

## Overview 概覽

The Cisco Meraki MV33 is a networked camera that is exceptionally simple to deploy and configure due to its integration into the Meraki dashboard and cloud augmented edge storage. The MV family eliminates the complex and costly servers and video recorders required by traditional solutions, removing the limitations typically placed on video surveillance deployments.

## Specifications 規格

- (2880x2880) ,
- (2112 x 2112)
- (1080x1080)

### Networking and Wireless

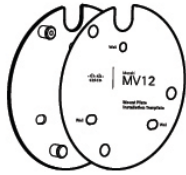
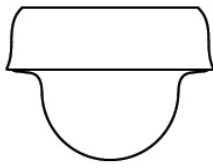
- 1x 10/100/1000 Base-T Ethernet (RJ45) DSCP traffic marking
- Supported frequency bands (country-specific restrictions apply):
- 2.4 GHz 802.11b/g/n radio :
- 2.400 - 2.483.5 GHz
- 5 GHz 802.11a/n/ax radio :
- 5.150 - 5.250 GHz (UNII-1)
- 5.250 - 5.350 GHz (UNII-2)
- 5.470 - 5.600, 5.650 - 5.725 GHz (UNII-2e) 5.725 - 5.850 GHz (UNII-3)
- 1x1 with one spatial stream
- MU-MIMO support
- 20 and 40 MHz channels (802.11n)
- 20, 40, and 80 MHz channels (802.11ax)
- Up to 256 QAM on both 2.4 GHz and 5 GHz bands
- 2.4 GHz Bluetooth Low Energy (BLE, EDR, BR) radio

## Package Contents 包裝內容

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

- Phillips head wall mounting screws
- Wall screw anchors for masonry (brick, concrete)
- Torx key

- Wall mount plate



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## Ethernet Port / Power

The MV33 features a 1000BASE-T Ethernet port that supports 802.3af Power-over-Ethernet (PoE).

## 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 MV33 to your network. For detailed instructions about creating, configuring, and managing Meraki Camera networks, refer to the online documentation (<https://documentation.meraki.com/MV>).

1. Login to <http://dashboard.meraki.com>. If this is your first time, create a new account.
2. Find the network you plan to add your cameras or create a new network.
3. Add your cameras to your network. You will need your Meraki order number (found on your invoice) or the serial number of each camera, which looks like QXXX-XXXX-XXXX and is located on the bottom of the unit.
4. Verify that your camera is now listed under Cameras > Monitor > Cameras.

## Check and Configure Firewall Settings

If a firewall is in place, it must allow outgoing connections on particular ports to particular IP addresses. The most current list of outbound ports and IP addresses for your specific organization can be found [here](#).

## DNS Configuration

Each MV33 will generate a unique domain name to allow secured 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.

If utilizing an on-site DNS server, please whitelist \*.devices.meraki.direct or configure a conditional forwarder so that local domains are not appended to \*.devices.meraki.direct and that these domain requests are forwarded to Google public DNS.

## Assigning IP Addresses

At this time, the MV33 does not support static IP assignment. MV33 units must be added to a subnet that uses DHCP and has available DHCP addresses to operate correctly.

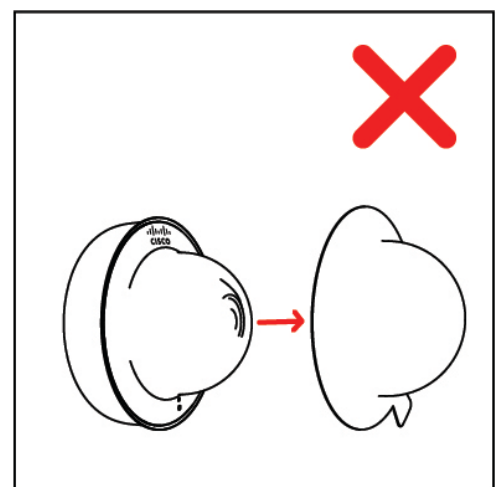
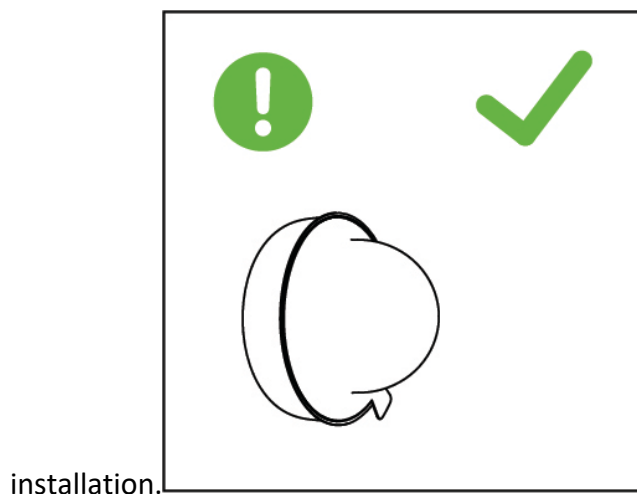
## Installation Instructions

Note: Each MV33 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: The MV33 will automatically update to the latest stable firmware during setup. Some features may be unavailable until this automatic update is completed. This process may take up to 10 minutes due to enabling whole disk encryption.

