



# TruVision IP Compact PTZ Camera Installation Guide

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**Certification**



**FCC compliance** **Class A:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**FCC conditions** This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:  
(1) This device may not cause harmful interference.  
(2) This Device must accept any interference received, including interference that may cause

undesired operation.

**ACMA compliance**

**Notice!** This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

**Canada**

This Class A digital apparatus complies with CAN ICES-003 (A)/NMB-3 (A).

Cet appareil numérique de la classe A est conforme à la norme CAN ICES-003 (A)/NMB-3 (A).

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**2013/56/EU & 2006/66/EC (battery directive):** This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: [www.recyclethis.info](http://www.recyclethis.info).

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**Contact  
information and  
manuals/ tools/  
firmware**

For contact information and to download the latest manuals, tools, and firmware, go to the web site of your region.

Americas: [www.interlogix.com](http://www.interlogix.com)

EMEA: [www.firesecurityproducts.com](http://www.firesecurityproducts.com)

Manuals are available in several languages.

Australia/New Zealand: [www.utcfs.com.au](http://www.utcfs.com.au)

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# Introduction

## Product overview

This is the installation guide for TruVision IP Compact PTZ Camera models:

- TVP-5101 (2.0 MPX, 4X, 350 degree, 20m IR, H.264/H.265)
- TVP-5102 (2.0 MPX, 20X, 150m IR, H.264/H.265)
- TVP-5103 (3.0 MPX, 20X, 50m IR, H.264/H.265)

The Configuration manual is available on our web site.

## Contact information and manuals/tools/firmware

For contact information and to download the latest manuals, tools, and firmware, go to the web site of your region.

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<b>Americas:</b>	<a href="http://www.interlogix.com">www.interlogix.com</a>
<b>EMEA:</b>	<a href="http://www.firesecurityproducts.com">www.firesecurityproducts.com</a> Manuals are available in several languages.
<b>Australia/</b>	<a href="http://www.utcfs.com.au">www.utcfs.com.au</a>
<b>New Zealand:</b>	

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# Installation

This section provides information on how to install the cameras.

## Installation environment

When installing your product, consider these factors:

The TVP-5101 or TVP-5103 were not designed to be mounted flat to a wall. They should be mounted to a ceiling. If mounted to a wall, the wall mount should be used. The bubble/lens assembly should be pointing towards the ground.

- **Electrical:** Install electrical wiring carefully. It should be done by qualified service personnel. Always use a proper PoE switch or a 12 VDC or 24 VAC (depending on the camera) UL listed Class 2 or CE certified power supply to power the camera. Do not overload the power cord or adapter.
- **Ventilation:** Ensure that the location planned for the installation of the camera is well ventilated.
- **Temperature:** Do not operate the camera beyond the specified temperature, humidity or power source ratings. The operating temperature of the camera without heater is between -30 to +60°C (-22 to 140°F). Humidity is below 90%. For the outdoor cameras that feature built-in heaters, the operating temperature range is -40 to 60°C (-40 to 140°F)
- **Moisture:** Do not expose the camera to rain or moisture or try to operate it in wet areas. Turn the power off immediately if the camera is wet and ask a qualified service person for servicing. Moisture can damage the camera and also create the danger of electric shock.

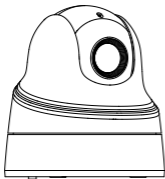
- **Servicing:** Do not attempt to service this camera yourself. Any attempt to dismantle or remove the covers from this product will invalidate the warranty and may also result in serious injury. Refer all servicing to qualified service personnel.
- **Cleaning:** Do not touch the sensor modules with fingers. If cleaning is necessary, use a clean cloth with some ethanol and wipe the camera gently. If the camera will not be used for an extended period of time, put on the lens cap to protect the sensors from dirt.

## Package contents

Check the package and contents for visible damage. If any components are damaged or missing, do not attempt to use the unit; contact the supplier immediately. If the unit is returned, it must be shipped back in its original packaging.

### TVP-5101 indoor IR PTZ camera

- Camera



- Screws:

Drywall anchor  
7.5 × 24.5 mm (3 pcs)

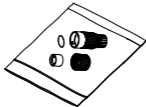


Screw  
PA4 × 25 mm (3 pcs)





- Water joint: Provides water resistance to network cable connector.



- Drill template



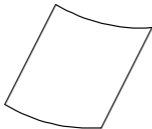
- Installation guide



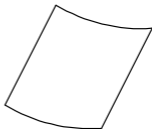
- CD with Configuration manual and TruVision Device Manager



- Equipment Disposal sheet

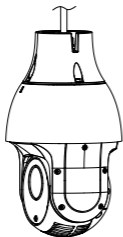


- Battery Disposal sheet

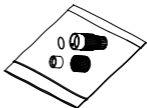


## TVP-5102 IR PTZ camera

- Camera



- Water joint: Provides water resistance to network cable connector.



