



INSTALLATION GUIDE

APTZ-3045-09

Class I Groups B, C, & D T6 Tamb +50°C (+122°F)

NEMA TYPE 4

Class I Zone 1 Group IIB H2

READ THIS FIRST

4/16/2020

IG-032

IVC Drawing:

IVC2174

Revision History:

Rev 0	2-11-2020	Issue
Rev 1	4-16-2020	Added Requirements to section 4

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Check Receipt of All Components

1.1 Component List

Camera with lens including:

- PTZ camera
- Any special mounting equipment (e.g. IVC mount arm)



APTZ-3045-09 shown with sunshield and wiper

NOTE: Only one test cable is enclosed per order, it may be in a different box

1.2 Additional Installation Requirements

The following items are required to properly complete installation:

- 12 x 1/4" base fasteners to suit your installation
- PTZ controlling device
- A flathead screw driver
- Tools for special mounting kit
- Window cleaner

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Set Up and Bench Test Camera

2.1 Remove Packaging and Inspect Camera

To ensure the integrity of the camera during shipping certain packing materials are placed around the PTZ camera. Remove the PTZ camera carefully.

If any damage occurred during shipping please call our support line (617-467-3059) for assistance.

2.2 Connect Camera

This unit can be powered using 115 or 230 VAC.

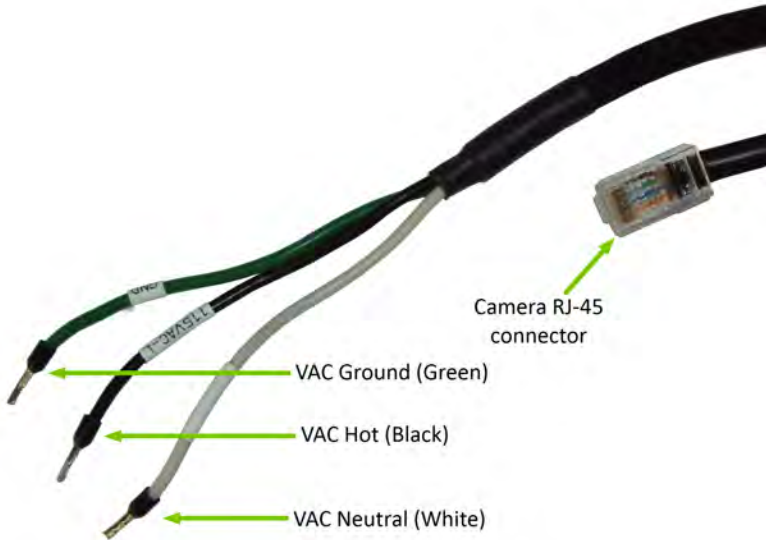
NOTE: Network and power connectivity is provided on two separate 15 foot cables. Do not attempt to remove these cables or alter their installation in any way. The cables are a controlled element of the certification and are potted in place.

The camera is provided with two factory installed cables. One is a weatherproof 3-conductor power cable and the other is a weatherproof CAT5e cable that is terminated with an RJ-45 connector.

NOTE: The RJ-45 connector is not weatherproof, so it should be terminated in a manner that ensures the weatherproof integrity of the network cable.

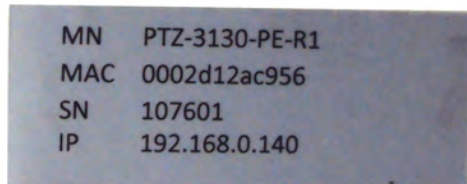
Connect the power wires to an appropriate power source. Plug the network cable into a switch or other network appliance necessary to connect the camera to your network. **NOTE:** A junction box containing an Ethernet extender may have been included with the camera. Consult Appendix B for details on this box.

Wire Table		
Function	Color	Type
115 or 230 VAC Line	Black	Straight
115 or 230 VAC Neutral	White	Straight
115 or 230 VAC Ground	Green	Straight
Network	Black	RJ-45



2.3 Set IP Address

For your convenience, the camera's default IP is printed on the information label attached to the camera and its shipping container.

