



# ContreraIP™ Panoramic

## Installation Manual

8MP

AV08CPD-118

20MP

AV20CPD-118

**Arecont Vision®**  
A COSTAR COMPANY

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## About Our Warranty

### Global (3 Year) Limited Warranty

ARECONT VISION COSTAR 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. ARECONT VISION COSTAR 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.

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# ConteraIP™ Panoramic Megapixel Cameras

## Camera Overview

ConteraIP™ Panoramic megapixel IP cameras provide an all-in-one solution for wide-area video surveillance. Four sensors and lenses are housed in an outdoor-rated IP66 and IK-10 impact-resistant dome enclosure. The cameras are available in a 180° configuration and resolutions of 8- and 20-megapixel (MP). A single Panoramic camera can replace multiple conventional cameras with the ability to zoom into multiple regions of interest. Their return on investment is easily measured any way you view it.

Regardless of the time of day, the ConteraIP™ Panoramic is prepared for any lighting condition. For applications with poor lighting conditions, Enhanced WDR™ (wide dynamic range) at 120dB provides the best visual balance to shaded and bright light conditions.

For clear color images in low-light, NightView™ offers strong low-light sensitivity for capturing details in extremely poor-lit scenes, which is further enhanced by LED illumination built into each sensor gimbal.

Arecont Vision® was the first to bring H.264 to the mainstream market and recently developed SNAPstream™ (Smart Noise Adaptation and Processing) technology for reducing bandwidth without impacting image quality. Today we are proud to offer our next generation H.265 with SNAPstream+™ smart codec capable of delivering high quality video while saving over 50% of the data rate to reduce or prevent strain on the network. The camera's power can be supplied via a Power-over-Ethernet (PoE - IEEE 802.3af) compliant network cable connection.

The ConteraIP™ Panoramic is ONVIF (Open Network Video Interface Forum) Profile S and G compliant, providing interoperability between network video products regardless of manufacturer.



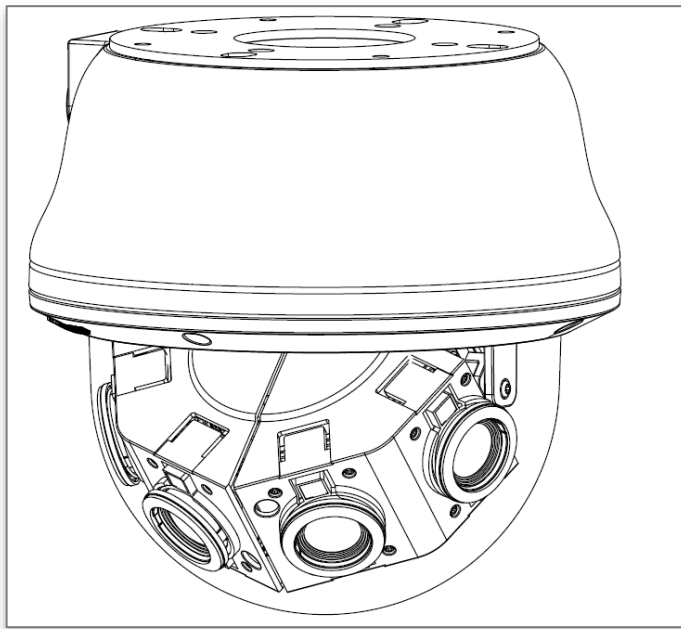
**CAUTION!**

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.

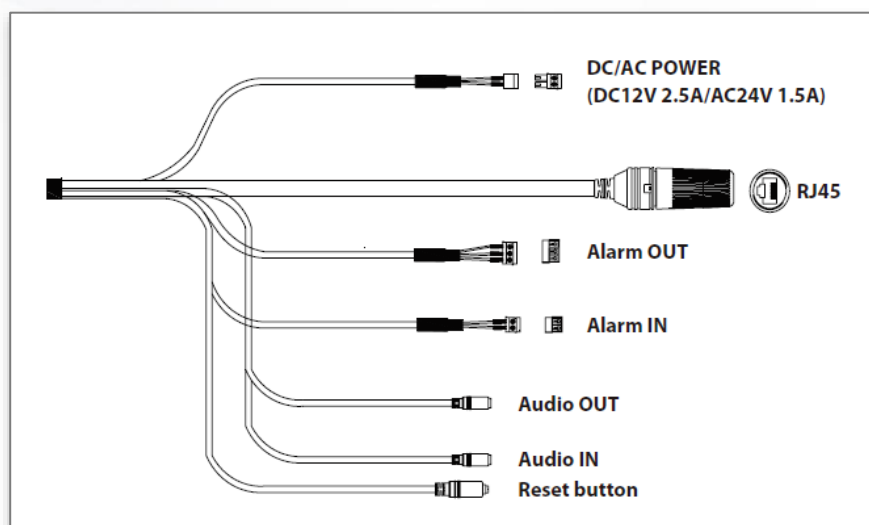
## Package Contents

Description	QTY
AV08CPD-118/ AV20CPD-118 IP camera	1
Mounting Template	1
Accessory Pack	1

- AV02CLB-100/ AV05CLB-100



- Cables



# Installation

## Mounting Recommendations

For the best visibility toward the target, and a minimal blind spot below the camera, Arecont Vision recommends mounting panoramic cameras 15-20ft off the ground. If the application is unable to meet this criteria, for every 10ft the camera is mounted from the ground, expect a 10ft blind spot below, and the camera should be aimed ~100ft, for every 10ft mounted from the ground, toward the horizon.

For example, a camera mounted at 30ft will have a 30ft blind spot below the camera and should be aimed 300ft toward the horizon. In the example below, the camera in Figures 1B and 1C are both mounted 30ft high; however, the camera in Figure 1B is aimed 250ft toward the horizon and the camera in Figure 1C is only aimed 150ft toward horizon. As a result, the camera in Figure 1C will have less than desirable results due to its higher curvature.



*Figure 1A: Recommended height for panoramic*



*Figure 1B: Less curvature provides better results*



*Figure 1C: Higher curvature produces less desirable results*

In the example below, the camera in Figures 1D and 1E are both mounted 8ft high; however, the camera in Figure 1D is aimed 80ft toward the horizon and the camera in Figure 1E is only aimed at 30ft toward horizon. The camera in Figure 1E results in a drastic curvature with less usable video.



*Figure 1D: Mounting height of 8ft and aimed 80ft toward horizon*

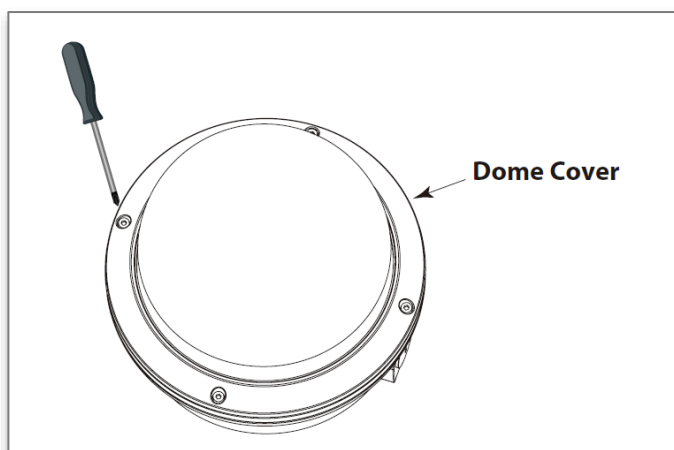


*Figure 1E: Mounting height of 8ft and aimed only 30ft toward horizon*

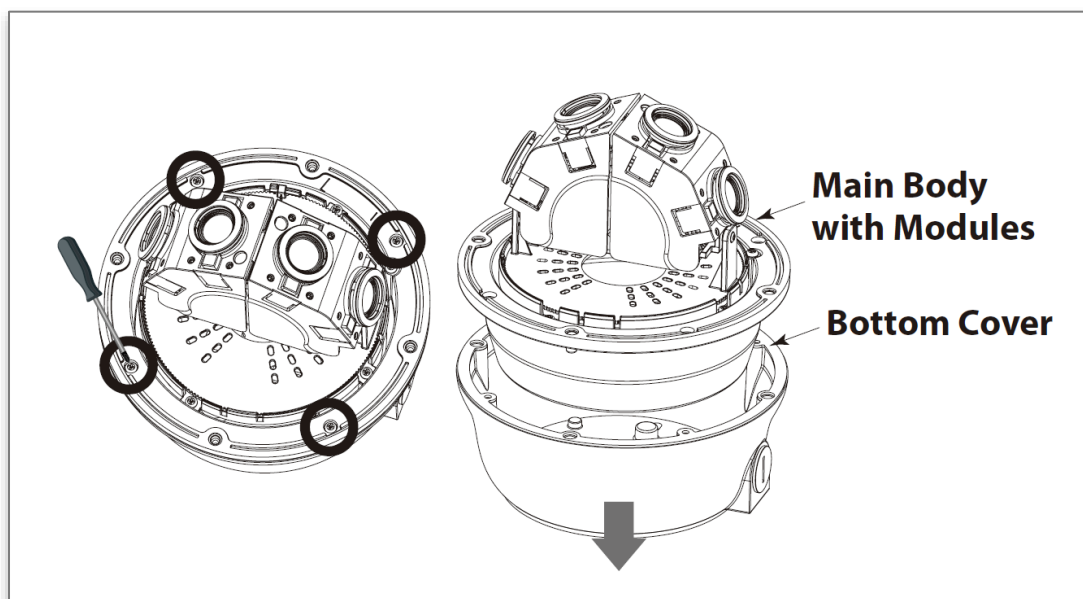


## Surface Mount

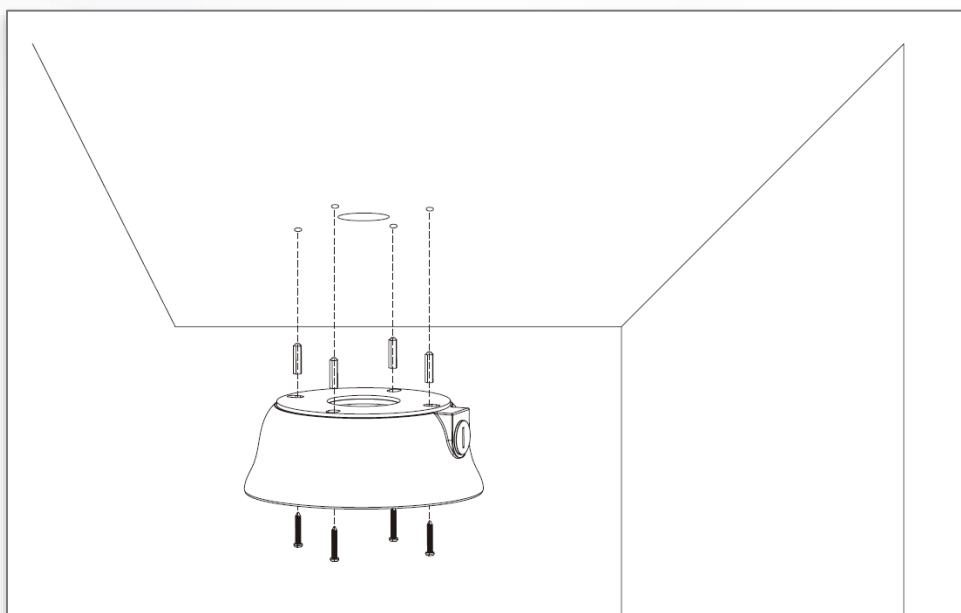
1. Determine a secure location to mount the camera.
2. Use the supplied security L-key, to loosen the four (4) screws securing the dome cover. Do not remove screws from the dome cover.



