



# Outdoor PTZ

## Mounting on a Corner Wall Using Accessory Sets

### Installation Guide

For Models:

I93, I94, I95, I96, KCM-8211

2013/12/09





**ACTi**  
Connecting Vision

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# Mounting Accessory Set Solutions

If the camera will be installed on a corner wall, consider the following options:

Mounting Solution	Cabling Solution	Must Drill a Hole on the Wall
<a href="#">Corner Mount with Heavy Duty Wall Mount (SMAX-0035)</a>	<p>The cables goes from the top of the camera into the Heavy Duty Wall Mount and comes out behind the Corner Mount kit. When using this type of installation outdoors, it is recommended to use a high PoE injector (purchased separately).</p> <p>PMAX- 0402      PMAX-0305</p> 	<p>No</p>
<a href="#">Corner Mount with Heavy Duty Wall Mount and Junction Box</a>	<p>The cables and the bundled power adapter are hosted inside the junction box. The cables go out the junction box enclosed in a flexible conduit through one of its side holes.</p> <p>PMAX-0402      PMAX-0305      PMAX-0700</p> 	<p>No</p>

# Corner Mount with Heavy Duty Wall Mount Installation Procedures

Perform the following procedures to install the camera on corner wall using Heavy Duty Wall Mount.

## Step 1: Unpack the Camera

**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.

1. Loosen the four screws using the bundled wrench.



2. Carefully lift the camera cover and place it aside.

**NOTE:** The cover is attached to the camera by a metallic wire; do not abruptly lift the cover.



3. Remove the outer and inner Styrofoam.



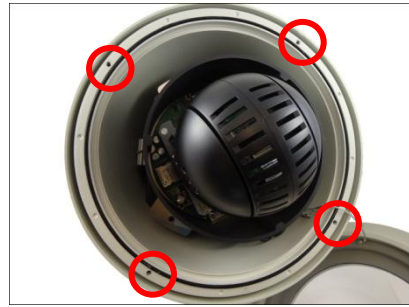
Outer Styrofoam



Inner Styrofoam

4. Attach the camera cover.

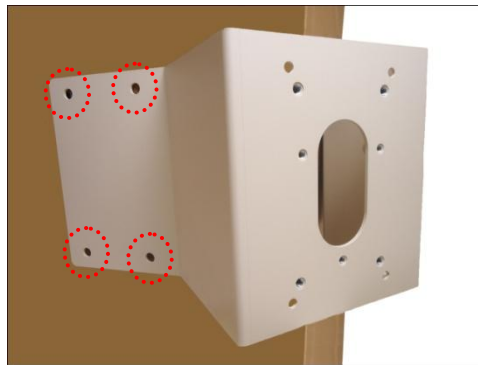
Align the cover screws to the screw holes on the camera (as marked on the illustration) and secure the screws using the bundled wrench.



## Step 2: Install the Corner Mount

**NOTE:** Before installation, make sure the wall can bear more than the total weight of the camera and the mounting accessories.

1. Align the Corner Mount to the corner wall and mark the location of the eight (8) screw holes.

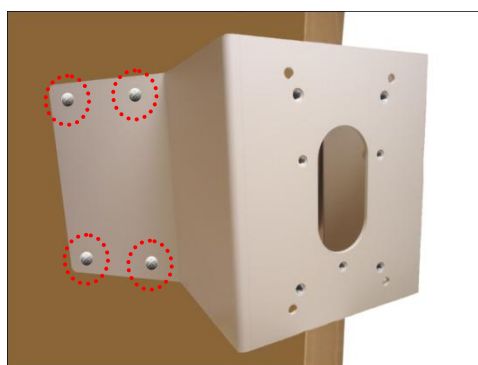


**NOTE:**

- The illustration above shows only the screw holes on one side of the wall. Remember to mark the screw holes on the other side of the wall, too.
- Due to different corner surfaces and shapes, it is recommended to use the actual Corner Mount to mark the holes for drilling.

2. Drill the eight (8) screw holes.
3. Attach eight (8) screws (not included in the package) to secure the Corner Mount to the wall.

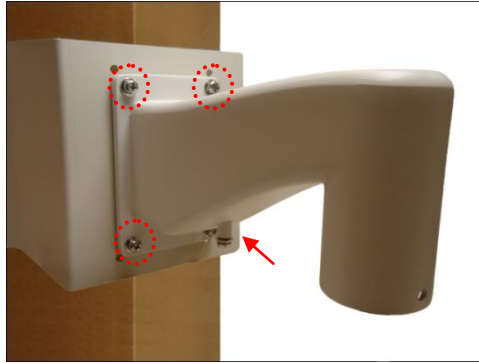
**NOTE:** Purchase screws applicable to the wall type you are mounting the Corner Mount to.



## Step 3: Install the Heavy Duty Wall Mount

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Attach the Heavy Duty Wall Mount to the Corner Mount using the four (4) screws (included in the Corner Mount package).



### Optional: Add Extension Tube

If the Heavy Duty Wall Mount is not long enough, add one extension tube (purchased separately).

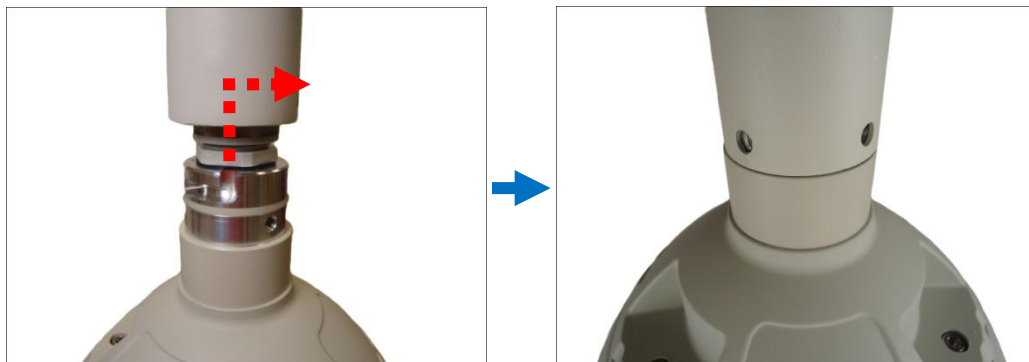
See [How to Install Extension Tubes](#) on page 30.

