



MV53X Installation Guide

This guide describes how to install and configure the Cisco Meraki MV53X, a smart camera that integrates with the Meraki dashboard. It covers the overview, powering, preparing dashboard, and step-by-step installation instructions for the MV53X camera.

Overview

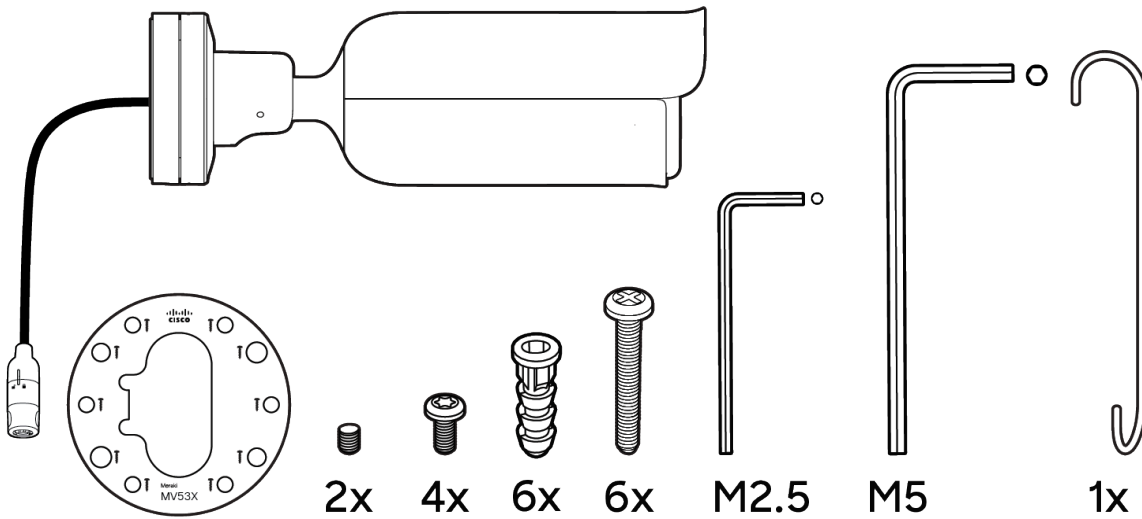
The Cisco Meraki MV53X is the first varifocal bullet camera in the third-generation smart camera lineup. It eliminates the need for complex and expensive servers or video recorders used in traditional surveillance systems. This camera simplifies video surveillance deployments and delivers improved analytics.

Datasheet: [MV53X Datasheet](#)

Box Contents

A single camera box contains:

- One camera hardware
- One mount template
- Two set screws
- Four plate screws
- Six screws and wall anchors
- One M2.5 torx key
- One M5 torx key
- One S-hook