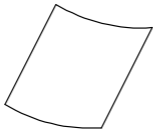
- Installation guide



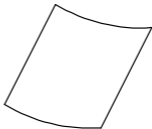
- CD with Configuration manual and TruVision Device Manager



- Equipment Disposal sheet



- Battery Disposal sheet

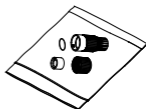


## TVP-5103 outdoor IR PTZ camera

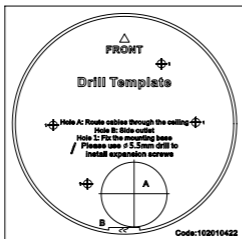
- Camera



- Water joint:  
Provides water resistance to network cable connector.



- Drill template



- Screws:

Drywall anchor  
7.5 × 24.5 mm (4  
pcs)



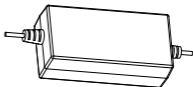
Screw  
PA4 × 25 mm (4  
pcs)



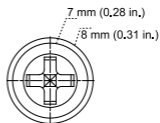
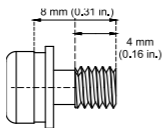
- Safety lanyard and mounting screw



- 12 VDC power supply. Power cord not included



- **Safety lanyard screw**



- **CD with Configuration manual and TruVision Device Manager**



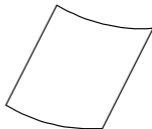
- **Installation guide**



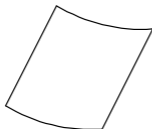
- **Torx wrench**



- **Equipment Disposal sheet**



- **Battery Disposal sheet**



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**CAUTION:** Use direct plug-in UL listed power supplies marked Class 2/CE certified or LPS (limited power source) of the required output rating as listed on the unit.

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**CAUTION:** Risk of explosion if the battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

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## Camera description

**Figure 1: TVP-5101 indoor IR PTZ camera adapter plate**

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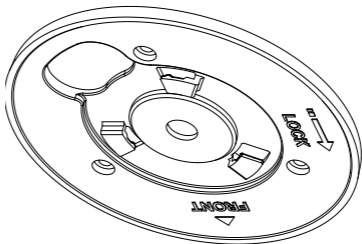
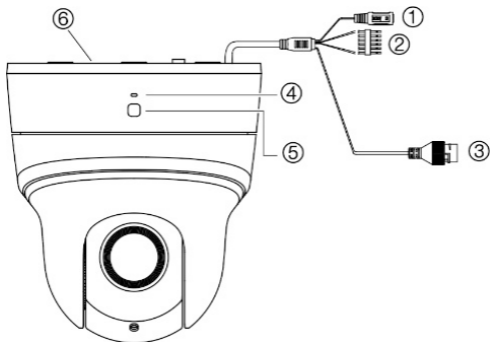
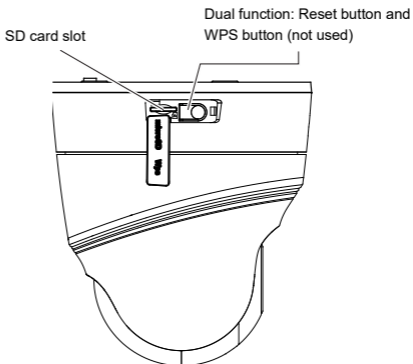


Figure 2: TVP-5101 indoor IR PTZ camera



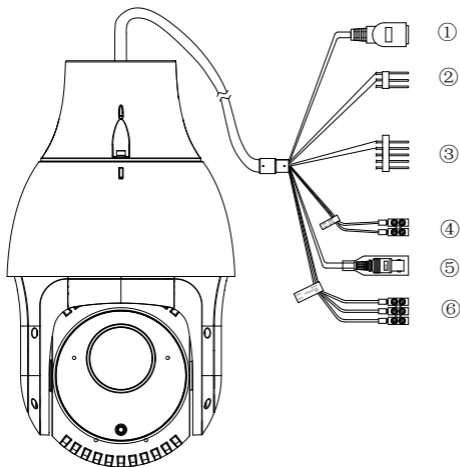
- |  |                            |
|--|----------------------------|
| 1. 12 VDC power  | 3. Ethernet RJ45 connector |
| 2. 1 alarm input (Yellow/Red)<br>/ 1 alarm output<br>(Yellow/Green)/ audio<br>input/output port (Pink) | 4. MIC                     |
|  | 5. Power LED               |
|  | 6. Adapter plate           |

## Plastic access panel area



**Note:** To reset the camera to default settings, press and hold the Reset button for 10 s and power on or reboot the camera. You can then restore the default settings, including the user name, password, IP address, port number., etc.

