

HARDWARE INSTALLATION GUIDE RA200 SERVICE-READY ACCESS POINT



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TRADEMARKS



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COMPANY HEADQUARTERS

1525 McCarthy Boulevard, Suite 209 Milpitas, CA 95035, USA

www.relay2.com

(408) 380-0031

NOTES

This device follows FCC Part 15. Two general conditions of operation:

- 1. No harmful interference is caused by this device.
- 2. This device can accept interference that may be caused by unexpected operation.

ATTENTION

Any unauthorized modifications or replacement of components may violate FCC regulation and be cause to invalidate FCC authorization.

PRODUCT OVERVIEW

The RA200 family is a cloud-managed Service-Ready Access Point (SR-AP) offering Edge Computing and storage capabilities with a highperformance wireless access point integrated. It enables businesses to deliver superior venue experiences, enhance business operations, and create competitive advantages. The RA200 family consists of various models—including the RA250, RA270, RA275, and RA280—to support various deployment needs. For more information about the RA200 family, refer to www.relay2.com.



Opening the Package

- Please ensure that all ordered optional accessories are included in the separate accessory box.
- Please peel off the protective film before using the AP.
- Please do not use a different power adapter than the one included with the package.
- Please check the packaging list first. If there are any missing or broken parts, please contact the authorized distributor of Relay2, Inc.

Safety

- Read the hardware installation guide carefully before installation and power up.
- The power supply can be either a 48 VDC power adapter or an IEEE 802.3at-compatible PoE+.
- Make sure the power input matches the voltage range of the power adapter.
- To avoid overheating, make sure the AP allows for proper heat dissipation, and leave enough room for air circulation.
- To avoid scalding, do not directly touch the bottom of the AP. When the AP is in operation, the surface temperature of the back plate will be very hot.
- Any unauthorized modification of the product structure and safety design is not allowed.
- Do not put anything on top of the AP. If the AP gets liquid in it, please disconnect the power supply, disconnect all network connections, and contact the authorized distributor of Relay2, Inc.

Before You Start

- Do not install the AP outdoors without a shield.
- Before installation, a signal-detecting test can be used to determine the best installation position.
- Keep your body at least 20 cm away from the AP during installation and operation.
- Install the AP at least 1 m distance from any metal obstructions to avoid radio signals affected by metal shielding effect.
- To avoid radio interference, keep the device away from magnets or magnetic fields (i.e., do not place it near a microwave, refrigerator, etc.)
- If there is a statement prohibiting the use of wireless devices in restricted places and explosive areas, please do not install the wireless AP.
- The wireless AP is equipped with a grounding screw on the wall-mounting plate; be sure to tighten the ground wire to the ground screw lock position to prevent lightning strikes.

Warranty

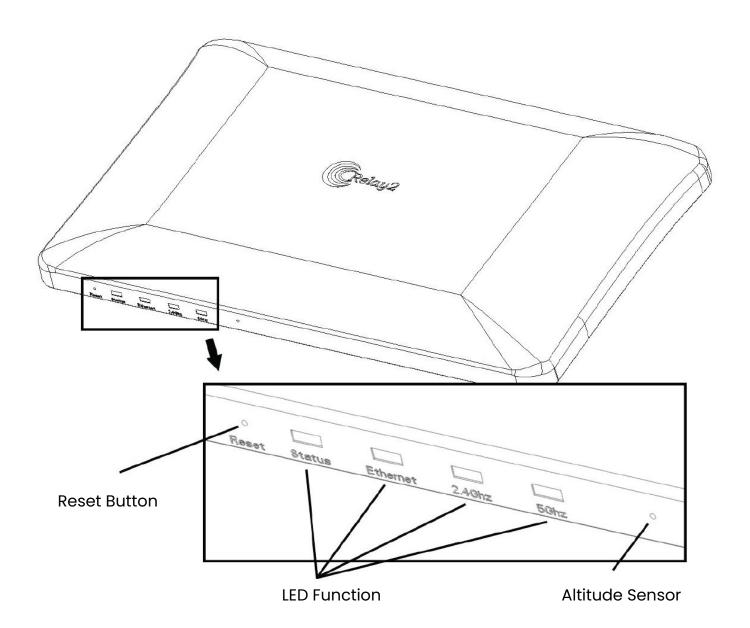
- Please provide the device model, MAC address, and serial number shown on the tag of the rear panel.
- The warranty does not cover a product that has been opened without authorization from Relay2 Inc.
- Reasonable repair and shipping costs will be charged for product faults or damage caused by using non-Relay2 accessories or improper operation.

