

Vandal Proof / Lightweight Fixed Dome IP Camera

Installation Guide

Indoor / Outdoor

Ver. 1.3

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1. Indoor Camera Installation

1.1 Hard Ceiling

The Fixed Dome IP Camera can be installed directly on the wall or ceiling. Please note that the wall or ceiling must have enough strength to support the IP Dome Camera.

Items Needed:

- Vandal Proof / Lightweight Fixed Dome IP Camera
- Ethernet Cable
- DC Jack Cable (required without PoE)
- Self-tapping Screws (supplied)
- Rubber Washers (supplied)
- Plastic Screw Anchors (supplied)

Tools Needed:

- Tools for drilling
- (+,-) Screwdriver

Follow the steps below to install the IP Dome Camera:

Step 1:

Unpack the Vandal Proof / Lightweight Fixed Dome IP Camera package and take out the IP Dome Camera.

Step 2:

Release the two Captive Security Screws with the supplied Security Torx and open the Dome Cover.

Vandal Proof



Lightweight



Figure-1: Captive Security Screw

Vandal Proof



Lightweight



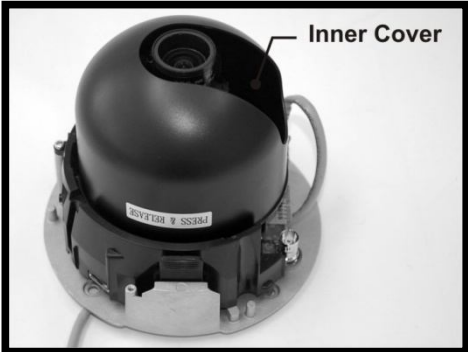
Step 3:

Press both sides of the Inner Cover and remove it from the Camera Module.

Vandal Proof



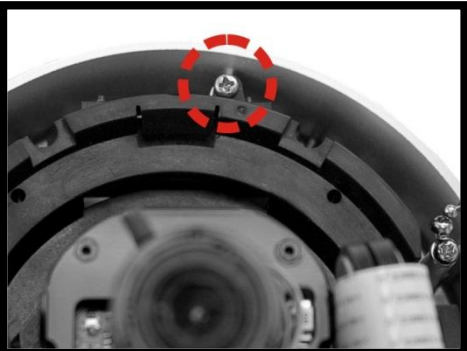
Lightweight



Step 4:

Unscrew the Module-fastened Screw with the screwdriver (as indicated in the figures below).

Vandal Proof



Lightweight



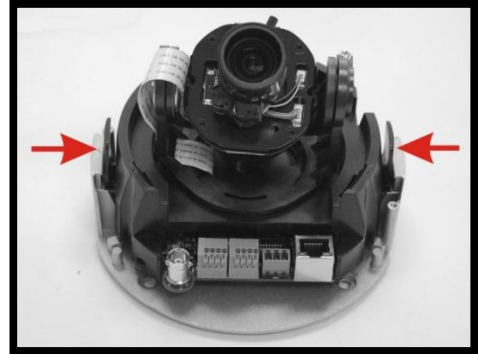
Step 5:

Press the sides of the Snap-on Camera Module, and detach it from the Dome Camera's Housing / Plate, as indicated in the figures below.

Vandal Proof



Lightweight



Step 6:

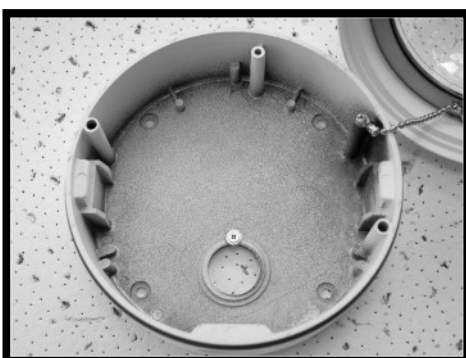
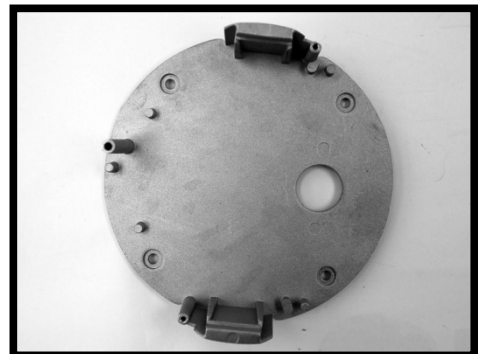
Mark the positions of the four screw holes on the base of the Dome Camera at the chosen installation location.

Vandal Proof



Type 1

Lightweight



Type 2

Step 7:

In the marked locations, drill each hole slightly smaller than the supplied Screw Anchors.

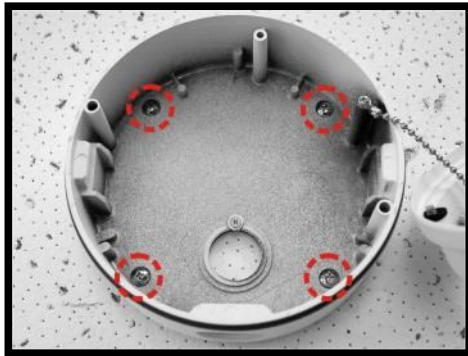
Step 8:

Put the supplied Anchors into these drilled holes.

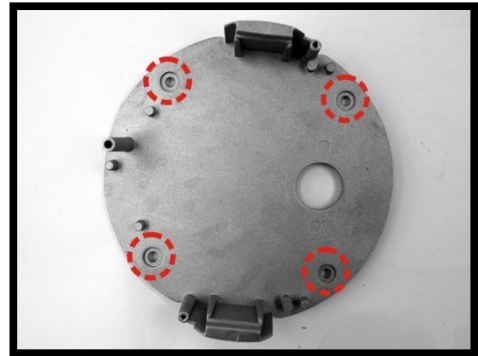
Step 9:

Fasten the Dome Camera's Housing / Plate with the four supplied Self-tapping Screws.

Vandal Proof



Lightweight

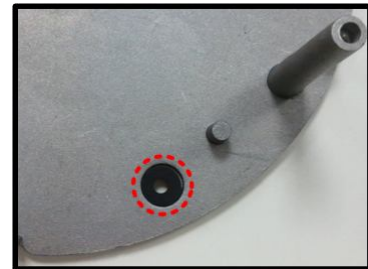


NOTE: Be sure to fix the Self-tapping Screws with the Rubber Washers.

Vandal Proof

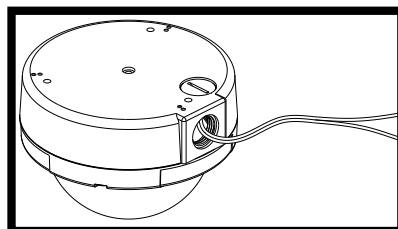


Lightweight

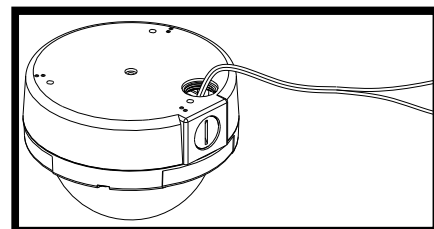


Step 10:

Thread the cables (Power / Ethernet / Audio / Alarm) through either the side conduit entry or back conduit entry, as illustrated below. Users may use a coin to screw off the conduit entry block for Vandal Proof IP Dome Camera.



Side Conduit Entry



Back Conduit Entry

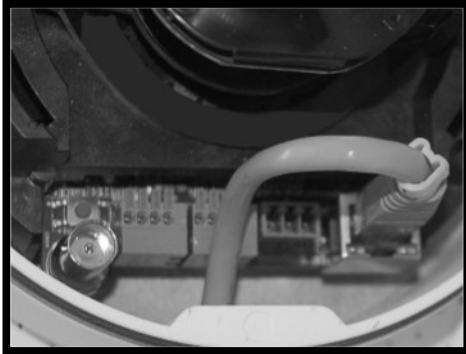


NOTE: The Power Cable is omitted if using PoE.

