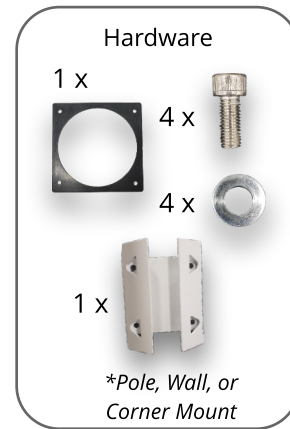# Hydra Install Guide

Physical Install

Step 1: Install Mount onto Hydra Base Box

Install the provided pole mount or other mounting plate onto the base box using the 4 socket cap bolts , 4 flat washers, and the gasket provided.

Note: The mounting plate hardware may vary depending on the mount being used.

Hardware

1 x

4 x

4 x

1 x

Pole, Wall, or Corner Mount

Step 2: Drill Base Box for Wiring

Determine the best location to bring the wiring into the base box and drill the appropriate sized hole for a weather tight connector.

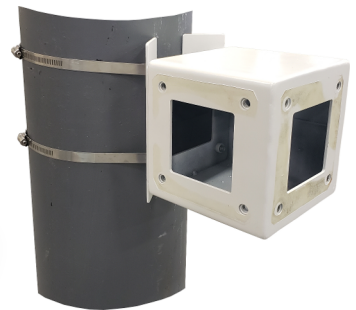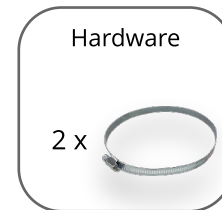It's recommend to drill the hole for the wiring either through the mount or on the bottom of the box.

Caution: *Drilling a hole on the top side of the Base Box makes the box more susceptible to water ingress and possible damage to connections and possibly the cameras.*

Step 3: Mount Base Box to the pole or other mounting surface

Mount base box to pole or other mounting surface using the provided hose clamps.

Note: If hose clamps are not large enough, you will need to supply larger hose clamps.

Hardware

2 x

Step 4: Mount the Standard Arm or Goose-neck Arm to Base Box with seal installed between Arm and Box

Place the gasket between the mount and the base box.

Use the (4) bolts and washers provided to bolt the mount to the base box.

Hardware

1 x

4 x

4 x

Step 5: Level Camera Box

Place a level on top of the camera box and adjust the mount as needed.

Caution: *if camera box is not level, it will negatively impact the Thermal Radar's detection analytics*
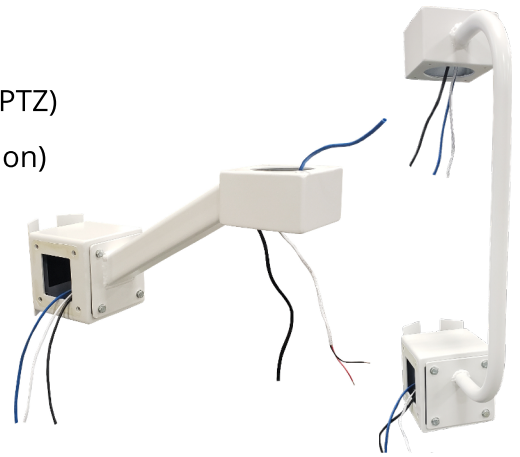
Step 6: Run Wires Through Base Box & Mount

Required Wiring: (2) CAT-5 cables (1 for Thermal Radar & 1 for the PTZ)

Optional Wiring: (1) 18/2 cable to power PTZ (for non-POE installation)

Run the wires into the Base Box and up through the mounting arm to the Camera Mounting Box. Leave enough slack to install RJ-45 ends and/or plug into each camera.

Note: Please reference the specific PTZ Integration Guide for key installation details

Step 7: Terminate CAT5/6 Cable for PTZ

Terminate the CAT5/6 cable for the PTZ according to the PTZ Manufacturers best practices. Many PTZ Manufacturers use proprietary weather-tight connectors

Note: The Thermal Radar CAT5/6 Cable will be terminated in Step 13.

Note: Please reference the specific PTZ Integration Guide for key installation details
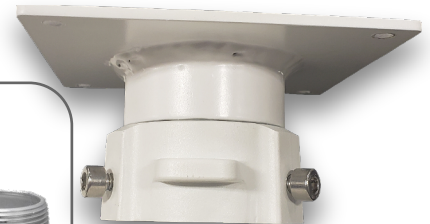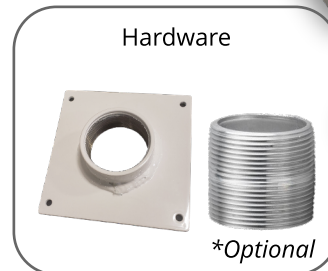
Step 8: Install 1.5" PTZ mounting adapter to PTZ Mounting Plate

Screw the PTZ adapter onto the PTZ mounting plate (adapter should be provided with PTZ).