## Step 4: Install the Camera

1. Insert the camera cables through the Heavy Duty Wall Mount, extension tube (if any), and through the Corner Mount.



2. Align the slot on the camera to the tab inside the Heavy Duty Wall Mount and insert the top of the camera.



3. Twist the camera to align the screw holes and attach the two (2) mounting screws (included in the camera package).



4. For I9x models, attach the safety wire strap for added protection; see [How to Attach the Safety Wire Strap \(For I9x Models\)](#) on page 32.



5. Remove the plastic covering the dome cover.

Below is a sample installation.



## Step 5: Connect the Cables





The camera itself is waterproof, however take note that the cable connections are not.

If the camera is mounted directly on the wall where the cables pass through the wall, then your installation is complete and you do not need to waterproof the cable connections.

However, if the camera is mounted where the cables may be exposed then it is recommended to waterproof the cable connections or use a junction box.





The camera comes with a **Cable Gland** and **Conduit Gland**. It is recommended to use one of these glands when a high PoE injector will be used with the camera. However, if the bundled power adapter will be used or digital input/output devices will be connected, it is recommended to house the cables inside the junction box (see [Corner Mount with Heavy Duty Wall Mount and Junction Box Installation Procedures](#) on page 20).

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

Cable Gland	Conduit Gland
 <p>For use with an exterior-grade Ethernet cable (not included in the package).</p>  <p>See <a href="#">How to Waterproof the Cable Using the Cable Gland</a> on page 11.</p>	 <p>For use with 1/2" flexible conduit (not included in the package).</p>  <p>See <a href="#">How to Waterproof the Cable Using the Conduit Gland</a> on page 15.</p>

### How to Waterproof the Cable Using the Cable Gland

1. Prepare the following items:

Cable Gland	Gland Rubber Ring	Exterior-Grade Ethernet Cable	Waterproof Tape
 <p><b>NOTE:</b> The washer will not be used in this installation, please set it aside.</p>		 <p><b>NOTE:</b> Not included in the camera package.</p>	 <p><b>NOTE:</b> Not included in the camera package.</p>

2. Detach the cable gland as shown below.



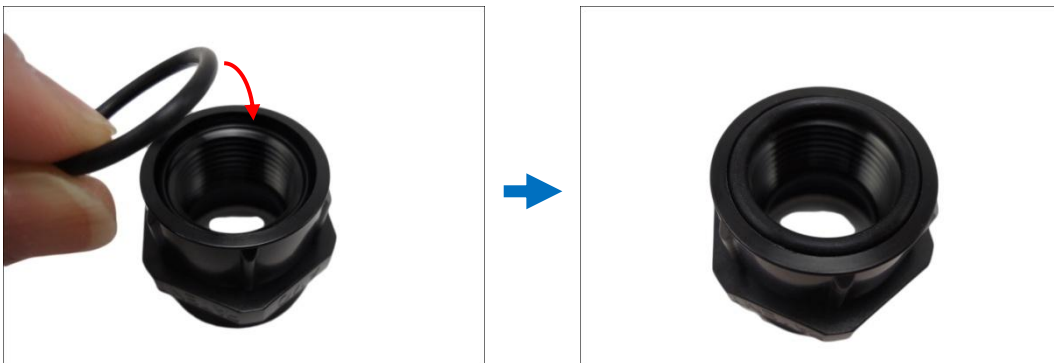
3. Insert the clamping nut through the Ethernet cable.



