SurroundVideo® OmniG3
Installation Manual

Models:

12 Megapixel

- AV12375RS

- AV12376RS

20 Megapixel

- AV20375RS

Contents

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⚠ # CAUTION!

1. Do not attempt to service a damaged unit yourself. Refer all servicing to qualified service personnel.
2. Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction. Wiring should be UL Listed and/or Recognized wire suitable for the application.
3. Always use hardware e.g. screws, anchors, bolts, locking nuts etc. which are compatible with mounting surface and of sufficient length and construction to insure a secure mount.

Package Contents

This equipment should be unpacked and handled with care. The original packaging is the safest container in which to transport the unit and can be used if returning the unit for service. The packaging contains:

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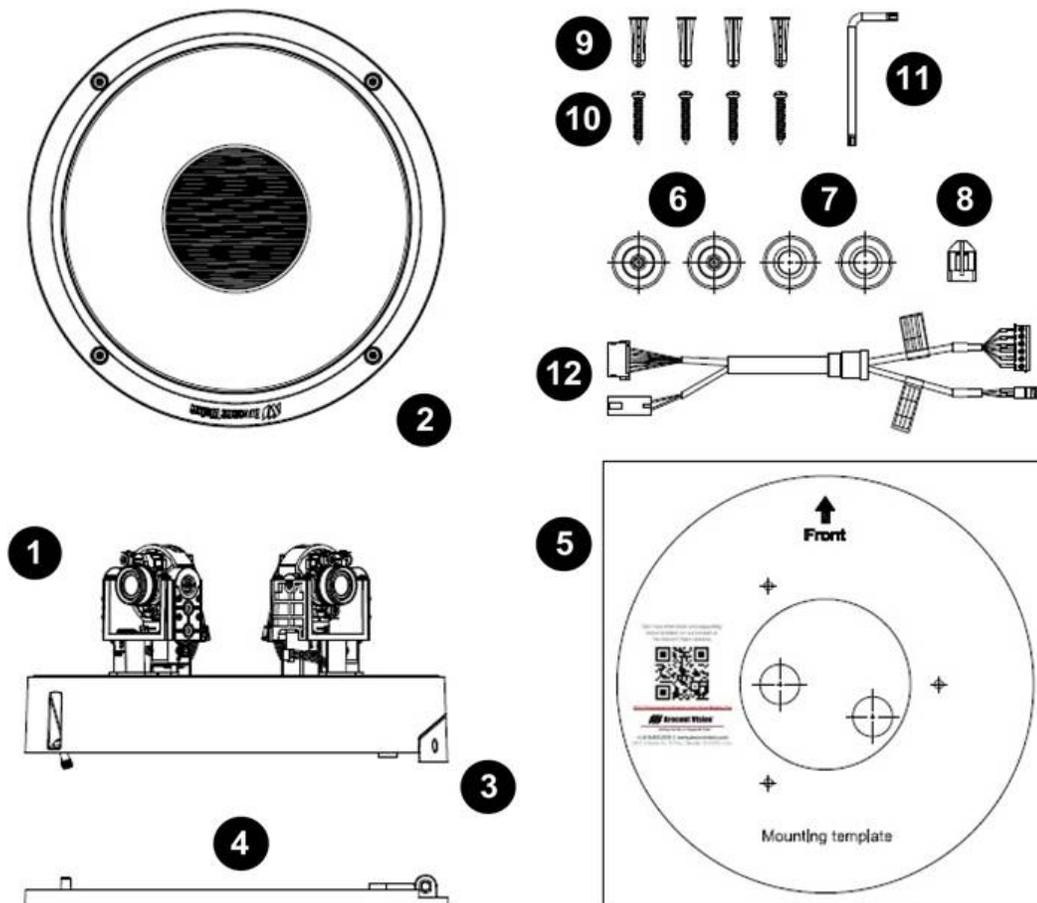
Reference #	Description
1	1x SurroundVideo® Omni G3
2	1x Dome Cover
3	1x Hinge Cover
4	1x Mounting Plate
5	1x Mounting template
6	2x Grommet with Through Hole
7	2x Grommet without Through Hole
8	1x Insertion Tool
9	4x PA4X25mm Drywall/ Masonry Mounting Anchors
10	4x PA4X25mm Wood/ Metal Sheet Screw
11	1x Security L-key
12	1x auxiliary power cable/ I/O Cable
	1x CD with Manual and Software

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Warranty Information

Global (3 Year) Limited Warranty

ARECONT VISION warrants to Purchaser (and only Purchaser) (the "Limited Warranty"), that: (a) each Product shall be free from material defects in material and workmanship for a period of **thirty-six (36) months** from the date of shipment (the "Warranty Period"); (b) during the Warranty Period, the Products will materially conform with the specification in the applicable documentation; (c) all licensed programs accompanying the Product (the "Licensed Programs") will materially conform with applicable specifications. Notwithstanding the preceding provisions, ARECONT VISION shall have no obligation or responsibility with respect to any Product that (i) has been modified or altered without ARECONT VISION's written authorization; (ii) has not been used in accordance with applicable documentation; (iii) has been subjected to unusual stress, neglect, misuse, abuse, improper storage, testing or connection; or unauthorized repair; or (iv) is no longer covered under the Warranty Period. ARECONT VISION MAKE NO WARRANTIES OR CONDITIONS, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, OTHER THAN THE EXPRESS LIMITED WARRANTIES MADE BY ARECONT VISION ABOVE, AND ARECONT VISION HEREBY SPECIFICALLY DISCLAIMS ALL OTHER EXPRESS, STATUTORY AND IMPLIED WARRANTIES AND CONDITIONS, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT AND THE IMPLIED CONDITION OF SATISFACTORY QUALITY. ALL LICENSED PROGRAMS ARE LICENSED ON AN "AS IS" BASIS WITHOUT WARRANTY. ARECONT VISION DOES NOT WARRANT THAT (I) THE OPERATION OF THE PRODUCTS OR PARTS WILL BE UNINTERRUPTED OR ERROR FREE; (II) THE PRODUCTS OR PARTS AND DOCUMENTATION WILL MEET THE END USERS' REQUIREMENTS; (III) THE PRODUCTS OR PARTS WILL OPERATE IN COMBINATIONS AND CONFIGURATIONS SELECTED BY THE END USER; OTHER THAN COMBINATIONS AND CONFIGURATIONS WITH PARTS OR OTHER PRODUCTS AUTHORIZED BY ARECONT VISION OR (IV) THAT ALL LICENSED PROGRAM ERRORS WILL BE CORRECTED.

The SurroundVideo Omni G3 motors are meant to be used for setup purposes or moving to preset positions no more than one time per day. Excessive use will void the warranty. This camera is not meant to be used as a traditional PTZ (pan tilt zoom) speed dome camera.

For RMA and Advance Replacement information visit http://www.arecontvision.com

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Camera Overview

The SurroundVideo® Omni G3, next generation multi-sensor, multi-megapixel camera was built to withstand evolving customer change-requirements. The unique, future-proof, remote setup platform of the SurroundVideo Omni G3 provides organizations of all sizes the flexibility to deploy a security system that truly matches their video surveillance needs now; and again if requirements change in the future. With its ground-breaking flexibility such as the ability to remotely move each of the four sensors around the Omni track, the pan and tilt capabilities of the gimbals for an increased range of motion when positioning the sensors, and the ability to remotely zoom and focus the lenses for a customized field of view, the SurroundVideo Omni G3 provides customers with the confidence in a future-proof investment. The SurroundVideo Omni G3 changes when you do.

The SurroundVideo Omni G3 multi-megapixel camera series features a choice of 12- or 20-megapixel resolution options. These cameras provide an all-in-one solution for capturing wide area video surveillance while maximizing the field-of-view and reducing the total number of cameras required saving installers time and end users money.

Regardless of time-of-day, this camera is ideal for applications with challenging lighting conditions. The series combines a day/night mechanical IR cut filter for the highest image quality at any time of day. For applications with bright or over saturated lighting conditions, optional wide dynamic range delivers up to 100dB at full resolution and is available on select 12MP models. For applications with poor low lighting conditions, Binning Mode increases the camera's low light performance by combining pixels so that more light can be collected.

SurroundVideo Omni G3 includes SNAPstream™ (Smart Noise Adaptation and Processing) technology to reduce bandwidth without impacting image quality. Once mounted, the operator can quickly zoom, focus and position the camera remotely, eliminating the need to adjust the camera on-site. No more hassle individually installing multiple cameras to cover a wide area, manually focusing lenses, or risk missing critical information.

SurroundVideo Omni G3 is designed for demanding environments. Subjected and certified to rigorous dust and water tests, the IP66 rating, and its extended operating temperature range make it ideal for outdoor applications. The IK-10 rated, rugged dome housing is perfect for deterring vandals since it can withstand the equivalent of 55 kg (120 lbs) of force.

The camera offers advanced streaming capabilities and is designed on an efficient H.264 encoding platform capable of delivering high quality video without straining the network. Power can be supplied via a single Power-over-Ethernet compliant network cable or with power from a12-24V DC/24V AC power supply.

The camera's interface allows for an intuitive, fast, and easy configuration; while the Free AV IP Utility tool allows users to quickly configure multiple cameras at one time.

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General Installation

1. Determine a secure location to mount the camera.
2. Using the supplied security L-key loosens the four (4) screws securing the dome cover.
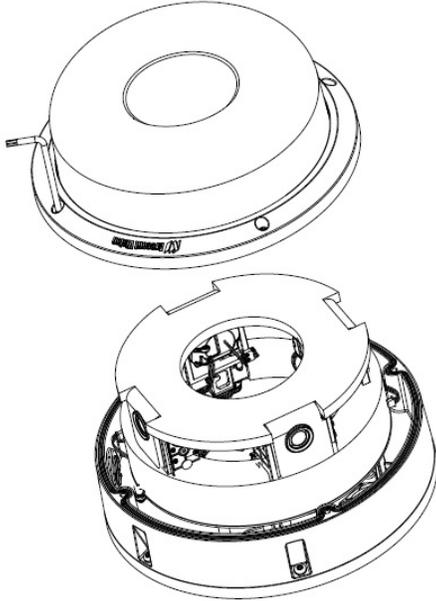
3. Remove the dome cover and protective foam. Do not remove screws from the dome cover.
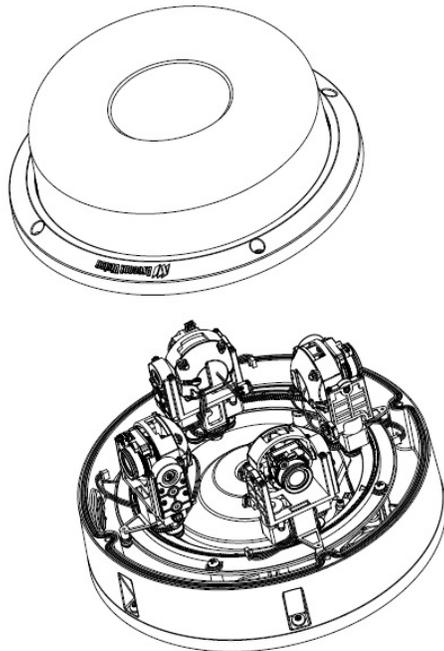
4. Re-attach the dome cover to the camera.
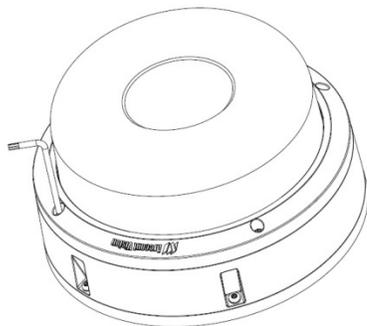
The SurroundVideo® Omni G3 camera has been designed to provide installers with flexible mounting options for ceilings, walls, poles or corners.

