



# Network Covert Camera

Quick Start Guide

### **Quick Start Guide**

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### **About this Manual**

The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version of this Manual at the Hikvision website (<http://www.hikvision.com/>).

Please use this Manual with the guidance and assistance of professionals trained in supporting the Product.

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### Regulatory Information

#### FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**FCC compliance:** 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 try to correct the interference by one or more 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 that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

### FCC Conditions

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.
2. This device must accept any interference received, including interference that may cause undesired operation.

### EU Conformity Statement



This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2014/30/EU, the RoHS Directive 2011/65/EU.



2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see:

[www.recyclethis.info](http://www.recyclethis.info).



2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your

supplier or to a designated collection point. For more information see: [www.recyclethis.info](http://www.recyclethis.info).

### Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (B)/NMB-3(B) standards requirements.



### Safety Instruction

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss.

The precaution measure is divided into "Warnings" and "Cautions"

**Warnings:** Serious injury or death may occur if any of the warnings are neglected.

**Cautions:** Injury or equipment damage may occur if any of the cautions are neglected.

 <b>Warnings</b>	 <b>Cautions</b>
<b>Warnings</b> Follow these safeguards to prevent serious injury or death.	<b>Cautions</b> Follow these precautions to prevent potential injury or material damage.



#### Warnings

- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

## Network Covert Camera ▪ Quick Start Guide

- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region. Please refer to technical specifications for detailed information.
- The power source should meet limited power source or PS2 requirements according to IEC 60950-1 or IEC 62368-1 standard. Refer to the appropriate documentation for detailed information.
- Do not connect several devices to one power adapter as adapter overload may cause over-heating or a fire hazard.
- Please make sure that the plug is firmly connected to the power socket. When the product is mounted on wall or ceiling, the device shall be firmly fixed.
- If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.



### Cautions

- CAUTION: Hot parts! Burned fingers when handling the parts.



Wait one-half hour after switching off before handling parts. This sticker is to indicate that the marked item can be hot and should not be touched without taking care. For device with this sticker, this device is intended for installation in a restricted access location, access can only be gained by service persons or by users who have been instructed about the reasons for the restrictions

applied to the location and about any precautions that shall be taken.

- Make sure the power supply voltage is correct before using the camera.
- Do not drop the camera or subject it to physical shock.
- Do not touch sensor modules with fingers. If cleaning is necessary, use clean cloth with a bit of ethanol and wipe it gently. If the camera will not be used for an extended period, please replace the lens cap to protect the sensor from dirt.
- Do not aim the camera at the sun or extra bright places. Blooming or smearing may occur otherwise (which is not a malfunction), and affect the endurance of sensor at the same time.
- The sensor may be burned out by a laser beam, so when any laser equipment is in using, make sure that the surface of sensor will not be exposed to the laser beam.
- Do not place the camera in extremely hot, cold (the operating temperature shall be -10 °C to 40 °C (14 °F to 104 °F) or -30 °C to 60 °C (-22 °F to 140 °F)), dusty or damp locations, and do not expose it to high electromagnetic radiation. Refer to the appropriate documentation for detailed information.
- To avoid heat accumulation, good ventilation is required for operating environment.
- Keep the camera away from liquid while in use.
- While in delivery, the camera shall be packed in its original packing, or packing of the same texture.



- Regular part replacement: a few parts (e.g. electrolytic capacitor) of the equipment shall be replaced regularly according to their average enduring time. The average time varies because of differences between operating environment and using history, so regular checking is recommended for all the users. Please contact with your dealer for more details.
- This equipment is not suitable for use in locations where children are likely to be present.
- CAUTION: Risk of explosion if the battery is replaced by an incorrect type. Dispose of used batteries according to the instructions

ATTENTION: IL Y A RISQUE D'EXPLOSION SI LA BATTERIE EST REMPLACÉE PAR UNE BATTERIE DE TYPE INCORRECT. METTRE AU REBUT LES BATTERIES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS

- Improper replacement of the battery with an incorrect type may defeat a safeguard (for example, in the case of some lithium battery types).
- Do not dispose of the battery into fire or a hot oven, or mechanically crush or cut the battery, which may result in an explosion.
- Do not leave the battery in an extremely high temperature surrounding environment, which may result in an explosion or the leakage of flammable liquid or gas.
- Do not subject the battery to extremely low air pressure, which may result in an explosion or the leakage of flammable liquid or gas.

## **Network Covert Camera • Quick Start Guide**

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- If the product does not work properly, please contact your dealer or the nearest service center. Never attempt to disassemble the camera yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)

