

How to set up new access points and cameras



Meraki



vodafone
business



As your business changes, you may want to **expand your network** to get greater Wi-Fi coverage by adding **new Wireless Access Points** or by adding **new smart security cameras** into the same great dashboard to enhance your businesses physical security.

**Either way, we've
got you covered with
Complete Connectivity**



Once you've been in touch and placed your order for your new devices, it's time to add them into your dashboard.

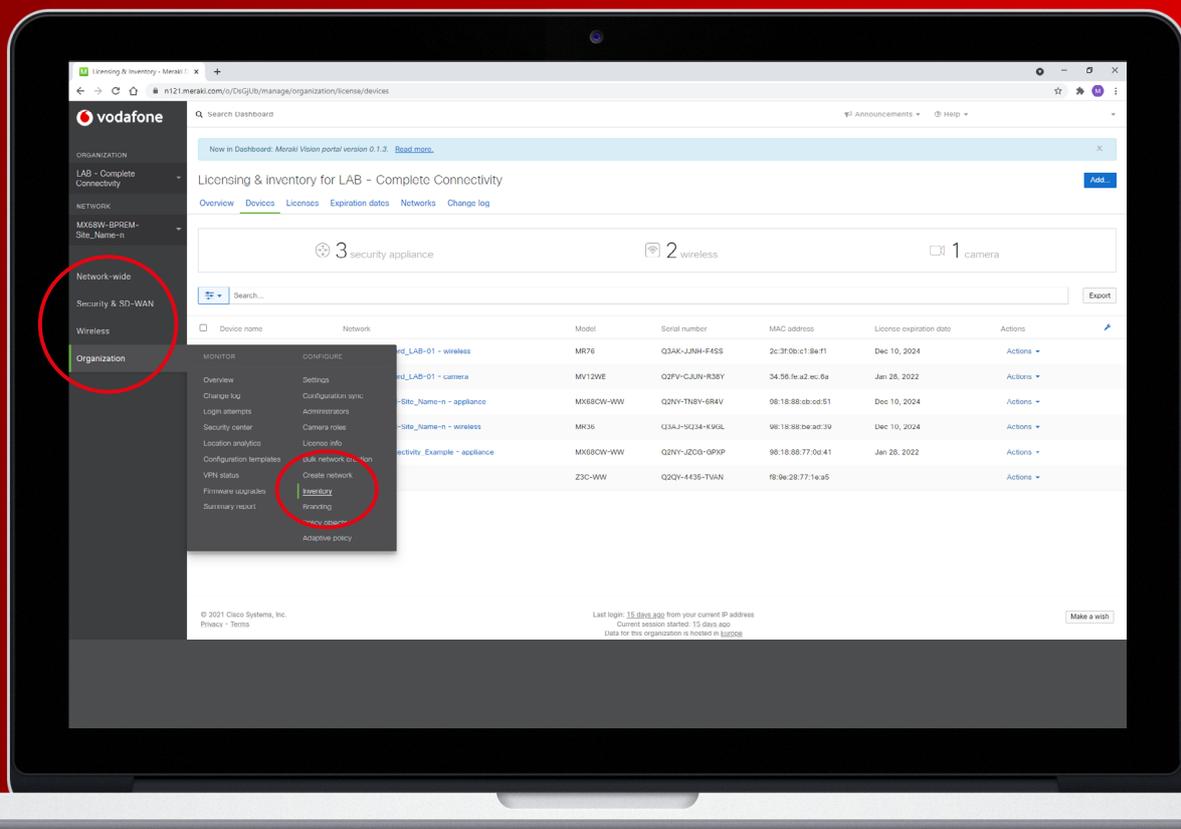


HOW TO SET UP NEW ACCESS POINTS AND CAMERAS

When you request a new device, Vodafone will make sure the device is added on your organisation & your network.

1

To confirm that the new device is added, go to **Organisation** menu and select **Inventory**;

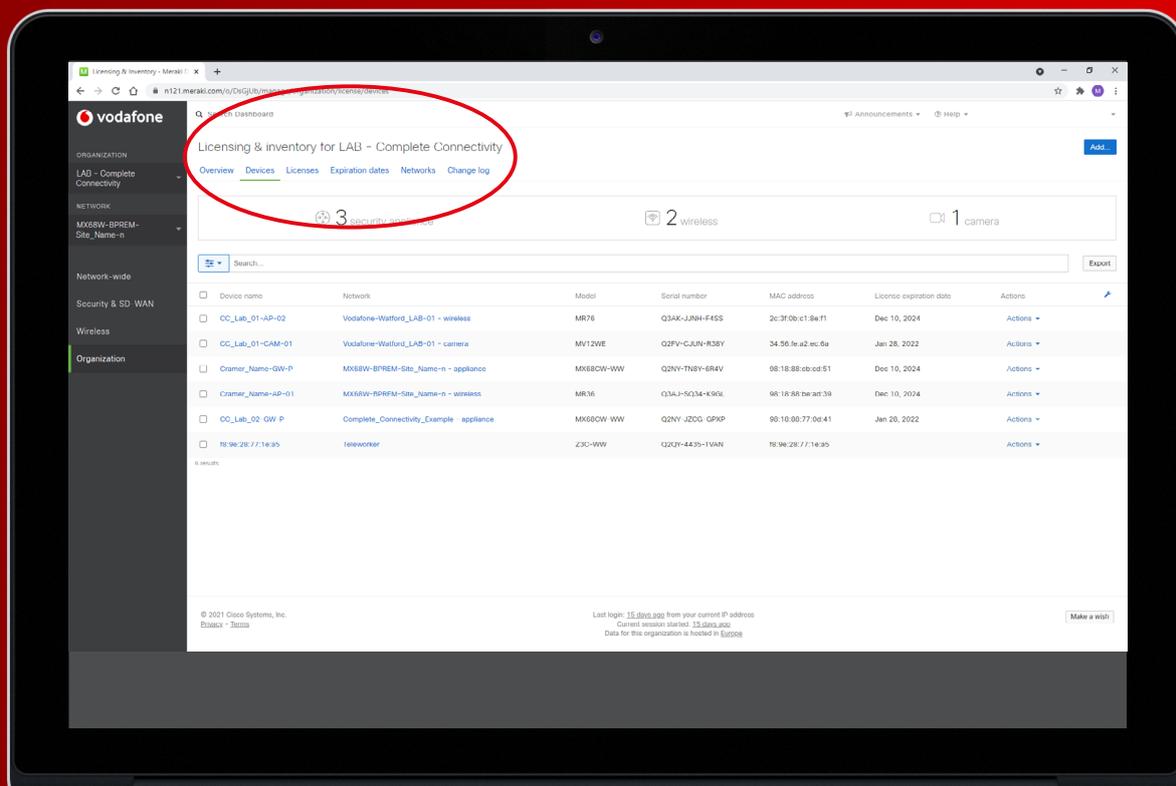


HOW TO SET UP NEW ACCESS POINTS AND CAMERAS

When you request a new device, Vodafone will make sure the device is added on your organisation & your network.

2

Confirm that your new device serial number is available in your organisation inventory and assigned to the right network;



Now to install your Meraki Access points:

1

You need to **choose your Access point Mounting Location carefully**, a good mounting location is important to get the best performance out of your access point.

2

Attach Meraki MR Access point to power via the Meraki “Power over Ethernet” (PoE) injector provided using an Ethernet cable.

The Meraki PoE injector allows delivery of both data and power to a Meraki access point over a single Ethernet cable, allowing deployment of devices exactly where they are needed to provide the best wireless coverage at a much lower installation cost.

ALWAYS MAKE SURE TO:



- 1. The Meraki MR Access point should not be obstructed by any walls, metal objects or blockers.** For example, if installing in an office filled with workspaces divided by mid-height cubicle walls, installing on the ceiling or high on a wall would be ideal.
- 2. Avoid placing the device adjacent to other electrical equipment.**
- 3. Place the device at a no longer distance than 100m (300 ft) from your Meraki MX security appliance.**

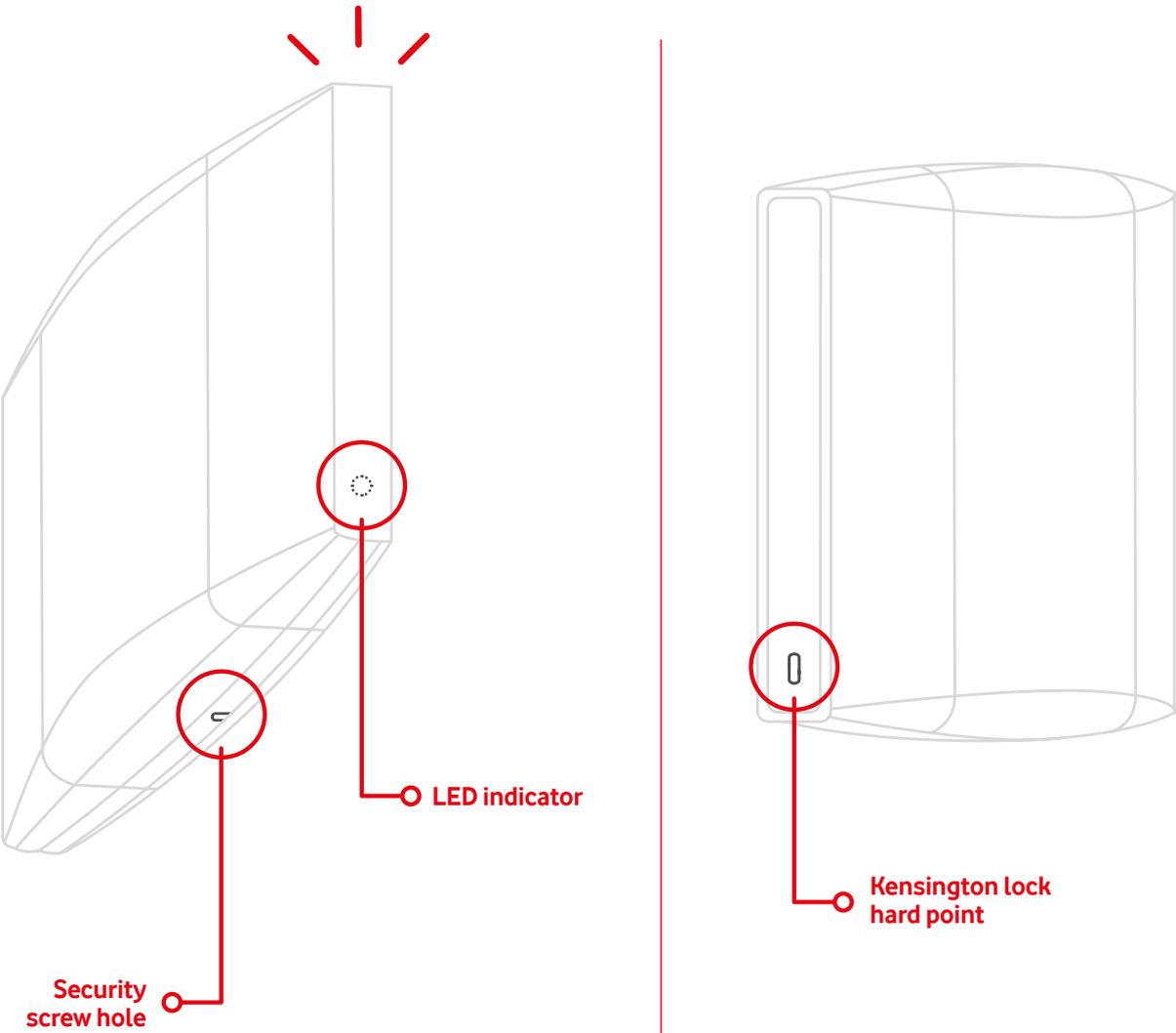


1

**TO INSTALL
A MERAKI
MR36 ACCESS
POINT**

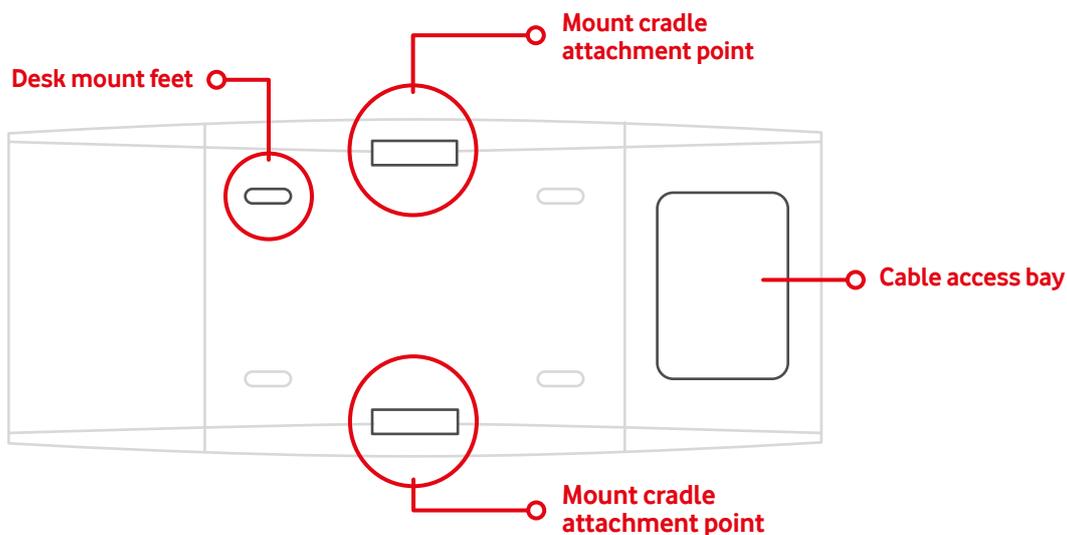
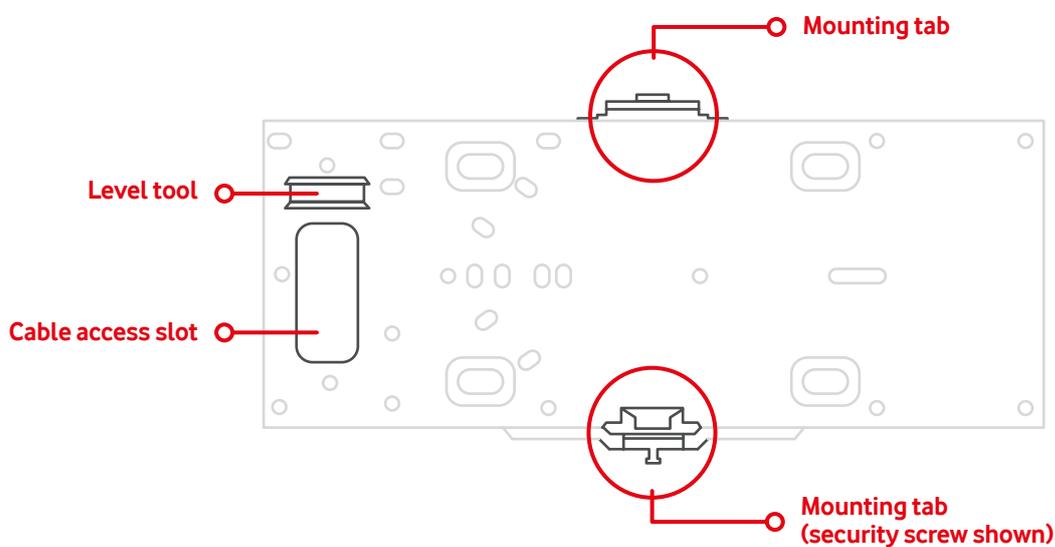
Product View and Physical Features

Your MR36 has the following features:



Product View and Physical Features

The mount cradle has the following features:



Security Features

The MR36 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.

2. KENSINGTON LOCK

The access point contains a hard point that allows it to be secured to any nearby permanent structure using a standard Kensington lock.

