COHU HD COSTAR

RISE
COMMAND CORE+

Operation Manual

9994001 Rev. A

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Table of Contents

1.0 Getting Started

The RISE Command Core + software is used to control all types of RISE cameras.

1.1 Requirements

1.1.1 Recommended Computer Specifications

The following are recommended computer specifications to run and operate a camera system:

- CPU: Intel i7-860S 2.53 GHz or better
- Operating system: Windows 7 or later
- Memory: 4GB DDR3@1066MHz or better
- Hard Drive: 7200 rpm – minimum speed with sufficient free space
- Video card: NVIDIA® GeForce® 9800 GTX+ with 512 MB RAM or better, or high-end ATI Radeon™ HD series
- Monitor: LCD monitor with 1920x1080 or better resolution

In order to test the camera system you need the following items:

1.1.2 System Requirements

Laptop or desktop computer

- 100/1000BASE-T network card installed in the computer
- Use one of the following web browsers:
    a. Mozilla Firefox, version 69.0 or later
    b. Google Chrome, version 77.0 or later
    c. Microsoft Edge, version 44.18 or later
- 100/1000BASE-T network switch or hub
- Cat5e or Cat 6 cable

1.1.3 Factory Defaults

The camera is shipped with:

- IP Address: 192.168.2.150
- Subnet mask: 255.255.255.0
- Gateway: 192.168.2.1

1.1.4 Usernames and Passwords

Note: The camera is no longer shipped with a username and password. The first user is admin who has to create a password and then login. Admin is responsible to create/distribute the subsequent user accounts.

Upon logging in for the first time as admin, you are asked to create a password. Enter and re-enter a desired password and click **Save New User**. You are then asked to login using your password.

Note: Usernames and Passwords are both case-sensitive.

Note: The admin changes user passwords after the first login.

1.2 Login

Enter the camera's URL in your browser's address bar, and in the *Sign in* tab, enter the **Username** and **Password**, then click **Login**.

To start the video stream as soon as logged in, select **Automatically Start video**.

If you have forgotten the password, select the *Forgot Password* tab.

A Reset Key is automatically generated. Then follow these 2-step procedure:

- Step #1: Click **Copy Key** link to copy the reset key shown in the blue box below. You may also copy the reset key directly from the blue box.

  Note: The reset key is valid for only 24 hours. To request a new reset key, click **New Password Reset Key**.

- Step #2: Paste the copied key in the green box below, then click **Reset Camera Password**.

The RISE Command Core + interface of the camera appears.
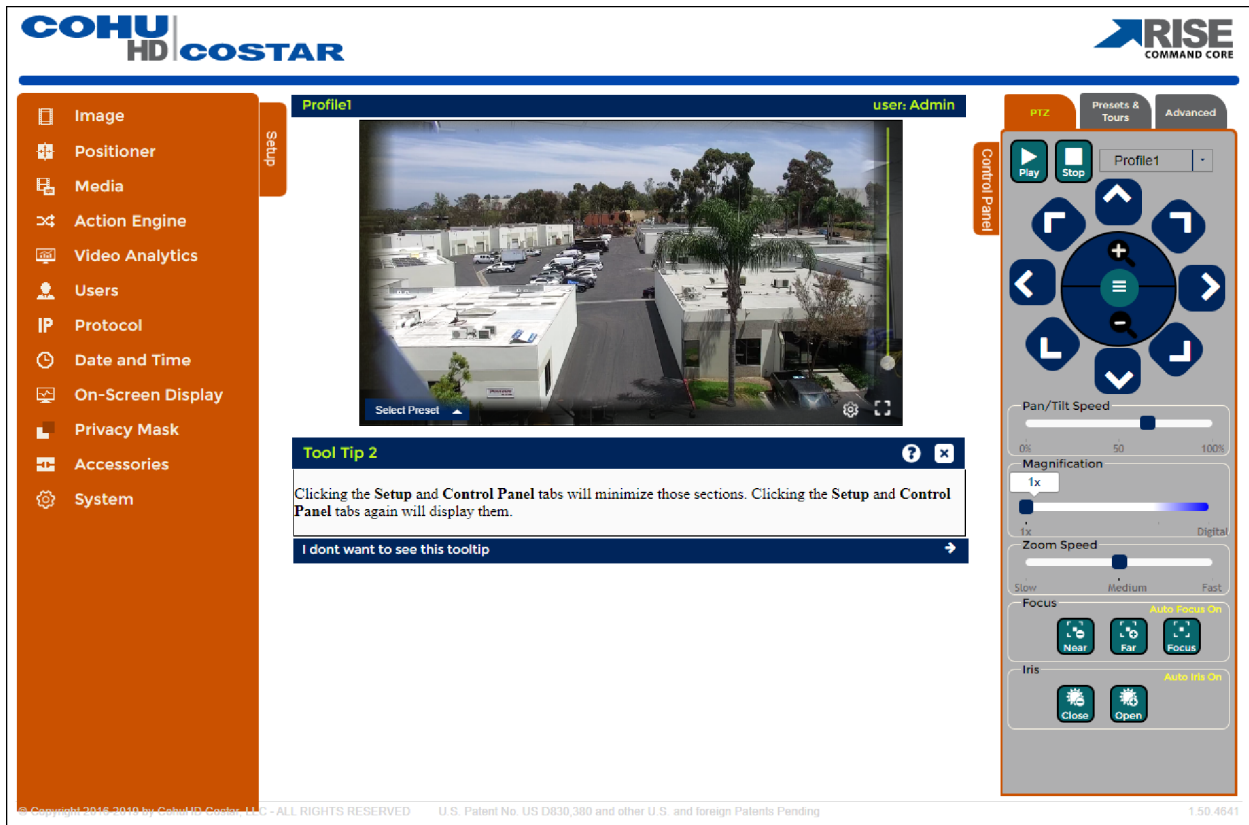
Note: The interface may differ depending on the role of the logged in user.

2.0 User Interface

The user interface is divided into four sections:

1. Display Area: where the video stream is displayed.
2. Setup Menu: options to setup the camera. Clicking the Setup tab minimizes that section.

> Note: The Setup tab is available only to the Administrator and Operator users.

3. Control Panel: a handy tool with shortcuts to mostly used Setup options, like a TV's remote control. Clicking the Control Panel tab minimizes that section.
4. Setup Dialog & Tool Tips:
    - Tool Tips appears when the program starts or when the Help icon ⍰ is pressed. Clicking the Next icon ➡ at the bottom, moves to the next tip related to the selection.
    - Setup Dialog: appears when an option from the Setup Menu is selected.
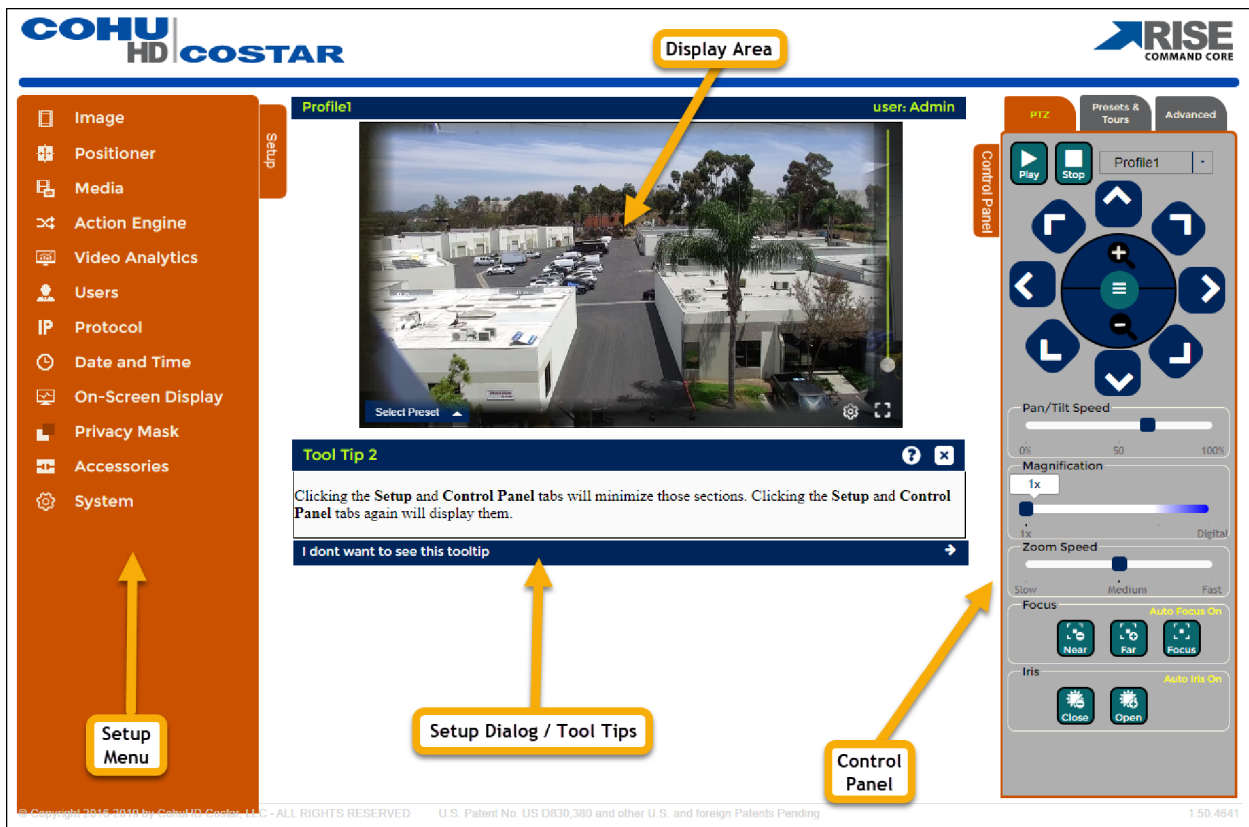
Clicking the navy blue bar above the display area/video player, or clicking on the Maximize button ⊞ at the bottom-right corner maximizes the display area. Pressing the ESC key returns back to the normal view.

On the right side of the display area is the "PTZ controls" slider. Moving this slider allows you to change the magnification of the stream.

At the bottom-left corner of the display area is the **Select Preset** drop-down, which when clicked displays predefined presets, if any, to select from. Presets are defined by the admin in Positioner > Preset Settings.

Next to the Maximize button, there is a Setup button ⚙. Clicking on the Setup button allows setting ON/OFF of the "Stream Information" and/or "PTZ controls" slider to be displayed over the image.
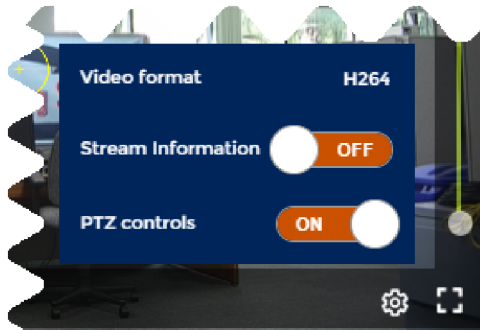
2.1 Control Panel

Control Panel gives the user flexibility to move and point the camera, and over-ride previously defined settings.

2.1.1 PTZ

Controls pan tilt, and zoom of the camera.
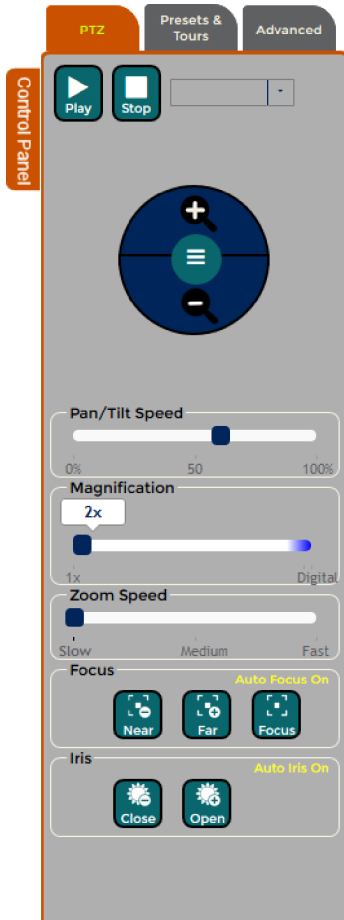
PTZ Profiles

Select a profile name predefined in <u>Setup > Media > Profile Setup</u>, then click the **Play** button to active the selected profile. Click the **Stop** button to stop that profile.
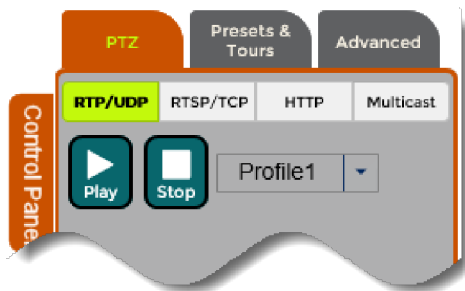
Transport Modes

RTP/UDP

Use RTP/UDP Unicast for video on demand between the camera and a single receiver.

RTSP/TCP

Use RTSP interleaved method to traverse firewalls.

HTTP

Use HTTP tunneling method to traverse firewalls.

Multicast

Use for a large simultaneous number of viewers and for the most efficient usage of bandwidth.

Note: Multicast requires a custom configuration of most routers. It is not possible to multicast over the Internet.

Note: Only 16 simultaneous connections are allowed for unicast streaming.

PTZ Control Wheel

Clicking the hamburger button in the middle of the PTZ "wheel" closes the pan and tilt arrows. Clicking again displays the arrows.
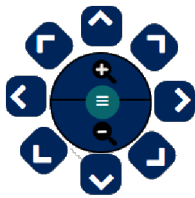
Click and hold any of the arrows "︿" to move the camera towards the direction of the selected arrow.

The plus "＋" and minus "━" buttons zoom in and zoom out the camera.

Other PTZ Controls
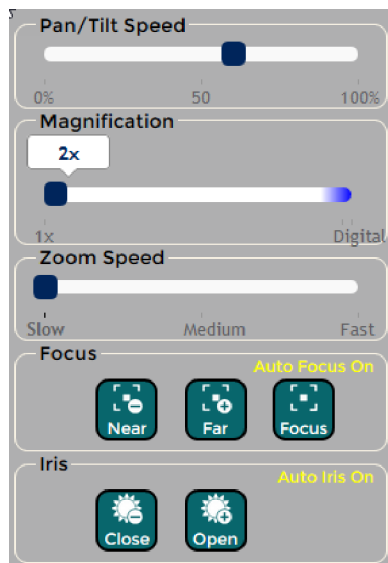
Pan/Tilt Speed

Move the slider to control the Pan/Tilt Speed. The more the speed, the greater the distance the camera travels before coming to a stop.

For more precise pan/tilt, set the slider to a lower level.

Magnification

Besides the lens zoom capability that has a limit, the stream can be further magnified digitally by moving the Magnification slider.

Alternatively, the magnification slider can be used to zoom without moving the lens.

Zoom Speed

Move the slider to control the Zoom Speed. The more the speed, the greater the zoom before before coming to a stop.

For more precise zoom, set the slider to a lower level.

Focus

Click and hold **Near**, **Far**. The focus will continue to change until the button is released or until the focus reaches the limit of its travel.

Click and hold **Focus** buttons to adjust the focus manually.

When focus is in the manual focus mode (auto focus is off), use the One Touch Focus button to adjust focus. The button changes the focus mode from manual to auto for 5 seconds. After 5 seconds, the focus mode will be back to manual.

Click the **Auto Focus On** or **Off** line to switch between auto and manual. In auto mode, the focus will be automatically changed based on the scene illumination.

Iris

Click **Close** or **Open** to restricts light to a usable amount and help extend depth of focus.

Press **Iris Close** to manually close the iris.

Press **Iris Open** to manually open the iris.

Click the **Auto Iris On** or **Off** line to switch between auto and manual. In auto mode, the iris will be automatically changed based on the scene illumination.

2.1.2 Presets & Tools

Click the Presets and Tours tab to bring the Presets and Tours control panel to the screen. The Presets and Tours panel allows users to have a quick access to already programmed presets and tours.

Select a Preset predefined in Setup > Positioner > Preset Settings, then click the **Go** button to active the selected preset.

Select a Tour predefined in Setup > Positioner > Tour Settings, then click the **Start** button to active the selected tour.
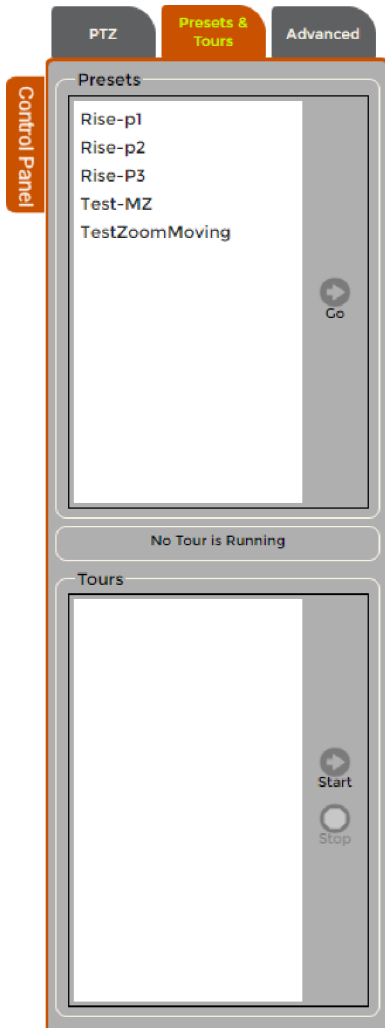
2.1.3 Advanced (Admin and Operator only)

Note: The user must be logged on as Administrator or Operator to use the Advanced tab.

The Advanced tab controls allow more precise settings of the image during fog, rain, wind, and other external conditions.
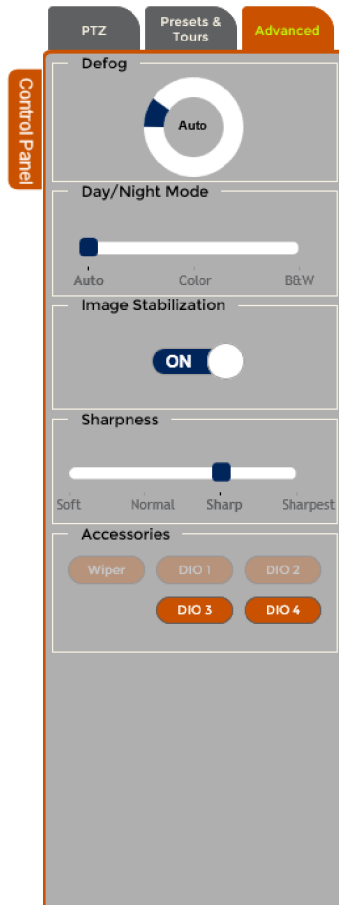
Defog

Click around the circle to set defogging to Auto, Manual, or Off.

Day/Night Mode

Move the slider to Auto, Color, or B&W to change the mode.

Image Stabilization

Select ON or OFF.

Accessories

The active buttons correspond to the type of the camera in use, and the installed accessories. Click one of the DIOs to activate.

3.0 Setup

The Setup menu options are:

- Image
- Positioner
- Media
- Action Engine
- Video Analytics
- Users
- Protocol
- Date and Time
- On-Screen Display
- Privacy Mask
- Accessories
- System

▯	Image
⊞	Positioner
▤	Media
⤨	Action Engine
▣	Video Analytics
☻	Users
IP	Protocol
◷	Date and Time
⊡	On-Screen Display
◪	Privacy Mask
▭	Accessories
⚙	System
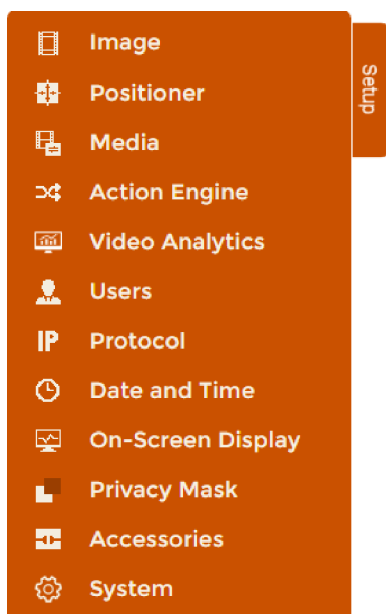
Note: Depending on the type of camera used and/or settings elsewhere in the Setup tab, some features may be grayed out and inactive. Hovering over the text "Why is this disabled?" explains the reason for that instance.

3.1 Image (Admin and Operator only)

Note: The user must be logged in as Administrator or Operator to see and use the Image option.

The options in Image menu are:

- Lens Settings
- Exposure Settings
- Defog Settings
- Advanced Setting.
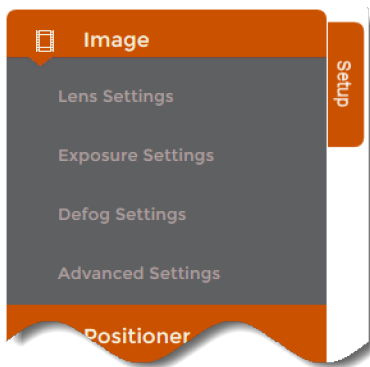
3.1.1 Lens Settings

Note: The user must be logged in as Administrator or Operator in order to make changes on the Lens Settings page.
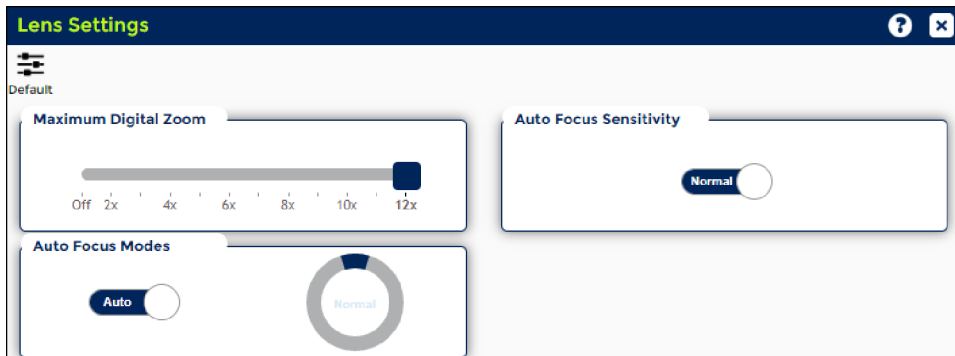
Maximum Digital Zoom

Digital zoom allows the user to electronically zoom while viewing the video. Maximum digital zoom for the camera system is 12x. Slide the bar to set the maximum digital zoom limit.

Auto Focus Sensitivity

The Auto Focus Sensitivity function allows the user to adjust auto focus in response to scene change or object movement.

How to Choose Auto Focus Sensitivity?

Auto focus sensitivity can be set to:

- Low: Slower auto focus reaction provides more stability when viewing scenes. Choose the Low position for scenes with minimal changes.
- Normal: Auto focus reacts more conventionally to scene changes.

Auto Focus Modes

The Auto Focus Modes indicates whether the camera should automatically adjust the focus by itself or it needs to be configured manually.

How to Choose Auto Focus Modes?

There are two auto focus types: Auto and Manual. In Manual type, the following modes can be set:

- Normal: This is the normal mode for Auto Focus operations. It's the default position.
- Interval: This the mode used for Auto Focus movements carried out at particular intervals. The time intervals for Auto Focus movements and for the timing of the stops can be set in one-second increments using the Set Time Command. The initial setting for both is set to 5 seconds.
- Zoom Trigger: When zoom position is changed, it becomes Auto Focus mode during the pre-set value (initial setting is set to 5 seconds). Then it stops.

Default: Restores the factory default settings.

3.1.2 Exposure Settings

Note: The user must be logged on as Administrator or Operator in order to make changes on the Exposure Settings page.
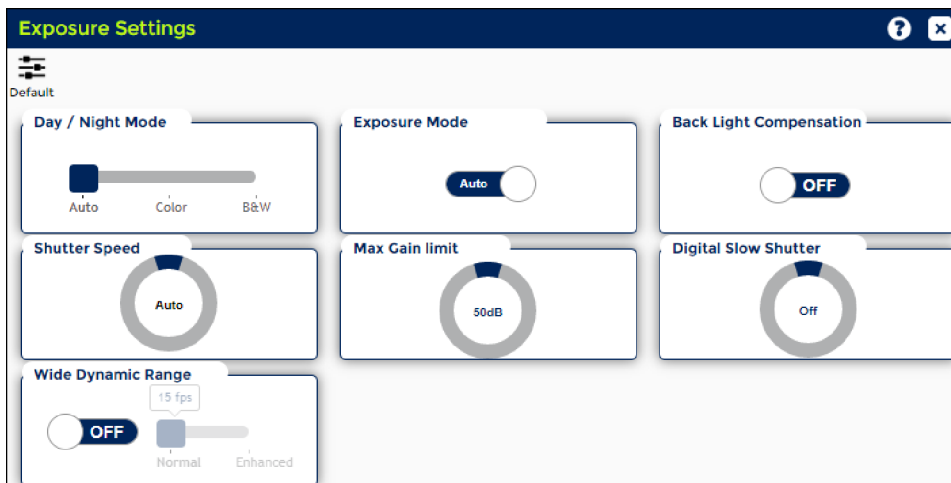
Day/Night Mode

The Day/Night mode determines whether the camera will produce a color image with the IR cut filter in place or a black and white image with the IR cut filter removed.