## Table of Contents

<b>1 Appearance Description .....</b>	<b>12</b>
1.1 General Appearance.....	12
1.1.1 Type I Camera General Appearance.....	12
1.1.2 Type II Camera General Appearance.....	14
1.1.3 Type III Camera General Appearance.....	15
1.2 Front Panel.....	16
1.2.1 Type I Covert Camera Front Panel.....	16
1.2.2 Type II Covert Camera Front Panel.....	18
1.2.3 Type III Covert Camera Front Panel.....	19
1.3 Rear Panel .....	19
1.3.1 Type I Covert Camera Rear Panel.....	19
1.3.2 Type II Covert Camera Rear Panel.....	20
1.3.3 Type III Covert Camera Rear Panel.....	21
1.4 Sensor Units .....	22
<b>2 Installation .....</b>	<b>28</b>
2.1 Installing the Main Unit.....	28
2.1.1 Installing Type I Covert Camera Unit.....	28
2.1.2 Installing Type II Covert Camera Unit.....	30
2.1.3 Installing Type III Covert Camera Unit.....	31
2.2 Installing the Block-Shaped Sensor Unit .....	32
2.2.1 Concealed Mounting .....	32
2.2.2 Exposed Mounting .....	35
2.2.3 Mounting with Pole-Shaped Bracket .....	36
2.3 Installing the Cylindrical Sensor Unit .....	44
2.4 Installing the Tube Lens .....	46
2.5 Installing the Ball-Shaped Sensor Unit.....	50
2.5.1 Mounting with the Included Bracket .....	50

2.5.2 Mounting with a Incline Bracket .....	54
<b>3 Activate and Access Network Camera .....</b>	<b>58</b>

# 1 Appearance Description

## 1.1 General Appearance

There are three covert camera types, and the general appearances of the covert cameras are shown below:

### 1.1.1 Type I Camera General Appearance

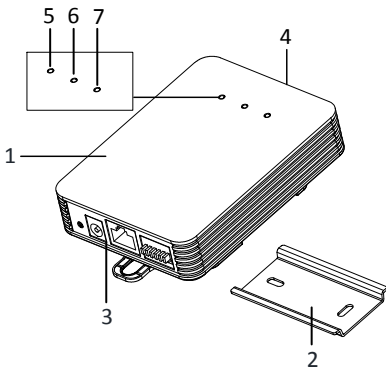


Figure 1-1 Type I Camera General Appearance

Table 1-1 Description of the Type I Camera

<b>No.</b>	<b>Description</b>	
1	Main unit	
2	Mounting rail	
3	Rear panel	
4	Front panel	
5	POWER Indicator LED	Solid red: Power-on Unlit: Power-off
6	STATUS Indicator LED	Solid green: The camera works properly. Unlit: The camera does not work properly.
7	LINK Indicator LED	Flashing amber: Network properly connected. Unlit: Network disconnected.

### 1.1.2 Type II Camera General Appearance

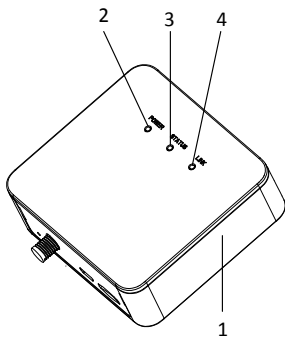


Figure 1-2 Type II Camera General Appearance

Table 1-2 Description of the General Appearance

No.	Description
1	Main unit
2	LINK: network indicator
3	STATUS: status indicator
4	POWER: power indicator

### 1.1.3 Type III Camera General Appearance

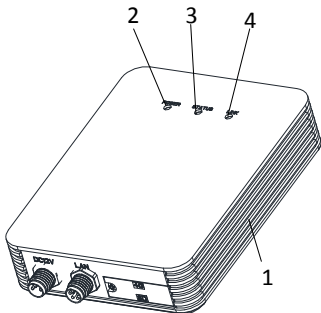


Figure 1-3 Type III Camera General Appearance

Table 1-3 Description of the General Appearance

No.	Description	
1	Main unit	
2	POWER Indicator LED	Solid red: Power-on Unlit: Power-off
3	STATUS Indicator LED	Solid green: The camera works properly. Unlit: The camera does not work properly.



No.	Description	
4	LINK Indicator LED	Flashing amber: Network properly connected. Unlit: Network disconnected.

## 1.2 Front Panel

### 1.2.1 Type I Covert Camera Front Panel

The Type I covert camera equips with three types of front panel, as shown in Figure 1-4, Figure 1-5, and Figure 1-6.

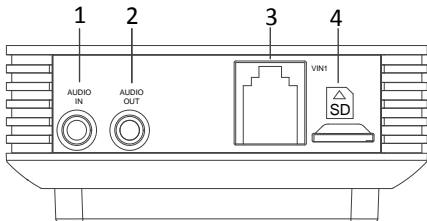


Figure 1-4 The Type A Front Panel

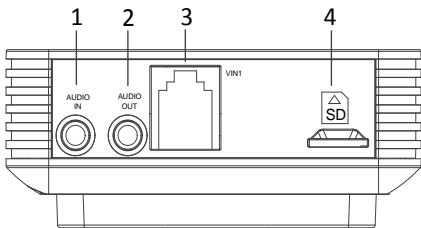


Figure 1-5 The Type B Front Panel

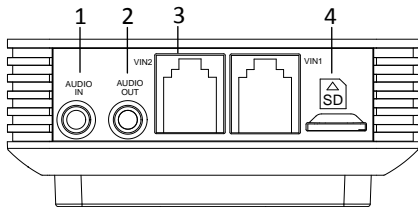


Figure 1-6 The Type C Front Panel

Table 1-4 Description of the Front Panel

No.	Description
1	Audio input
2	Audio output

3	RJ-12 video input interface(s)
4	Memory card slot

### 1.2.2 Type II Covert Camera Front Panel

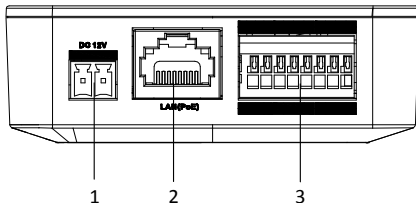


Figure 1-7 Type II Camera Front Panel

Table 1-5 Description of the Front Panel

No.	Description
1	Power Input: 12 V DC
2	Network interface
3	<ul style="list-style-type: none"> <li>● RS-485: connect RS-485 cable</li> <li>● ALARM: connect OUT and G terminals, connect IN and G terminals</li> <li>● AUDIO: connect OUT and G terminals, connect IN and G terminals</li> </ul>