Ethernet Ports

The MR36 features an Ethernet RJ45 port that accepts 802.3af power (labelled “Eth0, PoE”). This port should be used for uplink to your upstream network.

Power Source Options

The MR36 access point can be powered using the provided PoE injector provided by Vodafone.

Factory Reset Button

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

LED Indicators and Run Dark Mode

Your access point is equipped with a multi-colour LED light on the front of the unit to convey information about system functionality and performance:

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

NOTE: Blinking Green LED indicates that the device is in site survey mode. Please see the Conducting Site Surveys with MR Access Points for more details.

https://documentation.meraki.com/MR/WiFi_Basics_and_Best_Practices/Conducting_Site_Surveys_with_MR_Access_Points

The MR36 access point may be operated in the “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 enabled through the Meraki Dashboard.



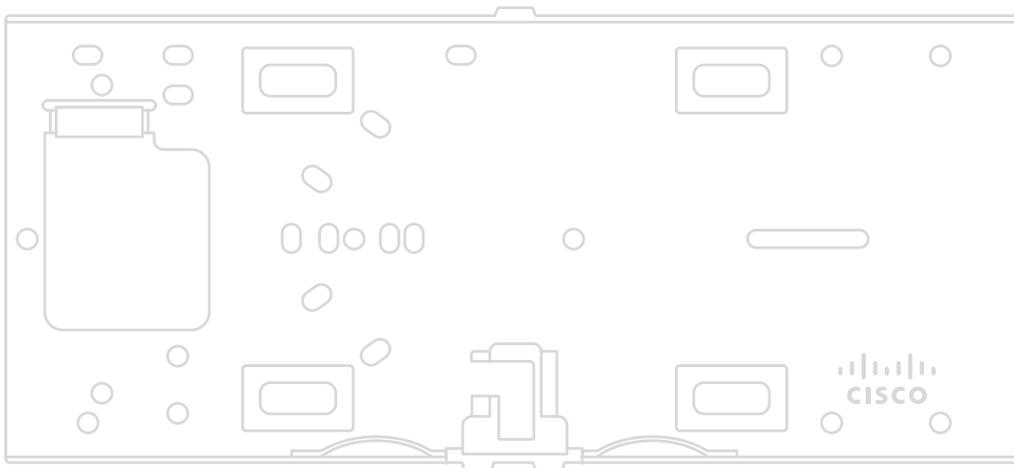
Package Contents

The access point packages contain the following:

MR36 Cloud-Managed Access Point



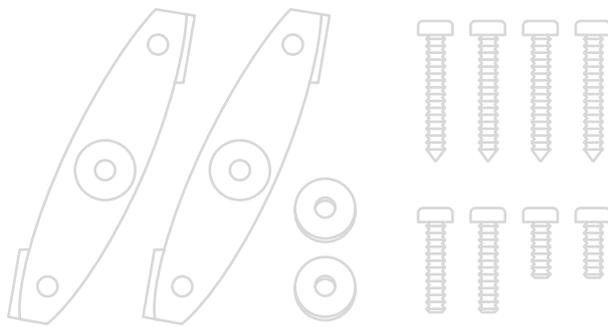
Mount cradle including built-in level tool



Package Contents

The access point packages contain the following:

Drop ceiling mount kit



Wall screws, wall screw anchors, and security screws



Safety and Warnings

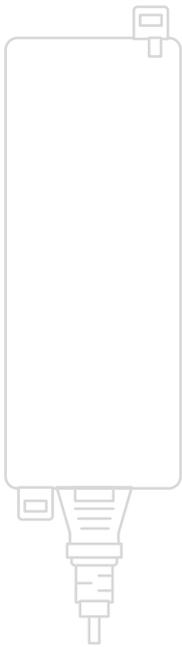
These operations are to be taken with respect to all local laws. Please take the following into consideration for safe operation:

- Power off the unit before you begin. Read the installation instructions before connecting the system to the power source.
- Before you work on any equipment, be aware of the hazards involved with electrical circuitry, and be familiar with standard practices for preventing accidents.
- Read the wall-mounting instructions carefully before beginning installation. Failure to use the correct hardware or to follow the correct procedures could result in a hazardous situation to people and damage to the system.
- This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than 15 A, 125 Vac, or 10A, 240 Vac.
- Please only power the device with the provided power cables or standard PoE to ensure regulatory compliance.

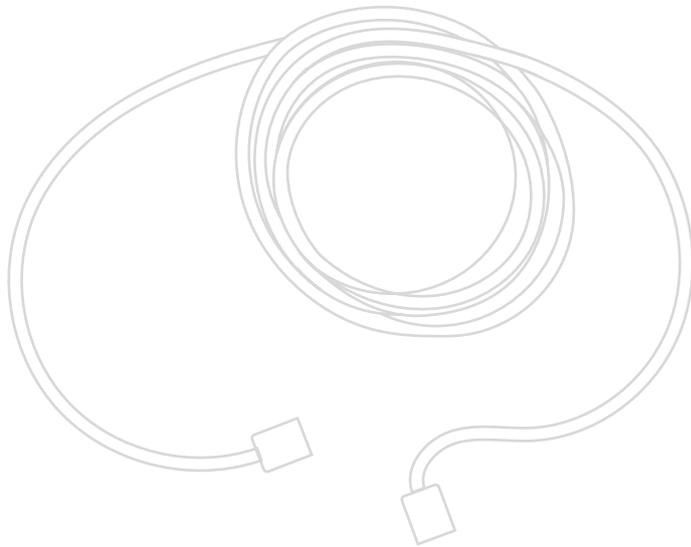


Collect Additional Hardware for Installation

You will need the **following hardware** to perform an installation:



802.3at PoE power source
Meraki 802.3at PoE injector



Network cables with RJ45 connectors
long enough for your particular
mounting location

Installation Instructions



WARNING

Due to the heat dissipation in the back of APs during normal operation, please do not stack powered on APs on top of each other during pre-installation to avoid heat damage.

Choose your Mounting Location

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

1. The device should have an unobstructed line of sight to most coverage areas. For example, if installing in an office filled with workspaces divided by mid-height cubicle walls, installing on the ceiling or high on a wall would be ideal.
2. Power over Ethernet supports a maximum cable length of 300 ft (100 m).
3. If being used in a mesh deployment, the AP should have a line of sight to at least two other Meraki devices.

Install the AP

For most mounting scenarios, the access point 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 AP to the mount cradle.



Installation Instructions

Attach the Mount Cradle

The access point mount cradle can be used to install your access point in a wide range of scenarios: wall or solid ceiling, below a drop ceiling, on various electrical junction boxes.

The mount cradle contains a variety of hole patterns that are customized for each installation scenario. The mounting template (included in box with mount cradle) should be used to drill holes for wall mounts and also to identify the correct hole patterns in the mount cradle that should be used for each type of mount.

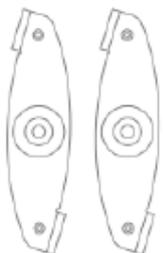
The included mount cradle template shows the hole patterns that should be used for each type of mount.

Wall or Solid Ceiling Mount Using Mount Cradle

Using included wall anchors and screws, attach the mount cradle to your mounting wall or ceiling. It is recommended that the AP be mounted to a wall or solid ceiling using the mount cradle for physical security reasons.

Drop Ceiling Mount using Mount Cradle

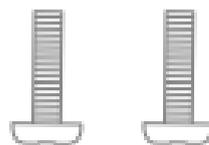
To mount your AP on a drop ceiling T-rail, use the included drop ceiling mounting accessory kit. The accessory kit can be used to mount to most 9/16", 15/16" or 1 1/2" T-rails. **The kit contains:**



Drop ceiling mounting clips with set screws



6-32x4 mm screws



6-32x7 mm screws only used for recessed rail mount

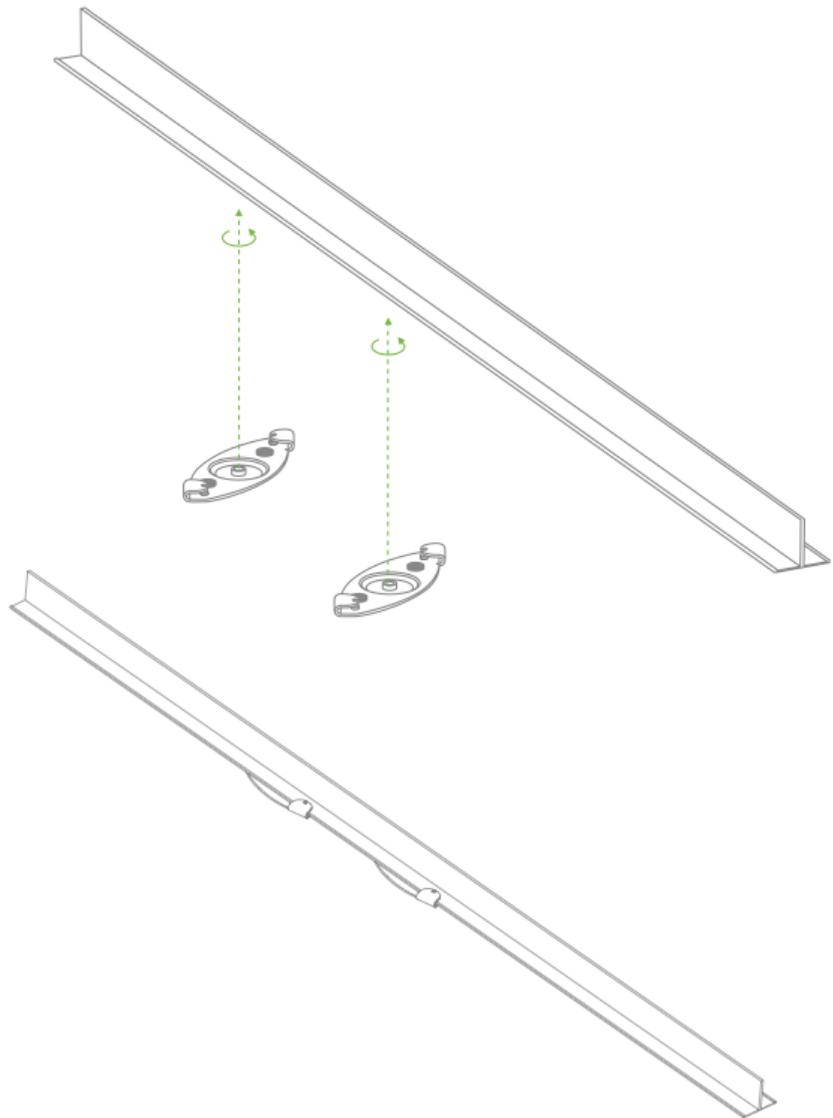


2 rubber spacers



Installation Instructions

1. Attach the T-rail clips to the T-rail by rotating them and snapping them into place as shown. The black foam pads should be compressed slightly after installation.

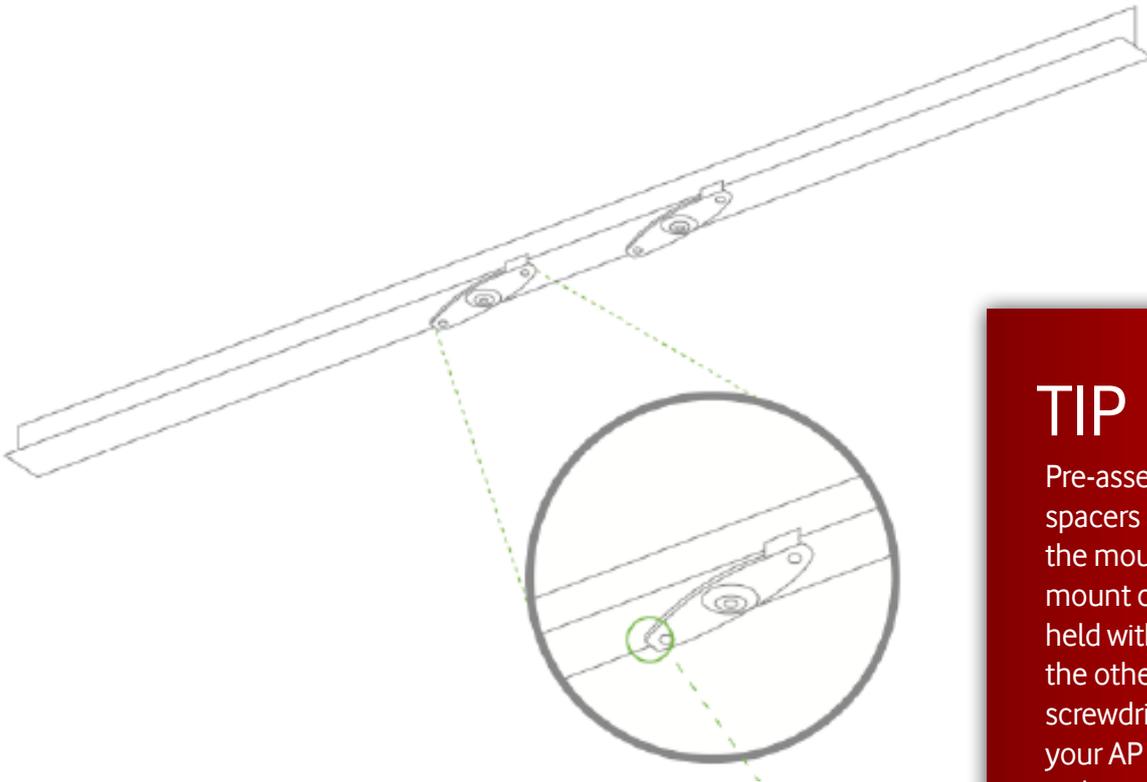


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2. Using the dashed lines on the mount cradle template as a guide, set the proper spacing of the T-rail clips on the T-rail.



Installation Instructions

3. Tighten the set screws on the T-rail clips to secure the clips using a 5/64"(2 mm) hex key.



4. Attach the mount cradle to the T-rail clips using the mount cradle holes (marked with a "T").

TIP



Pre-assemble rubber spacers and screws to the mount cradle. The mount cradle can then be held with one hand while the other hand holds a screwdriver. If mounting your AP to a dropped ceiling, skip to the "Getting Power to the AP" section.

Electrical Junction Box Mount Using Mount Cradle

The access point can be mounted to a 4" square cable junction box, a 3.5 or 4" round cable junction box, or various U.S. 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.



Getting Power to the AP

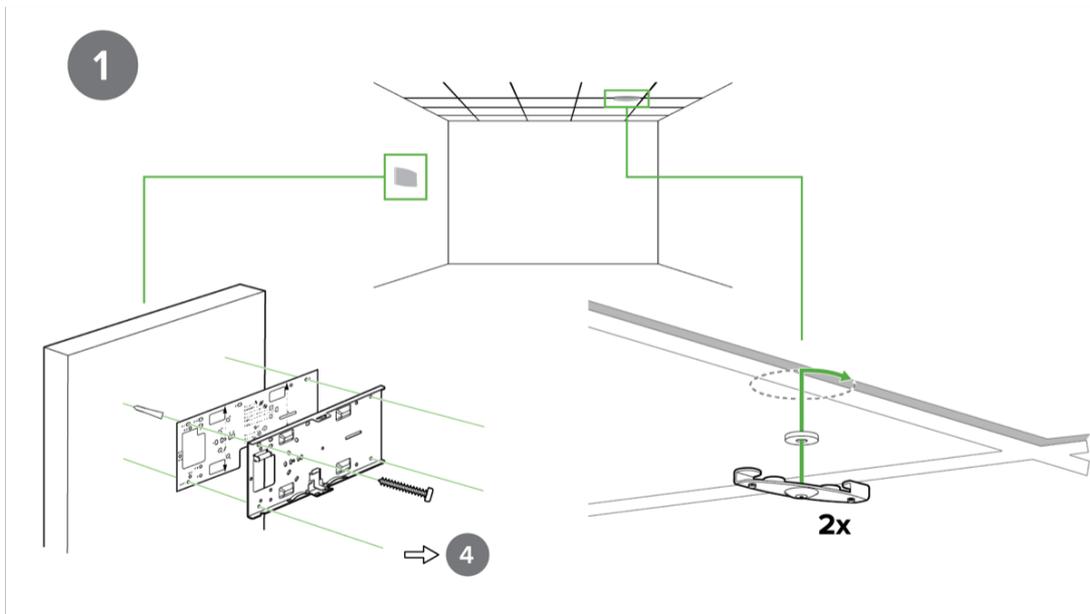


If mounting to an electrical junction box, feed the Ethernet cable through the cable access hole in the mount cradle. If mounting to a wall or ceiling, the Ethernet cable will feed from behind the AP. The “Power Source Options” section of this document lists the different powering options and their unique characteristics.

