

Contera® Micro Bullet

Installation Manual

1080p 5MP AV02CMB-100 AV05CMB-100





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About Our Warranty

Global (3 Year) Limited Warranty

ARECONT VISION warrants to Purchaser (and only Purchaser) (the "Limited Warranty"), that: (a) each Product shall be free from material defects in material and workmanship for a period of thirty-six (36) months from the date of shipment (the "Warranty Period"); (b) during the Warranty Period, the Products will materially conform with the specification in the applicable documentation; (c) all licensed programs accompanying the Product (the "Licensed Programs") will materially conform with applicable specifications. ARECONT VISION warrants to Purchaser (and only Purchaser) (the "Limited Warranty"), that: (a) each Product shall be free from material defects in material and workmanship for a period of thirty-six (36) months from the date of shipment (the "Warranty Period"); (b) during the Warranty Period, the Products will materially conform with the specification in the applicable documentation; (c) all licensed programs accompanying the Product (the "Licensed Programs") will materially conform with applicable specifications.

ARECONT VISION warrants to Purchaser (and only Purchaser) (the "Limited Warranty"), that: (a) each Product shall be free from material defects in material and workmanship for a period of thirty-six (36) months from the date of shipment (the "Warranty Period"); (b) during the Warranty Period, the Products will materially conform with the specification in the applicable documentation; (c) all licensed programs accompanying the Product (the "Licensed Programs") will materially conform with the specification in the applicable documentation; (c) all licensed programs accompanying the Product (the "Licensed Programs") will materially conform with applicable specifications.



Contera Micro Bullet IP Megapixel Cameras

Camera Overview

The Contera® Micro Bullet outdoor-ready megapixel camera features 1080p and 5-megapixel (MP) resolution for optimum performance. The Contera Micro Bullet combines a day/night mechanical IR cut filter with an integrated 3.6mm lens.

Regardless of the time of day, the Contera Micro Bullet 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, NightViewTM 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.

Arecont Vision was the first to bring H.264 to the mainstream market and recently developed SNAPstream™ (Smart Noise Adaptation and Processing) technology for reducing bandwidth without impacting image quality. Today we are proud to offer our next generation H.265 with SNAPstream+™ smart codec capable of delivering high quality video while saving over 50% of the data rate to reduce or prevent strain on the network.

The camera's power can be supplied via a Power-over-Ethernet (PoE - IEEE 802.3af) compliant network cable connection.

The Contera Micro Bullet is IP66 rated for both indoor and outdoor applications. All models feature an impact resistant cast-aluminum housing capable of withstanding the equivalent of 55 kg (120 lbs) of force.

The Contera Micro Bullet is ONVIF (Open Network Video Interface Forum) Profile S compliant, providing interoperability between network video products regardless of manufacturer.





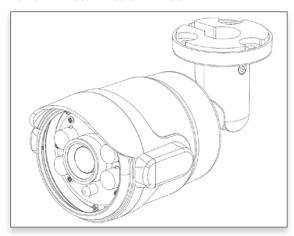
CAUTION!

- 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

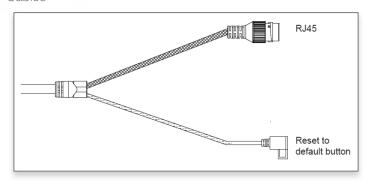
| Description | QTY |
|------------------------------------|-----|
| AV02CMB-100/ AV05CMB-100 IP camera | 1 |
| Mounting Template | 1 |
| Accessory Pack | 1 |

AV02CMB-100/ AV05CMB-100





Cables

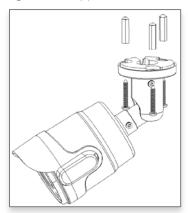




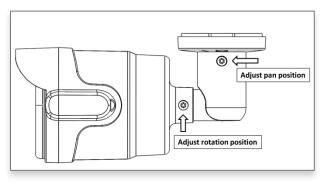
Installation

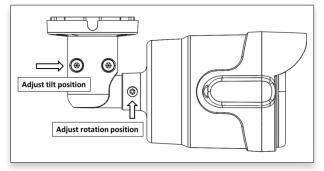
The Contera® Micro Bullet camera can be directly attached onto hard ceilings or walls including wood, plastic, metal and concrete.

