



# ConteralIP<sup>®</sup> Outdoor Dome

## Installation Manual

1080p

AV02CLD-200

5MP

AV05CLD-200

**AV** COSTAR

# Table of Contents

About Our Warranty .....	3
Global (3 Year) Limited Warranty .....	3
Camera Overview.....	4
Package Contents.....	5
Installation.....	7
Accessories.....	9
Camera Power Up.....	10
Alarm I/O Functions.....	11
Audio .....	11
Reset to Factory Default.....	12
Camera Discovery, Setup, and Configuration.....	13
Camera Discovery .....	13
Web Interface Navigation .....	14
Zoom and Focus.....	16
Image.....	17
Video & Audio .....	22
Network .....	25
Privacy Mask.....	30
Event.....	31
System Options.....	36
Administration .....	37
About.....	39
Support.....	39

## 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. 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.

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# ConteralIP Outdoor Dome Megapixel Cameras

## Camera Overview

The ConteralIP® Outdoor Dome megapixel camera features 1080p and 5-megapixel (MP) resolution for optimum performance. The ConteralIP Outdoor Dome combines a day/night mechanical IR cut filter with an integrated motorized remote focus and zoom precision iris (P-iris) lens for excellent, optimal image quality.

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

For clear color images in low-light, NightView™ offers strong low-light sensitivity for capturing details in extremely poor-lit scenes. Built-in Smart IR LED illumination automatically adjusts output in response to the distance of an object in view to prevent over-exposure when the object is very close to the camera. AV Costar was the first to bring H.264 to the mainstream market and recently developed SNAPstream™ (Smart Noise Adaptation and Processing) technology for reducing bandwidth without impacting image quality. Today we are proud to offer our next generation H.265 with SNAPstream+™ smart codec capable of delivering high quality video while saving over 50% of the data rate to reduce or prevent strain on the network.

The MicroSDXC card slot supports up to 1TB of storage capacity for convenient onboard storage. The camera's power can be supplied via a Power-over-Ethernet (PoE - IEEE 802.3af) compliant network cable connection. The ConteralIP Outdoor Dome is IP66 rated for both indoor and outdoor applications. All models feature an impact resistant cast-aluminum housing.

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

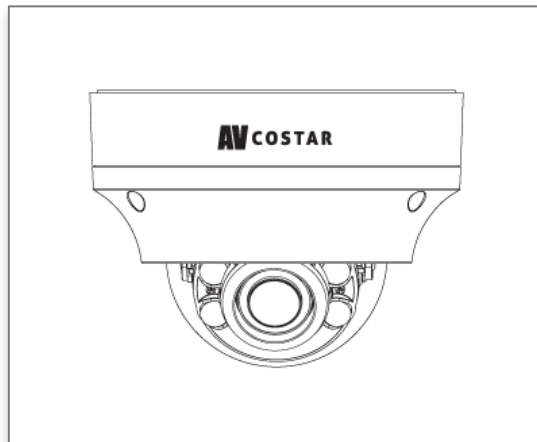
**CAUTION!**

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

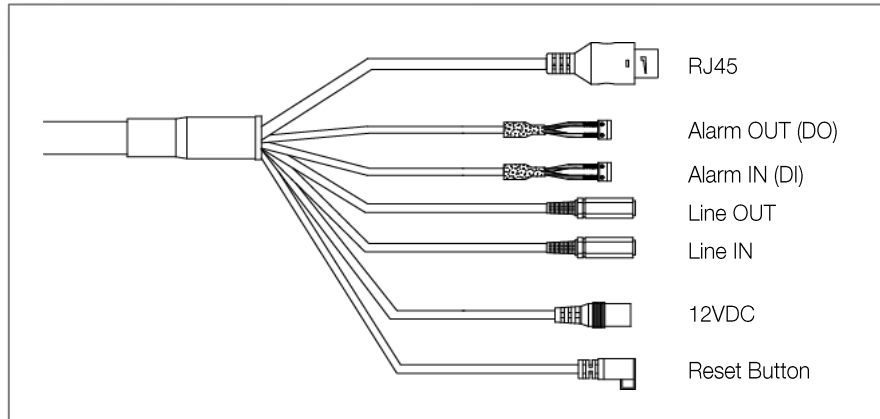
## Package Contents

Description	QTY
AV02CLD-200/ AV05CLD-200 IP camera	1
Mounting Template	1
Accessory Pack	1

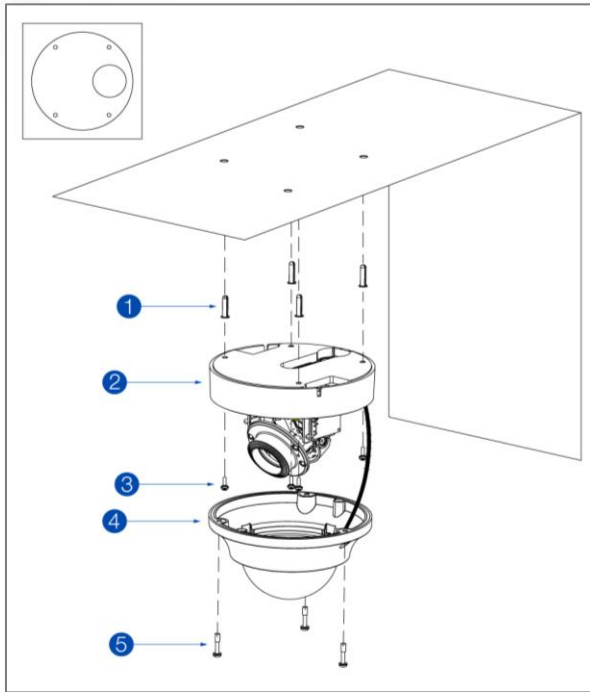
- AV02CLD-200/ AV05CLD-200



- Cables

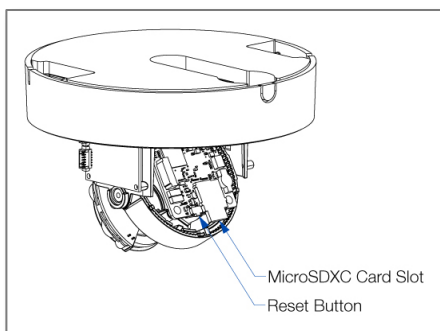


# Installation

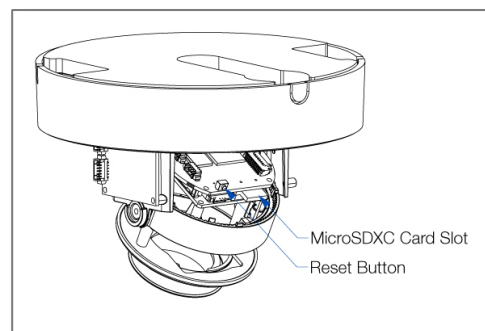


No.	Description
1	Supplied Drywall Anchors
2	ConteralP Outdoor Dome Camera
3	Supplied Screws
4	Camera Dome Cover
5	Camera Dome Screws

1. Determine a secure location to mount the camera
2. Use the template, anchors, and screws provided to prepare the mounting provisions for the camera installation.
3. Install four supplied dry wall anchors using the supplied mounting template
4. Remove the camera dome cover by hand
5. Connect the network, power, audio, and alarm cables as required.
6. (If necessary) Install a MicroSDXC card in the camera
  - a. *Note: You can access files in the SD card via FTP.*



