

WEBCONFIG INSTALLATION GUIDE



For SightSensor NS, TC and HD

SightSensor Firmware 15.10 and later

Set-Up Videos and Resources:

<https://www.sightlogix.com/webconfig/>

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Warnings and Cautions



Warning!

If mounting the camera on a pole, tower or any elevated location, use industry standard safe practices to avoid injuries.



Caution!

Except as described in this manual for wiring the back panel, do not open the SightLogix camera for any reason. Always handle the camera with care to avoid damage to electrostatic-sensitive components.

Prior to making any connections, ensure the power supply or circuit breaker is switched off.

Be careful not to leave fingerprints on the camera's optics.

Operating the camera outside of the specified input voltage range or the specified operating temperature range can cause permanent damage.

Always ensure that your SightLogix device is properly grounded. Failure to properly ground the camera can lead to permanent damage. Typical to good grounding practices, the camera ground should be connected to the lowest resistance path possible. You can learn best practices to protect your SightLogix equipment at <http://www.sightlogix.com/surge>.

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GETTING STARTED

GENERAL INFORMATION

This guide describes the basic installation of SightLogix SightSensor cameras using WebConfig. If you need help during the installation process, contact SightLogix at +1 609.951.0008 option 2 or support@sightlogix.com.

All installers are encouraged to use the SightLogix Support Portal where you will find documentation videos, third-party integrations, and troubleshooting:
<http://portal.sightlogix.com/help>.

This installation guide includes the following topics:

- Wiring and powering the camera
- Calibrating your device
- Creating video analytic alarm policies
- Troubleshooting

For safety, and to achieve the highest levels of performance from your SightLogix system, always follow the warnings and cautions in this manual when handling and operating the camera.

SightLogix System Overview

This guide provides setup information for the SightSensor NS, TC and HD.

- SightSensors use a thermal imager to detect intruders that violate pre-defined security rules.
 - **SightSensor NS** presents video as high-clarity black and white thermal images.
 - **SightSensor TC** presents high-clarity black and white thermal and HD color video.
 - **SightSensor HD** presents black and white thermal and HD color video.
- SightSensors use a high degree of processing to analyze video in real time, while also stabilizing the video to ensure reliable detection.
- SightSensors are automatically calibrated by entering the camera's installed height in WebConfig for accurate size, speed and direction rules that minimize false alerts and increase detection accuracy.
- SightLogix cameras are intended to be mounted on a heavy-duty mount or wall mount commonly used in the CCTV industry for outdoor cameras, and which are available from SightLogix or other suppliers. Cables will exit from the bottom rear of the camera housing.
- Each camera comes equipped with a standard 1/4-20 three-hole one-inch spacing plate suitable to attaching to a standard camera bracket. Three bolts are supplied. One of the mounting bolts is used to connect the green ground wire (supplied).
- Camera connections are made through the water-tight cable gland on the bottom rear of the camera.

- The camera can be powered with a conventional power supply using 24V AC/DC or POE.
 - Window heater for extreme conditions or LED Illumination (SightSensor HD) require 24V.
- An Ethernet connection is provided for IP video streaming.
- Configuration of the SightSensor is performed via an intuitive, web-based interface built into the camera called WebConfig.
 - SightLogix also offers Windows-based SightMonitor client/server software for more advanced use, including:
 - SightTracker for auto-steering PTZs
 - Live display of targets projected onto a sitemap
 - Site management for enterprise-level SightSensor deployments
 - Contact SightLogix to learn more about SightMonitor software.

Installation Steps

Setting up a SightLogix device includes the following basic steps:

- In a bench test environment, unpack the device, connect power, Ethernet, launch browser and connect to default IP address (192.168.0.99).
 - Log into WebConfig using default credentials: *root/push2edg*
 - Follow Quick Start Guide on right-side of WebConfig screen
- Change the IP address from the default to your network requirements
- Mount camera
- Enter height off ground to calibrate
- Set up alarm policies. By default, any object moving within the camera view generates an alarm; alarm policies allow you to be more selective.
- View video to confirm operation
- Additional Settings:
 - NETWORK page: Set NTP and time zone
 - DEVICE page: Integrate video/alarms with VMS
 - POLICY page: Adjust zones or rules

Supplied materials



Your SightLogix equipment will be shipped with the following items:

- Your SightLogix device
- Grounding wire (must be attached to mounting bolt, as shown).
- Weather-tight gland for connection cables
- Info tag containing key setup information

Required Materials

The installer will need to supply the following items:

- Power source (24V AC/DC) and power cable for system power (2-conductor, w/shield, gauge determined by cable length and supply voltage), and/or PoE power supply or PoE switch if used for system power
- Shielded Cat5e Ethernet cable for digital video and/or PoE for system power
- Camera mount, miscellaneous electrical hardware, connectors, and tools
- A PC with a 2 GHz dual-core processor with at least 4GB of memory running one of the following: Windows 7 Professional, Windows 10 (32-bit or 64-bit); Windows Server 2003, 2008 and 2012 (32-bit or 64-bit).
- Compatible web browser:
 - Microsoft Edge Version 41 or later
 - Chrome Version 63 or later

- Microsoft Internet Explorer - Recent 2018 versions or newer
- IP network. Cameras can connect to the network using copper wiring (CAT5e). 100MB and higher networks are required.
- Range of IP network addresses provided by the network administrator, including Port 80 open on your local network

INSTALLING YOUR DEVICE

INSTALLATION STEPS

Since the camera is to be mounted on a pole or building or other hard-to-reach location, we recommend performing initial setup on a work bench at ground level prior to mounting the camera in its final location.

1. Remove the Back Plate

To access the electrical connections and install the cables, it is necessary to remove the back plate of the device housing.



Note:

The back plate is held in place with screws which do not need to be removed entirely. Back out the screws maintaining forward pressure until you feel the threads disengage. The gasket will hold the screws in place while the back plate is removed.



2. Connect Ethernet and Power

- Connect the RJ45 jack to the Ethernet port of a workstation.
- If using Power over Ethernet (PoE) make sure power is being supplied by the Ethernet device which the Ethernet cable has been plugged into or a PoE power injector in the cable run leading to the camera.
- If POE is not being used connect 24VAC/DC by removing the connector header and connecting power to the header pins referencing the pin assignments printed on the pc board next to the connector which are marked for 24V.

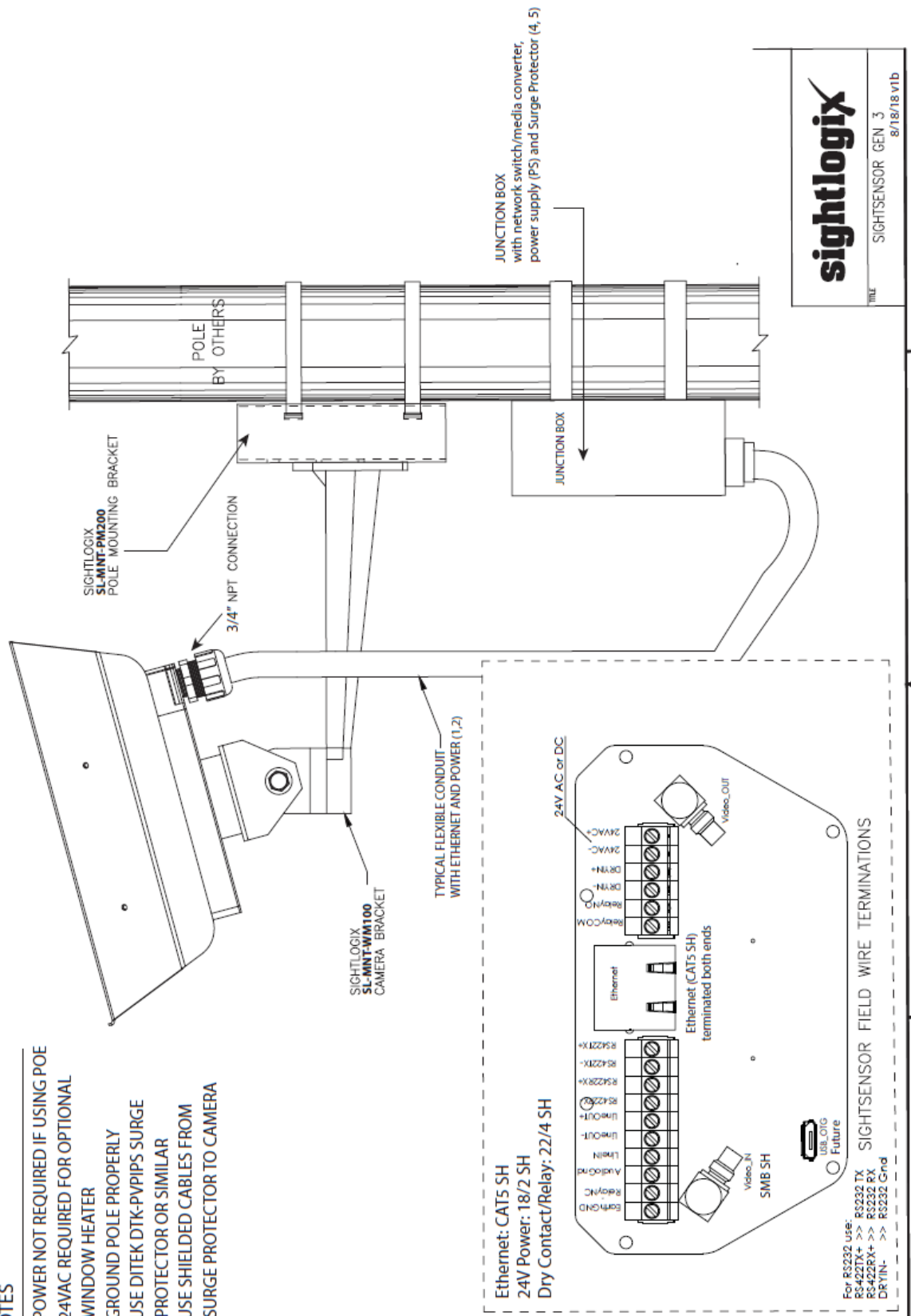


Note:

Window heater (and IR Illumination for HD cameras) require 24V power and will not operate on POE only.

NOTES

1. POWER NOT REQUIRED IF USING POE
2. 24VAC REQUIRED FOR OPTIONAL WINDOW HEATER
3. GROUND POLE PROPERLY
4. USE DITEK DTK-PVPIPS SURGE PROTECTOR OR SIMILAR
5. USE SHIELDED CABLES FROM SURGE PROTECTOR TO CAMERA



Wiring Overview

Total maximum power consumption with all camera options:

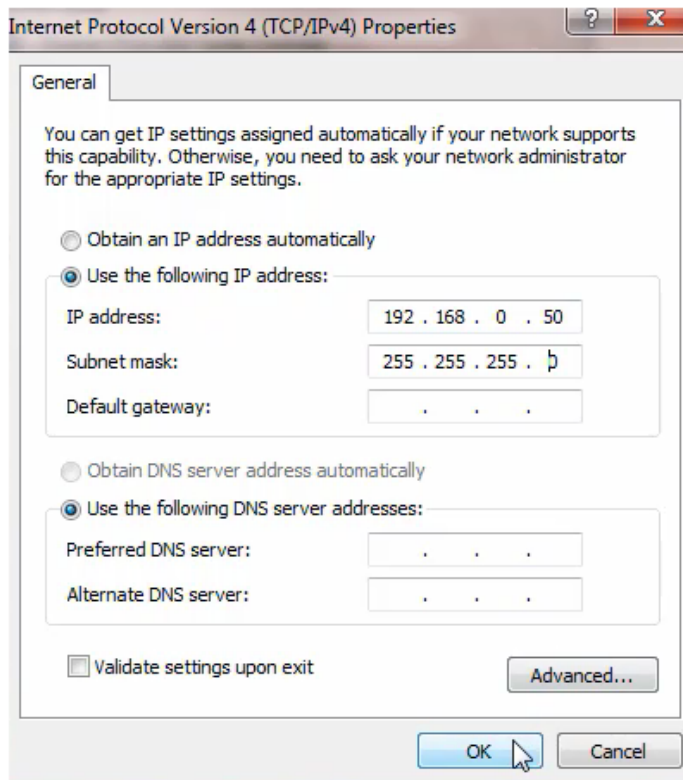
Camera	Basic Operation with Detection	Window Heater for Severe Icy Conditions	IR Lighting	Total with all Options
SightSensor HD	8W	20W	6W	34W (1.5 amps)
SightSensor NS (320x240)	6.5W	20W	NA	26W (1.5 amps)
SightSensor NS (640x480)	8W	20W	NA	26.5W (1.5 amps)
SightSensor TC	11W	20W	NA	31W (1.5 amps)

- Once power is supplied to the camera, the camera's LED light blinks a sequence of red/green for about two minutes and then turn off. This indicates the camera completed its boot cycle and is communicating with the network. You can then skip the next step.
 - If the LED's continue to blink red/green then the camera has not found a network to connect to and you will need to complete steps 3.


3. Assign Your PC an IP Address in Camera's Default IP Range


When first powered, the camera will request an IP address via DHCP; if one is not assigned after thirty seconds, it will take on the default IP address: 192.168.0.99. In this case you will need to assign your PC an IP address in the camera's default address range to continue.

