



TruVision IP PTZ Camera Installation Guide

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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.

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Canada This Class A digital apparatus complies with 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.

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**Product
documentation**

Please consult the following web link to retrieve the electronic version of the product documentation. The manuals are available in several languages.



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Product overview

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

- TVP-5104 (2.0 MP wall mount, 25X, H.264/H.265)
- TVP-5105 (2.0 MP wall mount, 36X, 200 m IR, H.264/H.265)

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.

EMEA:

<https://firesecurityproducts.com>

Manuals are available in several languages.

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Installation

This section provides information on how to install the cameras.

Installation environment

When installing your product, consider these factors:

- **Electrical:** Install electrical wiring carefully. It should be done by qualified service personnel. Always use a proper Hi-PoE (Max. 60 W) switch or a 24 VAC 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.

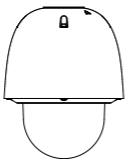
- **Cleaning:** Do not touch the sensor modules with fingers. If cleaning is necessary, use a clean cloth with some ethanol and wipe the camera gently. If the camera will not be used for an extended period of time, put on the lens cap to protect the sensors from dirt.

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.

PTZ camera

- PTZ camera



- Hex wrench



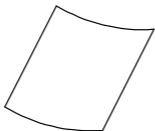
- CD with Configuration manual and TruVision Device Manager



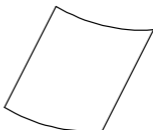
- Installation guide



- Battery Disposal sheet

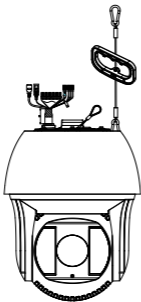


- Equipment Disposal sheet

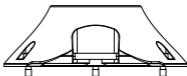


IR PTZ camera

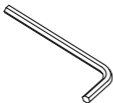
- IR PTZ camera



- Hinged back box



- Hex wrench



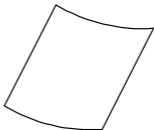
- CD with Configuration manual and TruVision Device Manager



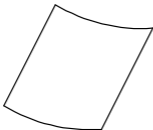
- Installation guide



- Equipment Disposal sheet



- Battery Disposal sheet

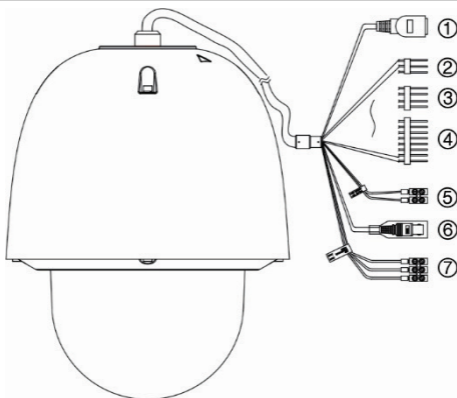


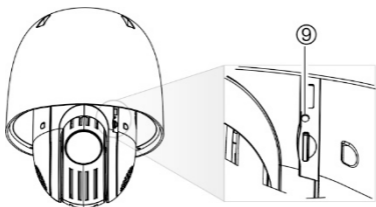
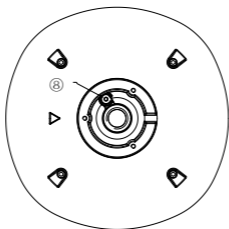
CAUTION: Use direct plug-in UL listed power supplies marked Class 2/CE certified or LPS (limited power source) of the required output rating as listed on the unit.

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

Camera description

Figure 1: PTZ camera



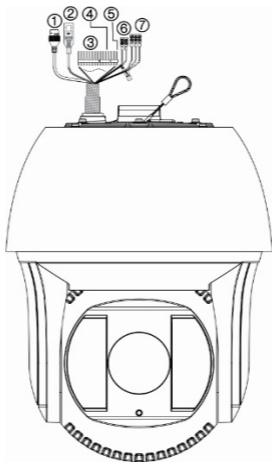


- | | |
|---|--|
| 1. Ethernet RJ45 connector | 5. RS-485 port |
| 2. Audio in (RED/WHITE)/out port (BLUE/WHITE) | a. Orange RS-485+ |
| 3. 2 alarm outputs (BROWN, ORANGE/WHITE) | b. Yellow RS-485- |
| 4. 7 alarm inputs (GREEN, BLUE, PURPLE, GRAY, WHITE, BLACK/ | 6. 960H analog output |
| | 7. 24 VAC power supply |
| | 8. Location to attach the safety lanyard |
| | 9. Reset button |

WHITE, BROWN/
WHITE)

Note: Hi-PoE (Max. 60 W) or 24 VAC is required to power the PTZ.

