Outdoor Dome

Mounting on a Straight Wall using the Wall Mount

Installation Guide

For Models:

B8x

E89

2014/10/24

ACTi
Connecting Vision

Table of Contents

Accessory Set Solutions 4

Heavy Duty Wall Mount Installation Procedures (Cable Passing Through the Wall) 5

Step 1: Prepare for Installation 6

Step 2: Prepare for Waterproof Installation 7

Waterproof Solution with Naked Cable 8

Waterproof Solution with Conduit 10

Step 3: Route the Cable Through the Wall Mount 12

Step 4: Install the Wall Mount 14

Step 5: Prepare the Camera for Installation 15

Step 6: Install the Camera to the Wall Mount 17

Step 7: Connect the Cable(s) 18

Step 8: Access the Camera Live View 19

Step 9: Adjust the Viewing Angle 19

Step 10: Close the Dome Cover 20

Heavy Duty Wall Mount Installation Procedures (Cable Goes Along the Wall) 21

Step 1: Install the Wall Mount 22

Step 2: Prepare for Waterproof Installation 23

Waterproof Solution with Naked Cable 24

Waterproof Solution with Conduit 26

Step 3: Route the Cable Through the Wall Mount 28

Step 4: Prepare the Camera for Installation 30

Step 5: Install the Camera to the Wall Mount 32

Step 6: Connect the Cable(s) 33

Step 7: Access the Camera Live View 34

Step 8: Adjust the Viewing Angle and Focus 34

Step 9: Close the Dome Cover 34

Heavy Duty Wall Mount with Junction Box Installation Procedures 35

Step 1: Install the Junction Box 36

Step 2: Install the Wall Mount 37

Step 3: Install the Power Adapter (Optional) 38

Step 4: Prepare for Waterproof Installation 39

Waterproof Solution with Naked Cable 40

Waterproof Solution with Conduit 42

Step 5: Route the Cable Through the Junction Box and Wall Mount .. 44

Step 6: Prepare the Camera for Installation 46

Step 7: Install the Camera to the Wall Mount 48

Step 8: Connect the Cable(s) 49

Step 9: Access the Camera Live View 50

Step 10: Adjust the Viewing Angle 50

Step 11: Close the Dome Cover 51

Appendices 52

Accessing the Camera Live View 52

Focus and Viewing Angle Adjustments 59

B8x Series 59

E89 60

Safety Information 62

Accessory Set Solutions

Consider the following solutions to install the camera on the wall with the camera facing down as if installed on the ceiling:

Mounting Solution	Cabling Solution	Must Drill a Cable Hole on the Wall
Heavy Duty Wall Mount with Cable Passing Through the Wall	Cable passes through a hole in the wall	Yes
	PMAX-0314	
Heavy Duty Wall Mount with Cable Along the Wall	Cable goes along the wall	No
	PMAX-0314	
Heavy Duty Wall Mount with Junction Box	Usually used when an external power adapter must be housed inside the Junction Box. Cables then exit the Junction Box through one of its cable holes.	No
	PMAX-0702 PMAX-0314	

Heavy Duty Wall Mount Installation Procedures (Cable Passing Through the Wall)

Perform the following procedures to install the camera on a straight wall using the Heavy Duty Wall Mount if the cable will pass through a hole on the wall.

Before starting the installation, make sure that the wall where the camera will be installed can support more than the total weight of the camera with the mounting accessories and other cables.

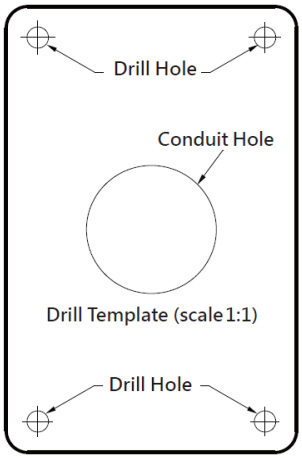
Prepare the following materials needed for installation:

- Heavy Duty Wall Mount package:
  - Wall mount
  - Wall mount plate
  - Screws for camera
  - Drill Template
- Screwdriver
- Screws (x4) to attach the Wall Mount to the wall (not supplied, purchase screws applicable to the wall material where the Wall Mount will be installed)
- Ethernet cable
- Flexible conduit (as needed)

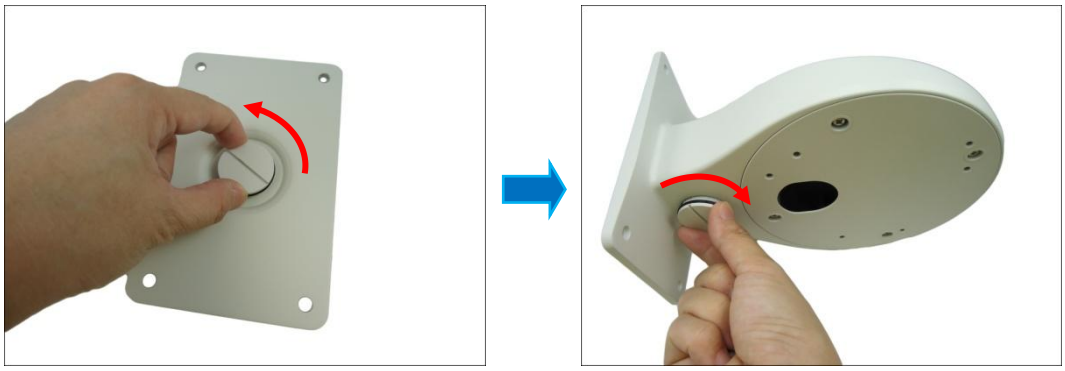
NOTE: The camera images shown in the succeeding pages are provided for reference only, actual camera may slightly differ.

Step 1: Prepare for Installation

1. Attach the drill template (included in the Heavy Duty Wall Mount package) to the wall and drill the screw holes and the cable hole.



2. Remove the cap covering the cable hole of the back plate and attach it to the bottom cable hole of the Wall Mount.



3. Route the cable(s)/conduit to pass through the hole on the wall.

Step 2: Prepare for Waterproof Installation

The camera comes with two (2) glands used for waterproof installation:

- **Cable Gland**: For use with an **Exterior-grade Ethernet cable**. Exterior-grade Ethernet cables are already waterproof. See ***Waterproof Solution with Naked Cable*** on page 8.
- **Conduit Gland**: For use with a flexible conduit. This solution is recommended when an exterior-grade Ethernet cable is not available or when other input/output devices or external power adapter will be connected to the camera (select models only). See ***Waterproof Solution with Conduit*** on page 10.

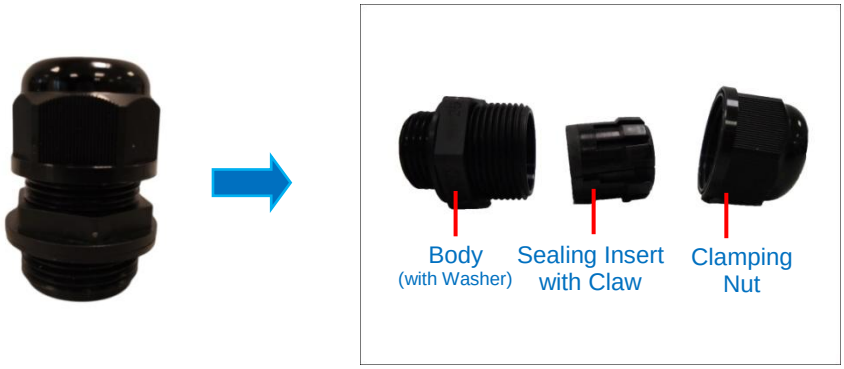
Determine the type of waterproof solution that is applicable to your installation requirements and prepare the necessary accessories or purchase extra materials.

Cable Gland	Conduit Gland
For use with an **Exterior-grade Ethernet cable** (not included in the package).	For use with **1/2”** flexible conduit (not included in the package)

Waterproof Solution with Naked Cable

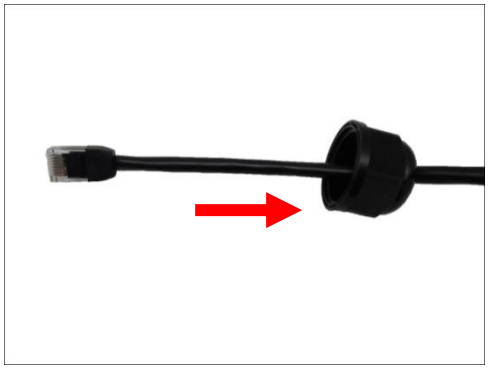
This section describes the procedures in using the bundled cable gland and an exterior-grade Ethernet cable.

1. Disassemble the cable gland as shown below:

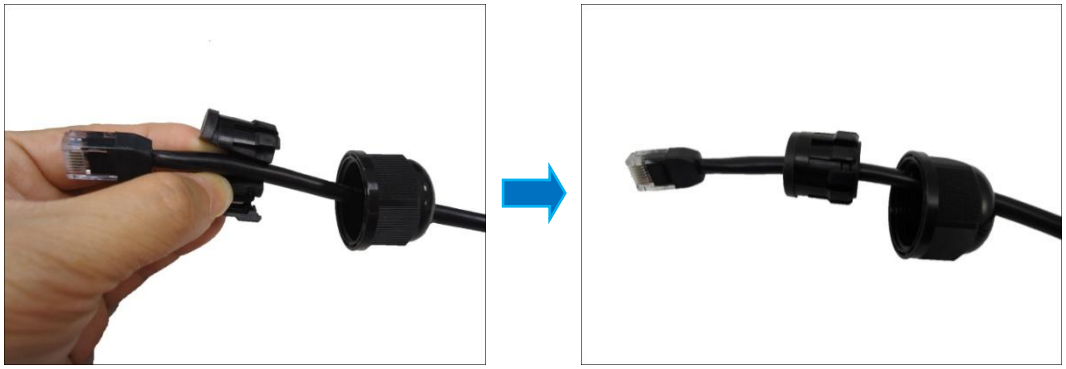


2. Attach the gland body to the cable hole of the back plate.

3. Insert the clamping nut through the cable.



4. Insert the sealing insert.

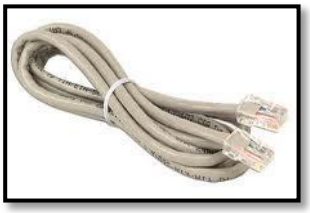


5. Skip to ***Step 3: Route the Cable Through the Wall Mount*** on page 12.

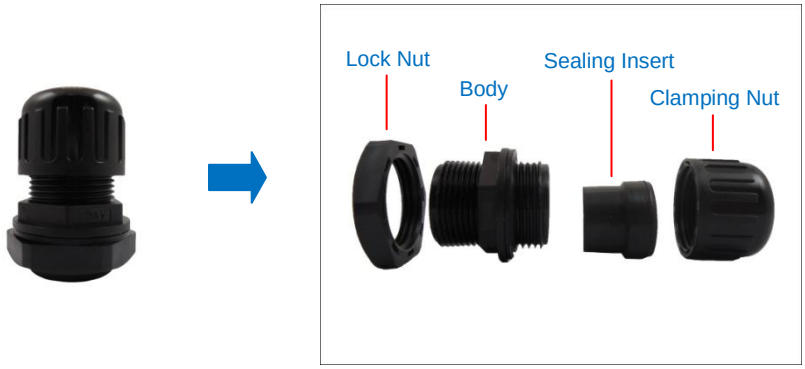
Waterproof Solution with Conduit

This section describes the procedures to waterproof the cabling connections using the bundled conduit gland and flexible conduit. This is the recommended solution when an exterior-grade Ethernet cable is not available or if other input/output devices or an external power adapter will be connected to the camera (select models only).

1. Prepare the following materials for waterproof installation:

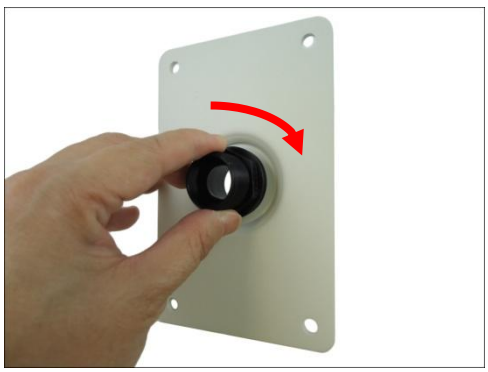
Conduit Gland (included in the camera package)	**Flexible Conduit** 1/2" Trade size (not included in the package)	**Network Cable** CAT 5 or CAT 6 (not included in the package)
For use with 1/2” flexible conduit		

2. Disassemble the bundled conduit gland as shown below:

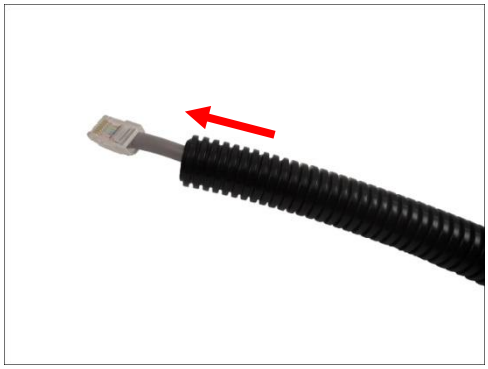


NOTE: In this installation, the conduit gland body can be securely attached to the back plate ; therefore the use of lock nut is not necessary. Please set the lock nut aside.