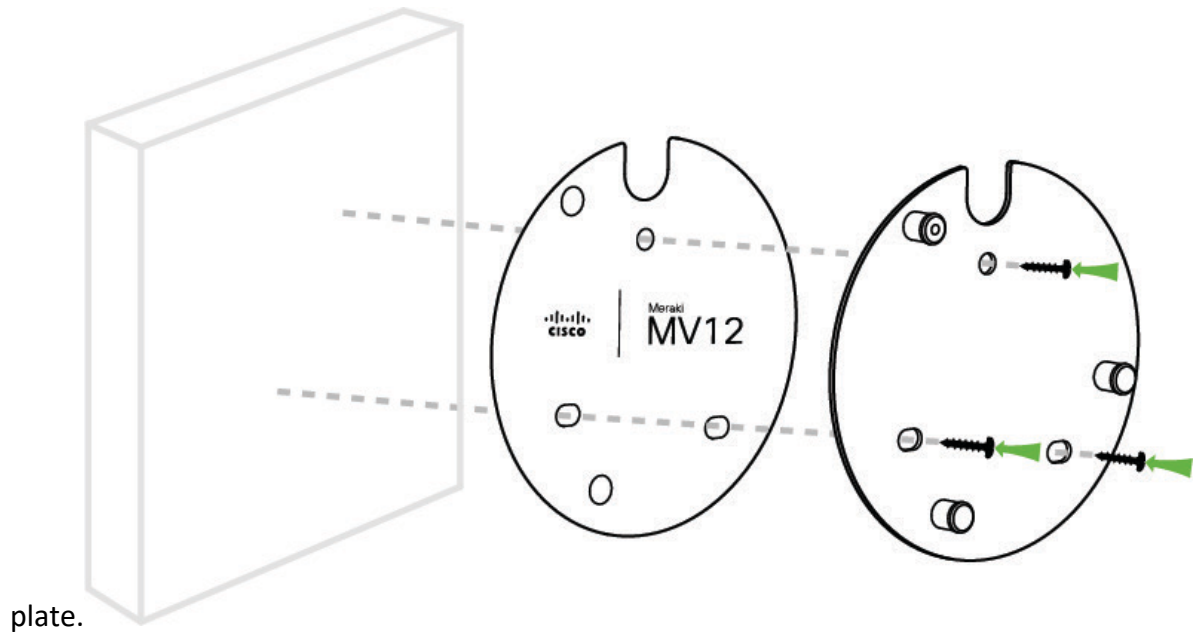
The MV33 wall mount provides a quick, simple, and flexible means of mounting your device for most mounting scenarios. The instructions are as follows:

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

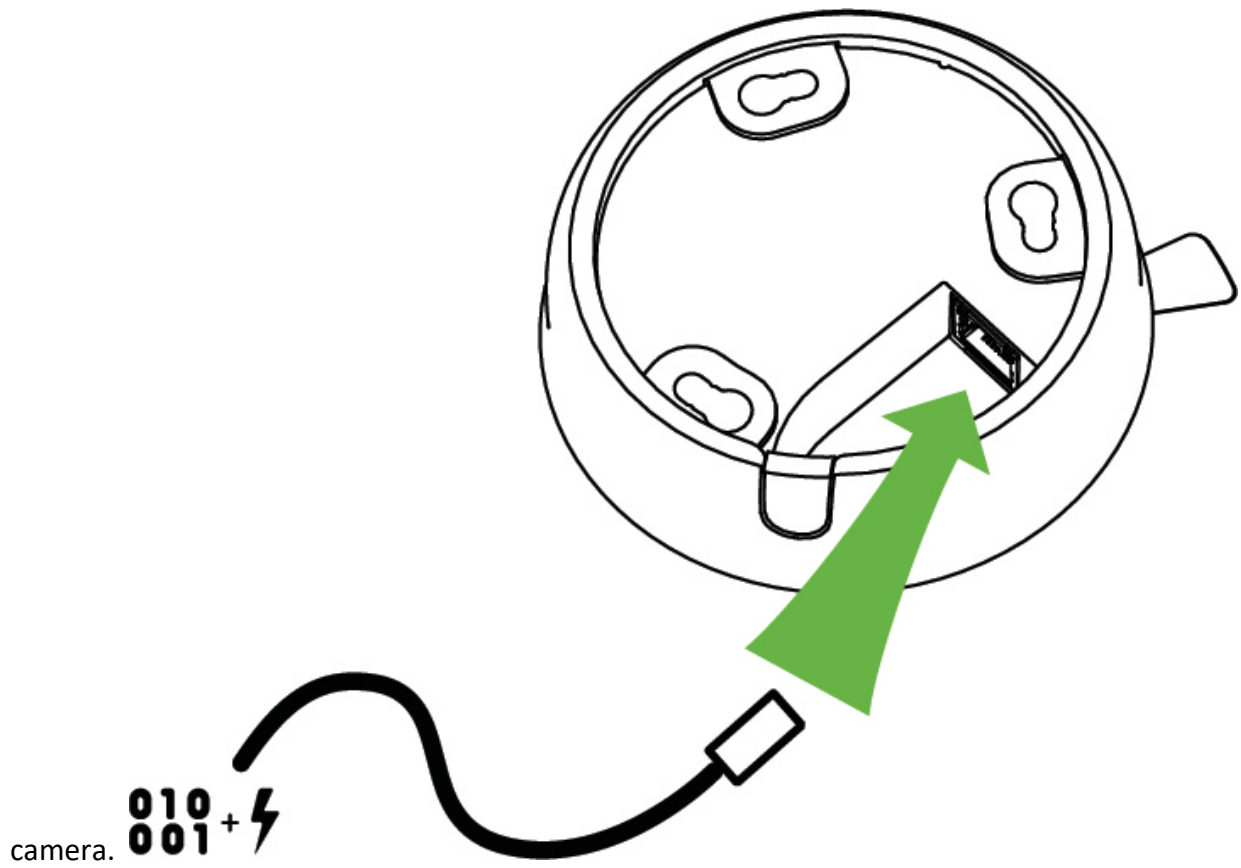


2. Use the template to determine mounting hole locations before screwing in the mounting plate. Peel backing from the mounting template to stick on the wall. Screw the mounting plate onto the

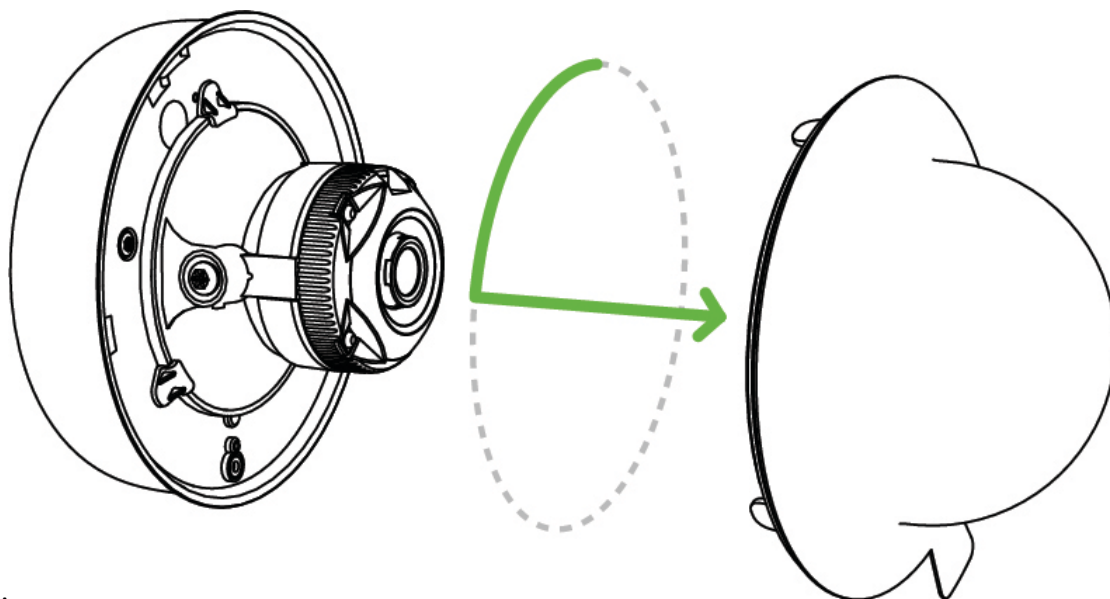
wall in pre-determined locations. Use template holes to align the mounting



3. Connect PoE cable to the

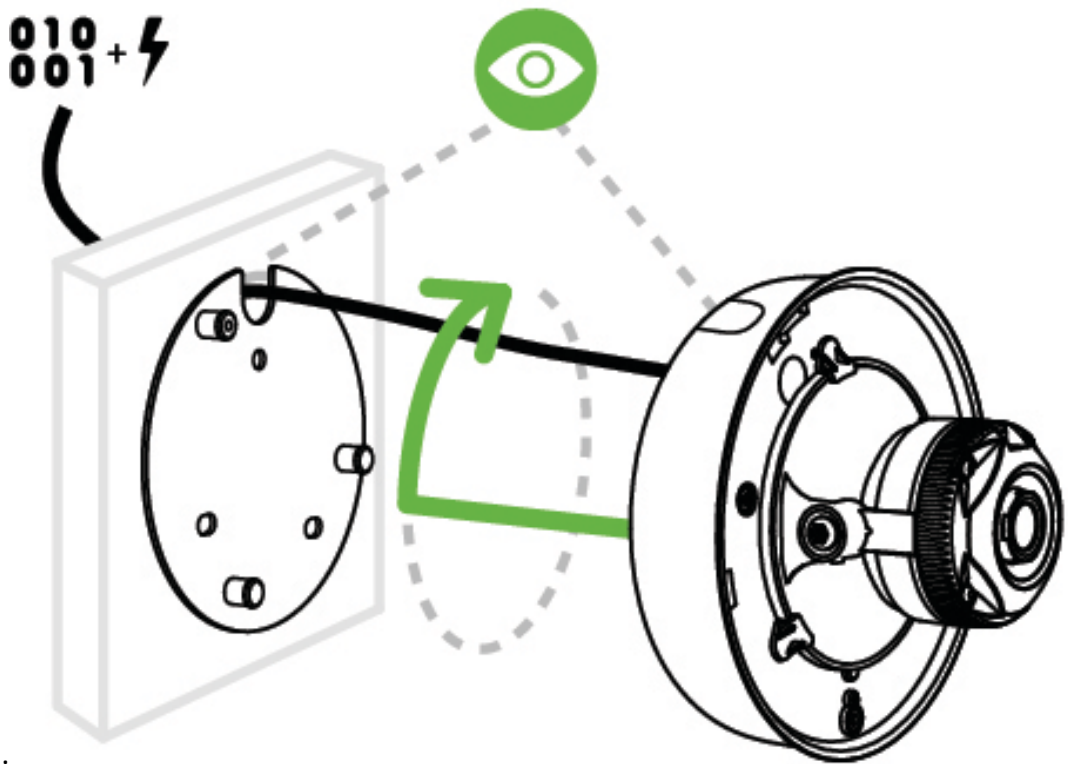
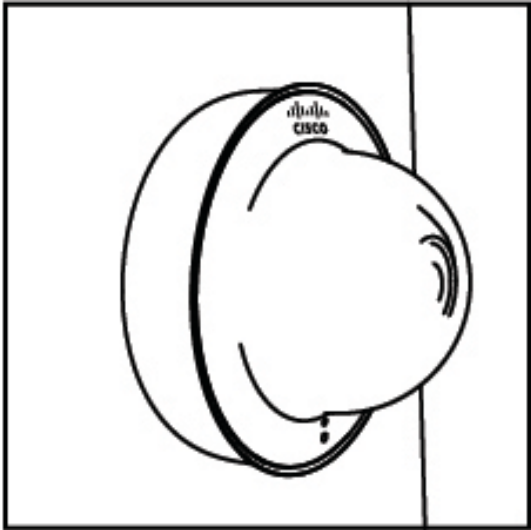


