SightTracker WebConfig Installation Guide

Firmware 15.10 and later

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SightTracker WebConfig Installation Guide
Made in the USA.

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Warnings and Cautions

Warning!

If mounting the device 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 device for any reason. Always handle the device with care to avoid damage to electrostatic-sensitive components.

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

Operating the device 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 device can lead to permanent damage. Typical to good grounding practices, the device 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 SightTracker devices 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 device
- Configuring your SightTracker
- Associating a SightTracker with SightSensor(s)
- Calibrating your SightTracker
- 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 device.

SightTracker Overview

SightTrackers enable PTZ devices to automatically aim at a target's GPS position when an alarm occurs, enabling security personnel to get an immediate, close-up view of the event triggering the alarm.

The SightTracker is a separate unit that receives target GPS information from one or more associated SightSensors and then converts the information to pan/tilt settings to control the PTZ device.

Currently, there is support for select ONVIF domes. Refer to the SightLogix Support Portal for the most up-to-date list: http://portal.sightlogix.com/help/sighttracker-third-party-ptz-support.

PTZ devices will continue to track an object if it remains in view of an associated SightSensor or until one of the following occurs:

- Another target becomes higher priority. In case of multiple targets, the default is to assign the highest priority to the newest target. However, you can specify a different priority.
- The VMS operator takes control of the device. Joystick control from the VMS is always able to immediately take control of the device.
- The SightTracker is frozen.

Device connections are made through the water-tight cable gland on the bottom rear of the device.

The device can be powered with a conventional power supply using 24V AC/DC or POE.

An Ethernet connection is provided for IP video streaming.

Installation Steps

Setting up a SightLogix SightTracker 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*
- Change the IP address from the default to your network requirements
- Set NTP
- Mount your device
- Connect and authenticate the device with a PTZ
- Associate the device with a SightSensor
- Calibrate the SighTracker with a geo-registered map
- View video to confirm operation

Supplied materials

Your SightLogix device will be shipped with the following items:

- Your SightTracker
- Weather-tight gland for connection cables

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
- Cat5e Ethernet cable for digital video and/or PoE for system power
- Device 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), or Windows 11 Professional; Windows Server 2003, 2008, 2012 (32-bit or 64-bit), or Windows Server 2019
- Compatible web browser:

  - Microsoft Edge Version 41 or later
  - Chrome Version 63 or later
  - Microsoft Internet Explorer - Recent 2018 versions or newer
- IP network. Devices 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
- At least one SightSensor, calibrated using the GPS Map Calibration procedure as described in the "SightSensor WebConfig Installation Guide" (available at http://portal.sightlogix.com/help/getting-started-web-config)
- Geo-registered map and .info file, often supplied by SightLogix 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.
- A compatible ONVIF IP PTZ camera, connected to a VMS system.

Refer to the SightLogix Support Portal for more information: http://portal.sightlogix.com/help/vms-and-ptz-integrations

INSTALLING YOUR SIGHTTRACKER

INSTALLATION STEPS

We recommend performing initial setup on a work bench at ground level prior to mounting the device in its final location.

