

# SOP for CCTVs in SunGuide

## CohuHD Costar

This Standard Operating Procedure is to provide a standard configuration for CCTV cameras in District 5 for consistent operation in SunGuide, VLC and IVEDDS. Standard settings to check: Network settings, Video/Encoder settings, SNTP (time server type), IP addresses, PTZ settings, Date and Time, RTSP port, NTCIP (port and address), and On Screen Display (ODS).

The following SOP is for the CohuHD (4226 and 4228) IP cameras.

**Log into the camera, using Internet Explorer version 11 or Chrome version 55.0 to access the camera's user interface. Type in the default IP address.**

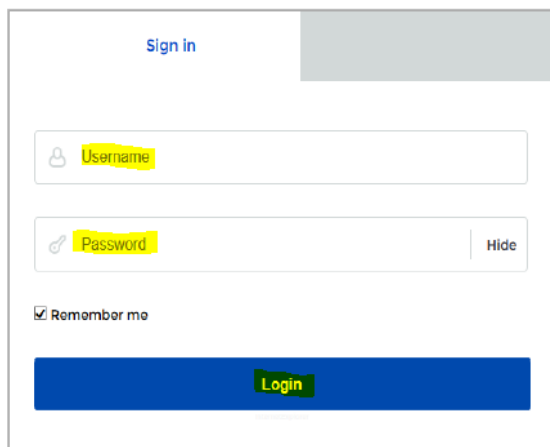
**Note: Microsoft ActiveX is required to view and control video if Internet Explorer is used. In order to make changes in network settings and install ActiveX controls in the local machine the user must be logged in as an Administrator.**



**Enter the following:**

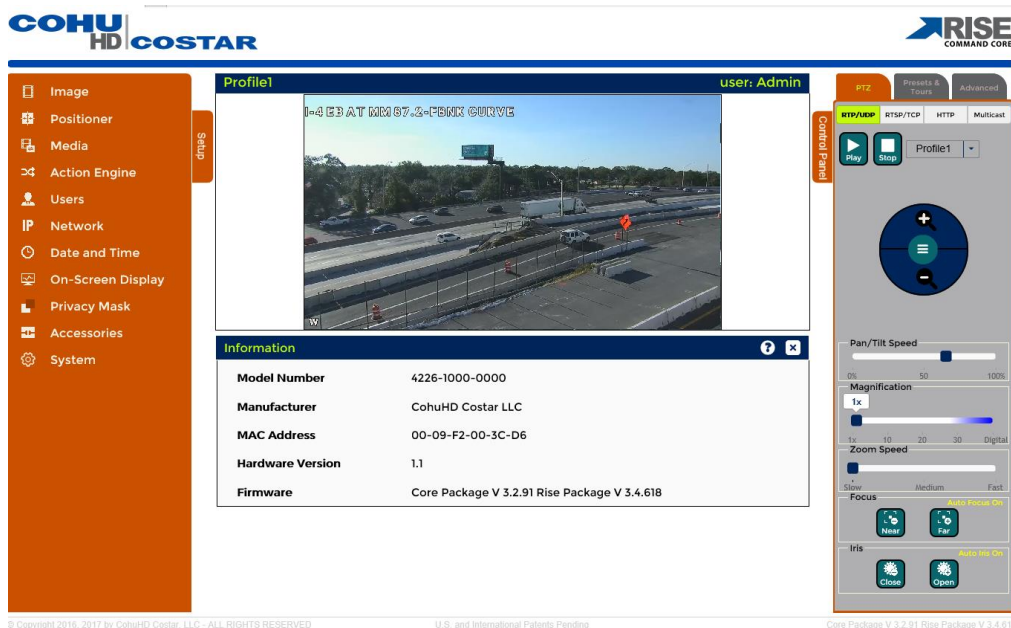
*Enter the user name:* <Call ITS staff>

*Enter the password:* <Call ITS staff>

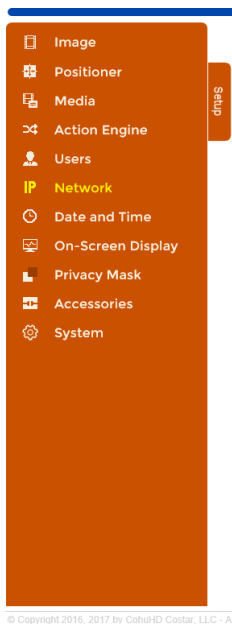
A screenshot of the CohuHD camera's login interface. The interface is titled "Sign in" and features a "Username" field, a "Password" field with a "Hide" button, and a "Remember me" checkbox. A blue "Login" button is located at the bottom of the form.

