



# Contera IP<sup>®</sup> Omni LX RS with IR

## Installation Manual

20MP

AV20576RSIR

32MP

AV32576RSIR

**AV** COSTAR

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## About Our Warranty

### Global (3 Year) Limited Warranty

AV 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. Notwithstanding the preceding provisions, AV COSTAR shall have no obligation or responsibility with respect to any Product that (i) has been modified or altered without AV COSTAR’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. AV COSTAR make no warranties or conditions, express, implied, statutory or otherwise, other than the express limited warranties made by AV COSTAR above, and AV COSTAR 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. AV COSTAR 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 AV COSTAR or (iv) that all licensed program errors will be corrected.

The ConteralP® Omni LX Remote Setup (RS) 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.avcostar.com>

# ConteralIP Omni LX RS IR Megapixel Cameras

## Camera Overview

The ConteralIP Omni LX Remote Setup (RS) with IR is an industry-game-changing omni-directional, remote-configurable, multi-sensor, multi-megapixel camera built to provide outstanding high resolution video coverage for a wide range of applications. The unmatched coverage and capabilities of the ConteralIP Omni LX RS IR provides organizations of all sizes the flexibility to deploy a surveillance camera system that truly matches their current and future requirements for complete situational awareness.

ConteralIP Omni LX RS IR is available with 20MP or 32MP resolution. The number of cameras required for a project can be dramatically reduced with a single ConteralIP Omni LX RS IR, thanks to its four customizable remote sensor gimbals. Installation is fast and easy. Connect the network cable, and then remotely configure the camera. Select a preset choice for 180°, 270°, or 360° views, or use the intuitive interface to remotely pan, tilt, zoom, and focus each sensor. Two custom presets created by the user can be saved to memory. The camera is integrated with the industry's leading VMS/NVR platforms.

All ConteralIP Omni LX RS IR cameras now support on-camera analytics on all four sensors. Several behaviors are available with the included standard analytic package. For even more powerful behaviors, optional advanced analytics are available.

The ConteralIP Omni LX RS IR is ideal for applications with challenging lighting conditions. The Omni LX RS IR combines a day/night mechanical IR cut filter for the highest image quality at any time of day and combines it with integrated 360° IR illumination. For clear color images in low-light, NightView offers strong low-light sensitivity for capturing details in extremely poor-lit scenes. The Omni LX RS IR also offers our next generation H.265 with SNAPstream+™ (Smart Noise Adaptation and Processing) smart codec capable of delivering high quality video while saving over 50% of the data rate to reduce or prevent strain on the network. Power can be supplied via a single PoE++ (802.3bt) compliant network cable or via a 24V DC/24V AC power supply.

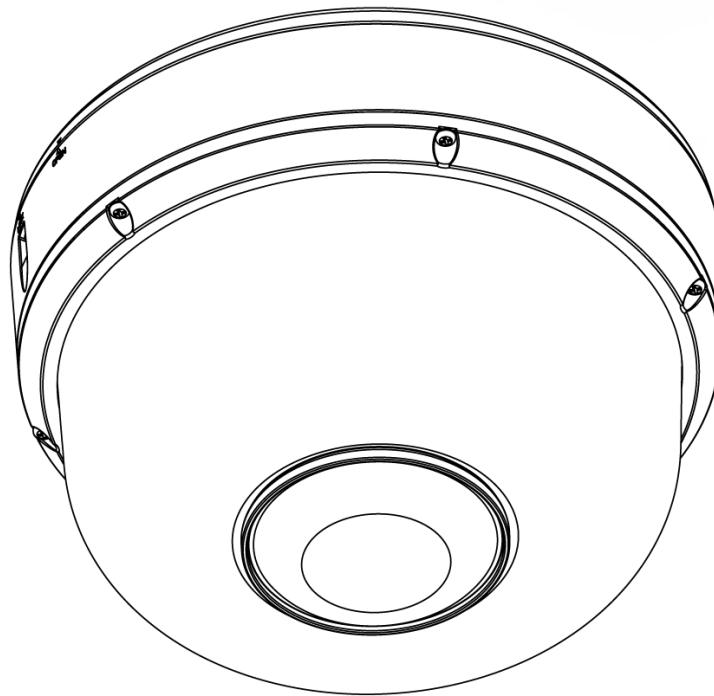
ConteralIP Omni LX RS IR is designed for demanding environments. Certified to rigorous dust and water tests, the camera carries an IP66 rating. The rugged dome housing is IK-10 rated for vandal-prone applications.

The ConteralIP Omni LX RS IR is ONVIF (Open Network Video Interface Forum) Profile S, G, M, and T compliant, providing interoperability between network video products regardless of manufacturer.

## Package Contents

- AV20576RSIR / AV32576RSIR

Description	QTY
AV20576RSIR / AV32576RSIR IP camera with Cap	1
Mounting Template	1
Rubber Kit	1
Mounting Accessory Kit and Desiccant	1
Power, Alarm, Audio Line In, and Audio Line Out Cables	1 ea.



# Installation

## Accessories

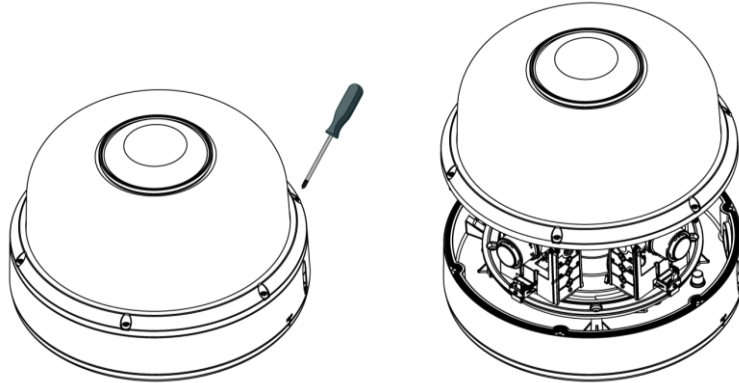
AV Costar offers various mounting solutions for the ConteralP Omni LX RS IR series of cameras that provide wall, pendant, and corner mounting options. Please visit the camera models' webpage on [www.avcostar.com](http://www.avcostar.com) or contact your local sales representative for information on all accessories.

Model Number	Description
AV-CRMA-W	Corner Mount Adapter (AV Costar White)
AV-PMA-W	Pole Mount Adapter (AV Costar White)
AV-PMJB-W	Pendant Mount Bracket with Standard Junction Box (AV Costar White) (Fits Cap 1.5" NPT, Box Fits 3/4" NPT)
AV-WMJB-W	Wall Mount Bracket with Standard Junction Box (AV Costar White) (Fits Cap 1.5" NPT, Box Fits 3/4" NPT)
7412007-006	75W IEEE 802.3af/at/bt PoE Injector with Wide Temperature Support
8188365002	Quick Disconnect

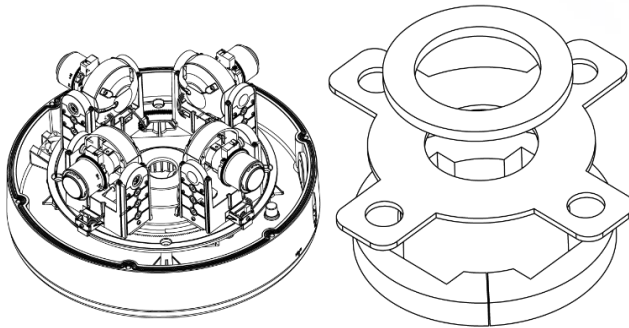
## Camera Unpacking and Preparation

Prior to installation, follow these steps to prepare the ConteraIP Omni LX RS IR.

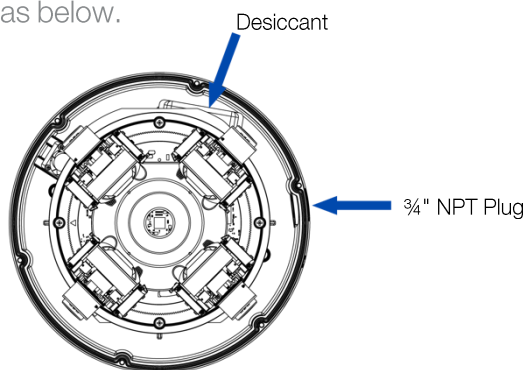
1. Loosen the 6 anti-drop screws on the top cover and open it.



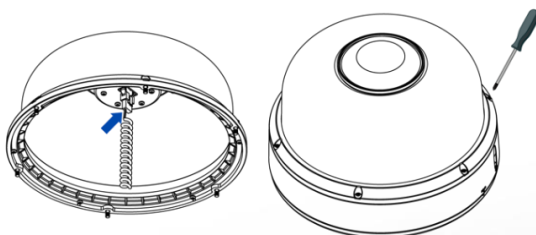
2. Remove and discard the protective EPE foam from the lens modules.



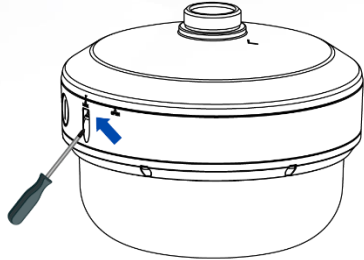
3. Remove desiccant from sealed container and install in the recommended position as below.



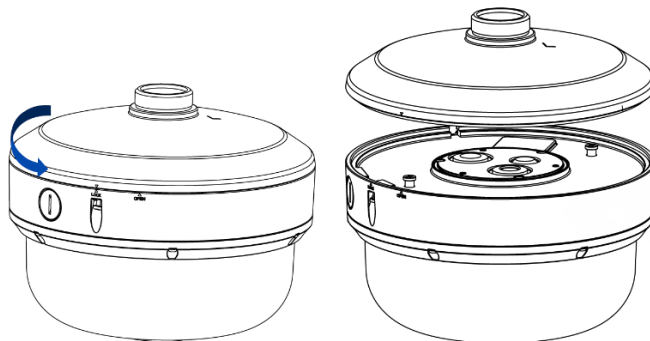
Plug the spring cable into the top cover. Then lock the 6 anti-drop screws on the top cover.



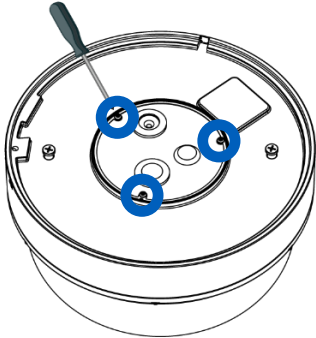
4. Loosen the anti-drop screw on the lateral side of the bottom cover.



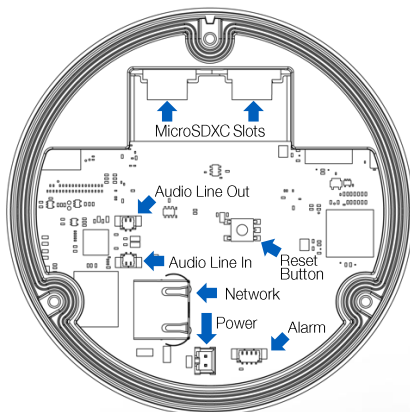
5. Rotate the cap (▼) from LOCK to OPEN in order to remove the cap.



6. Disconnect the safety wire on the hook.
7. Loosen the 3 anti-drop screws on the bottom plate and open it.

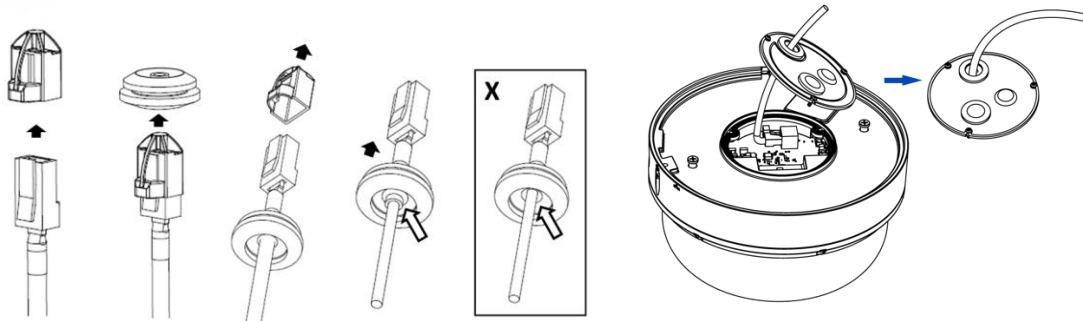


8. Locate the network, power, audio, and alarm cable camera interfaces and make the connections. Install microSDXC card(s).



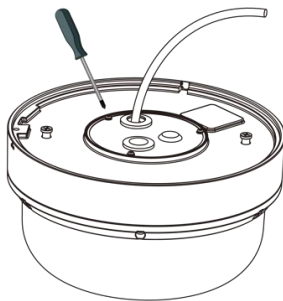


- Prepare the network cable (and the supplied power cable, audio, and alarm cables if necessary) with the supplied grommets by using the insertion tool or terminate the RJ-45 connector to the cable after passing through the grommet or the side NPT interface.



**NOTE:** Supplied grommet is required when mounting the camera outdoors or in a wet environment. Ensure the grommet properly seats flush with the camera housing to create a water-tight seal. If using the side connection of the NPT port, install the supplied grommet without a 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 3/4" NPT standard.

- Return the bottom plate back to the camera and lock the 3 anti-drop screws to secure it.



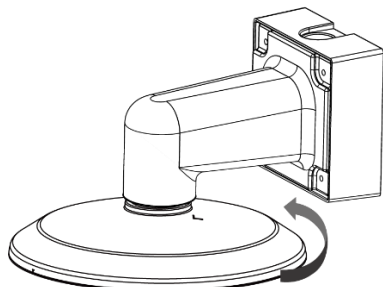
**CAUTION!** The captive screws must be used to properly secure the dome cover and camera housing. Failure to use the captive fastener may result in serious injury. When mounting the dome cover to the camera housing, ensure that the gasket is properly seated and not folded. Failure to do so may result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

- Determine the type of installation required. For installations using the cap and an NPT 1.5" mount (such as the AV-PMJB-W or AV-WMJB-W) proceed to **Cap and Mount Hardware Installation**. For surface mount installations proceed to **Surface Mount Hardware Installation**.