Figure 2: IR PTZ camera



- | | |
|----------------------------|--|
| 1. Ethernet RJ45 connector | 4. 2 alarm outputs (WHITE_RED, WHITE_PURPLE) |
| 2. 960H analog output | 5. Audio in (PURPLE)/out port (PINK) |
| 3. 7 alarm inputs | |

(YELLOW_BLUE,
YELLOW_ORANGE,
YELLOW_GREEN,
YELLOW_BROWN,
YELLOW_PURPLE,
YELLOW_GREY,
YELLOW_RED)

6. RS-485 port
 - a. Orange RS-485+
 - b. Yellow RS-485-
7. 24 VAC power supply

Note: Hi-PoE (Max. 60 W) or 24 VAC is required to power the PTZ.

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 TVN and TVR. 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.

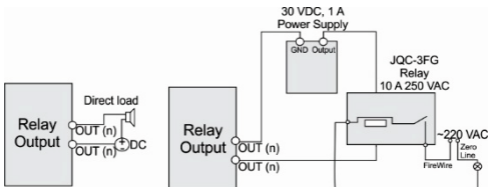
Note: Avoid installing the IR camera in close proximity to a solid object, such as a tree or wall. The reflection will cause over-exposure and loss of detail in the field of view.

Alarm input and output connections

The alarm output can be used to turn on and off an external alarm device. Connect a 30 VDC/1 A 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.

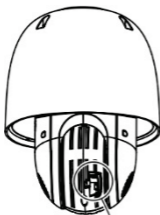
Figure 3: External alarm output



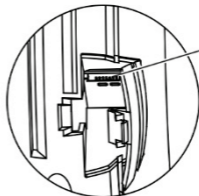
How to access the SD card slot

PTZ camera

Open the black plastic access panel on the back of the PTZ block. The SD card slot is in the corner, as shown below.



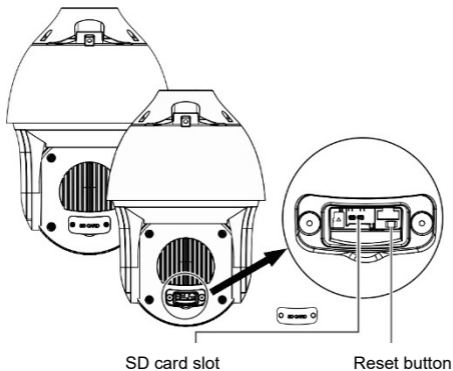
Black plastic access panel



SD card

IR PTZ camera

Open the black plastic access panel on the back of the PTZ block. The SD card location is shown in the figure below.



Restore default settings

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.

Mounting the PTZ camera

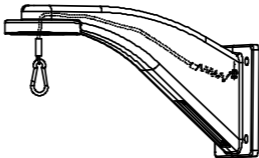
Mount the wall mount (not included) on the mounting surface)

You can mount the camera on indoor/outdoor solid walls. The following requirements are mandatory preconditions for wall mounting:

- The wall must be thick enough to install the expansion screws.
- Please ensure that the wall is strong enough to withstand more than eight times the weight of the dome and bracket.

To mount the wall mount (not included) on the mounting surface):

1. Attach the PTZ safety lanyard (depending on the type of PTZ, IR vs non-IR) to the wall mount. Refer to the wall mount installation guide for appropriate lanyard type, IR vs non-IR PTZ.



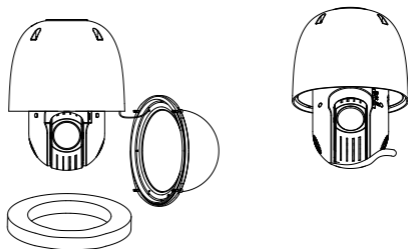
2. Route the PTZ interconnect cables that are required for the installation. Pull the cables through the wall mount prior to completing the installation.

3. Use the wall mount as a template to mark out the mounting area. Provide an access hole in the mounting surface for the interconnect cables. Drill four screw holes in the wall according to the mounting holes, and then insert M8 expansion anchors (included with the wall mount) into the mounting holes.
4. Pull the interconnect cables through the wall mount prior to installing the mount. The access area may ease the process when making the wiring connections.
5. Install the wall mount to the mounting surface by aligning the mounting holes with the expansion anchors.
6. Secure the wall mount with four nuts and washers.