ACCESSORIES LIST

KIT	PICTURE	COMPONENT NAME	QTY.
Universal Mount Kit		Universal Mount Kit	1
	Community of the second s	Screw Set for Mounting Kit	4
Power Adapter (Optional)		Power Adapter	1
		Power Cord	1

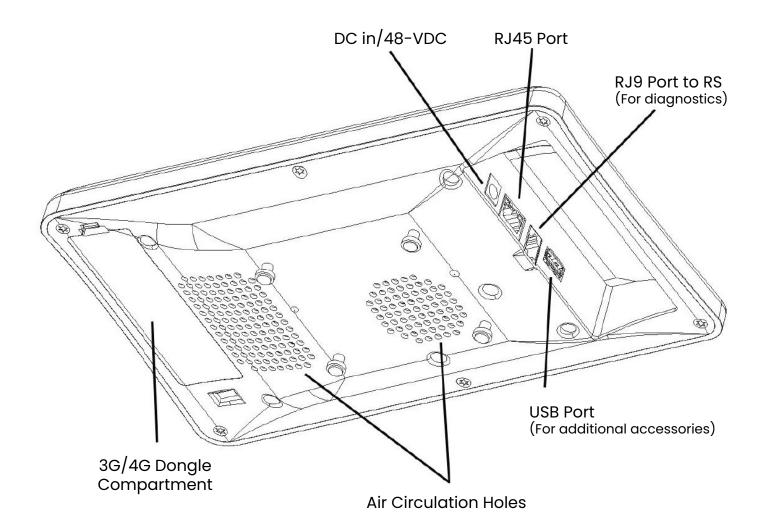
DISPLAY AND LEDS

WLAN Access Point (Front)

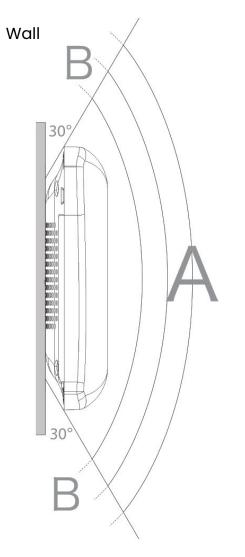




WLAN Access Point Interfaces (Back)



