

MR30H Installation Guide

The Cisco Meraki MR30H is a dual-band 802.11ac cloud-managed access point with integrated Ethernet switch. Designed for room wireless and wired connectivity, the MR30H is easy to install on the wall on a single gang box, and is the first cloud managed hospitality AP.

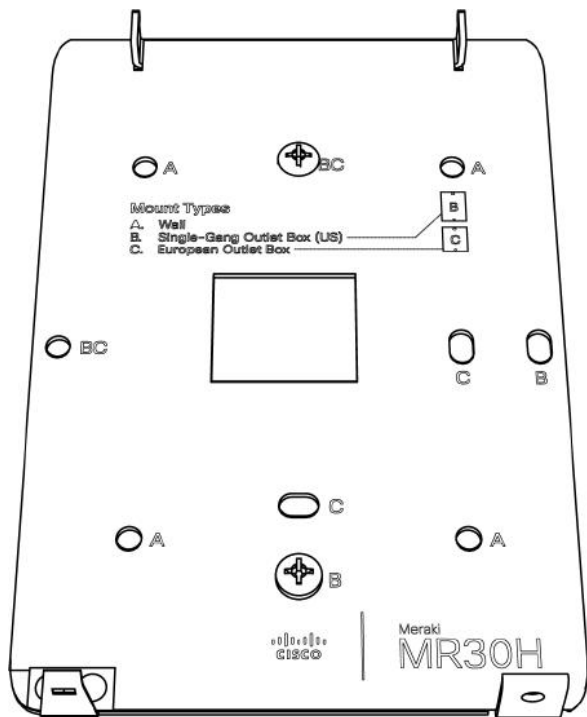
Package Contents

The MR30H package contains the following:

MR30H Cloud-Managed Access Point

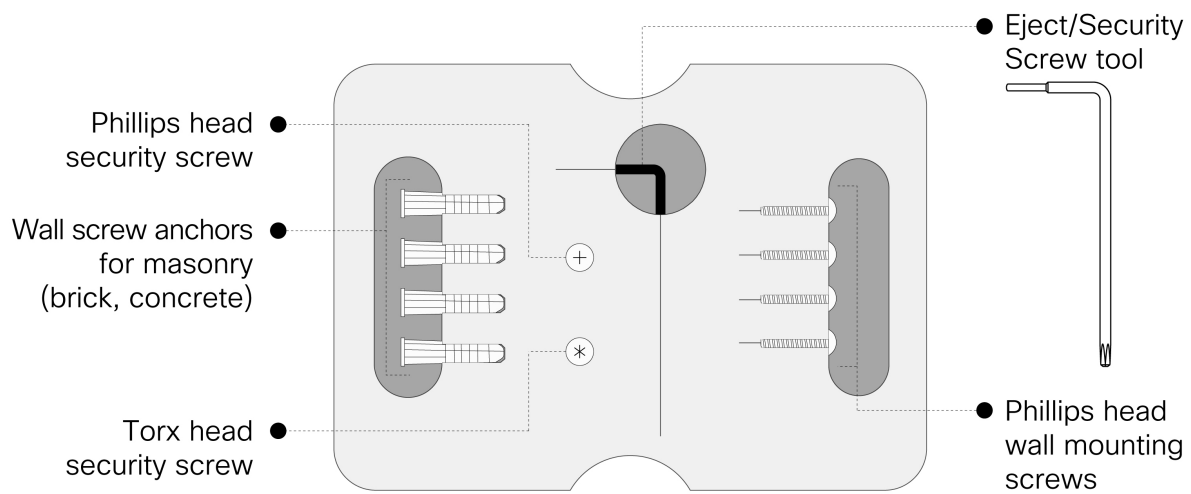


Mount cradle



Mount Kit

- Wall screws, wall screw anchors, and security screws
- Eject/Security Screw tool