NOTE: When mounting the camera outdoors or in a wet environment, use of the supplied grommet is required. Ensure the grommet properly seats flush with the camera housing to create a water-tight seal.

Ensure you have the proper compatible Arecont Vision mounting accessories prior to starting your installation:
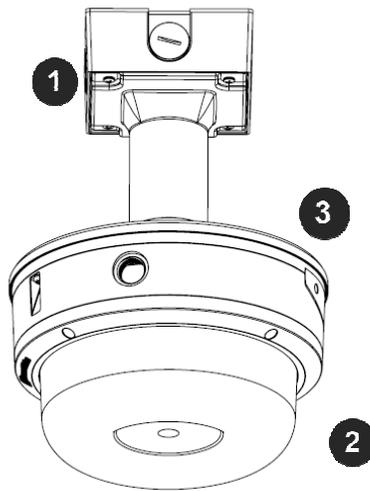
Pendant mount

Reference #	Pendant Mount Components Required
1	Pendant mount (AV-PMJB) with integrated junction box
2	SurroundVideo® Omni G3 camera
3	SO3-CAP mounting cap
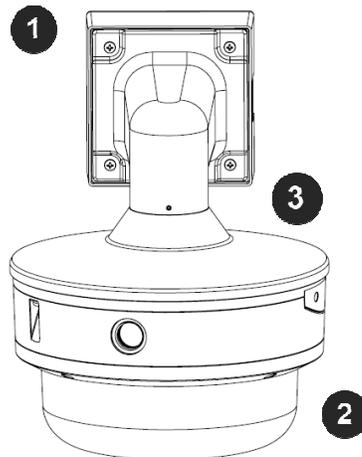
Wall mount

Reference #	Wall Mount Components Required
1	Wall mount (AV-WMJB) with integrated junction box
2	SurroundVideo® Omni G3 camera
3	SO3-CAP mounting cap

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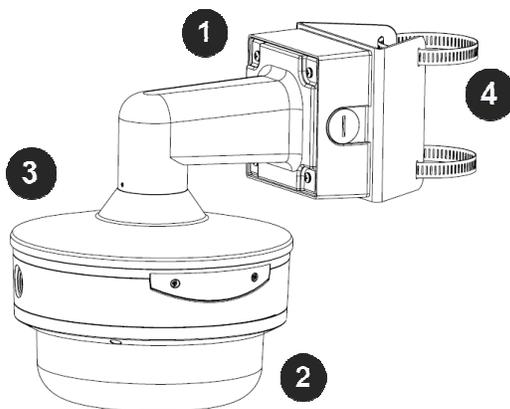
Pole mount

Reference #	Pole Mount Components Required
1	Wall mount (AV-WMJB) with integrated junction box
2	SurroundVideo® Omni G3 camera
3	SO3-CAP mounting cap
4	AV-PMA pole mount adapter
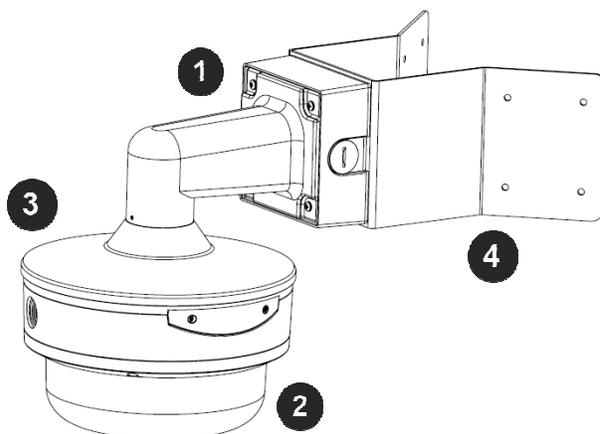
Corner mount

Reference #	Corner Mount Components Required
1	Wall mount (AV-WMJB) with integrated junction box
2	SurroundVideo® Omni G3 camera
3	SO3-CAP mounting cap
4	AV-CRMA corner mount adapter

4. Use the Arecont Vision software AV IP Utility located on the CD, QR code on the box, or available for download at our website (www.arecontvision.com) for camera discovery and setup (see Instruction Manual located on the CD or available on our website).

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Surface Mounting

The SurroundVideo® Omni G3 camera can be directly attached onto hard ceilings.

1. Use the template, anchors, and screws provided.
2. Using the supplied security L-key loosens the four (4) screws securing the dome cover.
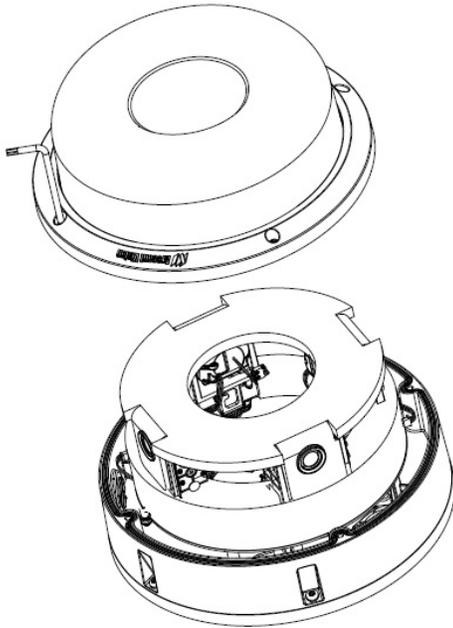
3. Remove the protective foam and discard.

4. Re-attach the dome cover to the camera.

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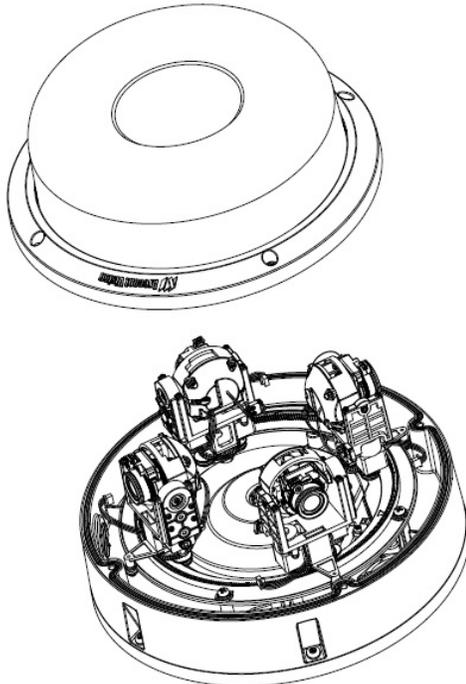
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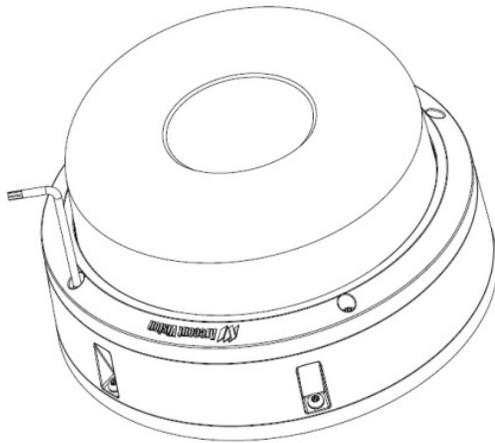
5. If presets will be used for 180°, 270°, or 360° configurations, orient the camera such that the arrow, denoting the front of the camera, is pointing towards the center of the desired field of view.
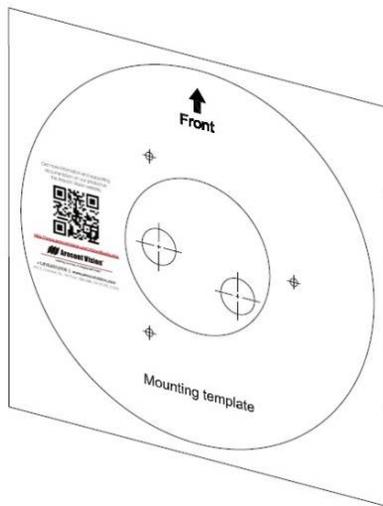
6. Attach the mounting plate to the ceiling using the supplied mounting hardware.