4. Insert the Ethernet cable through the sealing rubber and claw.

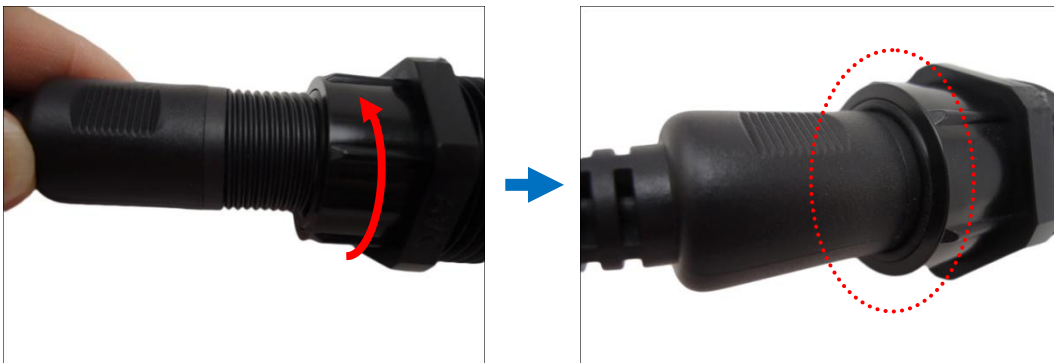


5. Attach one (1) supplied rubber ring on the gland body (smooth end).



**NOTE:** Make sure the rubber ring is completely aligned on the gap on the gland body.

6. Attach the gland body to the Ethernet port of the camera.



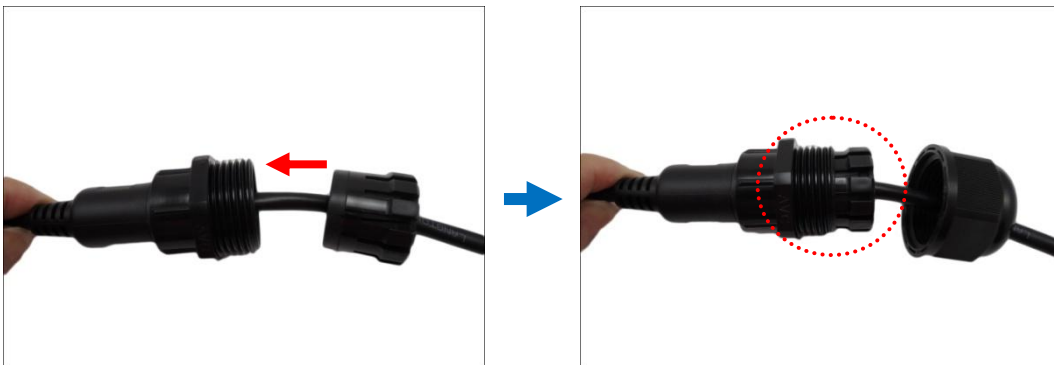
**IMPORTANT!**

***Make sure the rubber ring is completely aligned and flat on the gland body to avoid possible water leakage.***

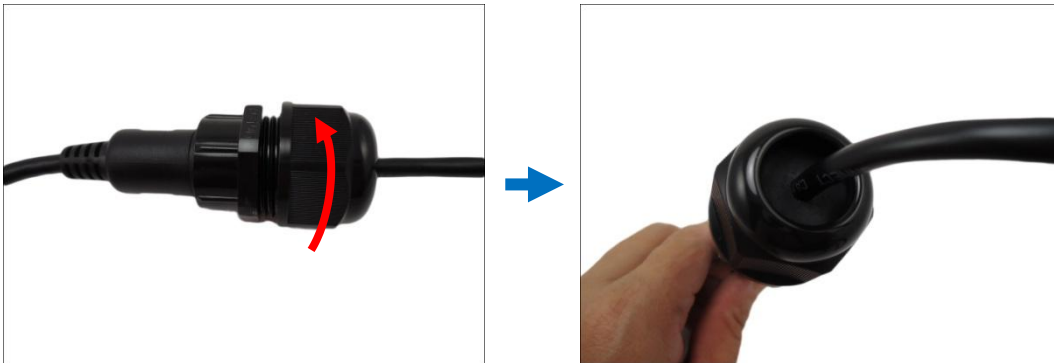
7. Connect the Ethernet connector to the Ethernet port of the camera.



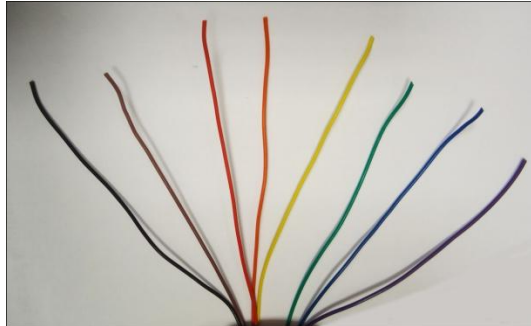
8. Insert the sealing rubber and claw into the cable gland body.



9. Attach the clamping nut to the cable gland body. Make sure the clamping nut is tightly secured and the rubber is squeezed in to avoid water leakage.

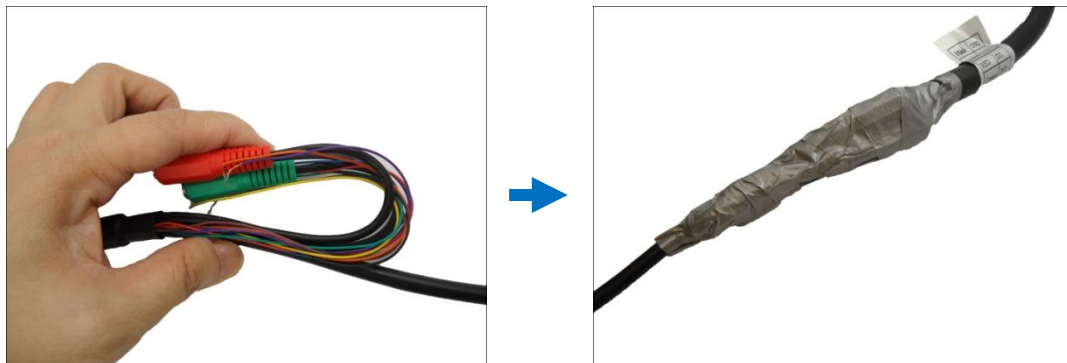


10. If necessary, connect the colored wires to digital input or output (DI/DO) devices to trigger events or notifications. Make sure to waterproof the cable connection (e.g. wrap with waterproof tape).



**NOTE:** Follow the wiring instructions described in the Camera Hardware Manual downloadable from the website ([www.acti.com](http://www.acti.com)).

11. Arrange all unused cables and wrap them with the waterproof tape.







**NOTE:**

- Different applications and installation environments require different types of waterproofing methods which may not be covered in this manual. Check your installation environment and adapt a suitable waterproofing method.
- If the camera is installed outdoors and the bundled power adapter is used or input/output devices are connected, be sure to protect them from different environmental factors. It is recommended to place the cable connections indoors or housed them inside a junction box (see [Corner Mount with Heavy Duty Wall Mount and Junction Box Installation Procedures](#) on page 20).

**DISCLAIMER:** ACTi will not be responsible for camera damage caused by improper use of the power adapter.

### How to Waterproof the Cable Using the Conduit Gland

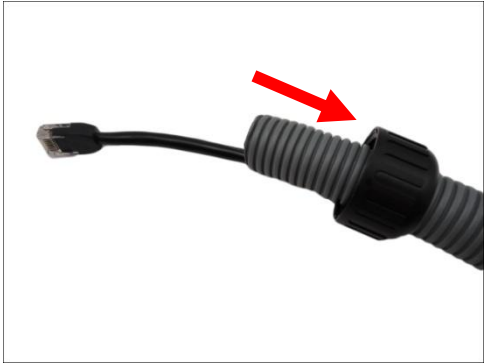
1. Prepare the following items:

Cable Gland	Gland Rubber Ring	1/2" Flexible Conduit	Waterproof Tape
 <p><b>NOTE:</b> The washer will not be used in this installation, please set it aside.</p>		 <p><b>NOTE:</b> Not included in the camera package.</p>	 <p><b>NOTE:</b> Not included in the camera package.</p>

2. Detach the conduit gland as shown below.



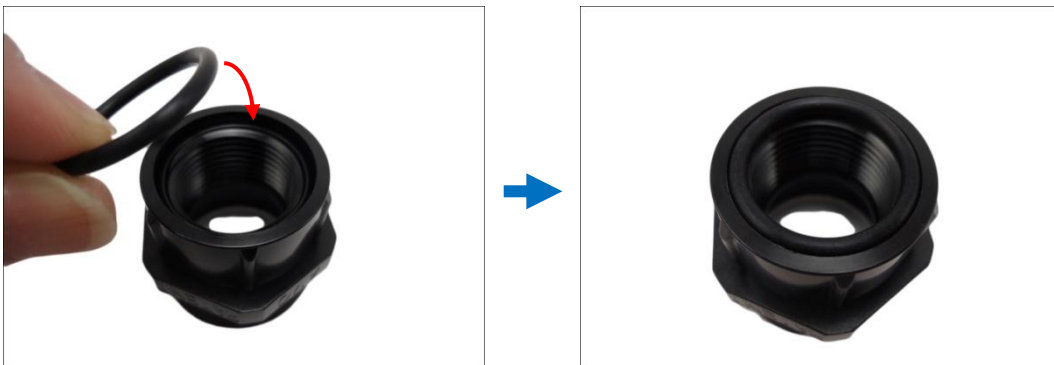
3. Insert the Ethernet cable through the flexible conduit. Then insert the clamping nut through the flexible conduit.