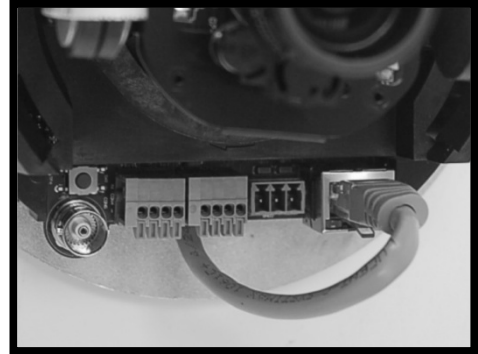
Step 11:

Connect the ports (on the Camera Module) with their cables / wires respectively (as shown in the figures below).

Vandal Proof



Lightweight



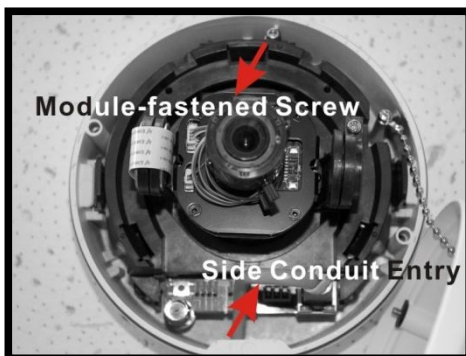
Step 12:

Attach the Snap-on Camera Module into / on the Dome Camera Housing / Plate, and screw the Module-fastened Screw tightly with the screwdriver to secure the Camera Module.

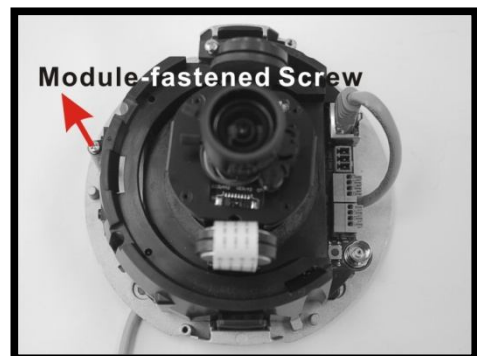


NOTE: For Vandal Proof IP Dome Camera, please install the Camera Module with the terminal blocks facing the side cable entry (as shown in the left figure below).

Vandal Proof



Lightweight

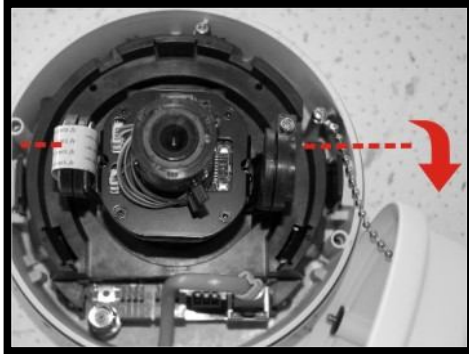


Step 13:

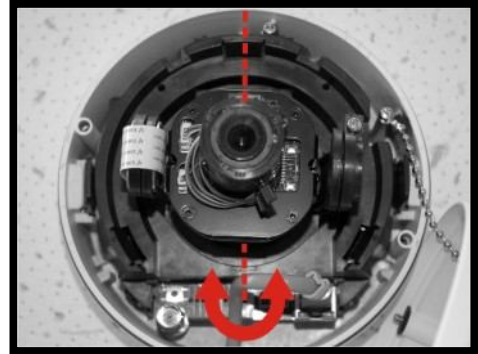
Access the Camera Browser-viewer for viewing images. Please refer to User's Manual for further details. Users can also use the Camera's BNC Connector for video output while choosing BNC as one of the streaming options in advance.

Step 14:

Adjust the Camera's Pan/Tilt Holder to a desired angle, as shown below. Pan adjustment range is nearly 360°; rotation angle range approaches to 270°. Tilt angle is adjustable between -10° ~ 90°.



Pan Adjustment



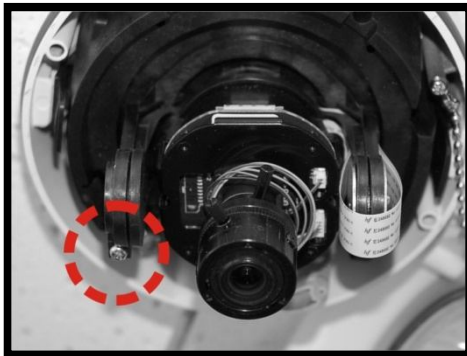
Tilt Adjustment



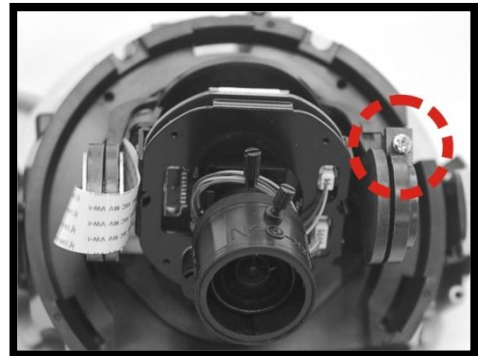
NOTE: Adjust the Lens carefully within the limits mentioned above, or the cables underneath would be harmed.

Please tighten the Camera's Pan/Tilt Holder Screw to secure the desired tilt angle after adjusting.

Vandal Proof



Lightweight



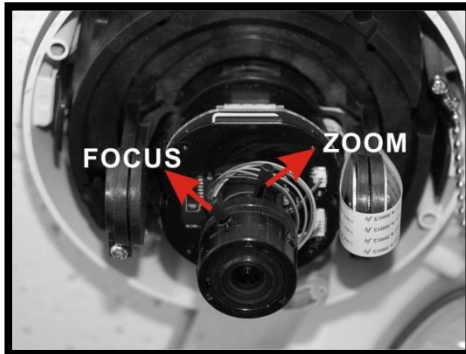
Step 15:

Adjust the Camera's zoom level and focal length via Zoom and Focus Ring Screws.

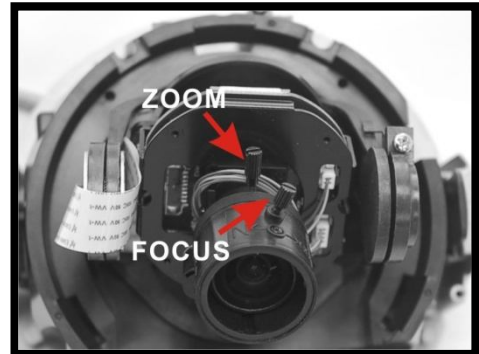


NOTE: The zoom level and focal length might be different with the Dome Cover on. In this case, adjusting the zoom level and the focal length through the Dome Cover is recommended.

Vandal Proof



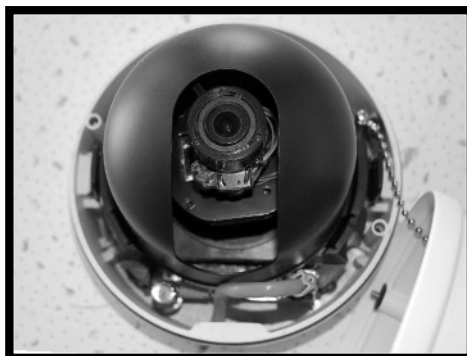
Lightweight



Step 16:

Put the Inner Cover back to the Camera Module.

Vandal Proof



Lightweight



Step 17:

Replace the Dome Cover back.