Figure 3: TVP-5102 IR PTZ camera

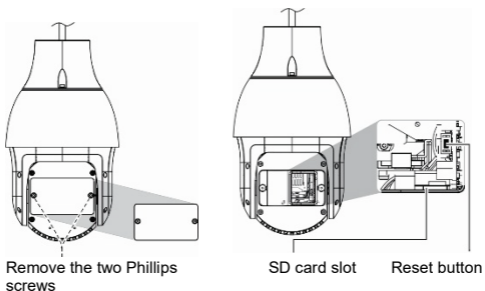


- |   |                       |
|---|-----------------------|
| 1. Ethernet RJ45 connector  | 4. RS-485 port        |
| 2. Audio input (Pink)/ output (Purple) port                                 | 5. 960H analog output |
| 3. 2 alarm inputs (Yellow/Blue, Yellow/Orange) / 1 alarm output (White/Red) | 6. 24 VAC power       |



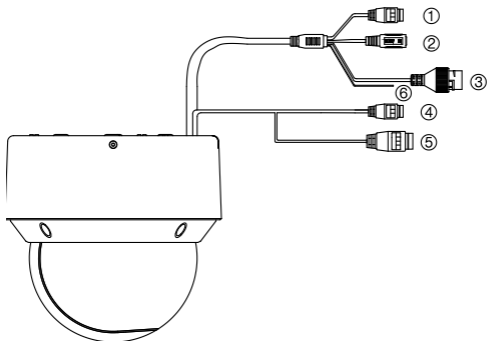
**Figure 4: TVP-5102 IR PTZ camera – Accessing the reset button and SC card slot**

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**Note:** To reset the camera to default settings, press and hold the Reset button for 10 s and power on or reboot the camera. You can then restore the default settings, including the user name, password, IP address, port number., etc.

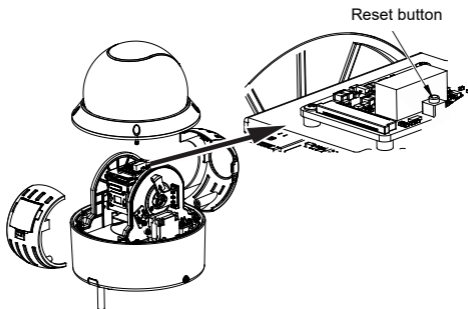
**Figure 5: TVP-5103 IR PTZ camera**



- |  |                          |
|--|--------------------------|
| 1. Audio input/output port                         | 4. 2 alarm inputs        |
| 2. 12 VDC power supply.<br>Power cord not included | 5. 2 alarm outputs       |
| 3. Ethernet RJ45 connector                         | 6. Ground (yellow/green) |

**Figure 6: TVP-5103 IR PTZ camera – Location of the reset button**

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**Note:** To reset the camera to default settings, press and hold the Reset button for 10 s and power on or reboot the camera. You can then restore the default settings, including the user name, password, IP address, port number., etc.

## IR illuminators

The IR PTZ camera's built-in IR illumination provides high-quality video in low-light environments, even when there is no other illumination available.

You can configure the IR illumination using the web browser or a recorder such as a NVR and DVR. If the function is enabled, the IR light is ON when the camera enters night (black and white) mode. If disabled, the IR light is always OFF.

The visible IR range may vary due to multiple factors such as weather, IR reflection level of objects in the frame, lens

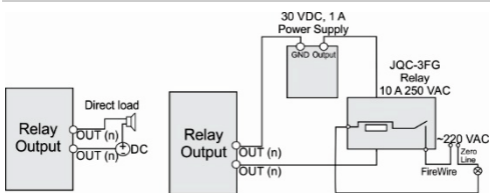
adjustment, and camera settings. Please refer to the camera datasheet for the standard IR range.

**Note:** Avoid installing the IR camera in close proximity to a solid object, such as a tree or wall. The reflection will cause over-exposure and loss of detail in the field of view.

## Alarm input and output connections

The alarm output can be used to turn on and off an external alarm device. Connect a 30 VDC/1A external power supply to the alarm output. If using an AC power supply, an external relay must be used to prevent electric shock and damage to the device. See Figure 3 below.

Figure 7: External alarm output



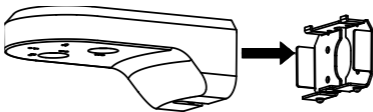
## Mounting the TVP-5101 PTZ camera

**Note:** Make sure that the wall is strong enough to withstand more than eight times the weight of the PTZ camera and its accessories.

The PTZ was not designed to be mounted flat to a wall. It should be mounted to a ceiling. If mounted to a wall, the wall mount should be used. The lens assembly should be pointing towards the ground.

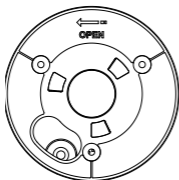
**To mount the TVP-5101 PTZ camera on the wall (wall mount is not included with the camera):**

1. Remove the wall mount mounting plate from the mount by loosening the screw that locks the mount in place, located towards the back of the wall mount. Pull the mounting plate away from the mount. It is held in place by two metal clips and dimples.