Select one of the positions:

- **Auto**: The camera will automatically change between the Color and Black and White modes based on the camera gain level. As the scene illumination decreases, the camera gain will increase to a point where the camera will change to the Black and White mode, and the IR cut filter will be removed from the light path. As the scene illumination increases, the camera gain will decrease to a point where the camera will change to the Color mode, and the IR cut filter will be inserted into the light path.

- **Color**: The camera will remain in the Color mode regardless of the camera gain level.
- **B&W (Black and White)**: The camera will remain in the Black and White mode regardless of the camera gain level.

Note: When changing from either Color or Black and White mode to the Auto mode, there will be a delay of approximately ten seconds before the automatic mode is engaged.

Note: The Auto Day/Night mode requires that the shutter speed also be in the Auto mode. If the Shutter speed is not already in the Auto mode, selecting the Auto Day/Night mode will cause the shutter to change into the Auto mode.

Exposure Mode

The Exposure Mode can be set to:

- Auto
    - Exposure Mode automatically changes in camera full auto mode
    - Shutter speed value changes into auto
    - Iris mode value changes into ON
- Manual
    - Exposure Mode automatically changes in camera full manual mode.
    - Shutter speed value changes into auto
    - Auto Iris mode value changes into OFF

Shutter Speed

The shutter Speed determines the electronic shutter speed, or integration timing, of the camera sensor.

Select the shutter speed:

- Auto: The shutter speed will automatically change based on the scene illumination.
- Manual: Selecting a shutter speed slower than 1/60 second (1/2s through 1/30s) will increase the camera sensitivity, but will also increase image lag and blurring. Selecting a shutter speed faster than 1/60s will decrease camera sensitivity, but will improve the ability to display moving objects.

Note: Selecting any Shutter speed other than Auto will force the camera to change from the Day/Night Auto mode to either Color or Black and White mode. Selecting any Shutter speed other than Auto locks the Shutter speed at that value.

Max Gain Limit

The gain limit determines:

- Max Gain Limit: Max gain limit can set if exposure mode is auto
- Manual Gain : Manual gain can set only if exposure mode is manual

Digital Slow Shutter (DSS)

Select the value by changing the knob position. When the value is set to 1/8 s or 1/15 s, the camera will automatically go into the long-term integration mode when the light level decreases.

Increasing the integration time of the sensor significantly increases the camera sensitivity, but also significantly increases motion blur.

Setting the value to OFF prevents the camera from entering the long-term integration mode, and is the recommended mode for most applications.

Note: The lens iris and the camera exposure controls operate independently. Changes made to one parameter may be automatically compensated for by the other. For example, in the Auto Iris mode, manually changing the shutter speed may not appear to make a difference in the video output from the camera because the iris is automatically compensating for the different shutter speed.

Backlight Compensation (BLC)

Select one of the modes:

- ON
- OFF

Important: When BLC is ON, WDR is OFF.

The BLC alters the automatic exposure control programming to prevent a bright background from making dark parts of the image too dark.

A bright background can cause the automatic exposure control to make a dark area of the scene too dark. When the dark area of the scene is more important than the bright area, enabling BLC will alter the automatic exposure control by placing less emphasis on the bright area and more emphasis on the dark areas.

Wide Dynamic Range (WDR)

Important: When WDR is ON, BLC is OFF.

The Wide Dynamic Range (WDR) balances the brightest and darkest sections of a scene to produce a picture that is better balanced in lighting and provides more detail. When WDR is ON, the frame rate is reduced from the standard 30 frames per second (fps) to 15 fps. Also, when this setting is ON, the iris will not close completely even in manual mode.

Select one of the following choices when the WDR mode is ON:

- Normal
- Enhanced

Default: Restores the factory default settings.

3.1.3 Defog Settings

Note: The user must be logged in as Administrator or Operator in order to make changes on the Defog Settings page.

Defog Mode

Select one of the modes:

- OFF
- MANUAL
- AUTO

The Defog function helps to enhance image quality for viewing in smoky environments and bad weather, such as rain, snow or fog. The defog control adjusts contrast, color, and sharpness.

- Auto: Select the Auto mode to automatically adjust the image in a foggy environment. In this mode, the camera automatically recognizes the fog density and applies the necessary correction level. The Auto mode allows the defog function to be enabled full time. When no fog is detected there is minimal compensation. The Auto mode has limitations under the following conditions:
  - Image is not in focus
  - Images are too dark or too bright because of the iris control related function
  - WDR is turned OFF
  - The scene has low contrast
  - The scene has high contrast
- Manual: Select one of the three manual levels of enhancement, depending on fog thickness: OFF for light fog density, ON for heavy fog density.

Defog Strength

Change the knob position to increase the defog level in poor visibility.

> Note: The Defog Strength level can be changed when Defog Mode is set to Manual.

Default: Click the button to restore the factory default defog settings.

3.1.4 Advanced Settings

> Note: The user must be logged on as Administrator or Operator in order to make changes on the Advanced Settings page.
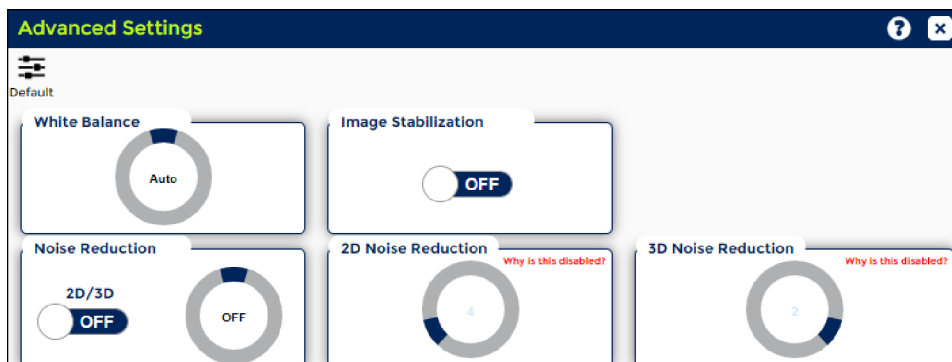
White Balance

The Auto white balance will automatically compensate for changing light conditions to maintain correct color reproduction, especially during the transition from day to night or from night to day.

Select one of the following White Balance modes:

- Auto: This mode computes the white balance value output using color information from the entire screen. It outputs the proper value using the color temperature radiating from a black subject based on a range of values from 2500K to 7500K. This mode is the initial setting
- Indoor: 3200K Base Mode
- Outdoor : 5800K Base Mode
- ATW: Auto Tracing White balance (2000K to 10000K)
- OutdoorAuto: This is an auto white balance mode specifically for outdoors. It allows you to capture images with natural white balance in the morning and evening
- SodiumLamp: This is a fixed white balance mode specifically for sodium vapor lamps
- SodiumLampAuto: This is an auto white balance mode that is compatible with sodium vapor lamps

- SodiumLampOutdoorAuto: This is an auto white balance mode specifically for outdoors, which is compatible with sodium vapor lamps

Image Stabilization (IS)

Use the IS function to stabilize the image if the camera is subject to vibration.

Select one of the modes:

- ON
- OFF

Noise Reduction (NR) Mode

Use the NR to decrease the noise by frame correction.

Select **2D/3D** mode to ON to turn off general Noise Reduction and turn ON 2D/3D Noise Reduction. Select OFF to turn off 2D/3D Noise Reduction.

- Noise Reduction level: Change the knob position to adjust the General NR level.
- 2D/3D Noise Reduction level: Once the 2D/3D mode is turned ON, change the knob position to adjust the respective NR level.

Note: Either Noise Reduction level or 2D/3D Noise Reduction level can be set at a time.

Default: Click the button to restore the factory default advanced settings.

3.2 Positioner (Admin and Operator only)

Note: The user must be logged in as Administrator or Operator to see and use the Positioner option.

The options in Positioner menu are:

- Preset Settings
- Tour Settings
- Park Settings
- Positioner Settings
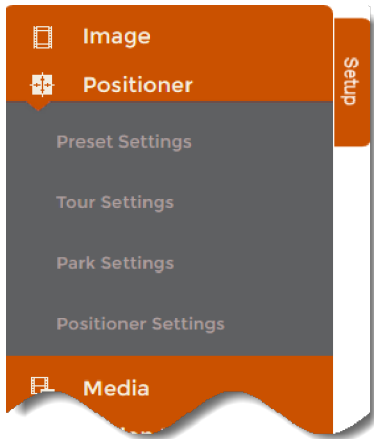
3.2.1 Preset Settings

Note: The user must be logged on as Administrator or Operator in order make changes on the Preset Settings page.
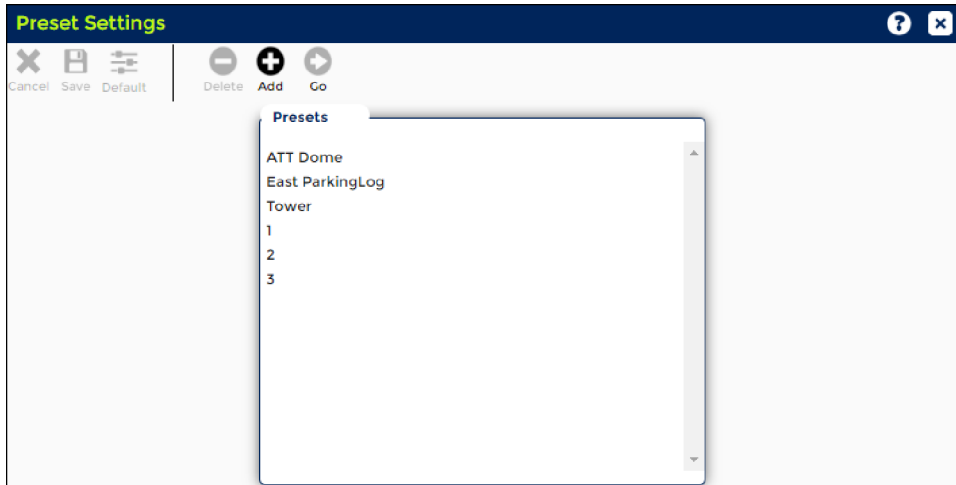
Presets are predefined pan, tilt, zoom, and focus camera views that are stored in the camera.

The camera system supports up to 200 presets.

Note: When received, camera systems do not have any established presets.

To create a new preset:

1. Move the camera to the desired position.
2. Click **Add**. A new window will appear.

Create Preset

Preset Name [   ]

Valid characters are A..Z,a..z,0-9,-,_,:

Create Preset   **Cancel**

3. Enter a Preset Name.
4. Click **Create Preset**.
   A new Preset name will be added to the *Presets* table, the *Presets* list in the PTZ control, and in the *Available Presets* table in the Tour Settings panel.
5. Click **Cancel** to cancel.

To delete a preset:

1. Select a preset name in the *Presets* table.
2. Click **Delete**.

To change a preset location but keep the same preset name:

1. Select a preset name in the *Presets* table.
2. Move the camera to the desired position.
3. Click **Save**.
4. In the new window that appears, click **Save** to save this preset.
5. Or, click **Cancel** to cancel the create preset operation.

To go to a desired preset:

1. Select a preset name in the *Presets* table.
2. Click **Go**.
3. Alternatively, use the PTZ control:
   a. Choose a preset from the drop-down list.
   b. Click **Go** to send the camera system to the chosen preset.

Cancel: Disabled on this screen.

Save: Disabled on this screen.

Default: Disabled on this screen.

3.2.2 Tour Settings

Note: The user must be logged in as Administrator or Operator in order to create tours or make changes on the Tour Settings page.
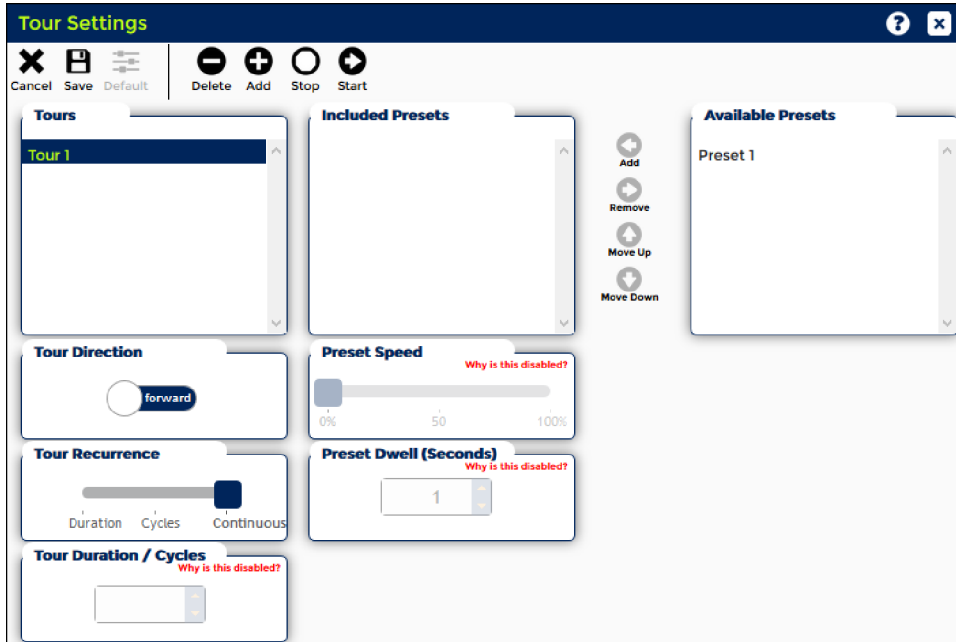
A tour is a group of presets that are visited in a defined sequence.

- The system supports 50 tours.
- Each tour can have a maximum of 32 presets.
- Each preset in a tour has its individual dwell time and pan and tilt speed.
- The minimum dwell time is 1 second and the maximum dwell time is 3600 seconds (one hour).
- Dwell time does not include the travel time between presets.

To create a tour:

1. Click **Add** ⊕.
   A *Create Tour* dialog appears.
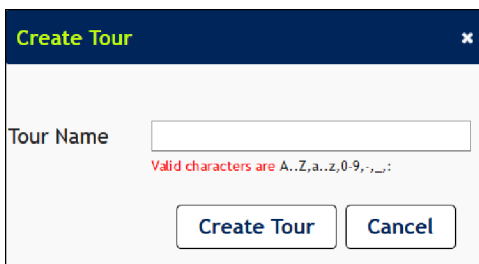
2. Enter a **Tour Name**.
3. Click **Create Tour**.
   A new tour name will be added to the *Tours* table.
4. Click **Save**.
5. Add presets to the tour:
   a. Select a tour in the *Tour* table.
   b. Select a preset from the *Available Presets* list.
   c. Click **Add** ⊕ .
      The preset will be added to the *Included Presets* table.
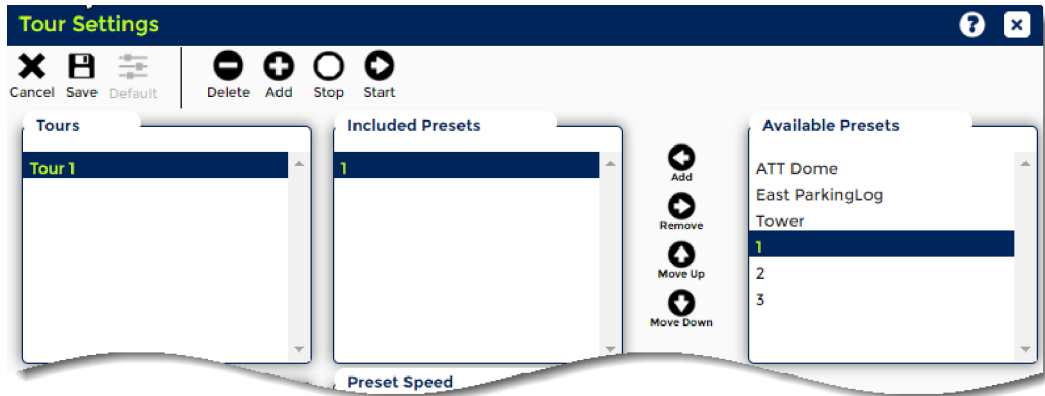
d. Add all desired presets to the tour.
6. For each preset establish speed and dwell time:
    a. Select a preset.
    b. Choose preset speed (Slow, Medium or Fast).
    c. Enter dwell time.
        The dwell time must be between 1 and 3600 seconds.
    d. Click **Save** to save the settings for each preset.
7. Establish the tour presets order:
    a. From the *Included Presets* table, select a preset.
    b. Click **Move Up** ⬆ or **Move Down** ⬇.
8. Choose a tour direction from the *Tour Direction* control.
9. Choose a tour recurrence from the *Tour Recurrence* control: Duration, Cycles, Continuous.
10. Type a tour duration (in seconds) in the Duration box, if required.
11. Click **Save** to save the tour.

To delete a preset from the tour:

1. Select a preset from the *Included Presets* list.
2. Click **Remove** ⊙.

To delete a tour:

1. Select a tour from the *Tours* list.
2. Click **Delete** ⊖.

To start or stop a tour:

1. Select a tour from the *Tours* list.
2. Click **Start** ⊙ or **Stop** ⊙ on the *Tour Settings* panel.
3. Alternatively, use the PTZ control:
    a. Select the tour from the *Tours* list.
    b. Click **Start** ⊙ or **Stop** ⊙ .

Note: When a tour is running, the name of the tour is displayed on the top blue bar with profile and user names.

Cancel: Returns to the previously saved state.

Save: Stores current settings permanently.

Default: Restores the factory default settings.

3.2.3 Park Settings

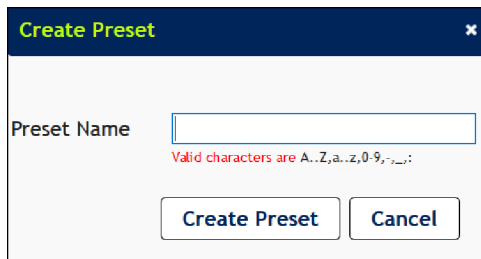Note: The user must be logged in as Administrator or Operator to make changes on the Park Settings page.
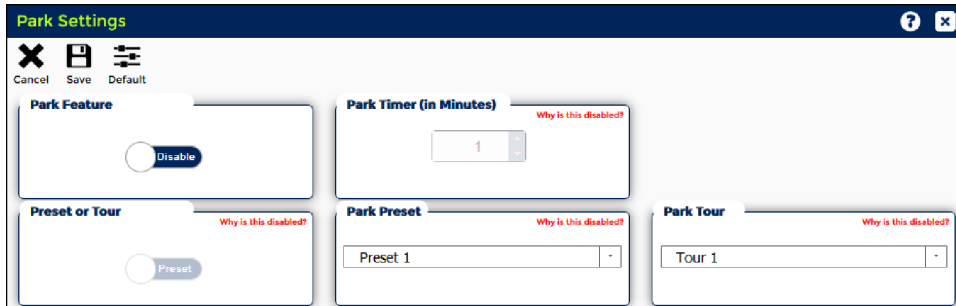
The camera system can be set to automatically move to a preset or start a tour after a selected interval of inactivity.

Note: Preset(s) or Tour(s) must be established in order to create a Park position.

Set the Park Position

Use the steps below to set the Park position:

1. From the *Park Feature* control, choose the **Enable** option.
2. From the *Preset or Tour* control, choose **Preset** or **Tour**.
3. From the *Park Timer* control, choose or enter an amount of inactive time (in minutes).
4. If the **Preset** option is chosen:
    - From the *Park Preset* drop-down, choose a preset.
5. If the **Tour** option is chosen:
    - From the *Park Tour* control, choose a tour.
6. Click **Save** to save the park settings.
7. Click **Cancel** to cancel the park settings operation and return to the previously saved state.

Save: Stores current settings permanently.

Default: Restores the factory default settings.

3.2.4 Positioner Settings

Note: The user must be logged in as Administrator or Operator to make changes on the Positioner Settings page.
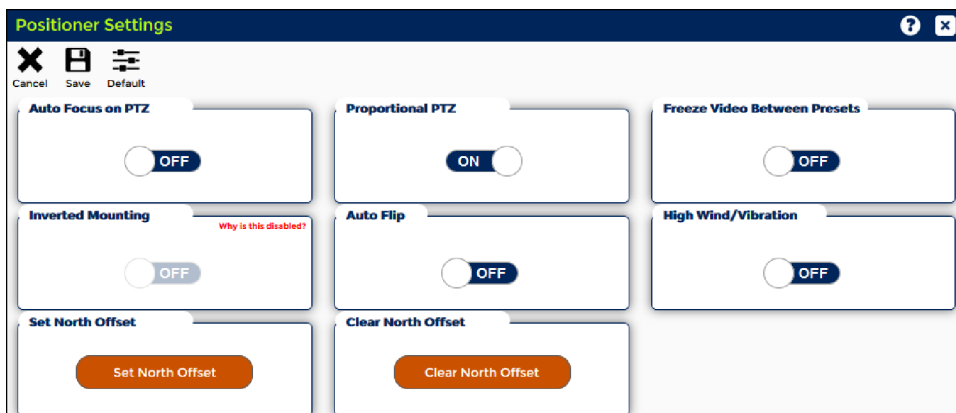
Auto Focus on PTZ

Choose one of two options:

- ON: To focus automatically when using pan, tilt and zoom functions.
- OFF: The camera lens does not attempt to focus while moving between presets.

Proportional PTZ

The Proportional PTZ feature automatically reduces or increases the pan and tilt speeds in proportion to the amount of zoom.

Choose one of two options:

- ON: At telephoto zoom settings, the pan and tilt speeds will be slower than at wide angle zoom settings. This keeps the image from moving too fast on the live view image when there is a large amount of zoom.
- OFF: The pan and tilt speeds are not influenced by the amount of zoom.

Freeze Video Between Presets

The Freeze Video feature eliminates the blurring effect of movements between preset positions and saves on the bandwidth and storage. This function gives operators a clean transition between scenes.

Choose one of two options:

- ON: To freeze the current image during preset movement.When the camera system reaches a new preset, the view from that new preset is shown.
- OFF: To resume normal video.

Inverted Mounting (4260HD)

The Inverted Mounting feature allows the camera system to be installed upside down.

Choose one of two options:

- ON: For inverted installation of the camera system.
- OFF: For upright installation.

Auto Flip (4220HD)

This function enables the PTZ dome camera to flip the image 180 degrees and enables the operator to see the target when it moves under the camera.

Choose one of two options:

- ON: To invert the image when the camera system reaches a mechanical stop at -90°.
- OFF: To disable the Flip function.

High Wind/Vibration

Enabling the feature reduces the traveling speed between presets.

Choose one of two options:

- ON: To enable the High Wind/Vibration mode.
- OFF: To disable the High Wind/Vibration mode.

Set North Offset

The button sets current pan position to North. North is a user defined point where pan position will be reported to be 0.000°. Compass and Headings will be referenced to this point, "N" and "0.000°" respectively.

Tilt will not be affected by setting the Home/North position. Returning to Factory Default settings will reset the Home/North setting to be the same as the mechanical home pan position.

Clear North Offset

Click the **Clear North Offset** button to return to the factory North default setting.

To establish the North position use the following steps:

1. Pan the camera to point due North.
2. Click the **Set North Offset** button to set the current pan angle to 0° (North).

Cancel: Returns to the previously saved state.

Save: Stores current settings permanently.

Default: Restores the factory default settings.

3.3 Media (Admin and Operator only)

Note: The user must be logged in as Administrator or Operator in order to see and use the Media option.

The options in Media menu are:

- Media Wizard
- Media Utilization
- Profile Settings
- Stream Settings
- Advanced Settings
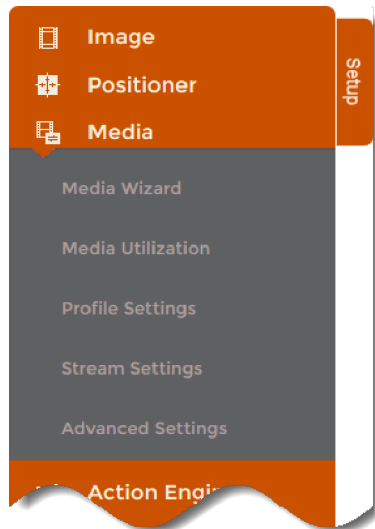
3.3.1 Media Wizard

Note: The user must be logged in as Administrator or Operator in order to make changes on the Media Wizard page.

A profile can be created by using one of two panels:

- Media Wizard: Use the Media Wizard panel to simultaneously create a profile and a stream associated with this profile.
- Profile Settings: Use the Profile Settings panel to create a profile associated with the existing stream.

How to Create a Profile Using Media Wizard Panel

Use the Media Wizard panel to create profiles customized for the network by following the prompts on the screen.

- Max number of profiles is 8.
- Max number of active streams (H.264 and JPEG combined) is 8.

To create a profile follow Wizard's prompts. The steps are:

1. From the Setup panel, click the *Media Wizard* tab.

    If the Utilization Warning dialog appears, go to the *Stream* tab and remove unnecessary streams. Click **OK** to close the dialog window.

    Choose your network type. Click **Next**.

Transmission speed is the rate at which data is moved across a communication channel. It is measured in megabits per second (Mbps).