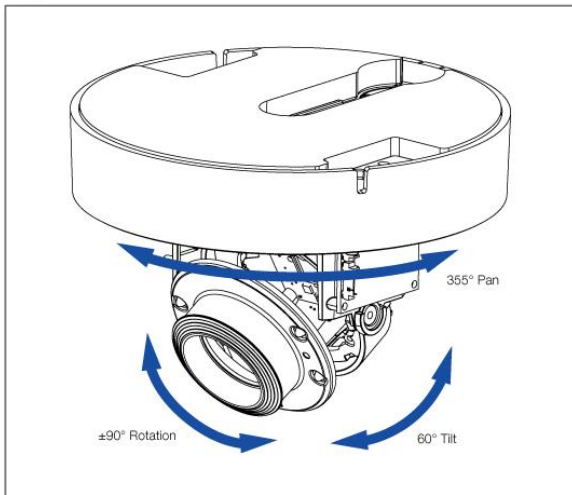
2MP (1080p) Models



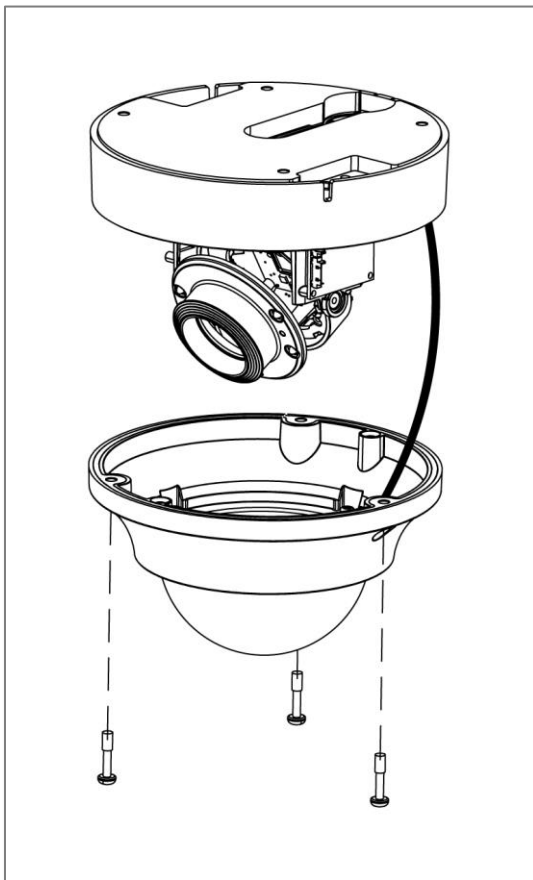
5MP (1080p) Models

7. Align three supplied screws with the dry wall anchors and screw the ConteralP Indoor Dome camera into place.
8. To configure the camera, reference the camera discovery, set-up and configuration section.

9. Follow below instruction to adjust the Pan/ Tilt and rotate the gimbal for the desired field of view.



10. To adjust the zoom and focus, see the “Zoom and Focus” Section of this manual. Install the camera dome cover back once you finish all the above steps.





## Accessories

AV Costar offers various mounting solutions for the ConteralP Outdoor Dome 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)
CLD-CAP-W	Mounting Cap for ConteralP Outdoor Dome (AV Costar White)
CLD-FMA-W	ConteralP Outdoor Dome Flush Mount Adapter (White)

# Camera Power Up

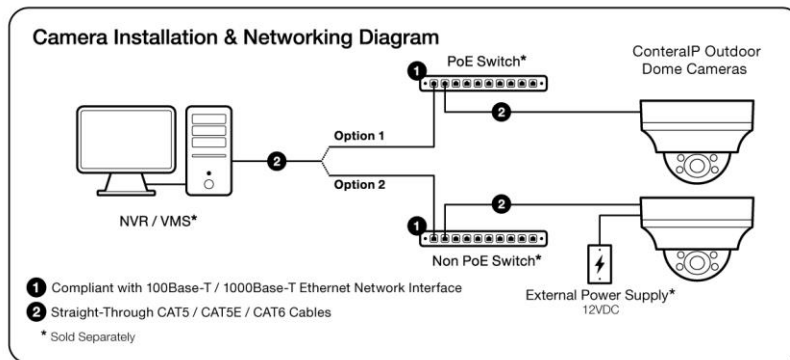
**⚠ CAUTION!** This product should be installed by a qualified service technician in accordance with the National Electrical Code (NEC 800 CEC Section 60) or applicable local code. Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction. Wiring should be UL Listed and/or Recognized wire suitable for the application.

**⚠ CAUTION!** Risk of Explosion if Battery is replaced by an Incorrect Type. Dispose of Used Batteries According to the Instructions.

**⚠ ATTENTION!** Risque d'explosion si la batterie est remplacée par un type incorrect. Mettre au rebus les Batteries usagées selon les instructions.

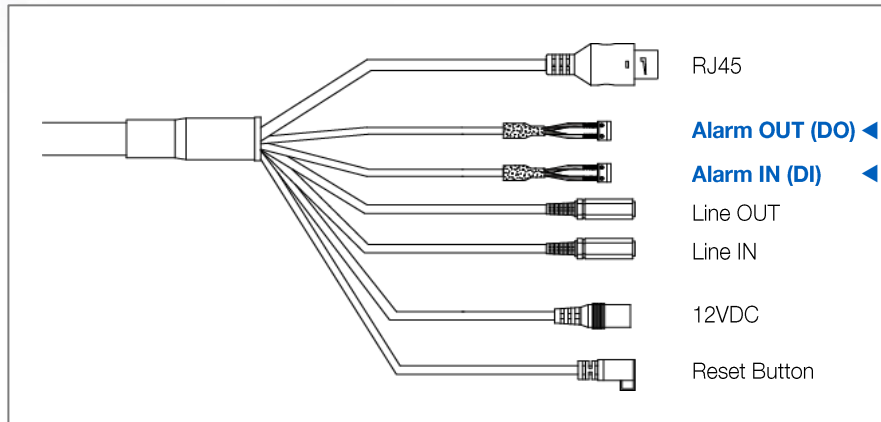
1. Connect the camera to a PoE port on 100Mbps network PoE switch using an Ethernet cable.
2. If the camera is powered by an outside power supply, connect the power wires from the external power supply (12VDC) to the power connector.
3. Connect the PoE switch to your computer's network port using an Ethernet cable.

**NOTE: This product is intended to be supplied by a Listed Power Adapter or DC power source, rated 12VDC (Max. 7W), or PoE 48VDC (Max. 9W), Tma = 50°C (1080p Models) or rated 12VDC (Max. 8.5W), or PoE 48VDC (Max. 10.5W), Tma = 50°C (5MP Models). 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 provides an earthing connection.**



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

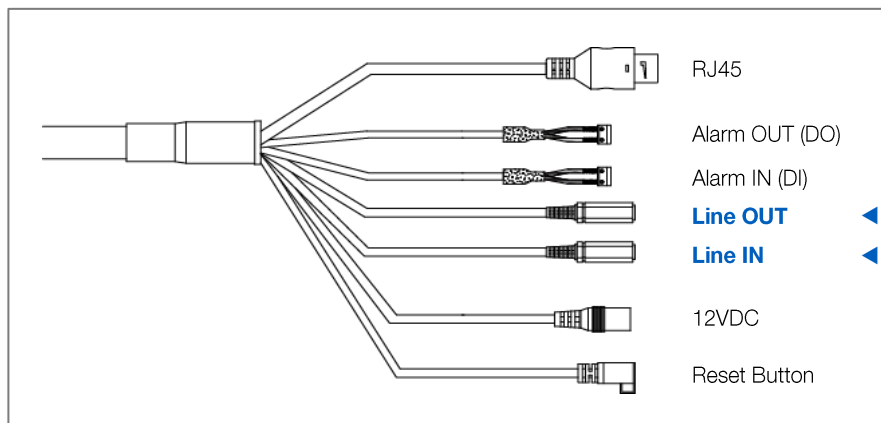
## Alarm I/O Functions



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

Alarm In (Dry Contact)	Alarm Out (Dry Contact)	
V sense	V sense	I sense
5V±5%	3.3V±5%	10mA (max)

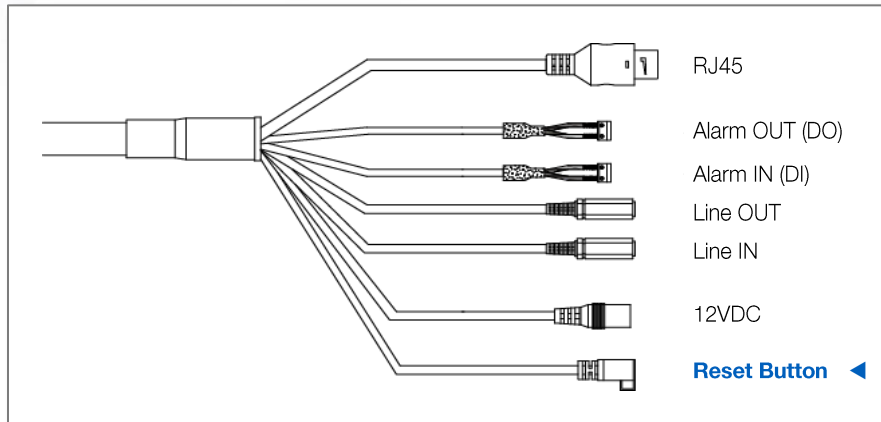
## Audio



Connect the Line In connector to an audio devices output such as a microphone, and connect the Line Out connector to an audio devices input such as a speaker.