3. Attach the gland body to the cable hole of the back plate.

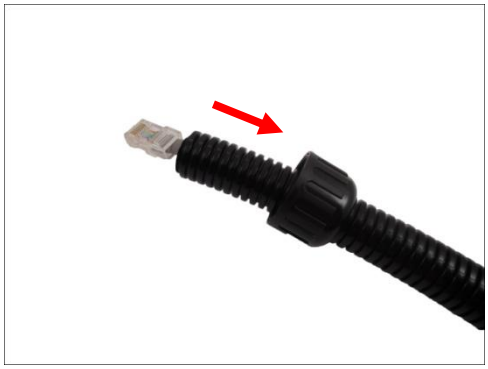


4. Pull the network cable through the flex conduit.

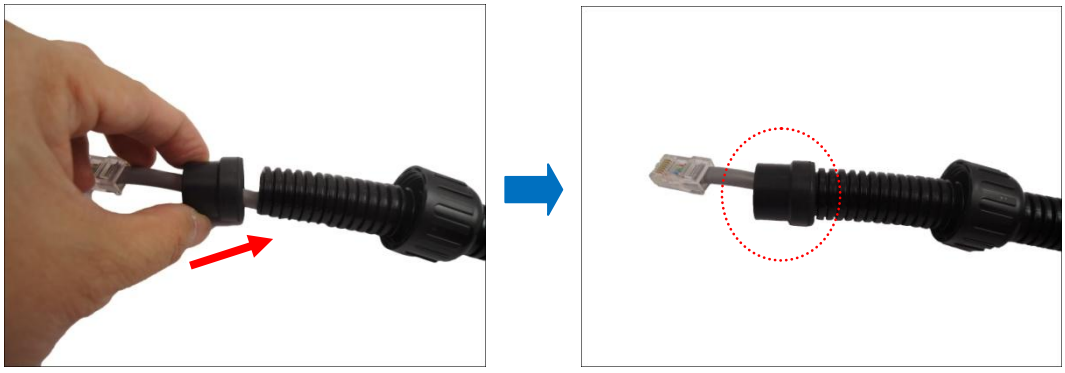


NOTE: For camera models that support external power adaptor, audio in/out, or digital input/output (DI/DO) functions, route the cables without connectors through the flex conduit together with the network cable. Once cables pass through the conduit hole of the camera, attach the bundled connectors. For more information on connecting these cables, please refer to the camera model hardware manual downloadable from the website (www.acti.com).

5. Insert the clamping nut.



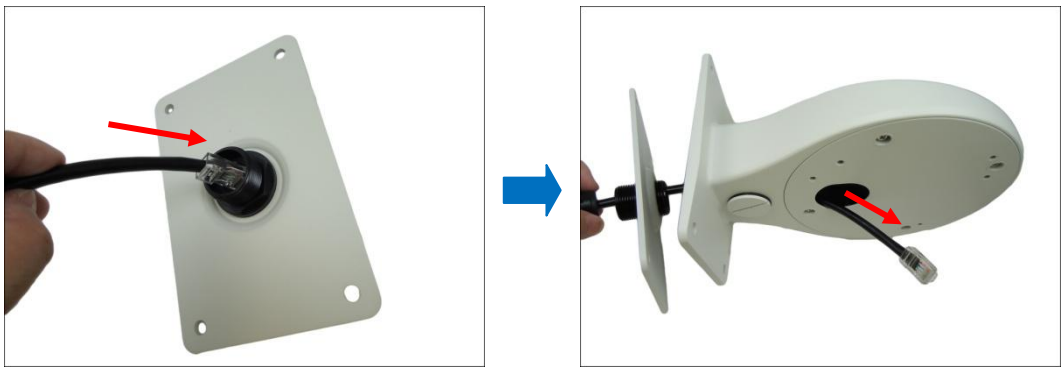
6. Insert the sealing insert at the end of the flex conduit.



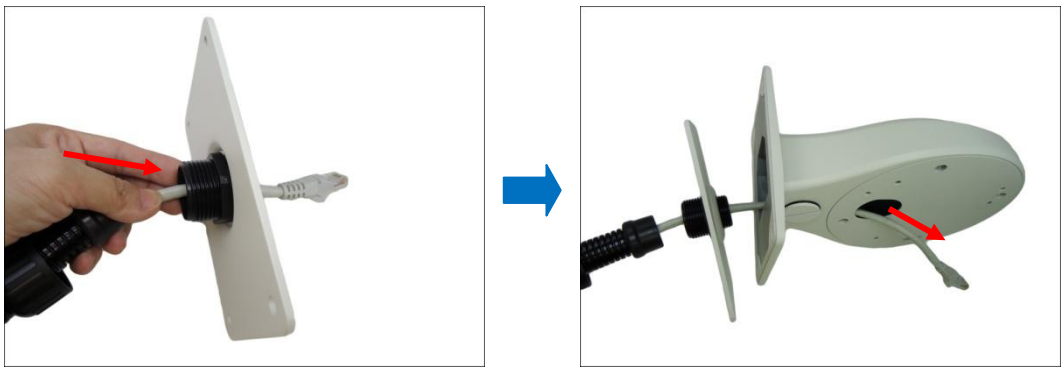
Step 3: Route the Cable Through the Wall Mount

1. Without connecting the cable/conduit gland parts, pull enough length of the network cable (and other cables, such as power or input/output device, if any).
2. Insert the cable through the back plate and the wall mount and route the cable to go through the hole marked below.

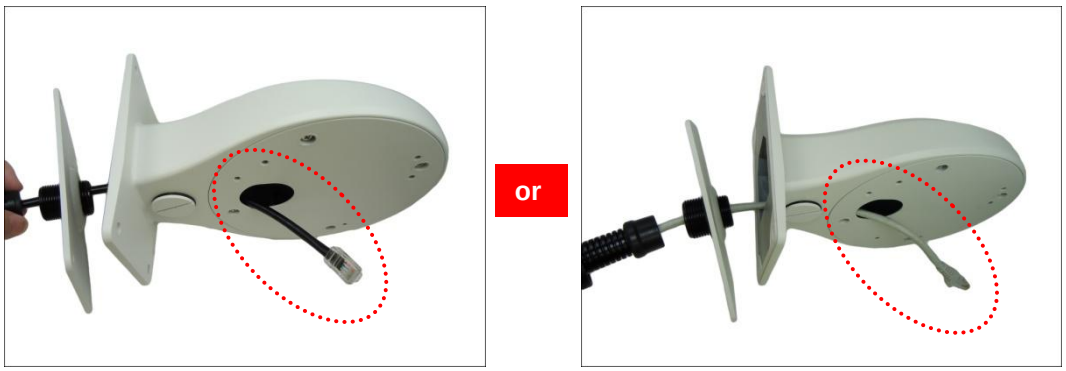
Using the Cable Gland



Using the Conduit Gland



3. Make sure to leave enough length of cable to connect to the camera later.

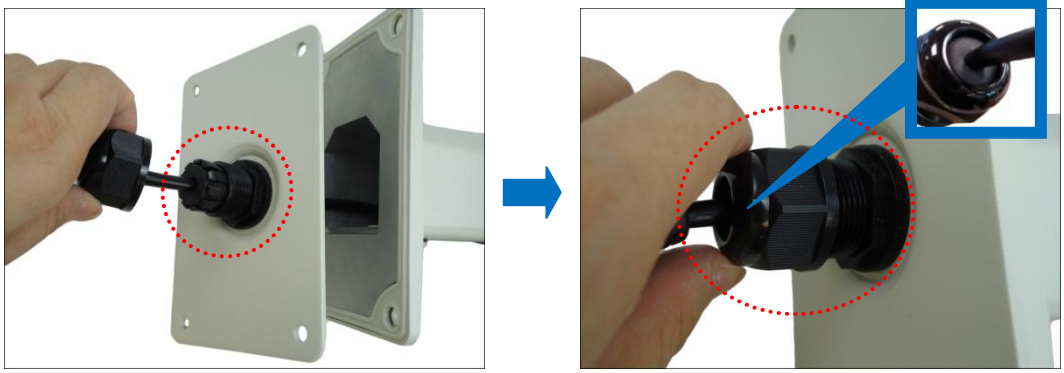


Cable Gland Solution | Conduit Gland Solution

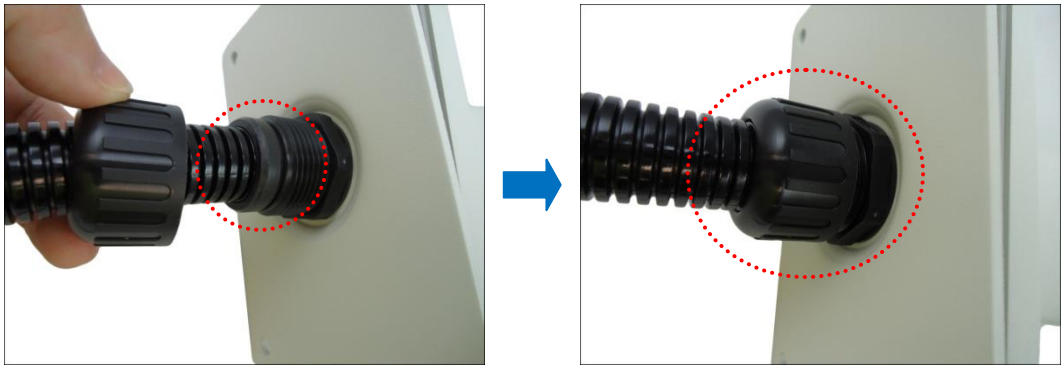
NOTE: When using the naked cable with the cable gland solution, be sure to pull enough length of the cable to connect to the camera later. Once the clamping nut is tightened, the cable cannot be pulled anymore.

4. Insert the sealing insert into the gland body and then attach the clamping nut to complete the cable solution.

Using the Cable Gland



Using the Conduit Gland



NOTE:

- Ensure that the clamping nut is tightly attached to the gland body.
- When using the naked cable with cable gland solution, be sure to pull enough length of the cable to connect to the camera later. Once the clamping nut is tightened, the cable cannot be pulled anymore.

Step 4: Install the Wall Mount

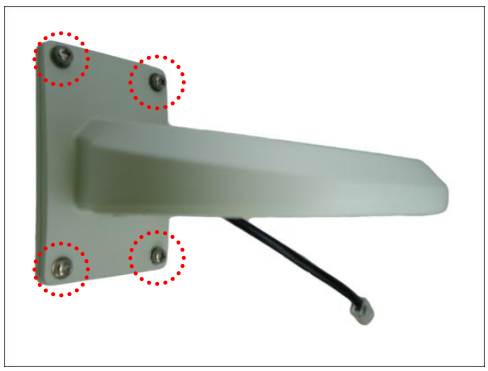
1. Align the back plate to the Wall Mount and push the excess cable through the hole on the wall.

Cable Gland Solution

or

Conduit Gland Solution

2. Secure the Wall Mount to the wall using four (4) screws (purchased separately).



NOTE: Make sure to purchase screws applicable to the wall material where the wall mount is to be installed.

Step 5: Prepare the Camera for Installation

NOTE: To avoid scratches or leaving fingerprints on the dome cover, it is recommended to retain the plastic covering the dome cover until the camera is completely installed. However, the plastic has been removed on some of the pictures in this documentation to show clarity of the procedures being described.

1. Remove the metal cap covering the bottom hole of the camera, and attach the cap to the side hole to close it.

NOTE: Make sure the cap is secured tightly by using tools (like coin) to tighten the cap.

2. With the bundled hex screwdriver, loosen the three (3) screws securing the dome cover.

3. Carefully lift to open the dome cover and place it on the side of the camera.

NOTE: Do not abruptly lift the dome cover; it is attached to the camera with a spring wire.

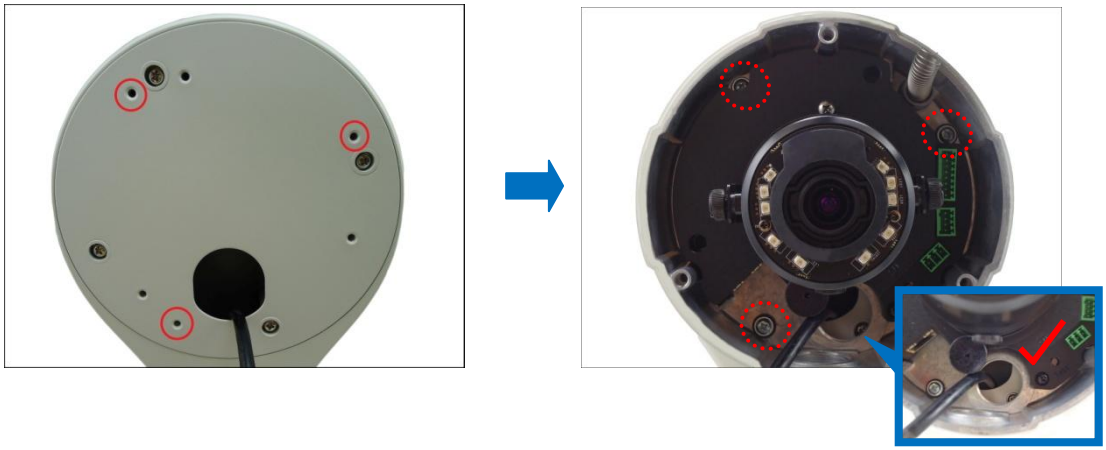
4. If necessary, insert a memory card, with the metallic contacts facing down, into the card slot of the camera.

Step 6: Install the Camera to the Wall Mount

1. Insert the network cable and other cables (if any) through the bottom cable hole of the camera.

2. Align the camera screw holes to the corresponding holes on the Wall Mount and attach the three (3) supplied screws (included in the Wall Mount package) to secure the camera.

   NOTE: There are at least 2 different types of screws included in the Wall Mount package, select the screw type applicable to the camera model.

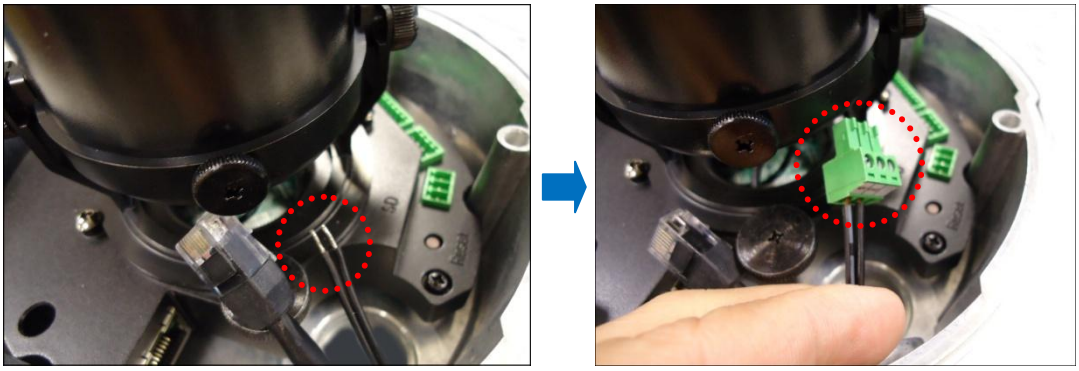


⚠ **CAUTION:** ***When using electric screwdrivers,*** be careful not to touch the internal camera components while attaching the screws. Since electric screwdrivers vary in sizes, speed, and force, they may bruise and damage the internal camera components.

DISCLAIMER: ACTi will not be responsible for camera damage caused by improper installations or the misuse of equipment for installation.