4. Turn bubble counterclockwise to unlock and remove. While the bubble is released, aim the lens to the desired

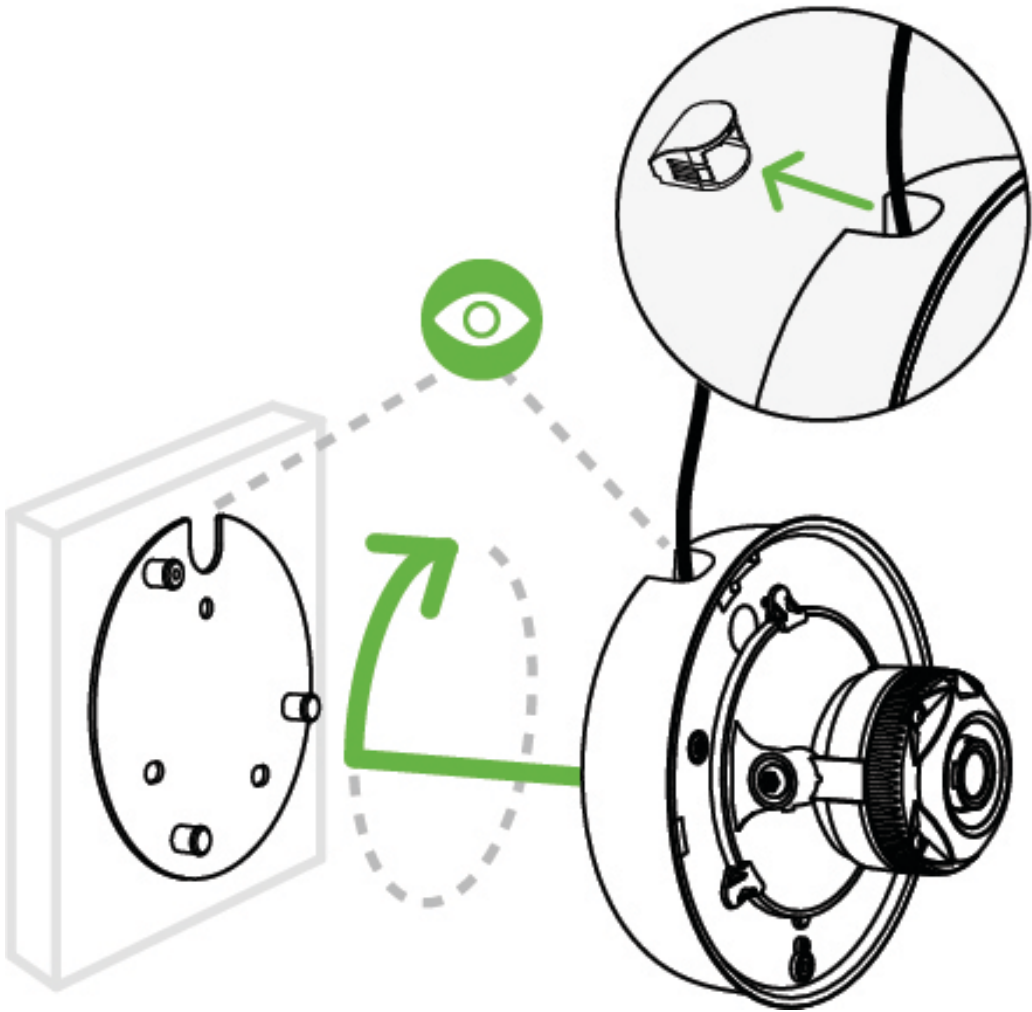
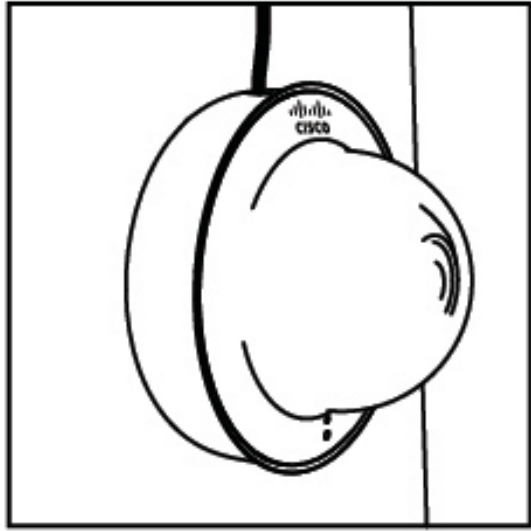