Choose network technology based on the data transmission speed:
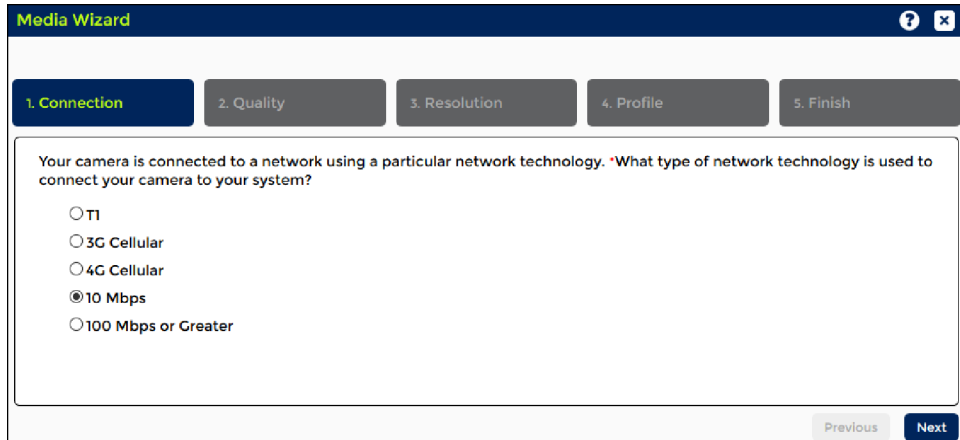
- T1 - data transmission speed is 1.5 Mbps
- 3G Cellular - data transmission speed is up to 3.1 Mbps with an average speed range between 0.5 to 1.5 Mbps
- 4G Cellular - data transmission speed is 2 to 12 Mbps
- 10-Base - data transmission speed is 10 Mbps
- 100-Base - data transmission speed is 100 Mbps or greater

2. Choose the preference for picture quality. Click **Next**.
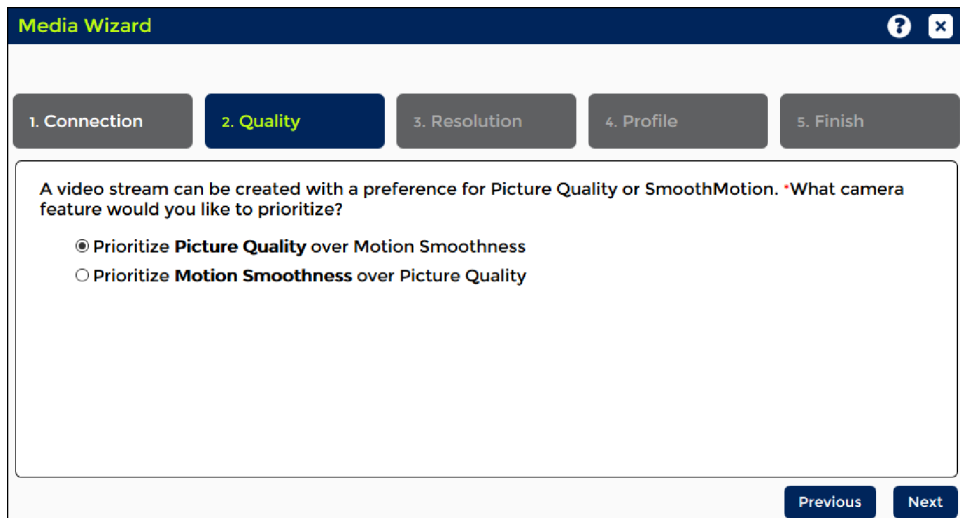
3. Choose video resolution. Resolutions that are not available for your camera type and camera con-figuration will be greyed out. Click **Next**.
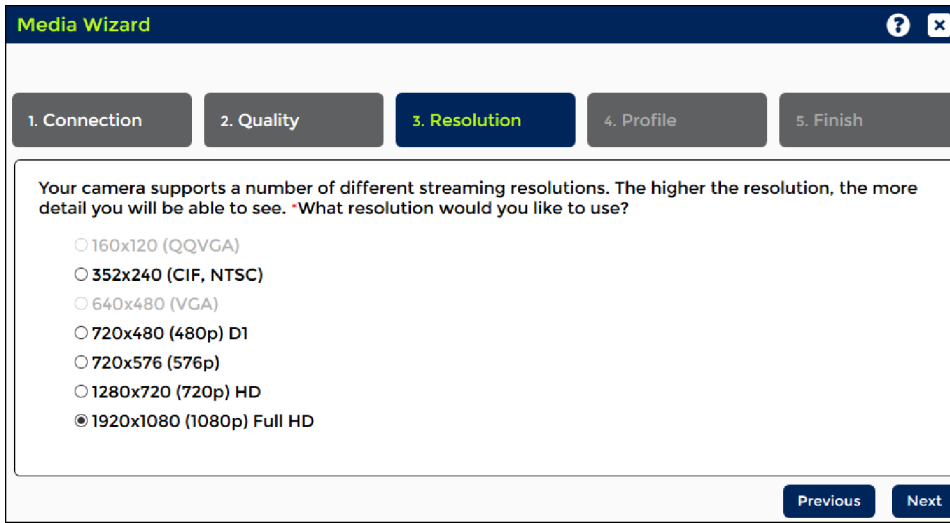
4. Enter a Profile Name. Click **Next**.
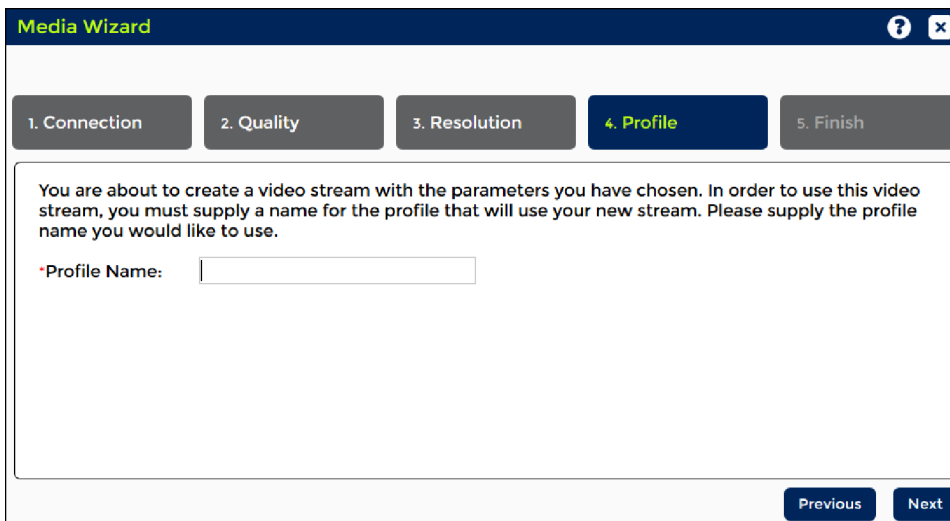
5. Click **Finish** to complete the stream and profile setup. The series of prompts in red will be displayed.
6. After the series of prompts, the dialog *Setup Successful* will be displayed. Click **OK**.

Note: The profile name will be added to the *Profile Name* list on the Profile Settings Panel. The stream name will be added to the *Stream Name* lists on the Profile Settings and Stream Settings panels.

3.3.2 Media Utilization

Note: The user must be logged in as Administrator or Operator in order to view the Media Utilization page.
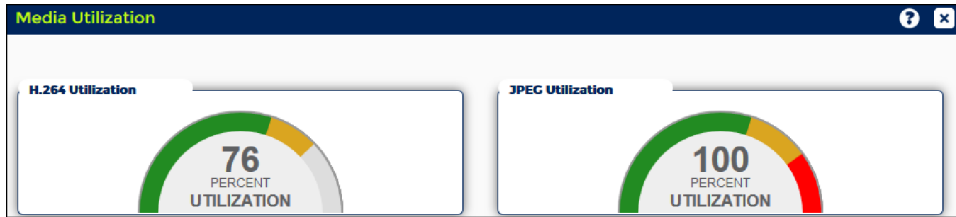
H.264 and JPEG Utilizations

H.264 or JPEG utilization is a measure (in percentage) of encoding capacities usage:

- Green Color: 0 - 70% utilization
- Yellow Color: 71 - 89% utilization
- Red Color: 90 - 100% utilization

H.264 and JPEG utilizations are independent of each other. A 100% H.264 utilization does not affect the JPEG utilization. When H.264 utilization is 100%, only the JPEG codec will be available for a new stream.

Important: To create a new stream with the H.264 codec, the H.264 utilization must be less then 100%. The same applies to the JPEG codec.

3.3.3 Profile Settings

Note: The user must be logged in as Administrator or Operator in order to make changes on the Profile Settings page.

Profile Name	Stream	Codec	Resolution	Multicast	Frames/sec	Bit Rate (kb/s)
Profile1	Stream0	H264	1920x1080	Disabled	30	4096
Profile2	Stream1	H264	1280x720	Disabled	30	2048
Profile3	Stream2	H264	352x240	Disabled	30	256
Profile4	Stream3	JPEG	1920x1080	Disabled	30	128
-	Stream4	H264	1920x1080	-	1	2000
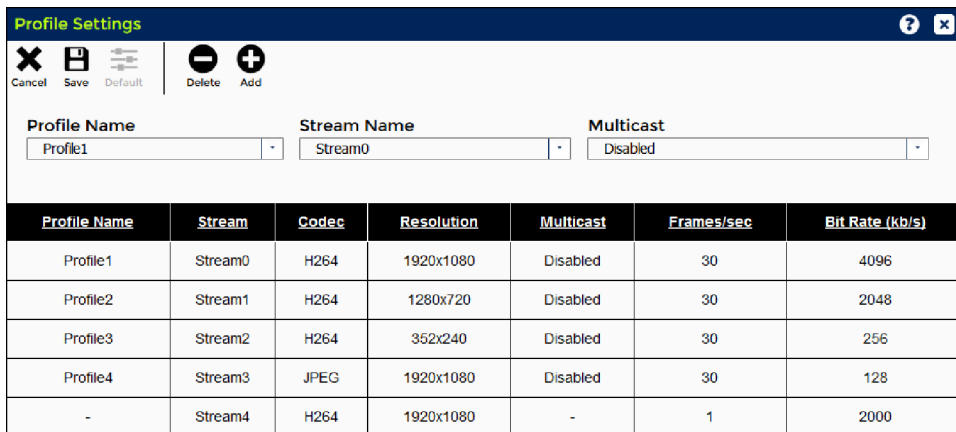
Profiles can be defined by using one of the two panels:

- Media Wizard: Use the Media Wizard panel to create simultaneously a profile and a stream associated with this profile.
- Profile Settings: Use the Profile Settings panel to create a profile associated with the existing stream.
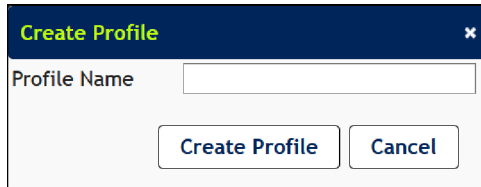
Creating a Profile Using Profile Settings Panel

Use the Profile Settings panel to create profiles that can be saved and quickly available from the PTZ Control. Two pre-programmed profiles (Profile 1 and Profile 2) are available for quick setup. More user defined profiles can be established.

- Max number of profiles is 8.
- Max number of active streams (H.264 and MJPEG combined) is 8.

To create a profile use the following steps:

1. Click **Add** from the Profile Setting panel.
2. Enter the profile name in the *Create Profile* box.

3. Click **Create Profile**.
   The profile name will be added to the *Profile Name* list.
4. Choose the video stream from the **Stream Name** drop-down.
5. Choose "Enable" or "Disable" from the **Multicast** drop-down.
6. Click **Save** to save a profile.
7. Create up to eight profiles.

To delete a profile use the following steps:

1. Select a profile from the *Profile Name* list.
2. Click **Delete**.

Cancel: to clear changes that were made.

3.3.4 Stream Settings

Note: The user must be logged in as Administrator or Operator in order to make changes on the Stream Settings page.
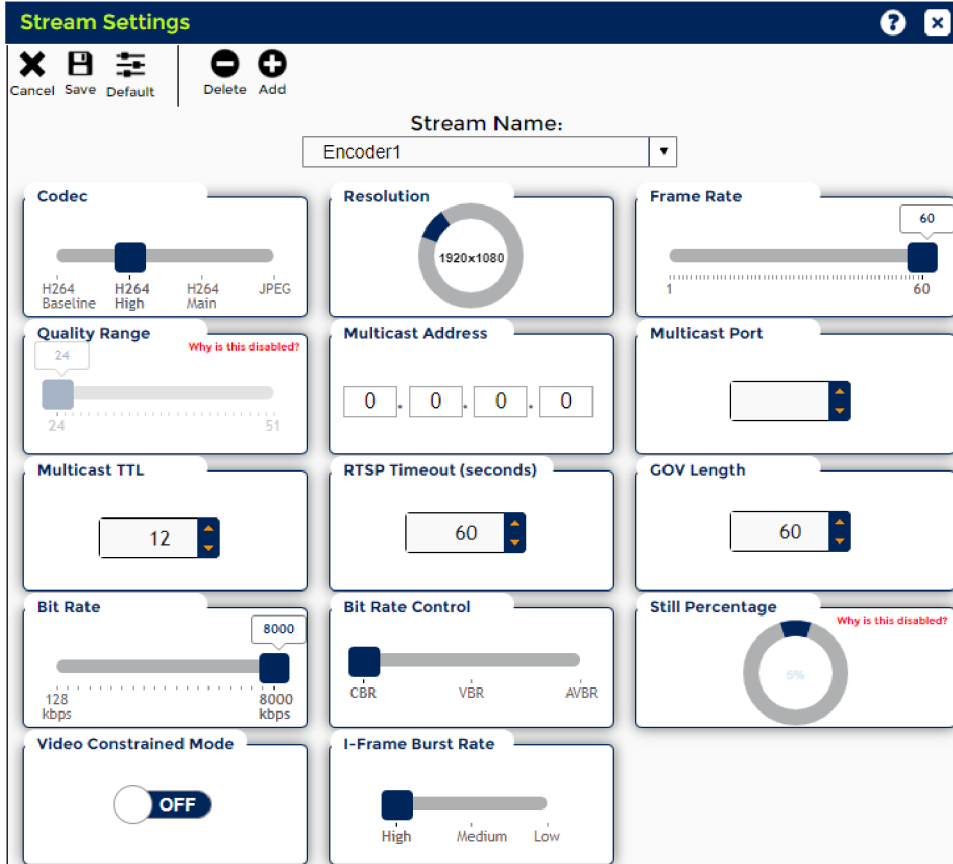
What is a Stream?

A real-time video stream is compressed live video files that are transmitted to the user over a network. Configuration for video streams includes codec (compression), resolution, image rate and frame rate. The network aspects of video transmission include multicast configurations, such as address, port, TTL, RTSP timeout, GOV length and video constrained mode.

How to Add a stream to the profile?

1. Click **Add** to add a new stream name. The stream name will be added to the *Stream Name* list.
2. Click **Save**.

How to Remove a stream from the profile?

1. Select a stream from the *Stream Name* list.
2. Click **Delete**.

Note: If a stream is associated with a profile, it cannot be deleted.

How to Configure a stream?

1. Select a stream from the *Stream Name* list.
2. Select the desired settings such as codec, resolution, etc.
3. Click **Save** to save configuration, or click**Cancel** to clear changes that were made since your last save, or click **Default** to restore the factory default settings.

Codec

The camera system supports the following compression standards:

- H.264 (Baseline, Main and High profiles)

  Reduces bandwidth and storage consumption significantly. H.264 codec is the most frequently recommended codec for high-definition video applications.

  - **Baseline**: Baseline is the least complex of the three profiles and places the least demand on a decoder. Use for streaming video to mobile phones.
  - **Main**: The most frequently used profile with better video quality than the Baseline profile.
  - **High**: Use for the highest quality video stream with high-end equipment. It is the most pro-cessor-intensive profile, but requires the least amount of bandwidth.
- JPEG

  JPEG consumes much more bandwidth and storage than H.264.

  Use JPEG to configure the video stream for the legacy equipment.

Note: H.264 video compression is not supported by browsers Mozilla Firefox and Google Chrome. Use Internet Explorer version 11 for H.264 compression.

Resolution

Width x Height = Resolution (in pixels). Choose the required resolution for your images.

Important: A maximum of 7 unique resolutions of visible spectrum video stream can be created by the camera at the same time - 4 high resolutions and 3 low resolutions.

Visible Spectrum Resolutions

The following seven resolutions are available for visible spectrum stream in H.264 Codec configuration:

- 1920x1080 (1080p)
- 1280x720 (720p)
- 720x576 (576p)
- 720x480 (480p)
- 640x480 (VGA)
- 352x240 (CIF, NTSC)
- 320x240 (QVGA)

The following resolutions are available for visible spectrum stream in JPEG Codec configuration:

- 1920x1080
- 1280x720
- 720x576
- 720x480
- 640x480
- 352x240
- 320x240
- 176x120
- 160x120

Important: All the listed resolutions are not always available. The availability of the resolutions to configure a stream depends on the media utilization percentage. If the media utilization reaches 100%, all the resolutions above the current resolutions of the stream will become unavailable so that media utilization does not exceed the limit.

Frame Rate

Frame Rate is the frequency at which frames in video are displayed. Slide the bar to set the Frame Rate either from 1 to 30 fps (for JPEG) or from 1 to 60 fps (for H264) in 1 fps increments. The frame rate range may also differ depending on the amount of media utilization.

The Bit Rate Control (below) is enabled only when the H.264 (Baseline/Main/High) codec is selected.

Bit Rate

The bit rate is the amount of video data generated by the camera in one second. A higher bit rate provides better image quality.

Note: VBR encoding produces an overall higher and more consistent quality level than CBR encoding, but may need more bandwidth.

Bit Rate Control

Choose:

- **Variable Bit Rate (VBR)**

  Note: When the VBR encoding method is used, the Minimum and Maximum Quality Range and the Maximum Bit Rate must be specified. The GOV Length control is enabled.

  Variable Bit Rate (VBR) is an encoding method that ensures consistent video quality throughout an encoded file. When VBR is selected the available bandwidth must be able to accommodate high throughputs. More bandwidth is used for increased activity in the image and less for lower activity. Use for consistent video quality.

  Maximum Bit Rate: Limiting the maximum bit rate helps to control the bandwidth used by the H.264 video stream. Leaving the Maximum bit rate as unlimited maintains consistently good image quality but increases bandwidth usage when there is more activity in the image. Limiting the bit rate to a defined value prevents excessive bandwidth usage, but images are lost when the limit is exceeded.

- **Adaptive Variable Bit Rate (AVBR)**

  Note: When the AVBR encoding method is used, the Minimum and Maximum Quality Range and the Maximum Bit Rate must be specified. The GOV Length and Still Percentage controls are enabled.

  Adaptive Variable Bit Rate (AVBR) means that the encoding bit rate can fluctuate within the bit rate statistical period. In this way, stable encoding image quality can be ensured.The camera detects the motion status of the current scenario, and improves the encoding bit rate in the motion scenario and reduces the target bit rate in the static scenario.

- **Constant Bit Rate (CBR)**

  Note: When the CBR encoding method is used, the Bit Rate must be specified. The GOV Length and Constrained Mode controls are enabled.

Constant Bit Rate (CBR) is an encoding method that varies the quality level to ensure a consistent bit rate throughout an encoded file. The restriction to keep the bit rate constant leads to a lower image quality for images that have high degree of motion or have a lot of textures. Use for limited bandwidth. Use the Bit Rate slider and GOV Length knob to control the image quality.

JPEG Codec Configuration

Quality Range: When JPEG codec is selected, use the Quality Range knob to control the image quality. 50% is a recommended number. JPEG quality settings are a tradeoff between image quality and bandwidth.

Multicast Address

Multicast is used for a large number of simultaneous viewers and for the most efficient usage of bandwidth.

Note: Multicast requires a custom configuration of most routers and must be able to interpret a class-D address. It is not possible to multicast over the Internet.

The multicast address must be an IP address between 224.0.0.0 and 239.255.255.255 or a hostname with an IP address in this range. Enter a multicast address.

Multicast Port

Enter a multicast port address in the range 1 to 65535.

Multicast TTL

Set the TTL (Time-to-Live) for the multicast UDP packets sent using RTP or M2TS transport. Type any value in the range 1 to 255. Default TTL value is 12.

Real Time Streaming Protocol (RTSP) Timeout

The server uses the timeout parameter to indicate to the client how long the server must wait between RTSP keep-alive commands before closing the session due to lack of activity. The timeout is measured in seconds, with the default of 60 seconds. Use a value in the range of 0 to 600 seconds, where the value of 0 disables timeout.

Important: If you use HTTP streaming transport protocol in the RISE web application, timeout value should be set to zero (0). In all other cases, RTSP timeout should be set to a non-zero value.

Group of Video (GOV) Length

The GOV length determines how many P-Frames are sent between each I-Frame. The GOV length of 30 frames is a recommended number.The selection of a greater GOV length leads to quality reduction but requires less bandwidth.

Still Percentage

The Still percentage describes the percentage of the maximum bitrate that the camera will generate when there is little to no motion in the AVBR Codec configuration

Video Constrained Mode

Select one of two modes:

- ON: To enable constrained mode for all the RTP over UDP video streams. With H.264 (not JPEG) UDP video in the CBR mode, CohuHD supports a constrained mode of operation. Use the constrained mode to improve the reliability of a video stream over cellular and wireless/radio network.
- OFF: To disable the constrained mode.

For more information on Constrained Mode see the Video Streaming Protocols white paper at CohuHD Costar website: http://www.cohuhd.com/Support/White-Papers.

Cancel: Returns to the previously saved state.

Save: Stores current settings permanently.

Default: Restores the factory default settings.

3.3.5 Advanced Settings

Note: The user must be logged in as Administrator or Operator in order to make changes on the Advanced Settings page.
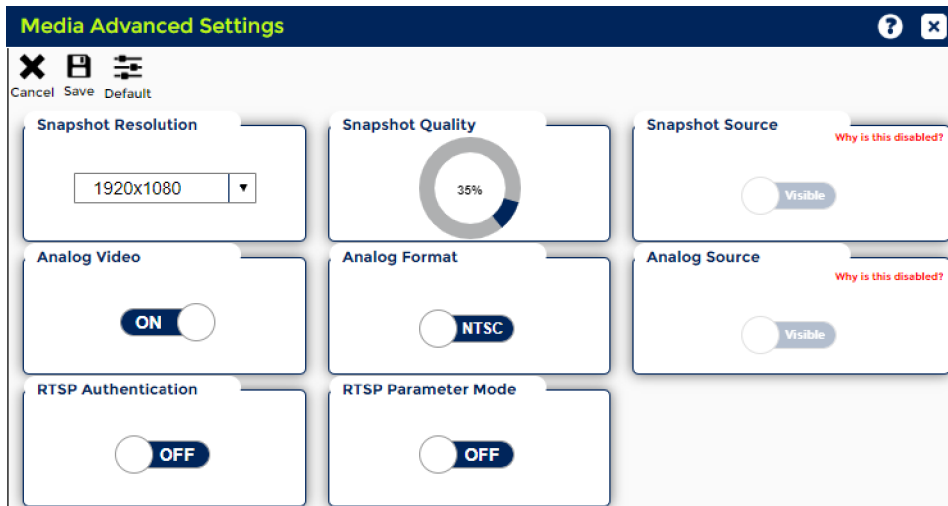
Use Media Advanced Settings to:

- Configure quality and file size of snapshots produced by the camera.
- Configure analog video format and source.

How to Configure a Snapshot

1. From the Snapshot Source section, choose a snapshot source: visible.
2. From the Snapshot Resolution section, choose a resolution from the drop-down list.
3. From the Snapshot Quality section, set a snapshot quality.
4. Click **Save** to save configuration.
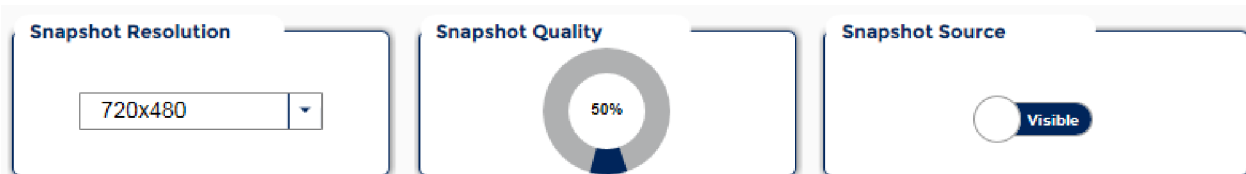
Snapshot Resolution

Visible Spectrum Stream Resolution

Important: A maximum of 7 unique resolutions can be created by the visible spectrum camera at the same time - 4 high resolutions and 3 low resolutions.

A visible spectrum snapshot can have one of the following resolutions (choose one from the drop-down):

- 1920x1080 (1080p)
- 1280x720 (720p)
- 720x576 (576p)
- 720x480 (480p)
- 640x480 (VGA)
- 352x240 (CIF, NTSC)
- 320x240 (QVGA)
- 376x120
- 160x120

Snapshot Quality

Use the Snapshot Quality knob to control the single snapshot quality. Quality settings are a tradeoff between snapshot quality and bandwidth.