**NOTE: The Line In audio input requires the source to have amplification.**

## Reset to Factory Default



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

# Camera Discovery, Setup, and Configuration

For camera discovery and setup, the Costar Camera Utility is recommended. The software can be found by scanning the QR code on the camera’s box or at: <http://www.arecontvision.com/software.php>

The Costar Camera Utility can discover cameras, check the status of a camera, change camera settings, import and export camera settings via a .csv file, and update firmware and/or hardware from virtually anywhere with a network connection.

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

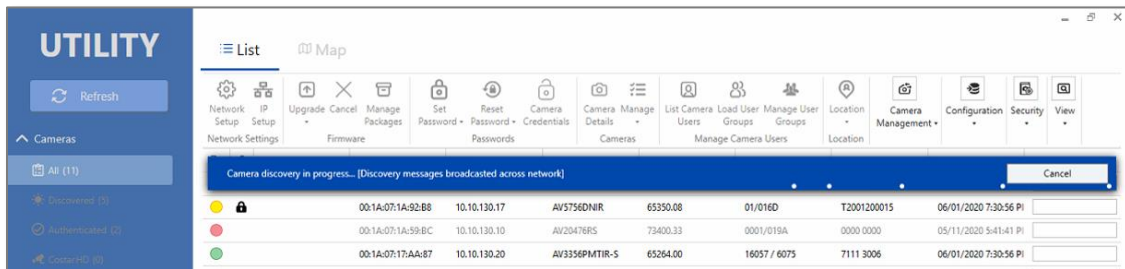
The Costar Camera Utility is compatible with all AV Costar and CostarHD cameras. The user manual for the software is available on our website.

## Camera Discovery

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



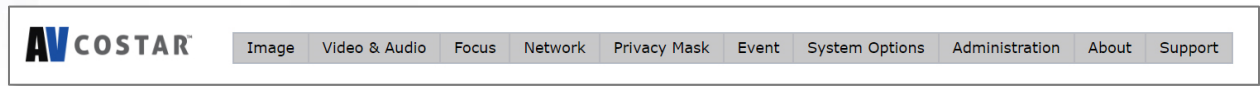
2. When the Costar Camera Utility is launched, it will automatically search the network for AV Costar and CostarHD cameras on the network and over a time interval. You can also manually search cameras by clicking the “Refresh” button.



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



## Web Interface Navigation



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

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

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

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

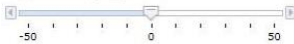


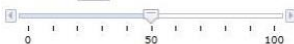

- SMTP (Simple Mail Transfer Protocol) Notification
- Network Storage
- SD Card
- **System Options**
  - Firmware Upgrade
  - Reboot & Restore Settings
  - Date/Time
- **Administration**
  - Administration settings
  - Viewer Management
- **About**
- **Support**

## Zoom and Focus


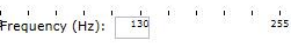

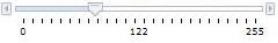

Menu	Feature	Description
<p><b>Zoom &amp; Focus</b></p> <hr/> <p>Zoom :</p> <p> <input type="button" value="+20"/> <input type="button" value="+5"/> <input type="button" value="+1"/> </p> <p> <input type="button" value="-20"/> <input type="button" value="-5"/> <input type="button" value="-1"/> </p> <p><input type="checkbox"/> Enable Auto Focus After Zoom</p> <p>Focus : <input type="text" value="DONE"/></p> <p> <input type="button" value="+20"/> <input type="button" value="+5"/> <input type="button" value="+1"/> </p> <p> <input type="button" value="-20"/> <input type="button" value="-5"/> <input type="button" value="-1"/> </p> <p><input type="button" value="Full-range Focus"/></p> <p><input type="button" value="Short-range Focus"/></p> <p><input type="button" value="Stop"/></p> <p><input type="button" value="Reset Zoom and Focus Position"/></p>	Manual Zoom/ Focus: +20, +5, +1, -20, -5, -1	Numbers indicate the level of Zooming/ focusing in order to adjust the field-of-view.
	Enable Auto Focus Zoom	Camera will do Auto Focus after changing zoom lens group position.
	Full-range Focus	Best for scenes that are completely out of focus. The camera automatically scans the full focus range of the scene to find the best focus position.
	Short-range Focus	Best for scenes that are slightly of out of focus. The camera quickly fine-tunes for a precise focus position.
	Stop	Stops any command in progress.
	Reset Zoom and Focus Position	Resets Zoom and Focus lens groups to zero position




Image

Menu	Feature	Description
<p><b>Image</b></p> <hr/> <p>Brightness: <input type="text" value="0"/></p>  <p>Sharpness: <input type="text" value="2"/></p>  <p>Saturation: <input type="text" value="3"/></p>  <p>Contrast: <input type="text" value="50"/></p>  <p>Hue: <input type="text" value="50"/></p>  <p><b>Rotate Image</b></p> <p><input checked="" type="radio"/> 0  <input type="radio"/> 90  <input type="radio"/> 180  <input type="radio"/> 270</p>	Brightness	Controls the overall brightness of the camera image and works in conjunction with the exposure controls to maintain the image brightness.
	Sharpness	Controls sharpness and edge definition of the image. Setting this to lower levels may make overall image appear a bit softer while causing lines and edges in the image to look smoother.
	Saturation	Controls the color saturation of the image.
	Contrast	Manually controls Gamma level (affects the overall luminance of the image).
	Hue	Configures the overall hue of the image, the range is 0 ~ 100. Increasing the value will adjust the image hue towards red. Decreasing the value will adjust the image hue towards blue.
	Rotate Image: 0, 90, 180, 270	Digitally rotates image 0°, 90°, 180°, or 270°.
<p><b>Mirror Image</b></p> <p><input type="checkbox"/> Flip Vertically  <input type="checkbox"/> Flip Horizontally  <input checked="" type="checkbox"/> Auto White Balance</p>	Mirror Image: Flip Vertically Flip Horizontally	Flips the image horizontally (flip left-to-right) or vertically (flip top-to- bottom). They can be selected at the same time.
	Auto White Balance	Checkbox enables the automatic white balance feature of camera, which will automatically remove unrealistic color cast so that white color is rendered white in the image.

