



# QUICK START GUIDE

Megapixel Network Camera for Video Surveillance

V5.15

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Thank you for purchasing Milesight Network Camera. This Guide provides basic instructions on installing and accessing Milesight Network Camera. For more details, please refer to the User Manual.

## 1. Package Contents

Before installation, please verify that all the necessary items are supplied in the gift box as the package contents listed below. If any item is missing or damaged, please contact the shipper and your Milesight sales representative.

	Items	Quantity	Description
Default	Milesight Network Camera	1 PC	The purchased model
	Power Adapter	1 PC	DC 12V (optional for part of devices)
	Quick Start Guide	1 PC	Printed material
	Warranty Card	1 PC	Printed material
Optional	Lens		If purchased
	Bracket& Screw Pack		If purchased

## 2. Cautions

- Do not expose the product to rain or moisture
- Make sure the device is firmly fixed when mounting them on the wall or ceiling
- Make sure that the power supply voltage is correct before using the camera
- Do not use a third party power adapter
- Never attempt to disassemble or modify the camera

## 3. System Requirements

**Operating System:** Windows XP/Vista/7/8/10/Server 2000/Server 2008

**CPU:** 1.66GHz or higher

**RAM:** 1G or higher

**Graphic memory:** 128MB or more

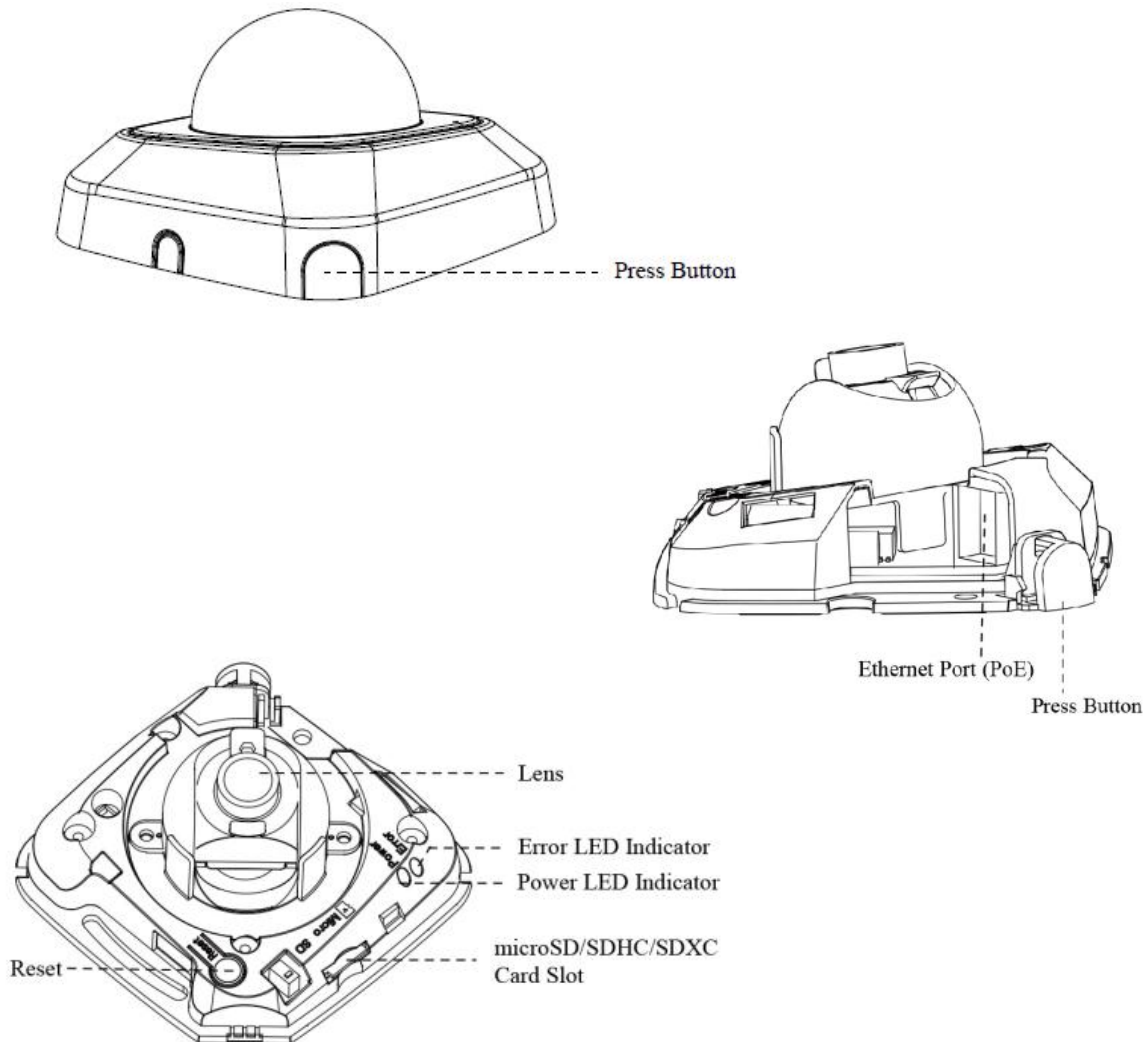
**Internet protocol:** TCP/IP (IPv4/IPv6)

**Web Browsers:** Internet Explorer 8.0 and above version, Mozilla Firefox, Google Chrome and Safari



## 4. Hardware Overview

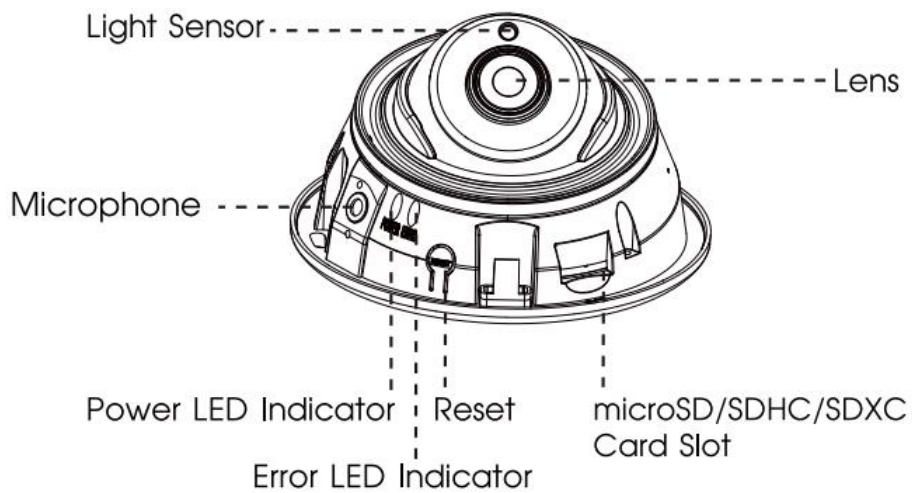
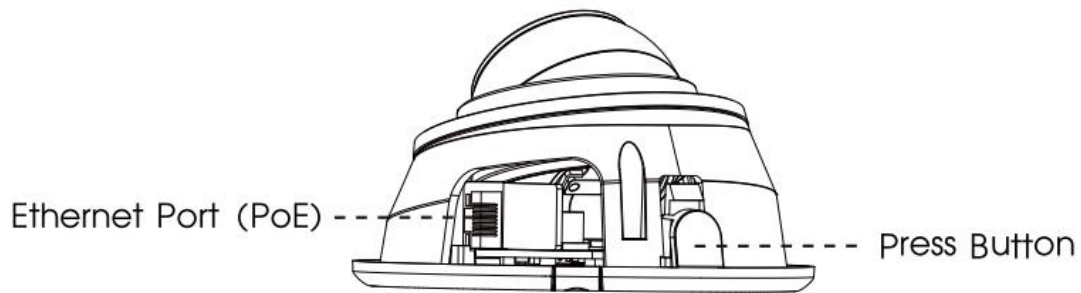
### 4.1 Mini Dome Network Camera



**Note:**

- 1) Error LED Indicator: Error LED Indicator is on when the device starts up or runs error;
- 2) Only PoE is available for power supply.

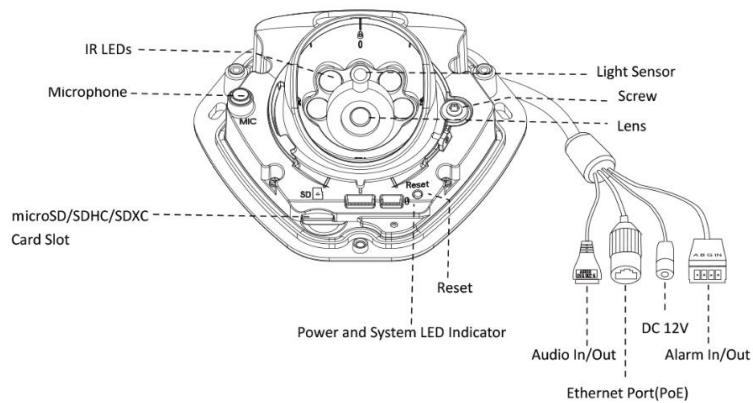
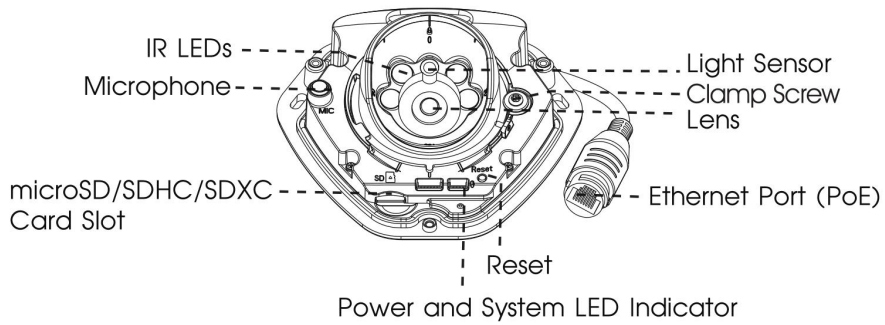
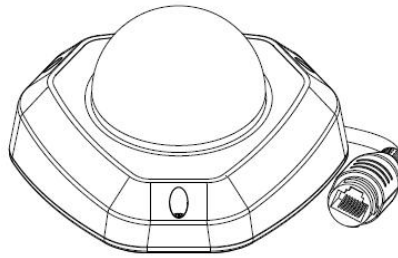
## 4.2 (AI) IR Mini Dome Network Camera



**Note:**

- 1) Error LED Indicator: Error LED Indicator is on when the device starts up or runs error;
- 2) Only PoE is available for power supply.

### 4.3 (AI) Vandal-proof Mini Dome Network Camera



(Multi-interface Version)

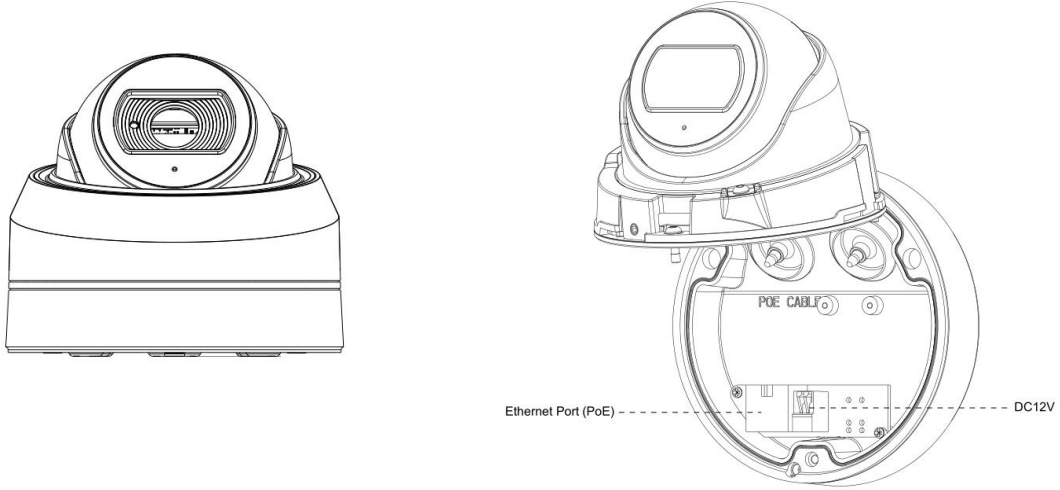
**Note:**

Default Version: Only PoE is available for power supply.

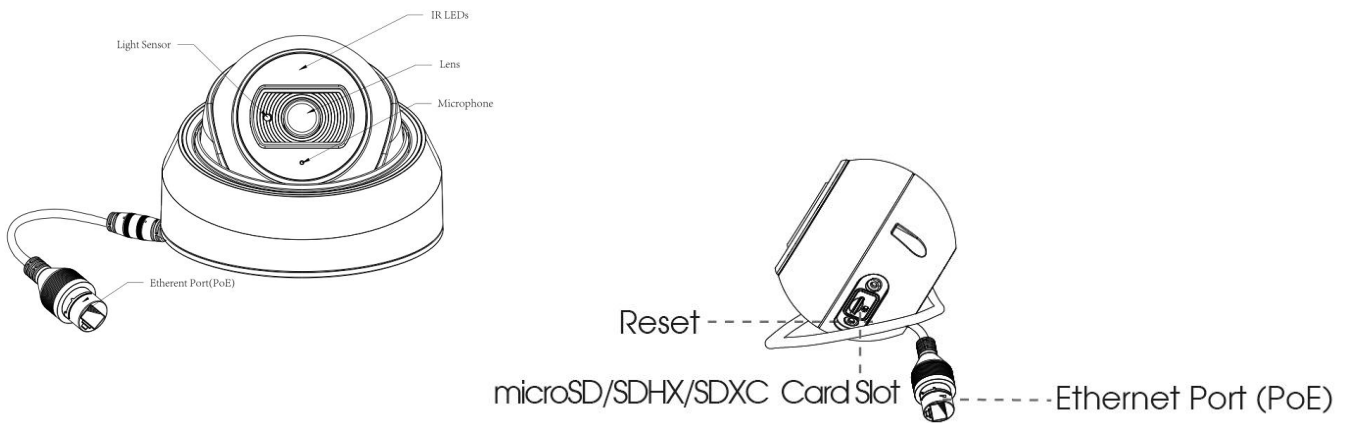
Multi-interface Version: Both PoE and DC12V are available for power supply.

### 4.4 (AI) Weather-proof Mini Dome Network Camera

Version A:

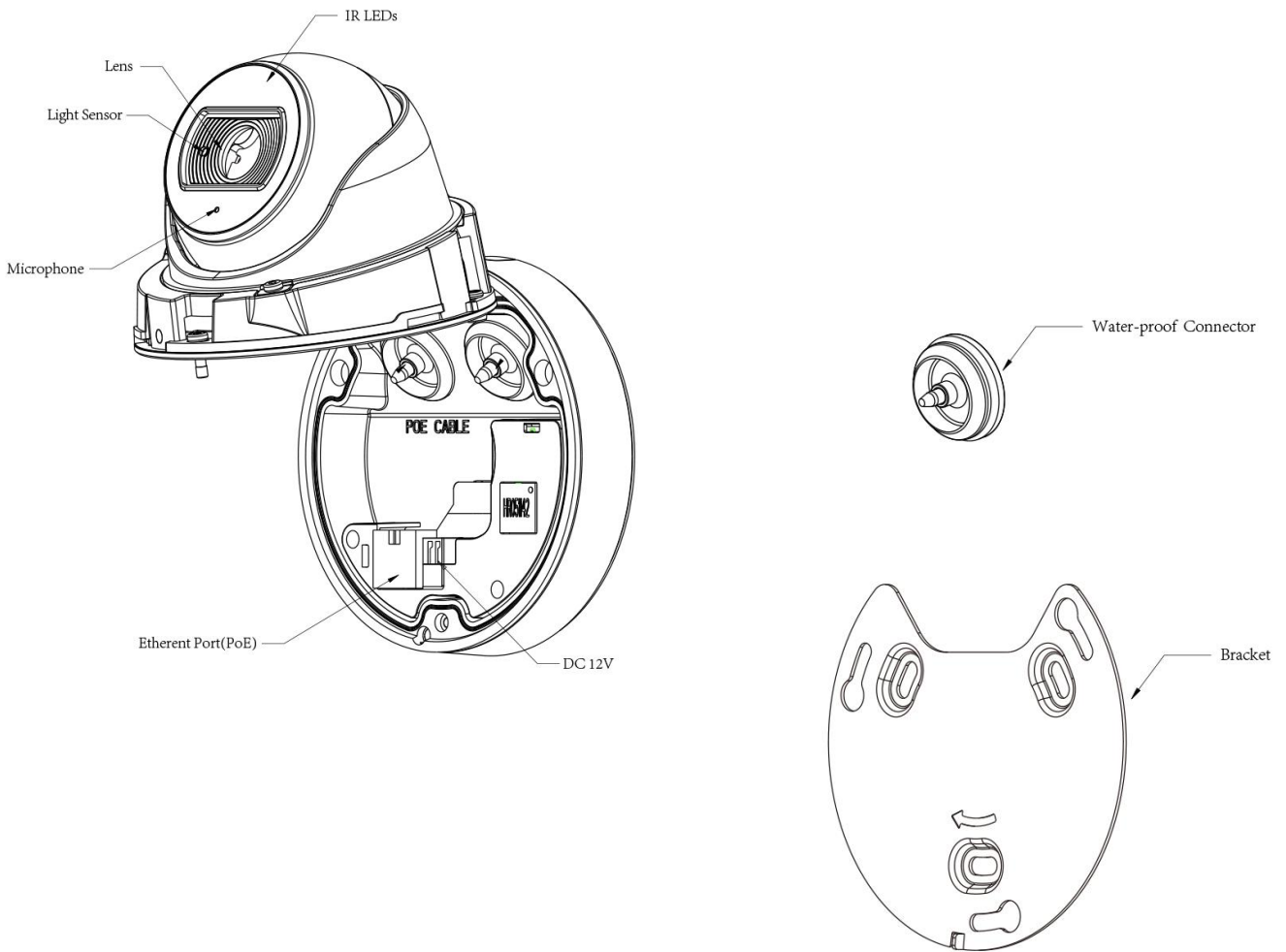


Version B:



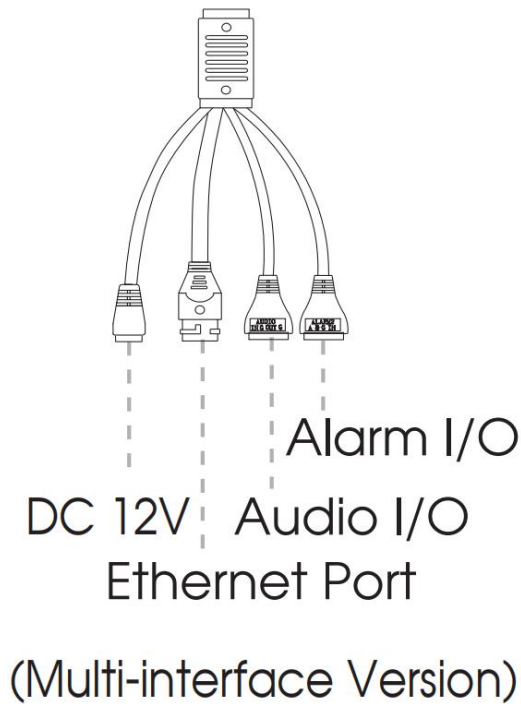
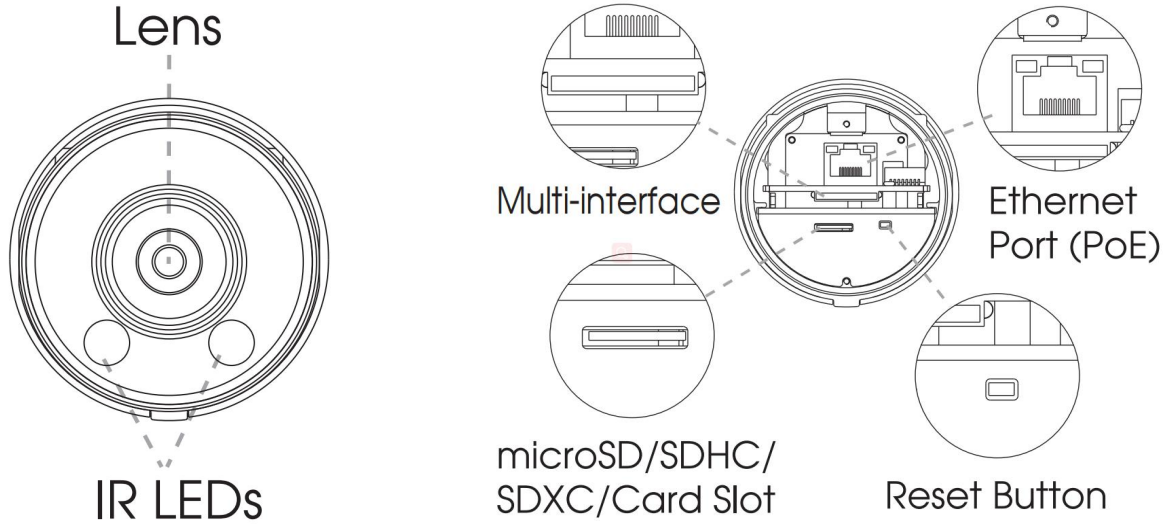
**Note:**  
Only PoE is available for power supply.

## 4.5 (AI) AF Motorized Mini Dome Network Camera



**Note:**  
DC 12V and PoE are available for power supply.

### 4.6 (AI Weather-proof) Mini Bullet Network Camera

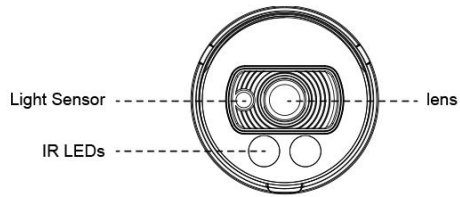


**Note:**

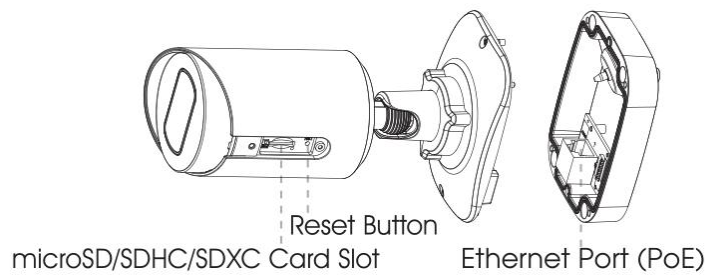
Default Version: Only PoE is available for power supply.

Multi-interface Version: Both PoE and DC12V are available for power supply.

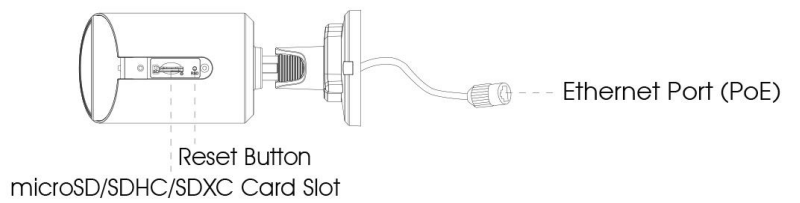
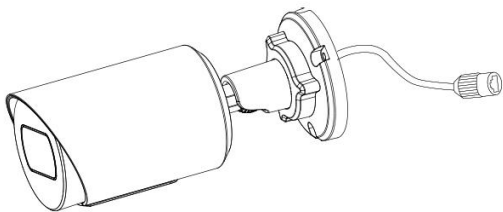
## 4.7 (AI) Vandal-proof Mini Bullet Network Camera



### Version A:



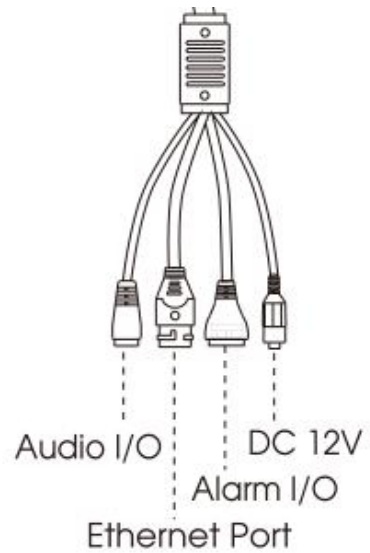
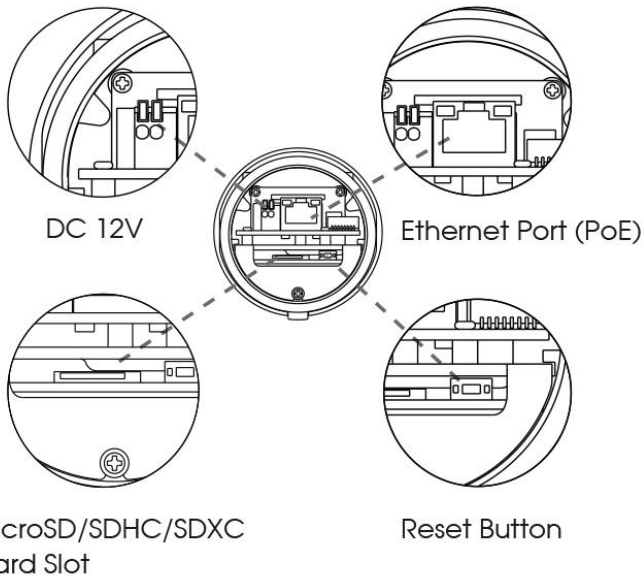
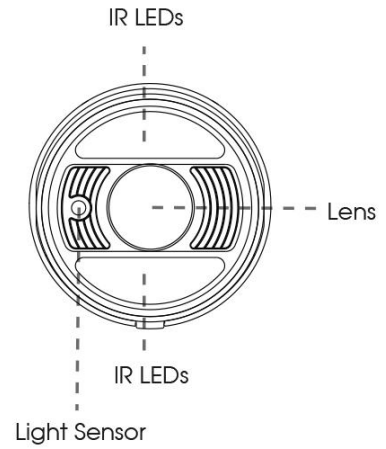
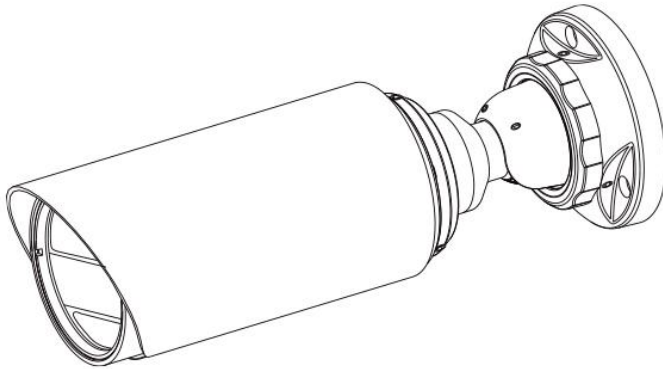
### Version B:



**Note:**

Only PoE is available for power supply.

### 4.8 (AI) (Vandal-proof) Motorized Mini Bullet Network Camera



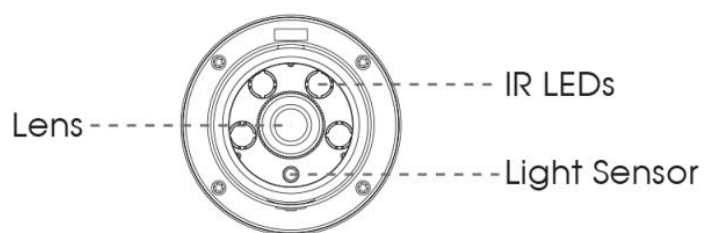
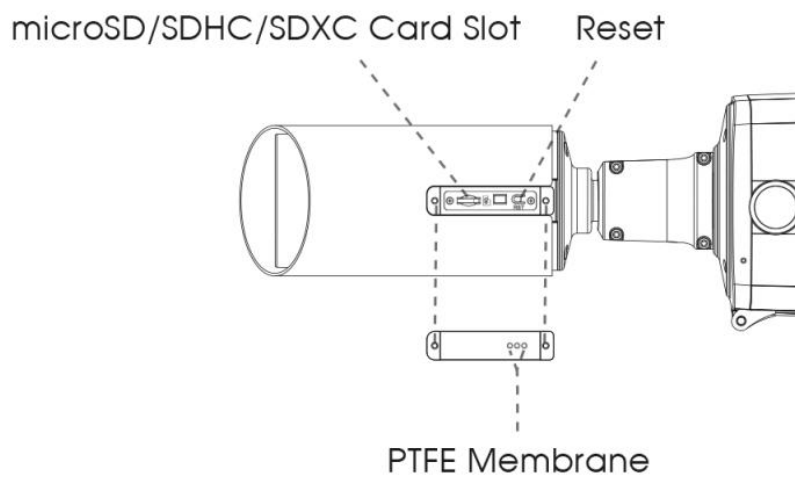
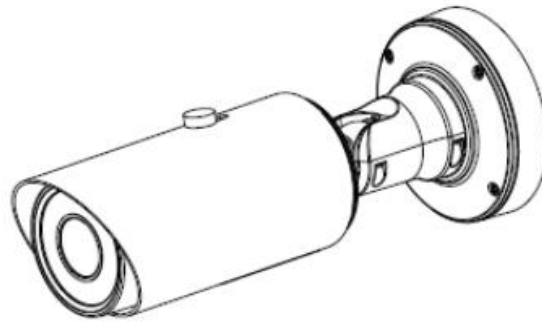
(Multi-interface Version)

**Note:**

DC 12V and PoE are available for power supply.

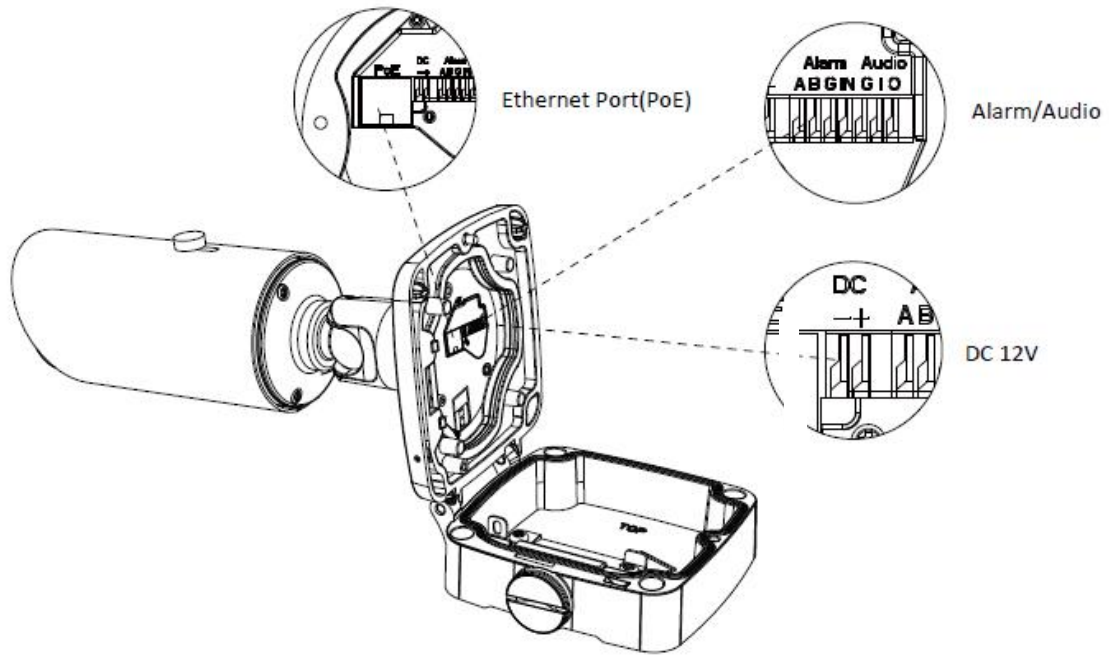


## 4.9 (AI) Motorized Pro Bullet Network Camera

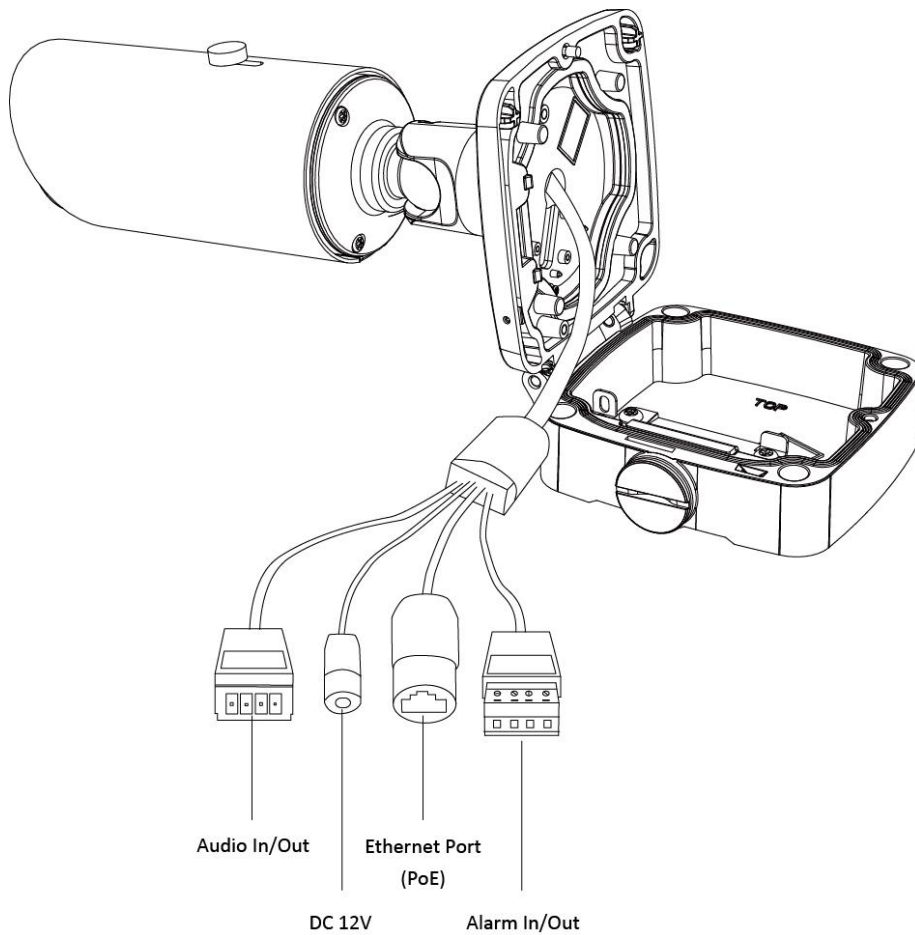


**Note:**

- 1) DC 12V and PoE are available for power supply;
- 2) There are two versions for Pro Bullet: the interface's pictures are shown as below.