Security Features

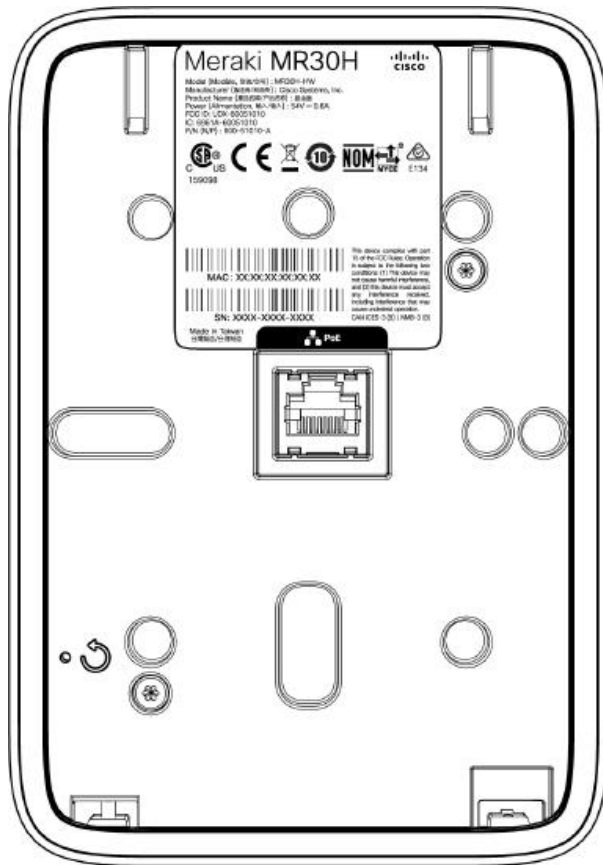
The MR30H features multiple options for physically securing the access point after installation:

1. Security screw – The accessory kit includes screws that can be used to secure the access point to the mount cradle. Engaging the security screw prevents accidental dislodging and theft.

Ethernet Ports

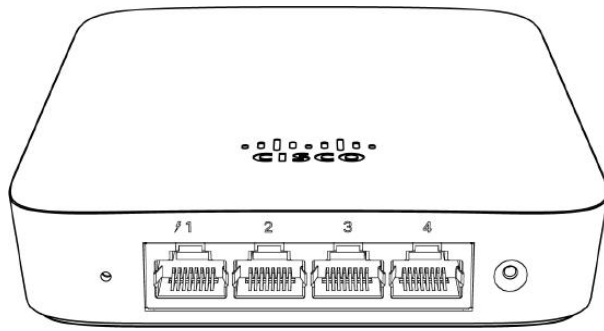
Uplink

The MR30H features a Gigabit Ethernet RJ45 port that accepts 802.3at and 802.3af power on the rear of the unit. This port should be used for uplink to your WAN connection.



LAN Access Ports

The MR30H features 4x LAN ports labeled 1 through 4. Port 1 may provide 802.3af out to a end device if the MR30H is powered via a 802.3at power source. Configuration details can be found in the [AP port profiles](#) article.



Power Source Options

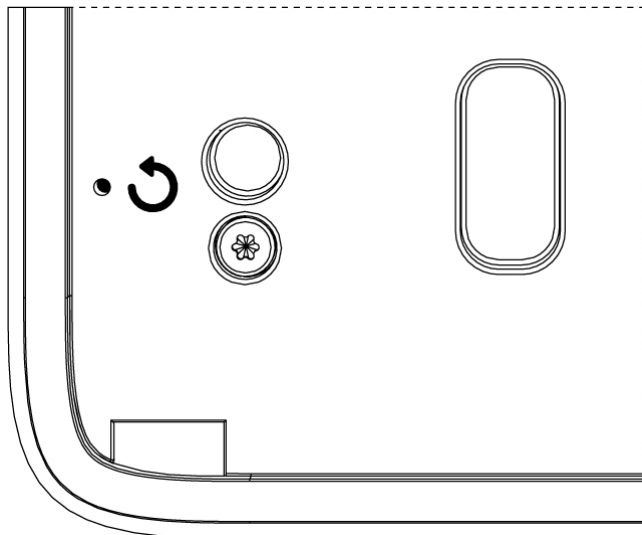
The MR30H access point can be powered via PoE using either the Meraki PoE Injector (sold separately), or a PoE switch.

- i** The MR30H will function in low power mode when powered by a 802.3af power source. While in low power mode, the MR30H will disable 802.3af out on the LAN1 port. Despite being in low power mode, the device can still supply full wireless capabilities.