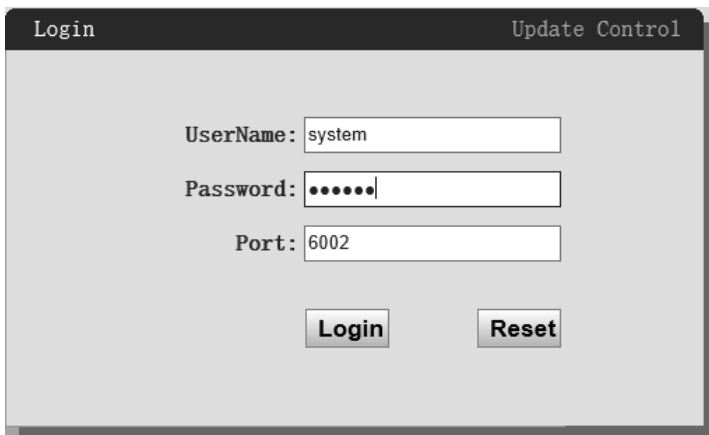


Example camera information label

The camera's IP address has been set on a 192.168.0.x/ class network. For this section, the computer you are using for bench testing must be set to the same subnet as the camera (e.g. 192.168.0.###). Consult your network administrator if you need assistance.

Once you have located the IP address please follow the instructions below to set it to a permanent address:

1. Using a web browser enter the IP address of the camera in the address bar.
2. When prompted by your browser, enter the camera username (factory default = **system**) and password (factory default = **system**). If prompted to load any plugins, do so.

A screenshot of a web browser window showing a login page. The window title is "Login" and "Update Control". The page has a light gray background. There are three input fields: "UserName:" with the text "system", "Password:" with seven dots, and "Port:" with the text "6002". Below the fields are two buttons: "Login" and "Reset".

3. To change the IP address click the Configuration **link** on the top right of the camera's web page.



- Click on the **Network** button in the menu on the resulting page. In the expanded menu, click on **TCP/IP**.



- On the resulting page, enter the new IP address, Subnet Mask, and Default Gateway. Click the **Submit** button at the bottom of the page when satisfied with the camera's network settings.

General Settings

Fixed IP Address Enable DHCP

IP Address:	192.168.1.101
Subnet Mask:	255.255.255.0
GateWay:	192.168.1.1
DNS:	192.168.1.1
Alternate DNS:	192.168.1.1

- Enter the new IP address in the address bar of your browser and observe live video on the **Live View** page.

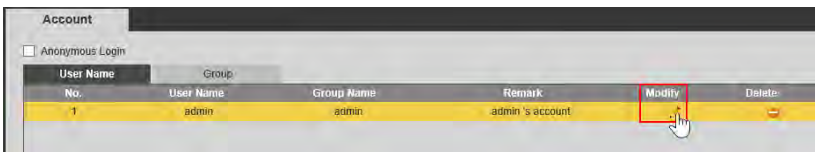
2.4 Configure Camera Login Credentials

IVC camera management software uses the **system** login to access the camera. If you desire to change the system password, follow the steps below:

1. If not already logged in, log into the camera by typing the camera's IP address into a browser address bar.
2. When prompted by your browser, enter the default username (**system**) and password (**system**).
3. Click on the **Configuration** link.
4. Click the **System** button.
5. Click on **System** in the resulting page's menu. Then click **Account** in the expanded menu.



6. On the resulting page, click on the **Modify** icon for the admin account.



7. On the resulting page, click the **Change Password** button.

User Set

User List	Permissions
system	<input checked="" type="checkbox"/> Control PTZ <input checked="" type="checkbox"/> Start or stop recording <input checked="" type="checkbox"/> Remote configuration <input checked="" type="checkbox"/> Remote query state and logs <input checked="" type="checkbox"/> Remote maintenance (Upgrade, Reboot, Restore) <input checked="" type="checkbox"/> Using two-way audio <input checked="" type="checkbox"/> Remote viewing live video <input checked="" type="checkbox"/> Manage user <input checked="" type="checkbox"/> Change the password <input checked="" type="checkbox"/> Remote playback <input checked="" type="checkbox"/> Remote Alarm Upload <input checked="" type="checkbox"/> Remote Control Port <input checked="" type="checkbox"/> Remote Connection RTSP

8. Then enter the current password in the **Old Password** field, the new password in the **New Password** and **Confirm Password** fields.
NOTE: The new login credentials will be needed to configure the camera in your IVC camera management software.