4. Insert the sealing rubber and attach it at the end of the flexible conduit.

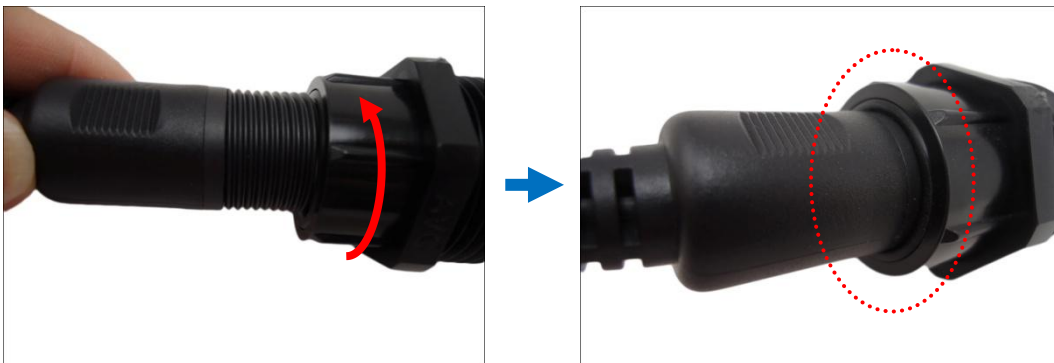


5. Attach one (1) supplied rubber ring on the gland body (smooth end).



**NOTE:** Make sure the rubber ring is completely aligned on the gap on the gland body.

6. Attach the gland body to the Ethernet port of the camera.



**IMPORTANT!**

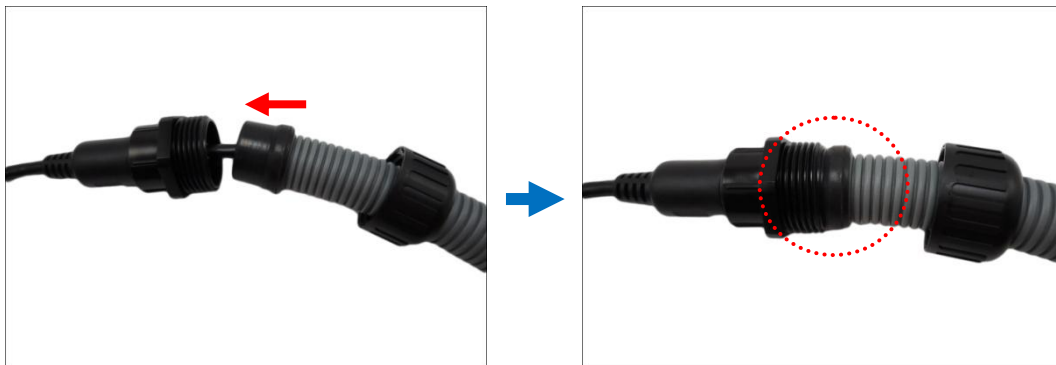
***Make sure the rubber ring is completely aligned and flat on the gland body to avoid possible water leakage.***



7. Connect the Ethernet connector to the Ethernet port of the camera.



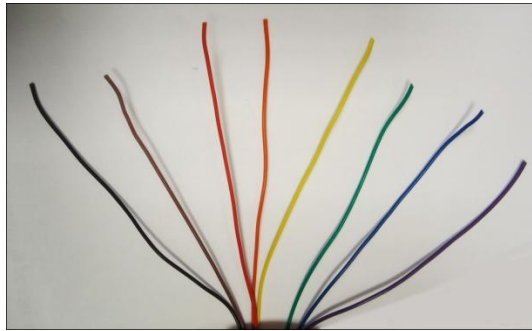
8. Insert the sealing rubber into the conduit gland body.



9. Attach the clamping nut to the conduit gland body. Make sure the clamping nut is tightly secured to avoid water leakage.

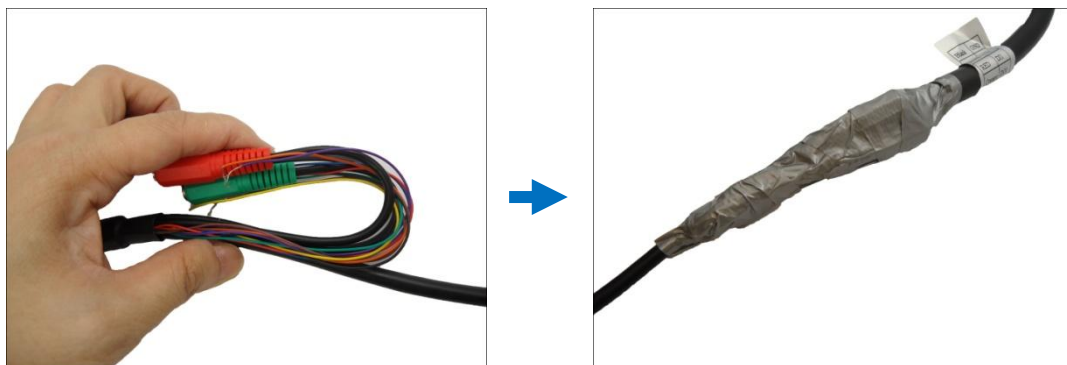


10. If necessary, connect the colored wires to digital input or output (DI/DO) devices to trigger events or notifications.



**NOTE:** Follow the wiring instructions described in the Camera Hardware Manual downloadable from the website ([www.acti.com](http://www.acti.com)).