1. Remove the Back Plate

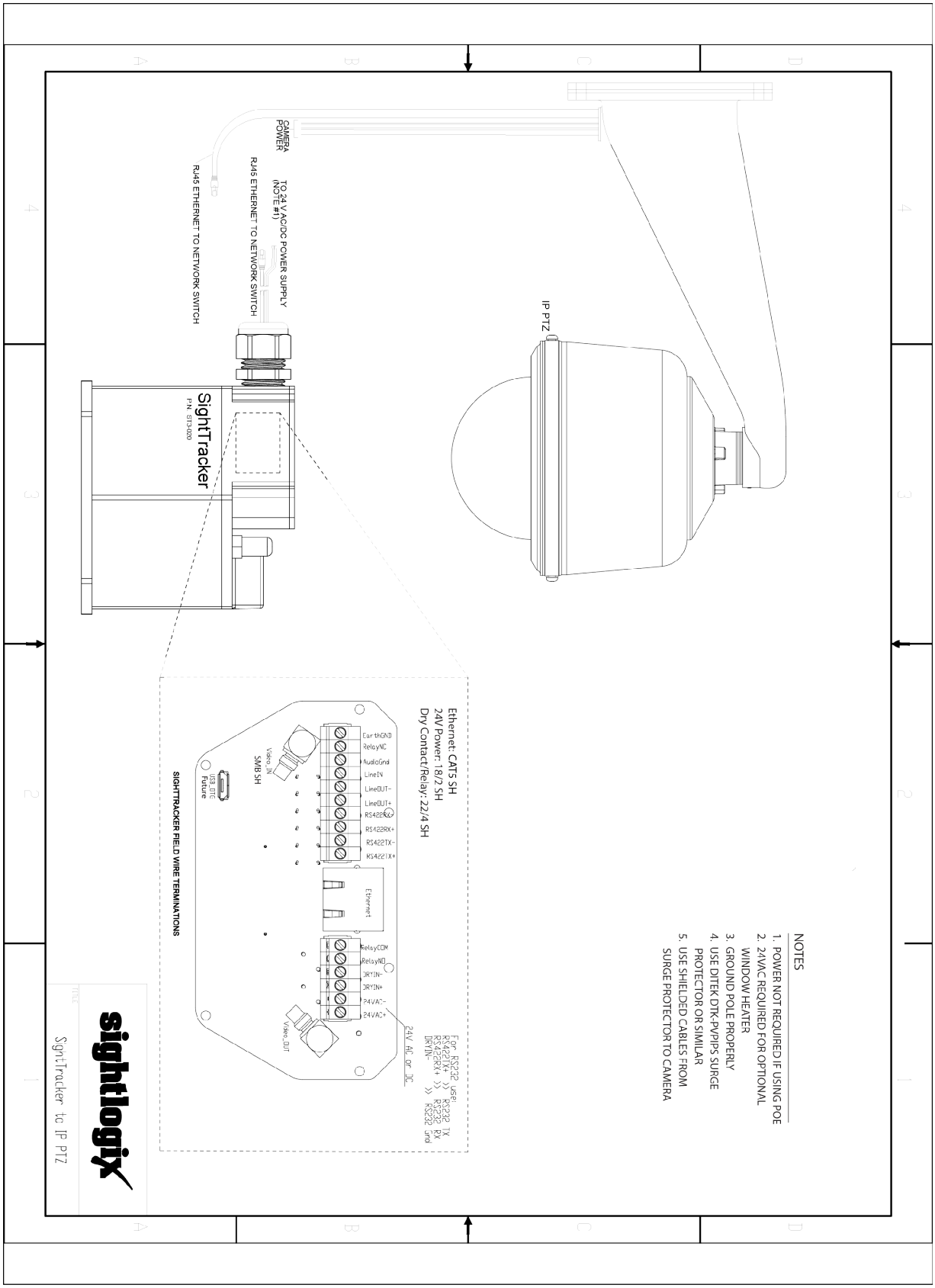
To access the electrical connections and install the cables, it is necessary to remove the back plate of the SightTracker housing.

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 device.
- 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.

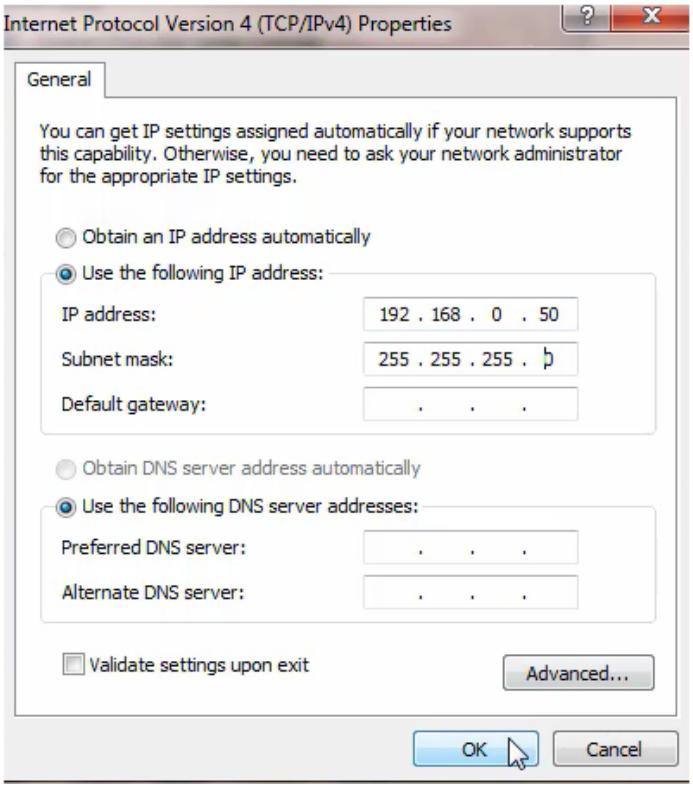

NOTES
1. POWER NOT REQUIRED IF USING POE
2. 24VAC REQUIRED FOR OPTIONAL WINDOW HEATER
3. GROUND POLE PROPERLY
4. USE DITEK DTK-PVPIPS SURGE PROTECTOR OR SIMILAR
5. USE SHIELDED CABLES FROM SURGE PROTECTOR TO CAMERA
IP PTZ
SightTracker
P/N 613-020
CAMERA POWER
TO 24 V AC/DC POWER SUPPLY (NOTE #1)
RJ45 ETHERNET TO NETWORK SWITCH
RJ45 ETHERNET TO NETWORK SWITCH
Ethernet CAT5 SH
24V Power: 18/2 SH
Dry Contact/Relay: 22/4 SH
EarthGND
RelayNC
AudioGnd
LineIN
LineOUT-
LineOUT+
RS422RX-
RS422RX+
RS422TX-
RS422TX+
Video_IN
SMB SH
USB OTG Future
Ethernet
RelayCOM
RelayNO
DRYIN-
DRYIN+
24VAC-
24VAC+
Video_OUT
24V AC or DC
For RS232 use RS422TX+ >> RS232 TX
RS422RX+ >> RS232 RX
DRYIN- >> RS232 Gnd
SIGHTTRACKER FIELD WIRE TERMINATIONS
sightlogix
TITLE
SightTracker to IP PTZ

- Once power is supplied to the device, the device's LED light blinks a sequence of red/green for about two minutes and then turn off. This indicates the device 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 device has not found a network to connect to and you will need to complete step 3.