## Cap and Mount Hardware Installation

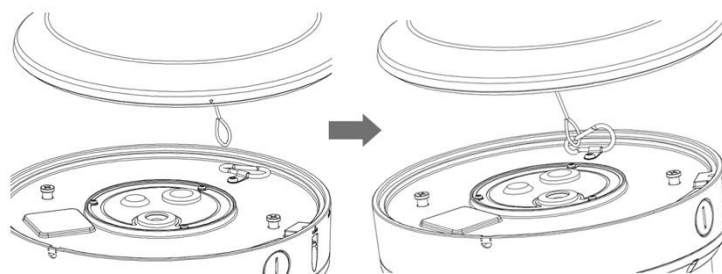
It's recommended to complete mount installation and run all cabling prior to camera installation.

1. Screw the cap to the mount (such as the AV-PMJB-W or AV-WMJB-W).

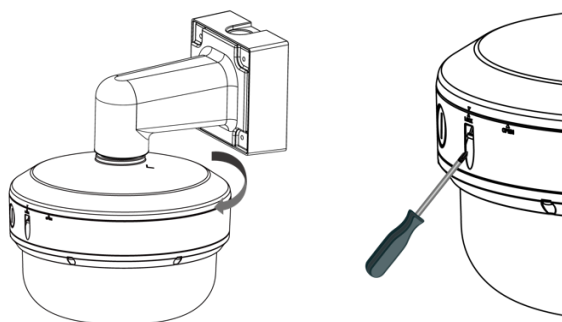


**NOTE: Apply grease or Teflon tape to threads on cap prior to installation to mount.**

2. Feed cables through the cap and mount.
3. Fasten the safety wire on the hook.



4. Connect cables from the unit to the cables from the cap/mount assembly.
5. Align the pins into the slots and rotate the camera from OPEN to LOCK in order to fix the camera. The ▼ mark should be aligned with the LOCK ■ mark. Lock the anti-drop screw on the lateral side of the bottom cover to fix the camera to the cap.

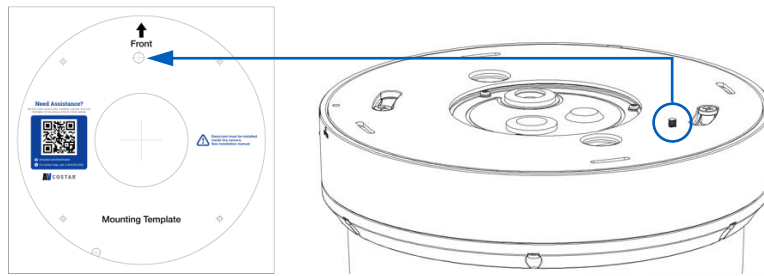


6. Make the final adjustment to the camera orientation. The AV Costar logo is the front of the camera. If a set screw is available on the mount, engage it to lock the camera in place.

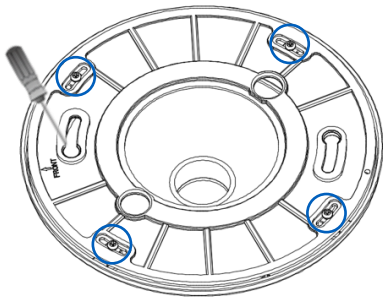
## Surface Mount Hardware Installation

We recommend placing the ConteralP Omni LX RS IR camera directly on a hard ceiling. A Template, anchors, and screws are provided for mounting the camera.

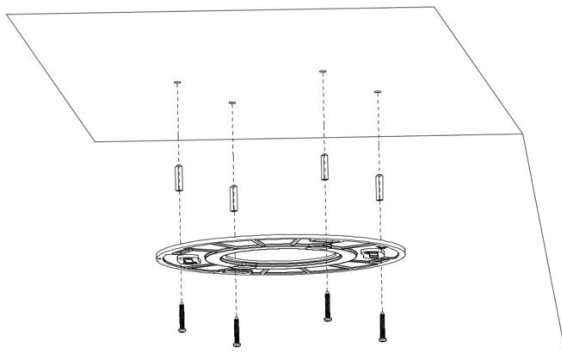
1. Place the mounting template at the desired installation location on the ceiling and drill a hole at the  $\oplus$  symbol marker to allow the tether screw on the surface mount plate to pass through. If cables are being routed from above, drill a hole or holes for the incoming wires and run the wires through the holes.



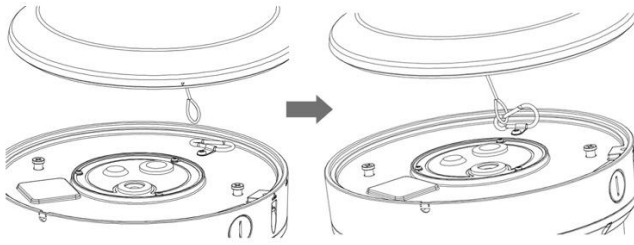
2. Loosen the 4 screws on the surface mount plate and remove it from the cap.



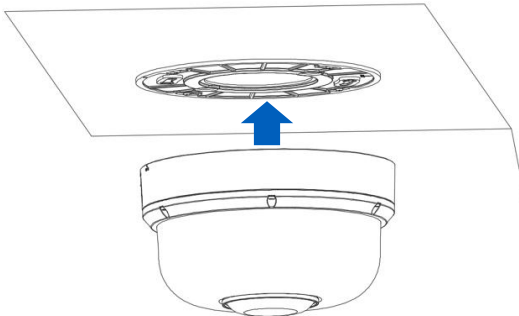
3. Drill 4 holes on the surface where indicated on the mounting template. Insert the 4 screw anchors provided into the holes and secure the plate to the ceiling by inserting the screws in the anchors.



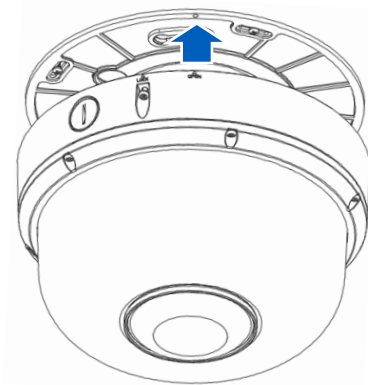
4. Fasten the safety wire on the hook.



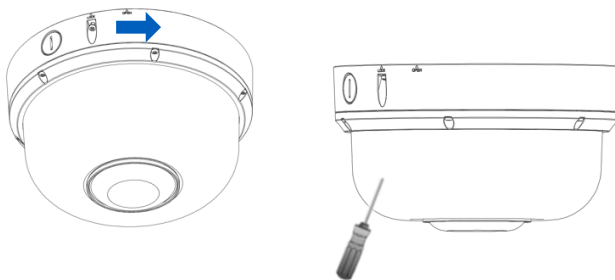
5. Connect the camera to the plate.





6. Please note that the OPEN ■ mark should be aligned with the screw hole on the plate.  
(There is only 1 screw hole on the plate for easy recognition.)



7. Twist the camera counterclockwise until it is secured firmly in place. Then fix the camera on the ceiling with the screw.



## Camera Power Up

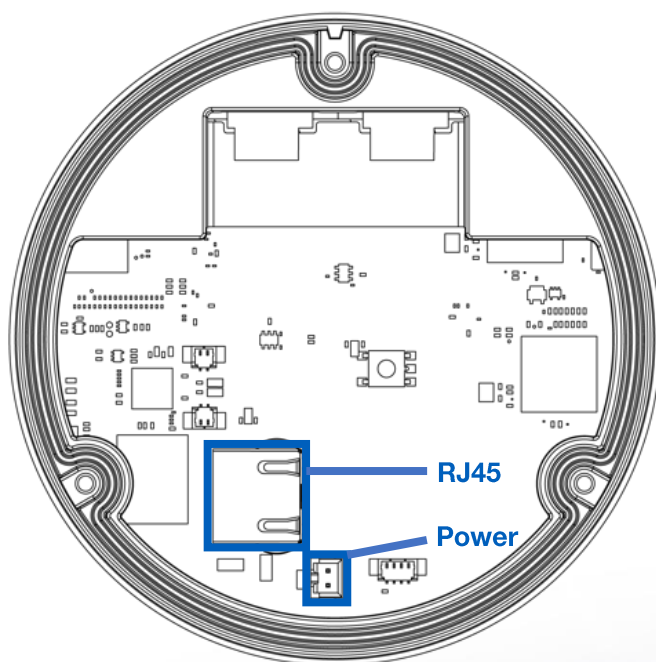
- 
**CAUTION!** This product should be installed by a qualified service technician in accordance with the National Electrical Code (NEC 800 CC Section 60) or applicable local code. Wiring methods should be in accordance with the National Electrical Code/NFPA 70/ANSI, also with all local codes and authorities 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 40W capable PoE++ IEEE 802.3bt, Class 5 capable port on a 1000Mbps network switch or injector, such as the 7412007-006, using an Ethernet cable.

**NOTE:** If using a PoE Injector and a PoE switch, the PoE function of the switch must be disabled to prevent incorrect PoE negotiation with the camera.

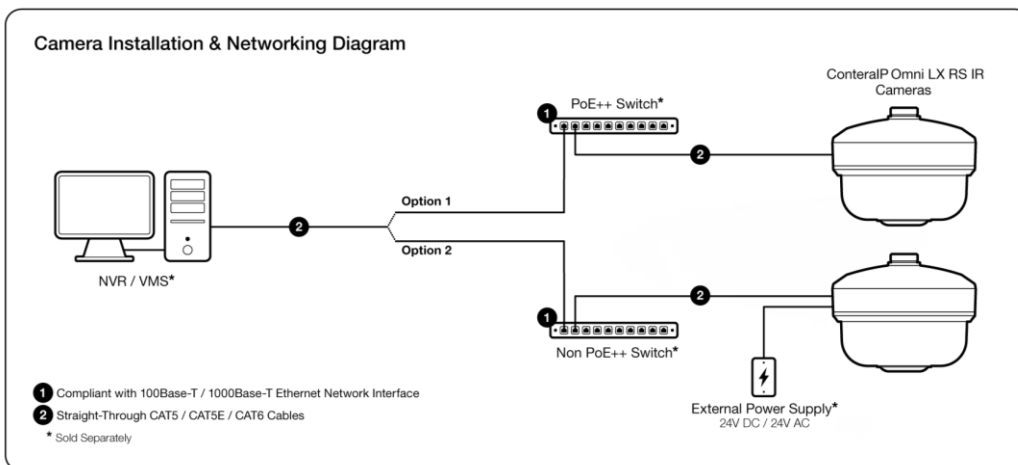
**NOTE:** If the camera is insufficiently powered by a PoE++ IEEE 802.3at powered switch or injector, IR LED function will be disabled. If the camera is powered by a PoE++ IEEE 802.3af powered switch or injector the camera will not display video and shows a warning message. If the camera is known to be powered by a known PoE++ IEEE 802.3bt/at PoE switch or injector but negotiation was incorrect, use the **Power Detection** section under **System** in the main menu of the camera web UI to select the correct power specifications.

2. If the camera is powered by an external 24V DC/24V AC power supply, connect the power supply wires to the power terminals. The power supply must be able to deliver 40W.



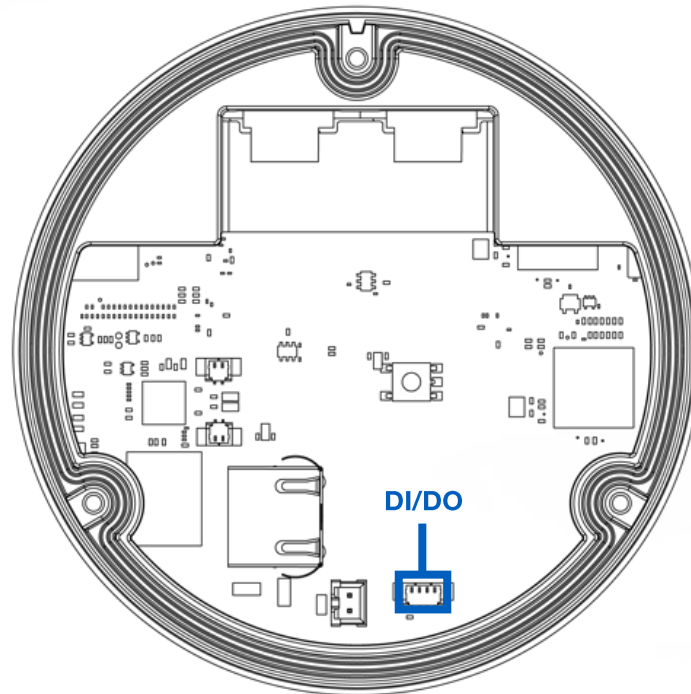
**NOTE:** This product is intended to be supplied by a Listed Power Adapter or DC power source, rated (1) 24V AC, 50/60Hz (Max. 40W); (2) 24V DC (Max. 40W); (3) 42.5-57V DC (Max. 40W) for PoE++ IEEE 802.3bt, Class 5, Tma = 50°C, and the altitude of operation = 2000m. For assistance with purchasing the power source, please contact AV Costar for further information. Ensure the power cord connection of the power adapter at the socket-outlet with provides an earthing connection.

3. Connect the switch to your computer's network port by using an ethernet cable.



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

## Alarm I/O Functions



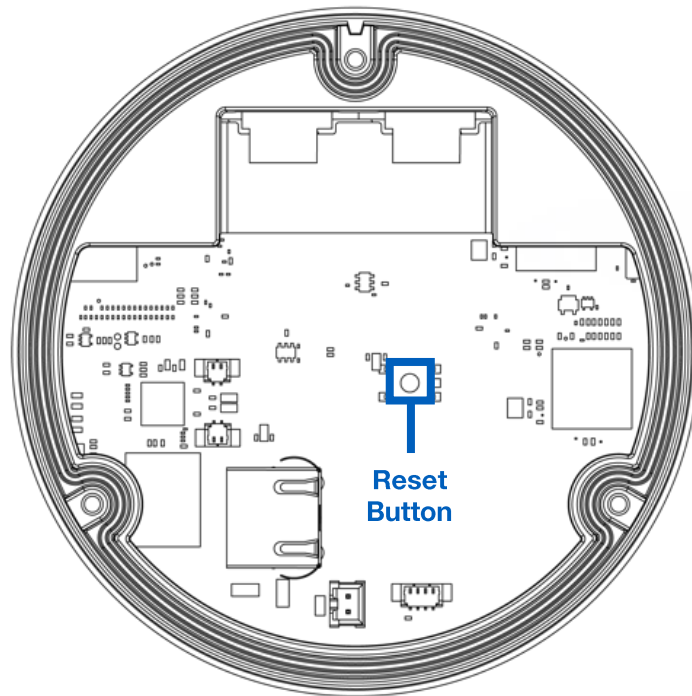
Connect the Alarm In (DI) connector to the alarm input sensor, and then connect the Alarm Out (DO) connector to the alarm output signal.