11. Arrange all unused cables and wrap them with the waterproof tape.



**NOTE:**

- Different applications and installation environments require different types of waterproofing methods which may not be covered in this manual. Check your installation environment and adapt a suitable waterproofing method.
- If the camera is installed outdoors and the bundled power adapter is used or input/output devices are connected, be sure to protect them from different environmental factors. It is recommended to place the cable connections indoors or housed them inside a junction box (see [Corner Mount with Heavy Duty Wall Mount and Junction Box Installation Procedures](#) on page 20).

**DISCLAIMER:** ACTi will not be responsible for camera damage caused by improper use of the power adapter.

## **Step 6: Access the Camera Live View**

Refer to the camera Hardware Manual downloadable from the website ([www.acti.com](http://www.acti.com)) for more information.

# Corner Mount with Heavy Duty Wall Mount and Junction Box Installation Procedures

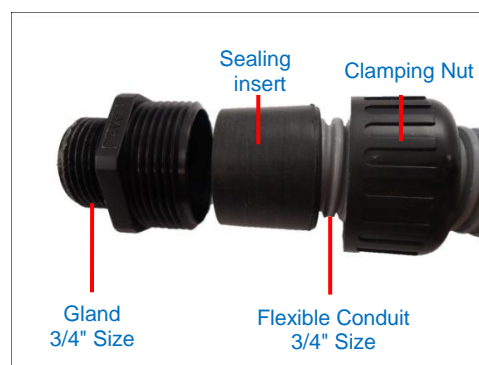
Perform the following procedures to install the camera on a corner wall using the Heavy Duty Wall Mount and a junction box.

This type of installation is ideal when using the bundled power adapter and power cord to ensure they are protected from different types of weather conditions.

Before installation, prepare the tools and equipment which are not supplied with the mounting accessory:

- Ethernet Cables
- Flexible Conduit with Conduit Gland (Size 3/4")

**NOTE:** Below is an example of a common conduit gland with flex conduit available in the market. Actual items sold in your area may vary.



For use with the bundled power adapter and power cord, prepare also the following equipment:

- Female-type Socket
- Male-type Plug
- Power Cable without connectors (length depends on the distance of the power supply outlet and installation site)
- Electrical tape

## Step 1: Unpack the Camera

**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.

1. Loosen the four screws using the bundled wrench.



2. Carefully lift the camera cover and place it aside.

**NOTE:** The cover is attached to the camera by a metallic wire; do not abruptly lift the cover.



3. Remove the outer and inner Styrofoam.



Outer Styrofoam



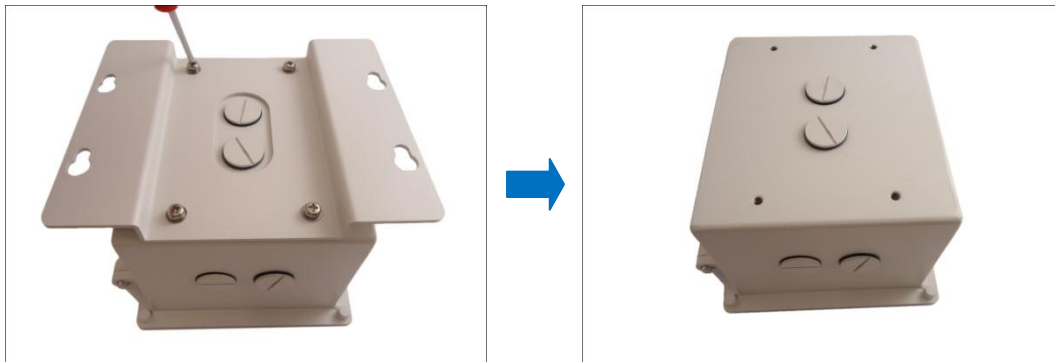
Inner Styrofoam

- Attach the camera cover.  
Align the cover screws to the screw holes on the camera (as marked on the illustration) and secure the screws using the bundled wrench.



## Step 2: Prepare the Junction Box

- Remove the four (4) screws securing the bracket from the junction box.



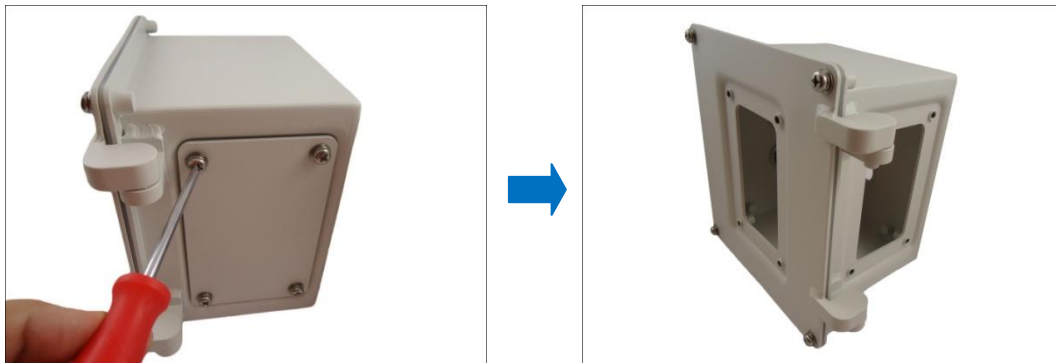
**NOTE:**

- The bracket is not necessary for this installation, please keep it aside.
- Retain the four (4) screws to be used in installing the Corner Mount later.

- Remove one or two of the rear metal cap(s) as needed.



3. Remove the four (4) screws securing the side door.

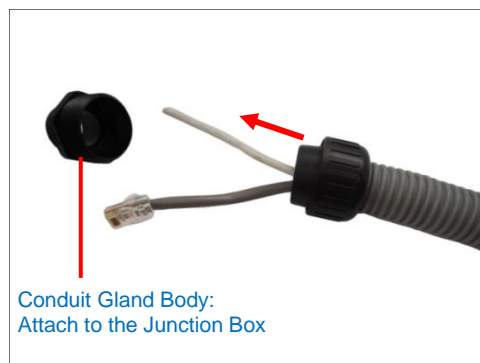


### Step 3: Prepare for Waterproof Installation

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1. Prepare the flexible conduit with conduit gland (size 3/4").
2. Insert the cables, such as the network cable, power cable without connectors (if using the bundled power adapter and power cord), etc., through the flex conduit.