Mount the AP

Attach the MR36 AP to the Mount Cradle

(This section applies to wall and/or solid ceiling, drop ceiling, or electrical junction box mount where you have already installed the mount cradle.)

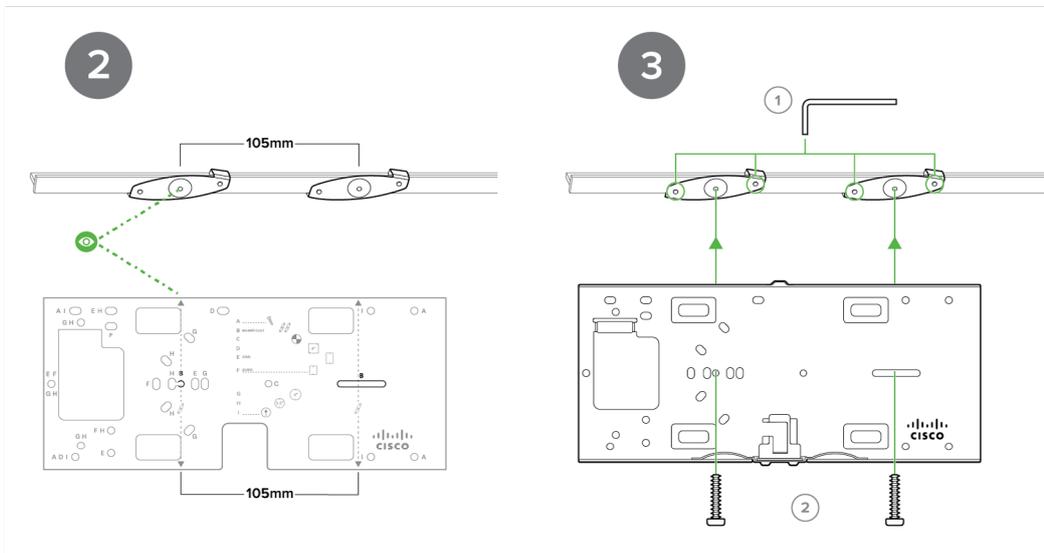


1. The MR36 AP attaches to the mount cradle with two tabs on the cradle that insert into the MR36 AP and is secured to the cradle using one screw.

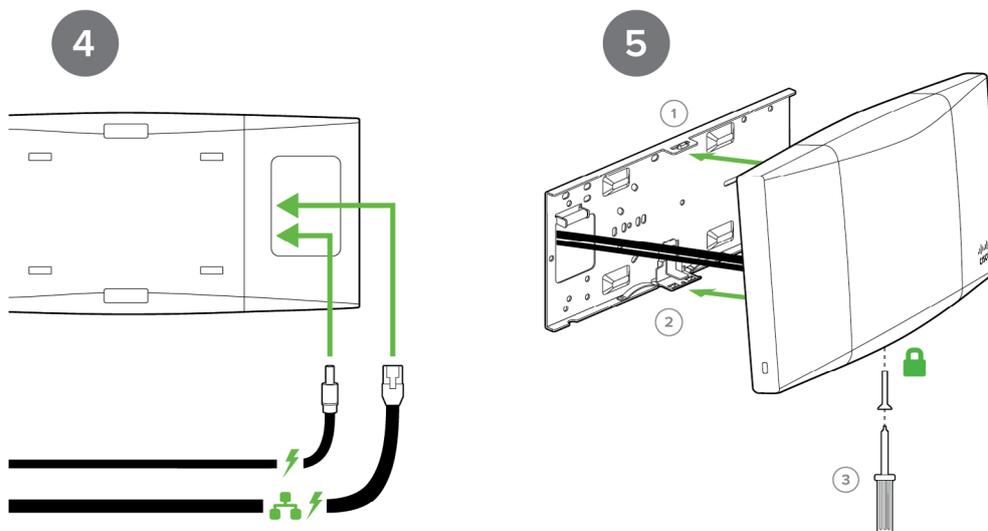
To attach the MR36 AP to the mount cradle properly, line up the top edge of the AP with the top tab of the mount cradle. Since the cradle is already mounted to the wall, guide the MR36 AP towards the top tab, and insert the top tab into the MR36 AP's slot.



TO INSTALL A MERAKI MR36 ACCESS POINT



- 2-3.** Then adjust the MR36 AP to guide the AP's bottom slot into the cradle's bottom tab until it clicks into place. Once in place, the MR36 AP should be secured to the cradle by using one of the included screws in the cradle's bottom tab.



- 4-5.** To release the AP from the mount cradle, first remove the security screw that secures the MR36 AP to the cradle's bottom tab. While holding the MR36 AP with one hand, press the cradle's bottom tab upwards, releasing the MR36 AP from the bottom of the cradle. Then remove the MR36 AP from the cradle's top tab.

Desk or Shelf Mount

The access point can both be placed on a desk or shelf resting on the non-scratch rubber feet. The mount cradle is not necessary for a desk or shelf installation.



Physical Security

Depending on your mounting environment, you may want to secure the AP to its mount location. The access point can both be secured in several ways. If the AP has been installed using the mount cradle, it should be secured via security screw (Torx security screws are included) and/or Kensington lock. If the mount cradle was not used, the AP can still be secured using a Kensington lock.

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.

Kensington Lock

The access point contains a hard point that allows it to be secured to any nearby permanent structure using a standard Kensington lock. Attach a Kensington lock cable to the access point at the hard point on the side of the device. Attach the other end of the cable to a secure location, such as a pipe or building fixture.



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 AP 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 AP and verify proper connectivity using the client’s web browser.

3. Check network coverage

4. Confirm

- a. Confirm that you have good signal strength throughout your coverage area. You can use the signal strength meter on a laptop, smartphone, or another wireless device.



Basic Troubleshooting

The following steps can be used for troubleshooting basic connectivity issues with your access point.

- Reset the access point
- Factory reset the access point by holding the factory reset button for 5 seconds
- Try switching cables, or testing your cable on another device

If your access point still does not connect, the following instructions may be useful, depending on your issue.

Check Radio Functionality by Making the AP a Repeater

1. If your AP is acting as a gateway, disconnect the Ethernet cable from the LAN (while keeping the AP powered on). This will switch your AP into repeater mode. If no other gateways are within range, the AP will begin broadcasting an SSID appended with “-scanning”. If you are able to connect to this SSID and go to my.meraki.com from your web browser, then your radio is working.
2. Physically place the repeater AP (AP with disconnected LAN) next to a working gateway AP.
3. Connect the PoE Injector. The radio and signal strength LEDs on the AP will turn solid green or blue once the access point boots up and detects the gateway.
4. The access point is now a repeater and will check into the Dashboard.
5. On the Wireless > Access Points page in the Dashboard, you will see the connectivity bar for the specific Repeater AP reflecting a light green colour, which means the AP is a repeater. Gateway APs will reflect a dark green colour in the connectivity bar and also will have the letter G (Gateway) on top of the AP symbol.



Check Ethernet Port Functionality by Connecting to the AP

1. Disable the Wireless adapter on your computer.
2. Make sure the Ethernet adapter on your device is set to obtain an IP address automatically via DHCP.
3. Connect your computer to the Ethernet port on the AP with an Ethernet cable.
4. The Ethernet LED on the AP should turn solid green or blue.
5. If the Ethernet LED does not turn solid green or blue, try swapping the cable. If the Ethernet port still does not turn green or blue, try the second Ethernet port, if the AP has one.
6. If the Ethernet LED does not turn solid green or blue, you may have a bad port on the AP. If this is the case, the AP signal LEDs will continue to scan.
7. Once the Ethernet LED turns solid green or blue, your computer should obtain an IP address from the AP via DHCP.

Check Static IP Address Configuration

1. If the AP has a static IP address, the green signal LEDs will begin to flash on and off and you will not receive an IP address via DHCP.
2. Disconnect the Ethernet cable from the AP.
3. Associate to the SSID being broadcasted by the AP. If there are no other APs in the network within range the SSID may be appended with “-scanning”.
4. Go to my.meraki.com in your web browser.
5. The MAC address on the back of the access point should match the physical address value on the my.meraki.com Overview page.
6. Once you have verified that the MAC address is correct on the overview tab, click the tab Static IP configuration.
7. Enter the username (serial number on the back of the AP) which is case sensitive and must include the dashes. (There is no password).
8. Make sure your AP is set to obtain a correct DHCP or static IP address configuration from your network.

Reference <https://documentation.meraki.com/MR> for additional information and troubleshooting tips.

If you are still experiencing hardware issues, please contact the Vodafone support team.



2

TO INSTALL
**YOUR MERAKI
MR76 ACCESS
POINT**

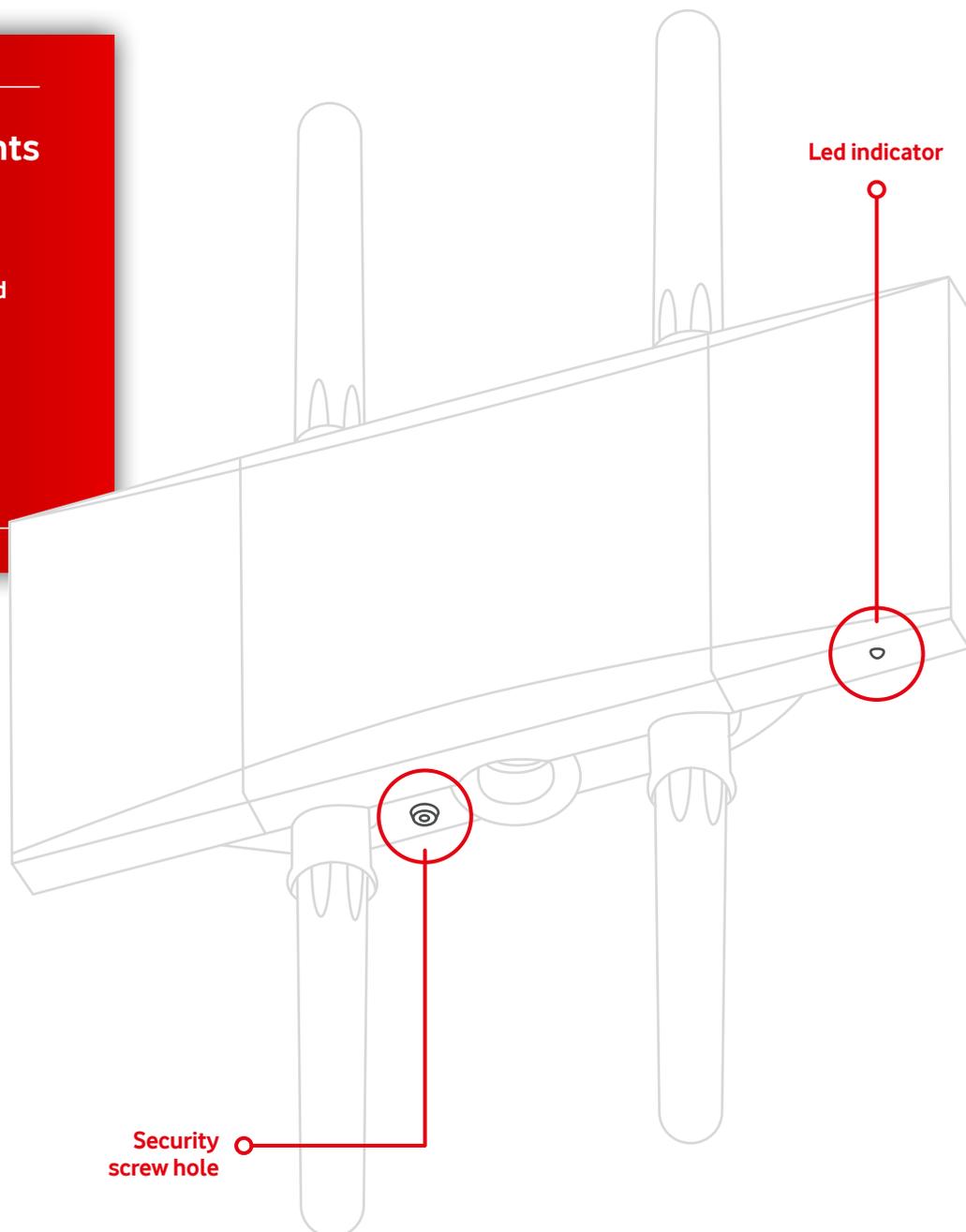
Product View and Physical Features

Your Meraki MR76 has the following physical features:

Package Contents

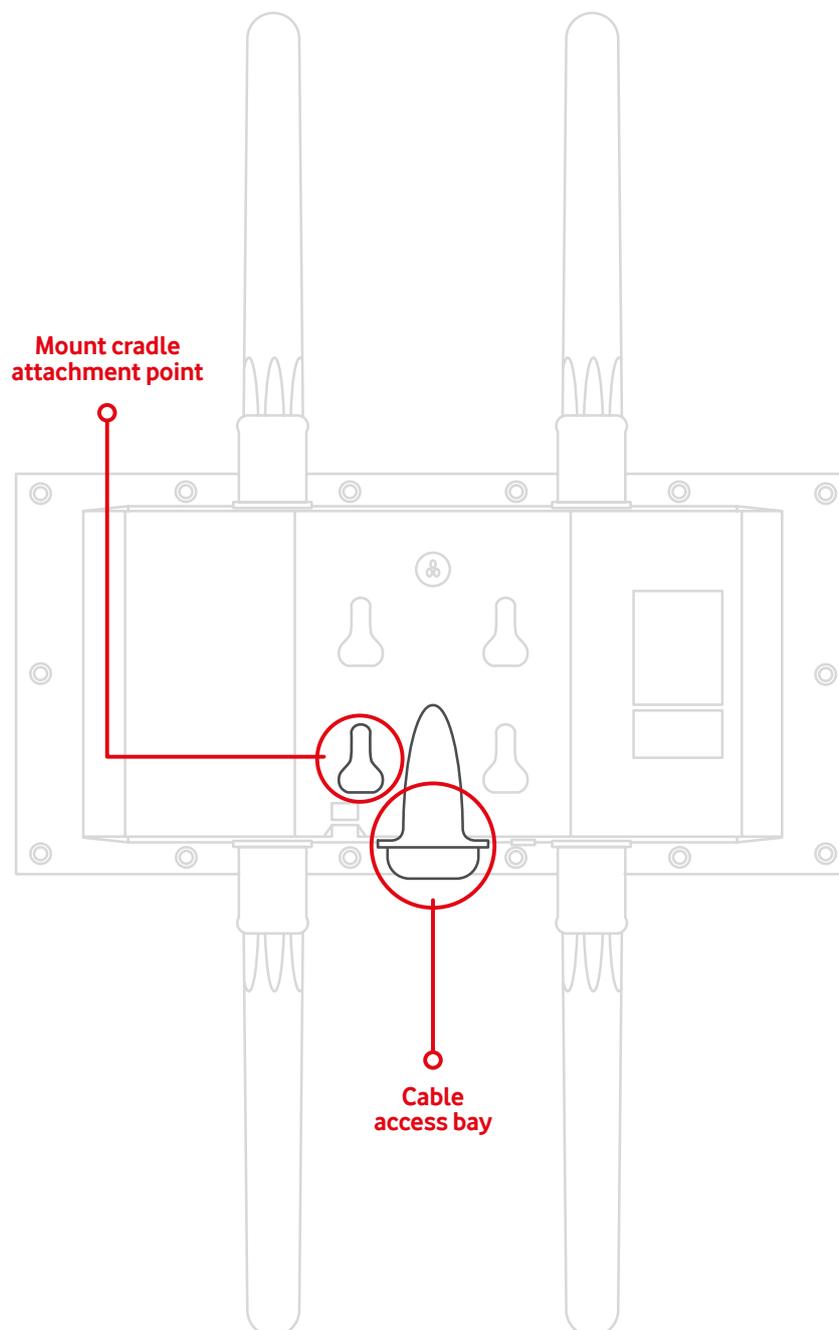
The MR76 package contains the following:

- MR76 Cloud-Managed Access Point
- Mount cradle
- Wall screws
- Wall screw anchors
- Grounding screws
- Mounting straps



Product View and Physical Features

The mount cradle has the following physical features:



Ethernet Ports

The MR76 features one Ethernet ports. This accepts 802.3af power and should be used as the primary uplink to your LAN/WAN.