To avoid any damage, please follow the specification of the part as below:

Alarm In (Wet Contact)		Alarm Out (Wet Contact)	
<b>3.5-12 VDC</b>	50mA (max)	<b>0-30 VDC</b>	50mA (max)

## Reset to Factory Default

1. Press and hold the reset button for 2 to 5 seconds, then release the reset button.  
This resets the camera to the factory default except for the network settings.
2. Press and hold the reset button for more than 5 seconds, then release the reset button.  
This resets the camera to the factory default, and this resets the network settings to the factory default.

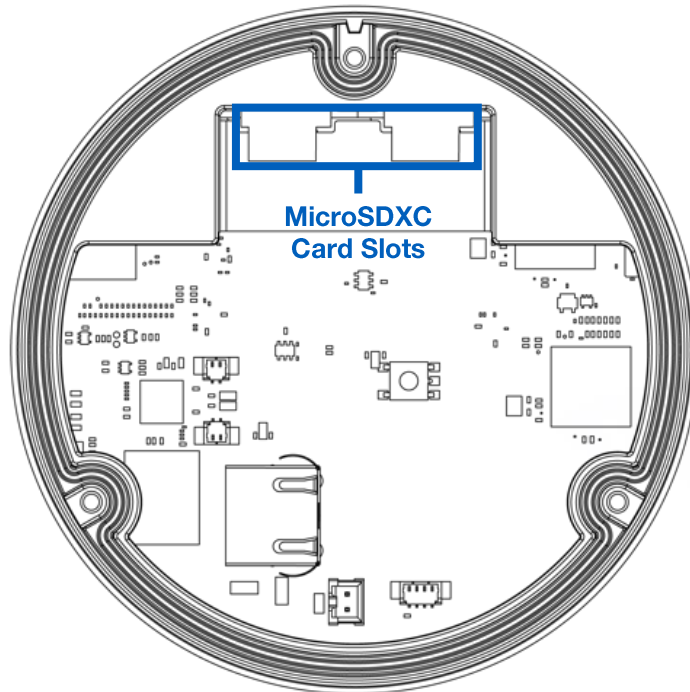


3. Also, the user can reset the camera to factory default via the camera web interface or the Costar Utility.

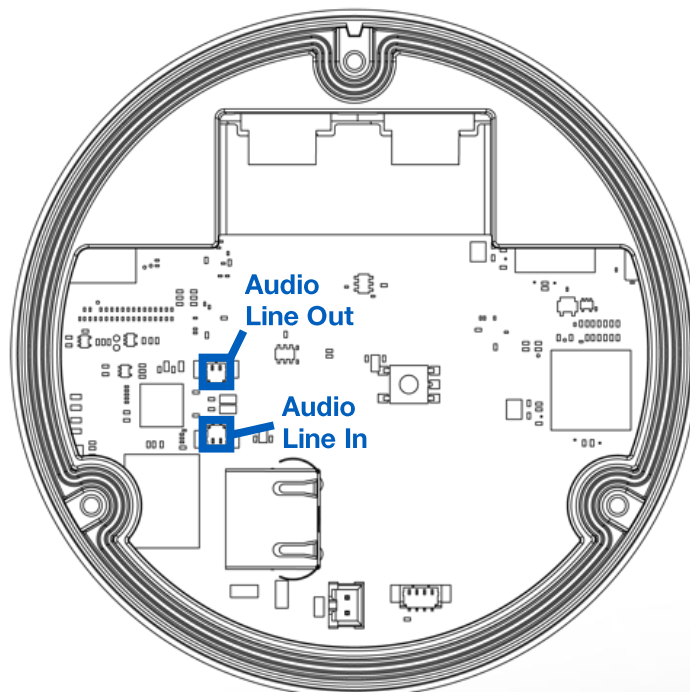


## Audio/SD Card Info

- MicroSDXC Card Slots



- Audio Connectors



## Camera Discovery, Setup, and Configuration

The Costar Utility is recommended for camera discovery and setup. Software can be found on the AV Costar website at <http://www.arecontvision.com/software.php>.

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

The Costar Utility tool is efficient and convenient for mass or single camera uploads whether used for large installations that require an update to multiple settings, or smaller installations where only one camera needs to be changed.

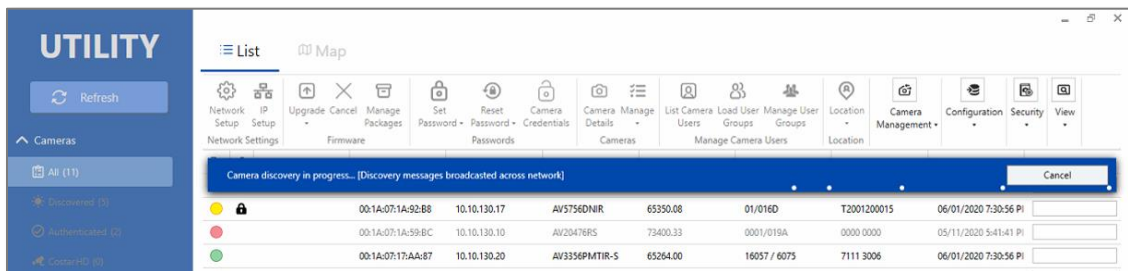
The Costar Utility version v3.1.2x+ tool is compatible with all AV Costar ConteralIP cameras. The user manual for the software is available on our website.

## Camera Discovery

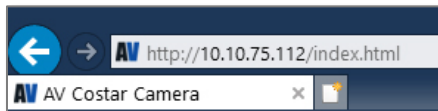
1. Locate and double click the Costar Utility shortcut on the desktop and login.



2. When the Costar Camera Utility is launched, it will automatically search the network for AV Costar and CostarHD cameras on the network and over a time interval. You can also manually search cameras by clicking the “Refresh” button.



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



4. If there is no DHCP server present in the network, the camera will default to the following IP Address “192.168.1.168”.

**NOTE:** A password must be entered before the camera can be used. To choose a password, visit the camera’s webpage or use the configuration utility.



### INITIAL PASSWORD SETUP

Prior to accessing this device for the first time a unique admin password must be created:

User Name: **admin**

Password:

Confirm Password:

**Prior to accessing this device for the first time a unique admin password must be created**

## Camera Preset Configurations

The AV Costar ConteralP Omni LX RS IR camera supports three (3) predefined camera preset configurations: 180 degrees, 270 degrees, and 360 degrees. Also, the camera supports two custom preset configurations. To control the camera preset configurations via the web interface, click the Presets Tab on the main menu.



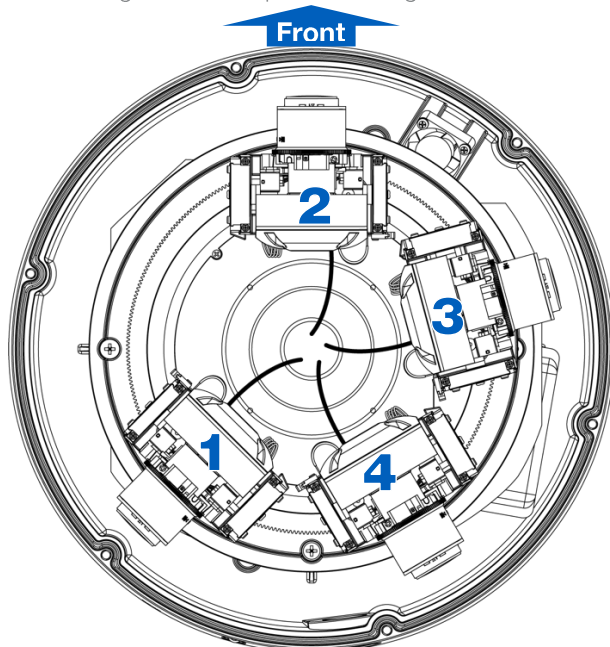
**NOTE:** ConteralP Omni LX RS IR camera is not used as traditional high speed PTZ camera. The motorized movement of the camera gimbals is meant for setup and configuration only. Movement of the modules more than one time per day will void the warranty.

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

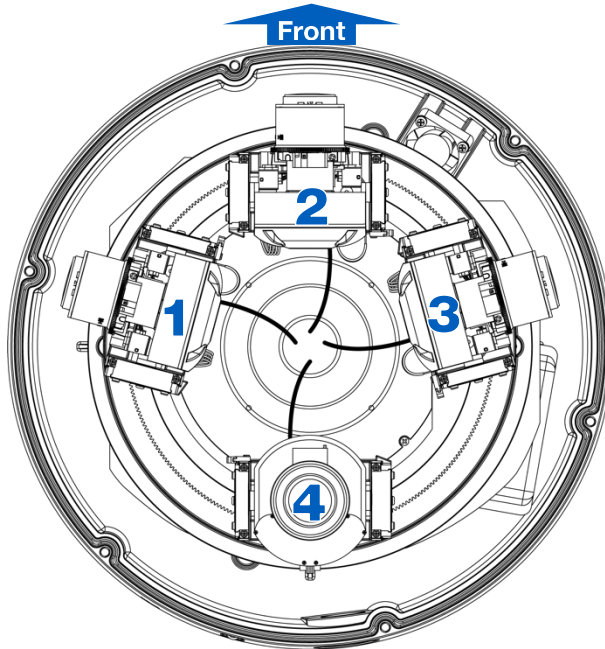
**NOTE:** Modules will stop moving once they hit the module next to it during pan movement in either direction.

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

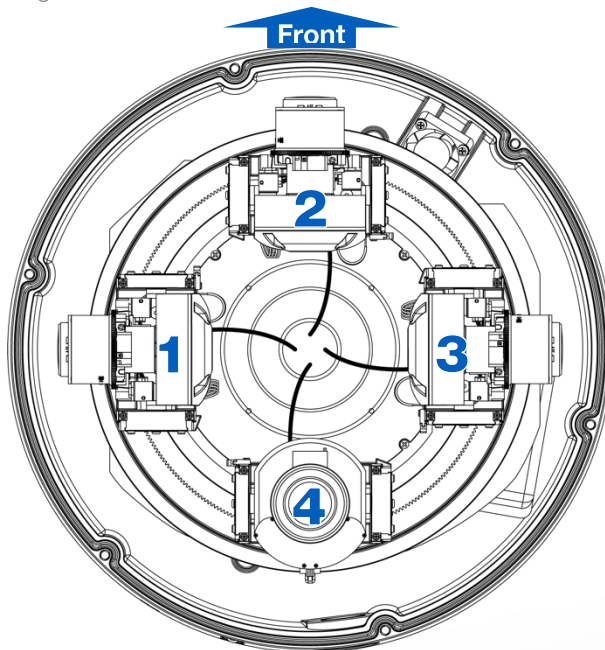
- Home position  
Four camera modules will move to the position as the image below. All four modules zoom out to widest angle, and tilt up to zero degree.



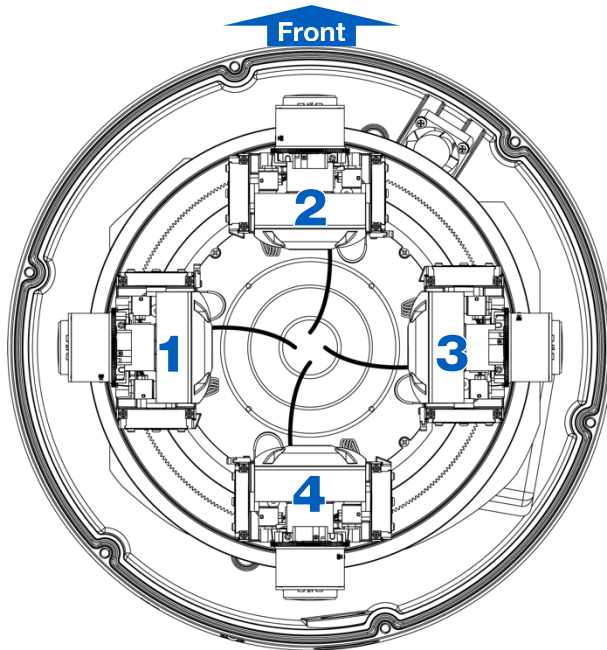
- 180 degrees preset configuration  
Four camera modules will move to the positions as the image below. CH1/2/3 zoom in to 60 degrees H-FOV, and tilt down to 37 degrees. CH4 zooms out to widest angle, and tilt down to 90 degrees.



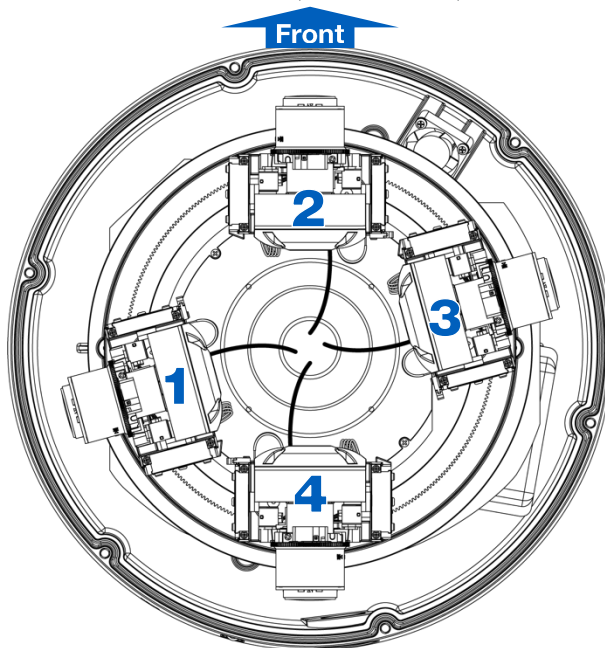
- 270 degrees preset configuration  
Four camera modules will move to the positions as the image shown. CH1/2/3 zoom in to 90 degrees H-FOV, and tilt down to 37 degrees. CH4 zooms out to widest angle, and tilt down to 90 degrees.



- 360 degrees preset configuration  
Four camera modules will move to the positions as the image below. All four modules zoom in to 90 degrees H-FOV, and tilt down to 37 degrees.



- Custom preset configuration  
The user can define custom pan/tilt/zoom positions as in the image below.



## Home Position / 360 Degrees Preset Configuration

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

**Preset Buttons**

**Select Preset**

---

**User Specified Presets**

2. To make an adjustment on all four camera modules without selecting each camera module individually; you can select “1-4” from the drop list.