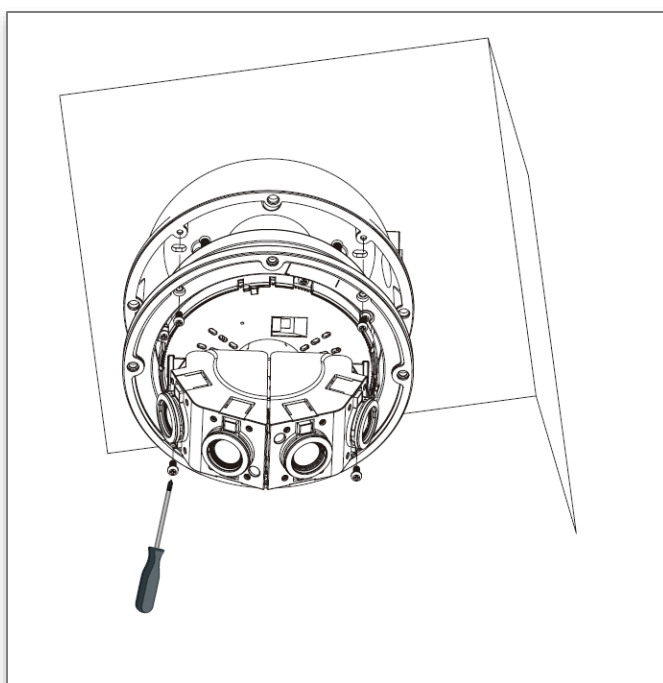
3. After removing the dome cover, loosen the four (4) screws and remove the bottom cover.



4. Use the template, anchors, and screws provided to prepare the mounting provisions for the camera installation.
5. Install four supplied dry wall anchors using the supplied mounting template.
6. Align four supplied screws with the dry wall anchors and screw the back cover into place.

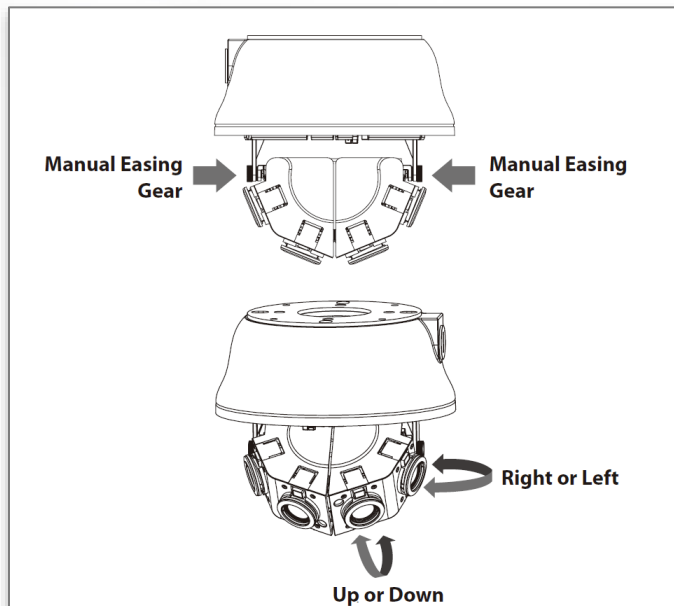


7. Connect the network cable to the camera's RJ45 connector.
8. Install the main body with modules back into the back cover. Fasten securely four (4) screws you I loosen from Step#3.



*NOTE: Ensure the gasket between the back cover and the main body properly seated flush.*

9. Loosen the manual easing gear, and adjust the pan and tilt to obtain the desired field of view.



10. To configure the camera, reference the camera discovery, set-up and configuration section.
11. After confirming the field of view, tighten the manual easing gear (both sides) to fix the camera direction in place.
12. Attach the dome cover back and fasten securely four captive screws.



**CAUTION!**

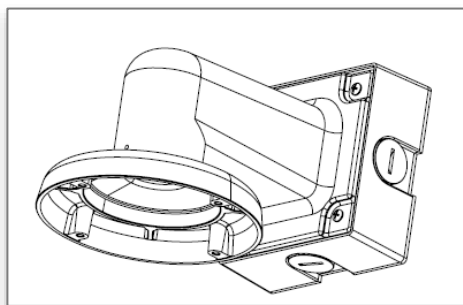
The captive screws must be used to properly secure the dome cover and camera housing. Failure to use the captive fastener may result in serious injury. When mounting the dome cover to the camera housing, ensure that the gasket is properly seated and not folded. Failure to do so may result in water and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

## Wall Mount

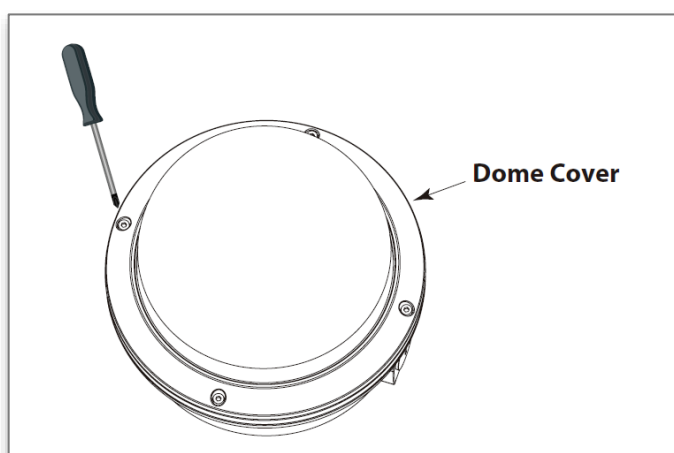
For a proper wall mount installation, the AV-WMJB-W wall mount and CP-CAP-W wall mount cap are required (sold separately). A wall mount should only be attached onto hard ceilings including wood, plastic, metal, and concrete.

1. Using the Mounting template, prepare the mounting provisions for the camera installation.
2. Connect wall mount cap and wall mount.

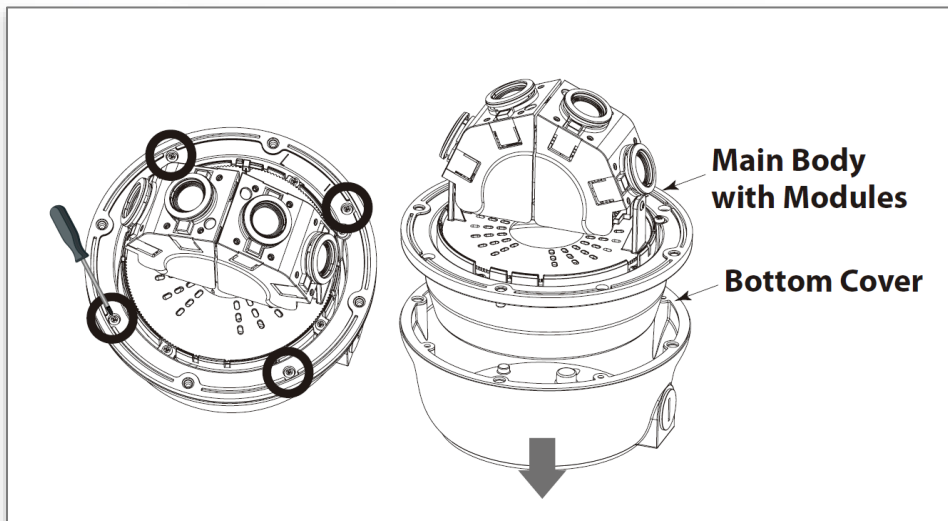
*NOTE: The thread size for Top shield, pendant pole and mount is 1.5" NPT.*



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 wall mount. Ensure the gasket is seated properly.
5. Use the supplied security L-key, to loosen the four (4) screws securing the dome cover. Do not remove screws from the dome cover.



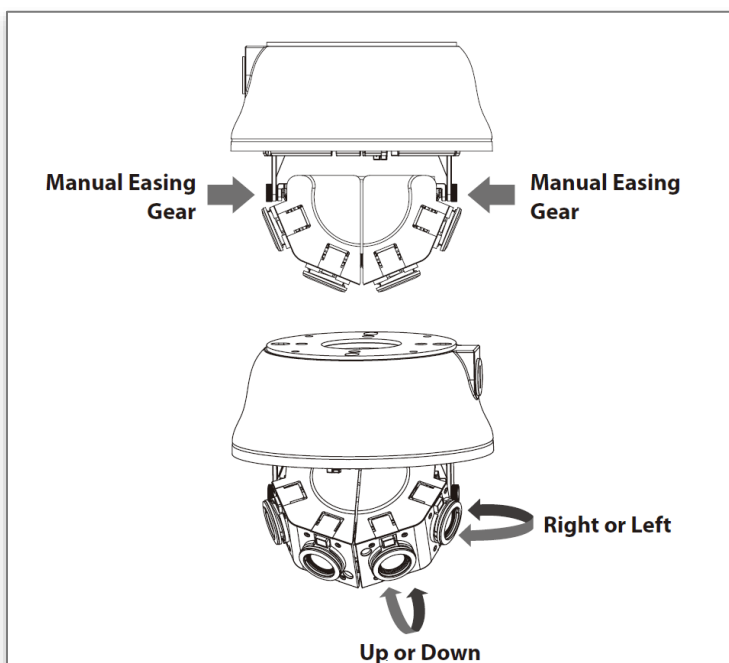
6. After removing the dome cover, loosen the four (4) screws and remove the bottom cover.



7. Install the back cover to CP-CAP-W with four (4) supplied screws.
8. Connect the network cable to the camera's RJ45 connector.
9. Install the main body with modules back into the back cover. Fasten securely four (4) screws you loosen from Step#6.

*NOTE: Ensure the gasket between the back cover and the main body properly seated flush.*

10. Loosen the manual easing gear, and adjust the pan and tilt to obtain the desired field of view.



11. To configure the camera, reference the camera discovery, set-up and configuration section.
12. After confirming the field of view, tighten the manual easing gear (both sides) to fix the camera direction in place.
13. Attach the dome cover back and fasten securely four captive screws.



**CAUTION!**

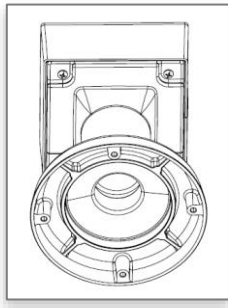
The captive screws must be used to properly secure the dome cover and camera housing. Failure to use the captive fastener may result in serious injury. When mounting the dome cover to the camera housing, ensure that the gasket is properly seated and not folded. Failure to do so may result in water and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

## Pendant Mount

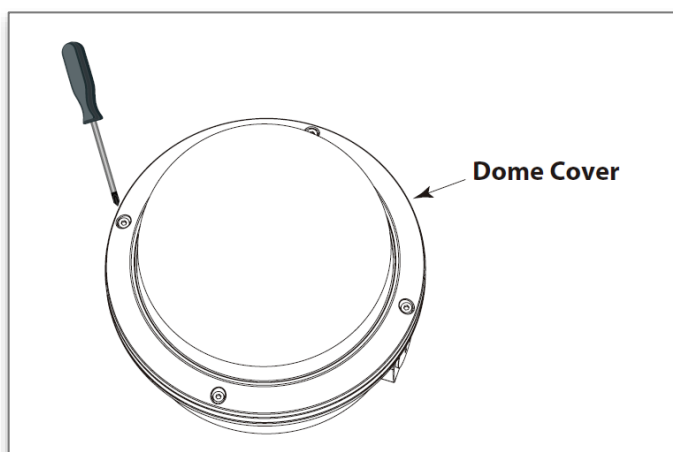
For a proper pendant mount installation, the AV-PMJB-W pendant mount and CP-CAP-W mounting cap are required (sold separately). A pendant mount should only be attached onto hard ceilings including wood, plastic, metal, and concrete.

1. Using the Mounting template, prepare the mounting provisions for the camera installation.
2. Connect the cap, pendant pole and mount together.