User Set

UserName:

Old password:

New password:

Confirm password:

9. Click the **Submit** button When satisfied with these settings.
10.Refresh the web page and enter the new credentials when prompted. Observe proper camera operation.

2.5 Verify Video

1. Connect the camera Ethernet cable to computer or network.
2. Power the camera.
3. Ensure proper initialization sequence for pan clockwise, pan counter-clockwise, tilt up, tilt down, zoom wide and zoom tele.

4. Type in IP address of camera in browser window.
5. Ensure clear video and proper camera operation.
6. Check wiper operation.

2.6 Bench Test Completed

This concludes the bench test.

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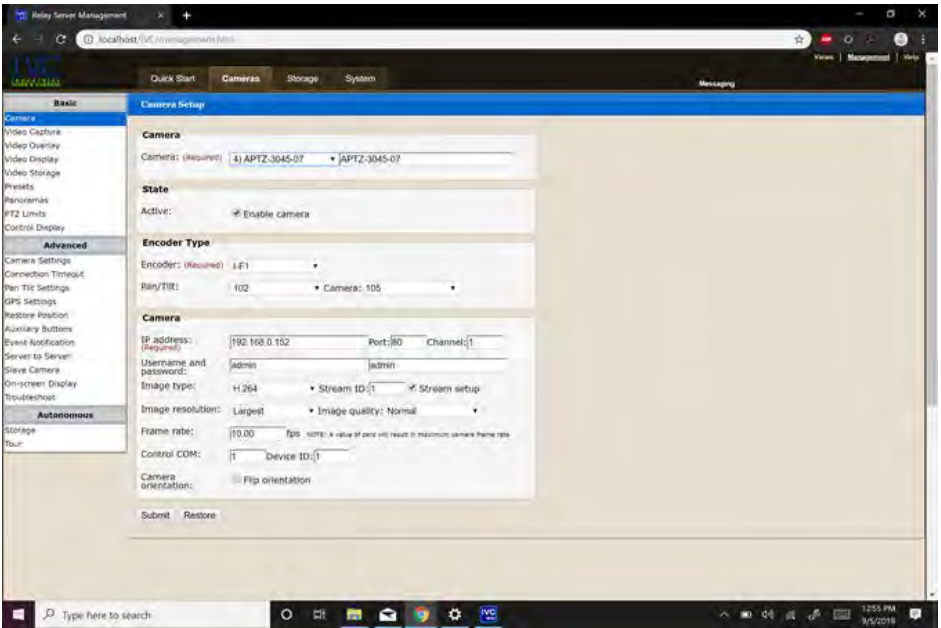
Configure IVC VMS Software

This chapter covers the settings for your IVC software that are unique to this camera. For more details on IVC software configuration and operation, consult the documentation provided with the software.

3.1 Relay Server Settings

To configure the APTZ-3045-09 in the Relay Server:

1. Enter the IP address of the Relay Server into your browser.
2. Login to the Relay Server when prompted for credentials. The user logging in must have sufficient rights to configure Relay Server.
3. Click on the **Management** link.
4. Click on the **Cameras** tab.
5. In the **Basic** menu, click **Camera**.
6. Click the **Camera** drop down menu and select an available ID number. Type a name for this camera in the corresponding text field.
7. Click the **Enable camera** check box.
8. In the **Encoder** drop down menu, select **I-F1**.
9. In the **IP address** text fields type the camera's IP address and Port number.
10. Enter the camera's username and password into the **Username and password** text fields.
11. Configure all other fields as shown below.



Click on the **Help** link on the Relay Server page for more information on these settings and other camera settings (storage, presets, panoramas, etc.)