Channel Selects[Focus/Pan - select individual channel; Tilt/Zoom - channels are based on button selection]

Focus/Pan  Tilt/Zoom

Message:

**Pan**

Status:

**Clockwise**

**Counterclockwise**

**Tilt**

**Up**

**Down**

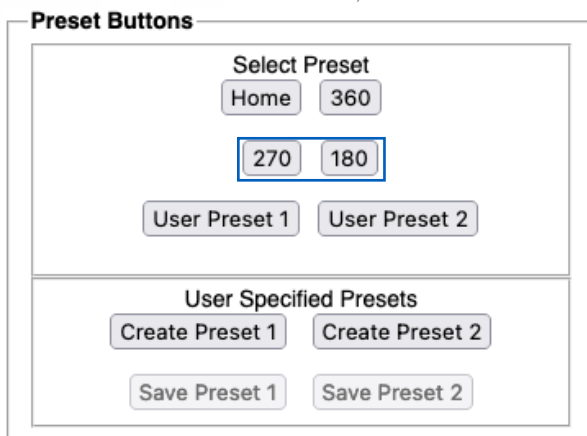
**Zoom**

Enable Auto Focus After Zoom

3. For individual adjustment on each camera module, select the “Focus/PTZ” tab.

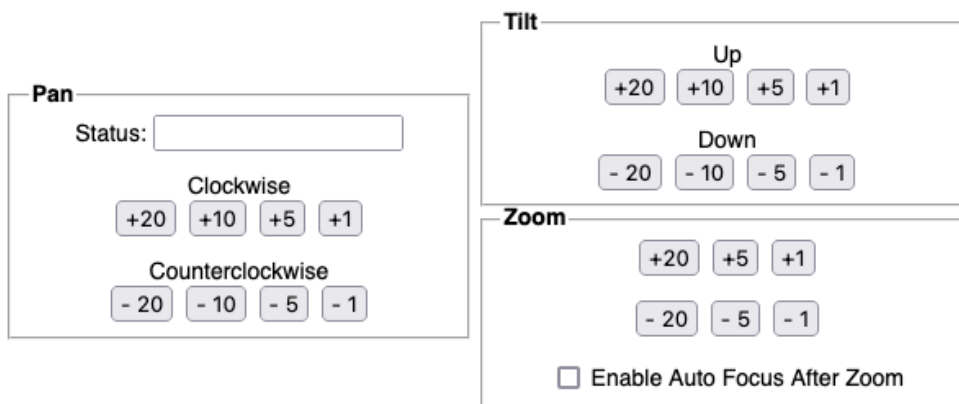
## 180 / 270 Degrees Preset Configuration

1. In the “Preset buttons” section, click “180” or “270”



- 2.
3. 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 the entire panoramic configuration.

**Channel Selects**[Focus/Pan - select individual channel; Tilt/Zoom - channels are based on button selection]



4. To individually adjust each camera module, select the “Focus/PTZ” tab.



## Create Custom Preset Configuration

1. In “Preset buttons” section, click “Create Preset 1” or “Create Preset 2”.

**Preset Buttons**

**Select Preset**

Home 360  
270 180  
User Preset 1 User Preset 2

**User Specified Presets**

Create Preset 1 Create Preset 2  
Save Preset 1 Save Preset 2

2. To adjust Focus/Pan/Tilt/Zoom positions for individual module or all four modules via Channel Selects.

Channel Selects[Focus/Pan - select individual channel; Tilt/Zoom - channels are based on button selection]

Focus/Pan 1  Tilt/Zoom All

**Pan**

Status:

**Clockwise**

+20 +10 +5 +1

**Counterclockwise**

- 20 - 10 - 5 - 1

**Tilt**

**Up**

+20 +10 +5 +1

**Down**

- 20 - 10 - 5 - 1

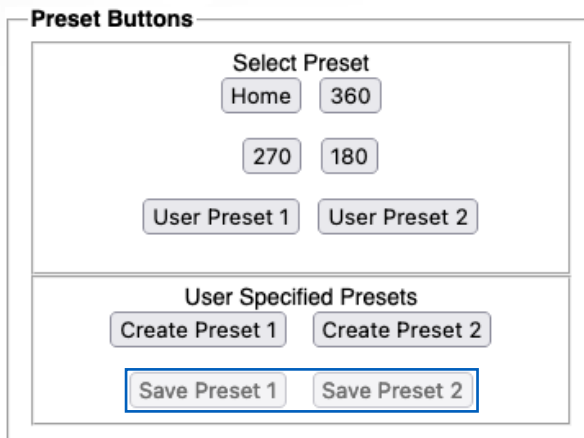
**Zoom**

+20 +5 +1

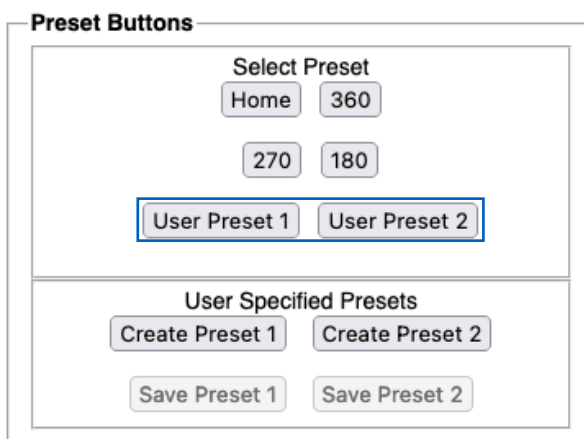
- 20 - 5 - 1

Enable Auto Focus After Zoom

- Once the user has a desired position for each module, click “Save Preset 1” or “Save Preset 2”.



- Click “User Preset 1” or “User Preset 2” to get the custom preset configuration which is setup by the user.



## Web Interface Navigation

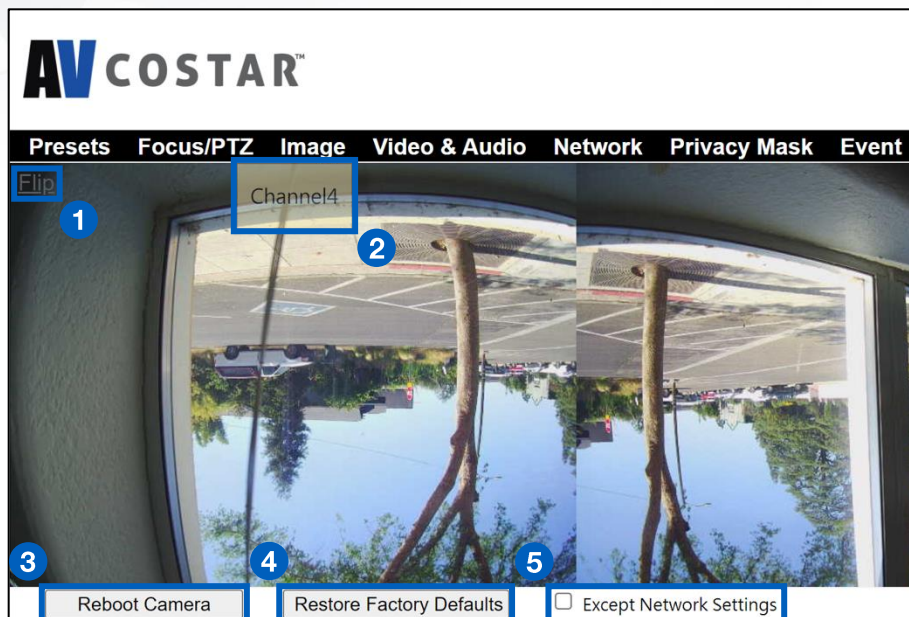


The entire menu is located on the top of the web interface.

The following camera settings are available on the top of the menu in the web interface, and the user will be directed to the page that they click on the menu.

- **Main Menu**
  - Flip Image
  - Reboot Camera
  - Restore Factory Defaults
- **Focus/PTZ**
  - Select Channel
  - Focus
  - Pan
  - Tilt
  - Zoom
- **Image**
  - Basic
    - Channel
    - Picture (Basic Image Settings)
    - Misc (AE Mode/AWB Mode)
    - WDR (Wide Dynamic Range) Mode
    - Day/Night Mode
    - Lighting Compensation Frequency
  - OSD (On-Screen Display)
    - General Setting
    - Text Overlay
  - ROI (Regions of Interest)
- **Video & Audio**
  - Codec
    - Channel
    - Main Stream Configuration
    - Sub Stream Configuration
    - Third Stream Configuration
  - Audio

- **Network**
  - Basic
    - IP Assignment
    - Ports
    - DNS
    - IPv6 Settings
  - 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
  - LDAP
- **Privacy Mask**
- **Event**
  - Motion Detection
  - Alarm Handler
  - Digital I/O
  - Tamper Detection
  - Network Failure
  - SD Card
  - FTP Upload
  - SMTP (Simple Mail Transfer Protocol) Notification
  - Network Storage
- **Video Analytics**
  - Analytics Settings
  - Object Calibration
  - Event List
- **System**
  - Maintenance
    - Camera Information
    - Camera Name
    - License
    - Firmware Upgrade
    - Download Log
    - Reboot the Camera
    - Restore Settings
  - Date/Time
- **Administration**
  - Administrator settings
  - Viewer Management
- **Support**



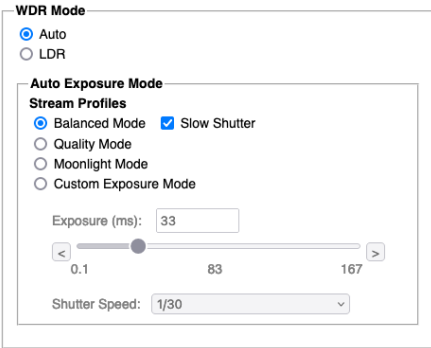
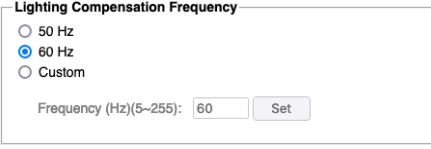
1. At the left corner on the top, you can see the “Flip” button that allows you to rotate the images up-side-down (180 degrees) with reorienting the channel order.
2. You will be able to see the Channel number when you move the mouse over the image of the channel.
3. The “Reboot Camera” button is located just below the live camera views. This button reboots the camera without changing settings.
4. To the right of the “Reboot Camera” button is the “Restore Factory Defaults” button. This button resets all settings to the factory default settings.
5. By selecting the “Except Network Settings” checkbox before pressing the “Restore Factory Defaults” button causes the network settings to be retained while resetting all other settings are restored to factory default settings.



AV32576RSIR  
Firmware: 65431.11  
MAC: 00-1a-07-1a-93-95  
PoE++

Presets Focus/PTZ **Image** Video & Audio Network Privacy Mask Event Video Analytics System Administration Support

Menu	Feature	Description
Basic		
<b>Channel</b> Select channel: <input type="button" value="1"/> <input type="button" value="Sync All Channels"/>	Select Channel	Select desired channel, 1-4. Click <b>Sync All Channels</b> to apply settings to all four channels.
<b>Picture</b> Brightness (-50...50) <input type="text" value="0"/> <input type="button" value="Set"/> Sharpness (0...4) <input type="text" value="2"/> <input type="button" value="Set"/> Saturation (0...6) <input type="text" value="3"/> <input type="button" value="Set"/> Contrast (0...100) <input type="text" value="50"/> <input type="button" value="Set"/> Hue (0...100) <input type="text" value="50"/> <input type="button" value="Set"/>	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 the 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 with a range of 0 ~ 100. Increasing the value will adjust the image hue towards red. Decreasing the value will adjust the image hue towards blue.
<b>Misc</b> <input type="checkbox"/> Rotate <input type="checkbox"/> Sync Brightness AE Mode: <input type="button" value="Auto"/> AWB Mode: <input type="button" value="Auto"/>	Rotate	Enable the image rotation on each channel.
	AE Mode (Auto Exposure Mode)	<b>Lock:</b> This option locks the exposure settings to the current values. <b>Auto:</b> If Auto is selected, each channel has individual settings of the Exposure Time Control and Gain Control. <b>NOTE:</b> When AE mode is set to "Lock" the camera will not update for new lighting conditions.
	AWB Mode (Auto White Balance Mode)	<b>Auto:</b> Enables the automatic white balance feature of camera, which will automatically remove unrealistic color cast so that the color white is rendered white in the image. <b>Off:</b> Select Off to disable AWB Mode.

	<p>Auto</p>	<p>Auto detects bright backlight, glare, or high contrast lighting and automatically selects the WDR level. <b>NOTE: Make sure AE mode is set to "Auto."</b></p>
	<p>LDR</p>	<p>Will not combine long and short exposures into one frame, resulting in better low light performance.</p>
	<p>Auto Exposure</p>	<p>Automatically adjusts illumination and exposure values. <b>NOTE: Make sure AE mode is set to "Auto".</b></p>
	<p>Stream Profiles: Balance Mode -Slow Shutter Quality Mode Moonlight Mode Custom Exposure Mode</p>	<p><b>Balanced Mode:</b> Limits exposure time from 0.1ms to 66ms. The camera will keep highest FPS when Slow Shutter is unchecked. <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. <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 low noise at the expense of high motion blur. <b>Custom Exposure Mode:</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 is used only when there is constant scene illumination sufficient enough to provide a quality image.</p>
	<p>Lighting Compensation Frequency: 50Hz, 60Hz, Custom</p>	<p>Prevents flicker caused by the power line frequency of lighting. Choose 50Hz for Europe or China, and 60Hz for US or Japan. This parameter will have no effect when the dominant light is sunlight. Optionally, the user can select a frequency between 5Hz and 255Hz. It will be enabled when user selects "Custom".</p>

<p><b>Day/Night Mode</b></p> <p><input checked="" type="radio"/> Automatic      Ref. Channel: OFF ▾</p> <p>Day to Night Switching Level(0~255): 40    Set</p> <p>Night to Day Switching Level(0~255): 140    Set</p> <p><input type="radio"/> Day  <input type="radio"/> Night  <input type="radio"/> Schedule Day Mode</p> <p>Start: 6 : 0 (hh:mm)    Set</p> <p>End: 18 : 0 (hh:mm)    Set</p> <p>IR Control: Auto ▾  IR Level: High ▾</p>	<p>Day/Night Mode</p> <p>Automatic</p> <p>Day</p> <p>Night</p> <p>Schedule Day Mode</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 day mode.</p>
<p>IR Control</p>	<p>Selects the IR Control mode. Options are <b>Auto</b>, <b>OFF</b> and <b>ON</b>.</p>	
<p>IR Level</p>	<p>Selects IR level when IR Control is set to <b>ON</b>. Options are <b>Low</b>, <b>Medium</b> and <b>High</b>.</p>	