**Click "Login".**

# SOP for CCTVs in SunGuide



Click on “Network” in the Setup menu.



**NOTE: Click Set/SAVE after every configuration setting for that window before moving to the next menu item.**

# SOP for CCTVs in SunGuide

Click on “Network”.

Click on “Network Settings”.

Set the following parameters for the “Network Settings”.

*IP Configuration* < Static >  
*IP address* <10.X.X.X>  
*Subnet mask* <255.255.255.X>  
*Gateway* <10.X.X.X>

The screenshot shows the SunGuide web interface. On the left is a navigation sidebar with an orange header and a grey section. The sidebar items are: Image, Positioner, Media, Action Engine, Users, IP Network, Network Settings (highlighted in green), Port Settings, Serial Settings, Date and Time, On-Screen Display, Privacy Mask, Accessories, and System. The main content area is titled 'Profile1' and shows a live video feed of a parking lot with a sign that reads '1-4 EB AT MM 87.2-PB NK CURVE'. The user is identified as 'Admin'. Below the video feed is the 'Network Settings' configuration window. At the top of this window are 'Cancel', 'Save', and 'Default' buttons. The configuration is divided into several sections: 'IP Configuration' (Static selected), 'DNS Configuration' (Static selected, with a red note 'Why is this disabled?'), 'Device Name' (CohuHDCamera), 'IP Address' (0.0.0.0), 'Subnet Mask' (255.255.255.0), 'Gateway' (0.0.0.0), 'Primary DNS' (0.0.0.0), 'Secondary DNS' (0.0.0.0), and 'MTU' (1500).

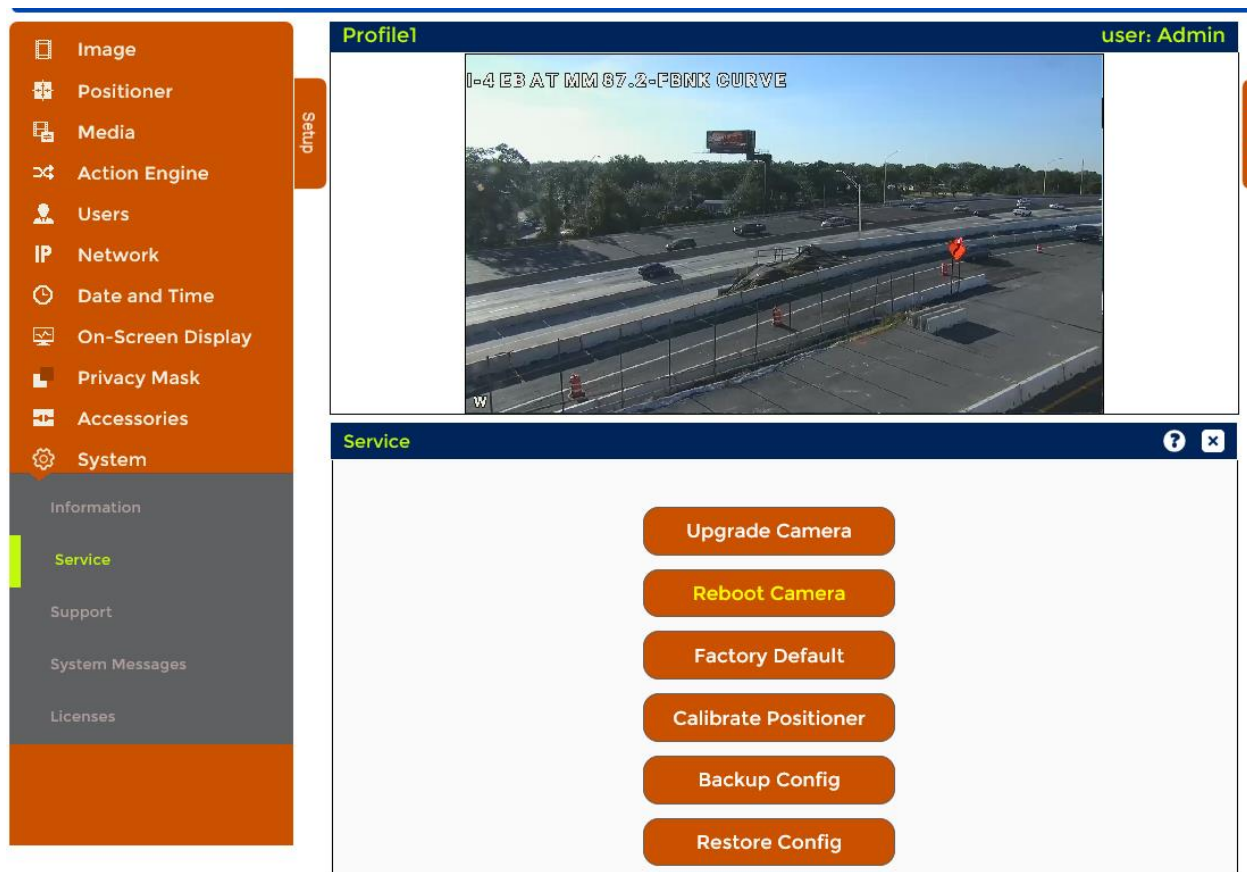
Click “Save”.