 <p><b>WDR Mode</b></p> <p><input checked="" type="radio"/> Auto  <input type="radio"/> LDR : 10</p> <p>1 2 3 4 5 6 7 8 9 10</p> <p><input type="radio"/> DWDR  <input type="radio"/> LDR  <input type="radio"/> Manual</p> <p>DAY LDR</p> <p>LOW LIGHT LDR</p> <p>B/W LDR</p> <p><input checked="" type="checkbox"/> Auto Exposure</p>	<p>Auto</p> <p>HDR</p> <p>DWDR</p> <p>LDR</p> <p>Manual</p> <p>DAY</p> <p>LOW LIGHT</p> <p>B/W</p> <p>Auto Exposure</p>	<p>Auto detects bright backlight, glare or high contrast lighting and automatically selects the WDR level.</p> <p>Manually adjusts the intensity of backlight compensation.</p> <p>Digital WDR (DWDR) is to enhance dark areas by adjusting the gamma value.</p> <p>Will not combine long and short exposures into one frame, resulting in better low light performance.</p> <p>Allows manual configuration of WDR by selecting the WDR level for the three lighting environment types (DAY, LOW LIGHT, B/W). The choices for each lighting environment are the same as the choices above LDR, AUTO, HDR, DWDR.</p> <p>Note: Manually adjust the HDR backlight compensation in the main HDR section above before selecting HDR for a lighting environment.</p> <p>Automatically adjusts illumination and exposure values.</p>
 <p><b>Stream Profiles</b></p> <p><input checked="" type="radio"/> Balanced Mode <input checked="" type="checkbox"/> Slow Shutter  <input type="radio"/> Quality Mode  <input type="radio"/> Moonlight Mode  <input type="radio"/> Custom Exposure Mode</p> <p>Exposure (ms): 33</p> <p>1 40 80</p>	<p>Stream Profiles:</p> <p>Balance Mode -Slow Shutter</p> <p>Quality Mode</p>	<p><b>Balanced Mode:</b> Limits exposure time from 0.1ms to 66ms. The camera will keep highest FPS when <b>Slow Shutter</b> is unchecked.</p> <p><b>Quality Mode:</b> Limits exposure time from 0.1ms to 200ms. This mode is a good compromise between reducing noise and motion blur under most lighting conditions, but with an increase in motion blur under low light conditions.</p>

<p><b>Stream Profiles</b></p> <ul style="list-style-type: none"> <li><input checked="" type="radio"/> Balanced Mode <input checked="" type="checkbox"/> Slow Shutter</li> <li><input type="radio"/> Quality Mode</li> <li><input type="radio"/> Moonlight Mode</li> <li><input type="radio"/> Custom Exposure Mode</li> </ul> <p>Exposure (ms): <input type="text" value="33"/></p> 	<p>Moonlight Mode Custom Exposure Mode</p>	<p><b>Moonlight Mode:</b> Limits exposure time from 20ms to 500ms. This mode produces the best image quality under very low light conditions with the least amount of image noise. The trade-off is in favor of low noise at the expense of high motion blur.</p> <p><b>Custom Exposure Mod:</b> Enables manual setting of exposure time between 1 and 80ms. Shorter exposure times reduces motion blur for applications such as monitoring fast moving objects and reading license plates. The trade-off is an increased level of noise. It is recommended that this mode be used only when there is constant scene illumination sufficient to provide a quality image.</p>
<p><b>Lighting Compensation Frequency</b></p> <ul style="list-style-type: none"> <li><input type="radio"/> 50hz</li> <li><input checked="" type="radio"/> 60hz</li> <li><input type="radio"/> Custom</li> </ul> <p>Frequency (Hz): <input type="text" value="130"/></p> 	<p>Lighting Compensation Frequency:  50hz, 60hz, Custom</p>	<p>Prevents flicker caused by the power line frequency of lighting. Chooses 50Hz for Europe and China and 60Hz for US and Japan. This parameter will have no effect when the dominate light is sunlight. Or, user can select frequency between 5Hz and 255Hz. It will be enabled when user select “Custom”.</p>
<p><b>Day/Night Mode</b></p> <ul style="list-style-type: none"> <li><input checked="" type="radio"/> Automatic</li> </ul> <p>Day to Night Switching Level: <input type="text" value="40"/></p> <p><small>*Selecting higher value for switching at higher lux level.</small></p>  <p>Night to Day Switching Level: <input type="text" value="80"/></p> <p><small>*Selecting higher value for switching at higher lux level.</small></p>  <ul style="list-style-type: none"> <li><input type="radio"/> Day</li> <li><input type="radio"/> Night</li> <li><input type="radio"/> Schedule Day Mode</li> </ul> <p>Start: <input type="text" value="6"/> : <input type="text" value="0"/> (hh:mm)</p> <p>End: <input type="text" value="18"/> : <input type="text" value="0"/> (hh:mm)</p>	<p>Day/Night Mode  Automatic Day Night 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 night mode.</p>
<p><b>IR Control</b></p> <ul style="list-style-type: none"> <li><input checked="" type="radio"/> Smart IR</li> <li><input type="radio"/> On</li> <li><input type="radio"/> Off</li> </ul> <p>IR Level: <input type="text" value="50"/></p> 	<p>IR control:  Smart IR On Off IR Level</p>	<p><b>Smart IR:</b> Automatically adjusts output in response to the distance of an object in view to prevent overexposure when the object is very close to the camera.</p> <p><b>On/ Off:</b> Manually turns on or off the IR LED array.</p> <p><b>IR Level:</b> Manually adjusts the IR intensity.</p>


<p><input checked="" type="checkbox"/> Enable P-Iris</p> <p>Position: : 61</p>  <p>Iris Status: Evaluating</p>	<p>Enable P-Iris</p> <p>Position Iris Status</p>	<p>Enables P-Iris for precise iris control.</p>
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<div style="text-align: center;"><b>OSD</b></div> <p><b>Camera Name</b>  <input type="text" value="Network Camera"/></p> <p><b>Background</b>  <input type="checkbox"/> Enable Font Border          Text color: <input type="text" value="White"/></p> <p><b>OSD to be shown on</b>  <input checked="" type="checkbox"/> Main Stream  <input checked="" type="checkbox"/> Sub Stream  <input checked="" type="checkbox"/> 3rd Stream-Jpeg</p> <p><b>Text Overlay</b>          Top Left: <input type="text" value="OFF"/>          Top Right: <input type="text" value="OFF"/>          Bottom Left: <input type="text" value="OFF"/>          Bottom Right: <input type="text" value="OFF"/>  <input type="button" value="Apply"/></p>	<p>Camera Name</p> <p>Background</p> <p>Enable Font Border</p> <p>Text Color</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>Specifies a name for the camera. The maximum length is 32 characters.</p> <p>Enables a border for the text overlay.</p> <p>Options are Black, White, Green, or Yellow.</p> <p>There are four content positions (Top Left, Top Right, Bottom Left and Bottom Right) 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>
<div style="text-align: center;"><b>ROI</b> ▼</div> <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: <input type="text" value="Main Stream"/></p> <p>ROI Zone 1: <input type="checkbox"/> Enable  <input type="text" value="Medium"/> Save Area Del Area</p> <p>ROI Zone 2: <input type="checkbox"/> Enable  <input type="text" value="Medium"/> Save Area Del Area</p> <p>ROI Zone 3: <input type="checkbox"/> Enable  <input type="text" value="Medium"/> Save Area Del Area</p> <p>ROI Zone 4: <input type="checkbox"/> Enable  <input type="text" value="Medium"/> Save Area Del Area</p> <p>ROI Zone 5: <input type="checkbox"/> Enable  <input type="text" value="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 to save bandwidth and storage.</p> <p>To setup the ROI:</p> <ol style="list-style-type: none"> <li>1. Select <b>Main Stream</b> or <b>Sub Stream</b></li> <li>2. Enable zones (up to five zones) and select the desired quality level (<b>High</b>, <b>Medium</b>, or <b>Low</b>).</li> <li>3. Create the ROI by dragging the mouse over the live image</li> <li>4. Press <b>Save Area</b> or <b>Del Area</b>.</li> </ol>

## Video & Audio



- Image
- Video & Audio
- Focus
- Network
- Privacy Mask
- Event
- System Options
- Administration
- About
- Support