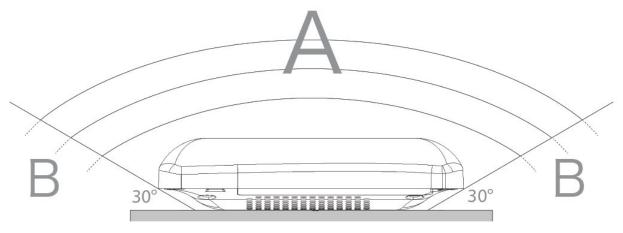
SIGNAL COVERAGE AREA



Install Reference

A: Strong signal coverage area

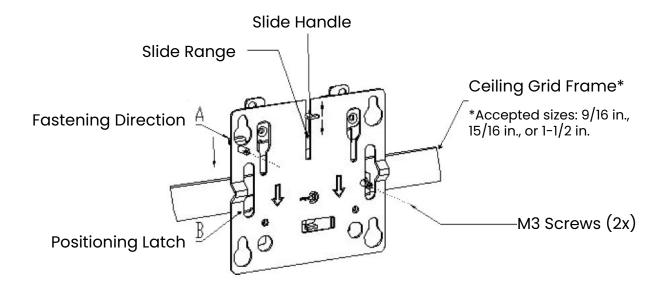
B: Weak signal coverage area



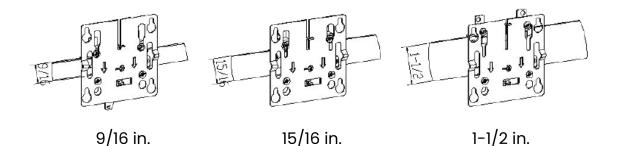
Table

CEILING INSTALLATION

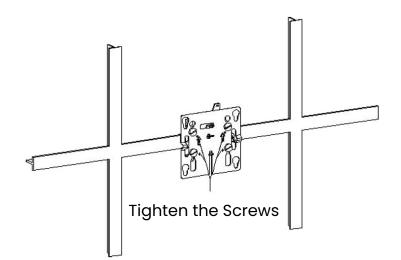
Universal Mount

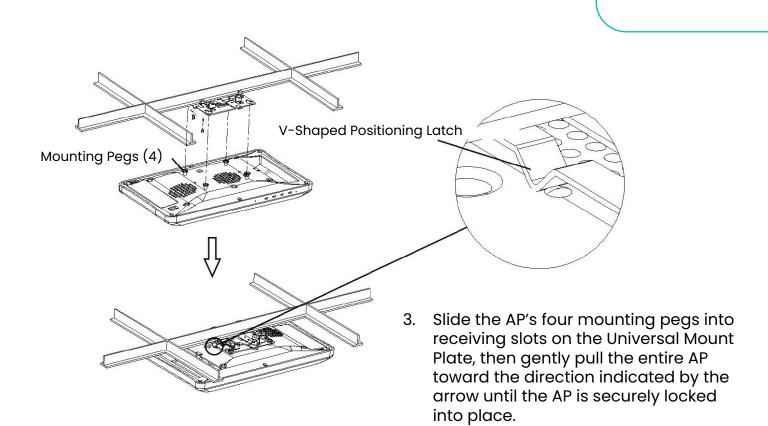


1. The universal mount is adjustable to three different widths to suit various ceiling frame sizes: 9/16 in., 15/16 in., and 1 1/2 in.

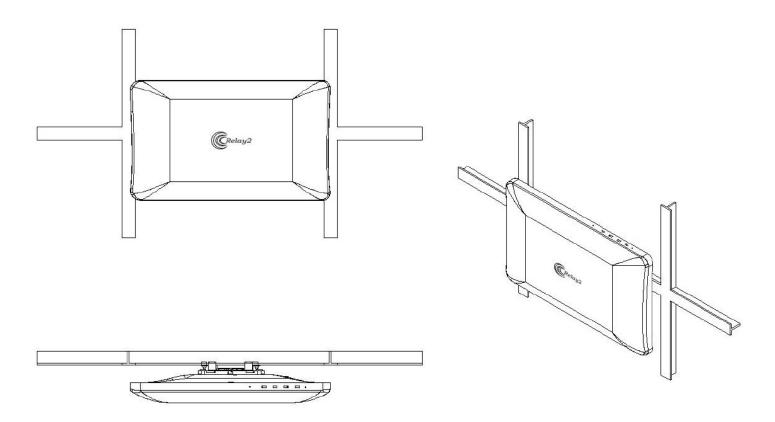


2. Place the universal mount over the ceiling frame and pinch the sliders until the frame is captured. Tighten the screws to lock the sliders in place. Check to ensure the mount is secure.