- On your computer, open Network and Sharing Center
- Click "Change Adapter Settings"
- Click "Local Area Connection"
- Choose "Internet Protocol Version 4" and click "Properties"
- Click "Use the following IP address" and complete the fields. The example below can be used for a camera that has the default IP address.



4. Launch a Browser and Enter IP Address (default is http://192.168.0.99)

 WebConfig SightSensor HD332-220



SL-13294 (000013294)

UNITS

- The login page shows a snapshot to help determine which camera you have accessed. Refresh the screenshot by clicking the small icon on the bottom left of the image. (SightSensor NS-series cameras will show a thermal image.)



Note

If you receive a security warning, you may have entered "https" or your browser may be configured to only allow HTTPS. Retry the URL using http: or refer to *Troubleshooting & Advanced Configuration* at the end of this guide.

- Enter default username/password: root/push2edg
- Set your default units (Metric or Feet) and click Sign In

WEBCONFIG OVERVIEW

Quick Start Guide

When you launch WebConfig, a Quick Start Guide shows basic steps to get you up and running.

- Close the window by clicking the “X” in the upper right.
- This pop-up returns each time you login until you create your first rule under POLICY.

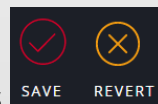
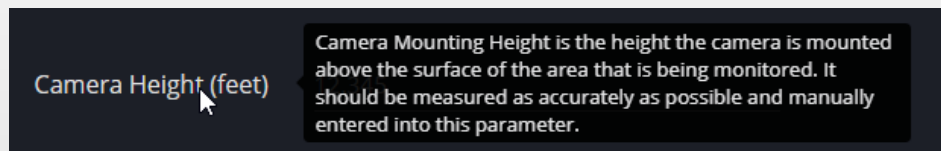


Left-side Navigation


- Click the left arrow to collapse the Navigation menu for more configuration space

Tool Tips and Online Help

- Hover over any field name **or** field entry to see helpful information.



Saving Parameters

- Entering new parameter(s) brings up SAVE/REVERT icon under the Page Menu.
- Changes made on a field's page but not yet saved are indicated by yellow text.
- Once parameter(s) are complete click “SAVE” checkmark circle to load new parameters to the camera.
- To cancel new entry(s) click the “REVERT” X circle and the original entries will be restored.
- Checking either circle will cause  to appear in the upper right corner to acknowledge the action.

5. Click NETWORK to Change Settings

NETWORK (SL-13294)

Camera Name SL-13294 Serial Number 000013294

Current Network Settings

Fallback IP	disabled		
IP Address	<u>192.168.50.141</u>	Gateway	<u>192.168.50.6</u>
Netmask	<u>255.255.255.0</u>	NTP	<u>192.168.50.116</u>
DNS		Syslog	

Network Configuration

Static ▼

IP Address	<u>192.168.50.141</u>	Gateway	<u>192.168.50.6</u>
Netmask	<u>255.255.255.0</u>	DNS	<u>Optional</u>
Syslog	<u>Optional</u>	Domain	<u>Optional</u>

NTP ▼

Custom 192.168.50.116

NTP Status

remote	refid	st	t	when	poll	reach	delay	offset	jitter
*192.168.50.116	45.33.103.94	3	u	365	1024	377	0.501	-1.866	1.629

Help Panel:

SightSensor HD Quick Start Guide
Hover over setting name or value field for help.

Camera Configuration

- NETWORK Page
 - Change IP address from default
- CALIBRATION Page
 - Enter camera height
- POLICY Page
 - Add Alarm Zone (+)
 - Adjust zone size/shape
 - Validate detection with live target

Viewing Video to validate operation

- Visible RTSP stream e.g. in VLC
 - rtsp://192.168.0.99/mpeg1
- Thermal RTSP stream
 - rtsp://192.168.0.99/mpeg2
- Using ONVIF Device Manager
 - Default username "service", password "test1234"
 - Discover automatically

Application Dependent Steps

- NETWORK Page
 - Set NTP and Time Zone
- DEVICE page
 - Connect video/alarms to your VMS
 - For SureView, choose Immix and set Hostname for alarm delivery

Click [Online Help](#) for setup videos and documentation

Set the IP Address

Now that your workstation can communicate with the camera, you can change the IP addressing from the default.

- If DHCP is selected and DHCP service is available on the network an IP Address, Gateway, and Netmask will be assigned by the DHCP service.
- If STATIC is selected, complete the IP Address, Netmask, Gateway and DNS fields. If the internet is reachable public DNS servers can be used such as 8.8.8.8.

Set NTP (Optional, Recommended)

NTP is used to enable features according to time of day. Secure authentication for an ONVIF VMS may also require NTP.

If set, NTP can display date and time in the upper right-hand corner of the video.

Two NTP options are provided:

- If Internet is available, choose a preset NTP from the drop-down menu.
- If you are running a local NTP server, choose Custom and enter its dotted-decimal IP address or hostname

- Changing NTP reboots the camera

6. Mount the Camera

Each SightLogix device comes equipped with an interface plate suitable either for attaching to a wall or pole. Install SightLogix devices according to these guidelines:

- **SightSensor HD only:** When mounting the dual-stream SightSensor HD, always use the thermal video stream to position the camera's field of view.
- Cameras must be pointing slightly down, less than zero degrees, to ensure triangulation and aid with accuracy.
- Once in place, adjust the camera as necessary to capture the area to be monitored. SightLogix cameras are fixed and need to be physically adjusted.
- When installing multiple cameras for a perimeter application, it is recommended that camera ranges slightly overlap to ensure complete coverage of the perimeter with no gaps between blind spots under the camera.
- Ensure the camera is properly grounded. SightSensors have grounding and surge protection to provide further immunity from high current transients that can occur in installations that are subject to electrical storms and/or nearby lightning events. In order to protect against these high current events, installers are required to provide an earth connection to the grounding lug on the base of the camera, as shown.
 - You can learn best practices to protect your SightLogix equipment at <http://www.sightlogix.com/surge>.



7. Calibrate Your Camera

Once your camera is mounted, one-click Quick Calibration lets you set accurate video analytic detection rules based on size, speed and direction.

For advanced GPS Map Calibration (which is required for SightTracker or third-party software which needs SightSensor metadata), refer to “Performing GPS Map Calibration” on page 43.

- Click CALIBRATION tab
- Enter your camera's height off the ground and click “Measure Camera Tilt”



Note

A warning notice will appear in WebConfig until the camera height is changed from its default value to indicate this important parameter has been addressed.

8. View Video to Validate Operation

Viewing Live Video: SightSensor TC and SightSensor HD

On the dual-stream SightSensor TC and HD, both visible and thermal streams are available as MJPEG or MPEG.

MPEG streams can be viewed using a third-party media player such as the open-source VLC (<https://www.videolan.org/vlc/>), ONVIF Device Manager (<https://sourceforge.net/projects/onvifdm/>), or your Video Management System.

For VLC Media Player, click “Media” and “Open Network Stream” (use your camera’s IP address if changed from the default)

- Visible: rtsp://192.168.0.99/mpeg1
- Thermal: rtsp://192.168.0.99/mpeg2

For ONVIF Device Manager:

- Default ONVIF credentials: service/test1234
- SightSensors can usually be discovered automatically

MJPEG streams can be viewed through a web browser using the following URLs (use your camera’s IP address if changed from the default):

- Visible: http://root:push2edg@192.168.0.99/axis-cgi/mjpg/video.cgi
- Thermal: http://root:push2edg@192.168.0.99/axis-cgi/mjpg/video.cgi?ch=2

Viewing Live Video: Thermal-Only SightSensors

On the Thermal SightSensor, thermal video streams are available as MJPEG or MPEG.

MPEG streams can be viewed using a third-party media player such as the open-source VLC (<https://www.videolan.org/vlc/>), ONVIF Device Manager (<https://sourceforge.net/projects/onvifdm/>), or your Video Management System.

For VLC Media Player, click “Media” and “Open Network Stream” (use your camera’s IP address if changed from the default)

- rtsp://192.168.0.99/mpeg1

For ONVIF Device Manager:

- Default ONVIF credentials: service/test1234
- SightSensors can usually be discovered automatically

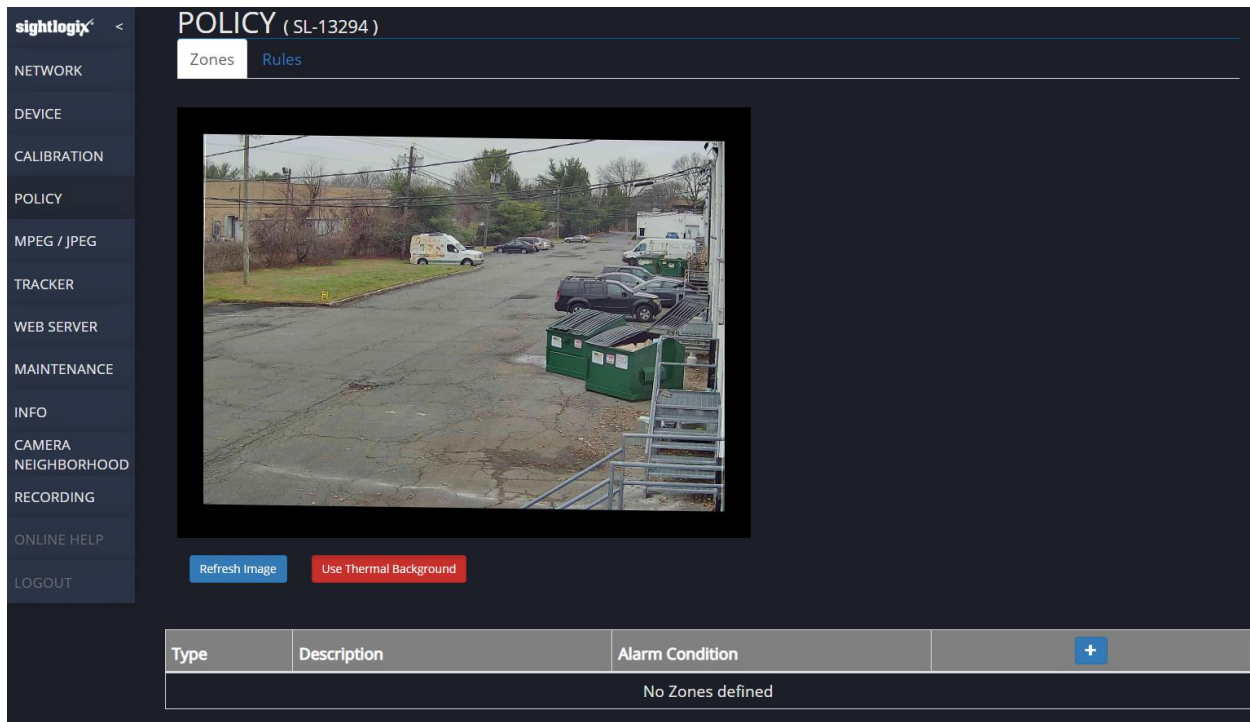
MJPEG streams can be viewed through a web browser using the following URLs (use your camera’s IP address if changed from the default):

- <http://root:push2edg@192.168.0.99/axis-cgi/mjpg/video.cgi>

9. Set Up Video Analytic Policies

Click the POLICY tab to get started.

You control alarms through **zones** and **alarm policies**.



A **zone** is an area of the camera view that you draw to specify whether or not it can generate alarms or track objects.



Three zone types are supported:

- An **alarm** zone is an area that can generate an alarm. Any sensitive areas that you wish to secure should be included in an alarm zone.
- A **mask** zone is an area in which no motion detection or tracking occurs. This zone type is useful for excluding areas prone to nuisance alarms, such as the sky, background roadways with traffic, or areas where birds congregate.
- An **ignore** zone also does not generate alarms, nor does it track objects that originate in the zone; however, unlike a mask zone, an ignore zone continues to track objects that are already being tracked, such as those that move from alarm zones or undefined areas into the ignore zone.

An alarm **policy** is an alarm zone together with a set of rules that dictate the conditions under which alarms within that zone occur, or do not occur.

Create a Policy for Human Detection

First, create a zone.

- **Note:** Dual-video SightSensor HD and TC cameras running firmware version 15.12 and later allow you to choose either the Thermal or Visible background to draw your zones. Choose the one that offers the best clarity. Click the “Use Visible Background” or “Use Thermal Background” button to toggle.
- Click the blue  plus icon.
- A default Alarm rule for human detection line is automatically created and listed in the table, and a zone overlay box covers the entire image.
- **Human detection** detects any human-sized object (> than 3 feet tall by > 1 foot wide) moving anywhere within that alarm zone area for longer than ½ second. This automatically generated rule is for convenience. You can change the default rule by selecting the row and clicking the List Rules symbol  where you can modify or add additional conditions.

Adjust the zone size using the drag points in the corners of the zone overlay. Additional points can be added by left clicking anywhere along the perimeter of the Zone box, and a drag point can be deleted by right clicking on it.

With the drag points you can make the box the desired size and position within the image of the area you want to cover with the zone. A zone can be made into any shape polygon. Any number of Zones can be created, each with their individual shape, size, Type and Alarm Rules.



Note

When defining alarm zones, always draw alarm zones on the ground; alarms are generated only when an object's ground position is within an alarm zone.

For advanced Video Analytic rules and policies, refer to the WebConfig Reference section of this guide, or visit www.sightlogix.com/webconfig/ for videos and guides.