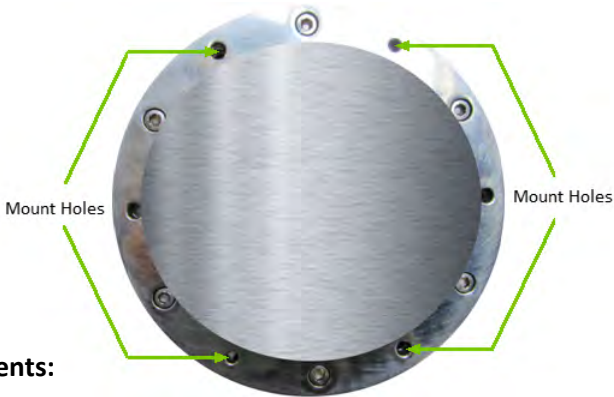
4

Mount the Camera

4.1 Deploy the PTZ

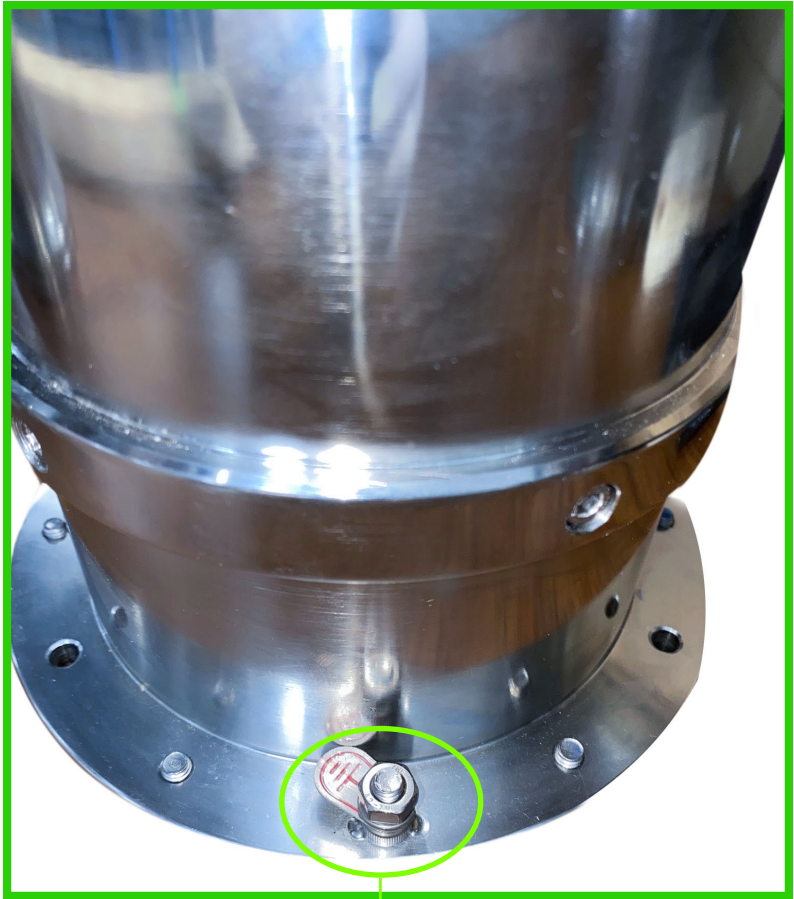
It is important to mount the PTZ camera to a solid, stable surface or pole. Refer to the drill pattern below (measurements shown in inches).

NOTE: Camera must only be mounted in an upright, vertical position. Mounting in any other manner, tilted, inverted, etc., **VOIDS THE RATING.**