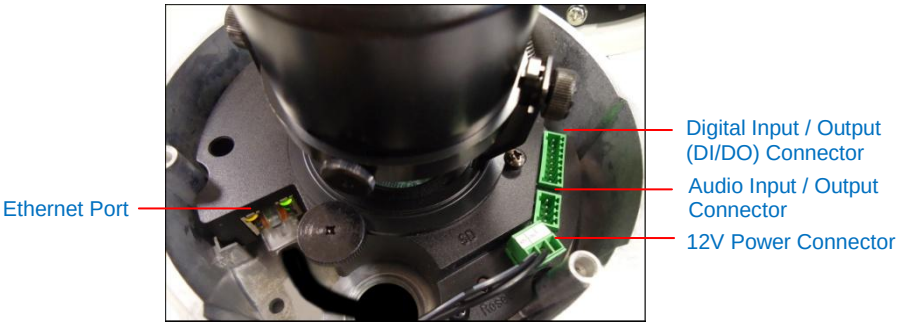
Step 7: Connect the Cable(s)

1. For camera models that support external power adaptor, audio in/out, or digital input/output (DI/DO) functions, attach the bundled connectors. Below is an example of connecting the power adaptor terminal connector. Otherwise, skip to the next step.



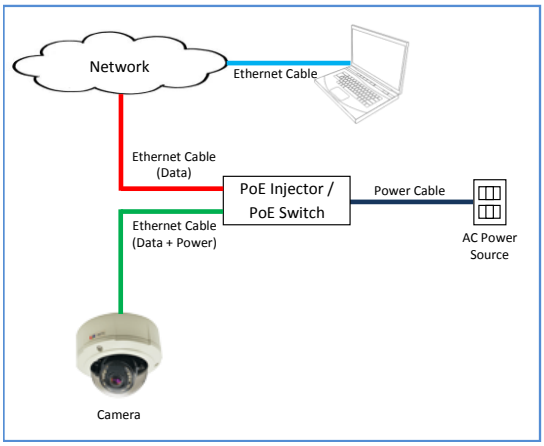
NOTE: For more information on connecting these cables, please refer to the camera model hardware manual downloadable from the website (www.acti.com).

2. Connect the network cable to the Ethernet port and the other cables (if any) to the corresponding connectors on the camera.



NOTE: The above image is for reference only. Available connectors and its placement vary depending on model.

3. Connect the other end of the network cable to a switch or injector. Then, connect the switch or injector to a network or PC and a power source. See the following Power-over-Ethernet example connection diagram.



In case of using a non-PoE switch, power up the camera using a power adapter (not supplied). As needed, power up the other connected devices.

Step 8: Access the Camera Live View

See ***Accessing the Camera Live View*** on page 52 for more information.

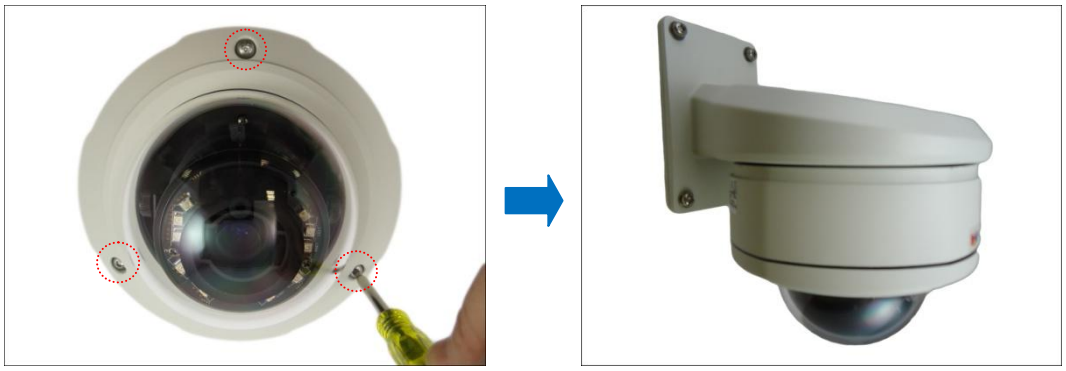
Step 9: Adjust the Viewing Angle

Based on the Live View, adjust the viewing angle, orientation and focus (if applicable) of the camera. Adjustments vary per model, for detailed information, please refer to the following sections:

- For B8x camera models, see ***B8x Series*** on page 59.
- For E89 camera model, see ***E89*** on page 60.

Step 10: Close the Dome Cover

Tighten the three (3) screws to attach the dome cover to the camera body. An example of a complete installation is shown below.



Heavy Duty Wall Mount Installation Procedures (Cable Goes Along the Wall)

Use this solution to install the camera on a straight wall using the Heavy Duty Wall Mount if the cables cannot or should not pass through the wall, thus the cable will be routed along the wall.

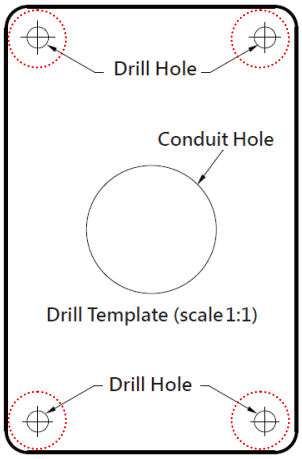
Before starting the installation, make sure that the wall where the camera will be installed can support the more than the total weight of the camera with the mounting accessories and other cables.

Prepare the following materials needed for installation:

- Heavy Duty Wall Mount package:
  - Wall mount
  - Wall mount plate
  - Screws for camera
  - Drill Template
- Screwdriver
- Screws (x4) to attach the Wall Mount to the wall (not supplied, purchase screws applicable to the wall material where the Wall Mount will be installed)
- Ethernet cable
- Flexible conduit (as needed)

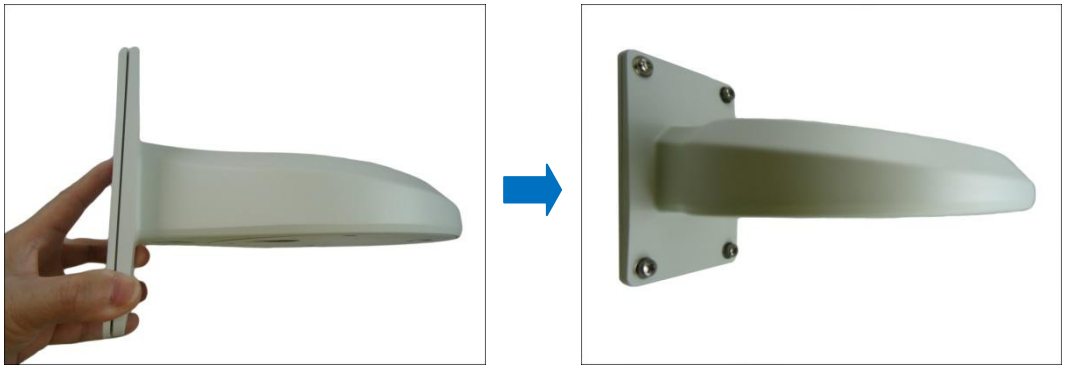
Step 1: Install the Wall Mount

1. Attach the drill template (included in the Heavy Duty Wall Mount package) to the wall and drill the screw holes.



3. The use of the back plate is not necessary if installing the Wall Mount on a flat even surface. However, in case the surface is rough or uneven, it is recommended to use the back plate to ensure the Wall Mount is sealed from the inside.

   Align the back plate to the Wall Mount and install the Wall Mount to the wall using four (4) screws (purchased separately).



NOTE: Make sure to purchase screws applicable to the wall material where the wall mount is to be installed.

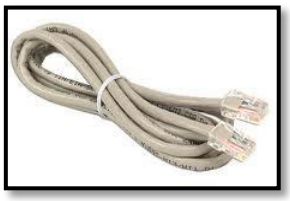
2. Route the cable(s) to go along the wall.

Step 2: Prepare for Waterproof Installation

The camera comes with two (2) glands used for waterproof installation:

- **Cable Gland**: For use with an **Exterior-grade Ethernet cable**. Exterior-grade Ethernet cables are already waterproof. See ***Waterproof Solution with Naked Cable*** on page 24.
- **Conduit Gland**: For use with a flexible conduit. This solution is recommended when an exterior-grade Ethernet cable is not available or when other input/output devices or external power adapter will be connected to the camera (select models only). See ***Waterproof Solution with Conduit*** on page 26.

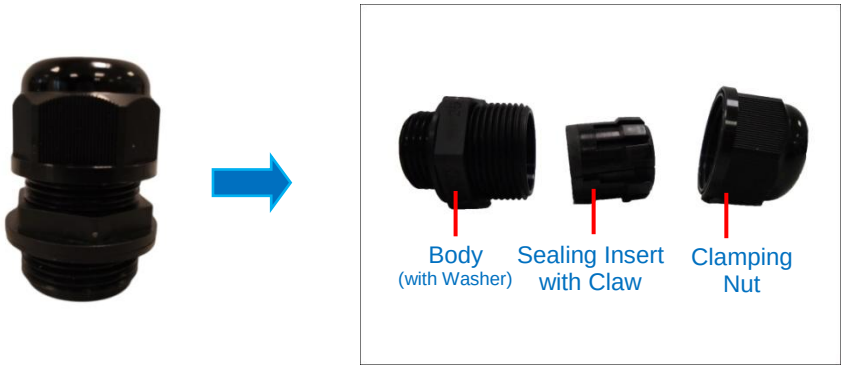
Determine the type of waterproof solution that is applicable to your installation requirements and prepare the necessary accessories or purchase extra materials.

Cable Gland	Conduit Gland
For use with an **Exterior-grade Ethernet cable** (not included in the package).	For use with **1/2”** flexible conduit (not included in the package)
	

Waterproof Solution with Naked Cable

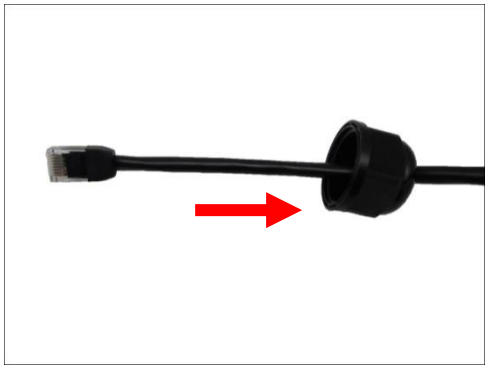
This section describes the procedures in using the bundled cable gland and an exterior-grade Ethernet cable.

1. Disassemble the cable gland as shown below:

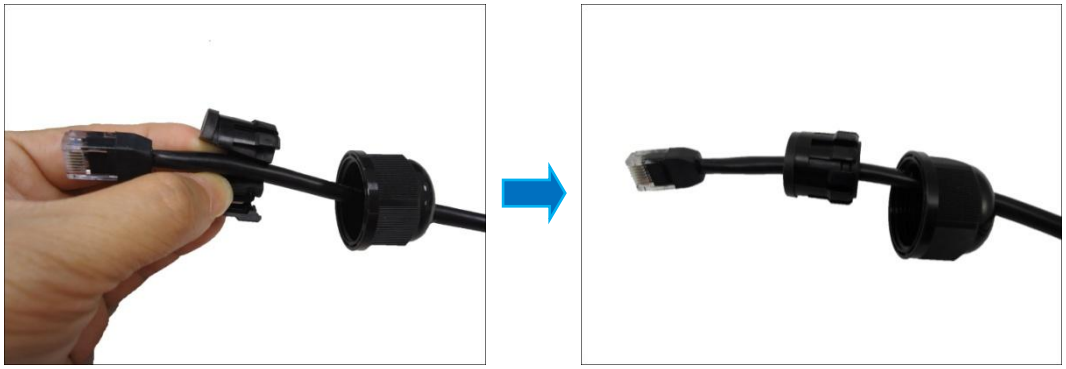


2. Attach the gland body to the bottom cable hole of the Wall Mount.

3. Insert the clamping nut through the cable.



4. Insert the sealing insert.

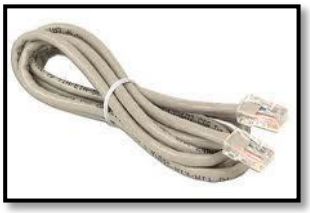


5. Skip to ***Step 3: Route the Cable Through the Wall Mount*** on page 28.

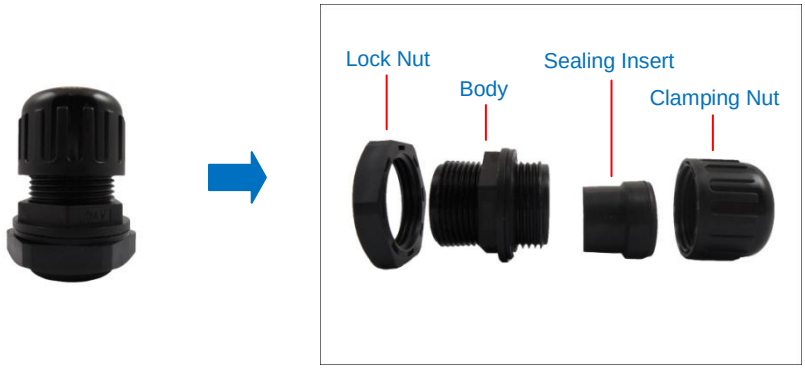
Waterproof Solution with Conduit

This section describes the procedures to waterproof the cabling connections using the bundled conduit gland and flexible conduit. This is the recommended when an exterior-grade Ethernet cable is not available or if other input/output devices or an external power adapter will be connected to the camera (select models only).

1. Prepare the following materials for waterproof installation:

Conduit Gland (included in the camera package)	**Flexible Conduit** 1/2" Trade size (not included in the package)	**Network Cable** CAT 5 or CAT 6 (not included in the package)
For use with 1/2” flexible conduit		

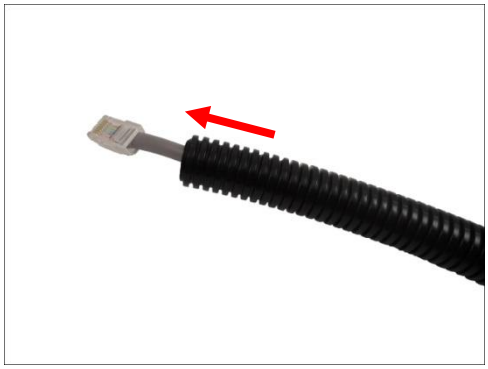
2. Disassemble the bundled conduit gland as shown below:



NOTE: In this installation, the conduit gland body can be securely attached to the back plate ; therefore the use of lock nut is not necessary. Please set the lock nut aside.