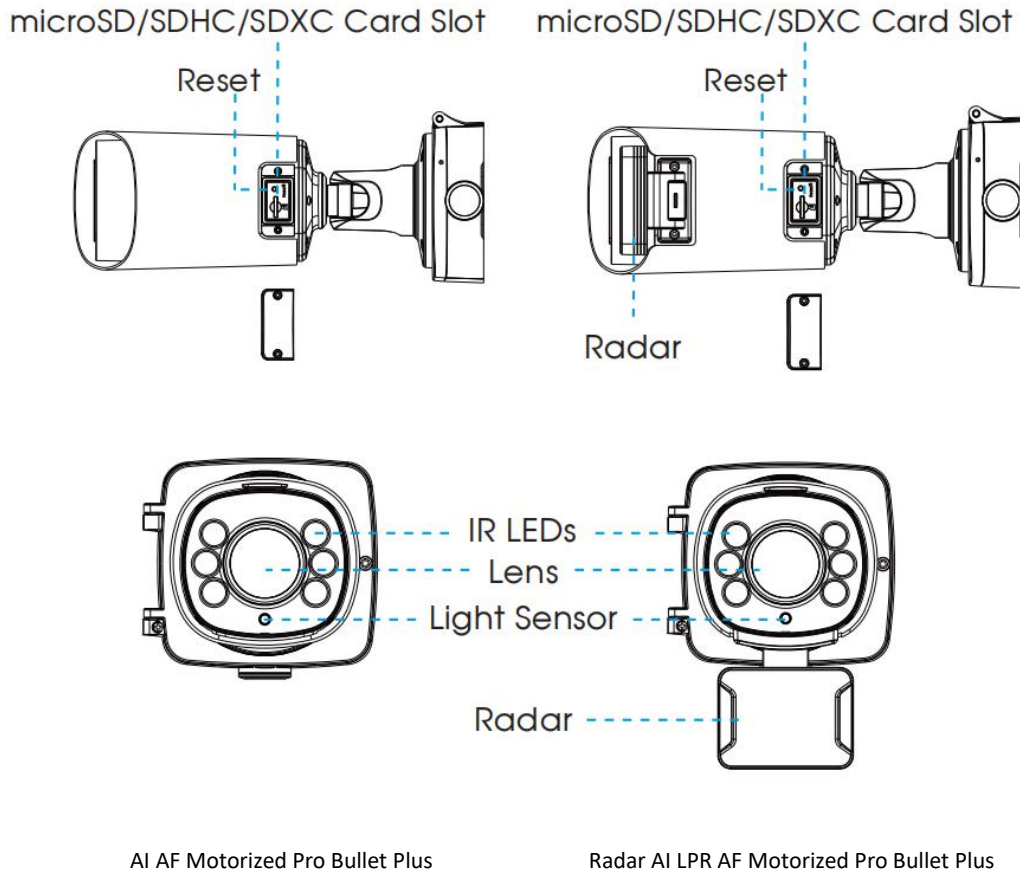


Motorized Pro Bullet Network Camera (Version A)



Motorized Pro Bullet Network Camera (Version B)

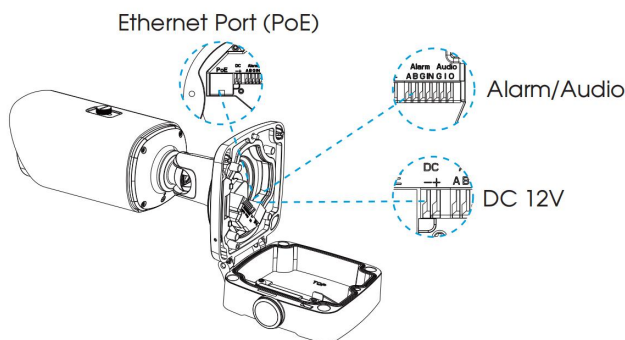
### 4.10 (Radar) AI (LPR) Pro Bullet Plus Network Camera



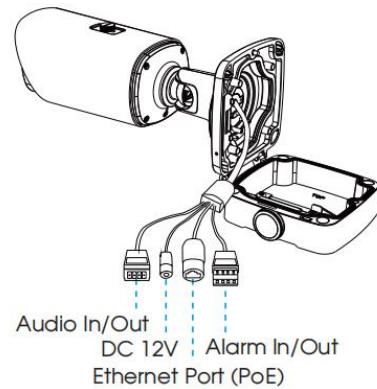
**Note:**

- 3) DC 12V and PoE are available for power supply;
- 4) There are two versions for AI Pro Bullet Plus and Radar AI LPR Pro Bullet Plus: the interface's pictures are shown as below.

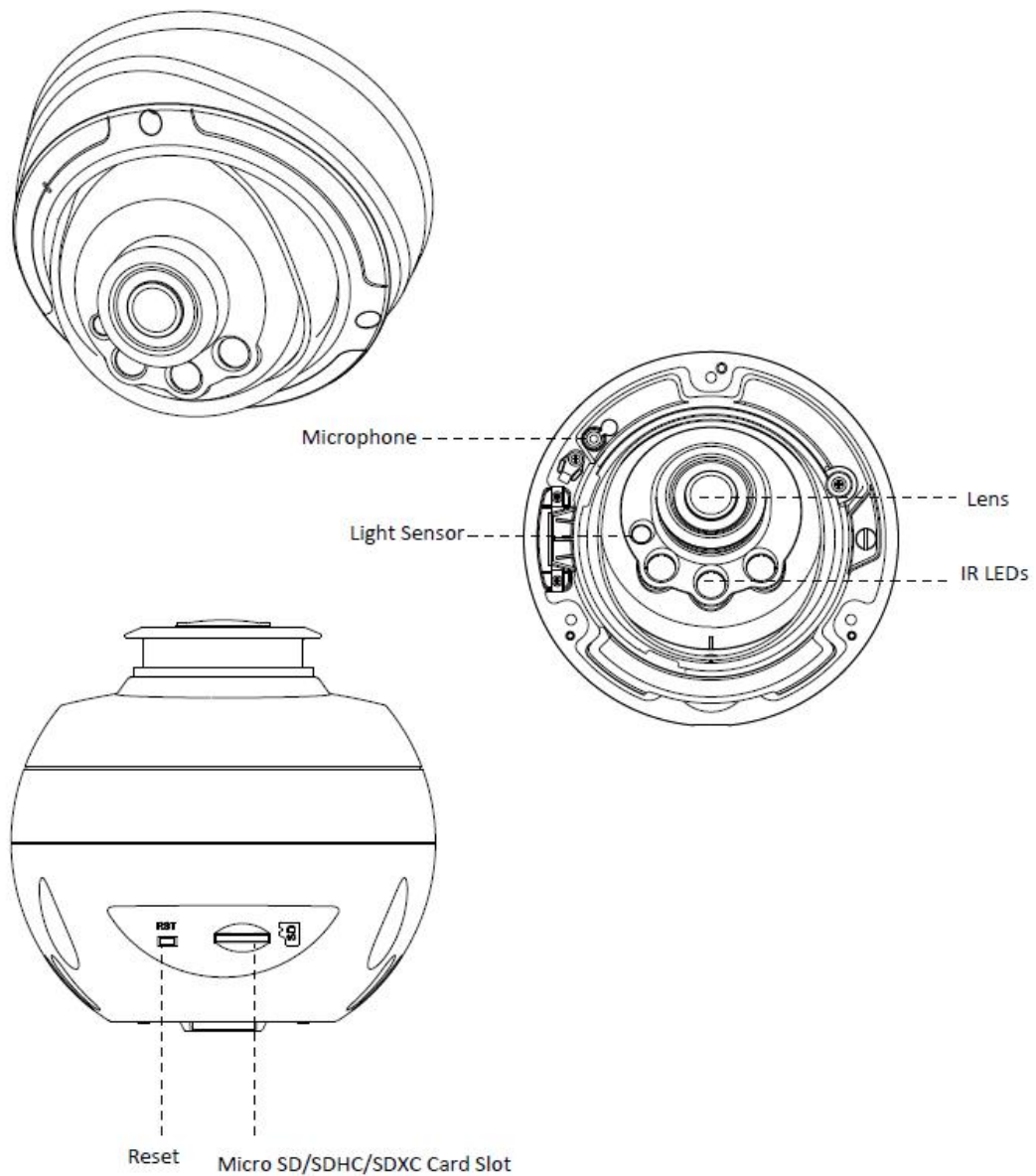
**Version A**



**Version B**

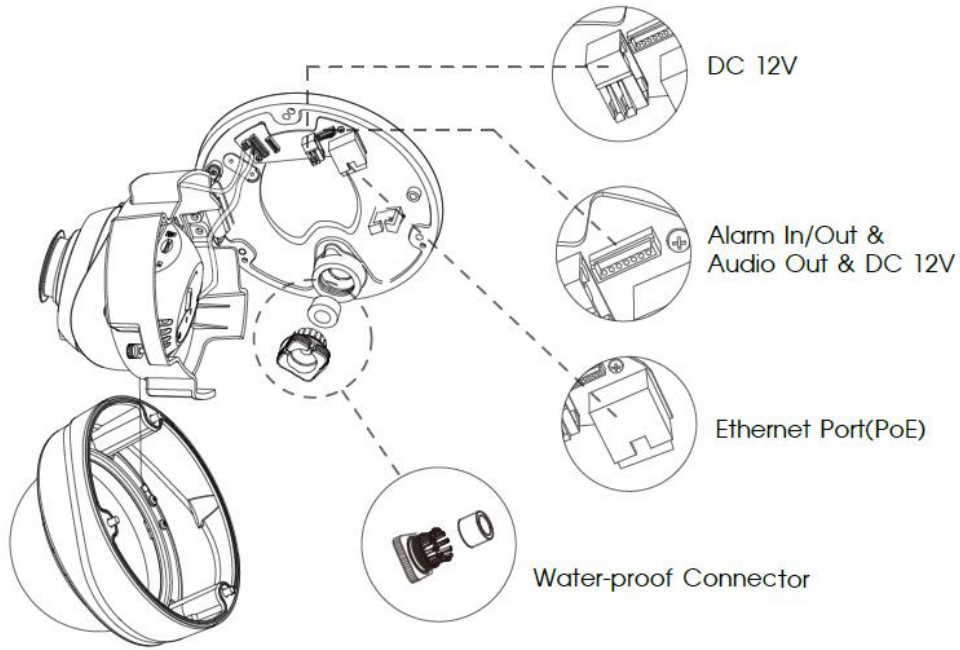


## 4.11 (AI) Motorized Pro Dome Network Camera



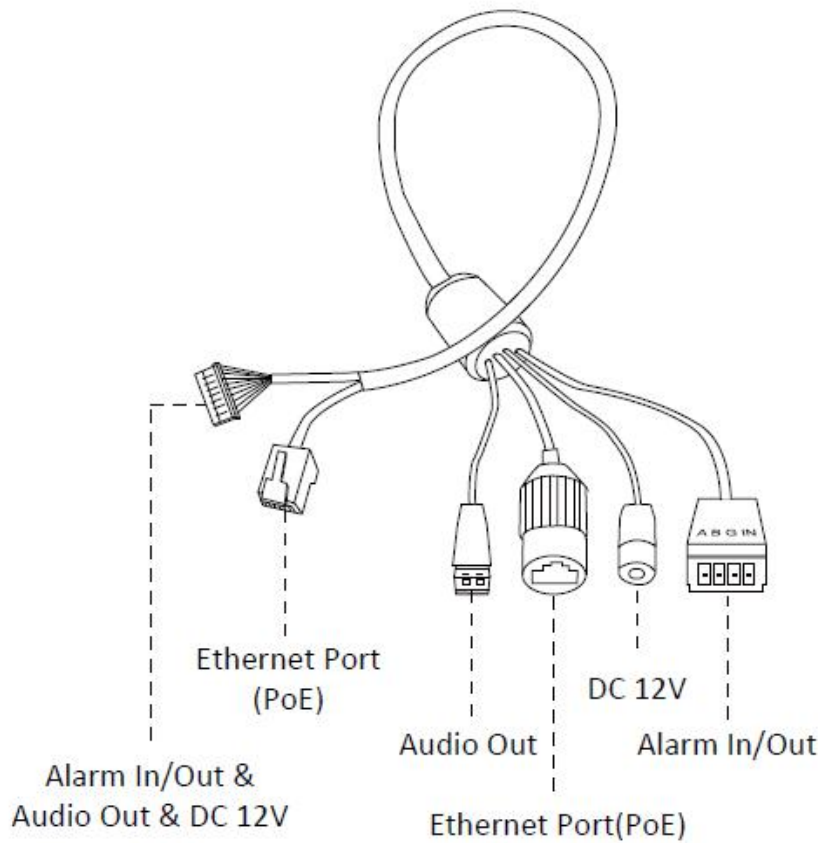
**Note:**

DC 12V and PoE are available for power supply.



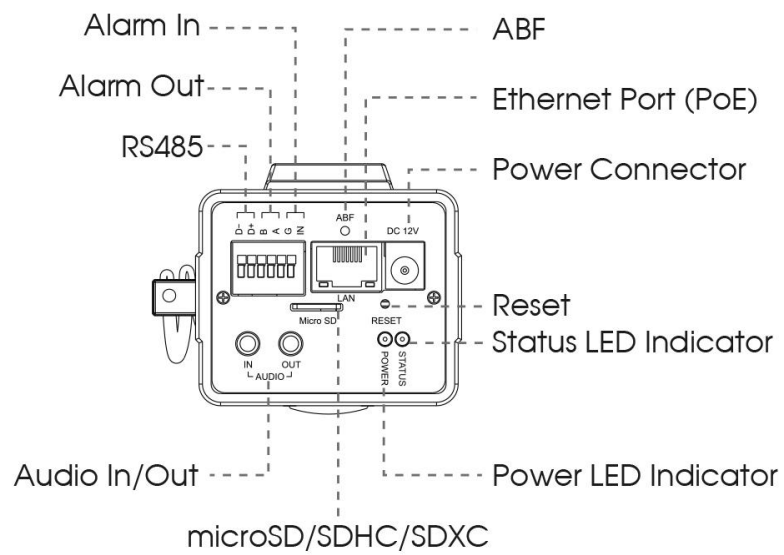
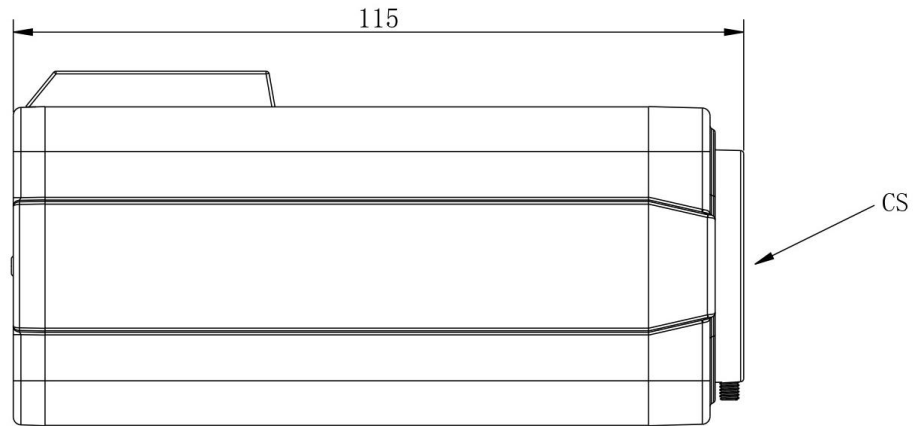
Motorized Pro Dome Network Camera multiple interface

Here is one equipped cable for multiple interface usage:



Motorized Pro Dome Network Camera multiple interface cable

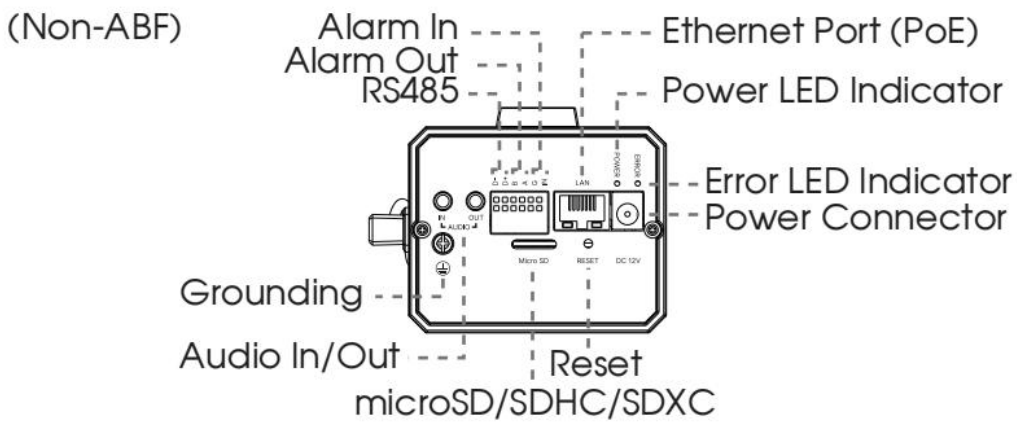
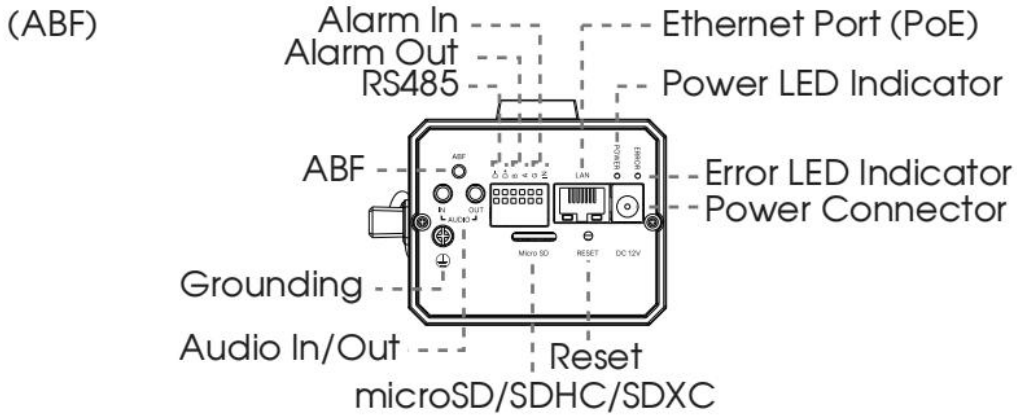
## 4.12 (ABF) Pro Box Network Camera



**Note:**

DC 12V and PoE are available for power supply.

### 4.13 AI Pro Box Plus Network Camera

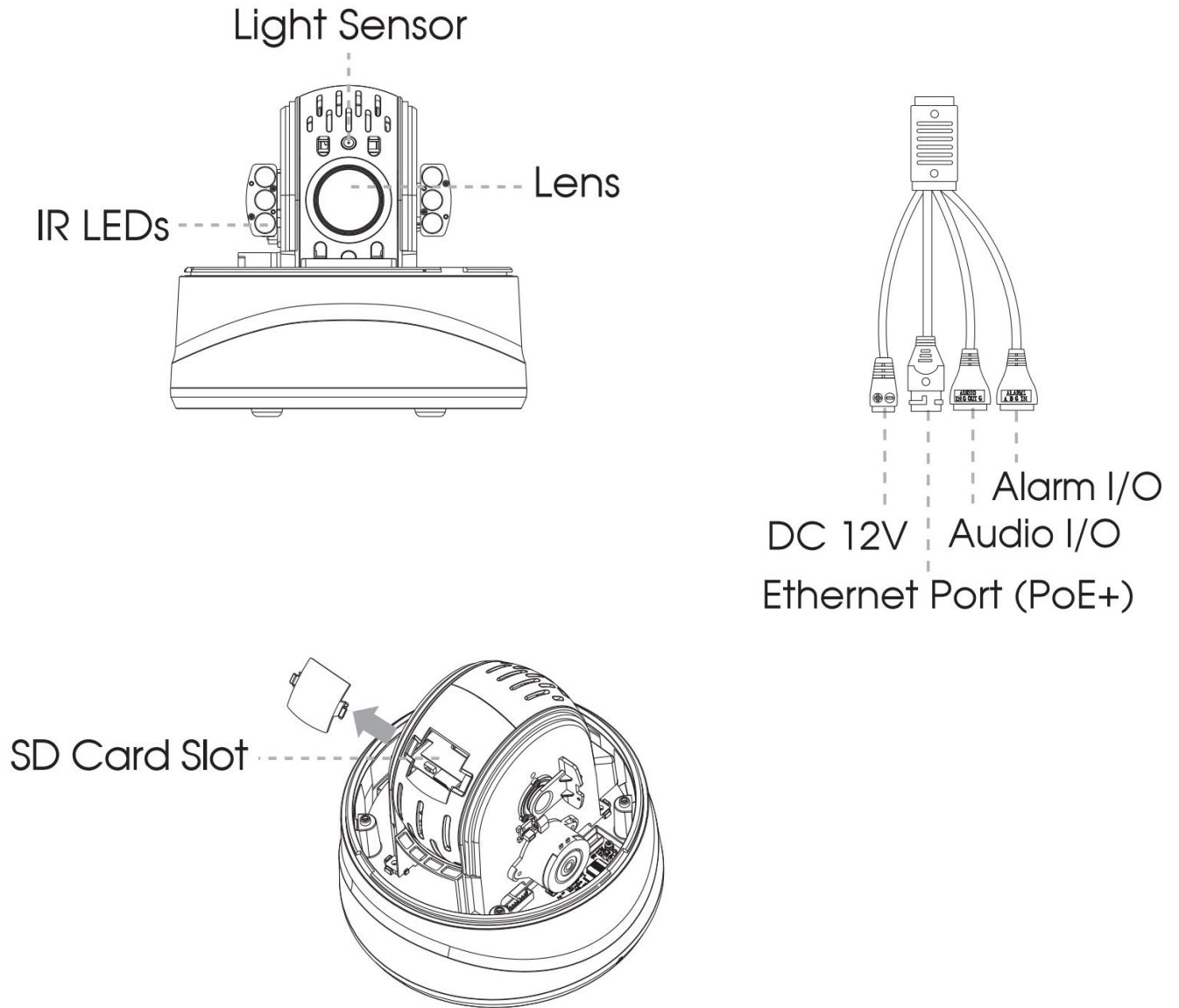


**Note:**

DC 12V and PoE are available for power supply.



### 4.14 (AI) 12X/20X/23X Mini PTZ Dome Network Camera



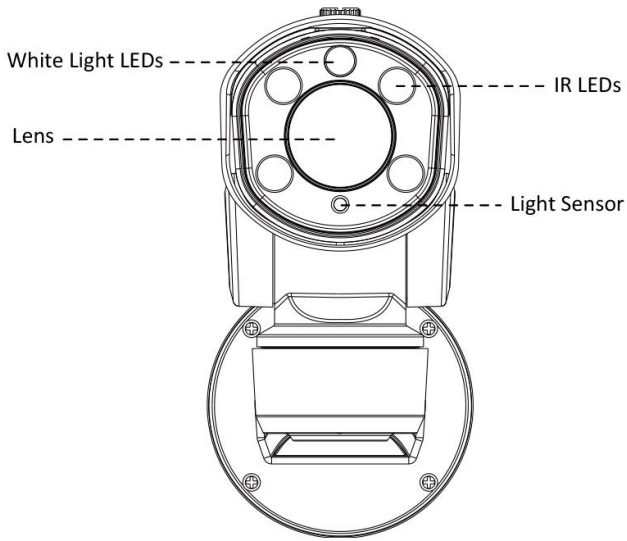
**Note:**

- 1) Reset Button: Press “Reset” button for 5 seconds, then the device will be restored to factory default;
- 2) DC and PoE+ (802.3at) are available for power supply .

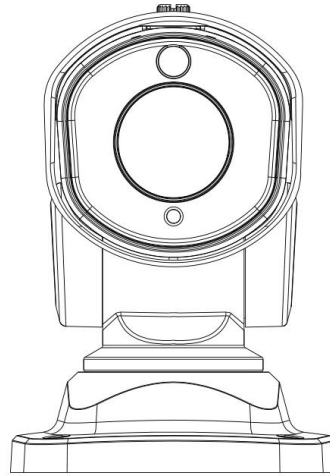


## 4.15 12X Mini PTZ Bullet Network Camera

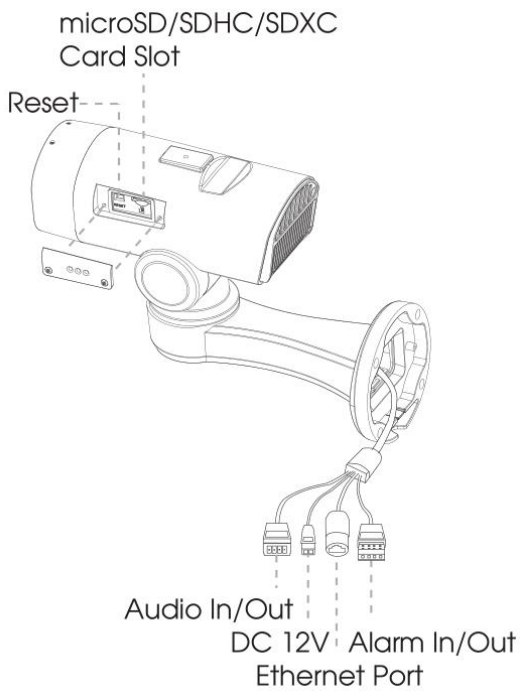
Wall Mount:



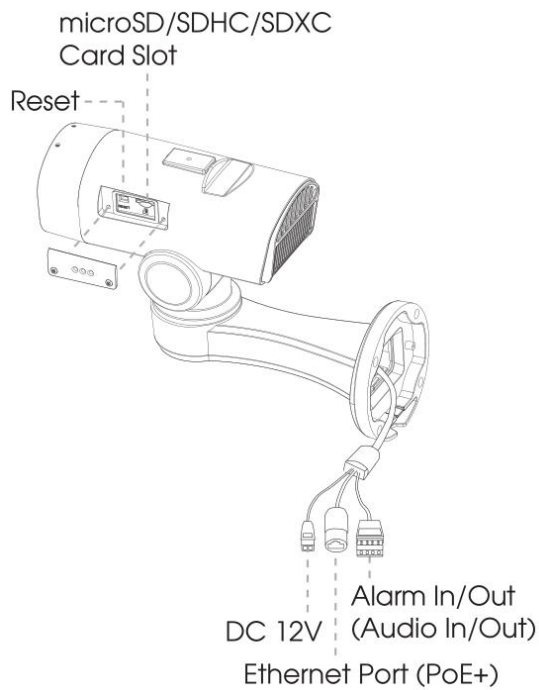
Pedestal Mount:



Mini PTZ Bullet:



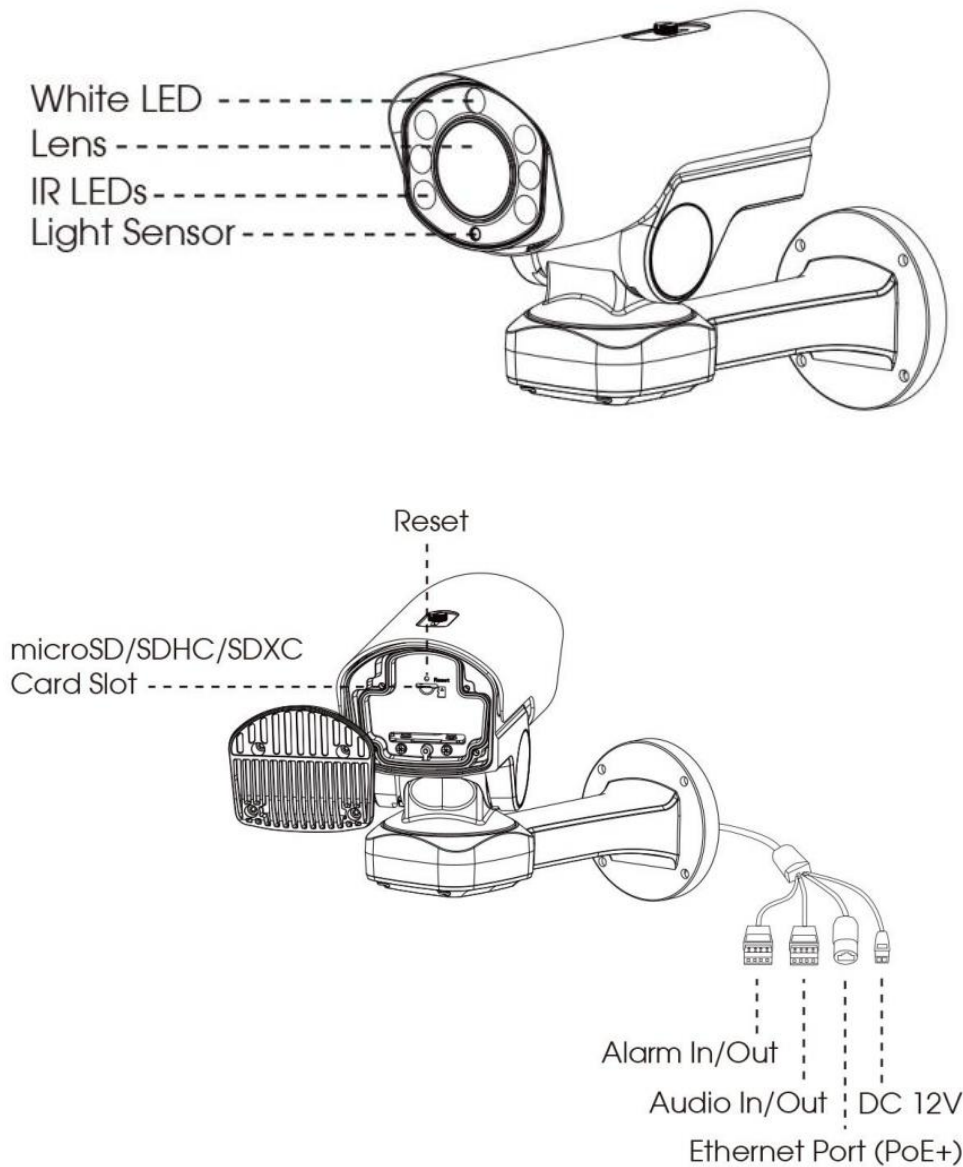
Mini PoE PTZ Bullet:



**Note:**

Only DC 12V is available for Mini PTZ Bullet Network Camera power supply. DC 12V and PoE+ (802.3at) are available for Mini PoE PTZ Bullet Network Camera power supply.

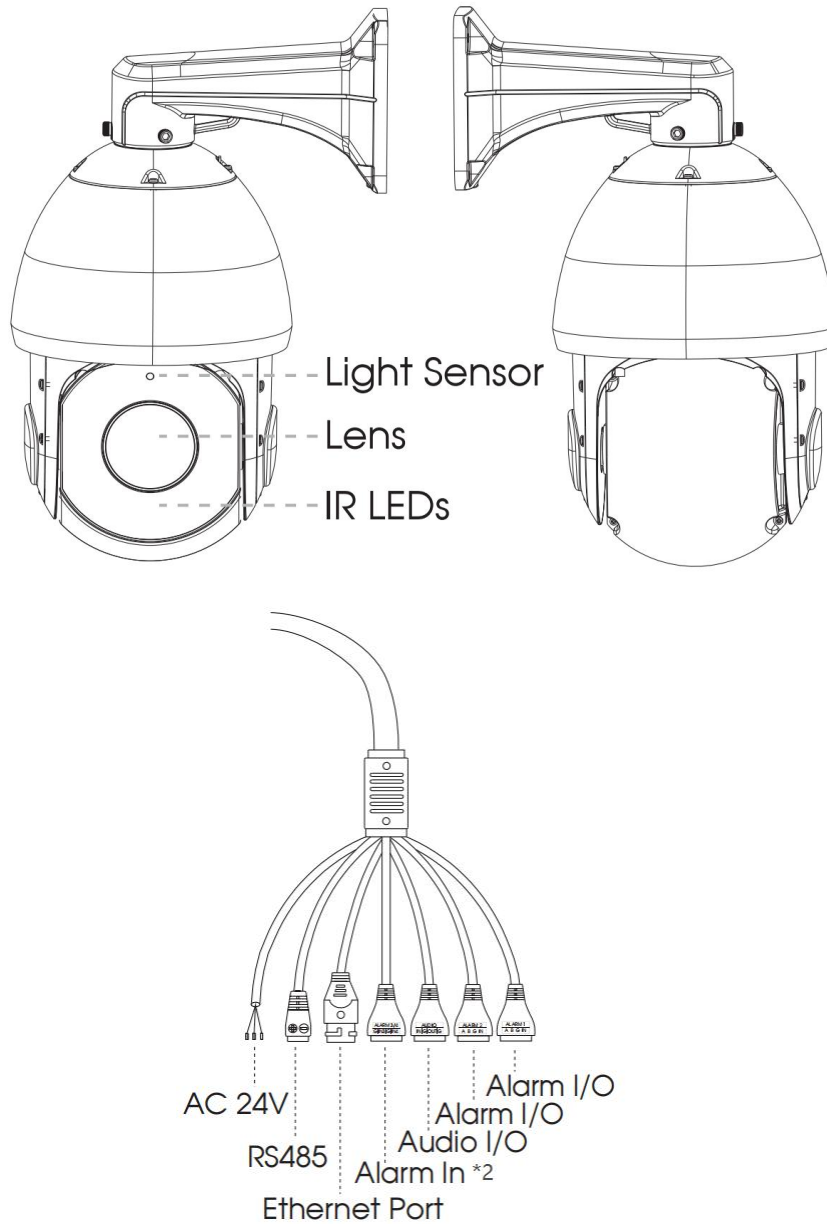
## 4.16 AI 5X/20X/23X Mini PTZ Bullet Plus Network Camera



**Note:**

- 1) Reset Button: Press “Reset” button for 5 seconds, then the device will be restored to factory default;
- 2) DC and PoE+ (802.3at) are available for power supply .

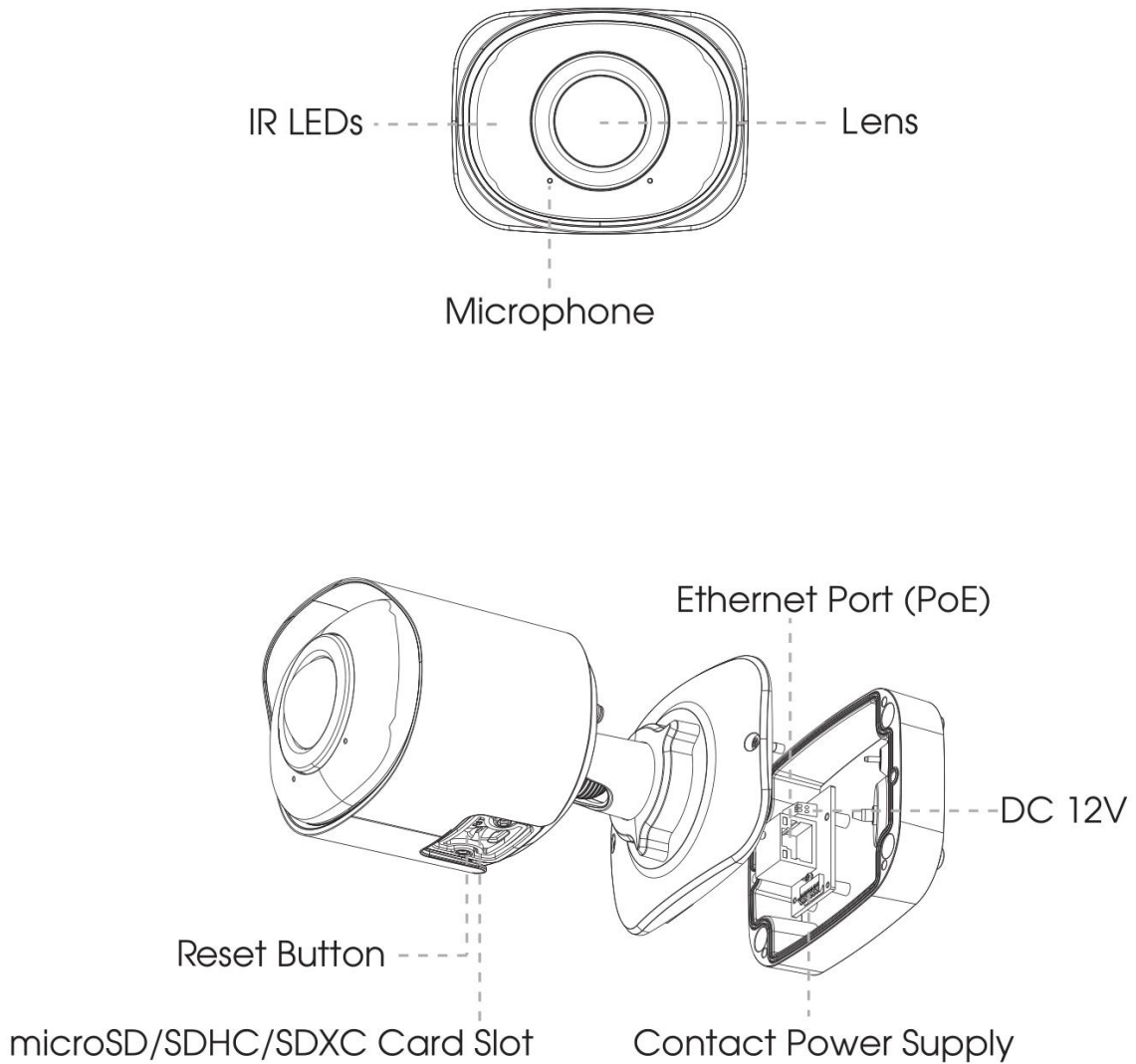
## 4.17 (AI) 23X/30X/36X/42X Speed Dome Network Camera



**Note:**

- 1) Only AC 24V is available for Speed Dome Network Camera power supply. AC 24V and PoE+ (802.3at) are available for PoE Speed Dome Network Camera power supply;
- 2) Built-in SD card slot can be seen after removing the 4 screws and open the front panel;
- 3) Speed Dome on AI Camera Series only support 30X/36X Optical Zoom Lens.