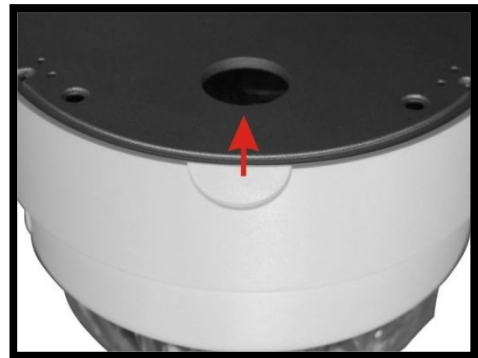
For Vandal Proof IP Dome Camera, please align the arrow mark on the Dome Cover with the one on the Housing (as shown in the left figure below).

For Lightweight Fixed Dome IP Camera, please align the arc area on the Dome Cover with the back conduit entry (as shown in the right figure below).

Vandal Proof



Lightweight



Step 18:

Screw on the two Captive Security Screws on the side of the Dome Cover tightly to fasten the Dome Cover. Camera installation is complete.

Vandal Proof



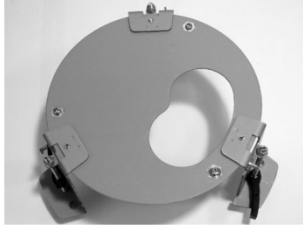
Lightweight



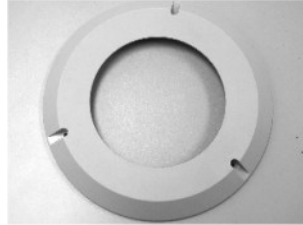
1.2 In-Ceiling (T-Bar) Mounting

The indoor Dome Camera can be mounted with the optional accessory: In-Ceiling (T-Bar) Mount. The items and tools needed for in-ceiling installation are listed as follows.

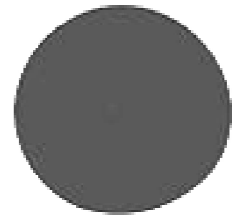
In-Ceiling Mount Package Contents:



In-Ceiling Mount

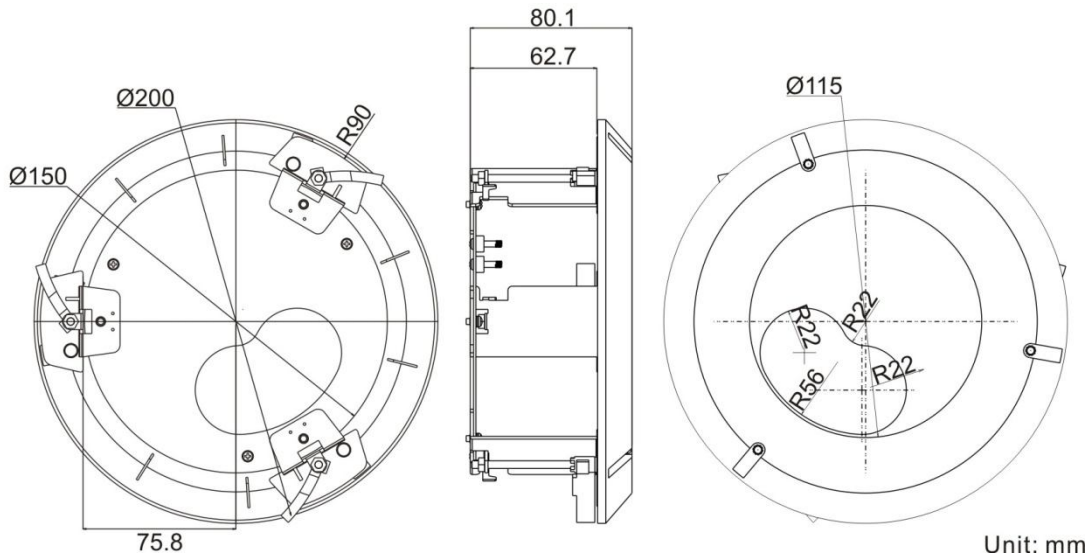


Trim Ring



Ceiling Sticker

In-Ceiling Mount Dimension:



Tools Needed:

- Tools for drilling
- Phillips Screwdriver
- Security Torx provided



Follow the steps below to install the In-Ceiling (T-Bar) Mounting:

Step 1:

Release the two Captive Security Screws with the supplied Security Torx and open the Dome Cover.

Vandal Proof



Lightweight



Figure-2: Captive Security Screw

Vandal Proof



Lightweight



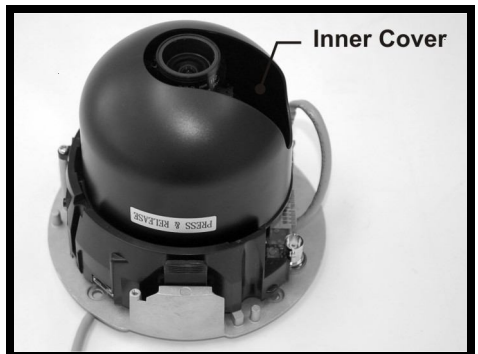
Step 2:

Press both sides of the Plastic Inner Cover and remove it from the Camera Module.

Vandal Proof

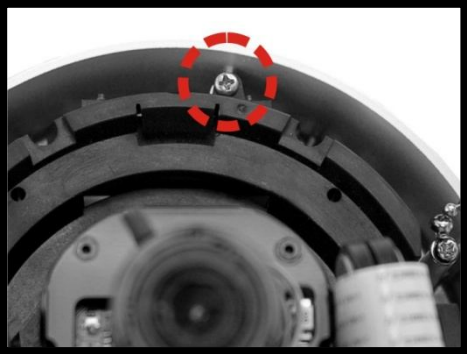


Lightweight



Unscrew the Module-fastened Screw with the screwdriver (as indicated in the figures below).

Vandal Proof



Lightweight



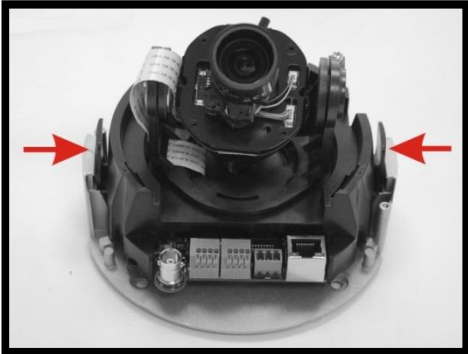
Step 3:

Press the sides of the Snap-on Camera Module and detach it from the Dome Camera's Housing / Plate.

Vandal Proof



Lightweight

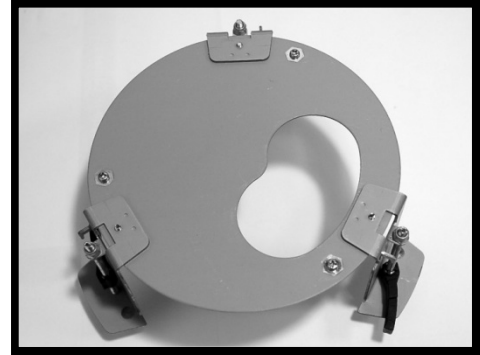


NOTE: Users may use a coin to screw off the conduit entry block for the Vandal Proof Fixed Dome IP Camera.

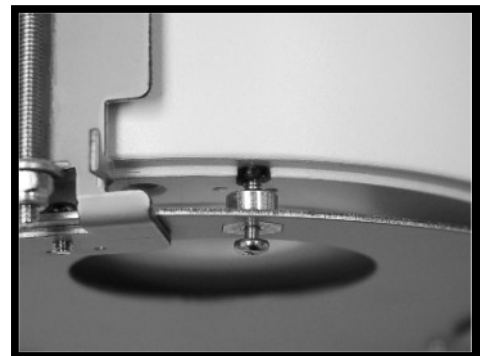
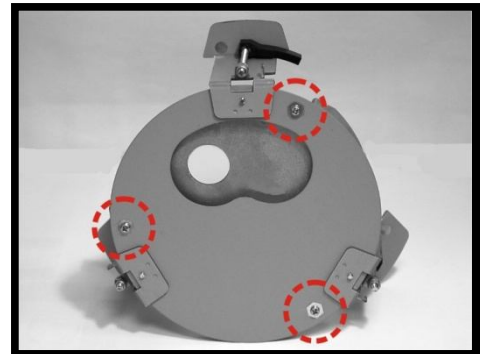


Step 4:

Attach the Camera Housing / Plate's base to the In-Ceiling Mount's top plate, aligning the camera's rear cable entry with the entry hole on the In-Ceiling Mount's top plate.

