

# VIVOTEK Fixed Dome Series Extender Conduit Box

## Installation Guide

Using AM-712 conduit box,  
AP-FXC-0210 PoE Extender,  
and compatible accessories

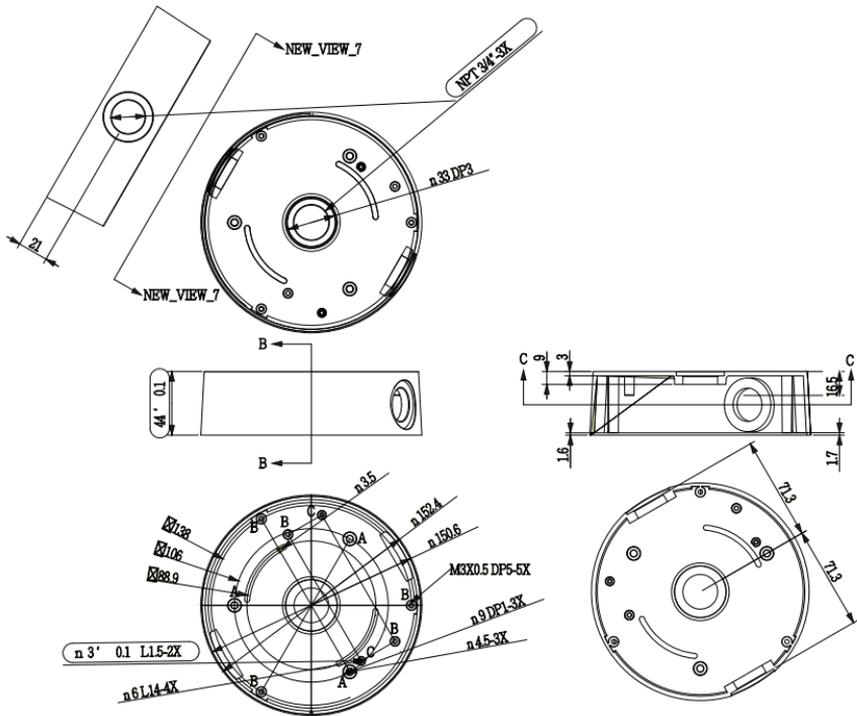
Corresponding part number:  
AM-712: 909004720G (v03)  
AM-221: 900014801G  
AM-118: 900014601G  
AM-522: 900020201G

Rev. 1.3

## Revision History:

- \* Rev. 1.0: Initial Release
- \* Rev. 1.1: Added FD8367-TV, FD8167-T, and FE8180 as the supported models.
- \* Rev. 1.2: Added corresponding part numbers, and FD8169 as supported model.
- \* Rev. 1.3: Updated the corresponding part numbers of accessories.

## AM-712 Conduit Box Mechanical Drawings

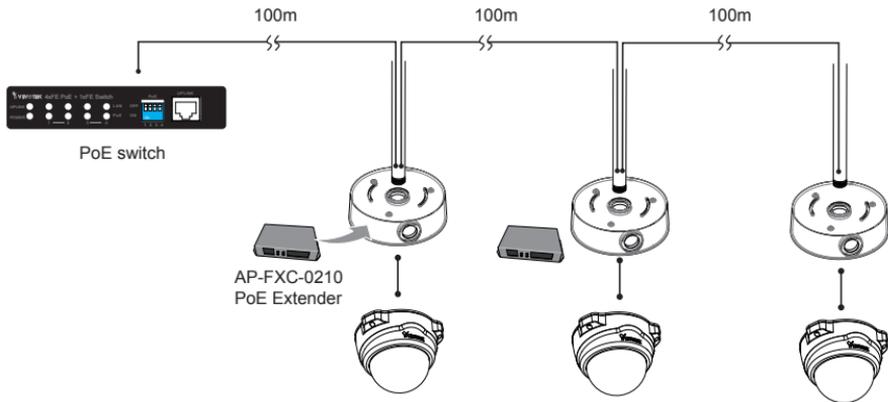


## Package Contents

	Item	No.
AM-712 conduit box	Conduit box	1

	Item	No.
Screw pack	M3x6 round head w/ washer (nickel and nylok) 7mm; (for securing dome cameras to the base plate)	5
	#6-32 L6 truss head (nickel and nylok) 8mm (for direct installation to a junction box)	2
	Anchors	3
	Pan head M4x25, zinc-plated, self-tapping screws (for direct installation to ceiling)	3
	M3x6 pan washer head	2