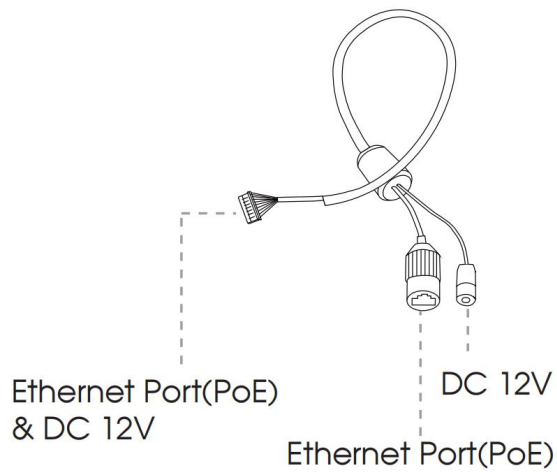
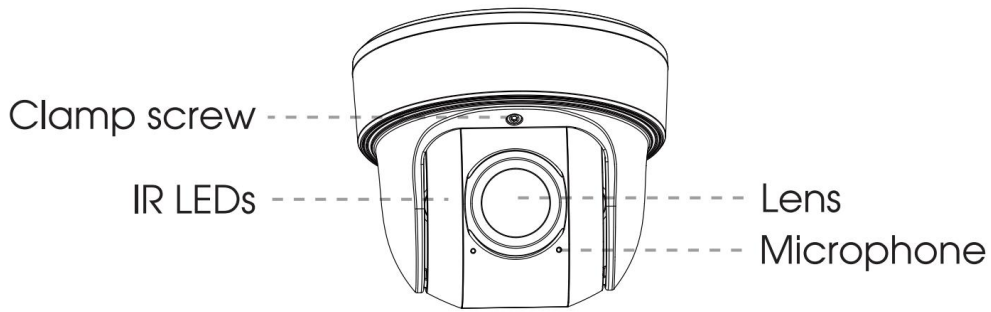
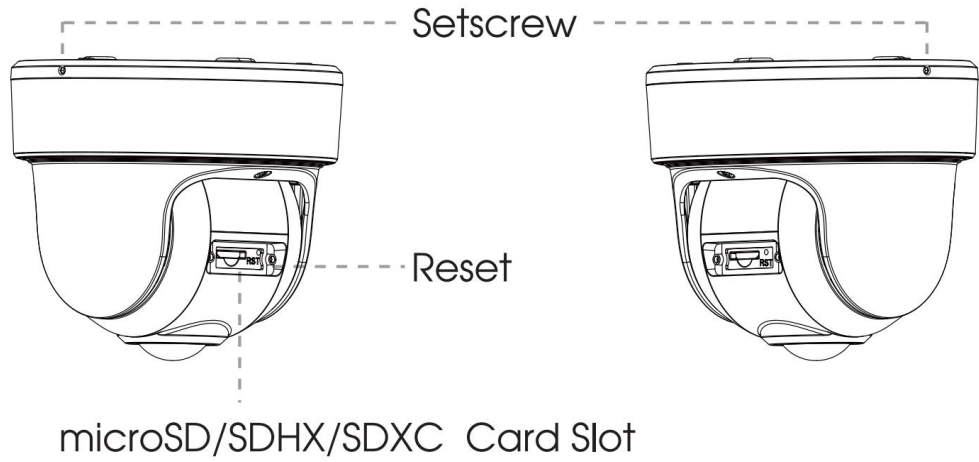
## 4.18 (AI) 180° Panoramic Mini Bullet Network Camera



**Note:**

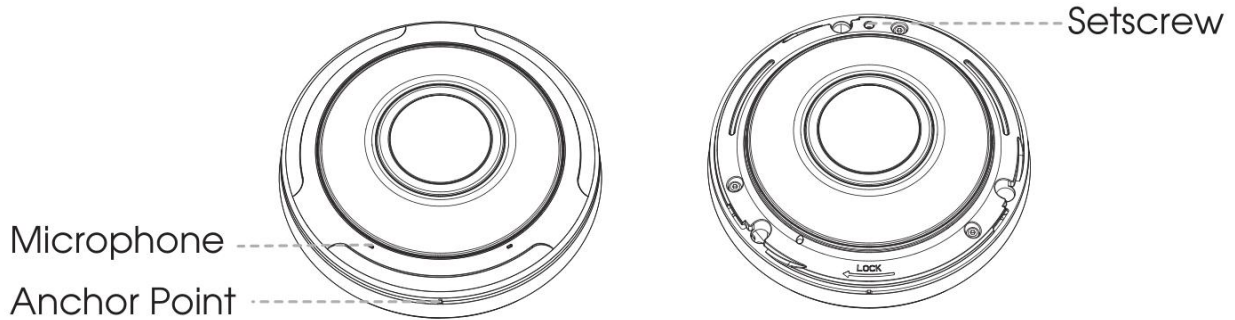
DC 12V and PoE are available for power supply.

### 4.19 (AI) 180° Panoramic Mini Dome Network Camera

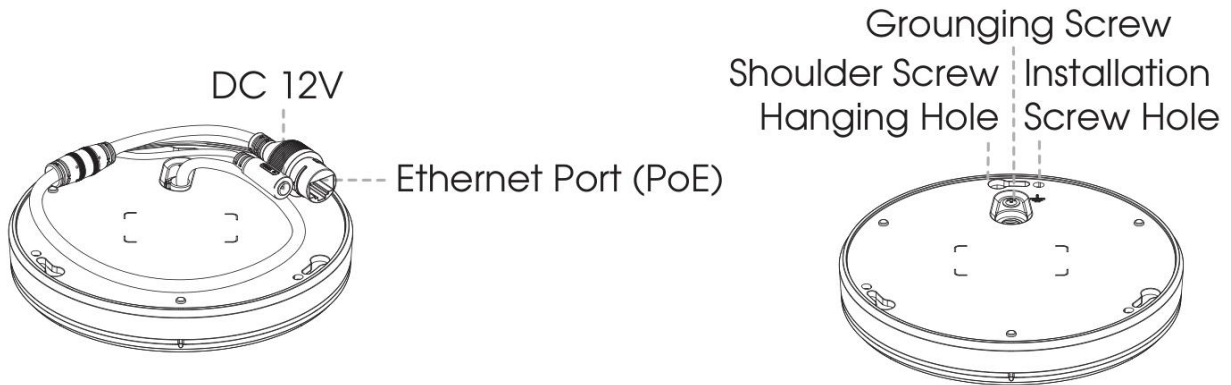


**Note:**  
DC 12V and PoE are available for power supply.

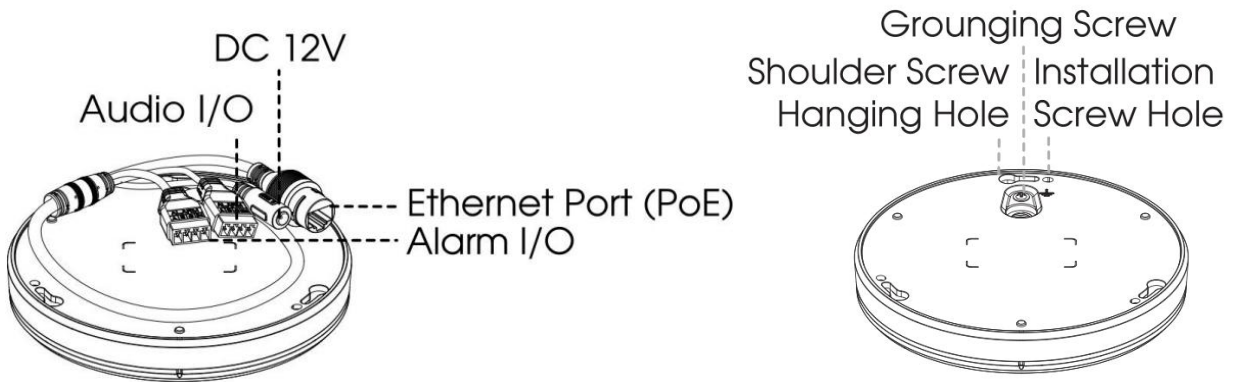
### 4.20 (AI) Fisheye Network Camera



#### 5MP Fisheye Network Camera:

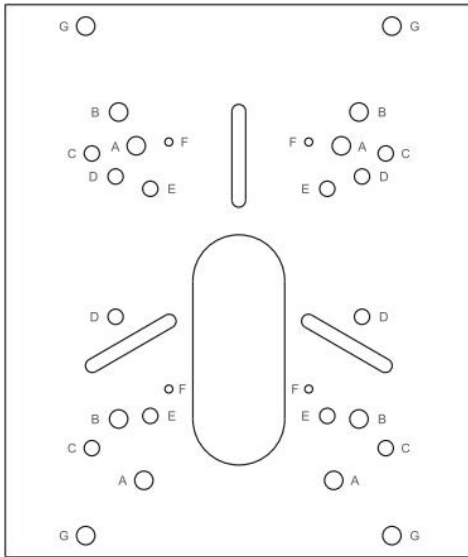


#### 12MP Fisheye Network Camera:



**Note:**  
DC 12V and PoE are available for power supply.

### 4.21 A01 Pole Mount & A03 External Corner Bracket



A: A72 Wall Mount

B: A41/A77 Wall Mount

C: A62/A63 Junction Box

D: A71 Wall Mount

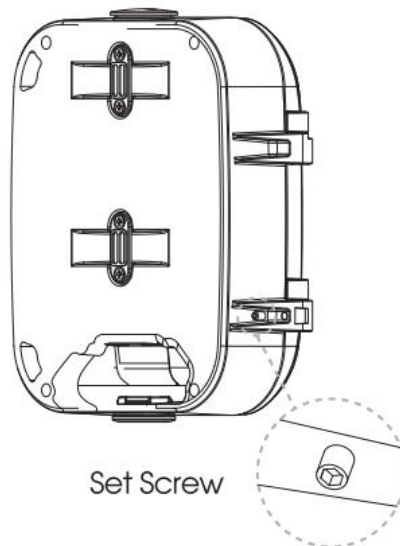
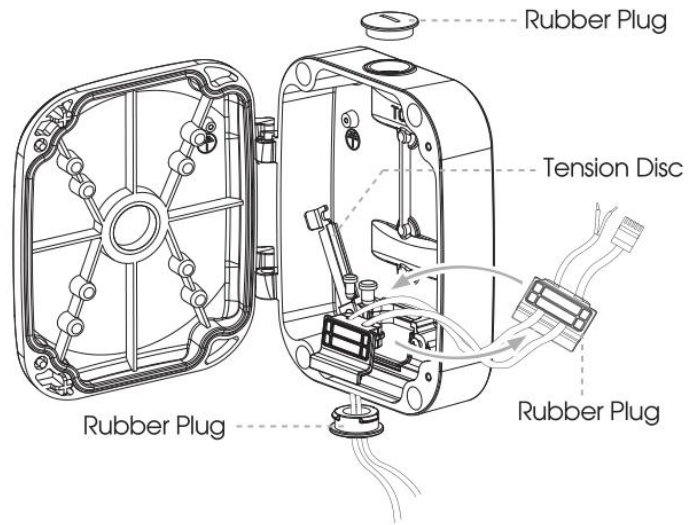
E: A62 Junction Box

F: MS-CXX64-PB/MS-CXX65-PB Junction Box

G: A43 Junction Box (Only for Pole Mount A01)

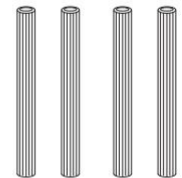
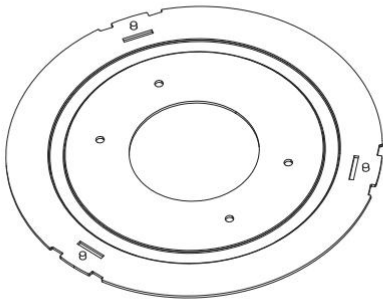
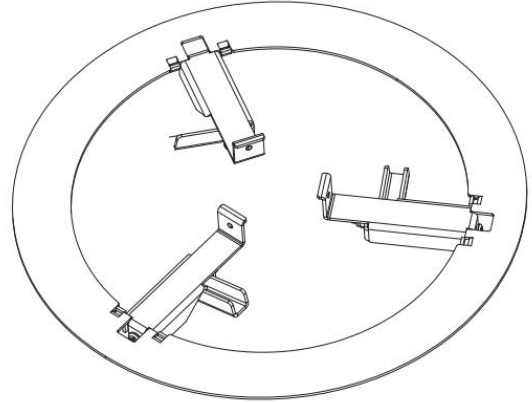
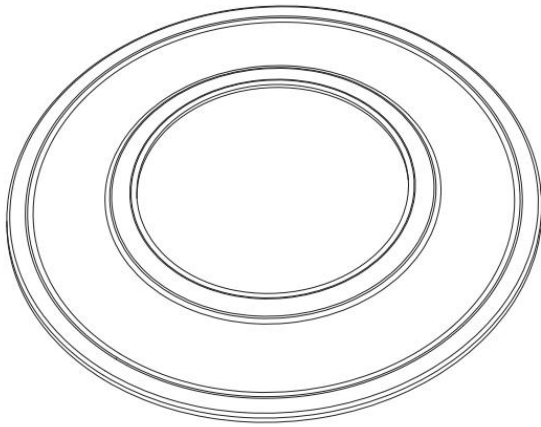


## 4.22 A43 Junction Box





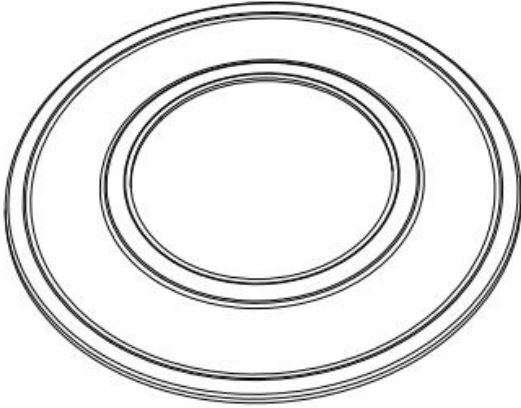
### 4.23 A78 Recessed Mount



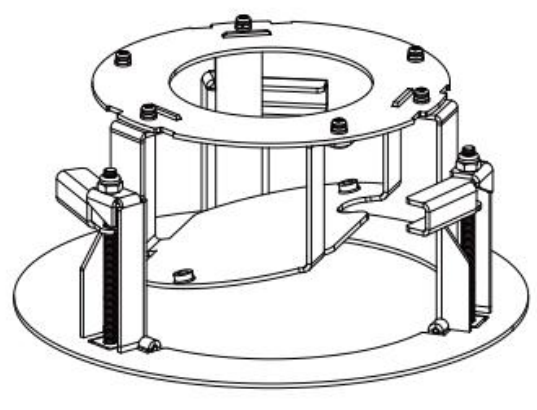
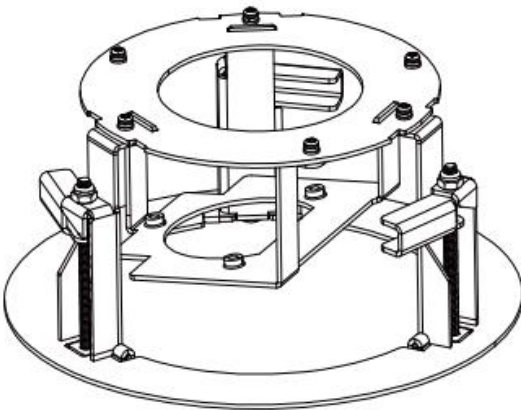
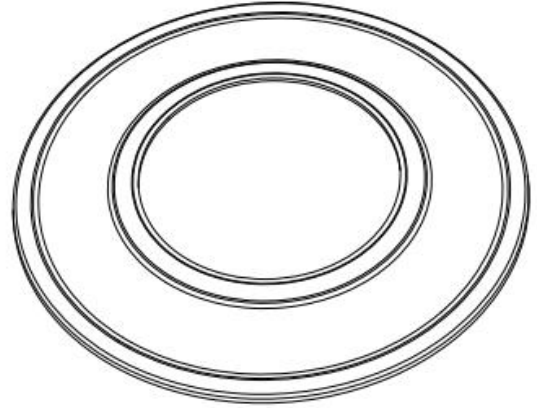
**Note:** There are black and white versions supported.

### 4.24 A81 & A82 Recessed Mount

A81

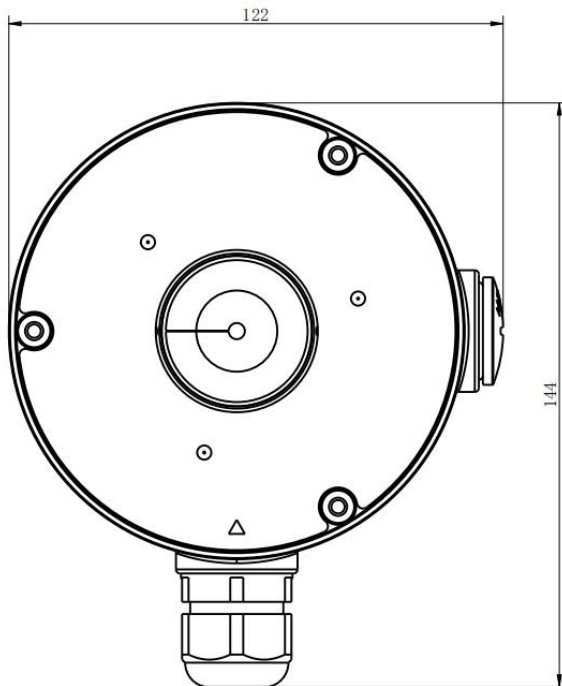


A82



**Note:** There are black and white versions supported.

## 4.25 A83 Junction Box

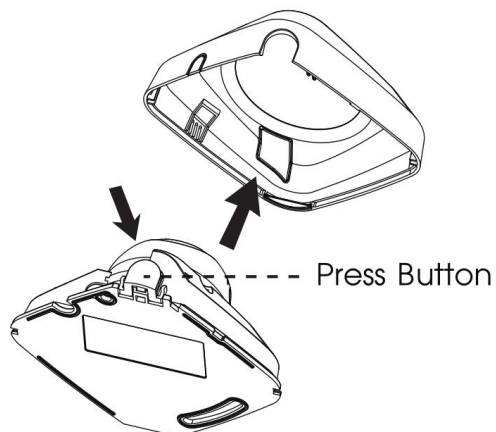


## 5. Hardware Installation

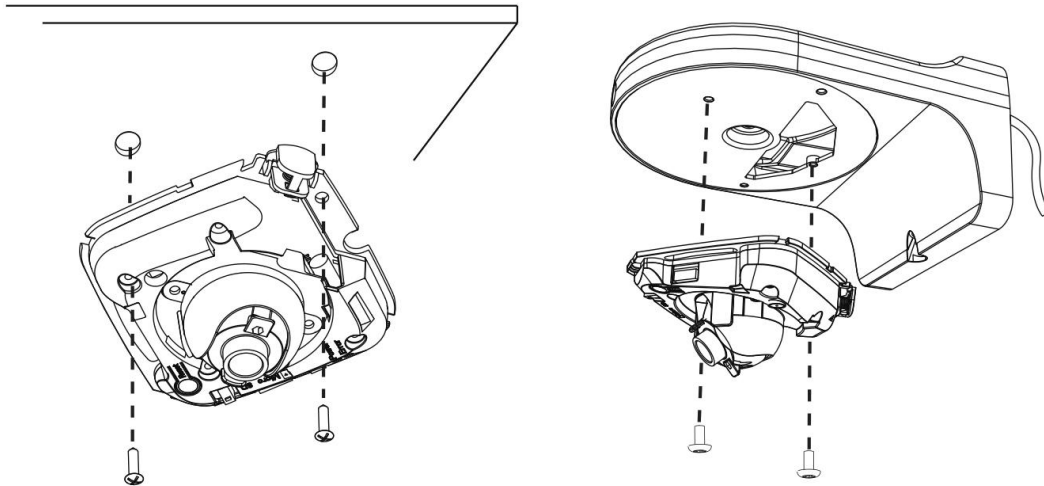
For AI series camera, please mount it in a forward-facing position for more accurate AI function.

### 5.1 Mini Dome Network Camera

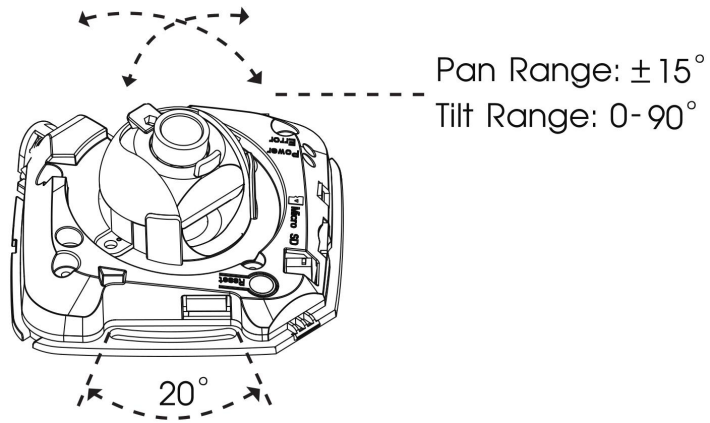
Step1: Remove the dome cover;



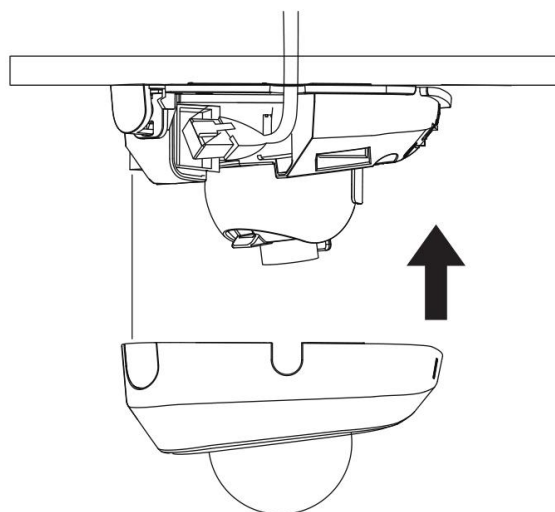
Step2: Fix the camera on ceiling or wall directly or using Wall Mount (A71), then secure the screws.  
Connect the cables;



Step3: Loosen the clamp screw to adjust lens angle, then tighten it again;

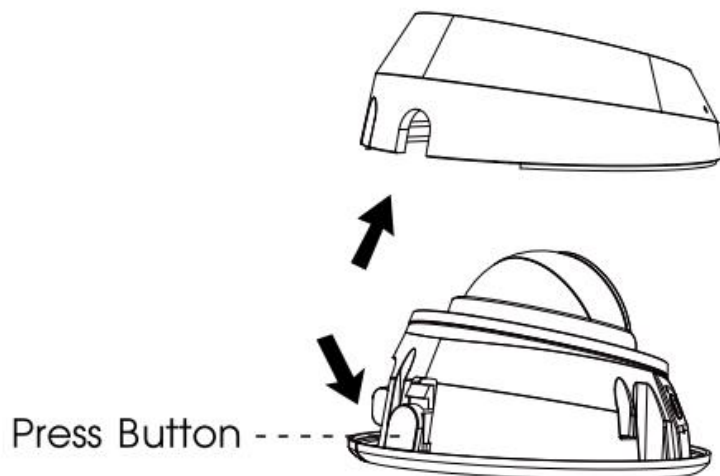


Step4: Attach the dome cover.

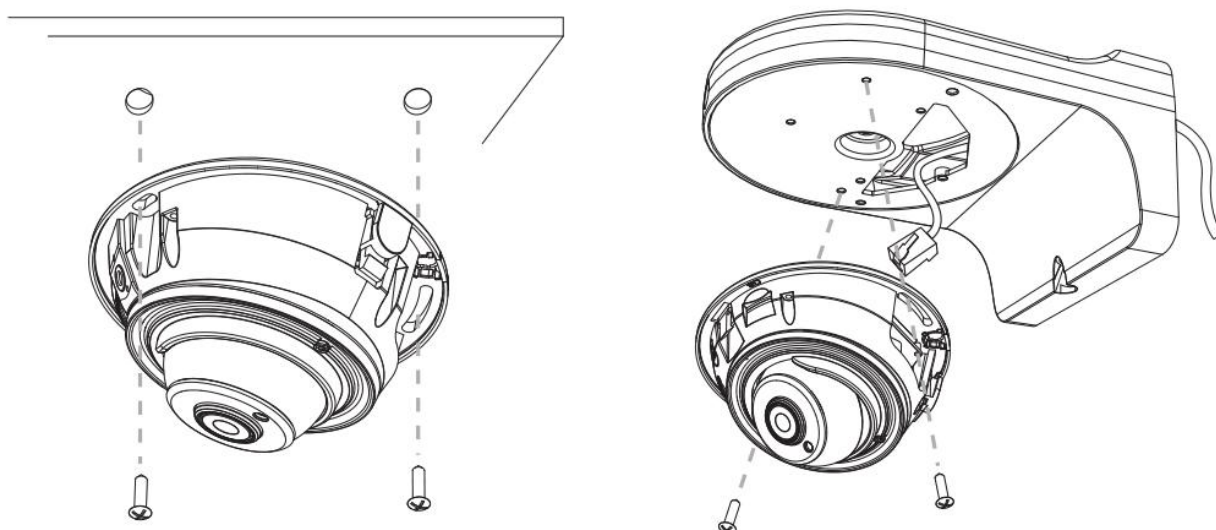


## 5.2 (AI) IR Mini Dome Network Camera

Step1: Remove the dome cover;

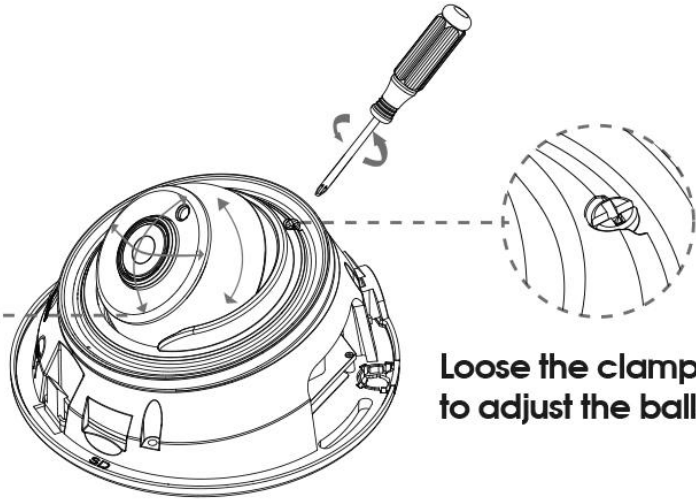


Step2: Fix the camera on ceiling or wall directly or using Wall Mount (A71), then secure the screws.  
Connect the cables;



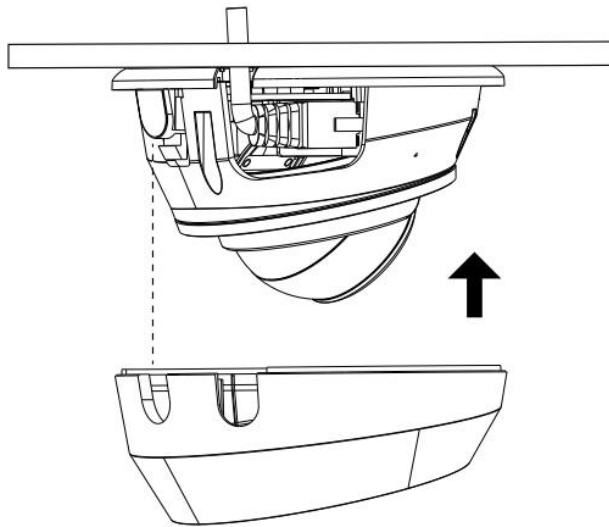
Step3: Loosen the clamp screw to adjust lens angle, then tighten it again;

Pan Range:  $\pm 90^\circ$   
Tilt Range: 15 - 90°



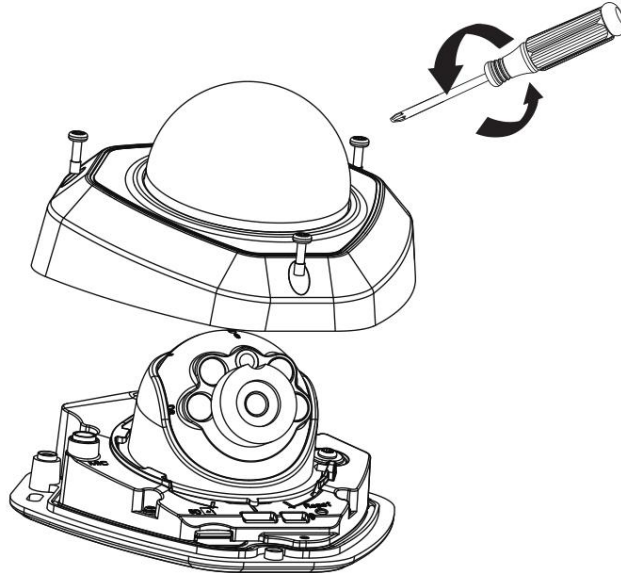
**Loose the clamp screw  
to adjust the ball.**

Step4: Attach the dome cover.

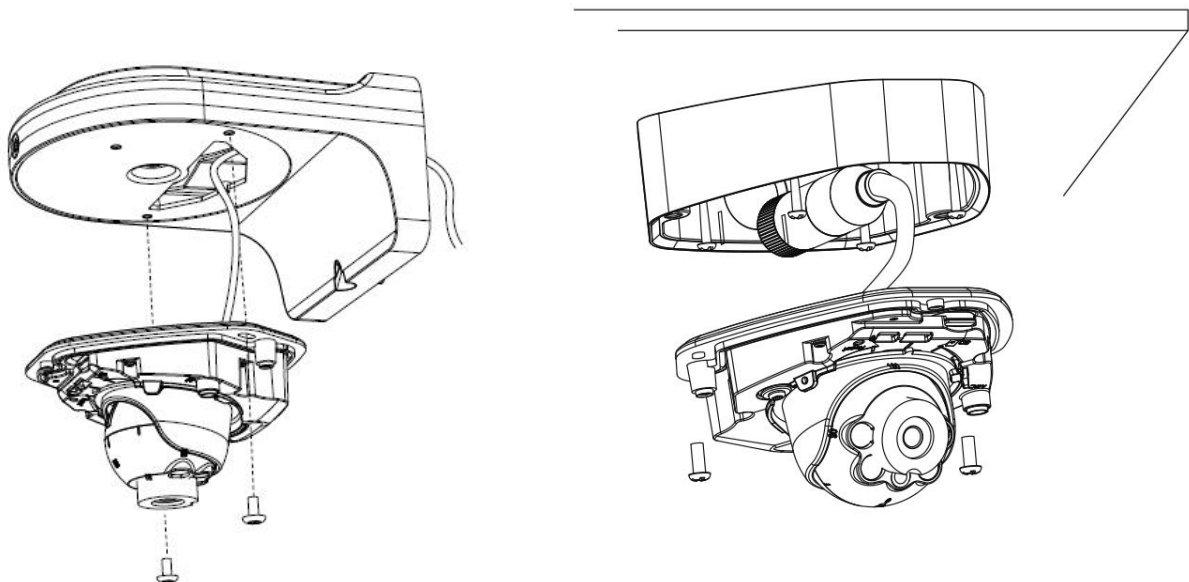


## 5.3 (AI) Vandal-proof Mini Dome Network Camera

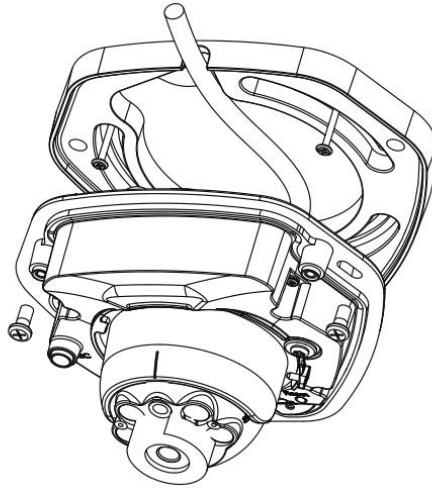
Step1: Remove the dome cover;



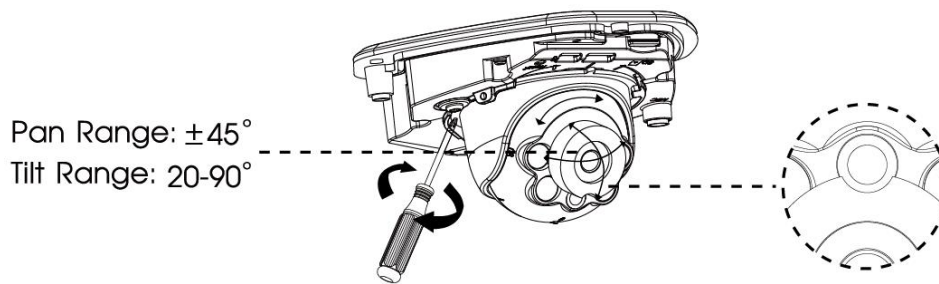
Step2: Fix the camera on ceiling or wall directly or using Wall Mount (A71), Adapter Plate (A73), Junction Box (A74), then secure the screws. Connect the cables;





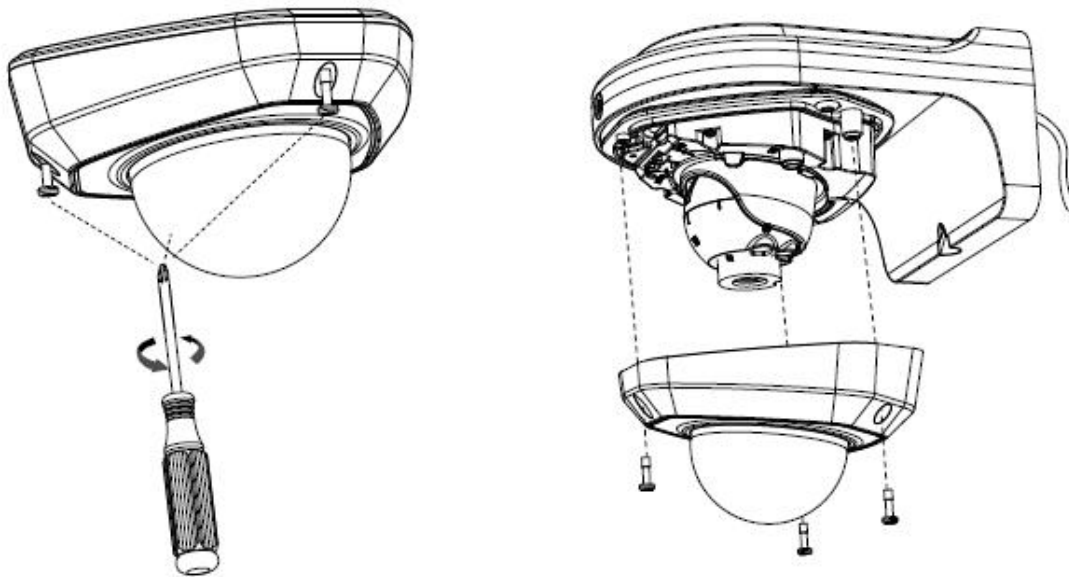


Step3: Loosen the clamp screw to adjust lens angle, then tighten it again;



The gap of the foam shall be aligned to Light Sensor as the picture shows.

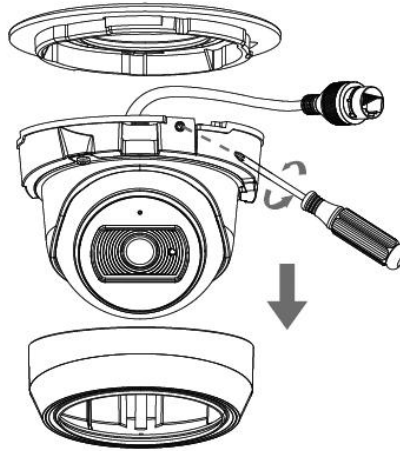
Step4: Attach the dome cover.