# SOP for CCTVs in SunGuide

Click on “System”.

Click on “Service”.

Select “Reboot Camera”.



After Reboot, log into the camera, use Internet Explorer or Chrome to access the camera’s user interface. Type in the assigned IP address.

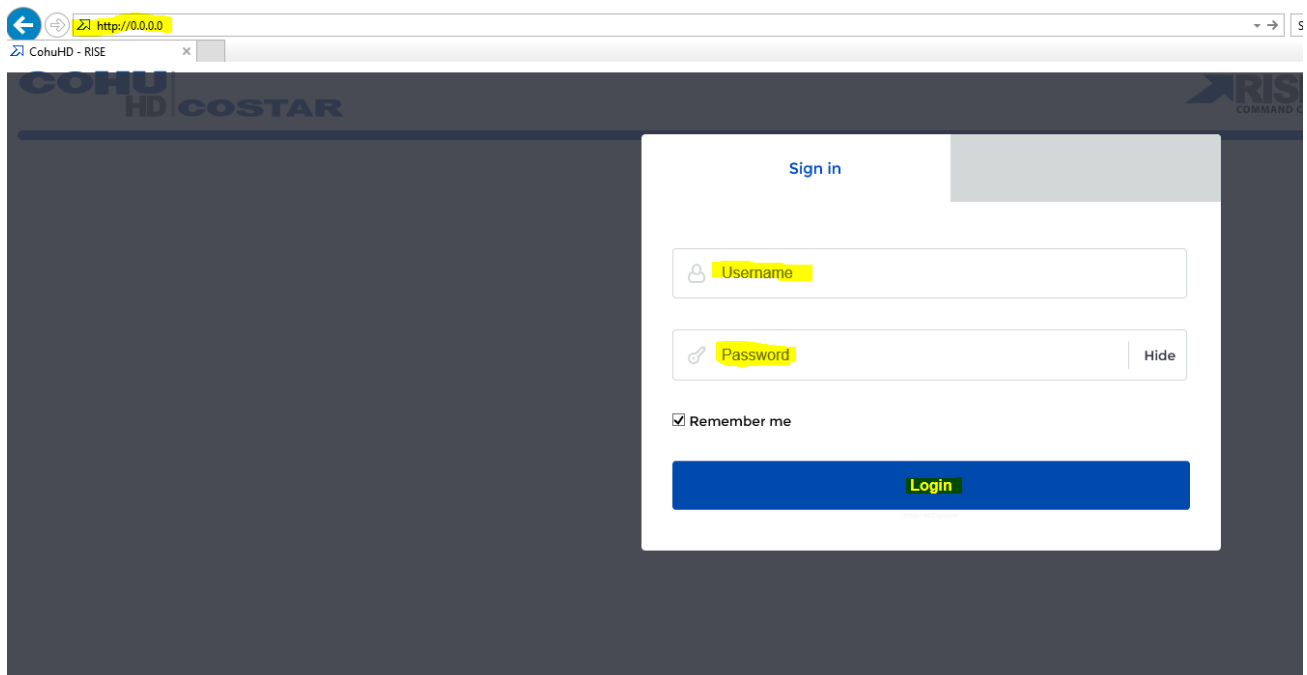
# SOP for CCTVs in SunGuide

Enter the following:

*New IP address:* < X.X.X.X. >

*Enter the user name:* < Call ITS staff (if needed) >

*Enter the password:* < Call ITS staff (if needed) >



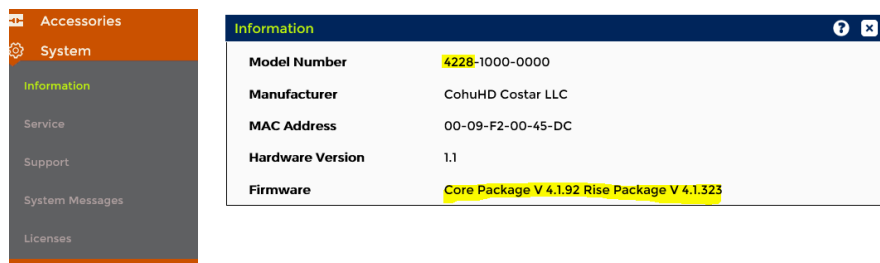
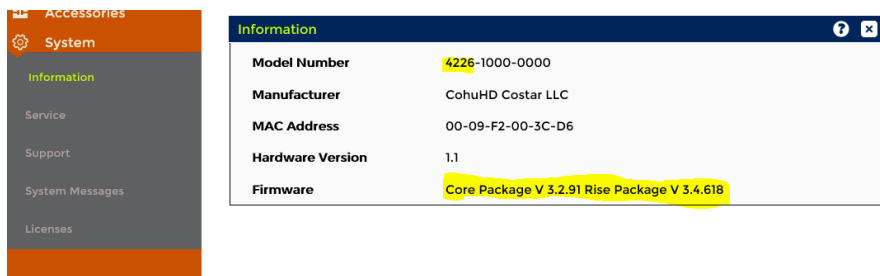
Click "Login".

# SOP for CCTVs in SunGuide

Click on “System.”

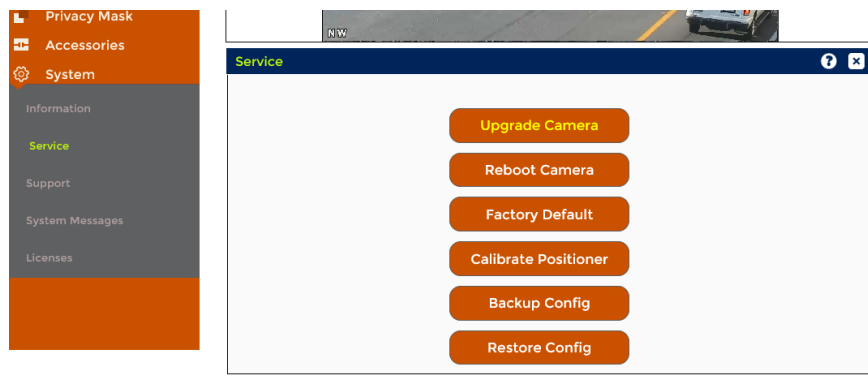
Click on “Information.”

Check Software Version. The software version highlighted below should match or be the latest version for SunGuide.



If software version listed does not match, Click “Upgrade Camera”.

Browse to the stored file and upload the latest version for SunGuide.



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Click “Upload”.

If camera doesn't automatically reboot, Select “Service” and Reboot Camera.

# SOP for CCTVs in SunGuide

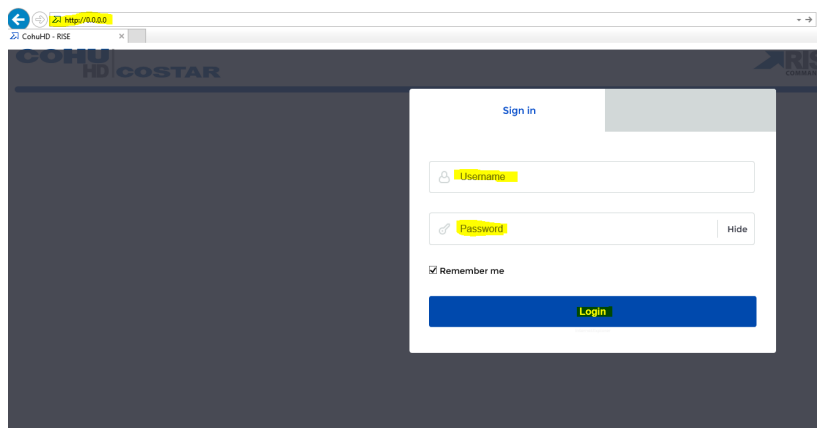
Log back into camera.

Enter the following:

*New IP address:* < X.X.X.X. >

*Enter the user name:* < Call ITS staff (if needed) >

*Enter the password:* < Call ITS staff (if needed) >



Click "Login".

Click on "Image".

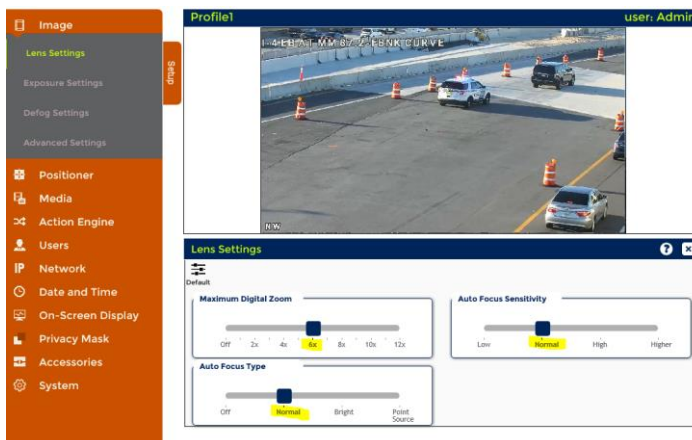
Click on "Lens Settings".