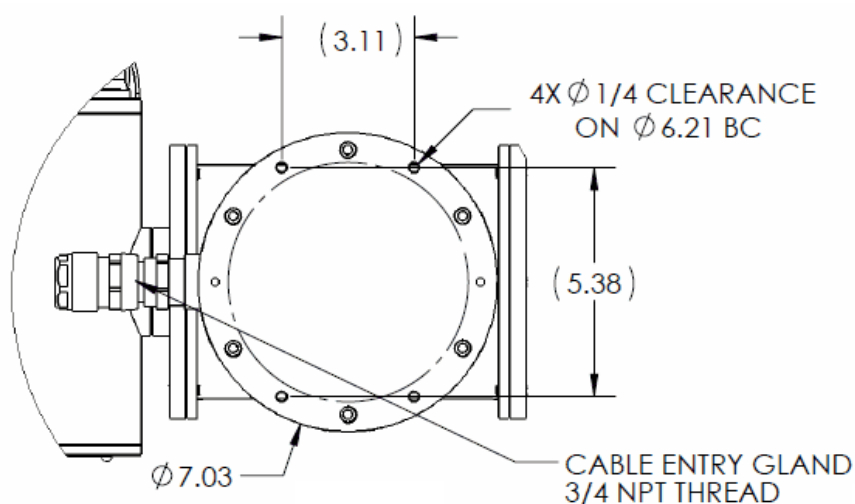


- Requirements:

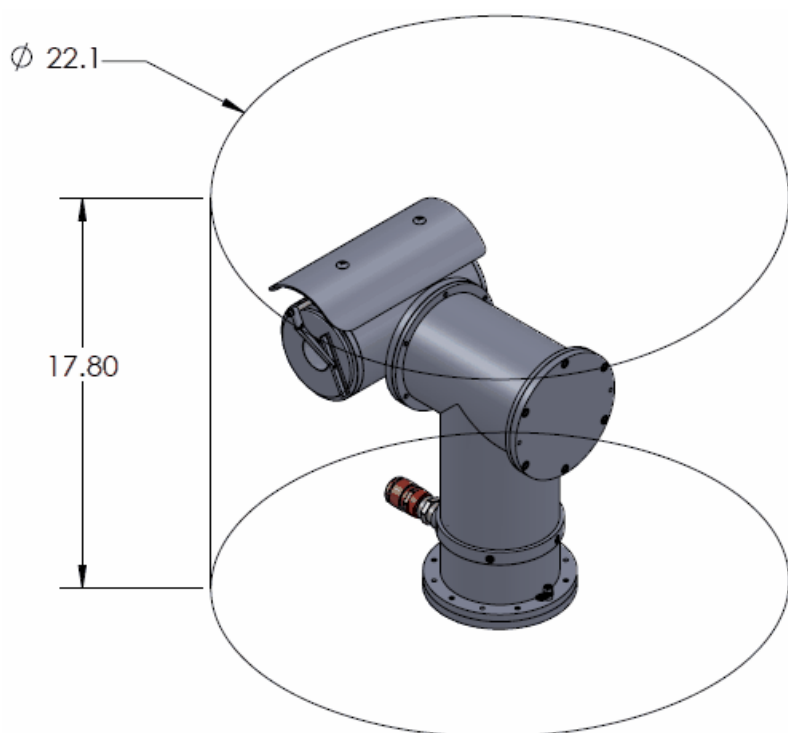
- The equipment shall be securely mounted using four each ¼-20, 316L Stainless Steel bolts with appropriate washers and locking nuts.
- The equipment is provided with a ground tab (please see image below). This tab is not intended as a safeguard. However, it is recommended to ground this point to a grounded surface as provided by the installer.
- Connect the equipment PROTECTIVE EARTHING CONDUCTOR (reference page five) to the installation PROTECTIVE EARTHING CONDUCTOR.
- It is required that the equipment power harness be connected to an all pole MAINS switch suited to the area rating and in accordance with UL/CSA 62368-1 Annex L. This shall be supplied by the installer and shall serve as the primary disconnect switch.



Ground Tab



Ensure that there is sufficient clearance all around for complete operation of the camera (consult image below). Camera must be mounted in accordance with NFPA 70.



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Support Information

5.1 Unit Service

This unit is not field-serviceable. Maintenance should involve a regular wash down of the unit, based on the camera environment.

5.2 Maintenance

Check cable for any sign of degradation.

Regular wash down as needed.

NOTE: Camera must never be opened when energized.

5.3 Contact IVC

If you experience any problems please call us (617-467-3059) or email support@ivcco.com.