10. Set Camera Parameters on DEVICE Page

Device Description – Used to identify this camera from others on the site. Content here is displayed on the INFO page.

Time Zone, Custom Time Zone - If NTP service is set on the NETWORKING Page, Time Zone must be set to calculate sunrise/sunset within that time zone

SightSensor HD Only – Day/Night IR Illumination settings. Hover over each option for details. Default is “Auto Sense with LED”.

11. Connect to a VMS or SureView Immix

- Click DEVICE.
- Select VMS Type from the drop-down to connect to a VMS system. Default is ONVIF H.264.
- If connecting directly to SureView Immix and set Hostname for Motion On and Motion Off Event Servers

This completes installation of the SightSensor camera for the most common settings.

- Refer to the next section, “WebConfig Reference” for a detailed overview of each WebConfig page and field option.
- Refer to the final section “Troubleshooting & Advanced Configuration” for more advanced use.

WEBCONFIG REFERENCE

NETWORK PAGE PARAMETERS

NETWORK (SL-13294)

Camera Name Serial Number

Current Network Settings

Fallback IP	disabled		
IP Address	<input type="text" value="192.168.50.141"/>	Gateway	<input type="text" value="192.168.50.6"/>
Netmask	<input type="text" value="255.255.255.0"/>	NTP	<input type="text" value="192.168.50.116"/>
DNS	<input type="text" value="Syslog"/>		

Network Configuration

IP Address	<input type="text" value="192.168.50.141"/>	Gateway	<input type="text" value="192.168.50.6"/>
Netmask	<input type="text" value="255.255.255.0"/>	DNS	<input type="text" value="Optional"/>
Syslog	<input type="text" value="Optional"/>	Domain	<input type="text" value="Optional"/>

NTP

Custom

NTP Status

remote	refid	st	t	when	poll	reach	delay	offset	jitter
*192.168.50.116	45.33.103.94	3	u	365	1024	377	0.501	-1.866	1.629

SightSensor HD Quick Start Guide

Hover over setting name or value field for help.

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- For SureView, choose Immix and set Hostname for alarm delivery

Click [Online Help](#) for setup videos and documentation

Camera Name – Default enters Camera serial number in this field. It can be changed to a name for the camera which will be displayed at the top of each WebConfig page. This might be a location identifier like "Front Admin Building" or another convenient identifier.

Serial Number – is read directly from the camera and is unique to that camera.

Current Network Settings

Fallback IP, IP Address, Gateway, Netmask, NTP, DNS and Syslog – are all parameters acquired from the network based on the camera settings. They are listed here for convenience.

Network Configuration

Network IP address selection is specified by either **DHCP** or a **Static** IP address. If DHCP is selected and DHCP service is available on the network an IP Address, Gateway, and Netmask will be assigned by the DHCP service. If a DHCP service is not available and no Static address has been previously assigned the camera will default after 30 seconds to a Static address of 192.0.0.99. The camera can be accessed using this address at which time the address can be changed and the appropriate Gateway and Netmask values can be assigned also.

DNS – this field is optional, but if the internet is reachable public DNS servers can be used such as 8.8.8.8 This field is entered in dot-decimal notation.

NTP – (Network Time Protocol) The NTP service is used to provide the camera with accurate, synchronized, real-time clock information. While not necessary in all installations it is needed if the camera is asked to coordinate selected local events, such as changing operational modes or enabling features in conjunction with the time of day. Also, secure authentication for Onvif connections to a VMS may require it. NTP, if provided, can display date and time in the upper right-hand corner of the video.

The NTP Address field defaults to Custom where you can enter a NTP site address as a dotted-decimal IP address or hostname, or an address can be selected from the drop-down menu of the three sites listed where NTP service may be available (pool.ntp.org, time.nist.gov, or time.google.com) through Internet access if NTP service is not available on the local sub-net. Changing this parameter will cause a reboot of the camera.

Syslog – is an (Optional) IP address of the machine on which the syslog server is installed. Knowing the syslog address allows the logging information created by the camera to be accessed, which can be helpful for troubleshooting. Changing this parameter will cause a reboot of the camera.

Domain – The Domain option specifies the domain in which to search to resolve names. It is only used when the camera has a Static IP Address and is used in conjunction with a DNS Server to configure the camera's DNS resolver.

NTP Status – NTP Status shows the internal state of the NTP service in the camera. This is an advanced debugging feature. More information is available by consulting ntp documentation "peers" command <http://doc.ntp.org/current-stable/ntpq.html>.

DEVICE PAGE PARAMETERS

DEVICE (SL-13294)

Device Description	New Camera		
Time Zone	(GMT-05:00 DST) Eastern Time (U.S, Canada, Bahamas, Haiti)		
Custom Time Zone			
Device GPS Location	0.000000,0.000000		
Day/Night Mode	Auto Sense with LED	Sunrise Offset (min)	Sunset Offset (min)
		0	0
Next Day/Night Event	Auto Sense		
Dual Sensor Analytics	Off (Thermal Only)		
VMS Type	ONVIF H.264	Relay Out Mode	Disabled
Motion On Event Servers	Custom	Video Out Mode	NTSC
	protocol://<ip address>		
Motion Off Event Servers	protocol://<ip address>		
	protocol://<ip address>		
	<input type="button" value="Alarm Test"/> <input type="button" value="Visible Clip"/> <input type="button" value="Thermal Clip"/>		
Last Clip Timestamp	No clips generated since last camera boot		
Anti Flicker	Outdoor Mode	<input checked="" type="checkbox"/> Enable Heater	

Device Description – is a description of specifics about this device which appears on the INFO page under Description. It can contain up to 1024 characters.

Time Zone, Custom Time Zone – If the NTP service is set up on the NETWORKING Page, then the Time Zone must also be setup to provide the proper local time corrections to “calculate accurate” sunrise/sunset’ corrections within that time zone.

Day/Night Mode (SightSensor HD and TC Only) – menu determines if and/or when the IR LEDs are active and the sensitivity setting of the visible imager (normal color, high sensitivity color, high sensitivity black & white).

(Note: LEDs can only be active if 24v is applied to the camera, they do not work with just PoE power).

The Day/Night Mode choices are:

Day (LED off) – imager is permanently set to normal low sensitivity full color with LEDs off

Night with LED on – imager is permanently set to high sensitivity black & white night mode with LEDs on

Night with LED off – imager is permanently set to high sensitivity color mode with LEDs off

Schedule with LED on at night – imager will automatically switch from full color day mode to high sensitivity black & white night mode with LEDs on at sunset, and back to low sensitivity full color with the LEDs off at sunrise. *(Note: NTP must be enabled for this mode to operate.)*

Schedule with LED off – LEDs will be permanently off, but imager will automatically switch from normal low sensitivity full color during the day, to low light full color mode at sunset, and back to normal full color at sunrise. *(Note: NTP must be enabled for this mode to operate.)*

Auto Sense with LED – will use the local ambient light in the area of the camera’s field of view to automatically switch from low sensitivity full color, to high sensitivity black & white with LEDs on when the ambient light level is low, and back to full color with the LEDs off when the ambient light level is high.

(Note: The “calculated time” for sunrise/sunset switching is a combination of the NTP time service, Time Zone setting, and the Camera GPS Location within its time zone.)

Sunrise Offset (min) – used by scheduled day/night mode to offset the “calculated” sunrise switching times. Enter a number representing the number of offset minutes desired; a positive (+) number to delay (make later), or negative (-) number to move forward (make earlier).

Sunset Offset (min) – used by scheduled day/night mode to offset the “calculated” sunset switching times. Enter a number representing the number of offset minutes desired; a positive (+) number to delay (make later), or negative (-) number to move forward (make earlier).

Next Day/Night Event (SightSensor HD and TC Only) – indicates the day, time, and type of the next scheduled event the camera will take action on based on the camera’s settings and function.

VMS Type – selection drop-down lists options for the connection criteria that will be used to connect to a VMS system. Default is ONVIF H.264.


Dual Sensor Analytics (SightSensor HD only) - uses both thermal and visible imagers to improve daytime detection performance. If activated, Dual Sensor Analytics will automatically turn off when LEDs are turned on. Disabled by default.

Relay Out Mode – defines the event that will activate the relay output contacts on the camera interface terminals. The options are “Disable” or no action, “Alarm” activated when a detection alarm is generated, or “Day/Night” activated when camera automatically switches between day and night modes.

Video Out Mode – analog video may be configured for NTSC or PAL. The default is NTSC. The camera reboots if Video Out Mode is changed.

Motion On Event Servers – custom selection from drop-down menu allows HTTP or TCP URL’s that can be user configured to send specific messages to a Video Management System (VMS) or other platforms when an alarm is initially generated (refer to VMS configuration instructions), or Immix selection sets up for the proper event message to be sent to a Sureview Immix server.

Motion Off Event Servers – field for entering HTTP or TCP URL’s that can be user configured to send specific messages to a Video Management System (VMS) or other platforms when an alarm is initially generated. Refer to VMS configuration instructions.

Alarm Test – clicking on the “Alarm Test” box  causes the camera to simulate an alarm event. If a custom URL is entered in the Motion On or Off Event Servers field this alert is generated when pressing by the Alarm Test. This is useful to verify the communications of alarm events to Video Management Systems.

If Immix is selected and Pre- and Post- triggers are defined, clicking “Alarm Test” will generate a test clip. Click “Visible Clip” (SightSensor HD only) or “Thermal Clip” will display the test clip in the browser (wait a few seconds for the clip to be created). Refer to *Troubleshooting Clip Delivery* for more information.

Last Clip Timestamp – shows the time the last clip was generated, if defined by the SightSensor. Useful for debugging clip delivery.

Anti Flicker – prevents flickering effects to lighting visible within in the camera’s visible field of view when using the camera inside under artificial light. The drop-down menu provides three choices; Outdoor, or selection of the frequency of the lighting use in the local area of the camera indoors, 60Hz or 50Hz.

Enable Heater - This option enables/disables heater (enabled by default). Heater operation requires 24V power.

QUICK CALIBRATION PAGE PARAMETERS

sightlogix < **CALIBRATION** (SL-13294)

Calibration Method ☒ Quick Calibration ☐ GPS Map Calibration

Camera Height (feet) 13

Tilt (degrees) -6.74

Yaw (degrees) -0.46

[Measure Camera Tilt](#)

2019/12/13 10:55:01

[Tilt Sensor Maintenance](#)

Actual Tilt Angle _____

Actual Yaw Angle _____

Calibration Method – Quick Calibration Uses an internal tilt sensor and defined height of your mounted camera to calculate target size and can be used for most applications. GPS Map Calibration is for advanced use, e.g., SightTracker used to control a PTZ. (Refer to the *Troubleshooting & Advanced Configuration* section of this guide.)

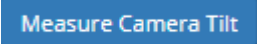
Camera Mounting Height – this is the height the camera is mounted above the surface of the area that is being monitored. It should be measured as accurately as possible and manually entered into this parameter. The default is set at 12.345 feet.

(Note: *Entering the correct camera mounting height, having a good camera tilt angle, and low yaw number is very important to the accuracy of the detection analytics for discriminating the size of objects in the detection area. A warning notice will appear until the camera height is changed from its default value to indicate this important parameter has been addressed.*)

Tilt (degrees) – is measured at the center line of the camera's field of view between horizontal (level) and the down tilt angle of the camera. This is typically between -10 and -17 degrees when camera is mounted to cover about 2 meters height above ground level at its maximum rated cross

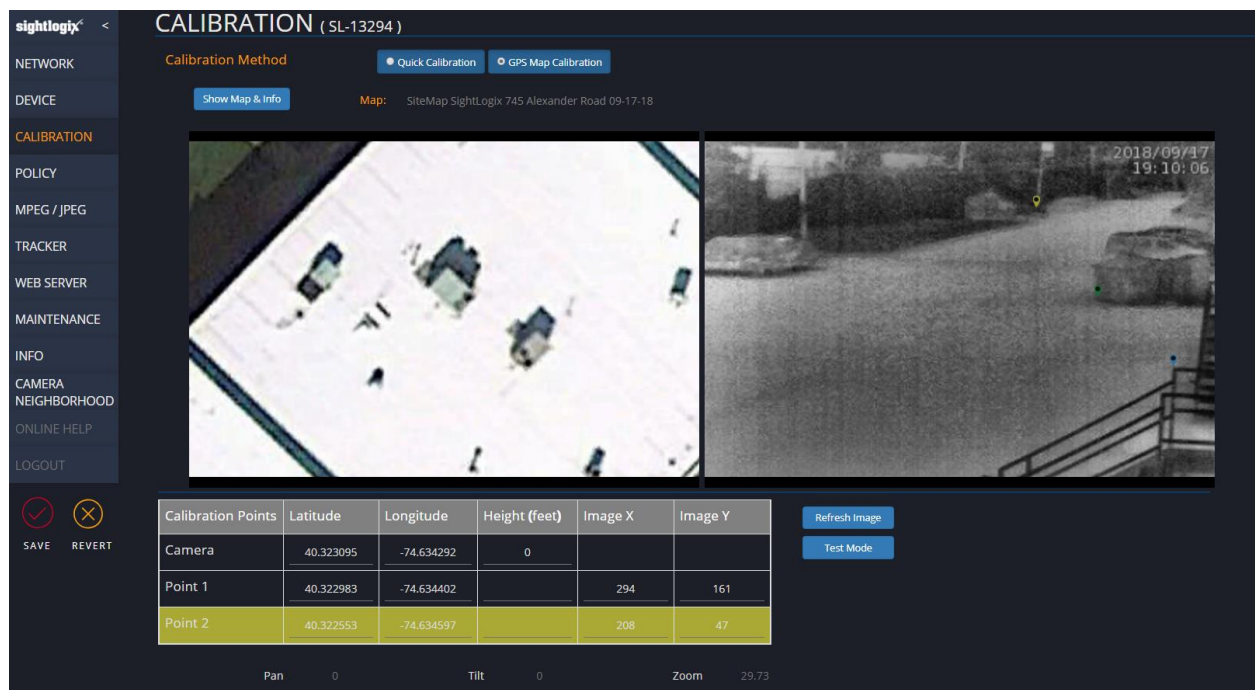
field detection range. This value is calculated by the camera when the **Measure Camera Tilt** button is selected. In general, the greater the tilt angle the better target size discrimination the analytics will have. So shallow tilt angles, i.e. -5 degrees, is not desirable.