**OSD**

<p><b>General Setting</b></p> <p>Camera Name: AV32576RSIR-95</p> <p>Font Border <input type="checkbox"/></p> <p>Text color: White ▾</p> <p><b>Text Overlay</b></p> <p>Top Left: OFF ▾</p> <p>Top Right: OFF ▾</p> <p>Bottom Left: OFF ▾</p> <p>Bottom Right: OFF ▾</p> <p style="text-align: center;">Apply</p>	<p>Camera Name</p>	<p>Specifies a name for the camera. The maximum name length is 32 characters.</p>
<p>Font Border</p>	<p>Enables a border for the text overlay.</p>	
<p>Text Color</p>	<p>Options are <b>Black</b>, <b>White</b>, <b>Green</b>, or <b>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</b>, <b>Top Right</b>, <b>Bottom Left</b>, and <b>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**

<p><b>ROI</b>      Exit</p> <p>Select channel: 1 ▾</p> <p><small>* 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".</small></p> <p>Stream: Main Stream ▾</p> <p>ROI Zone 1: <input type="checkbox"/> Enable  Medium ▾ Save Area Del Area</p> <p>ROI Zone 2: <input type="checkbox"/> Enable  Medium ▾ Save Area Del Area</p> <p>ROI Zone 3: <input type="checkbox"/> Enable  Medium ▾ Save Area Del Area</p> <p>ROI Zone 4: <input type="checkbox"/> Enable  Medium ▾ Save Area Del Area</p> <p>ROI Zone 5: <input type="checkbox"/> Enable  Medium ▾ Save Area Del Area</p>	<p>ROI (Regions of Interest)</p>	<p>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 in order to save bandwidth and storage.</p> <p>To setup the ROI:</p> <ol style="list-style-type: none"> <li>1. Select the desired channel</li> <li>2. Select Main Stream or Sub Stream</li> <li>3. Enable zones (up to five zones) and select the desired quality level (High, Medium, or Low)</li> <li>4. Create the ROI by dragging the mouse over the live image</li> </ol> <p>Press Save Area or Del Area</p>
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## Video & Audio

AV32576RSIR  
Firmware: 65431.11  
MAC: 00-1a-07-1a-93-95  
PoE++

Presets
Focus/PTZ
Image
Video & Audio
Network
Privacy Mask
Event
Video Analytics
System
Administration
Support

Menu	Feature	Description
Codec		
<b>Channel</b> Select channel: <span style="border: 1px solid #ccc; padding: 2px;">Sync All Channels ▾</span>	Select channel	Select the desired channel to change video settings or select Sync All Channels to change video settings for all four channels at once.
<b>Main Stream</b> Codec <span style="border: 1px solid #ccc; padding: 2px;">H.264 ▾</span> Resolution <span style="border: 1px solid #ccc; padding: 2px;">3840x2160 ▾</span> <input type="checkbox"/> Enable SNAPstream+™ <input type="radio"/> Variable Bitrate <input checked="" type="radio"/> Maximum Bitrate Rate Limit (128-8000 kbps) <span style="border: 1px solid #ccc; padding: 2px;">8000</span> H.264 Quality (1...10) <span style="border: 1px solid #ccc; padding: 2px;">3</span> <small>* 10 - lowest quality, 1 - highest quality</small> <input type="radio"/> Constant Bitrate (512-8000 kbps) <span style="border: 1px solid #ccc; padding: 2px;">0</span> Frames Per Seconds (1~30) <span style="border: 1px solid #ccc; padding: 2px;">30</span> GOP Length (1~120) <span style="border: 1px solid #ccc; padding: 2px;">30</span>	Video Compression: H.265 / H.264	Radio buttons to select the desired compression.
	Resolution	Radio buttons to select the desired resolution. Options vary based on the sensor resolution being used.
	Enable SNAPstream+™	Enable the SNAPstream+™ feature on the camera. This feature utilizes both Smart GOP and Smart ROI to reduce bitrate without impacting the image quality. Smart GOP sets GOP to automatically increase when no moving objects are detected. Smart ROI will increase the bitrate of moving objects and make them clearer.
	Variable Bitrate	Maintains the Quality settings configured. There may be variation in the bit rate output from the camera when using this mode.
	Maximum Bitrate	Maintains variable bit rate control and maintains the bitrate under the rate limit you choose. It can be set from 64 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 or setting a higher value results in lower image quality.
	Frames Per Seconds	Frame rate adjustment for the camera video stream.
	GOP Length	Specifies how many frames exist between two consecutive I-Frames.
<b>Sub Stream</b> Codec <span style="border: 1px solid #ccc; padding: 2px;">H.264 ▾</span> Resolution <span style="border: 1px solid #ccc; padding: 2px;">1920x1080 ▾</span> <input type="checkbox"/> Enable SNAPstream+™ <input type="radio"/> Variable Bitrate <input checked="" type="radio"/> Maximum Bitrate Rate Limit (128-8000 kbps) <span style="border: 1px solid #ccc; padding: 2px;">8000</span> H.264 Quality (1...10) <span style="border: 1px solid #ccc; padding: 2px;">3</span> <small>* 10 - lowest quality, 1 - highest quality</small> <input type="radio"/> Constant Bitrate (512-8000 kbps) <span style="border: 1px solid #ccc; padding: 2px;">0</span> Frames Per Seconds (1~30) <span style="border: 1px solid #ccc; padding: 2px;">30</span> GOP Length (1~120) <span style="border: 1px solid #ccc; padding: 2px;">30</span>		

<p><b>Third Stream</b></p> <p>Codec: MJPEG</p> <p>Resolution: 640x360</p> <p>Quality: High</p> <p>Frame Rate (1~30): 30</p>	<p>Codec: MPJEG</p>	<p>The third stream is designed for the live view on web interface, and the only option of video codec is MJPEG.</p>
	<p>Resolution</p>	<p>The third stream is designed for the live view on web interface, and the only option for Resolution is VGA.</p>
	<p>Quality: Low / Mid / High</p>	<p>Adjusts the compression level for JPEG images</p>
	<p>Frame Rate</p>	<p>Frame rate adjustment for the camera video stream.</p>
<p>Audio</p>		
<p><b>Audio Configuration</b></p> <p>Audio In :</p> <p><input checked="" type="radio"/> Enable      <input type="radio"/> Disable</p> <p>Audio In Volume : Mid</p> <p>Audio Out :</p> <p><input checked="" type="radio"/> Enable      <input type="radio"/> Disable</p> <p>Audio Out Volume : Mid</p> <p>Encoding : U-Law</p> <p>Apply</p>	<p>Audio In Enable/Disable Audio In Volume Audio Out Enable/Disable Audio Out Volume Encoding</p>	<p>Enable/Disable: Enables or Disables the Audio In / Audio Out features on the camera. Audio In/Out Volume: Specifies the volume level of Audio In / Audio Out High, Middle, or Low. Encoding: Specifies the encoding algorithm: A-Law or U-Law.</p>



AV32576RSIR  
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Presets Focus/PTZ Image Video & Audio **Network** Privacy Mask Event Video Analytics System Administration Support

Menu	Feature	Description
Basic		
<p><b>IP Assignment</b></p> <p>IP Address <input type="text" value="10.10.2.100"/> <input type="checkbox"/> DHCP</p> <p>Subnet Mask <input type="text" value="255.255.248.0"/></p> <p>Default Gateway <input type="text" value="10.10.0.1"/></p> <p><b>Ports</b></p> <p>HTTP Port <input type="text" value="80"/> (80,1024-65535)</p> <p>Second HTTP Port <input type="text" value="8080"/> (8080,1024-65535)</p> <p>HTTPS Port <input type="text" value="443"/> (443,1024-65535)</p> <p><b>DNS</b></p> <p>Primary DNS <input type="text" value="8.8.8.8"/></p> <p>Secondary DNS <input type="text" value="1.1.1.1"/></p>	<p>IP Assignment:</p> <p>DHCP</p> <p>IP Address</p> <p>Subnet Mask</p> <p>Default Gateway</p>	<p>DHCP: If checked, the camera will attempt to obtain its IP address from the DHCP server available on the network.</p> <p>IP Address: Sets the current IP address of the camera.</p> <p>Subnet Mask: Once set, the camera will use these mask bits to determine if a destination is from a different network.</p> <p>Default Gateway: Once set, the camera will send network traffic to the specified gateway if the destination is on a different network.</p>
	<p>Port:</p> <p>HTTP</p> <p>Second HTTP Port</p> <p>HTTPS Port</p>	<p>HTTP: The port default is 80. It is used to access the camera via the web browser.</p> <p>Second HTTP Port: Sets an alternative HTTP port. This port can be useful when the standard HTTP port (80) is not appropriate for this camera.</p> <p>HTTPS Port: The port default is 443. It can be used when you use HTTPSs.</p>
	<p>DNS:</p> <p>Primary DNS</p> <p>Secondary DNS</p>	<p>Configures the Primary and Secondary DNS.</p>
<p><b>IPv6 Settings</b></p> <p><input type="checkbox"/> Enable IPv6</p> <p>Link-Local:</p> <p>IPv6 Address <input type="text"/></p> <p>Address Prefix <input type="text" value="64"/> (0~127)</p> <p>Default Route <input type="text"/></p> <p><input type="checkbox"/> Router Advertisement</p> <p>DNS <input type="text"/></p>	<p>IPv6 Settings:</p> <p>Enable IPv6</p> <p>IPv6 Address</p> <p>Address Prefix</p> <p>Default Route</p> <p>Router Advertisement</p> <p>DNS</p>	<p>Enable IPv6: Enables IPv6 function. Manually configures IPv6 address, Address prefix, Default route, and DNS server address.</p> <p>Router Advertisement: Enables Router Advertisement</p>

QoS		
<b>QoS</b> <input type="checkbox"/> QoS Enable QoS Video (0-63) <input type="text" value="34"/> <input type="button" value="Set"/> Management DSCP (0-63) <input type="text" value="0"/> <input type="button" value="Set"/>	QoS Enable	Enables quality of service.
	QoS Video	Sets DSCP value for video traffic.
	Management DSCP	Sets DSCP value for non-video traffic.
UPnP		
<b>UPnP</b> <input checked="" type="checkbox"/> Enable UPnP	Enable UPnP	Enables Universal Plug and Play function.
RTSP		
<b>Channel</b> Select channel: <input type="text" value="1"/>	Select channel	Select the desired channel to change RTSP settings
<b>Unicast</b> Port: <input type="text" value="554"/> (554, 1025-65535) <input checked="" type="checkbox"/> Enable RTSP Unicast Stream1 <input type="checkbox"/> Enable RTSP Stream1 Metadata Path1 : <input type="text" value="stream1"/> Link for external media players : <input type="text" value="rtsp://10.10.2.100:554/stream1"/> <input checked="" type="checkbox"/> Enable RTSP Unicast Stream2 <input type="checkbox"/> Enable RTSP Stream2 Metadata Path2 : <input type="text" value="stream2"/> Link for external media players : <input type="text" value="rtsp://10.10.2.100:554/stream2"/> <input checked="" type="checkbox"/> Enable RTSP Unicast Stream3 <input type="checkbox"/> Enable RTSP Stream3 Metadata Path3 : <input type="text" value="stream3"/> Link for external media players : <input type="text" value="rtsp://10.10.2.100:554/stream3"/>	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
<b>Multicast Stream1</b> <input checked="" type="checkbox"/> Enable RTSP Multicast Stream <input type="checkbox"/> Always Multicast Video IP : <input type="text" value="225.168.138.131"/> Video Port : <input type="text" value="5000"/> (1025-65535) Audio IP : <input type="text" value="226.168.138.131"/> Audio Port : <input type="text" value="5002"/> (1025-65535) Meta IP : <input type="text" value="227.168.138.131"/> Meta Port : <input type="text" value="5004"/> (1025-65535) Path : <input type="text" value="stream1m_1"/> TTL : <input type="text" value="255"/> (1-255)	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 streaming 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.
	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.

DDNS		
<p><b>DDNS</b></p> <p><input type="checkbox"/> Enable DDNS</p> <p>Host Name : <input type="text" value="ipcamera"/></p> <p>DDNS Server : <input type="text" value="DynDNS"/></p> <p>User Name : <input type="text"/></p> <p>Password : <input type="text"/></p> <p>Password Confirmation : <input type="text"/></p>	Enable DDNS	Enables DDNS service
	Host Name	Specifies the Host name registered with the DDNS server
	DDNS Server	Selects one of the public DDNS servers from the dropdown menu. Options are DynDNS, NO-IP, and Two-DNS.
	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.
	SNMP	
<p><b>SNMP</b></p> <p><input checked="" type="radio"/> No SNMP Server</p> <p><input type="radio"/> SNMP V2c</p> <p>Public Community String : <input type="text" value="public"/></p> <p>Private Community String : <input type="text" value="private"/></p> <p><b>Trap Configuration</b></p> <p>Address : <input type="text" value="192.168.1.200"/></p> <p>Community String : <input type="text" value="public"/></p> <p><input type="radio"/> SNMP v3</p> <p>SNMP User : <input type="text" value="initial"/></p> <p>Authentication : <input type="text" value="None"/></p> <p>Privacy : <input type="text" value="None"/></p> <p><b>Trap Configuration</b></p> <p>Address : <input type="text" value="192.168.1.200"/></p> <p><input type="button" value="Download MIB"/></p>	No SNMP Server	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	Selects one of the Authentication modes from the dropdown menu. Options are None, MD5, and SHA. Specifies the Password for the Authentication.
	Privacy Password	Selects one of the encryption methods for SNMP v3 from the dropdown menu. Options are DES and AES. Specifies the Password for the encryption.
	Trap Configuration: Address	Specifies the destination IP address to send SNMP trap messages.
	Download MIB	Clicks to download MIB file for SNMP.