Factory reset button

The factory reset button is located in a small pin-sized hole just above the PoE Ethernet port of the MR76. If the button is pressed and held for at least five seconds and then released, the MR76 will reboot and be restored to its original factory settings by deleting all configuration information stored on the unit.

The vent

The vent allows pressure equalization between the interior and the environment. This prevents internal condensation and maintains a waterproof seal.

N-Type antenna attachment ports (4x)

2x N-Type antenna ports are located at the top of the MR76 and 2x are located at the bottom of the MR76. The 4 antenna ports are connected to 2.4 GHz and 5 GHz client serving radios respectively. Please see the markings on the AP to verify 2.4GHz and 5GHz ports. In order to ensure the highest performance, ensure antennas connected to the 4 ports have overlapping coverage areas.

Mount plate attachment slots

The mounting slots located on the rear shell of the MR76 marry to the 4 mounting posts on the mounting plate, securely fastening the MR76 to the mounting plate.

LED indicator

Your MR76 is equipped with a multi-colour LED light on the bottom edge of the unit to convey information about system functionality and performance:

- **Orange** - AP is booting (permanent Orange suggests hardware issue)
- **Rainbow** - AP is initializing/scanning
- **Blinking Blue** - AP is upgrading

- **Green** - AP in Gateway mode with no clients
- **Blue** - AP in Gateway mode with clients
- **Blinking Orange** - AP can't find uplink

The MR76 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 enabled through the Meraki dashboard.



Understanding the MR76 mount plate

The mount plate is unique to the MR76. Previous outdoor AP mount plates are not compatible with the MR76.

Mounting posts (4x)

The mounting slots located in the middle of the mounting plate marry the MR76 to the mounting plate.

Mounting holes (4x)

The mounting holes located on the 4 outermost corners of the mounting plate allow secure installation of the mounting plate to a surface such as a wall.

Vertical orientation mounting strap slots (2x)

The vertical orientation mounting strap slots located in the middle of the mounting plate secure the mounting plate to a vertical pole using the included mounting straps.

Horizontal orientation mounting strap slots (2x)

The horizontal orientation mounting strap slots located in the middle of the mounting plate secure the mounting plate to a horizontal pole using the included mounting straps.

Release tab

The release tab located at the bottom of the mounting plate. It locks the movement of the AP once attached.

Mount plate attachment screw

The mount plate attachment screw is located at the bottom of the mounting plate. It securely attaches the AP to the mounting plate.

Mount plate grounding post

The mount plate grounding post located on the left side of the mounting plate. Using the included grounding strap, the ground post allows you to ground the unit.



Understanding the MR76 mount plate

The mount plate is unique to the MR76. Previous outdoor AP mount plates are not compatible with the MR76.



Safety and Warnings

These operations are to be taken with respect to all local laws.

Please take the following into consideration for safe operation:

- Power off the unit before you begin. Read the installation instructions before connecting the system to the power source.
- Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents.
- Read the wall-mounting instructions carefully before beginning installation. Failure to use the correct hardware or to follow the correct procedures could result in a hazardous situation to people and damage to the system.
- This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 15 A, 125 Vac, or 10A, 240 Vac.
- Please only power the device with the provided power cables or standard PoE to ensure regulatory compliance.



Collect Additional Hardware for Installation

You will need the **following hardware** to perform an installation:

- Network cables with RJ45 connectors long enough for your particular mounting location
- 802.3af PoE power source (Meraki PoE Injector)
- Connection to the internet (if you are setting up your MR76 as a gateway to the internet)
- Appropriately sized metal straps (if mounting to a pole larger than 3.9" in diameter)
- Specialized mounting hardware if mounting to surface other than wood, stucco or stone



Installation Instructions



WARNING

Due to the heat dissipation in the back of APs during normal operation, please do not stack powered on APs on top of each other during pre-installation to avoid heat damage.

Choose Your Mounting Location

A good mounting location is important to getting the best performance out of your MR76 access point. Keep the following in mind:

1. The device should have unobstructed line of sight to most coverage areas.
2. Power over Ethernet supports a maximum cable length of 300 ft (100 m).
3. If being used in a mesh deployment, the MR76 should have line of sight to at least two other Meraki devices.
4. The antennas should be as unobstructed as possible. Make sure that there is clearance around the MR76 for installation of all of your chosen antennas.

Install the MR76

For most mounting scenarios, the MR76 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 MR76 to the mount cradle.

Remove the Mount Plate from the Access Point

Before installing the mount plate, you must remove it from the back of the access point.

1. Unscrew the mount plate attachment screw.
2. Lift the mount plate release tab upwards.
3. While holding the mount plate release tab up, slide the mount plate off the access point in the direction shown below.

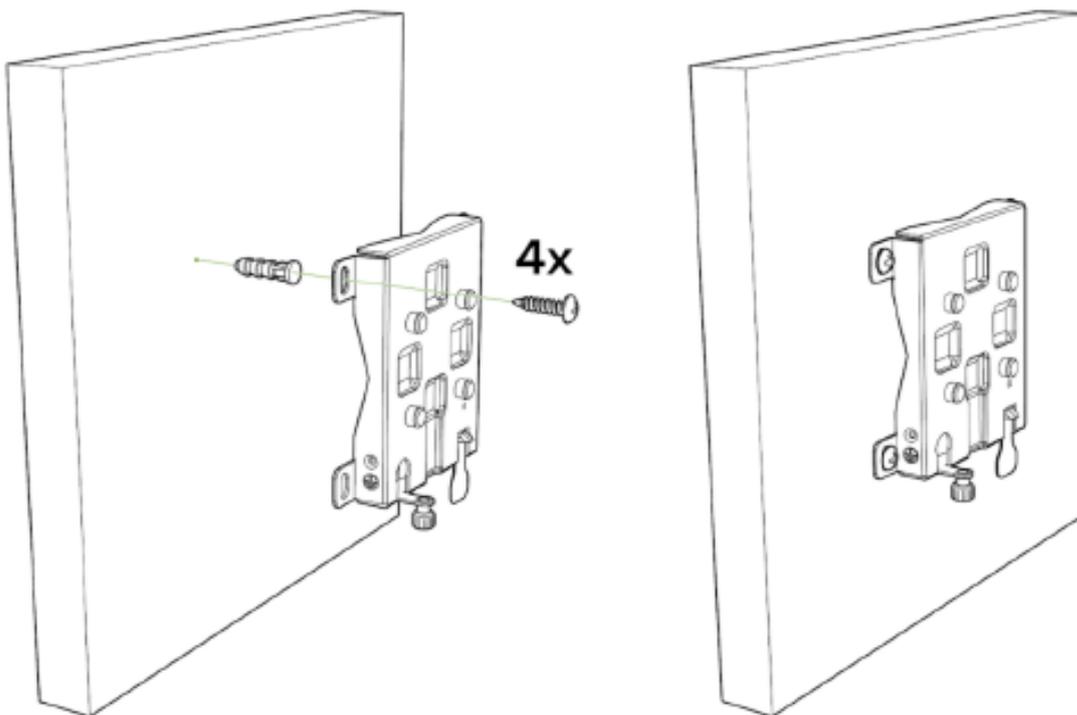


Attach the mount cradle

The **MR76 mount plate** can be used to install your access point in a wide range of scenarios.

Wall or Solid Ceiling Mount Using mount cradle

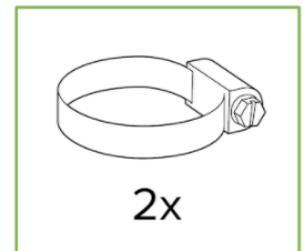
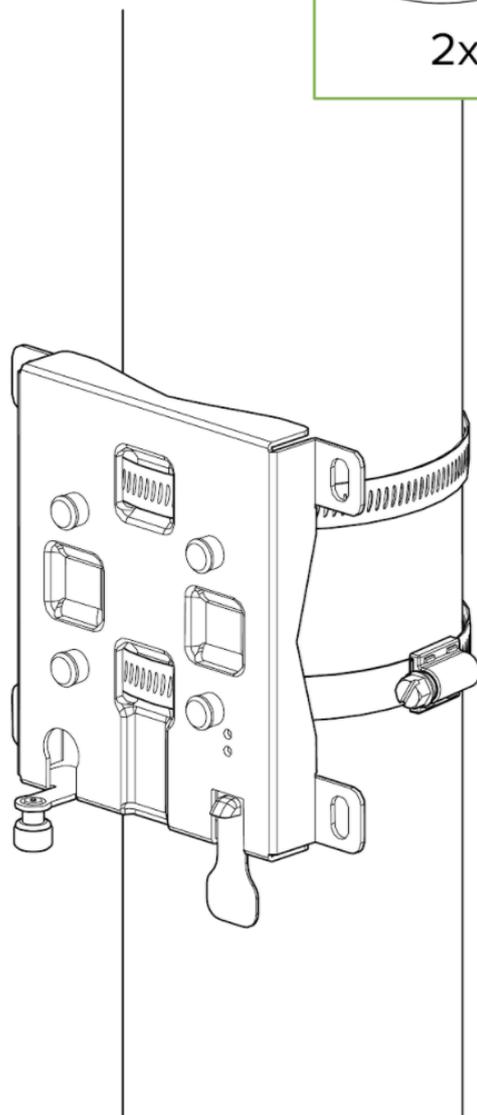
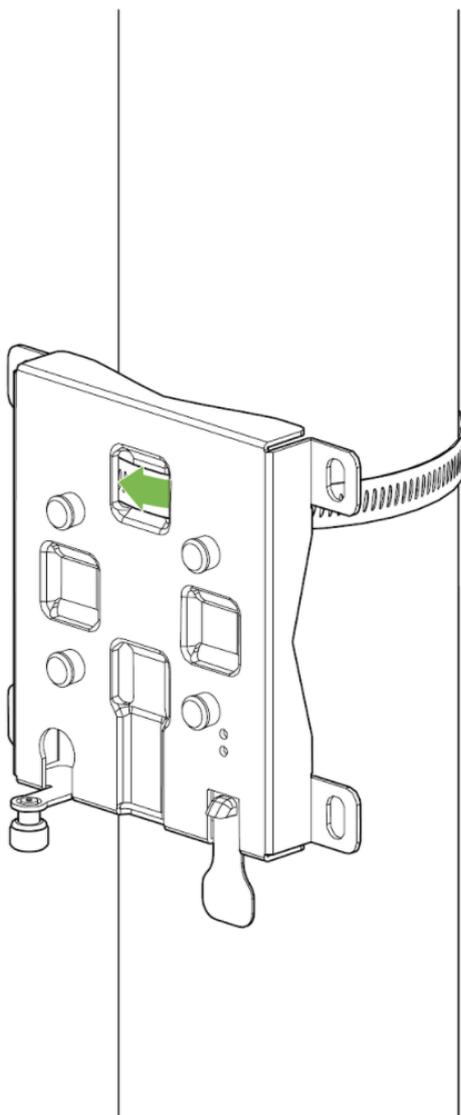
Using included wall anchors and screws, attach the mount plate to your mounting wall or ceiling.



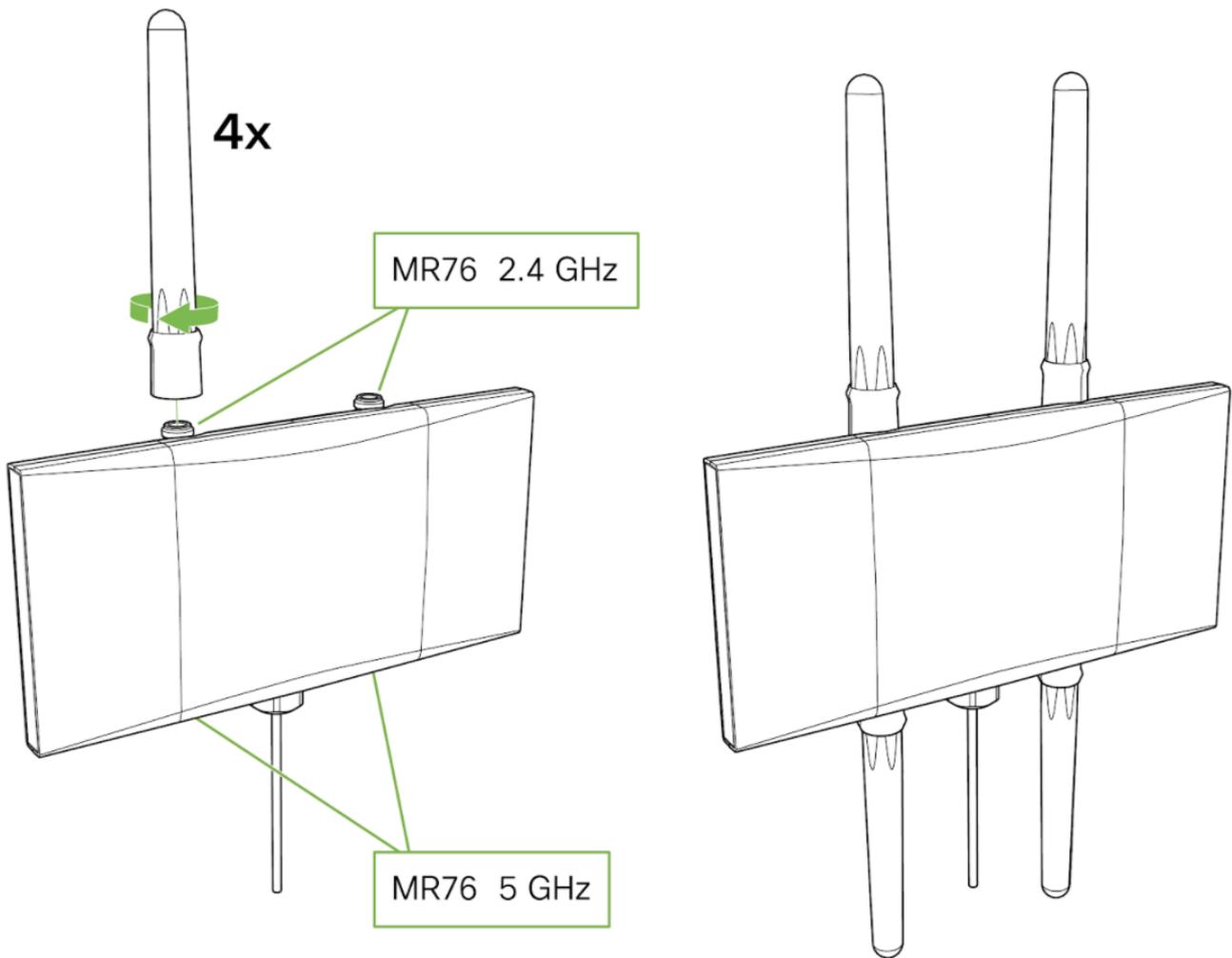
It is recommended that the MR76 be mounted to a wall or solid ceiling using the mount plate for physical security reasons.