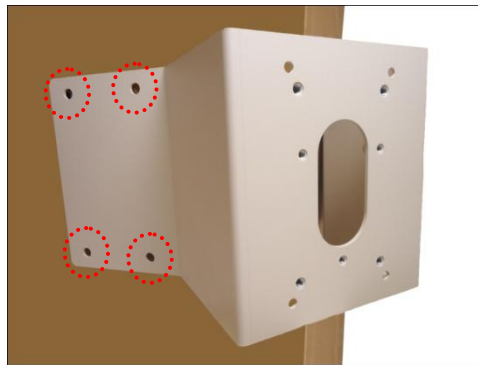
**NOTE:** Only a power cable fits through the conduit hole of the junction box; thus the installation of a power outlet to the power cable must be done inside the junction box.



## Step 4: Prepare for Corner Mount Installation

**NOTE:** Before installation, make sure that the wall can bear more than the total weight of the camera and the mounting accessories.

1. Align the Corner Mount to the corner wall and mark the location of the eight (8) screw holes.



**NOTE:**

- The illustration above shows only the screw holes on one side of the wall. Remember to mark the screw holes on the other side of the wall, too.
- Due to different corner surfaces and shapes, it is recommended to use the actual Corner Mount to mark the holes for drilling.

2. Drill the eight (8) screw holes.
3. Align the screw holes on the back of the Corner Mount to the back screw holes of the junction box.





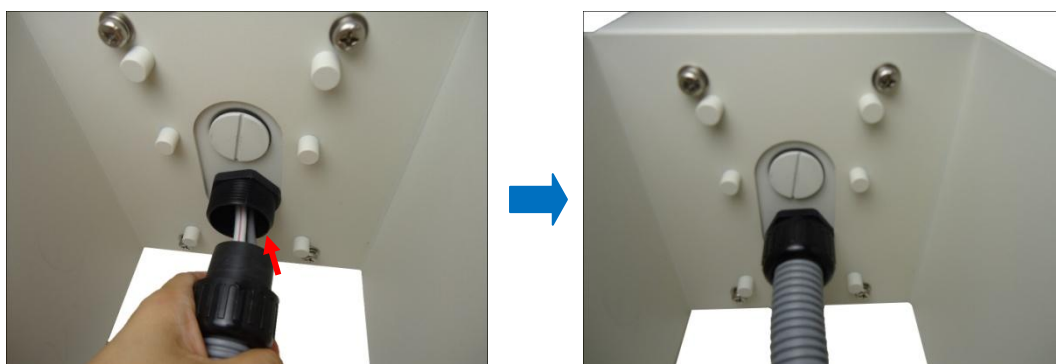
- Attach the four (4) screws, which were removed from the junction box bracket, to secure the Corner Mount to the junction box.



- Attach the conduit gland body to the hole of the junction box.



- Insert enough length of the cables into the junction box and attach the clamping nut to the conduit gland body.

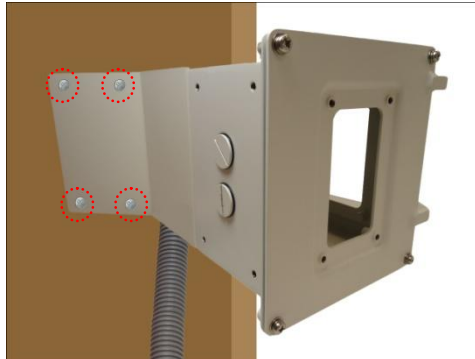


**⚠ CAUTION:** Make sure the clamping nut is securely attached to the conduit gland body to avoid water leak, etc.

**DISCLAIMER:** The manufacturer will not be responsible for damage caused by water leak from incorrect cabling methods.

## Step 5: Install the Corner Mount

Attach the Corner Mount on the wall using eight (8) screws (not included in the package).

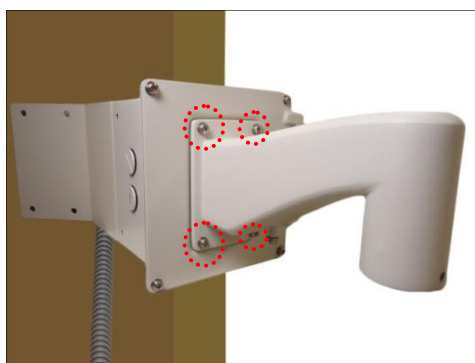


### NOTE:

- The illustration above shows only the screw holes on one side of the wall. Remember to secure the screws on the other side of the wall, too.
- It is recommended to route the flexible conduit to go along the wall on a downward position. You may also use the side holes of the junction box. However, do not route the flexible conduit towards an upward position to avoid unnecessary water leak concerns.

## Step 6: Install the Heavy Duty Wall Mount

Attach the Heavy Duty Wall Mount to the Corner Mount using the four (4) screws (included in the Corner Mount package).



### Optional: Add Extension Tube

If the Heavy Duty Wall Mount is not long enough, add one extension tube (purchased separately).

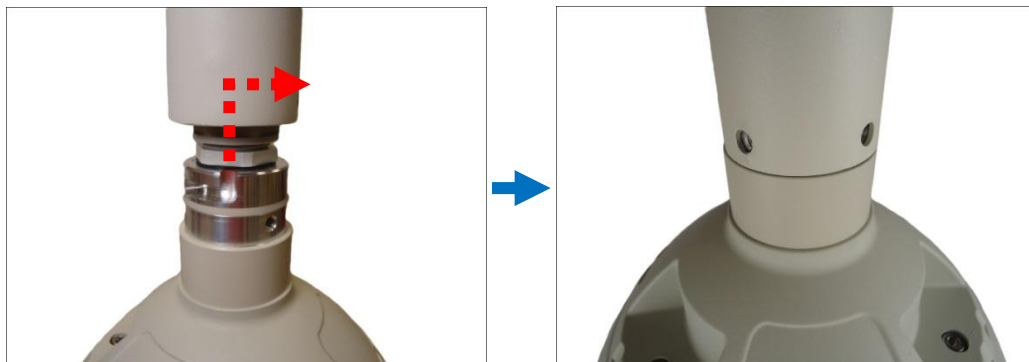
See [How to Install Extension Tubes](#) on page 30.