Menu	Feature	Description
<p style="text-align: center; color: #0070C0;">Video</p> <hr/> <p><b>Show Video Type</b></p> <ul style="list-style-type: none"> <li><input type="radio"/> Disable Video</li> <li><input checked="" type="radio"/> MJPEG over HTTP</li> <li><input type="radio"/> H.264 over RTP/UDP</li> </ul> <p><small>* For H.264 streaming, please make sure ActiveX Plugin is installed during VLC installation and axvlc.dll is at exactly the same path as C:\Program Files (x86)\VideoLAN\VLC\axvlc.dll</small></p> <p><input type="checkbox"/> Fit Video to Window</p> <p>Snapshot</p>  <p><b>Control Video with Mouse</b></p> <ul style="list-style-type: none"> <li><input checked="" type="radio"/> No Control</li> <li><input type="radio"/> Digital Zoom</li> <li><input type="radio"/> ROI Exposure Reference</li> </ul> <p><small>* Mouse-related control requires running MJPEG video * Click and move to select window to set. * Double click to reset to default settings. * ROI Exposure Reference is only available in LDR mode.</small></p>	<p>Show Video Type:</p> <p>Disable Video MJPEG over HTTP H.264 over RTP/UDP</p> <p>Fit Video to Window</p> <p>Snapshot</p> <p>Control Video with Mouse</p> <p>No Control PTZ ROI Exposure Reference</p>	<p><b>Disable Video:</b> Disables live video on the screen.</p> <p><b>MJPEG over HTTP:</b> This radio button is the default browser display option. No plug in is required as most browsers can decode MJPEG images.</p> <p><b>H.264 over RTP/UDP:</b> Displays video using H.264. If viewing this way for the first time you will see the following prompt to download the necessary browser plug –in to display the video in the browser using this compression.</p> <p>Scales the full field of view image to fit the browser window. When in default unselected images will be displayed in the browser at VGA resolution.</p> <p>Takes a snapshot of the current video.</p> <p>Radio buttons control various functions using the mouse to select them on screen.</p> <p>Whichever function is selected can be controlled by left clicking in the image with the mouse and dragging to select an image region relevant to the corresponding control function.</p> <p><b>No Control:</b> Disables mouse control of these functions.</p> <p><b>PTZ:</b> Zooms in the selected region. Double clicks on the image will restore the image to default.</p> <p><b>ROI Reference:</b> Creates a custom exposure reference using the selected region to customize backlight.</p>

<p><b>Resolution</b></p> <p>Left : <input type="text" value="0"/></p> <p>Top : <input type="text" value="0"/></p> <p>Right : <input type="text" value="1920"/></p> <p>Bottom : <input type="text" value="1080"/></p> <p><input type="button" value="Preview"/> <input type="button" value="Apply"/></p>	<p>Resolution: Left Top Right Bottom</p>	<p>Controls the image size and image cropping features.</p> <p><b>Left, Top, Right, and Bottom</b> numeric fields set custom image size cropping and crop area coordinates in pixels. Supported values are 0 to maximum resolution in pixels (maximum varies based on the sensor resolution being cropped)</p>
<p><b>Main Stream</b></p> <p>Video Compression</p> <p><input type="radio"/> H.265</p> <p><input checked="" type="radio"/> H.264</p> <p>Resolution</p> <p><input checked="" type="radio"/> 1920x1080</p> <p><input type="radio"/> 1280x720</p> <p><input type="radio"/> 960x540</p> <p><input type="checkbox"/> Enable SNAPstream+™</p> <p><input type="radio"/> Variable Bitrate</p> <p><input checked="" type="radio"/> Maximum Bitrate</p> <p>(64-8000 kbps): <input type="text" value="5000"/></p> <p>H.264 Quality (1..10) : <input type="text" value="3"/></p> <p>* 10 - lowest quality, 1 - highest quality</p> <p>Frames Per Seconds: <input type="text" value="30"/> (0~30)</p> <p>GOP Length : <input type="text" value="15"/> (1~120)</p> <p><input type="button" value="Apply"/></p> <p>* "Apply" will apply changes for all three streams settings to the camera.</p>	<p>Video Compression: H.265 H.264</p>	<p>Radio buttons to select the desired compression.</p>
	<p>Resolution</p>	<p>Radio buttons to select the desired resolution. Options vary based on the sensor resolution being used.</p>
	<p>Enable SNAPstream+™</p>	<p>Enables the SNAPstream+ feature on camera. This feature utilizes both Smart GOP and Smart ROI to reduce bitrate without impacting the image quality.</p> <p>Smart GOP sets GOP to automatically increase when no moving objects are detected.</p> <p>Smart ROI will increase the bitrate of moving objects and make them clearer.</p>
	<p>Variable Bitrate</p>	<p>Maintains the Quality setting configured. There may be variation in the bit rate output from the camera using this mode.</p>
	<p>Maximum Bitrate</p>	<p>Maintains variable bit rate control and maintains the bitrate under the rate limit you set to. It can be set from 64 kbps to 8000 kbps.</p>
	<p>H.264 Quality</p>	<p>H.264 image quality setting for variable bit rate control. Setting a lower value results in higher image quality, higher value results in lower image quality.</p>

<p><b>Sub Stream</b></p> <p>Video Compression  <input type="radio"/> H.265  <input checked="" type="radio"/> H.264</p> <p>Resolution  <input type="radio"/> 1920x1080  <input type="radio"/> 1280x720  <input checked="" type="radio"/> 960x540  <input type="radio"/> 640x480  <input type="radio"/> 640x360  <input type="radio"/> 320x240</p> <p><input type="checkbox"/> Enable SNAPstream+™</p> <p><input type="radio"/> Variable Bitrate  <input checked="" type="radio"/> Maximum Bitrate</p> <p>(64-8000 kbps): <input type="text" value="2850"/></p> <p>H.264 Quality (1..10) : <input type="text" value="7"/></p> <p>* 10 - lowest quality, 1 - highest quality</p> <p>Frames Per Seconds: <input type="text" value="10"/> (0~30 )</p> <p>* If both Main Stream and Sub Stream set to 1080P, the Third Stream will be terminated, and the FPS of Sub Stream can be set up to 20fps.</p> <p>GOP Length : <input type="text" value="30"/> (1~120 )</p> <p><input type="button" value="Apply"/></p> <p>* "Apply" will apply changes for all three streams settings to the camera.</p> <p><b>Third Stream</b></p> <p>Video Compression  <input checked="" type="radio"/> MJPEG</p> <p>Resolution  <input checked="" type="radio"/> 640x360</p> <p>Frames Per Seconds: <input type="text" value="30"/> (0~30 )</p> <p>Quality  <input type="radio"/> Low  <input type="radio"/> Mid  <input checked="" type="radio"/> High</p> <p><input type="button" value="Apply"/></p> <p>* "Apply" will apply changes for all three streams settings to the camera.</p>	<p>Frames Per Seconds</p> <p>GOP Length</p> <p>Video Compression: MJPEG</p> <p>Resolution</p> <p>Frames Per Seconds</p> <p>Quality: Low Mid High</p>	<p>Frame rate adjustment for the camera video stream.</p> <p>Note: For 2MP models, FPS will be up to 50% of specified FPS if WDR is enabled.</p> <p>Specifies how many frames between two consecutive I-Frames.</p> <p>The third stream is designed for the live view on web interface, and the only option of Video Compression is MJPEG.</p> <p>The third stream is designed for the live view on web interface, and the only option of Resolution is VGA.</p> <p>Frame rate adjustment for the camera video stream.</p> <p>Adjusts the compression level for JPEG images</p>
<p style="text-align: center;"><b>Audio</b></p> <p><input checked="" type="checkbox"/> Audio In Volume  <input type="radio"/> High  <input checked="" type="radio"/> Middle  <input type="radio"/> Low</p> <p><input checked="" type="checkbox"/> Audio Out Volume  <input type="radio"/> High  <input checked="" type="radio"/> Middle  <input type="radio"/> Low</p> <p>Encoding  <input checked="" type="radio"/> u-Law  <input type="radio"/> A-Law</p>	<p>Audio In</p> <p>Audio Out</p> <p>Volume: High Middle Low</p> <p>Audio In u-Law A-Law</p>	<p>Enables the Audio In/ Audio Out features on the camera.</p> <p>Specifies the volume level of Audio In/ Audio Out: <b>High</b>, <b>Middle</b>, or <b>Low</b>.</p> <p>Specifies the encoding algorithm: <b>u-Law</b> or <b>A-Law</b>.</p>