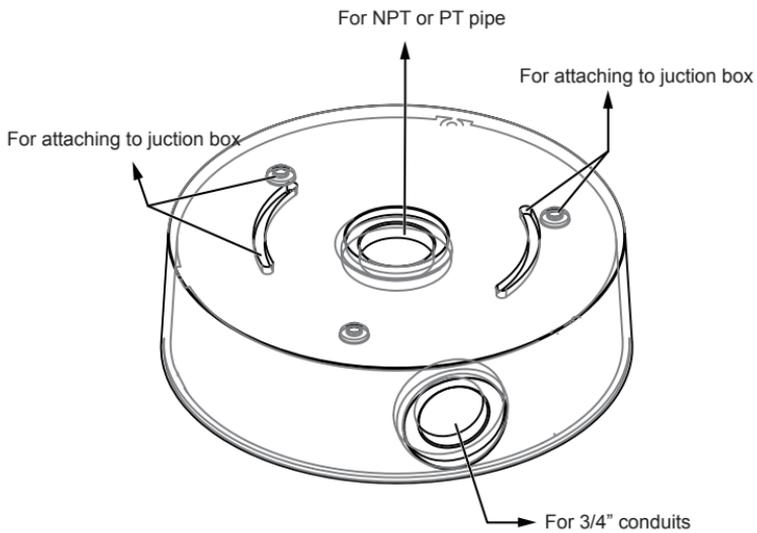
### Physical Description - Use



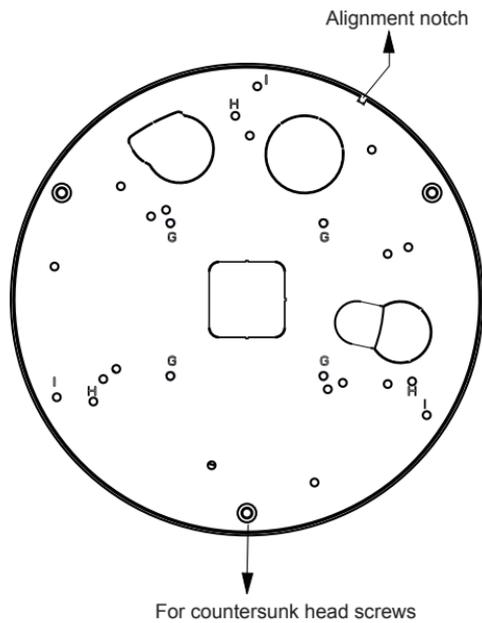
\* The NPT (National Pipe Taper) or PT pipes with male threads are user-supplied.

\*\* The last conduit box does not need to contain a PoE extender.

## Physical Description - Top



## Physical Description - Bottom



## I Compatible VIVOTEK Cameras

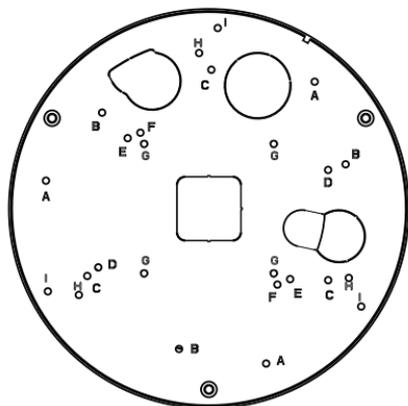
Fixed Dome series

FD8152V, FD816BA-HF2, FD816BA-HT, FD8182-F2, FD8182-T, FD9171-HT, FD9181-HT, FE8180, FD8166A, FD8166A-N

You may also refer to VIVOTEK's website for the list of supported models. Support for other models can be available through time.

## II Installation

### Mounting Hole Definitions



Above are the locations of different groups of mounting holes for matching different cameras:

Hole Type	Applicable Cameras	Screw	No. of screws
A	FD8137HV/ FD8154V / FD8164V	M3x6 round head	3
B	FD8137H / FD8154 / FD8164 / FD8169		3
C	FD8131V / FD8133V/ FD8134V		3
D	FD8131 / FD8133 / FD8134		2
E	FD8151V / FD8152V		2
F	FD8136 / FD8166		2
G	FE8180	M3x6 pan washer head	2
H	FD816BA-HF2, FD816BA-HT, FD8182-F2, FD8182-T, FD9171-HT, FD9181-HT	M3x6 round head	3
I	FD8367-V / FD8367-TV / FD8338-HV		3

For cabling and configuration details with each network camera, please refer to their documentation.