## Step 7: Install the Camera

1. Insert the camera cables through the Heavy Duty Wall Mount, extension tube (if any), and into the junction box.



2. Align the slot on the camera to the tab inside the Heavy Duty Wall Mount and insert the top of the camera.



3. Twist the camera to align the screw holes and attach the two (2) mounting screws (included in the camera package).



4. For I9x models, attach the safety wire strap for added protection; see [How to Attach the Safety Wire Strap \(For I9x Models\)](#) on page 32.
5. Remove the plastic covering the dome cover.

Below is a sample installation.



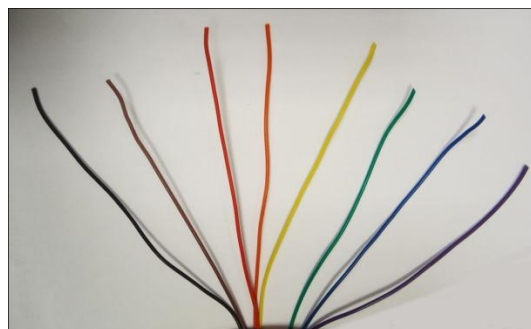
## Step 8: Connect the Cables

From the junction box, perform the following:

1. Connect the bundled power adapter and power cord and place them inside the junction box. For I9x models, see [How to Use the Power Adapter \(For I9x Models\)](#) on page 31 for more information on using the power adapter.
2. Connect the Ethernet cable from the network side to the Ethernet port of the camera.



3. If necessary, connect the colored wires to digital input or output (DI/DO) devices to trigger events or notifications.



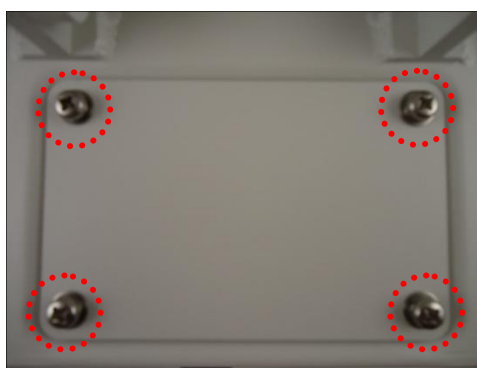
**NOTE:** Follow the wiring instructions described in the Camera Hardware Manual downloadable from the website (<http://www.acti.com/>).

4. Attach the female-type socket to the power cable in the junction box, and connect the power cord to the socket.

**NOTE:**

- Only a power cable fits through the conduit hole of the junction box; thus the installation of a power outlet to the power line cable must be done inside the junction box.
- Use only the supplied power adapter and power cord that came with the camera or the optional High PoE Injector (PPOE-0110). Using other accessories not approved by the manufacturer may cause damage to the equipment.

5. Close the side door using the four (4) screws.



**NOTE:** Make sure the side is door is tightly sealed to ensure water does not enter the junction box.

6. On the network side, connect the other end of the Ethernet cable to a network switch.
7. On the power supply side, attach the male-type plug on the other end of the power cable, and then connect it to a power outlet.

## Step 9: Access the Camera Live View

Refer to the camera Hardware Manual downloadable from the website ([www.acti.com](http://www.acti.com)) for more information.

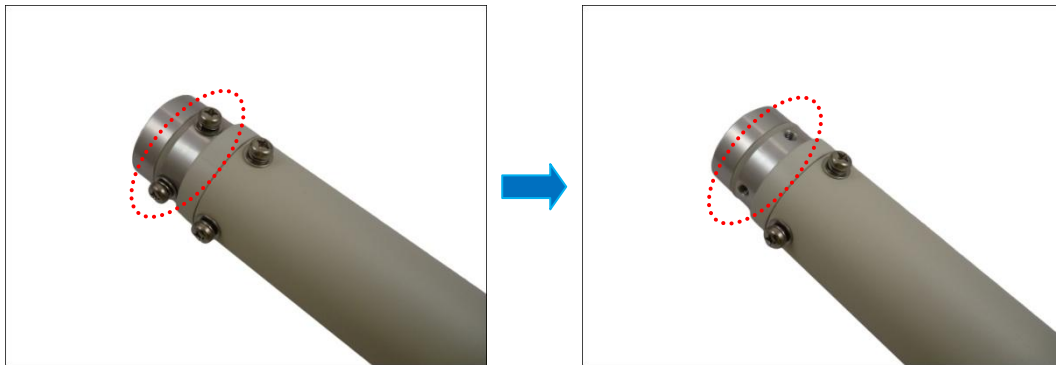
# Appendices

## How to Install Extension Tubes

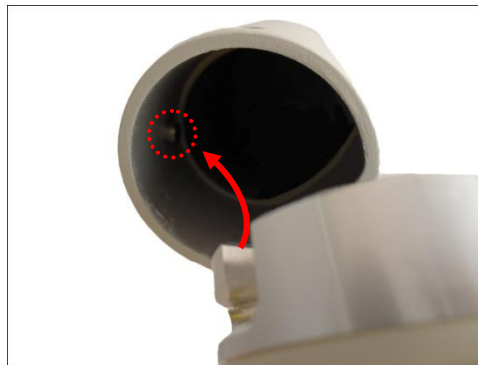
If the mounting accessory is not long enough, add one extension tube (purchased separately).

**NOTE:** Do not attach more than one extension tube.

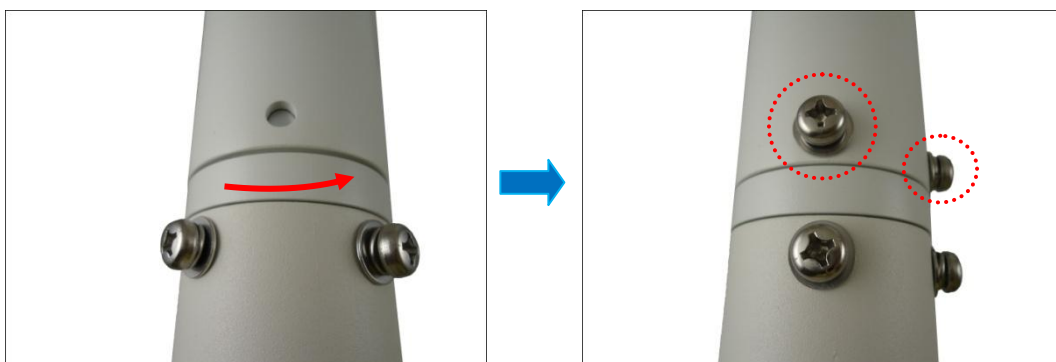
1. Remove the two (2) pre-installed screws on the extension tube.



