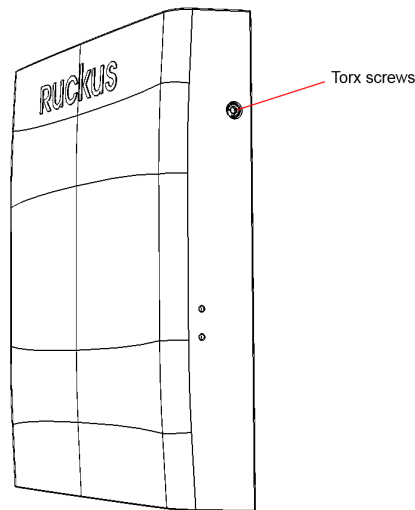
1. Pull any bypass cables (up to two) through the wall outlet box. Note: The bypass cables can be Ethernet, coax, or any other type of cable, as required.
2. If you are installing a USB device (such as a BLE beacon), then plug it securely into the USB jack on the bottom of the C110.
3. Pull the uplink coaxial cable from your network through the outlet box, and plug it into the back of the C110.
4. Connect the power adapter cable to the 12VDC in port on the back of the C110.
5. The mounting bracket has two lower hooks that fit into slots on the bottom of the C110. Rest the bottom of the C110 on those hooks, and then tilt the C110 toward the wall until it is up against the mounting bracket. Any optional bypass cable(s) should slide smoothly into the slots on the bottom panel of the C110.

FIGURE 4 Attaching the C110 to the Mounting Bracket



6. Use a T10 Torx driver to screw the two white torx machine screws through the C110 screw holes into the threaded inserts on the sides of the mounting bracket.

FIGURE 5 : Insert the torx screws to lock the AP to the bracket



STEP 8: TESTING THE C110 OPERATION

After a short pause to re-establish the Internet connection, you can test the C110.

NOTE: As Ruckus does not provide the CMTS side of the connection, the installer must first ensure that the cable modem connection to the CMTS is resolved prior to calling Ruckus Support.

1. Check that the cable modem LEDs are lit. Cable modem LEDs are labeled DS (downstream), US (upstream) and ONLINE.
2. Using any wireless-enabled computer or mobile device, search for and select the wireless network you previously configured (or auto-configured by CMTS).
3. If you can connect, open a browser and navigate to any public website.
4. Using any wired computer or other device and an Ethernet cable, plug into an Ethernet port on the bottom of the C110.
5. Open a browser and navigate to any public website.
6. Repeat Step 4 and Step 5 for the rest of the Ethernet ports on the bottom of the C110.
7. Verify that any connected USB devices are working correctly, if applicable.

Congratulations! Your C110 is active and ready for use.

For more information on AP configuration, maintenance and administration, refer to the *Ruckus Wireless Indoor Access Point User Guide*, available from support.ruckuswireless.com.