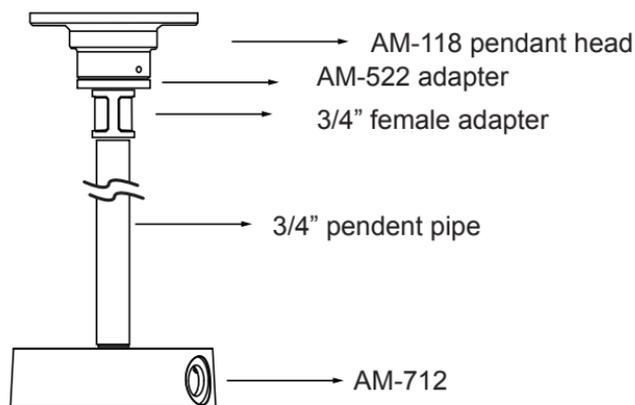


**NOTE:**

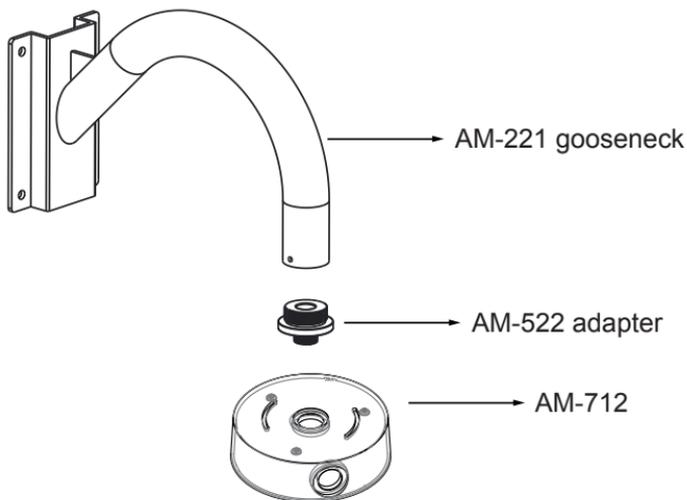
1. The AM-522 is necessary when installing the AM-712 mounting cap to VIVOTEK's standard mounting options such as AM-212 (wall mount bracket) and AM-221 (gooseneck).  
The AM-522 features the mounting option for NPT pipes only.
  2. Route cables before you secure the accessories to a wall.
  3. For details on the cable connections with each camera, please refer to their Quick Installation Guide.
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**NOTE:**

The following mount types do not apply to PT pipes.

**Configuration - Pendant Pipe**

Note: The 3/4" female adapter and pendant pipes are separately purchased.

**Configuration - Gooseneck**

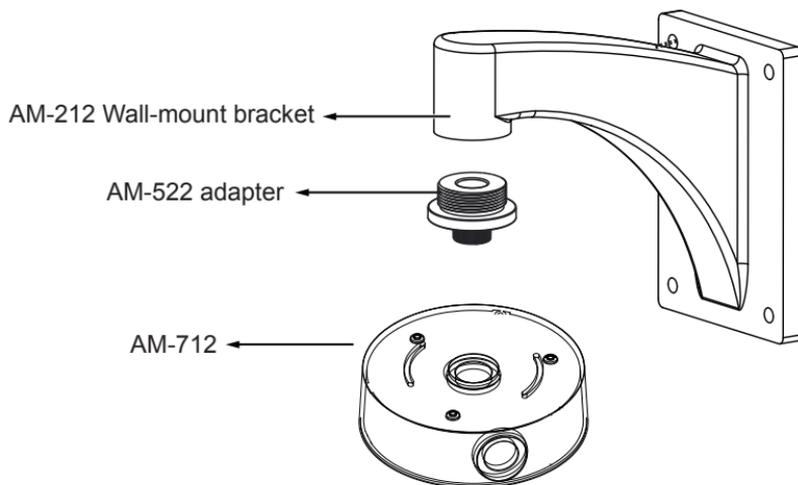


**NOTE:**

When installing the mounting cap, take note that the orientation of the mounting cap can affect the camera's shooting direction. You may need to disconnect the conduit box from the NPT pipe, rotate, and re-install it for the best orientation.