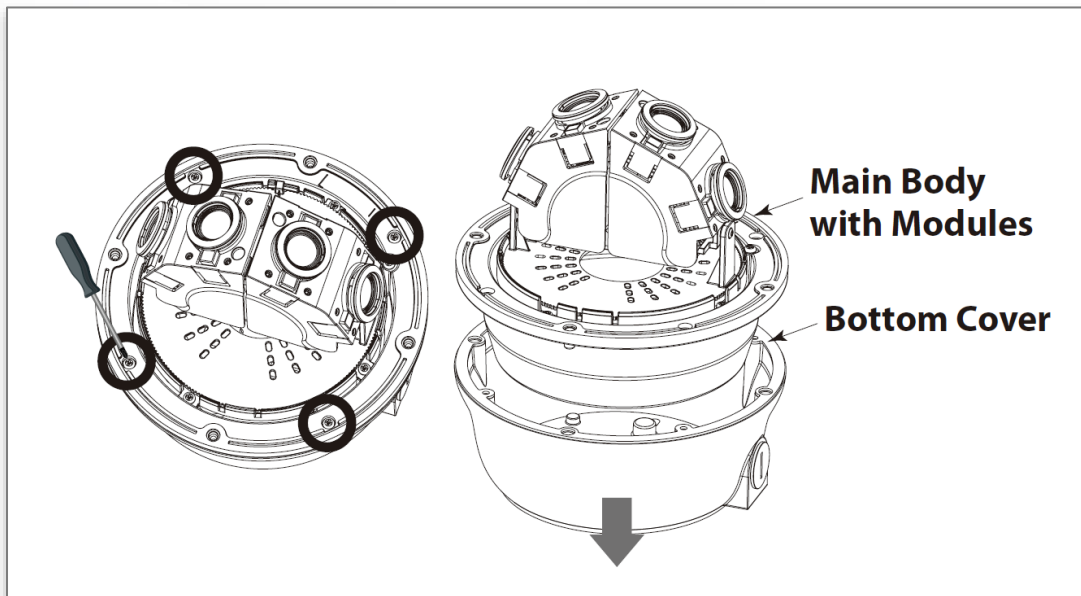
*NOTE: The thread size for Top shield, pendant pole and mount is 1.5" NPT.*



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 Pendant mount. Ensure the gasket is seated properly.
5. Use the supplied security L-key, to loosen the four (4) screws securing the dome cover. Do not remove screws from the dome cover.



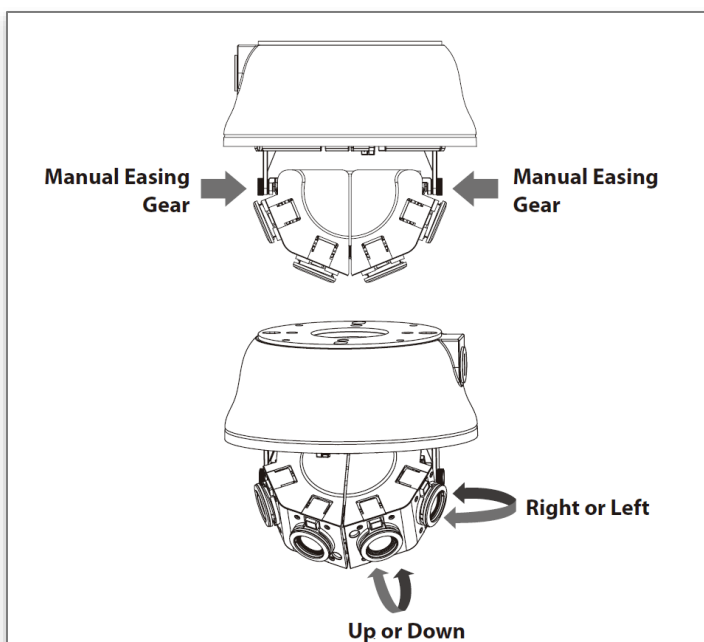
6. After removing the dome cover, loosen the four (4) screws and remove the bottom cover.



7. Install the back cover to CP-CAP-W with four (4) supplied screws.
8. Connect the network cable to the camera's RJ45 connector.
9. Install the main body with modules back into the back cover. Fasten securely four (4) screws you loosen from Step#6.

*NOTE: Ensure the gasket between the back cover and the main body properly seated flush.*

10. Loosen the manual easing gear, and adjust the pan and tilt to obtain the desired field of view.





11. To configure the camera, reference the camera discovery, set-up and configuration section.
12. After confirming the field of view, tighten the manual easing gear (both sides) to fix the camera direction in place.
13. Attach the dome cover back and fasten securely four captive screws.



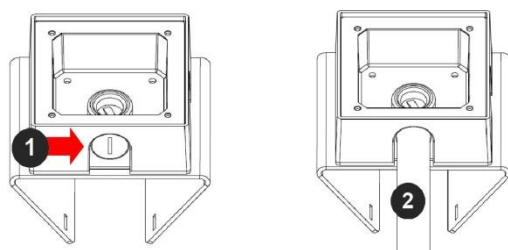
**CAUTION!**

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 Mount

For a pole mount installation, the AV-WMJB-W wall mount, AV-PMA-W pole mount, and CP-CAP-W mount cap are required (sold separately). A pole mount should only be attached onto hard ceilings including wood, plastic, metal, and concrete.

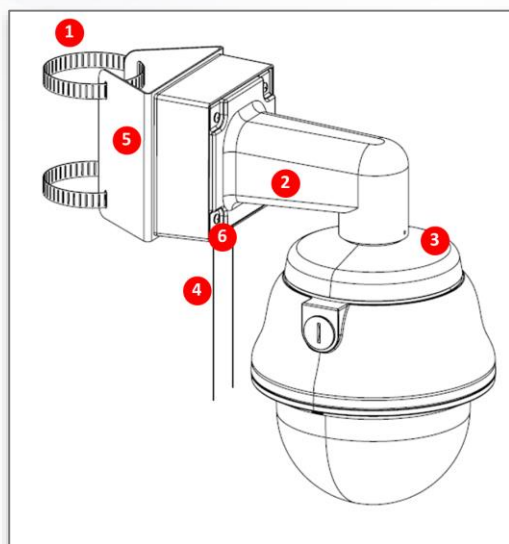
1. Using the Mounting template, prepare the mounting provisions for the camera installation.
2. Connect the wall mount cap and wall mount.
3. Attach the Junction Box Adapter to the Pole Mount Adapter.
4. Remove the conduit plug on the junction box adapter and connect  $\frac{3}{4}$ " NPT conduit to the junction box adapter.



Reference #	Description
1	Remove conduit plug
2	Connect $\frac{3}{4}$ " 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 Junction Box Adapter. Ensure the gasket is seated properly.
6. Attach the Wall Mount Adapter (AV-WMJB-W) to the Pole Mount Adapter (AV-PMA-W).



Reference #	Description
1	Steel straps with compression screws
2	AV-WMJB-W wall mount
3	CP-CAP-W mount cap
4	Conduit pipe
5	AV-PMA-W pole mount adapter
6	Apply Teflon water seal tape to the thread of 3/4" 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.
8. To attach the camera to the Wall Mount Adapter (AV-WMJB-W), reference the Installation and Wall Mount section.
9. To configure the camera, reference the camera discovery, set-up and configuration section.

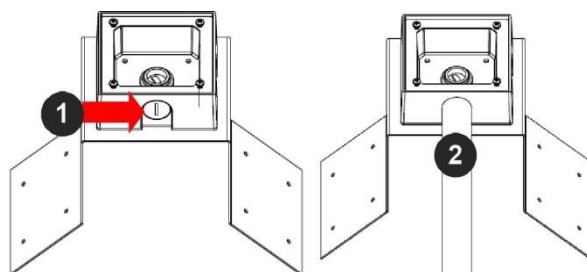


**CAUTION!** The captive screws must be used to properly secure the dome cover and camera housing. Failure to use the captive fastener may result in serious injury. When mounting the dome cover to the camera housing, ensure that the gasket is properly seated and not folded. Failure to do so may result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

## Corner Mount

For a corner mount installation, the AV-WMJB-W wall mount, AV-CRMA-W corner mount, and CP-CAP-W mount cap are required (sold separately). A corner mount should only be attached onto hard corner surfaces including wood, plastic, metal, and concrete.

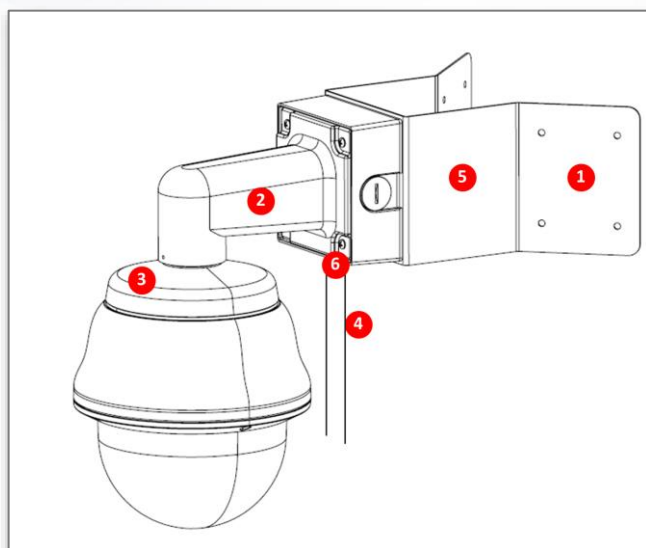
1. Using the Mounting template, prepare the mounting provisions for the camera installation.
2. Connect the wall mount cap and wall mount.
3. Attach the Junction Box Adapter to the Corner Mount Adapter.
4. Remove the conduit plug on the junction box adapter and connect  $\frac{3}{4}$ " NPT conduit to the junction box adapter.



Reference #	Description
1	Remove conduit plug
2	Connect $\frac{3}{4}$ " 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 Junction Box Adapter. Ensure the gasket is seated properly.
6. Attach the Wall Mount Adapter (AV-WMJB-W) to the Corner Mount Adapter (AV-CRMA-W).



Reference #	Description
1	Attach corner mount adapter to exterior 90 degree corner wall
2	AV-WMJB wall mount
3	CP-CAP-W mount cap
4	Conduit pipe
5	AV-CRMA-W corner mount adapter
6	Apply Teflon water seal tape to the thread of 3/4" NPT pipe to avoid water leakage

- Using the screws provided (or other hardware), attach the Corner Mount Adapter to an exterior 90 degree corner wall.
- To attach the camera to the Wall Mount Adapter (AV-WMJB-W), reference the Installation and Wall Mount section.
- To configure the camera, reference the camera discovery, set-up and configuration section.

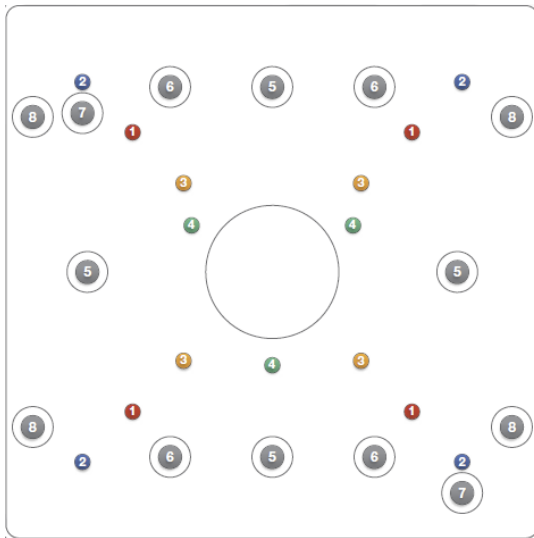


**CAUTION!** The captive screws must be used to properly secure the dome cover and camera housing. Failure to use the captive fastener may result in serious injury. When mounting the dome cover to the camera housing, ensure that the gasket is properly seated and not folded. Failure to do so may result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

## Electrical Box Adapter

The electrical box adapter is used to attach the camera to a common single, double or square electrical box. The AV-EBAS-W is required (sold separately).

1. Attach the electrical box adapter to the user supplied electrical box.
2. Using the supplied machine screws, match the mounting holes (#2) on the electrical box adapter with the holes on the camera back cover.



3. Install the camera back cover on AV-EBAS-W.
4. Install the main body with modules back into the back cover.
5. Attach the dome cover back and fasten securely four captive screws.