Powering the MV53X

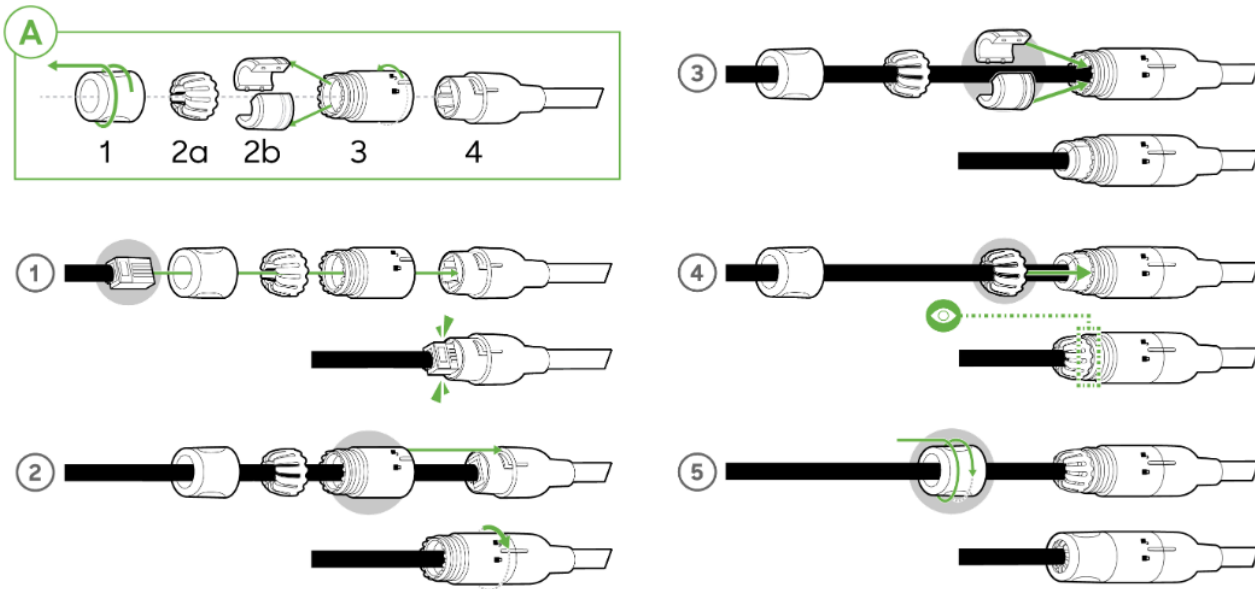
The MV53X has a 1000BASE-TX Ethernet port that supports **802.3at PoE+** and needs **30W** of power. Route the Ethernet cable from an active port on a PoE switch or PoE injector.



The MV53X needs 30W of dedicated power to run its processor and infrared (IR) functions.

Supported Cable Diameter

The MV53X works with cables that are **5.4 mm to 6.9 mm** in diameter. Using cables smaller or larger than this range breaks the waterproof seal and can cause hardware damage. Damage from using the wrong cable size is not covered by the warranty.



Pre-Install Preparation

Complete the following steps before performing an on-site installation.

Configure Your Network in Dashboard

This section provides a brief overview of the steps to add an MV53X to your network. For detailed instructions on creating, configuring, and managing Meraki Camera networks, refer to the online documentation (<https://documentation.meraki.com/MV>).

1. Log in to the Meraki dashboard at <http://dashboard.meraki.com>. If you are a first-time user, create a new account.
 2. Find the existing network where you intend to add the cameras. If needed, create a new network.
 3. Add your cameras to the network using either your Meraki order number (located on your invoice) or the serial number of each camera (in the format Qxxx-xxxx-xxxx, found on the bottom of the unit).
 4. Confirm that the camera is listed under **Cameras > Monitor > Cameras** in the dashboard.
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Check and Configure Firewall Settings

If a firewall is in place, it must permit outgoing connections on specific ports to designated IP addresses. To obtain the most up-to-date list of outbound ports and IP addresses for your organization is available on the [Firewall Configuration page](#).

DNS Configuration

Each MV53X will generate a unique domain name to enable secure direct streaming functionality. These domain names resolve an A record for the private IP address of the camera. Any public recursive DNS server will resolve this domain.

For utilizing an on-site DNS server, allow *.devices.meraki.direct or configure a conditional forwarder to prevent local domains from being appended to *.devices.meraki.direct. Forward these domain requests to Google Public DNS for resolution.

Assigning IP Addresses

Currently, the MV53X does not support static IP address assignment. To ensure proper operation, MV53X units must be connected to a subnet configured for DHCP with sufficient available DHCP addresses.

Install Instructions

The camera comes with a protective lens cover. Remove the lens cap after installation is complete. This allows the camera to work properly and deliver clear visuals.

Placement Guidelines

The MV53X camera offers four mounting options, which are outlined below:

Wall or ceiling Mount

- No additional accessories are required.