Please note that no equipment (in-warranty or out-of-warranty) should be sent back to IVC without an Return Material Authorization (RMA). Contact IVC support or your IVC sales representative for an RMA.

CAUTION: All installations must insure the camera assembly is mounted securely to ensure that it cannot become dislodged during high wind, accidental bumping or other such incidents. All wiring must comply with NEC, NFPA, and local codes.

NOTE: IVC is not liable for direct or consequential damages resulting from use of this product and IVC makes no guarantees regarding results of intended and unintended use of the product.

5.4 Spare Parts

IVC PART NUMBER	DESCRIPTION
SP1001	Wiper Arm
SP1002	Wiper Blade

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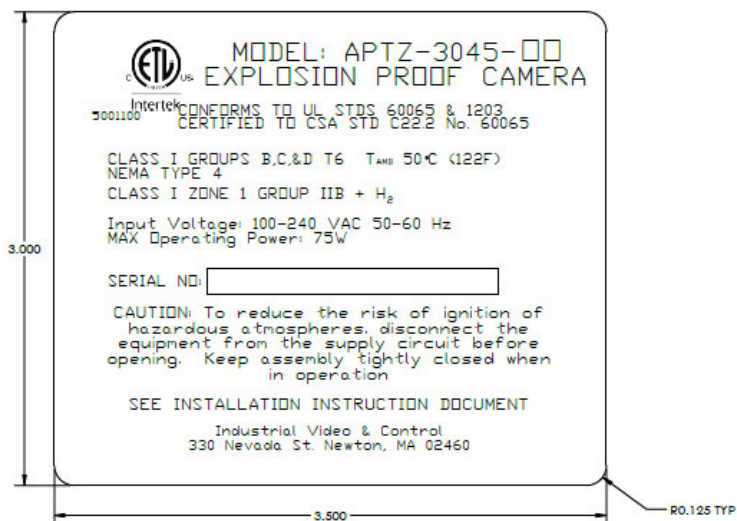
Appendix A - Specifications

▶ specifications

Imager	1/2.8" Exmor R CMOS
Shutter	1/25 to 1/10,000 seconds
Minimum Illumination	Color: 0.1 Lux B/W: 0.006 Lux
White Balance	Auto and Manual
Iris	Auto and Manual
Focus	Auto and Manual
View Angle	2.3° - 63.7°
Focal Length	4.3 - 129.0 mm
F-number	1.6 - 4.7
Zoom ratio	30x Optical
Pan Angle	360°
Pan Speed	40° per second
Tilt Angle	-90° to 90° (180° view range)
Tilt Speed	40° per second
Frame Rate	30 FPS
Ethernet	100BASE-T (RJ-45)**
Protocols	IPv4, TCP/IP, UDP, HTTP, RTP/ RTCP/RTSP, FTP, DDNS, NTP, IGMP, ICMP, VISCA, ONVIF
Resolution	1920 x 1080
Weight	48.5 lbs.
Voltage Required	90 - 240 VAC**
Current	50W
Operating Temperature	-25° to 50° C
Dimensions	15.73" H x 13.97" W x 10.31" D
Mount	Pedestal
Protection Class	NEMA TYPE 4
Approvals	Class I Division 1 Groups B, C, & D T6 Tamb +50°C (+122°F)
	Pending: Class I Zone 1 Group IIB H2

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Appendix B - Label Certification (Z-1001 Drawing Number)


NOTES:

NON-METALLIC PRESSURE SENSITIVE LABEL PER UL 969

BACKGROUND COLOR: RED

TEXT/ LINE COLOR: BLACK

LAST 2 DIGITS OF MODEL NUMBER TO BE PRINTED BY LABEL MANUFACTURER PER IV&C

SERIAL NUMBER TO BE PRINTED SEQUENTIALLY BY LABEL MANUFACTURER PER IV&C

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	ISSUE	8/17/13	BGR
2	UPDATES	10/9/13	BGR
3	TEXT	10/29/13	BGR
4	FORMATTING	12/23/13	BGR
5	TEXT UPDATES	4/6/15	BGR
6	TEXT UPDATES	5/24/15	BGR
7	TEXT UPDATES	6/5/15	BGR
8	TEXT AND MARK UPDATE	7/14/15	BGR
9	TEXT UPDATES	09/09/16	BGR
10	MODEL NUMBER TABLE UPDATE	10/25/16	BGR
11	TEXT UPDATES	07/24/17	BGR
12	MODEL NUMBER TABLE UPDATE/LABEL MAX POWER VALUE CHANGE	10/10/19	BGR