- 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 three supplied dry wall anchors using the supplied mounting template
- 4. Connect the network cable to the camera's RJ45 connector
- 5. Align three supplied screws with the dry wall anchors and the camera into place



- 6. To configure the camera, reference the camera discovery, set-up and configuration section.
- 7. Follow below instruction to adjust the Pan/ Tilt and rotate the gimbal for the desired field of view. NOTE: Do not remove the screws!





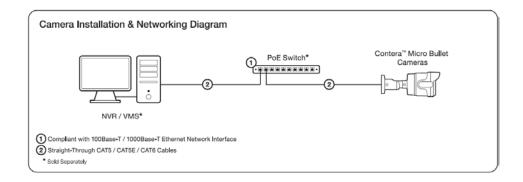


Camera Power Up



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

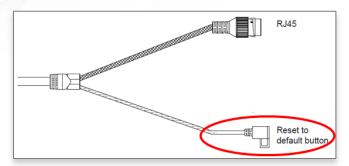
- 1. Connect the camera to a PoE port on 100Mbps network PoE switch using an Ethernet cable.
- 2. Connect the PoE switch to your computer's network port using an Ethernet cable.



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



Reset to Factory Default



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



Camera Discovery, Setup, and Configuration

For camera discovery and setup, the AV IP Utility is recommended. The software can be found at Arecont Vision website: http://www.arecontvision.com/softwares.php

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

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

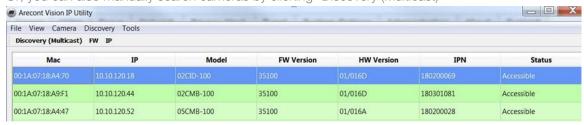
The AV IP Utility tool is compatible with all Contera® cameras. The user manual for the software is available at Arecont Vision website: http://www.arecontvision.com/softwares.php

Camera Discovery

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



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



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
 - IR Control
 - OSD (On-Screen Display)
 - ROI (Regions of Interest)
- Video
 - Main Stream Configuration
 - Sub Stream Configuration
 - Third Stream Configuration
- Network
 - IP Assignment
 - QoS (Quality of Service)
 - UPnP (Universal Plug and Play)
 - RTSP (Real Time Streaming Protocol)
 - DDNS (Dynamic DNS)
 - SNMP (Simple Network Management Protocol)
 - SSL (Secure Sockets Layer)
 - FTP (File Transfer Protocol)
 - 802.1x
- Privacy Mask
- Event
 - Motion Detection
 - Alarm Handler
 - Digital I/O
 - Tamper Detection
 - FTP Upload Handler
 - SMTP (Simple Mail Transfer Protocol) Notification
 - Network Storage
- System Options
 - Firmware Upgrade
 - Reboot & Restore Settings
 - Date/Time



- Administration
 - Administrator settings
 - Viewer Management
- About
- Support