Pole (with accessory) Mount

- Pole mount MA-MNT-MV-28 is available to order separately.
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- [MA-MNT-MV-28 installation instructions](#)

Junction Box Mount

- Junction box MA-MNT-MV-58 is available to order separately.
 - [MA-MNT-MV-58 installation instructions](#)

Corner Mount

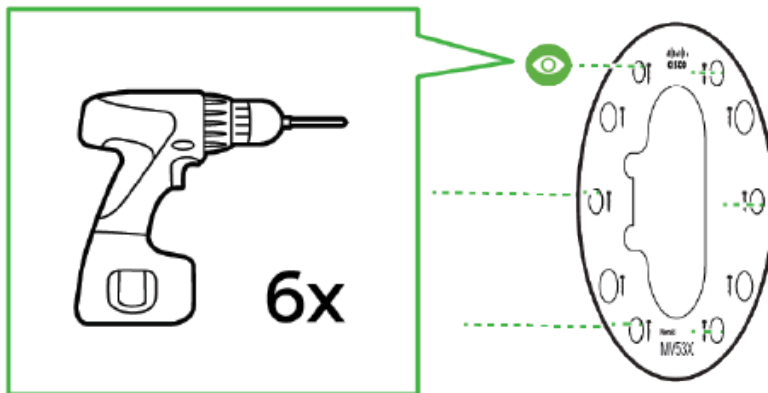
- Corner mount MA-MNT-MV-88 is available to order separately.
 - [MA-MNT-MV-88 installation instructions](#)

Mounting Instructions

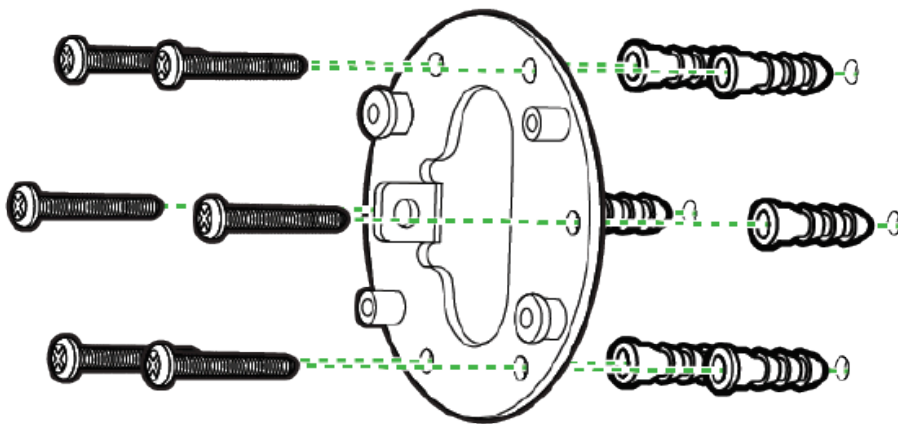
The camera unit has a metal plate at its base when unboxed.

To prepare it for mounting, rotate the plate counter-clockwise to detach it from the camera body. Secure the plate to a wall or compatible mounting surface. Use the provided template to mark pilot hole locations for accurate alignment before drilling.

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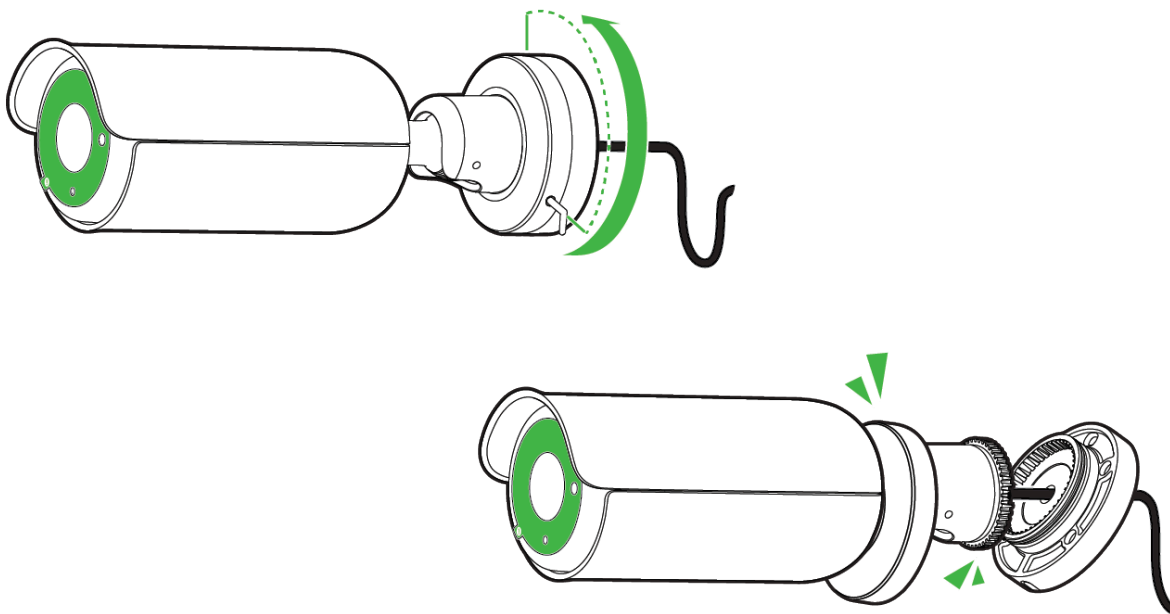
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Rotate the baseplate of the camera counter-clockwise in order to separate the camera body from the second plate.