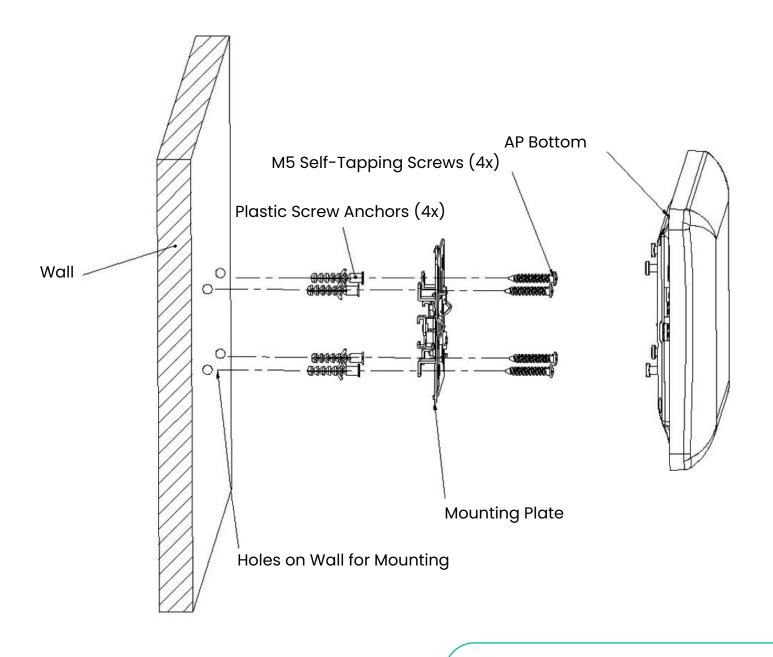


Complete Assembly (Ceiling Installation)

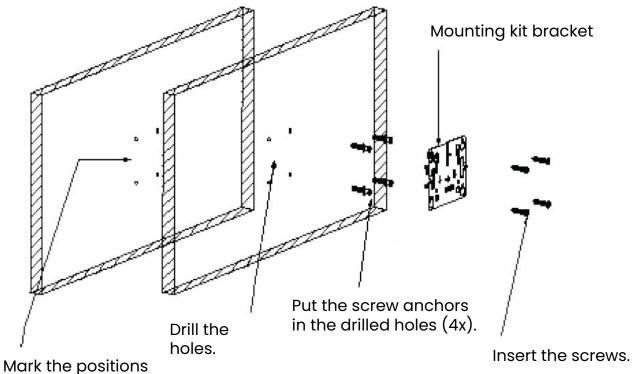


WALL INSTALLATION

1. The universal mount can also be used to install the RA200 on walls. Drywall, plasterboard, and other similar indoor wall materials are suitable to secure the access point.

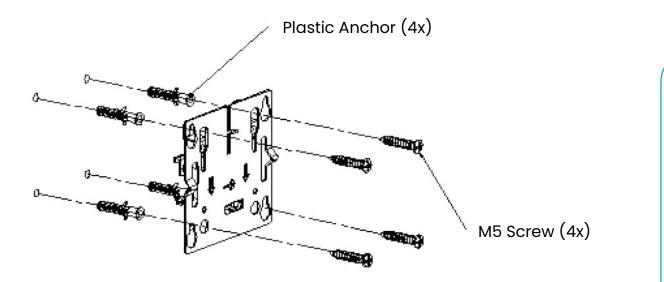


2. Place the universal mount against the wall in the location the AP is to be installed. Mark the holes with a scribe or pen after the desired positioning is achieved. With the appropriately sized drill bit, drill four holes in the wall with the mount in place. The drilled holes should be about the same diameter as the plastic screw anchors. Remove the mounting plate. Tap the plastic screw anchors into place with a mallet.