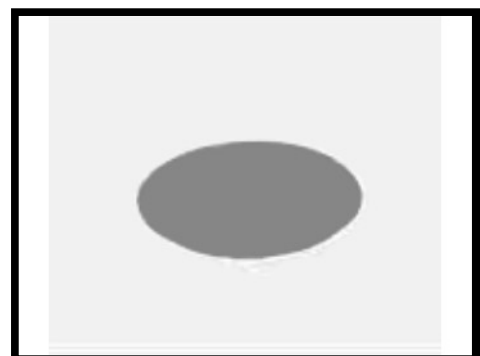


Align the three Captive Screws with the mating screw holes on the Camera Housing / Plate's base. Then tighten the three Captive Screws as shown in the right figure.



Step 5:

Position the supplied adhesive-backed Ceiling Sticker (Diameter: 176 mm) onto the ceiling where the Camera will be mounted, and cut the ceiling hole using the template as a guide.



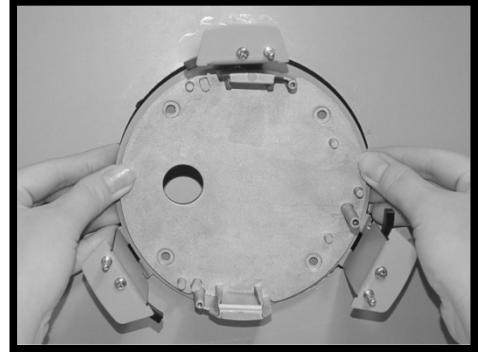
Step 6:

Insert the Dome Camera with the attached In-Ceiling Mount into the ceiling hole, and run the Ethernet Cable through the desired cable entry.

Vandal Proof



Lightweight



Step 7:

Secure the Unit to the ceiling:



NOTE: Do Not over-tighten the three fixing screws. If using a power tool the slip clutch should be set to the lightest setting or the clamps could be damaged.



The In-Ceiling Mount's Wing Clamps will draw the Dome Camera Housing / Plate to the ceiling board until it is completely flush with the board.

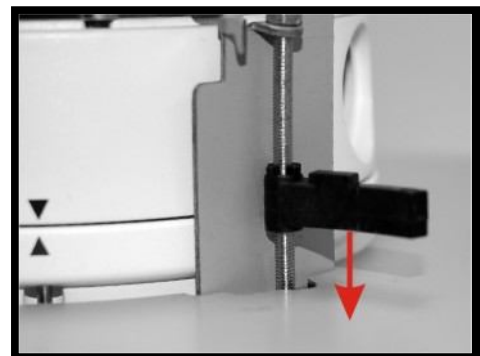
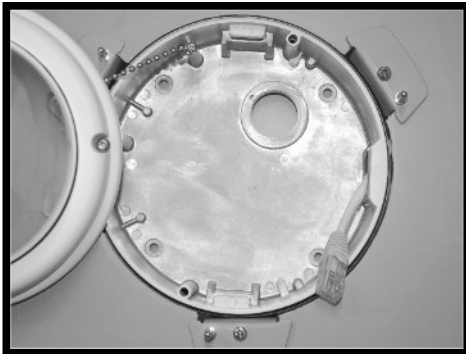
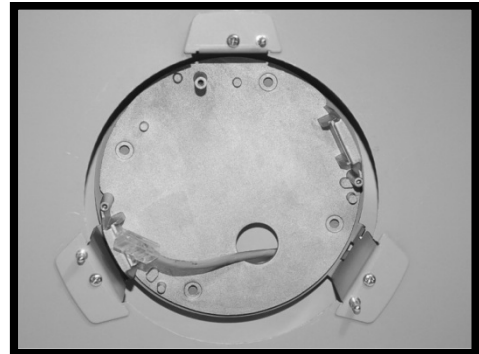


Figure-3: Bottom View of installed In-Ceiling Mount.

Vandal Proof



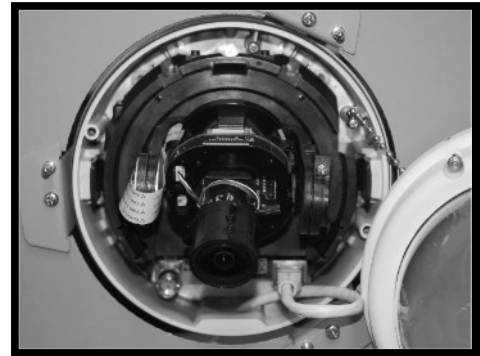
Lightweight



Step 8:

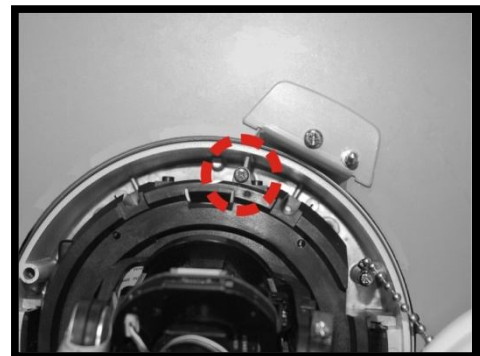
Attach the Snap-on Camera Module to the Dome Camera Housing / Plate.

For Vandal Proof IP Dome Camera, please install the Camera Module with the terminal blocks facing the side cable entry.



Step 9:

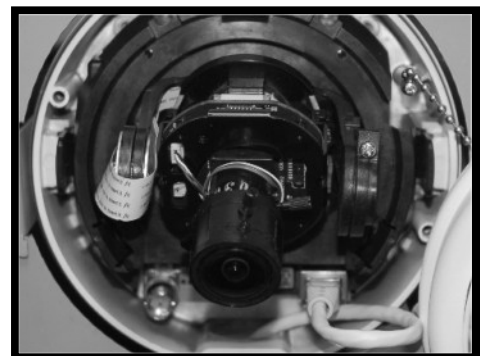
Tighten the Module-fastened Screw.



Step 10:

Connect the Ethernet Cable to the camera's network connector.

Refer to the Camera Quick Guide for details regarding the Camera Connector Definition.



Step 11:

Access the Camera Browser-viewer for viewing images. Please refer to Chapter [Accessing Camera](#) in IP Camera User's Manual for further details. Users can also use the Camera's BNC Connector for video output while choosing BNC as one of the streaming options in advance.

Step 12:

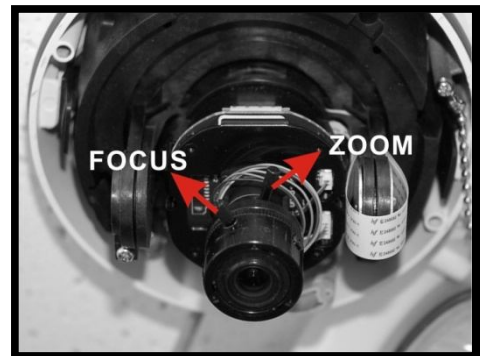
Adjust the Camera to a desired angle by adjusting the Pan / Tilt / Rotation. Pan adjustment range is nearly 360°; rotation angle range approaches to 270°. Tilt angle is adjustable between -10° ~ 90°.