Image

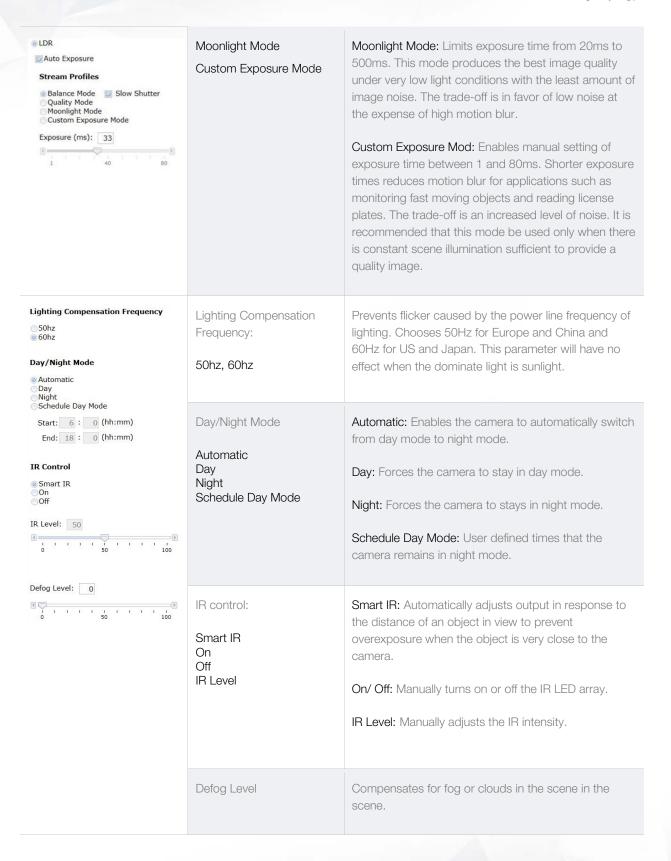


| Menu | Feature | Description |
|---|---|--|
| Image Brightness: 0 | Brightness | Controls the overall brightness of the camera image and works in conjunction with the exposure controls to maintain the image brightness. |
| 50 0 50 Sharpness: 2 | Sharpness | Controls sharpness and edge definition of 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: 3 | Saturation | Controls the color saturation of the image. |
| 0 1 2 3 4 5 6 | Contrast | Manually controls Gamma level (affects the overall luminance of the image). |
| Contrast: 50 | 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 | Rotate Image: 0, 90, 180, 270 | Digitally rotates image 0°, 90°, 180°, or 270°. |
| Mirror Image ☐ Flip Vertically ☐ Flip Horizontally ☑ Auto White Balance | 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. |



| Menu | Feature | Description |
|---|--|---|
| WDR Mode | Auto | Auto detects bright backlight, glare or high contrast lighting and automatically selects the WDR level. |
| HDR: 10 | Auto | Note: WDR enabled will decrease the FPS of 5MP camera. |
| □ Turn off in low light □ Turn off in B/W □ DWDR | HDR | Manually adjusts the intensity of backlight compensation. Note: WDR enabled will decrease the FPS of 5MP camera. |
| | Turn off in low light | Disables WDR backlight compensation when the light levels drop for better nighttime image quality. |
| | Turn off in B/W | Disables WDR backlight compensation when the camera is in night mode for better nighttime image quality. |
| | DWDR | Digital WDR (DWDR) is to enhance dark areas by adjusting the gamma value. This will not impact FPS of 5MP camera. |
| LDR Auto Exposure Stream Profiles Balance Mode Quality Mode | LDR | Will not combine long and short exposures into one frame, resulting in better low light performance. |
| Moonlight Mode Custom Exposure Mode Exposure (ms): 33 | Auto Exposure | Automatically adjusts illumination and exposure value |
| | Stream Profiles: Balance Mode -Slow Shutter | Balanced Mode: Limits exposure time from 0.1ms to 66ms. The camera will keep highest FPS when Slow Shutter is unchecked. |
| | Quality Mode | Quality Mode: 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. |







| OSD | Camera Name | Specifies a name for the camera. The maximum length |
|--|--|--|
| Camera Name Contera Network Camera | | is 32 characters. |
| ackground | | |
| Translucent Transparent ext color: White | Background Translucent | Configures the background color of the text overlay. The options are Translucent (light grey) or Transparer |
| ext Overlay | Transparent | |
| op Left OFF | Text Color | Options are Black, White, Green, or Yellow. |
| op Right OFF | | |
| Bottom Left OFF Bottom Right | Text Overlay Off | There are four content positions (Top Left, Top Right, Bottom Left and Bottom Right) to display the text overlay. |
| OFF V | Date/Time Camera Name Camera Name + Date/Time | Date/ Time: Displays the current date/time. It will force the camera to synchronize the date/time information. Camera Name: Displays the camera name you set. |
| | Custom Text | Camera Name + Date/Time: Displays both camera name and date/time information. Custom Text: Displays a customized text. |
| **Create custom regions of interest by enabling zones below and selecting the desired quality level. Then create the ROI by dragoling the mouse over the live image and press "Save Area" or "Del Area". Stream: Main Stream ** | ROI (Regions of Interest) | ROI (Regions of Interest) is used to select which area will be monitored and recorded with higher image quality while using lower image quality for other non-ROI zones to save bandwidth and storage. |
| ROI Zone 1: Enable | | To setup the ROI: |
| Medium ✓ Save Area Del Area | | 1 Coloot Main Chronn or Cula Chronn |
| ROI Zone 2: ☐ Enable Medium ✓ Save Area Del Area | | Select Main Stream or Sub Stream Enable zones (up to five zones) and select the |
| ROI Zone 3: Enable Medium Save Area Del Area | | desired quality level (High, Medium, or Low). 3. Create the ROI by dragging the mouse over the live image |
| ROI Zone 4: Enable | | Press Save Area or Del Area. |
| Medium ✓ Save Area Del Area | | |
| | | |