Note: A typical URL for a snapshot is: http://camera ip/jpegpull/snapshot.

How to Configure an Analog Video

Note: The camera systems can be built with different cable types attached to the camera base for electrical connections. The camera model number identifies the type(s) of cable(s) the camera system requires. Analog video is available only for certain models. See the model index for cable configurations and Installation manuals for pinout configurations. The documents are available from the CohuHD website: http://www.cohuhd.com/Support/Product-Documentation

1. From the Analog Video section, choose the ON option.
   ON is the default option.
2. From the Analog Format section, choose PAL or NTSC.
   NTSC is the default option.
3. From the Analog Source section, choose Visible video stream.
   Visible is the default option.
4. Click **Save** to save the configuration.

RTSP Authentication

Real Time Streaming Protocol (RTSP) authentication provides authentication in RTSP clients.

If RTSP authentication is turned on, then the user has to provide the username and password in RTSP clients.

Cancel: Returns to the previously saved state.

Default: Restores the factory default settings on this page.

3.4 Action Engine (Admin only)

Note: The user must be logged on as Administrator to see and use the Action Engine option.

The options in Action Engine menu are:

- Action Engine Wizard
- Email Servers
- FTP Servers
- Action Engine Configuration
- Settings
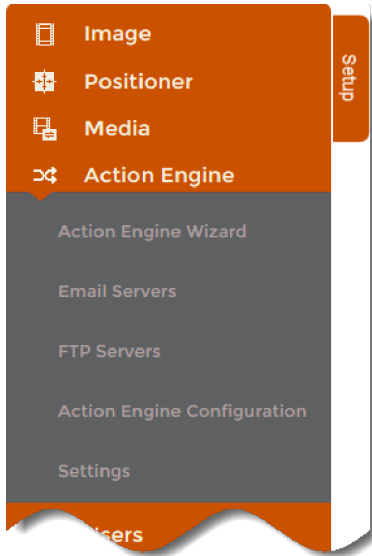
3.4.1 Action Engine Wizard

Note: The user must be logged in as Administrator in order to make changes on the Action Engine Wizard page.

Action Engine can be configured by using one of two panels:

- Action Engine Wizard: Use the Action Engine Wizard panel for a quick configuration of the action engine.
- Action Engine Configuration.

Configuring an Action Using the Action Engine Panel

To create an action follow Wizard's prompts:

1. *Trigger*: Choose the trigger. Click **Next**.
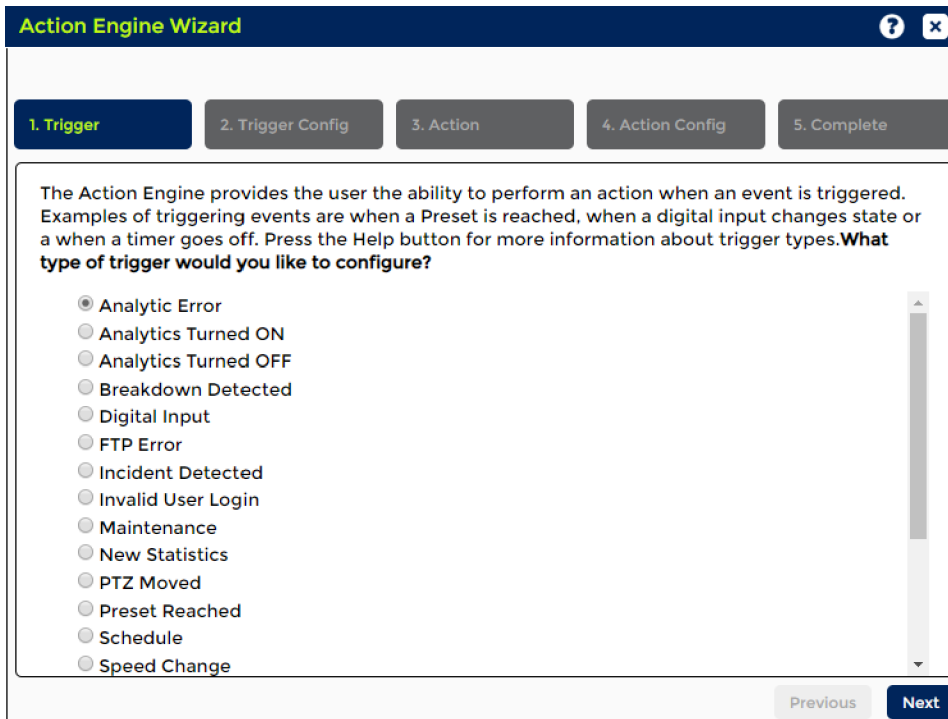
The following triggers are available:

- Analytic Error
- Analytics Turned ON
- Analytics Turned OFF
- Breakdown Detected
- Digital Input: Inputs for external signals, such as door contacts
- FTP Error
- Incident Detected
- Invalid User Login
- Maintenance: Low Pressure, Temperature High,Temperature Low, Positioner System Error, Camera Module Error, Wiper Error, Heater Error
- New Statistics
- PTZ Moved
- Preset Reached
- Schedule: A user-defined schedule trigger
- Speed Change
- Timer: A user-defined time trigger
- Tour Stopped
- User Command: This feature is used to test configured actions in the camera
- Valid User Login
- Wrong Way Detected
- Zone Active
- Zone Inactive

2. *Trigger Config*: Enter a Trigger Name in the text box. Click **Next**.

Action Engine Wizard   ❓ ✖

| 1. Trigger | 2. Trigger Config | 3. Action | 4. Action Config | 5. Complete |

To make editing of Action Engine entries easier, each trigger is given a name. Please enter the name of this Action Engine trigger in the text box below.

Previous   Next
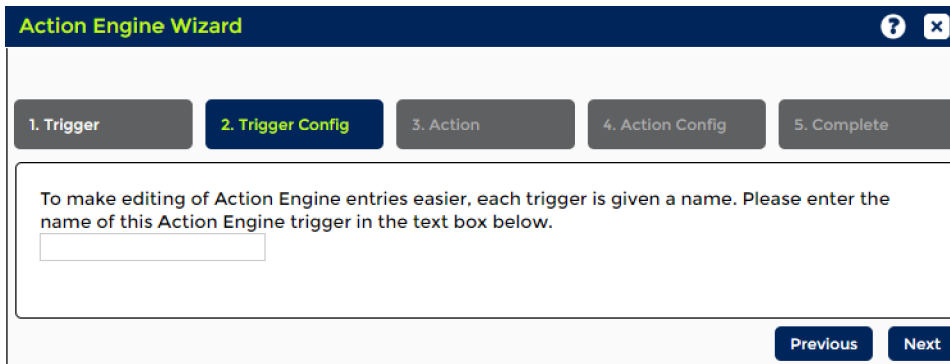
3. *Action*: Choose an action. Click **Next**.

Action Engine Wizard   ❓ ✖

| 1. Trigger | 2. Trigger Config | 3. Action | 4. Action Config | 5. Complete |

When the trigger is initiated, the Action Engine will cause one or more actions to happen. Examples of actions are sending a snapshot to an FTP server, sending a snapshot via text, chaning the state of digital output or going to a predefined preset. Press the help button for more information about available action types. **What type of action should happen when your trigger goes off?**

- ⦿ Activate Tour
- ○ Activate Wiper
- ○ Control Timer
- ○ Delay
- ○ Display OSD Event Text
- ○ External Output
- ○ Go to Preset
- ○ Reset Camera
- ○ Send Email
- ○ Send CSV via EMail
- ○ Send Snapshot via EMail
- ○ Send Text Message
- ○ Send Snapshot via Text

Previous   Next

The following actions are available:

- Activate Tour
- Activate Wiper
- Control Timer
- Delay
- Display OSD Event Text
- External Output
- Go to Preset
- Reset Camera
- Send Email
- Send CSV via Email
- Send Snapshot via Email
- Send Text Message
- Send Snapshot via Text
- Send CSV via FTP

4. *Action Config*: Enter the Action Name in the text box. If you are using email or FTP, the best practice is to validate connection. Select a Tour from the drop-down. Click **Next**.

5. *Complete*: Click **Finish**.

3.4.2 Email Servers

Note: The user must be logged in as Administrator in order to make changes on the Email Servers page.

Create Email Server
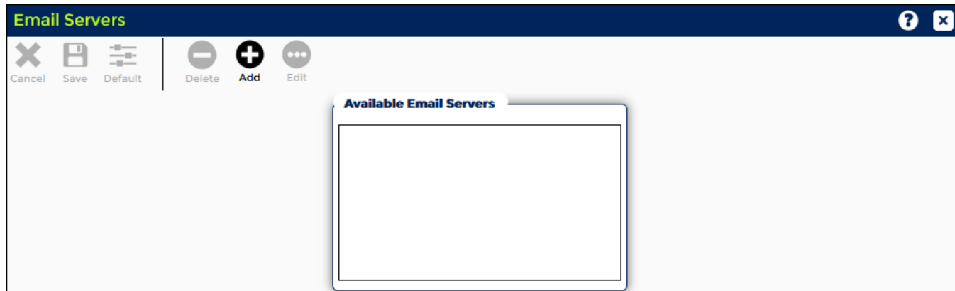
1. Click **Add**. A Create Email Server dialog appears.

2. Enter the following fields:
   - **Server Name**: Enter the name of the SMTP server. This name will be used to identify the server for later actions.
   - **Server Address**: Enter the IP Address or URL of the SMTP server.
   - **Server Username**: Enter your credentials to connect to the server.
   - **Server Password**: Enter your credentials to connect to the server.
   - **Server Port**: Enter the port number from 5 to 65535. The default port is 25. If TLS (Transport Layer Security) is enabled, the default port number is 465.
   - **SMTP Encryption**: Select one of the options from the drop-down list:
     - None: This selection does not provide a secure data transfer and will fail if the server requires encryption.
     - Transport Layer Security (TLS): Establishes the most secure connection.
     - Secure Sockets Layer (SSL)
3. Click **Validate Connection**.
4. Click **Save Server**. A new Server name will be added to the *Available Email Servers* list.
5. Click **Cancel** if you wish to cancel the Create Email Server operation.
6. To delete or edit the server:
   a. Highlight the desired line in the *Available Email Servers* table.
   b. Click **Delete** or **Edit**.

3.4.3 FTP Servers

Note: The user must be logged in as Administrator in order to make changes on the FTP Servers page.
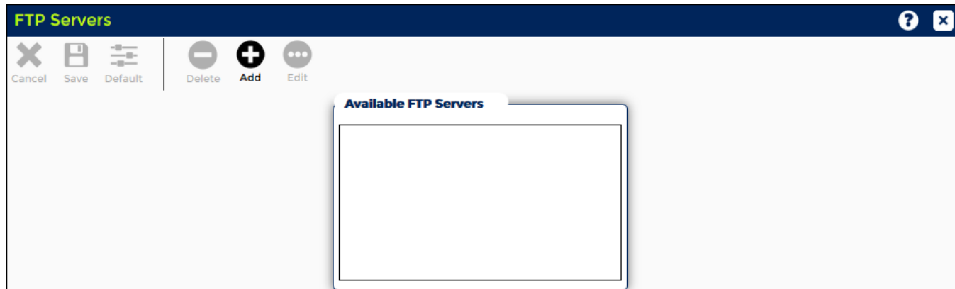
Create FTP Server

1. Click **Add**. A Create Email Server dialog appears.

2. Enter the following fields:
    - **Server Name**: Enter the name of the SMTP server. This name will be used to identify the server for later actions.
    - **Server Address**: Enter the IP Address or URL of the SMTP server.
    - **Server Username**: Enter your credentials to connect to the server.
    - **Server Password**: Enter your credentials to connect to the server.
    - **Server Port**: Enter the port number from 5 to 65535. The default port is 21.
    - **FTP Encryption**: Select one of the options from the drop-down list:
        ○ FTP
        ○ Secure FTP: FTP over an encrypted link.
    - **FTP Path**: Enter the directory where you wish to store the snapshots.
3. Click **Validate Connection**.
4. Click **Save Server**. A new Server name will be added to the *Available FTP Servers* list.
5. Click **Cancel** if you wish to cancel the Create FTP Server operation.
6. To delete or edit the server:
    a. Highlight the desired line in the *Available FTP Servers* table.
    b. Click **Delete** or **Edit**.

3.4.4 Action Engine Configuration

Note: The user must be logged in as Administrator in order to make changes on the Action Engine Configuration page.

The Action Engine allows a user to associate available actions with a trigger. When a trigger is activated, all the actions associated with it are executed in the order in which they were programmed by the user.
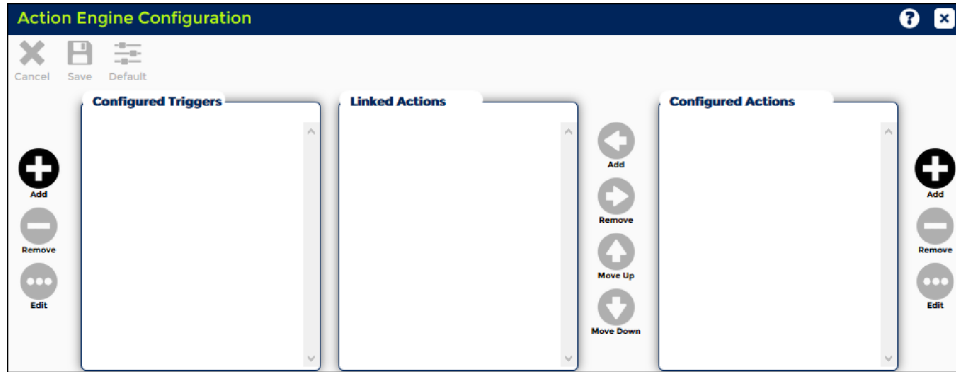
Important: DNS must be setup in the camera for any URL to work properly.

The camera system supports the following triggers:

- Analytic Error
- Analytics Turned ON
- Analytics Turned OFF
- Breakdown Detected
- Digital Input: Inputs for external signals, such as door contacts
- FTP Error
- Incident Detected
- Invalid User Login
- Maintenance: Low Pressure, Temperature High, Temperature Low, Positioner System Error, Camera Module Error, Wiper Error, Heater Error
- New Statistics
- PTZ Moved
- Preset Reached
- Schedule: A user-defined schedule trigger

The camera supports the following actions when a trigger happens:

- Activate Tour
- Activate Wiper
- Control Timer
- Delay
- Display OSD Event Text: Displays an alarm OSD text
- External Output: Sends a digital signal to an external device
- Go to Preset: Activates a Preset
- Reset Camera
- Send Email: Sends an email notification. SMTP (Simple Mail Transfer Protocol) server must be configured
- Send CSV via Email
- Send Snapshot via Email: Sends an email notification with one or more snapshots
- Send Text Message: Sends SMS (text message)

- Send Snapshot via Text: Sends MMS (multimedia message) with one or more snapshots
- Send Snapshot via FTP: Creates and uploads one or more snapshots to an FTP server

Limitations:

- Not all actions are available for every trigger.
- Each trigger can have up to 32 actions associated with it.
- Only the Timer and Scheduler triggers can be added multiple times.
- The total number of actions the camera can have at any point in time can not exceed 64.

How to Configure the Action Engine

1. Configure a trigger
2. Configure an action
3. Link the action with the trigger

How to Configure a Trigger

1. Click **Add** from the left column. A *Create Trigger* dialog appears.

2. Select a **Trigger Type** from the drop-down menu.
3. The *Create Trigger* dialog appears. Enter a **Trigger Name**.

4. Click **Save Trigger**. A new Configured Trigger name will be added to the *Configured Triggers* table.
5. Alternatively, click **Cancel** to cancel the Create Trigger operation.

Digital Input: This trigger allows the camera to execute a sequence of user programmed actions when the inputs for alarm signals happen (e.g.; door contact). Go to Accessories > Digital IO Settings to learn how to configure Digital Input settings.

Maintenance: This trigger allows the camera to execute a sequence of user programmed actions when one of the maintenance events happen (e.g. low or high temperature, low pressure).

Preset Reached: This trigger allows the camera to execute a sequence of user programmed actions when the camera reaches a user configured preset.

PTZ Moved: This trigger allows the camera to execute a sequence of user programmed actions when the camera is moved from a stationary position.

Schedule: This trigger allows the camera to execute a sequence of user programmed actions at a user programmed date and time value. Select one of the two modes from the drop-down list:

- Day of Week: Select On Day of Week to begin the action at the selected time on one or more days of the week. The Schedule Trigger will execute the associated action sequence at the user selected time (s) on the user selected day(s) of the week indefinitely.

- Specific Date: Select Specific Date to begin the action on a particular date and time. The Schedule Trigger will execute the associated action sequence only once, at the user programmed date and time.

Multiple instances of the schedule trigger can be created and added to the trigger list.

Timer: The Timer Trigger allows the camera to execute a sequence of user programmed actions at a user programmed interval.

The timer requires:

- Timer Interval: Enter the interval at which user programmed actions will be executed. Timer interval can be set in days, hours, minutes and seconds.
- Timer Starts and Timer Ends: Configure the period during which the action will be executed. Timer duration can be set in days, hours, minutes and seconds.

User Command: This feature is used to test configured actions in the camera.

The following actions are available for User Command:
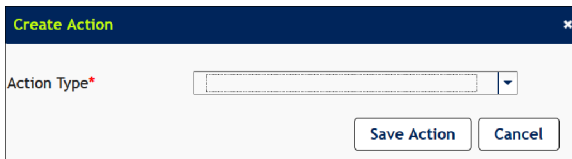
- Activate alarm output1
- Activate alarm output2
- Activate alarm output3
- Activate alarm output4
- Upload snapshot to FTP
- Send email notification
- Send email notification with snapshot
- Send sms message
- Send mms message with snapshot
- Activate Preset or Tour
- Display alarm OSD text
- Activate Wiper
- Reset Camera

Example: How to test the configured action Go to Preset using the User Command:

1. Configure a preset (Positioner > Preset Settings).
2. Configure the trigger "User Command" (Action Engine > Action Engine Configuration):
   a. From the Configured Triggers table, click the Add button. The Create Trigger dialog box appears. Select the User Command from the drop-down list.
   b. Enter the Trigger Name.
   c. Click the Save Trigger Button.
3. Configure the action Go to Preset.
4. Link the trigger and the action.
5. Test the User Command (Action Engine > Settings):
6. From the User Command section, select the configured trigger. The camera should move to the configured preset.

How to Configure an Action

1. Click **Add** from the right column. A *Create Action* dialog appears.

2. Select one of the following **Action Type**s from the drop-down menu:
3. Create the action. See How to Create an Action.

4. Click **Save Action**. A new configured action name will be added to the *Configured Action* table.
5. Alternatively, click **Cancel** to cancel the Create Action operation.

How to Create an Action

Display OSD

Adds predefined text (e.g., Check Pressure, Low Temperature, Check Wiper) to video for 15 seconds.

External Output

Sends a digital signal to an external device. Go to Accessories > Digital IO Settings to learn how to configure Digital Output settings.

Go to Preset

Moves the camera to a user-defined preset.

Send Email

Send Email: Sends an email to a defined email address. The camera must be configured to connect to a SMTP server.

Action Name: Enter an action name.

SMTP (Simple Mail Transfer Protocol) Server: SMTP server is used to verify an action later. Select the server from the drop-down list.

Email Sender: Enter the email address from where email is sent.

Email Recipients: Enter the email addresses where you wish to send email notifications. In case of multiple recipients, the addresses must be separated by commas, spaces or semicolons.

Email Subject: The subject line is constructed of several names.

To configure the Email Subject:

1. Click **Configure**. The *Create Subject Format* dialog appears.
2. Select the Field name from the **Select Field Type** drop-down list. The field name will be added to the *Subject Format* box. Each field will be populated dynamically when the email is sent. Fields will appear in the email subject separated by _ (underscore).

    > Note: Subject Format can be configured to include the Host Name, IP Address, Trigger Type, Trigger Name, Date, Time, and User Text.

3. Enter a text message in the *User Text* box. Click **Add**. The text will be added to the *Subject Format* box.
4. Click **Save Subject Format**. You will be returned to the *Create Action* dialog.

Send Snapshot via FTP

The camera system can be configured to capture one or more snapshots (JPEG file) in response to a trigger and transfer the image to an FTP site.

Action Name: Enter an action name.

FTP (File Transfer Protocol) Server: SMTP server is used to verify an action later. Select the server from the drop-down list.

Snapshot Filename: Configure the name of the attached image.

To configure the Snapshot Filename:

1. Click **Configure**. The *Create Filename Format* dialog appears.
2. Select the field name from the drop-down list. The field name will be added to the *Filename Format* box. Each field will be populated dynamically when the email is sent. Fields will appear in the email subject separated by _ (underscore).

> Note: Snapshot filenames can be configured to include the Host Name, IP Address, Trigger Type, Trigger Name, Date, Time, and User Text.

3. Enter a text message in the *User Text* box. Click **Add**. The text will be added to the *Subject Format* box.
4. Click **Save Subject Format**. You will be returned to the *Create Action* dialog.

Number of Snapshots: Select a number from the drop-down list. If multiple snapshots are selected, automatic sequence numbering will be appended to each snapshot filename.

Send Snapshot via Email

The camera system can be configured to capture one or more snapshots (JPEG file) in response to a trigger and transfer images to an email address.

Action Name: Enter an action name.

SMTP (Simple Mail Transfer Protocol) Server: The server is used to identify actions later. Select the server from the drop-down list.

Email Sender: Enter the email address from where email is sent.

Email Recipients: Enter the email addresses where you wish to send email notifications. In case of multiple recipients, the addresses must be separated by commas, spaces or semicolons.

Email Subject: The subject line is constructed of several names.

To configure the Email Subject:

1. Click **Configure**. The *Create Subject Format* dialog appears.
2. Select the field name from the drop-down list. The field name will be added to the *Subject Format* box. Each field will be populated dynamically when the email is sent. Fields will appear in the email subject separated by _ (underscore).

> Note: Subject Format can be configured to include the Host Name, IP Address, Trigger Type, Trigger Name, Date, Time, and User Text.

1. Enter a text message in the *User Text* box, then click **Add**. The text will be added to the *Subject Format* box.
2. Click **Save Subject Format**. You will be returned to the *Create Action* dialog.

Snapshot Filename: Configure the name of the attached image.

To configure the Snapshot Filename:

1. Click **Configure**. The *Create Filename Format* dialog appears.
2. Select the field name from the drop-down list. The field name will be added to the *Filename Format* box. Each field will be populated dynamically when the email is sent. Fields will appear in the email subject separated by _ (underscore).

> Note: Snapshot filenames can be configured to include the Host Name, IP Address, Trigger Type, Trigger Name, Date, Time, and User Text.

1. Enter a text message in the *User Text* box. Click **Add**. The text will be added to the *Subject Format* box.
2. Click **Save Subject Format**. You will be returned to the *Create Action* dialog.

Number of Snapshots: Select a number from the drop-down list. If multiple snapshots are selected, automatic sequence numbering will be appended to each snapshot filename.

Send Snapshot via Text (MMS)

The camera system can be configured to capture one or more snapshots (JPEG file) in response to a trigger and transfer the image to an MMS device.

Action Name: Enter an action name.

SMTP (Simple Mail Transfer Protocol) Server: SMTP server is used to verify an action later. Select the server from the drop-down list.

Email Sender: Enter the email address from where email is sent.

Email Subject: The subject line is constructed of several names.

To configure the Email Subject:

1. Click **Configure**. The *Create Subject Format* dialog appears.
2. Select the field name from the drop-down list. The field name will be added to the *Subject Format* box. Each field will be populated dynamically when the email is sent. Fields will appear in the email subject separated by _ (underscore).

   Note: Subject Format can be configured to include the Host Name, IP Address, Trigger Type, Trigger Name, Date, Time, and User Text.

3. Enter a text message in the *User Text* box. Click **Add**. The text will be added to the *Subject Format* box.
4. Click **Save Subject Format**. You will be returned to the *Create Action* dialog.

Snapshot Filename: Configure the name of the attached image.

To configure the Snapshot Filename:

1. Click **Configure**. The *Create Filename Format* dialog appears.
2. Select the field name from the drop-down list. The field name will be added to the *Filename Format* box. Each field will be populated dynamically when the email is sent. Fields will appear in the email subject separated by _ (underscore).

   Note: Snapshot filenames can be configured to include the Host Name, IP Address, Trigger Type, Trigger Name, Date, Time, and User Text.

3. Enter a text message in the *User Text* box. Click **Add**. The text will be added to the *Subject Format* box.
4. Click **Save Filename Format**. You will be returned to the *Create Action* dialog box.

Number of Snapshots: Select a number from the drop-down list. If multiple snapshots are selected, automatic sequence numbering will be appended to each snapshot filename.

Text Recipients: Enter the phone numbers where you wish to send text notifications. In case of multiple recipients, the numbers must be separated by commas, spaces or semicolons.

Text Carrier: Choose cell phone carrier from the drop-down list.

Important: All recipients of this action must use the same cell phone carrier.

<u>Send Text Message</u>

The camera system can be configured to send a text message in response to a trigger.

Action Name: Enter an action name.

SMTP (Simple Mail Transfer Protocol) Server: SMTP server is used to verify an action later. Select the server from the drop-down list.