scene.

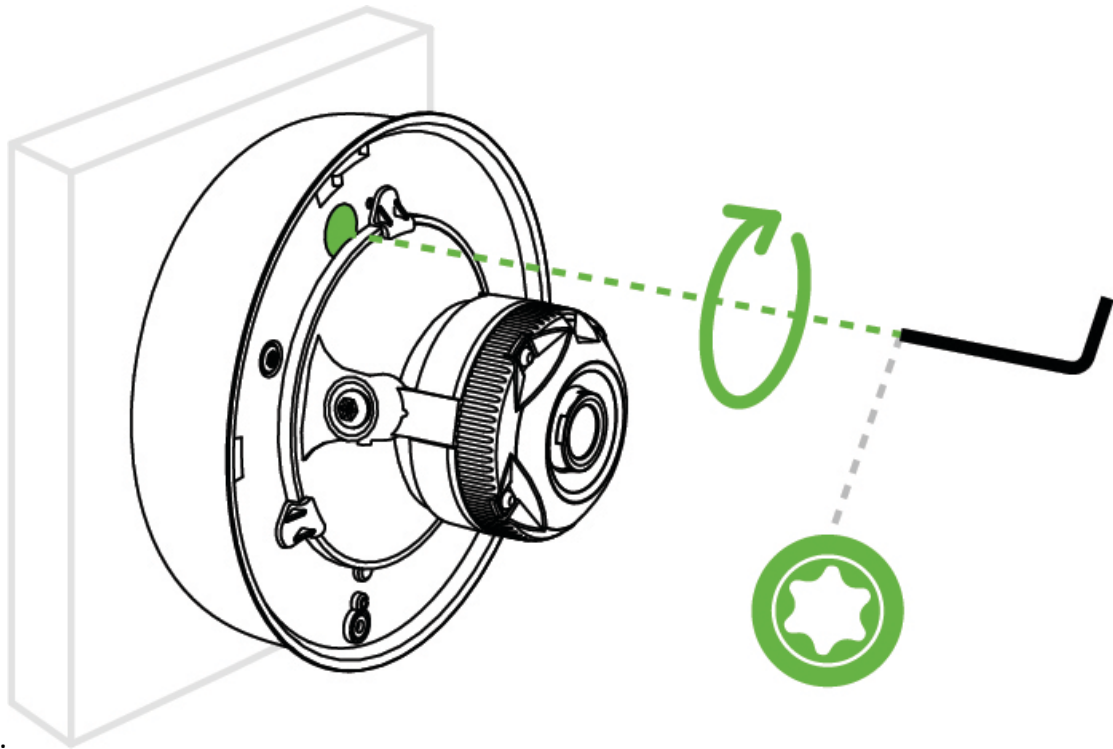
5. Align camera to mounting plate studs. Slide the camera onto studs and turn the camera clockwise to secure the top plate. If the cable run is not coming directly behind the camera, the cable guard will need to be removed. Below are two mounting



examples.