Video



| Menu | Feature | Description |
|--|---|---|
| Video | | Disable Video: Disables live video on the screen. |
| Chow Video Type Disable Video MJPEG over HTTP H.264 over RTP/UDP For H.264 streaming, please make sure ActiveX Plugin MJPEG over HTTP | Disable Video | MJPEG over HTTP: This radio button is the default browser display option. No plug in is required as most browsers can decode MJPEG images. H.264 over RTP/UDP: 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. |
| No Control PTZ ROI Exposure Reference Mouse-related control requires running MPEG video Click and move to select window to set. | Fit Video to Window | 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. |
| * Double click to reset to default settings. | Control Video with Mouse No Control PTZ ROI Exposure Reference | Radio buttons control various functions using the mouse to select them on screen. 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. No Control: Disables mouse control of these functions. PTZ: Zooms in the selected region. Double clicks on the image will restore the image to default. ROI Reference: Creates a custom exposure reference using the selected region to customize backlight. |



| Resolution Left: 0 Top: 0 Right: 1920 Bottom: 1080 Preview Apply | Resolution: Left Top Right Bottom | Controls the image size and image cropping features. Left, Top, Right, and Bottom 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) |
|--|---|---|
| Main Stream Video Compression H.265 H.264 Resolution 1280x720 | Video Compression: H.265 H.264 | Radio buttons to select the desired compression. |
| 1280x720 960x540 Enable SNAPstream+™ Variable Bitrate Maximum Bitrate (64-8000 kbps): 5000 H.264 Quality (110): 3 *10-lowest quality, 1-highest quality Frames Per Seconds: 30 (0~30) GOP Length: 15 (1~120) Apply * "Apply" will apply changes for all three streams settings to the camera. | Resolution | Radio buttons to select the desired resolution. Options vary based on the sensor resolution being used. |
| | Enable SNAPstream+™ | Enables the SNAPstream+ feature on 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 setting configured. There may be variation in the bit rate output from the camera using this mode. |
| | Maximum Bitrate | Maintains variable bit rate control and maintains the bitrate under the rate limit you set to. It can be set from 64 kbps to 8000 kbps. |



| Sub Stream Video Compression H.265 H.264 Resolution 1920x1080 1280x720 960x540 640x480 640x360 320x240 | H.264 Quality | H.264 image quality setting for variable bit rate control. Setting a lower value results in higher image quality, higher value results in lower image quality. |
|--|--------------------------------|--|
| Enable SNAPstream+ Variable Bitrate Maximum Bitrate (64-8000 kbps): 2850 H.264 Quality (110): 7 10 - lowest quality, 1 - highest quality Frames Per Seconds: 10 (0~30) If both Main Steam and Sub Stream set to 1000P, the Third Stream will be terminated, and the FPS of Sub Stream can be set up to 20fps. GOP Length: 30 (1~120) | Frames Per Seconds | Frame rate adjustment for the camera video stream. Note: For 5MP models, FPS will be up to 50% of specified FPS if WDR is enabled. Note: For 5MP models, if both main and sub stream set to full resolution, the maximum FPS of the main stream is up to 15 FPS. |
| Apply " "Apply" will apply changes for all three streams settings to the camera. | GOP Length | Specifies how many frames between two consecutive I-Frames. |
| Third Stream Video Compression MPJEG Resolution 640x360 | Video Compression: MPJEG | The third stream is designed for the live view on web interface, and the only option of Video Compression is MPJEG. |
| Frames Per Seconds: 30 (0~30) Quality Low Mid High | Resolution | The third stream is designed for the live view on web interface, and the only option of Resolution is VGA. |
| Apply * "Apply" will apply changes for all three streams settings to the camera. | Frames Per Seconds | Frame rate adjustment for the camera video stream. |
| | Quality: Low Mid High | Adjusts the compression level for JPEG images |