SSL		
<p><b>SSL</b></p> <p>Mode : <input checked="" type="radio"/> Disabled <input type="radio"/> Optional            Certificate : No certificate has been installed.</p> <p>Action : <input type="button" value="Install New Certificate"/></p> <p>Key PEM file : <input type="button" value="Browse..."/> No file selected. <input type="button" value="Upload"/></p> <p>Certificate PEM file : <input type="button" value="Browse..."/> No file selected. <input type="button" value="Upload"/></p>	Mode	Disabled: Support for HTTP only. Optional: Support for HTTP and HTTPs both.
	Certificate	Shows the current status of the Certificate
	Action Install New Certificate Key PEM file Certificate PEM file	<ol style="list-style-type: none"> <li>1. Locate Key PEM file and Certificate PEM file and click Upload.</li> <li>2. Click Install New Certificate to upload the Certificate.</li> </ol>
FTP		
<p><b>FTP Server</b></p> <p><input type="checkbox"/> Enable</p> <p>User name : adminftp</p> <p>Password : <input type="password" value="...."/></p> <p>Confirm : <input type="password" value="...."/></p> <p>Max. Connection (1~10) : <input type="text" value="10"/></p>	Enable	Enables FTP access to the camera. <b>NOTE:</b> This function is only available when a SD card is installed. You can access files in the SD card via FTP.
	Password Confirm	Specifies and confirms the password to access the FTP.
	Max. Connection	Specifies the maximum number of FTP connections to the IP camera.
802.1x		
<p><b>802.1x</b></p> <p>Protocol : <input type="text" value="NONE"/></p>	Protocol	<p>The default is <b>None</b> to disable 802.1x functions. You can select one of the protocol options from the dropdown menu. The supported protocols are EAP-MD5, EAP-TLS, EAP-TTLS or EAP-PEAP.</p> <p>After the protocol has been selected, manually configure the username, password, and other required information.</p>

LDAP		
<p><b>LDAP</b></p> <p><input type="checkbox"/> Enable LDAP</p> <p>Server : <input type="text"/></p> <p>Port : <input type="text" value="389"/> (389, 1025-65535)</p> <p>Base dn : <input type="text" value="dc=ipcamera,dc=com"/></p> <p>Bind dn template : <input type="text" value="cn=%u,ou=people,dc=ipcamera,dc=com"/></p> <p>Search dn template : <input type="text" value="cn=%u"/></p> <p>Administrator : <input type="text" value="cn=admin,ou=groups,dc=ipcamera,dc=com"/></p> <p>Viewer : <input type="text" value="cn=user,ou=groups,dc=ipcamera,dc=com"/></p>	Enable LDAP	Enables LDAP service.
	Server	Specifies the IP address of the LDAP server.
	Port	Specifies the port address of the LDAP server. Default port is 389.
	Base dn	Specifies the starting point an LDAP server uses when searching for user's authentication within the Directory.
	Bind dn template	Identifies the username that will be used to do the searching and request the authentication
	Search dn template	Defines at which node the search originates
	Administrator	Specifies the administrator
	Viewer	Specifies the viewer user

## Privacy Mask

AVCOSTAR™

AV32576RSIR  
 Firmware: 65431.11  
 MAC: 00-1a-07-1a-93-95  
 PoE++

Presets
Focus/PTZ
Image
Video & Audio
Network
Privacy Mask
Event
Video Analytics
System
Administration
Support

Menu	Feature	Description
<div style="border: 1px solid gray; padding: 10px;"> <p><b>Privacy Mask</b> <span style="float: right; border: 1px solid gray; padding: 2px 5px;">Exit</span></p> <p>Enable privacy mask <input type="checkbox"/></p> <p>Select channel # <span style="border: 1px solid gray; padding: 2px 5px;">1</span></p> <p>Drag mouse to <input checked="" type="radio"/> Mask <input type="radio"/> Unmask</p> <p style="font-size: 0.8em; color: blue;"><i>*Note: It might take a few seconds for a privacy mask to show on the video stream.</i></p> </div>	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: Mask Unmask	Select <b>Mask</b> to add privacy masks or select <b>Unmask</b> to remove privacy masks.



Event



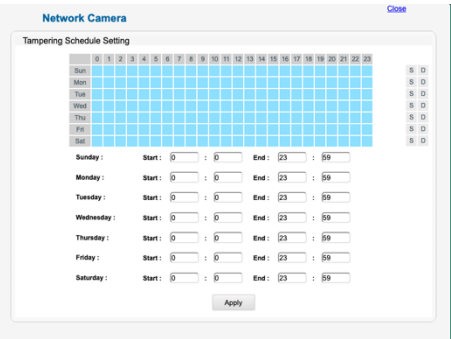
AV32576RSIR  
Firmware: 65431.11  
MAC: 00-1a-07-1a-93-95  
PoE++

Presets Focus/PTZ Image Video & Audio Network Privacy Mask **Event** Video Analytics System Administration Support

Menu	Feature	Description
Motion Detection		
<div style="border: 1px solid gray; padding: 5px;"> <p><b>Motion Detection</b> <span style="float: right;">Exit</span></p> <p><input checked="" type="checkbox"/> Enable motion detection  <input type="checkbox"/> Enable extended motion detection</p> <p>Select channel <span style="border: 1px solid gray; padding: 2px;">1</span> ▾</p> <p>Zone Size (15..15) <span style="border: 1px solid gray; padding: 2px;">15</span> <span style="float: right;">Set</span></p> <p>Object Size Sensitivity (1..225) <span style="border: 1px solid gray; padding: 2px;">2</span> <span style="float: right;">Set</span></p> <p>Movement Duration Factor (2..31) <span style="border: 1px solid gray; padding: 2px;">15</span> <span style="float: right;">Set</span></p> <p>Motion Sensitivity (1..100) <span style="border: 1px solid gray; padding: 2px;">30</span> <span style="float: right;">Set</span></p> </div>	Enable motion detection	Turn on and off on-camera motion detection.
	Enable extended motion detection	Enables the extended motion detection and motion detection zones with an 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 where the number of sub zones is set by setting the zone size 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, and 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, and "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.

Alarm Handler

<p><b>Alarm Handler</b></p> <p><input checked="" type="checkbox"/> Enable Alarm Detection</p> <p>Alarm Schedule</p>	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. Alternatively, you can manually enter the numbers to configure the hours and minutes for the “start” and “end” of the day.</p> <p><b>S:</b> Click “S” to set up a 24-hour schedule on a particular day.</p> <p><b>D:</b> Click “D” to clear the previous schedule on a particular day.</p>
Digital I/O		
<p><b>Digital I/O</b></p> <p><input type="checkbox"/> Trigger Alarm Detection</p> <p><input type="checkbox"/> Trigger Motion Detection</p> <p><input type="checkbox"/> Trigger Tamper Detection</p> <p><input type="checkbox"/> Trigger Video Analytics</p> <p><input type="checkbox"/> Trigger Network Failure</p> <p>Type <input style="width: 50px;" type="text" value="N.O."/></p> <p>Off Time <input style="width: 50px;" type="text" value="0"/> (0~30s)</p>	Trigger Alarm Detection	When a signal is detected from Alarm in the Alarm out will be triggered.
	Trigger Motion Detection	When a motion event is detected the Alarm out will be triggered.
	Trigger Tamper Detection	When a tamper event is detected, the Alarm out will be triggered.
	Trigger Video Analytics	When a video analytics 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 (Normally Open) or N.C. (Normally Closed)
	Off Time	Specifies the alarm duration

Tamper Detection		
<p><b>Tampering Detection</b></p> <p>Select channel: <input type="text" value="1"/></p> <p><input checked="" type="checkbox"/> Enable Tampering Detection</p> <p><b>Tampering Schedule</b></p> <p>Sensitivity: <input type="text" value="Medium"/></p>	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 for 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. Alternatively, you can manually enter the numbers to configure the hours and minutes for the “start” and “end” of the day.</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 Tamper Detection: <b>High, Medium, and Low.</b>
Network Failure		
<p><b>Network Failure</b></p> <p><input type="checkbox"/> Enable Network Failure</p>	Enable Network Failure	Enable network failure detection.
SD Card		
<p><b>SD Record Handler</b></p> <p><input type="checkbox"/> Enable</p> <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 Video Analytics</li> <li><input type="radio"/> Trigger Network Failure</li> <li><input type="radio"/> Manual Record</li> </ul>	SD Record Handler Enable	Enables and selects a desired trigger source. The options are Trigger Alarm Detection, Trigger Motion Detection, Trigger Tampering Alarm, Trigger Video Analytics, Trigger Network Failure, and Manual Record.

<p><b>SD Card Information</b></p> <p>Available Storage : 0 MBytes <span>Format SD Card</span></p> <p>Usage : 0% ( 0 / 0 MBytes)</p> <p>Status : not_mounted</p> <p>Overwrite when storage full : <input checked="" type="checkbox"/></p> <p>Record Type : <span>Video</span></p>	<p>SD Card Information</p> <p>Available Storage</p> <p>Format SD Card</p> <p>Usage</p> <p>Status</p> <p>Overwrite when storage full</p> <p>Record Type</p>	<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>
<p><b>FTP Upload</b></p>		
<p><b>FTP Upload Handler</b></p> <p><input type="checkbox"/> Enable Trigger Event</p> <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 Video Analytics</li> <li><input type="radio"/> Trigger Scheduled</li> </ul>	<p>FTP Upload Handler</p> <p>Enable Trigger Event</p>	<p>Enables and selects a desired trigger source. The options are Trigger Alarm Detection, Trigger Motion Detection, Trigger Tampering Alarm, Trigger Video Analytics, and Trigger Scheduled.</p>
<p><b>Remote Server</b></p> <p>Host Address : <input type="text"/></p> <p>Port : <input type="text" value="21"/> (21, 1025-65535)</p> <p>Username : <input type="text"/></p> <p>Password : <input type="password"/></p>	<p>Remote Server</p> <p>Host Address</p> <p>Port</p> <p>Username</p> <p>Password</p>	<p><b>Host Address:</b> Specifies the host name or IP address of the FTP server.</p> <p><b>Port:</b> Specifies the port number of the FTP server.</p> <p><b>Username:</b> Specifies the login username of the FTP server.</p> <p><b>Password:</b> Specifies the login password of the FTP server.</p>
<p><b>SMTP Notification</b></p>		
<p><b>SMTP Notification Handler</b></p> <p>From : <input type="text"/></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Trigger Alarm Detection</li> <li><input type="checkbox"/> Trigger Motion Detection</li> <li><input type="checkbox"/> Trigger Tampering Alarm</li> <li><input type="checkbox"/> Trigger Video Analytics</li> </ul>	<p>SMTP Notification Handler</p>	<p><b>From:</b> Specifies the email address of the sender</p> <p>Select a desired trigger source. The options are Trigger Alarm Detection, Trigger Motion Detection, Trigger Tampering Alarm, and Trigger Video Analytics.</p>

<p><b>SMTP Server</b></p> <p>Host Address : <input type="text"/></p> <p>Port : <input type="text" value="25"/> (1-65535)</p> <p>Username : <input type="text"/></p> <p>Password : <input type="password"/></p> <p>Authentication : <input type="text" value="NO_AUTH"/></p>	<p>SMTP Server Host Address Port Username Password Authentication</p>	<p><b>Host Address:</b> Specifies the host name or IP address of the SMTP server.</p> <p><b>Port:</b> Specifies the port number of the SMTP server.</p> <p><b>Username:</b> Specifies the login username of the SMTP server.</p> <p><b>Password:</b> Specifies the login password of the SMTP server.</p> <p><b>Authentication:</b> Specifies the authentication mode of the SMTP sever. The options are NO_AUTH, SMTP_PLAIN, LOGIN and TLS_TTLS.</p>																																																																													
<p><b>Recipient List</b></p> <table border="1"> <thead> <tr> <th>Enable</th> <th>No</th> <th>Email</th> <th>Alarm</th> <th>Motion</th> <th>Tampering</th> <th>Analytics</th> </tr> </thead> <tbody> <tr><td><input type="checkbox"/></td><td>1</td><td><input type="text"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td>2</td><td><input type="text"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td>3</td><td><input type="text"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td>4</td><td><input type="text"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td>5</td><td><input type="text"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td>6</td><td><input type="text"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td>7</td><td><input type="text"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td>8</td><td><input type="text"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td>9</td><td><input type="text"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td>10</td><td><input type="text"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> </tbody> </table>	Enable	No	Email	Alarm	Motion	Tampering	Analytics	<input type="checkbox"/>	1	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Recipient List</p>	<p>Specifies the email addresses to send the email notification when selected events are triggered by Alarm, Motion, or Tamper. A maximum of 10 email addresses can be configured.</p>
Enable	No	Email	Alarm	Motion	Tampering	Analytics																																																																									
<input type="checkbox"/>	1	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																									
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<p><b>Network Storage</b></p>																																																																															
<p><b>Network Storage Handler</b></p> <p><input type="checkbox"/> Enable Trigger Event</p> <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 Video Analytics</li> <li><input type="radio"/> Trigger Scheduled</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, Trigger Video Analytics, and Trigger Scheduled.</p>																																																																													
<p><b>Recipient Setup</b></p> <p>Network Storage Status : <input type="text" value="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>Recipient Setup Network Storage Status Network Address Folder Name Record Type</p>	<p><b>Network Storage Status:</b> Displays the current status of the connection with the network storage server. (Status will display “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>																																																																													

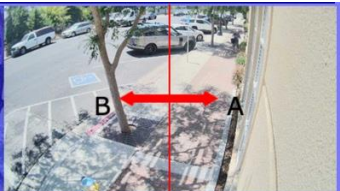
<p><b>Login Certificate</b></p> <p>Username : <input type="text"/></p> <p>Password : <input type="password"/></p>	Login Certificate	Specifies the login Username and Password for the network storage sever.
<p><b>Mount and Remove Network Storage</b></p> <p><input type="button" value="Mount"/> <input type="button" value="Remove"/></p>	Mount and Remove Network Storage	<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>

# Video Analytics



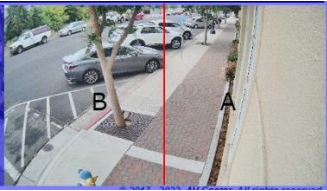
AV32576RSIR  
 Firmware: 65431.11  
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Presets
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Event
Video Analytics
System
Administration
Support

Menu	Feature	Description
Analytics Settings		
<div style="border: 1px solid gray; padding: 5px;"> <p><b>Analytics Settings</b></p> <p>Camera Number: 1</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Enable Analytics</li> <li><input type="checkbox"/> Line Crossing</li> <li><input type="checkbox"/> Loitering</li> <li><input type="checkbox"/> Camera Tamper</li> <li><input type="checkbox"/> Intrusion Detection</li> <li><input type="checkbox"/> Person/Vehicle Counting</li> <li><input type="checkbox"/> Object Left/Removed</li> </ul> </div>	<p>Camera Number</p> <hr/> <p>Enable Analytics Line Crossing Loitering Camera Tamper Intrusion Detection Person/Vehicle Counting Object Left/Removed</p>	<p>Indicates which camera sensor is currently being configured. A blue outline is also placed around the current camera sensor. To select a different camera sensor, click on the desired camera preview.</p> <hr/> <p>Enables and selects a desired Analytic function. The options are Line Crossing, Loitering, Camera Tamper, Intrusion Detection, Person/Vehicle Counting,* Object Left/Removed.*</p> <p><b>Line Crossing:</b> Detects objects that cross a virtual line.</p> <p><b>Loitering:</b> Detects objects that remain in a user-specified area beyond a specified time.</p> <p><b>Camera Tamper:</b> Detects attempts to partially or completely block the lens or field of view, or drastic changes to the camera angle.</p> <p><b>Intrusion Detection:</b> Detects objects that move into a user specified area.</p> <p><b>Person/Vehicle Counting*:</b> Performs a continuous, multidirectional count of people, vehicles, or all objects.</p> <p><b>Object Left/Removed*:</b> Continuously monitors a specified area to detect objects that have been left/removed.</p> <p><small>* Optional Advanced License Required</small></p>