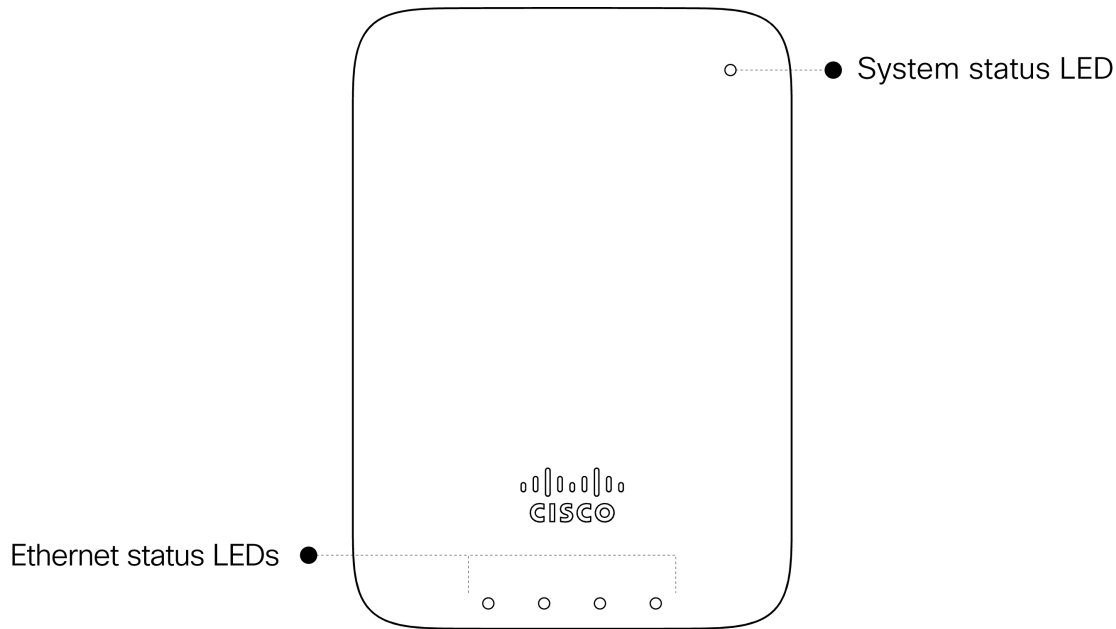
Factory Reset Button

If the button is pressed and held for at least five seconds and then released, the MR30H will reboot and be restored to its original factory settings by deleting all configuration information stored on the unit.

- i** The factory reset button is located on the rear of the unit and must be ejected from the mount plate in order to be activated.



LED Indicators



System Status

The MR30H is equipped with a multi-color LED light on the front of the unit on the top right to convey information about system functionality and performance. The LED shines through the faceplate of the AP and is not visible when either disabled via Run Dark mode or powered off.

- Orange - AP is booting (permanent Orange suggests hardware issue)
- Blinking Orange - AP can't find uplink
- Rainbow - AP is initializing/scanning
- Blue - AP in Gateway mode with clients
- Blinking Blue - AP is upgrading
- Green - AP in Gateway mode with no clients

Ethernet Status

The MR30H features four green Ethernet status LEDs near the bottom of the faceplate. When an Ethernet client is connected, the LED will shine through the faceplate if Run Dark mode is not enabled.

Run Dark Mode

The MR30H may be operated in “Run Dark” mode for additional security and to reduce the visibility of the access point. In this mode, the LED will not be illuminated. This mode may be [configured](#) through Meraki dashboard.



When a MR30H is rebooted with rundark mode enabled, a orange LED will illuminate during boot then all lights will be turned off after boot.

Pre-Install Preparation

You should complete the following steps before going on-site to perform an installation.

Configure Your Network in Dashboard

The following is a brief overview only of the steps required to add an MR30H to your network. For detailed instructions about creating, configuring and managing Meraki wireless networks, refer to the online documentation (documentation.meraki.com).

1. Login to <http://dashboard.meraki.com>. If this is your first time, create a new account.
2. Find the network to which you plan to add your APs or create a new network.
3. Add your APs to your network. You will need your Meraki order number (found on your invoice) or the serial number of each AP, which looks like Qxxx-xxxx-xxxx, and is found on the bottom of the unit. You will also need your Enterprise license key, which you should have received via email.
4. Go to the map / floor plan view and place each AP on the map by clicking and dragging it to the location where you plan to mount it.

Check and Upgrade Firmware

To ensure your MR30H performs optimally immediately following installation, it is recommended that you facilitate a firmware upgrade prior to mounting your MR30H.

1. Attach your MR30H to power and a wired Internet connection. See the "Power the MR30H" section for details.
2. The MR30H will turn on and the LED will glow solid orange. If the unit does not require a firmware upgrade, the LED will turn either green (no clients associated) or blue (clients associated) within thirty seconds.

* If the unit requires an upgrade, the LED will begin blinking orange until the upgrade is complete, at which point the LED will turn solid green or blue. You should allow at least a few minutes for the firmware upgrade to complete, depending on the speed of your internet connection.