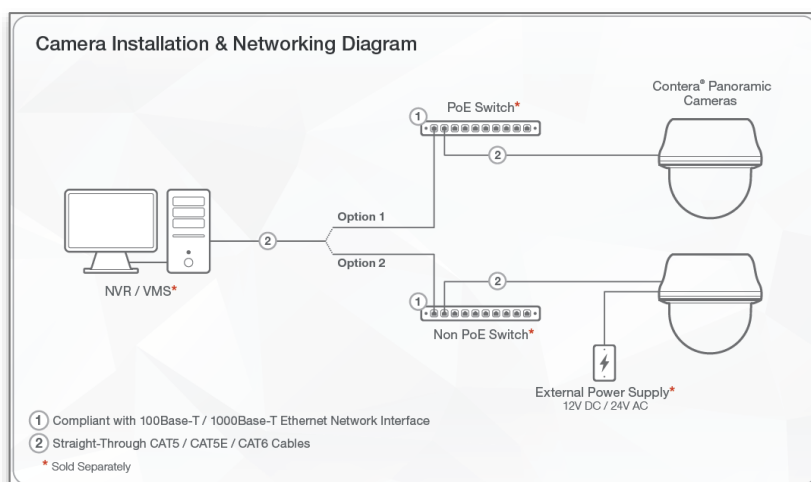
## Camera Power Up



**CAUTION!** 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. 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.

**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.

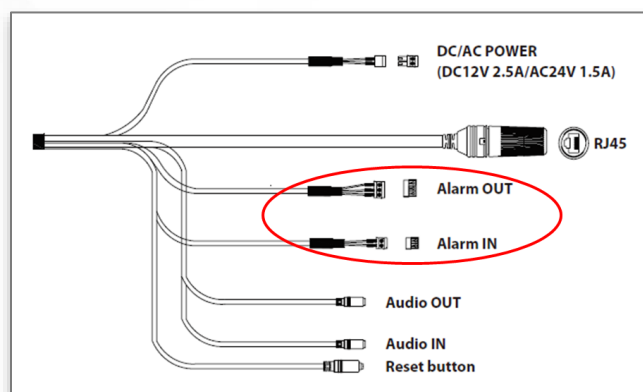
1. Connect the camera to a PoE+ port on 1000Mbps network PoE+ switch using an Ethernet cable.
2. If the camera is powered by an outside power supply, 12VDC or 24VAC connects the power cable.
3. Connect the PoE+ switch to your computer's network port using an Ethernet cable.



A

LED	Status	Description
Green	Quick Flashing	Link has been established
	Slow Flashing	Normal operation
None	None	No Connection

## Alarm I/O Functions



Connect the Alarm In (DI) connector to the alarm input sensor, and connect Alarm Out (DO) connector to the alarm output signal. To avoid any damaged, please follow the specification of the part as below:

Alarm In (Dry Contact)	Alarm Out (Relay)			
	DC		AC	
V sense	V sense	I sense	V sense	I sense
0.5V	0-220V	2A (max)	0-250V	2A (max)

## Reset to Factory Default

1. Press and hold the reset button for 2 to 5 seconds and release the reset button. The camera has been reset to the factory default except the network settings.
2. Press and hold the reset button for more than 5 seconds and release the reset button. The camera has been reset to the factory.
3. Or, user can reset the camera to factory default via camera web interface or AV IP Utility



# 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/software.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 ConteraIP™ cameras. The user manual for the software is included on the CD that came with your camera or available on our website.

## Camera Discovery

1. Locate and double click the AV IP Utility shortcut on the desktop.



2. When the AV IP Utility is launched, it will automatically search the Contera cameras on the network. Or, you can also manually search cameras by clicking "Discovery (Multicast)"

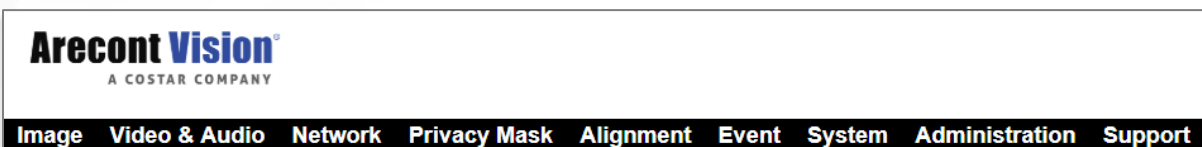
The screenshot shows the 'Arecont Vision IP Utility' window. The 'Discovery (Multicast)' tab is selected. Below the menu bar, there is a table with the following data:

Mac	IP	Model	FW Version	HW Version	IPN	Status
00:1A:07:18:A4:70	10.10.120.18	02CID-100	35100	01/016D	180200069	Accessible
00:1A:07:18:A9:F1	10.10.120.44	02CMB-100	35100	01/016D	180301081	Accessible
00:1A:07:18:A4:47	10.10.120.52	05CMB-100	35100	01/016A	180200028	Accessible

3. You can access the camera web user interface by typing the camera IP address on the preferred web browser.



## Web Interface Navigation



The entire menu categories are located on the top of the web interface, and clicking on any one of the buttons will cause bottom side of the page to jump to the settings section for the selected button.

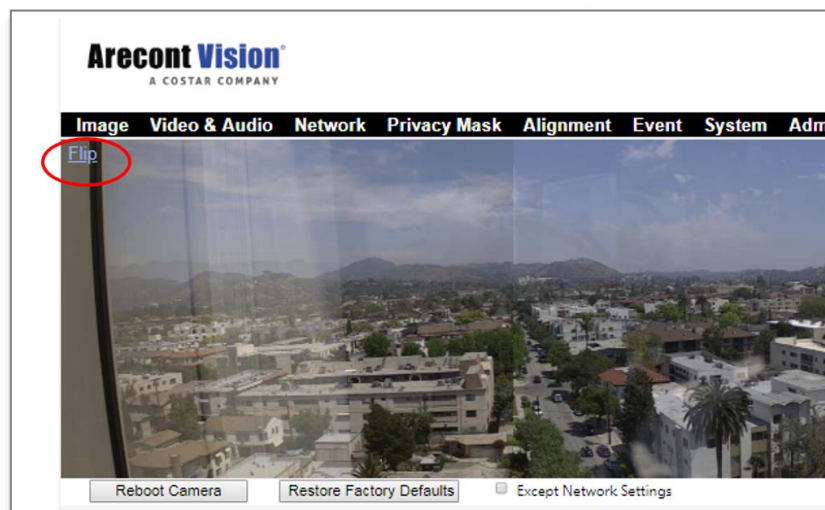
The following are the camera settings available on the top of the web interface:

**The following are the camera settings available on the top of the web interface:**

- Image
  - Basic Image Settings
  - WDR (Wide Dynamic Range) Settings
  - IR Control
  - OSD (On-Screen Display)
  - ROI (Regions of Interest)
- Video & Audio
  - Main Stream Configuration
  - Sub Stream Configuration
  - Third Stream Configuration
  - Audio
- Network
  - IP Assignment
  - QoS (Quality of Service)
  - UPnP (Universal Plug and Play)
  - RTSP (Real Time Streaming Protocol)
  - DDNS (Dynamic DNS)
  - SNMP (Simple Network Management Protocol)
  - SSL (Secure Sockets Layer)
  - FTP (File Transfer Protocol)
  - 802.1x
- Privacy Mask
- Alignment
- Event
  - Motion Detection
  - Alarm Handler
  - Digital I/O
  - Tamper Detection
  - Network Failure
  - SD Card
  - FTP Upload Handler

- SMTP (Simple Mail Transfer Protocol) Notification
- Network Storage
- System
  - Firmware Upgrade
  - Reboot & Restore Settings
  - Date/Time
- Administration
  - Administrator settings
  - Viewer Management
- Support

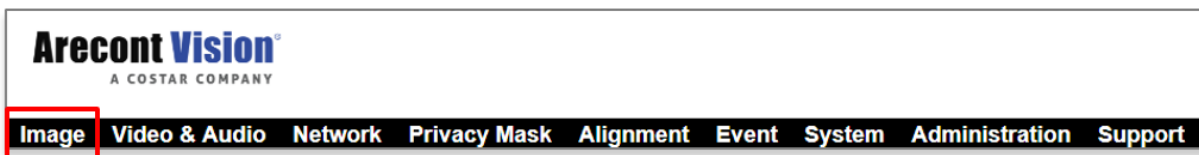
On the upper left corner, you can find the “Flip” button that allows you to flip images 180 degree.



When you move the mouse over the top of each image channel, you will see the channel number.

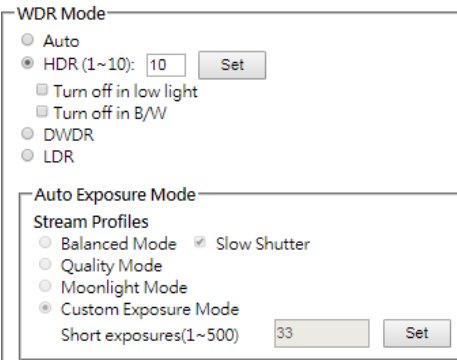


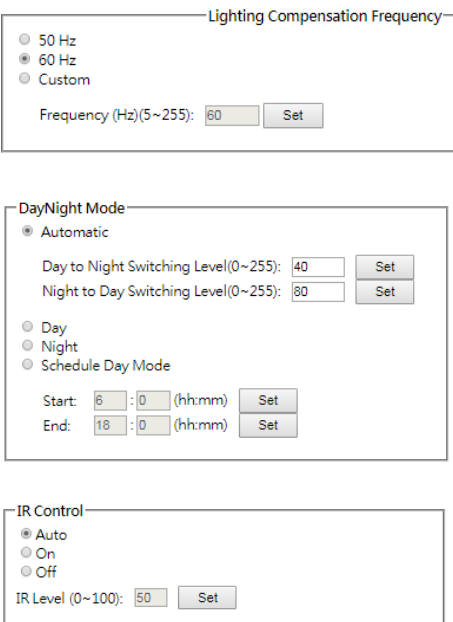
## Image

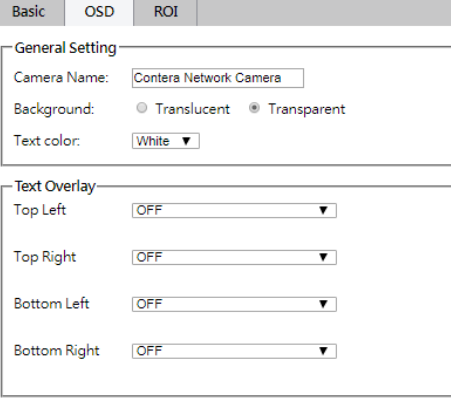


Menu	Feature	Description
<p><b>Channel</b></p> <p>Global Mode: <input checked="" type="radio"/> On <input type="radio"/> Off</p> <p>Select channel: <input type="text" value="1"/> ▼</p>	Global Mode	<p><b>Enable Global Mode (ON):</b></p> <p>Set up the parameters for four channels together. If Global Mode enabled, the settings of four channels will be the same and can be adjusted together.</p> <p><b>Disable Global Mode (OFF):</b></p> <p>Set up the parameters for each channel independently. If Global Mode disabled, you can select the desired channel from “Select channel” to change settings.</p>
<p><b>Picture</b></p> <p>Brightness (-50...50) <input type="text" value="0"/> <input type="button" value="Set"/></p> <p>Sharpness (0..4) <input type="text" value="2"/> <input type="button" value="Set"/></p> <p>Saturation (0..6) <input type="text" value="3"/> <input type="button" value="Set"/></p> <p>Contrast (0...100) <input type="text" value="50"/> <input type="button" value="Set"/></p> <p>Hue (0...100) <input type="text" value="50"/> <input type="button" value="Set"/></p>	Brightness	Controls the overall brightness of the camera image and works in conjunction with the exposure controls to maintain the image brightness.
	Sharpness	Controls sharpness and edge definition of the image. Setting this to lower levels may make overall image appear a bit softer while causing lines and edges in the image to look smoother.
	Saturation	Controls the color saturation of the image.
	Contrast	Manually controls Gamma level (affects the overall luminance of the image).
	Hue	Configures the overall hue of the image, the range is 0 ~ 100. Increasing the value will adjust the image hue towards red. Decreasing the value will adjust the image hue towards blue.
<p><b>Misc</b></p> <p>AE Mode: <input type="text" value="Auto"/> ▼</p> <p>AWB Mode: <input type="text" value="Auto"/> ▼</p>	AE Mode (Auto Exposure Mode)	<p><b>Sync Brightness:</b></p> <p>This option is available only if Global Mode is enabled. If Sync Brightness is selected, the Exposure Time Control and Gain Control are the same for all four channels. Also, the camera will be in LDR mode.</p>