Yaw (degrees) – is the number of degrees out of side to side level the camera is mounted. This should be held to less than a few degrees to maintain detection accuracy over the entire field of view.

Measure Camera Tilt – this button  will cause an immediate update of the Tilt and Yaw information from the Inertial Measurement Unit internal to the camera.

Title Sensor Maintenance - should be used with guidance from SightLogix Support. If you see a red warning message that the sensor needs tuning, click the Title Sensor Maintenance link to reveal the Actual Tilt Angle and Actual Yaw Angle fields to perform this operation.

GPS MAP PAGE PARAMETERS



Calibration Points Table

Calibration Points	Latitude	Longitude	Height (feet)	Image X	Image Y
Camera	40.323095	-74.634292	0		
Point 1	40.322983	-74.634402		294	161
Point 2	40.322553	-74.634597		208	47

Pan 0 Tilt 0 Zoom 29.73

Calibration Method – Quick Calibration Uses an internal tilt sensor and defined height of your mounted camera to calculate target size and can be used for most applications. GPS Map Calibration is for advanced use, e.g., SightTracker used to control a PTZ.

Show Map & Info – Opens the map details. Allows a site map jpeg to be loaded along with associated GPS info.

Calibration Points Table – Clicking each row activates the ability to set pins for camera location and associated points,

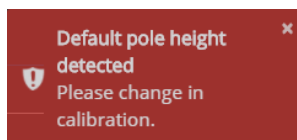
Refresh Image - Updates the calibration image by taking a snapshot from the camera's live scene.

Test Mode - Allows a calibration to be verified. While button is pressed, clicking on the calibration image will place green pins on the image and the corresponding position in the map.


POLICY PAGE PARAMETERS

Type	Description	Alarm Condition	
Alarm ▾	zone-b1100bb3a2f1	Human Detection ▾	<div>+</div> <div> <div></div> <div></div> <div></div> </div>


Note: The **CALIBRATION** page parameters must be set prior to setting any **POLICY** Page parameters. If you try to set a Zone or Rule without first Calibrating the following warning flag will be displayed and any zones or rule set may not be accurate.



Zones Configuration Tab

Observe the image presented on the POLICY page. Click on the Refresh Image  button to make sure you are working with the current image as the camera is seeing it.

- Note: Dual-video SightSensor HD and TC cameras running firmware version 15.12 and later (shown in the example above) allow you to choose either the Thermal or Visible background to draw your zones. Choose the one that offers the best clarity. Click the “Use Visible Background” or “Use Thermal Background” button to toggle.

To create a zone, click on the blue  plus icon in the gray area and an entry line will be listed in the table, and a zone overlay box with red borders and thin red diagonal lines will appear and cover the entire image. The actual final zone color depends on the **Type** of Zone ultimately selected.

Type of zones you can select from the drop-down menu:

Alarm – (default) An area that can generate an alarm. Any sensitive areas that you wish to secure should be included in an alarm zone which is identified by a red box with red hash lines. When defining alarm zones, always draw alarm zones on the ground; alarms are generated only when an object's ground position is within an alarm zone.

Mask – A zone area in which no motion detection or tracking will occur. This zone type is useful for excluding areas prone to nuisance alarms, such as the sky, background roadways with traffic. Identified by an orange box with yellow hash lines.

Ignore – A zone that does not generate alarms, nor does it track objects that originate in the zone; however, unlike a mask zone, an ignore zone continues to track objects that are already being tracked, such as those that move from alarm zones or undefined areas into the ignore zone. Identified by a blue box with blue hash lines.


Then adjust the zone size as desired using the drag points in the corners of the zone overlay. Additional drag points can be added by left clicking anywhere along the perimeter line of the Zone box, and a drag point can be deleted by right clicking on it. With the drag points you can make the box the desired size and position within the image of the area you want to cover with the zone. A zone can be made into any shape polygon. Any number of Zones can be created, each with their individual shape, size, Type and Alarm Rules.

Description – is a field to name this zone for reference purposes. As a default a unique name will be assigned which may be changed.

Setting up zone actions


If a **Mask** or **Ignore** zone **Type** is selected, then that zone is setup is complete. If an **Alarm Type** zone is selected, then the **Alarm** action must be defined further. The alarm action to be taken is selected under the **Alarm** heading. The following options are available:

Human detection – (default) This setting automatically sets up a **Rule** to detect any human size object (> than 3 feet tall by > 1 foot wide) moving anywhere within that alarm zone area for longer than ½ second. This automatically generated rule is for convenience but you can

still change it by selecting the List Rules symbol  where you can modify or add additional conditions. Beyond this simple setup it is recommended to use the **Rule-Based** option from the **Alarm** drop-down menu (see below)

Never Alarms – Useful for defining “From” zones where you want a target to be identified but only alarmed if it moves from this zone to an active **Alarm** zone. This technique is used to make target detection extremely resistant to false positive alarms.


Rule-Based – Alarms only under conditions set by rules. Recommended for reducing nuisance alarms or discriminating between various objects like a person and a vehicle or detecting on various differentiating parameters. After selecting this option, mouse over the

List Rules symbol,  select it and you will be taken to the Rules tab for this Zone.










This will open the Rules Configuration Tab.

(Note: Rule-based alarms specify more precisely the conditions under which alarms are generated. These rules restrict alarms by time, by the duration of time spent in the zone, by tripwire, by previous path, or by target attributes such as the target's size, speed, direction, and shape or aspect ratio.)

Rules Configuration Tab

Click on + blue  plus icon in the gray area and an entry line will be listed in the table and the full **Rules** configuration menu will open.



Type	Description	Alarm Condition	
Alarm ▾	AlarmZone	Human Detection ▾	   
Alarm ▾	FromZone	Never Alarms ▾	  
Ignore ▾	IgnoreZone		  
Mask ▾	MaskZone		  

Specifying Target Attributes

You can control a target's ability to generate an alarm in relationship to a zone by setting the Rule Type. You can also restrict a target's ability to generate an alarm based on its size, shape (aspect ratio), speed, or direction, thus qualifying the object as a "valid" target.

Rule Type - Alarm zones can be associated with a set of rules that specify more precisely the conditions under which the zone alarms are generated. These rules restrict alarms by tripwire (enter and/or exit the zone), or by previous path.

Motion Zone – by default this option is set. Any valid target that appears in this zone generates an alarm

Tripwire Enter Zone – any valid target generates an alarm only when entering the perimeter of this zone

Tripwire Exit Zone – any valid target generates an alarm only when exiting the perimeter of this zone

Tripwire Enter and Exit Zone – any valid target generates an alarm only when entering or when exiting the perimeter of this zone

Disarm Zone – enables Disarm functions (*Reserved for advance analytic functions*)

Disarm All Zone – enables Disarm functions (*Reserved for advance analytic functions*)

Description – is a field to name this rule for reference purposes. As a default a unique name will be assigned which may be changed.

Duration (sec.) – provides a time delay between the time a valid target is detected to when it alarms. The target must remain valid for the time specified.

From Zone – this limits the ability of this Zone to generate alarms to only valid targets that enter this Zone only from a Zone selected from the **From Zone** drop-down menu.

Alarm Height (feet), Alarm Width (feet), Aspect Ratio (width/height), Alarm Speed (mph), Alarm Heading (degrees) – straight out from camera center is zero degrees – provides **Min** and/or **Max** limits on these parameters to qualify a moving object as a “valid” target. When blank, the condition is not enforced. Note that “0.0” is treated as a value, not a blank field. Older versions incorrectly showed “0.0” as a placeholder for a blank field.

Rules Configuration Tab (continued)

Disarm Conditions

Disarm Height (feet) 0.0
Disarm Width (feet) 0.0
Rearm Delay 1.000000

Disarm Aspect Ratio 0.0
Disarm Speed (mph) 0.0

Disabled Times

Start Time	End Time	Day of Week	Additional Pattern	
12:00 AM	11:59 PM	*	* * * *	+
				×

Enabled Times

Start Time	End Time	Day of Week	Additional Pattern	
Unrestricted				

Disarm Height, Disarm Width, Disarm Aspect Ratio, Disarm Speed, and Rearm delay – these parameters are used with **Disarm Rule Types** when selected (*Reserved for advance analytic functions*)

Setting time ranges

A time range specifies the hours when alarms can be generated for an alarm zone. By default, an alarm zone is in effect for all 24 hours. Using time ranges require an NTP server to be defined on the NETWORK page.

Disabled Times – click on the + to schedule times when the rule should be disabled.

Enabled Times – click on the + to schedule times when the rule should be disabled.

Depending on how you want to define a time range, enter both a start and end pattern for the appropriate field or fields. (Asterisks denote no constraints for a field.) Hours are entered using a 24-hour clock. Day(s) of Week (Sunday is 1, Monday is 2... Saturday is 7) are entered in a consecutive range separated by hyphen (-) or individual days separated by (,) comma. For example, for alarms to be generated only during work hours, enter 0700 for the start pattern (in hour field) and 1800 for end pattern; in day of week, 2-6 are all week days. An entry of 1,4 is Sunday and Thursday only. In Additional Pattern are days of the month individually, contiguous range of dates separated by hyphen (-), or individual dates separated by commas (,).

MPEG / JPEG PAGE PARAMETERS

MPEG Configuration Tab

The screenshot shows the 'MPEG / JPEG (SL-13417)' configuration page. The sidebar on the left contains the following menu items: sightlogix, NETWORK, DEVICE, CALIBRATION, POLICY, MPEG / JPEG (selected), TRACKER, WEB SERVER, MAINTENANCE, INFO, CAMERA, NEIGHBORHOOD, RECORDING, ONLINE HELP, and LOGOUT. The main configuration area has two tabs: 'MPEG Configuration' (active) and 'JPEG Configuration'. The 'MPEG Configuration' tab contains the following settings:

- Channel Description:** A text input field.
- Display Overlay:** A button labeled 'Select Options'.
- Disable Visible Zone Overlay:** A checkbox.
- RTSP Broadcast Mode:** A dropdown menu currently set to 'Unicast'.
- Disable RTSP Timeout:** A checkbox.
- Detect Max Frame Rate (fps):** A value of 15.
- No Detect Max Frame Rate (fps):** A value of 15.
- Detect Max Bit Rate (bps):** A value of 3000000.
- No Detect Max Bit Rate (bps):** A value of 3000000.
- Detect Max I-Frame Interval:** A value of 15.
- No Detect Max I-Frame Interval:** A value of 15.

Channel Description – text overlay shown at top center of the thermal video

Display Overlay Options – these are visual overlays that are shown on a target in both the visible and thermal video streams. You can select as many options as desired by checking the boxes. The options are:

Timestamp – (default on) this puts a timestamp in the upper right-hand corner of the video stream. If an NTP server is specified then the time will track the real local time, otherwise it will run a timer incrementing from the initiation of the video stream.

Camera Identity – this displays the serial number and mac address of the camera on the bottom of the video image

Zones – shades the zone area on the video stream as they are specified in the POLICY Page.

Bounding Box – (default on) this puts a red box around a detected target.

Corners Bounding Box – red box around target has only corner marks.

Object ID – adds a unique ID to the target above the bounding box

Object Size – (default on) indicates the height and width of a target at the bottom of the bounding box as it is being tracked.

Track Duration – adds a timer which indicates how long a target has been tracked

Object Speed – this indicates the speed at which the target being tracked is traveling.

Motion Track – this causes a trail of the target that indicates its past position on the thermal video image

Nonalarmed Objects – (default on) draws a yellow box around all objects all objects detected by the analytics, regardless of where they are in the image, which do not meet the alarm criteria specified in POLICY page (alarmed objects are boxed in red). This feature is used to validate analytics settings and not recommended for normal operation

Disable Visible Zone Overlay (SightSensor HD and TC only) – When checked, you will not see any zones on the visible video regardless of the zone setting.

RSTP Broadcast Mode – is selectable for: Unicast, where RTSP server broadcast mode is Unicast; or Multicast, where RTSP server broadcast mode is Multicast.

Disable RTCP Timeout – Controls whether an RTCP server closes the stream when there is no client. This field is turned off by default.

Detect Max Frame Rate (fps) – is the maximum frame rate allowable when a target is being detected.

No Detect Max Frame Rate (fps) – is the maximum frame rate allowable when a target is not being detected.