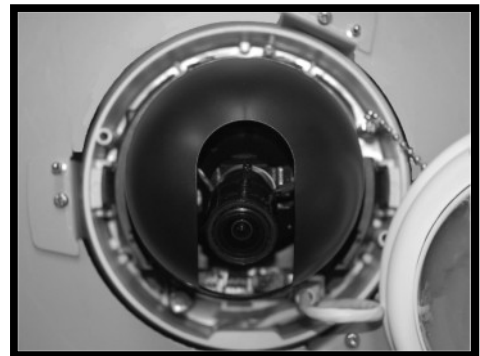
NOTE: Adjust the Lens carefully within the limits mentioned above, or the cables underneath would be harmed.

Step 13:

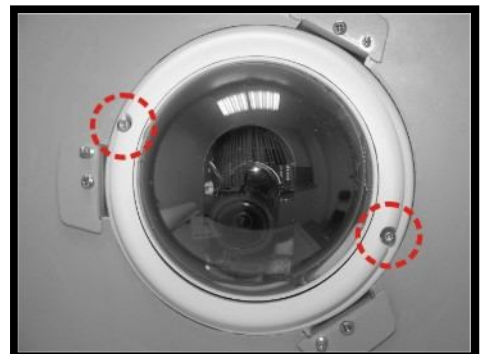
Adjust the Zoom Ring Screw to set the desired zoom; subsequently, modify the Focus Ring Screw to set the desired focal length.

**Step 14:**

Reinstall the Plastic Inner Cover.

**Step 15:**

Close the Dome Cover and tighten the two Security Screws.



Step 16:

Align the 3 holes in the Trim Ring with the Retaining Nut on the In-Ceiling Mount and snap the Trim Ring in place to complete the installation.



1.3 4S Mount Electrical Box

Before installing the IP Dome Camera in the 4S Electrical Box, please unscrew and open the Dome Cover with the Security Torx.

Follow the steps below to install the 4S Mount Electrical Box:

Figure-4: 4S Mount Electrical Box



Step 1:

Run the wires (Ethernet and power) through the 4S Mount Electrical Box.



NOTE: The Power Cable is omitted if using PoE.

Step 2:

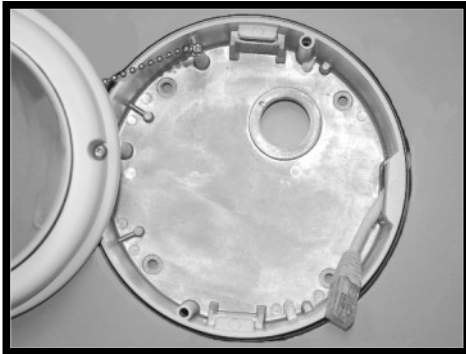
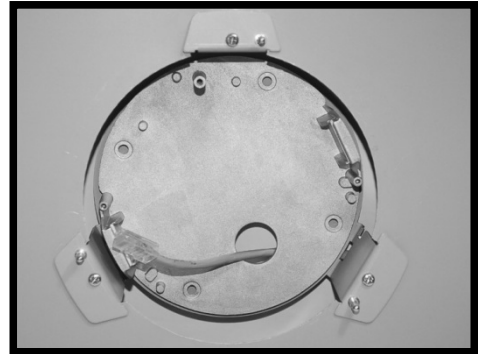
Disassemble the Dome Camera's Inner Cover (see the illustration in [1.1 Hard Ceiling: Step 3](#)) from the Camera Module.

Step 3:

Detach the Snap-on Camera Module from the Dome Camera's Housing / Pleat by unscrewing the Module-fastened Screw first. Then press the sides of Camera Module and pull it slightly out of the Housing / Plate.

Step 4:

Thread the Power and Ethernet Cables through either the side conduit entry or back conduit entry. Then fasten the Dome Camera's Housing / Plate on the Electrical Box with the two screws.

Vandal Proof**Lightweight****Step 5:**

Connect the power and Ethernet Cables to their connectors on the Camera Module.

Step 6:

Attach the Snap-on Camera Module into / on the Dome Camera's Housing / Plate. Screw on the Module-fastened Screw to secure the Camera Module.

Step 7:

Access the camera browser-viewer for viewing images. Please refer to the Dome Camera User's Manual for further details. Users can also use the Camera's BNC Connector for video output while choosing BNC as one of the streaming options in advance.

Step 8:

Position the camera at a desired angle through PTZ adjustment. Please refer to the last section for illustration.

Step 9:

Adjust the camera's zoom level and focal length via Zoom and Focus Ring Screws.

Step 10:

Replace the Dome Cover back.

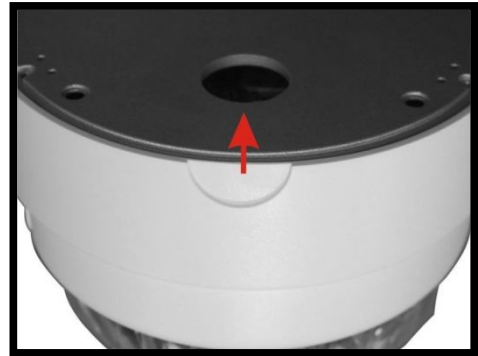
For Vandal Proof IP Dome Camera, please align the arrow mark on the Dome Cover with the one on the Housing (as shown in the left figure below).

For Lightweight Fixed Dome IP Camera, please align the arc area on the Dome Cover with the back conduit entry (as shown in the right figure below).

Vandal Proof



Lightweight



Step 11:

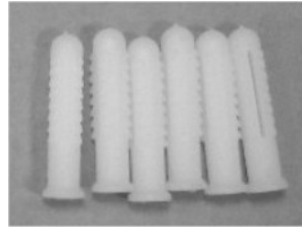
Screw on the two Captive Security Screws on the side of the Dome Cover tightly to fasten the Dome Cover. Camera installation is complete.

1.4 Corner Mounting

Corner Mount Package Contents:



Corner Mount



M4 Plastic Anchors (x6)

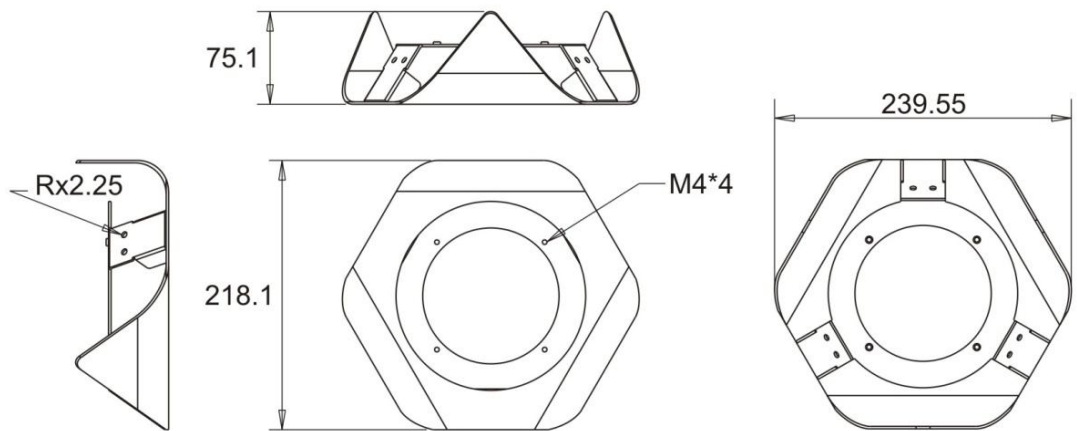


M4 Self-tapping Screws (x6)



M4 Mechanical Screws (x4)

Corner Mount Dimension:



Unit: mm

Tools Needed:

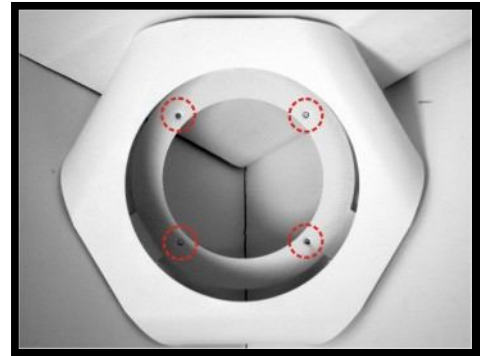
- Tools for drilling
- Phillips Screwdriver
- Security Torx (Supplied)



Follow the steps below to install the Corner Mount:

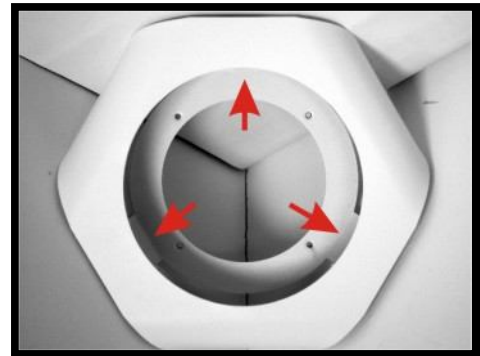
Step 1:

Match the Corner Mount at the ceiling corner. Please note that the Dome Camera's Housing / Plate installing holes are in position as the right figure.