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

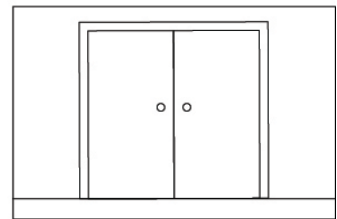
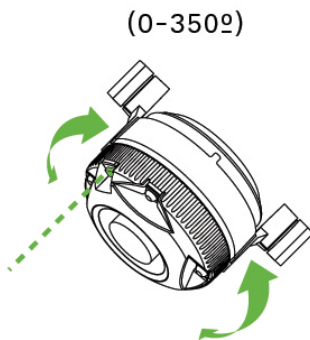
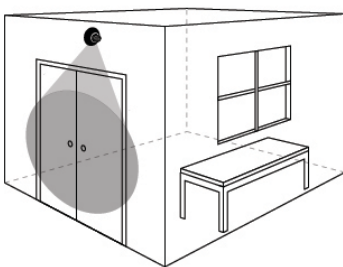
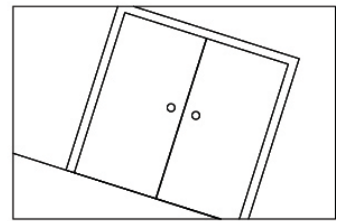
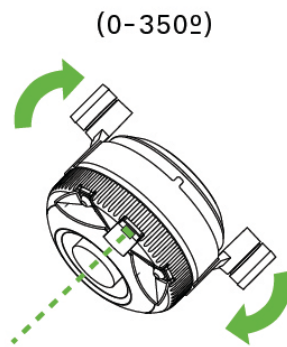
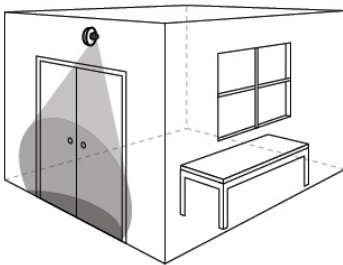
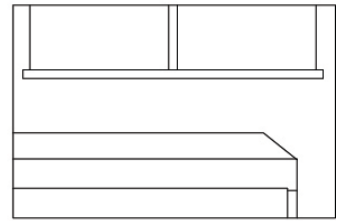
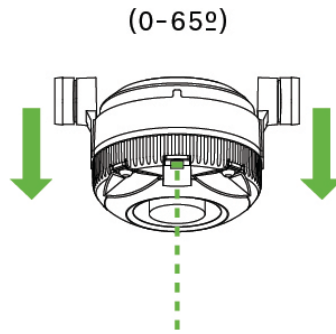
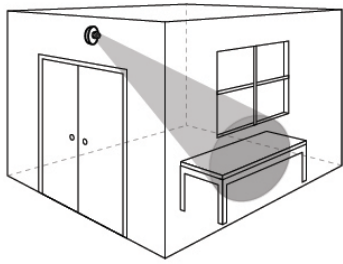
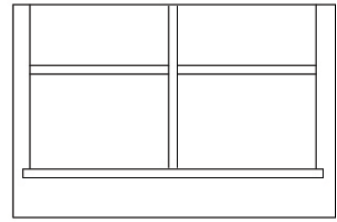
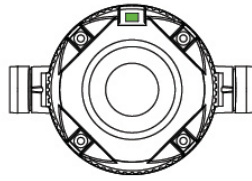
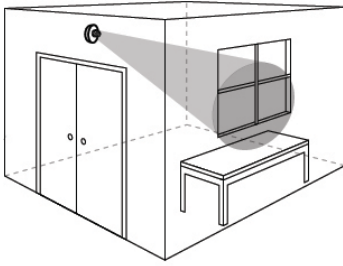


screw.