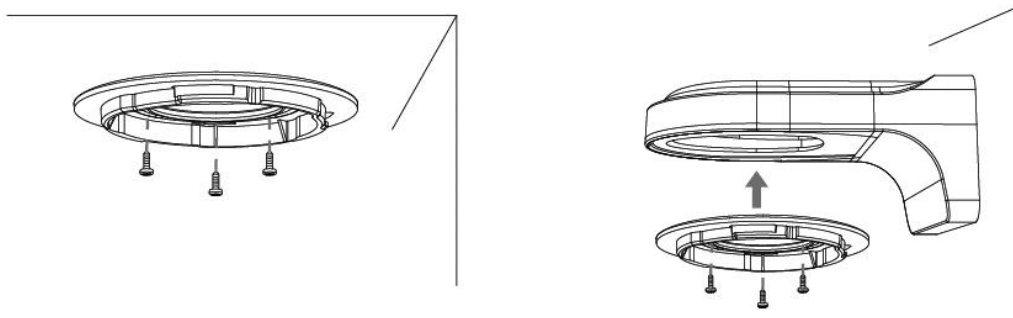


## 5.4 (AI) Weather-proof Mini Dome Network Camera

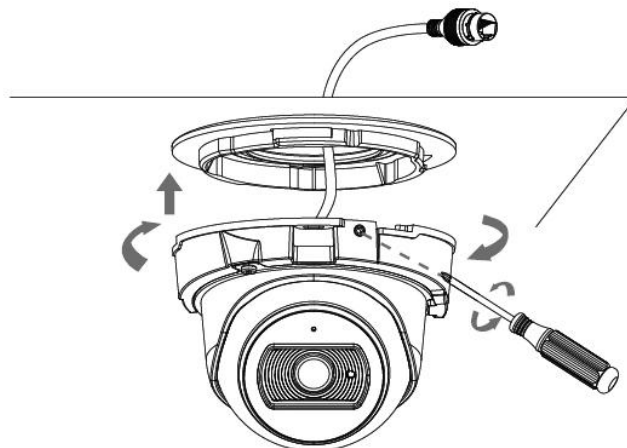
Step1: Remove the dome cover, loosen the setscrew and take the bracket off;



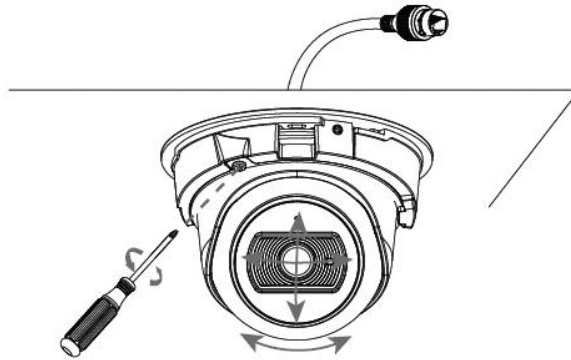
Step2: Fix the bracket in the position where the camera is intended to be installed. Wall Mount (A71) is available for installation;



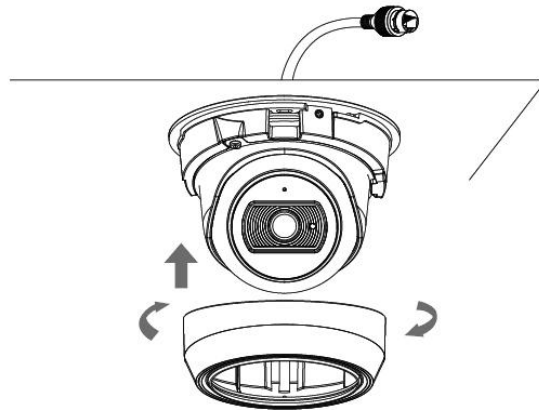
Step3: Connect the cables, rotate the camera to bracket and tighten the setscrew;



Step4: Loosen clamp screw and adjust shooting direction, tighten clamp screw;

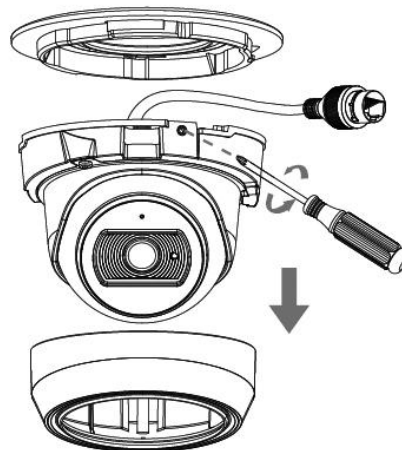


Step5: Attach the dome cover.

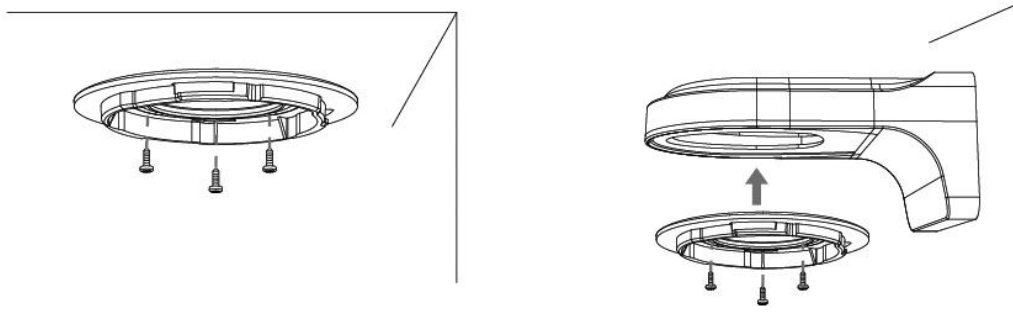


## 5.5 (AI) AF Motorized Mini Dome Network Camera

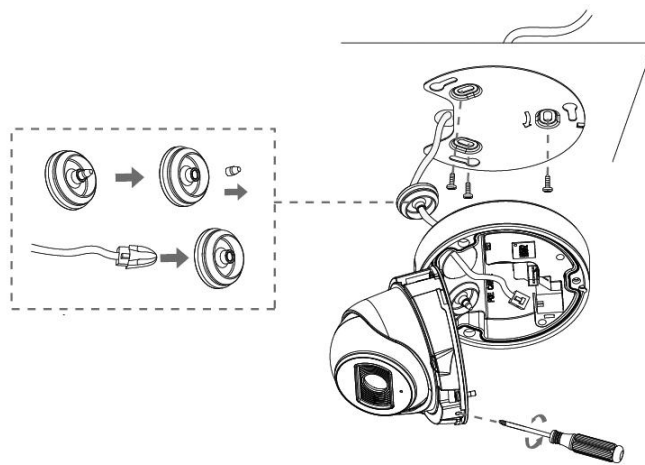
Step1: Remove the dome cover, loosen the setscrew and take the bracket off;



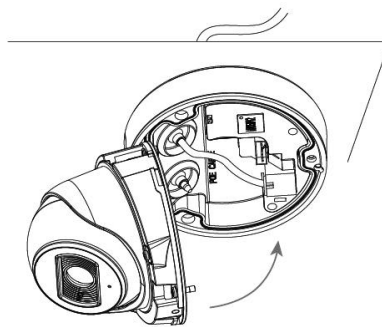
Step2: Fix the bracket in the position where the camera is intended to be installed. Wall Mount (A71) is available for installation;



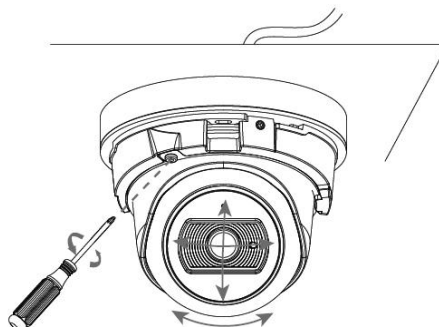
Step3: Loosen the shoulder screw and open the dome body. Take out the waterproof connector, pull out connector center. Place Piercing Cap on Ethernet Connector, and put cable through from large opening to small one. Finally, plug connector into Cable Entry Hole and rotate camera to bracket clockwise, then secure setscrew;



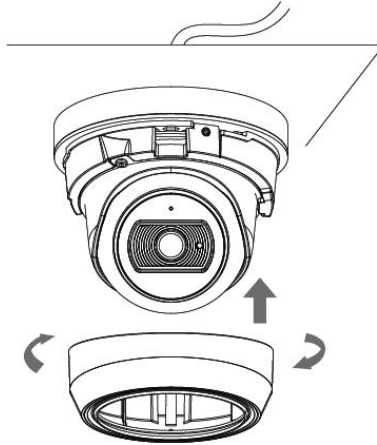
Step4: Connect the cables to respective connectors, then attach camera body to the base and secure shoulder screw;



Step5: Loosen clamp screw, then tighten it after adjusting shooting direction;



Step6: Attach the dome cover.

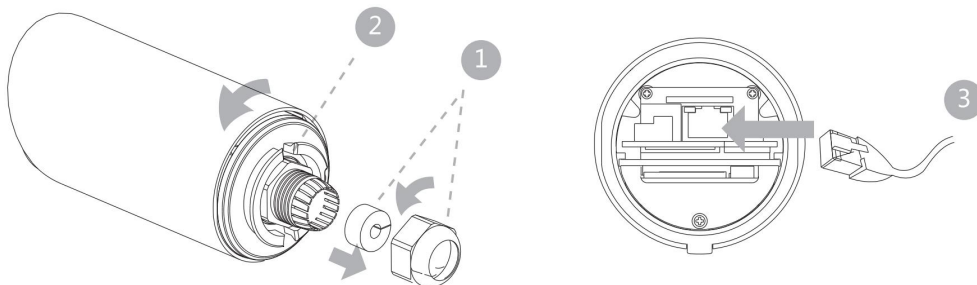


### 5.6 (AI Weather-proof) Mini Bullet Network Camera

Step1: Loosen the waterproof connector, and then remove the rubber seal and the waterproof connector;

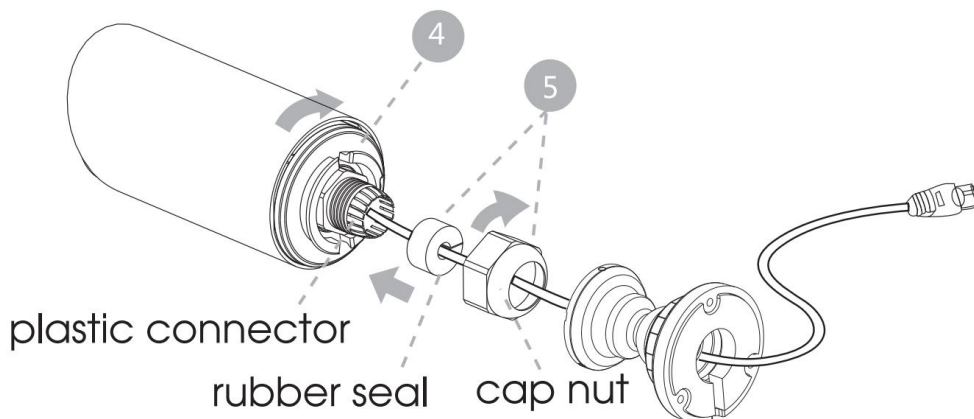
Step2: Loosen and open the rear cover, then install a microSD/SDHC/SDXC card;

Step3: Pass the Ethernet cable (or the tail wire of Mini Bullet with Multi-interface Version) through the center of the mount bracket, cap nut, rubber seal and rear cover orderly for connection;

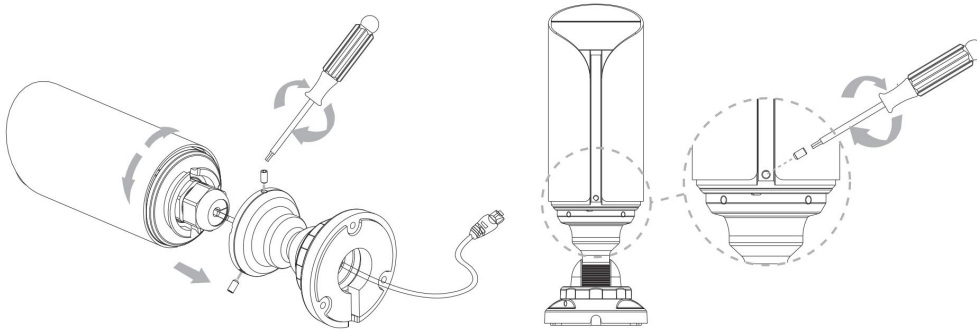


Step4: Install and tighten the rear cover;

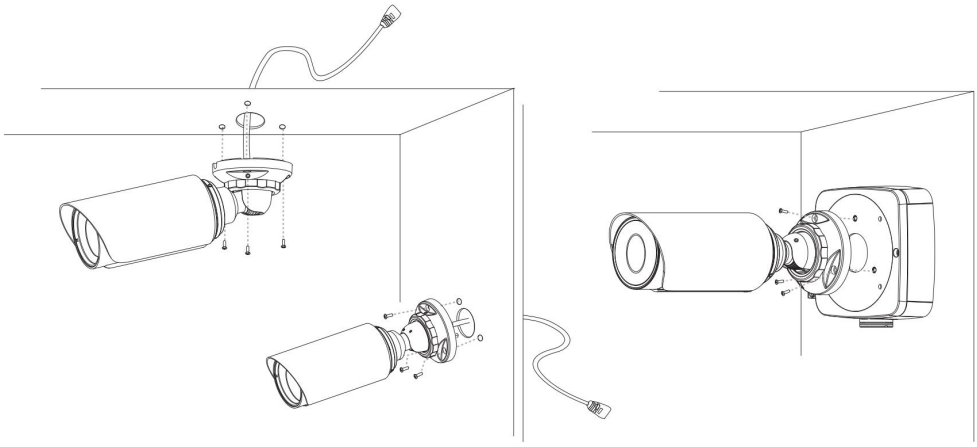
Step5: Tighten the plastic connector, rubber seal, and cap nut of the waterproof connector;



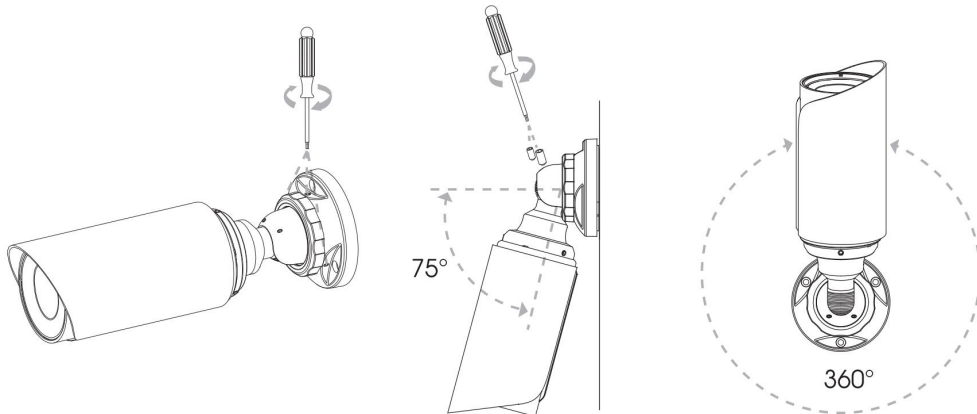
Step6: Put the bracket and camera together, rotate the bracket and fasten it using screws;



Step7: Mount Camera to ceiling, wall or Junction Box (A63);

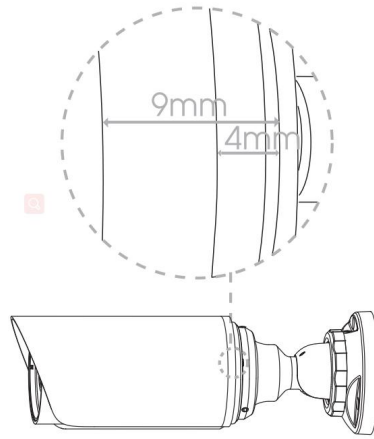


Step8: Adjust shooting direction and fix setscrew.



**Note:**

- 1) The upper cover of the Mini Bullet Network Camera could only be moved forward for 5mm at most to ensure better field of view;
- 2) It will be much easier to remove the rubber seal with a screwdriver when tearing down the camera.

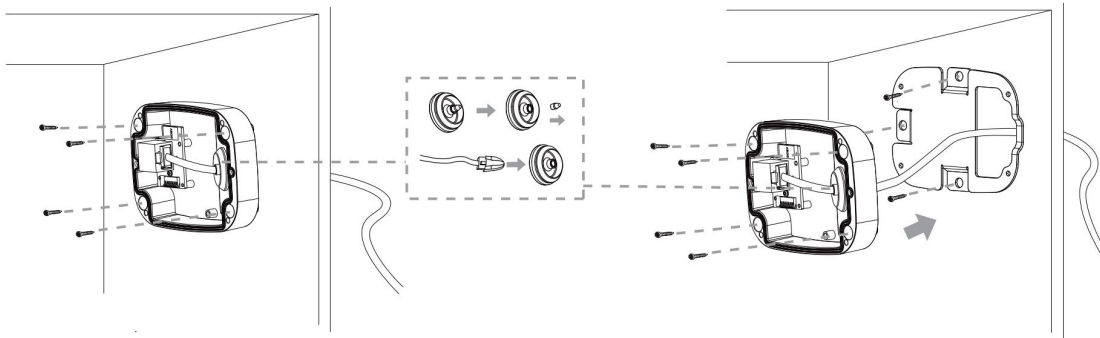


## 5.7 (AI) Vandal-proof Mini Bullet Network Camera

Step1: Connect the cables to the corresponding interface on the rear cover of the Junction Box. Then fix the rear cover on the position where it is intended to be installed. The rear cover can be fixed in the following two ways:

① Fix the rear cover directly;

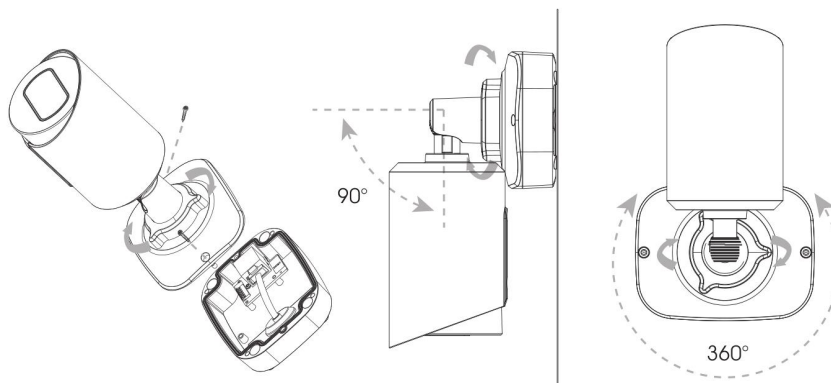
② Fix the rear cover via a bracket;



### Note:

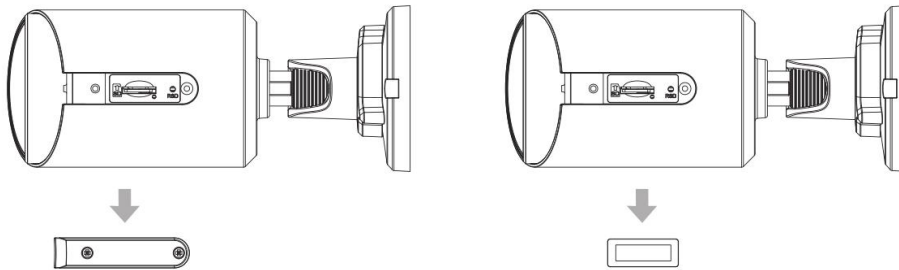
The bracket is optional, which can be applied in special scenarios that require screws of larger sizes.

Step2: When the front cover is correctly fixed to the rear cover, the camera will be powered on by contact power supply. Adjust shooting direction and rotate locking ring.



### Note:

Loosen the screws of SD card structure to get access to the SD card slot if you need. Fix the screws again after inserting the SD card to complete the operation.

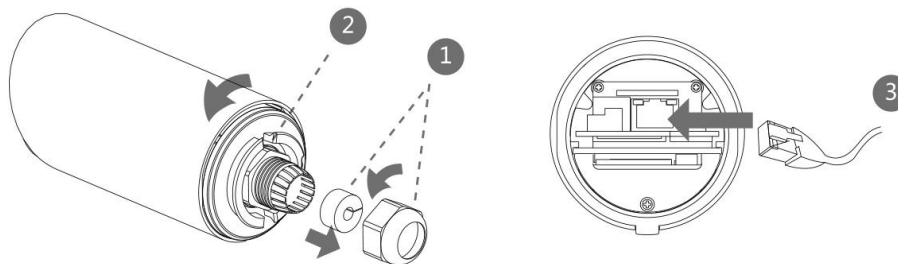


## 5.8 (AI) (Vandal-proof) Motorized Mini Bullet Network Camera

Step1: Loosen the plastic connector, and then remove the rubber seal and cap nut of the waterproof connector;

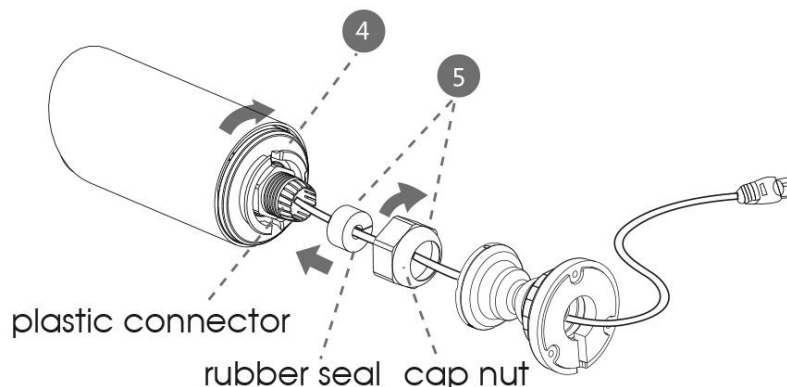
Step2: Loosen and open the rear cover, then install a microSD/SDHC/SDXC card;

Step3: Pass the Ethernet cable (or the tail wire of Mini Bullet with Multi-interface Version) through the center of the mount bracket, cap nut, rubber seal and rear cover orderly for connection;

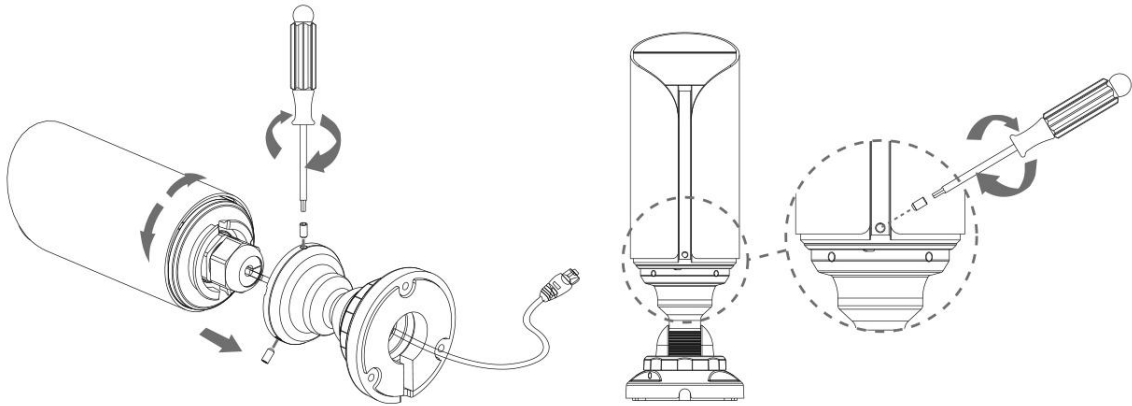


Step4: Install and tighten the rear cover;

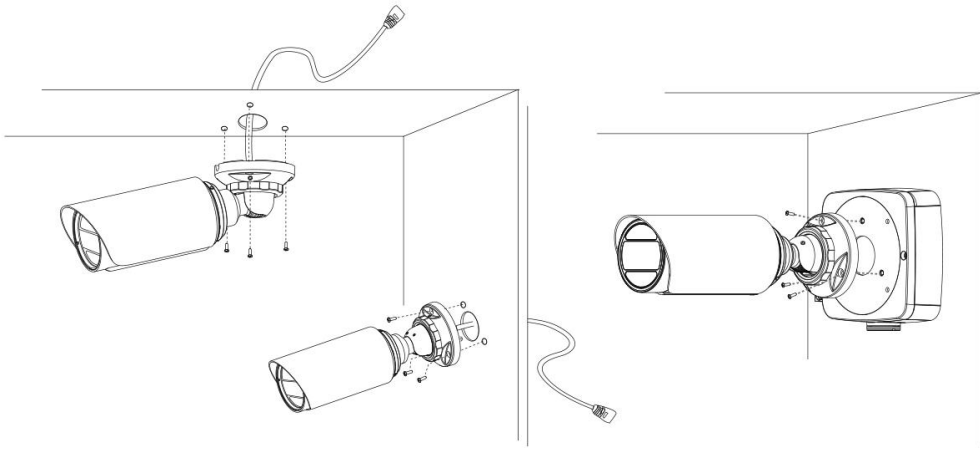
Step5: Tighten the plastic connector, rubber seal, and cap nut of the waterproof connector;



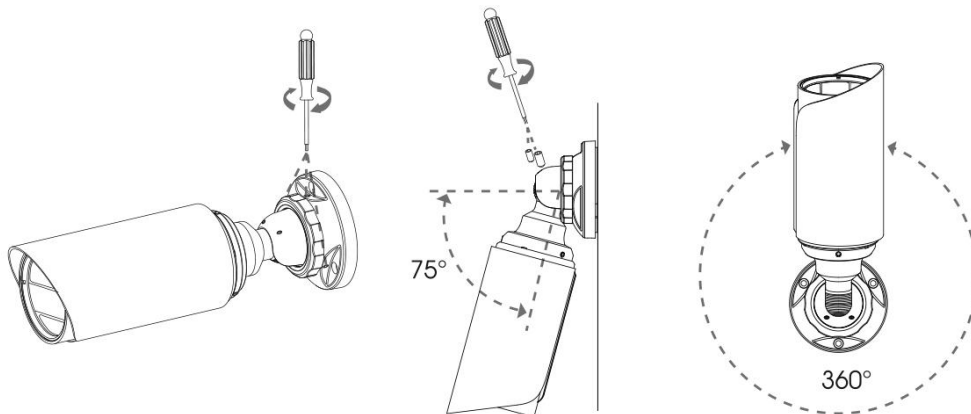
Step6: Put the bracket and camera together, rotate the bracket and fasten it using screws;



Step7: Mount Camera to ceiling, wall or Junction Box (A63);



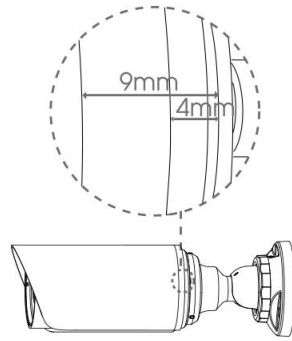
Step8: Adjust shooting direction and fix setscrew;



**Note:**

- 1) The upper cover of the Motorized Mini Bullet Network Camera could only be moved forward for 5mm at most to ensure better field of view;
- 2) It will be much easier to remove the rubber seal with a screwdriver when tearing down the camera.

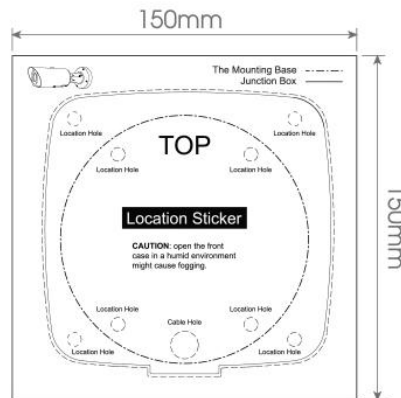




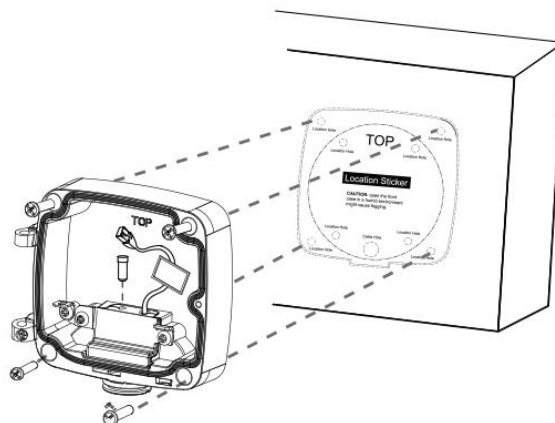
## 5.9 (A1) Motorized Pro Bullet Network Camera

### Default Junction Box (A62):

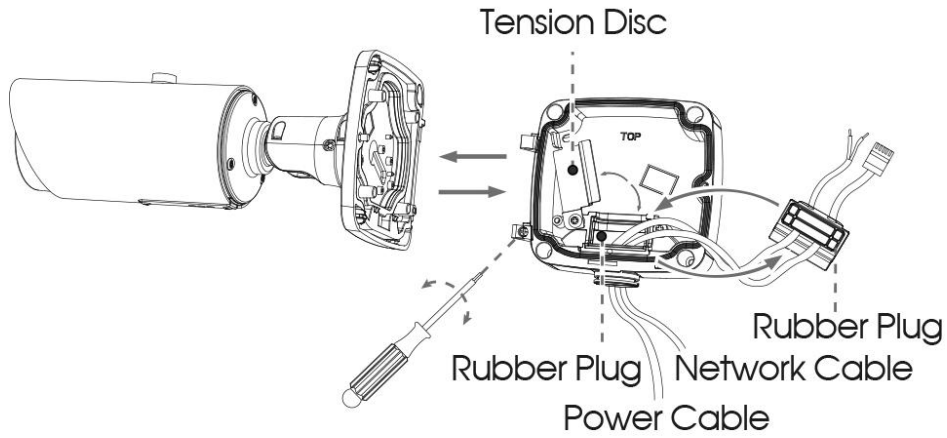
Step1: Fix a sticker on the position where the camera is intended to be installed;



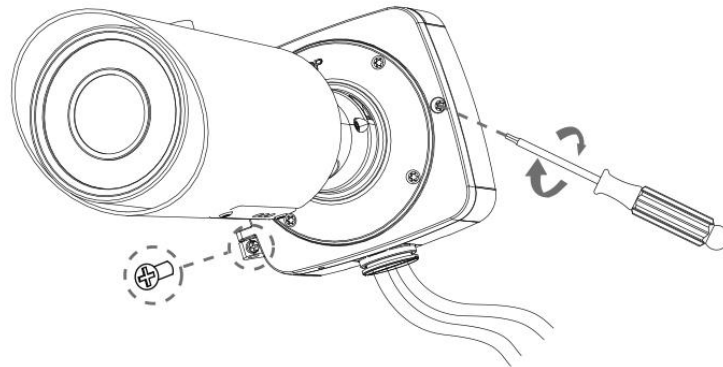
Step2: Remove the tension disc on the rear cover of the Junction Box, and cut an opening on the rubber plug and get cables through the opening then fasten the rear cover to the sticker;



Step3: Install the front cover from the angle near 90° to the rear cover. Pay attention to the two "Tops". The "Top" on the bullet shall be aligned to the "Top" on the Junction Box;

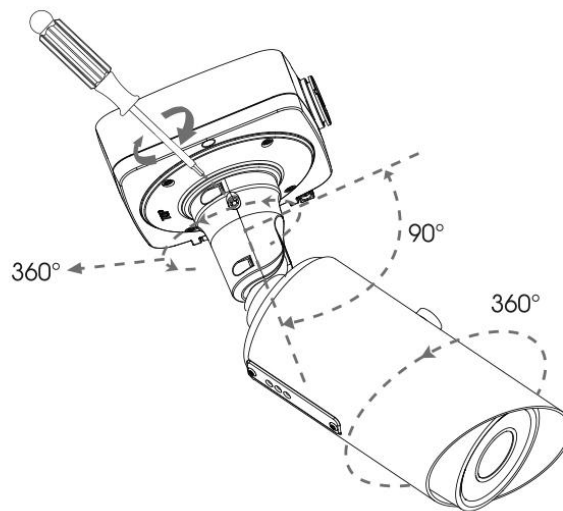


Step4: Adjust the cables length, and connect the cables to corresponding interfaces and fix the tension disc. Close the junction box and fix screws at last. Please remember to plug the small rubber plug whenever the holes on the rubber plug is not in use;



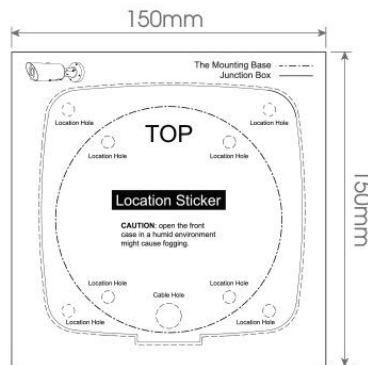
**⚠ Remember to fix the setscrew tightly.**

Step5: Adjust shooting direction and fix the setscrew.

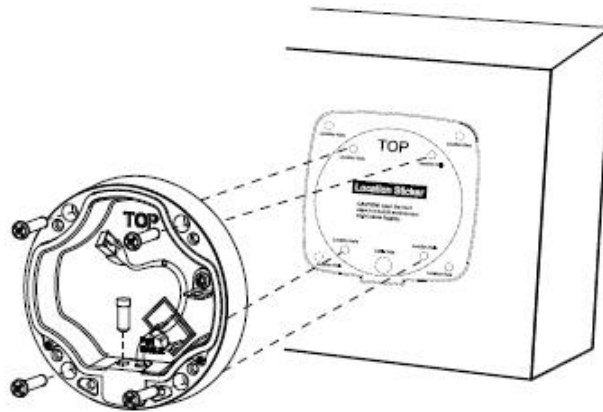


**Junction Box (Optional):**

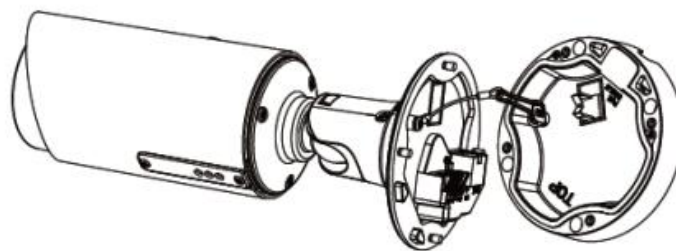
Step1: Fix a sticker on the position where the camera is intended to be installed;



Step2: Take out the black rubber plug on the base, put the cables you need through the base and rubber plug (for more convenient and easier setup, the cables can get through from the side opening of rubber plug); Fasten the base to the sticker;

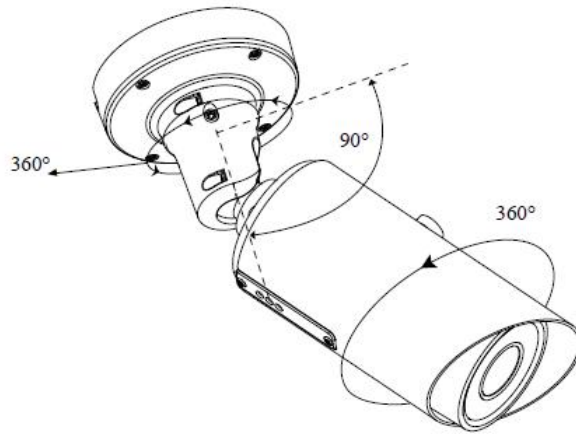


Step3: Hang the bullet via the hook on the base;



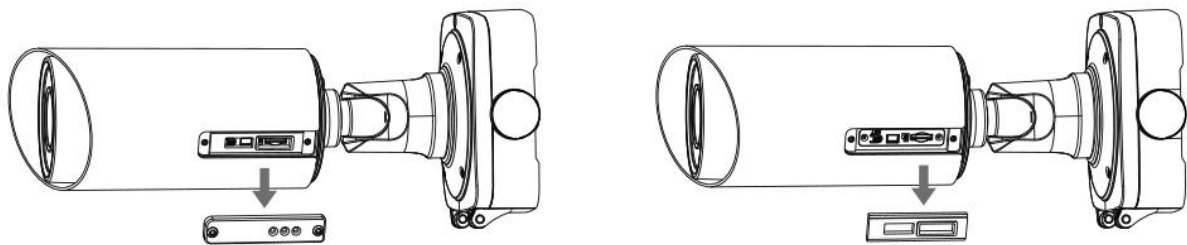
Step4: Adjust the cables to a suitable length and place, then connect the cables to the corresponding interfaces. Plug the black rubber plug back to the cable entry hole to prevent the ingress of dust or water. Buckle the cables by the black clamp on the base in case that the cables turning twisted and mussy. Whenever you don't need to use the holes on the rubber plug, making sure that the small black plug is tightly stuffed up;

Step5: Install the Pro Bullet to the Junction Box, and pay attention to the two "Tops". The "Top" on the Bullet shall be aligned to the "Top" on the Junction Box. Then fix the screws. At last, adjust the shooting direction and fix the setscrew.