		<p><b>Auto:</b> If Auto is selected, each channel has individual settings of the Exposure Time Control and Gain Control.</p>
	<p>AWB Mode (Auto White Balance Mode)</p>	<p><b>Auto:</b> Enables the automatic white balance feature of camera, which will automatically remove unrealistic color cast so that white color is rendered white in the image.</p> <p><b>Off:</b> Select Off to disable AWB Mode.</p>

Menu	Feature	Description
 <p>The screenshot shows the camera's menu interface. Under 'WDR Mode', 'Auto' is selected, and 'HDR (1~10)' is set to 10. Under 'Auto Exposure Mode', 'Stream Profiles' are shown with 'Balanced Mode' selected and 'Slow Shutter' checked. 'Custom Exposure Mode' is also selected, and 'Short exposures(1~500)' is set to 33.</p>	Auto	<p>Auto detects bright backlight, glare or high contrast lighting and automatically selects the WDR level.</p> <p><i>Note: WDR enabled will decrease the FPS of 20MP camera.</i></p> <p><i>Note: Make sure AE mode is set to "Auto".</i></p>
	HDR	<p>Manually adjusts the intensity of backlight compensation.</p> <p><i>Note: WDR enabled will decrease the FPS of 20MP camera.</i></p> <p><i>Note: Make sure AE mode is set to "Auto".</i></p>
	Turn off in low light	Disables WDR backlight compensation when the light levels drop for better nighttime image quality.
	Turn off in B/W	Disables WDR backlight compensation when the camera is in night mode for better nighttime image quality.
	DWDR	Digital WDR (DWDR) is to enhance dark areas by adjusting the gamma value. This will not impact FPS of 20MP camera.
	LDR	Will not combine long and short exposures into one frame, resulting in better low light performance.
	Auto Exposure	<p>Automatically adjusts illumination and exposure values.</p> <p><i>Note: Make sure AE mode is set to "Auto".</i></p>

	<p>Stream Profiles:</p> <p>Balance Mode -Slow Shutter</p> <p>Quality Mode</p>	<p><b>Balanced Mode:</b> Limits exposure time from 0.1ms to 66ms. The camera will keep highest FPS when <b>Slow Shutter</b> is unchecked.</p> <p><b>Quality Mode:</b> Limits exposure time from 0.1ms to 200ms. This mode is a good compromise between reducing noise and motion blur under most lighting conditions, but with an increase in motion blur under low light conditions.</p>
	<p>Moonlight Mode</p> <p>Custom Exposure Mode</p>	<p><b>Moonlight Mode:</b> Limits exposure time from 20ms to 500ms. This mode produces the best image quality under very low light conditions with the least amount of image noise. The trade-off is in favor of low noise at the expense of high motion blur.</p> <p><b>Custom Exposure Mod:</b> Enables manual setting of exposure time between 1 and 500ms. Shorter exposure times reduces motion blur for applications such as monitoring fast moving objects and reading license plates. The trade-off is an increased level of noise. It is recommended that this mode be used only when there is constant scene illumination sufficient to provide a quality image.</p>
	<p>Lighting Compensation Frequency:</p> <p>50hz, 60hz, Custom</p> <p>Day/Night Mode</p> <p>Automatic</p> <p>Day Night Schedule Day Mode</p>	<p>Prevents flicker caused by the power line frequency of lighting. Chooses 50Hz for Europe and China and 60Hz for US and Japan. This parameter will have no effect when the dominate light is sunlight. Or, user can select frequency between 5Hz and 255Hz. It will be enabled when user select "Custom".</p> <p><b>Automatic:</b> Enables the camera to automatically switch from day mode to night mode. User can define the switching level from Day to Night or Night to Day.</p> <p><b>Day:</b> Forces the camera to stay in day mode.</p> <p><b>Night:</b> Forces the camera to stay in night mode.</p> <p><b>Schedule Day Mode:</b> User defined times that the camera remains in night mode.</p>

	<p>IR control:</p> <p>On Off IR Level</p>	<p><b>On/ Off:</b> Manually turns on or off the IR LED array.</p> <p><b>IR Level:</b> Manually adjusts the IR intensity.</p>
	<p>Camera Name</p> <p>Background</p> <p>Translucent Transparent</p> <p>Text Color</p>	<p>Specifies a name for the camera. The maximum length is 32 characters.</p> <p>Configures the background color of the text overlay. The options are <b>Translucent</b> (light grey) or <b>Transparent</b>.</p> <p>Options are <b>Black, White, Green, or Yellow</b>.</p>
	<p>Text Overlay</p> <p>Off</p> <p>Date/Time</p> <p>Camera Name</p> <p>Camera Name + Date/Time</p> <p>Custom Text</p>	<p>There are four content positions (<b>Top Left, Top Right, Bottom Left and Bottom Right</b>) to display the text overlay.</p> <p><b>Date/ Time:</b> Displays the current date/time. It will force the camera to synchronize the date/time information.</p> <p><b>Camera Name:</b> Displays the camera name you set.</p> <p><b>Camera Name + Date/Time:</b> Displays both camera name and date/time information.</p> <p><b>Custom Text:</b> Displays a customized text.</p>



ROI

Exit

Select channel: 1

\* Create custom regions of interest by enabling zones below and selecting the desired quality level. Then create the ROI by dragging the mouse over the live image and press "Save Area" or "Del Area".

Stream: Main Stream

ROI Zone 1:

Enable

Medium

Save Area

Del Area

ROI Zone 2:

Enable

Medium

Save Area

Del Area

ROI Zone 3:

Enable

Medium

Save Area

Del Area

ROI Zone 4:

Enable

Medium

Save Area

Del Area

ROI Zone 5:

Enable

Medium

Save Area

Del Area

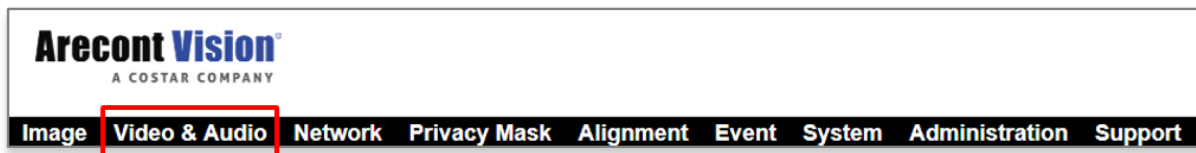
## ROI (Regions of Interest)

ROI (Regions of Interest) is used to select which areas will be monitored and recorded with higher image quality while using lower image quality for other non-ROI zones to save bandwidth and storage.

To setup the ROI:

1. Select the desired channel
2. Select **Main Stream** or **Sub Stream**
3. Enable zones (up to five zones) and select the desired quality level (**High**, **Medium**, or **Low**).
4. Create the ROI by dragging the mouse over the live image
5. Press **Save Area** or **Del Area**.

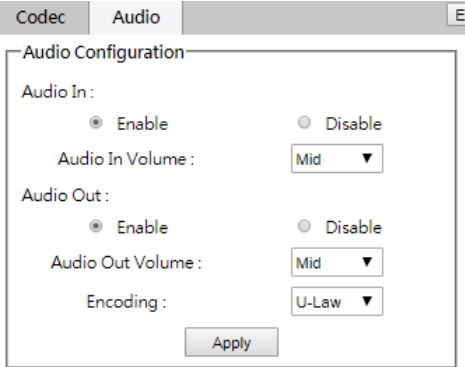
## Video & Audio



Menu	Feature	Description
<div>Channel</div> <div>Select channel: <span>Sync All Channels ▼</span></div>	Select channel	Select the desired channel to change video settings, or select <b>Sync All Channels</b> to change video settings for all four channels at once.

<div> <div>Main Stream</div> <div> <div>Codec <span>H.264 ▼</span></div> <div>Resolution <span>2592x1944 ▼</span></div> <div> <input type="checkbox"/> Enable SNAPstream+™           <div> <input checked="" type="radio"/> Variable Bitrate               <input checked="" type="radio"/> Maximum Bitrate             </div> </div> <div>Rate Limit (64-8000 kbps) <span>4000</span></div> <div>H.264 Quality (1...10) <span>3</span></div> <div><small>* 10 - lowest quality, 1 - highest quality</small></div> <div>Frames Per Seconds (0~30) <span>30</span></div> <div>GOP Length (1~120) <span>30</span></div> </div> </div> <div> <div>Sub Stream</div> <div> <div>Codec <span>H.264 ▼</span></div> <div>Resolution <span>640x480 ▼</span></div> <div> <input type="checkbox"/> Enable SNAPstream+™           <div> <input checked="" type="radio"/> Variable Bitrate               <input checked="" type="radio"/> Maximum Bitrate             </div> </div> <div>Rate Limit (64-8000 kbps) <span>3000</span></div> <div>H.264 Quality (1...10) <span>3</span></div> <div><small>* 10 - lowest quality, 1 - highest quality</small></div> <div>Frames Per Seconds (0~30) <span>30</span></div> <div>GOP Length (1~120) <span>30</span></div> </div> </div>	Video Compression:	Radio buttons to select the desired compression.
	H.265	
	H.264	
	Resolution	Radio buttons to select the desired resolution. Options vary based on the sensor resolution being used.
	Enable SNAPstream+™	<p>Enables the SNAPstream+ feature on camera. This feature utilizes both Smart GOP and Smart ROI to reduce bitrate without impacting the image quality.</p> <p>Smart GOP sets GOP to automatically increase when no moving objects are detected.</p> <p>Smart ROI will increase the bitrate of moving objects and make them clearer.</p>
	Variable Bitrate	Maintains the Quality setting configured. There may be variation in the bit rate output from the camera using this mode.