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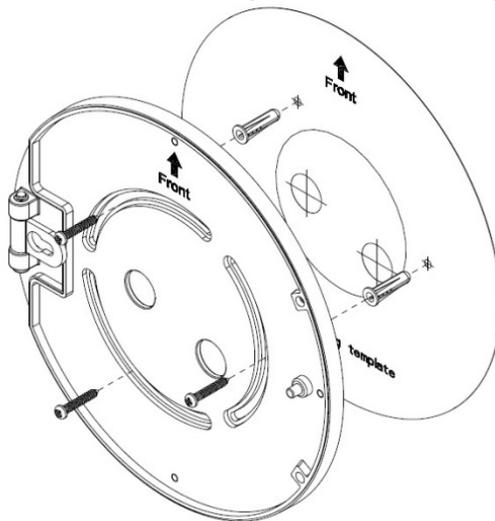
7. Attach the camera to the mounting plate as shown in the image below. The camera will "hang" from the hinge once properly attached.
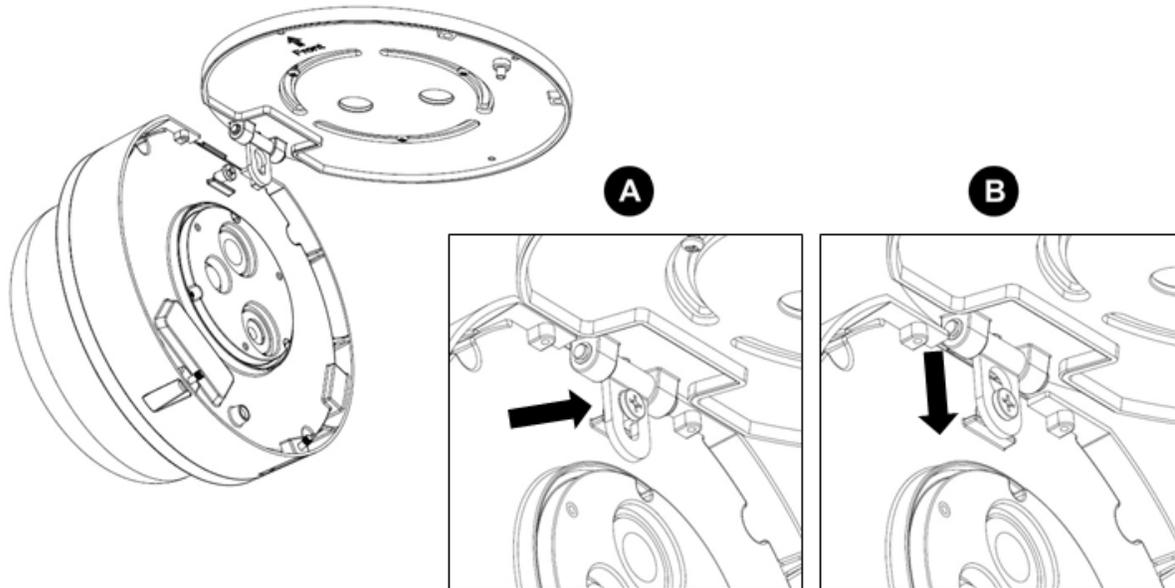
8. Use a Phillips head screwdriver to loosen the three (3) screws on main housing cover to access the network port.
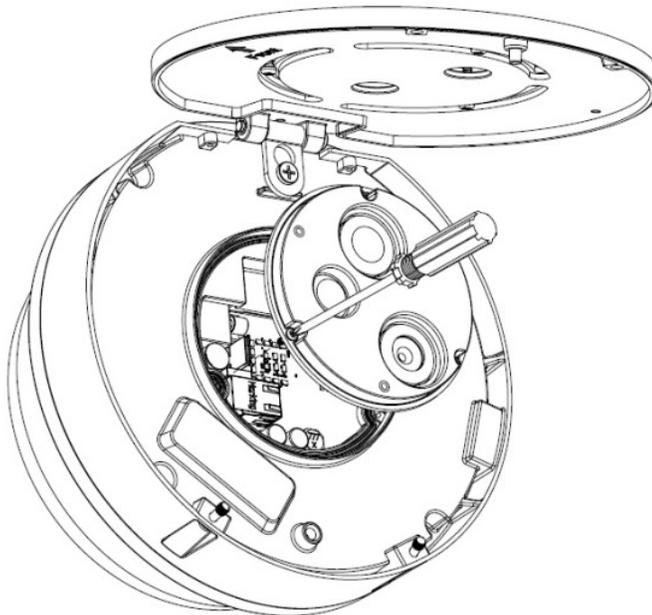
9. Run the Ethernet Cable (and the supplied power cable/ I/O cable,if necessary) through the cable entry holes on the mounting plate.
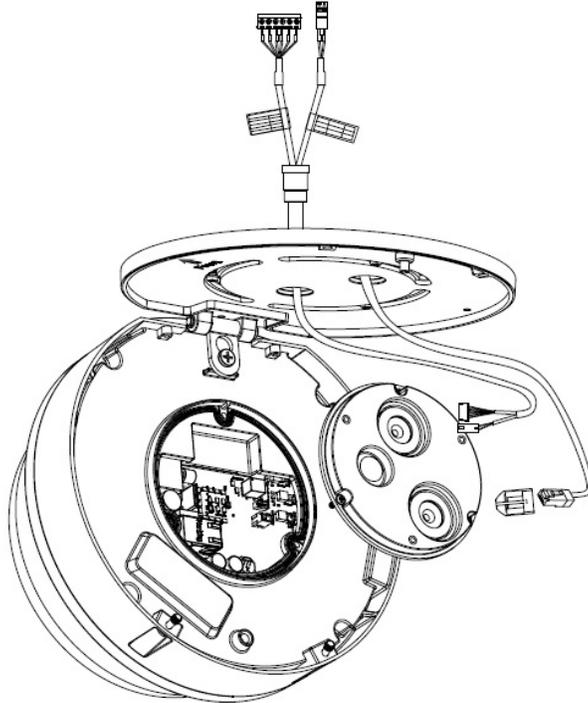
10. Prepare the network cable (and the supplied power cable/ I/O cable,if necessary) with the supplied grommets by using insertion tool or terminate the RJ-45 connector to the cable after passing through the grommet.
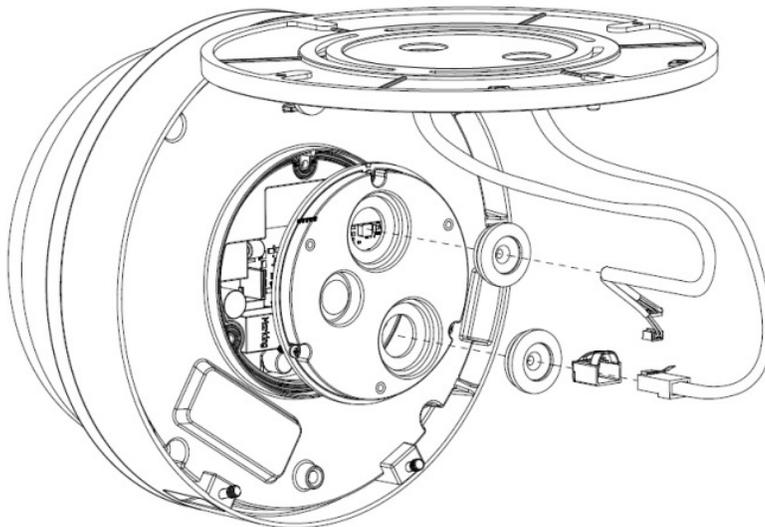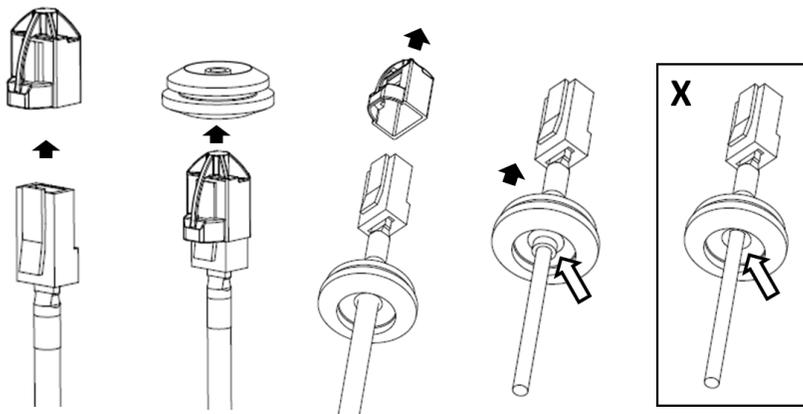
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NOTE: When mounting the camera outdoors or in a wet environment, use of the supplied grommet is required. Ensure the grommet properly seats flush with the camera housing to create a water-tight seal.

11. Connect the network cable (and the supplied power cable/ I/O cable, if necessary) to the corresponding connectors inside the camera.
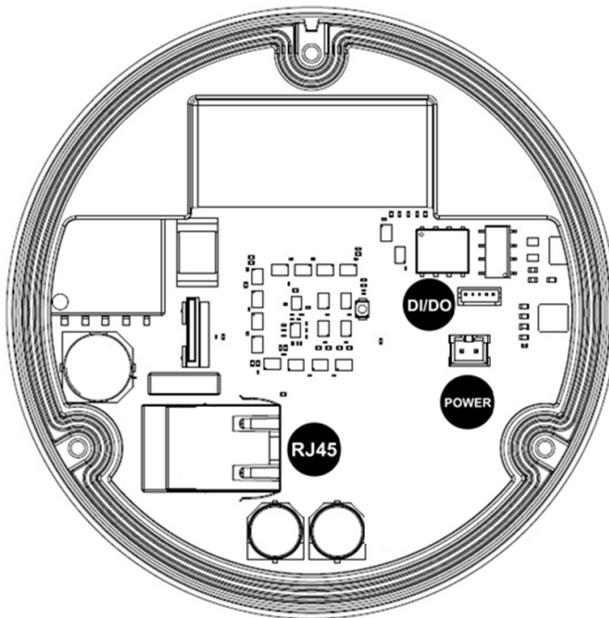
12. Align the holes on main housing cover with the holes on mounting plate, and install the main housing cover back on to the camera.

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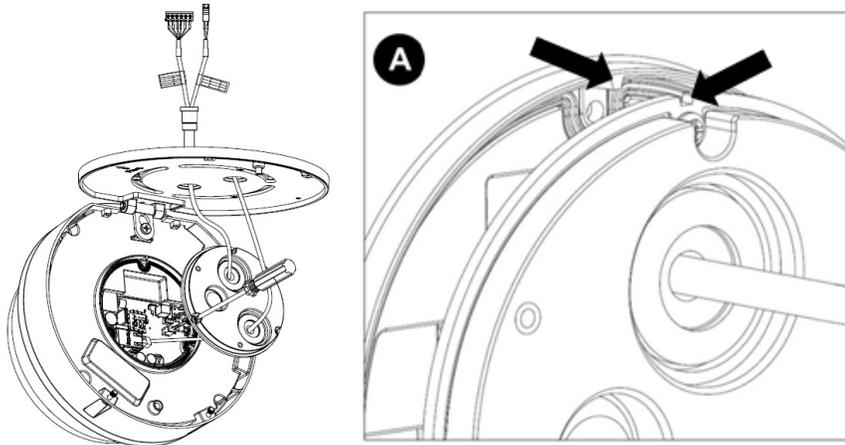
NOTE: If using the side connection of the NPT port, you need to install the supplied grommet without a through hole on the main housing cover, and remove the cap covering the side entrance, otherwise; leave the cap in place. If using the NPT port, always use Teflon tape around the threads to ensure proper sealing. The conduit fits ¾" NPT standard.