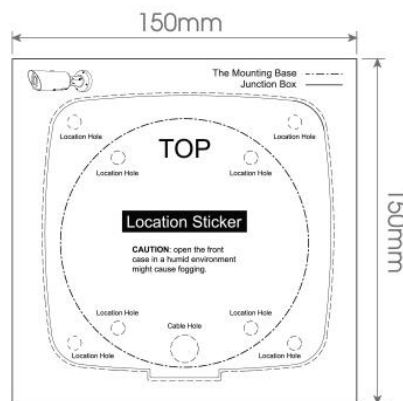
**Note:**

Loosen the screws of PTFE Membrane structure to get access to the SD card slot if you need. Fix the screws again after inserting the SD card to complete the operation.

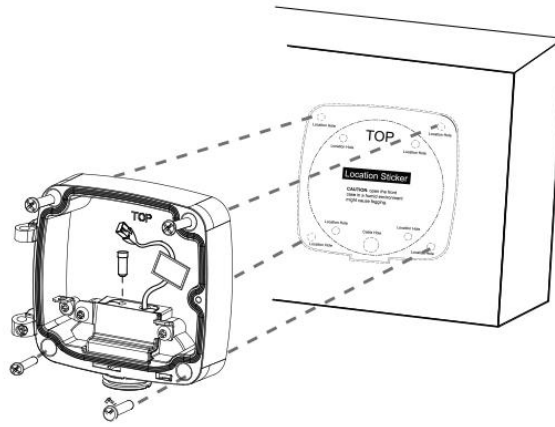


### 5.10 (Radar) AI (LPR) Pro Bullet Plus Network Camera

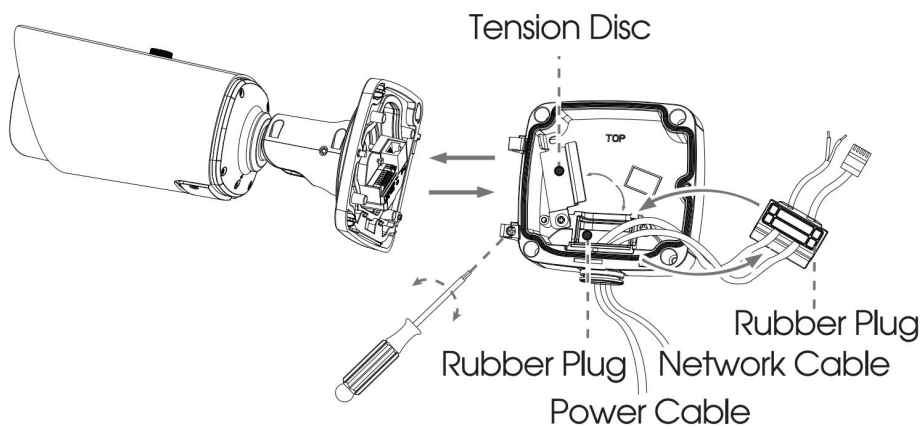
Step1: Fix a sticker on the position where the camera is intended to be installed;



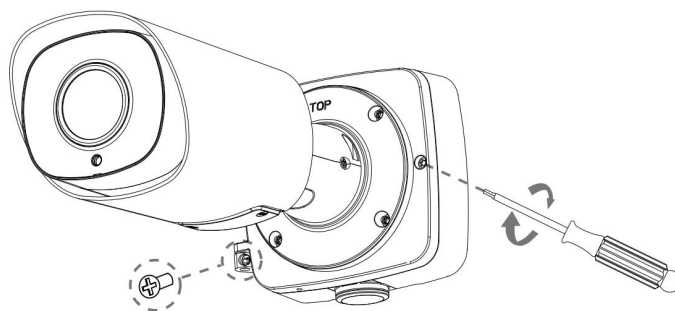
Step2: Remove the tension disc on the rear cover of the Junction Box, and cut an opening on the rubber plug and get cables through the opening then fasten the rear cover to the sticker;



Step3: Install the front cover from the angle near 90° to the rear cover. Pay attention to the two “Tops”. The “Top” on the bullet shall be aligned to the “Top” on the Junction Box;

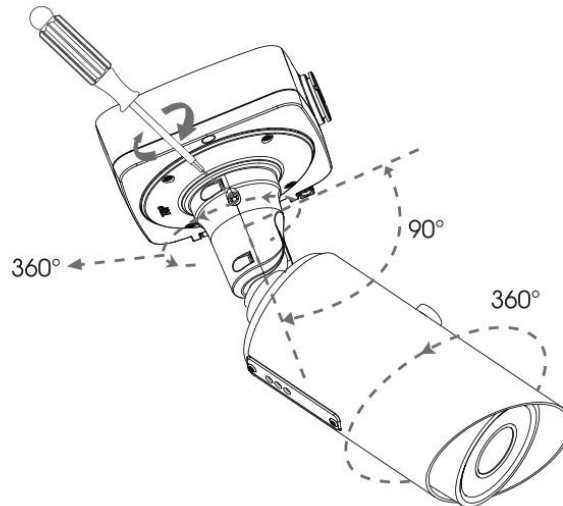


Step4: Adjust the cables length, and connect the cables to corresponding interfaces and fix the tension disc. Close the junction box and fix screws at last. Please remember to plug the small rubber plug whenever the holes on the rubber plug is not in use;



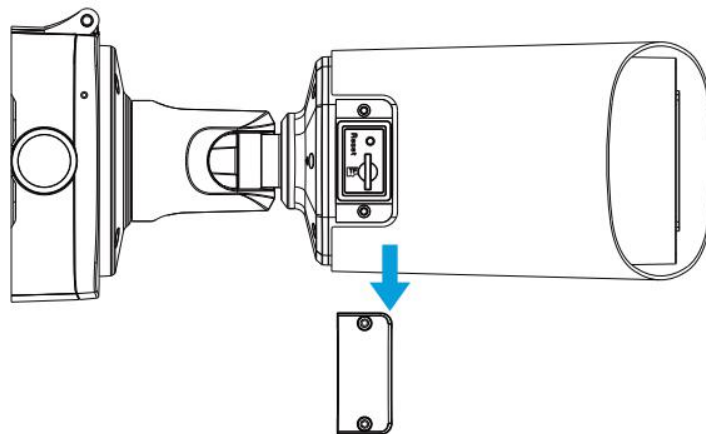
 **Remember to fix the setscrew tightly.**

Step5: Adjust shooting direction and fix the setscrew.



**Note:**

Loosen the screws of PTFE Membrane structure to get access to the SD card slot if you need. Fix the screws again after inserting the SD card to complete the operation.



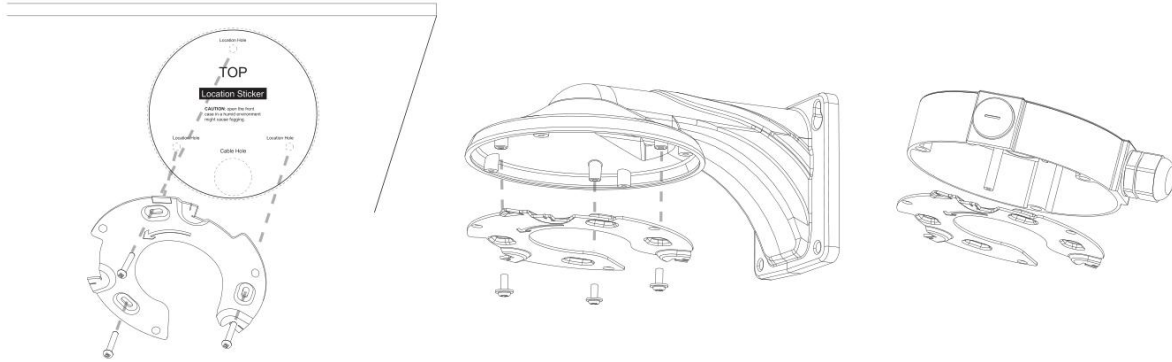
## 5.11 (AI) Motorized Pro Dome Network Camera

Loosen the screws of the dome cover and take it off.

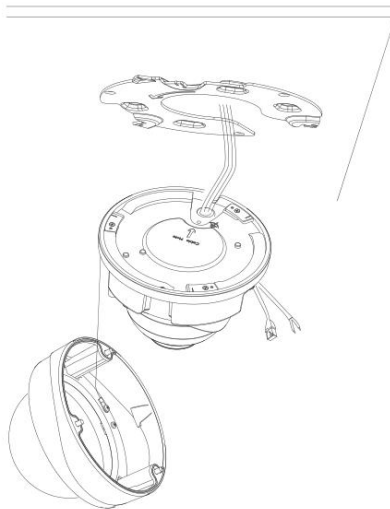
Loosen the setscrew and take the bracket off.

Step1: Fix the bracket on the position where the camera is intended to be installed. Wall Mount (A72) and Junction Box (A75) are available for installation;

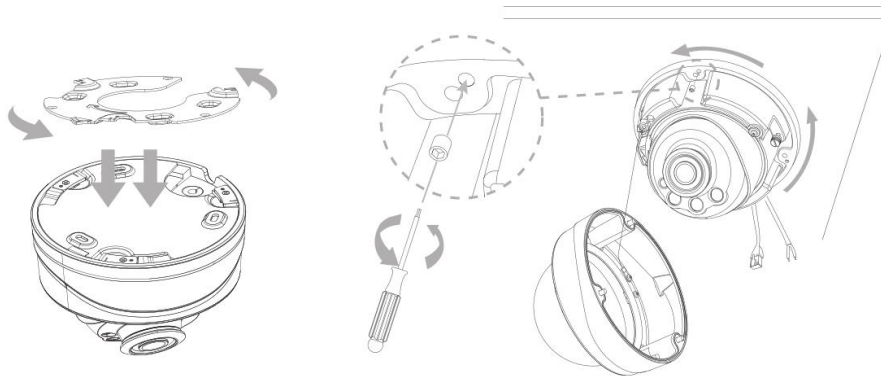
**Note:** Only the **new bracket** is compatible with A75.



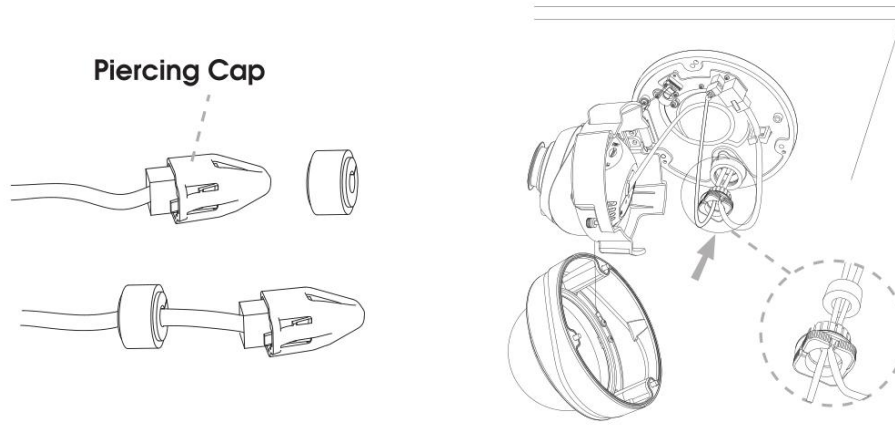
**Step2:** Loosen the shoulder screw and open the camera body. Remove the waterproof connector in the Cable Entry Hole, and then pass the cables through the Cable Entry Hole;



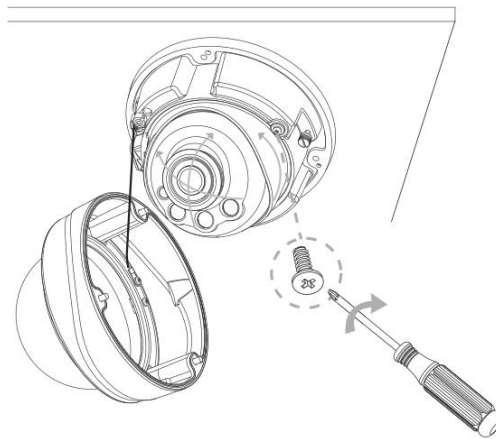
**Step3:** Rotate the camera unit clockwise, and then fix the camera to the bracket with the setscrew;



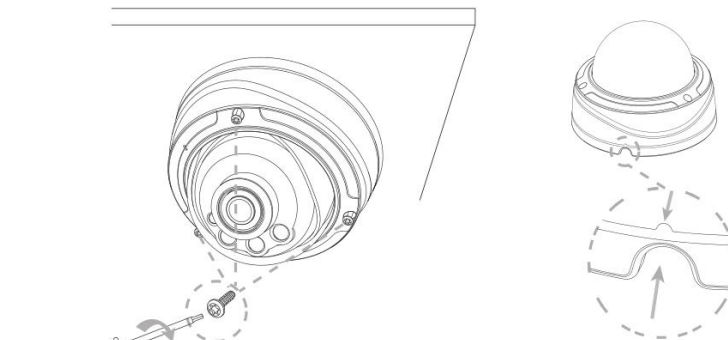
**Step4:** Put the cables through the White Rubber Ring and Black Rubber Bung successively (Place the Piercing Cap on the Ethernet Connector, and put the cables through White Rubber Ring from large opening to the small one). Combine the Ring and Bung and plug them into the Cable Entry Hole. Connect the cables to respective connectors, then attach the camera body to the base;




Step5: Loosen the clamp screw, adjust the camera lens to the desired direction(360° Pan and -5~75° Tilt). Tighten the clamp screw to fix the lens;



Step6: Attach the dome cover and make sure that the groove above is aligned to the one below as the picture shows, then fix the camera tightly ;

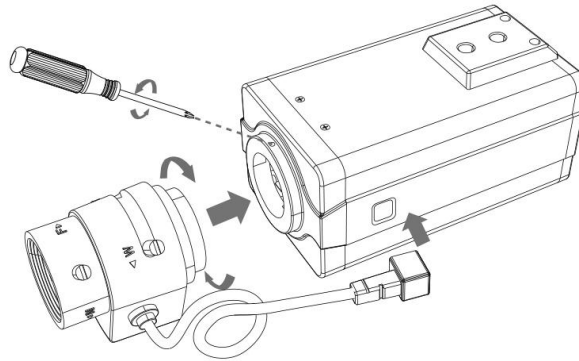


 The groove above shall be aligned to the one below.

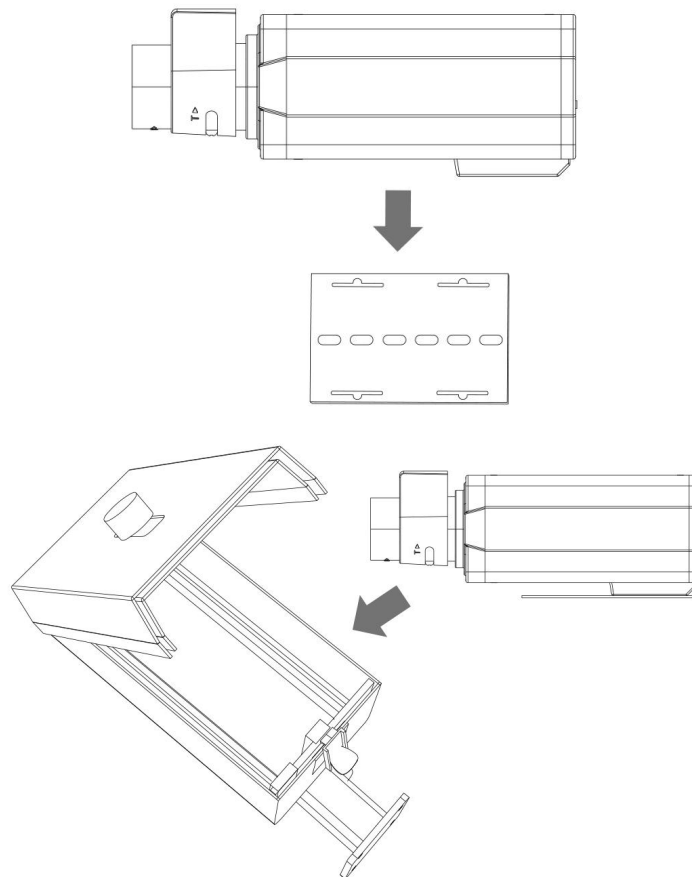


## 5.12 (ABF) Pro Box Network Camera

Step1: Fix the lens and the cable for Iris controlling to the Pro Box, then tighten the screw;



Step2: Connect the cables. Fix the camera on the accessory which has already been installed on the position where the camera is intended to be mounted (Milesight provides Protective Housing (A51) for installation).

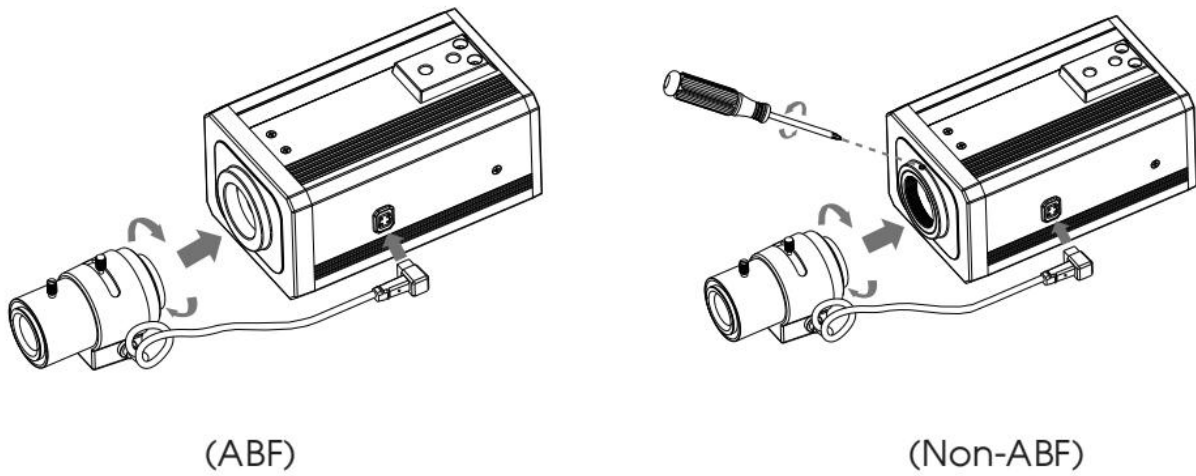


**Note:**

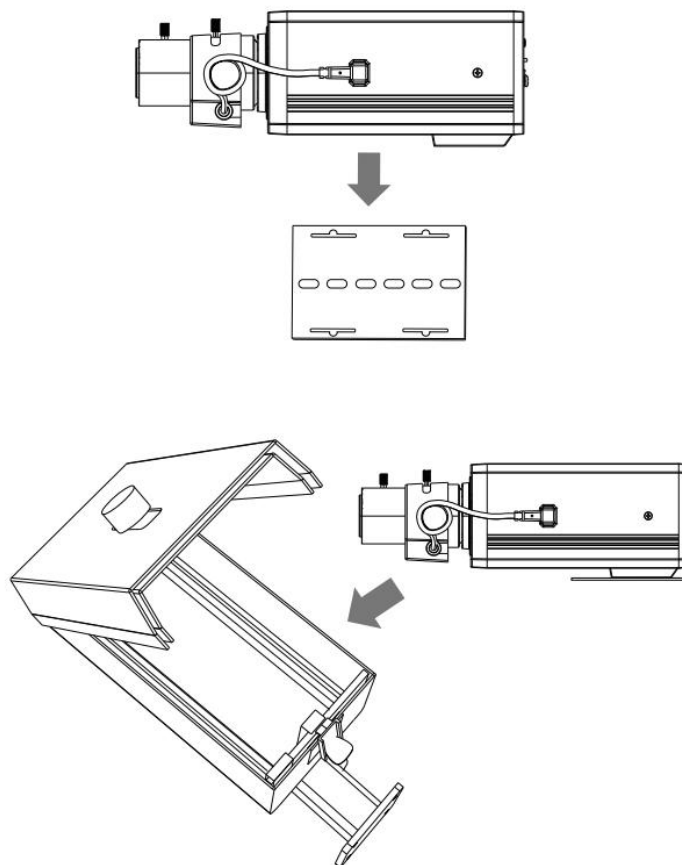
You can press ABF button on the back panel of camera to help focusing.

### 5.13 AI Pro Box Plus Network Camera

Step1: Fix the lens and the cable for Iris controlling to the Pro Box, then tighten the screw;



Step2: Connect the cables. Fix the camera on the accessory which has already been installed on the position where the camera is intended to be mounted (Milesight provides Protective Housing(A51) for installation).

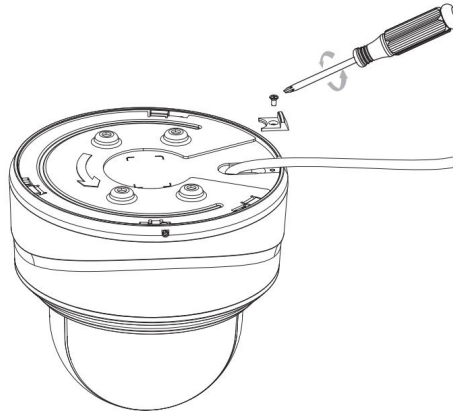


**Note:**

You can press ABF button on the back panel of camera to help focusing.

## 5.14 (AI) 12X/20X/23X Mini PTZ Dome Network Camera

Mini PTZ Dome Network Camera supports to get the cables out from the side. Loose the screw on the bottom if you need.

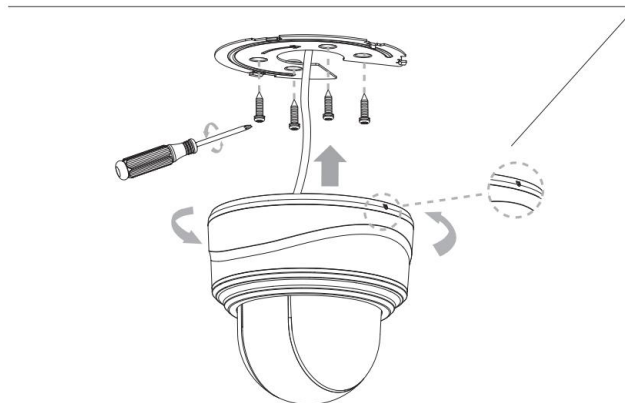


**Check the wall or ceiling condition. Ensure that it is strong enough to avoid flaking. It should be able to bear the weight eight times heavier than the camera's.**

### Install with Mounting Bracket

Step1: Fix the mounting bracket on the position where the camera is intended to be installed;

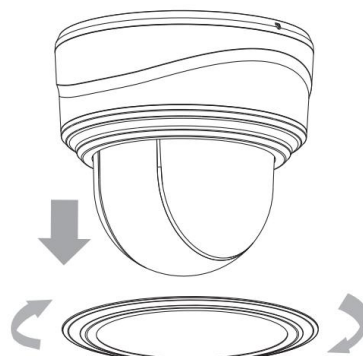
Step2: Connect the cables. Then rotate the camera to the mounting bracket and tighten setscrew.



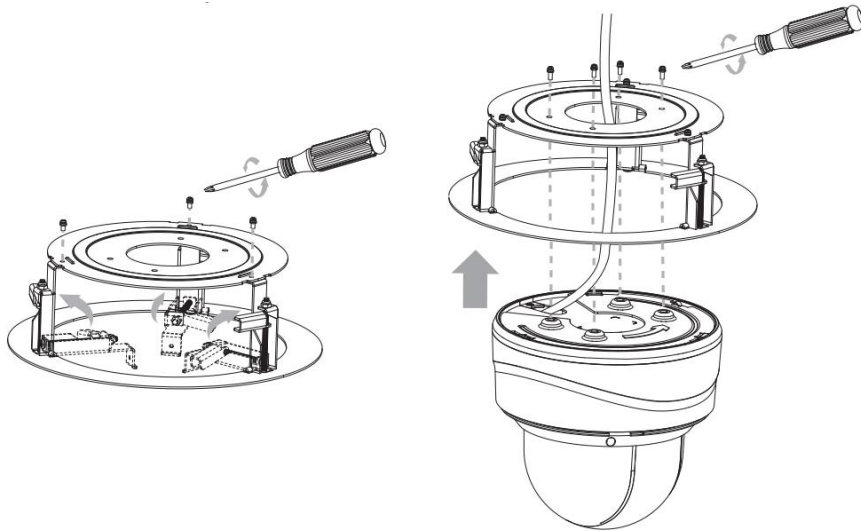
### Install with Recessed Mount (A78)

Step1: Ensure that the thickness of ceiling is less than 30mm, then drill a round hole whose diameter is 220mm on it;

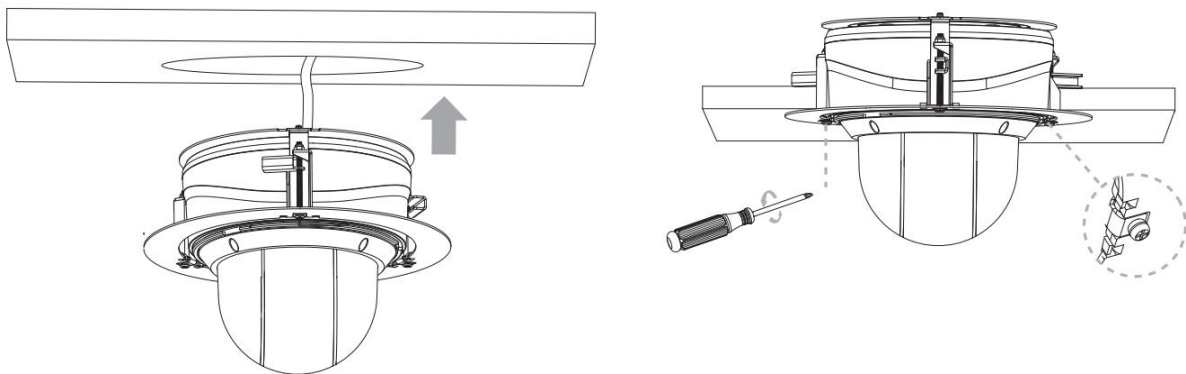
Step2: Hold the camera and turn the top cover clockwise, then take it off;



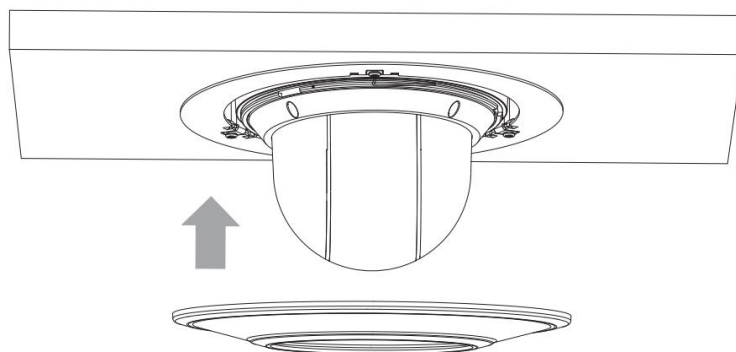
Step3: Assemble the Recessed Mount, set the support up and screw the fixation plate to them.  
Then tightly lock camera with mounting bracket to the Recessed Mount;



Step4: Put the camera and Recessed Mount to the drilled hole. Screw it tightly to fix them in the ceiling;

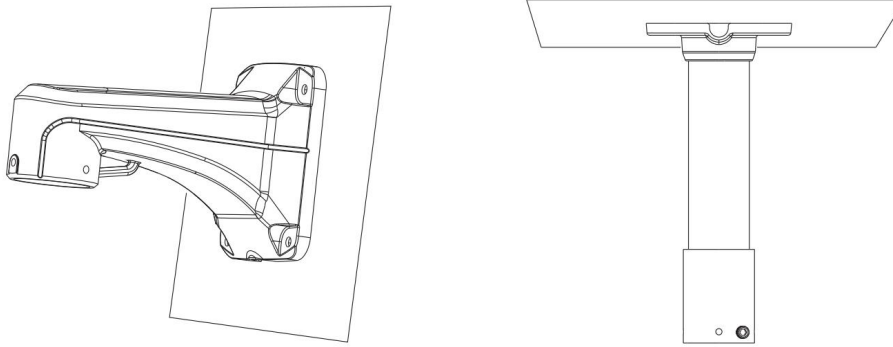


Step5: Put the Recessed Mount cover on.

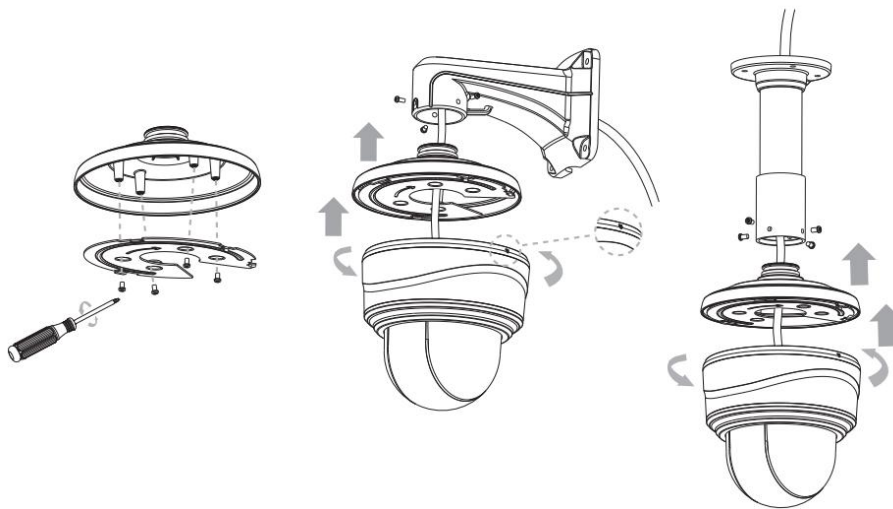


**Install with Wall Mount (A77) or Pendant Mount (A79)**

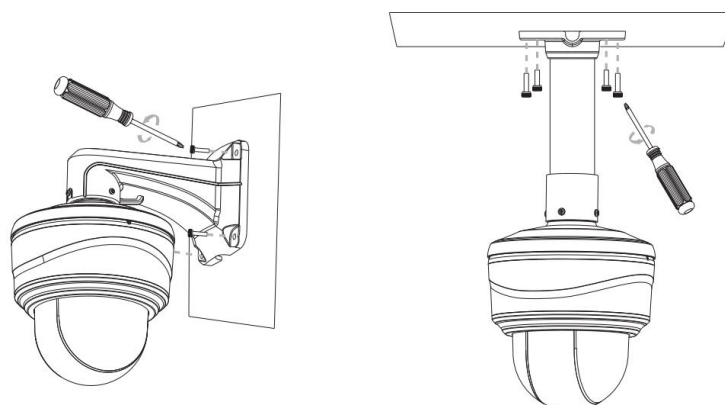
Step1: Use the wall or ceiling hanging holder to mark the holes. Drill 4 holes on the wall or ceiling;



Step2: Screw the mounting bracket to the wall mount (A77) or pendant mount (A79). Screw the mounting bracket and holder, put the cables through them. Rotate the camera to the mounting bracket and tighten the setscrew;

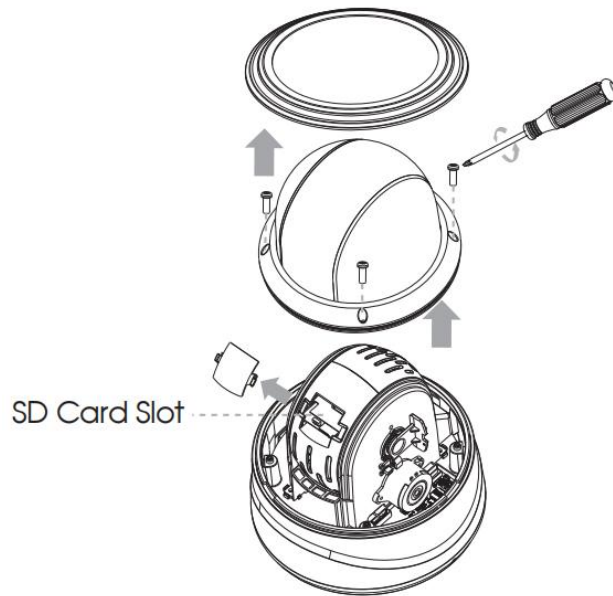


Step3: Match the holder to the holes on the wall or ceiling, then tighten the screws.



**Note:**

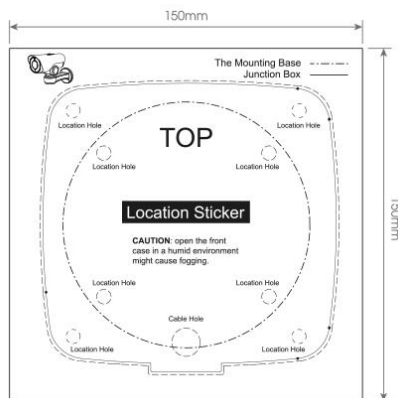
Loosen the screws of the dome cover and take it off. Then loosen the screws on the back of dome body to get access to the SD card slot if you need.