	Maximum Bitrate	Maintains variable bit rate control and maintains the bitrate under the rate limit you set to. It can be set from 64 kbps to 8000 kbps.
	H.264 Quality	H.264 image quality setting for variable bit rate control. Setting a lower value results in higher image quality, higher value results in lower image quality.
	Frames Per Seconds	Frame rate adjustment for the camera video stream.  <i>Note: For 20MP models, FPS will be up to 50% of specified FPS if WDR is enabled.</i>  <i>Note: For 20MP models, if one stream set to full resolution and another one set to full or half resolution, the maximum FPS of the main and sub stream is up to 15 FPS.</i>
	GOP Length	Specifies how many frames between two consecutive I-Frames.
<div> <b>Third Stream</b>            Codec <input type="text" value="MJPEG"/> ▼            Resolution <input type="text" value="640x480"/> ▼            Quality <input type="text" value="Middle"/> ▼            Frame Rate (0~30) <input type="text" value="5"/> </div>	Video Compression: <b>MPJEG</b>	The third stream is designed for the live view on web interface, and the only option of Video Compression is MPJEG.
	Resolution	The third stream is designed for the live view on web interface, and the only option of Resolution is VGA.
	Frames Per Seconds	Frame rate adjustment for the camera video stream.
	Quality: <b>Low</b> <b>Mid</b> <b>High</b>	Adjusts the compression level for JPEG images

	Video Compression: <b>MPJEG</b>	The third stream is designed for the live view on web interface, and the only option of Video Compression is MPJEG.
	Audio In Audio Out Volume Encoding	<p>Enables the Audio In/ Audio Out features on the camera.</p> <p>Specifies the volume level of Audio In/ Audio Out: <b>High, Middle, or Low.</b></p> <p>Specifies the encoding algorithm: <b>A-law or U-Law.</b></p>

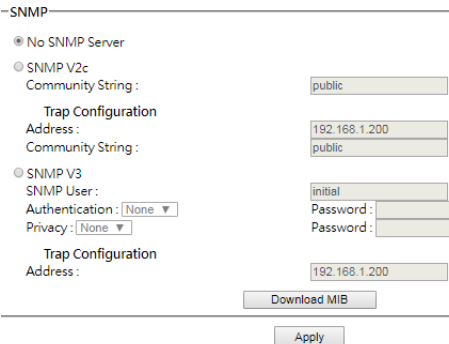
## Network



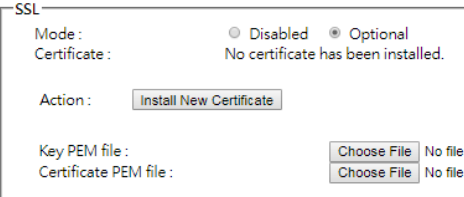
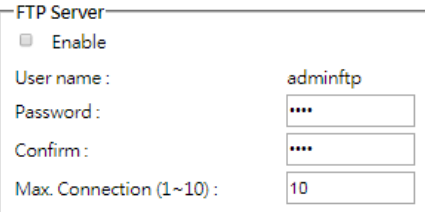
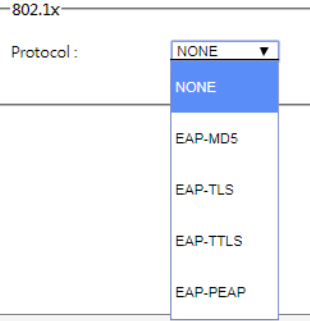
Menu	Feature	Description
<div>IP Assignment</div> <div> <div>IP Address</div> <div>10.10.45.60</div> </div> <div> <div>Subnet Mask</div> <div>255.255.255.0</div> </div> <div> <div>Default Gateway</div> <div>10.10.45.1</div> </div> <div>Ports</div> <div> <div>HTTP Port</div> <div>80</div> <div>(80,1024~65535)</div> </div> <div> <div>Second HTTP Port</div> <div>8080</div> <div>(8080,1024~65535)</div> </div> <div> <div>HTTPS Port</div> <div>443</div> <div>(443,1024~65535)</div> </div> <div>DNS</div> <div> <div>Primary DNS</div> <div>10.10.0.5</div> </div> <div> <div>Secondary DNS</div> <div>10.10.0.177</div> </div>	<div>IP Assignment:</div> <div>DHCP</div> <div>IP Address</div> <div>Subnet Mask</div> <div>Default Gateway</div>	<p><b>DHCP:</b> If checked, the camera will attempt to obtain its IP address from the DHCP server available on the network.</p> <p><b>IP Address:</b> Sets the current IP address of the camera.</p> <p><b>Subnet Mask:</b> Once set, the camera will use these mask bits to determine if a destination is from a different network</p> <p><b>Default Gateway:</b> Once set, the camera will use send traffic to the specified gateway if the destination is on a different network</p>
	<div>Port:</div> <div>HTTP</div> <div>Second HTTP Port</div> <div>HTTPS</div>	<p><b>HTTP:</b> The port default is 80. It is used to access the camera via the web browser.</p> <p><b>Second HTTP port:</b> Sets an alternative HTTP port. This port can be useful when the standard HTTP port (80) is not appropriate for this camera.</p> <p><b>HTTPS:</b> The port default is 443. It can be used when you use HTTPS.</p>
	<div>Port:</div> <div>Primary DNS</div> <div>Secondary DNS</div>	<p>Configures the Primary and Secondary DNS.</p>

<div>IPv6 Settings</div> <div> <input type="checkbox"/> Enable IPv6  Link-Local:  IPv6 Address  Address Prefix 64 (0~127)  Default Route  <input type="checkbox"/> Router Advertisement  DNS </div>	IPv6 Settings:  Enable IPv6 IPv6 Address Address Prefix Default Route Router Advertisement DNS	<b>Enable IPv6:</b> Enables IPv6 function.  Manually configures IPv6 address, Address prefix, Default route, and DNS server address.  <b>Router Advertisement:</b> Enables Router Advertisement
<input type="checkbox"/> QoS Enable  QoS Video (0~63) 34 Set  Management DSCP (0~63) 0 Set	QoS Enable	Enables quality of service.
	QoS Video	Sets DSCP value for video traffic.
	Management DSCP	Sets DSCP value for non-video traffic.
<div>UPnP</div> <div><input checked="" type="checkbox"/> Enable UPnP</div>	Enable UPnP	Enables Universal Plug and Play function.
<div>Basic QoS UPnP RTSP</div> <div>Channel</div> <div>Select channel: 1 * Video port c</div>	Select channel	Select the desired channel to change RTSP settings
<div>Unicast</div> <div> Port: 554 (554, 1025~65535)  <input checked="" type="checkbox"/> Enable RTSP Unicast Stream1  <input type="checkbox"/> Enable RTSP Stream1 Metadata  Path1: stream1  Link for external media players :  rtsp://10.10.45.60:554/stream1  <input checked="" type="checkbox"/> Enable RTSP Unicast Stream2  <input type="checkbox"/> Enable RTSP Stream2 Metadata  Path2: stream2  Link for external media players :  rtsp://10.10.45.60:554/stream2  <input checked="" type="checkbox"/> Enable RTSP Unicast Stream3  <input type="checkbox"/> Enable RTSP Stream3 Metadata  Path3: stream3  Link for external media players :  rtsp://10.10.45.60:554/stream3 </div>	Enable RTSP Unicast Stream	Enables RTSP Unicast for stream 1(Main stream), stream 2(Sub Stream), and stream 3(Third Stream)
	Enable RTSP Stream metadata	Enables RTSP stream metadata for stream 1(Main stream), stream 2(Sub Stream), and stream 3(Third Stream)
	Path	Configures the pathname for each stream.
	Link for external media players	Copies the link from here for external media players

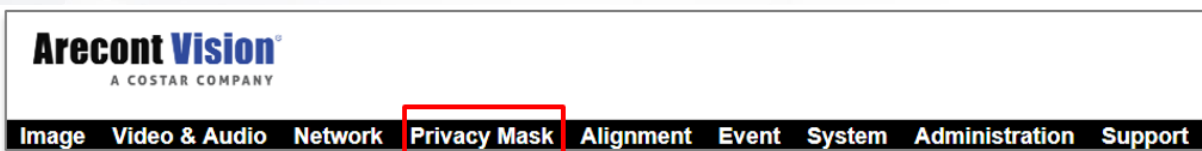
<div> <b>Multicast Stream1</b> <div> <input checked="" type="checkbox"/> Enable RTSP Multicast Stream           <input type="checkbox"/> Always Multicast         </div> <div>           Video IP : <input type="text" value="225.24.228.121"/> </div> <div>           Video Port : <input type="text" value="5016"/> (1025~65535)         </div> <div>           Audio IP : <input type="text" value="226.24.228.121"/> </div> <div>           Audio Port : <input type="text" value="5002"/> (1025~65535)         </div> <div>           Meta IP : <input type="text" value="227.24.228.121"/> </div> <div>           Meta Port : <input type="text" value="5004"/> (1025~65535)         </div> <div>           Path : <input type="text" value="stream1m"/> </div> <div>           TTL : <input type="text" value="255"/> (1~255)         </div> </div>	Enable RTSP Multicast Stream	Enables RTSP Multicast stream for stream 1(Main stream), stream 2(Sub Stream), and stream 3(Third Stream)
	Always Multicast	Enables the video streams to start multicast steaming without using RTCP
	Video IP Video Port	Configures the multicast address and the port number to stream video.
	Audio IP Audio Port	Configures the multicast address and the port number to stream audio.  <i>*This function is supported depends on models.</i>
	Meta IP Meta Port	Configures the multicast address and the port number to the HTML meta.
	Path	Configures the URL address of the video stream.
	TTL	Configures the time-to-live threshold of the multicast datagram before it is discarded by the router.
<div> <b>DDNS</b> <div> <input type="checkbox"/> Enable DDNS         </div> <div>           Host Name : <input type="text"/> </div> <div>           DDNS Server : <input type="text" value="DynDNS"/> ▼         </div> <div>           User Name : <input type="text"/> </div> <div>           Password : <input type="text"/> </div> <div>           Password Confirmation : <input type="text"/> </div> </div>	Enable DDNS	Enables DDNS service
	Host Name	Specifies the Host name registered with the DDNS server
	DDNS Sever	Selects one of the pubic DDNS severs from the dropdown menu. Options are <b>DynDNS</b> , <b>NO-IP</b> , and <b>TwI-DNS</b> .
	User Name	Specifies the user name of the DDNS account.

	Password	Specifies the password of the DDNS account.
	Password Confirmation	Confirms the password of the DDNS account.
	No SNMP Sever	Disables SNMP function
	SNMP v2c	Enables SNMP version 2 support
	Community String	Specifies the name of the community to access to SNMP information.
	Trap Configuration: Address Community String	Specifies the destination IP address to send SNMP trap messages.
	SNMP v3	Enables SNMP version 3 support.
	SNMP User	Specifies the user name of the SNMP v3.
	Authentication Password	<p>Selects one of the Authentication modes from the dropdown menu. Options are <b>None</b>, <b>MD5</b>, and <b>SHA</b>.</p> <p>Specifies the Password for the Authentication.</p>
	Privacy Password	<p>Selects one of the encryption methods for SNMP v3 from the dropdown menu. Options are <b>DES</b> and <b>AES</b>.</p> <p>Specifies the Password for the encryption.</p>
	Trap Configuration: Address	Specifies the destination IP address to send SNMP trap messages.



	Download MIB	Clicks to download MIB file for SNMP.
	Mode	<p><b>Disable:</b> Support for HTTP only.</p> <p><b>Optional:</b> Support for HTTP and HTTPS both.</p>
	Certificate	Shows the current status of the Certificate
	Install New Certificate Key PEM file Certificate PEM file	<ol style="list-style-type: none"> <li>1. Locate <b>Key PEM file</b> and <b>Certificate PEM file</b> and click Upload.</li> <li>2. Click <b>Install New Certificate</b> to upload the Certificate.</li> </ol>
	Enable	<p>Enables FTP access to the camera.</p> <p><i>Note: This function is only available when a SD card is installed. You can access files in the SD card via FTP.</i></p>
	Password Confirm	Specifies and confirms the password to access the FTP.
	Max. Connection	Specifies the maximum number of FTP connections to the IP camera.
	Protocol	<p>The default is <b>None</b> to disable 802.1 x functions. You can select one of the protocol options from the dropdown menu. The supported protocols are <b>EAP-MD5, EAP-TLS, EAP-TTLS or EAP-PEAP.</b></p> <p>After the protocol has been selected, manually configures the username, password and other required information.</p>

## Privacy Mask



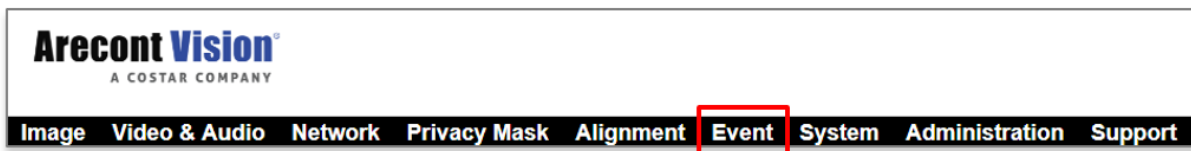
Menu	Feature	Description
<p>The screenshot shows the 'Privacy Mask' dialog box. It has a title bar 'Privacy Mask' and an 'Exit' button. Inside, there is a checkbox 'Enable privacy mask' which is currently unchecked. Below it is a 'Select channel #' dropdown menu showing '1'. Further down are two radio buttons labeled 'Mask' and 'Unmask', with 'Mask' being selected. At the bottom, there is a note: '*Note: It might take a few seconds for a privacy mask to show on the video stream.'</p>	Enable Privacy Mask	Creates a privacy mask on the image so the selected areas will not be visible.
	Select channel	Select the desired channel to add privacy masks.
	Drag mouse to:	Select <b>Mask</b> to add privacy masks or Select <b>Unmask</b> to remove privacy masks.
	Mask Unmask	