Menu	Feature	Description
<p><b>Network</b></p> <hr/> <p><b>IP Assignment</b></p> <p><input checked="" type="checkbox"/> DHCP</p> <p>IP Address: <input type="text" value="192.168.1.168"/></p> <p>Subnet Mask: <input type="text" value="255.255.255.0"/></p> <p>Default Gateway: <input type="text" value="192.168.1.254"/></p> <p><b>Port</b></p> <p>HTTP: <input type="text" value="80"/> (80,1024~65535)</p> <p>Second HTTP Port: <input type="text" value="8080"/> (8080,1024~65535)</p> <p>HTTPS: <input type="text" value="443"/> (443,1024~65535)</p> <p><b>DNS</b></p> <p>Primary DNS: <input type="text" value="192.168.1.1"/></p> <p>Secondary DNS: <input type="text" value="192.168.1.2"/></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 use send 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</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: The port default is 443. It can be used when you use HTTPS.</p>
	<p>Port:</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.</p> <p>Manually configures IPv6 address, Address prefix, Default route, and DNS server address.</p> <p>Router Advertisement: Enables Router Advertisement</p>

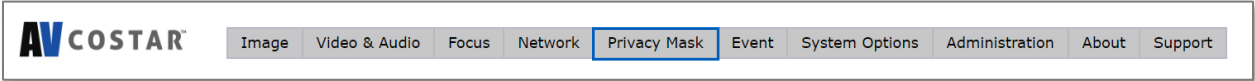
<p style="text-align: center;"><b>QoS</b></p> <p><input type="checkbox"/> Enable QoS</p> <p>Video QoS (0-63) : <input type="text" value="34"/></p> <p>Management DSCP (0-63) : <input type="text" value="0"/></p>	<p>Enable QoS</p>	<p>Enables quality of service.</p>
	<p>Video QoS</p>	<p>Sets DSCP value for video traffic.</p>
	<p>Management DSCP</p>	<p>Sets DSCP value for non-video traffic.</p>
<p style="text-align: center;"><b>UPnP</b></p> <p><input checked="" type="checkbox"/> Enable UPnP</p>	<p>Enable UPnP</p>	<p>Enables Universal Plug and Play function.</p>
<p style="text-align: center;"><b>RTSP</b></p> <p>Port : <input type="text" value="554"/> (554, 1025~65535)</p> <p><input checked="" type="checkbox"/> Enable RTSP Unicast Stream1</p> <p><input type="checkbox"/> Enable RTSP Stream1 Metadata</p> <p>Path1 : <input type="text" value="stream1"/></p> <p>Link for external media players : <a href="rtsp://10.10.120.18:554/stream1">rtsp://10.10.120.18:554/stream1</a></p> <p><input checked="" type="checkbox"/> Enable RTSP Unicast Stream2</p> <p><input type="checkbox"/> Enable RTSP Stream2 Metadata</p> <p>Path2 : <input type="text" value="stream2"/></p> <p>Link for external media players : <a href="rtsp://10.10.120.18:554/stream2">rtsp://10.10.120.18:554/stream2</a></p> <p><input checked="" type="checkbox"/> Enable RTSP Unicast Stream3</p> <p><input type="checkbox"/> Enable RTSP Stream3 Metadata</p> <p>Path3 : <input type="text" value="stream3"/></p> <p>Link for external media players : <a href="rtsp://10.10.120.18:554/stream3">rtsp://10.10.120.18:554/stream3</a></p>	<p>Port</p>	<p>Configures the port number for stream 1 to stream 3. The range is 554/1025~65535.</p>
	<p>Enable RTSP Unicast Stream</p>	<p>Enables RTSP Unicast for stream 1(Main stream), stream 2(Sub Stream), and stream 3(Third Stream)</p>
	<p>Enable RTSP Stream metadata</p>	<p>Enables RTSP stream metadata for stream 1 (Main stream), stream 2 (Sub Stream), and stream 3 (Third Stream)</p>
	<p>Path</p>	<p>Configures the pathname for each stream.</p>
	<p>Link for external media players</p>	<p>Copies the link from here for external media players</p>
<p style="text-align: center;"><b>Multicast</b></p> <p><b>Multicast Stream1</b></p> <p><input type="checkbox"/> Enable RTSP Multicast Stream</p> <p><input type="checkbox"/> Always Multicast</p> <p>Video IP : <input type="text" value="225.24.164.112"/></p> <p>Video Port : <input type="text" value="5000"/> (1025~65535)</p>	<p>Enable RTSP Multicast Stream</p>	<p>Enables RTSP Multicast stream for stream 1 (Main stream), stream 2 (Sub Stream), and stream 3 (Third Stream)</p>
	<p>Always Multicast</p>	<p>Enables the video streams to start multicast steaming without using RTCP</p>
	<p>Video IP</p> <p>Video Port</p>	<p>Configures the multicast address and the port number to stream video.</p>

<p>Audio IP : <input type="text" value="226.24.164.112"/></p> <p>Audio Port : <input type="text" value="5002"/> (1025~65535)</p> <p>Meta IP : <input type="text" value="227.24.164.112"/></p> <p>Meta Port : <input type="text" value="5004"/> (1025~65535)</p> <p>Path : <input type="text" value="stream1m"/></p> <p>TTL : <input type="text" value="255"/> (1~255)</p>	<p>Audio IP</p> <p>Audio Port</p>	<p>Configures the multicast address and the port number to stream audio.</p> <p>*This function is supported depends on models.</p>
	<p>Meta IP</p> <p>Meta Port</p>	<p>Configures the multicast address and the port number to the HTML meta.</p>
	<p>Path</p>	<p>Configures the URL address of the video stream.</p>
	<p>TTL</p>	<p>Configures the time-to-live threshold of the multicast datagram before it is discarded by the router.</p>
<p style="text-align: center;"><b>DDNS</b></p> <p><input type="checkbox"/> Enable DDNS</p> <p>Host Name : <input type="text"/></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>	<p>Enable DDNS</p>	<p>Enables DDNS service</p>
	<p>Host Name</p>	<p>Specifies the Host name registered with the DDNS server</p>
	<p>DDNS Sever</p>	<p>Selects one of the pubic DDNS severs from the dropdown menu. Options are <b>DynDNS</b>, <b>NO-IP</b>, and <b>TwI-DNS</b>.</p>
	<p>User Name</p>	<p>Specifies the user name of the DDNS account.</p>
	<p>Password</p>	<p>Specifies the password of the DDNS account.</p>
	<p>Password Confirmation</p>	<p>Confirms the password of the DDNS account.</p>
<p style="text-align: center;"><b>SNMP</b></p> <p><input checked="" type="radio"/> No SNMP Server</p> <p><input type="radio"/> SNMP V2c</p> <p>Community String : <input type="text" value="public"/></p>	<p>No SNMP Sever</p>	<p>Disables SNMP function</p>
	<p>SNMP v2c</p>	<p>Enables SNMP version 2 support</p>
	<p>Community String</p>	<p>Specifies the name of the community to access to SNMP information.</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"/> Password : <input type="text"/></p> <p>Privacy : <input type="text" value="None"/> Password : <input type="text"/></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>	<p>Trap Configuration:</p> <p>Address</p> <p>Community String</p>	<p>Specifies the destination IP address to send SNMP trap messages.</p>
	SNMP v3	Enables SNMP version 3 support.
	SNMP User	Specifies the user name of the SNMP v3.
	Authentication	Selects one of the Authentication modes from the dropdown menu. Options are <b>None</b> , MD5, and SHA.
	Password	Specifies the Password for the Authentication.
	Privacy	Selects one of the encryption methods for SNMP v3 from the dropdown menu. Options are <b>DES</b> and <b>AES</b> .
	Password	Specifies the Password for the encryption.
	Trap Configuration:	Specifies the destination IP address to send SNMP trap messages.
	Address	
	Download MIB	Clicks to download MIB file for SNMP.
<p><b>SSL</b></p>	Mode:	<b>Disable:</b> Support for HTTP only.
<p>Mode : <input type="radio"/> Disable <input checked="" type="radio"/> Optional</p>	Disable	
<p>Certificate : No certificate has been installed.</p>	Optional	<b>Optional:</b> Support for HTTP and HTTPs both.
<p>Action : <input type="button" value="Install New Certificate"/></p>	Certificate	Shows the current status of the Certificate
<p>CA Certificate :</p> <p><input type="text"/> <input type="button" value="Browse..."/> <input type="button" value="Upload"/></p>	Install New Certificate	1. Locate <b>CA Certificate</b> and <b>Client Certificate</b> and click Upload.
<p>Client Certificate :</p> <p><input type="text"/> <input type="button" value="Browse..."/> <input type="button" value="Upload"/></p>	CA Certificate	2. Click <b>Install New Certificate</b> to upload the Certificate.
	Client Certificate	
	Enable	Enables FTP access to the camera.
		Note: This function is only available when a SD card is installed. You can access files in the SD card via FTP.

