

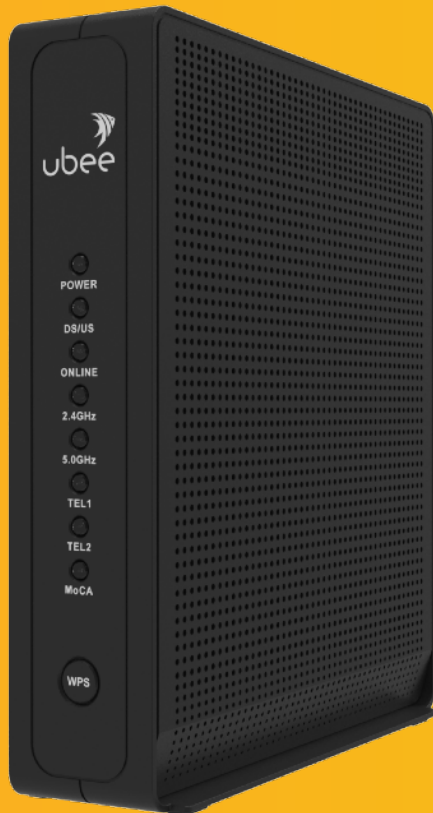


UBC1322AA

DOCSIS 3.1

Wireless eMTA

Quick Installation Guide - Subscriber





• SAFETY NOTICES

Grounding the Device: Install the cable modem to include grounding the coaxial cable to the earth as close as practical to the building entrance per ANSI/NFPA 70 and the National Electrical Code (NEC, in particular, Section 820.93, Grounding of the Outer Conductive Shield of a Coaxial Cable). The device is designed for IT power systems with phase-to-phase voltage at 120V.

This unit requires a 100-240V, 50/60Hz power adapter. Power adapter must be keyed for proper polarization, and must be fully inserted to contact the back of the power connector port to ensure snug connection. Do NOT use any other power adapter.

Disconnecting the Device: If the cable modem becomes damaged or encounters some other abnormality, disconnect the power plug from the AC wall outlet immediately.

Temperature and Altitude: Install the device in a location not to exceed the maximum temperature of 104 Fahrenheit (40 Celsius). Regular operating altitude is 2000 m, and maximum operating altitude is 4500 m.

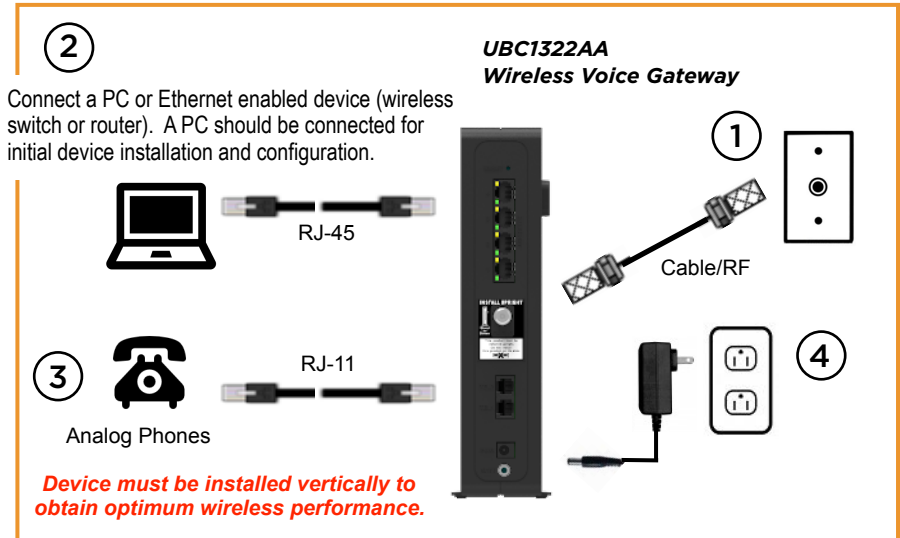
• PREPARING FOR INSTALLATION

- ✓ Locate the RF (coaxial) cable connector on the wall.
- ✓ Verify the power outlet is working and is wired correctly. Place your cable modem within a proper distance from the outlet.