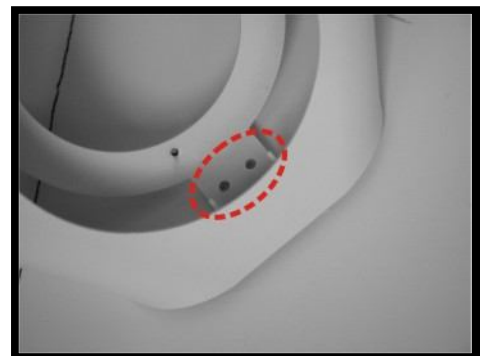


Step 2:

Drill six holes on the wall and the ceiling to install six M4 plastic anchors.



Fix the Corner Mount on the Ceiling by fastening six M4 Self-tapping Screws in the Plastic Anchors.

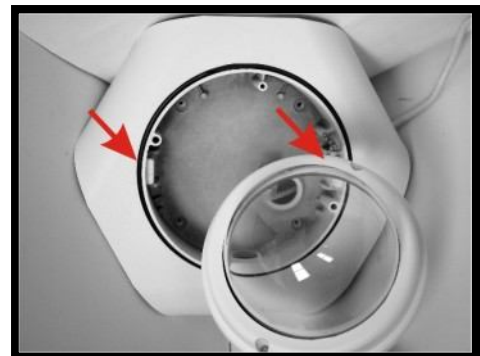


Step 3:

Place the Dome Camera's Housing / Plate in the Corner Mount.

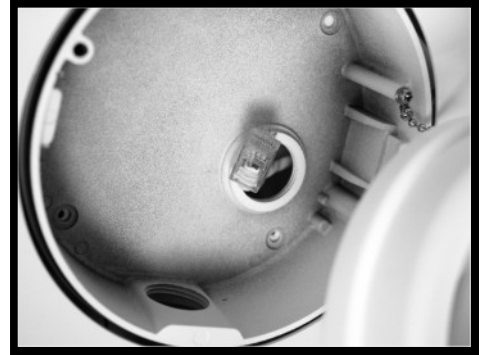


NOTE: Detach the Snap-on Camera Module before placing the Dome Camera's Housing / Plate into the Corner Mount.



Step 4:

Thread the RJ-45 Cable through the Dome Camera's Housing / Plate.



Step 5:

Tighten the four M4 Mechanical Screws to install the Dome Camera's Housing / Plate in the Corner Mount.



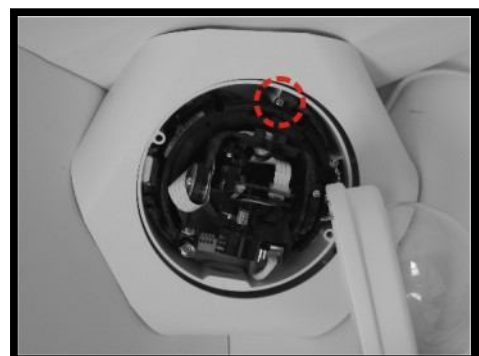
Step 6:

Place the Camera Module into the Dome Camera's Housing / Plate until there is a "click" sound.



Step 7:

Tighten the Module-fasten Screw on the Camera Module to fix the Camera Module on the Dome Camera's Housing / Plate.

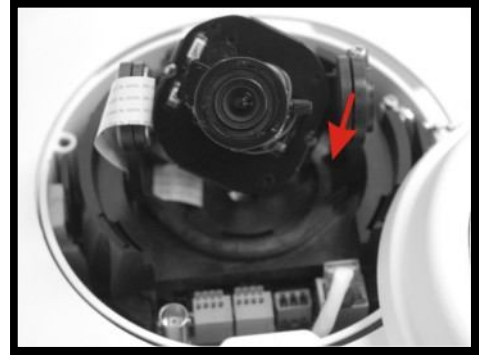


Step 8:

Connect the RJ-45 Cable to the Camera Module, and then adjust the Dome Camera lens to a desired angle.



NOTE: The zoom level and focal length might be different with the Dome Cover on. In this case, adjusting zoom level and focal length through the Dome Cover is recommended.



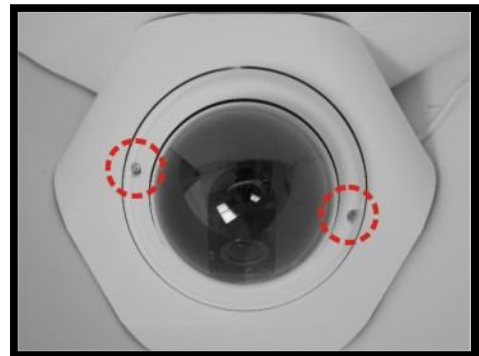
Step 9:

Install the Inner Cover on the Camera Module.



Step 10:

Place the Dome Cover back in position and tighten the two Captive Security Screws with the supplied Security Torx.



2. Outdoor Camera Installation

The Outdoor Vandal Proof Fixed Dome IP Camera could be mounted on the wall with the Standard / Compact Pendant Mount for monitoring convenience.

2.1 Standard / Compact Pendant Mounting

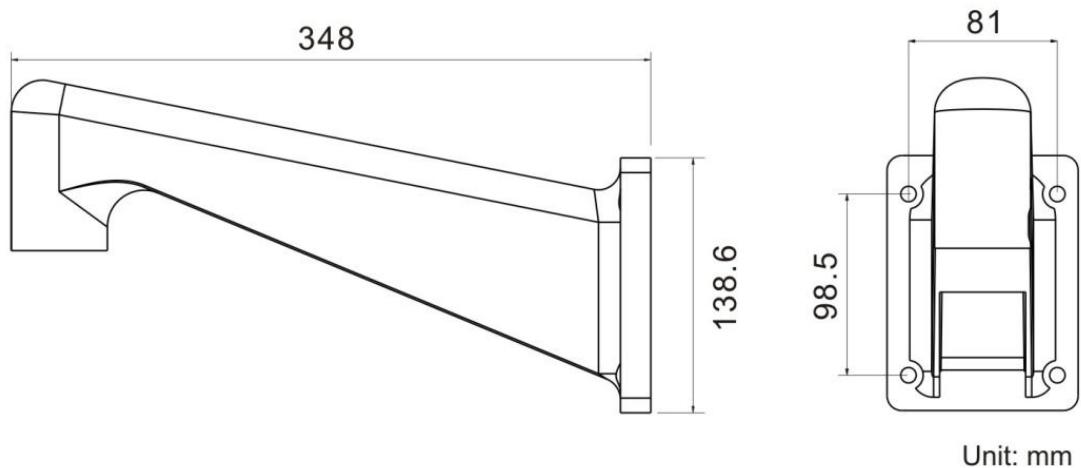
Standard Pendant Mount Package Contents:

- M8x16 Hex Head Stainless Steel Screw (x1)
- Rubber Washer-8 (x1)
- Pendant Tube Washer (x1)
- Spring Washer-8 (x5)
- Plain Washer-8 (x4)
- M8x30 Hex Head Machine Screw (x4)
- Sponge (x2)

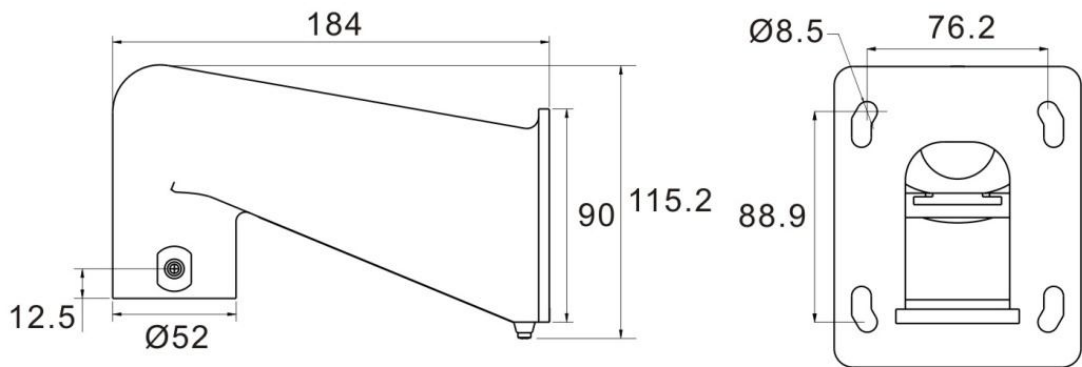
Compact Pendant Mount Package Contents:

- M8x16 Hex Head Stainless Steel Screw (x1)
- Rubber Washer-8 (x1)
- Pendant Tube Washer (x1)
- Spring Washer-8 (x1)
- Sponge (x1)

Standard Pendant Mount Dimension:



Compact Pendant Mount Dimension:



Unit: mm

Tools Needed:

- Tools for drilling
- Tools for screwing
- Security Torx (supplied)

Follow the steps below to install the Standard / Compact Pendant Mount:

Step 1:

Unscrew the two Captive Security Screws with the supplied Security Torx Driver and open the Dome Cover.



Step 2:

Press both sides of the Inner Cover and remove it from the Camera Module.



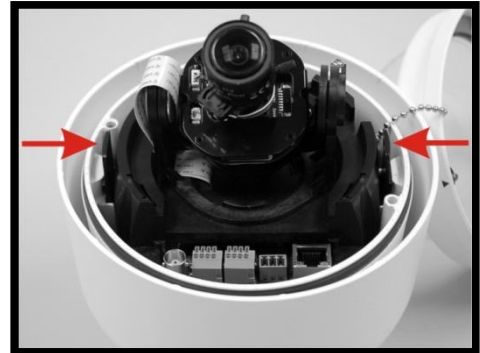
Step 3:

Unscrew the Module-fastened Screw, as indicated in the right figure.



Step 4:

Press the sides of the Snap-on Camera Module and detach it from the Dome Camera's Housing (as indicated in the right figure).



Step 5:

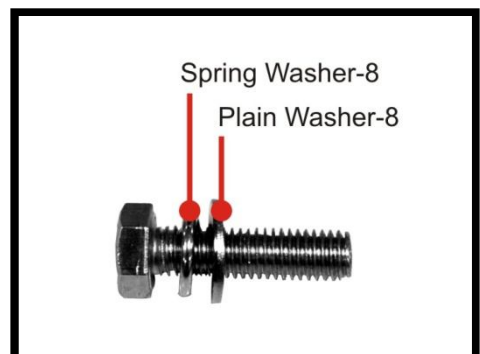
Fasten the Standard / Compact Pendant Mount onto the wall securely. Run the Ethernet Cable through the Standard / Compact Pendant Mount as shown in the right figure.



M8x30 Hex Head Machine Screw

(for Standard Pendant Mount only):

The Standard Pendant Mount is supplied with four M8x30 Hex Head Machine Screws for the convenience of installation by fastening the Pendant Mount with other metal part together.



Step 6:

Thread the Ethernet Cable through the entry of the Dome Camera's Housing.



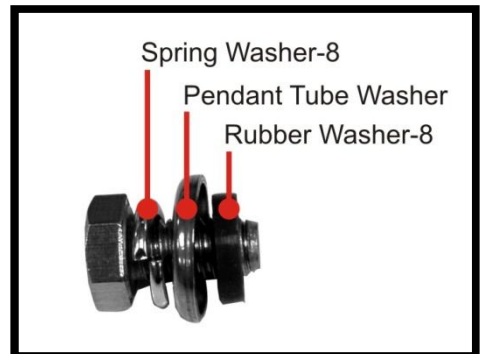
Step 7:

Rotate the joint of Dome Camera Housing into the entry of the Pendant Mount, aligning the screw hole of the joint with the one of the Pendant Mount.



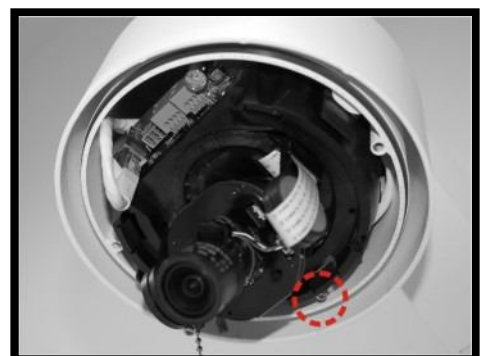
Step 8:

Fix the camera housing with the supplied M8x16 Hex Head Stainless Steel Screw and Washers.



Step 9:

Attach the Snap-on Camera Module to the Dome Camera Housing and tighten the Module-fastened Screw.

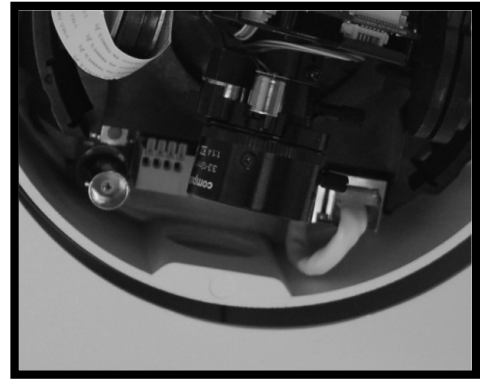


Step 10:

Connect the RJ-45 Cable to the Camera Module to access the camera for viewing video, and then adjust the Dome Camera lens to a desired angle.

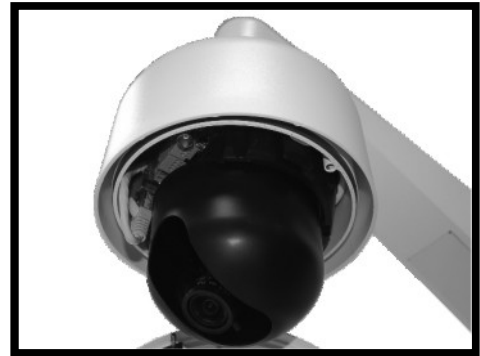


NOTE: The zoom level and focal length might be different with the Dome Cover on. In this case, adjusting zoom level and focal length through the Dome Cover is recommended.



Step 11:

Put the Inner Cover back to the Camera Module.



Step 12:

Close the Dome Cover and tighten the two Captive Security Screws.



Installation Completed.