Set the following parameters for the "Lens Settings".

*Digital Zoom:* < 6x >

*Auto Focus:* < Normal >

*Focus Type:* < Normal >



# SOP for CCTVs in SunGuide

Click on “Exposure Settings”.

Set the following parameters for the “Exposure Settings”.

*Day/Night:* < Auto >  
*WDR Mode:* < Off >  
*BLC:* < Off >  
*AGC Limit:* < 30dB to 48 dB >

The screenshot displays the SunGuide web interface. On the left is a vertical navigation menu with the following items: Image, Lens Settings, Exposure Settings (highlighted in green), Defog Settings, Advanced Settings, Positioner, Media, Action Engine, Users, Network, Date and Time, On-Screen Display, Privacy Mask, Accessories, and System. The main content area is titled 'Profile1' and shows a live camera feed of a road construction site with orange traffic cones and cars. The user is identified as 'Admin'. Below the camera feed is the 'Exposure Settings' panel, which includes a 'Default' icon and several adjustable parameters: Day / Night Mode (set to Auto), Shutter Speed (set to Auto), Back Light Compensation (set to OFF), Automatic Gain Control (set to 48dB), Digital Slow Shutter (set to Off), and Wide Dynamic Range (set to OFF). The Wide Dynamic Range section also shows a slider between 'Normal' and 'Enhanced' and a '15 fps' indicator.



# SOP for CCTVs in SunGuide

Click on “Positioner”.

Click on “Positioner Settings”.

Set the following parameters for the “Positioner Settings”.

*Auto Focus on PTZ:* < On >

*Proportional PTZ:* < On >

*Camera Flip Mode:* < On >

The screenshot displays the SunGuide web interface. On the left is a vertical navigation menu with the following items: Image, Positioner (highlighted), Preset Settings, Tour Settings, Park Settings, Positioner Settings (highlighted in green), Media, Action Engine, Users, Network, Date and Time, On-Screen Display, Privacy Mask, Accessories, and System. The main content area is titled 'Profile1' and shows a live camera feed of a parking lot with several cars and orange traffic cones. The user 'Admin' is logged in. Below the camera feed is the 'Positioner Settings' dialog box, which contains the following controls:

- Auto Focus on PTZ: ON (toggle)
- Proportional PTZ: ON (toggle)
- Freeze Video Between Presets: OFF (toggle)
- Inverted Mounting: OFF (toggle) with a red note 'why is this disabled?'
- Auto Flip: ON (toggle)
- High Wind/Vibration: OFF (toggle)
- Set North Offset: Set North Offset button
- Clear North Offset: Clear North Offset button

Click “Save”.

# SOP for CCTVs in SunGuide

Click on “Media”.

Click on “Profile Settings”.

Set the following parameters for the “Profile Settings and Stream Settings”.

*Profile Name:* < Profile 1 >

*Stream Name:* < Stream0, Stream1>

*Multicast:* < Enabled >

The screenshot shows the SunGuide interface with the 'Profile Settings' window open. The left sidebar contains navigation options: Image, Positioner, Media, Media Wizard, Media Utilization, Profile Settings (highlighted), Stream Settings, Advanced Settings, Action Engine, Users, Network, Date and Time, On-Screen Display, Privacy Mask, Accessories, and System. The main window displays a live camera feed of a road construction site with orange traffic cones and cars. Below the feed is the 'Profile Settings' configuration panel with fields for Profile Name, Stream Name, and Multicast, and a table of stream settings.

Profile Name	Stream Name	Codec	Resolution	Multicast	Frame Rate (F/s)	Bit Rate (kb/s)
Profile1	Stream0	H264	1280x720	Enabled	30	3000
Profile2	Stream1	H264	720x480	Enabled	30	1100
-	Stream2	JPEG	1920x1080	-	30	256

# SOP for CCTVs in SunGuide

Click on “Stream Settings”.

Set the following parameters for “Stream0”.