MODEL NUMBER TABLE		
VERSION SUFFIX	CAMERA MODEL	LABEL PN
-04	CAM4440 (SONY 1020)	L-2010
-06	CAMHD1005 (SONY 7520/ 7520A with ANALOG BOARD)	L-2011
-07	CAMHD1006 (MULTIPIX IVC36X)	L-2012
-08	CAMHD1010 (SONY 8520 with BOARD)	L-2013
-09	CAMHD1009 (SONY 7520 with IP BOARD)	L-2014
-10	CAMHD1010 (SONY 8520 with BOARD)[4K output setting]	L-2015
-11	TBD PER SP-xxxx	L-2016
-12	TBD PER SP-xxxx	L-2017
-13	TBD PER SP-xxxx	L-2018
-14	TBD PER SP-xxxx	L-2019

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Appendix C - Ethernet Extender

If you received a junction box containing an Ethernet extender, install it as described below.



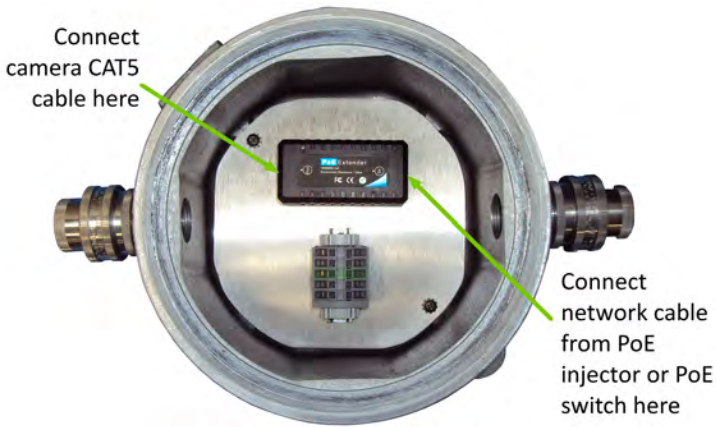
As pictured above the junction box is provided with cable glands for cable entry. Killark Hubbell GUM-2-EX fittings are installed into the 3/4" NPT cable entries.

1. Unscrew the enclosure lid to access the extender.



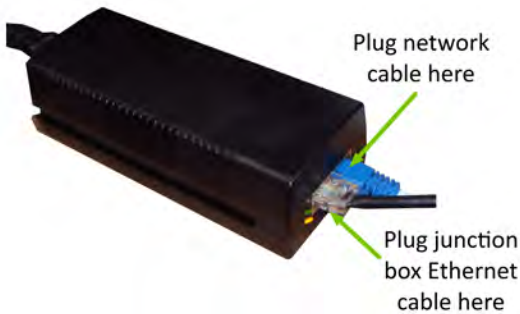
2. Pass camera's Ethernet cable through cable gland and connect to Ethernet extender as indicated below.

3. Pass network cable from PoE injector (provided with junction box) or PoE switch through cable gland and connect to Ethernet extender as indicated below.



4. Replace enclosure lid.

NOTE: The Ethernet extender will not function until power applied to the PoE injector or PoE switch. If using the PoE injector provided, connect as pictured below. Maximum cable distance to/from injector is 100m.



It is important to mount the APTZ-3045-07 to a solid, stable surface or pole. If this equipment is to be bolted to a flat horizontal surface, refer to the drill patterns (below). All dimensions shown in inches.

- A 7.75
- B 7.75
- C 6.375
- D 6.375
- E 0.4375
- F 5.625
- G 4.5625