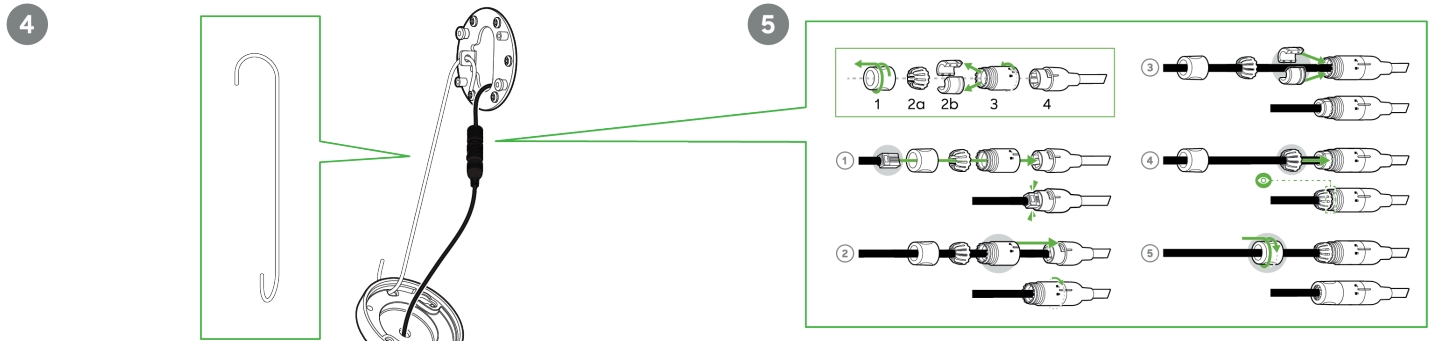
- You have to use the included M5 wrench to rotate this plate.

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Use the provided S-hook to hang the camera and guide the cable through the central hole if routing it through a wall or into a junction box. Alternatively, you can remove the cable guard located at the bottom of the camera base and push the pigtail through that opening.