Check and Configure Firewall Settings

If a firewall is in place, it must allow outgoing connections on particular ports to particular IP addresses. Check the Meraki Dashboard under the help section for Firewall information.

Assigning an IP Address to the MR30H

All gateway MR30Hs (MR30Hs with Ethernet connections to the LAN) must be assigned routable IP addresses. These IP addresses can be dynamically assigned via DHCP or statically assigned.

Dynamic Assignment

When using DHCP, the DHCP server should be configured to assign a static IP address for each MAC address belonging to a Meraki AP. Other features of the wireless network, such as 802.1X authentication, may rely on the property that the APs have static IP addresses.

Static Assignment

Static IPs are assigned using the local web server on each AP. The following procedure describes how to set the static IP:

1. Using a client machine (e.g., a laptop), connect to the AP wirelessly (by associating to any SSID broadcast by the AP) or over a wired connection.
2. If using a wired connection, connect the client machine to the MR30H either through a PoE switch or a PoE Injector. If using a PoE switch, plug an Ethernet cable into the MR30H's Ethernet jack, and the other end into a PoE switch. Then connect the client machine over Ethernet cable to the PoE switch. If using a PoE Injector, connect the MR30H to the "PoE" port of the Injector, and the client machine to the "LAN" port.
3. Using a web browser on the client machine, access the AP's built-in web server by browsing to <http://my.meraki.com>. Alternatively, browse to <http://10.128.128.128>.
4. Click on the "Uplink Configuration" tab. Log in. The default login is the serial number (e.g. Qxxx-xxxx-xxxx), with no password (e.g., Q2DD-551C-ZYW3).
5. Configure the static IP address, net mask, gateway IP address and DNS servers that this AP will use on its wired connection.
6. If necessary, reconnect the AP to the LAN.

Static IP via DHCP Reservations

Instead of associating to each Meraki AP individually to configure static IP addresses, an administrator can assign static IP addresses on the upstream DHCP server. Through "DHCP reservations," IP addresses are "reserved" for the MAC addresses of the Meraki APs. Please consult the documentation for the DHCP server to configure DHCP reservations.

Installation Instructions

Choose Your Mounting Location

A good mounting location is important to getting the best performance out of your MR30H access point. Keep the following in mind:

1. The device should have unobstructed line of sight to most coverage areas for highest performance.
2. Power over Ethernet supports a maximum cable length of 300 ft (100 m).

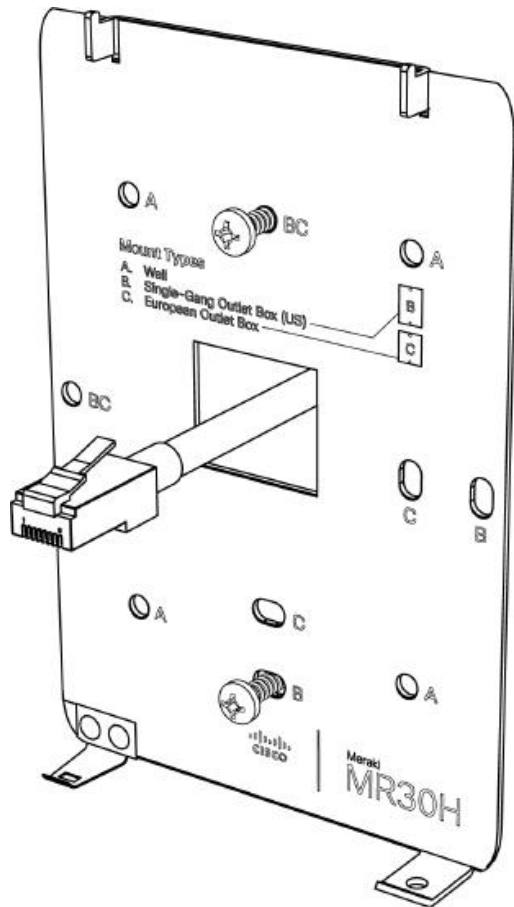
Install the MR30H

For most mounting scenarios, the MR30H mount cradle provides a quick, simple, and flexible means of mounting your device. The installation should be done in two steps. First, install the mount cradle to your selected location. Then, attach the MR30H to the mount cradle.