### 1.2.3 Type III Covert Camera Front Panel

The front panel of the Type III covert camera is shown in Figure 1-8.

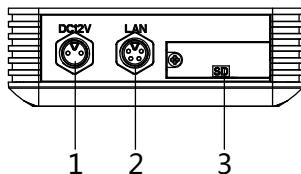


Figure 1-8 The Type B Front Panel

Table 1-6 Description of the Front Panel

No.	Description
1	12 V DC M8 aviation plug
2	LAN interface
3	Memory card slot

## 1.3 Rear Panel

### 1.3.1 Type I Covert Camera Rear Panel

The rear panel of the Type I covert camera is shown in Figure 1-9.

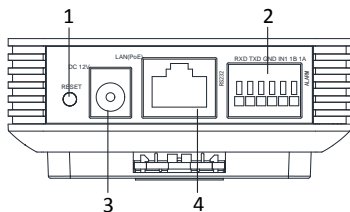


Figure 1-9 Type I Covert Camera Rear Panel

Table 1-7 Description of the Type I Covert Camera Rear Panel

No.	Description
1	Reset
2	Power input
3	RS-232 and alarm input and output interfaces
4	Ethernet interface with PoE function

### 1.3.2 Type II Covert Camera Rear Panel

The rear panel of the Type II covert camera is shown in Figure 1-10.

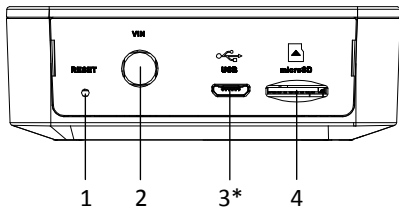


Figure 1-10 Type II Covert Camera Rear Panel

1	RESET button
2	VIN interface (Connect SMA Interface)
3*	USB interface*
4	Memory card slot

**Note:**

Only certain models have USB interface.

**1.3.3 Type III Covert Camera Rear Panel**

The rear panel of the Type III covert camera is shown in Figure 1-11.

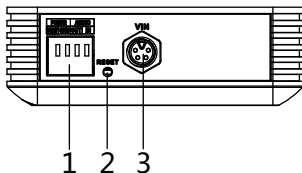


Figure 1-11 Type II Covert Camera Rear Panel

Table 1-8 Description of the Covert Camera Rear Panel

No.	Description
1	Power input: 12 VDC AUDIO: connect OUT and GND terminals, connect IN and GND terminals
2	Reset
3	VIN interface

## 1.4 Sensor Units

The different covert camera model is equipped with four different types of sensor unit, including block-shaped sensor unit, cylindrical sensor unit, tube lens and ball-shaped sensor unit.

### Type I: Block-Shaped Sensor Unit

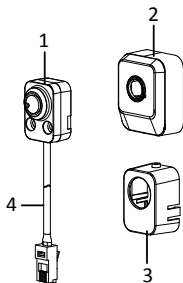


Figure 1-12 Block-Shaped Sensor Unit

Table 1-9 Description of the Block-Shaped Sensor Unit

No.	Description
1	Block-Shaped sensor unit
2	Decorative cover
3	Straight mounting bracket
4	Video output cable with RJ-12 interface



**Type II: Cylindrical Sensor Unit**

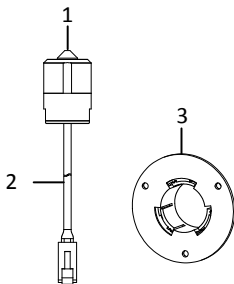


Figure 1-13 Cylindrical Sensor Unit

Table 1-10 Description of the Block-Shaped Sensor Unit

No.	Description
1	Cylindrical Sensor Unit
2	Video output cable with RJ-12 interface
3	Round Rail Mounting Bracket

Type III: Tube Lens

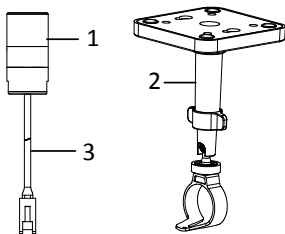


Figure 1-14 Tube Lens

Table 1-11 Description of the Tube Lens

No.	Description
1	Tube Lens
2	Ceiling Mounting Bracket
3	Video output cable with RJ-12 interface

### Type IV: Ball-Shaped Sensor Unit

The ball-shaped sensor unit has two models with different communication interfaces, the RJ-12 interface and M12 interface.