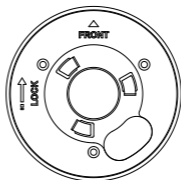


2. Rotate the PTZ adapter plate counterclockwise to separate it from the PTZ camera.

Open

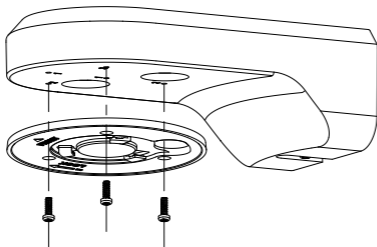


View of the adapter plate when mounted to the PTZ



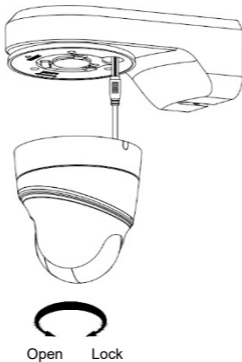
View of the adapter plate that goes towards the PTZ

3. Align the cable access hole on the adapter plate with the access hole in the wall mount. Install the adapter plate to the wall mount using screw B. Keep in mind that the PTZ pan range is 350 degrees.

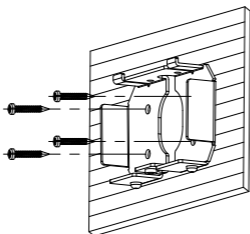


4. Route the PTZ cable harness through the cable access hole.

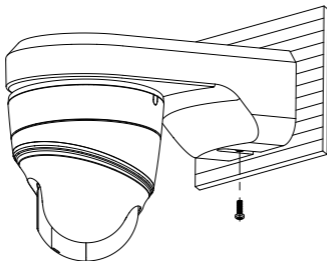
5. Align the PTZ camera with the adapter plate. Rotate the PTZ clockwise to secure the camera to the adapter plate. The three clips on the adapter plate lock the camera into place.



6. Using the supplied drill template or wall mount mounting plate, mark and drill four holes in the mounting surface. Provide access for the interconnect cables.
7. Making sure that the up arrow on the mounting plate is pointing up, secure the wall mount mounting plate to the wall with screw A (supplied with the wall mount).



8. Connect the corresponding cables.
9. Install the camera assembly to the mounting plate by lining up the two slots in the top of the wall mount with the two metal clips at the top of the mounting plate. Push down on the wall mount/PTZ until it snaps into place. Tighten the screw at the base of the wall mount to lock it in place.



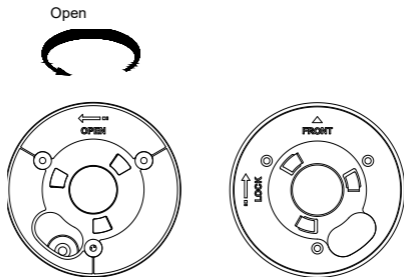


## To mount the TVP-5101 PTZ camera on the ceiling:

**Note:** Make sure the ceiling is strong enough to withstand more than four times the weight of the PTZ camera and its accessories.

The PTZ was not designed to be mounted flat to a wall. It should be mounted to a ceiling. If mounted to a wall, the wall mount should be used. The lens assembly should be pointing towards the ground.

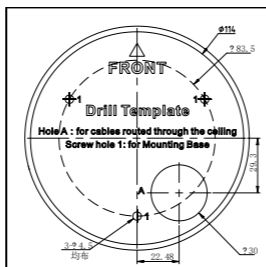
1. Rotate the adapter plate counterclockwise to separate it from the PTZ camera.



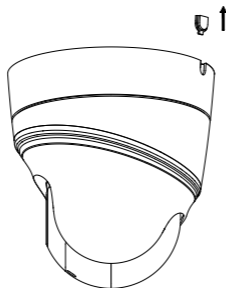
View of the adapter plate when mounted to the PTZ

View of the adapter plate that goes towards the PTZ

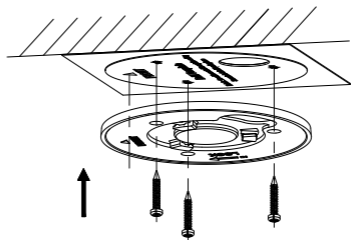
2. A drill template is provided. Drill three holes in the mounting surface, and provide an access hole for the interconnect cables. Make sure the front arrow on the template (or adapter plate) points to the area to be viewed. Keep in mind that the PTZ pan range is 350 degrees.



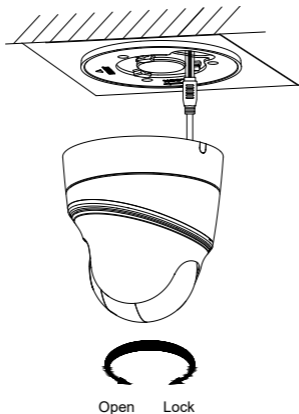
- Remove the cable slot cover (as shown) if you want to route the cable harness along the surface of the ceiling.



4. Attach the adapter plate to the ceiling and secure it with the three supplied screws. Make sure that the front arrows on the drill template and adapter plate are aligned.



5. Route the cables.
6. Align the PTZ camera with the adapter plate. Rotate the PTZ camera clockwise to secure the PTZ to the adapter plate. There are three clips on the adapter plate that lock on the camera into place.