## Alignment



Menu	Feature	Description
<p>The screenshot shows the 'Alignment' configuration window. It has a title bar 'Alignment' and an 'Exit' button. Inside, there is a checkbox 'Enable alignment' which is checked. Below it is a 'Channel' dropdown menu showing '1'. There are two sets of buttons: 'Vertical' with 'Down' and 'Up' buttons, and 'Horizontal' with 'Left' and 'Right' buttons. At the bottom, there is a 'Steps (1..10)' input field with the value '1'. A note at the bottom states: '*Note: It might take a few seconds to be effective.'</p>	Enable alignment	Enable vertical/ horizontal alignment to allow the user to adjust vertical/ horizontal position of each channel.
	Select channel	Select the desired channel to change vertical/ horizontal position.
	Vertical/ Horizontal Steps	<p>Select <b>Down</b> and <b>Up</b> to change image position vertically.</p> <p>Select <b>Left</b> and <b>Right</b> to change image position horizontally.</p> <p>Select the desired steps to do vertical/ horizontal alignment.</p>

## Event



Menu	Feature	Description
<p>The screenshot shows the 'Motion Detection' configuration menu. It includes an 'Exit' button, two checkboxes: 'Enable motion detection' (checked) and 'Enable extended motion detection' (unchecked), a 'Select channel' dropdown menu set to '1', and five settings with input fields and 'Set' buttons: 'Zone Size (2..15)' set to 11, 'Object Size Sensitivity (1..225)' set to 2, 'Movement Duration Factor (2..31)' set to 15, and 'Motion Sensitivity (1..64)' set to 30.</p>	Enable motion detection	Turns on and off on-camera motion detection.
	Enable extended motion detection	Enables the extended motion detection and motion detection zones increase from default 64 to 1024 for enhanced motion detection sensitivity.
	Select channel	Select the desired channel to apply motion detection.
	Zone Size	Adjusts the size of motion detection zones.
	Object Size Sensitivity	Sets the size of each zone displayed by the motion detection grid contains sub zones the number of which is set by the zone size setting up to 32x32 (pixels). This setting configures the sensitivity of the motion detection to the size of objects in the image moving through the zone. Higher values will trigger motion only for larger objects moving through the zone, lower values will cause detection of smaller objects in the zone (increasing sensitivity to smaller size objects moving through the image).
	Movement Duration Factor	Sets the sensitivity to brightness changes between dark and light objects within each grid zone. As an example "Object Size Sensitivity" will set the size of the object detected within the zone, "Movement Duration Factor" sets the duration that movement must be maintained to trigger motion detection. Lower settings can increase

		false motion alarms caused by image noise, higher settings will require more movement to trigger a motion event.
	Motion Sensitivity	Sets the sensitivity to sudden overall brightness changes in the image.
<div> <b>Alarm Handler</b>  <input checked="" type="checkbox"/> Enable Alarm Detection  <div>Alarm Schedule</div> </div>	Enable Alarm Detection	Enables Alarm Detection (Alarm In) function.
	Alarm Schedule	<p>Configures the alarm schedule by holding down the mouse button and clicking the time block to enable the schedule settings on the selected time. A light blue color on the time block indicates that the alarm schedule is enabled, while a light grey color indicates that the alarm schedule is disabled.</p> <p>Alternatively, you can manually enter numbers to configure the hours and minutes from start to end for all weekdays.</p> <p><b>S:</b> Click “S” to set up a 24-hour schedule for a particular day.</p> <p><b>D:</b> Click “D” to clear the previous schedule for a particular day.</p>
<div> <b>Digital I/O</b>  <input type="checkbox"/> Trigger Alarm Detection  <input type="checkbox"/> Trigger Motion Detection  <input type="checkbox"/> Trigger Tamper Detection  <input type="checkbox"/> Trigger Network failure  Type <input type="text" value="N.O."/> ▼  Off Time <input type="text" value="0"/> (0~30s) </div>	Trigger Alarm Detection	When a signal is detected from Alarm in, the Alarm out will be triggered.
	Trigger Motion Detection	When a motion detection event is detected, the Alarm out will be triggered.
	Trigger Tamper Detection	When a tamper detection event is detected, the Alarm out will be triggered.
	Trigger Network Failure	When a network failure event is detected, the Alarm out will be triggered.
	Type	Selects the type: N.O (Normal Open) or N.C (Normal Close)
	Off Time	Specifies the alarm duration

<div> <h3>Tampering Detection</h3> <p>Select channel: <span>1 ▼</span></p> <p><input type="checkbox"/> Enable Tampering Detection</p> <p><span>Tampering Schedule</span></p> <p>Sensitivity: <span>Medium ▼</span></p> </div>	Select channel	Select the desired channel to enable tampering detection.
	Enable Tampering Detection	Enables Tampering Detection function.
	Tampering Schedule	<p>Configures the alarm schedule by holding down the mouse button and clicking the time block to enable the schedule settings on the selected time. A light blue color on the time block indicates that the alarm schedule is enabled, while a light grey color indicates that the alarm schedule is disabled.</p> <p>Alternatively, you can manually enter numbers to configure the hours and minutes from start to end for all weekdays.</p> <p><b>S:</b> Click "S" to set up a 24-hour schedule for a particular day.</p> <p><b>D:</b> Click "D" to clear the previous schedule for a particular day.</p>
	Sensitivity	Configures the sensitivity level of Tampering Detection: <b>High</b> , <b>Medium</b> , and <b>Low</b> .
<div> <h3>Network Failure</h3> <p><input type="checkbox"/> Enable Network Failure</p> </div>	Enable Network Failure	Enable network failure detection.
	FTP Upload Handler Enable Trigger Event	<p>Enables and selects a desired trigger source. The options are <b>Trigger Alarm Detection*</b>, <b>Trigger Motion Detection</b>, <b>Trigger Tampering Alarm</b>, and <b>Trigger Scheduled</b>.</p> <p><i>*This function is supported depends on models.</i></p>

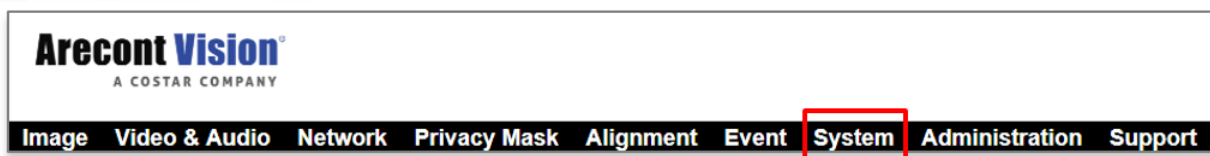
<div><div>FTP Upload Handler</div><div><div><input type="checkbox"/> Enable Trigger Event</div><div><div><input type="radio"/> Trigger Alarm Detection</div><div><input type="radio"/> Trigger Motion Detection</div><div><input type="radio"/> Trigger Tampering Alarm</div><div><input type="radio"/> Trigger Scheduled</div></div></div></div> <div><div>Remote Server</div><div><div>Host Address :</div><div></div></div><div><div>Port :</div><div>21</div><div>(21, 1025~65535)</div></div><div><div>Username :</div><div></div></div><div><div>Password :</div><div></div></div></div> <div></div>	<div>Remote Server</div> <div>Host Address</div> <div>Port</div> <div>Username</div> <div>Password</div>	<div>Host Address:</div> Specifies the host name or IP address of the FTP server. <div>Port:</div> Specifies the port number of the FTP server. <div>Username:</div> Specifies the login username of the FTP server. <div>Password:</div> Specifies the login password of the FTP server.																																																							
<div><div>SMTP Notification Handler</div><div><div>From :</div><div></div></div><div><div><input type="checkbox"/> Trigger Alarm Detection</div><div><input type="checkbox"/> Trigger Motion Detection</div><div><input type="checkbox"/> Trigger Tampering Alarm</div></div></div> <div><div>SMTP Server</div><div><div>Host Address :</div><div></div></div><div><div>Port :</div><div>25</div><div>(1~65535)</div></div><div><div>Username :</div><div></div></div><div><div>Password :</div><div></div></div><div><div>Authentication :</div><div>NO_AUTH</div><div></div></div></div> <div><div>Recipient List</div><div><table><tr><th>Enable</th><th>No</th><th>Email</th><th>Alarm</th><th>Motion</th></tr><tr><td><input type="checkbox"/></td><td>1</td><td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td>2</td><td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td>3</td><td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td>4</td><td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td>5</td><td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td>6</td><td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td>7</td><td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td>8</td><td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td>9</td><td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td>10</td><td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr></table></div></div>	Enable	No	Email	Alarm	Motion	<input type="checkbox"/>	1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10		<input type="checkbox"/>	<input type="checkbox"/>	<div>SMTP Notification Handler</div>	<div>From:</div> Specifies the email address of the sender <div>Selects a desired trigger source. The options are Trigger Alarm Detection, Trigger Motion Detection, and Trigger Tampering Alarm.</div>
Enable	No	Email	Alarm	Motion																																																					
<input type="checkbox"/>	1		<input type="checkbox"/>	<input type="checkbox"/>																																																					
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	<div>SMTP Server</div> <div>Host Address</div> <div>Port</div> <div>Username</div> <div>Password</div> <div>Authentication</div>	<div>Host Address:</div> Specifies the host name or IP address of the SMTP server. <div>Port:</div> Specifies the port number of the SMTP server. <div>Username:</div> Specifies the login username of the SMTP server. <div>Password:</div> Specifies the login password of the SMTP server. <div>Authentication:</div> Specifies the authentication mode of the SMTP sever. The options are NO_AUTH, SMTP_PLAIN, LOGIN and TLS_TLS.																																																							
	<div>Recipient List</div>	<div>Specifies the email address to send the email when selected events are triggered by Alarm, Motion, or Tamper. A maximum of 10 email addresses can be configured.</div>																																																							

<p><b>Network Storage Handler</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Enable Trigger Event <ul style="list-style-type: none"> <li><input type="radio"/> Trigger Alarm Detection</li> <li><input type="radio"/> Trigger Motion Detection</li> <li><input type="radio"/> Trigger Tampering Alarm</li> <li><input type="radio"/> Trigger Scheduled</li> </ul> </li> </ul>	<p>Network Storage Handler</p>	<p>Enables and selects a desired trigger source. The options are Trigger Alarm Detection*, Trigger Motion Detection, Trigger Tampering Alarm, and Trigger Scheduled.</p> <p><i>*This function is supported depends on models.</i></p>
<p><b>Recipient Setup</b></p> <p>Network Storage Status: not_mounted</p> <p>Network Address: <input type="text"/></p> <p>Folder Name: <input type="text"/></p> <p>Record Type: <input type="text" value="Video"/></p> <p><b>Login Certificate</b></p> <p>Username: <input type="text"/></p> <p>Password: <input type="password"/></p> <p><b>Mount and Remove Network Storage</b></p> <p><input type="button" value="Mount"/></p>	<p>Recipient Setup</p> <p>Network Storage Status</p> <p>Network Address</p> <p>Folder Name</p> <p>Record Type</p>	<p><b>Network Storage Status:</b> Displays the current status of the connection with the network storage server. ( not_mounted or ok)</p> <p><b>Network Address:</b> Specifies the IP address of the network storage server.</p> <p><b>Folder Name:</b> Specifies the folder name on the network storage server.</p> <p><b>Recording Type:</b> Specifies the desired action when an event is triggered. The options are Snapshot and Video.</p>
	<p>Mount and Remove Network Storage</p>	<p><b>Mount:</b> Sets up a network connection with the network storage server. All the video recordings or snapshots from event triggers will be uploaded to the network storage server. After the setting is complete, the Network Storage Status field will display "ok".</p> <p><b>Remove:</b> Deletes the previous setting. After the setting is removed, the Network Storage Status field will display "not_mounted".</p>