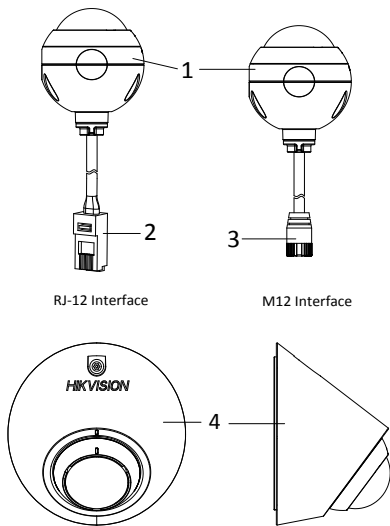


Figure 1-15 Ball-Shaped Sensor Unit and Included Bracket

Table 1-12 Description of Ball-Shaped Sensor Unit

<b>No.</b>	<b>Description</b>
1	Ball-Shaped Sensor Unit
2	Video output cable with RJ-12 interface
3	Video out cable with M12 aviation plug
4	Bracket Included

## 2 Installation

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### *Before you start:*

- Make sure the device in the package is in good condition and all the assembly parts are included.
- The standard power supply is 12 VDC or PoE, please make sure your power supply matches with your camera.
- Make sure all the related equipment is power-off during the installation.
- Check the specification of the products for the installation environment.
- Make sure that the wall is strong enough to withstand four times the weight of the camera and the bracket.

For the camera that supports IR, you are required to pay attention to the following precautions to prevent IR reflection:

- Make sure that there is no reflective surface too close to the camera lens. The IR light from the camera may reflect back into the lens causing reflection.

### 2.1 Installing the Main Unit

#### 2.1.1 Installing Type I Covert Camera Unit

##### *Steps:*

1. Secure the mounting rail onto the installation surface with the supplied screws.

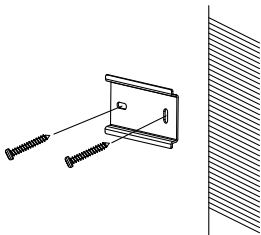


Figure 2-1 Secure the Mounting Rail

2. Secure the bracket on the rear surface of the main unit with corresponding screws.

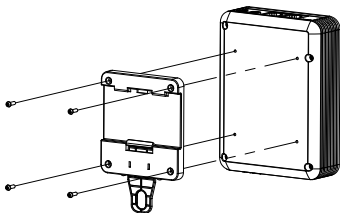


Figure 2-2 Secure Bracket onto Main Unit



Do not upside down the main unit when you fasten the bracket.

3. Hang the main unit together with the bracket to the mounting rail and complete the installation.

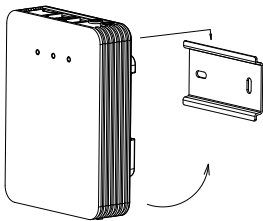


Figure 2-3 Hang the Main Unit

### 2.1.2 Installing Type II Covert Camera Unit

#### Steps:

1. Secure the mounting rail onto the installation surface with the supplied PA3 × 25 screws.

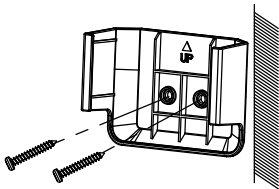


Figure 2-4 Secure the Mounting Rail

2. Secure the bracket on the rear surface of the main unit with corresponding screws.

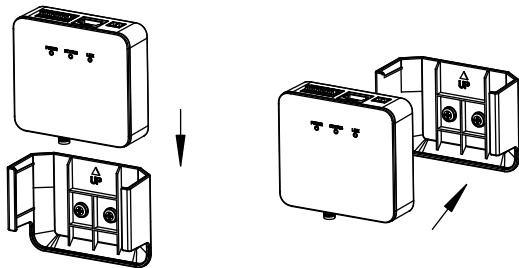


Figure 2-5 Secure Bracket onto Main Unit



Do not upside down the main unit when you fasten the bracket.

3. Hang the main unit together with the bracket to the mounting rail and complete the installation.

### 2.1.3 Installing Type III Covert Camera Unit

#### **Steps:**

1. Secure the bracket on the rear surface of the main unit with four M2\*5 screws.



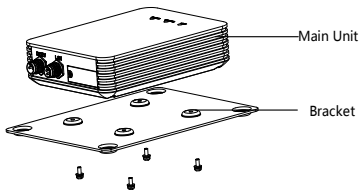


Figure 2-6 Secure Bracket onto Main Unit

2. Secure the bracket onto the installation surface with the supplied screws.

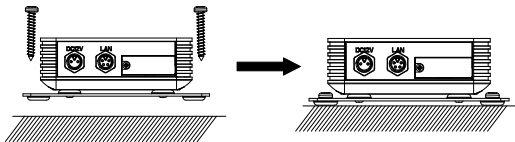


Figure 2-7 Secure the Mounting Rail

## 2.2 Installing the Block-Shaped Sensor Unit

This series of camera support concealed mounting and exposed mounting with a decorative cover.

### 2.2.1 Concealed Mounting



Please make sure that the mounting surface is suitable for adhesive pasting.