13. Use the supplied security L-key to attach the camera to the mounting plate.
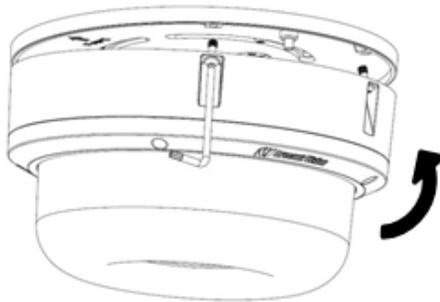
14. Swing the camera up into place and use a Phillips head screwdriver to the camera to the mount plate. Use caution to not bend or pinch the cables during this step.
15. Secure the cover plate as shown in the image below.

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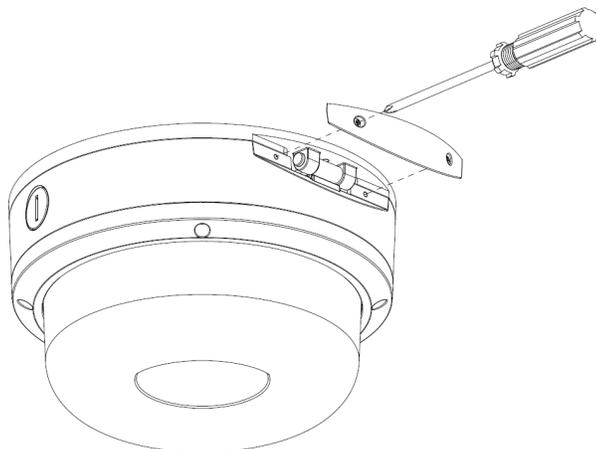
16. To configure the camera, reference the camera discovery, set-up and configuration section.

⚠ **CAUTION!** The captive screws must be used to properly secure the dome cover and camera housing. Failure to use the captive fastener may result in serious injury. When mounting the dome cover to the camera housing, ensure that the gasket is properly seated and not folded. Failure to do so may result in water and dust ingress. Water damage from improper installation is not covered by the warranty!

Wall Mounting

For a proper wall mount installation, the AV-WMJB wall mount and SO3-CAP wall mount cap are required (sold separately).

1. Using the Mounting template, prepare the mounting provisions for the camera installation.
2. Connect SO3-CAP cap and wall mount.
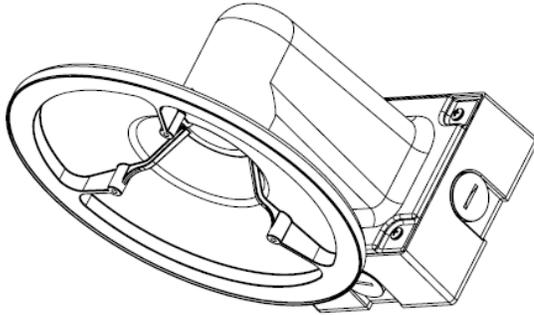
NOTE: The thread size for Top shield, pendant pole and mount is 1.5" NPT.

3. Attach the wall mount to the wall using the four drywall screws provided or any optional hardware suitable for the mounting surface.
4. Run the Ethernet Cable and outside power cable (if necessary) through the supplied rubber gasket and then through the wall mount. Ensure the gasket is seated properly.
5. Follow the Step#2 to Stpe#4 from Surface mount installation on P.11 and P.12.
6. If presets will be used for 180°, 270°, or 360° configurations, orient the camera such that the arrow, denoting the front of the camera, is pointing towards the center of the desired field of view.
7. Attach the mounting plate to the SO3-CAP with the supplied screws.

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8. Follow the Step#7 to Stpe#15 from Surface mount installation on P.13 to P.16.

9. To configure the camera, reference the camera discovery, set-up and configuration section.

⚠️ **CAUTION!** The captive screws must be used to properly secure the dome cover and camera housing. Failure to use the captive fastener may result in serious injury. When mounting the dome cover to the camera housing, ensure that the gasket is properly seated and not folded. Failure to do so may result in water and dust ingress. Water damage from improper installation is not covered by the warranty!

Pendant Mounting

For a proper pendant mount installation, the AV-PMJB pendant mount and SO3-CAP mounting cap are required (sold separately).

1. Using the mounting template, prepare the mounting provisions for the camera installation.
2. Connect SO3-CAP, pendant pole and mount together.
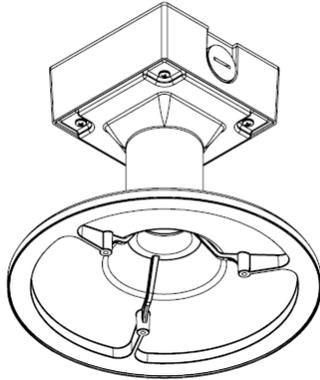
NOTE: The thread size of top shield, pendant pole and mount is 1.5" NPT.

3. Attach the pendant mount to the ceiling using the four wood screws provided or any optional hardware suitable for the mounting surface.
4. Run the Ethernet Cable and outside power cable (if necessary) through the supplied rubber gasket and then through the pendant. Ensure the gasket is seated properly.
5. Follow the Step#2 to Stpe#4 from Surface mount installation on P.11 and P.12.
6. If presets will be used for 180°, 270°, or 360° configurations, orient the camera such that the arrow, denoting the front of the camera, is pointing towards the center of the desired field of view.
7. Attach the mounting plate to the SO3-CAP with the supplied screws.

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8. Follow the Step#7 to Stpe#15 from Surface mount installation on P.13 to P.16.
9. To configure the camera, reference the camera discovery, set-up and configuration section.

⚠ **CAUTION!** The captive screws must be used to properly secure the dome cover and camera housing. Failure to use the captive fastener may result in serious injury. When mounting the dome cover to the camera housing, ensure that the gasket is properly seated and not folded. Failure to do so may result in water and dust ingress. Water damage from improper installation is not covered by the warranty!

Pole Mounting

For a pole mount installation, the AV-WMJB wall mount, AV-PMA pole mount, and SO3-CAP mount cap are required (sold separately).

1. Using the mounting template, prepare the mounting provisions for the camera installation.

2. Connect the wall mount cap and wall mount.

3. Attach the Junction Box Adapter to the Pole Mount Adapter as shown in Figure 1.

4. Remove the conduit plug on the junction box adapter and connect ¾" NPT conduit to the junction box adapter (Figure 1).
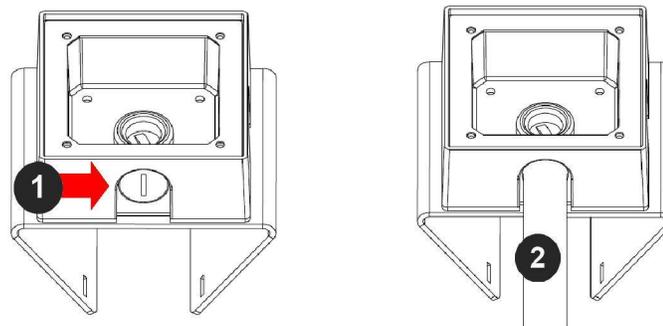
Figure 1: Attach conduit to AV-JBA junction box adapter

Reference #	Description
1	Remove conduit plug
2	Connect ¾" NPT conduit to junction box adapter (ensure use of water seal tape)

NOTE: Use silicon or water pipe seal tape to make sure no water leakage between conduit pipe and junction box adapter.

5. Run the Ethernet cable and outside power cable (if necessary) through the supplied rubber gasket and then through the Junction Box Adapter and AV-WMJB, Wall Mount Adapter. Ensure the gasket is seated properly.

6. Attach the Wall Mount Adapter (AV-WMJB) to the Pole Mount Adapter (AV-PMA) as shown in Figure 2.

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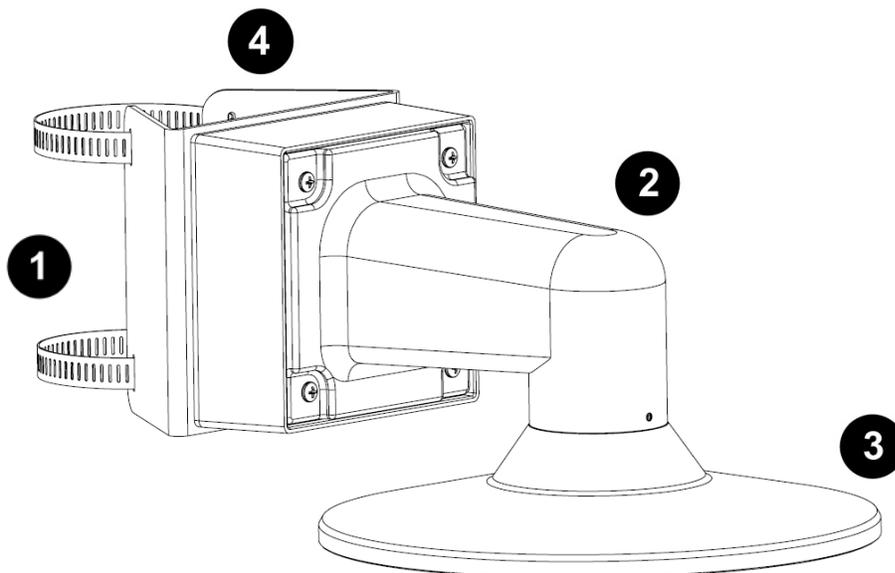
Figure 2: Attach wall mount adapter to pole mount adapter

Reference #	Description
1	Steel straps with compression screws
2	AV-WMJB wall mount
3	SO3-CAP mount cap
4	AV-PMA pole mount
5	Apply Teflon water seal tape to the thread of ¾" NPT pipe to avoid water leakage

7. Use the supplied two Steel Straps to attach the Pole Mount Adapter to the pole and tighten the compression screws as shown in Figure 2.

8. To attach the camera to the Wall Mount Adapter (AV-WMJB), reference the Installation and Wall Mounting section.

9. To configure the camera, reference the camera discovery, set-up and configuration section.

⚠️ **CAUTION!** The captive screws must be used to properly secure the dome cover and camera housing. Failure to use the captive fastener may result in serious injury. When mounting the dome cover to the camera housing, ensure that the gasket is properly seated and not folded. Failure to do so may result in water and dust ingress. Water damage from improper installation is not covered by the warranty!

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Corner Mounting

For a corner mount installation, the AV-WMJB wall mount, AV-CRMA corner mount, and MD-CAP mount cap are required (sold separately).