Attach the mount cradle

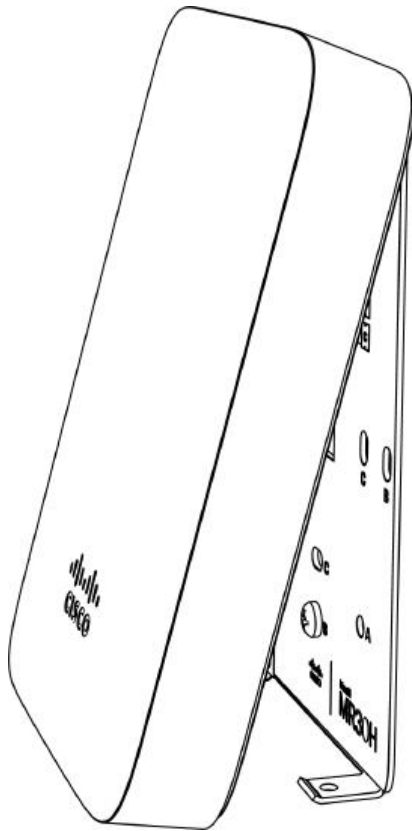
The MR30H can be mounted to a 4" square cable junction box and European outlet boxes (mounting screws are not included).

Using appropriate mounting hardware for your specific type of junction box, attach the mount cradle to the junction box.

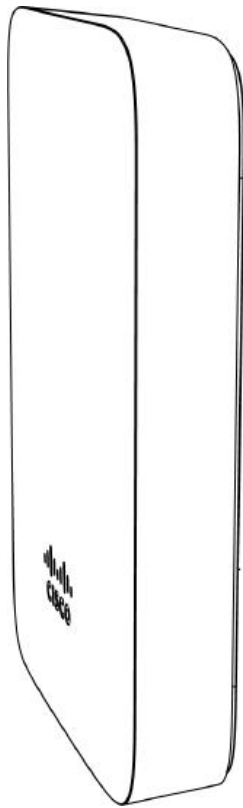


Attach the MR30H to the Mount Cradle

To attach the MR30H to the mount cradle properly, line up the top edge of the AP with the top tab of the mount cradle. Since the cradle is already mounted to the wall, guide the MR30H towards the top tab and insert the top tabs into the MR30H's slot.

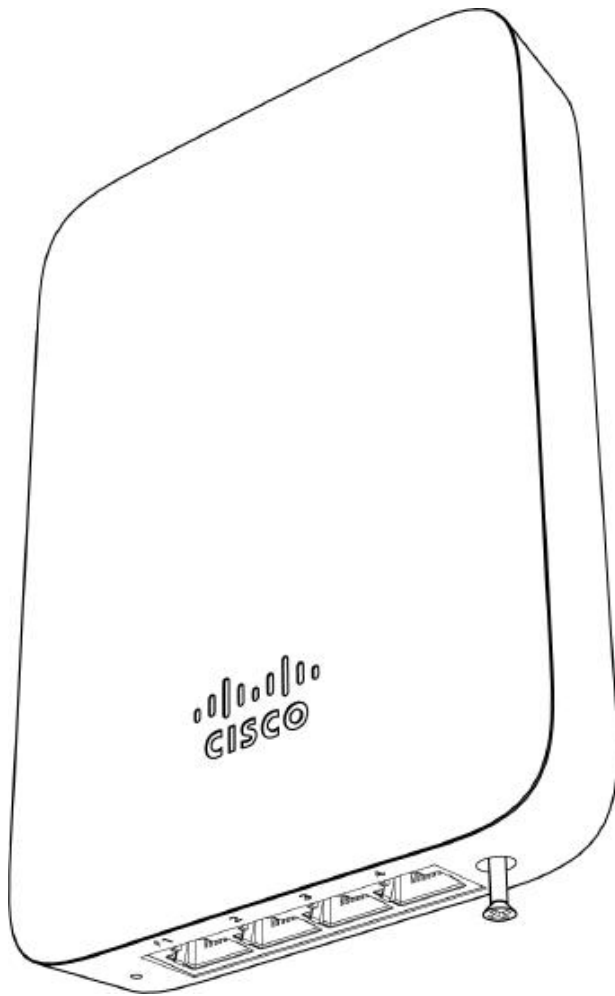


Then adjust the MR30H to guide the MR30H's bottom slot into the cradle's bottom tab until it clicks into place. Once in place, the MR30H should be secured to the cradle by using one of the included screws in the cradle's bottom tab.