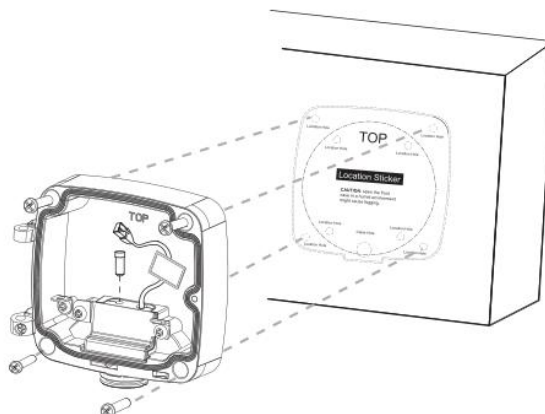
### 5.15 12X Mini PTZ Bullet Network Camera

**Install with Junction Box (A62\_Only for wall Mount Version.)**

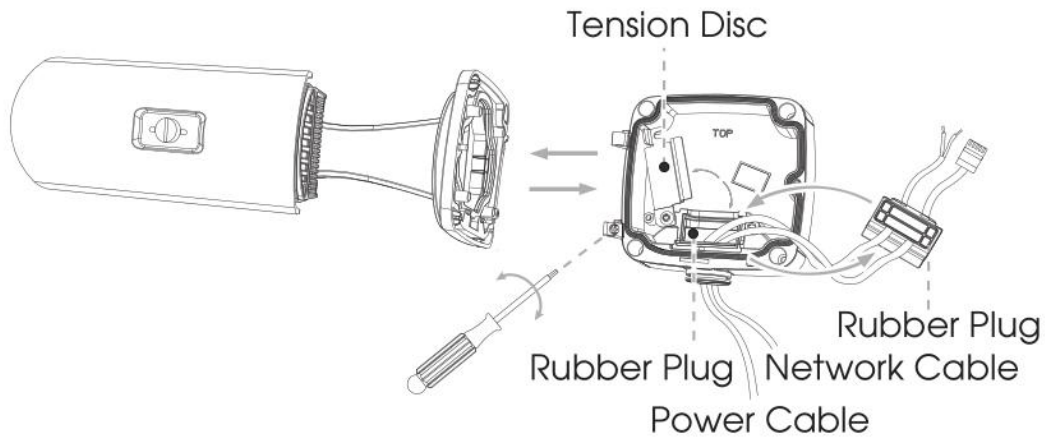
Step1: Fix a sticker in the position where the camera is intended to be installed;



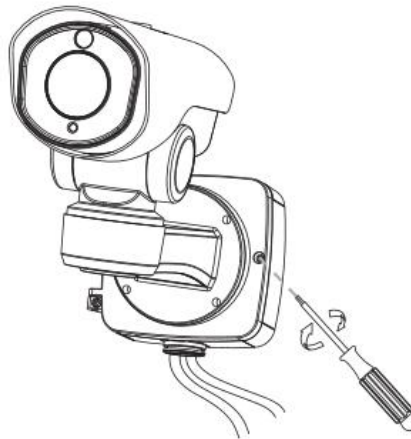
Step2: Unbolt the screws on the Junction Box (A62) between the front cover and rear cover and remove the front cover. Remove the tension disc on the rear cover, and cut an opening on the rubber plug and get cables through the opening then fasten the rear cover to the sticker;



Step3: Install the camera to front cover by using 4 torx screws and then reinstall the front cover from the angle near 90° to the rear cover;



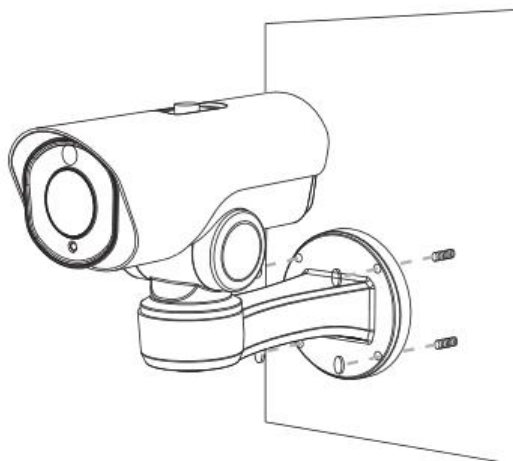
Step4: Adjust the cables length, and connect the cables to corresponding interfaces and fix the tension disc. Close the junction box and fix screws at last. Please remember to plug the small rubber plug whenever the holes on the rubber plug is not in use;



**⚠ Remember to fix the setscrew tightly.**

### Install to wall directly

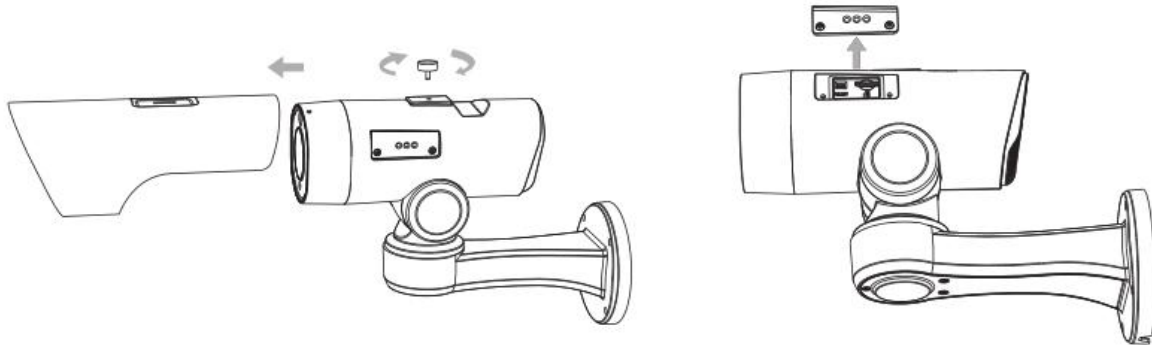
Fix the screws to the installed wall if you don't use junction box.





**Note:**

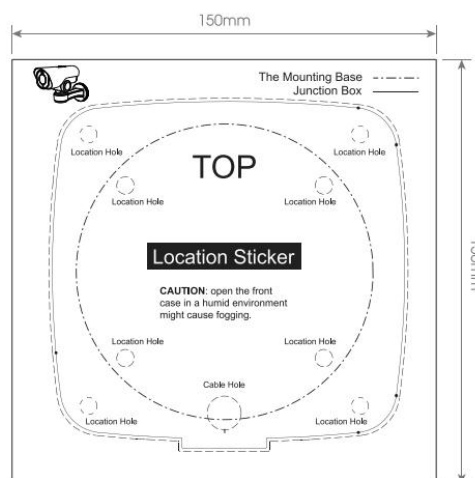
If you need to use the SD card, please remove the screw of the top cover and pull out the cover, then loosen the screws of SD card cover to get access to the SD card slot. After inserting SD card, fix the screws again.



## 5.16 AI 5X/20X/23X Mini PTZ Bullet Plus Network Camera

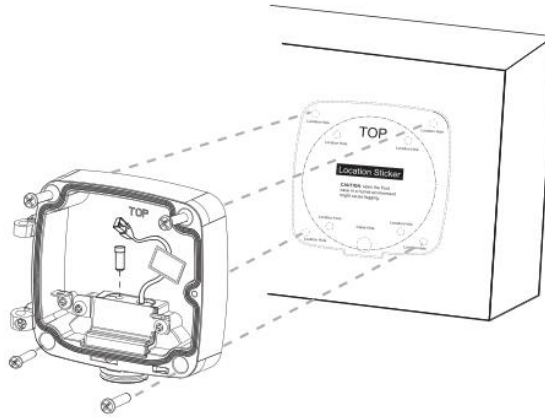
### Install with Junction Box (A62)

Step1: Fix a sticker in the position where the camera is intended to be installed;

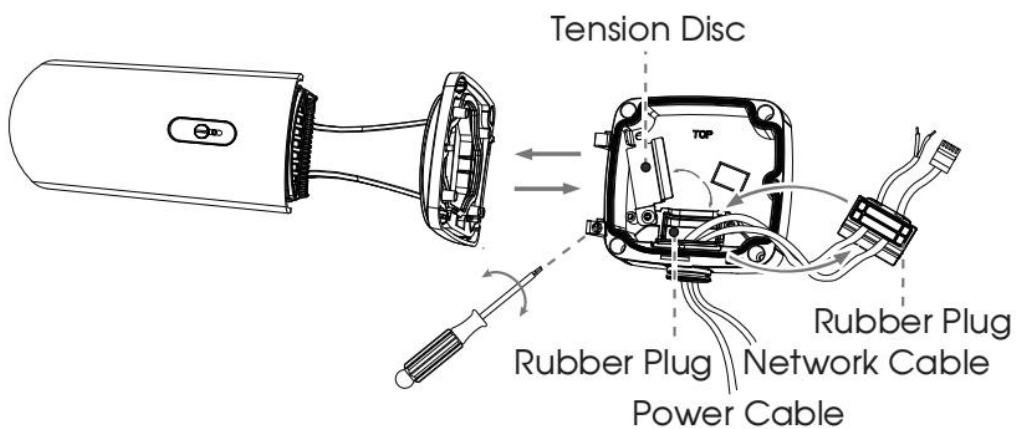


Step2: Unbolt the screws on the Junction Box(A62) between the front cover and rear cover and remove the front cover. Remove the tension disc on the rear cover, and cut an opening on the rubber plug and get cables through the opening then fasten the rear cover to the ceiling or wall;

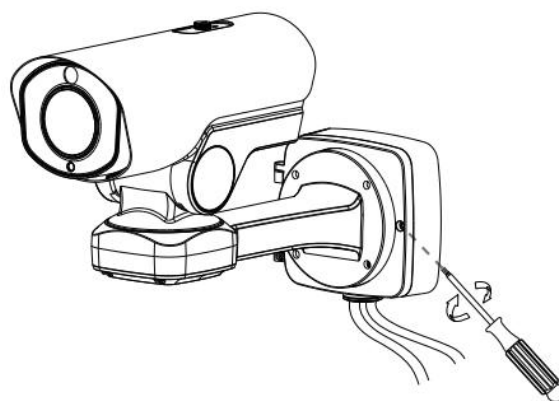




Step3: Install the camera to front cover by using 4 torx screws and then reinstall the front cover from the angle near 90° to the rear cover;



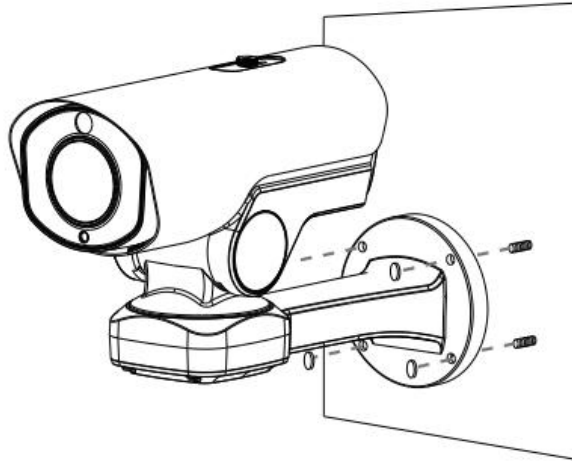
Step4: Adjust the cables length, and connect the cables to corresponding interfaces and fix the tension disc. Close the junction box and fix screws at last. Please remember to plug the small rubber plug whenever the holes on the rubber plug is not in use.



**Remember to fix the setscrew tightly.**

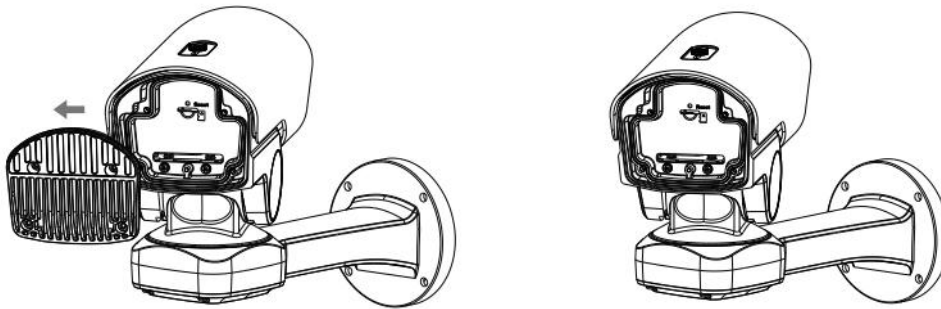
#### **Install to wall directly**

Fix the screws to the installed wall if you don't use junction box.



**Note:**

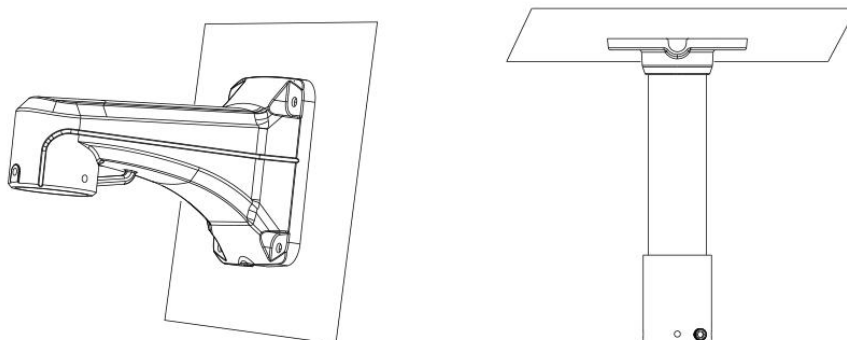
If you need to use the SD card, please remove the screw of the rear cover and pull out the cover to get access to the SD card slot. After inserting SD card, fix the screws again.



**5.17 (AI) 23X/30X/36X/42X Speed Dome Network Camera**

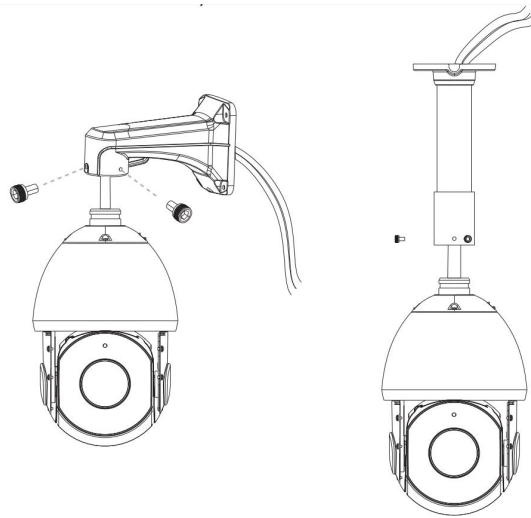
Step1: Check the wall or ceiling condition. Ensure that there is sufficient strength to avoid flaking. It should be able to bear the weight eight times larger than the camera's;

Step2: Use the wall or ceiling hanging holder to mark the holes. Drill 4 holes on the wall or ceiling;

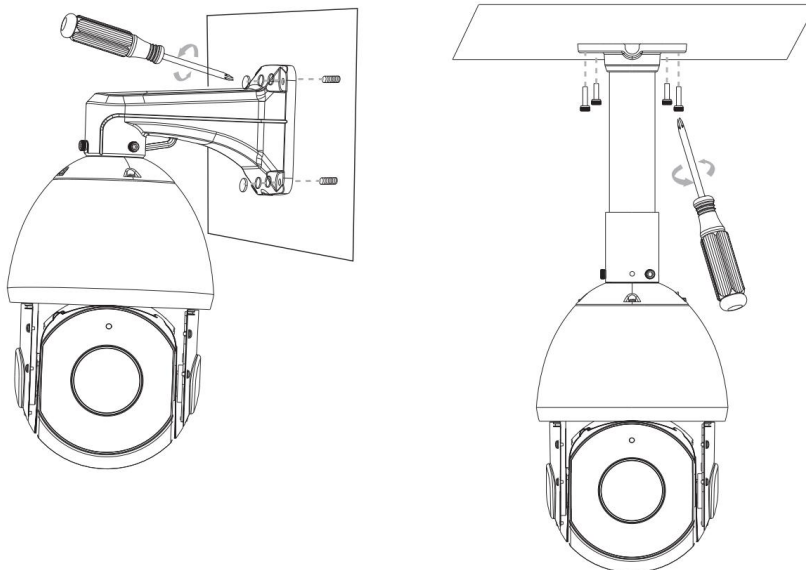


Step3: Put the cables through the holder. Match the holder with the screw holes of the camera

body and secure them;



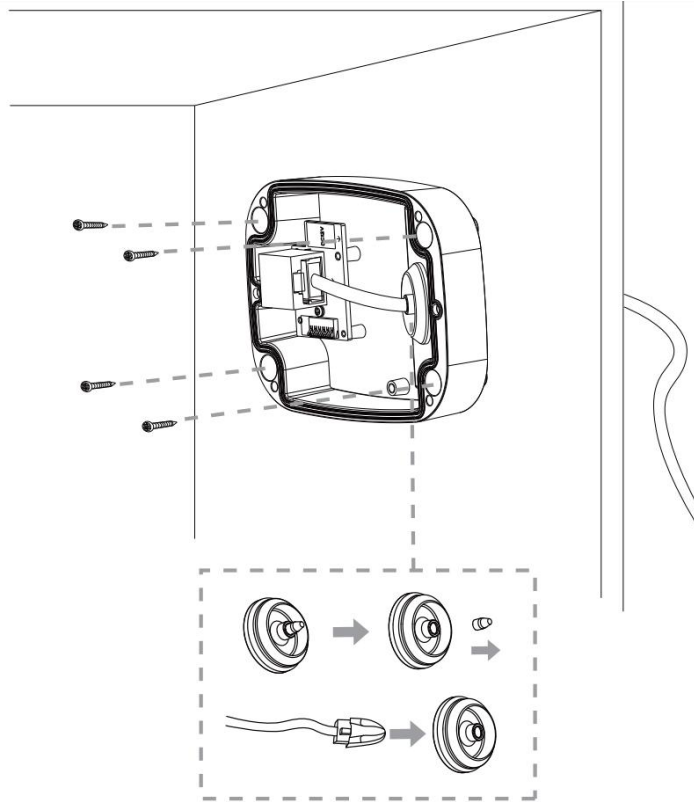
Step4: Make sure that the camera body has been correctly installed to the holder, and match the holder to the holes on the wall or ceiling, then tighten the screws.



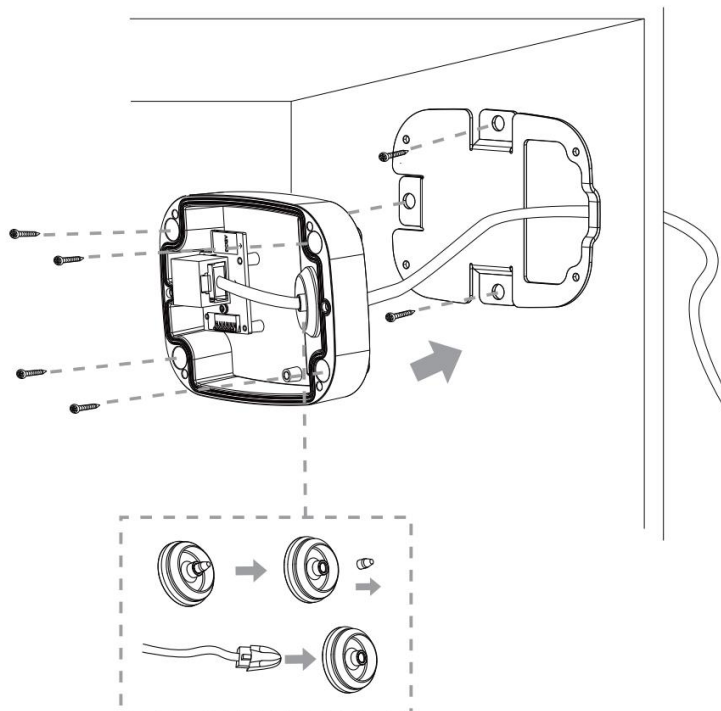
## 5.18 (AI) 180° Panoramic Mini Bullet Network Camera

Step1: Connect the cables to the corresponding interface on the rear cover of the Junction Box. Then fix the rear cover on the position where it is intended to be installed. The rear cover can be fixed in the following two ways:

- ① Fix the rear cover directly;



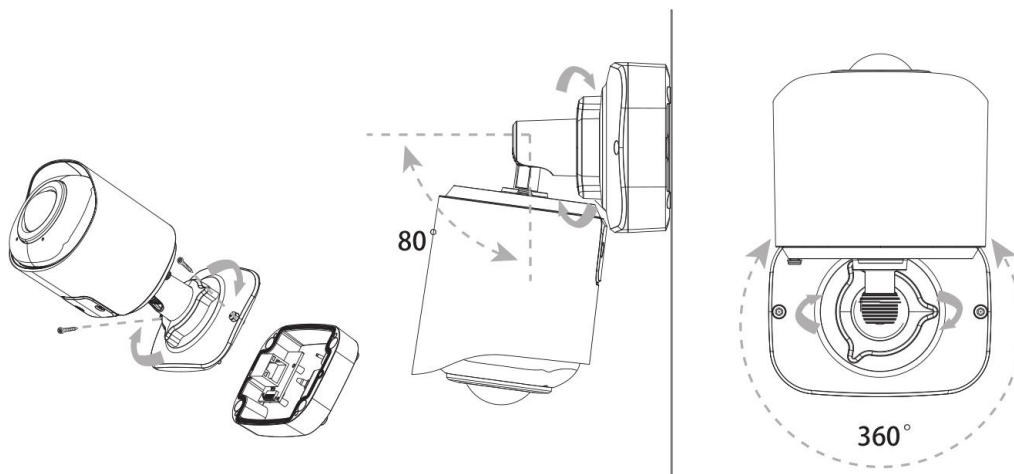
- ② Fix the rear cover via a bracket;



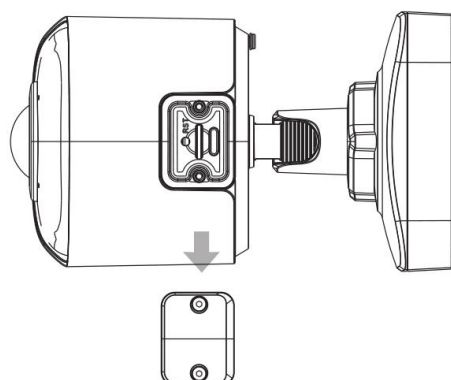
**Note:**

The bracket is optional, which can be applied in special scenarios that require screws of larger sizes.

Step2: When the front cover is correctly fixed to the rear cover, the camera will be powered on by contact power supply. Adjust shooting direction and rotate locking ring.

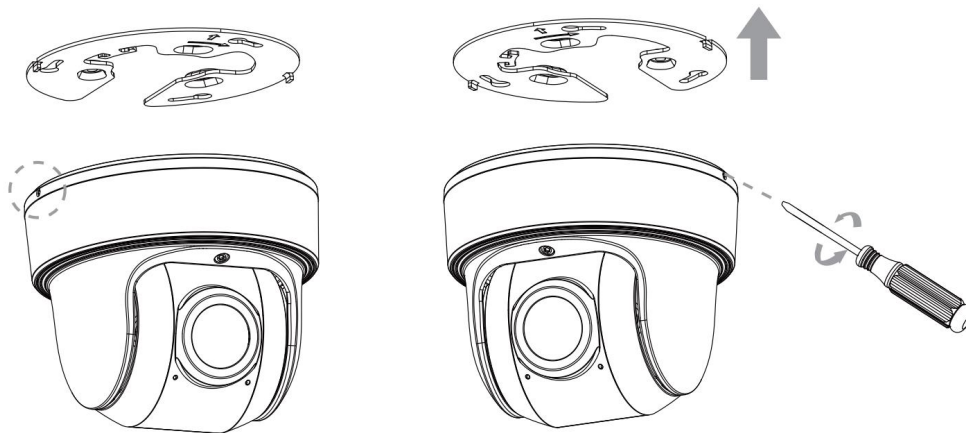
**Note:**

Loosen the screws of SD card structure to get access to the SD card slot if you need. Fix the screws again after inserting the SD card to complete the operation.



## 5.19 (AI) 180° Panoramic Mini Dome Network Camera

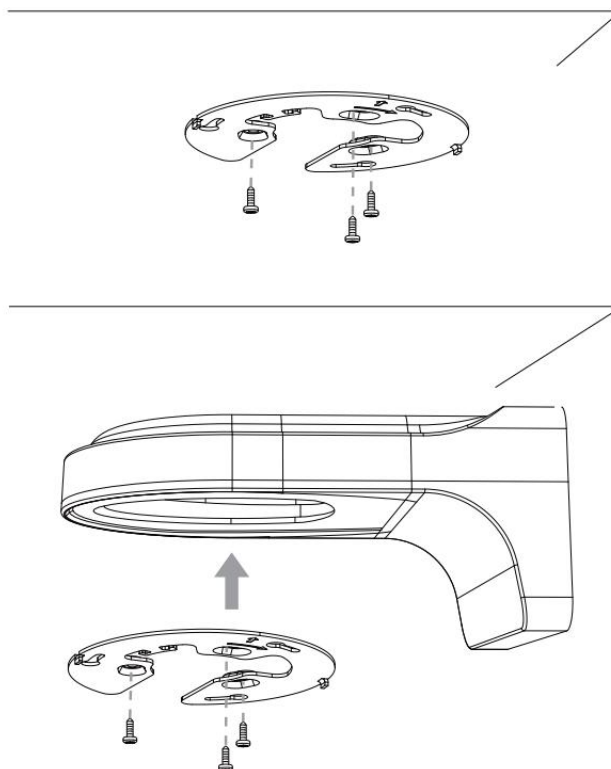
Loosen the setscrew and take the bracket off.



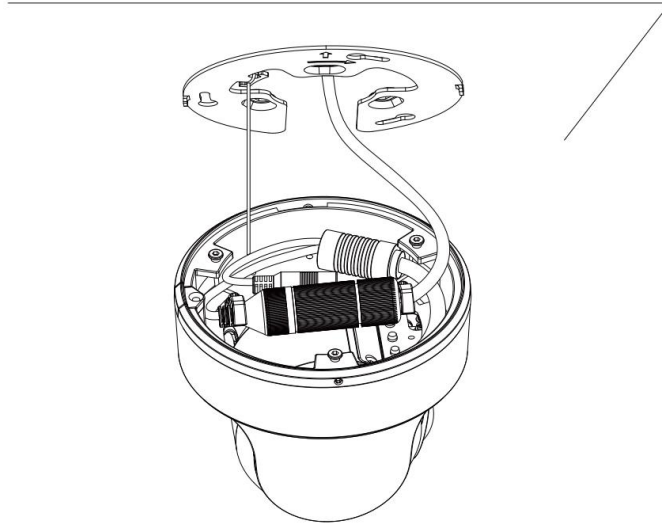
**Note:**

There are two setscrews on the camera that fasten the bracket. Loose either one or both setscrews until the bracket can be taken off. Only one of the setscrews needs to be screwed while fixing.

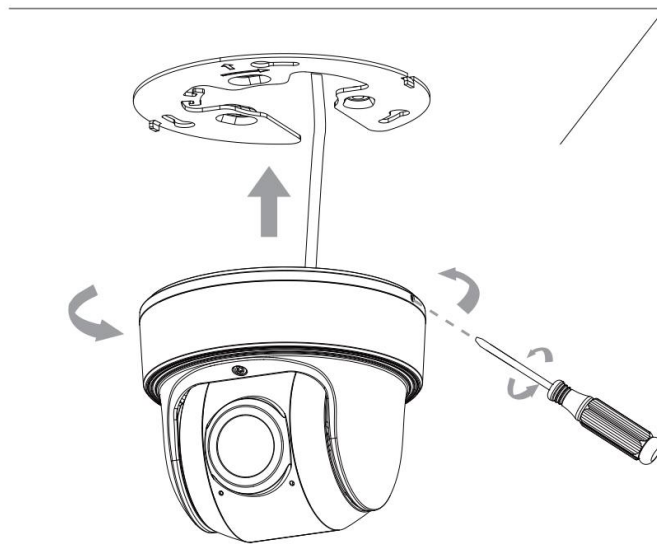
**Fix the bracket on the position where the camera is intended to be installed. Wall Mount (A71) is available for installation.**



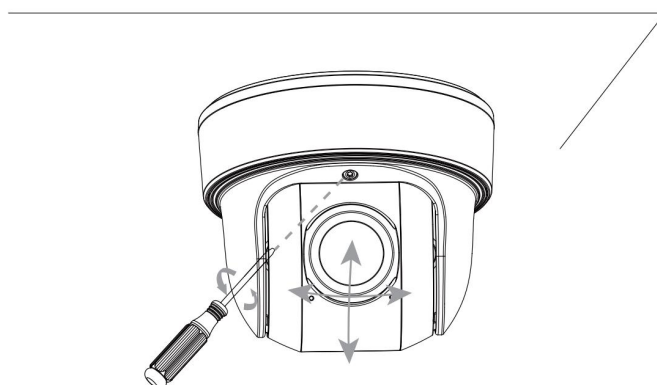
Step1: Buckle the lanyard on the camera body tightly to the reserved hook on the bracket. After connecting the cables to respective connectors, twine the cables around tidily in the room on the bottom;



Step2: Rotate the camera to bracket and tighten the setscrew;

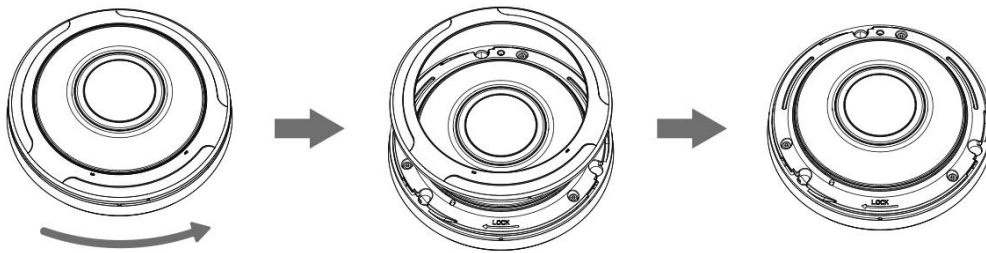


Step3: Loosen clamp screw and adjust shooting direction, tighten clamp screw.



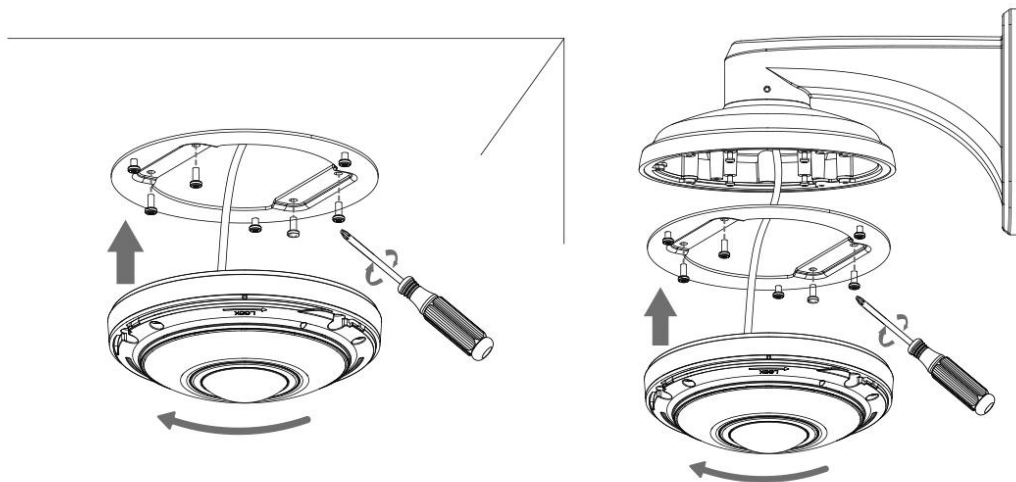
## 5.20 (AI) Fisheye Network Camera

Hold the camera and turn the top cover anticlockwise, then take it off.

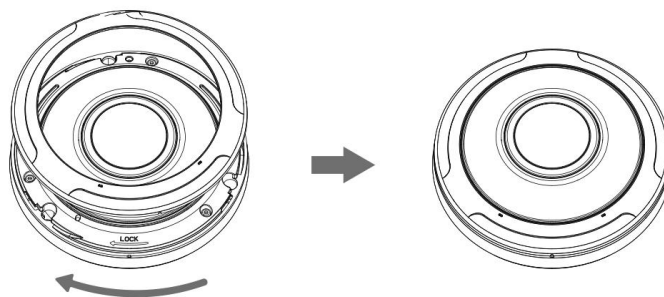


### Install with Bracket or Wall Mount (A72)

Step1: Fix bracket on ceiling or wall where the camera is intended to be installed. Then secure the screws. Connect the cables, and rotate the camera to the bracket clockwise and tighten the setscrew;



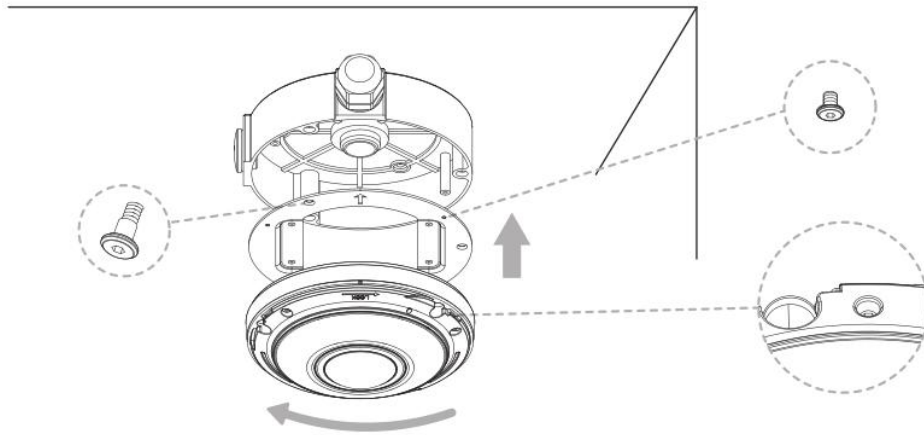
Step2: Turn the top cover clockwise till the anchor points are aligned.



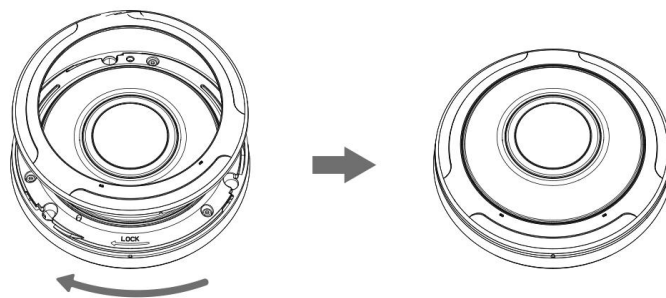
### Install with Junction Box (A75).

Step1: Fix the junction box in the position where the camera is intended to be installed. Secure the bracket to the junction box. Pay attention that the two marks on the junction box and the bracket shall be aligned. Then connect the cables and rotate the camera to the bracket. Secure them;



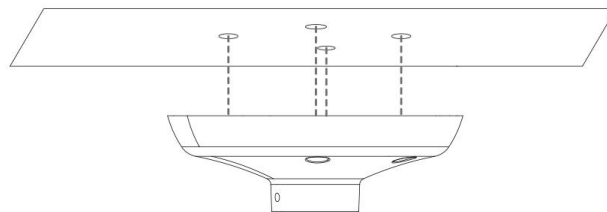


Step2: Turn the top cover clockwise till the anchor points are aligned.