Network



| M | lenu | Feature | Description |
|--|--|--|---|
| Network IP Assignment ☑ DHCP IP Address: 192.168.1.168 Subnet Mask: 255.255.255.0 Default Gateway: 192.168.1.254 Port HTTP: 80 (80,1024~65535) Second HTTP Port: 8080 (8080,1024~65535) HTTPS: 443 (443,1024~65535) DNS | IP Assignment: DHCP IP Address Subnet Mask Default Gateway | DHCP: If checked, the camera will attempt to obtain its IP address from the DHCP server available on the network. IP Address: Sets the current IP address of the camera. Subnet Mask: Once set, the camera will use these mask bits to determine if a destination is from a different network Default Gateway: Once set, the camera will use send traffic to the specified gateway if the destination is on a different network | |
| Primary DNS: Secondary DNS: | 192.168.1.2 192.168.1.2 | Port: HTTP Second HTTP Port HTTPs | HTTP: The port default is 80. It is used to access the camera via the web browser. 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. HTTPs: The port default is 443. It can be used when you use HTTPs. |
| | Port: Primary DNS Secondary DNS | Configures the Primary and Secondary DNS. | |
| IPv6 Settings Enable IPv6 Link-Local: IPv6 Address: Address Prefix: Default Route: Router Advertiseme DNS: | 64 (0~127) | IPv6 Settings: Enable IPv6 IPv6 Address Address Prefix Default Route Router Advertisement DNS | Enable IPv6: Enables IPv6 function. Manually configures IPv6 address, Address prefix, Default route, and DNS server address. Router Advertisement: Enables Router Advertisement |



| QoS | Enable QoS | Enables quality of service. |
|---|---------------------------------|---|
| Enable QoS Video QoS (0-63): 34 Management DSCP (0-63): 0 | Video QoS | Sets DSCP value for video traffic. |
| | Management DSCP | Sets DSCP value for non-video traffic. |
| UPnP ☑ Enable UPnP | Enable UPnP | Enables Universal Plug and Play function. |
| RTSP Port: 554 (554, 1025~65535) | Port | Configures the port number for stream 1 to stream 3. The range is 554/1025~65535. |
| Enable RTSP Unicast Stream1 Enable RTSP Stream1 Metadata Path1: stream1 Link for external media players: http://lo.10.120.18554stream1 | Enable RTSP Unicast Stream | Enables RTSP Unicast for stream 1(Main stream), stream 2(Sub Stream), and stream 3(Third Stream) |
| ☑ Enable RTSP Unicast Stream2 ☐ Enable RTSP Stream2 Metadata Path2: stream2 Link for external media players: | Enable RTSP Stream metadata | Enables RTSP stream metadata for stream 1(Main stream), stream 2(Sub Stream), and stream 3(Third Stream) |
| itsp://10.10.120.18:554/stream2 Enable RTSP Unicast Stream3 Enable RTSP Stream3 Metadata | Path | Configures the pathname for each stream. |
| Path3: stream3 Link for external media players: risp://10.10.120.18.554/stream3 | Link for external media players | Copies the link from here for external media players |
| Multicast Multicast Stream1 Enable RTSP Multicast Stream Always Multicast | Enable RTSP Multicast Stream | Enables RTSP Multicast stream for stream 1(Main stream), stream 2(Sub Stream), and stream 3(Third Stream) |
| Video IP: 225.24.164.112 Video Port: 5000 (1025~65535) Audio IP: 226.24.164.112 | Always Multicast | Enables the video streams to start multicast steaming without using RTCP |
| Audio Port: 5002 (1025~65535) Meta IP: 227.24.164.112 Meta Port: 5004 (1025~65535) Path: stream1m | Video IP Video Port | Configures the multicast address and the port number to stream video. |