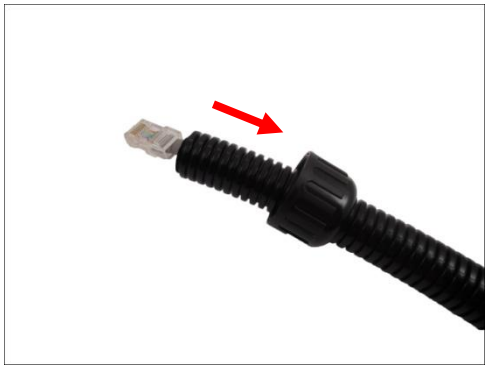
3. Attach the gland body to the bottom cable hole of the camera.

4. Pull the network cable through the flex conduit.

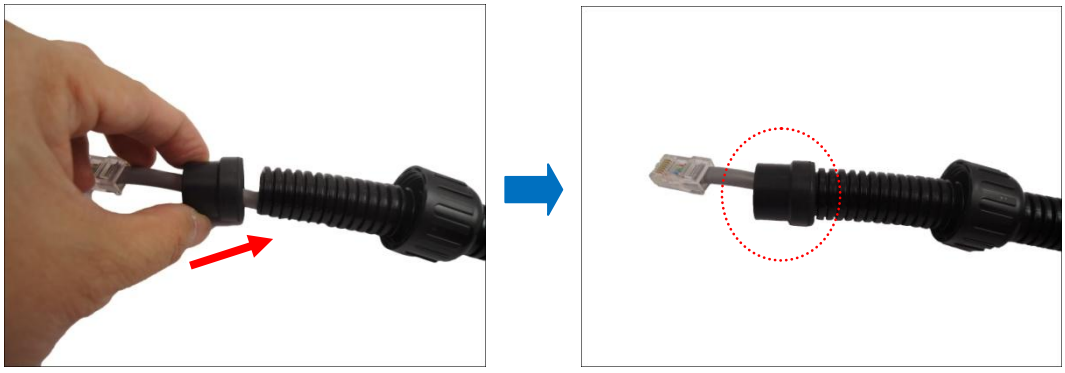


NOTE: For camera models that support external power adaptor, audio in/out, or digital input/output (DI/DO) functions, route the cables without connectors through the flex conduit together with the network cable. Once cables pass through the conduit hole of the camera, attach the bundled connectors. For more information on connecting these cables, please refer to the camera model hardware manual downloadable from the website (www.acti.com).

5. Insert the clamping nut.

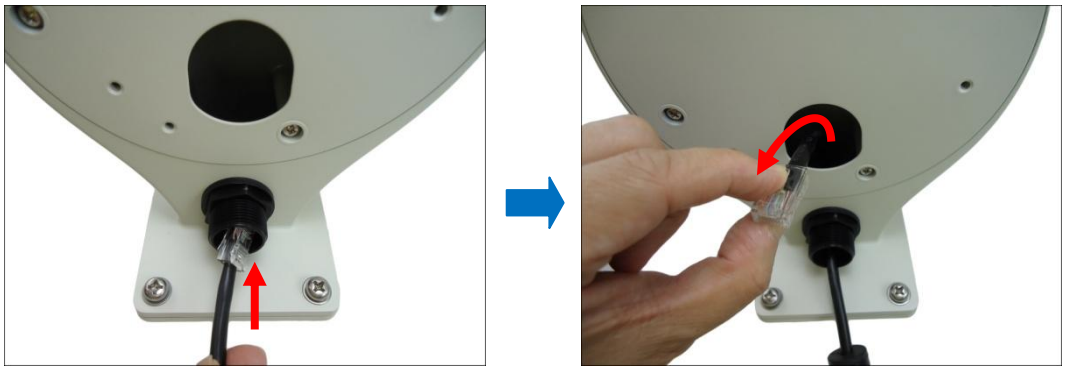


6. Insert the sealing insert at the end of the flex conduit.

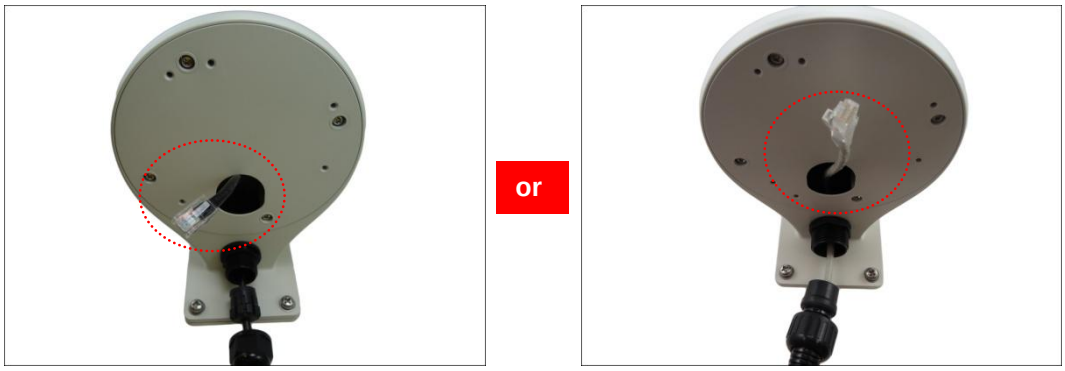


Step 3: Route the Cable Through the Wall Mount

1. Without connecting the cable/conduit gland parts, insert the cable into the bottom cable hole and out through the hole marked below.



2. Pull enough length of the network cable (and other cables, such as power or input/output device, if any) to connect to the camera later.



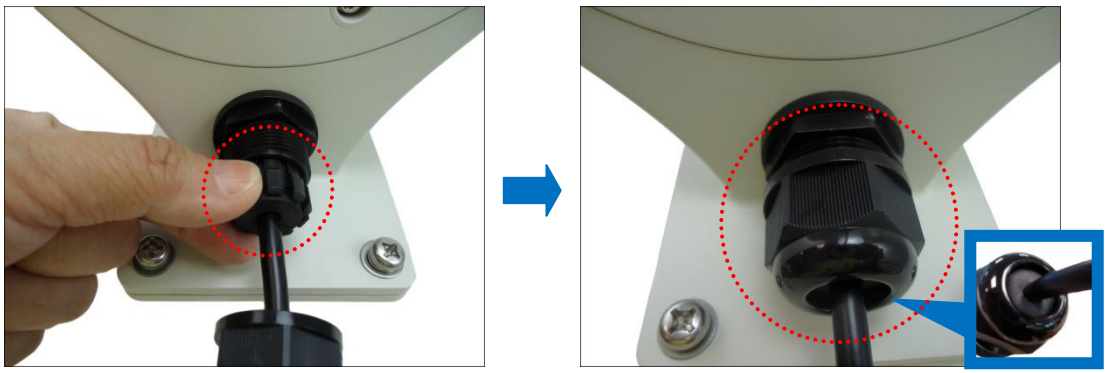
Cable Gland Solution

Conduit Gland Solution

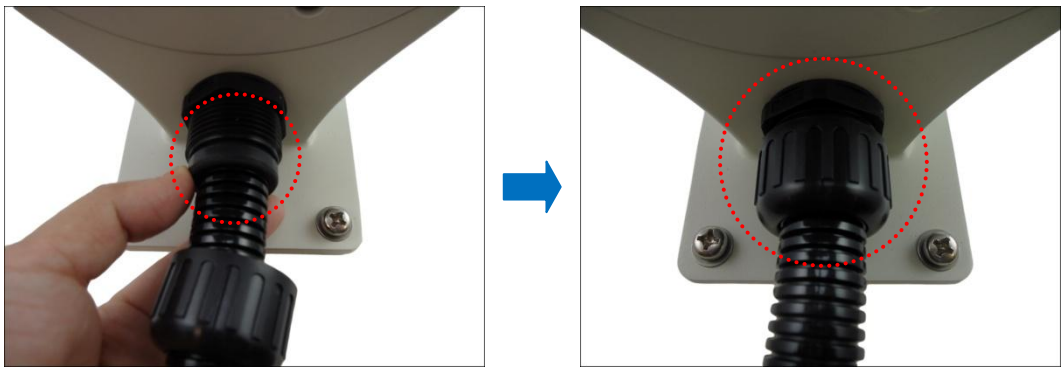
NOTE: When using the naked cable with the cable gland solution, be sure to pull enough length of the cable to connect to the camera later. Once the clamping nut is tightened, the cable cannot be pulled anymore.

3. Insert the sealing insert into the gland body and then attach the clamping nut to complete the cable solution.

Using the Cable Gland



Using the Conduit Gland



NOTE:

- Ensure that the clamping nut is tightly attached to the gland body.
- When using the naked cable with cable gland solution, be sure to pull enough length of the cable to connect to the camera later. Once the clamping nut is tightened, the cable cannot be pulled anymore.

Step 4: Prepare the Camera for Installation

NOTE: To avoid scratches or leaving fingerprints on the dome cover, it is recommended to retain the plastic covering the dome cover until the camera is completely installed. However, the plastic has been removed on some of the pictures in this documentation to show clarity of the procedures being described.

1. Remove the metal cap covering the bottom hole of the camera, and attach the cap to the side hole to close it.

NOTE: Make sure the cap is secured tightly by using tools (like coin) to tighten the cap.

2. With the bundled hex screwdriver, loosen the three (3) screws securing the dome cover.

3. Carefully lift to open the dome cover and place it on the side of the camera.

NOTE: Do not abruptly lift the dome cover; it is attached to the camera with a spring wire.

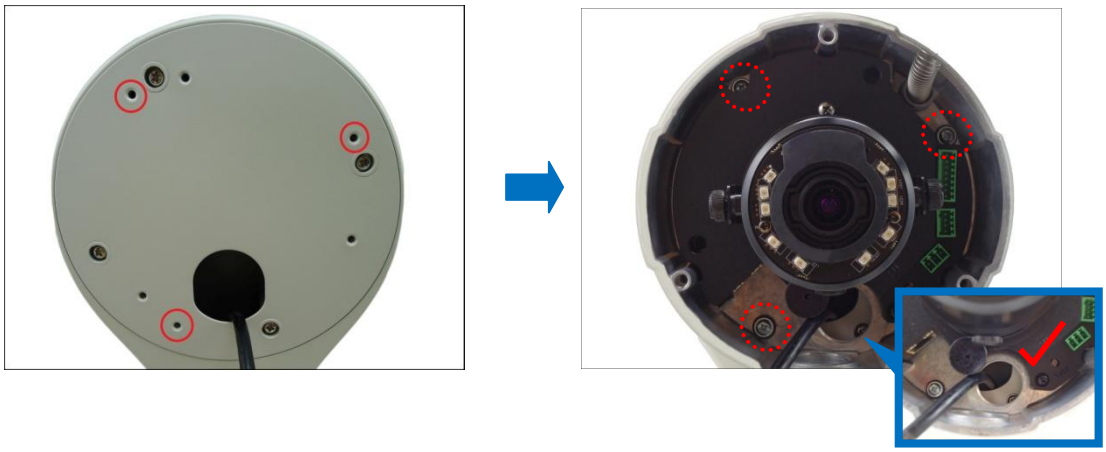
4. If necessary, insert a memory card, with the metallic contacts facing down, into the card slot of the camera.

Step 5: Install the Camera to the Wall Mount

1. Insert the network cable and other cables (if any) through the bottom cable hole of the camera.

2. Align the camera screw holes and the cable hole to the corresponding holes on the Wall Mount and attach the three (3) supplied screws (included in the Wall Mount package) to secure the camera.

NOTE: There are at least 2 different types of screws included in the Wall Mount package, select the screw type applicable to the camera model.

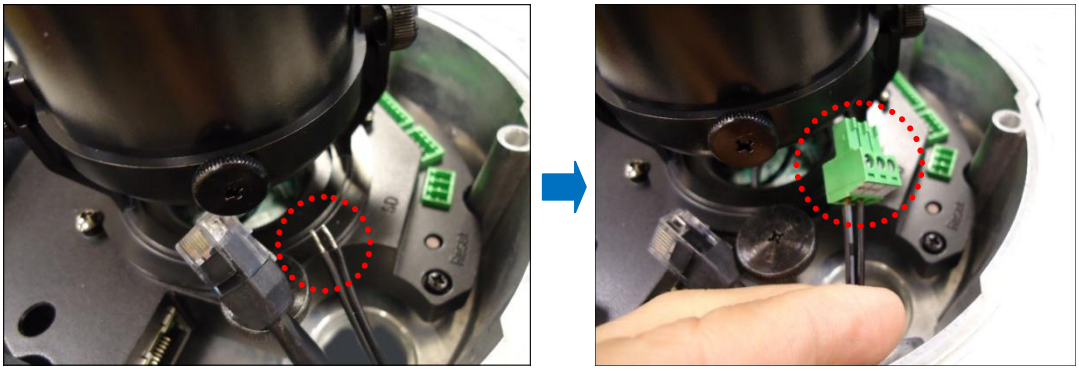


⚠ **CAUTION:** ***When using electric screwdrivers,*** be careful not to touch the internal camera components while attaching the screws. Since electric screwdrivers vary in sizes, speed, and force, they may bruise and damage the internal camera components.

DISCLAIMER: ACTi will not be responsible for camera damage caused by improper installations or the misuse of equipment for installation.

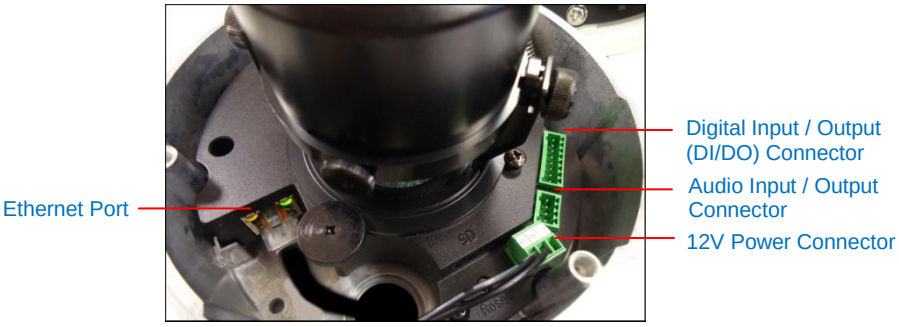
Step 6: Connect the Cable(s)

1. For camera models that support external power adaptor, audio in/out, or digital input/output (DI/DO) functions, attach the bundled connectors. Below is an example of connecting the power adaptor terminal connector. Otherwise, skip to the next step.