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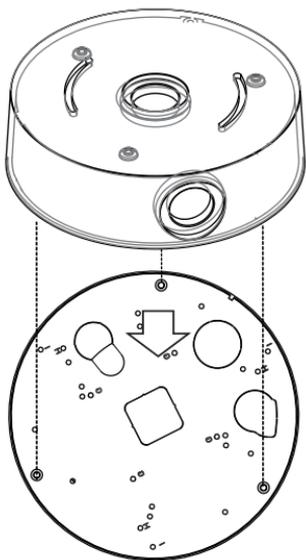
## Configuration - Wall Mount



### III-1. Installing Camera to Conduit Box

Refer to the matching table on page 4 for the mounting hole information for your camera.

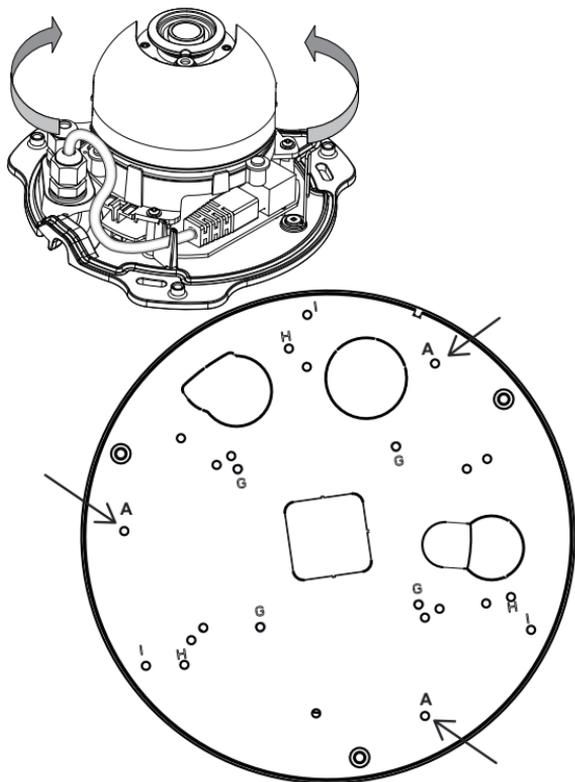
1. Remove the base plate from the bottom of the conduit box.
2. You can route cables through other accessories before you install cameras to the base plate.



3. Orient and install the camera to the base plate (to the side with printed characters).
4. Connect cables to the camera.
5. Install the base plate to the conduit box.
6. Proceed with initial setup such as enabling network access, focus tuning, or zooming. When done, secure the outer dome cover.

Some installation samples are shown below:

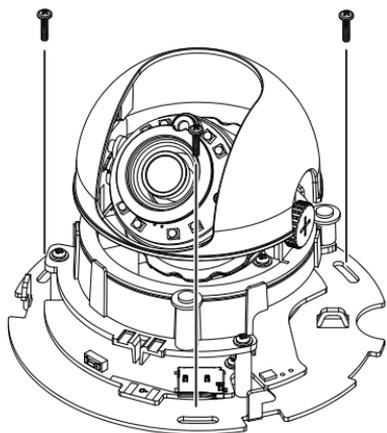
### The A Screw Holes: FD8154V / FD8137HV / FD8164V



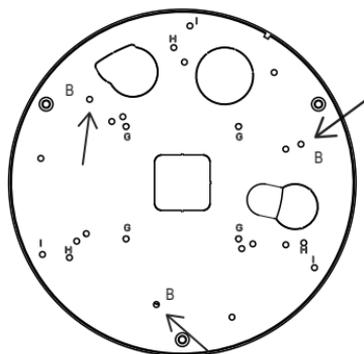
**NOTE:**

Orient the camera so that cables coming out from the camera can pass through the cabling hole on the base plate.