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

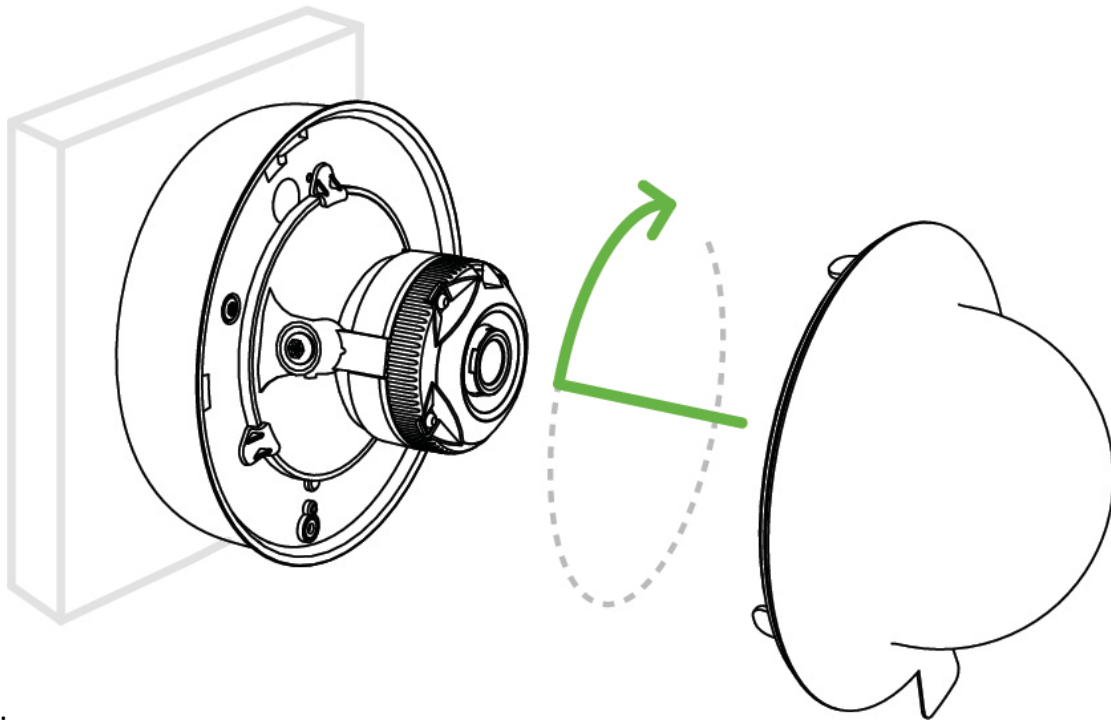


adjusted on the



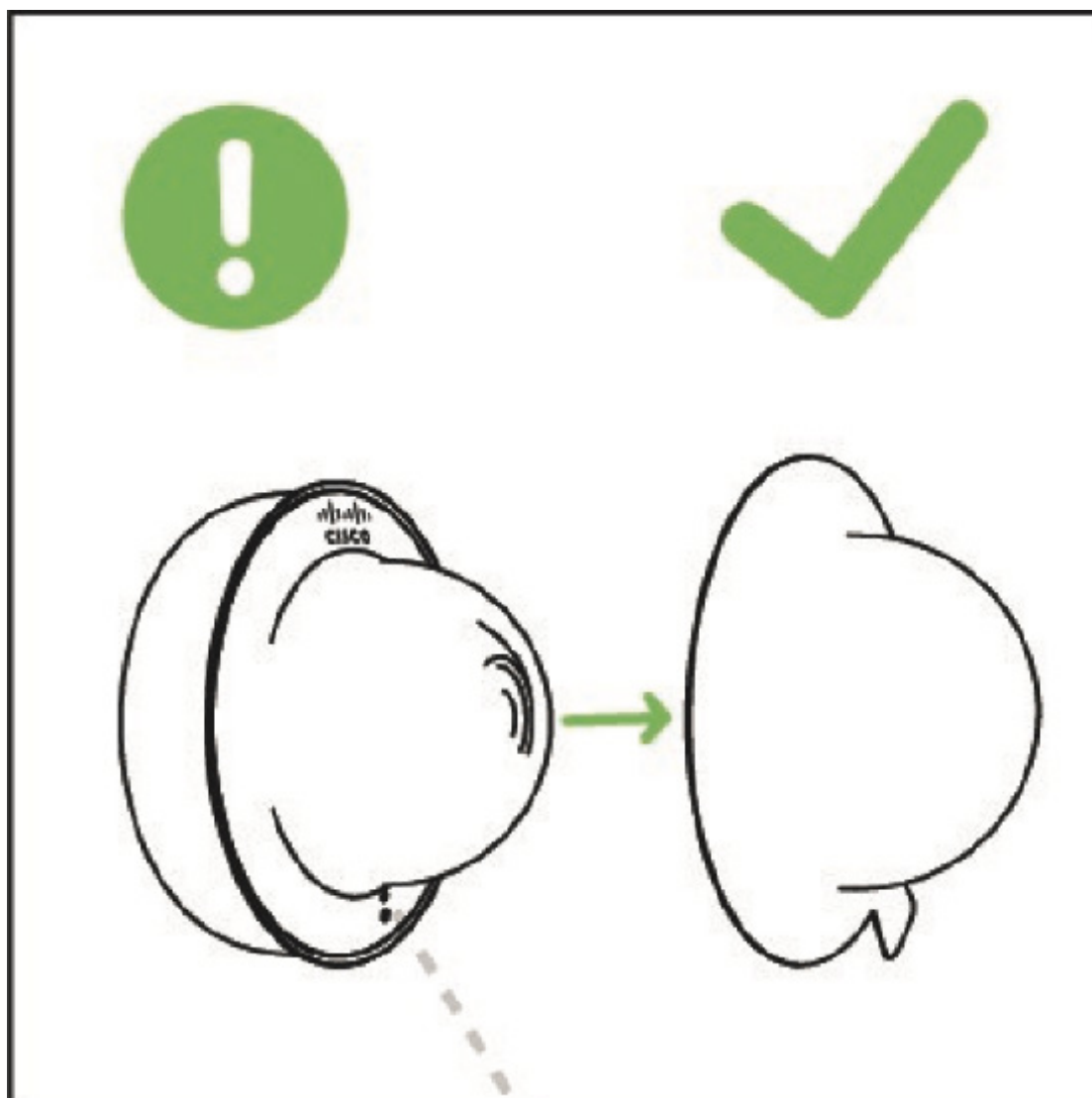
camera.

8. Replace the plastic dome. Turn dome clockwise to



lock.

9. Remove the protective cap from the camera bubble.



# Powering the MV33

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

Note: PoE supports a maximum cable length of 300 ft (100 m).

## WLAN Capability

MV33 cameras running MV firmware 3.16 and newer can be configured as wireless clients. To learn how to configure MV33 wireless settings, check out our [MV Wireless Configuration Guide](#).

## LED Indicator

Your MV33 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.

1.

## Regulatory Information

### FCC Compliance 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.

### FCC Interference Statement

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 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 which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### FCC Caution

Any changes or modifications not expressly approved by Cisco Systems, Inc. could void the user's authority to operate this equipment. This Transmitter must not be co-located or operation in conjunction with any other antenna or transmitter.

#### FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. Installing or mounting of this device shall be done as such that a minimum separation distance (distance between a person and the device, or the device's antennas) of 20 cm is always ensured. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

IEEE 802.11b or 802.11g operation of this product in the USA is firmware-limited to channels 1 through 11.

#### Industry Canada Statement

This device complies with license exempt RSSs of the Industry Canada 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. (3) this device subject to this section shall not be capable of transmitting in the band 5600-5650 MHz. This restriction is for the protection of Environment Canada's weather radars operating in this band.

Ce dispositif est conforme à les RSS d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable. (3) Ce dispositif soumis au présent article ne doit pas pouvoir émettre dans la bande 5600-5650 MHz. Cette restriction vise la protection des radars météorologiques d'Environnement Canada qui fonctionnent dans cette bande.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

Pour les produits disponibles aux États-Unis / Canada du marché, seul le canal 1 à 11 peuvent être exploités. Sélection d'autres canaux n'est pas possible.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with IC multi-transmitter product procedures.