**Steps:**

1. Drill on the mounting surface, as shown in Figure 2-8.

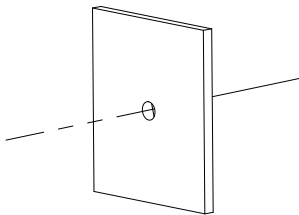
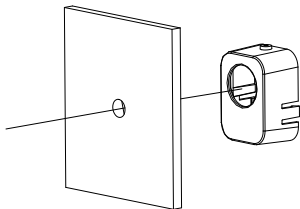


Figure 2-8 Drill on the Surface



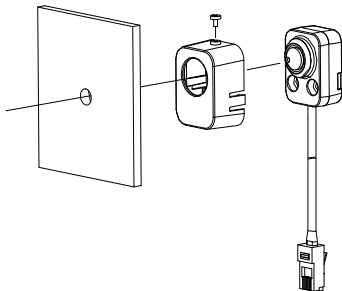
Make sure the drilling hole is big enough for the camera lens.

2. Remove a side of the adhesive tape on the bracket. Paste the bracket on mounting surface by aligning with the drilled hole.



**Figure 2-9 Paste the Bracket**

3. Install the block-shaped sensor unit into the bracket and make it to be buckled.
4. Tighten the fastening screw on the top of the bracket.



**Figure 2-10 Insert the Block-shaped Sensor Unit**

## 2.2.2 Exposed Mounting

### Steps:

1. Fix the Block-shaped sensor unit on the mounting surface with screws, as shown in Figure 2-11.

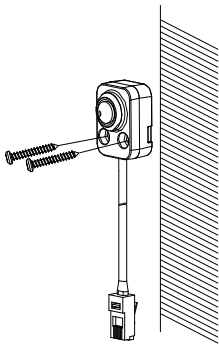


Figure 2-11 Fix the Block-shaped Sensor Unit



- For cement surface mounting, you need to use the expansion screw to fix the camera.
- For wooden surface mounting, you can just use the self-tapping screw to fix the camera.

- Shield the sensor unit with the decorative cover. As shown in Figure 2-12.

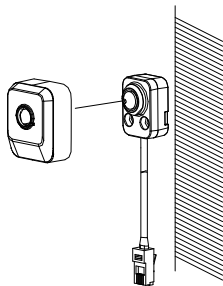


Figure 2-12 Hood the Cover

### 2.2.3 Mounting with Pole-Shaped Bracket

If you purchase the camera with a pole-shaped mounting bracket, follow the steps to complete installation of the lens and the bracket.

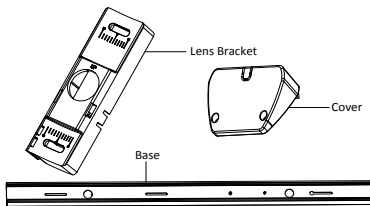


Figure 2-13 Pole-Shaped Bracket Component

**Steps:**

1. Fit the lens and the lens cable into the lens bracket as shown below.

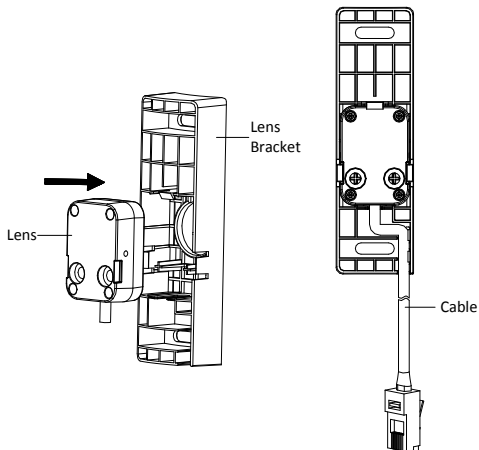


Figure 2-14 Fit Lens and Lens Cable into Lens Bracket

2. Make a mark at a height of 1.83m (6ft.) on wall (or other desired mounting position). Align the “1.83m (6ft.)” sticker on base with the mark on wall. Then, mark the first expansion screw hole as shown in the figure below.

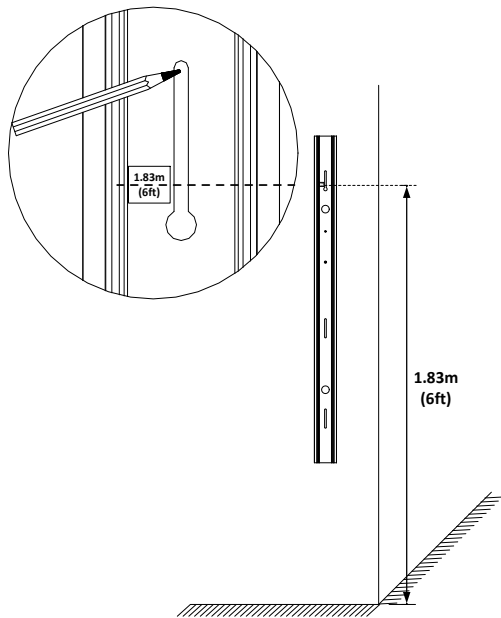


Figure 2-15 Marking for Installation

3. Install the first expansion screw loosely and hang the bracket base on the screw.

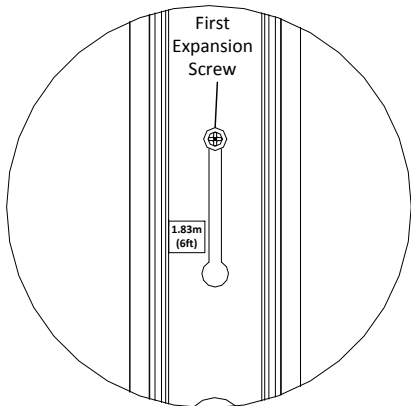


Figure 2-16 Hang the Bracket Base

4. Plan and prepare cable routing. This bracket supports cable routing through wall and on surface, select one way according to your actual needs.
  - 1). If you choose to route cable through wall, drill a cable hole according to the size and height of cable hole on the base. See Figure 2-17.
  - 2). If you choose to route cable on surface, make a cable hole on the top or bottom cover. See Figure 2-17.