Email Sender: Enter the email address from where email is sent.

Email Subject: The subject line is constructed of several names.

To configure the Email Subject:

1. Click **Configure**. The *Create Subject Format* dialog appears.
2. Select the field name from the drop-down list. The field name will be added to the *Subject Format* box. Each field will be populated dynamically when the email is sent. Fields will appear in the email subject separated by _ (underscore).

   Note: Subject Format can be configured to include the Host Name, IP Address, Trigger Type, Trigger Name, Date, Time, and User Text.

3. Enter a text message in the *User Text* box. Click **Add**. The text will be added to the *Subject Format* box.
4. Click **Save Subject Format**. You will be returned to the *Create Action* dialog.

Text Recipients: Enter the phone numbers where you wish to send text notifications. In case of multiple recipients, the numbers must be separated by commas, spaces or semicolons.

Text Carrier: Choose the cell phone carrier from the drop-down list.

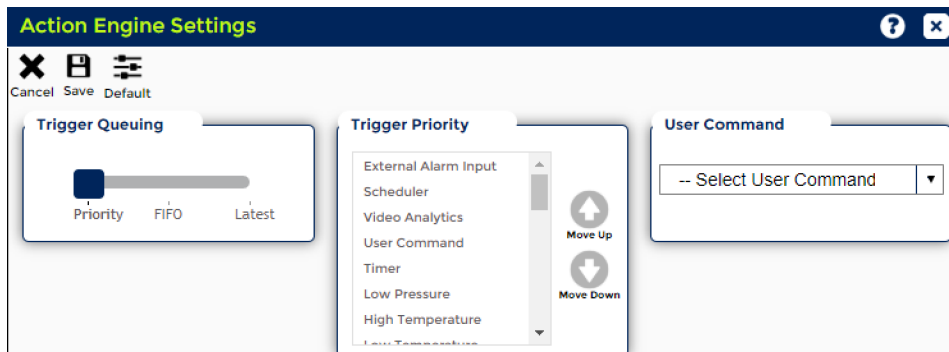Important: All recipients of this action must use the same cell phone carrier.

Cancel: Returns to the previously saved state.

Save: Stores current settings permanently.

Default: Restores the factory default settings.

3.4.5 Settings

Note: The user must be logged in as Administrator in order to make changes on the Settings page.

When an action is triggered, all the actions associated with it are executed in the order in which they are programmed by the user. The Action Engine implements three user selectable schemes to handle simultaneous event triggers.

Trigger Queuing: Select one of the three options to handle simultaneous event triggers:

- Priority: When two events are triggered simultaneously or a new event is triggered while actions of a previous event are being executed, the action engine will immediately clear its current action list and start executing the action list of the highest priority event trigger based on a user configured priority list. The following is the list of action triggers sorted by the default priority:
    - External alarm inputs
    - Scheduler
    - Video Analytics
    - User Command
    - Timer
    - Low Pressure
    - High Pressure
    - Low Temperature
    - High Temperature
    - Positioner System Error
    - Camera Error
    - Heater Error
    - Video Error
    - Low Memory
    - Low Flash Space
    - Preset Reached
    - PTZ Moved
    - Valid User Login
    - Invalid User Login
    - Tour Stopped
    - FTP Error
    - Analytics Turned OFF
    - Analytics Turned ON
    - Zone Active
    - Zone Inactive
    - Analytic Error
    - Statistics
    - Speed Change
    - Wrong Way
    - Breakdown
- FIFO (First In, First Out)): When two events are triggered simultaneously or a new event is triggered while actions of a previous event are being executed, the action engine will add the list of new actions to the end of its current queue.
- Latest Event First: When two events are triggered simultaneously or a new event is triggered while actions of a previous event are being executed, the action engine will immediately clear its current action list and start executing the action list of the latest event trigger.

Trigger Priority: The Trigger Priority table allows the user to establish priority in which events will be executed by moving table items up and down.

User Command: The User Command feature allows a user to test configured actions in the camera. Select a trigger from the Select User Command drop-down list.

Cancel: Returns to the previously saved state.

Save: Stores current settings permanently.

Default: Restores the factory default settings.

3.5 Video Analytics (Admin and Operator only)

Note: The user must be logged on as Administrator or Operator to see the Video Analytics option and make changes.

The video analytics menu provides the licensing, configuration, and display of the embedded RISE video analytics packages.

Note: Analytic License is automatically selected if no license has been entered. No other action in Video Analytics is available until an Analytic License is entered.
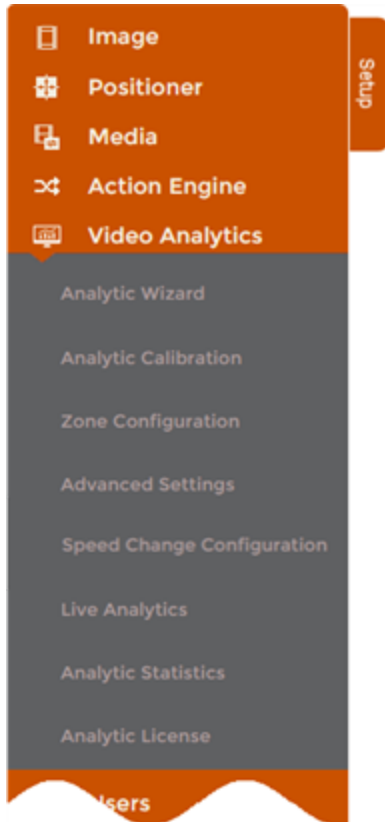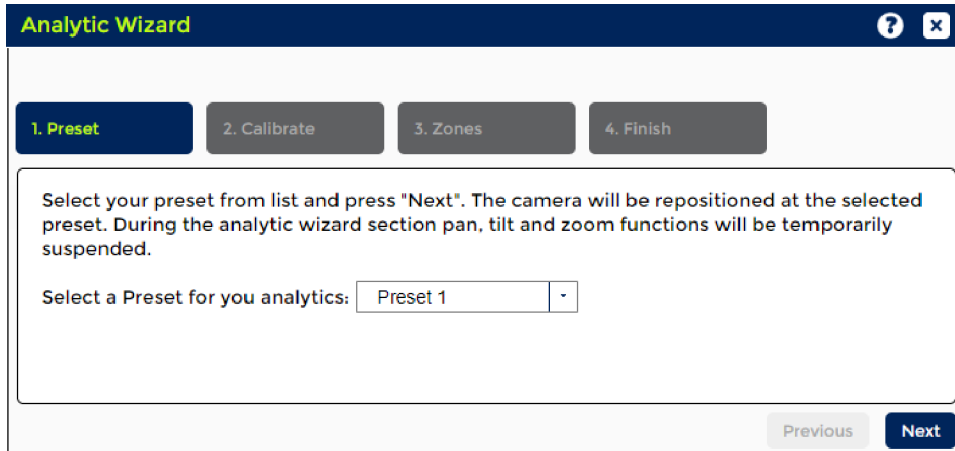

Note: When Video Analytics is selected, the Control Panel grays out and "PTZ controls" slider becomes unavailable.

3.5.1 Analytic Wizard

Analytic Wizard uses four steps to create and calibrate zones.

Preset

Select a previously created Preset (Positioner > Preset Settings) from the drop-down.

The camera will be repositioned at the selected preset.

> Note: When running Analytic Wizard, the PTZ functions will be temporarily suspended and the Control Panel is grayed out.

Calibrate

The calibration process is required to provide the video analytics process to have an awareness of height, width, and depth of the scene. The more accurate the calibration data is relative to the scene dimensions, the more accurate the video analytics performance will be.

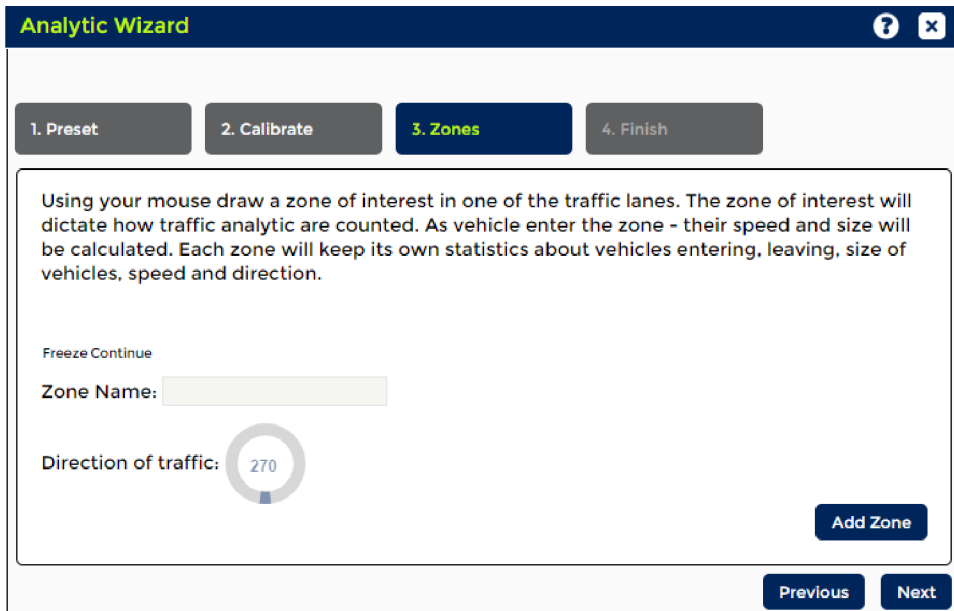A square with handles in each corner appears in the video stream.

Once the square appears, drag the handles to a size and shape to specify the area.

Then in the *Calibrate* tab, adjust the length of each section of the square, if necessary.
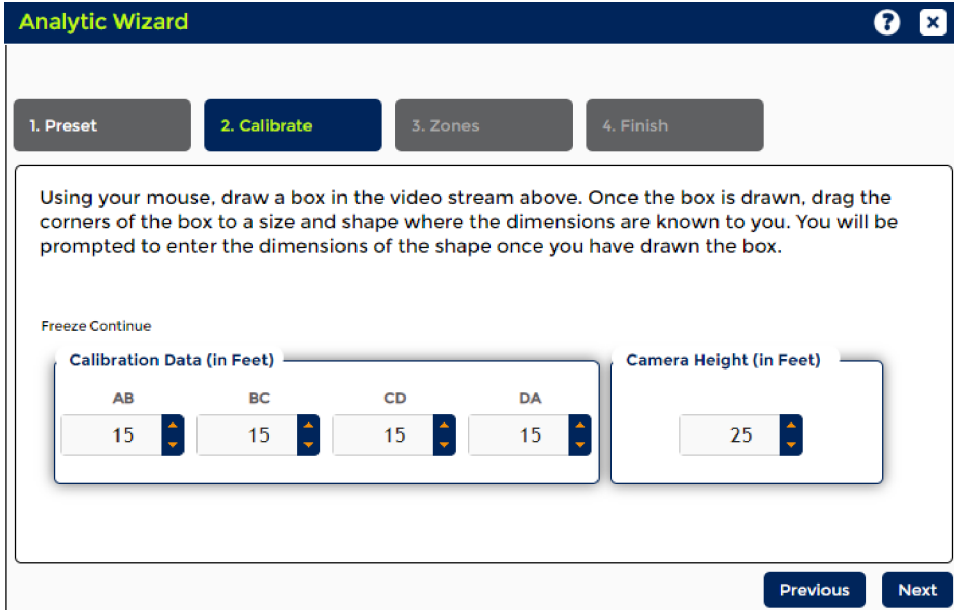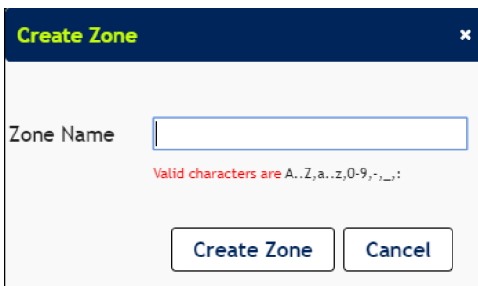
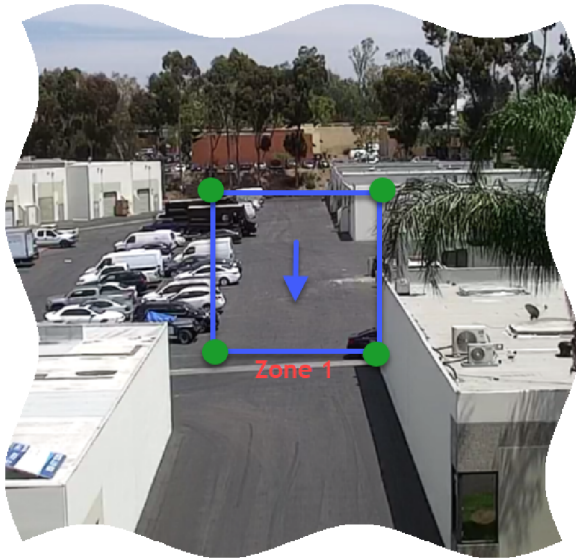Finally, specify the height of the camera where it is installed.

Zones

Click **Add Zone**, then in the *Create Zone* dialog enter a Zone Name.

An arrow appears within the box, representing the zone of interest that dictates how traffic analytics are counted. As vehicles enter the zone, their speed and size will be calculated.

Using the **Direction of traffic** wheel, adjust the angle of the arrow.

More than one zone may be created and each zone will keep its own statistics about vehicles entering, leaving, size of vehicles, speed, and direction.

Finish
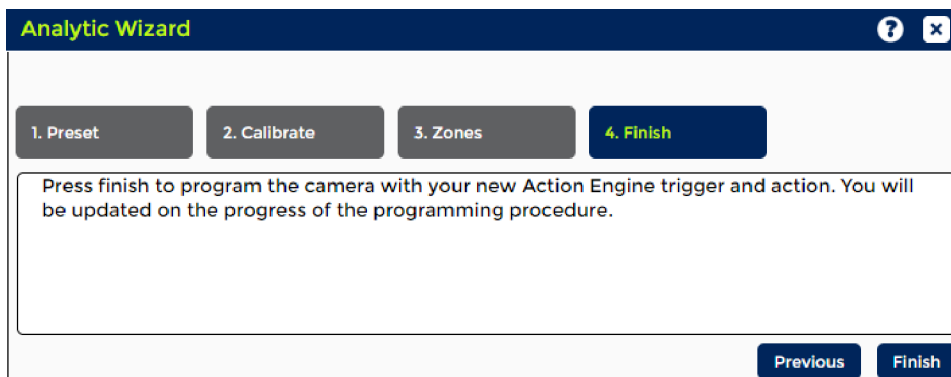
Click **Finish** to save the settings.

Next: Returns to the previously saved state.

Previous: Returns to the previously saved state.

Freeze: To pause the live video.

Continue: To continue the live video.

3.5.2 Analytic Calibration

Calibration may be done for each Preset manually instead of using Analytic Wizard's Calibrate, or used to change the calibration settings after using the Analytic Wizard without having to go through every step.

A square with handles in each corner appears in the video stream.

Once the square appears, drag the handles to a size and shape to specify the area.

Then in the *Calibrate Data* area, adjust the length of each section of the square and the height of the installed camera, if necessary.
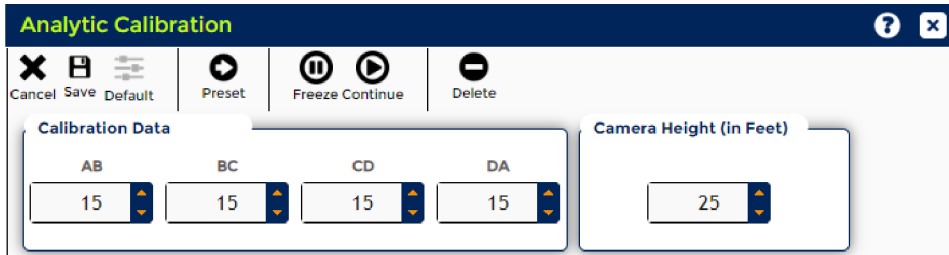
Note: Calibration must be performed at a preset, and the calibration values need to be saved for each calibration session/preset combination.

Important: The analytic engine must be calibrated for each preset scene.

Cancel: Returns to the previously saved state.

Save: Saves current settings.

Default: Restores the factory default settings.

Freeze: To pause the live video.

Continue: To continue the live video.

3.5.3 Zone Configuration

Optional statistic values may be set here for each zone.
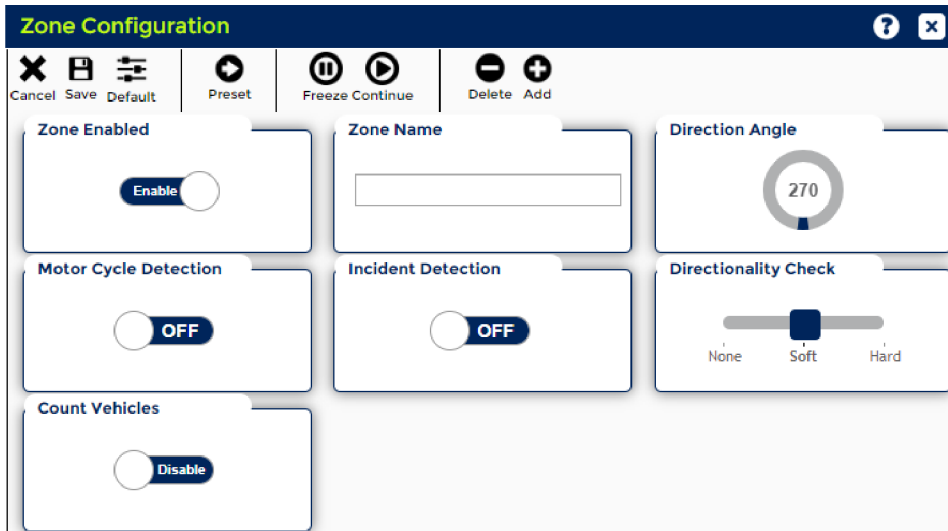
On the display select a preset, or click **Add** ⊕ to create a zone.
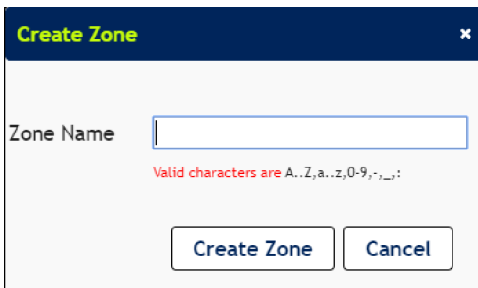
A square indicating the zone appears. An arrow in the middle indicate the direction of the traffic.
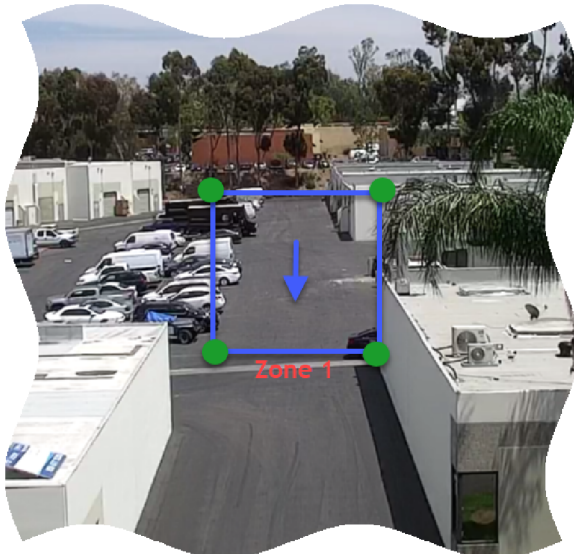
- **Zone Enabled**: This value is a toggle that enables the created zone. The default values is "On".
- **Zone Name**: This value is text field with a maximum of 32 characters. The default value is empty.

- **Direction Angle**: This is a directional indicator with values from 1 – 360 degrees. The default value is 180 degrees (pointing straight down). Use the wheel to change the angle of the arrow, if desired.
- **Motor Cycle Detection**: Enables/disables.
- **Measure Length** (Video Analytics > Advanced Settings).
- **Incident Detection**: This value is a boolean value that indicates if analytics should generate an event if scene shows an incident. The default value is "Off".
- **Directionality Check**: This value is an integer value from 0 to 2 that indicates the directional check algorithm. The user will be presented with three options for zone direction detection (Soft, Hard, and None). This data should be displayed with a slide control. The default value is "Soft". The arrow disappears if "None" is selected.
- **Count Vehicles**: Enables/disables count vehicle count.

**Cancel**: Returns to the previously saved state.

Save: Saves current settings.

Default: Restores the factory default settings.

Freeze: To pause the live video.

Continue: To continue the live video.

3.5.4 Advanced Settings

Optional features may be set here.
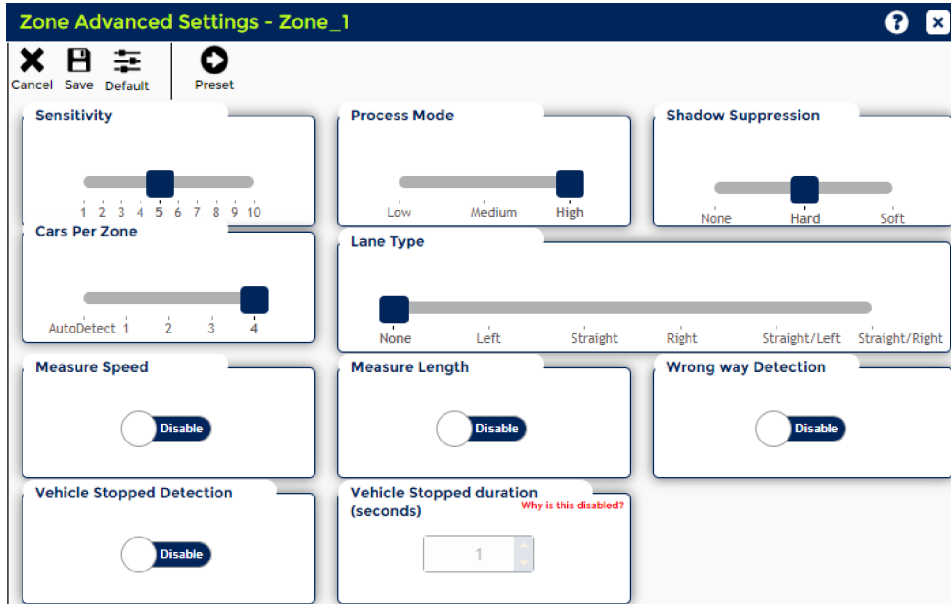
On the display, select a preset and click **Preset** ⊙. The zone and direction arrow appears.
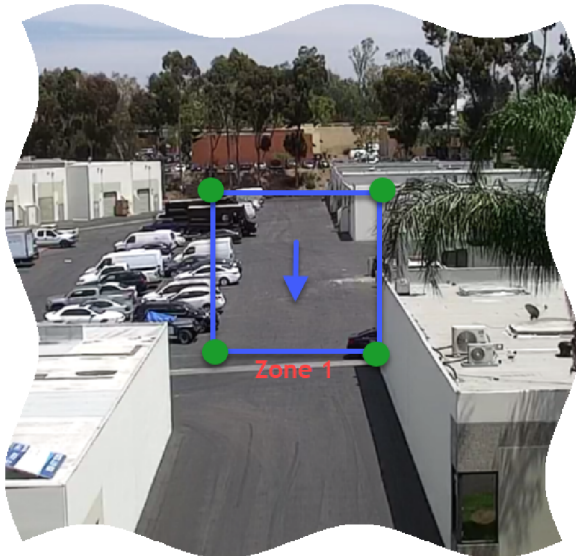
- **Sensitivity**: This value is an integer value from 1 to 10 that indicates the analytic sensitivity of the zone. Use the slider to change the values. The default value is "5".
- **Process Mode**: The user is able to select the analytic processing mode. There are three processing types (Low, Medium or High). The default value is "High".
- **Shadow Suppression**: This value is an integer value from 0 to 2 that indicates the shadow suppression algorithm. The user is presented with three types of shadow suppression (Soft, Hard, and None). The default value is "Hard".
- **Car per Zone**: This feature indicates the number of cars that will fit in the zone. The user can pick from a range of 1 to 4 cars or AutoDetect, which will determine how many cars are in a zone. The default value is "4".

- **Lane Type**: The user is able to select what type of lane the zone is covering. The user is presented with six lane types (None, Left, Straight, Right, Straight/Left, Straight/Right). The default value is "None".
- **Measure Speed**: Enables/disables. Allows the users to choose whether they want the Analytics Engine to determine the speed of a vehicle that passes through the zone.
- **Measure Length**: Enables/disables. Allows the users to choose whether they want the Analytics Engine to determine the length of a vehicle that passes through the zone.
- **Wrong Way Detection**: Ebables/disables. Allows the users to choose whether they want the Analytics Engine to determine if there is a vehicle moving the wrong way in the zone.
- **Vehicle Stopped Detection**: Enables/disables. Allows the users to choose whether they want the Analytics Engine to determine if there is a vehicle stopped in the zone after a certain period of time. The period of time is determined by the Vehicle Stopped Duration feature.
- **Vehicle Stopped Duration (seconds)**: Allows the users to choose the time in seconds they want to wait before sending an alert that a vehicle is stopped in the zone. This feature is only enabled when Vehicle Stopped Detection feature is enabled..