<i>Stream Name:</i>	< Stream0 >
<i>Codec:</i>	< H264 High >
<i>Bit Rate Control:</i>	< CBR >
<i>Multicast Address:</i>	< XXX.XXX.XXX.XXX >
<i>Resolution:</i>	< 1280x720 >
<i>Multicast Port:</i>	< 5554 >
<i>Frame Rate:</i>	< 30fps >
<i>Bit Rate:</i>	< 3000kbps >
<i>Multicast TTL:</i>	< 64 >

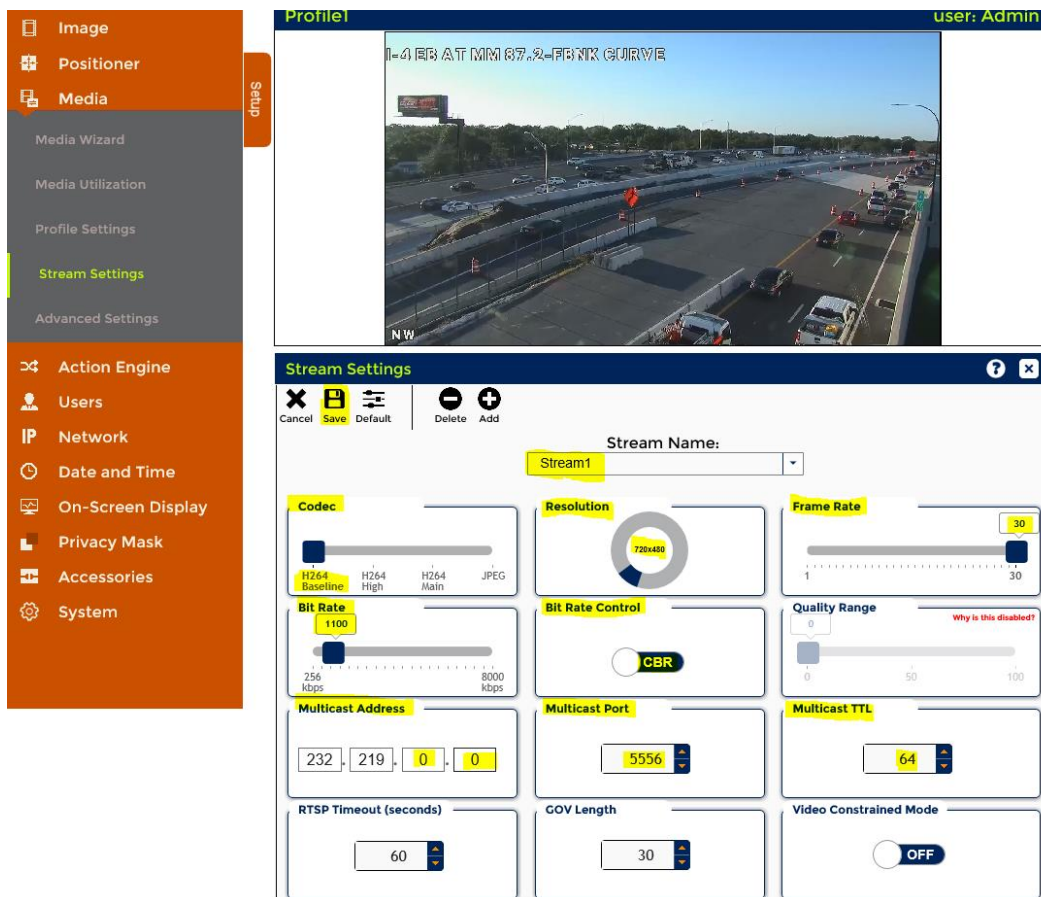
The screenshot displays the SunGuide web interface. On the left, a vertical 'Setup' menu is visible with 'Stream Settings' highlighted in green. The main content area is split into two sections. The top section shows a live video feed of a construction site with orange traffic cones and a blue barrier. The bottom section is the 'Stream Settings' configuration panel, which includes a 'Stream Name' dropdown set to 'Stream0'. Below this are several parameter controls: 'Codec' set to H264 High, 'Resolution' set to 1280x720, 'Frame Rate' set to 30, 'Bit Rate' set to 3000, 'Bit Rate Control' set to CBR, 'Multicast Address' set to 232.219.0.0, 'Multicast Port' set to 5554, 'Multicast TTL' set to 64, 'RTSP Timeout (seconds)' set to 60, 'GOV Length' set to 30, and 'Video Constrained Mode' set to OFF. The 'Quality Range' slider is disabled with a red warning message 'Why is this disabled?'. The interface also shows a 'Cancel Save Default Delete Add' toolbar at the top of the settings panel.

Click “Save”.

# SOP for CCTVs in SunGuide

Set the following parameters for “Stream1”.