Pole Mount Using Mount Plate

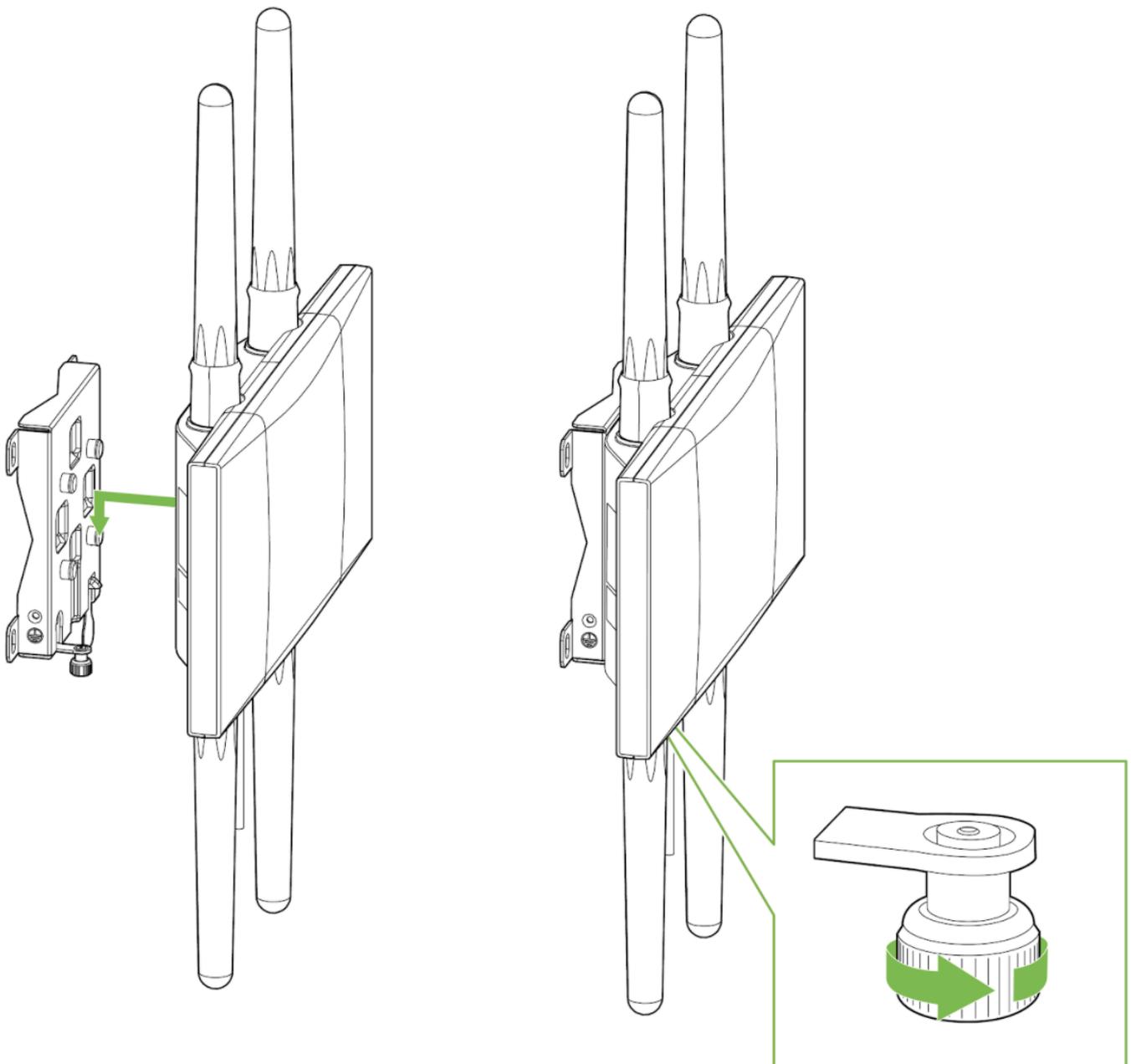
Use the **included mounting straps** to mount the AP to a pole less than 3.9" in diameter. Thread the mounting straps through the mounting strap slots to secure the mount plate in a horizontal or vertical orientation.



Attaching the antennas to the AP

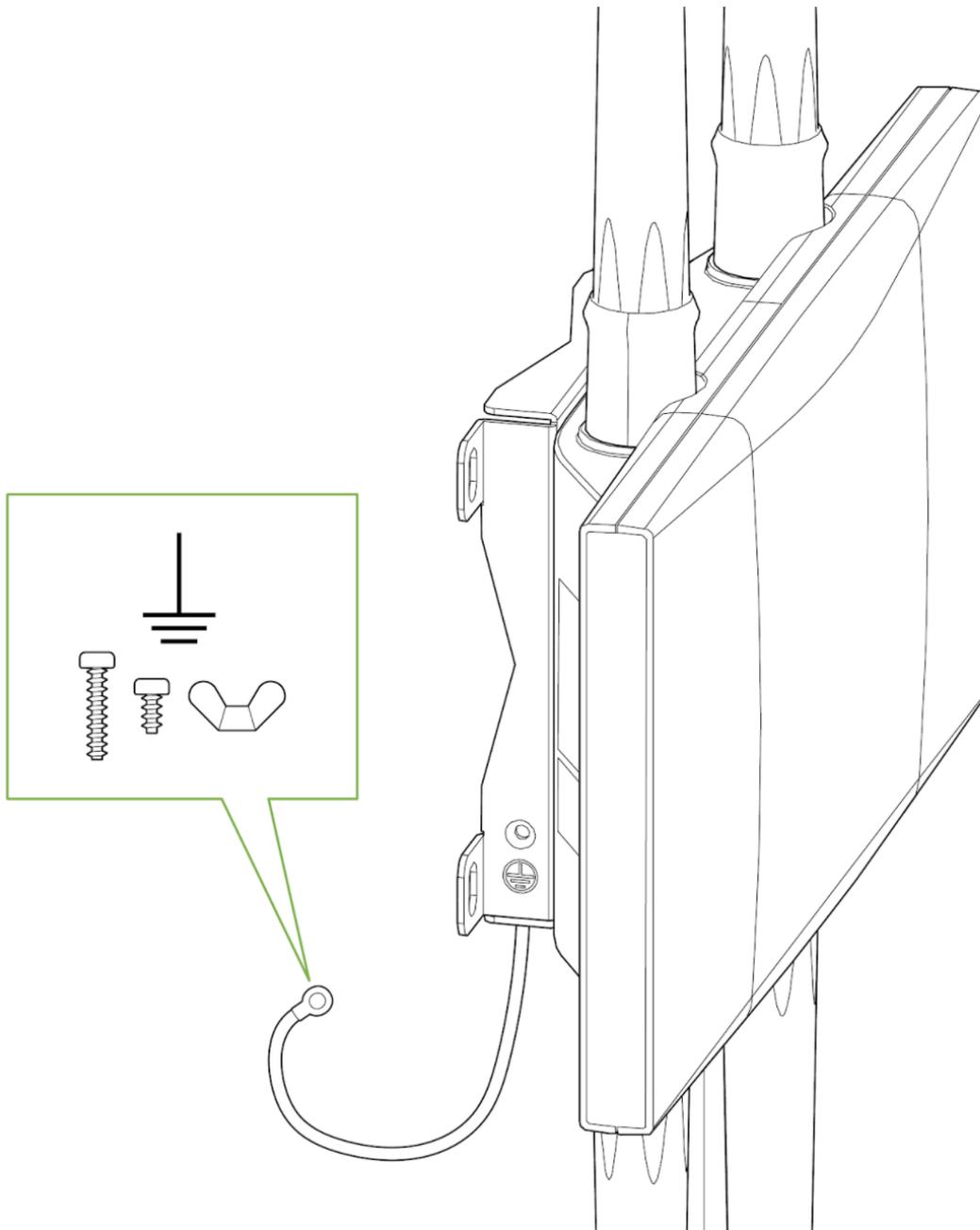


Attaching the AP to the mounting bracket



Attach Grounding Strap

Connect one end of **grounding strap** to **grounding post** with included screw and washer. Securely attach the other end nearby metal structure.



Antennas

Choose the antenna **based on the install location and designed area of coverage.**



REMINDER

Since the MR76 requires one antenna for each band please ensure that the antennas are aimed in the same coverage area.

Aim Antennas

Vodafone provides you with 2 sets of Omnidirectional antennas compatible with your MR76 device. Omnidirectional antennas perform best in a mesh network when oriented vertically. Patch and sector antennas should be angled in the direction of the desired coverage area.

Attach Antennas

Remove protective plastic covers from all four N-type RF connectors. Attach appropriate antennas (and protective boots if included).

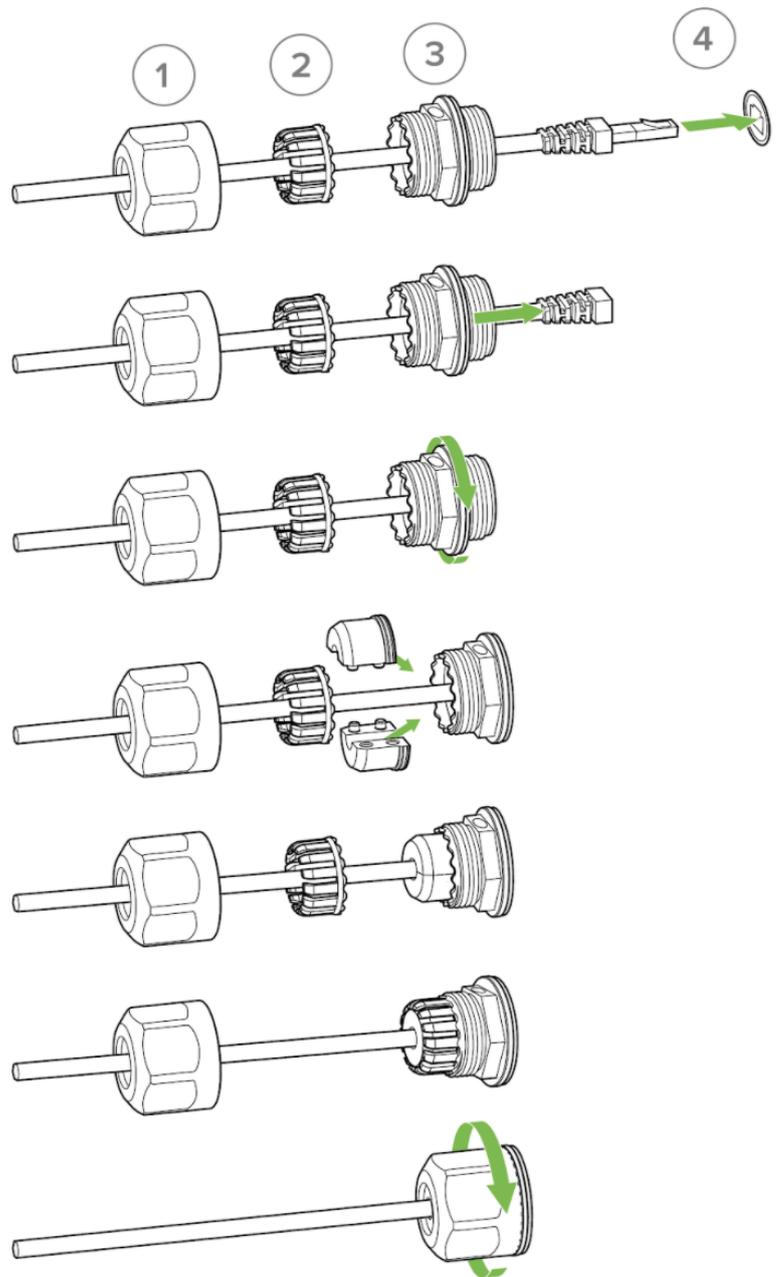
Power the MR76

1. Route the Ethernet cable from the PoE Injector “OUT” port or from a PoE enabled switch to the MR76.

2. Install a Cable Gland on the MR76 end of the cable.

3. Plug the Ethernet cable into the Ethernet port of the Meraki MR76.

- a. Connect the cable to the Ethernet port on the MR76.
- b. Screw the gland body into the threaded hole of the port. Use an adjustable wrench to make sure the gland body is fully seated in the hole.
- c. Insert the split ring gasket into the gland body.
- d. Screw the cap tightly onto the gland. You may need a wrench to fully tighten the cap, but take care not to damage the cable in the process.



Powering the MR76 with the Meraki 802.3at Power over Ethernet Injector

(Provided with your Vodafone Complete Connectivity service)

1. Plug the power cord into the PoE Injector and the other end into wall power.
2. Plug an Ethernet cable that is connected to an active Ethernet connection into the “IN” port on the injector.
3. Route Ethernet cable from the “OUT” port on the injector to the PoE labelled port in the cable bay of the MR76.



NOTE

MR76 requires only 802.3af power to operate in normal mode.

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 MR76 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 MR76 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.



Troubleshooting

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



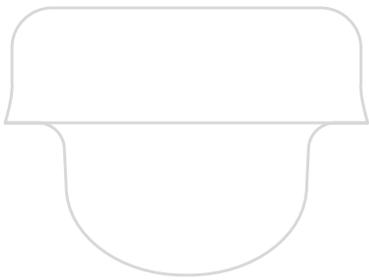
3

TO INSTALL
**YOUR MERAKI
MV12 CAMERA**

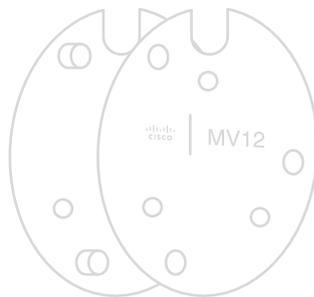
Package Contents

In addition to the MV camera, the following are provided:

Camera



Wall mount plate



Torx key



Wall screw anchors for masonry (brick, concrete)



Installation Instructions

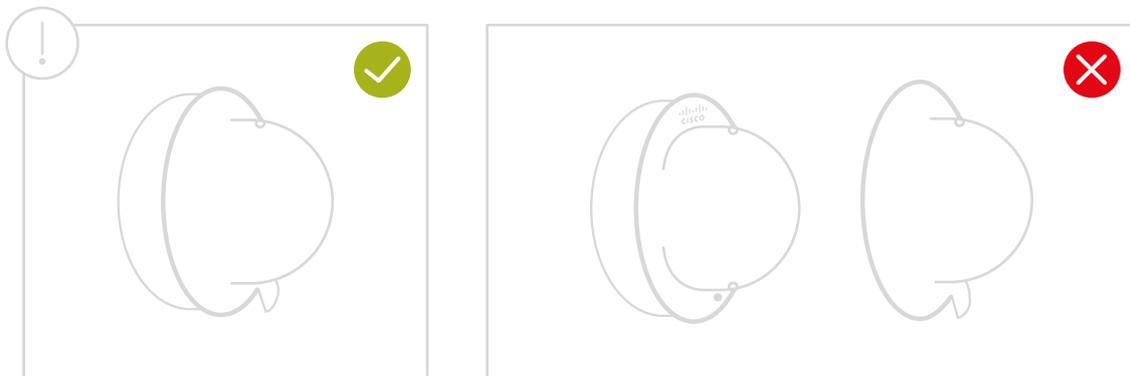
NOTE: Each MV12 comes with an instruction pamphlet within the box. This pamphlet contains detailed step by step guides and images to assist in the physical install of the camera.