Cancel: Returns to the previously saved state.

Save: Saves current settings.

Default: Restores the factory default settings.

3.5.5 Speed Change Configuration

Optionally, set the speed change statistic values.
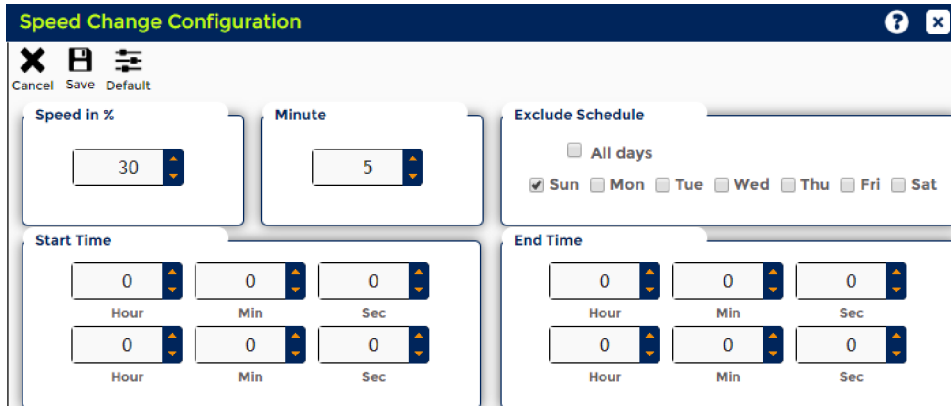
- **Speed in %**: This feature collects statistics when a vehicle is moving with the selected speed percentage. This option allows the value of minimum 1 and maximum 100, and the field is mandatory.
- **Minute**: This option allows the value of minimum 1 and maximum 60, and the field is mandatory.
- **Exclude Schedule**: The user is able to exclude day/s from being checked by selecting the corresponding box/s. There is also an option to exclude all days at once by selecting the "All Days" box.
- **Start Time**: This option allows the user to set the start time to begin checking for vehicle speed change (Hours,Minutes,Seconds).
- **End Time**: This option allows the user to set the end time to stop checking for vehicle speed change (Hours,Minutes,Seconds).

Cancel: Returns to the previously saved state

Save: Stores current settings permanently

Default: Restores the factory default settings

3.5.6 Live Analytics

Displays the active video stream as a series of JPEG pulls with the analytic zones overlaid on the video.
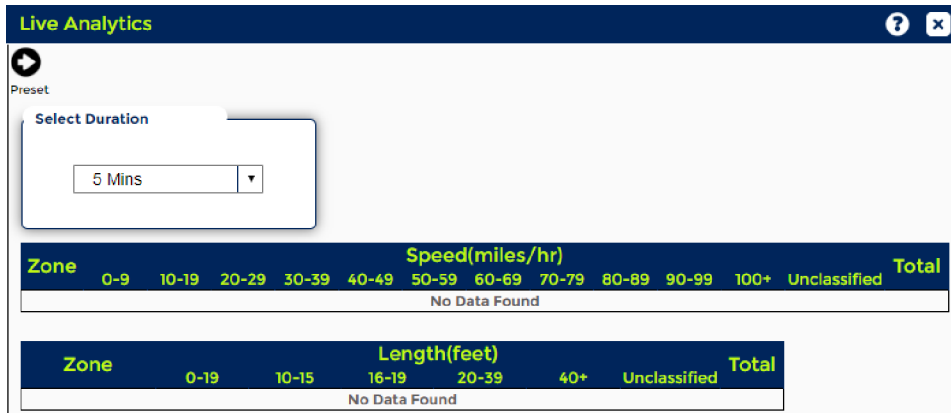
Click **Preset** ● to select a preset.

The border of the zone will change from green to red when the analytic engine detects vehicular movement within any particular zone.

- **Select Duration**:This option gives the statistics of last 5 minutes by default. Other selections are "60 Mins" to give the statistics of last 1 hour, and "24 Hrs" to give the statistics of last 24 hours.
- **Speed Table** shows the vehicle speed report.
- **Length Table** shows the vehicle length report.

3.5.7 Analytic Statistics

Statistics reporting are configured in this section.

Preset: Contains all the presets that have been calibrated. The user can select any of the preset and get statistics data based on that preset.

Duration: The drop-down has options for 5 mins, 60 mins, or 24 Hrs. These times are used for filtering statistics data:

- 5 mins: This option will display the last five minutes of data.
- 60 mins: This option will display the last hour of data.
- 24 Hr: This option will display the last twenty-four hours of data.

Reset Analytics: This action requires two parameters:

- Reset: The reset button will reset the statistics of the selected preset.
- Reset all: Selecting this option resets the analytics statistics of all the presets.

Download Report

Download a report using two options:

- Duration: The user can download a report using the Duration Type (Year, Month, Week, Day, Hour), and Duration Count.
- Date Options: The user can download a report using a specific start date and end date.

Statistics Report

The Statistics Report table lists all of the statistics data based on the selected presets.It contains both vehicle speed and length related data. The chart value is also based on the same values.

The table lists all the statistics data related to different speeds and length.This section also shows chart for the statistics data.

3.5.8 Analytic License

Analytic licenses may be added or viewed.
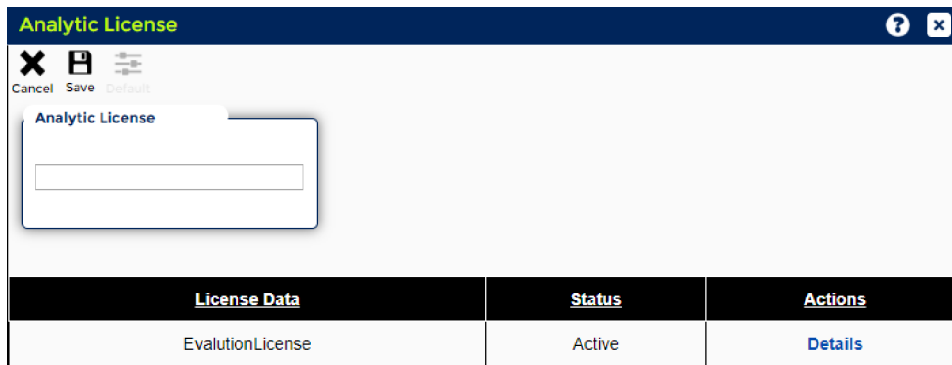
License Information

ITS Standard provides the features below:

- Vehicle Detection
- Count and Speed
- % Change of Speed
- Multiple View Analytics / PTZ Presets

ITS Advanced provides the features below:

- Includes ITS Standard
- Vehicle Classification
- Traffic Incident Detection
- Stopped Vehicle
- Wrong Way Direction

Add A New License

In **Analytic License** field, enter the license number.

The license number length should be 28 character, and special characters are not allowed.

Click **Save** to save the license to the Analytic Engine, or click **Cancel** to cancel the operation.

License List

The License Details table shows information on when the license will expire, the part number, and the type of license.

The valid license and invalid licenses are both shown in the table.

Clicking on **Details**, displays the details of the license.

License Details	✖
Expiry Date	2019-12-5
Features	Detection-Statistics-Incident
Type	Advanced

Cancel

3.6 Users (Admin only)

Note: The user must be logged on as Administrator to see Users option.

The only option in User menu is:

- User Settings
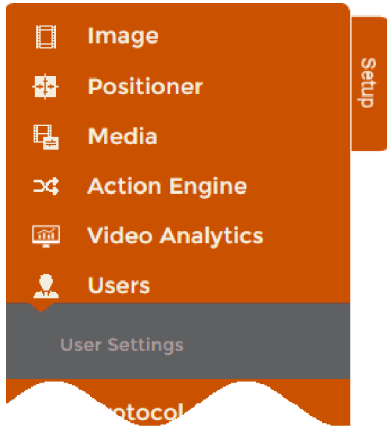
3.6.1 Users Settings

Note: The user must be logged on as Administrator to make changes on the Users Settings page.
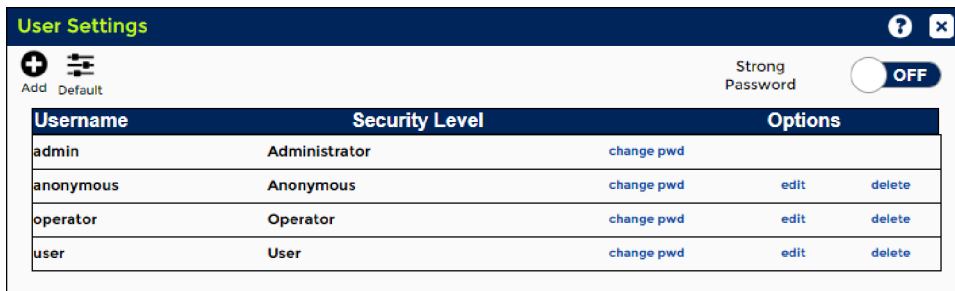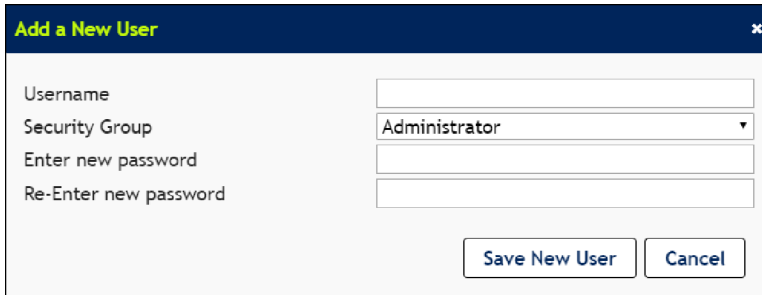
Authentication

Four user accounts are defined in the web interface to allow different levels of access:

- Administrator
- Operator
- User
- Anonymous

Creating a New User:

1. Click **Add**. The *Add a New User* dialog appears.

Add a New User	✖
Username	
Security Group	Administrator ▾
Enter new password	
Re-Enter new password	
	Save New User Cancel

2. If strong password is desired, set **Strong Password** to ON. If ON, the following criteria must be met:
   - At least 8 characters
   - Maximum 32 characters
   - Password and the username cannot be the same
   - Must contain at least one uppercase character (A-Z)
   - Must contain at least one lowercase character (a-z)
   - Must contain at least one Arabic number (0-9)
   - Must contain at least one special character (!, @, #, $, etc.)
1. Enter Username.
2. Select the appropriate access level from the drop-down Security group list.
3. Enter a password. Note: Password complexity is not required.
4. Verify the password.
5. Click **Save New User**. The user name will be added to the *User Settings* table.

Changing a Password

1. From the Username list, click **change pwd**. The *Change User Password* dialog appears.
2. Enter a new password.
3. Verify the password.
4. Click **Change Password**.

Editing User Properties

1. From the Username list, click **edit**. The *Edit User Properties* dialog appears.
2. Enter a new user name.
3. Choose a new Security Group.
4. Click **Save User Settings**.

Deleting a User

From the user account list, click **delete**.

3.7 Protocol (Admin only)

Note: The user must be logged on as Administrator to see the Protocol option and make changes.

The options in Protocol menu are:

- Port Settings
- Serial Settings
- SNMP Settings
- Security
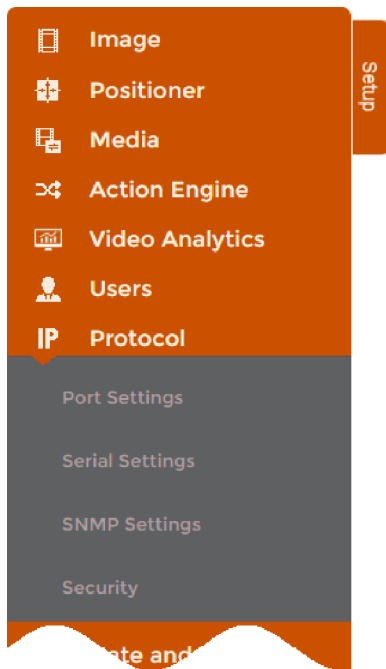
3.7.1 Port Settings

Note: The user must be logged on as Administrator to make changes on the Port Settings page.

Cohu Port: The default port of COHU is 1233.

Cohu With Header Port: The default port of Cohu With Header Port is 1234.

Cohu T Port: The default port of Cohu T Port is 1237.

FAST Port:

PelcoD Port:

RTSP Port: The RTSP (Real Time Streaming Protocol) allows a connecting client to start a video stream. The default setting is 554 and can be changed to any port within the range 1024 to 65535.

HTTP Port: The default HTTP (Hypertext Transfer Protocol) port number is 80 and can be changed to any port within the range 1024 to 65535.

HTTPS Port: The default HTTPS (HTTP over SSL or HTTP Secure) port number is 443 and can be changed to any port within the range 1024 to 65535.

NTCIP UDP Port: The default number is displayed.

NTCIP TCP Port: The default number is displayed.

Start Video Port: Enter a port number between 30,000 and 39,920. Even values only.

End Video Port: Enter a port number. The End Port number is the sum of the Start Port number plus 199.

Cancel: Returns to the previously saved state.

Save: Stores current settings permanently.

Default: Restores the factory default settings.

3.7.2 Serial Settings

Note: The user must be logged on as Administrator to make changes on the Serial Settings page.

Protocol: Select one of the protocols from the drop-down list.

Camera Address: Enter the serial address.

Baud Rate: Select the baud rate. The standard rate is 9600 bps.

Duplex: Select one of the standards from the drop-down list.

Data Bits: The standard value is 8 bit.

Stop Bits: The standard value is 1 bit.

Parity: The standard value is None.

Cancel: Returns to the previously saved state.

Save: Stores current settings permanently.

Default: Restores the factory default settings.

3.7.3 SNMP Settings

Note: The user must be logged on as Administrator to make changes on the SNMP Settings page.

SNMP Mode: The version of SNMP to be used:

- Off: The camera will not be listening/receiving any SNMP messages or sending any traps.
- v1/v2c: The camera will be compatible with SNMPv1 and SNMPv2c messages/traps.
- v3: The camera will be compatible with SNMPv3 messages/traps.

Community Name: The security string used by SNMPv1 and SNMPv2c to authenticate GET, SET, and TRAP messages.

User Configuration: Configure the SNMPv3 user to be used for GET, SET, and TRAP messages.

- User Name: The security/user name used by SNMP.
- Authentication: Protocol and password used to verify the identity of the sender and the authenticity of the messages.
- Privacy: Protocol and password used for the encryption of the contents of SNMP messages.

Trap Server: The IP address of the device receiving SNMP trap alert messages.

Soft Reboot Trap: Enable or disable the trap message sent in the event of the camera restarting due to an expected action.

Hard Reboot Trap: Enable or disable the trap message sent in the event of the camera restarting unexpectedly and improperly (e.g. power disruption).

Invalid Login Trap: Enable or disable the trap message sent in the event of an invalid login attempt on the web application.

H264 Load Change Trap: Enable or disable the trap message sent in the event of a change in H.264 utilization due to adding, removing, or modifying H.264 encoders.

JPEG Load Change Trap: Enable or disable the trap message sent in the event of a change in JPEG utilitzation due to adding, removing, or modifying JPEG encoders.

Vehicle Detected Trap:

Wrong Way Vehicle Trap:

Incident Detected Trap:

Vehicle Stopped Trap:

Speed Change Detected Trap:

Additional Information:

- Transmission protocol: UDP
- Port: 161
- Trap server port: 162

Cancel: Returns to the previously saved state.

Save: Stores current settings permanently.

Default: Restores the factory default settings.

3.7.4 Security

Note: The user must be logged on as Administrator to make changes on the Security page.
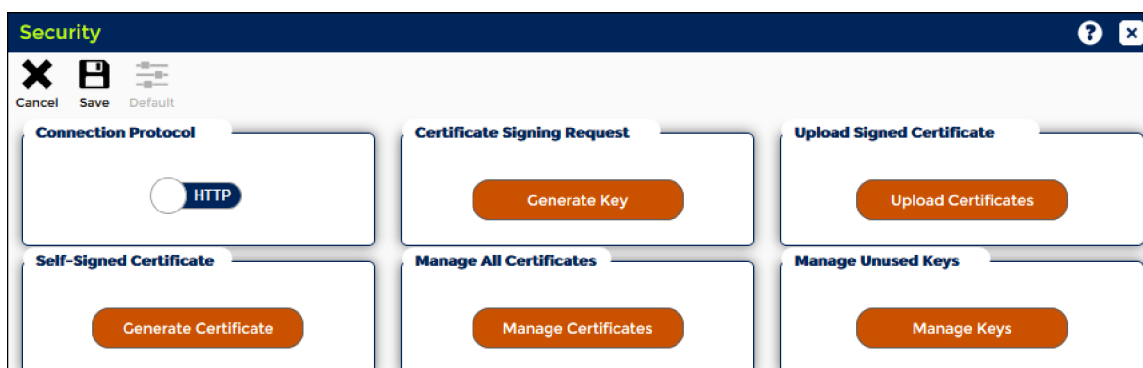
Connection Protocol: Choose whether to use unsecure HTTP or secure HTTPS. If HTTPS is chosen and there is no certificate assigned to the camera, the web server will use its default certificate (not recommended).

Certificate Signing Request: Generate a certificate from the camera to provide to a Certificate Authority (CA) in order to receive a Signed Certificate.

Upload Signed Certificate: Upload the Signed Certificate, and any other intermediate certificates, received from the Certificate Authority to provide to the camera for use in HTTPS connections.

Self-Signed Certificate: The camera will generate a Self-Signed Certificate for use in HTTPS connections.

Manage Certificates: Assign, delete, or view the available certificates in the camera.

Manage Unused Keys: Delete unused keys from the camera to avoid the maximum limit of keys. Unused keys accumulate when a Certificate Signing Request is initiated, but a Signed Certificate is not uploaded to complete the process.

Cancel: Returns the Connection Protocol setting to its previously saved state.

Save: Save the Connection Protocol setting.

3.8 Date and Time (Admin only)

Note: The user must be logged on as Administrator to see the Date and Time option and make changes.

The only option in Date and Time menu is:

- Date and Time Settings
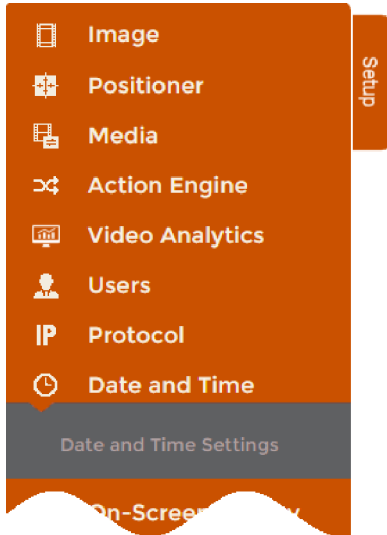
3.8.1 Date and Time Settings

Note: The user must be logged in as Administrator in order to make changes on the Date and Time Settings page.
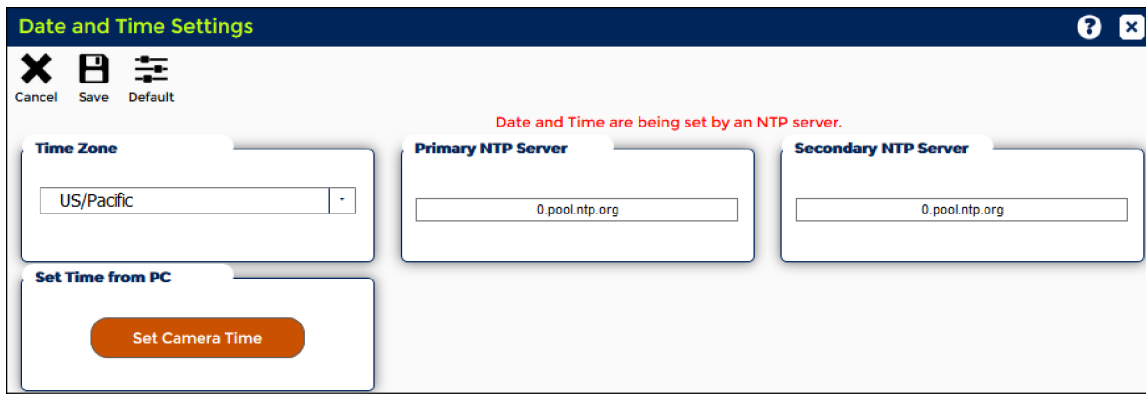
The camera system allows the user to set the camera date and time using two methods:

- Through synchronization with NTP (Network Time Protocol) server
- Manually through synchronization with your PC

Synchronization with NTP (Network Time Protocol)

What is NTP?

NTP stands for Network Time Protocol. NTP allows users to synchronize the time of the camera with the time of the server running the NTP.

Why to Use NTP?

Connecting IP cameras to the same NTP server ensures that their clocks are synchronized. Date and time settings in the cameras connecting to the NTP server are updated continuously.

Note: If the camera time is synchronized through the NTP, it will get the time directly from the server when rebooted. Synchronization with the NTP server is the recommended method.

Important: DNS must be set up in the camera for any URL to work properly. Alternatively, you can use the IP address of the NTP server.

Choosing NTP Servers

Choose the server by:

- the NTP server address or
- public NTP pool server name. Example of public NTP pool server name: pool.ntp.org.

How to Synchronize Camera Time with NTP Server?

1. From the *Time Zone* section, choose your **Time Zone**.
2. Enter **NTP Server** addresses or names
3. Click **Save**.
   After the series of prompts, the line in red "Date and Time are being set by NTP server" will be displayed.

Manual Synchronization with PC

What is Manual Synchronization with PC?

The manual synchronization with PC sets the time of the camera from the clock on your computer. The disadvantage of this method is that computer clocks don't keep perfect time and tend to drift.

Why to Use Manual Synchronization?

Synchronize your camera with the PC when the NTP server is not available or in the absence of an Internet connection. When the PC method is applied, date and time are set once and will not be updated automatically.

How to Synchronize Camera Time with PC Time?

From the *Set Time from PC* section, click **Set Camera Time**.
After the series of prompts, the line in red "Date and Time were set manually. The camera IS NOT using NTP." will be displayed.

Cancel: Returns to the previously saved state.

Save: Stores current settings permanently.

Default: Restores the factory default settings.

3.9 On-Screen Display (Admin and Operator only)

Note: The user must be logged on as Administrator or Operator in order to make changes on the OSD page.

The options in On-Screen Display (OSD) are:

- OSD Wizard
- Advanced Settings
- Banner Settings
- Front Settings
- Sector Settings
- Manage Logos

3.9.1 OSD Wizard

> Note: The user must be logged on as Administrator or Operator in order to make changes on the OSD Wizard page.

OSD elements can be configured by using one of two panels:

- OSD Wizard: Use the OSD Wizard panel for a quick configuration of OSD elements.
- OSD Settings: Use the OSD Settings panel to create OSD elements with more configuration options.

Configuring OSD Elements Using the OSD Wizard Panel

To create an OSD element use the following steps:

1. Choose *Type*. Click **Next**.
   The following elements are available to be superimposed on the video:
   - Text: User defined character text
   - Date/Time: Current system date and time on the camera
   - PTZ Position: Current pan, tilt and zoom position
   - Preset: Current active preset title
   - Compass: Current virtual compass position
   - Sector: Current active sector title
   - Maintenance: Current system temperature and pressure
   - Event: Current active action (Action Engine)

2. In the Text tab, enter the **Text to Display**, then click **Next**

.

3. Choose the **Font Size** of the element. Click **Next**.

OSD Wizard

| 1. Type | 2. Text | 3. Font Size | 4. Font Color | 5. Background | 6. Location |

Each OSD element can have a different size. *What size should this element be?

○ 12 points   ○ 48 points
○ 18 points   ○ 54 points
○ 24 points   ○ 60 points
○ 30 points   ○ 72 points
○ 36 points   ○ 84 points
◉ 42 points   ○ 96 points

Previous   Next

4. Choose **Font Color** of the element. Click **Next**.

OSD Wizard

| 1. Type | 2. Text | 3. Font Size | 4. Font Color | 5. Background | 6. Location |

Each OSD element can be displayed in a different color. *In what color should this element be displayed?

◉ White Letters
○ Black Letters
○ Green Letters
○ Red Letters
○ Blue Letters

Previous   Next

5. Choose a **Background** for the element. Click **Next**.

OSD Wizard

| 1. Type | 2. Text | 3. Font Size | 4. Font Color | 5. Background | 6. Location |

Each OSD element can be displayed with a different background color. *In what background color should this element be displayed?