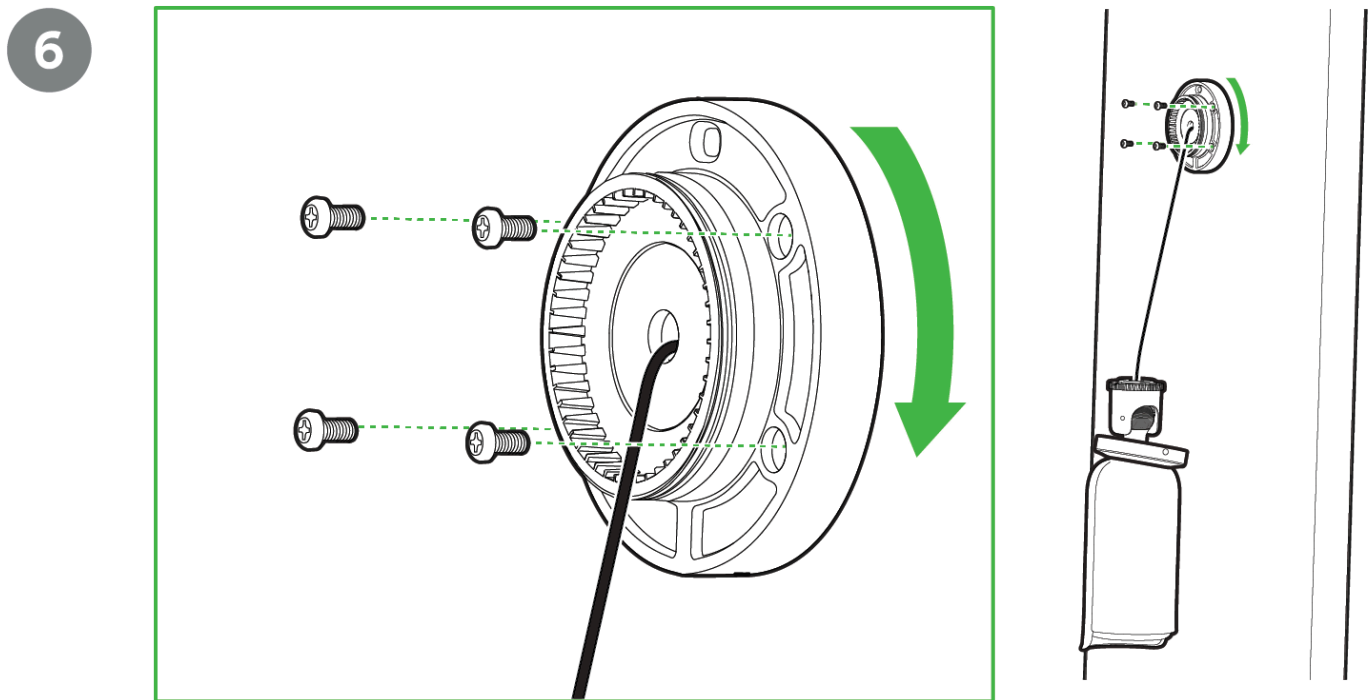
Now, install the waterproof cable gland on the Ethernet cable. Follow the instructions outlined earlier in this guide or refer to the image below to ensure you take proper precautions and prevent any risk of water damage to the unit.



On the bottom of the camera base, there are two slots designed for the metal pegs of the base-plate to fit into.

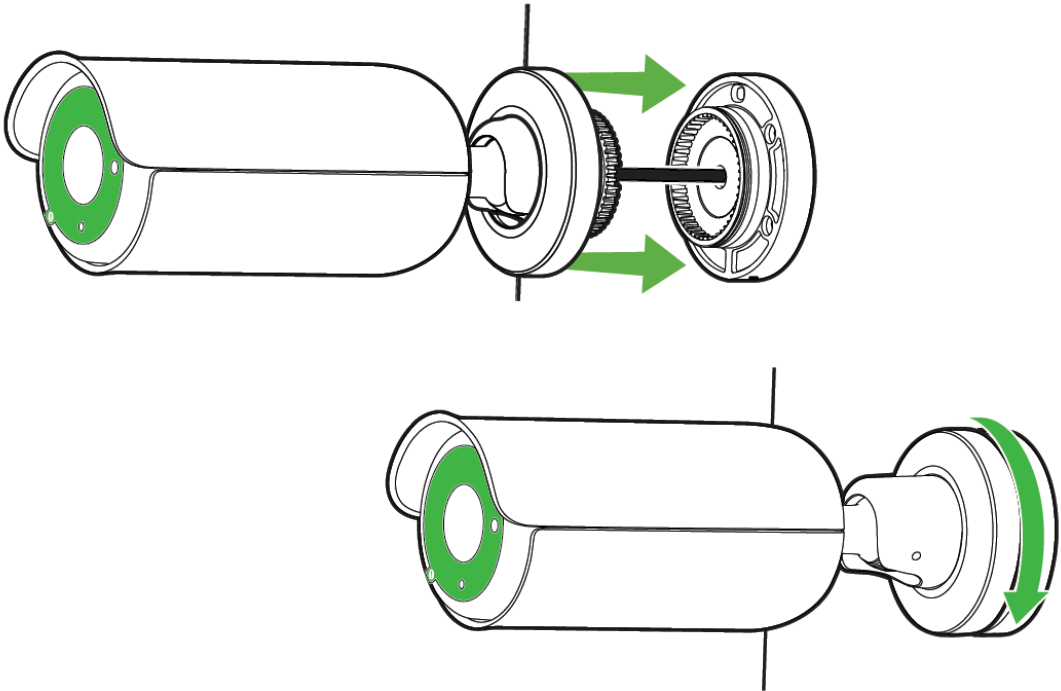
After completing this step, twist the base to lock it onto the mounting plate. If you are not pushing the pigtail through the center of the mounting plate, ensure the grommet on the pigtail is passed through the cable guard.