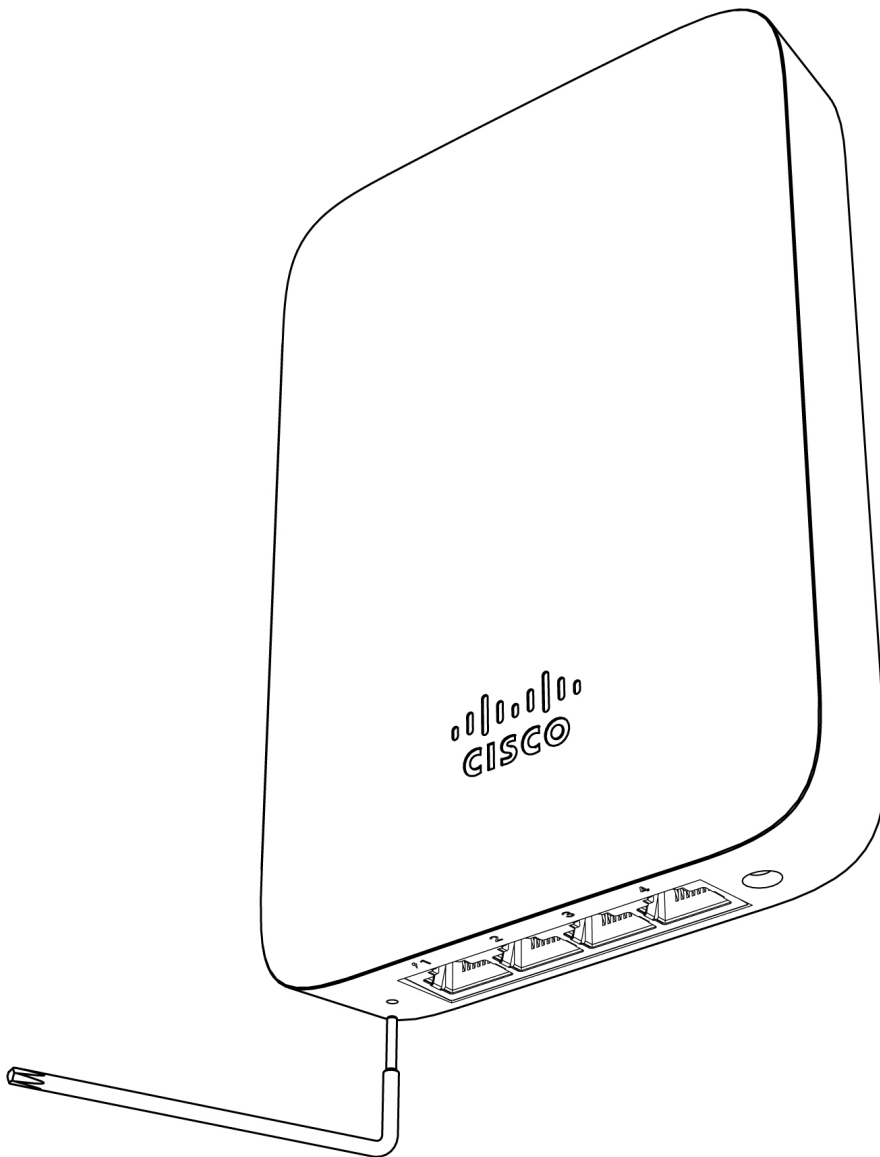
Secure the MR30H

Depending on your mounting environment, you may want to secure the MR30H to its mount location. Your MR30H can be secured via security screw (Torx security screws are included).



Ejecting MR30H from mount plate

To release the MR30H from the mount cradle, first remove the security screw that secures the MR30H to the cradle's bottom tab. While holding the MR30H with one hand, use the eject tool to trigger the release mechanism. Then remove the MR30H from the cradle's top tab.



Verify Device Functionality and Test Network Coverage

1. Check LEDs
 - a. The Power LED should be solid green (or blue, if clients are connected). If it is flashing blue, the firmware is automatically upgrading and the LED should turn green when the upgrade is completed (normally within a few minutes). See the "[LED Indicators](#)" section for more details. .
 - b. Note: Your MR30H must have an active route to the Internet to check and upgrade its firmware.
 2. Verify access point connectivity
 - a. Use any 802.11 client device to connect to the MR30H and verify proper connectivity using the client's web browser.
 3. Check network coverage
 4. Confirm that you have good signal strength throughout your coverage area. You can use the signal strength meter on a laptop, smart phone, or other wireless device.
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Troubleshooting

Reference the [MR Product Page](#) for additional information and troubleshooting tips.