• INSTALLING THE MODEM

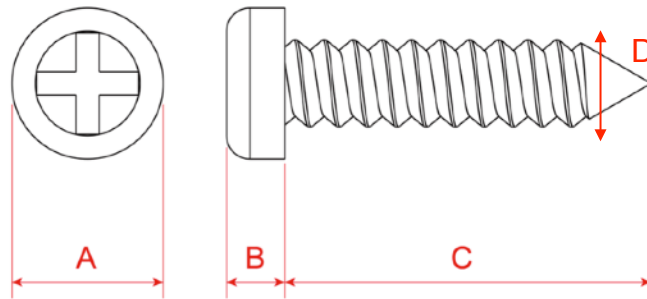
1. Connect the coaxial cable (not supplied) to the CABLE connector on the rear panel of the modem and connect the other end to the cable wall outlet. Do not bend or over tighten the cables, as this may strain the connector and cause damage. To connect a modem and a television to the same wall outlet, you must use a cable line splitter (not included).

2. Connect an Ethernet cable (supplied) to the Ethernet port on the back panel of the modem and connect the other end to the Ethernet port of a PC. Use a Category 5e or Category 6 Ethernet cable with RJ-45 connectors to ensure Gigabit Ethernet speeds (when the computer supports it).
3. Connect an RJ-11 phone cable (not supplied) to the TEL1 port on the modem (when provisioned for voice service as specified by the service provider), and connect the other end to the phone port of the telephone. If voice service is not provisioned through the service provider, telephone service is not available.
4. Connect the power adapter (supplied) to the PWR (power) port. Connect the other end to a power outlet.



• DEVICE WALL MOUNT INSTRUCTIONS

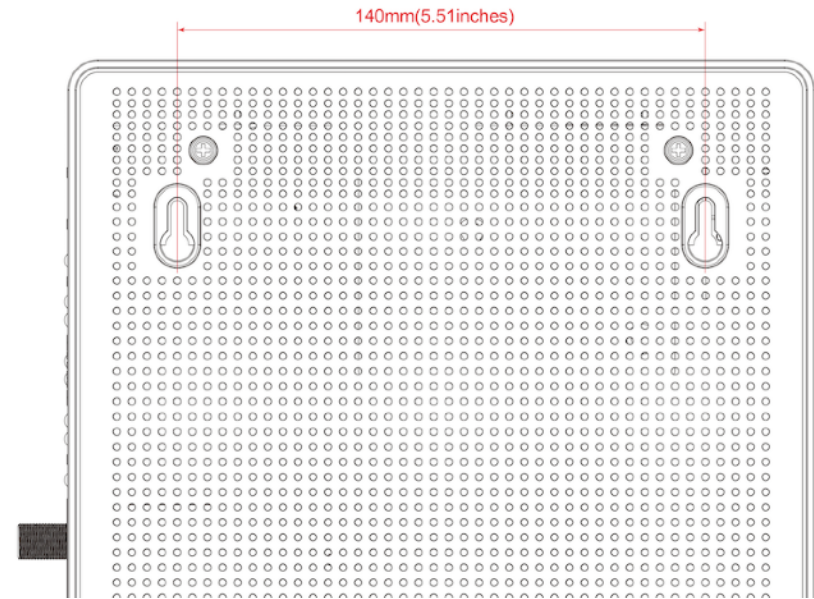
You can mount the UBC1322AA on a wall using the 2 mounting brackets on the side of the device. Two round or pan head screws are recommended. See the figure below for measurements.



Label	Size in Millimeters (mm)
A	6.65 +/- 0.35
B	1.9 +/- 0.15
C	19.0 +/- 1.2
D	4 - 5

To mount the device on a wall:

1. Install the 2 screws horizontally on the wall 140 mm (5.5 inches) apart.



Note: The screws should protrude from the wall so you can fit the device between the head of the screws and the wall. If you install the screws in drywall, use hollow wall anchors to ensure the unit does not pull away from the wall due to prolonged strain from the cable and power connectors.

2. Mount the device on the wall.

NOTE to CATV SYSTEM INSTALLER:

This reminder is provided to call the CATV systems installer's attention to section 820-93 of the National Electric Code, which provides guidelines for proper grounding and in particular, specify that the Coaxial cable shield shall be connected to grounding system of the building, as close to the point of cable entry as practical.

• UNDERSTANDING DEVICE CONNECTIONS AND BUTTONS

The rear and front panel of the UBC1322AA has the following connections and buttons:

RESET: Use to reset the device. Take a small object like the end of a paper clip and insert it into the RESET opening. To power cycle the device, hold for less than **5** seconds. To reset to factory default settings, hold for more than **20** seconds. The UBC1322AA will reset and reboot. **WARNING:** Resetting factory defaults will erase ANY and ALL settings that you have made and will restore the device to factory default settings.