Note: Mounting varies depending in the PTZ model and brand. Please reference the specific PTZ Integration Guide for key installation details

Hardware

*Optional

Step 9: Install PTZ Mounting Plate on PTZ

Mount PTZ mounting plate with the adapter onto the PTZ. Place the supplied PTZ mounting plate gasket over PTZ wiring onto PTZ mounting plate in preparation for installation.

Step 10: Mount PTZ to Arm or Goose-neck Mount

Install the PTZ onto the camera box using the socket cap bolts provided. Ensure to place the supplied gasket in between the PTZ mounting plate and the camera box (Notice: mounting holes are not square)
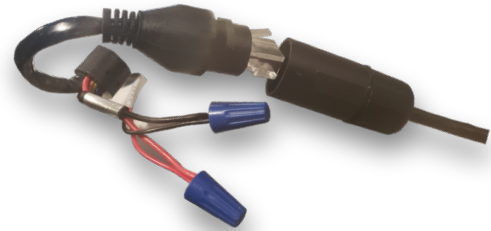
Hardware

1 x   4 x

Step 11: Connect Network and Optional Power cables to PTZ

Connect the Ethernet cable coming through the mount to the PTZ. If not using POE to power the PTZ, or if the PTZ requires a separate power source, connect the power wires to the PTZ.

Note: See the PTZ's installation manual for proper field wiring.

Step 12: Stuff extra slack into camera box

Stuff the extra cabling down into the Camera Box leaving only the Thermal Radar network cable sticking out of the camera box.
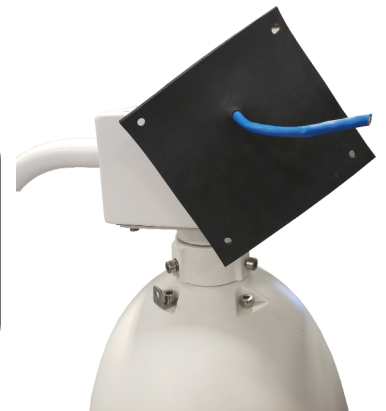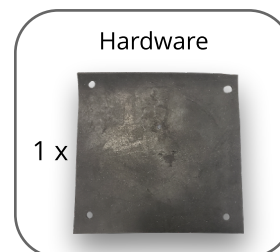
Step 13: Place a camera box seal on top of Camera Box

Feed the unterminated CAT-5/6 cable for the Thermal Radar through the small hole the is near the center of the gasket.

Install an RJ-45 connector on the end of the CAT-5/6.

Hardware

1 x

Caution: *Pushing an already terminated CAT-5/6 cable through the gasket could cause the gasket to tear, rendering the gasket ineffective at sealing the base of the Thermal Radar. Which could result in decreased performance or damage to the Thermal Radar.*
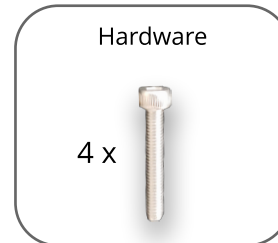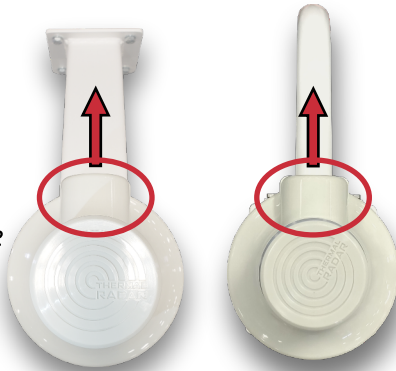
Step 14: Mount Thermal Radar

Plug the Network Cable into the bottom of the Thermal Radar and place the Thermal Radar on the top of the Camera Box with the square part of the housing facing directly towards the mounting arm.

Secure the Thermal Radar by installing the (4) 4mm socket cap bolts through the Thermal Radar base plate and into the camera box

Note: Ensure the square part of the Thermal Radar housing is facing the mounting arm.
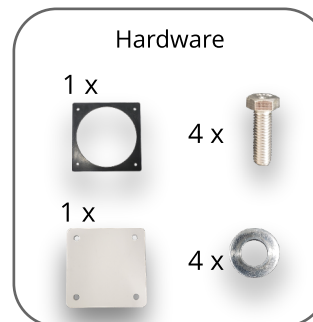
Hardware

4 x

Step 15: Check Lens Cover

Check that the top plastic Lens Cover is fully sealed to the top housing of the Thermal Radar and does not have any wrinkles or holes. The lens cover only needs to be tightened to the point where the black O-ring touches the housing, then tighten an additional 10mm or 3/8" in.