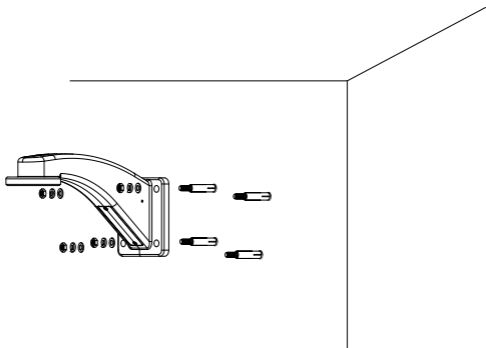


## Mounting the TVP-5102 PTZ camera

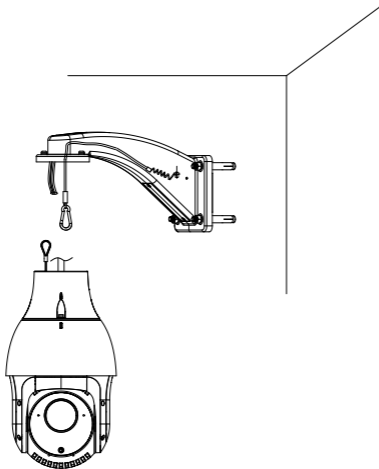
**Note:** Make sure that the wall is strong enough to withstand more than eight times the weight of the PTZ camera and its accessories.

### To wall mount the TVP-5102:

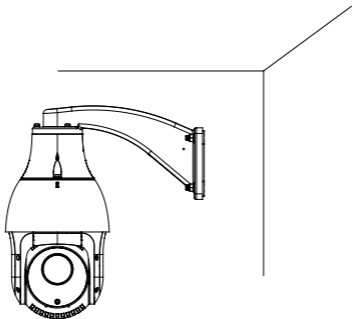
1. Refer to the *Wall Mount Installation Guide* for details. Attach the wall mount TVP-WMB (not included with the PTZ) to the wall by aligning the four screw holes of the mount with expansion anchors.



2. Clip the safety lanyard from the wall mount to the metal loop at the top of the PTZ, as shown.

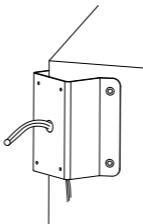


3. Install the PTZ camera to the wall mount, and secure the PTZ camera using the screws enclosed with the mount.

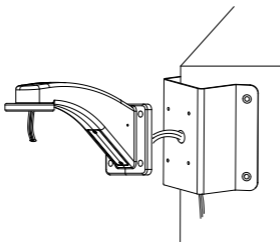


**To corner mount the TVP-5102:**

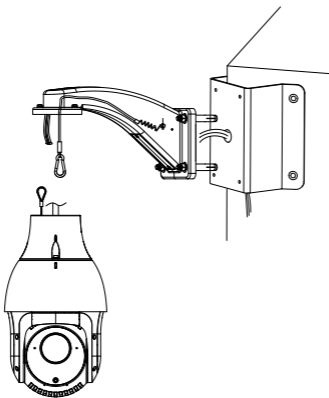
1. Refer to the *Wall Mount and Corner Mount Adapter Installation Guide* for details. Mark the surface and drill four mounting holes on the surface. Route the interconnect cables prior to mounting the corner adapter. Install the PTZ corner mount adapter to the corner of a building using the four expansion anchors.



2. Install the PTZ wall mount on the corner mount adapter with four screws.

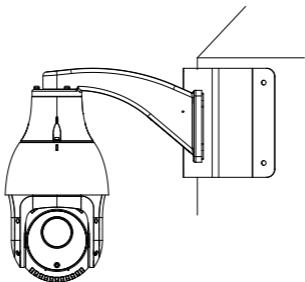


3. Clip the safety lanyard from the wall mount to the metal loop at the top of the PTZ, as shown.



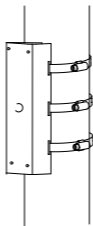


4. Install the PTZ camera to the wall mount. Secure the PTZ using the screws enclosed with the wall mount.

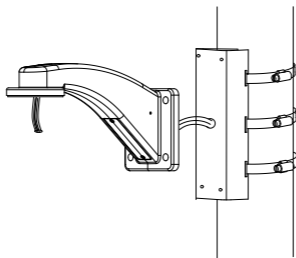


**To pole mount the TVP-5102:**

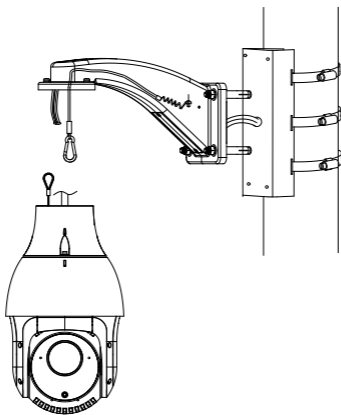
1. Route the interconnect cables prior to installing the pole mount adapter. Attach the PTZ pole mount adapter to the pole using the three hose clamps.