3. Cable Gland Installation

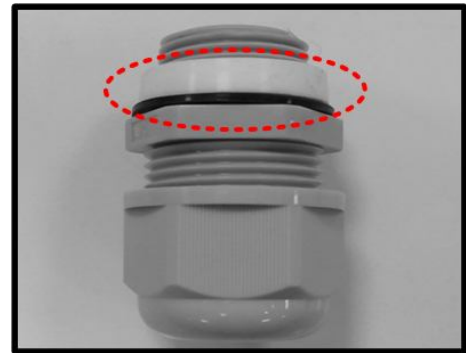
For Vandal Proof Dome-Indoor housing, cable connection can be protected from water damages by installing the all-in-one cable with a cable gland.

Cable Gland Installation Kit:

1. Silicone Rubber Ring
2. Cable Gland



First insert the silicone rubber ring into the cable gland body from the top (as shown on the right).



Before starting the installation of the all-in-one cable with the cable gland, please refer to section [Hard Ceiling installation](#) → Step 1~9 for camera housing installation. Then follow the instruction below.

Step 1:

Loosen the thread-lock sealing nut from the cable gland body and insert the all-in-one cable from the side with the network connector, starting from the biggest size connector to the smallest size connector.



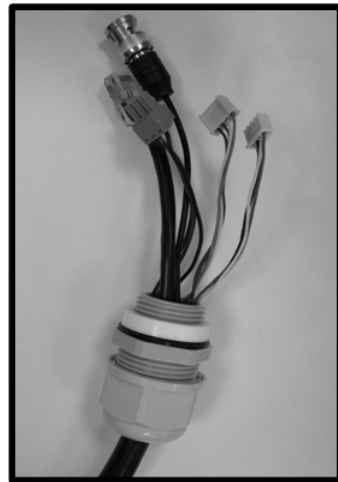
Step 2:

Insert the all-in-one cable to the cable gland body from the bottom, starting from the biggest size connector to the smallest size connector as well.



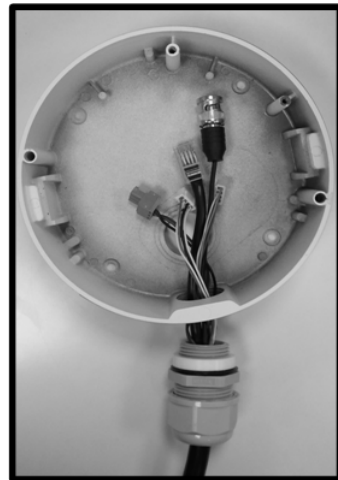
Step 3:

Twist in the thread-lock sealing nut a little bit back to the cable gland body.



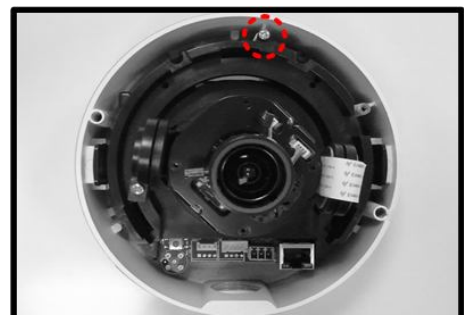
Step 4:

Insert the all-in-one cable to the side conduit entry, again starting from the biggest size connector to the smallest size connector.



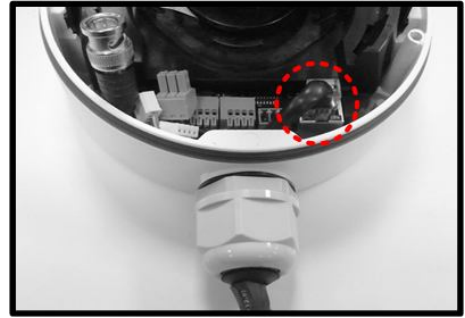
Step 5:

Attach the Snap-on Camera Module into the Dome Camera Housing, and screw the Module-fastened Screw tightly with the screwdriver to secure the Camera Module.



Step 6:

Plug-in the connectors to their corresponding ports. Then adjust the cable lines and twist in the cable gland body to the side conduit entry. After the cable gland body is in, fasten the thread-lock sealing nut until the cable is completely covered.



After the above steps are completed, please refer to section [Hard Ceiling installation](#) → Step 13~18 for the remaining steps to complete camera installation.

4. Mini Dome Mounting Kit Installation

Mini Dome Mounting Kit (69PNX32X1M01) is designed to work with various kinds of pendants and tubes.



The Mini Dome Mounting Kit cannot be used for Vandal Proof Fixed Dome IP Camera.

Supported Model:

- Lightweight Fixed Dome IP Camera

Dimensions of Compatible Pendant / Tube:

- NPT ¾"
- NPT 1½"

Mini Dome Mounting Kit Package Contents:

- Mini Dome Mounting Kit (x1)
- M4x8 Machine Screws (x6)
- M4x14 Machine Screws (x4)
- Silicone Rubber Ring (x1)

Items Needed:

- IP Camera
- Ethernet Cable
- DC Jack Cable (required without PoE)

Tools Needed:

- (+, -) Screwdriver
- Security Torx (supplied in the camera package)



Follow the steps below to install the camera onto the mounting kit.

Step 1:

Fix the mounting kit onto the pendant / tube.



NOTE: If NPT 3/4" mounting accessory is used with the Mini Dome Mounting Kit, please fit the supplied Silicone Rubber Ring on the mounting kit **BEFORE** fixing the mounting kit to the pendant / tube.



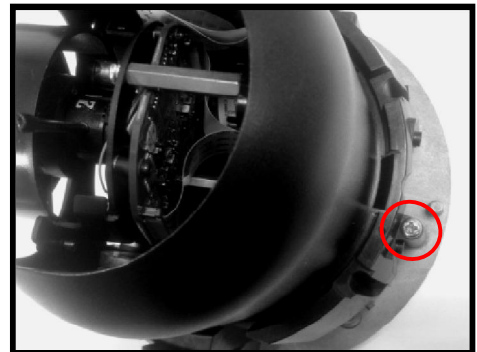
Step 2:

Remove the Dome Cover from the camera by loosening the two Captive Security Screws with the supplied Security Torx.



Step 3:

Loosen the Camera Fastened Screw with the screwdriver (as shown in the right figure).



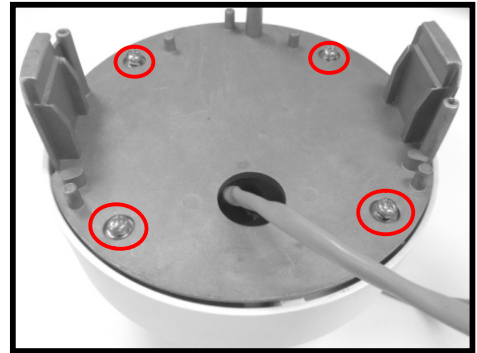
Step 4:

Press and hold the sides of the camera module, and detach it from the Dome Camera's Plate.



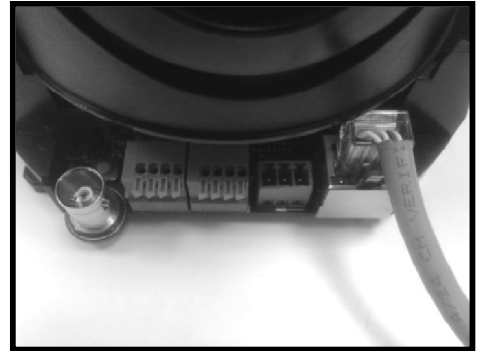
Step 5:

Thread the cable through the back conduit entry of the Dome Camera's Plate. Then fix the Dome Camera's Plate to the mounting kit by screwing on four supplied M4x8 Machine Screws at the positions shown in the right figure.



Step 6:

Connect the Ethernet Cable to the camera, as shown in the right figure.



Step 7:

Place the camera module back to the Dome Camera's Plate, and tightens the Camera Fastened Screw with the screwdriver.



Step 8:

Put the Dome Cover back to the camera, and tighten the Captive Security Screws at each side of the cover.