1. Using the Mounting template, prepare the mounting provisions for the camera installation.

2. Connect the wall mount cap and wall mount.

3. Attach the Junction Box Adapter to the Corner Mount Adapter as shown in Figure 1.

4. Remove the conduit plug on the junction box adapter and connect ¾" NPT conduit to the junction box adapter as shown in Figure 1.
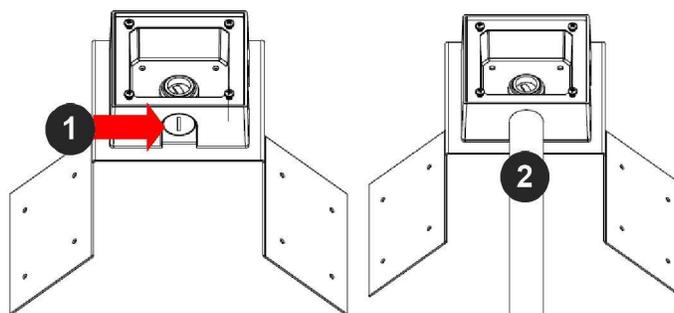
Figure 1: Attach conduit to SV-JBA junction box adapter

Reference #	Description
1	Remove conduit plug
2	Connect ¾" NPT conduit to junction box adapter (ensure use of water seal tape)

NOTE: Use silicon or water pipe seal tape to make sure no water leakage between conduit pipe and junction box adapter.

5. Run the Ethernet cable and outside power cable (if necessary) through the supplied rubber gasket and then through the Junction Box Adapter and AV-WMJB, Wall Mount Adapter. Ensure the gasket is seated properly.

6. Attach the Wall Mount Adapter (AV-WMJB) to the Corner Mount Adapter (AV-CRMA) as shown in Figure 2.

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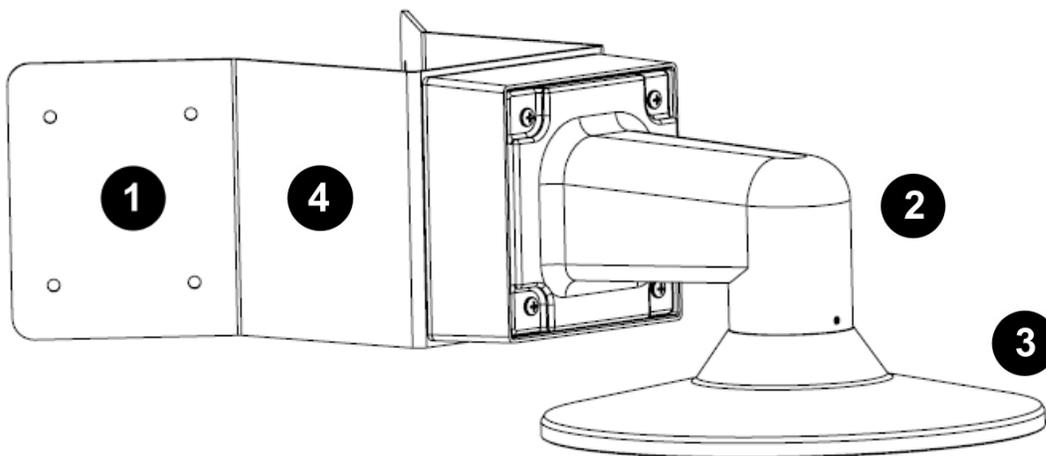
Figure 2: Attach corner mount adapter to exterior corner wall

Reference #	Description
1	Attach corner mount adapter to exterior 90 corner wall
2	AV-WMJB wall mount
3	SO3-CAP mount cap
5	AV-CRMA corner mount adapter
6	Apply Teflon water seal tape to the thread of ¾" NPT pipe to avoid water leakage

7. Using the screws provided (or other hardware), attach the Corner Mount Adapter to an exterior 90 degree corner wall.

8. To attach the camera to the Wall Mount Adapter (AV-WMJB), reference the Installation and Wall Mounting section.

9. To configure the camera, reference the camera discovery, set-up and configuration section.

⚠ **CAUTION!** The captive screws must be used to properly secure the dome cover and camera housing. Failure to use the captive fastener may result in serious injury. When mounting the dome cover to the camera housing, ensure that the gasket is properly seated and not folded. Failure to do so may result in water and dust ingress. Water damage from improper installation is not covered by the warranty!

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Electrical Box Adapter

The AV-EBAS and AV-EBAR electrical box adapter are used to attach the camera to a common single, double or square electrical box.

1. Using the supplied machine screws from AV-EBAS or AV-EBAR, match the mounting holes on the mounting plate with the threaded holes on the electrical box. Ensure every threaded hole is matched with a mounting hole.

2. Attach the electrical box adapter to the user supplied electrical box.

AV-EBAS   **AV-EBAR**

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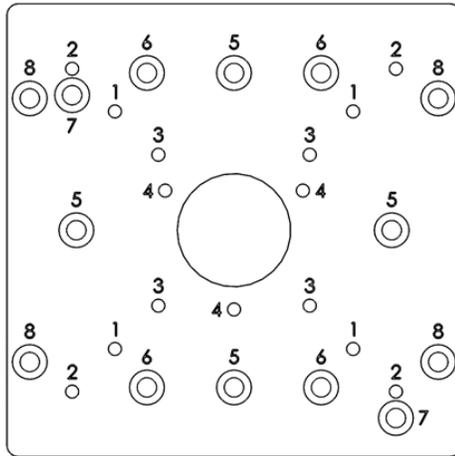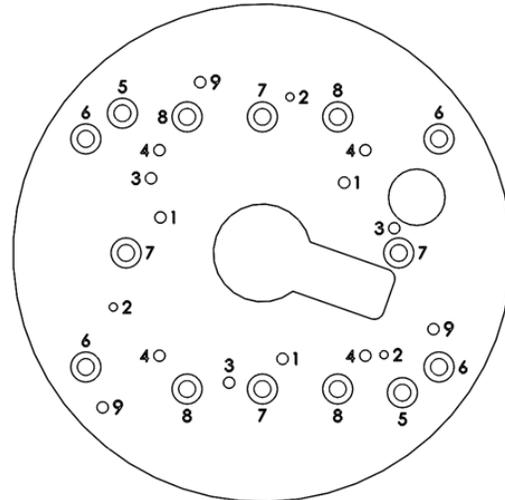
Auxiliary I/O Functions

The auxiliary input and output are accessible after removing dome cover as shown in Figure 1.
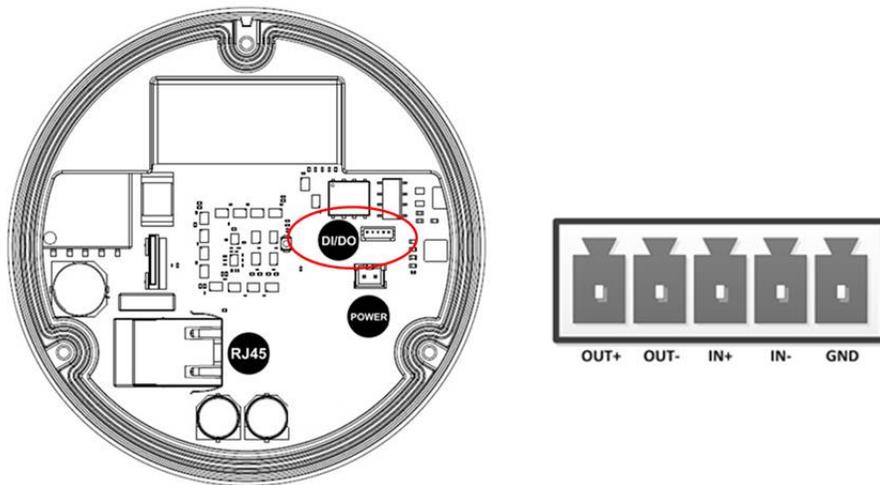
Figure 1

The output consists of an optically coupled solid state relay (SSR) and the input has an optocoupler. Both the SSR and optocoupler have an isolation voltage of 1500 VRMS between the external terminals and internal camera circuitry. The input is further protected with a serial 250Ω resistor and a debouncing circuit.
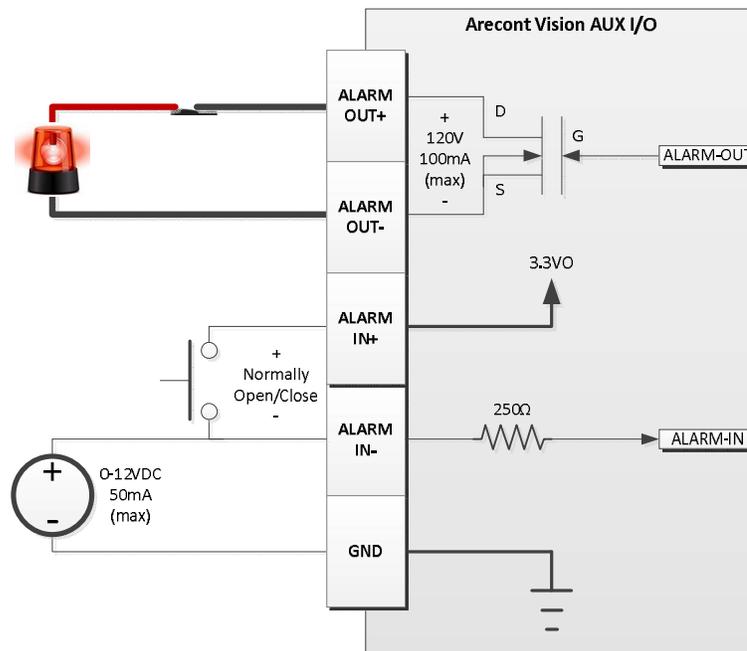
Figure 2: AUX I/O use case example

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OUTPUT Relay Control and Function

The camera has an output for activating an external device. The camera supports both transient and continuous relay operation. You can operate the relay during an active connection using the API command set. Typical applications include turning on lights or activating doors and locks.
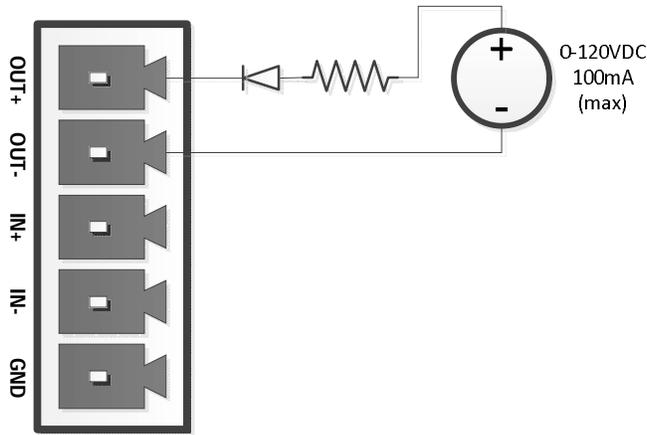
Figure 3: Relay wiring with power source to the camera

Camera output can be turned on|off with the following command:
http://camera_ip/set?auxout=("on"|"off")

The following table shows the output control and electrical characteristics:

Output Control				
Terminals	External Status	Camera Status	Max Voltage	Max Current
OUT+ & OUT-	OPEN	OFF	120V	-
	CLOSED	ON	-	100mA

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INPUT Alarm Control and Detection

The input optocoupler supports two ways to connect external unsupervised alarms to Arecont Vision camera. **Only one of the following two schemes should be used at any given time**.