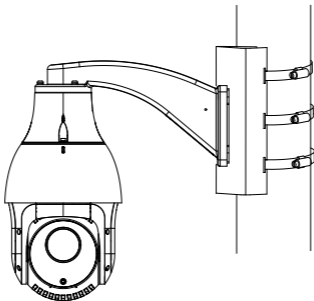
2. Install the PTZ wall mount on the PTZ pole mount adapter with four screws.



3. Clip the safety lanyard from the wall mount to the metal loop at the top of the PTZ, as shown.



4. Install the PTZ camera to the mount. Secure the PTZ camera using the screws enclosed with the wall mount.



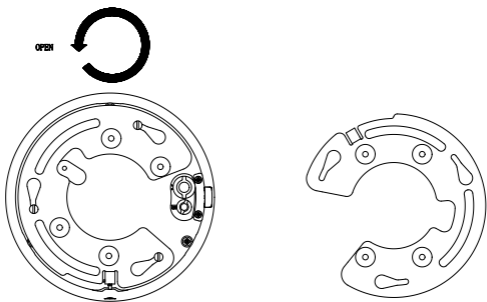
## Mounting the TVP-5103 PTZ camera

**Note:** Make sure that the wall is strong enough to withstand more than eight times the weight of the PTZ camera and its accessories.

The PTZ was not designed to be mounted flat to a wall. It should be mounted to a ceiling. If mounted to a wall, the wall mount should be used. The bubble assembly should be pointing towards the ground.

**To wall mount the TVP-5103 PTZ (mount not included with the PTZ):**

1. Using the supplied Torx wrench, loosen the locking screw at the base of the PTZ. Loosen slightly the three screws/standoffs on the base of the PTZ camera and rotate the metal adapter plate counterclockwise to separate it from the PTZ camera.

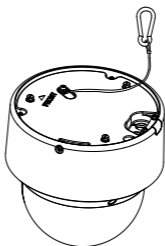


2. Place the metal PTZ adapter plate on the cup base wall mount. The arrow that states FRONT should be pointing away from the base of the wall mount. Using screw A, secure the adapter plate to the wall mount.

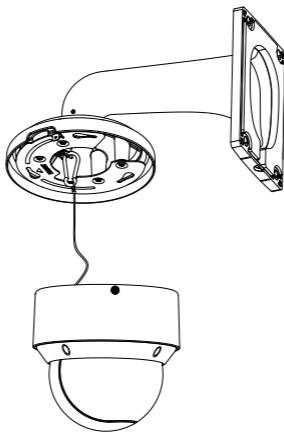
Tighten screw A fully. Otherwise, the dome will not slide properly into place over the three standoffs. The screw head will block the rotation.

3. Attach the safety lanyard to the base of the PTZ camera, as shown.

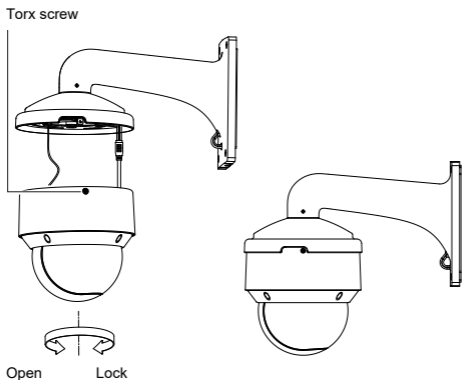
It is important to make sure that the lug, at the end of the safety lanyard, is contained within the recessed area of the PTZ base. Otherwise, it will not allow you to lock the PTZ to the adapter plate.



4. Clip the safety lanyard on the metal tab inside of the cup base of the wall mount, as shown.



5. Route the PTZ cable harness through the wall mount. If you are not using all the features/cables, you may want to tuck them behind the PTZ adapter plate to keep them out of the way so they do not interfere when you install the PTZ on the wall mount.
6. Align the PTZ camera with the adapter plate. Rotate the PTZ camera clockwise to lock in place, making sure that the Torx screw is lined up with the metal tab on the metal adapter plate.
7. Tighten the Torx screw at the base of the PTZ to lock into place.



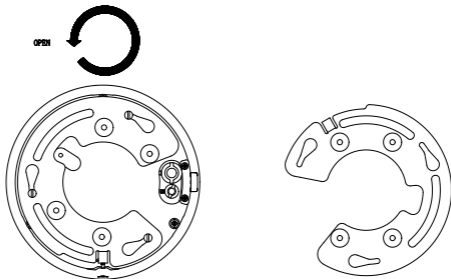
## To ceiling mount the TVP-5103:

### ◆ Ceiling mounting without a back box

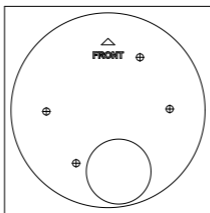
The camera can be ceiling mounted to indoor and outdoor solid ceiling construction. The following are the mandatory preconditions for ceiling mounting:

- The thickness of the ceiling must be between 5 to 40 mm.
- Make sure the ceiling is strong enough to withstand more than four times the weight of the PTZ camera and its accessories.