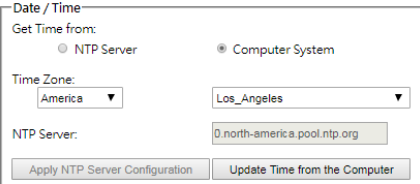


	Login Certificate	Specifies the login Username and Password for the network storage sever.
<div>SD Card Information</div> <div> Available Storage : 0 MBytes  Usage : 0% ( 0 / 0 MBytes)  Status : not_mounted  Overwrite when storage full : <input checked="" type="checkbox"/>  Record Type : Video ▼ </div>	Enable	Enables and selects a desired trigger source. The options are Trigger Alarm Detection, Trigger Motion Detection, Trigger Tampering Alarm, Trigger Network Failure, and Manual Record.
<div>SD Record Handler</div> <div> <input checked="" type="checkbox"/> Enable <ul style="list-style-type: none"> <li>Trigger Alarm Detection</li> <li>Trigger Motion Detection</li> <li>Trigger Tampering Alarm</li> <li>Trigger Network Failure</li> <li>Manual Record</li> </ul> </div>	SD Card Information  Available Storage Format SD Card Usage Status Overwrite when storage full Record Type	<p><b>Available Storage:</b> Displays the available storage of the SD card if it is installed.</p> <p><b>Format SD Card:</b> Erases all the data stored on the SD Card.</p> <p><b>Usage:</b> Displays the total storage that has been used now.</p> <p><b>Status:</b> Displays the status whether the SD card is installed or not. (not_mounted or ok)</p> <p><b>Overwrite when storage full:</b> Enables overwriting the SD card if the storage is full.</p> <p><b>Recording Type:</b> Specifies the desired action to record a stream. The options are Snapshot and Video.</p>

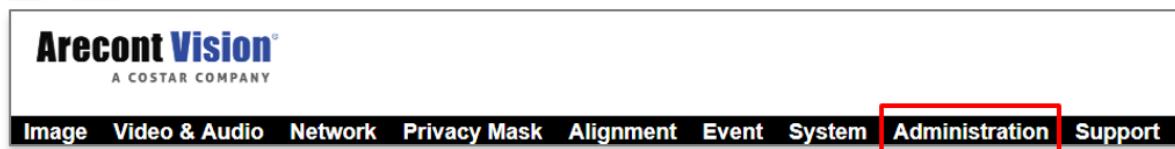
## System



Menu	Feature	Description
<p><b>Firmware Upgrade</b></p> <p>Please select a file to update:</p> <p><input type="button" value="Choose File"/> No file chosen</p> <p><input type="button" value="Upgrade"/></p> <p><b>Download Log</b></p> <p><input type="button" value="Download"/></p> <p><input type="button" value="Reboot the Camera"/></p> <p><input type="button" value="Restore to Factory Default Settings Except Network Settings"/></p> <p><input type="button" value="Restore to Factory Default Settings"/></p>	Firmware Upgrade	Clicks <b>Choose file</b> to choose the firmware upgrade file, and then clicks <b>Upgrade</b> .
	Download Log	Records all the status information of the camera in list format. Downloads the log file to the computer as a text file.  <i>Note: The log file is protected by a password. Please contact with Arecont Vision technical support team.</i>
	Reboot the Camera	<b>Reboot the Camera:</b> Reboots the camera.
	Restore Factory Default Settings Except Network Settings	<b>Restore Factory Default Settings Except Network Settings:</b> Restores all settings to factory default except the network settings.
	Restore to Factory Default Settings	<b>Restore to Factory Default Settings:</b> Restores all settings to factory default.
<p><b>Camera information</b></p> <p>Model Name <input type="text" value="AV20CPD-118"/></p> <p>Firmware <input type="text" value="45102.1"/></p> <p>MAC Address <input type="text" value="00-1a-07-18-e4-79"/></p> <p>Serial Number <input type="text" value="190300575"/></p>	Camera information	Displays the information of the camera: Model Name, Firmware, MAC Address, and Serial Number.
	Get Time from NTP Server Computer System	<b>NTP Server:</b> Synchronizes the date/time information with defined NTP server. After setting up the desired

	<p>Time zone and NTP Server, clicks Apply NTP Server Configuration.</p> <p><i>Note: Please make sure set up appropriate gateway before configuring the NTP server.</i></p> <p><b>Computer System:</b> Synchronizes the date/time information with current computer's date/time. Once this option selected, clicks Update Time from the computer.</p>	
Time Zone	Specifies the country/ city of the time zone from the drop down menu.	
NTP Server	Specifies the desired NTP server	

## Administration



Menu	Feature	Description
<p><b>Administrator</b></p> <p>Username: admin</p> <p>Admin Password: <input type="password"/></p> <p>Confirmation: <input type="password"/></p> <p><input type="button" value="Set"/> <input type="button" value="Erase"/></p>	Access Control	<p>Passwords can be up to 16 letters, digits and symbols, excluding following symbols for passwords without encoding # % &amp; ' " &lt; &gt; / [ ] { } _ ( ) = . + ,</p>
<p><b>Viewer Management</b></p> <p>User List: <input type="text"/></p> <p><input type="button" value="Add"/> <input type="button" value="Delete"/></p> <p>User Information</p> <p>User Viewer Name: <input type="text"/></p> <p>User Viewer password: <input type="password"/></p> <p>Confirmation: <input type="password"/></p> <p>Access Level: <input type="radio"/> Admin <input type="radio"/> Viewer</p> <p><input type="button" value="Set"/> <input type="button" value="Erase"/></p>	<p>Administrator</p> <p>Username</p> <p>Admin Password</p> <p>Confirmation</p> <p>Set/ Erase</p>	<p><b>Username:</b> The username of Administrator is admin and cannot be changed.</p> <p><b>Admin:</b> full access to all camera settings and live video.</p> <p><b>Admin Password:</b> Specifies the password for the administrator.</p> <p><b>Confirmation:</b> Re-enters the password for the password validation.</p> <p><b>Set/ Erase:</b> Saves or removes the password.</p> <p><i>Note: If admin password was set but has been lost, it can be erased by AV IP Utility using the key file. Please contact Arecont Vision technical support to obtain the key file required to perform this function. Or, if the camera has a reset button, you can also reset to Factory default for removing the password.</i></p>
	<p>Viewer Management</p> <p>User List</p> <p>User Viewer Name</p> <p>User Viewer Password</p> <p>Confirmation</p> <p>Access Level</p>	<p><b>User List:</b> Displays current user accounts created on the camera. Clicks <b>New User/ Delete User</b> to create or remove a user account.</p>

	<b>Set/ Erase</b> <p><b>User Viewer Name:</b> Specifies the user name. It must be at least five and up to sixteen characters.</p> <p><b>User Viewer Password:</b> Specifies the password for the viewer.</p> <p><b>Confirmation:</b> Re-enters the password for the password validation.</p> <p><b>Access Level:</b> Defines the authorization level for the user: <b>Admin</b> or <b>Viewer</b>.</p> <p><b>Set/ Erase:</b> Save or removes the password.</p>
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Support

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Image Video & Audio Network Privacy Mask Alignment Event System Administration **Support**

Menu	Feature	Description
<div>Support<ul style="list-style-type: none"><li><a href="#">Resources</a></li><li><a href="#">Online Support Request</a></li><li><a href="#">Firmware Downloads</a></li><li><a href="#">Software Downloads</a></li><li><a href="#">Technical Updates</a></li><li><a href="#">Product Selector</a></li><li><a href="#">Downloads</a></li></ul></div>	Support	Provides several useful hyperlinks to get more information of the camera.

# **Arecont Vision®**

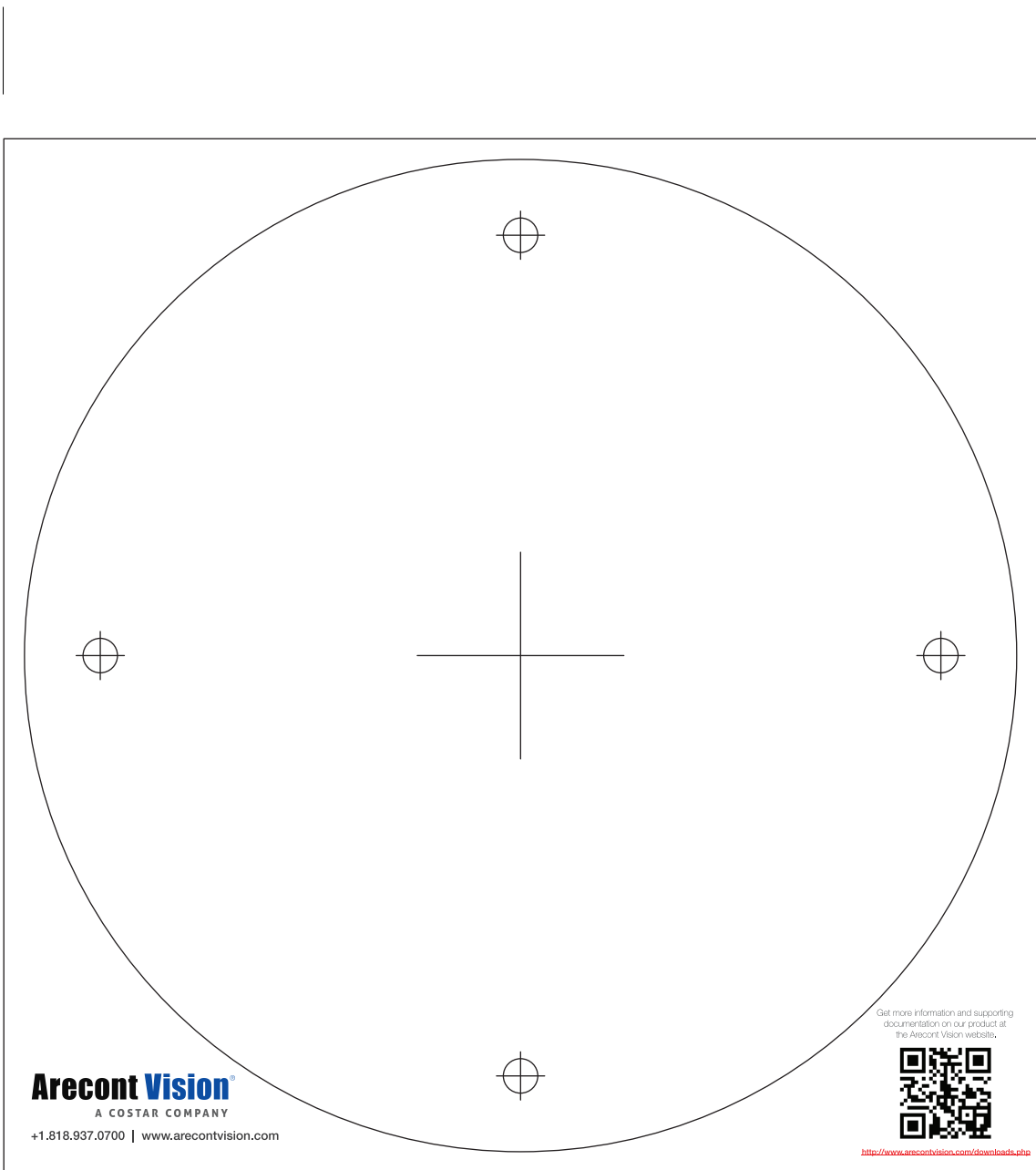
**A COSTAR COMPANY**

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



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

150 mm

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