Use the 4 screw holes and included screws to affix the base of the camera to the mounting plate.



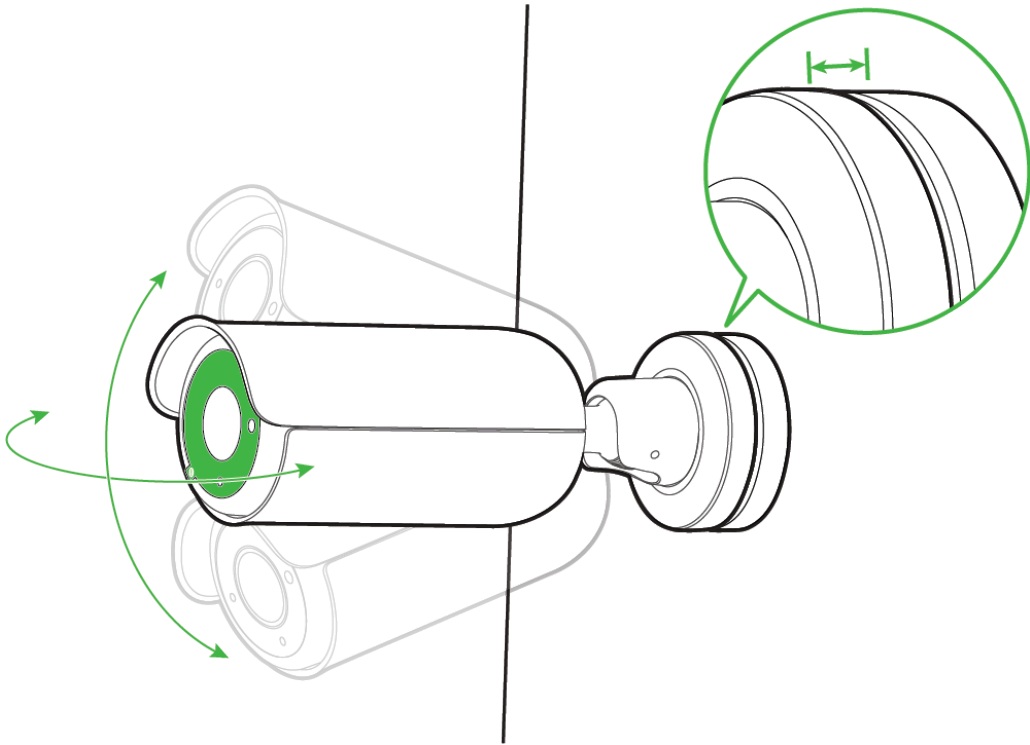
You can now attach the camera base plate to the wall-mounted plate. Once attached, hand-tighten the plate to stabilize the camera.