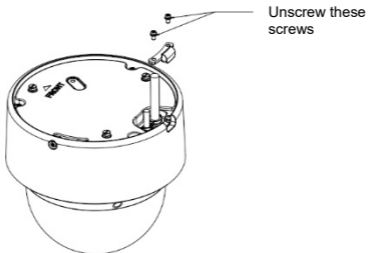
1. Loosen slightly the three screws on the base of the PTZ. Using the supplied Torx wrench, loosen the locking screw at the base of the PTZ. Loosen slightly the three screws on the base of the PTZ camera and rotate the metal adapter plate counterclockwise to separate it from the PTZ camera.



2. Attach the drill template (supplied) to the location where you want to install the PTZ camera. Make sure the front arrow points to the mounting area.

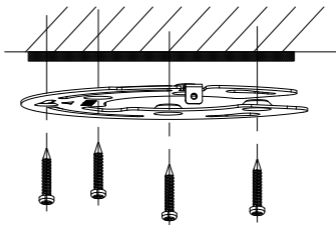


3. Drill a cable access hole in the ceiling according to the circle on the template if you want to route the cables through the ceiling. Unscrew two screws indicated below to pull out the cable slot cover if you want to route the cable on the surface of the ceiling.

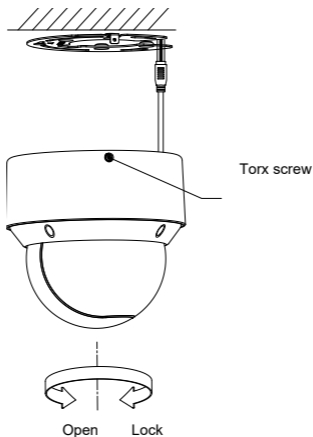




4. Attach the adapter plate to the ceiling and secure it with the four supplied screws. Tighten screw A fully. Otherwise, the dome will not slide properly into place over the three standoffs. The screw head will block the rotation. Make sure that the front arrows on the drill template and adapter plate are aligned.



5. Align the PTZ camera with the adapter plate. Rotate the PTZ camera clockwise to secure the PTZ to the adapter plate.
6. Tighten the Torx screw with the Torx wrench that is provided with the PTZ.



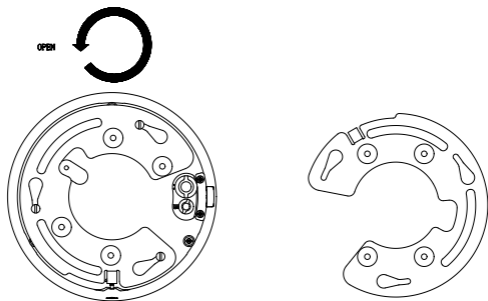
### ◆ In-ceiling mounting

#### Notes:

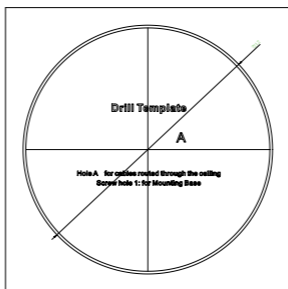
- There must be at least 250 mm of height for in-ceiling mounting.
- The thickness of the ceiling must be between 5 to 40 mm.
- Make sure the ceiling is strong enough to withstand more than four times the weight of the PTZ camera and its accessories.

1. Using the supplied Torx wrench, loosen the locking screw at the base of the PTZ. Loosen slightly the three screws

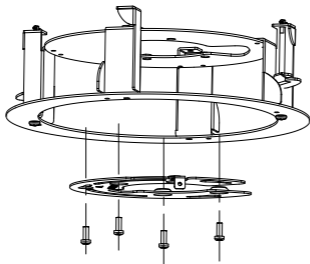
on the base of the PTZ camera and rotate the metal adapter plate counterclockwise to separate it from the PTZ camera.



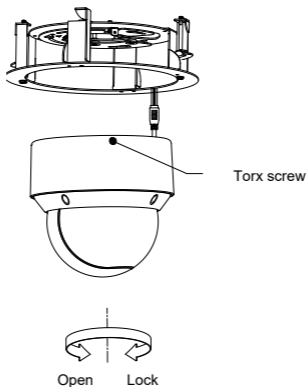
2. Cut a hole in the mounting surface using the supplied template.



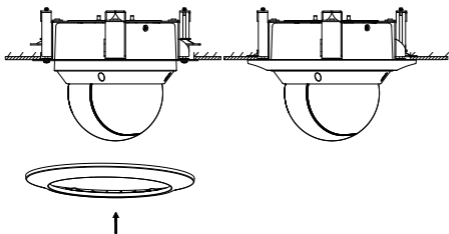
3. Align the cable access hole in the mounting plate with cable access in the flush mount. Install the mounting plate to the flush mount with the A screw. Tighten screw A fully. Otherwise, the dome will not slide properly into place over the three standoffs. The screw head will block the rotation.