## The B Screw Holes: FD8154 / FD8137H / FD8164 / FD8169

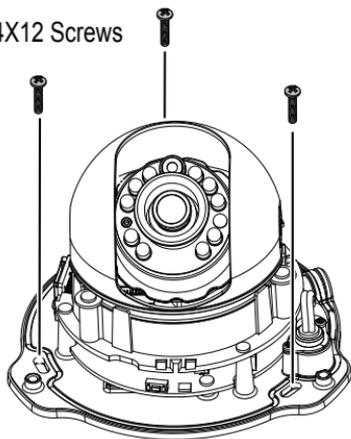


B holes

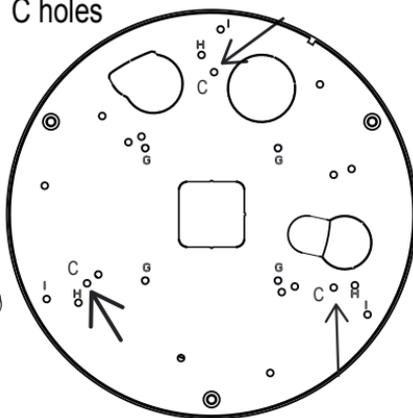


## The C Screw Holes: FD8131V / FD8133V / FD8134V

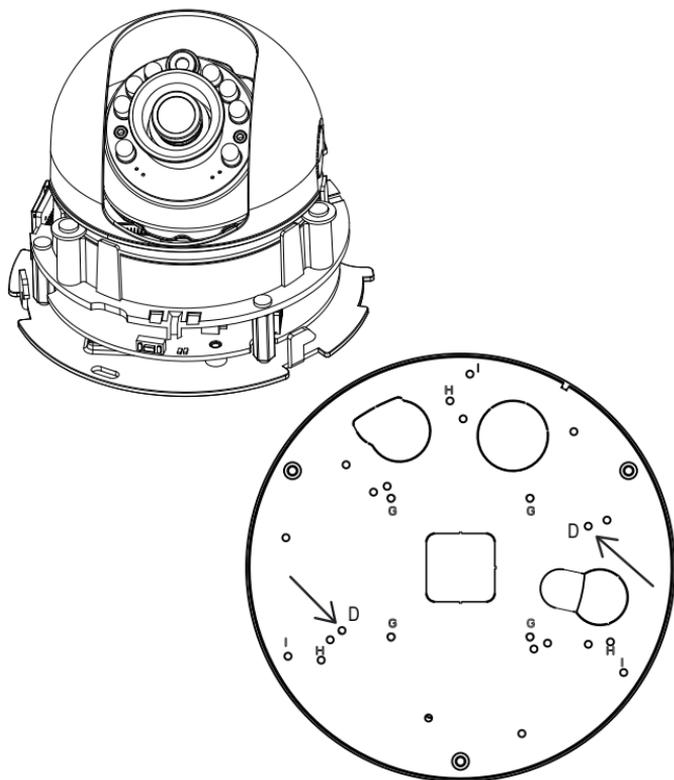
M4X12 Screws



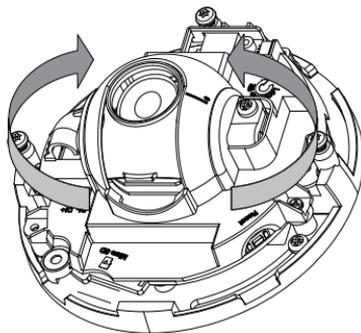
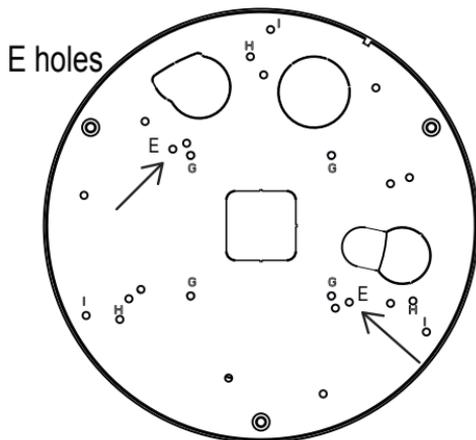
C holes



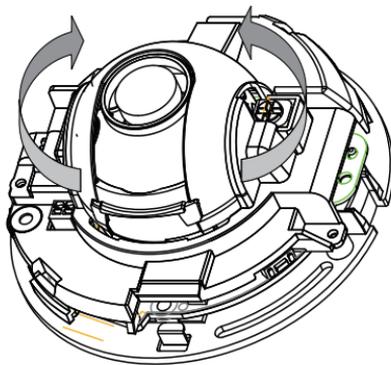
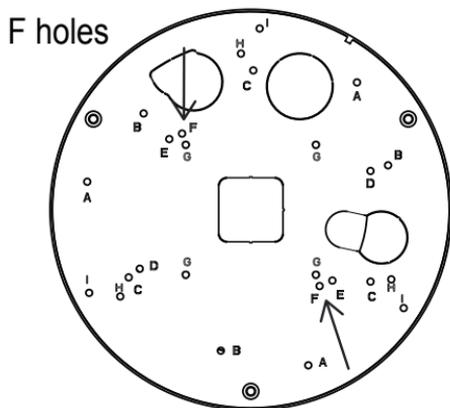
## The D Screw Holes: FD8131 / FD8133 / FD8134