| | Audio IP Audio Port Meta IP Meta Port | Configures the multicast address and the port number to stream audio. *This function is supported depends on models. 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 | Enable DDNS | Enables DDNS service |
| □ Enable DDNS Host Name: □ DDNS Server: □ DynDNS ✓ User Name: □ Password: □ Password Confirmation: | Host Name | Specifies the Host name registered with the DDNS server |
| | DDNS Sever | Selects one of the pubic DDNS severs from the dropdown menu. Options are DynDNS, NO-IP, and Twi-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 | No SNMP Sever | Disables SNMP function |
| No SNMP Server SNMP V2c Community String : public | SNMP v2c | Enables SNMP version 2 support |



| Trap Configuration Address: 192.168.1.200 Community String: public SNMP V3 | Community String | Specifies the name of the community to access to SNMP information. |
|--|---|--|
| SNMP User: initial Authentication: Password: None Privacy: None Trap Configuration | Trap Configuration: Address Community String | Specifies the destination IP address to send SNMP trap messages. |
| Address: 192.168.1.200 Download MIB | 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 | Mode: | Disable: Support for HTTP only. |
| Mode : O Disable O Optional Certificate : No certificate has been | Disable Optional | Optional: Support for HTTP and HTTPs both. |
| Action : Install New Certificate | Certificate | Shows the current status of the Certificate |
| CA Certificate : Browse Upload Client Certificate : Browse Upload | Install New Certificate CA Certificate Client Certificate | Locate CA Certificate and Client Certificate and click Upload. Click Install New Certificate to upload the Certificate. |



| FTP Enable User name: adminftp Password: Confirm: Max. Connection (1~10): 10 | 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. |
|--|---------------------|---|
| | 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 Protocol: NONE V Enable: Apply | Protocol | The default is None to disable 802.1 x 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. |
| | | After the protocol has been selected, manually configures the username, password and other required information. |



Privacy Mask



| Menu | Feature | Description |
|--|---------------------|--|
| Privacy Mask | Enable Privacy Mask | Creates a privacy mask on the image so the selected areas will not be visible. |
| Enable Privacy Mask * Left click and drag to set mask * Right click and drag to erase mask | | |



Event



| Menu | Feature | Description |
|--|------------------------|--|
| Motion Detection * | Enable | Turns on and off on-camera motion detection |
| Extended Zone Size: 8 | Extend | Enables the extended motion detection and motion detection zones increase from default 64 to 1024 for enhanced motion detection sensitivity. |
| 2 8 15 | Zone Size | Adjusts the size of motion detection zones. |
| Detail: 2 1 113 225 Level Threshold: 15 2 16 31 Motion Sensitivity, %: 30 * Left click and move to select window to set mask. * Right click and move to select window to reset mask. | 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. |
| Alarm Handler Enable Alarm Detection Alarm Schedule *This function is supported depends on models. | Enable Alarm Detection | Enables Alarm Detection (Alarm In) function. |



| | Alarm Schedule | 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 numbers to configure the hours and minutes from start to end for all weekdays. S: Click "S" to set up a 24-hour schedule for a particular day. D: Click "D" to clear the previous schedule for a |
|---|----------------------------|---|
| Digital I/O | Trigger Alarm Detection | particular day. When a signal is detected from Alarm in, the Alarm out will be triggered. |
| Trigger Alarm Detection Trigger Motion Detection Trigger Tamper Detection | Trigger Motion Detection | When a motion detection event is detected, the Alarm out will be triggered. |
| Type N.O. ▼ Off Time 0 (0~30s) | Trigger Tamper Detection | When a tamper detection event is detected, the Alarm out will be triggered. |
| *This function is supported depends on models. | Туре | Selects the type: N.O (Normal Open) or N.C (Normal Close) |
| | Off Time | Specifies the alarm duration |
| Tamper Detection Enable Tampering Detection | Enable Tampering Detection | Enables Tampering Detection function. |
| Tampering Schedule Sensitivity Medium V | Tampering Schedule | 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 numbers to configure the hours and minutes from start to end for all weekdays. |
| | | S: Click "S" to set up a 24-hour schedule for a particular day. |
| | | D: Click "D" to clear the previous schedule for a particular day. |