Caution: *Over tightening can cause the lens cover to develop wrinkles, which will affect the image quality.*

Step 16: Install Blank Covers

Install the blank base box covers on all open sides of the Base Box with the supplied 8mm bolts and flat washers. Ensure to place one of the supplied gaskets in between the cover plate and the base box.

Hardware

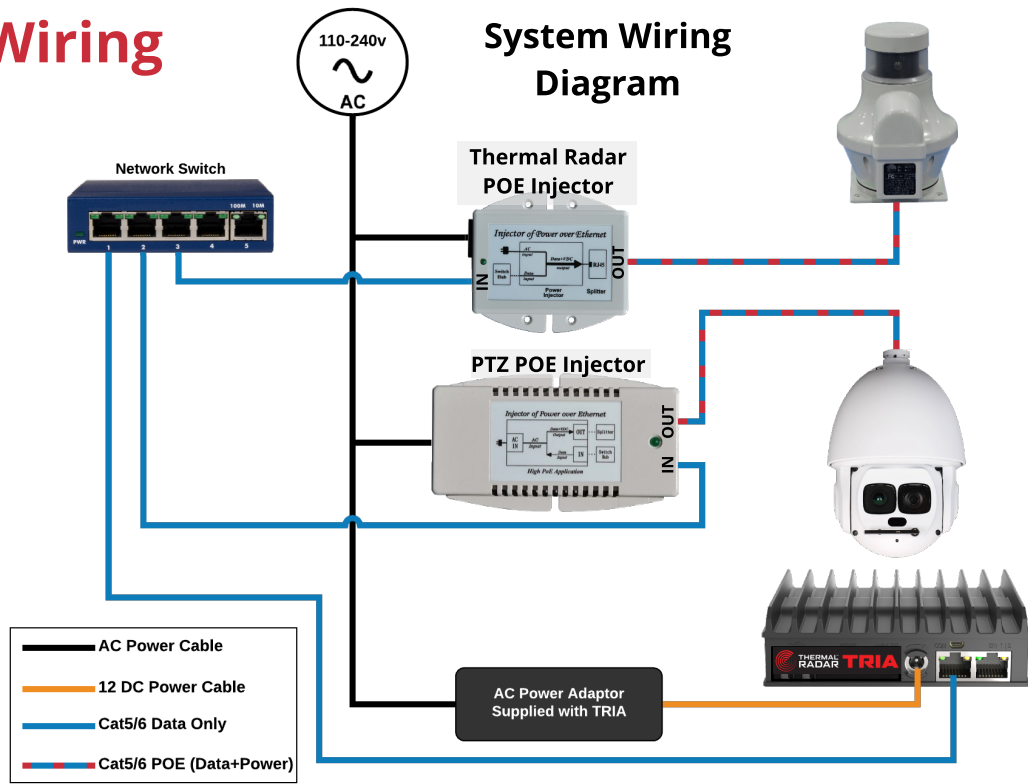1 x   4 x

1 x   4 x

Step 17: Ensure All Seals are Installed & Seated

Ensure all seals on the Base Box and Camera Box are fully seated without any openings for water ingress.

System Wiring

System Wiring Diagram

- AC Power Cable
- 12 DC Power Cable
- Cat5/6 Data Only
- Cat5/6 POE (Data+Power)

Step 1: Wire Thermal Radar for Network and Power

1. Plug cable from Thermal Radar to the OUT (Power+Data) port of the POE Injector

2. Plug the IN (Data Only) port of the POE Injector into the Network Switch

3. Plug the Thermal Radar POE Injector into AC Power Source

4. Verify that after applying power, the Thermal Radar will rotate to its Home position and begin rotating after 30 seconds.

Step 2: Wire PTZ for Network and Power

1. Plug cable from PTZ to the OUT (Power+Data) port of the POE Injector.

2. Plug the IN (Data Only) port of the POE Injector into the Network Switch.

3. Plug the PTZ POE Injector into AC Power Source

4. Verify that after applying power, the PTZ moves around testing its range of movement.

Step 3: Wire TRIA for Network and Power

1. Connect the LAN network wire to the "Eth 1" port on the TRIA.
2. If not already plugged in, insert the dongle into the HDMI port.
3. Connect the power cable from the supplied power supply to the power port on the TRIA

Hardware

Network Cable