<p><b>FTP</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>	<p>Password Confirm</p>	<p>Specifies and confirms the password to access the FTP.</p>
<p><b>802.1x</b></p> <p>Protocol : <input type="text" value="NONE"/></p> <p>Enable : <input type="checkbox"/></p> <p><input type="button" value="Apply"/></p>	<p>Max. Connection</p>	<p>Specifies the maximum number of FTP connections to the IP camera.</p> <p>Protocol</p> <p>The default is <b>None</b> to disable 802.1 x functions. You can select one of the protocol options from the dropdown menu. The supported protocols are <b>EAP-MD5, EAP-TLS, EAP-TTLS or EAP-PEAP</b>.</p> <p>After the protocol has been selected, manually configures the username, password and other required information.</p>
<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> <p><input type="button" value="Apply"/></p>	<p>Enable LDAP</p>	<p>Enables LDAP service.</p>
	<p>Server</p>	<p>Specifies the IP address of the LDAP server.</p>
	<p>Port</p>	<p>Specifies the port address of the LDAP server. Default port is <b>389</b>.</p>
	<p>Base dn</p>	<p>Specifies the starting point an LDAP server uses when searching for user's authentication within the Directory.</p>
	<p>Bind dn template</p>	<p>Identifies the username that will be used to do the searching and request the authentication</p>
	<p>Search dn template</p>	<p>Defines at which node the search originates</p>
	<p>Administrator</p>	<p>Specifies the administrator</p>
	<p>Viewer</p>	<p>Specifies the viewer user</p>

## Privacy Mask



Menu	Feature	Description
<p><b>Privacy Mask</b></p> <hr/> <p><input type="checkbox"/> Enable Privacy Mask</p> <p>* Left click and drag to set mask * Right click and drag to erase mask</p>	<p>Enable Privacy Mask</p>	<p>Creates a privacy mask on the image so the selected areas will not be visible.</p>

Event



- Image
- Video & Audio
- Focus
- Network
- Privacy Mask
- Event
- System Options
- Administration
- About
- Support

Menu	Feature	Description
<p><b>Motion Detection</b> ▾</p> <p><input checked="" type="checkbox"/> Enable <input type="checkbox"/> Extended</p> <p>Zone Size: <input type="text" value="8"/> </p> <p>Detail: <input type="text" value="2"/> </p> <p>Level Threshold: <input type="text" value="15"/> </p> <p>Motion Sensitivity, %: <input type="text" value="30"/> </p> <p><small>* Left click and move to select window to set mask. * Right click and move to select window to reset mask.</small></p>	Enable	Turns on and off on-camera motion detection
	Extend	Enables the extended motion detection and motion detection zones increase from default 64 to 1024 for enhanced motion detection sensitivity.
	Zone Size	Adjusts the size of motion detection zones.
	Detail	Sets the size of each zone displayed by the motion detection grid contains sub zones the number of which is set by the zone size setting up to 32x32 (pixels). This setting configures the sensitivity of the motion detection to the size of objects in the image moving through the zone. Higher values will trigger motion only for larger objects moving through the zone, lower values will cause detection of smaller objects in the zone (increasing sensitivity to smaller size objects moving through the image).
	Level Threshold	Sets the sensitivity to brightness changes between dark and light objects within each grid zone. As an example "Detail" will set the size of the object detected within the zone, "level" 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.
<p><b>Alarm Handler</b></p> <p><input type="checkbox"/> Enable Alarm Detection</p> <p><input type="button" value="Alarm Schedule"/></p> <p><i>*This function is supported depends on models.</i></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.</p> <p>Alternatively, you can manually enter numbers to configure the hours and minutes from start to end for all weekdays.</p> <p><b>S:</b> Click “S” to set up a 24-hour schedule for a particular day.</p> <p><b>D:</b> Click “D” to clear the previous schedule for a particular day.</p>
<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>Type <input type="text" value="N.O."/> ▼</p> <p>Off Time <input type="text" value="0"/> (0~30s)</p> <p><i>*This function is supported depends on models.</i></p>	Trigger Alarm Detection	When a signal is detected from Alarm in, the Alarm out will be triggered.
	Trigger Motion Detection	When a motion detection event is detected, the Alarm out will be triggered.
	Trigger Tamper Detection	When a tamper detection event is detected, the Alarm out will be triggered.
	Type	Selects the type: N.O (Normal Open) or N.C (Normal Close)
	Off Time	Specifies the alarm duration
<p><b>Tamper Detection</b></p> <p><input type="checkbox"/> Enable Tampering Detection</p> <p><b>Tampering Schedule</b></p> <p>Sensitivity <input type="text" value="Medium"/> ▼</p>	Enable Tampering Detection	Enables Tampering Detection function.
	Tampering Schedule	<p>Configures the alarm schedule by holding down the mouse button and clicking the time block to enable the schedule settings on the selected time. A light blue color on the time block indicates that the alarm schedule is enabled, while a light grey color indicates that the alarm schedule is disabled.</p> <p>Alternatively, you can manually enter numbers to configure the hours and minutes from start to end for all weekdays.</p> <p><b>S:</b> Click “S” to set up a 24-hour schedule for a particular day.</p> <p><b>D:</b> Click “D” to clear the previous schedule for a particular day.</p>
	Sensitivity	Configures the sensitivity level of Tampering Detection: <b>High</b> , <b>Medium</b> , and <b>Low</b> .



<p><b>FTP Upload Handler</b> ▼</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="text"/></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 Scheduled</li> </ul>	<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> </ul>	<p>SMTP Notification 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, and Trigger Scheduled.</p> <p><i>*This function is supported depends on models.</i></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="text"/></p> <p>Authentication : <input type="text" value="NO_AUTH"/> ▼</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> </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></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></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></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></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></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></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></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></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></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></tr> </tbody> </table>	Enable	No	Email	Alarm	Motion	Tampering	<input type="checkbox"/>	1	<input type="text"/>	<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"/>	3	<input type="text"/>	<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"/>	5	<input type="text"/>	<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"/>	7	<input type="text"/>	<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"/>	9	<input type="text"/>	<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"/>	<p>SMTP Server</p> <p>Host Address</p> <p>Port</p> <p>Username</p> <p>Password</p> <p>Authentication</p> <p>Recipient List</p>	<p><b>From:</b> Specifies the email address of the sender</p> <p>Selects a desired trigger source. The options are Trigger Alarm Detection, Trigger Motion Detection, and Trigger Tampering Alarm.</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_TLS.</p> <p>Specifies the email address to send the email when selected events are triggered by Alarm, Motion, or Tamper. A maximum of 10 email addresses can be configured.</p>
Enable	No	Email	Alarm	Motion	Tampering																																																															
<input type="checkbox"/>	1	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																															
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	<p>Login Certificate</p>	<p>Specifies the login Username and Password for the network storage sever.</p>																																																																		