| | Sensitivity | Configures the sensitivity level of Tampering Detection: High, Medium, and Low. |
|---|---|--|
| Remote Server Host Address: Port: 21 (21, 1025~65535) Username: Password: | Remote Server Host Address Port Username Password | Host Address: Specifies the host name or IP address of the FTP server. Port: Specifies the port number of the FTP server. Username: Specifies the login username of the FTP server. Password: Specifies the login password of the FTP server. |
| FTP Upload Handler ☐ Enable Trigger Event ☐ Trigger Alarm Detection ☐ Trigger Motion Detection ☐ Trigger Tampering Alarm ☐ Trigger Scheduled | FTP Upload Handler Enable Trigger Event | Enables and selects a desired trigger source. The options are Trigger Alarm Detection*, Trigger Motion Detection, Trigger Tampering Alarm, and Trigger Scheduled. *This function is supported depends on models. |
| SMTP Notification SMTP Notification Handler From: Trigger Alarm Detection Trigger Motion Detection Trigger Tampering Alarm | SMTP Notification Handler | From: Specifies the email address of the sender Selects a desired trigger source. The options are Trigger Alarm Detection, Trigger Motion Detection, and Trigger Tampering Alarm. |
| Host Address: Port: 25 (1~65535) Username: Password: Authentication: NO_AUTH Recipient List Enable No Email Alarm Motion Tampering 1 2 3 4 | SMTP Server Host Address Port Username Password Authentication | Host Address: Specifies the host name or IP address of the SMTP server. Port: Specifies the port number of the SMTP server. Username: Specifies the login username of the SMTP server. Password: Specifies the login password of the SMTP server. Authentication: Specifies the authentication mode of the SMTP sever. The options are NO_AUTH, SMTP_PLAIN, LOGIN and TLS_TLS. |
| 4 5 6 7 7 8 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10 | Recipient List | 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. |



| Network Storage Login Certificate Username: | Login Certificate | Specifies the login Username and Password for the network storage sever. |
|--|---|---|
| Recipient Setup Network Storage Status: Network Address: Folder Name: Record Type: Mount and Remove Network Storage Mount Remove Network Storage Handler Enable Trigger Event Trigger Motion Detection Trigger Tampering Alarm Trigger Scheduled | Recipient Setup Network Storage Status Network Address Folder Name Record Type Mount and Remove Network Storage | Network Storage Status: Displays the current status of the connection with the network storage server. (not_mounted or ok) Network Address: Specifies the IP address of the network storage server. Folder Name: Specifies the folder name on the network storage server. Recoding Type: Specifies the desired action when an event is triggered. The options are Snapshot and Video. Mount: 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". Remove: Deletes the previous setting. After the setting is removed, the Network Storage Status field will display "not_mounted". |
| | Network Storage Handler | Enables and selects a desired trigger source. The options are Trigger Alarm Detection*, Trigger Motion Detection, Trigger Tampering Alarm, and Trigger Scheduled. *This function is supported depends on models. |
| SD Card Enable Trigger Alarm Detection Trigger Motion Detection Trigger Tampering Alarm Manual Record *This function is supported depends on models. | Enable | Enables and selects a desired trigger source. The options are Trigger Alarm Detection*, Trigger Motion Detection, Trigger Tampering Alarm, and Manual Record. *This function is supported depends on models. |



SD Card Information
Available Storage 0 MBytes

Format SD Card

Usage 0% (0/0 MBytes)
Status not_mounted
Overwrite when storage full
Record Type Video V

*This function is supported depends on models.

SD Card Information

SD card if it is installed.

Format SD Card: Erases all the data stored on the SD

Available Storage

Format SD Card

Usage

Status

Overwrite when storage full

Record Type

Usage: Displays the total storage that has been used

Available Storage: Displays the available storage of the

Status: Displays the status whether the SD card is

installed or not. ($not_mounted$ or ok)

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.