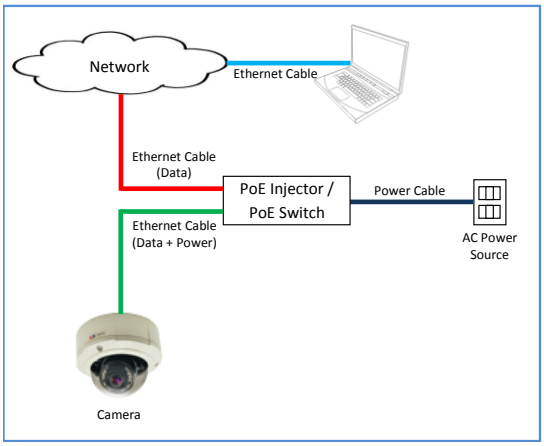
NOTE: For more information on connecting these cables, please refer to the camera model hardware manual downloadable from the website (www.acti.com).

2. Connect the network cable to the Ethernet port and the other cables (if any) to the corresponding connectors on the camera.



NOTE: The above image is for reference only. Available connectors and its placement vary depending on model.

3. Connect the other end of the network cable to a switch or injector. Then, connect the switch or injector to a network or PC and a power source. See the following Power-over-Ethernet example connection diagram.



In case of using a non-PoE switch, power up the camera using a power adapter (not supplied). As needed, power up the other connected devices.

Step 7: Access the Camera Live View

See ***Accessing the Camera Live View*** on page 52 for more information.

Step 8: Adjust the Viewing Angle and Focus

Based on the Live View, adjust the viewing angle, orientation and focus (if applicable) of the camera. Adjustments vary per model, for detailed information, please refer to the following sections:

- For B8x camera models, see ***B8x Series*** on page 59.
- For E89 camera model, see ***E89*** on page 60.

Step 9: Close the Dome Cover

Tighten the three (3) screws to attach the dome cover to the camera body. Final installation examples as shown below:

Cable Gland Solution

or

Conduit Gland Solution

Heavy Duty Wall Mount with Junction Box Installation Procedures

Use this solution to install the camera on a straight wall using the Heavy Duty Wall Mount and Junction Box. The Junction Box is used to house the power injector, power adapter or other cable connections to protect it from different environmental factors.

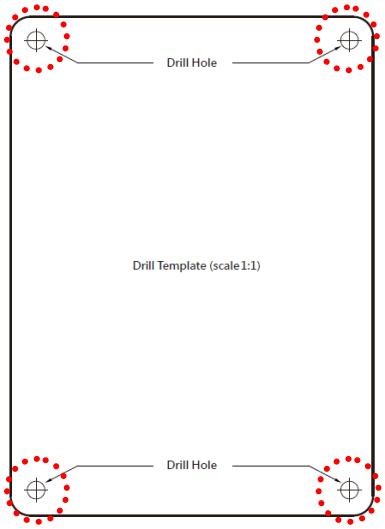
Before starting the installation, make sure that the wall where the camera will be installed can support more than the total weight of the camera with the mounting accessories and other cables.

Prepare the following materials needed for installation:

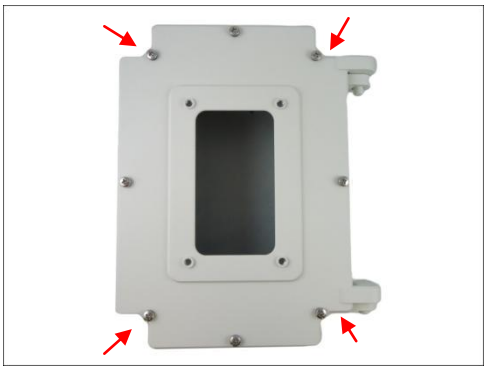
- Junction Box package:
  - Junction Box
  - (4) Mounting Screws (Wall Mount to Junction Box)
  - (2) Fixing screws for power adapter
  - Cable / Conduit Gland Connector
  - Drill Template
- Heavy Duty Wall Mount package:
  - Wall mount (the bundled wall mount back plate is not needed in this installation)
  - Screws for camera
  - Drill Template
- Screwdriver
- (4) Screws to attach the Junction Box to the wall (not supplied, purchase screws applicable to the wall material where the Junction Box will be installed)
- Ethernet cable
- Flexible conduit (as needed)

Step 1: Install the Junction Box

1. Attach the drill template (included in the Junction Box package) to the wall and drill the screw holes.



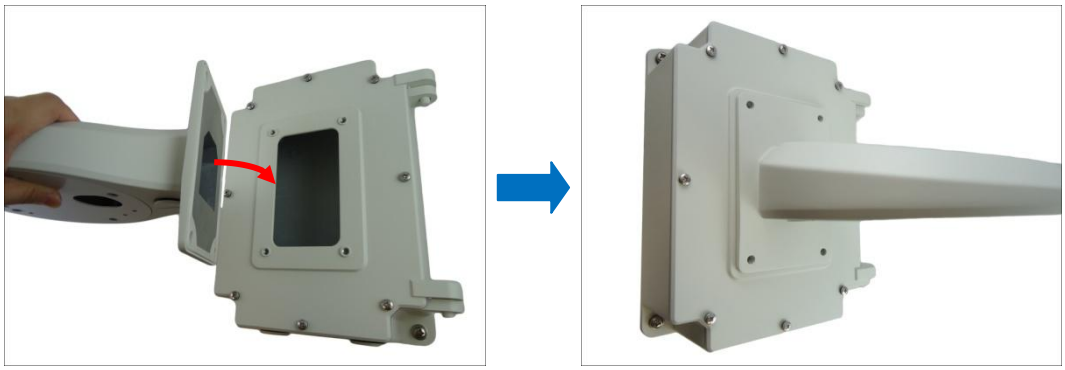
2. Install the Junction box onto the wall using the four (4) screws (purchased separately).



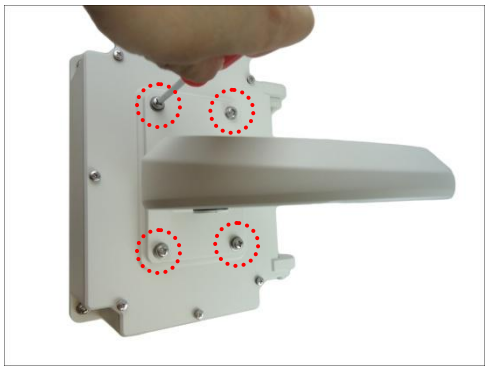
NOTE: Make sure to purchase screws applicable to the wall material where the wall mount is to be installed.

Step 2: Install the Wall Mount

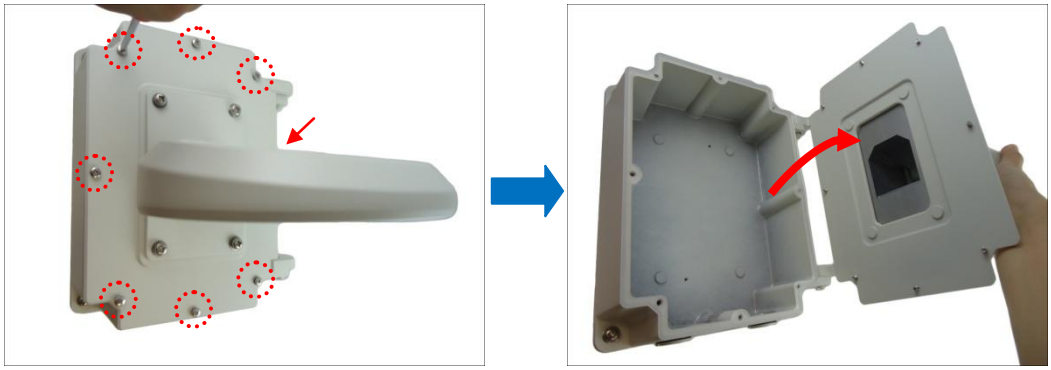
1. Without attaching the base plate, align the Wall Mount to the Junction Box.



2. Attach the four M6x10 screws (bundled with the Junction Box) to secure the Wall Mount to the Junction Box.

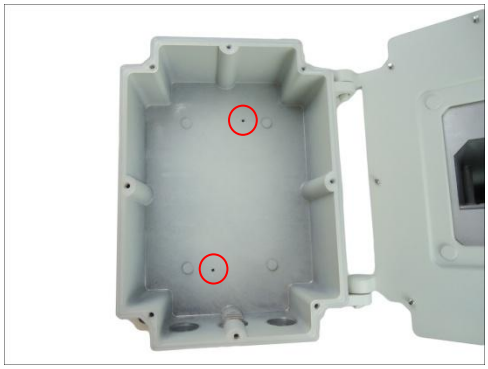


3. Loosen the eight (8) screws to open the Junction Box door.



Step 3: Install the Power Adapter (Optional)

If a power adapter will be used, install the power adapter inside the Junction Box. There are two screw holes inside the box that can be used to fix the position of the power injector / adapter or other cables using the two fixing screws (bundled in the Junction Box). Use them as needed.



Below is an example.

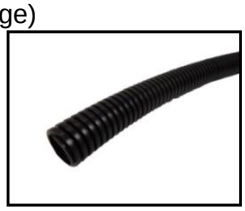
Step 4: Prepare for Waterproof Installation

The Junction Box has three cable holes that can be used to route the cables. Remove the cap(s) covering the cable holes as needed. Otherwise, leave the caps tightly screwed to the Junction Box to avoid water leakage.

The Junction Box comes with two (2) Conduit Glands and one (1) Cable Gland used for waterproof installations.

- **Cable Gland**: For use with an ***Exterior-grade Ethernet cable***. Exterior-grade Ethernet cables are already waterproof. See ***Waterproof Solution with Naked Cable*** on page 24.
- **Conduit Gland**: For use with a flexible conduit. This solution is recommended when an exterior-grade Ethernet cable is not available or when other input/output devices or external power adapter will be connected to the camera (select models only). See ***Waterproof Solution with Conduit*** on page 26.

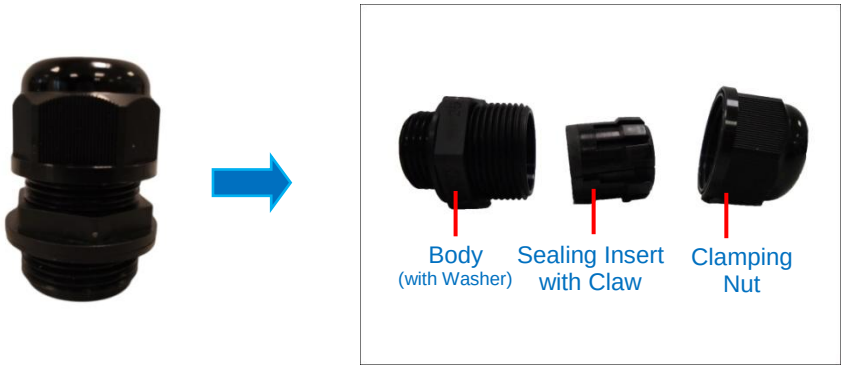
Determine the type of waterproof solution that is applicable to your installation requirements and prepare the necessary accessories or purchase extra materials.

Cable Gland x 1	Conduit Gland x 2
For use with an **Exterior-grade Ethernet cable** (not included in the package).	For use with **1/2”** flexible conduit (not included in the package) 

Waterproof Solution with Naked Cable

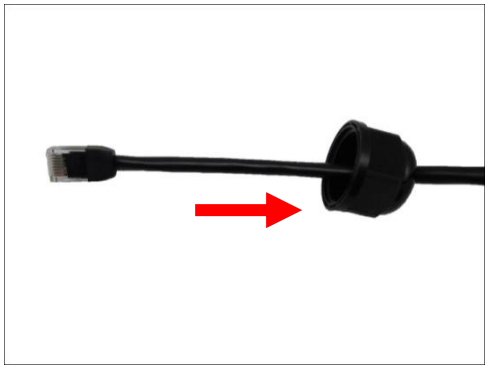
This section describes the procedures in using the bundled cable gland and an exterior-grade Ethernet cable.

1. Disassemble the cable gland as shown below:

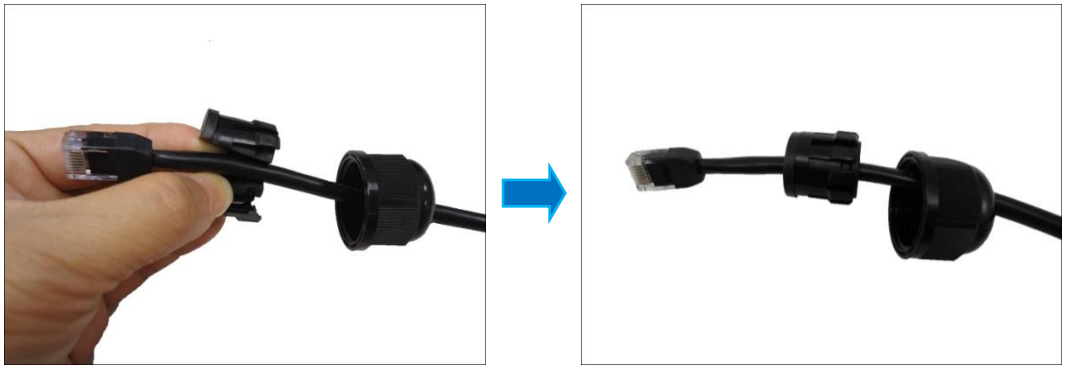


2. Attach the gland body to one of the cable holes of the Junction Box.

3. Insert the clamping nut through the cable.



4. Insert the sealing insert.

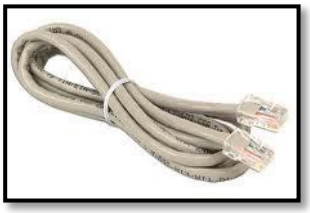


5. Skip to ***Step 5: Route the Cable Through the Junction Box and Wall Mount*** on page 44.

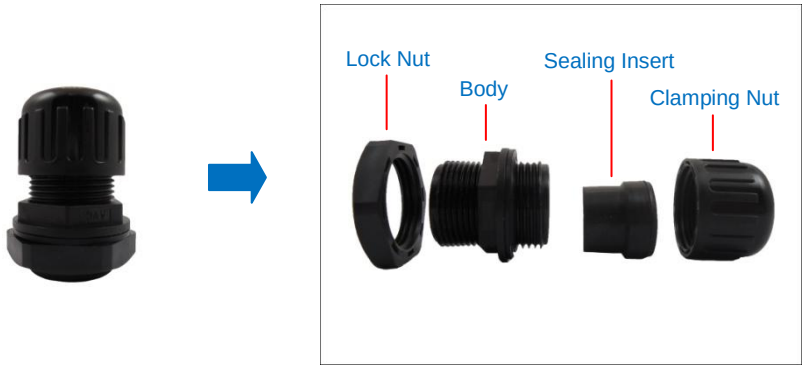
Waterproof Solution with Conduit

This section describes the procedures to waterproof the cabling connections using the bundled conduit gland and flexible conduit. This is the recommended when an exterior-grade Ethernet cable is not available or if other input/output devices or an external power adapter will be connected to the camera (select models only).