Detect Max Bit Rate (bps) – is the maximum bit rate allowable when a target is being detected.

No Detect Max Bit Rate (bps) – is the maximum bit rate allowable when a target is not being detected.

Detect Max I-Frame Interval – is the maximum I-frame rate allowable when a target is being detected.

No Detect Max I-Frame Rate – is the maximum i-frame rate allowable when a target is not being detected.

JPEG Configuration Tab

Note: SightSensor HD cameras do not provide options for setting Channel Description and Display Overlay for JPEG. In this case, the settings defined for these fields on the MPEG Configuration tab will be applied to the JPEG Configuration.

Channel Description – text overlay shown at top center of the thermal video

Display Overlay Options – these are visual overlays that are shown on a target in both the visible and thermal video streams. You can select as many options as desired by checking the boxes. The options are:

Timestamp – (default on) this puts a timestamp in the upper right-hand corner of the video stream. If an NTP server is specified then the time will track the real local time, otherwise it will run a timer incrementing from the initiation of the video stream.

Camera Identity – this displays the serial number and mac address of the camera on the bottom of the video image

Zones – shades the zone area on the video stream as they are specified in the POLICY Page.

Bounding Box – (default on) this puts a red box around a detected target.

Corners Bounding Box – red box around target has only corner marks.

Object ID – adds a unique ID to the target above the bounding box

Object Size – (default on) indicates the height and width of a target at the bottom of the bounding box as it is being tracked.

Track Duration – adds a timer which indicates how long a target has been tracked

Object Speed – this indicates the speed at which the target being tracked is traveling.

Motion Track – this causes a trail of the target that indicates its past position on the thermal video image

Nonalarmed Objects – (default on) draws a yellow box around all objects all objects detected by the analytics, regardless of where they are in the image, which do not meet the alarm criteria specified in POLICY page (alarmed objects are boxed in red). This feature is used to validate analytics settings and not recommended for normal operation

Detect Max Frame Rate (fps) – is the maximum frame rate allowable when a target is being detected.

No Detect Max Frame Rate (fps) – is the maximum frame rate allowable when a target is not being detected.

Detect Max Bit Rate (bps) – is the maximum bit rate allowable when a target is being detected.

No Detect Max Bit Rate (bps) – is the maximum bit rate allowable when a target is not being detected.

Detect Quality – is the compression quality when a target is being detected.

No Detect Quality – is the compression quality when a target is not being detected.

TRACKER PAGE PARAMETERS

Target interval (sec) – Interval between object status updates. Metadata reported from the camera will update Target position at this interval. The default of one third of a second is usually ideal.

Still Object Lifetime – selects hold time for the object to be tracked once the object has stopped moving. Short – 30 seconds, Medium – 1 minute, or Long – 2 minutes

Tracker Vision Mode – optimizes analytics for specific detection applications such as:

Normal – universal detection over normal surfaces

Water – detection over large areas of water

Falling Objects – detecting objects that are falling through the field of view from higher places

Grassy – detecting over fields of taller grass

Long Object Detection – detecting objects that occupy most of the image area


Water Mode (Large Object Detection) – detecting objects over water that occupy most of the image area

Water Mode (Large Slow Object Detection) – detecting objects over water that occupy most of the image area that are moving slowly

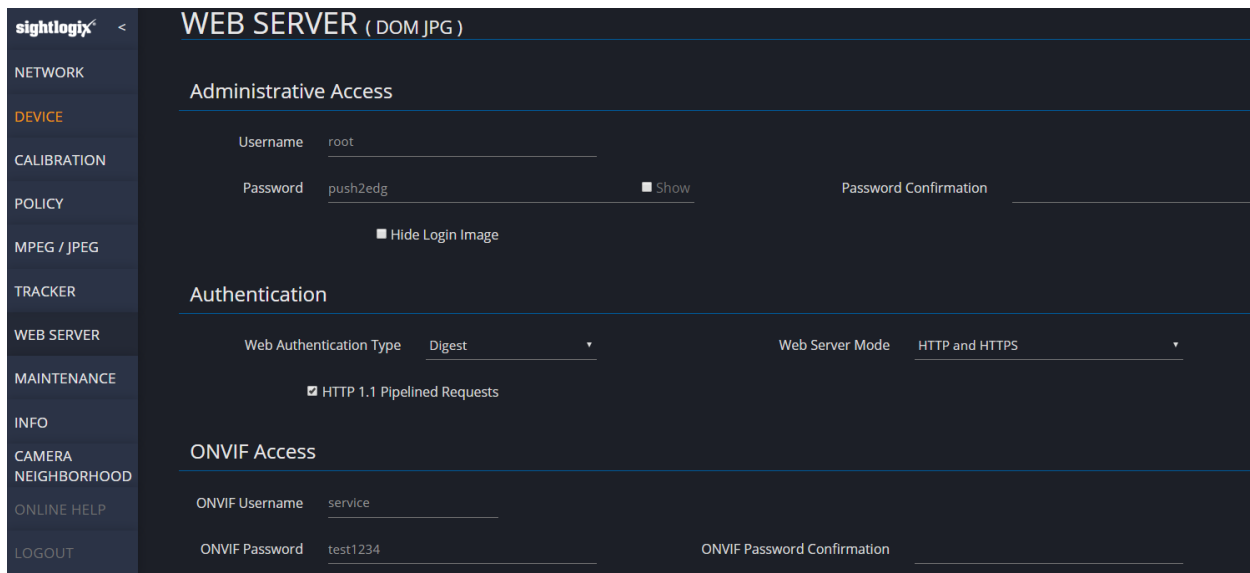
Normal No Stabilizer – normal detection but turns off the stabilizer

Grassy No Stabilizer – detecting over fields of taller grass without using the stabilizer

Target Alarm Mode – changes the style of alarms reported. Alarm reports alarm while and motion is tracked, regardless of number of targets detected in scene; Target sends an alarm for briefly for each target detected in the scene

Tracker Reset –  The video analytics are reset. Any targets currently being tracked are re-evaluated.

WEB SERVER PAGE PARAMETERS



WEB SERVER (DOM.JPG)

Administrative Access

Username

Password ☐ Show Password Confirmation

☐ Hide Login Image

Authentication

Web Authentication Type Web Server Mode

☒ HTTP 1.1 Pipelined Requests

ONVIF Access

ONVIF Username

ONVIF Password ONVIF Password Confirmation

Administrative Access

Username – enter a unique user name to sign in to this camera (default is “root”)

Password – enter a unique password to sign into this camera (default is “push2edg”)

Password Confirmation – enter a unique confirmation password to sign into this camera (default is no confirmation password assigned)

Hide Login Image – Check this box if you want to hide the snapshot showing the camera’s view from the login page.

Authentication (Camera will Reboot)

Web Authentication Type – Drop-down menu: Basic or Digest (default setting is “Basic”).

Basic – HTTP Basic Authentication (BA) implementation is the simplest technique for enforcing access controls to web resources because it does not require cookies, session identifiers, or login pages

Digest- digest access authentication is intended as a security trade-off, being stronger than Basic, but weaker than HTTPS

HTTP 1.1 Pipelined Requests – Enable HTTP 1.1 Requests check box (default is checked)

Web Server Mode – Choose “HTTP and HTTPS” (default) or “HTTPS Only” (encrypts all data between the SightSensor and your browser, **recommended**).



Note!

If you select “HTTPS Only” **or** if you enter "https://" in your web browser, you must also accept the SightLogix self-signed certificate. Refer to *Troubleshooting & Advanced Configuration* at the end of this guide.

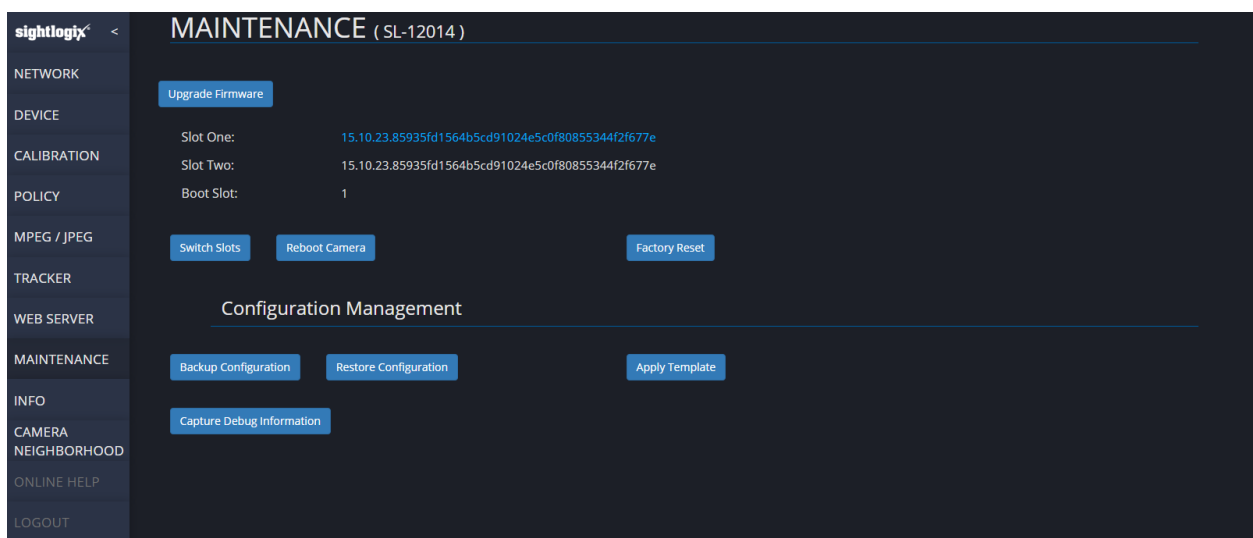
ONVIF Access

ONVIF Username – enter a unique user name for Onvif security (default is “service”)

ONVIF Password – enter a unique password for Onvif security (default is “test1234”)

ONVIF Password Confirmation – enter a unique confirmation password for Onvif security (default is no confirmation password assigned)

MAINTENANCE PAGE PARAMETERS



Upgrade Firmware Box – clicking on this box will bring up a window to select the location and file name of the new firmware to be loaded. Once selected click open and firmware will upgrade the standby slot (slot that is in white print), and immediately when finished loading will reboot the camera to the newly loaded software (which will then be the blue text). To upgrade the other slot, repeat the process again.

(Note: the camera will reboot after the firmware update process and the video will be interrupted during that time.)

Slot one: and Slot two: – contain separate copies of the firmware and the **Boot Slot:** indicates which slot's firmware is active (blue text) with the other slot being standby (white text)

Switch Slots Box – when selected will cause the camera to reboot and run the firmware from the other slot.

Reboot Camera Box – when selected will cause the camera to do a reboot but will not change the active firmware slot.

Factory Reset – causes all configuration, calibration and alarm policies to reset to factory default condition. IP Address, Gateway and Netmask data will not get reset.

Backup Configuration Box – clicking on this box will download the current camera configuration to the download area of the browser. It will be downloaded with file name "sightlogix_[Serial Number]_[date-time].json", it can then be re-labeled and archived in case there is a need to restore the original configuration.

Restore Configuration Box – Clicking on this box will bring up a window to select the configuration file to be loaded to the camera. The serial number in the backup file must match the camera you are restoring to. If you are restoring a backup file to a different camera, i.e. a replacement camera with a different serial number, edit the file's second term using a text editor (like WordPad) so the serial number in the backup file matches the serial number of the camera being restored. Any serial number information in the file's title is not relevant.

Apply Template – clicking on this box will bring up a window to select the configuration file template to be loaded to the camera. This aids in setting up multiple cameras that would want to use the same basic configuration. A template is made by setting up one camera to the desired configuration then using that configuration file as the template. Unlike the normal Restore Configuration function the Apply Template function does not load camera specific data like name, IP configuration, camera description or GPS location, calibration data, policy information, and MPEG/JPEG channel description.

Capture Debug Information – downloads an archive with relevant information to aid SightLogix technical support to diagnose issues. This archive contains network specific information which may be privileged.

INFO PAGE PARAMETERS

The INFO page is reporting information and status about this camera and as such there is no input of information on this page. The information is divided into three areas: INFO – general camera information, VITALS – key operating information, and SETTINGS – status of camera setting.

sightlogix<

NETWORK

DEVICE

CALIBRATION

POLICY

MPEG / JPEG

TRACKER

WEB SERVER

MAINTENANCE

INFO

CAMERA

NEIGHBORHOOD

ONLINE HELP

LOGOUT

INFO (SL-13294)

Model	HD332-220	Description	
Uptime	00h, 31m, 48s	Camera Time	Mon Sep 17 19:40:21 2018
Firmware Version	15.7.288	Serial #	000013294
Boot Code	Detected normal reboot after apps but early		

Vitals

Temperature (°C)	32.5	Current (amperes)	1.3
Heater (%)	0	VMain (volts)	5.3
Clips Delivered	0	Clips Undelivered	0
Motion Alarms	8		

Settings

Pan (degrees)	-154.43	Non Alarmed Objects Enabled	true
Tilt (degrees)	-7.77	Target Alarm Mode	Alarm
Zoom (degrees)	29.73		

INFO

Model – lists the model number of the camera

Description – lists the **Camera Description** entry from the DEVICE Page

Uptime – indicates the uptime since the last boot

Camera Time – lists the date and time as provided by the NTP service as per the time zone setting of the camera. (This information is only valid if NTP is provided)

Firmware Version – lists the firmware version that is currently operating the camera

Serial # - list the serial number of this camera

Boot Code – lists the status of the last boot of the camera (useful for trouble shooting)

VITALS

Temperature (Celsius) – lists the current internal temperature of the camera (this is typically about 10 to 12 degrees higher than the external temperature)

Current (amperes) – indicates the current draw in amperes of the internal 5 vdc supply voltage

Pressure (kiloPascals) – indicates internal pressure of the camera (only relevant to camera models that are pressurized)

VMain (volts) – measures the voltage of the main internal 5-volt power source

Heater (%) – the level that the internal heater is working (Heater requires 24v power to camera to function) and is controlled automatically by monitoring the internal camera temperature

Motion Alarms – the total number of alarms generated since the last reboot.