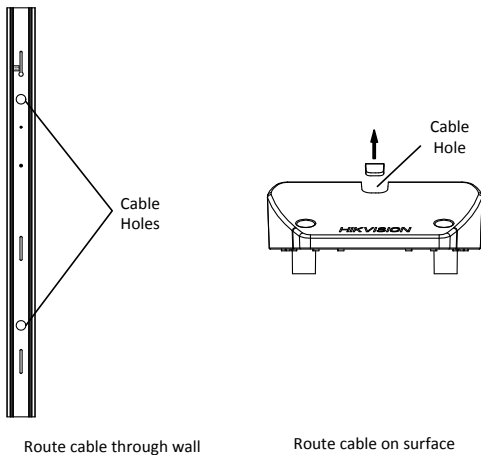


Figure 2-17 Plan Cable Routing

5. Route cable and fit the lens bracket into the base. Use a screw to secure the lens bracket. See Figure 2-18.

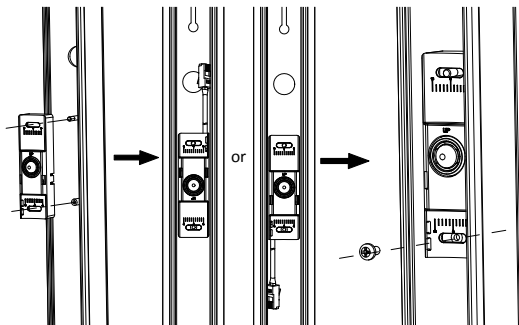


Figure 2-18 Install and Secure Lens Bracket

- Loosely screw the thumbscrew to the base. Adjust the panning position of the lens, and tighten the thumbscrew.

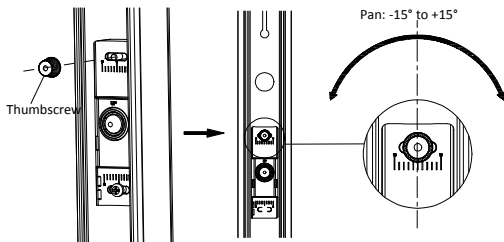


Figure 2-19 Install Thumbscrew and Adjust Panning Position

7. Screw the top cover to the base.

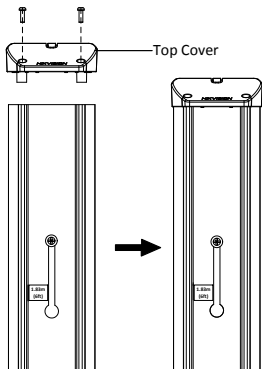


Figure 2-20 Install Top Cover

8. Install the second expansion screw. Tighten the first expansion screw. See Figure 2-21.
9. Peel off protective films on both side of the decorative cover. Slide the decorative cover in the base. See Figure 2-22.

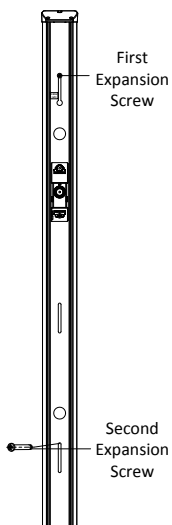


Figure 2-21 Secure Base on Wall

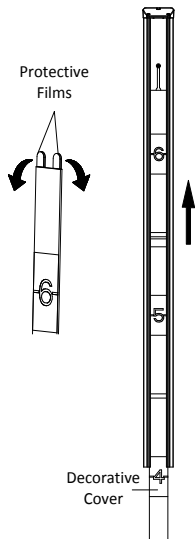


Figure 2-22 Peel off Protective Films and Slide the Decorative Cover in the Base

10. Screw the bottom cover to the base.

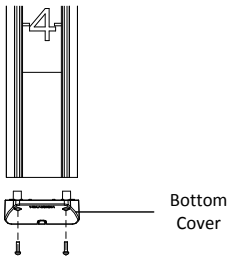


Figure 2-23 Install Bottom Cover

## 2.3 Installing the Cylindrical Sensor Unit

This series of camera only support concealed mounting.



Please make sure that the mounting surface is suitable for adhesive pasting.

### **Steps:**

1. Drill on the mounting surface, as shown in Figure 2-24.

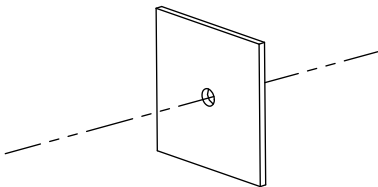


Figure 2-24 Drill on the Surface



Make sure that the drilling hole is big enough for the camera lens.