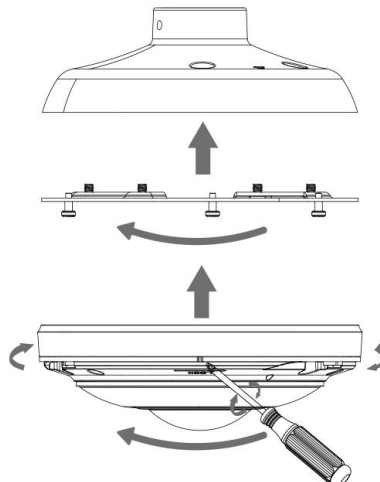


**Install with Pendant Mount (A76)**

Step1: Use the Pendant Head to mark holes. Drill 4 holes in the ceiling;

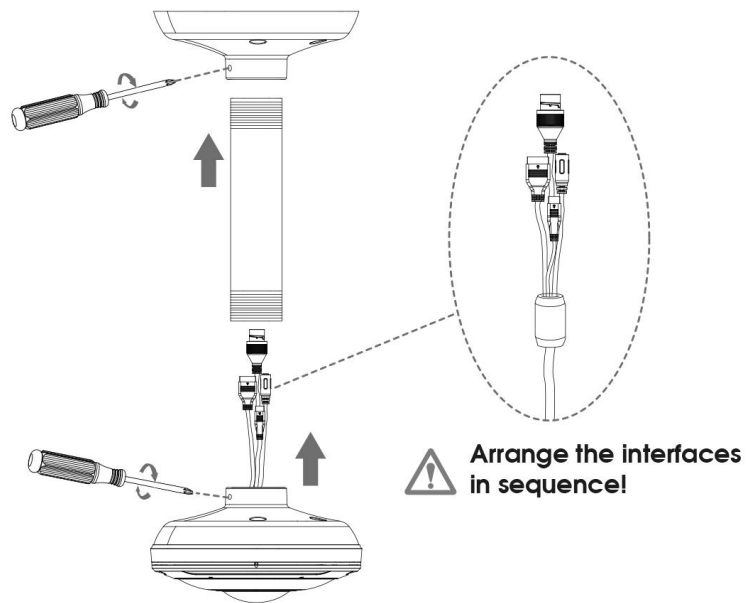


Step2: Secure Mounting Adapter with Pendant Base. Put the cables through Pendant Base and then rotate the camera clockwise. Tighten the setscrew to fix the camera, then turn the top cover clockwise till the anchor points are aligned;

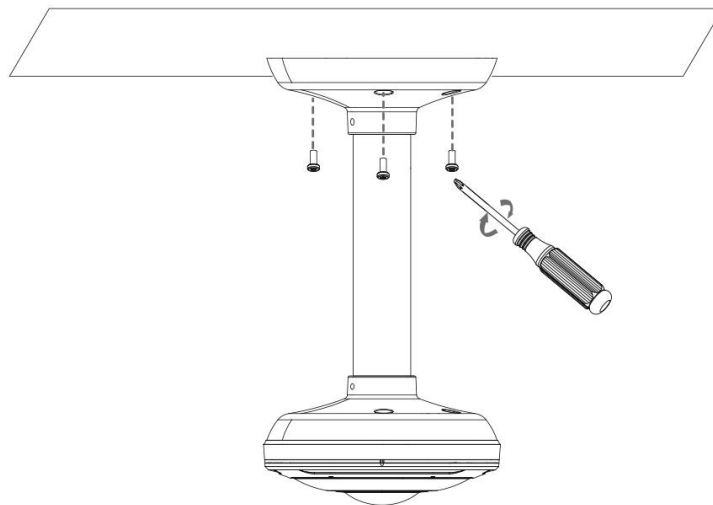


Step3: Put the cables through the pendant pipe in turn. And rotate it with the base and secure the

setscrew. Put the cables through the pendant head, and rotate it with the pipe and secure the setscrew;



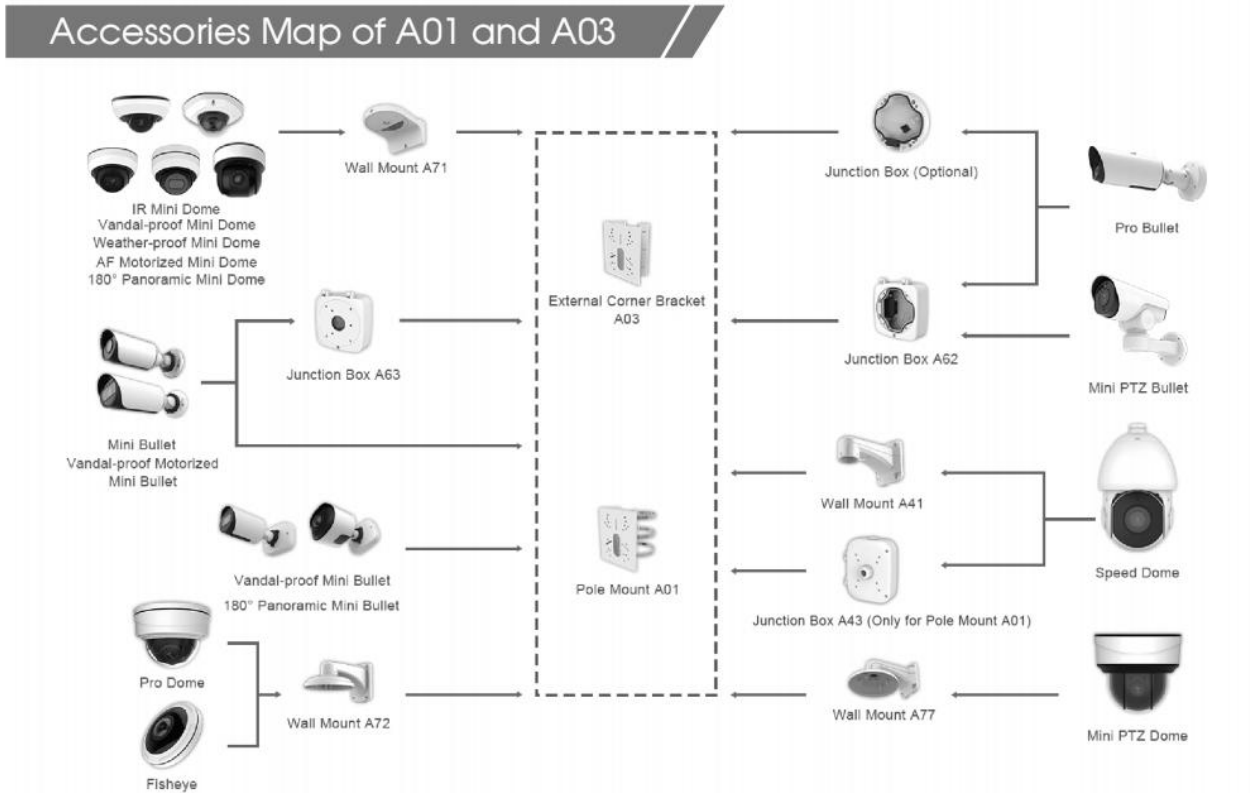
Step4: Connect the cables, then fix the whole pendant and camera to the drilled holes in ceiling.



**Note:**

Image Rotation function is not supported for the -PA model in the AI series. When installing the camera, please make sure the image is displayed in a forward-facing position after dewarping.

## 5.21 A01 Pole Mount & A03 External Corner Bracket



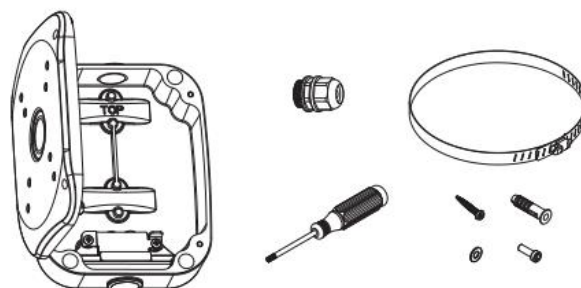
**Note:**

Mini Bullet, Vandal-proof Mini Bullet and Vandal-proof Motorized Mini Bullet can be installed by A01 or A03 directly.

## 5.22 A43 Junction Box

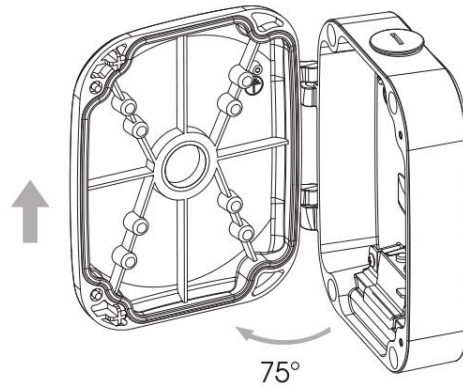
Accessory A43 is equipped for Accessory A41/A77(Wall Mount) and A42/A79(Ceiling Mount) in order to bring a rather flexible and easy installation of Speed Dome and Mini PTZ Dome Network Camera.

Loosen the screws to open the front cover and rear cover, take out other parts from the box.

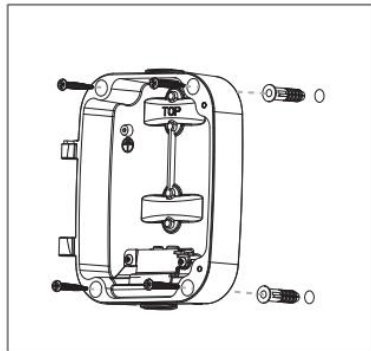


### Install on the Wall Mount / Ceiling Mount

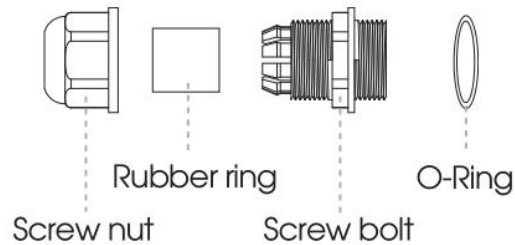
Step 1: Rotate to open the front cover over about 75° to conveniently take off it from the box;



Step 2: Install the rear cover first;



Step 3: Take out the weather-proof connector, separate it to four parts as screw nut, rubber ring, screw bolt and O-ring;

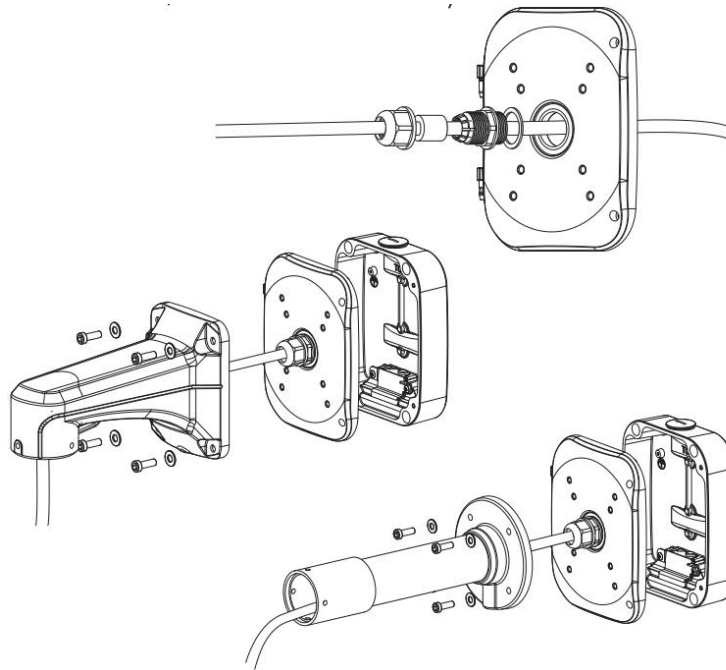


Step 4: Install camera on wall/ceiling mount accessory, put the camera cables through then. The process would be easier if put the larger interface first;

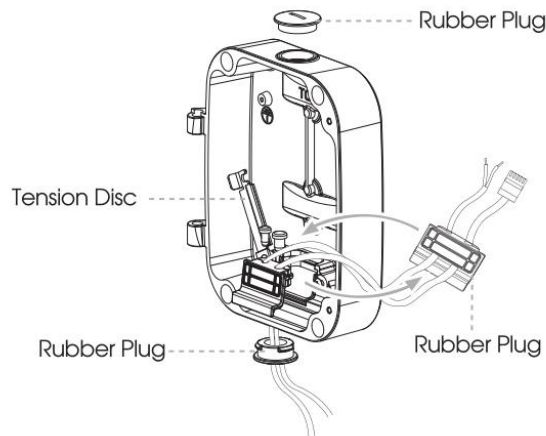
Step 5: Put the camera cables through A43 screw nut, screw bolt and O-ring;

Step 6: Take rubber ring circle over the cables and put it into screw bolt;

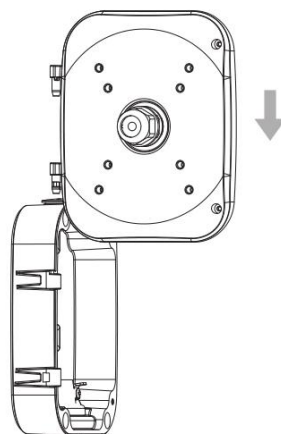
Step 7: Rotate screw nut on screw bolt to tighten, then pass all the cables through the entry hole and rotate the whole weather-proof connector back on the front cover, and lock the accessory back on the front cover;



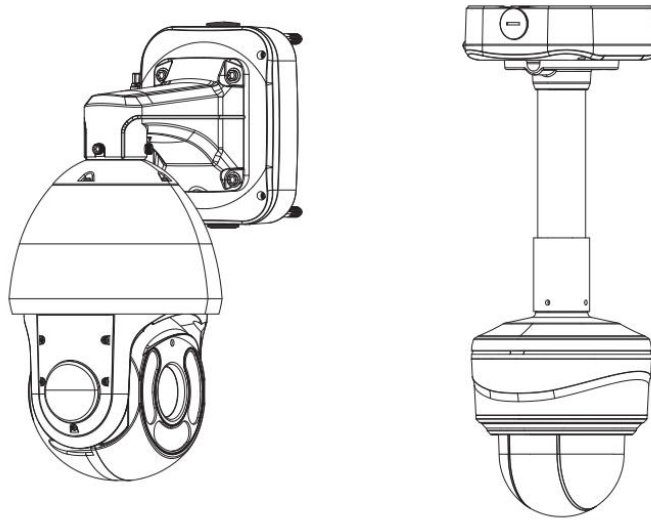
Step 8: The box supports top or bottom cable-out ways as below picture, through the top hole, or tension disc which put cables through bottom or bottom back. For tension disc, please remove it then cut an opening on the rubber plug, get cables through the opening. Please remember to plug the rubber plug whenever the holes on it are not in use;



Step 9: Carefully hold the front cover with wall/ceiling mount accessory and camera, put the front cover stick into the rear cover. The set screw will lock the body securely;

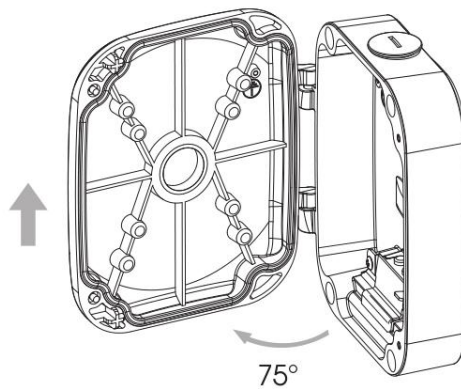


Step 10: Connect camera cables with previous cables. Manage the cables well then close the front cover and lock the screws.

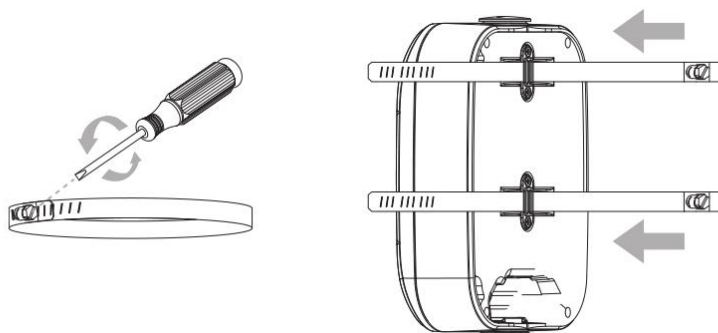


**Install on the Pole Mount**

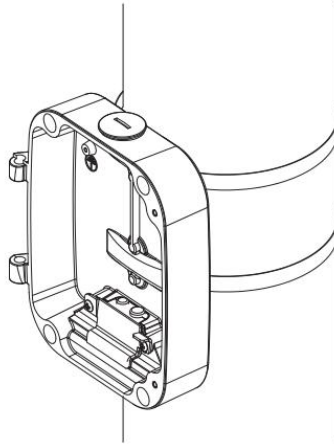
Step 1: Rotate to open the front cover over about 75° to conveniently take off it from the box;



Step 2: Loosen the screws of the fix rings, put rings through the back of the box body;



Step 3: Fix the rings with rear cover on the pole, fasten the screws;

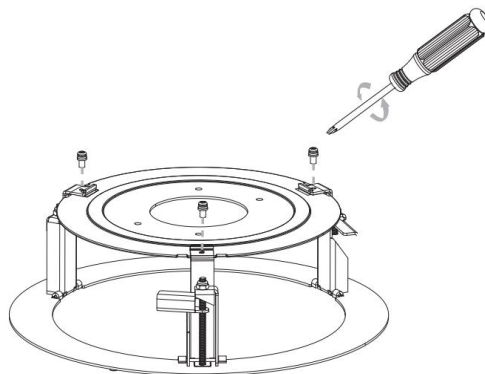


Step 4: The following steps are the same as it installed on the wall mount.

### 5.23 A78 Recessed Mount

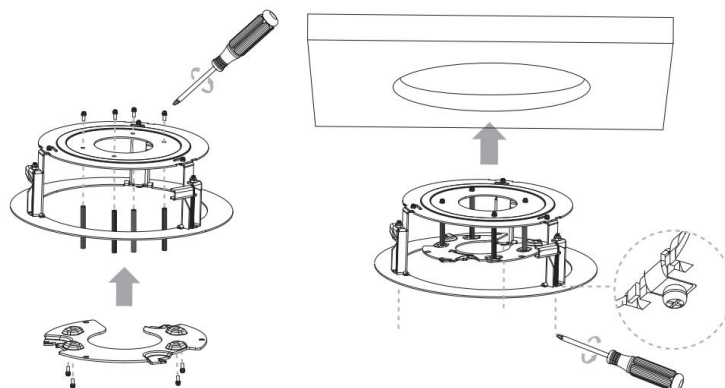
Accessory A78 is used for Motorized Pro Dome Network Camera and Mini PTZ Dome Network Camera installation, providing a way to blend camera in the environment.

Ensure that the intended installed ceiling is suitable. The thickness of the ceiling should be less than 30mm. Then drill a round hole whose diameter is 220mm on it. Assemble the Recessed Mount. Stand up the legs of the big part, then put the small part on it and screw three screws.

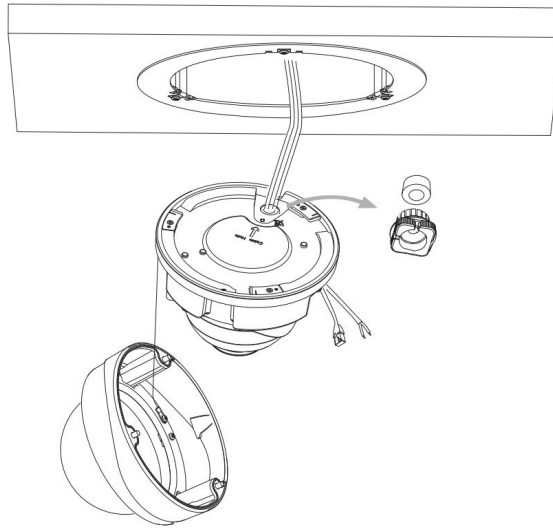


#### Install with Motorized Pro Dome Network Camera

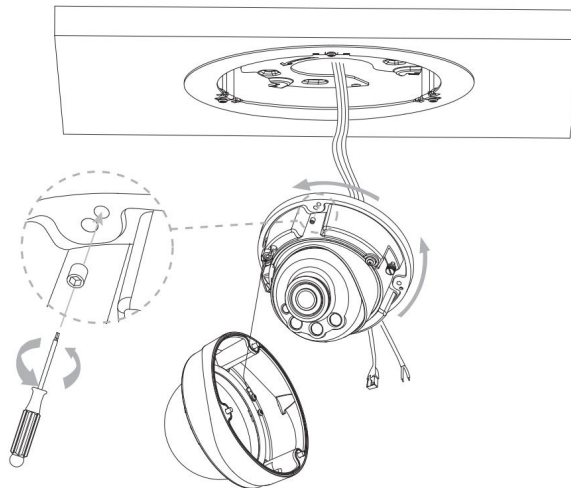
Step1: Screw four copper columns to Recessed Mount, then lock mounting bracket to them. Tightly screw the Recessed Mount to the drilled hole;



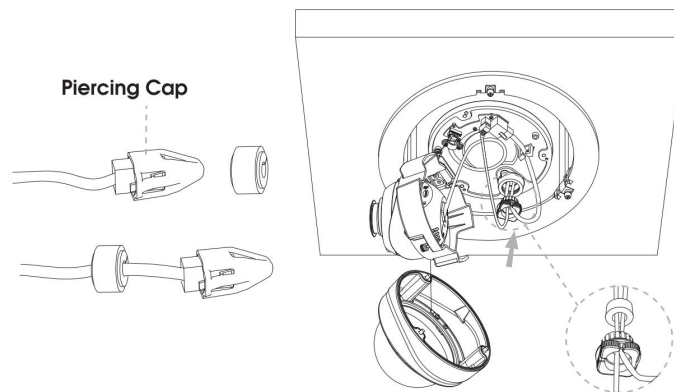
Step2: Loosen the shoulder screw and open the camera body. Remove the waterproof connector in the cable entry hole. Connect the cables and pass it through the cable entry hole;



Step3: Rotate the camera to mounting bracket anticlockwise, then fix the camera with setscrew;

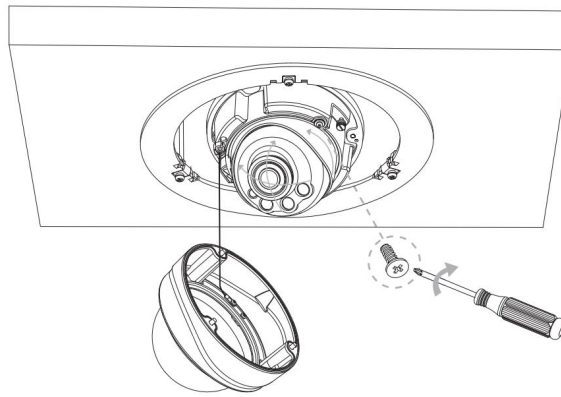


Step4: Put the cables through the waterproof connector, then plug the connector into the cable entry hole. Connect the cables to the respective connectors, then attach the camera body to the base;

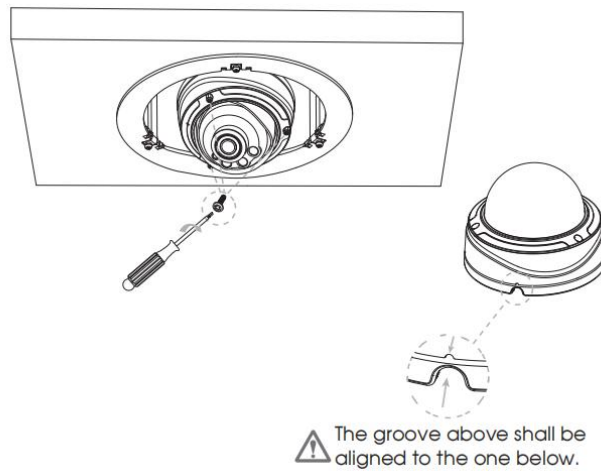


Step5: Loosen the clamp screw, adjust the camera lens to the desired direction. Tighten the clamp screw to fix the lens;

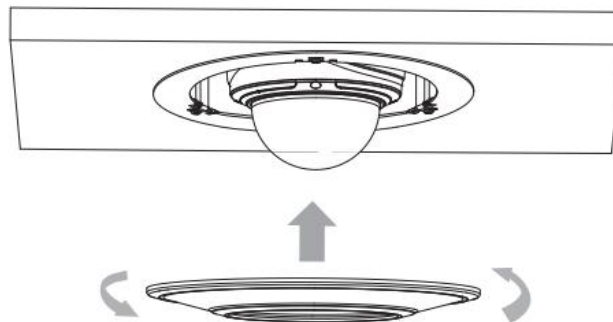




Step6: Attach the dome cover and make sure that the groove above is aligned to the one below, then fix the camera tightly;

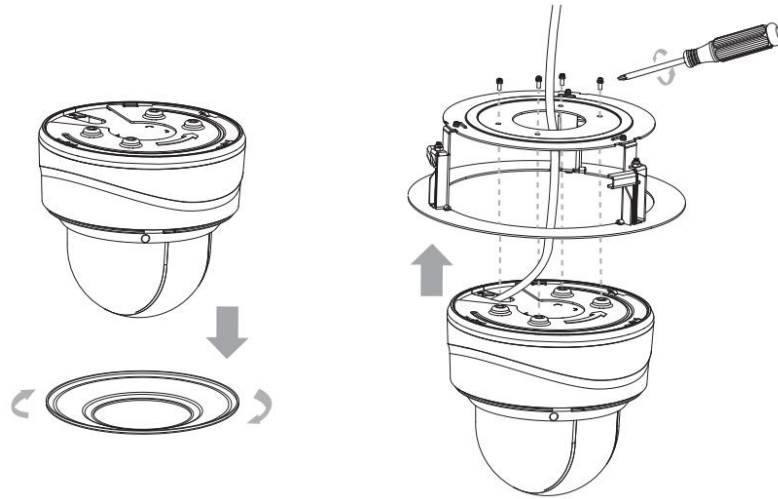


Step7: Put the Recessed Mount cover on.

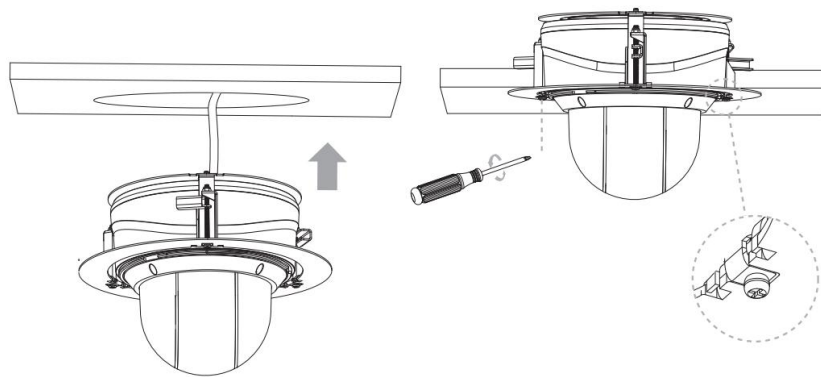


**Install with Mini PTZ Dome Network Camera**

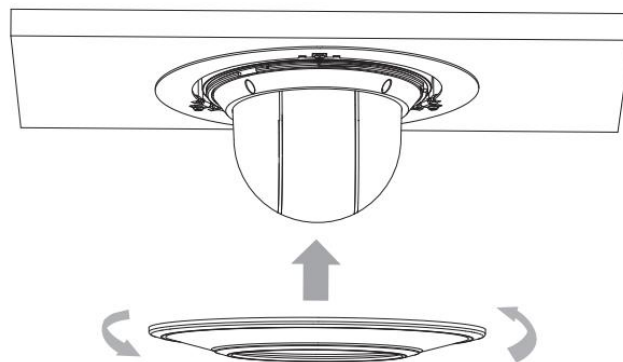
Step1: Hold the camera and turn the top cover anticlockwise, then take it off; Tightly lock camera with mounting bracket to the Recessed Mount;



Step2: Connect cables and put the camera with Recessed Mount to the drilled hole. Screw it tightly to fix them in the ceiling;



Step3: Put the Recessed Mount cover on.



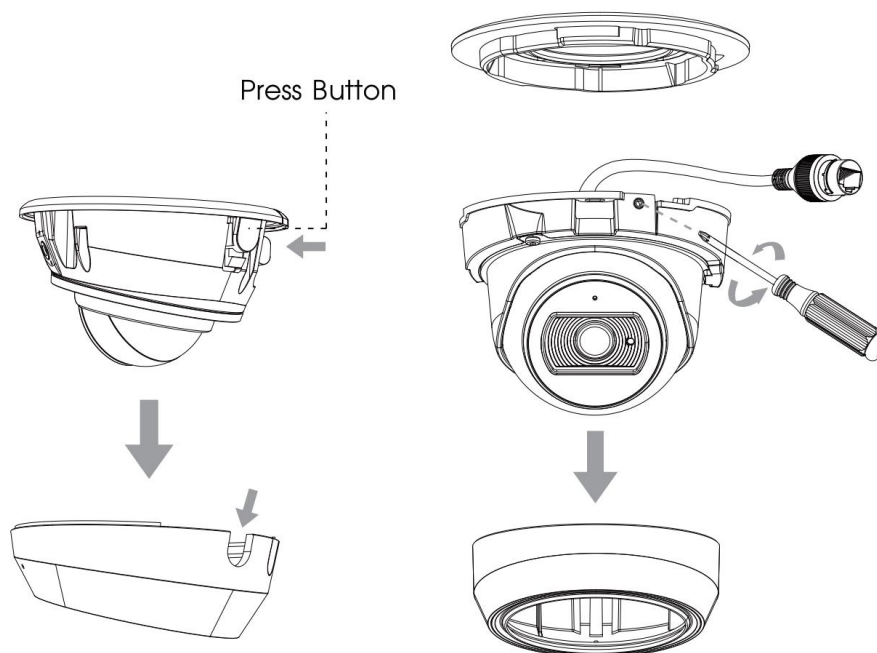
## 5.24 A81 & A82 Recessed Mount

Accessory A81 is used for installing the cable out version of the Weather-proof Mini Dome Network Camera, efficiently making the camera blend in with the environment.

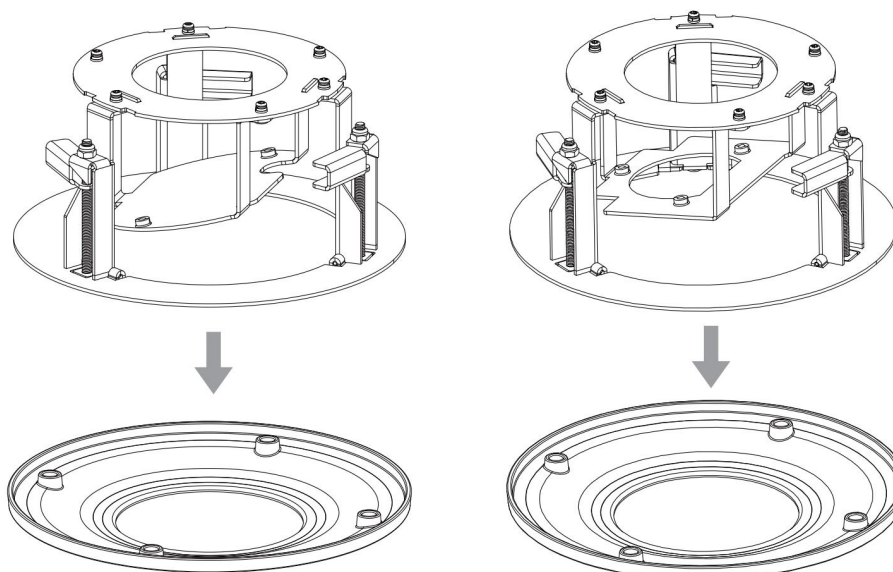
Accessory A82 is used for installing the IR Mini Dome Network Camera, efficiently making the camera blend in with the environment.

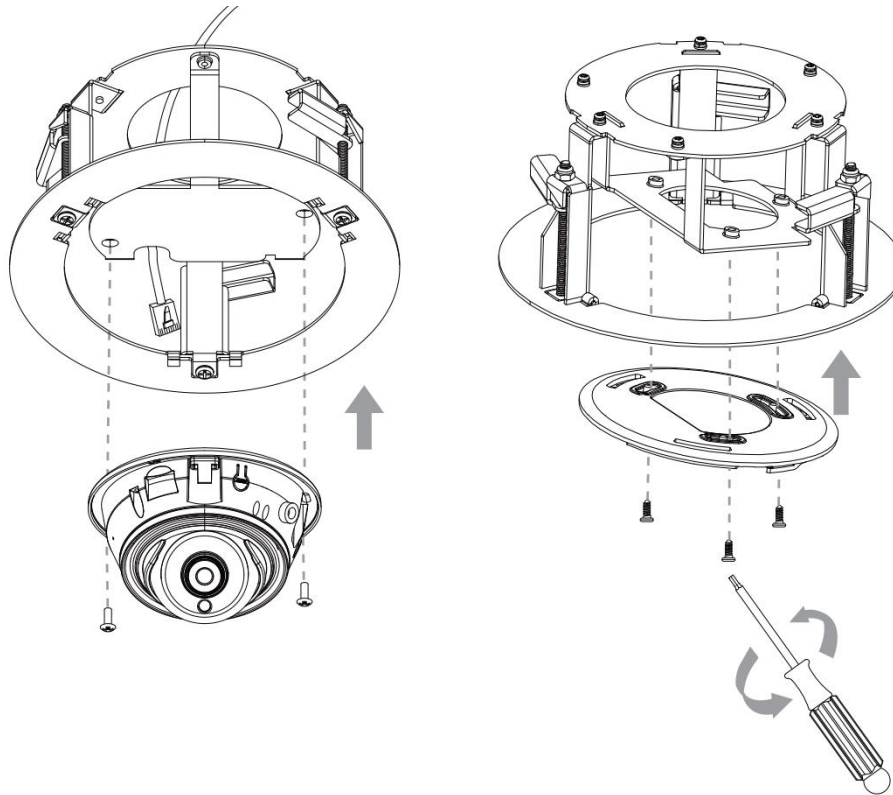
Ensuring that the intended installed ceiling is suitable, the thickness of the ceiling should be less than 30mm. Then drill a round hole whose diameter is 150mm.

Step1: Remove the dome cover, for Weather-proof Mini Dome Network Camera also need to loosen the set screw and take the bracket off;

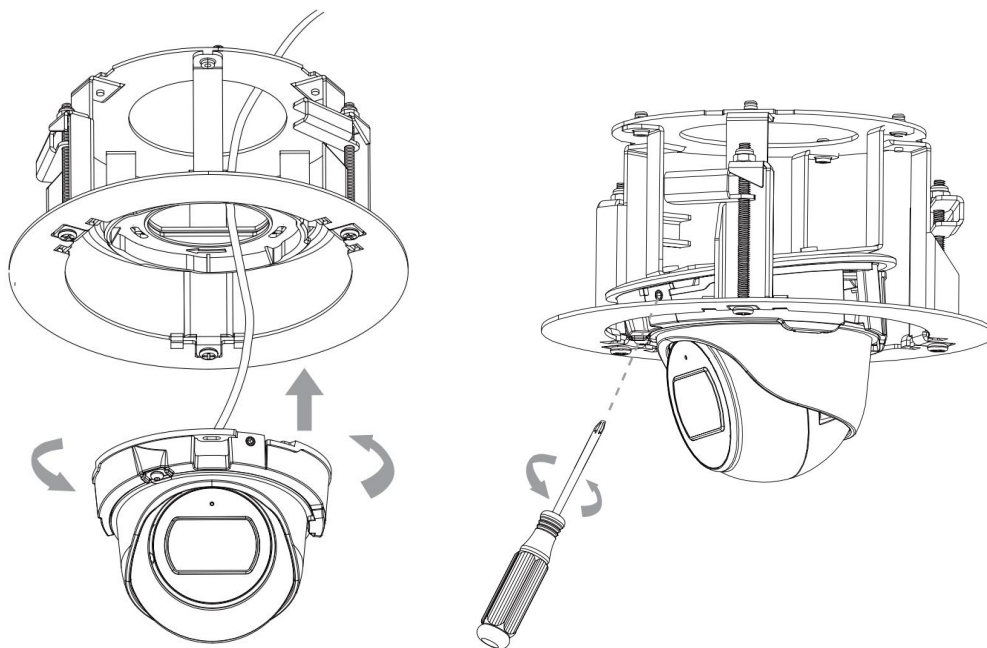


Step2: Take the Recessed Mount cover off and lock the IR Mini Dome to Recessed Mount, for Weather-proof Mini Dome Network Camera need to lock the Camera bracket to Recessed Mount;

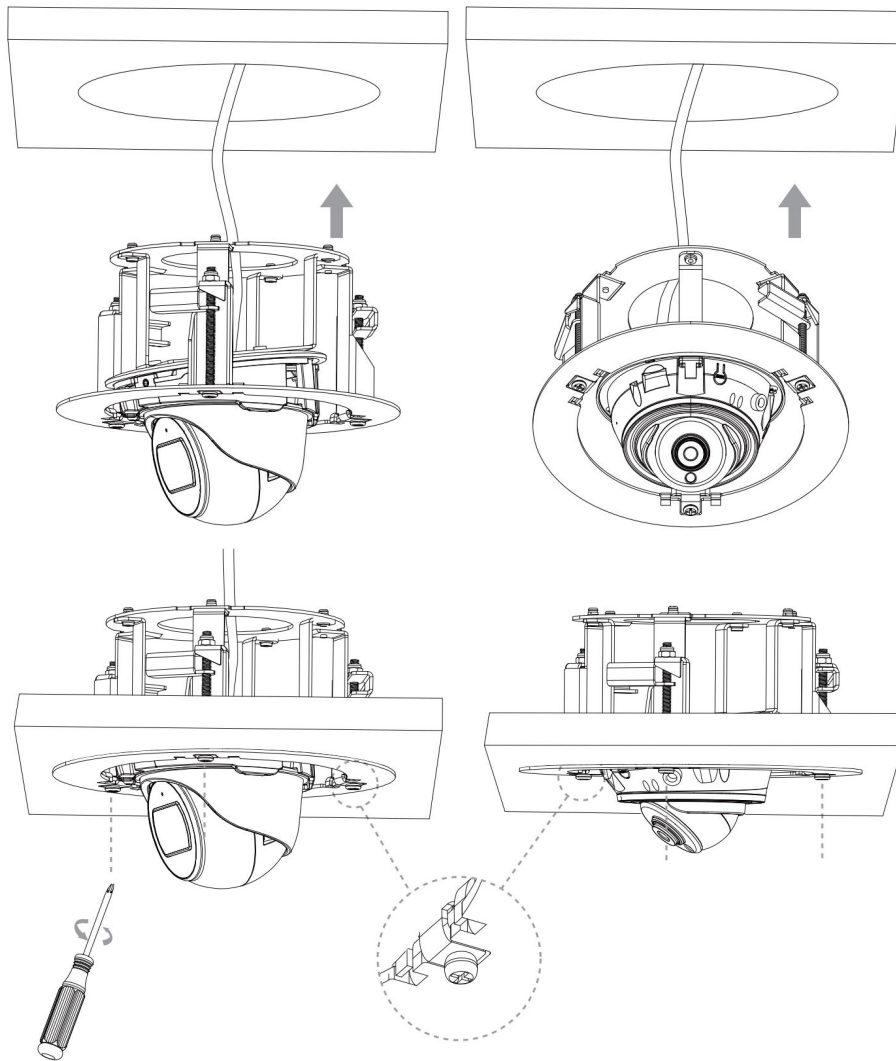




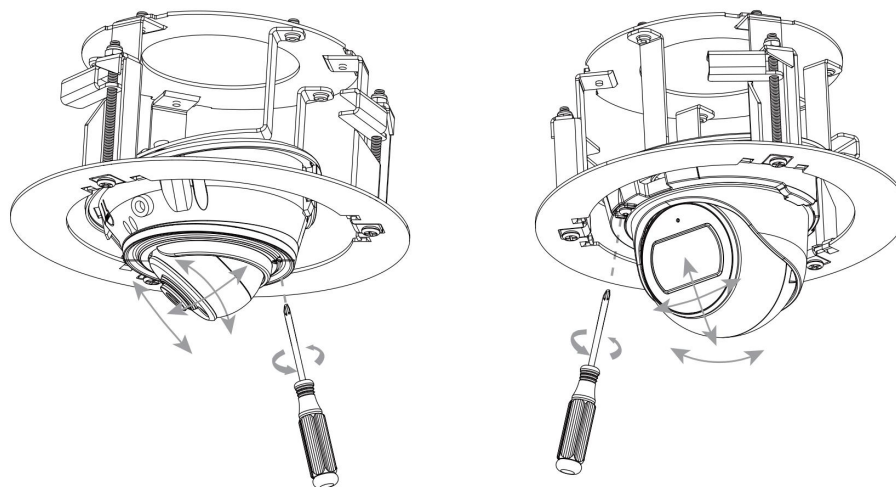
Step3: Rotate the Weather-proof Mini Dome Network Camera to bracket and tighten the set screw;



Step4: Connect the cables and tightly lock the A81 or A82 to the drilled hole;

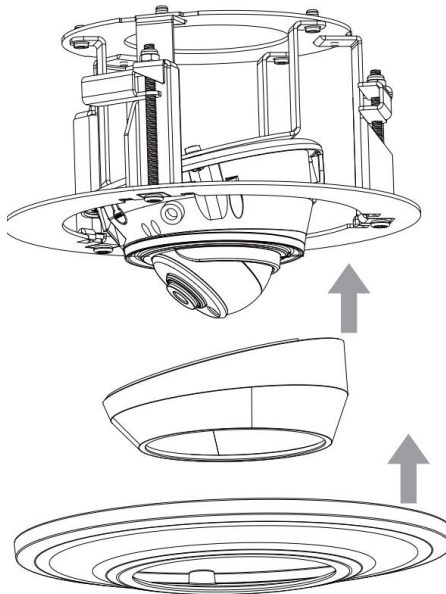


Step5: Adjust the IR Mini Dome Network Camera shooting direction and then attach dome cover, for Weather-proof Mini Dome Network Camera need to loosen clamp screw and adjust shooting direction, tighten clamp screw;

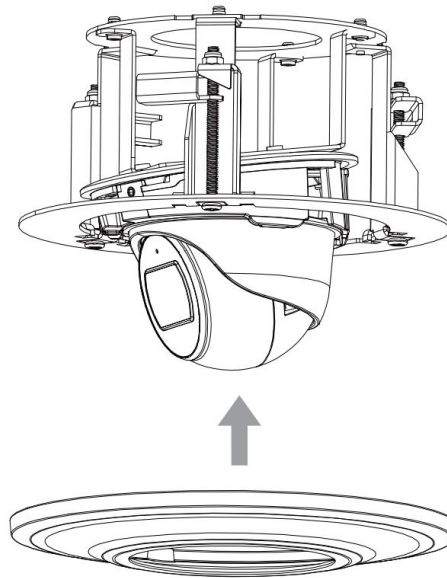


Step6: Put the Recessed Mount cover on.