ETHERNET 1-4: Use to connect to an Ethernet-enabled devices such as computers, gaming consoles or a wireless access point (LAN switch, router) using an RJ45 Ethernet cable. Each Ethernet port on the back panel of the device has two LEDs to indicate its status.

When an Ethernet device is connected to the cable modem:

- The **Orange** LED is lit when connected at 10/100 Mbps speeds.
- The **Green** LED is lit when connected at 1000 speeds (Gigabit Ethernet).
- LED blinks (either **Orange** or **Green**) when data is passed between the cable modem and the connected device.

CABLE: Use to connect to the coaxial cable from your Internet service provider.

TEL1-TEL2: Use to connect analog telephones to the device.

PWR: Use to connect to the power adapter. Plug the other end into the wall power outlet.

BATT: Use to connect to an *optional* external battery.

WPS: Located on the front panel of the device, it is used for the Wi-Fi Protected Setup (WPS) method to connect a PIN-protected Wi-Fi device to the cable modem. When a user pushes the WPS button or triggers WPS via Web UI, flashes for 4 minutes until PIN is entered from the wireless client. After a WiFi client attaches successfully, the LED remains on for 5 minutes, then turns off.

• BASIC MODEM INFORMATION

Example of Cable RF MAC Address	00:71:CC:8E:54:C7
Firmware Version	12.6.xxxx
Compatibility	DOCSIS 3.1/3.0/2.0/1.0 certified Ethernet 10/100/1000 Mbps Wireless 802.11a/b/g/n/ac
Local Web User Interface Access	http://192.168.100.1 or http://192.168.0.1
Modem Web Page Login (web user interface)	Login: admin Password: Randomly generated string, 12 characters in length. Found on the device label. This is your login password.
Encryption	WPA2-PSK with AES encryption
Wireless Default SSID	“WIFI” plus the last 6 characters of the Cable Modem MAC address (in upper case). “-5G” is added when the 5GHz band is being used.
SSID Examples	2.4GHz radio with above MAC address: SSID = WIFI8E54C7 5GHz radio with above MAC address: SSID = WIFI8E54C7-5G
WPA2-PSK Wireless Key	Randomly generated string, 16 characters in length. Found on the device label. This is your wireless password.
WPA2-PSK Wireless Key Example	HP3WZ7IHXCT6D9QS

• LED BEHAVIOR

LED	COLOR	DESCRIPTION
POWER	GREEN	ON - Internal power-on completed successfully. FLASHES - Power-on failed. Note: LED blinks briefly immediately after powering on the device. OFF - No power supplied.
DS/US (downstream/ upstream)	GREEN	FLASHES - DS and US scans in progress. Also flashes when a firmware upgrade is in progress. ON - Locked to DS and US channels and registered OK, and when data is being passed.
ONLINE	GREEN	FLASHES - Obtaining IP address and configuration file. ON - Configuration completed successfully, network connected. OFF - Network connect failed.
2.4G	GREEN	FLASHES - 2.4GHz WiFi traffic is being passed. ON - 2.4GHz WiFi is enabled. OFF - 2.4GHz WiFi is disabled.
5G	GREEN	FLASHES - 5GHz WiFi traffic is being passed. ON - 5GHz WiFi is enabled. OFF - 5GHz WiFi is disabled.
TEL1 / TEL2	GREEN	ON - Telephony is enabled and telephone is on-hook. OFF - Telephony is not provisioned. FLASHES - Call is in progress or eMTA is attempting to register.
MoCA	GREEN	ON - Device is connected to a MoCA network. OFF - Device is not connected to a MoCA network.
WPS	WHITE	When a user pushes the WPS button or triggers WPS via the web user interface, the WPS LED flashes for 4 minutes until the PIN is entered from the wireless client. After a WiFi client attached successfully, the LED remains on for 5 minutes, then turns off.
ETHERNET 1-4 (rear panel)	GREEN / ORANGE	ON GREEN - An Ethernet device is connected to the UBC1322AA at 1000 Mbps speed. ON ORANGE - An Ethernet device is connected to the UBC1322AA at 10/100 Mbps speeds. FLASHES (GREEN or ORANGE) - Data is being passed between the UBC1322AA and the connected Ethernet device.

* Please note that both the 2.4GHz and 5GHz radios are enabled by default.

• FEDERAL COMMUNICATION COMMISSION INTERFERENCE STATEMENT

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 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 of the following measures:

- 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.

5GHz Wireless Statement:

For operation within the 5.15-5.25GHz and 5.47-5.725GHz frequency ranges, this device is restricted to indoor environments.

This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 38cm between the radiator & your body.