Mount the PTZ camera on the wall mount

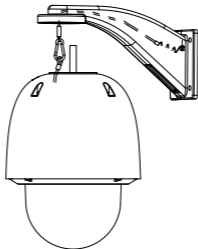
To mount the PTZ camera:

1. While leaving the protective plastic liner in place, use the provided wrench to loosen the four hex head screws that hold the bubble assembly in place.
2. Remove the bubble assembly. Remove and discard the tape and foam ring that are used to protect the PTZ during shipping.

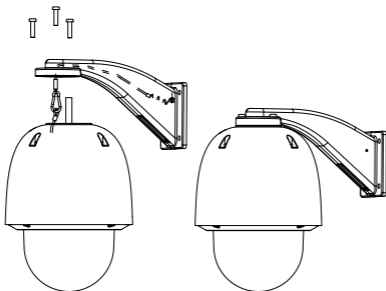


Reinstall the bubble assembly, making sure that the rubber gasket remains in place. Fully tighten the four hex head screws to ensure a good seal.

3. Route the PTZ cable harness through the wall mount. A cable access panel is provide to ease the overall installation. Clip the wall mount safety lanyard to the PTZ, as shown.

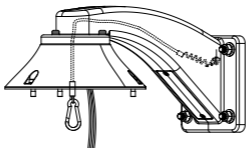


4. Mount the PTZ to the wall mount using the three screws that are provided with the mount.

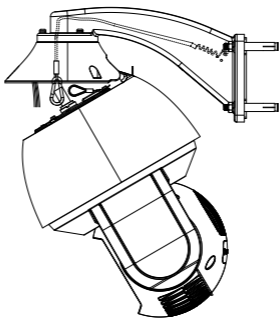


To mount the IR PTZ camera:

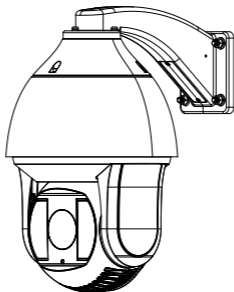
1. Pull the interconnect cables through the wall mount prior to installing the mount. Install the upper base to the wall mount.



2. Clip the IR IP PTZ on to the upper base.
3. Connect the IR IP PTZ safety lanyard to the IR PTZ, as shown below. Refer to the wall mount installation guide for lanyard type.



4. Route the interconnect cables to the PTZ camera. Connect the corresponding network/power/RS-485 cables.
5. Raise the IR IP PTZ into position and tighten the three hex bolts, using the supplied hex wrench, to secure the PTZ to the upper base.



Using the camera with a TruVision 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 a TruVision 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 IP PTZ camera

Electrical

Voltage input	24 VAC
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Power consumption	Hi-PoE (Max. 60W)
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Miscellaneous

Connectors	24 VAC, Alarm In/Out, RS-485, Ethernet RJ45 connector, Audio In/Out, 960H Output
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Operating temperature	-40 to +65°C (-40 to +149°F)
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Dimensions	260.2 × 250.2 × 327.0 mm (10.24 × 9.85 × 12.87 in.)
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Weight	6 kg (13.23 lb.)
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Environmental rating	IP67, IK10
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TruVision IR IP PTZ dome

Electrical

Voltage input 24 VAC

Power consumption Hi-PoE (Max. 60W)

Miscellaneous

Connectors 24 VAC, Alarm In/Out, RS-485, Ethernet RJ45 connector, Audio In/Out, 960H Output

Operating temperature -40 to +65°C (-40 to 149°F)

Dimensions 266.6 × 396.4 mm
(10.50 × 15.61 in.)

Weight 8 kg (17.64 lb.)

Environmental rating IP66, IK10

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 1: Straight-through cable

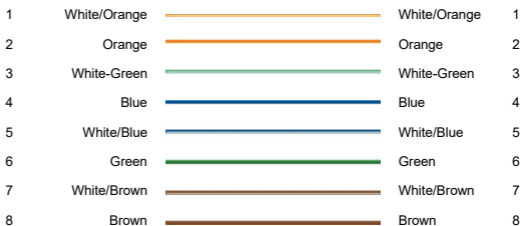
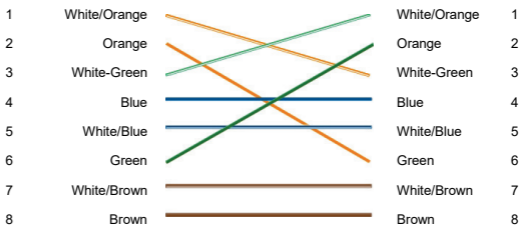


Figure 2: Cross-over cable



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