OPTION-1: UNSUPERVISED ALARM DETECTION
In this scheme the IN+ & IN- terminals can be used for external signaling devices, such as door contacts or motion detectors. Both normally open and normally closed devices are supported as shown in Figure 4:
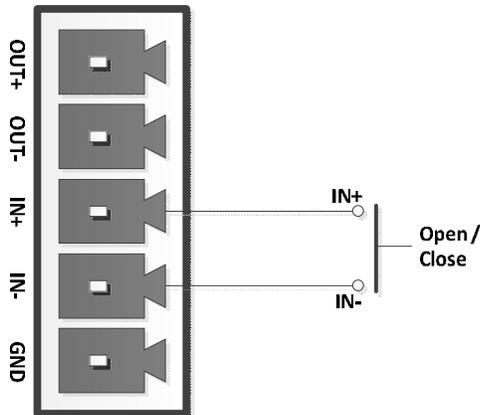
Figure 4

Figure 5 illustrates the unsupervised alarm conditions:
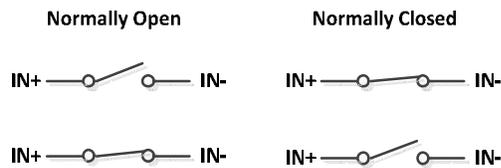
Figure 5

The following table shows how camera detects unsupervised alarms:

Input Unsupervised Alarms		
Terminals	**External Status**	**Camera Status**
IN+ & IN-	OPEN	ON
	CLOSE	OFF

Camera status can be read with the following command:
http://camera_ip/get?auxin

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OPTION-2: INPUT VOLTAGE DETECTION

In this scheme the IN- & GND terminals can be tied to an external power source. The camera can detect a range of voltage to trigger an internal alarm on|off condition.
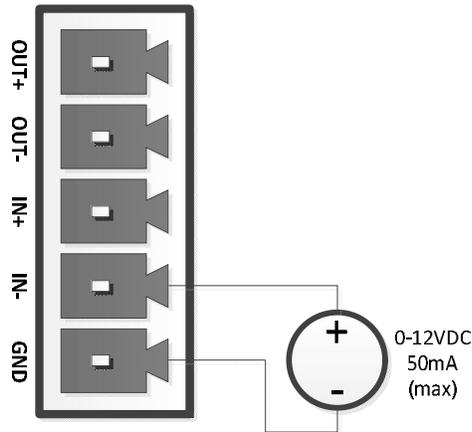
Figure 6

The following table shows the input voltage range and electrical characteristics:

Input Voltage Detection				
Terminals	External Status	Camera Status	Voltage Range	Current Range
IN- & GND	OFF	ON	0-1V	0-2mA
	ON	OFF	2-12V	10-50mA

The status of the camera can be read with the following command:
http://camera_ip/get?auxin

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Camera Power Up

⚠️ This product should be installed by a qualified service technician in accordance with the National Electrical Code (NEC 800 CEC Section 60) or applicable local code.

1. Connect the camera to a PoE port on 100Mbps network PoE switch using an Ethernet cable as shown in the image below.
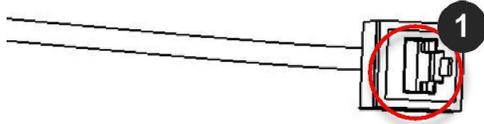
Reference #	Description
1	PoE Connector

2. If the camera is powered by an outside power supply, 12~24VDC or 24VAC, connect the power cable.

3. Connect the PoE switch to your computer's network port using an Ethernet cable.

IP Networking Diagram

PC
Laptop
PoE Switch*
MegaDome® 4K Camera
or
Windows 8 / 7 / Vista / XP

① Compliant with 100Base-T / 1000Base-T Ethernet Network Interface
② Straight-Through CAT5 / CAT5E / CAT6 Cables

* Sold Separately

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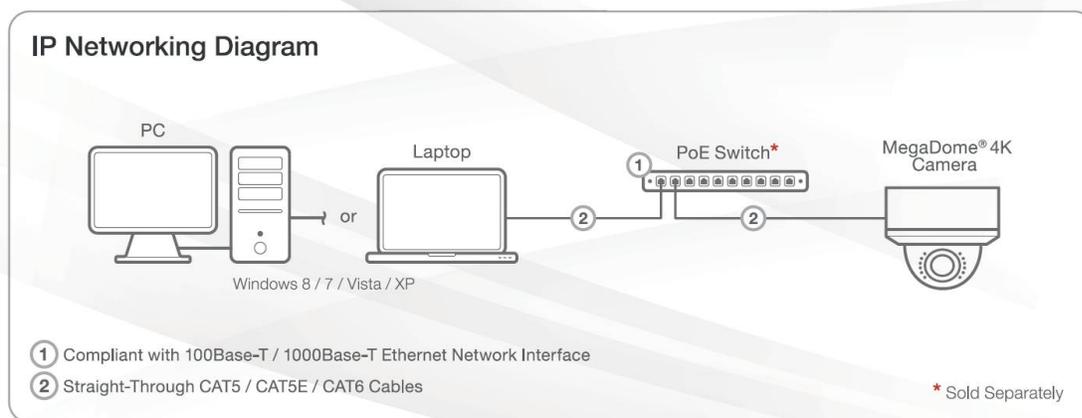
Auxiliary Power

If the camera is powered by a separate outside AC or DC power source, run the supplied power cable through the access hole on the camera housing and connect the power cable to the 2-position connector on the main camera board. The approximate location of the 2-position connector is circled below.
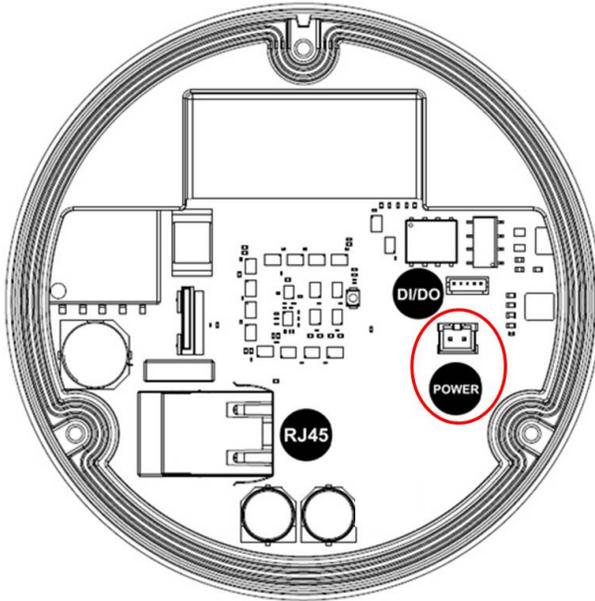
NOTE: Cameras using auxiliary power with 802.1x enabled may need to manually power cycle the camera to reconnect to the network.

CAUTION! Make the connections inside a watertight compartment. Isolate unused power wires individually.

After connections are made, ensure that the watertight compartment is tightly closed and cables and conduits are properly sealed to prevent ingress of water.

NOTE: A yellow LED on the rear of the camera illuminates after a few seconds.

- The flashing yellow LED indicates that a link to your computer has been established.
- A green LED will blink when the camera has been accessed.

LED	Status	Description
Yellow	Flashing	Link has been established.
	Solid	Normal Operation.
Green	Flashing	Camera has been accessed. Normal operation.
	Solid	N/A
None	None	No Connection.

NOTE: Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction. Wiring should be UL Listed and/or Recognized wire suitable for the application.

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System Requirements

Computer with Windows XP/Vista/7 operating system, network access, and Microsoft Internet Explorer web browser version 9.0 or later (32-bit).

Camera Discovery, Setup, and Configuration

For camera discovery and setup, the AV IP Utility is recommended. The software can be found on the CD included with your camera or at: http://www.arecontvision.com/softwares.php.

The AV IP Utility has the ability to provide multiple discovery options, including broadcast and multicast, check the status of a camera, change camera settings, import and export camera settings via a .csv file, and update firmware and/or hardware from virtually anywhere with a network connection.

Whether used for large installations that require an update to multiple settings, or smaller installations where only one camera needs changed, the AV IP Utility tool is efficient and convenient for mass or single camera uploads.

The AV IP Utility tool is compatible with all Arecont Vision® megapixel cameras. The user manual for the software is included on the CD that came with your camera or available on our website.

Network Protocols

The Arecont Vision SurroundVideo® Omni G3 cameras support RTSP, RTP/TCP, RTP/UDP, HTTP, DHCP, TFTP, QoS, IP version 4 (IPv4), and 802.1x.

RTSP – Cameras communicate with video management systems over Real Time Streaming Protocol. Do not change the RTSP port unless you are sure your VMS does not use the default setting.

RTP/TCP – The Real-time Protocol/Transmission Control Protocol is best suited for applications that require high reliability, and transmission time is relatively less critical.

RTP/UDP – The Real-time Protocol/User Datagram Protocol is used for live unicast video, especially when it is important to always have an up-to-date video stream, even if some images are dropped.

HTTP – The Hypertext Transfer Protocol is an application protocol for distributed, collaborative, hypermedia information systems.

DHCP – The Dynamic Host Configuration Protocol allows network administrators to centrally manage and automate the assignment of IP addresses. DHCP should only be enabled if using dynamic IP address notification, or if the DHCP can update a DNS server.

TFTP – The Trivial File Transfer Protocol is a simple, lock-step, File Transfer Protocol which allows a client to get from or put a file onto a remote host. TFTP lacks security and most of the advanced features offered by more robust file transfer protocols such as File Transfer Protocol.

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QoS – Quality of Service guarantees a certain level of a specified resource to selected traffic on a network. A QoS-aware network prioritizes network traffic and provides a greater network reliability by controlling the amount of bandwidth an application may use.

IPv4 – The MicroDome G2 supports the IPv4 internet-layer protocol for packet-switched internetworking across multiple IP networks. IPv4 uses 32-bit addressing which allows for devices and users on the internet for routing traffic.

802.1x – The IEEE 802.1x standard provides a general method for authentication and authorization in IEEE-802 networks. Authentication is carried out via the authenticator, which checks the transmitted authentication information using an authentication server and approves or denies access to the offered services (LAN, VLAN or WLAN) accordingly.