NOTE: During first time setup, the MV12 will automatically update to the latest stable firmware. Some features may be unavailable until this automatic update is completed. This process may take up to 10 minutes due to enabling of whole disk encryption.

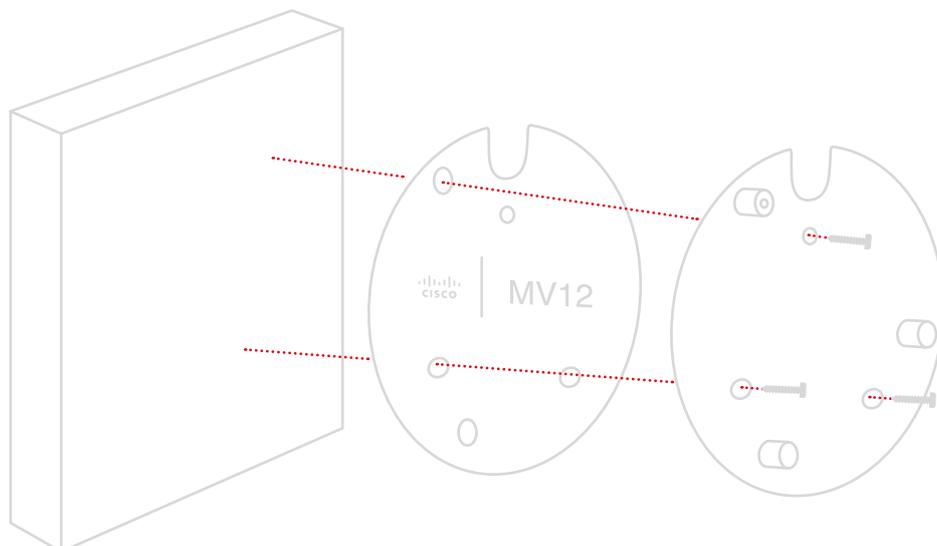
Installation Instructions

For most mounting scenarios, the MV12 wall mount provides a quick, simple, and flexible means of mounting your device. The instructions are as follows:

1. Leave protective cap on camera bubble to avoid getting scratches on the bubble during installation.

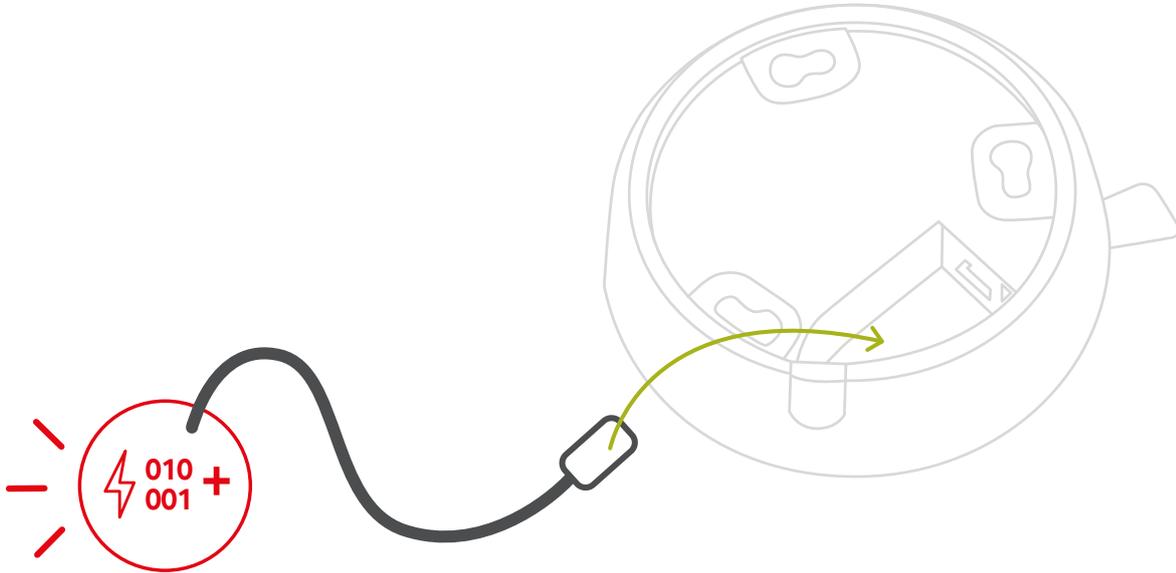


2. Use template to determine mounting hole locations before screwing in the mount plate. Peel backing from mount template to stick on wall. Screw the mounting plate onto the wall in pre-determined locations. Use template holes to align the mounting plate.

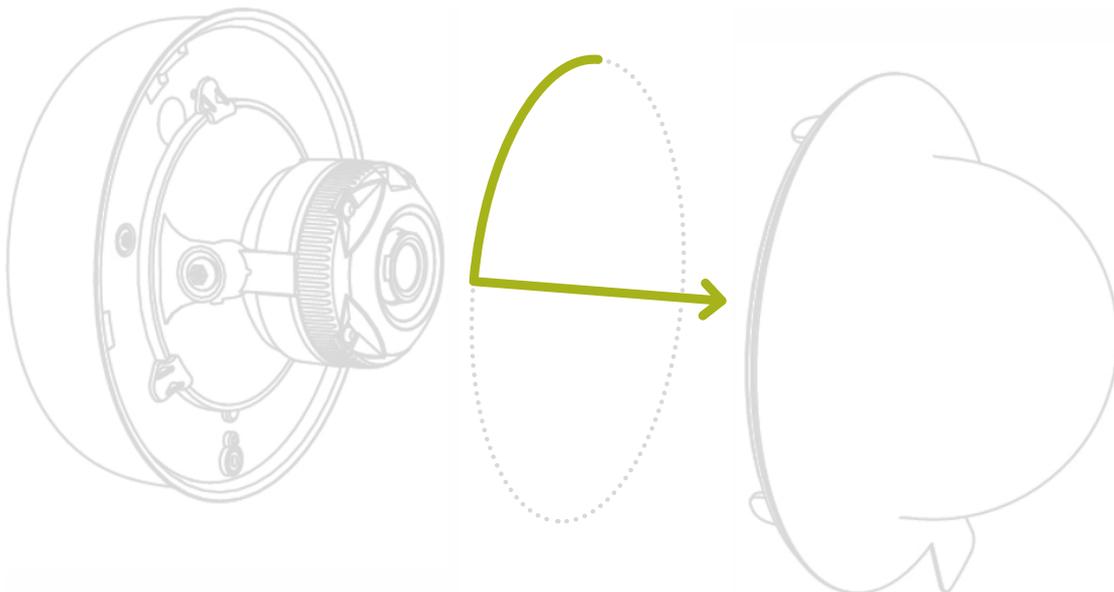


TO INSTALL YOUR MERAKI MV12 CAMERA

3. Connect PoE cable to camera.

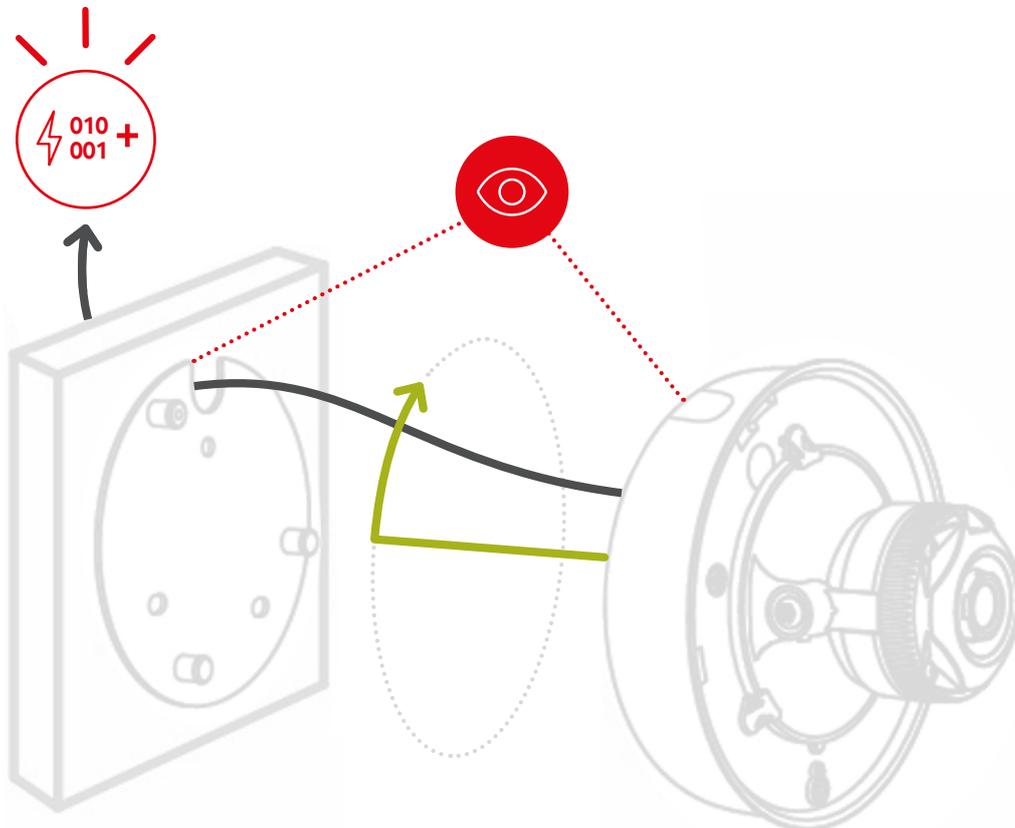
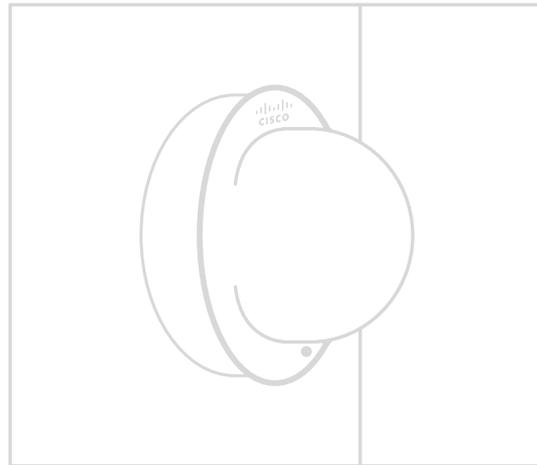


4. Turn bubble counter clockwise to unlock and remove. While the bubble is removed, aim the lens to the desired scene.

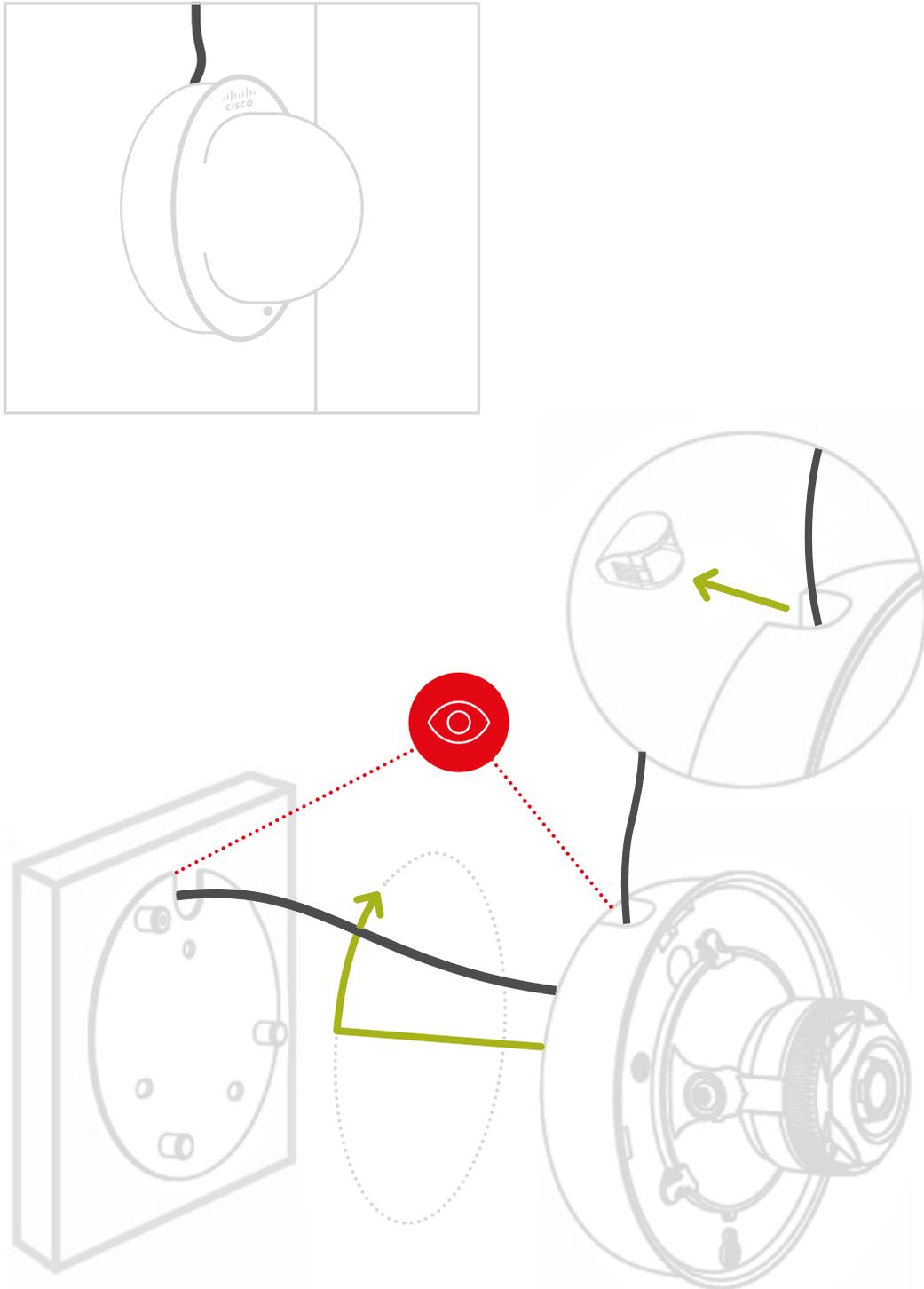


TO INSTALL YOUR MERAKI MV12 CAMERA

5. Align camera to mounting plate studs. Slide camera onto studs and turn camera clockwise to secure camera to plate. If cable run is not coming from directly behind the camera, the cable guard will need to be removed. Below are two mounting examples.