## The E Screw Holes: FD8151V / FD8152V

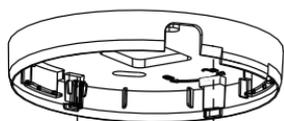


## The F Screw Holes: FD8166A / FD8166A-N

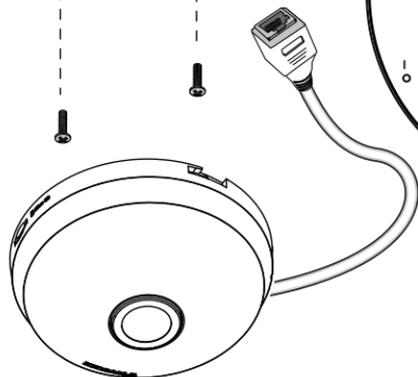
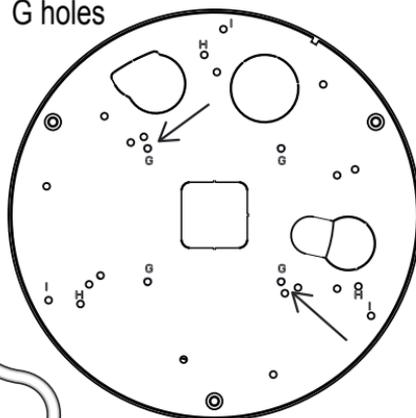


## The G Screw Holes: FE8180

M3X6 Screws

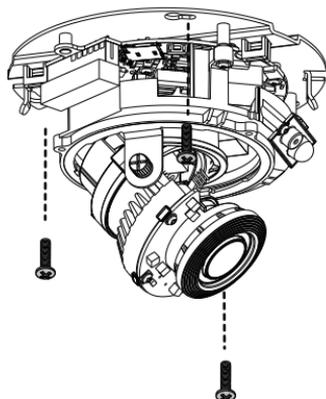


G holes

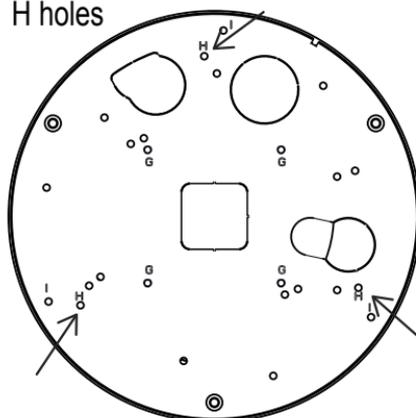


## The H Screw Holes: FD816BA-HF2, FD816BA-HT, FD8182-F2, FD8182-T, FD9171-HT, FD9181-HT

M3X0.5 L6 Screws

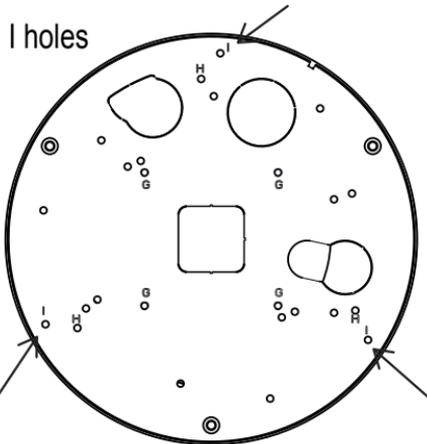
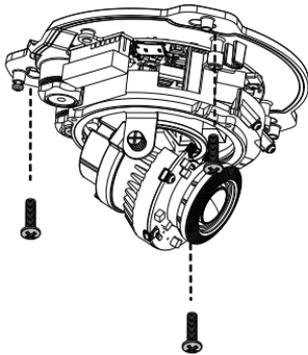