4. Route the cables through the flush mount.
5. Align the PTZ camera with the adapter plate. Rotate the PTZ camera clockwise to secure the PTZ to the adapter plate. There are three clips on the adapter plate that lock on the camera into place. Make sure that the locking Torx screw is lined up with the metal adapter plate.
6. Tighten the Torx screw with the Torx wrench that is provided with the PTZ.



7. Remove the plastic decorative trim ring from the flush mount. It is held into place with six small magnets. Insert the camera assembly and flush mount into the mounting surface. While holding the camera and mount in place, use a Phillips screwdriver to lock the camera in place. (two locations, see the image of the hooks in the *Dimensions* section of the TCP-CFM installation instructions.)
8. Install the trim ring on to the flush mount. The trim ring will snap into location, locking it in place.



## Using the camera with an Interlogix NVR or Hybrid DVR or another system

Please refer to the NVR/DVR user manuals for instructions on connecting and operating the camera with these systems.

## Using the camera with a TruVision Navigator

A camera must be connected to an Interlogix NVR or hybrid DVR to be operated by TruVision Navigator. Please refer to the TruVision Navigator user manual for instructions on operating the camera with the TruVision Navigator.

## Accessing the camera over the internet

Use the web browser to access and control the camera over the internet.

**Note:** Any changes made to the camera's configuration only apply to this camera.

Change the administrator password once the set-up is complete. Only authorized users should be able to modify camera settings.

### To access the camera online:

1. In the web browser enter the camera's IP address (default is 192.168.1.70). The Login dialog box appears.
2. Enter your user name and password.

Default user name: admin

A valid password range must be between 8 and 16 characters. You can use a combination of numbers, lower and upper case letters, and special characters : \_ - , . \* & @ / \$ ? Space. The password must contain characters from at least two of these groups. We also recommend that you reset your password regularly. For high security systems, it is particularly recommended to reset the password monthly or weekly for better protection.

Click **Login**. The web browser screen appears in live mode.

3. Click the **Configuration** tab on the top of the screen and select the parameter to change.

# Specifications

## TruVision TVP-5101 indoor IR IP PTZ camera

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### Electrical

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Voltage input	12 VDC, PoE (802.3af)
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Power consumption	Max. 9 W
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### Miscellaneous

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Connectors	12 VDC, Audio, Alarm In/Out, Ethernet RJ45 connector
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Operating temperature	-10 to +50 °C (-14 to +122°F)
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Dimensions	125 × 136.7 mm (4.92 × 5.38 in.)
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Weight	0.65 kg (1.40 lb.)
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Environmental rating	NA
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## TruVision TVP-5102 IR IP PTZ camera

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### Electrical

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Voltage input	24 VAC, Hi-PoE
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Power consumption	Max. 32 W
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### Miscellaneous

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Connectors	24 VAC, Alarm In/Out, RS-485, Ethernet RJ45 connector, Audio in/out (960H) analog output
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Operating temperature	-30 to +65 °C (-22 to +149°F)
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Dimensions	185 × 330 mm (7.28 × 2.99 in.)
Weight	4 kg (8.82 lb.)
Environmental rating	IP66

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## **TruVision TVP-5103 IR IP PTZ camera**

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### **Electrical**

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Voltage input	12 VDC, PoE+ (802.3at)
Power consumption	Max. 18 W

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### **Miscellaneous**

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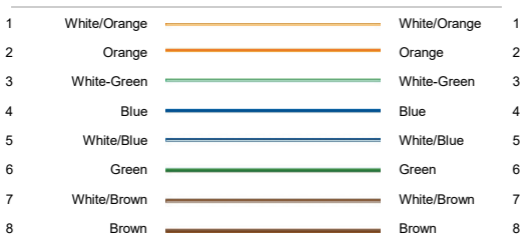
Connectors	12 VDC, Alarm In/Out, Ethernet RJ45 connector, Audio in/out
Operating temperature	-30 to +65 °C (-22 to 149°F)
Dimensions	169 × 161 mm (6.65 × 6.34 in.)
Weight	2.45 kg (5.40 lb.)
Environmental rating	IP66

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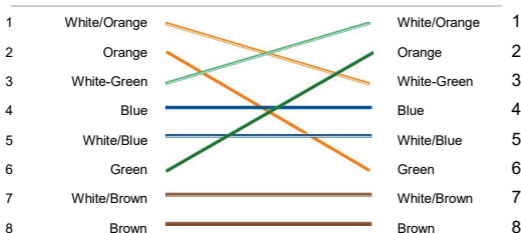
# Pin definitions

There are eight wires on a standard UTP/STP cable and each wire is color-coded. The following shows the pin allocation and color of straight and crossover cable connection:

**Figure 8: Straight-through cable**



**Figure 9: Cross-over cable**



Please make sure your connected cables have the same pin assignment and color as above before deploying the cables in your network.