- Stream Name:** < Stream1 >
- Codec:** < H264 Baseline >
- Bit Rate Control:** < CBR >
- Multicast Address:** < XXX.XXX.XXX.XXX >
- Resolution:** < 720x480 >
- Multicast Port:** < 5556 >
- Frame Rate:** < 30fps >
- Bit Rate:** < 1100kbps >



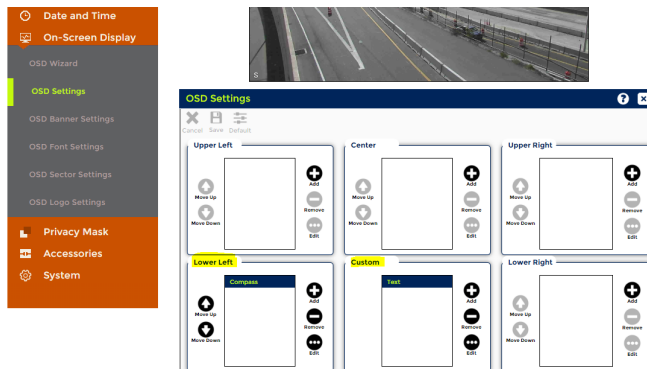
Click “Save”.

# SOP for CCTVs in SunGuide

Click on “On -Screen Display”.

Click on “OSD Settings”.

Click “ + Add ” in the Custom tab to set the Text to be displayed.



Click in the Text field, type the Camera Name or Location.

*Location:* < Custom >

*Type:* < Text >

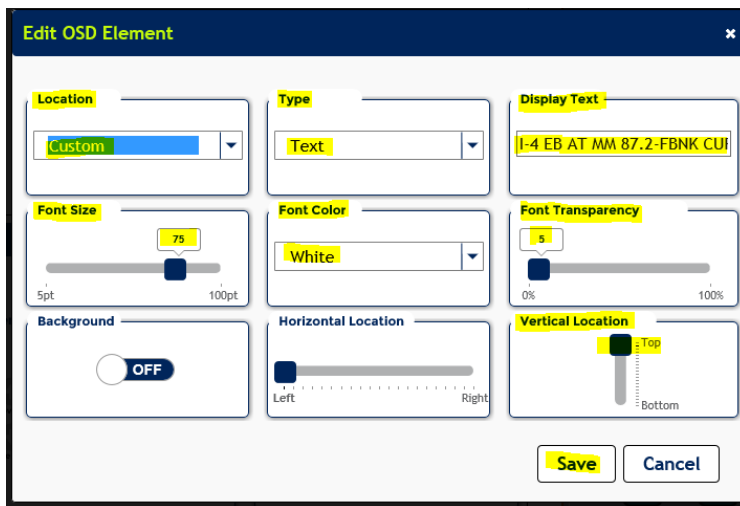
*Display Text:* < Example: I-95 NB AT MM 000.0 >

*Font Size:* < 75pt >

*Font Color:* < White >

*Font Transparency:* < 5 >

*Vertical Location:* < Top >

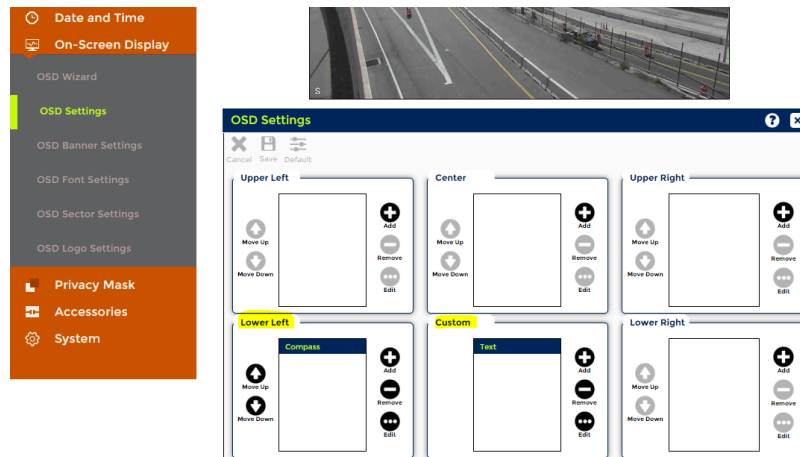


Click “Save”.

# SOP for CCTVs in SunGuide

Click on “OSD Settings”.

Click “ + Add ” in the Lower Left tab to set the Compass to be displayed.