2. Remove a side of the adhesive tape on the bracket. Paste the bracket on the mounting surface with aligning with the drilling hole. As shown in figure below.

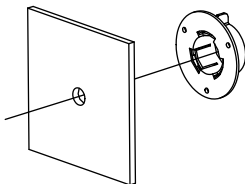


Figure 2-25 Paste the Bracket

3. Install the cylindrical sensor into the mounting hole in the round rail bracket.

4. Turn the locking sleeve to fix the sensor.

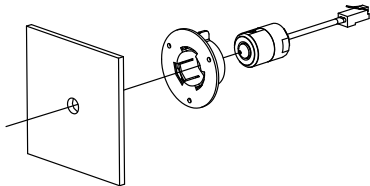


Figure 2-26 Install the Cylindrical Sensor

## 2.4 Installing the Tube Lens

### Steps:

1. Fix the mounting base of the bracket to the ceiling with the supplied screws.

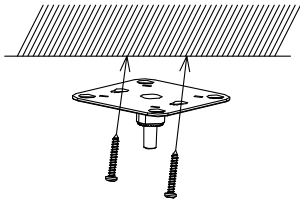


Figure 2-27 Fix the Ceiling Mounting Bracket

2. Hood the bracket cover to the mounting base.

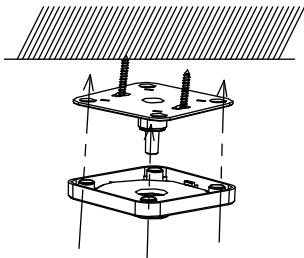


Figure 2-28 Hood the Bracket Cover

3. Screw the bracket to the mounting base.

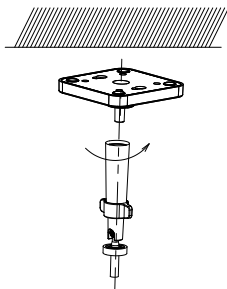


Figure 2-29 Screw the Bracket





Another shorter bracket is also selectable; please select the bracket according to your demand.

4. Loop the tube lens with the loop of the bracket, and tighten it with the supplied screw. As shown in Figure 2-30.

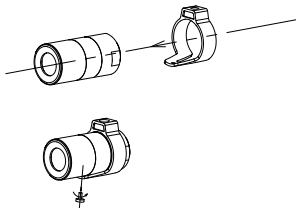


Figure 2-30 Loop the Tube Lens

5. Align the assembled tube lens to the bracket, and rotate the lens to tighten the lens with the bracket.

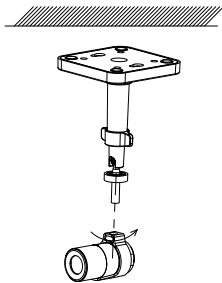


Figure 2-31 Install the Tube Lens to the Bracket

6. Loosen the knob to adjust the surveillance angle, and then tighten the lock nut to complete the installation.

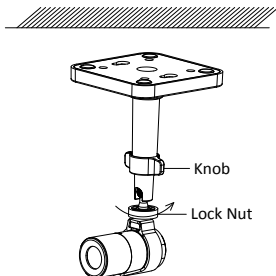


Figure 2-32 Complete the Installation

## 2.5 Installing the Ball-Shaped Sensor Unit

### 2.5.1 Mounting with the Included Bracket

**Steps:**

1. Paste the drill template to the desired mounting place. Drill two screw holes and a hole for routing cable according to the drill template.

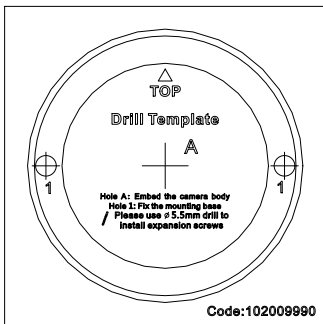


Figure 2-33 Drill Template

2. Route the camera cable through the mounting base of the included bracket. Fixed the mounting base to the wall or ceiling.

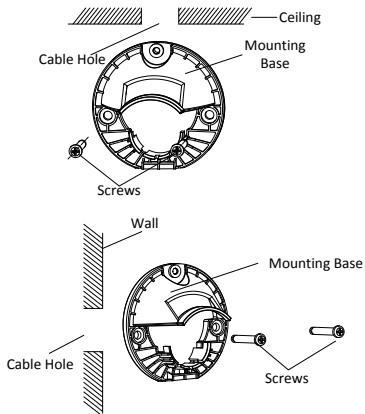


Figure 2-34 Fix the Mounting Bracket on Ceiling or on Wall

3. Place the camera in the bracket cover.

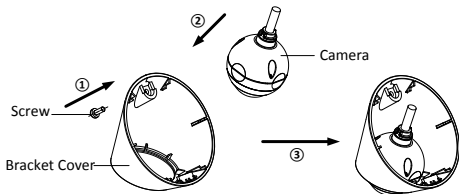


Figure 2-35 Place the Camera in Bracket Cover

4. Get the wedge on the bracket cover stuck in the slot of the mounting base, close the cover, and screw the bracket cover on the mounting base loosely.