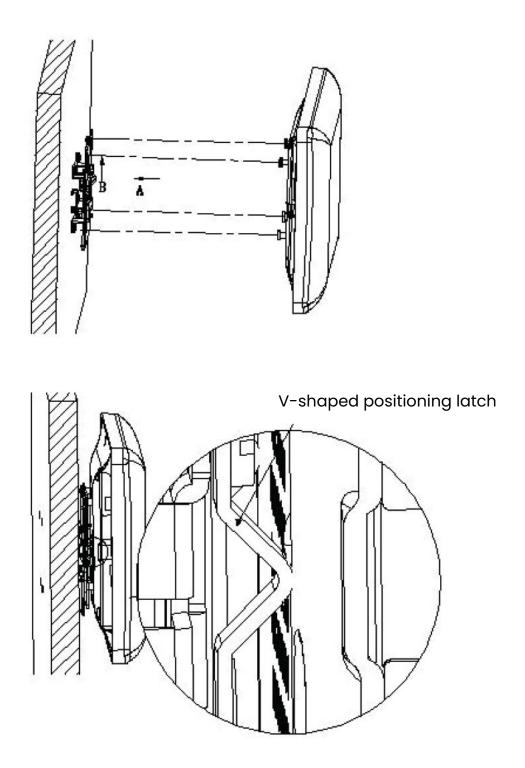


Mark the position for the holes.

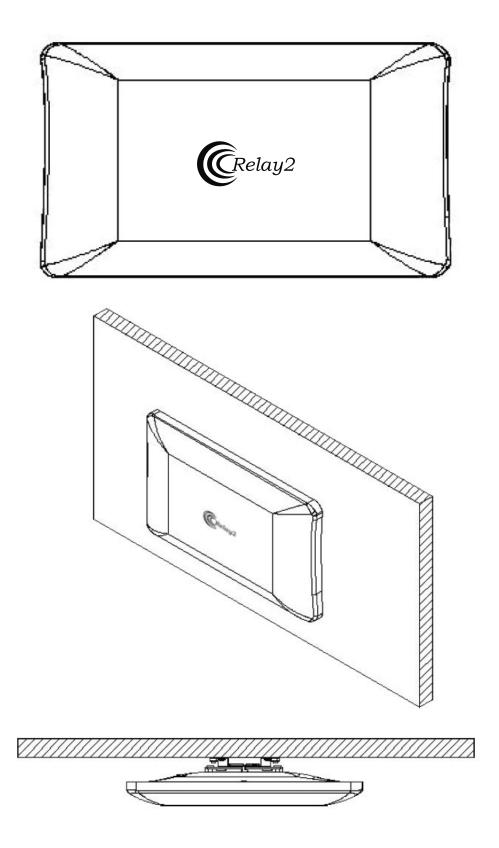
3. Place the mount against the wall and fasten it with the M5 Screws as shown below.



4. Slide the four mounting pegs on the back of the AP into the holes of the mounting bracket, then slightly pull in the direction of arrow B. The AP will not be positioned on the bracket.



Complete Assembly (Ceiling Installation)



HARDWARE SPECIFICATIONS

Weight	0.65 KG	
Mounting	Desktop, Ceiling, or Wall Mount	
Physical Dimensions	255 mm x 155 mm x 38 mm (not including desk mount feet or wall mounting kit)	
Power	 PoE+ (802.3at compatible) 48 VDC power adapter When both PoE+ and DC power adapters are connected to the AP as redundant power supply, the DC adapter has precedence over the PoE+. 	
Power Consumption	Maximum 18 W	
Operating Temperature	32°F–104°F (0°C–40°C)	
Operating Humidity	15%-95% noncondensing	
Storage Temperature	-4°F-176°F (-20°C-80°C)	
Network Interface	One RJ45 GE port (802.3at standard PoE+)	
Antennae	Embedded Directional Antennae Gain: 3 dBi at 2.4 GHz, 5 dBi at 5 GHz	
LED Indicators	1x power status Indicator 1x Ethernet connectivity indicator 1x 2.4 GHz indicator 1x 5 GHz indicator	
Regulatory	FCC (US), TA (China)	
Certifications	Wi-Fi Certified	

FCC Disclaimer

§ 15.19 Labeling Requirements

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.

§ 15.21 Information to User

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

§ 15.105 Information to the User

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, resolve the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to 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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Operations in the 5.15–5.35 GHz band are restricted to indoor usage only.