Clips Delivered - the total number of video clips delivered to the Motion On Event Server defined on the DEVICE page. May be less than total Motion Alarms due to Post-Reset requirement.

Clips Undelivered - the total number of video clips undelivered to the Motion On Event Server defined on the DEVICE page.

SETTINGS

Pan (degrees) – camera using this setup process is assumed to have a zero-degree heading looking straight out from camera center. This parameter is only meaningful Geospatially when camera is setup using full geo-calibration.

Non Alarmed Objects Enabled – indicates the status of check box on TRACKER page to report Nonalarmed Objects (true = box checked)

Tilt (degrees) – lists the degrees of forward camera tilt (same as value listed on the CALIBRATION page)

Target Alarm Mode – states the status of the Target Alarm Mode as specified on the TRACKER page

Zoom (degrees) – the effective detection horizontal field of view of the thermal image

CAMERA NEIGHBORHOOD PAGE PARAMETERS

sightlogix <		CAMERA NEIGHBORHOOD (SL-13294)				
NETWORK	SN	IP	Type	Sensor	Uptime	Version
DEVICE	12006	192.168.50.40	DHCP	NS62-320	01H 18M	15.7.289
CALIBRATION	12007	192.168.50.114	DHCP	FLIR Tau 25 4000	75D 20H 47M	15.15.08
POLICY	12008	192.168.50.115	DHCP	NS145-420	23H 21M	15.7.289
MPEG / JPEG	12009	192.168.50.116	DHCP	NS6000	75D 21H 30M	15.6.82
TRACKER	12010	192.168.50.118	DHCP	200 40 Degree	75D 21H 31M	15.11.11404
WEB SERVER	12011	192.168.50.120	DHCP	FLIR Tau 12 4000	11D 11M 30M	15.6.72
MAINTENANCE	12012	192.168.50.121	Static	200 40 Degree	02H 42M	15.6.87
INFO	12013	192.168.50.122	DHCP	Composite	100D 13H 12M	15.15.08
CAMERA NEIGHBORHOOD	12014	192.168.50.123	DHCP	200 37.5 Degree	06H 23M	15.15.08
ONLINE HELP	12015	192.168.50.124	DHCP	NS62-320	01H 18M	15.7.289
LOGOUT	12016	192.168.50.125	DHCP	FLIR Tau 67 4000	02H 11M	15.5.9
	12017	192.168.50.127	Static	NS600-320	11D 01H 10M	15.6.85
	12018	192.168.50.128	DHCP	NS120-320	24D 02H 02M	15.7.213
	12019	192.168.50.129	DHCP	NS120-320	03H 18M	15.7.289
	12020	192.168.50.130	Static	NS6000	21D 05H 30M	15.6.29
	12021	192.168.50.131	Static	Teach Thermal im. 20 Degree	75D 21H 30M	15.6.121

Provides a list with selected details of all the SightLogix camera types connected directly to this local network. This can be handy to discover other cameras.

RECORDING PAGE

Refer to the Edge Storage Setup Guide for using the Recording page with newer cameras:
<https://portal.sightlogix.com/help/webconfig-docs>.

ONLINE HELP

Selecting this page will take the web browser directly to the SightLogix web site help page if the internet is accessible from the local network.

LOGOUT

Selecting the logout page will terminate the browser session and log the user out of the camera. Note that WebConfig will auto-logout a user after one hour of inactivity.

TROUBLESHOOTING & ADVANCED CONFIGURATION

PERFORMING GPS MAP CALIBRATION

Quick Calibration can be used for most situations. GPS Map Calibration is for more advanced applications, and is required for two scenarios:

- You will be using SightTracker to automatically control a PTZ camera
- You are using a PSIM or other third-party software which requires SightSensor metadata to provide target details such as longitude and latitude

GPS Map Calibration Requirements

- You will need a georeferenced site map and .info file. This is often provided by SightLogix and shipped with your product.
 - If your product shipment did not include a site map, you can obtain aerial images from Google® Earth, SightLogix other providers. Instructions for using Google Earth to install a custom site map are here: <http://portal.sightlogix.com/help/google-earth>.

GPS Map Calibration Steps

- Click the CALIBRATION Tab in the SightSensor left-side navigation menu
- Click the GPS Map Calibration button, as shown.

The screenshot shows the 'CALIBRATION (SL-13294)' interface. On the left is a sidebar with navigation links: NETWORK, DEVICE, CALIBRATION (selected), POLICY, MPEG / JPEG, TRACKER, WEB SERVER, MAINTENANCE, INFO, CAMERA, NEIGHBORHOOD, ONLINE HELP, and LOGOUT. The main area has a 'Calibration Method' section with 'Quick Calibration' and 'GPS Map Calibration' buttons. Below this is a 'Show Map & Info' button and a 'Map: No name' label. The central part of the interface is split: the left side is a dark map area, and the right side shows a thermal image of a street scene with a timestamp '2018/09/17 19:10:06'. At the bottom, there is a table for 'Calibration Points' and a 'Refresh Image' button.

Calibration Points	Latitude	Longitude	Height (feet)	Image X	Image Y
Camera	0	0	0		
Point 1					
Point 2					

Below the table, there are controls for 'Pan' (0), 'Tilt' (0), and 'Zoom' (29.73). At the bottom left, there are 'SAVE' and 'REVERT' buttons. At the bottom right, there are 'Refresh Image' and 'Test Mode' buttons.

The window at right shows a single frame capture from the thermal imager. Click "Refresh Image" to update.

The black area at left is where the site map will reside once it has been uploaded, along with the .info file.

- Click the Show Map & Info button to reveal the Map upload options, as shown.

- Upload your .Info file and JPEG using the Info File Upload and Map File Upload buttons.
- Once uploaded, click Use Map to store the information.
- Click Save.

The window at left now displays your uploaded site map.

- Click/drag the map to reposition as needed and use your mouse scroll wheel to zoom in/out.

Calibration Points	Latitude	Longitude	Height (feet)	Image X	Image Y
Camera	0	0	0		
Point 1					
Point 2					

Pan: 0 Tilt: 0 Zoom: 29.73

- Click the Camera row from the Calibration Points table to turn the row RED.
- Enter your camera's height above the ground in the Height field.



You MUST enter the camera's height to have an accurate calibration.

- Click the sitemap at the location of your SightLogix device to place a RED camera pin and set its GPS location.
- A camera pin is displayed at that location and its current GPS coordinates are displayed in the Latitude and Longitude windows. Click at different locations in the site map to relocate the pin.

Next, you will choose two calibration points in the site map at left with the same location in the camera's image, at right.

- Click the Point 1 row in the Calibration Points table to activate it and turn it BLUE.
- Click the site map to set Point 1. A BLUE pin is placed on the site map. Choose a fixed object such as a utility pole, the corner of a building, etc.
- Then click the same location in the camera's image at right.
- Click the Point 2 row to activate it and turn the row YELLOW. Choose a second calibration point using a different fixed point on the site map. A YELLOW pin is placed at the location.
- Click Save.
- A camera cone is overlaid on the site map, and yellow horizon line is placed on the camera's image at right

Calibration Points	Latitude	Longitude	Height (feet)	Image X	Image Y
Camera	40.322976	-74.634443	15		
Point 1	40.322781	-74.634629	0	244	111
Point 2	40.322628	-74.634613	0	113	83

Pan: -154.37 Tilt: -9.85 Zoom: 29.73

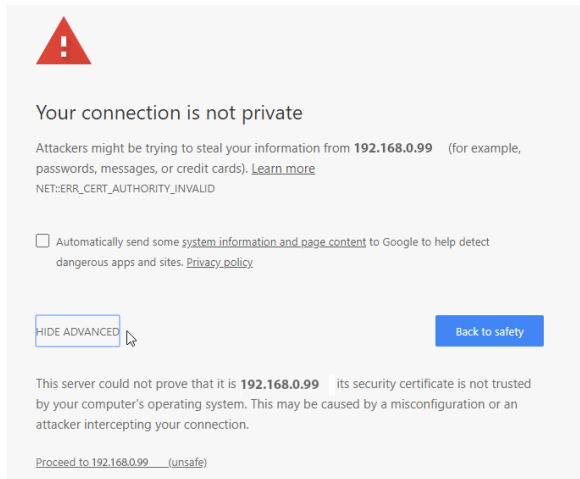
- If the horizon line is not level, or if the camera cone is misshaped, reposition your calibration points for accuracy (click the row in the Calibration Points table to activate). Click Save and check your horizon line.
- Verify your calibration using the Test Mode button. When pressed, clicking on the calibration image will place green pins on the image and the corresponding position in the map.

Troubleshooting GPS Map Calibration

- If you do not see a camera cone on the site map after setting your camera and calibration points and saving, or if the cone is misshaped, confirm that you have entered the correct height in the Camera row of the Calibration Points table. Click save.
- When selecting points, select a ground location next to a landmark or other permanent object and always select locations that can be easily identified in both the site map and the camera view. The points should be close to areas you're interested in monitoring. Points should be some distance away from one another.
- If the area is hilly with wide variations in elevation, select points that are roughly midway between the highest and lowest elevations.

INSTALLING THE SIGHTLOGIX SELF-SIGNED CERTIFICATE

SightSensors are shipped with a self-signed certificate that SightLogix has secured. If you access WebConfig using HTTPS, you may receive a security warning until you install the SightLogix self-signed certificate in your browser, as shown below.



Security Warning - Chrome

This site is not secure

This might mean that someone's trying to fool you or steal any info you send to the server. You should close this site immediately.

Close this tab

More information

Your PC doesn't trust this website's security certificate.

Error Code: DLG_FLAGS_INVALID_CA

Go on to the webpage (not recommended)