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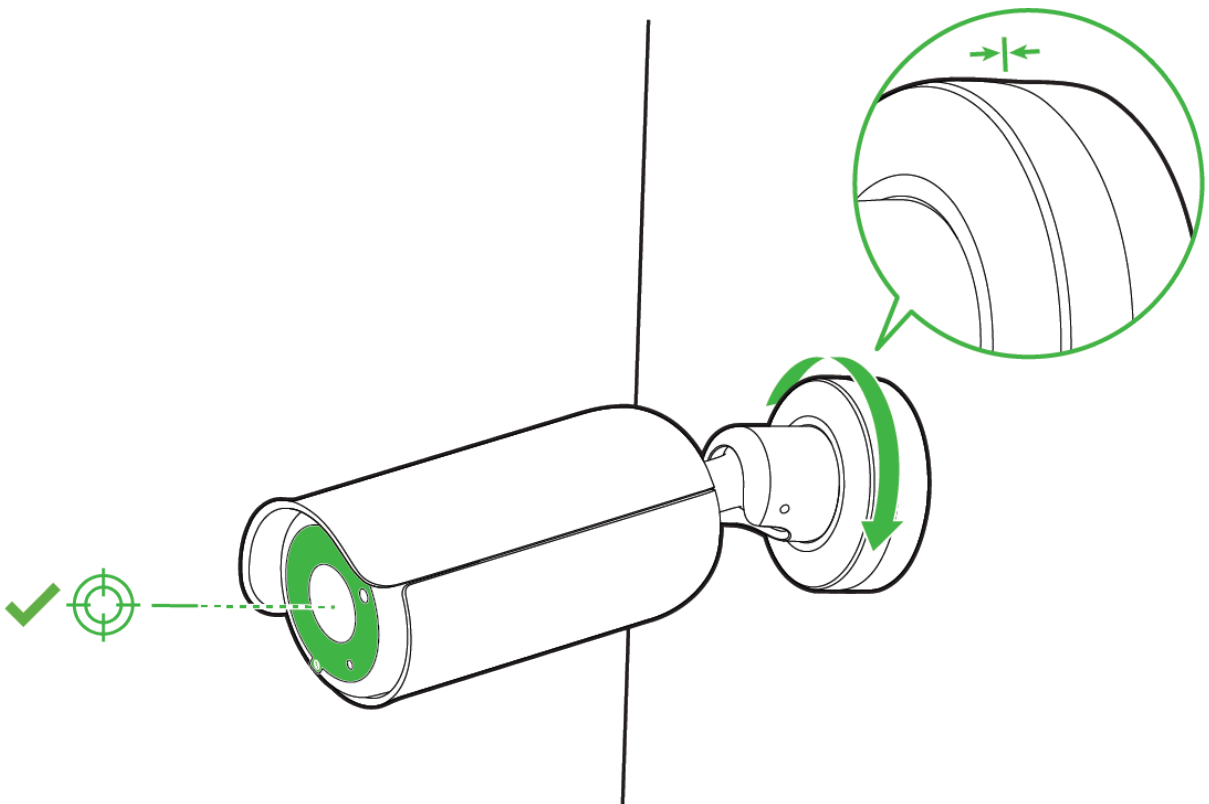
Position the camera so that the top of the base is aligned, then use the ball joint to adjust the camera's orientation(view/angle). Ensure that the camera's opening is directed towards the desired view and the hood is correctly positioned at the top.