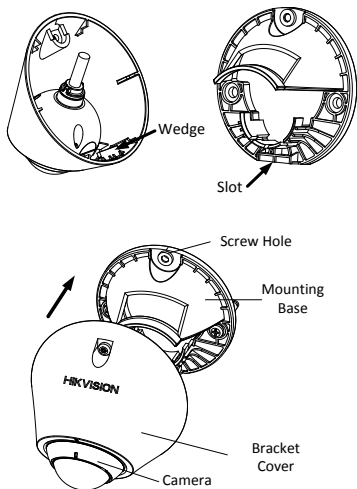


Figure 2-36 Install the Camera and Bracket Cover

5. Adjust the surveillance angle.
  - 3). Stick the supplied plastic ring in the camera
  - 4). Connect the cables and power on the camera to view the image.
  - 5). Hold and move the plastic ring to adjust the panning, tilting, and rotating position to desired place.

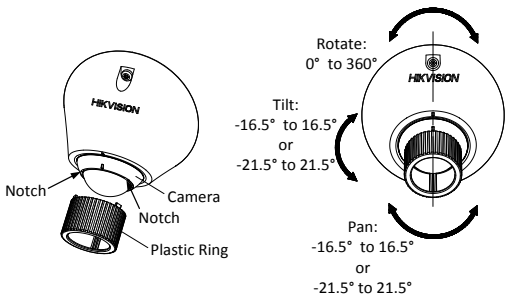


Figure 2-37 Adjust the View Angle

- 6). Remove the plastic ring after adjustment finished.



For the camera equipped with a fisheye lens, the panning and tilting adjusting range is  $-16.5^{\circ}$  to  $16.5^{\circ}$ . For the camera equipped with a regular fixed focal lens, the adjusting range is  $-21.5^{\circ}$  to  $21.5^{\circ}$ .

6. Tighten the screw on the bracket cover.

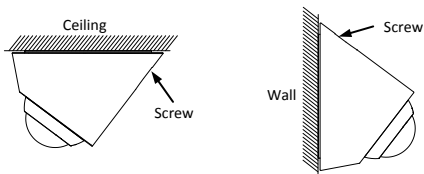


Figure 2-38 Tighten the Screw

## 2.5.2 Mounting with a Incline Bracket

### ***Before you start:***

There is no incline bracket included in the package. If you choose this mounting type, you need to provide a bracket before starting. The shown bracket below is only for demonstration.

### ***Steps:***

1. Paste the drill template to the desired mounting place. Drill two screw holes and a hole for routing cable according to the drill template.

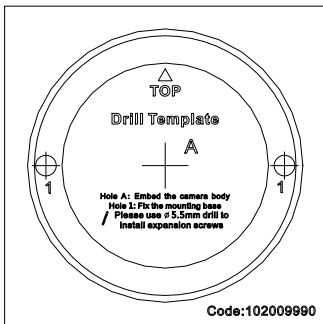


Figure 2-39 Drill Template

2. Route the camera cable through the mounting base of the incline bracket. And fix the camera to the mounting base with the fixing ring and screw.



The screw should be installed loosely to leave some space for view angle adjustment.



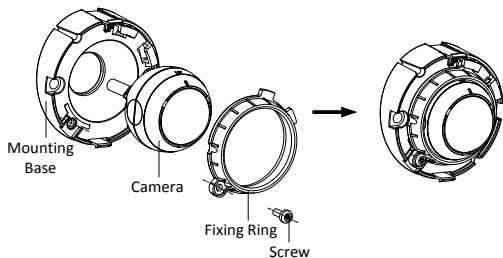


Figure 2-40 Fix the Camera to Mounting Base

3. Install the incline bracket with camera on the wall or ceiling with supplied screws.

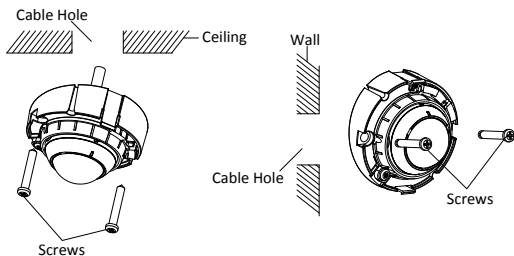


Figure 2-41 Fix the Camera and Mounting Base to Wall or Ceiling

4. Adjust view angle of the camera. Refer to *Step 5 in Section 2.5.1*.

5. Tighten the screw on fixing ring.
6. Install the incline bracket cover.

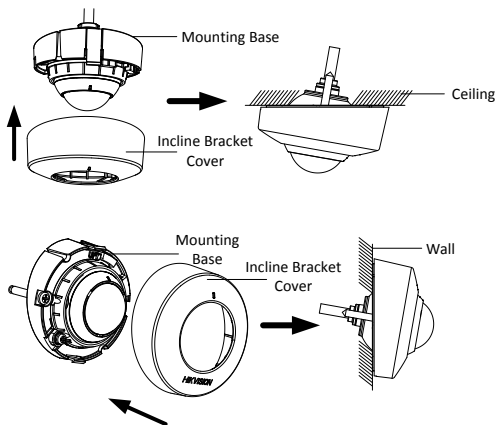


Figure 2-42 Install the Incline Bracket Cover

## 3 Activate and Access Network Camera

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Scan the QR code to get Activate and Access Camera. Note that mobile data charges may apply if Wi-Fi is unavailable.





**UD19466B**