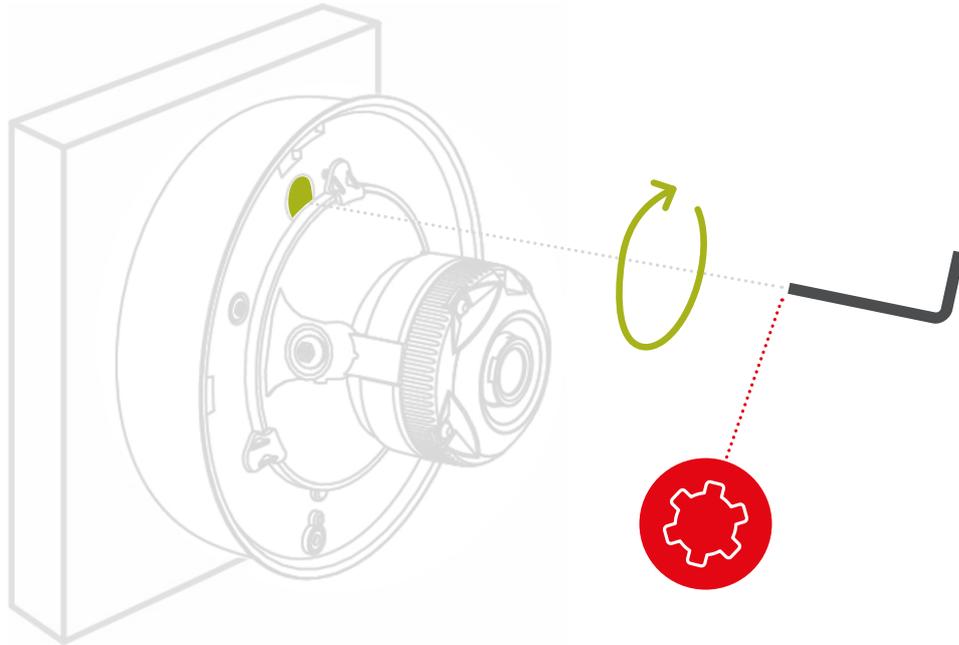


TO INSTALL YOUR MERAKI MV12 CAMERA

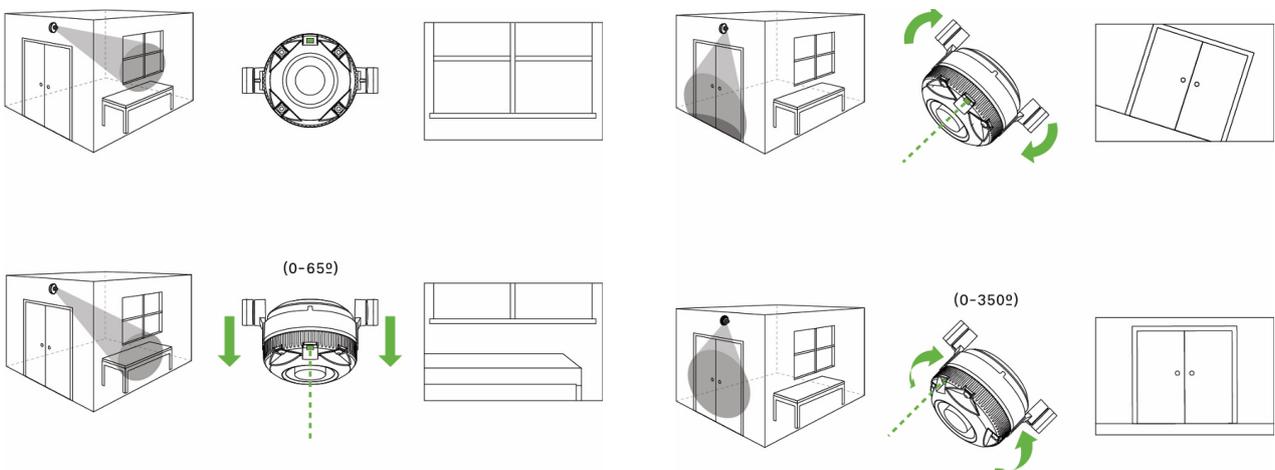


TO INSTALL YOUR MERAKI MV12 CAMERA

6. Further secure camera to mounting plate by tightening the green security screw.

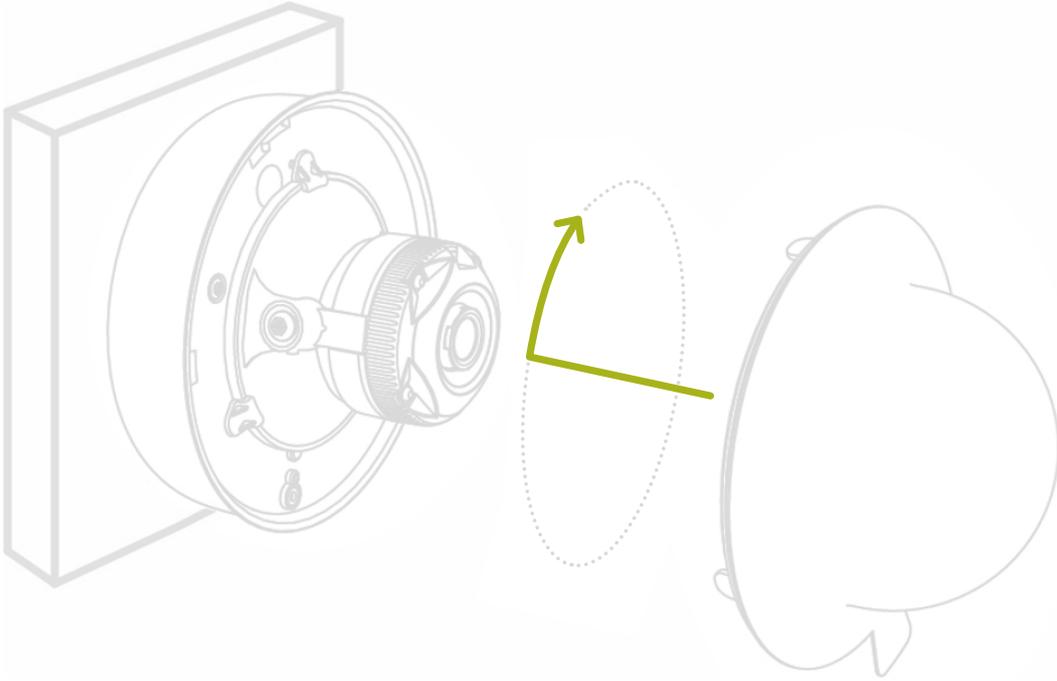


7. Aim the lens. Inspect the camera feed on the Meraki Dashboard to fine tune the picture. The camera sensor and lens unit can be physically tilted through a range of 65 degrees, rotated through a range of 350 degrees, and panned through a range of 350 degrees. The image can only be rotated by 180 degrees in software and no other adjustments can be made. Zoom and focus **can not** be adjusted on the camera.

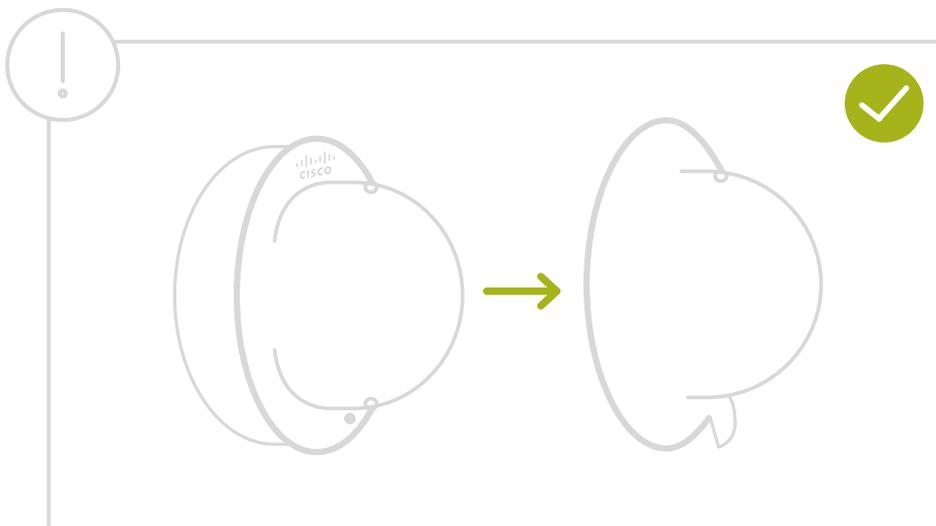


TO INSTALL YOUR MERAKI MV12 CAMERA

8. Replace the plastic dome. Turn dome clockwise to lock.



9. Remove protective cap from camera bubble.





Powering the MV12

Remove the cable guard and route the Ethernet cable from an active port on a 802.3af PoE injector.

NOTE: POE SUPPORTS A MAXIMUM CABLE LENGTH OF 300 FT (100 M).

LED indicator

Your MV12 is equipped with a LED light on the front of the unit to convey information about system functionality and performance:

NOTE: Cameras running 3.23 or higher

- **Rainbow** - MV is initializing or looking for upstream network connectivity.
- **Solid Green** - MV is online with an active wired connection.
- **Flashing Green** - MV is formatting its storage and/or upgrading its firmware.
- **Flashing Blue** - MV is attempting to connect to a nearby access point.
- **Solid Blue** - MV is online with an active wireless connection.
- **Solid Purple** - MV is recording audio.



4

**TO INSTALL
A MERAKI
MV72 CAMERA**

Package Contents

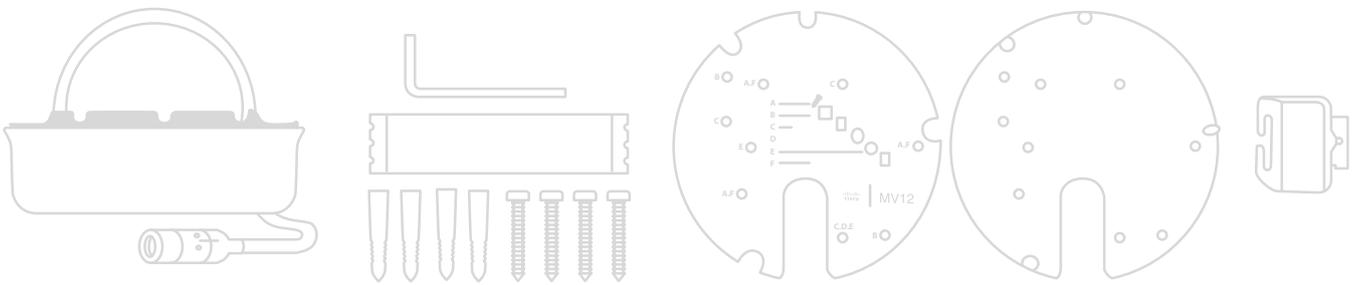
In addition to the MV camera, the following are provided:

1 x MV72
1 x T10 Torx key

1 x desiccant pack
4 x wall anchors

4 x wall screws
1 x base mount plate

1 x base mount wall template
1 x conduit adapter



Powering the MV72 Series

The MV72 features a 1000BASE-TX Ethernet port and requires 802.3at PoE minimally for operation. Route the Ethernet cable from an active port on a PoE injector.

NOTE: Power over Ethernet supports a maximum cable length of 300 ft (100 m).

Installation Instructions

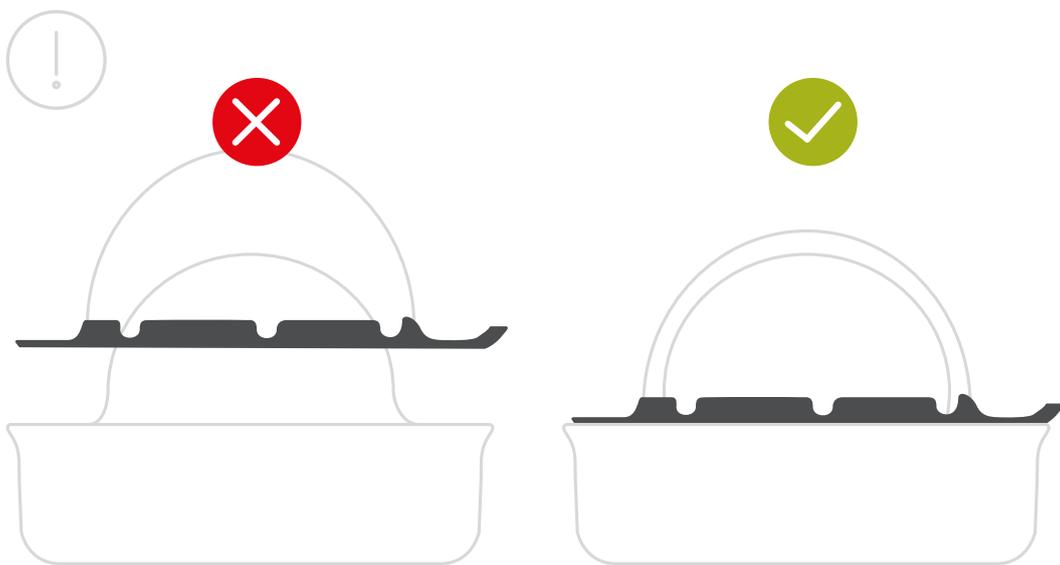
NOTE: Each MV72 comes with an instruction pamphlet within the box. This pamphlet contains detailed step by step guides and images to assist in the physical install of the camera.

NOTE: During first time setup, the MV72 will automatically update to the latest stable firmware. Some features may be unavailable until this automatic update is completed. This process may take up to 5 minutes due to enabling of whole disk encryption.



Mounting Instructions

For most mounting scenarios, the MV72 wall mount provides a quick, simple, and flexible means for mounting your device. The installation should be done in a few simple steps:



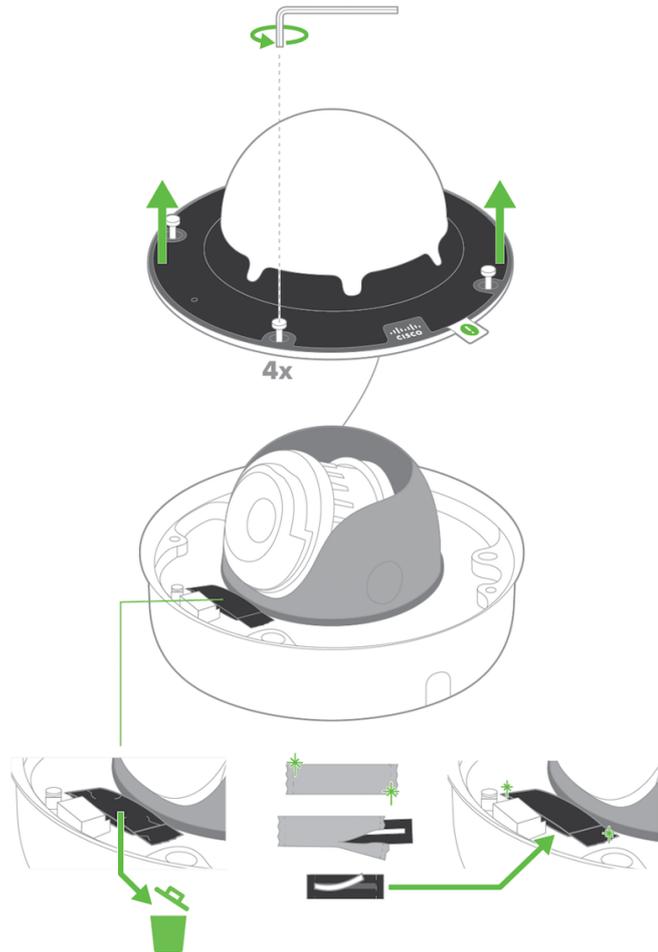
NOTE

Leave protective plastic cover on the optical dome, as this will prevent the optical dome from any damage during installation.



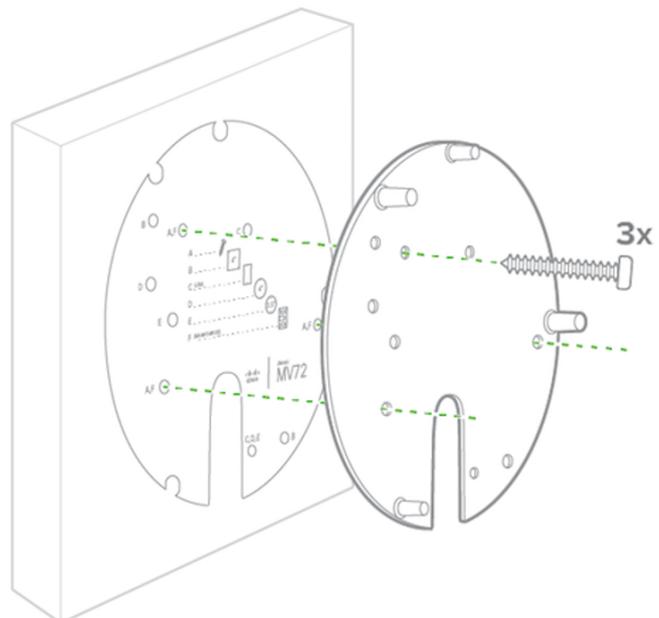
TO INSTALL A MERAKI MV72 CAMERA

1. Carefully loosen all four Torx head security screws and remove the optical dome from the base. There is a tether cable attached to the optical dome and camera base to simplify installation. Remove the desiccant pack included in the camera during product shipment and replace with the provided spare desiccant pack. This is important to prevent moisture accumulating within the sealed optical dome.