H holes



## The I Screw Holes: FD8367 and 8338 Series

M3X0.5 L6 Screws

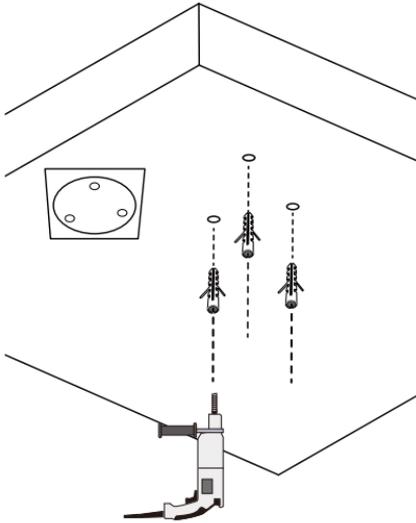


## III-2. Installing the Pendant Head and Pipe

Below are the sample procedures using a pendant head and pendant pipe:

1. Determine a hard surface ceiling location, and use the alignment sticker to mark the positions where holes will be drilled to secure the pendant head. Hammer the anchors into the ceiling.

Note that mounting holes should be 10mm in diameter and 60mm deep. The included screws are M6.2 x75mm.

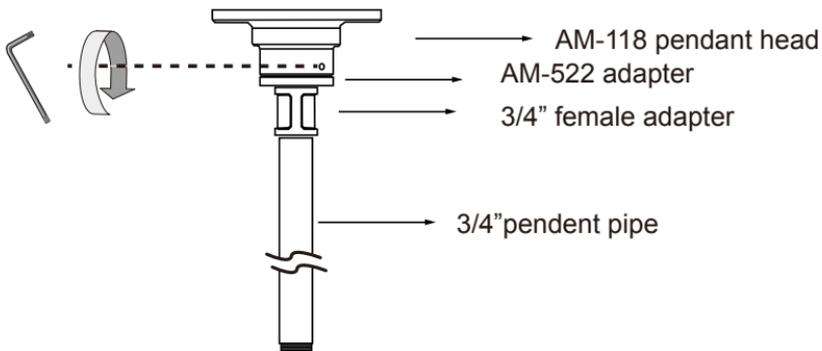


### NOTE:

This mount type applies to NPT pipes only.

For NT pipes, fixture on the other end should be handled by users.

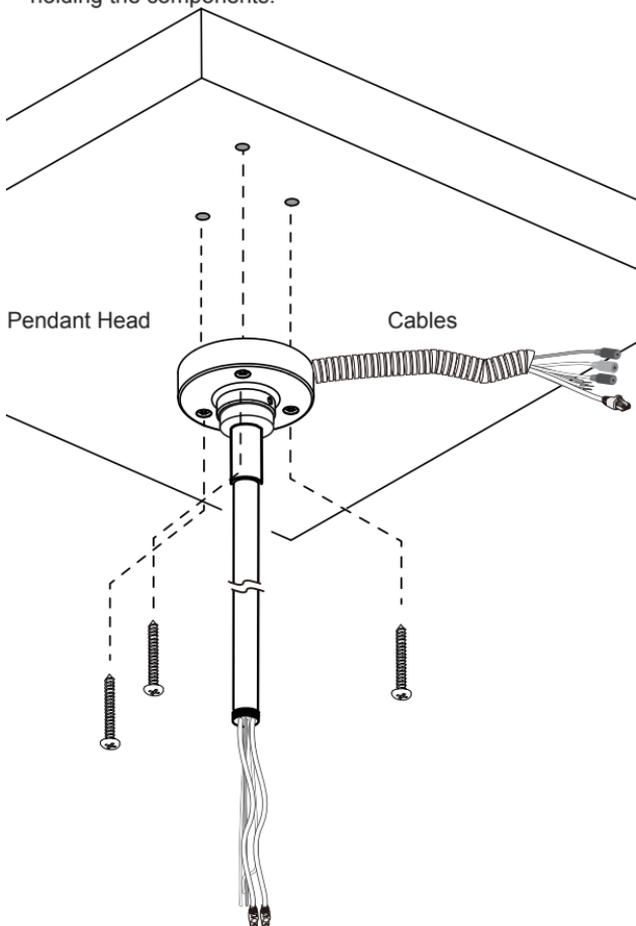
2. Install an NPT or PT male thread pipe (length determined by installers) by turning it clockwise to the pendant head, and secure the connection using an included 3mm hex wrench.