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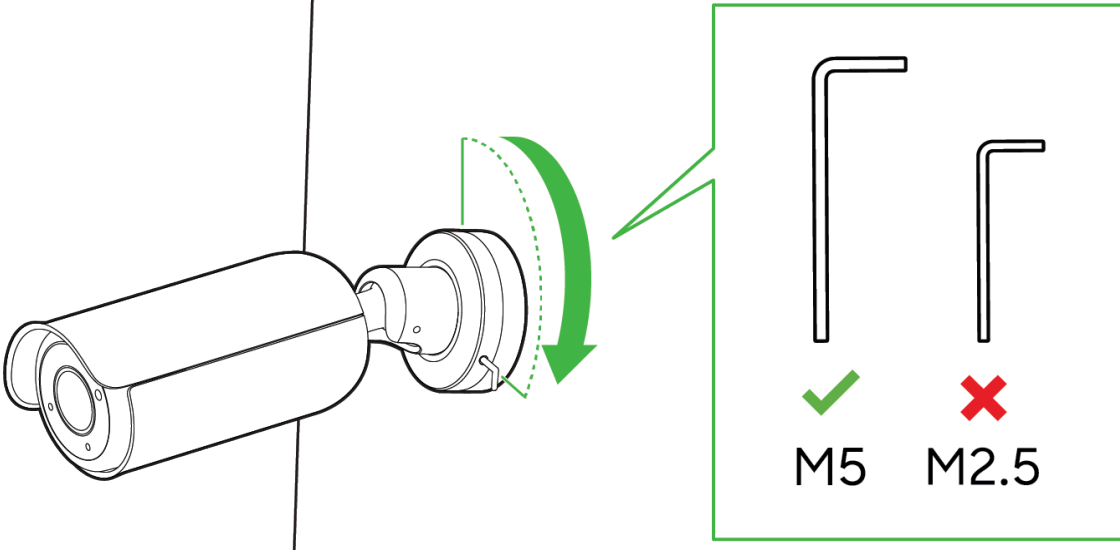
Tighten the top of the base clockwise after confirming the position.

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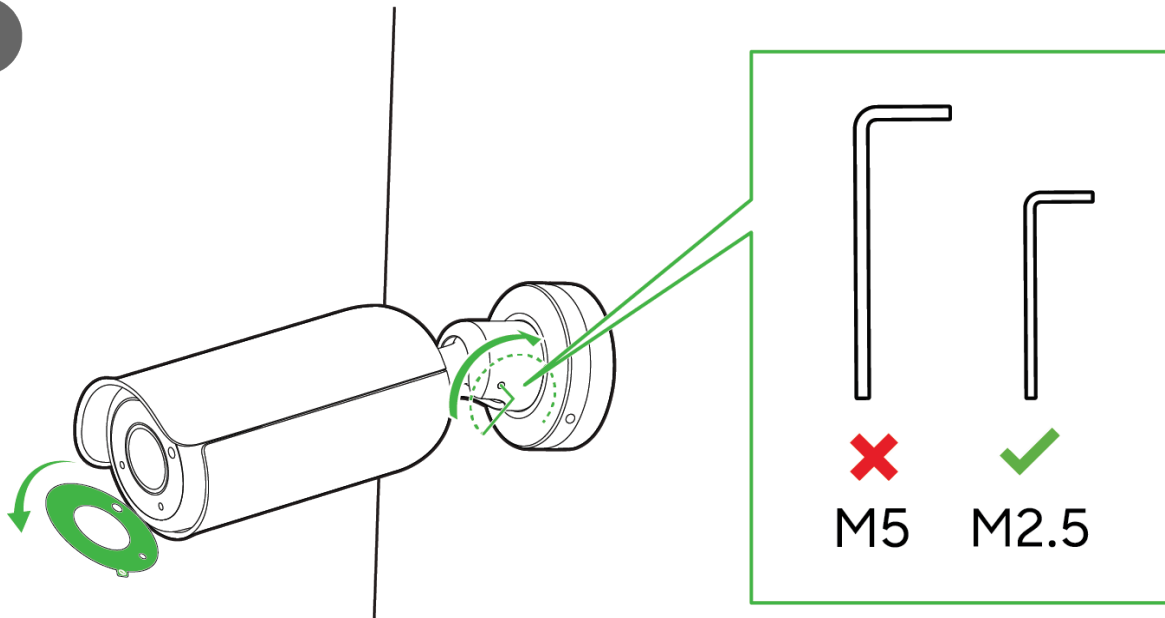


Tighten this even further by using the M5 and M2.5 torx keys provided around the joint and the top of the base. Finally, remove the protective lens cap.

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LED Indicator

The various status conditions of an MV are indicated by the following colors and patterns:

- Rainbow (solid, rotating through colors) - MV is booting up
- Flashing Green - MV is upgrading or initializing for the first time
- Solid Green - MV is connected via Ethernet
- Solid Violet - MV has audio recording enabled
- Solid Amber - MV has a network issue and cannot talk to dashboard
- Solid Red - Power connection is below <math><7.8V</math>