Camera Preset Configurations

The Arecont Vision SurroundVideo® Omni G3 cameras support three predifined camera preset configurations: 180 degree, 270 degree, and 360 degree. Also, the cameras support two custom preset configurations.

- **Home position**
  Four camera modules will move to the positions as the image shown in below. All four modules zoom out to widest angle, and tilt up to zero degree.

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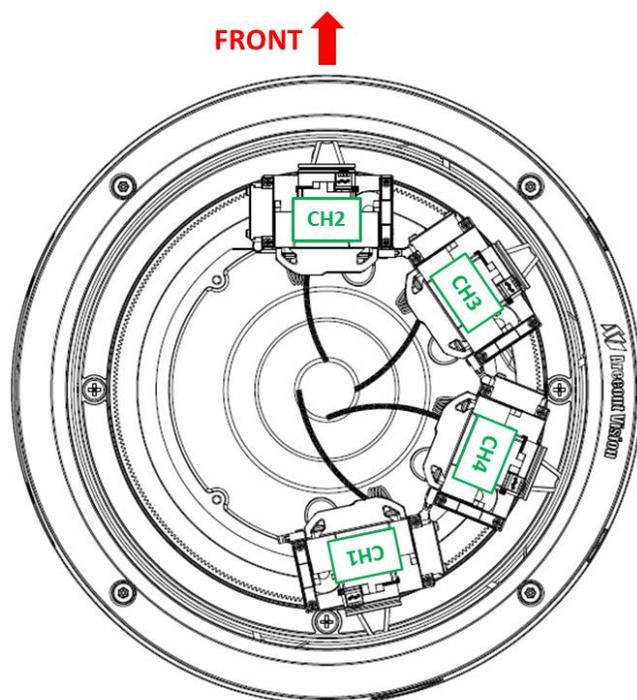
- **180 degree preset configuration**
  Four camera modules will move to the positions as the image shown in below. CH1/2/3 zoom in to 60 degree H-FOV, and tilt down to 37 degree. CH4 zooms out to widest angle, and tilt down to 135 degree.
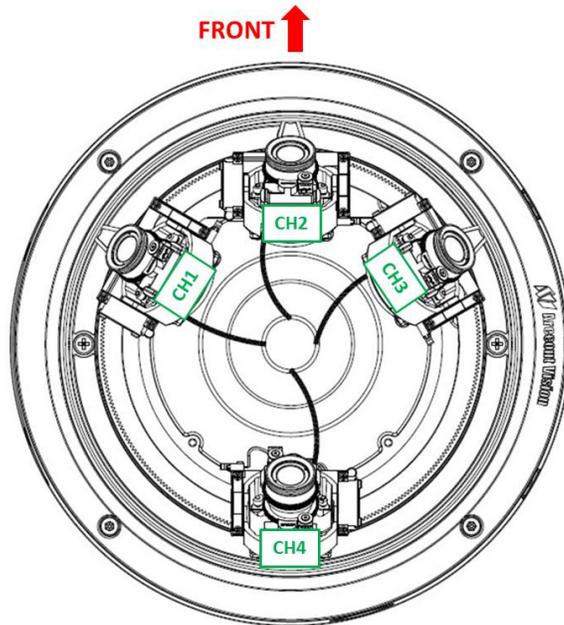
- **270 degree preset configuration**
  Four camera modules will move to the positions as the image shown in below. CH1/2/3 zoom in to 90 degree H-FOV, and tilt down to 37 degree. CH4 zooms out to widest angle, and tilt down to 135 degree.

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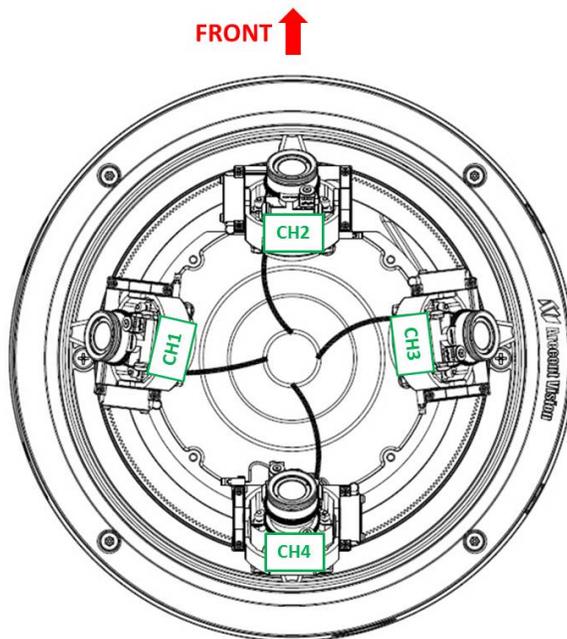
- **360 degree preset configuration**
    Four camera modules will move to the positions as the image shown in below. All four modules zoom in to 90 degree H-FOV, and tilt down to 37 degree.
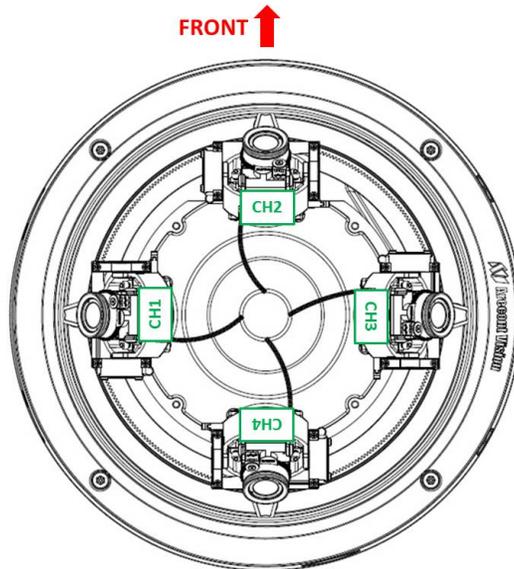
- **Custom preset configuration**
    User could define custom pan/tilt/zoom positions as the image shown in below.
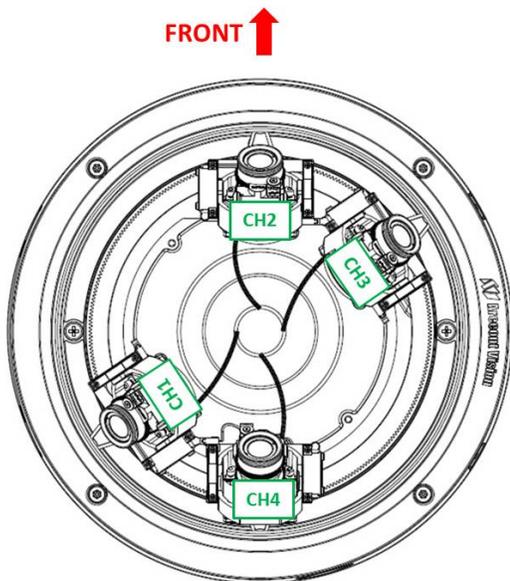
1. To control the camera preset configurations via the web interface, double click the camera within the AV IP Utility (Figure 1) or open your preferred web browser and type the camera's IP address (Fig 2).

    NOTE: For H.264 streaming support on a webpage, the recommended browsers are Internet Explorer and Firefox.

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Figure 1: Double click via AV IP Utility

Figure 2: Type the camera IP address

2. Click Presets Tab

NOTE: SurroundVideo® Omni G3 cameras are not to be used as traditional high speed PTZ cameras. The motorized movement of the camera gimbals is meant for setup and configuration only. Movement of the modules more than one time per day will void the warranty.

NOTE: Module CH2 will not pass the FRONT position shown on the mounting plate. This is to avoid cable routing problems.

NOTE: Modules will stop moving once they hit the neighbor module during pan movement in either direction

NOTE: Live video is disabled during pan/tilt adjustment.

NOTE: Additional information regarding the Arecont Vision® web interface is found separately in the **AV IP Utility Web Browser Manual** via the Arecont Vision website.

Home Position/ 360 Degree Preset Configuration

1. In the "Preset buttons" section, click "Home" or "360"

2. To make an adjustment to all 4 camera modules (without having to select each camera module individually) you can select "1-4" from the drop down menu.
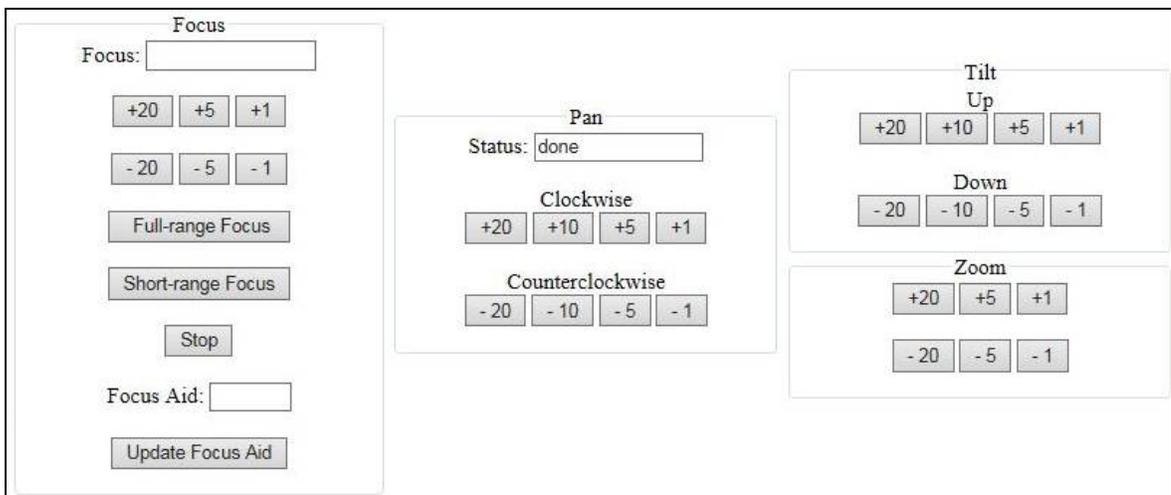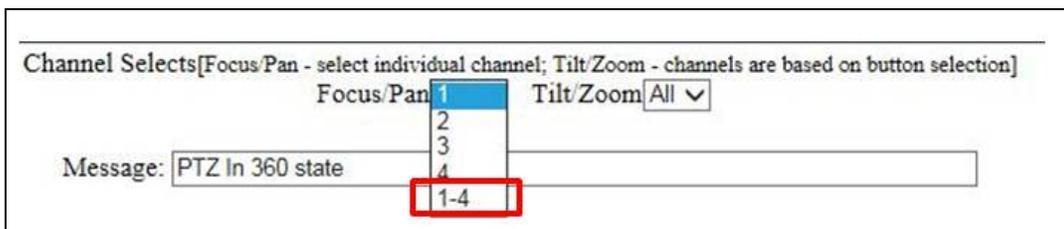
3. To individually adjust each camera module, select the "Focus/PTZ" tab.