① IR Mini Dome Network Camera

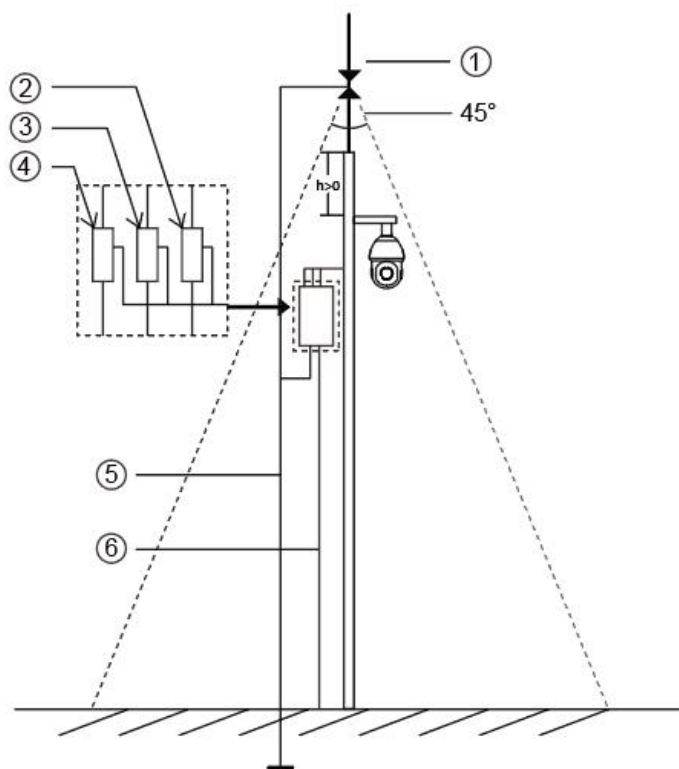


② Weather-proof Mini Dome Network Camera



## 6. Recommended method of outdoor installation

The picture below shows an example of outdoor installation:



The devices represented by numbers in the picture are explained as follows:

- ① Lightning rod
- ② Video surge arrester
- ③ Telecommunication surge arrester
- ④ Power surge arrester
- ⑤ Grounding conductor (resistance no more than 4 ohms)
- ⑥ Steel tube protector

### Here are some notes for outdoor installation:

- 1) Never use the overhead line in open area.
- 2) Set the line under eave.
- 3) The signal line is at least 50 meters away from the high voltage.
- 4) Attach a lightning rod to the top of the pole on which the camera is going to be mounted.
- 5) Make sure that your camera is not at the top of the pole and must be installed within the lightning rod below 45 degrees.
- 6) Make sure that system adopts equipotential grounding.

## 7. How to do Hardware Reset

Step1: Press the reset button and hold on, then power on the network camera and the IR LEDs will begin to twinkle ;

Step2: (Only for model -A) Keep pressing until the LEDs stop twinkle;  
(Only for model -B) Keep pressing the reset button until the IR LEDs stay always on;

Step3: Loosen the reset button, then the camera begin to reset;

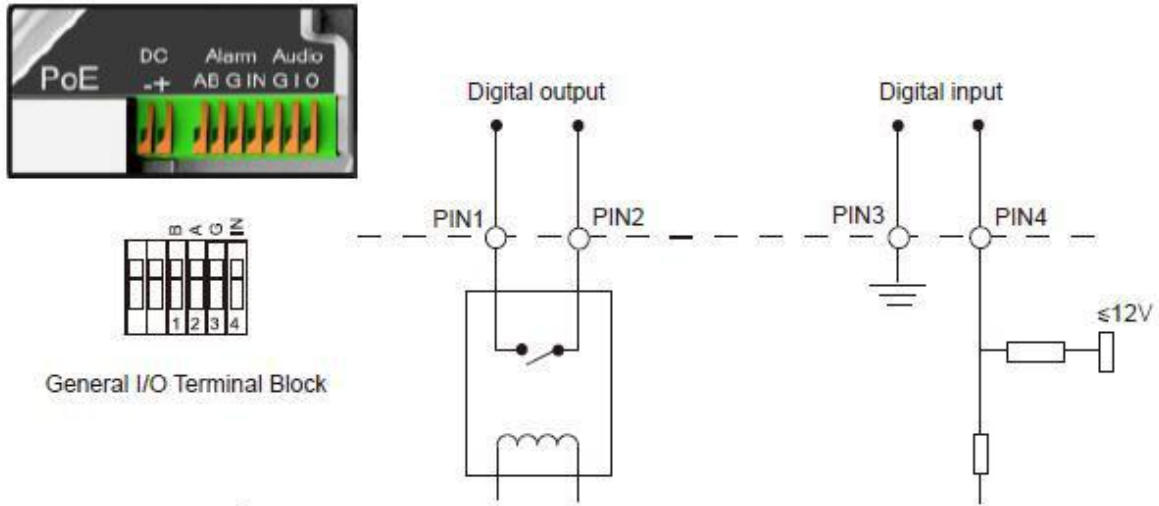
Step4: It will take 1~3 minutes to complete the reset and the IP will turn into 192.168.5.190 (If the IP does not be changed into 192.168.5.190, please try again from step 1.);

Step5: Modify your local IP by Smart Tools again.



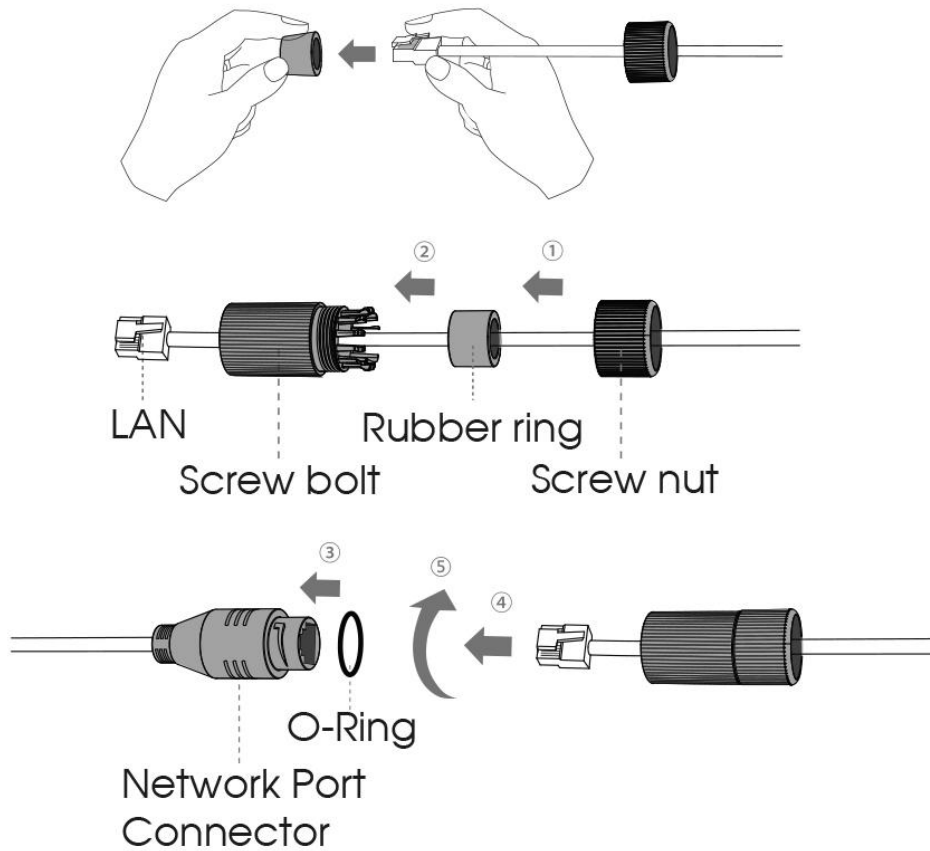
## 8. How to Connect to Alarm Interface

External interface of camera is as the following, you can refer to the picture to install the external alarm device:



- PIN1: Alarm Output NC/NO 24V DC 1A
- PIN2: Alarm Output NC/NO 24V DC 1A
- PIN3: Alarm Input NC/NO  $\leq 12V$
- PIN4: Alarm Input NC/NO  $\leq 12V$

## 9. How to Connect the Water-proof Connector



Step1: Get the network cable through the screw nut, rubber ring and the screw bolt;

Step2: Insert the rubber ring into the screw bolt;

Step3: Connect the screw nut to the screw bolt;

Step4: Place the O-Ring on the network port connector;

Step5: Connect the RJ45 to the network port connector, tighten the screw bolt and the connector.

**Note:**

Please tightly wrapped all cable-out interface with adhesive tape at last to prevent them from water.

## 10. Accessing the Milesight Network Camera

The camera must be assigned an IP address to be accessible.

### 10.1 Assigning an IP Address

The Network Camera must be assigned an IP address to be accessible. The default IP address of Milesight Network Camera is 192.168.5.190.

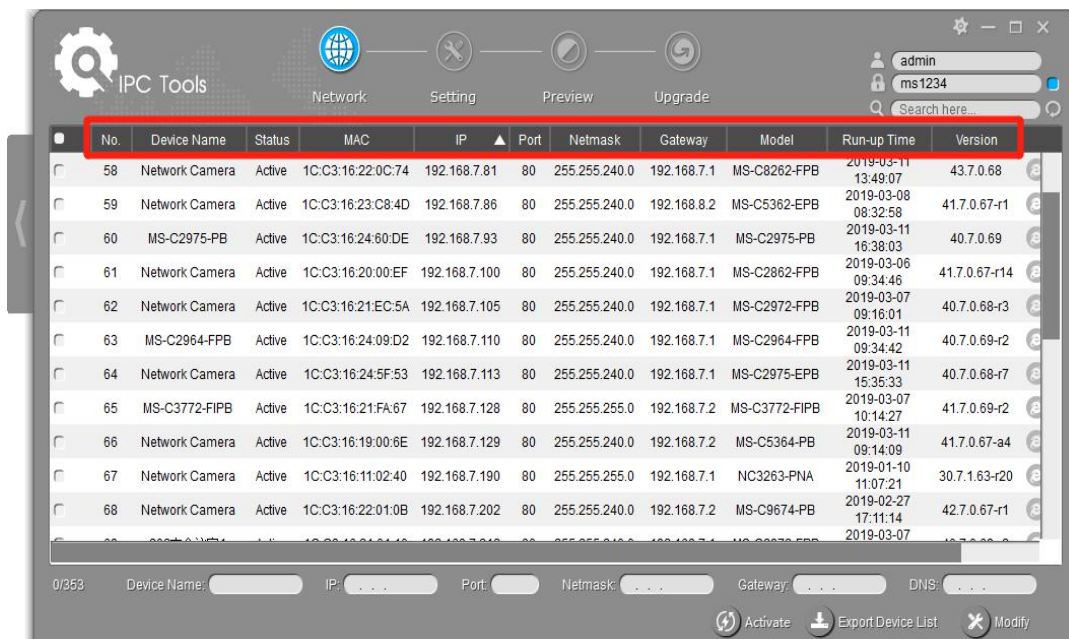
You can either change the IP address of the camera via Smart Tools or browser. Please connect the camera in the same LAN of your computer.

#### 10.1.1 Assigning an IP Address by Using Smart Tools

Smart Tools is a software tool which can automatically detect multiple online Milesight network cameras in the LAN, set IP addresses, and manage firmware upgrades. It's recommended to use when assigning IP addresses for multiple cameras.

Step1: Install Smart Tools (The software could be downloaded from our website);

Step2: Start Smart Tools, click the IPC Tools page, then enter the device information, such as IP address, MAC address, Status, Port number, Netmask, and Gateway, then all related Milesight network cameras in the same network that will be displayed. Details are shown as shown below;



Step3: Select a camera or multiple cameras according to the MAC addresses;




Select single camera



Select multiple cameras

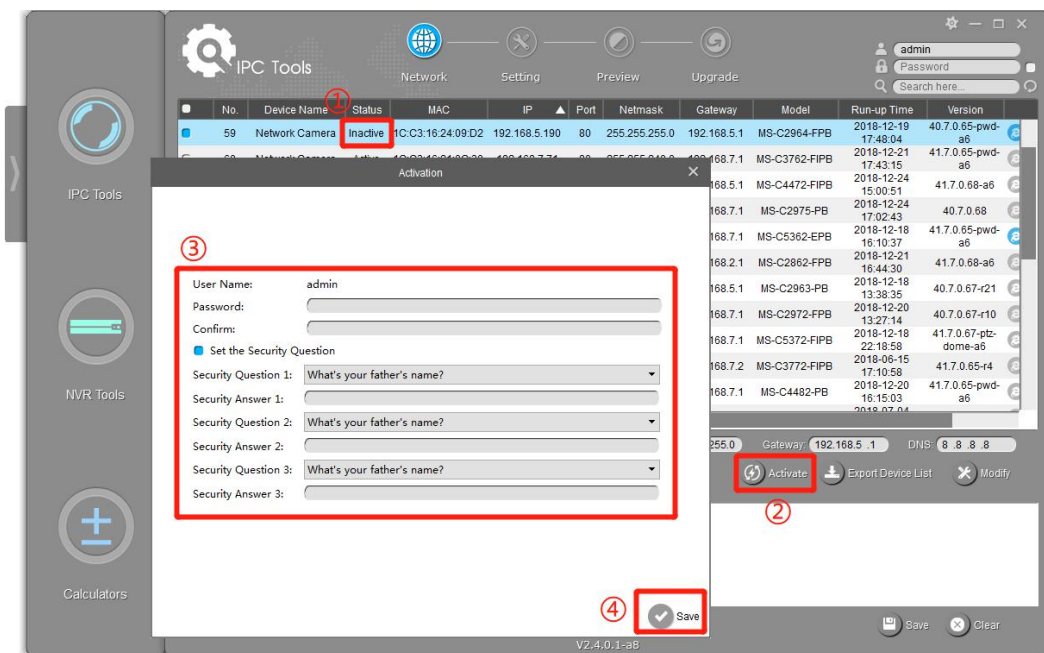
Step4: If the selected camera shows "Active" in the status bar, you can directly type the User Name and Password (Camera with version lower than 4x.7.0.69 is using admin/ms1234 by default), change the IP address or other network values, and then click "Modify" button;



If the selected camera shows "Inactive" in the status bar(Camera with version V4x.7.0.69 or above), click  to set the password when using it for the first time. You can also set the security questions when activating the camera in case that you forget the password(You can reset the password by answering three security questions correctly). Click 'Save' and it will show that the activation was successful.

**Note:**

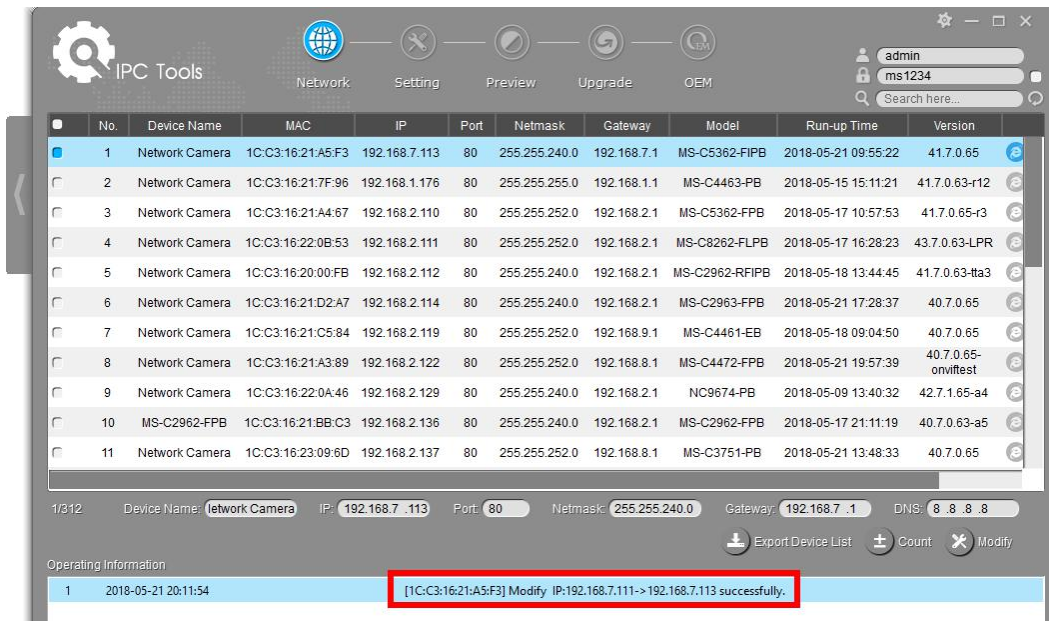
- (1) Password must be 8 to 32 characters long, contain at least one number and one letter.
- (2) You need to upgrade Smart Tools version to V2.4.0.1 or above to activate the camera.



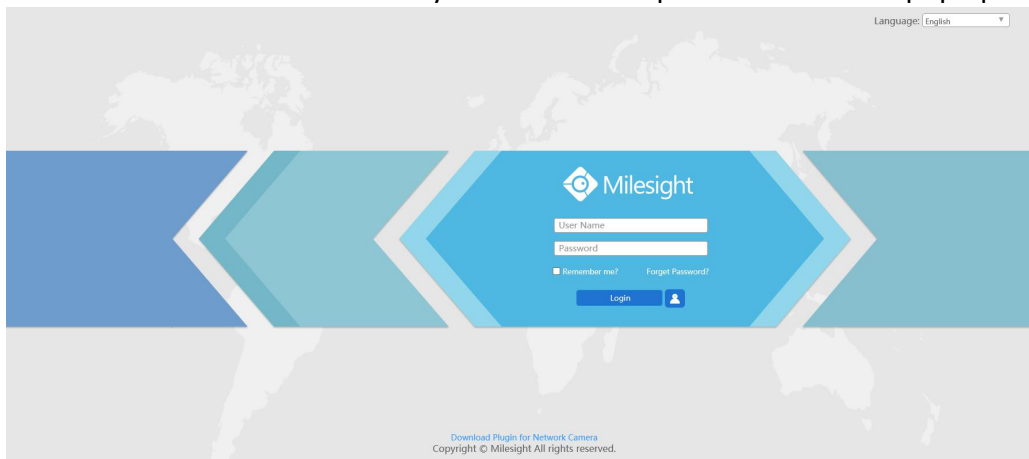
After activation, you can change the IP address or other network values, and then click "Modify" button.

Step5: Change the IP address successfully;





Step6: By double clicking the selected camera or the browser of interested camera, you can access the camera via web browser directly. The Internet Explorer window will pop up.

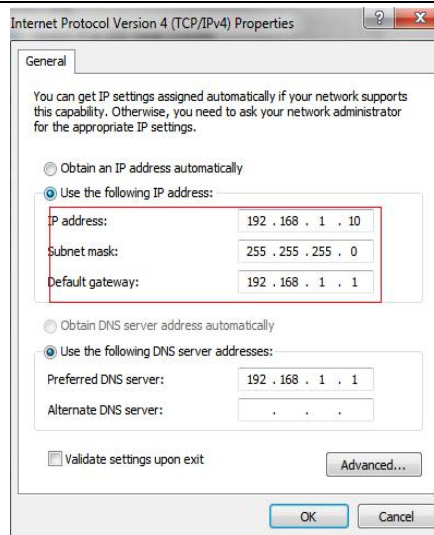


More usage of Smart Tools, please refer to the **“Smart Tools User Manual”**.

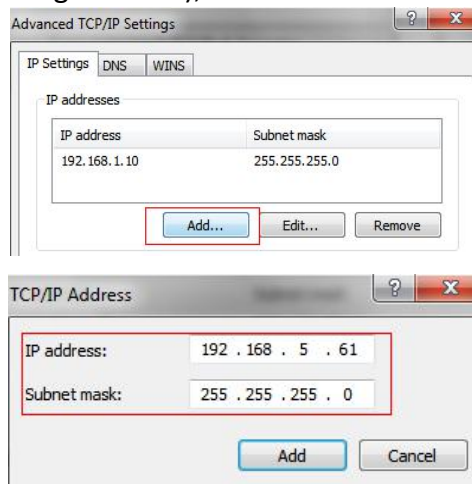
### 10.1.2 Assign an IP Address via Browser

If the network segment of the computer and that of the camera are different, please follow the steps to change the IP address:

- Step1: Change the IP address of computer to 192.168.5.0 segment, here are two ways as below:
- a. Start → Control Panel → Network and Internet Connection → Network Connection → Local Area Connection, and double click it.



- b. Click “Advanced”, and then click “IP settings” → “IP address” → “Add”. In the pop-up window, enter an IP address that in the same segment with Milesight network camera ( e.g. 192.168.5.61, but please note that this IP address shall not conflict with the IP address on the existing network);

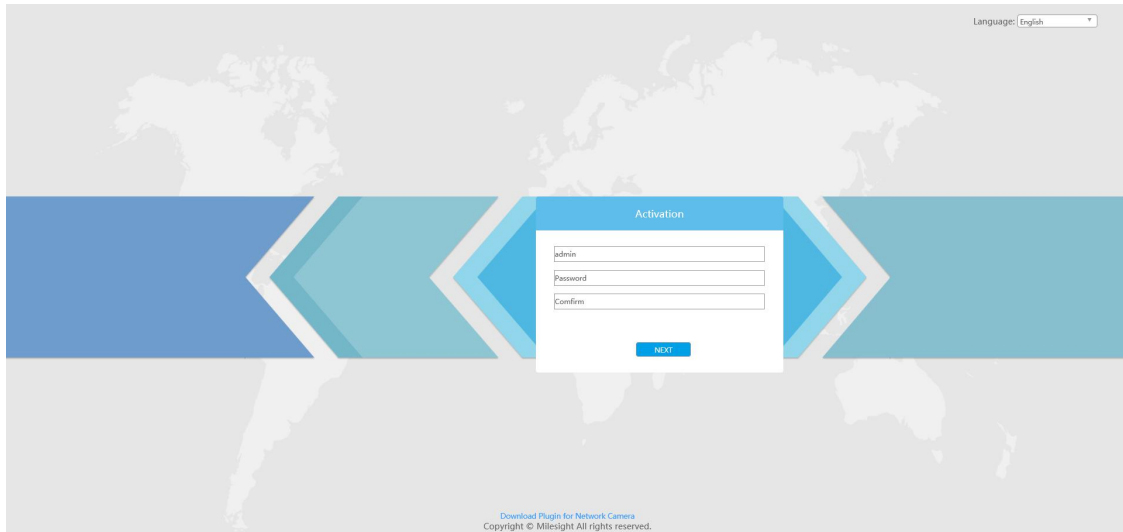


Step2: Start the browser. In the address bar, enter the default IP address of the camera:  
<http://192.168.5.190>;

Step3: If the camera’s firmware version is lower than V4x.7.0.69, it will directly display the login page, enter the user name and password when the LOGIN page appears;  
 (Default user name: **admin**; Default password: **ms1234**)



If the camera’s firmware version is V4x.7.0.69 or above, you need to set the password first when using it for the first time. And you can also set three security questions for your device after activation. Then, you can log in the device with You can log in to the camera with the username(admin) and a custom password.

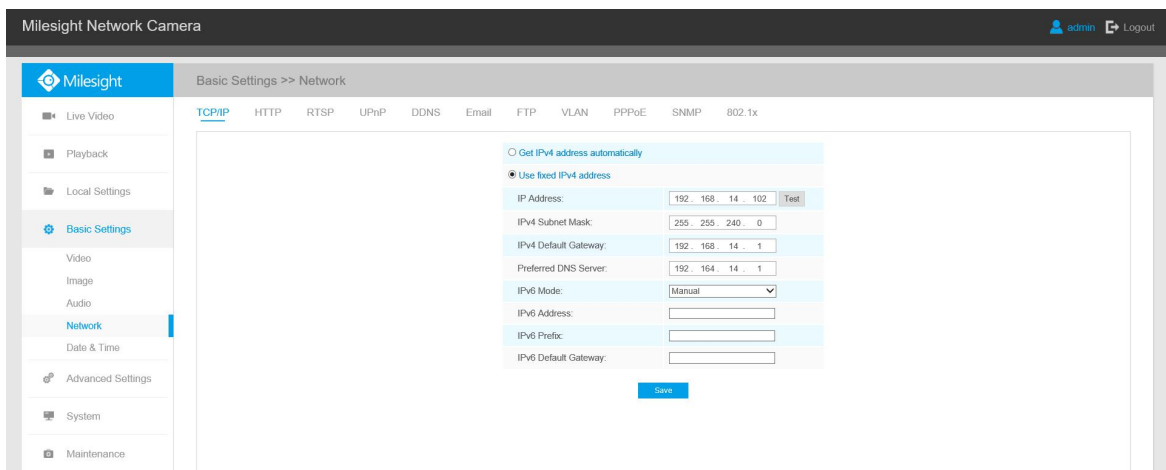


**Note:**

- (1) Password must be 8 to 32 characters long, contain at least one number and one letter.
- (2) You can click the “forget password” in login page to reset the password by answering three security questions when you forget the password, if you set the security questions in advance.



Step4: After login, please select “Configuration”→ “Basic Settings”→ “Network”→ “TCP/IP”. The Network Settings page appears (Shown as below Figure);





Step5: Change the IP address or other network values. Then click “Save” button;

Step6: The change of default IP address is completed.

## 10.2 Accessing from the Web Browser

The camera can be used with the most standard operating systems and browsers. The recommended browsers are Internet Explorer, Firefox, Chrome, Safari.

### 10.2.1 Access over IE Browser

Before using the browser to get access to your camera, you need to install the MsActiveX firstly. You can refer the steps as follows:

Step1: Launch the IE browser and enter the IP address of the camera:

http://192.168.5.190;

Step2: If the camera’s firmware version is lower than V4x.7.0.69, it will directly display the login page, enter the user name and password when the LOGIN page appears;

(Default user name: **admin**; Default password: **ms1234**)


If the camera’s firmware version is V4x.7.0.69 or above, you need to set the password first when using it for the first time. And you can also set three security questions for your device after activation. Then, you can log in the device with the username(admin) and a custom password.

**Note:**

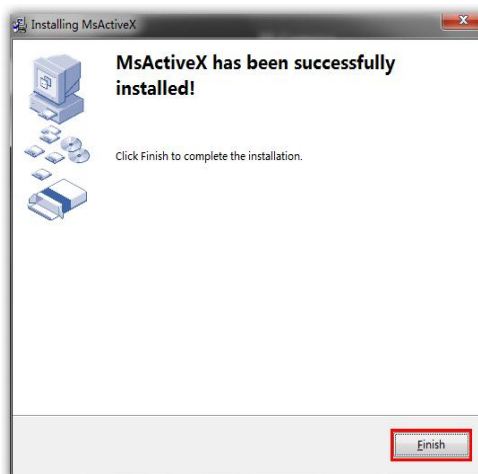
(1) Password must be 8 to 32 characters long, contain at least one number and one letter.

(2) You can click the “forget password” in login page to reset the password by answering three security questions when you forget the password, if you set the security questions in advance.

Step3: At the first time to log in the device, the browser will prompt to install Controls, please click “Click here to download and install controls manually” as shown below;



Step4: Follow the prompts to install the Controls, when it’s finished, it will pop out a window as below. Please click “Finish” and refresh the browser, then you will see the video.



If IE9 or higher version browser is used, it is suggested that the Milesight camera web link should

be added as a trusted site. See the instructions as follows:

Step1: Start the IE9 or higher version browser, and select “Tools”→ “Internet Options”;

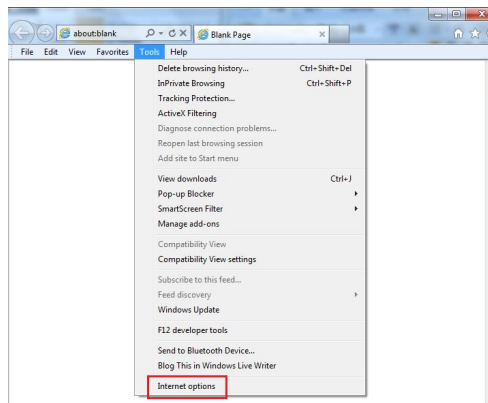


Figure8-14

Step2: Select “Security” to “Trusted”;

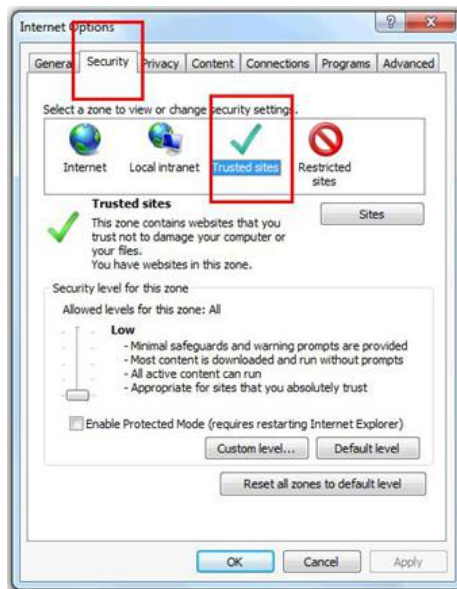


Figure 8-15

Step3: Enter the IP address of the camera in the blank and click “Add”;

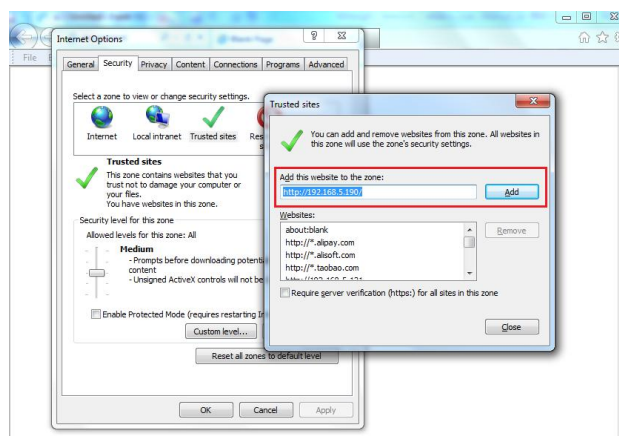
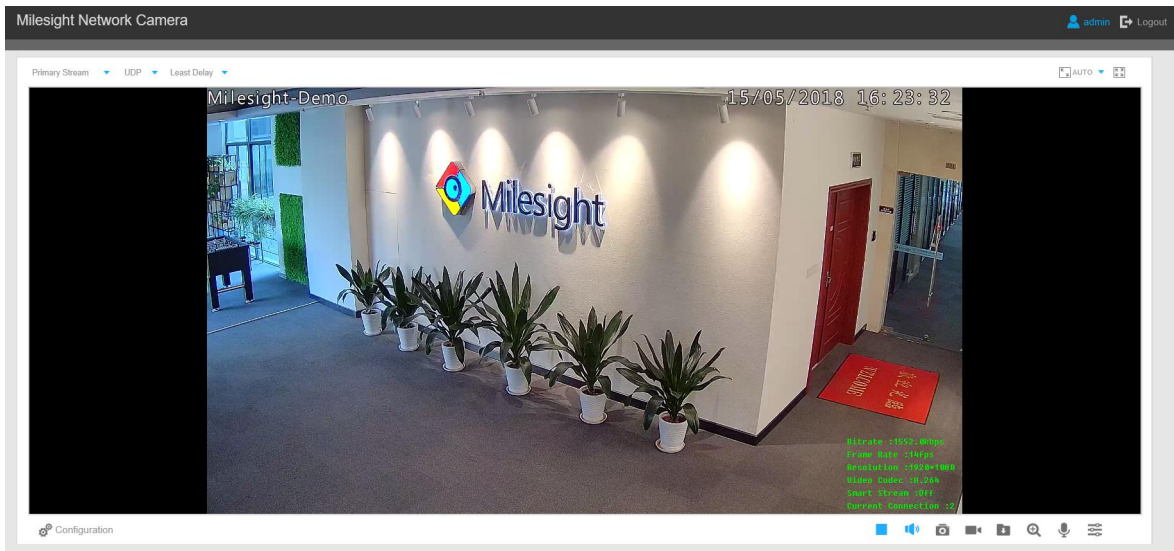


Figure 8-16

Step4: Enter the IP address. After logging on Network Camera’s web GUI successfully, user is allowed to view live video as follows.



# Network Camera

Megapixel Network camera for video surveillance

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for choosing  
Milesight product

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