<p><b>Basic Settings</b></p> <p>Camera Position: <span style="border: 1px solid gray; padding: 2px;">Angled View</span> ▼</p> <p>Sensitivity: <input type="text" value="80"/> (0-100)          *A higher value will detect more motion/movements.</p> <p><input checked="" type="checkbox"/> Display Bounding Boxes</p> <p><input checked="" type="checkbox"/> Trigger Video Motion Detection Event</p> <p><input type="checkbox"/> Block Standard Motion Detection Data</p> <p><small>*If checked, the client(VMS) will only receive the Analytic events as motion detection events.</small></p>	<p>Basic Settings</p> <p>Camera Position</p>	<p>When selecting the correct position for analytics care should be taken to avoid the following:</p> <ol style="list-style-type: none"> <li>1. Objects that are too small (&lt;10% of the image).</li> <li>2. Objects that are too large (&gt;40% of the image).</li> <li>3. Objects that can be hidden from view.</li> </ol> <p><b>Angled View:</b> Typically used for wall or corner mounts looking down. Useful for general intrusion.</p> <p><b>Top Down View:</b> Typically used for vertical ceiling mounts. Primarily used for line crossing or directional movement.</p> <p><b>Horizontal View:</b> Typically used for horizontal wall mounts at a lower height. It is not recommended for most situations since objects can be hidden from view.</p>
<p><b>Line Crossing Settings</b></p> <p>*Left click and drag to set a line.</p> <p>Object Type:</p> <p><input type="radio"/> Person</p> <p><input type="radio"/> Vehicle</p> <p><input checked="" type="radio"/> All Objects</p> <p><input checked="" type="checkbox"/> Crossing Detection</p> <p><input type="radio"/> A → B</p> <p><input type="radio"/> B → A</p> <p><input checked="" type="radio"/> A ↔ B</p> 	<p>Line Crossing Settings</p> <p>Object Type</p> <p>Person</p> <p>Vehicle</p> <p>All Objects</p> <p>Crossing Detection</p> <p>A → B</p> <p>A ← B</p> <p>A ↔ B</p>	<ol style="list-style-type: none"> <li>1. Left click and drag a line on the live video.</li> <li>2. Select a desired Object Type* to trigger events. The options are Person, Vehicle and All Objects.</li> <li>3. Select a desired crossing direction to trigger events. The options are A → B, A ← B, A ↔ B.</li> <li>4. Click Apply.</li> </ol> <p><small>* Optional Advanced License Required</small></p>



<p><b>Loitering Settings</b>          *Left click and drag to set a specified area.          *Right click and drag to erase a specified area.          *5 Seconds is the lowest time allowed for trigger</p> <p>Minimum Loitering Time(Sec): <input type="text" value="5"/></p> 	<p>Loitering Settings          Minimum Loitering Time (Sec)</p>	<ol style="list-style-type: none"> <li>Left click and drag to draw a virtual area.</li> <li>Right click and drag to erase a virtual area.</li> <li>Specify the amount of time an object must be in the area to trigger the event.</li> </ol> <p>Click Apply.</p>
<p><b>Camera Tamper Settings</b>  <input type="checkbox"/> Triggered by Light Changes          Sensitivity: <input type="text" value="60"/> (0-100)</p>	<p>Camera Tamper Settings          Triggered by Light Changes</p>	<p>If enabled, lights turning on/off will be treated as a tamper event.</p>
<p>Sensitivity</p>	<p>Sensitivity</p>	<p>Sets the sensitivity to detect the tamper event due to the sudden changes in the image.</p>
<p><b>Intrusion Detection Settings</b>          *Left click and drag to set a specified area.          *Right click and drag to erase a specified area.          Object Type:  <input type="radio"/> Person  <input type="radio"/> Vehicle  <input checked="" type="radio"/> All Objects</p> 	<p>Intrusion Detection Settings          Object Type:          Person          Vehicle          All Objects</p>	<ol style="list-style-type: none"> <li>Left click and drag to draw a virtual area.</li> <li>Right click and drag to erase a virtual area.</li> <li>Select a desired Object Type* to trigger events. The options are Person, Vehicle and All Objects.</li> <li>Click Apply.</li> </ol> <p>* Optional Advanced License Required</p>
<p><b>Person/Vehicle Counting Settings</b>          *Left click and drag to set a line.          *Count incoming and outgoing objects that cross a specified line.          Object Type:  <input type="radio"/> Person  <input type="radio"/> Vehicle  <input checked="" type="radio"/> All Objects          Event Count:          A -&gt; B: <input type="text" value="0"/>          B -&gt; A: <input type="text" value="0"/>  <input checked="" type="checkbox"/> Trigger event if count is greater than:          A -&gt; B: <input type="text" value="0"/>          B -&gt; A: <input type="text" value="0"/>  <input checked="" type="checkbox"/> Reset Event Count  <input type="radio"/> Every Day  <input type="radio"/> Every Week  <input checked="" type="radio"/> Every Month  <input type="text" value="1"/> day <input type="text" value="Monday"/>  <input type="text" value="0"/> hour <input type="text" value="0"/> min  <input type="button" value="Reset Event Count"/></p> 	<p>Person/Vehicle Counting Settings          Object Type:          Person          Vehicle          All Objects          Event Count:          A -&gt; B          B -&gt; A          Trigger event if count is greater than:          A -&gt; B          B -&gt; A          Reset Event Count          Every Day          Every Week          Every Month</p>	<ol style="list-style-type: none"> <li>Left click and drag to draw a virtual area.</li> <li>Right click and drag to erase a virtual area.</li> <li>Select the Object Type* that will trigger the analytic.</li> <li>Select an object crossing direction count to trigger events. An event will be created when the counts for A -&gt; B or A &lt;- B reach a count greater than the number entered in the field.</li> <li>Choose whether or not to Reset Event Count. When checked, the Event Count will be reset at the selected interval.</li> <li>Click Apply</li> </ol> <p>* Optional Advanced License Required</p>

<p><b>Object Left/Removed Settings</b>          *Left click and drag to set a specified area.          *Right click and drag to erase a specified area.          *The event will be triggered once the object left or removed for more than 10 seconds.          *Suggest to change the pre-motion recording setting of VMS to more than 10 seconds.</p> <p><input type="checkbox"/> Enable Object Left  <input type="checkbox"/> Enable Object Removed</p>	<p>Object Left/Removed Settings          Enable Object Left          Enable Object Removed</p>	<ol style="list-style-type: none"> <li>1. Left click and drag to draw a virtual area.</li> <li>2. Right click and drag to erase a virtual area.</li> <li>3. Select Enable Object Left or/and Enable Object Removed.</li> <li>4. Click Apply</li> </ol>
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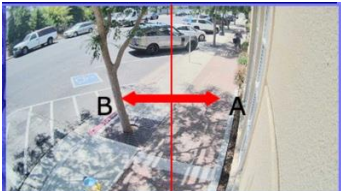




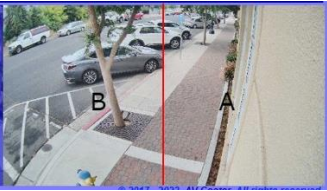
**Object Calibration**


<p><b>Object Calibration</b>          Camera Number: 1</p> <p><input type="checkbox"/> Stop Live Video</p> <p><b>Object Type:</b></p> <p><input type="checkbox"/> Enable Object Size Setting</p> <p><input type="radio"/> Person  <input type="radio"/> Minimum    <input type="radio"/> Maximum</p> <p><input type="radio"/> Vehicle  <input type="radio"/> Minimum    <input type="radio"/> Maximum</p> <p><input type="radio"/> All Objects  <input type="radio"/> Minimum    <input type="radio"/> Maximum</p> <p>*Left click and drag to set an object size.          *Height Max / Width Max values must be larger than minimum values.</p> <p><input type="button" value="Apply"/></p> <table border="1"> <thead> <tr> <th>Type</th> <th>Width Min (%)</th> <th>Height Min (%)</th> <th>Width Max (%)</th> <th>Height Max (%)</th> </tr> </thead> <tbody> <tr> <td>Person</td> <td>5</td> <td>5</td> <td>85</td> <td>85</td> </tr> <tr> <td>Vehicle</td> <td>5</td> <td>5</td> <td>85</td> <td>85</td> </tr> <tr> <td>All</td> <td>5</td> <td>5</td> <td>85</td> <td>85</td> </tr> </tbody> </table>	Type	Width Min (%)	Height Min (%)	Width Max (%)	Height Max (%)	Person	5	5	85	85	Vehicle	5	5	85	85	All	5	5	85	85	<p>Stop Live Video          Object Type          Enable Object Size Setting          Person          Vehicle          All Objects</p>	<p>Click Stop Live Video to perform object calibration.          Enable Object Size Setting to start object calibration.</p> <ol style="list-style-type: none"> <li>1. Select Minimum to specify the minimum object size of the target.</li> <li>2. Left click and drag to set the object size.</li> <li>3. Select Maximum to specify the maximum object size of the target.</li> <li>4. Left click and drag to set the object size.</li> <li>5. Click Apply</li> </ol> <p><b>NOTE:</b> It is recommended to set minimum object size to half the width and height of the average object and maximum object size to ~130% the width and height of the average object.</p>
Type	Width Min (%)	Height Min (%)	Width Max (%)	Height Max (%)																		
Person	5	5	85	85																		
Vehicle	5	5	85	85																		
All	5	5	85	85																		

**Event List**

<p><b>Event List</b></p> <p><input type="checkbox"/> Stop Refreshing Event List</p> <p><b>Display Event Types</b></p> <p><input checked="" type="checkbox"/> Line Crossing  <input checked="" type="checkbox"/> Loitering  <input checked="" type="checkbox"/> Camera Tamper  <input checked="" type="checkbox"/> Intrusion Detection  <input type="checkbox"/> Person/Vehicle Counting  <input type="checkbox"/> Object Left/Removed</p> <p><b>Date Time</b></p> <p>2018 / 1 / 1 0 : 0 : 0          ~ 2023 / 5 / 15 13 : 30 : 50</p> <p><input type="button" value="Display"/> <input type="button" value="Export"/></p> <p><input type="button" value="Reset Event List"/></p>	<p>Event List          Stop Refreshing Event List          Display Event Types          Date Time          Reset Event List</p>	<p>Click Stop Refreshing Event list to pause new events from being displayed.</p> <ol style="list-style-type: none"> <li>1. Select desired event type under Display Event Types. The options are Line Crossing, Loitering, Camera Tamper, Intrusion Detection, Person/Vehicle Counting*, Object Left/Removed*.</li> <li>2. Specify a start time and end time for events you want to search for in Date Time fields.</li> <li>3. Click the Display button.</li> </ol> <p>Click Reset Event List button to reset the current event list.</p> <p>* Optional Advanced License Required</p>
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<p><b>Basic Settings</b></p> <p>Camera Position: <span style="float: right;">Angled View ▾</span></p> <p>Sensitivity: <input type="text" value="80"/> (0-100)          *A higher value will detect more motion/movements.</p> <p><input checked="" type="checkbox"/> Display Bounding Boxes</p> <p><input checked="" type="checkbox"/> Trigger Video Motion Detection Event</p> <p><input type="checkbox"/> Block Standard Motion Detection Data</p> <p><small>*If checked, the client(VMS) will only receive the Analytic events as motion detection events.</small></p>	<p>Basic Settings</p> <p>Camera Position</p>	<p>When selecting the correct position for analytics care should be taken to avoid the following:</p> <ol style="list-style-type: none"> <li>1. Objects that are too small (&lt;10% of the image).</li> <li>2. Objects that are too large (&gt;40% of the image).</li> <li>3. Objects that can be hidden from view.</li> </ol> <p><b>Angled View:</b> Typically used for wall or corner mounts looking down. Useful for general intrusion.</p> <p><b>Top Down View:</b> Typically used for vertical ceiling mounts. Primarily used for line crossing or directional movement.</p> <p><b>Horizontal View:</b> Typically used for horizontal wall mounts at a lower height. It is not recommended for most situations since objects can be hidden from view.</p>
<p><b>Line Crossing Settings</b></p> <p>*Left click and drag to set a line.</p> <p>Object Type:</p> <p><input type="radio"/> Person</p> <p><input type="radio"/> Vehicle</p> <p><input checked="" type="radio"/> All Objects</p> <p><input checked="" type="checkbox"/> Crossing Detection</p> <p><input type="radio"/> A → B</p> <p><input type="radio"/> B → A</p> <p><input checked="" type="radio"/> A ↔ B</p> 	<p>Line Crossing Settings</p> <p>Object Type</p> <p>Person</p> <p>Vehicle</p> <p>All Objects</p> <p>Crossing Detection</p> <p>A → B</p> <p>A ← B</p> <p>A ↔ B</p>	<ol style="list-style-type: none"> <li>1. Left click and drag a line on the live video.</li> <li>2. Select a desired Object Type* to trigger events. The options are Person, Vehicle and All Objects.</li> <li>3. Select a desired crossing direction to trigger events. The options are A → B, A ← B, A ↔ B.</li> <li>4. Click Apply.</li> </ol> <p>* Optional Advanced License Required</p>