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Presets Focus/PTZ Image Video Network MotionDetection PrivacyMask Alignment

NOTE: SurroundVideo® Omni G3 cameras are not to be used as traditional high speed PTZ cameras. The motorized movement of the camera gimbals is meant for setup and configuration only. Movement of the modules more than one time per day will void the warranty.

NOTE: Module CH2 will not pass the FRONT position shown on the mounting plate. This is to avoid cable routing problems.

NOTE: Modules will stop moving once they hit the neighbor module during pan movement in either direction

NOTE: Live video is disabled during pan/tilt adjustment.

NOTE: Additional information regarding the Arecont Vision® web interface is found separately in the **AV IP Utility Web Browser Manual** via the Arecont Vision website.

180/270 Degree Preset Configuration

1. In the "Preset buttons" section, click "180" or "270"
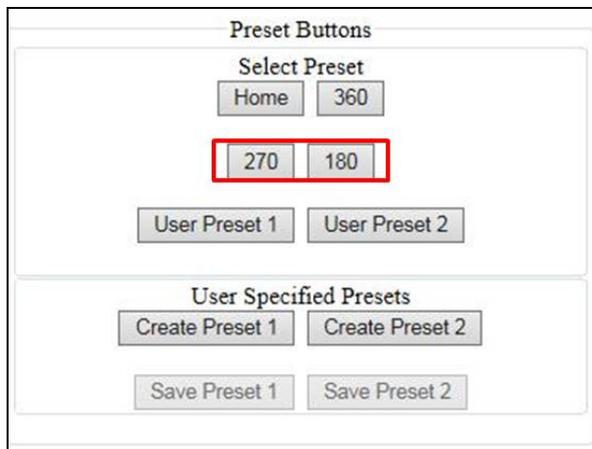
2. To make an adjustment to the entire panoramic configuration (without having to select each camera module individually) you can select "1/2/3" from the drop down menu. Doing this will allow you to modify.

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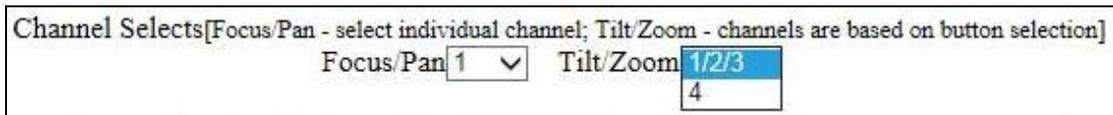
3. To individually adjust each camera module, select the "Focus/PTZ" tab.

NOTE: SurroundVideo® Omni G3 cameras are not to be used as traditional high speed PTZ cameras. The motorized movement of the camera gimbals is meant for setup and configuration only. Movement of the modules more than one time per day will void the warranty.

NOTE: Module CH2 will not pass the FRONT position shown on the mounting plate. This is to avoid cable routing problems.

NOTE: Modules will stop moving once they hit the neighbor module during pan movement in either direction

NOTE: Live video is disabled during pan/tilt adjustment.

NOTE: Additional information regarding the Arecont Vision® web interface is found separately in the **AV IP Utility Web Browser Manual** via the Arecont Vision website.

Create Custom Preset Configuration

1. In "Preset buttons" section, click "Create Preset 1" or "Create Preset 2"

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2. To adjust Focus/Pan/Tilt/Zoom positions for individual module or all four modules together via Channel Selects.
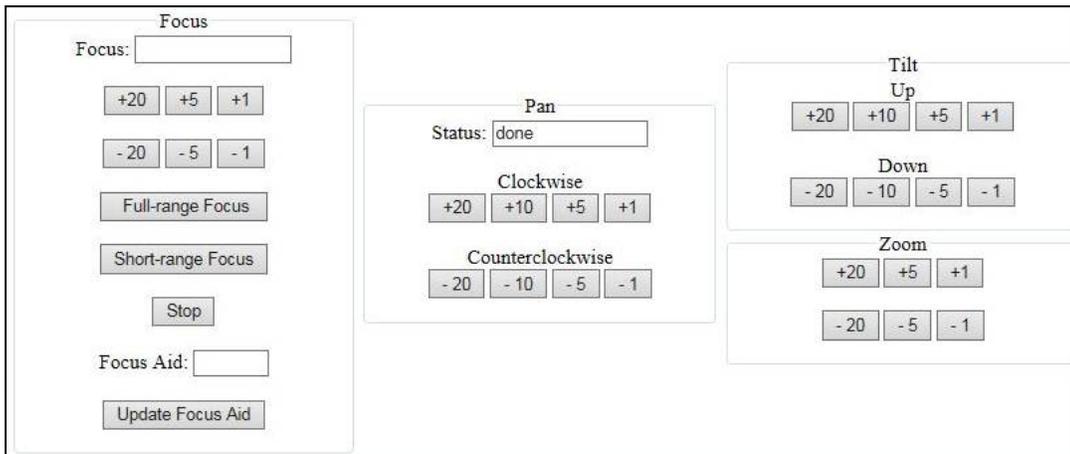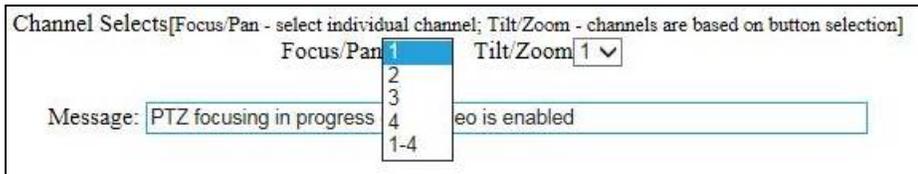
3. Once having desired position for each module, click "Save Preset 1" or "Save Preset 2"
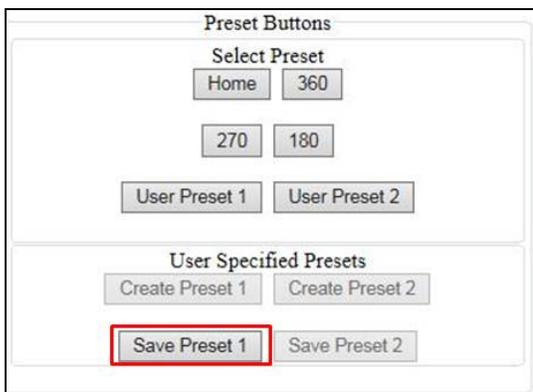
4. Click "User Preset 1" or "User Preset 2" to get the saved custom preset configuration

NOTE: SurroundVideo® Omni G3 cameras are not to be used as traditional high speed PTZ cameras. The motorized movement of the camera gimbals is meant for setup and configuration only. Movement of the modules more than one time per day will void the warranty.

NOTE: Module CH2 will not pass the FRONT position shown on the mounting plate. This is to avoid cable routing problems.

NOTE: Modules will stop moving once they hit the neighbor module during pan movement in either direction

NOTE: Live video is disabled during pan/tilt adjustment.

NOTE: Additional information regarding the Arecont Vision® web interface is found separately in the **AV IP Utility Web Browser Manual** via the Arecont Vision website.

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General Remote Focus, Pan, Tilt, Zoom

1. To control the remote focus, pan, tilt, or zoom via the web interface, double click the camera within the AV IP Utility (Figure 1) or open your preferred web browser and type the camera's IP address (Fig 2).

   NOTE: For supporting H.264 streaming on a webpage, the recommended browsers are Internet Explorer and Firefox.

Figure 1: Double click via AV IP Utility

Figure 2: Type the camera IP address

2. Click Focus/PTZ Tab

3. Select the channel you would like to adjust focus, pan, tilt, or zoom
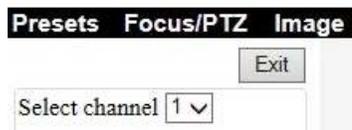
5. Follow the instruction from the table below to adjust Focus/Pan/Tilt/Zoom positions for each individual module

AV IP Utility Focus/ Pan/ Tilt/ Zoom Tab

Menu	Feature	Description
	Manual Focus: +20, +5, +1, -20, -5, -1	Numbers indicate the level of Focusing in order to adjust the field-of-view.
	Full-range Focus	Best for scenes that are completely out of focus. The camera automatically scans the full focus range of the scene to find the best focus position.
	Short-range Focus	Best for scenes that are slightly of out of focus. The camera quickly fine-tunes for a precise focus position.
	Stop	Stops any command in progress.
	Manual Pan: +20, +10, +5, +1, -20, -10, -5, -1	Numbers indicate the level of Pan in order to adjust the field-of-view.
	Manual Tilt: +20, +10, +5, +1, -20, -10, -5, -1	Numbers indicate the level of Tilt in order to adjust the field-of-view.
	Manual Zoom: +20, +5, +1, -20, -5, -1	Numbers indicate the level of Zooming in order to adjust the field-of-view.

NOTE: SurroundVideo® Omni G3 cameras are not to be used as traditional high speed PTZ cameras. The motorized movement of the camera gimbals is meant for setup and configuration only. Movement of the modules more than one time per day will void the warranty.

NOTE: Module CH2 will not pass the FRONT position shown on the mounting plate. This is to avoid cable routing problems.

NOTE: Modules will stop moving once they hit the neighbor module during pan movement in either direction

NOTE: Live video is disabled during pan/tilt adjustment.

NOTE: Additional information regarding the Arecont Vision® web interface is found separately in the **AV IP Utility Web Browser Manual** via the Arecont Vision website.

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Mounting Templates

Front

Get more information and supporting
documentation on our product at
the Arecont Vision website.

http://www.arecontvision.com/downloads.php

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Support

1. Arecont Vision FAQ Page Located at ArecontVision.com
2. Check the following before you call:
   - Restore camera to factory default with AV200 or the camera webpage.
   - Upgrade to the latest firmware by visiting ArecontVision.com.
   - Isolate the camera on a dedicated network and test with AV200.
   - Swap the "troubled" camera with a known good camera to see if the problem follows the camera or stays at the location.
3. Contact Arecont Vision Technical Support one of three ways:
   1. Online Portal: Support.ArecontVision.com
   2. Phone: 1.818.937.0700 (option #1)
   3. Email: support@arecontvision.com
4. Use the Arecont Vision software AV IP Utility located on the CD, QR code on the box, or available for download at our website (www.arecontvision.com) for camera discovery and setup (see Instruction Manual located on the CD or available on our website).

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