◉ Transparent Background
○ Black Background

Previous   Next

6. Choose **Location** for the element.
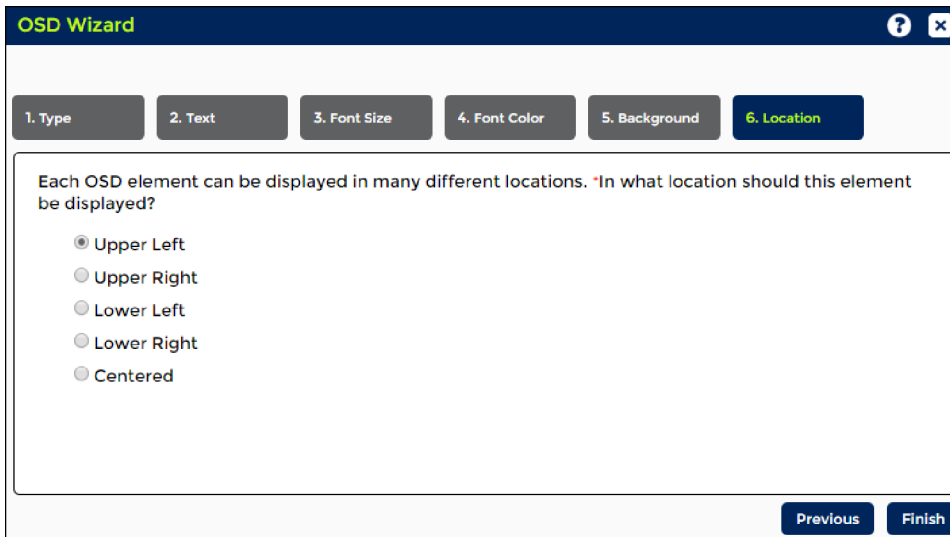
1. Click **Finish**.
2. If desired, add another element.

3.9.2 Advanced Settings

Note: The user must be logged in as Administrator or Operator to make changes on the Advanced Settings page.
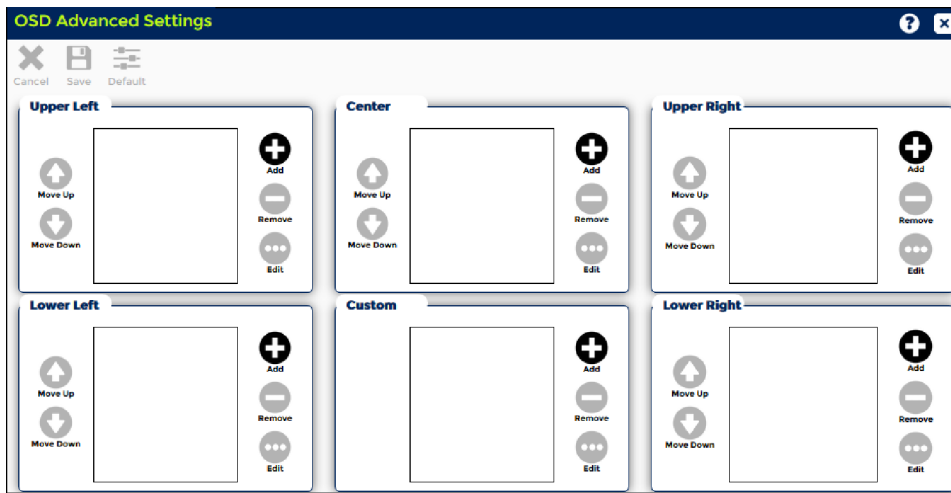
The camera system cam be programmed to display up to eight elements, with particular information. Each element can be independently configured.

What is an Element?

Eight elements are available to be superimposed on the video:

- Text: User defined character text
- Date/Time: Current system date and time on the camera
- PTZ Position: Current pan, tilt and zoom position
- Preset: Current active preset title
- Compass: Current virtual compass position
- Sector: Current active sector title

- Maintenance: Current system temperature and pressure
- Event: Current active action (Action Engine)

How to Add an OSD Element to the Stream?

1. From the *OSD Settings* panel, select one of the OSD **Location**: Upper Left, Center, Upper Right, Lower Left, Custom, Lower Right.
2. Click **Add**. The *Create OSD Element* dialog appears.

Create OSD Element   ✖

Location

Upper Left   ▾

Type

Text   ▾

Display Text

[   ]

Font Size

[42]

━━━━━●━━━━━━

12pt   96pt

Font Color

[▾]

Font Transparency

[0]

●━━━━━━━━━━

0%   100%

Background

(OFF)

Save   **Cancel**

3. OSD **Type**: Select the element from the drop-down list.
   Text Element
   If the Text element is chosen, type the text, up to 24 characters. Only the following characters are allowed to be used in the text:
      - digits (0123456789)
      - uppercase letters (A-Z)
      - lowercase letters (a-z)
      - hyphen (-)
      - underscore (_)
      - period (.)
      - comma (,)
      - colon (:)
      - at sign (@)
      - slash mark (/)
   Date Time Element
   a) If the Date Time element is chosen, select OSD date format from the drop-down list.
   Supported formats are:
      - M/d/yyyy (3/6/2013)
      - MM/dd/yyyy (03/06/2013)
      - dd/MM/yyyy (06/03/2013)
      - yyyy/MM/dd (2013/03/06)
      - yyyy-MM-dd (2013-03-06)
      - dddd, MMMM dd, yyyy (Wednesday, March 06, 2013)
      - MMMM dd, yyyy (March 06, 2013)
      - dd MMMM, yyyy (06 March, 2013)
   b) Select OSD Time Format from the drop-down list. Supported formats are:

- 12 Hour (2:00 PM)
- 12 Hour (02:00 PM)
- 24 Hour (2:00)
- 24 Hour (02:00)

Compass Element and PTZ Element

If the Compass element or PTZ element is chosen, you need to enable or disable OSD timeout.

Note: Timeout settings for compass and PTZ elements are configured independently. The default is: disabled.

What is OSD Timeout?

OSD timeout refers to the period of five seconds when the compass element or PTZ element is superimposed on the video after the camera stops its panning movement.

If Timeout is enabled: After 5 seconds of camera pan inactivity, the compass element and/or PTZ element will no longer be superimposed on the video.

If Timeout is Disabled: The compass element and/or PTZ element will be superimposed on the video regardless of the camera's activity .

4. **Font Size**: Slide the bar to set the font size.
5. **Font Color**: Select the font color from the drop-down list.
6. **Font Transparency**: Slide the bar to set the percentage of transparency.
7. **Background**: Choose the On or Off option.
8. Click **Save**. The element will appear at the desired location.
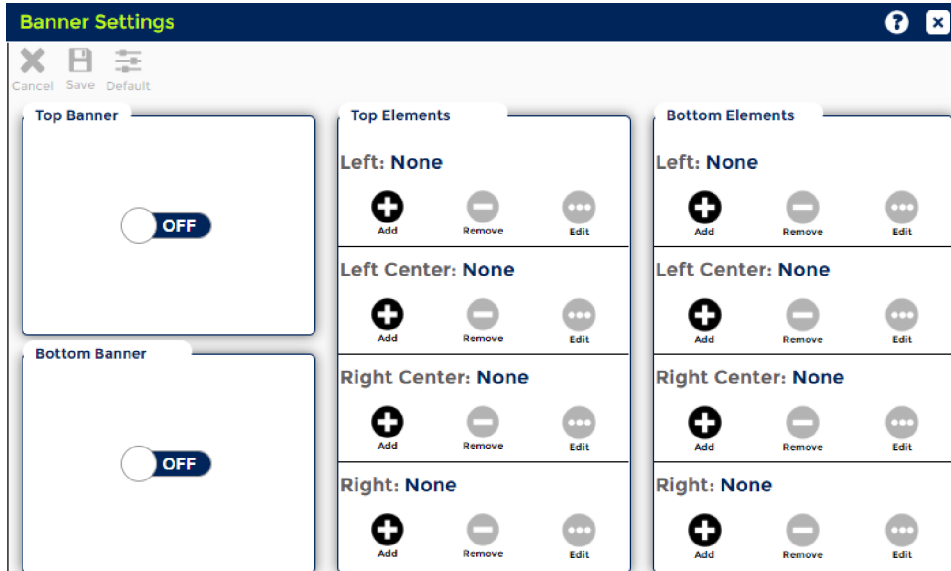
How to Edit an Element?

Select the element and click **Edit**. Make changes and click **Save**.

How to Delete an Element from the Stream?

Select the element and click **Remove**. The element will be remove.

3.9.3 Banner Settings

Note: The user must be logged in as Administrator or Operator to make changes on the Banner Settings page.

The camera system can be programmed to display two banners: one across the top and one across the bottom. Each banner can be displayed and configured independently .

- Banner Size: 6 - 8% of the image height
- Banner Position: top or bottom or both
- Banner Color: black
- Up to eight elements can be added to the banner:
  - Text: User defined character text
  - Date/Time: Current system date and time on the camera
  - PTZ Position: Current pan, tilt and zoom position
  - Preset: Current active preset title
  - Compass: Current virtual compass position
  - Sector: Current active sector title
  - Maintenance: Current system temperature and pressure
  - Event: Current active action (Action Engine)

To display the banner:

In the *Top Banner* or *Bottom Banner* sections, choose the option ON. The banner will be displayed.

Note: Each banner can be displayed and configured independently.

To add an OSD element to the banner, use the following steps:

1. Display the banner.
2. In the *Top Elements* or *Bottom Elements* section, click **Add** in one of the banner positions: Left, Left Center, Right Center, or Right.
   The *Create OSD Banner Element* dialog appears.

Create OSD Banner Element ✖

OSD Location*	Left ▾
OSD Type*	-- Select OSD Type -- ▾
OSD Font Size*	-- Select OSD Font Size -- ▾
OSD Color*	-- Select OSD Color -- ▾
OSD Transparency*	-- Select OSD Transparency -- ▾

Save Cancel

3. OSD **Type**: Select the element from the drop-down list.
   Text Element
   If the Text element is chosen, type the text, up to 24 characters. Only the following characters are allowed to be used in the text:
   - digits (0123456789)
   - uppercase letters (A-Z)
   - lowercase letters (a-z)
   - hyphen (-)
   - underscore (_)
   - period (.)
   - comma (,)
   - colon (:)
   - at sign (@)
   - slash mark (/)

   Date Time Element
   a) If the Date Time element is chosen, select OSD date format from the drop-down list.
   Supported formats are:
   - M/d/yyyy (3/6/2013)
   - MM/dd/yyyy (03/06/2013)
   - dd/MM/yyyy (06/03/2013)
   - yyyy/MM/dd (2013/03/06)
   - yyyy-MM-dd (2013-03-06)
   - dddd, MMMM dd, yyyy (Wednesday, March 06, 2013)
   - MMMM dd, yyyy (March 06, 2013)
   - dd MMMM, yyyy (06 March, 2013)

   b) Select OSD Time Format from the drop-down list. Supported formats are:
   - 12 Hour (2:00 PM)
   - 12 Hour (02:00 PM)
   - 24 Hour (2:00)
   - 24 Hour (02:00)

4. **Font Size**: Slide the bar to set the font size.
5. **Font Color**: Select the font color from the drop-down list.
6. **Font Transparency**: Slide the bar to set the percentage of transparency.
7. **Background**: Choose the On or Off option.
8. Click **Save**. The element will appear at the desired location.

To edit the element:

1. Click **Edit** in the section where the change is desired.
2. Make the changes. After the changes are made, click **Save**.

To delete the element from the banner:

1. Select the section and click **Remove**. The element will be removed.

If any OSD elements are displayed on the stream before the banner feature is enabled, the OSD elements will be moved below the banner at the top or above the banner at the bottom when the banner is activated.

If any OSD elements are displayed on the stream before the banner feature is enabled, the OSD elements will be moved up to the top or down to the bottom when the banner is disabled .

When the banner is disabled, the elements positioned on the banner will be saved in the camera but not displayed on the video stream.

3.9.4 Font Settings

Note: The user must be logged in as Administrator or Operator to make changes on the Font Settings page.
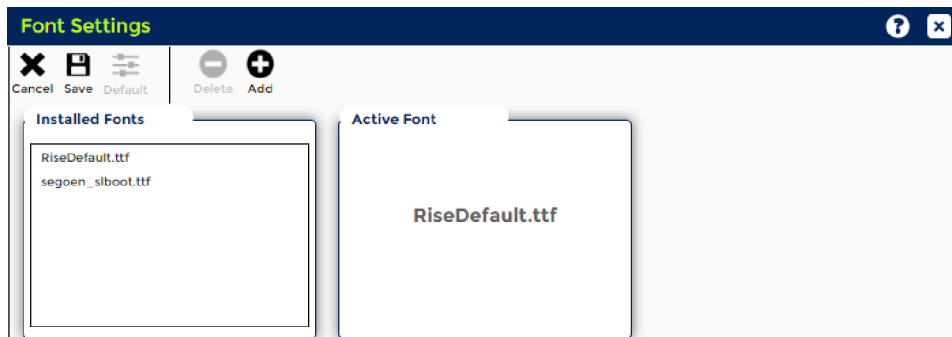
The camera system supports 10 fonts: five default fonts and five fonts that can be added by the user. The font file format is TrueType (TTF file extension).

To upload a font:

1. In the *Font Settings* panel, click **Add**. The *Choose File to Upload* dialog appears.
2. Choose the folder containing the font to be uploaded.
3. Select the font file (.ttf extension), and then click **Open**.
4. The new font is added to the *Installed Fonts* list.

To make a font active:

1. From the *Installed Font* section, select the font.
2. Click **Save**.
3. Selected font will be shown in the *Active Font* section.
    The new font will be applied to all elements that superimpose the stream.

To remove a font (future option):

1. From the *Installed Font* section, select the font.
2. Click **Delete**.

3.9.5 Sector Settings

Note: The user must be logged in as Administrator or Operator to make changes on the Sector Settings page.
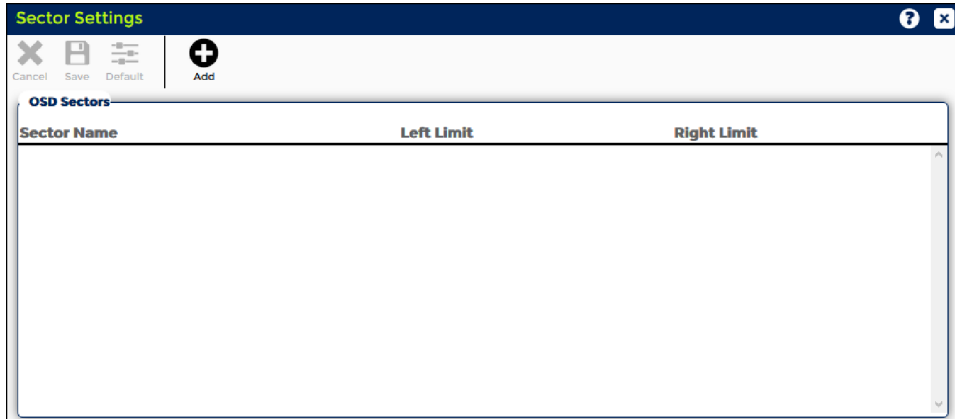
A sector is a programmed pan segment with set boundaries and an identifying label. The camera system supports 16 sectors.

To establish a sector:

1. Click **Add**. A *Create Sector* dialog appears.

2. Enter a **Sector Name**.
   Use up to 24 characters. This name will be shown on the stream, when you pass the sector.
3. Click **Create Sector**.
   The sector name will be added to the *Sector Name* list.
4. Pan the camera to the left edge of the area to be labeled, then click **Set Left Limit**.
   Left limit pan degrees will be added to the Left Limit column.
5. Pan the camera to the right edge of the area to be labeled, then click **Set Right Limit**.
   Right limit pan degrees will be added to the Right Limit column.
6. To check the left limit, click **Go** from the Left Limit section. To check the right limit, click click **Go** from the Right Limit section.

Note: For a sector name to be displayed, a sector element must be created (See On-Screen Display > Advanced Settings).

Note: Tilt and zoom positions have no effect on sector labeling.

To delete a sector from the stream:

1. From the *Sector Name* list, click **Delete** on the desired line.

Note: For a sector name to be removed, a sector element must be removed (See On-Screen Display > Advanced Settings).

3.9.6 Manage Logos

Note: The user must be logged in as Administrator or Operator to make changes on the Logos Settings page.
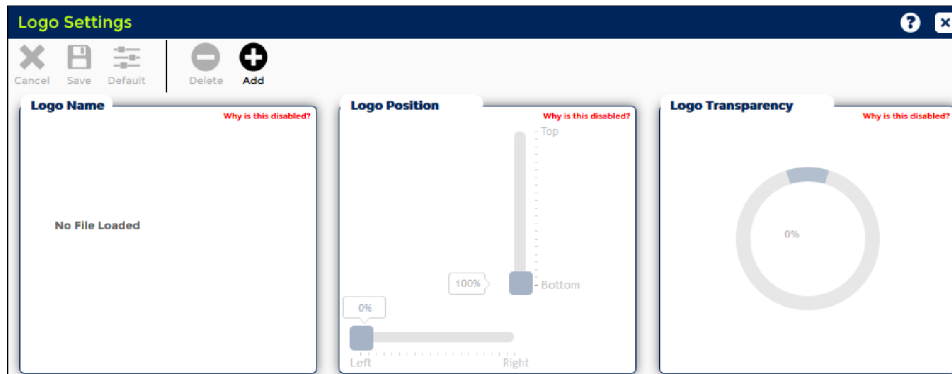
An overlay Logo File is a static image superimposed over the video stream. The logo file must first be uploaded to the camera system.

- The camera system supports the following logo formats: BMP, GIF and PNG.
- The maximum size for the logo is 1 MB. Bit depth must be greater then 8.
- The OSD logo has a transparency feature that can make the background color transparent.
- The background color for image formats that do not inherently support transparency will be the color of the pixel in the lower left corner of the image.

To upload the logo:

1. Click **Add**.
2. Select the logo file to upload.
3. Double-click the file to upload the logo to the camera.
   After upload is completed, check for the file name in the *Logo Name* section.
4. From the *Logo Position* section, use slides to position the logo.
   Range is left to right and bottom to top.
   Coordinates are measured as a percentage of the screen size.
5. From the *Logo Transparency* section, choose the desired transparency.
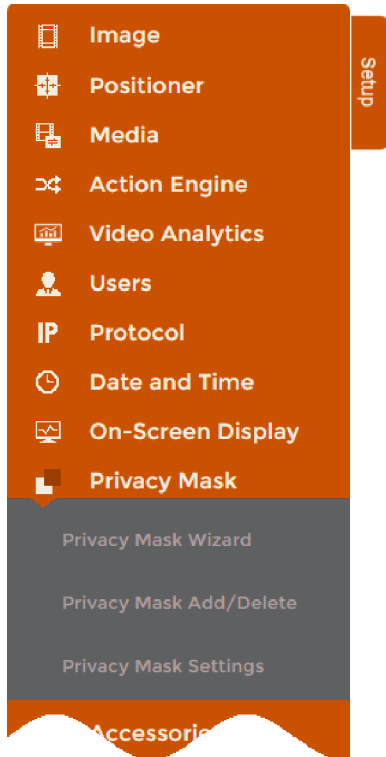
To remove the logo from the stream:

1. Select the logo.
2. Click **Delete**.

3.10 Privacy Mask (Admin and Operator only)

Note: The user must be logged on as Administrator or Operator in order to create Privacy Masks.

The options in Privacy Mask menu are:

- Privacy Mask Wizard
- Privacy Mask Add/Delete
- Privacy Mask Settings

🔲 Image	Setup
➕ Positioner	
🔳 Media	
⤫ Action Engine	
🖥 Video Analytics	
👤 Users	
IP Protocol	
🕐 Date and Time	
🖼 On-Screen Display	
🔲 Privacy Mask	

Privacy Mask Wizard

Privacy Mask Add/Delete

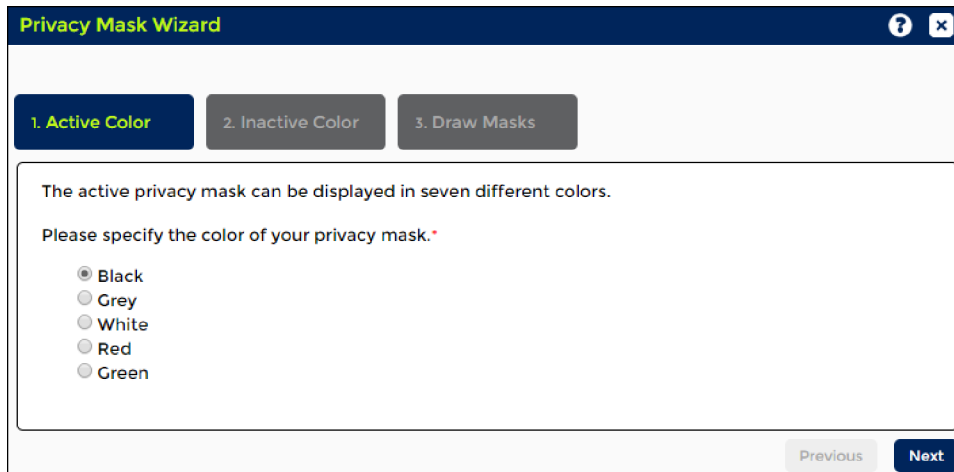Privacy Mask Settings

Accessori

3.10.1 Privacy Mask Wizard

Note: The user must be logged in as Administrator or Operator in order to make changes on the Privacy Mask Wizard page.

A mask can be created by using the following panels:

- Privacy Mask Wizard:
  Create masks by following the Wizard's prompts.
  Masks will be automatically added to the *Privacy Masks* table (Privacy Mask tab > Privacy Mask Add / Delete panel) by the wizard.
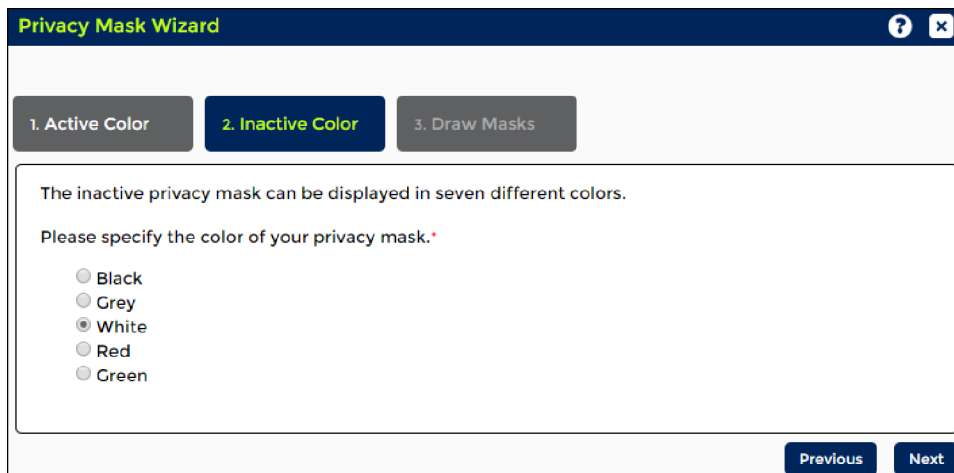- Privacy Mask Add / Delete and Privacy mask Settings panels.

To create a mask using the Wizard follow the next steps:

1. Choose your active mask color. Click **Next**.

    Privacy Mask Wizard

1. Active Color	2. Inactive Color	3. Draw Masks

    The active privacy mask can be displayed in seven different colors.

    Please specify the color of your privacy mask.*

    - ● Black
    - ○ Grey
    - ○ White
    - ○ Red
    - ○ Green

    Previous   **Next**

2. Choose your inactive mask color. Click **Next**.

    Privacy Mask Wizard

1. Active Color	2. Inactive Color	3. Draw Masks

    The inactive privacy mask can be displayed in seven different colors.

    Please specify the color of your privacy mask.*

    - ○ Black
    - ○ Grey
    - ● White
    - ○ Red
    - ○ Green

    Previous   **Next**

3. Draw a mask.
    Press the left mouse button (LMB) and drag the mouse to draw a frame around the area to be con-cealed. When the LMB is released, the privacy mask will appear as a dark blue rectangle.

    Note: The green border indicates that you are in a drawing mode.
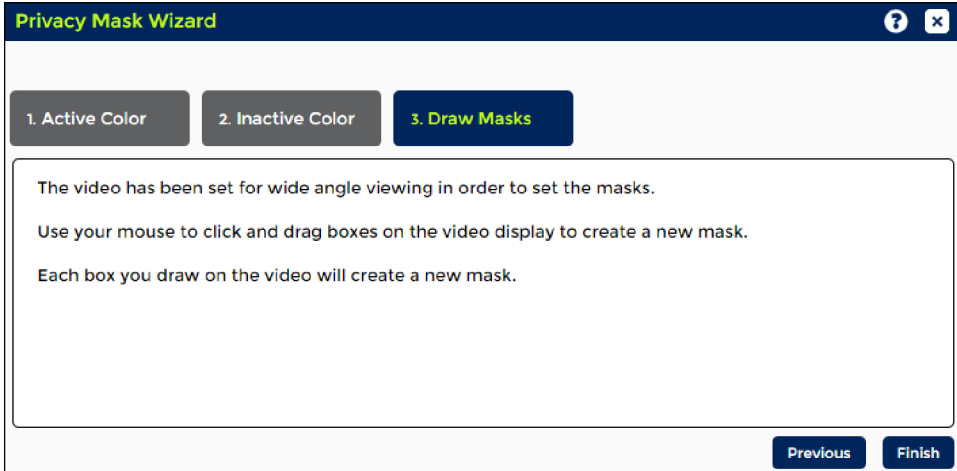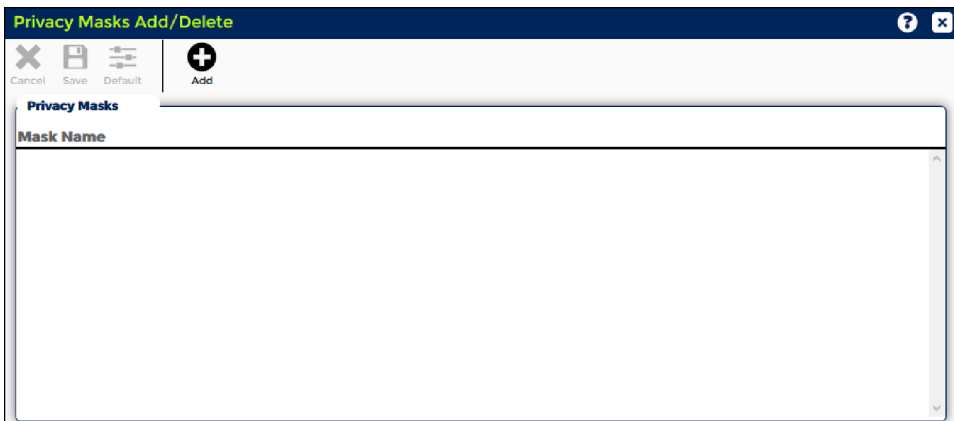
4.   Click **Finish**.