Cet appareil et son antenne (s) ne doit pas être co-localisés ou fonctionnement en association avec une autre antenne ou transmetteur.

Dynamic Frequency Selection (DFS) for devices operating in the bands 5250- 5350 MHz, 5470-5600 MHz and 5650-5725 MHz.

Sélection dynamique de fréquences (DFS) pour les dispositifs fonctionnant dans les bandes 5250-5350 MHz, 5470-5600 MHz et 5650-5725 MHz.

#### Industry Canada Caution

(i) The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

#### Avertissement:

(i) Les dispositifs fonctionnant dans la bande 5 150-5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

#### Industry Canada Radiation Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. Installing or mounting of this device shall be done as such that a minimum separation distance (distance between a person and the device, or the device's antennas) of 20 cm is always ensured.

#### Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

For indoor use only.

*Pour une utilisation en intérieur uniquement.*

#### Australia Radiation Exposure Statement

This equipment complies with Australian radiation exposure limits set forth for an uncontrolled environment. Installing or mounting of this device shall be done as such that a minimum separation distance (distance between a person and the device, or the device's antennas) of 20 cm is always ensured.

### VCCI Statement for Japan

警告 この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としてい

ますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。取扱説明書に従って正しい取り扱いをしてください。VCCI-B

<製品仕様における安全上の注意>

[www.cisco.com/web/JP/techdoc/index.html](http://www.cisco.com/web/JP/techdoc/index.html)

接続ケーブル、電源コードセット、ACアダプタ、バッテリーなどの部品は、必ず添付品または指定品をご使用ください。添付品・指定品以外をご使用になると故障や動作不良、火災の原因となります。また、電源コードセットは弊社が指定する製品以外の電気機器には使用できないためご注意ください。

### Europe-EU/UK Declaration of Conformity

#### Scope

The information in this document is applicable to the Cisco Meraki MV33-HW This product is intended to be placed on the market within the European Union, Lichtenstein, Switzerland, Iceland, Norway, Turkey and other countries that have implemented the EU Directive 2014/53/EU & **Radio Equipment Regulations 2017 (S.I. 2017/1206)**

Additionally, this product is intended to be placed on the market within the UK and other countries that have implemented S.I. 2017 No. 1206 (The Radio Equipment Regulations 2017). This equipment is in compliance with the essential requirements and other relevant provisions of S.I. 2017 No. 1206 (The Radio Equipment Regulations 2017).

The full UK/EU declaration of conformity for this product can be found at [cisco.com/c/en/us/products/product-approvals.html](http://cisco.com/c/en/us/products/product-approvals.html)

The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the EU Directive 2014/53/EU, & **Radio Equipment Regulations 2017 (S.I. 2017/1206)**


Radio	:	EN 300 328, EN 301 893, IR 2030 – UK Interface Requirements 2030 ( UK only)
EMC	:	EN 301 489-1, EN 301 489-17, EN 55032, EN 55035, EN 61000-3-2, EN 61000-3-3 EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11

Safety	:	EN 62368-1
RF Exposure	:	EN 50385, EN IEC 62311, EN50665

### Simplified EU/UK Declaration of Conformity

This declaration is only valid for configurations (combinations of software, firmware and hardware) provided and/or supported by Cisco Systems for use within the EU or countries that have implemented the EU Directives and/or spectrum regulation. The use of software or firmware not supported/provided by Cisco Systems may result in equipment no longer compliant with the regulatory requirements.

The full declaration of conformity for this product can be found at [meraki.cisco.com/compliance](http://meraki.cisco.com/compliance) and/or [cisco.com/c/en/us/products/product-approvals.html](http://cisco.com/c/en/us/products/product-approvals.html)

				
AT	BE	BG	CZ	DK
EE	FR	DE	IS	IE
IT	EL	ES	CY	LV
LI	LT	LU	HU	MT
NL	NO	PL	PT	RO
SI	SK	TR	FI	SE
CH	HR	UK(NI)		

### Antennas

This device has integrated antennas that cannot be replaced.

The frequency and the maximum transmitted power in EU/UK are listed below:

2400-2483.5 MHz: 100mW EIRP

5150-5725 MHz: 200mW EIRP

5725-5850MHz: 200mW EIRP ( UK only)

### EU/UK Radiation Exposure Statement

This equipment complies with EU/UK radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

### Taiwan NCC & BSMI

本產品符合低功率電波輻射性電機管理辦法:

取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻器材之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前述合法通信，指依電信管理法規定作

業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。應避免影響附近雷達系統之操作。

#### **1). Brazil**

"Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados. Para maiores informações, consulte o site da ANATEL – [www.anatel.gov.br](http://www.anatel.gov.br)")

#### **2). Mexico**

La operación de este equipo está sujeta a las siguientes dos condiciones:

(1) Es posible que este equipo o dispositivo no cause interferencia perjudicial y

(2) Este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Taiwan RoHS

Statement CS-0438 - 台灣 RoHS

台灣 RoHS“限用物質含有情況標示聲明書”網址 [www.cisco.com/go/taiwanrohs](http://www.cisco.com/go/taiwanrohs)

Statement CS-0438 - Taiwan RoHS

Taiwan RoHS “Restricted Substances Content Disclosure Table” web address

[www.cisco.com/go/taiwanrohs](http://www.cisco.com/go/taiwanrohs)