1. Prepare the following materials for waterproof installation:

Conduit Gland (included in the camera package)	**Flexible Conduit** 1/2" Trade size (not included in the package)	**Network Cable** CAT 5 or CAT 6 (not included in the package)
For use with 1/2” flexible conduit		

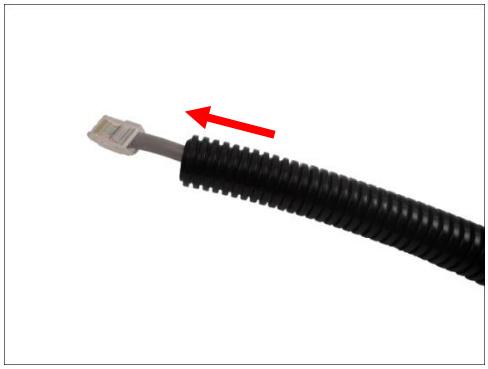
2. Disassemble the bundled conduit gland as shown below:



NOTE: In this installation, the conduit gland body can be securely attached to the back plate ; therefore the use of lock nut is not necessary. Please set the lock nut aside.

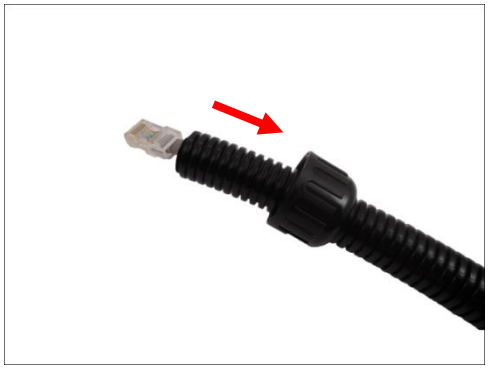
3. Attach the gland body to one of the cable holes of the Junction Box.

4. Pull the network cable through the flex conduit.

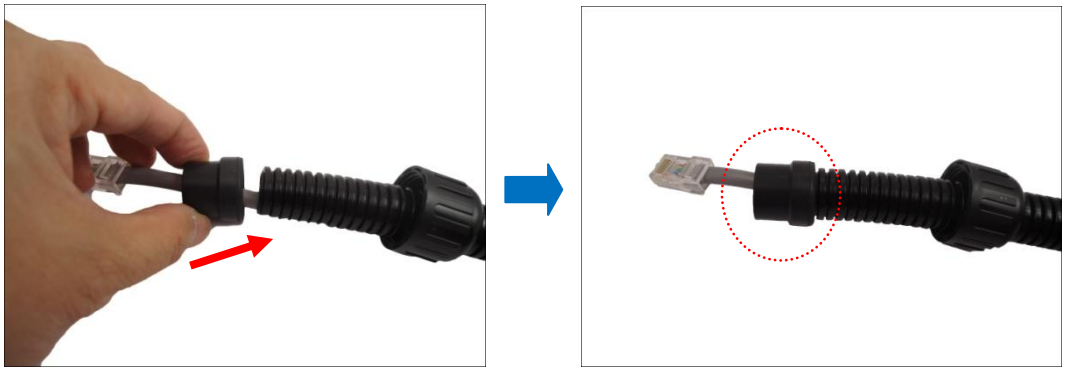


NOTE: For camera models that support external power adaptor, audio in/out, or digital input/output (DI/DO) functions, route the cables without connectors through the flex conduit together with the network cable. Once cables pass through the hole on the camera, attach the bundled connectors. For more information on connecting these cables, please refer to the camera model hardware manual downloadable from the website (www.acti.com).

5. Insert the clamping nut.



6. Insert the sealing insert at the end of the flex conduit.



Step 5: Route the Cable Through the Junction Box and Wall Mount

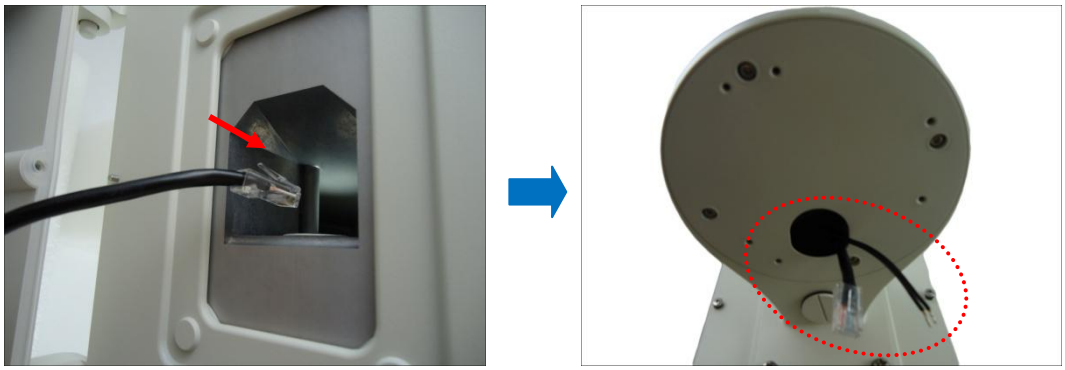
1. Without connecting the cable/conduit gland parts, pull enough length of the network cable (and other cables, such as power or input/output device, if any).
2. Insert the cable through the Junction Box.

Using the Cable Gland

or

Using the Conduit Gland

3. Route the cable through the Wall Mount and out through the hole marked below. Make sure to leave enough length of cable to connect to the camera later.

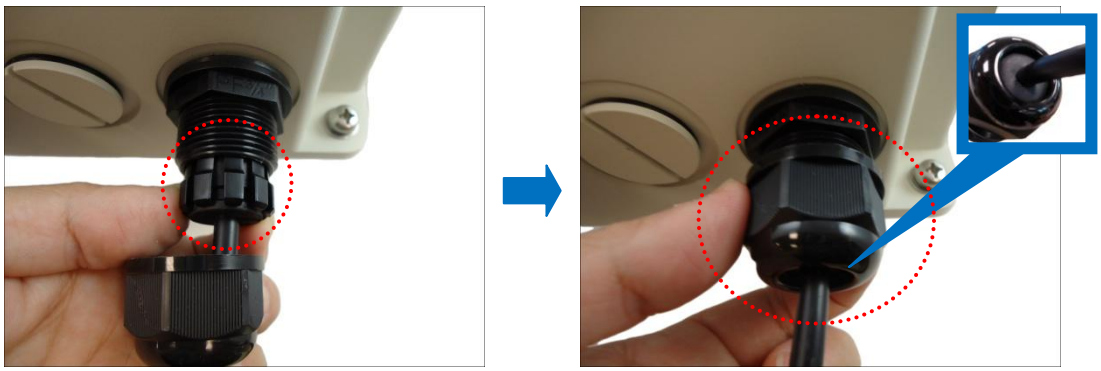


NOTE: When using the naked cable with the cable gland solution, be sure to pull enough length of the cable to connect to the camera later. Once the clamping nut is tightened, the cable cannot be pulled anymore.

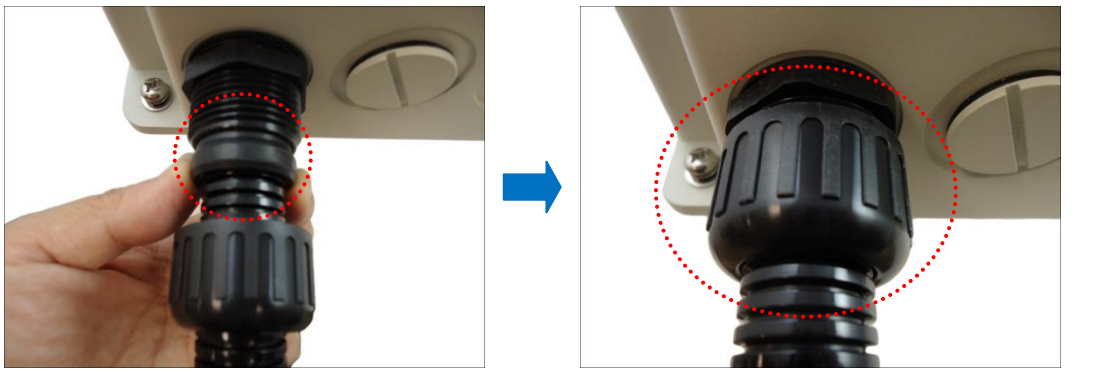
4. Close the Junction Box. Tighten the eight (8) screws to secure and seal the Junction Box door.

5. Insert the sealing insert into the gland body and then attach the clamping nut to complete the cable solution.

Using the Cable Gland



Using the Conduit Gland



NOTE:

- Ensure that the clamping nut is tightly attached to the gland body.
- When using the naked cable with cable gland solution, be sure to pull enough length of the cable to connect to the camera later. Once the clamping nut is tightened, the cable cannot be pulled anymore.

Sample installation at this point is shown below:

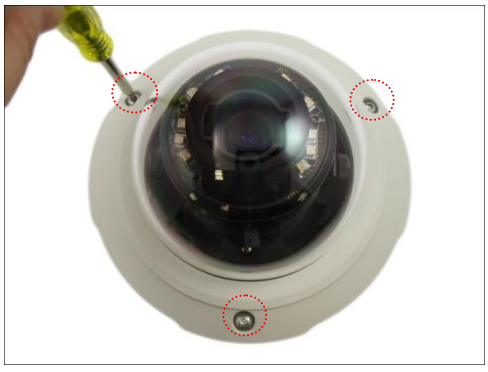
Step 6: Prepare the Camera for Installation

NOTE: To avoid scratches or leaving fingerprints on the dome cover, it is recommended to retain the plastic covering the dome cover until the camera is completely installed. However, the plastic has been removed on some of the pictures in this documentation to show clarity of the procedures being described.

1. Remove the metal cap covering the bottom hole of the camera, and attach the cap to the side hole to close it.

NOTE: Make sure the cap is secured tightly by using tools (like coin) to tighten the cap.

2. With the bundled hex screwdriver, loosen the three (3) screws securing the dome cover.



3. Carefully lift to open the dome cover and place it on the side of the camera.

   NOTE: Do not abruptly lift the dome cover; it is attached to the camera with a spring wire.

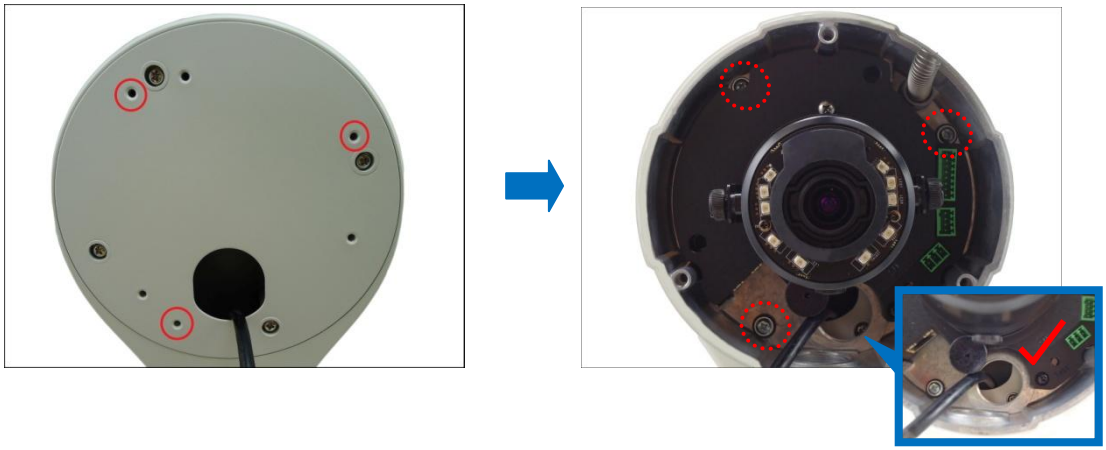
4. If necessary, insert a memory card, with the metallic contacts facing down, into the card slot of the camera.

Step 7: Install the Camera to the Wall Mount

1. Insert the network cable and other cables (if any) through the bottom cable hole of the camera.

2. Align the camera screw holes to the corresponding holes on the Wall Mount and attach the three (3) supplied screws (included in the Wall Mount package) to secure the camera.

   NOTE: There are at least 2 different types of screws included in the Wall Mount package, select the screw type applicable to the camera model.

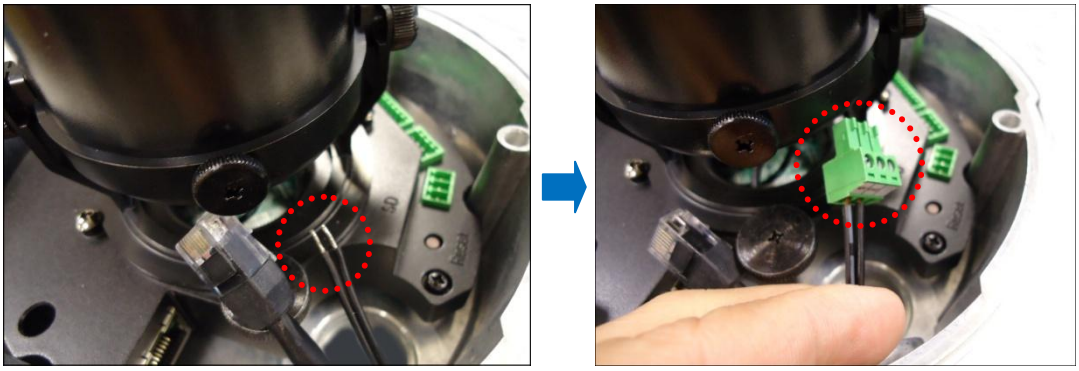


⚠ **CAUTION:** ***When using electric screwdrivers,*** be careful not to touch the internal camera components while attaching the screws. Since electric screwdrivers vary in sizes, speed, and force, they may bruise and damage the internal camera components.