System Options



| Menu | Feature | Description |
|---|--|--|
| System Options | Firmware Upgrade | Clicks Browse to choose the firmware upgrade file, and then clicks Upgrade. |
| Firmware Upgrade Please select a file to update: File Name : Browse Upgrade Download Log Download | Download Log | Records all the status information of the camera in list format. Downloads the log file to the computer as a text file. Note: The log file is protected by a password. Please contact with Arecont Vision technical support team. |
| Reboot & Restore Settings Reboot the Camera Restore to Factory Default Settings Except Network Settings Restore to Factory Default Settings | Reboot & Restore Settings Reboot the Camera Restore Factory Default Settings Except Network Settings Restore to Factory Default Settings | Reboot the Camera: Reboots the camera. Restore Factory Default Settings Except Network Settings: Restores all settings to factory default except the network settings. Restore to Factory Default Settings: Restores all settings to factory default. |
| Date/Time Get Time from: NTP Server Computer System Time Zone: America ✓ Los_Angeles ✓ NTP Server: time.nist.gov Apply NTP Server Configuration Update Time from the Computer * Select NTP Server option to syncronize time with the NTP server and enter server configuration. Select Computer System option to syncronize time with the computer system option to syncronize time with the computer system via camera web page. * Set up appropriate gateway before configuring the NTP server. | Get Time from NTP Server Computer System | NTP Server: Synchronizes the date/time information with defined NTP server. After setting up the desired Time zone and NTP Server, clicks Apply NTP Server Configuration. Note: Please make sure set up appropriate gateway before configuring the NTP server. Computer System: Synchronizes the date/time information with current computer's date/time. Once this option selected, clicks Update Time from the computer. |
| | Time Zone | Specifies the country/ city of the time zone from the drop down menu. |
| | NTP Server | Specifies the desired NTP server |



Administration



| Menu | Feature | Description |
|---|---|---|
| Administration | Access Control | Passwords can be up to 16 letters, digits and symbols, excluding following symbols for passwords without encoding # % & ' " $< > /[]{}_{()} = . + ,$ |
| Access Control (Passwords can be up to 16 letters, digits and symbols, excluding following symbols for passwords without encoding # % & " < > / [] { } _ () = . Administrator Username: admin Admin Password: Confirmation: Set Erase Viewer Management User List: New User Delete User User Information User Name: Viewer Password: Confirmation: Access Level: Admin Viewer | Administrator Username Admin Password Confirmation Set/ Erase | Username: The username of Administrator is admin and cannot be changed. Admin: full access to all camera settings and live video. Admin Password: Specifies the password for the administrator. Confirmation: Re-enters the password for the password validation. Set/ Erase: Saves or removes the password. 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. |



Viewer Management

User List
User Name
Viewer Password
Confirmation
Access Level
Set/ Erase

User List: Displays current user accounts created on the camera. Clicks New User/ Delete User to create or remove a user account.

User Name: Specifies the user name. It must be at least five and up to sixteen characters.

Viewer Password: Specifies the password for the viewer.

Confirmation: Re-enters the password for the password validation.

Access Level: Defines the authorization level for the user: Admin or Viewer.

Set/ Erase: Save or removes the password.



About



| Menu | Feature | Description |
|--|---------|---|
| About Model Name: AV02CMB-100 Firmware: 35100.25 Serial Number: 180301081 MAC Address: 00-1a-07-18-a9-f1 | About | Displays the information of the camera: Model Name, Firmware, Serial Number, and MAC Address. |

Support

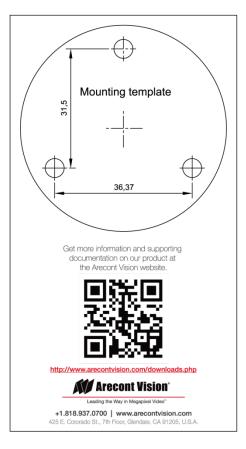


| Menu | Feature | Description |
|---|---------|--|
| • Resources • Online Support Request • Firmware Downloads • Software Downloads • Technical Updates • Product Selector • Downloads | Support | Provides several useful hyperlinks for users who would like to get more information of the camera. |



Mounting Template

60mm



110mm



Leading the Way in Megapixel Video™

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