2. Align the slot on the extension tube to the tab inside the mounting accessory and install the extension tube.



3. Twist the extension tube to align the screw holes and reattach the two (2) mounting screws removed from step 1.

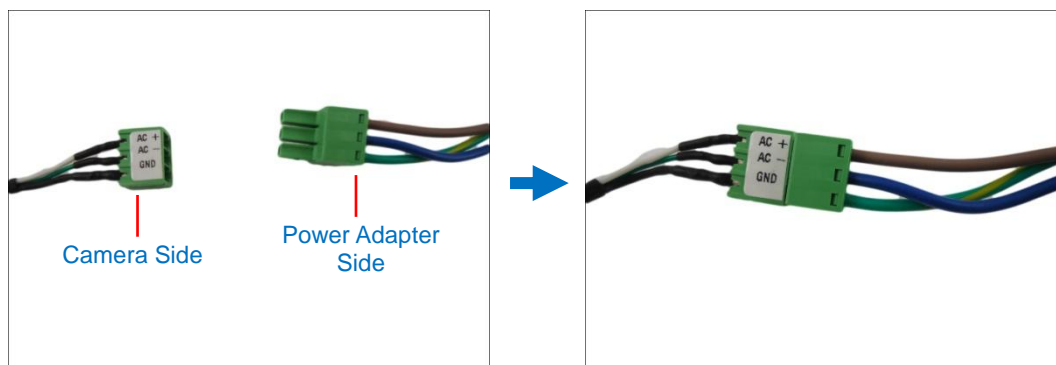


## How to Use the Power Adapter (For I9x Models)

1. Slide the voltage switch to set the adapter voltage according to the voltage standard in your location.
2. Connect the power cord to the power adapter.



3. Connect the power connector of the camera to the cable connector of the adapter.

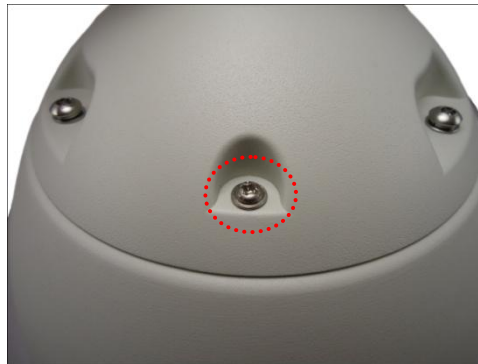


## How to Attach the Safety Wire Strap (For I9x Models)

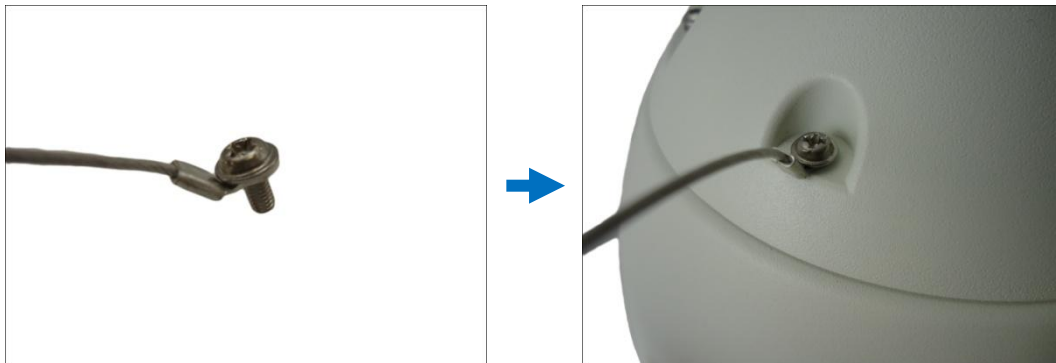
Most of ACTi's mounting accessories have a safety screw where the bundled safety wire strap can be used as additional protection to avoid dropping the camera while mounted on the high ceilings, etc.

To attach the safety wire strap, do the following:

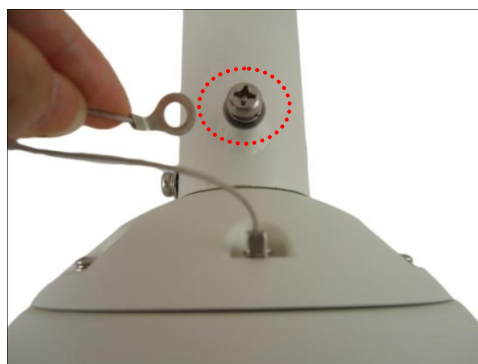
1. Using a screwdriver, remove the screw on top of the camera.



2. Insert the screw through the smaller end of the safety wire strap and attach it to the camera.

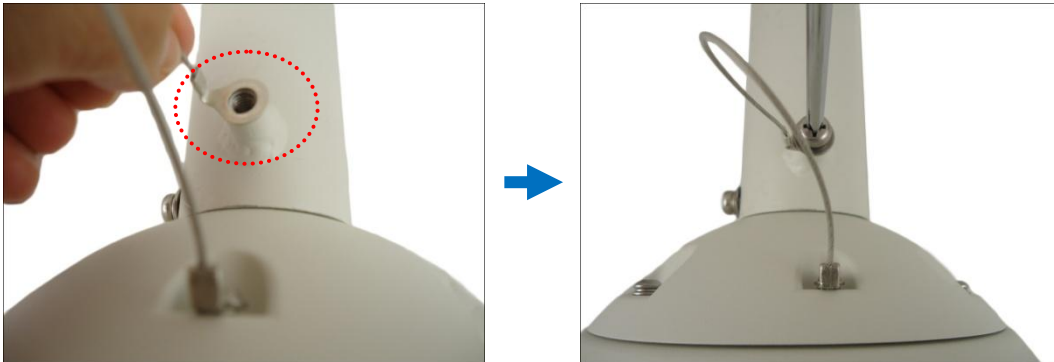


3. Remove the safety screw from the mounting solution (below is an example of the straight tube).





4. Align the bigger end of the safety wire strap on the mounting solution and then tightly attach the screw to lock the safety wire strap in place.



# 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.