DISCLAIMER: ACTi will not be responsible for camera damage caused by improper installations or the misuse of equipment for installation.

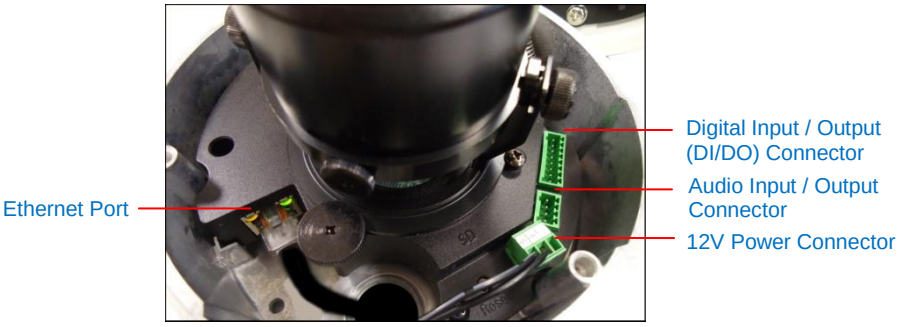
Step 8: Connect the Cable(s)

1. For camera models that support external power adaptor, audio in/out, or digital input/output (DI/DO) functions, attach the bundled connectors. Below is an example of connecting the power adaptor terminal connector. Otherwise, skip to the next step.



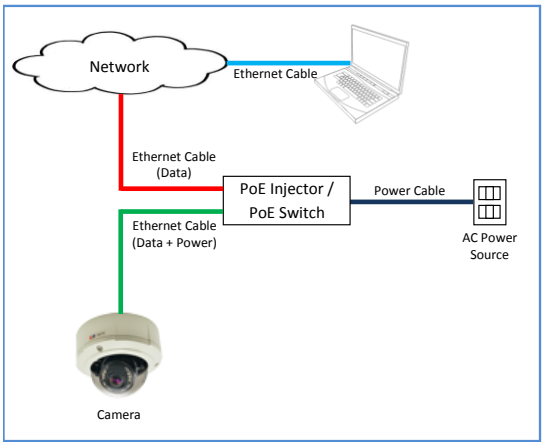
NOTE: For more information on connecting these cables, please refer to the camera model hardware manual downloadable from the website (www.acti.com).

2. Connect the network cable to the Ethernet port and the other cables (if any) to the corresponding connectors on the camera.



NOTE: The above image is for reference only. Available connectors and its placement vary depending on model.

3. Connect the other end of the network cable to a switch or injector. Then, connect the switch or injector to a network or PC and a power source. See the following Power-over-Ethernet example connection diagram.



In case of using a non-PoE switch, power up the camera using a power adapter (not supplied). As needed, power up the other connected devices.

Step 9: Access the Camera Live View

See ***Accessing the Camera Live View*** on page 52 for more information.

Step 10: Adjust the Viewing Angle

Based on the Live View, adjust the viewing angle, orientation and focus (if applicable) of the camera. Adjustments vary per model, for detailed information, please refer to the following sections:

- For B8x camera models, see ***B8x Series*** on page 59.
- For E89 camera model, see ***E89*** on page 60.

Step 11: Close the Dome Cover

Tighten the three (3) screws to attach the dome cover to the camera body. An example of a complete installation is shown below.

Appendices

Accessing the Camera Live View

Connect the Equipment

To be able to connect to the camera firmware from your PC, both the camera and the PC have to be connected to each other via Ethernet cable. At the same time, the camera has to have its own power supply. In case of PoE cameras, you can use a PoE Injector or a PoE Switch between the camera and the PC. The cameras that have the DC power connectors may be powered on by using a power adaptor.

The Ethernet port LED or Power LED of the camera will indicate that the power supply for the camera works normally.

Configure the IP Addresses

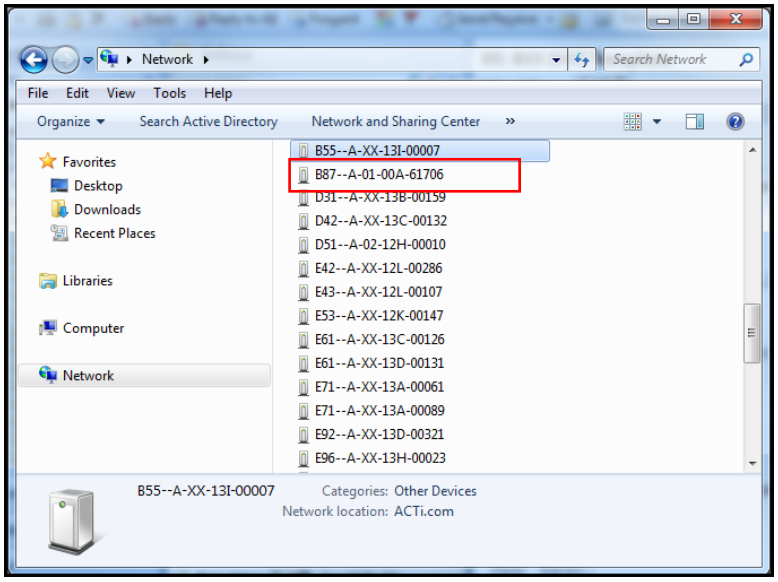
In order to be able to communicate with the camera from your PC, both the camera and the PC have to be within the same network segment. In most cases, it means that they both should have very similar IP addresses, where only the last number of the IP address is different from each other. There are 2 different approaches to IP Address management in Local Area Networks – by DHCP Server or Manually.

Using DHCP server to assign IP addresses:

If you have connected the computer and the camera into the network that has a DHCP server running, then you do not need to configure the IP addresses at all – both the camera and the PC would request a unique IP address from DHCP server automatically. In such case, the camera will immediately be ready for the access from the PC. The user, however, might not know the IP address of the camera yet. It is necessary to know the IP address of the camera in other to be able to access it by using a Web browser.

The quickest way to discover the cameras in the network is to use the simplest network search, built in the Windows system – just by pressing the “Network” icon, all the cameras of the local area network will be discovered by Windows thanks to the UPnP function support of our cameras.

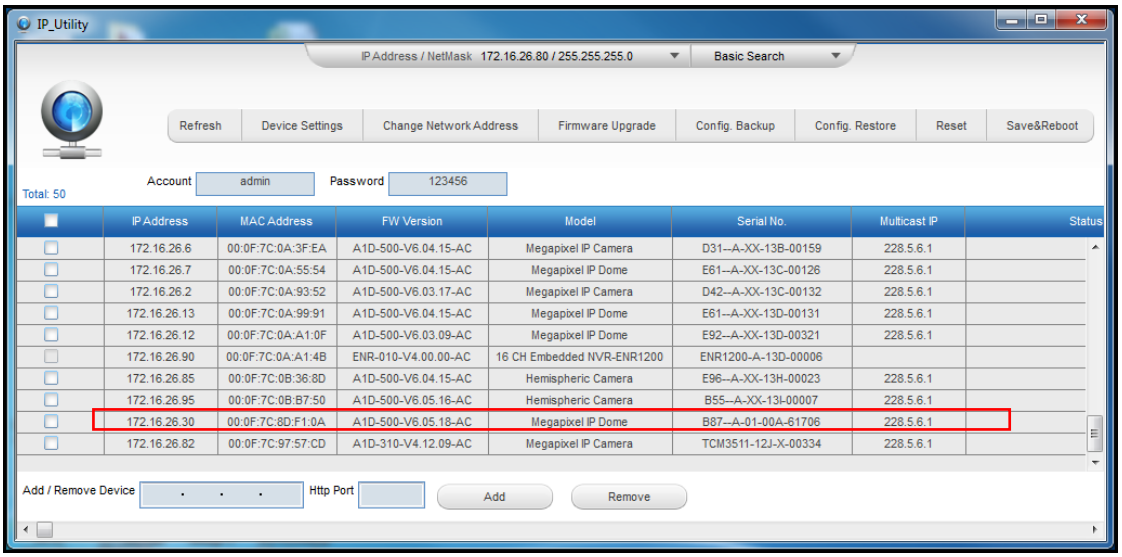
In the example below, we successfully found the camera model that we had just connected to the network.



By double-clicking the mouse button on the camera model it is possible to automatically launch the default browser of the PC with the IP address of the target camera filled in the address bar of the browser already.

If you work with our cameras regularly, then **there is even a better way to discover the cameras in the network** – by using **IP Utility**. The IP Utility is a light software tool that can not only discover the cameras, but also list lots of valuable information, such as IP and MAC addresses, serial numbers, firmware versions, etc, and allows quick configuration of multiple devices at the same time.

The IP Utility can be downloaded for free from **http://www.acti.com/IP_Utility**
With just one click, you can launch the IP Utility and there will be an instant report as follows:



You can quickly notice the camera model in the list. Click on the IP address to automatically launch the default browser of the PC with the IP address of the target camera filled in the address bar of the browser already.

Use the default IP address of a camera:

If there is no DHCP server in the given network, the user may have to assign the IP addresses to both PC and camera manually to make sure they are in the same network segment.

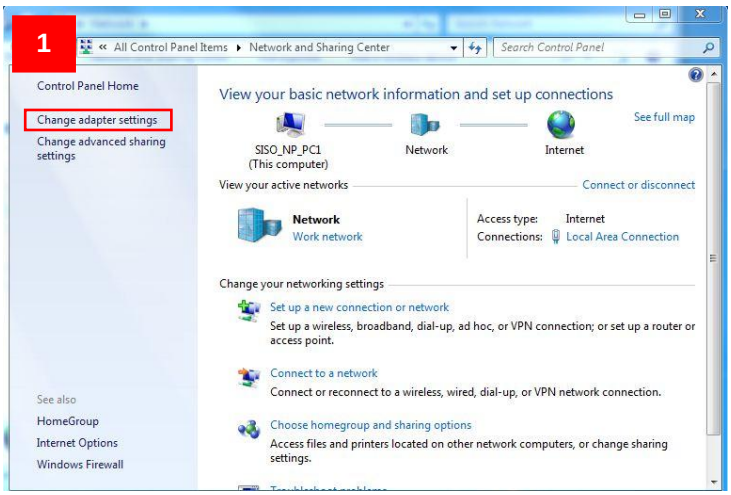
When the camera is plugged into network and it does not detect any DHCP services, it will automatically assign itself a default IP:

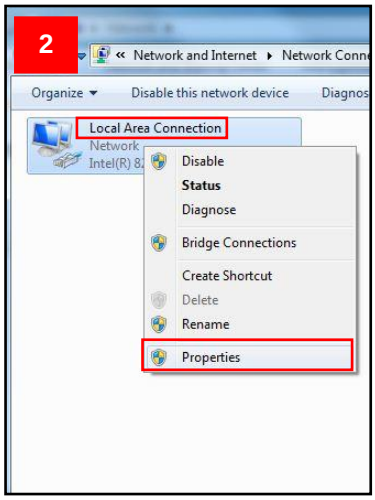
192.168.0.100

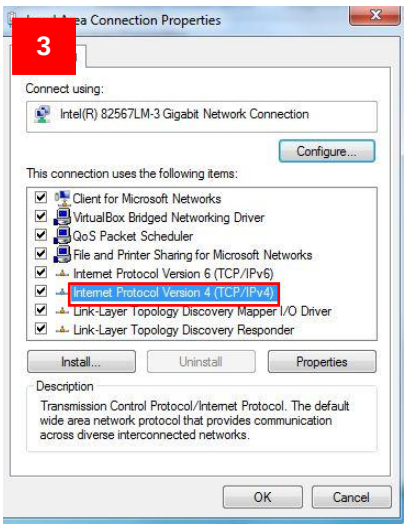
Whereas the default port number would be **80**. In order to access that camera, the IP address of the PC has to be configured to match the network segment of the camera.

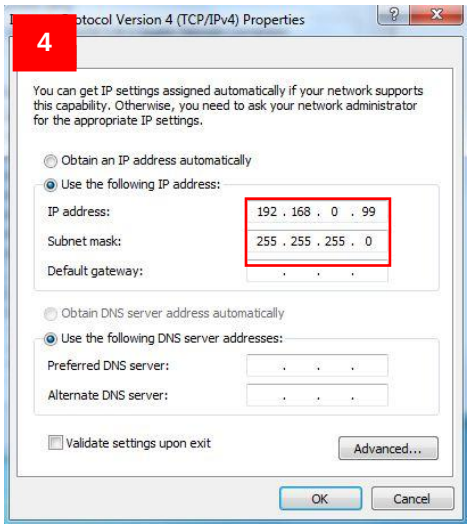
Manually adjust the IP address of the PC:

In the following example, based on Windows 7, we will configure the IP address to **192.168.0.99** and set Subnet Mask to **255.255.255.0** by using the steps below:



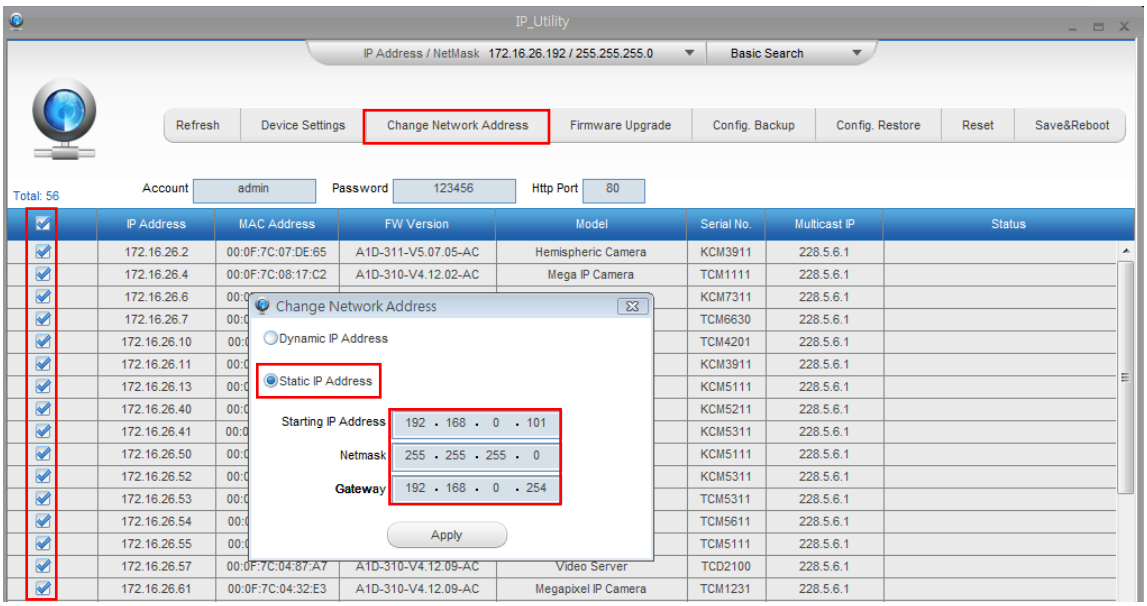






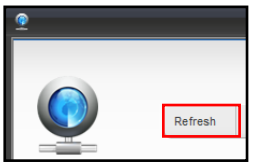
Manually adjust the IP addresses of multiple cameras:

If there are more than 1 camera to be used in the same local area network and there is no DHCP server to assign unique IP addresses to each of them, all of the cameras would then have the initial IP address of **192.168.0.100**, which is not a proper situation for network devices – all the IP addresses have to be different from each other. The easiest way to assign cameras the IP addresses is by using **IP Utility**:



With the procedure shown above, all the cameras will have unique IP addresses, starting from 192.168.0.101. In case there are 20 cameras selected, the last one of the cameras would have the IP 192.168.0.120.