Note: Draw the mask 10% larger than the object to ensure that the mask completely covers the object as the camera zooms in and out.

3.10.2 Privacy Mask Add/Delete

Note: The user must be logged in as Administrator or Operator to Add/Delete masks.

To add a privacy mask:

1. Aim the camera to the desired mask location.
2. Click **Add**. A new mask's name will be added to the *Mask Name* list.

3. Click **Draw**. You will see a green border around the video window appears. The green border indicates that you are in a drawing mode.
4. Press the left mouse button (LMB) and drag the mouse to draw a frame around the area to be concealed. When the LMB is released, the privacy mask will appear as a rectangle.

Note: Draw the mask 10% larger than the object to ensure that the mask completely covers the object as the camera zooms in and out.

To delete a privacy mask:

1. Click **Flash** to identify the mask on the screen.
2. Click **Delete**.

Cancel: Disabled on this screen.

Save: Disabled on this screen.

Default: Disabled on this screen.

3.10.3 Privacy Mask Settings

Note: The user must be logged on as Administrator or Operator to make changes on the Privacy Mask Settings page.
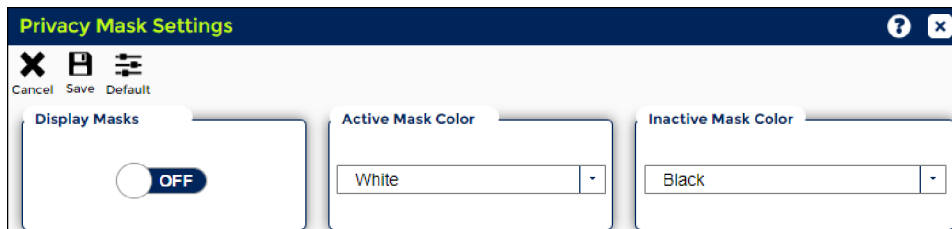
Display Masks

Choose one of two options:

- ON: To show all existing privacy masks.
- OFF: To hide all existing privacy masks.

Active Mask Color

Select the color from the drop-down list for the active mask.

Inactive Mask Color

Select the color from the drop-down list for the Inactive mask.

Cancel: Returns to the previously saved state.

Save: Stores current settings permanently.

Default: Restores the factory default settings.

3.11 Accessories

The options in Accessories menu are:

- Accessory Settings
- Digital IO Settings
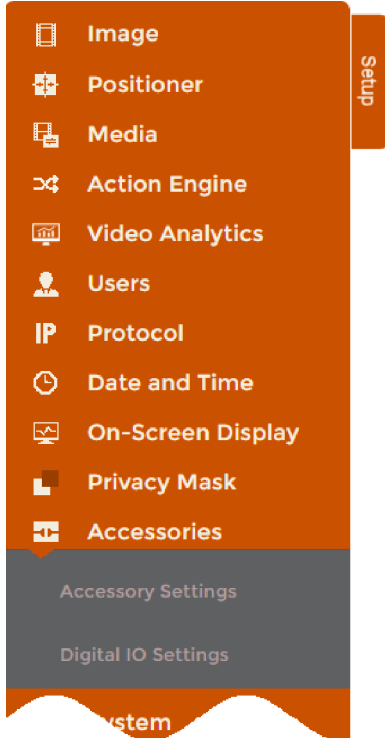
3.11.1 Accessory Settings (Admin and Operator only)

Note: The user must be logged in as Administrator or Operator in order to make changes on the Accessory Settings page.
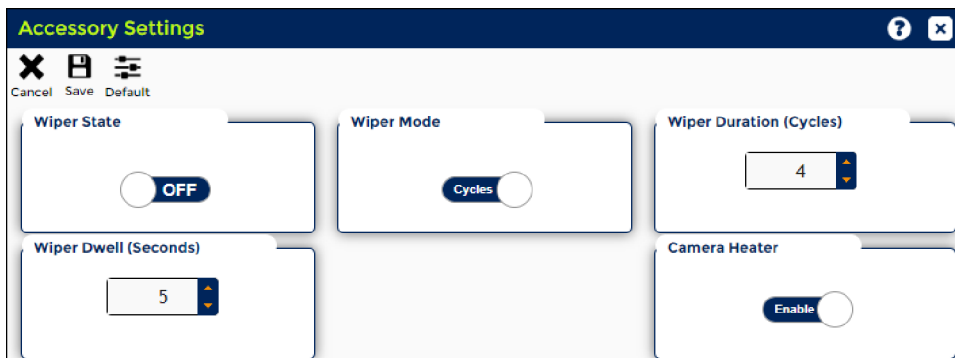
Camera Wiper (Applies to 4260HD)

<u>Wiper State</u>

Select one of the modes:

- OFF: Click the Off button, then click **Save** to turn off the wiper.
- ON: Click the On button, then click **Save** to turn on the wiper.

Wiper Mode

Select one of the modes:

- Runtime: The run time is total duration that the wiper will be active. Wiper will operate according to the programmed duration time (in seconds).
- Cycles: Wiper will operate according to the programmed number of cycles.

Cycle is a complete set of clockwise and counterclockwise windshield movements.

Wiper Dwell Time

Dwell time is time between clockwise counterclockwise movement (in seconds).

Wiper Dwell Duration

Period of time (in seconds) that the wiper is cleaning the window glass. This is enabled when in the Runtime Mode.

Camera Heater

Thermostatically controlled heater.

The heater controller in the camera has two modes:

- When the Camera Heater is 'Disabled', the heater inside the camera will never come on. This is true no matter what the internal camera temperature is.
- When the Camera Heater is 'Enabled', the heater logic will turn on the heater when the camera's internal temperature is falling and will shut off the heater when the camera's internal temperature is rising.

Select one of the modes:

- Disable: Click **Disable**, then click **Save** to turn off the thermostat.
- Enable: Click **Enable**, then click **Save** to turn on the thermostat.

Cancel: Returns to the previously saved state.

Save: Stores current settings permanently.

**Default**: Restores the factory default settings.

3.11.2 Digital IO Settings (Admin only)

Note: The user must be logged in as Administrator in order to make changes on the Digital IO Settings page.
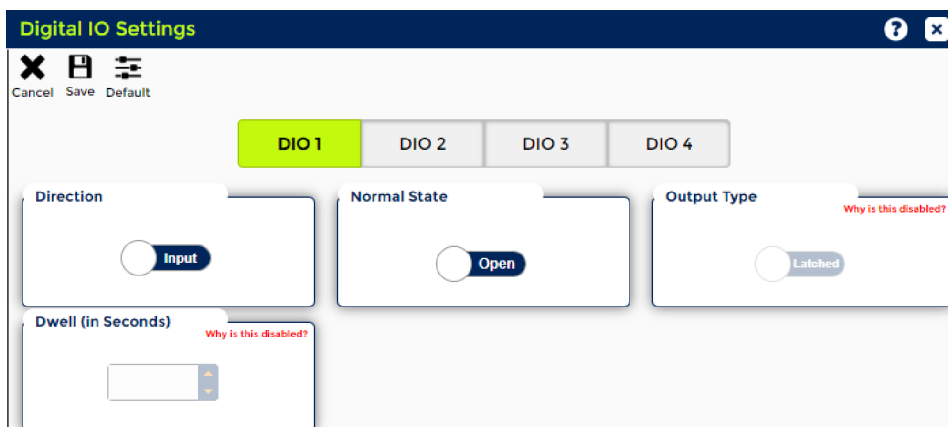
The camera is equipped with 4 alarm pins. These alarm pins can be configured as either input or output.

Direction

Choose one of the option:

- Input
- Output

Each input can be configured to be:

- Normally open or normally closed

Each output can be set up to be:

- Open or Closed
- Momentary or Latched

Dwell

If the output is set to the momentary mode, the dwell time in seconds must be set.

To set up External I/O

1. From *Accessories* tab, select Digital IO Settings. The *Digital IO Settings* dialog appears.
2. Configure the Inputs and Outputs as required for your camera.
3. Click **Save** to apply the settings and save in the camera, or click **Cancel** to cancel operation.

Note: Go to the Action Engine tab > Action Engine Configuration line to set up the actions that are to be taken if an input event occurs or to set an output in response to a particular camera event.

Cancel: Returns to the previously saved state.
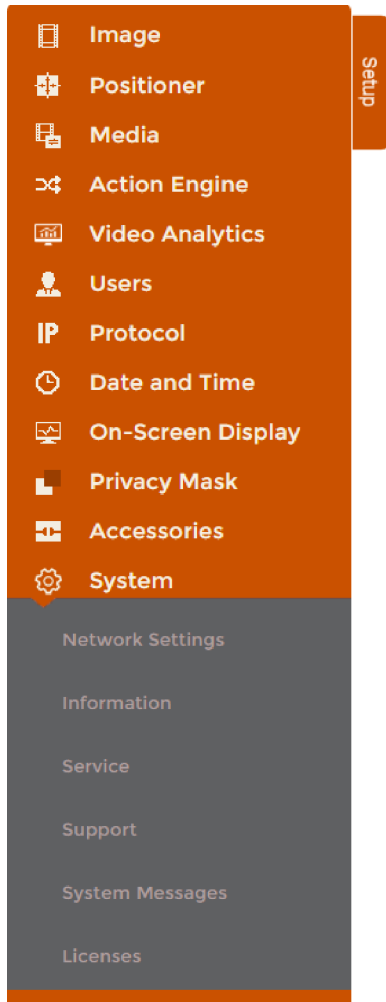
Save: Stores current settings permanently.

Default: Restores the factory default settings.

3.12 System (Admin only)

Note: The user must be logged in as Administrator to make changes on the System page.

The options in System menu are:

- Network Settings
- Information
- Service
- Support
- System Messages
- Licenses

3.12.1 Network Settings

Note: The user must be logged in as Administrator to make changes on the Network Settings page.

The Network Settings panel allows the user to assign IP information through a DHCP (Dynamic Host Configuration Protocol) server or manually.

Note: When DHCP is used, make sure that a DHCP server is operating on the network.

IP Configuration

Select one of the two options:

- Static
- DHCP

In the DHCP mode the camera will request network configuration from a DHCP server (usually the router) which will assign it to an IP address.

Static IP Configuration

Device Name

What is a Device Name?

A device name is a name that is assigned to the camera connected to a network and that is used to identify the camera.

The following characters are allowed to be used in the device name:

- digits (0-9)
- uppercase letters (A-Z)
- lowercase letters (a=z)
- hyphen (-)
- period (.)

Important: You cannot start a device name with a number unless the number is part of a dotted octet IP address. You cannot use a period (.) or a hyphen (-) at the end of a device name.

IP Address

Enter the static IP address assigned to the camera. Be sure it is not already assigned on your network.

Subnet Mask

Enter the subnet mask used to define the size of the subnet.

Gateway

Enter the default gateway address. The camera must be able to reach the gateway from the camera's IP address using the subnet mask. If not, the line in red "The gateway is not reachable from this IP address using the subnet mask provided." will be displayed.

Note: The gateway must be reachable from the camera's IP address using the subnet mask.

Primary DNS Server

Enter a preferred DNS server address to be used by the camera.

Secondary DNS Server

Enter an alternate DNS server address to be used by the camera.

Maximum Transmission Unit (MTU)

The MTU is the largest physical packet size that a network can transmit. Any messages larger than the MTU are divided into smaller packets before being sent.

MTU sizes are inherent properties of physical network interfaces and the values are fixed for each physical technology. Ethernet: Use the MTU value from 68 bytes to 9188 bytes.

DHCP IP Configuration

DNS Configuration

The DNS (Domain Name System) is an Internet service that translates domain names into IP addresses.

Select one of the two options:

- Static
  Primary DNS Server
  Enter a preferred DNS server address to be used by the camera.
  Secondary DNS Server
  Enter an alternate DNS server address to be used by the camera.
  MTU
  Ethernet: Use the MTU value from 68 bytes to 9188 bytes.
- DHCP
  MTU
  Ethernet: Use the MTU value from 68 bytes to 9188 bytes.
  Auto Negotiate
  Select one of the two options:
    - ON
    - OFF

Note: Network Speed and Network Duplex are only enabled when Auto Negotiate is turned OFF.

Cancel: Returns to the previously saved state.

Save: Stores current settings permanently.

Note: When you click **Save**, the camera will reboot and redirect you to the programmed IP address.

3.12.2 Information

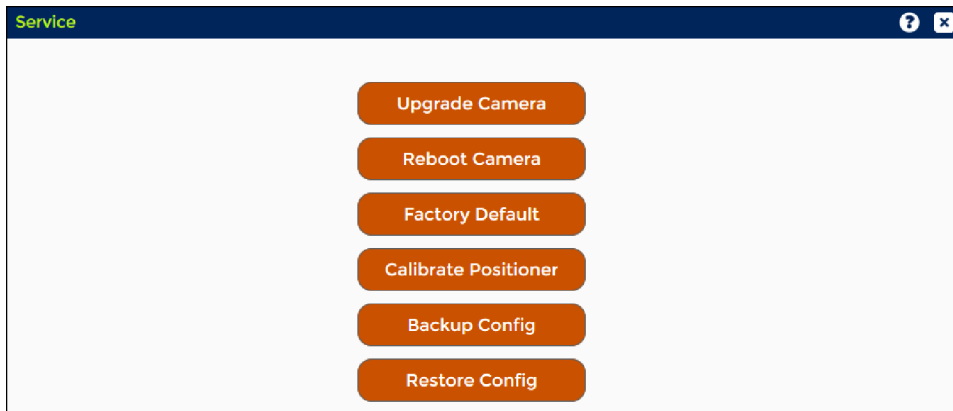Note: The user must be logged in as Administrator to view the Information page.

Information	
Model Number	4261-1100-0000-02
Manufacturer	CohuHD Costar LLC
MAC Address	00:09:f2:00:4d:69
Network Auto Negotiate	Auto
Network Speed	100 Mbps
Network Duplex	Full
Hardware Version	1.0
Firmware	1.40.5460
Engine Version	v1.0
ARMSoft Version	IV

The Information panel provides the following:

- Model Number: The specific model number of your camera.
- Manufacturer: CohuHD Costar, LLC.
- MAC Address: The number assigned by CohuHD.
- Network Auto Negotiate
- Network Speed
- Network Duplex
- Hardware Version: The specific version of your camera hardware.
- Firmware: The current visible camera system software version: CORE Package and RISE Package.
- Engine Version
- ARMSoft Version

3.12.3 Service

Note: The user must be logged in as Administrator to use the Service page.

Service	? ☒
Upgrade Camera	
Reboot Camera	
Factory Default	
Calibrate Positioner	
Backup Config	
Restore Config	

Upgrade Camera

Upgrades the desired version of the software.

Important: The RISE platform maintenance upgrade includes two software files:the CORE package and the RISE package. The CORE package must be upgraded first.

Before Upgrade:

- Contact Technical Support to access software downloads. Download the desired software upgrade to your computer.
- Log in as Administrator to your RISE camera system.

To Upgrade:

1. Upgrade the CORE Software Package:
   a. Click **Upgrade Camera**.
   b. Choose the CORE Package file to upload. Double-click on the file.
   c. The *Firmware Upgrade* dialog appears. Click **Yes**.
   d. The *Loading New Firmware* dialog appears.
      The upgrading process might take several minutes depending on the speed of the network connection to the camera.
   e. After the upgrade is completed, the camera will automatically reboot.
   f. After reboot, sign in is required.
2. Upgrade the RISE Software Package:
   a. Click **Upgrade Camera**.
   b. Choose the RISE Package file to upload. Double-click on the file.
   c. The *Firmware Upgrade* dialog appears. Click **Yes**.
   d. The *Loading New Firmware* dialog appears. The upgrading process might take several minutes depending on the speed of the network connection to the camera.
   e. After the upgrade is completed, the camera will automatically reboot.
   f. Clear cache: click **CTRL+Shift+Del**.

   If you use IE 11, the *Delete Browsing History* dialog appears. Check "Preserve Favorites website data", "Temporary Internet files and website files" and "Cookies and website data" boxes. Click **Delete**.

      g.   Refresh the page. Press **F5**.

      h.   After reboot, sign in is required.

3. After you sign in, check for the new firmware version on the Information panel (System > Information > Firmware).

Reboot Camera

Reinitializes the camera system.

Factory Default

Restores the factory default settings except for Network. See "Factory Default Values".

Factory Default IP Address and Settings

The camera is shipped with:

- IP Address: 192.168.2.150
- Subnet mask: 255.255.255.0
- Gateway: 192.168.2.1

Image Default Settings

- Digital Zoom Max: 6x
- Zoom Speed: Normal Camera Setting
- Focus Auto Type: Auto
- Focus Speed: Normal Camera Setting
- Auto Focus Sensitivity: Normal
- Auto Focus Search Type: Normal
- Zoom Position: Wide Angle
- Digital Zoom: 1x

Exposure Settings

- Day/Night Mode: Auto
- IR Correction: Off Camera Setting = Visible
- Shutter: Auto
- DSS: Off
- WDR Mode: Off
- BLC: Off
- Iris: Auto

Advanced Settings

- Defog Mode: Auto
- Auto Defog Strength Level: 0% Camera Setting
- Enhanced Level: 50% Camera Setting
- Whiteout Reduction: 0%
- White Balance Mode: Normal
- 2D/3D NR Mode: OFF
- Fixed FNR Level: 50% Camera Setting
- EIS Mode: Off
- AGC Limit: 50dB (100%)
- Sensor Frame Rate: 30 fps

Positioner Default Settings

Park Configuration

- Timer: 1
- Timer Units: Minutes
- Activity: Disabled

Presets

- No presets are present

Tours

- No Tour are present
- Direction: Forward
- Recurrence: Continuous

General Settings

- Auto Focus on PTZ: On
- Proportional PTZ: On
- Freeze Video - Presets: Off
- Inverted Mounting: Off
- Camera Flip Mode: Off
- High Wind/Vibration Mode: Off
- North: Reset to Factory Setting

Media Default Settings

Profile Settings

- Profiles: Profile 1
- Video Codec: H.264 MP
- Video Resolution: 1920 x 1080
- Video Frame Rate: 30 fps
- Video Bit Rate Control: CBR
- Video Bit Rate: 8 Mbps
- GOV Length: 30
- MJPEG Quality: 1% (MJPEG is not active)
- Video Multicast Address: <empty>
- Video Multicast Port: <empty>
- RTSP Timeout: 60 Seconds
- Video Constrained Mode: Off
- Profiles: Profile2
- Video Codec:H.264 MP
- Video Resolution: 1280 x 720
- Video Frame Rate: 30 fps
- Video Bit Rate Control: CBR
- Video Bit Rate: 4 Mbps
- OV Length: 30
- MJPEG Quality: 1%(MJPEGis not active)
- Video Multicasts Address: <empty>
- Video Multicasts Port: <empty>
- RTSP Timeout: 60 Seconds
- Video Constrained Mode: Off
- Profiles 3 through 8 not defined

Advanced Media Setup Settings

- Analog Video Setting: Enabled

Network Default Settings

IPv4 Network Settings

- IP Configuration: Static
- IP address: 192.168.2.150

- Subnet mask: 255.255.0.0
- Default gateway: 192.168.2.1
- Device Name: <empty>
- DNS Configuration: Static
- Preferred DNS Server: 172.16.10.110
- Alternate DNS Server: Cleared
- Domain Name: CohuHDCamera
- Auto Negotiation: On
- Duplex Setting: Full
- Speed: 100 Mbps
- MTU: 1500

Network Port Configurations

- HTTP: 80
- RTSP: 554
- RTP Start Port: 30000
- RTP End Port: 31000
- Serial Port Configuration
- Protocol: Cohu
- Address: 1
- Baud Rate: 9600
- Duplex: Full
- Data Bits: 8
- Stop Bits: 1
- Parity: None

OSD Default Settings

OSD Display Configurations

- OSD Position: Customer Position (X=7% & Y=23%)
- Line: Title
- Text: <empty>
- Size: Large
- Location: <empty>
- Display: Off
- Size: 40%
- Logo Display: <empty>
- Logo Location (X & Y): <empty>
- Logo Display: Off

OSD Sector Configurations

- Sector Title: <empty>
- Coordinates: <empty>

Privacy Mask Settings

Privacy Mask Configuration

- Display Masks: Off
- Color: Blue
- Mosaic: Off
- Transparency: 0%
- Gradation: 0%

Accessories Settings

Wiper Settings

- Mode: Off
- Dwell: 10 Seconds
- Time Out: 1 Minute

Heater Settings

- State: Enabled

Date/Time

- Configuration
- Date Format: mm-dd-yyyy
- 12Hr/24Hr Clock: 12 Hr
- Time Zone: UTC-8 Pacific Time
- Time Source: NTP Server
- NTP Server 1: server 0.pool.ntp.org
- NTP Server 2: server 1.pool.ntp.org

Calibrate Positioner

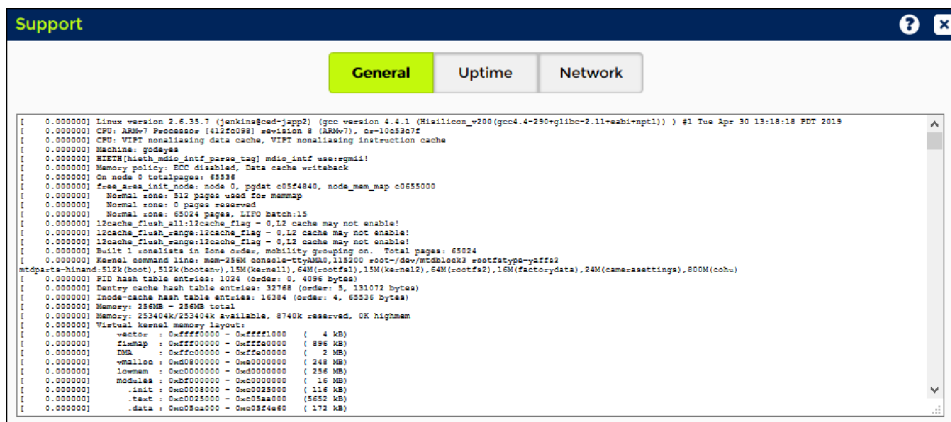Calibrates pan/tilt position reference.

Backup Configuration

Downloads the camera system configuration file from the camera to the PC.

Restore Configuration

Uploads the camera system configuration file from the PC to the camera.
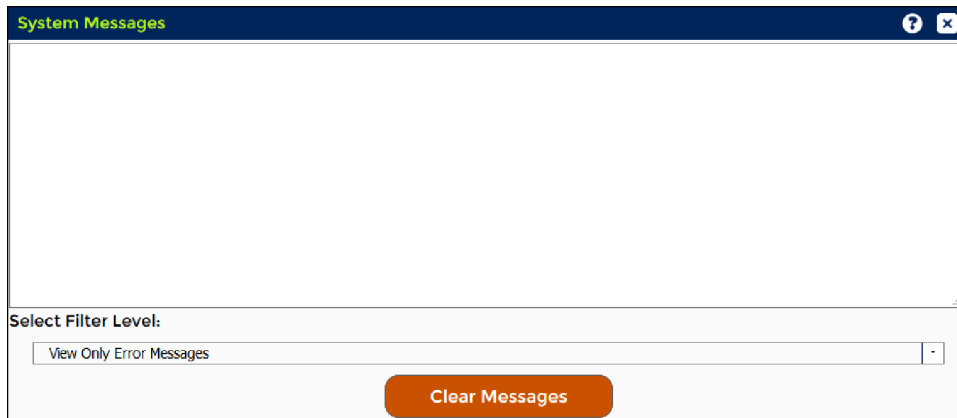
3.12.4 Support

Note: The user must be logged in as Administrator to view the Support page.

The Support panel allows the user to generate reports and display camera system information for troubleshooting.

3.12.5 System Messages

Note: The user must be logged in as Administrator to view the System Messages page.

Use the System Message page for technical support to diagnose the problem.

3.12.6 Licenses

Note: The user must be logged in as Administrator to view the Licenses page.

The software included in this product contains copyrighted software that is licensed under various licensing agreements. A link to each license is included.

For more information please visit us at:

www.CohuHD.com