Security Warning - Internet Explorer

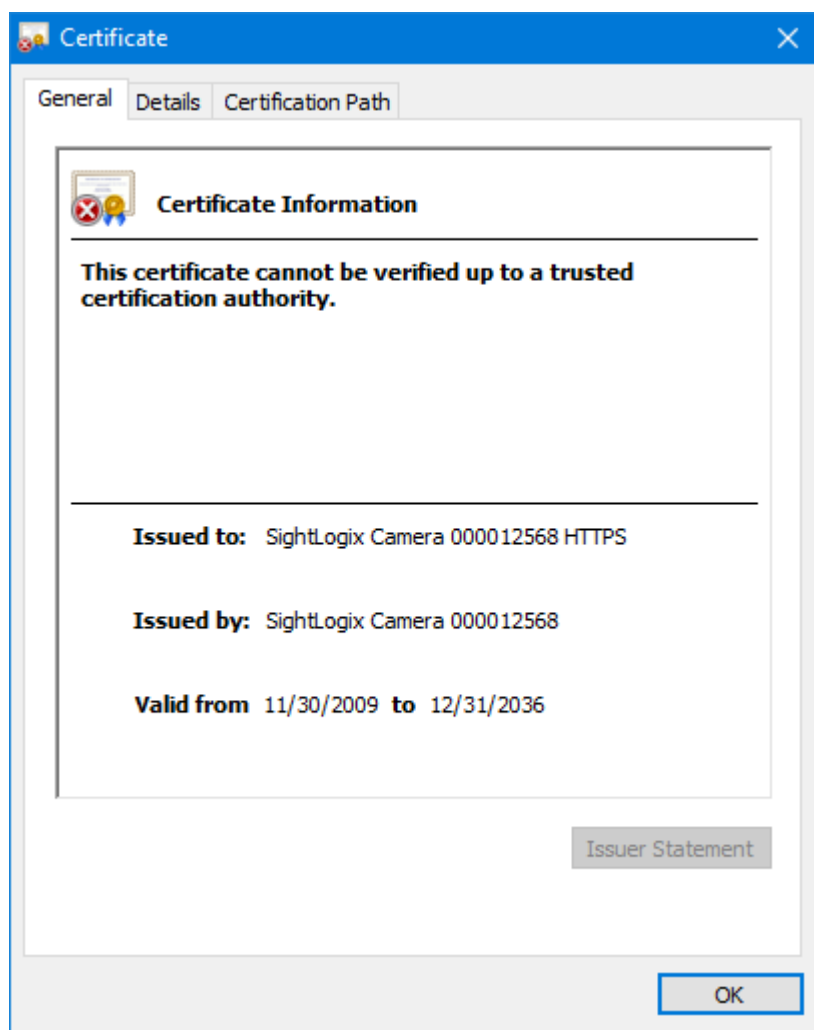


Note

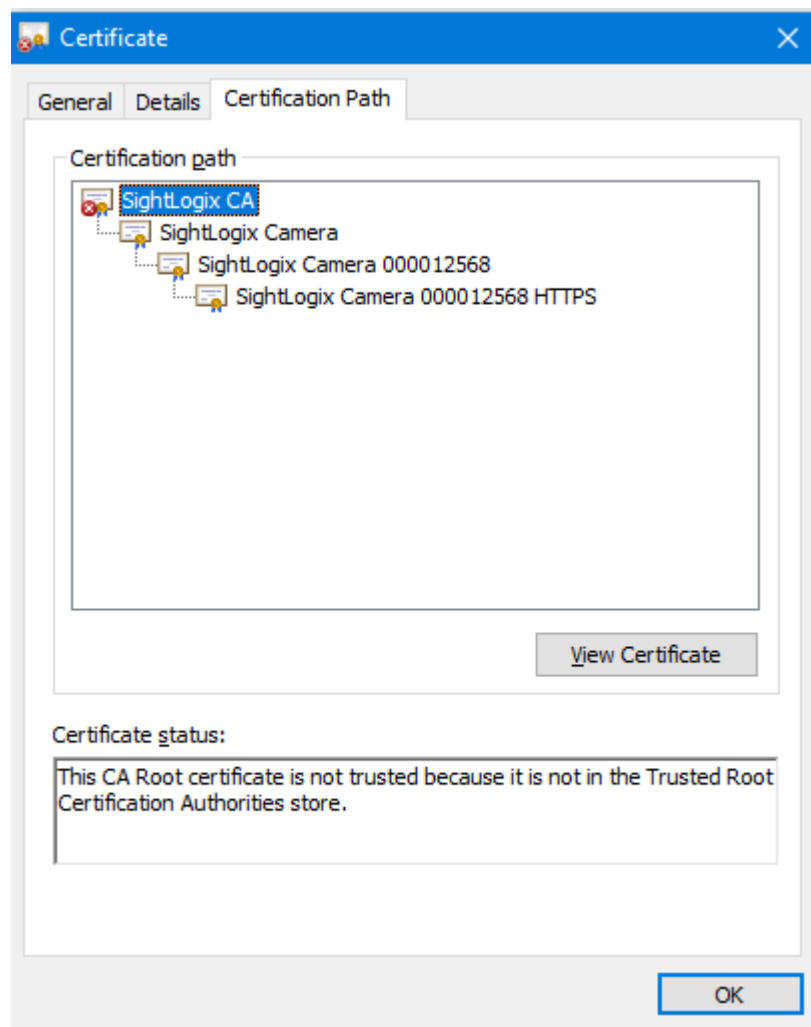
Microsoft Edge does not allow you to add a self-signed certificate. If you are using Edge to access WebConfig and receive a warning like the one above, click the three-dot menu on the upper right of the browser, select "Open with Internet Explorer" and follow the instructions below.

- Browse to WebConfig using HTTPS (e.g., <https://192.168.0.99>)
- If you receive the security warning shown above, proceed to WebConfig:
 - In Chrome, click "Advanced" and "Proceed to https://<ip address> (unsafe)"
 - In Explorer, click "Go on to the webpage (not recommended)."
- Web Config opens
 - In Chrome: Right-click "Not Secure" in the upper left
 - In Explorer, right-click "Certificate Error" on the upper right.
- View the certificate:
 - In Chrome, Click "Invalid"
 - In Explorer, click "View Certificates"

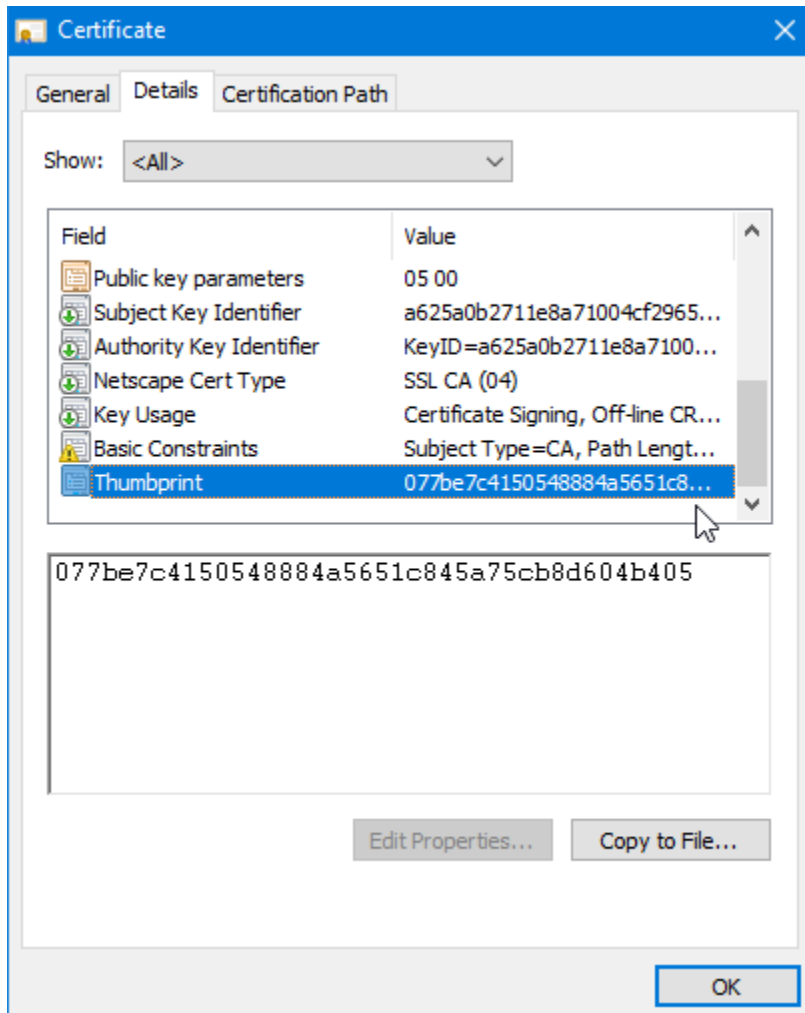
The Certificate window opens.



- Click Certification Path tab, highlight the SightLogix CA, and click “View Certificate.”



- Click “Details” and scroll to Thumbprint, as shown.

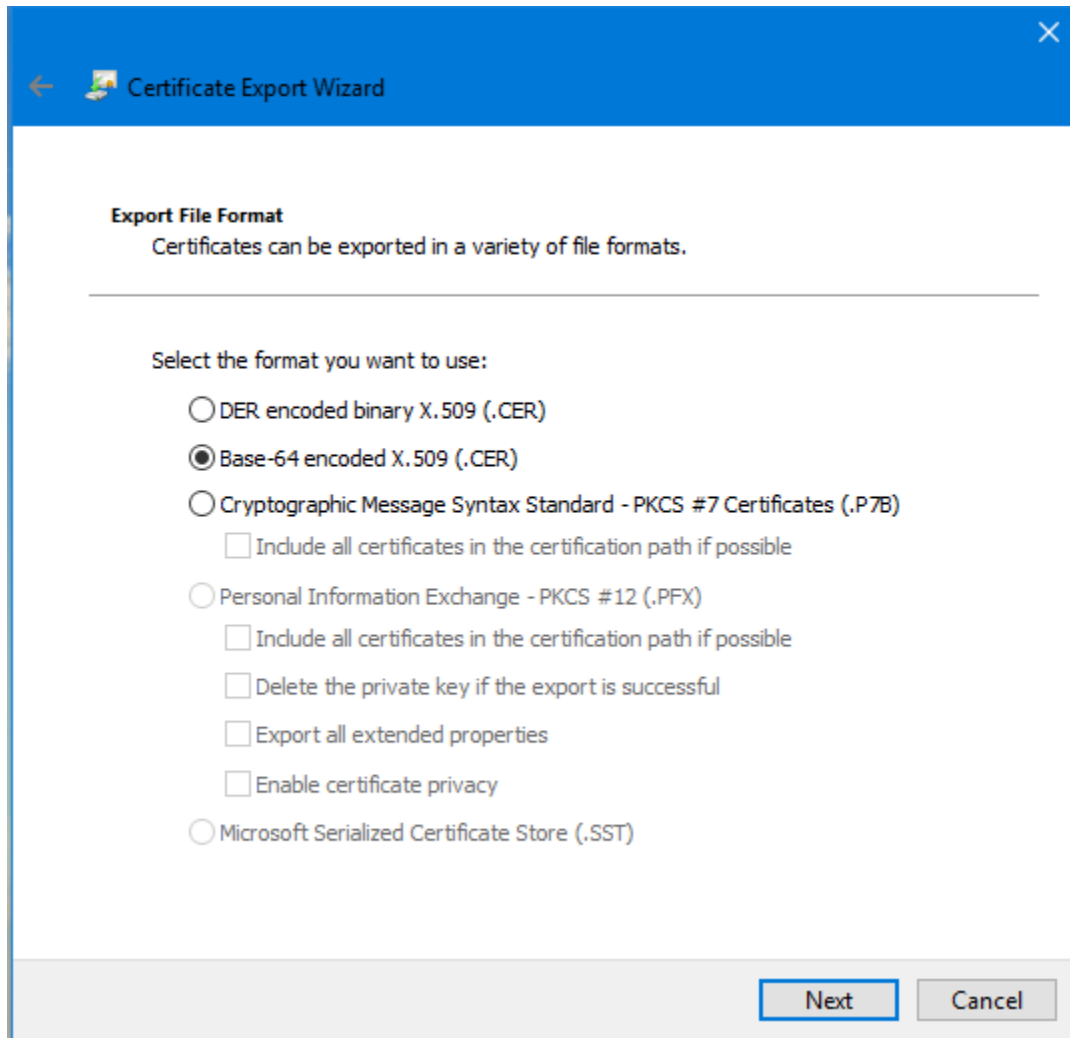


- Confirm that the thumbprint matches the SightLogix thumbprint:

07 7B E7 C4 15 05 48 88 4A 56 51 C8 45 A7 5C B8 D6 04 B4 05

- Click “Copy to File...”
- The Certificate Export Wizard opens. Click “Next”

- Choose Base-64 encoded x.509 (.CER) and click “Next”

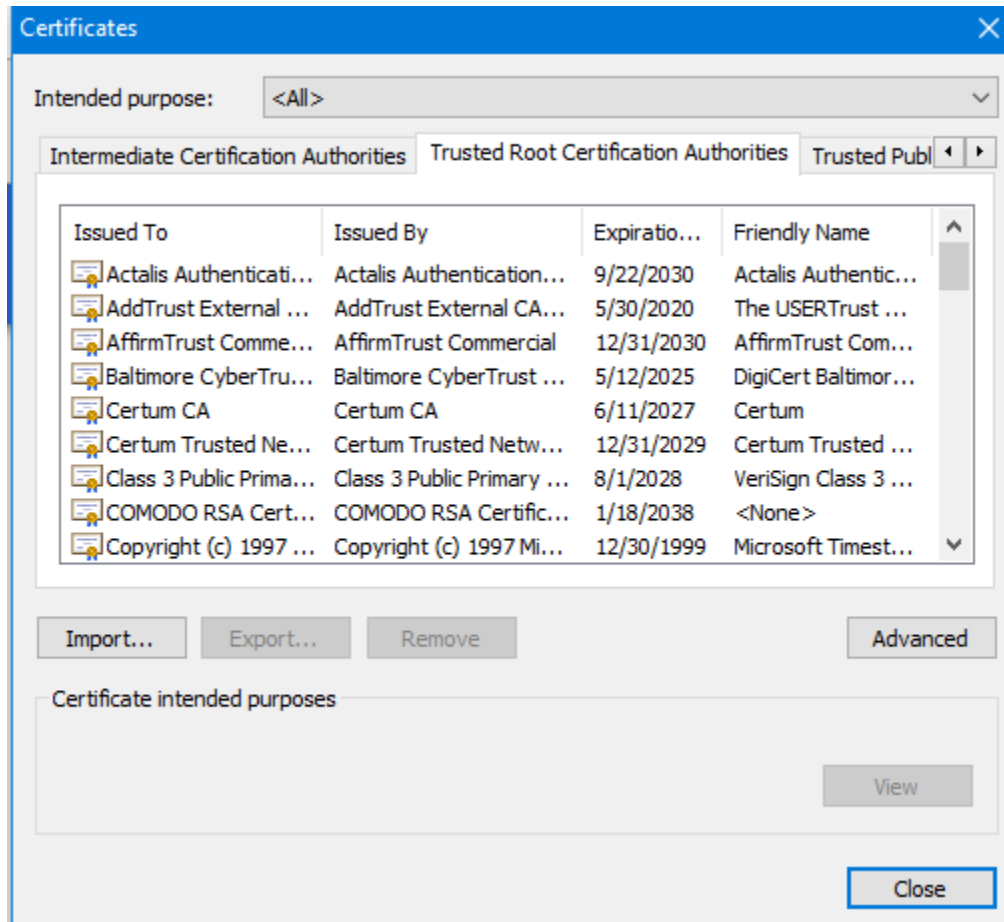


- Name the file (for example, SightLogix CA) and save to a location on our computer, such as your Downloads directory.