2. If you're mounting to a 4x4 junction box, first route the Ethernet cable through the gap and affix the base mount plate to the junction box.

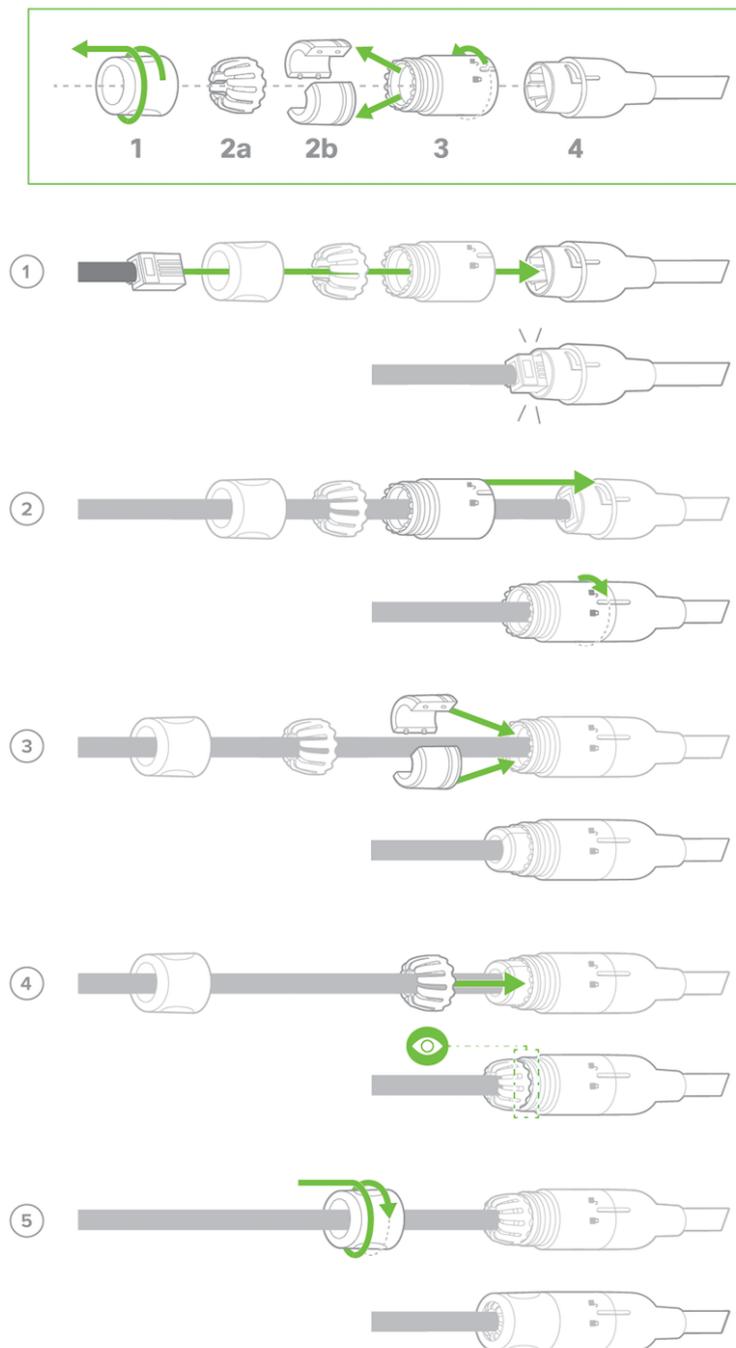
If wall mounting, use template to determine mounting hole locations before screwing in the base mount plate. Peel backing from mount template to stick on wall. Use template holes marked with the letter "A" for standard wall mounting. Screw the base mount plate onto the wall in pre-determined locations using the provided wall screws.



TO INSTALL A MERAKI MV72 CAMERA

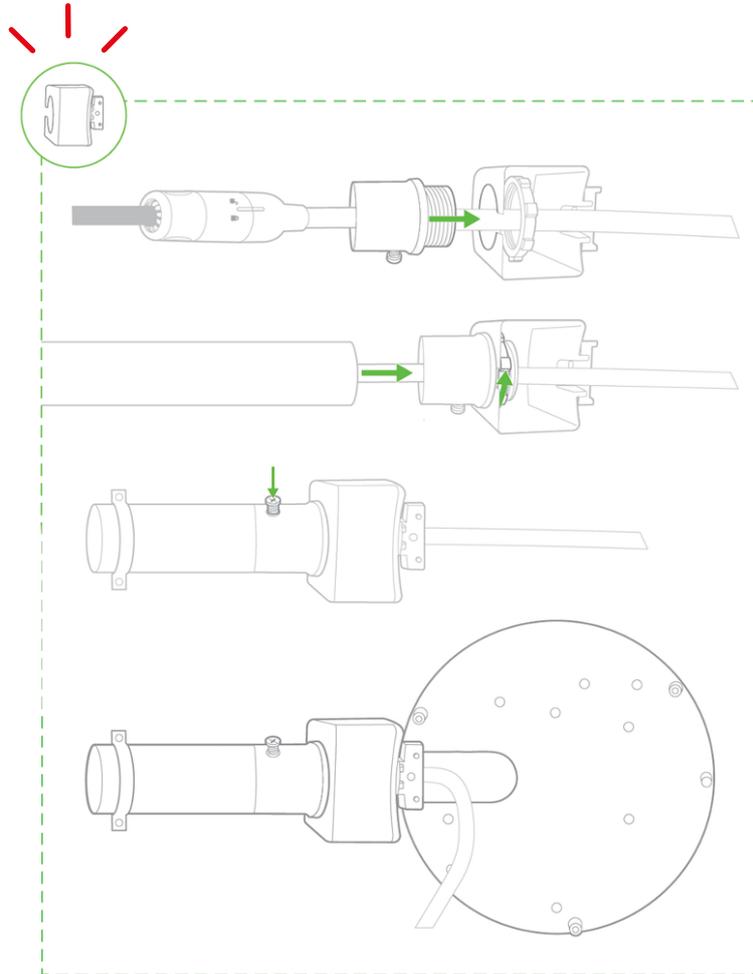
3. Follow this [in-depth cable gland assembly guide](#) to connect the PoE cable to the camera cable gland and ensure seal is water-tight. **This step is very important and may result in damage to the camera if done to completed.**

NOTE: If installing external conduit terminated at the camera, ensure the camera conduit adapter and terminal adapter are pulled over the camera pigtail prior to making the connection!

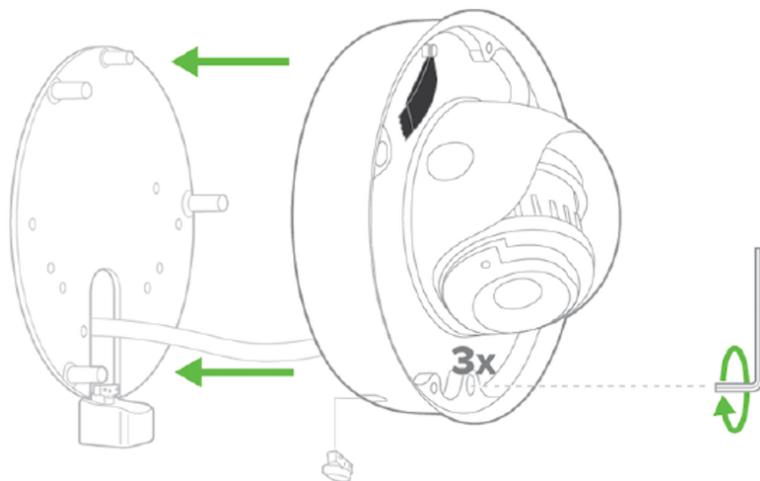


TO INSTALL A MERAKI MV72 CAMERA

- 3a.** If using conduit adapter, attach the terminal adapter to the conduit adapter. Route the conduit over the water-tight cable gland assembly and terminate at the terminal adapter. Ensure the camera conduit adapter is securely placed on the base mount plate as pictured.



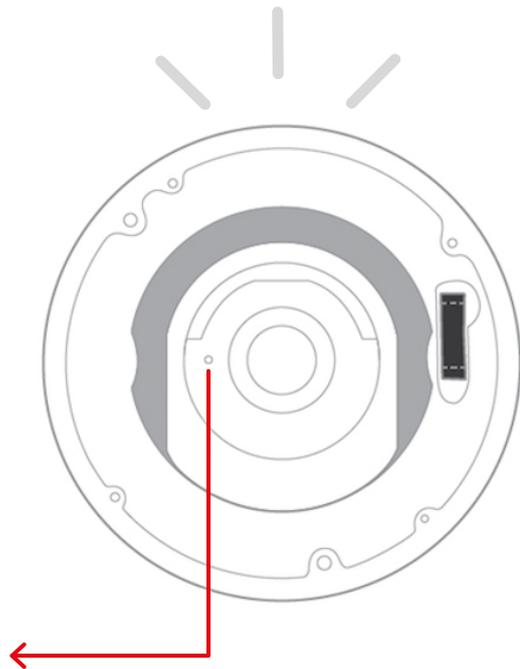
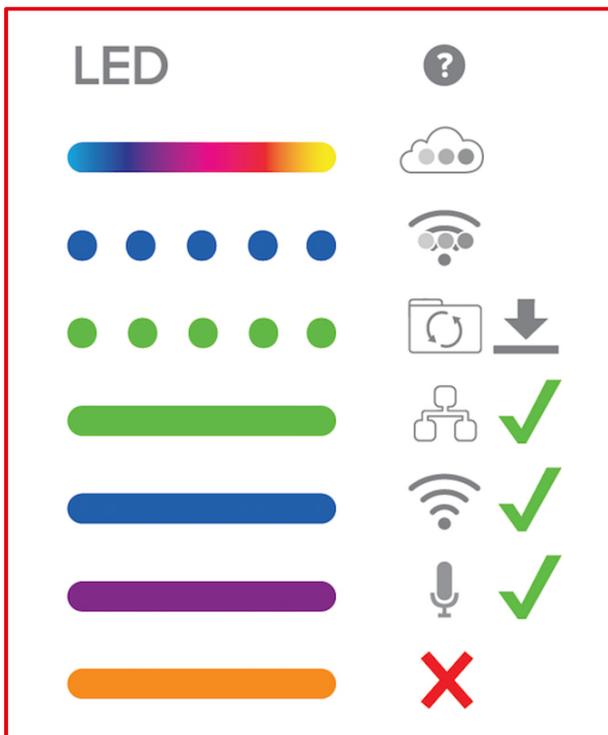
- 4.** Slide camera over top of base mount plate. Secure all three Torx head security screws. Remove the mouse hole cover if using conduit adapter.



TO INSTALL A MERAKI MV72 CAMERA

5. Observe the status LED on the left side of the camera lens assembly and ensure the camera is connected via Ethernet (solid green) or WiFi (solid blue). A MV must first be provisioned over a wired Ethernet connection before it can be deployed wirelessly.

Your MV72 is equipped with a LED light on the front of the unit to convey information about system functionality and performance.



The various status conditions of a MV are **indicated by the following colours** and patterns:

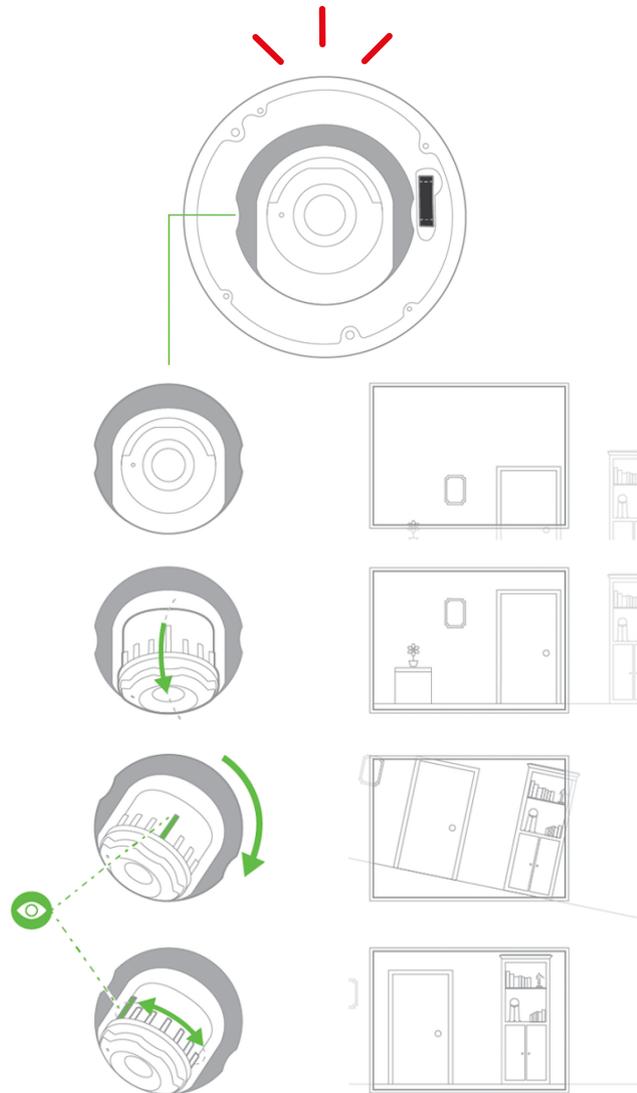
- **Rainbow (solid, rotating through colours)** – MV is booting up.
- **Flashing Blue** – MV is searching for WiFi network(s).
- **Flashing Green** – MV is upgrading or initializing for the first time.
- **Solid Green** – MV is connected via Ethernet.
- **Solid Blue** – MV is connected via WiFi.
- **Solid Violet** – MV has audio recording enabled.
- **Solid Amber** – MV has an issue and may need replacement.



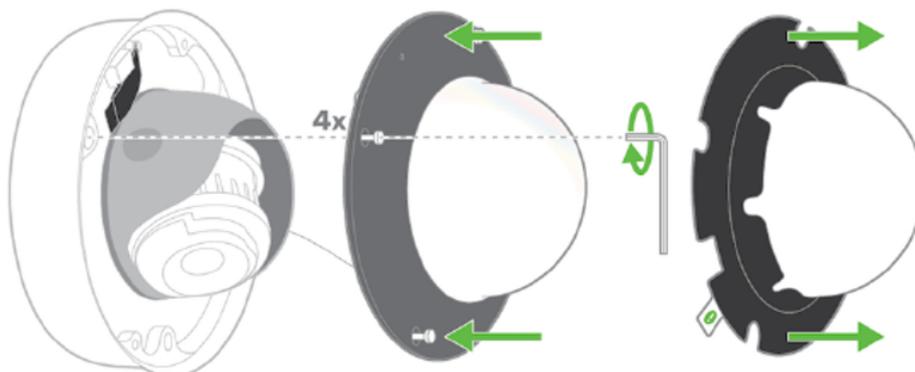
TO INSTALL A MERAKI MV72 CAMERA

6. Aim the lens. Look through the camera on the Meraki Dashboard to fine tune the picture. The camera sensor and lens unit can be physically tilted through a range of 65 degrees, rotated through a range of +/-90 degrees, and panned through a range of 354 degrees. The image can only be rotated by 180 degrees in software and no other adjustments can be made. Zoom and focus can be adjusted remotely and **can not** be adjusted physically on the camera. For more information on zooming, refer to the [adjusting the Field of View article](#).

NOTE: Never adjust or remove the rubber lens gasket or protective lens guard.



7. Replace optical dome and completely secure all four Torx head security screws. Remove the protective plastic cover.





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