<p><b>Network Storage</b> ▾</p> <p><b>Login Certificate</b>          Username : <input type="text"/>          Password : <input type="password"/></p> <p><b>Recipient Setup</b>          Network Storage Status : not_mounted          Network Address : <input type="text"/>          Folder Name : <input type="text"/>          Record Type : <input type="text" value="Video"/></p> <p>Mount and Remove Network Storage  <input type="button" value="Mount"/> <input type="button" value="Remove"/></p> <p><b>Network Storage Handler</b>  <input type="checkbox"/> Enable Trigger Event  <input type="radio"/> Trigger Alarm Detection  <input type="radio"/> Trigger Motion Detection  <input type="radio"/> Trigger Tampering Alarm  <input type="radio"/> Trigger Scheduled</p>	<p>Recipient Setup</p> <p>Network Storage Status</p> <p>Network Address</p> <p>Folder Name</p> <p>Record Type</p> <p>Mount and Remove Network Storage</p>	<p><b>Network Storage Status:</b> Displays the current status of the connection with the network storage server. ( not_mounted or ok)</p> <p><b>Network Address:</b> Specifies the IP address of the network storage server.</p> <p><b>Folder Name:</b> Specifies the folder name on the network storage server.</p> <p><b>Recording Type:</b> Specifies the desired action when an event is triggered. The options are Snapshot and Video.</p> <p><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>
<p><b>SD Card</b></p> <p><input type="checkbox"/> Enable  <input type="radio"/> Trigger Alarm Detection  <input type="radio"/> Trigger Motion Detection  <input type="radio"/> Trigger Tampering Alarm  <input type="radio"/> Manual Record</p>	<p>Enable</p>	<p>Enables and selects a desired trigger source. The options are Trigger Alarm Detection*, Trigger Motion Detection, Trigger Tampering Alarm, and Manual Record.</p> <p><i>*This function is supported depends on models.</i></p>
<p><b>SD Card Information</b>          Available Storage 0 MBytes  <input type="button" value="Format SD Card"/>          Usage 0% ( 0 / 0 MBytes)          Status not_mounted          Overwrite when storage full <input checked="" type="checkbox"/>          Record Type <input type="text" value="Video"/></p>	<p>SD Card Information</p> <p>Available Storage</p> <p>Format SD Card</p> <p>Usage</p> <p>Status</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>

	Overwrite when storage full Record Type	Overwrite when storage full: Enables overwriting the SD card if the storage is full.  Recoding Type: Specifies the desired action to record a stream. The options are Snapshot and Video.
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# System Options

Menu	Feature	Description
<p><b>System Options</b></p> <hr/> <p><b>Firmware Upgrade</b> Please select a file to update: File Name : <input type="text"/> <input type="button" value="Browse..."/> <input type="button" value="Upgrade"/></p> <p><b>Download Log</b> <input type="button" value="Download"/></p> <p><b>Reboot &amp; Restore Settings</b></p> <p><input type="button" value="Reboot the Camera"/></p> <p><input type="button" value="Restore to Factory Default Settings Except Network Settings"/></p> <p><input type="button" value="Restore to Factory Default Settings"/></p>	Firmware Upgrade	Clicks <b>Browse</b> to choose the firmware upgrade file, and then clicks <b>Upgrade</b> .
	Download Log	Records all the status information of the camera in list format. Downloads the log file to the computer as a text file.  <i>Note: The log file is protected by a password. Please contact with Arecont Vision technical support team.</i>
	Reboot & Restore Settings	<p><b>Reboot the Camera:</b> Reboots the camera.</p> <p><b>Restore Factory Default Settings Except Network Settings:</b> Restores all settings to factory default except the network settings.</p> <p><b>Restore to Factory Default Settings:</b> Restores all settings to factory default.</p>
	<p><b>Reboot the Camera</b></p> <p><b>Restore Factory Default Settings Except Network Settings</b></p> <p><b>Restore to Factory Default Settings</b></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="time.nist.gov"/></p> <p><input type="button" value="Apply NTP Server Configuration"/></p> <p><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>	Get Time from NTP Server Computer System	<p><b>NTP Server:</b> Synchronizes the date/time information with defined NTP server. After setting up the desired Time zone and NTP Server, clicks <b>Apply NTP Server Configuration</b>.</p> <p><i>Note: Please make sure set up appropriate gateway before configuring the NTP server.</i></p> <p><b>Computer System:</b> Synchronizes the date/time information with current computer's date/time. Once this option selected, clicks <b>Update Time from the computer</b>.</p>
	Time Zone	Specifies the country/ city of the time zone from the drop down menu.
	NTP Server	Specifies the desired NTP server

# Administration



- Image
- Video & Audio
- Focus
- Network
- Privacy Mask
- Event
- System Options
- Administration
- About
- Support

Menu	Feature	Description
<p style="text-align: center;"><b>Administration</b></p> <hr/> <p><b>Access Control</b></p> <p><small>(Passwords can be up to 16 letters, digits and symbols, excluding following symbols for passwords without encoding # % &amp; ' " &lt; &gt; / [ ] { } _ ( ) = . + , + , )</small></p> <p><b>Administrator</b></p> <p>Username : <input type="text" value="admin"/></p> <p>Admin Password : <input type="password"/></p> <p>Confirmation : <input type="password"/></p> <p style="text-align: center;"> <input type="button" value="Set"/> <input type="button" value="Erase"/> </p> <p><b>Viewer Management</b></p> <p>User List: <input type="text" value=""/></p> <p style="text-align: center;"> <input type="button" value="New User"/> <input type="button" value="Delete User"/> </p> <p style="text-align: center;"><u>User Information</u></p> <p>User Name: <input type="text"/></p> <p>Viewer Password : <input type="password"/></p> <p>Confirmation : <input type="password"/></p> <p>Access Level : <input type="radio"/> Admin <input type="radio"/> Viewer</p> <p style="text-align: center;"> <input type="button" value="Set"/> <input type="button" value="Erase"/> </p>	<p>Access Control</p> <p>Administrator</p> <p>Username</p> <p>Admin Password</p> <p>Confirmation</p> <p>Set/ Erase</p>	<p>Passwords can be up to 16 letters, digits and symbols, excluding 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> full access to all camera settings and live video.</p> <p><b>Admin Password:</b> Specifies the password for the administrator.</p> <p><b>Confirmation:</b> Re-enters the password for the password validation.</p> <p><b>Set/ Erase:</b> Saves or removes the password.</p> <p><i>Note: If admin password was set but has been lost, it can be erased by AV IP Utility using the key file. Please contact Arecont Vision technical support to obtain the key file required to perform this function. Or, if the camera has a reset button, you can also reset to Factory default for removing the password.</i></p>

<p><b>Viewer Management</b></p> <p>User List: <input type="text" value=""/></p> <p><input type="button" value="New User"/> <input type="button" value="Delete User"/></p> <p><u>User Information</u></p> <p>User Name: <input type="text"/></p> <p>Viewer Password : <input type="text"/></p> <p>Confirmation : <input type="text"/></p> <p>Access Level : <input checked="" type="radio"/> Admin <input type="radio"/> Viewer</p> <p><input type="button" value="Set"/> <input type="button" value="Erase"/></p>	<p>Viewer Management</p> <p>User List</p> <p>User Name</p> <p>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 <b>New User/ Delete User</b> to create or remove a user account.</p> <p><b>User Name:</b> Specifies the user name. It must be at least five and up to sixteen characters.</p> <p><b>Viewer Password:</b> Specifies the password for the viewer.</p> <p><b>Confirmation:</b> Re-enters the password for the password validation.</p> <p><b>Access Level:</b> Defines the authorization level for the user: <b>Admin</b> or <b>Viewer</b>.</p> <p><b>Set/ Erase:</b> Save or removes the password.</p>
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## About

Image Video & Audio Focus Network Privacy Mask Event System Options Administration About Support

Menu	Feature	Description
<p><a href="#">About</a></p> <hr/> <p>Model Name : AV02CMB-100</p> <p>Firmware : 35100.25</p> <p>Serial Number : 180301081</p> <p>MAC Address : 00-1a-07-18-a9-f1</p>	About	Displays the information of the camera: Model Name, Firmware, Serial Number, and MAC Address.

## Support

Image Video & Audio Focus Network Privacy Mask Event System Options Administration About Support

Menu	Feature	Description
<p><a href="#">Support</a></p> <hr/> <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>	Support	Provides several useful hyperlinks for users who would like to get more information of the camera.



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Rev 002.003



## Need Assistance?

Get the Costar Camera Utility, installation manuals, and more information on this product at the AV Costar website.



 [avcostar.com/downloads](http://avcostar.com/downloads)

 For further help, call +1.818.937.0700

**AV** COSTAR™



**Desiccant must be installed  
inside the dome cover.  
See installation manual**