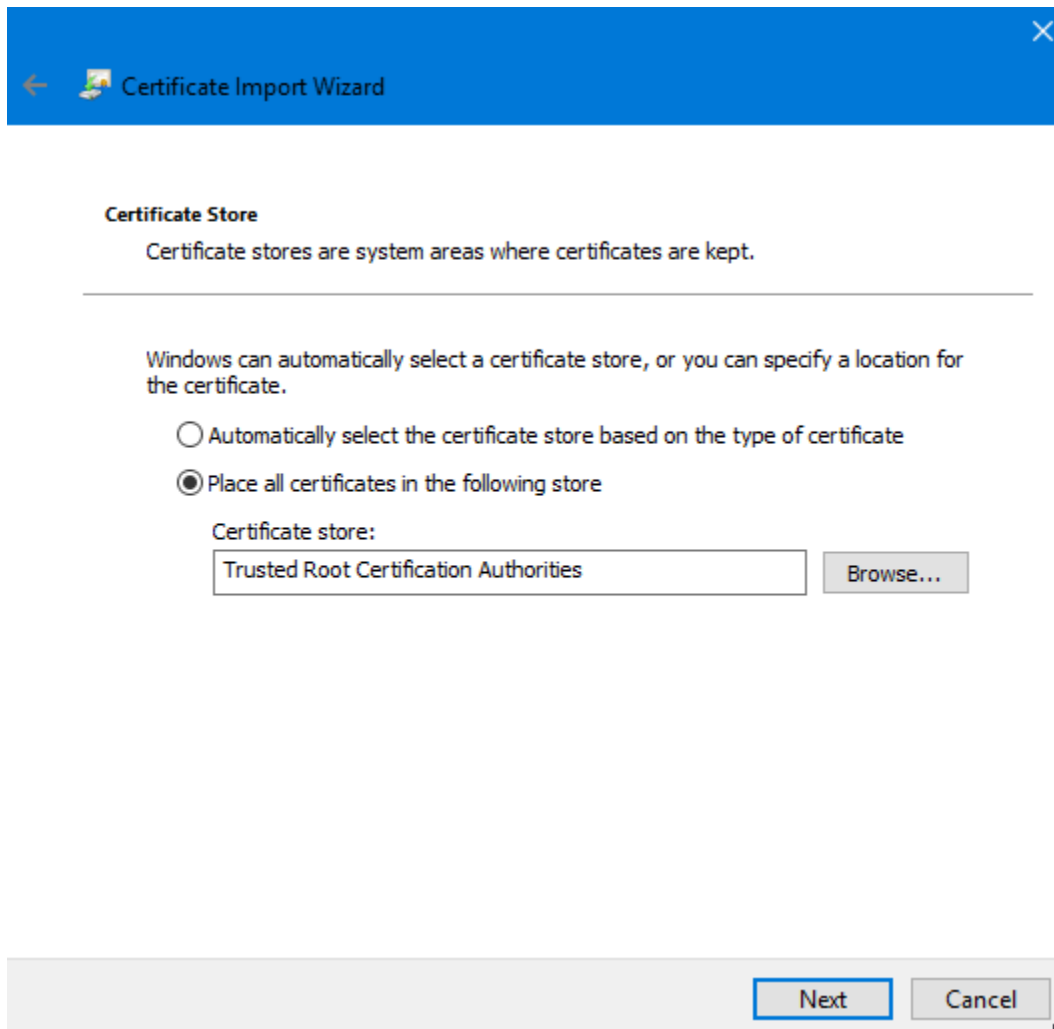
- Next, import the certificate into your computer's Trusted Root Certificates.
 - In Chrome, right-click *Not Secure* in the upper left of the browser and choose *Site Settings*, then scroll to Manage HTTPS/SSL certificates and settings
 - In Internet Explorer, click "Settings" -> "Internet Options" -> "Content" -> "Certificates"

The Certificates window opens

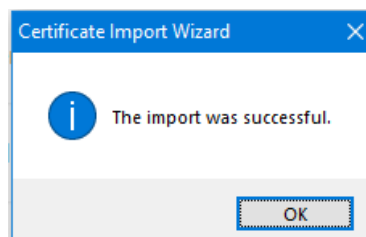
- Click the Trusted Root Certification Authorities tab



- Click "Import..."
- The Certificate Import Wizard opens. Click "Next" and browse to the location where you previously saved the SightLogix certificate.



- Choose “Place all certificates in the following store” and confirm that “Trusted Root Certification Authorities” is selected, as shown.
- Click “Next” and then click “Finish”
- Click “Yes” to the Security Warning. Then click “OK” to close the Import Wizard



- **Close your browser completely.**
- Restart your browser and enter the IP address of the SightSensor, using https (for example, <https://192.168.0.99>).
- You will see a lock icon indicating a secure connection.

ADDING YOUR SIGHTSENSOR TO A VIDEO MANAGEMENT SYSTEM

First, set the VMS type in the Device Page:

The screenshot shows the 'DEVICE (SL-12014)' configuration page. On the left is a sidebar with navigation links: NETWORK, DEVICE (highlighted), CALIBRATION, POLICY, MPEG / JPEG, TRACKER, WEB SERVER, MAINTENANCE, INFO, CAMERA, NEIGHBORHOOD, ONLINE HELP, and LOGOUT. The main content area has the following settings:

- Device Description:** New Camera
- Time Zone:** (GMT-05:00 DST) Eastern Time (U.S, Canada, Bahamas, Haiti)
- Custom Time Zone:** (empty field)
- VMS Type:** ONVIF H.264 (dropdown menu)
- Relay Out Mode:** Disabled (dropdown menu)
- Motion On Event Servers:** Custom (dropdown menu)
- Video Out Mode:** PAL (dropdown menu)
- Motion Off Event Servers:** protocol://<ip address> (text field)
- Alarm Test:** (button)
- Thermal Clip:** (button)
- Last Clip Timestamp:** No clips generated since last camera boot

- ONVIF H.264 is selected by default. The system uses the default username *service* and the password *test1234*.
- If connecting to Sureview System's Immix software, choose "Immix," enter your host's IP address, and configure your Pre-Trigger, Post-Trigger and Post-Reset settings for clip delivery.
- Additional steps are required depending on the VMS. Refer to the SightLogix Support Portal for your specific VMS: <http://portal.sightlogix.com/help/vms-and-ptz-integrations>.

TROUBLESHOOTING CLIP DELIVERY

SightSensors support sending a short pre- and post- video clip to monitoring software, such as Immix, giving operators a view of the conditions before, during and after an alarm occurs. These settings are configured using Motion on Event Servers on the Device page by choosing either Immix or Custom. WebConfig provides a number of features to help troubleshoot this functionality.

To confirm if your SightSensor is generating clips, and/or if your monitoring software is having trouble receiving them, click the INFO page and check the Vitals section.

- Motion Alarms, Clips Delivered and Clips Undelivered can help determine where the issue resides, either in the SightSensor or your Monitoring software. For example, if Clips Delivered is 0, check your Motion On Event Server's settings on the Device page.

Vitals			
Temperature (°C)	35.5	Current (amperes)	1.4
Pressure (kiloPascals)	100.6	VMain (volts)	5.3
Heater (%)	0	Motion Alarms	54
Clips Delivered	0	Clips Undelivered	7

To review clip settings, click the Device page and scroll to the clip section at the bottom.

- Review the file sizes for the Visible Clip (SightSensor HD only) and the Thermal Clip. If you experience clip delivery issues, reducing the number of seconds for your pre- and post-triggers can be helpful.
- Test your camera's clip generation by clicking Alarm Test. This feature allows you to simulate an alarm without the need for someone to physical cross the camera's field of view.
 - Wait several seconds, and then refresh your browser.
 - The Last Clip Timestamp should reflect the time of the test.
 - Review the generated clip directly by right-clicking Visible Clip (SightSensor HD) and/or Thermal Clip to view the video in a new tab.

Motion On Event Servers	Immix
Host	<ip address hostname>[:port]
Pre-Trigger (sec)	Post-Trigger (sec)
1	5
	Post-Reset (sec)
	20
Motion Off Event Servers	protocol://<ip address>
<div> <div>Alarm Test</div> <div>Visible Clip 2.2MB</div> <div>Thermal Clip 483.2KB</div> </div>	
Last Clip Timestamp	Tue Apr 3 13:51:24 2018

DECODING THE FLASHING LEDS

Normal LED Progression

After applying power to a camera, the normal LED sequence is:

Solid Red

The camera has power and is trying to load the firmware - approximately 8 seconds

Flashing Red (1/4 Sec on, 1/4 Sec off)

The camera has loaded the firmware and is starting to boot - approximately 4 seconds

Alternating Red/Green (1/4 Sec Green, 1/4 Sec Red)

Camera is attempting to find a network - approximately 4 seconds

Flashing Green (1/4 Sec on, 1/4 Sec off)

Camera has found a network (Ethernet has link); for DHCP, the IP address has not yet been found. Camera will check all hardware and establish all services at this stage - approximately 18 seconds

Solid Green

Camera has finished booting and after 3 seconds will show the last octet of the IP address approximately 3 seconds

Flashing IP

See below - approximately 8 seconds flashing followed by 3 seconds of solid green

Off

After 2 minutes, the LED turns off no matter what it was indicating

Factory Reset Case

Fast Alternating Red/Green (1/8 Sec Green, 1/8 Sec Red)

LED only shows this when camera has detected reset jumper shorting relay to Dry Input pins - 20 seconds

IP

Interpreting the Flashing IP

If the camera successfully boots, after showing solid green for three seconds, the camera will flash out the last octet of the IP address in binary, e.g.

- If the IP address is 192.168.50.148 then the camera reports 148
- 148 decimals is 0xA4 in hexadecimal
- 0xA4 is binary 1 0 0 1 0 1 0 0, indicated as Red Green Green Red Green Red Green Green

Failure cases

If the camera does not show solid green for 3 seconds, the camera will show one of these states for approximately 8 seconds before showing solid red again (indicating the start of a new boot cycle)

Off

If the LED never turns on at all, check the power connections to the camera. When it receives power, the LED will show solid red

Solid Red

Camera failed to boot firmware. You will see a brief blink of the Red LED every 15 seconds when the camera attempts to boot again.

Alternating Red/Green

Camera did not find a network, the Ethernet has no link

Flashing Green

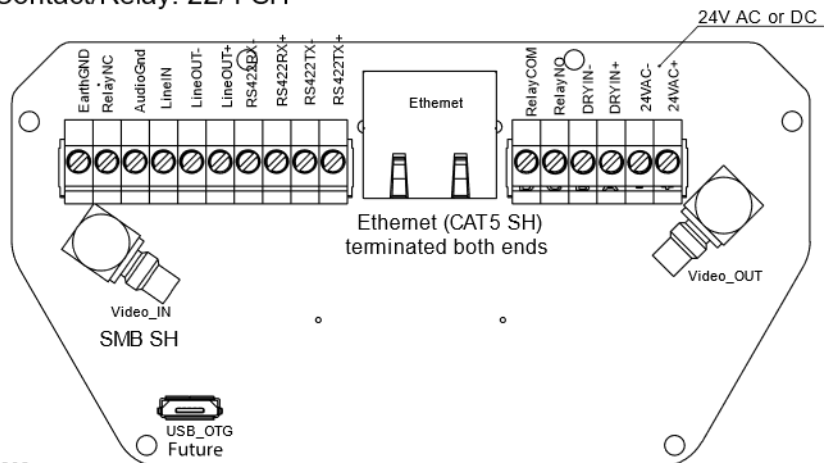
Camera did not establish IP address via DHCP or otherwise failed to complete the boot process

WIRE TERMINATIONS OVERVIEW

Ethernet: CAT5 SH

24V Power: 18/2 SH

Dry Contact/Relay: 22/4 SH



For RS232 use:
 RS422TX+ >> RS232 TX
 RS422RX+ >> RS232 RX
 DRYIN- >> RS232 Gnd

SIGHTSENSOR FIELD WIRE TERMINATIONS

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Wire Termination Descriptions	
EarthGND	Earth Ground connects to chassis ground
RelayNC	Relay Normally Closed
LineIN/AudioGnd	Microphone input
LineOUT-/ LineOut+	Audio output to an external amplifier
RS422RX-	Connect to RS422TX- signal from external device such as analog PTZ
RS422RX+	Connect to RS422TX+ or RS232RX signal from external device such as analog PTZ (DryIN- is ground for RS232)
RS422TX-	Connect to RS422RX- signal to external device such as analog PTZ
RS422TX+	Connect to RS422RX+ or RS232TX signal to external device such as analog PTZ (DryIN- is ground for RS232)
USB	(Future) USB connection to an external slave
RelayCOM/ RelayNO	Dry contact relay output. Normally open; close when activated.
DryIN-/ DryIN+	Input signal: Open is OFF state; shorting DryIN- to DryIN+ is ON state.
24VAC-/24VAC+	Nominal 24V AC/DC power input
Video_IN	Video input from an analog PTZ/dome for SightTrackers. NTSC or PAL.
Video_Out:	Analog video output from SightSensor (NTSC)
Ethernet (RJ45)	Network connection; supports PoE IEEE 802.3af

FINDING MORE INFORMATION

- Visit the SightLogix Support Portal for additional resources including technical documentation, third-party VMS instructions, drawings, diagrams, and videos:
<http://portal.sightlogix.com/help>

Contact SightLogix Support

Visit: <http://portal.sightlogix.com/help>

Call: +1 609.951.0008, option 2

Email: support@sightlogix.com