3. Route Ethernet cable and other wires through the pendant head. You may apply a 1 inch conduit.

Note that when routing Ethernet cables, please make sure you have tagged the cables as PoE input (coming from a PoE switch), or PoE output (one that transmit data and power to the next conduit box).

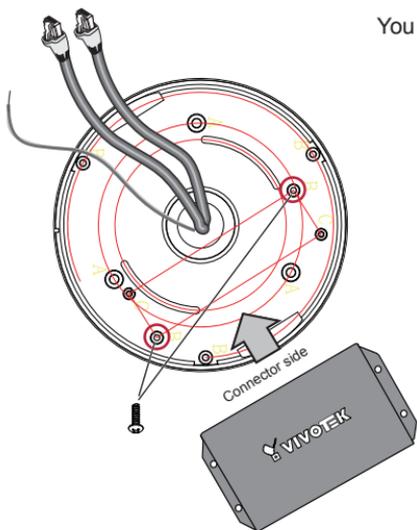
4. Secure the pendant head to ceiling by driving screws through its mounting holes. Depending on the length of your cables, you may need the help from your colleague for holding the components.



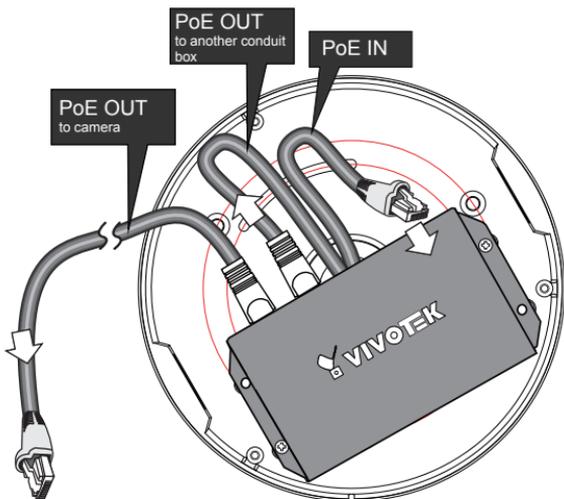
### III-3. Installing the Conduit Box and PoE Extender

1. Pull cables through the NPT pipes and then the conduit box.
2. Install the conduit box to the NPT pipe.
3. When done, install the PoE extender by driving 2 screws to the conduit box, its connector side facing the inside of the box.

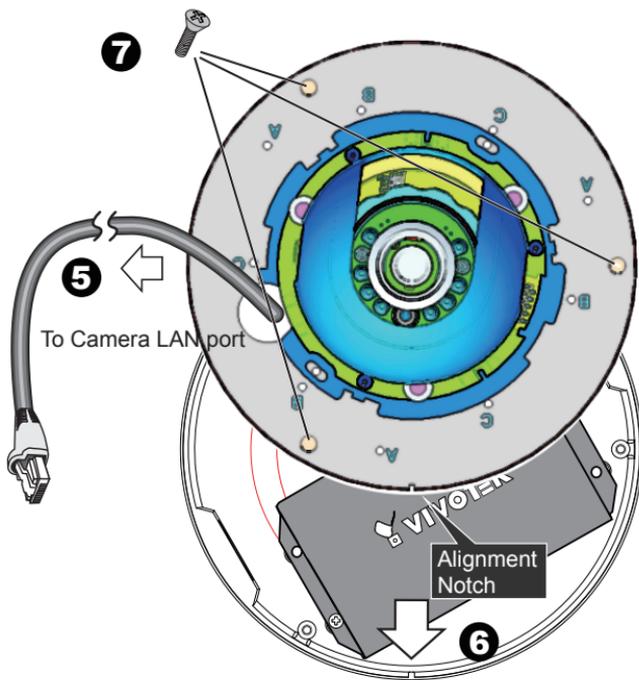
You may use cable tags to identify PoE cables.



4. In a cascade topology, there should be 2 Ethernet cables in the pipe. One is used as PoE input, the other as the out port to the next conduit box.



5. Pull the Ethernet cable (and/or I/O wires) through the cabling hole on the base plate.
6. Orient the alignment notch with the tab on the conduit box.
7. Secure the base plate along with the camera to the conduit box.



8. Install the camera's dome cover.
9. Proceed with initial setup such as enabling network access, focus tuning, or zooming.

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