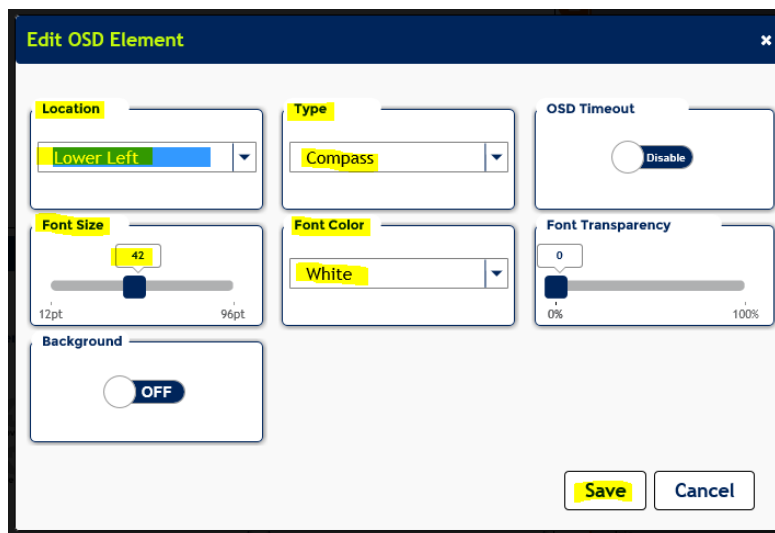
Click in the Text field, type the Camera Name or Location.

*Location:* < Lower Left >

*Type:* < Compass >

*Font Size:* < 42pt - 60pt >

*Font Color:* < White >



Click “Save”.

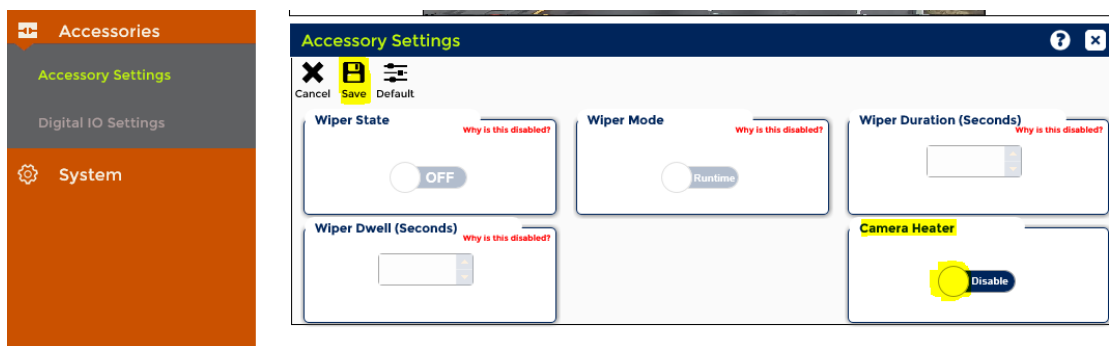
# SOP for CCTVs in SunGuide

Click on “Accessories”.

Click on “Accessory Settings”.

Set the following parameters for the “Accessory Settings”.

*Camera Heater:* < Disable >



Click “Save”.

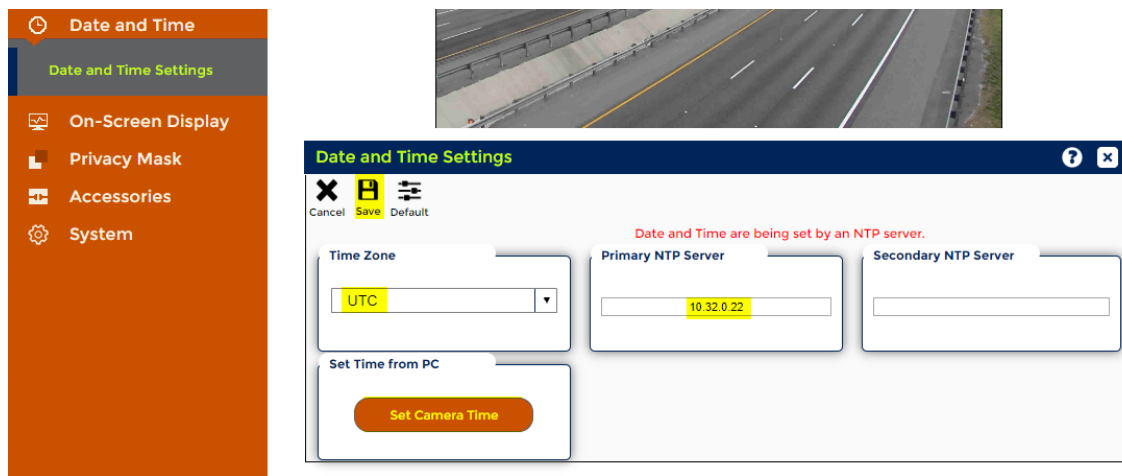
Click on “Date and Time”.

Set the following parameters for the “Date and Time Settings”.

*Time Source:* < Select Set Camera Time >

*Device Time format:* < Select (UTC -5:00) Eastern Time >

*Primary NTP Server:* <10.32.0.22>



Click “Save”.

# SOP for CCTVs in SunGuide

Log out of camera.