Later, by pressing the “Refresh” button of the IP Utility, you will be able to see the list of cameras with their new IP addresses.



Please note that it is also possible to change the IP addresses manually by using the Web browser. In such case, please plug in only one camera at a time, and change its IP address by using the Web browser before plugging in the next one. This way, the Web browser will not be confused about two devices having the same IP address at the same time.

Access the Camera

Now that the camera and the PC are both having their unique IP addresses and are under the same network segment, it is possible to use the Web browser of the PC to access the camera.

You can use **any of the browsers** to access the camera, however, the full functionality is provided only for **Microsoft Internet Explorer**.

The browser functionality comparison:

Functionality	Internet Explorer	Other browsers
Live Video	Yes	Yes*
Live Video Area Resizable	Yes	No
PTZ Control	Yes	Yes
Capture the snapshot	Yes	Yes
Video overlay based configuration (Motion Detection regions, Privacy Mask regions)	Yes	No
All the other configurations	Yes	Yes

* When using non-Internet Explorer browsers, free third-party software plug-ins must be installed to the PC first to be able to get the live video feed from the camera:

Browser	Required Plug-In
Safari	QuickTime (http://www.apple.com/quicktime/download/)
Other non-Internet Explorer browsers	Basic VLC Media Player (http://www.videolan.org)

Disclaimer Notice: The camera manufacturer does not guarantee the compatibility of its cameras with VLC player or QuickTime – since these are third party softwares. The third party has the right to modify their utility any time which might affect the compatibility. In such cases, please use Internet Explorer browser instead.

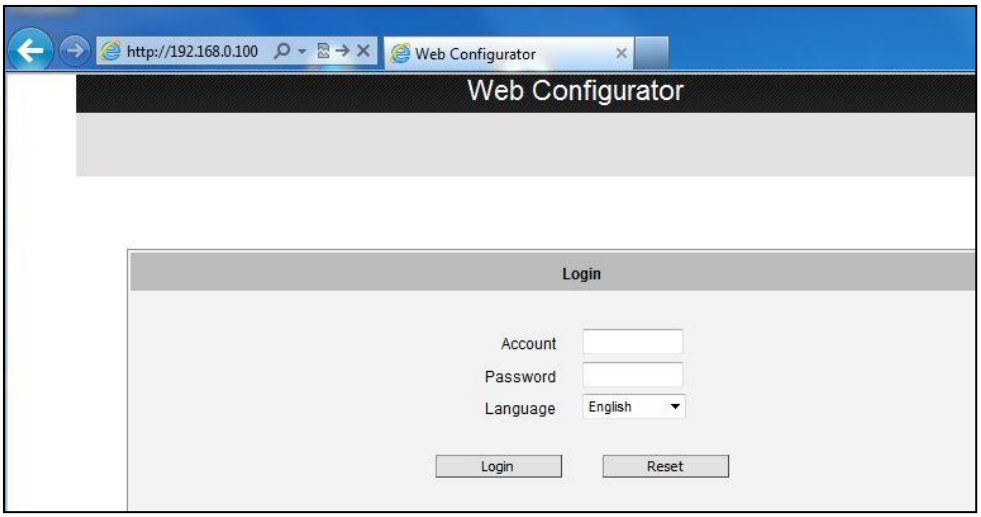
When using Internet Explorer browser, the ActiveX control for video stream management will be downloaded from the camera directly – the user just has to accept the use of such control when prompted so. No other third party utilities are required to be installed in such case.

The following examples in this manual are based on Internet Explorer browser in order to cover all functions of the camera.

Assuming that the camera's IP address is **192.168.0.100**, you can access it by opening the Web browser and typing the following address into Web browser's address bar:

http://192.168.0.100

Upon successful connection to the camera, the user interface called **Web Configurator** would appear together with the login page. The HTTP port number was not added behind the IP address since the default HTTP port of the camera is 80, which can be omitted from the address for convenience.



Before logging in, you need to know the factory default Account and Password of the camera.

Account: **Admin**

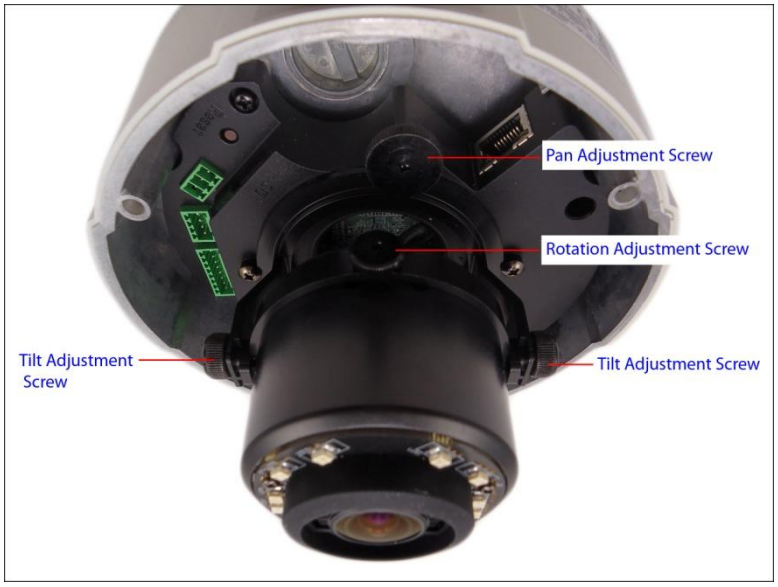
Password: **123456**

Focus and Viewing Angle Adjustments

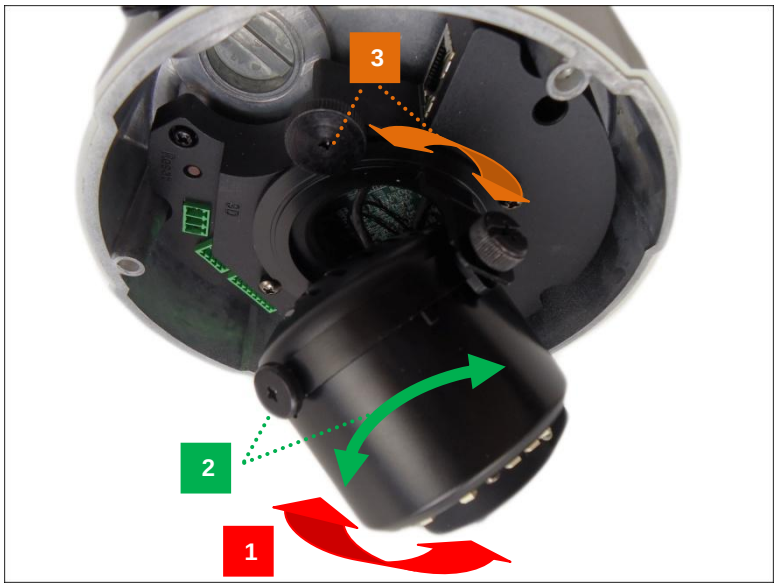
This section describes the procedures in adjusting the viewing angle, pan direction, and focus (if applicable) of the different camera models under the Outdoor Dome series.

B8x Series

Camera Parts Overview



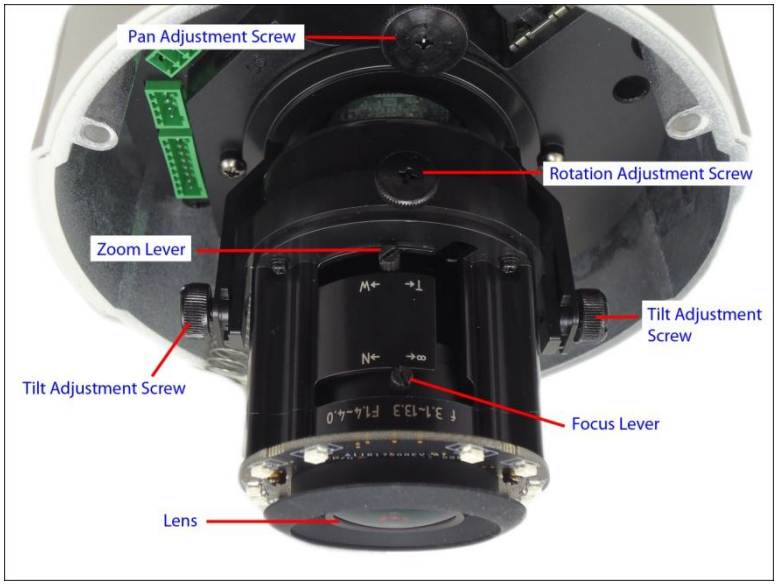
Adjustment Procedures



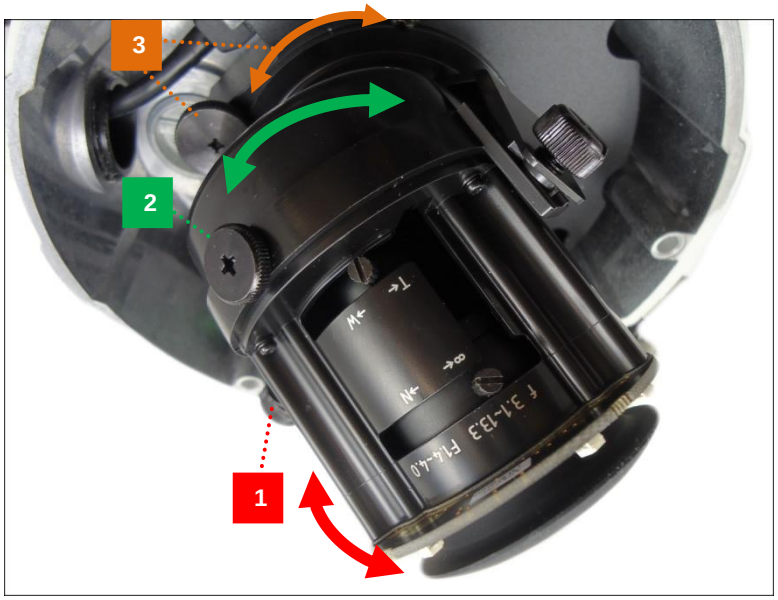
1. Loosen the tilt adjustment screws, adjust the tilt, and then tighten back the screws to fix the tilt position.
2. Loosen the rotation adjustment screw, rotate the viewing orientation, and then tighten back the screw to fix the orientation.
3. Loosen the pan adjustment screw, move the pan direction, and then tighten back the screw to fix the pan position.

E89

Camera Parts Overview



Adjustment Procedures



1. Loosen the tilt adjustment screws, adjust the tilt, and then tighten back the screws to fix the tilt position.
2. Loosen the rotation adjustment screw, rotate the viewing orientation, and then tighten back the screw to fix the orientation.
3. Loosen the pan adjustment screw, move the pan direction, and then tighten back the screw to fix the pan position.

The camera comes with the focus and viewing angle already pre-fixed. However, if you need to change the focus and viewing angle, do the following:

1. Loosen the zoom lever screw, then move the lever left or right to adjust the viewing angle.

2. Loosen the focus lever screw, then move the lever left or right to adjust the focus.

3. When the desired viewing angle and focus are already achieved, tighten the lever screws again to fix their position.

Safety Information

Read these instructions

You should read all the safety and operating instructions before using this product.

Heed all warnings

You must adhere to all the warnings on the product and in the instruction manual. Failure to follow the safety instruction given may directly endanger people, cause damage to the system or to other equipment.

Trademarks

All names used in this manual are probably registered trademarks of respective companies.

Liability

Every reasonable care has been taken during the writing of this manual. Please inform your local office if you find any inaccuracies or omissions. We cannot be held responsible for any typographical or technical errors and reserve the right to make changes to the product and manuals without prior notice.

Cleaning

Disconnect this video product from the power supply before cleaning.

Attachments

Do not use attachments not recommended by the video product manufacturer as they may cause hazards.

Do not use accessories not recommended by the manufacturer

Only install this device in a dry place protected from weather

Servicing

Do not attempt to service this video product yourself. Refer all servicing to qualified service personnel.

Damage Requiring service

Disconnect this video product from the power supply immediately and refer servicing to qualified service personnel under the following conditions.

1) When the power-supply cord or plug is damaged
2) If liquid has been spilled, or objects have fallen into the video product.
3) If the inner parts of video product have been directly exposed to rain or water.
4) If the video product does not operate normally by following the operating Instructions in this manual. Adjust only those controls that are covered by the instruction manual, as an improper adjustment of other controls may result in damage, and will often require extensive work by a qualified technician to restore the video product to its normal operation.

Safety Check

Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks to determine if the video product is in proper operating condition.

Copyright © 2014, ACTi Corporation All Rights Reserved

7F, No. 1, Alley 20, Lane 407, Sec. 2, Ti-Ding Blvd., Neihu District, Taipei, Taiwan 114, R.O.C.

TEL : +886-2-2656-2588 FAX : +886-2-2656-2599

Email: sales@acti.com