<p><b>Loitering Settings</b>          *Left click and drag to set a specified area.          *Right click and drag to erase a specified area.          *5 Seconds is the lowest time allowed for trigger</p> <p>Minimum Loitering Time(Sec): <input type="text" value="5"/></p> 	<p>Loitering Settings          Minimum Loitering Time (Sec)</p>	<ol style="list-style-type: none"> <li>1. Left click and drag to draw a virtual area.</li> <li>2. Right click and drag to erase a virtual area.</li> <li>3. Specify the amount of time an object must be in the area to trigger the event.</li> </ol> <p>Click <b>Apply</b>.</p>
<p><b>Camera Tamper Settings</b>  <input type="checkbox"/> Triggered by Light Changes          Sensitivity: <input type="text" value="60"/> (0-100)</p>	<p>Camera Tamper Settings          Triggered by Light Changes</p>	<p>If enabled, lights turning on/off will be treated as a tamper event.</p>
<p>Sensitivity</p>	<p>Sensitivity</p>	<p>Sets the sensitivity to detect the tamper event due to the sudden changes in the image.</p>
<p><b>Intrusion Detection Settings</b>          *Left click and drag to set a specified area.          *Right click and drag to erase a specified area.          Object Type:  <input type="radio"/> Person  <input type="radio"/> Vehicle  <input checked="" type="radio"/> All Objects</p> 	<p>Intrusion Detection Settings          Object Type:          Person          Vehicle          All Objects</p>	<ol style="list-style-type: none"> <li>1. Left click and drag to draw a virtual area.</li> <li>2. Right click and drag to erase a virtual area.</li> <li>3. Select a desired Object Type* to trigger events. The options are Person, Vehicle and All Objects.</li> <li>4. Click Apply.</li> </ol> <p>* Optional Advanced License Required</p>
<p><b>Person/Vehicle Counting Settings</b>          *Left click and drag to set a line.          *Count incoming and outgoing objects that cross a specified line.          Object Type:  <input type="radio"/> Person  <input type="radio"/> Vehicle  <input checked="" type="radio"/> All Objects          Event Count:          A -&gt; B: <input type="text" value="0"/>          B -&gt; A: <input type="text" value="0"/>  <input checked="" type="checkbox"/> Trigger event if count is greater than:          A -&gt; B: <input type="text" value="0"/>          B -&gt; A: <input type="text" value="0"/>  <input checked="" type="checkbox"/> Reset Event Count  <input type="radio"/> Every Day  <input type="radio"/> Every Week  <input checked="" type="radio"/> Every Month  <input type="text" value="1"/> day <input type="text" value="Monday"/>  <input type="text" value="0"/> hour <input type="text" value="0"/> min  <input type="button" value="Reset Event Count"/></p> 	<p>Person/Vehicle Counting Settings          Object Type:          Person          Vehicle          All Objects          Event Count:          A -&gt; B          B -&gt; A          Trigger event if count is greater than:          A -&gt; B          B -&gt; A          Reset Event Count          Every Day          Every Week          Every Month</p>	<ol style="list-style-type: none"> <li>1. Left click and drag to draw a virtual area.</li> <li>2. Right click and drag to erase a virtual area.</li> <li>3. Select the Object Type* that will trigger the analytic.</li> <li>4. Select an object crossing direction count to trigger events. An event will be created when the counts for A -&gt; B or A &lt;- B reach a count greater than the number entered in the field.</li> <li>5. Choose whether or not to Reset Event Count. When checked, the Event Count will be reset at the selected interval.</li> <li>6. Click Apply</li> </ol> <p>* Optional Advanced License Required</p>

<p><b>Object Left/Removed Settings</b>          *Left click and drag to set a specified area.          *Right click and drag to erase a specified area.          *The event will be triggered once the object left or removed for more than 10 seconds.          *Suggest to change the pre-motion recording setting of VMS to more than 10 seconds.</p> <p><input type="checkbox"/> Enable Object Left  <input type="checkbox"/> Enable Object Removed</p> 	<p>Object Left/Removed Settings          Enable Object Left          Enable Object Removed</p>	<ol style="list-style-type: none"> <li>1. Left click and drag to draw a virtual area.</li> <li>2. Right click and drag to erase a virtual area.</li> <li>3. Select Enable Object Left or/and Enable Object Removed.</li> <li>4. Click Apply</li> </ol>
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<p><b>Object Calibration</b></p>																						
<p><b>Object Calibration</b>          Camera Number: 1</p> <p><input type="checkbox"/> Stop Live Video</p> <p><b>Object Type:</b></p> <p><input type="checkbox"/> Enable Object Size Setting</p> <p><input type="radio"/> Person  <input type="radio"/> Minimum      <input type="radio"/> Maximum</p> <p><input type="radio"/> Vehicle  <input type="radio"/> Minimum      <input type="radio"/> Maximum</p> <p><input type="radio"/> All Objects  <input type="radio"/> Minimum      <input type="radio"/> Maximum</p> <p>*Left click and drag to set an object size.          *Height Max / Width Max values must be larger than minimum values.</p> <p><input type="button" value="Apply"/></p> <table border="1" data-bbox="228 940 667 1035"> <thead> <tr> <th>Type</th> <th>Width Min (%)</th> <th>Height Min (%)</th> <th>Width Max (%)</th> <th>Height Max (%)</th> </tr> </thead> <tbody> <tr> <td>Person</td> <td>5</td> <td>5</td> <td>85</td> <td>85</td> </tr> <tr> <td>Vehicle</td> <td>5</td> <td>5</td> <td>85</td> <td>85</td> </tr> <tr> <td>All</td> <td>5</td> <td>5</td> <td>85</td> <td>85</td> </tr> </tbody> </table>	Type	Width Min (%)	Height Min (%)	Width Max (%)	Height Max (%)	Person	5	5	85	85	Vehicle	5	5	85	85	All	5	5	85	85	<p>Stop Live Video          Object Type          Enable Object Size Setting          Person          Vehicle          All Objects</p>	<p>Click Stop Live Video to perform object calibration.          Enable Object Size Setting to start object calibration.</p> <ol style="list-style-type: none"> <li>1. Select Minimum to specify the minimum object size of the target.</li> <li>2. Left click and drag to set the object size.</li> <li>3. Select Maximum to specify the maximum object size of the target.</li> <li>4. Left click and drag to set the object size.</li> <li>5. Click Apply</li> </ol> <p><b>NOTE:</b> It is recommended to set minimum object size to half the width and height of the average object and maximum object size to ~130% the width and height of the average object.</p>
Type	Width Min (%)	Height Min (%)	Width Max (%)	Height Max (%)																		
Person	5	5	85	85																		
Vehicle	5	5	85	85																		
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<p><b>Event List</b></p> <p><input type="checkbox"/> Stop Refreshing Event List</p> <p><b>Display Event Types</b></p> <p><input checked="" type="checkbox"/> Line Crossing  <input checked="" type="checkbox"/> Loitering  <input checked="" type="checkbox"/> Camera Tamper  <input checked="" type="checkbox"/> Intrusion Detection  <input type="checkbox"/> Person/Vehicle Counting  <input type="checkbox"/> Object Left/Removed</p> <p><b>Date Time</b></p> <p>2018 / 1 / 1 0 : 0 : 0          ~2023 / 5 / 15 13 : 30 : 50</p> <p><input type="button" value="Display"/> <input type="button" value="Export"/></p> <p><input type="button" value="Reset Event List"/></p>	<p>Event List          Stop Refreshing Event List          Display Event Types          Date Time          Reset Event List</p>	<p>Click Stop Refreshing Event list to pause new events from being displayed.</p> <ol style="list-style-type: none"> <li>1. Select desired event type under Display Event Types. The options are Line Crossing, Loitering, Camera Tamper, Intrusion Detection, Person/Vehicle Counting*, Object Left/Removed*.</li> <li>2. Specify a start time and end time for events you want to search for in Date Time fields.</li> <li>3. Click the Display button.</li> </ol> <p>Click Reset Event List button to reset the current event list.</p> <p>* Optional Advanced License Required</p>
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AV32576RSIR  
Firmware: 65431.11  
MAC: 00-1a-07-1a-93-95  
PoE++

Presets
Focus/PTZ
Image
Video & Audio
Network
Privacy Mask
Event
Video Analytics
System
Administration
Support

Menu	Feature	Description
Event List		
<p><b>Camera information</b></p> <p>Model Name: <input type="text" value="AV32576RSIR"/></p> <p>Firmware: <input type="text" value="65431.11"/></p> <p>MAC Address: <input type="text" value="00-1a-07-1a-93-95"/></p> <p>Serial Number: <input type="text" value="AVC22129012"/></p>	Camera information	Displays the information of the camera: Model Name, Firmware Version, MAC Address, and Serial Number.
<p><b>Camera Name</b></p> <p><input type="text" value="AV32576RSIR-95"/></p> <p><input type="button" value="Save"/></p>	Camera Name	Specifies a name for the camera. The maximum length is 32 characters.
<p><b>License</b></p> <p><input checked="" type="checkbox"/> Cam1      <b>Current License Version</b>  <input checked="" type="checkbox"/> Cam2      standard  <input checked="" type="checkbox"/> Cam3      standard  <input checked="" type="checkbox"/> Cam4      standard</p> <p>Update License: <input type="text"/></p> <p><input type="button" value="Apply"/></p>	License Current License Version Update License	Current License Version shows the license level: Standard or Advanced. Enter a license key then click Apply. <b>NOTE:</b> If you would like to upgrade to Advanced License, please contact the Technical Assistance Center (TAC) at +1.818.937.0700 and select option #1. Cameras with Advanced Licenses cannot be downgraded to Standard License.
<p><b>Firmware Upgrade</b></p> <p>Please select a file to update:  <input type="button" value="Browse..."/> No file selected.</p> <p><input type="button" value="Upgrade"/></p>	Firmware Upgrade	Click <b>Choose File</b> to choose the firmware upgrade file, then click <b>Upgrade</b> .
<p><b>Download Log</b></p> <p style="text-align: center;"><input type="button" value="Download"/></p>	Download Log	Records all the status information of the camera in list format. Downloads the log file to the computer as a text file. <b>NOTE:</b> The log file is protected by a password. Please contact with AV Costar technical support team.
<p><b>Power Detection</b></p> <p>Power Detection      <input type="radio"/> Auto      <input checked="" type="radio"/> Manual  Power Type            <input type="radio"/> 802.3at      <input checked="" type="radio"/> 802.3bt</p> <p><input type="button" value="Save"/></p> <p><small>NOTE: Switch 802.3at will cause IR led to be disabled.</small></p>	Power Detection Power Detection Power Type	Power Detection: Auto allows the camera to determine the Power Type by what is negotiated by the PoE interface. Manual allows the selection of the Power Type with 802.3at or 802.3bt. <b>NOTE:</b> Choosing 802.3at in Power Type will disable IR LED function.

<p><b>Configuration Management</b></p> <p>Importing:  <input type="button" value="Browse..."/> No file selected.</p> <p><input type="button" value="Import"/></p> <p>Exporting <input type="button" value="Export"/></p>	<p>Configuration Management          Importing          Exporting</p>	<p>Records all the configuration information of the camera except network settings.  <b>Importing:</b> Imports a Configuration file from other cameras.  <b>Exporting:</b> Exports a Configuration file from this camera.</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>	<p>Reboot the Camera          Restore Factory Default Settings Except Network Settings          Restore to Factory Default Settings</p>	<p><b>Reboot the Camera:</b> Reboots the camera.  <b>Restore Factory Default Settings Except Network Settings:</b> Restores all settings to factory default except the network settings.  <b>Restore to Factory Default Settings:</b> Restores all settings to factory default.</p>
<p><b>Date / Time</b></p> <p>Get Time from:  <input type="radio"/> NTP Server <input checked="" type="radio"/> Computer System</p> <p>Time Zone:  <input type="text" value="America"/> <input type="text" value="Los_Angeles"/></p> <p>NTP Server:  <input type="text" value="0.north-america.pool.ntp.org"/></p> <p><input type="button" value="Apply NTP Server Configuration"/> <input type="button" value="Update Time from the Computer"/></p> <p><small>* Select NTP Server option to synchronize time with the NTP server and enter server configuration.          * Select Computer System option to synchronize time with the computer system via camera web page.          * Set up appropriate gateway before configuring the NTP server.</small></p>	<p>Date/Time          Get Time from          NTP Server          Computer System</p>	<p><b>NTP Server:</b> Synchronizes the date/time information with defined NTP server. After setting up the desired Time zone and NTP Server, click Apply NTP Server Configuration.  <b>NOTE:</b> Please make sure to set up appropriate gateway before configuring the NTP server.  <b>Computer System:</b> Synchronizes the date/time information with current computer's date/time. Once this option is selected, click Update Time from the computer.</p>
	<p>Time Zone</p>	<p>Specifies the country / city of the time zone from the drop-down menu.</p>
	<p>NTP Server</p>	<p>Specifies the desired NTP server</p>

## Administration



AV32576RSIR  
 Firmware: 65431.11  
 MAC: 00-1a-07-1a-93-95  
 PoE++

Presets Focus/PTZ Image Video & Audio Network Privacy Mask Event Video Analytics System **Administration** Support

Menu	Feature	Description
<p><b>Administrator</b></p> <p>Username: admin</p> <p>Admin Password: [.....]</p> <p>Confirmation: [.....]</p> <p>Set Erase</p> <p><small>(Password requirements: Minimum 8 and maximum 16 characters and have at least one uppercase, one lowercase, one digit and one special character. It cannot use these special characters: # % &amp; ' " &lt; &gt; / [ ] { } _ ( ) = . + , and space)</small></p>	<p>Access Control</p> <p>Administrator Username</p> <p>Admin Password</p> <p>Confirmation</p> <p>Set/ Erase</p>	<p>Passwords can be 8-16 letters, digits and symbols, excluding the following symbols for passwords without encoding # % &amp; ' " &lt; &gt; / [ ] { } _ ( ) = . + ,</p> <p><b>Username:</b> The username of Administrator is admin and cannot be changed.</p> <p><b>Admin:</b> includes 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><b>NOTE:</b> If admin password was set but has been lost, it can be erased by AV IP Utility using the key file. Please contact AV Costar technical support to obtain the key file required to perform this function. Or, if the camera has a reset button, you can also reset it to Factory default to remove the password.</p>
<p><b>Viewer Management</b></p> <p>User List : [.....]</p> <p>Add Delete</p> <p>User Information</p> <p>User Viewer Name: [.....]</p> <p>User Viewer password: [.....]</p> <p>Confirmation: [.....]</p> <p>Access Level: <input type="radio"/> Admin <input type="radio"/> Viewer</p> <p>Set Erase</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>Set/ Erase</p>	<p><b>User List:</b> Displays current user accounts created on the camera. Clicks New User/ Delete User to create or remove a user account.</p> <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: Admin or Viewer.</p> <p><b>Set/ Erase:</b> Saves or removes the password.</p>



Support



AV32576RSIR  
 Firmware: 65431.11  
 MAC: 00-1a-07-1a-93-95  
 PoE++

**Presets Focus/PTZ Image Video & Audio Network Privacy Mask Event Video Analytics System Administration Support**

Menu	Feature	Description
<p><b>Support</b></p> <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>	<p>Support</p>	<p>Provides several hyperlinks to get more information on the camera.</p>



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