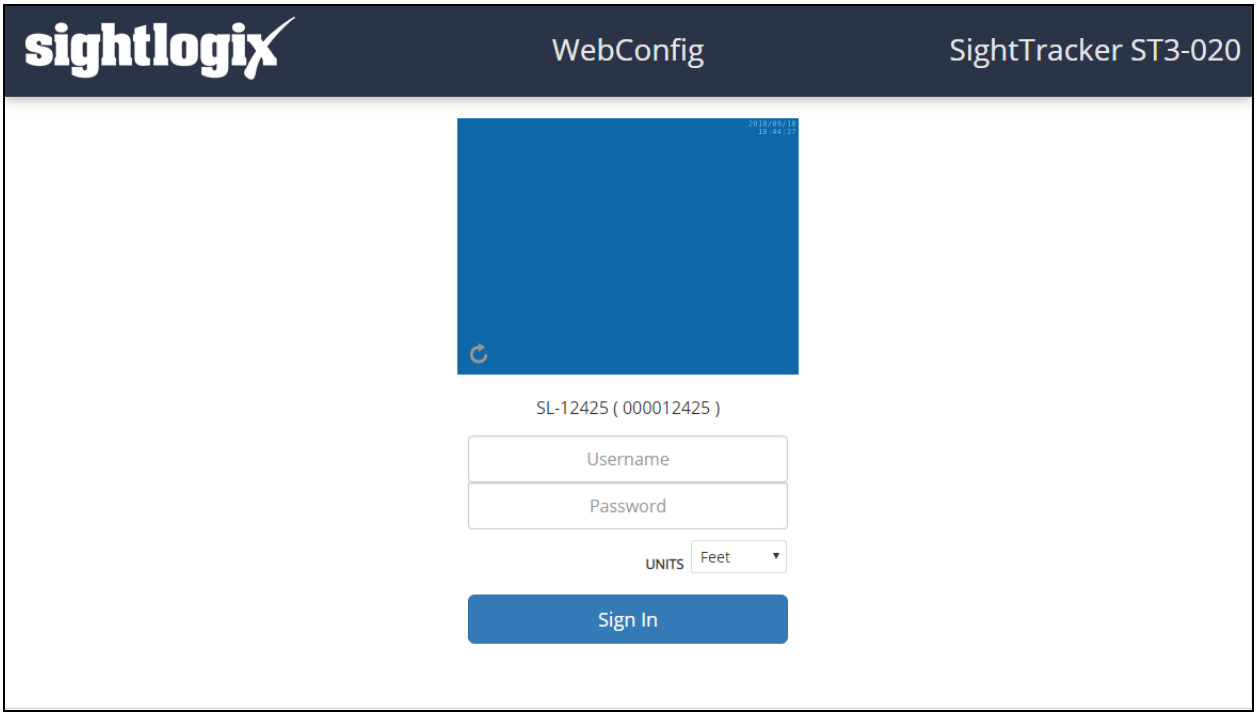
3. Assign Your PC an IP Address in Device's Default IP Range

When first powered, the device 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 device'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 device that has the default IP address.



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



- The login page shows a blue box for possible error messages.

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 *Installing the SightLogix Self-Signed Certificate* in the Troubleshooting section of this guide for instructions.

- 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.

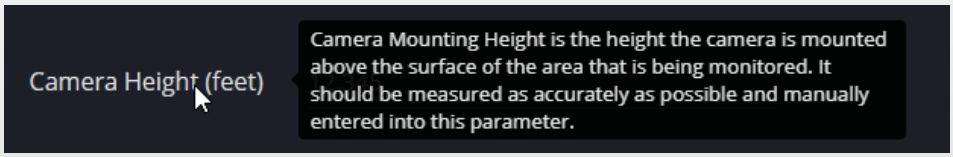
- Close the window by clicking the "X" in the upper right.
- This pop-up returns at each login until you CALIBRATE your SightTracker.

Left-side Navigation

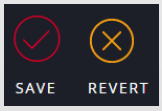
- Click the left arrow to collapse the Navigation menu for more configuration space.

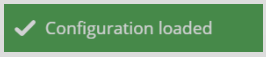
Tool Tips and Online Help

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



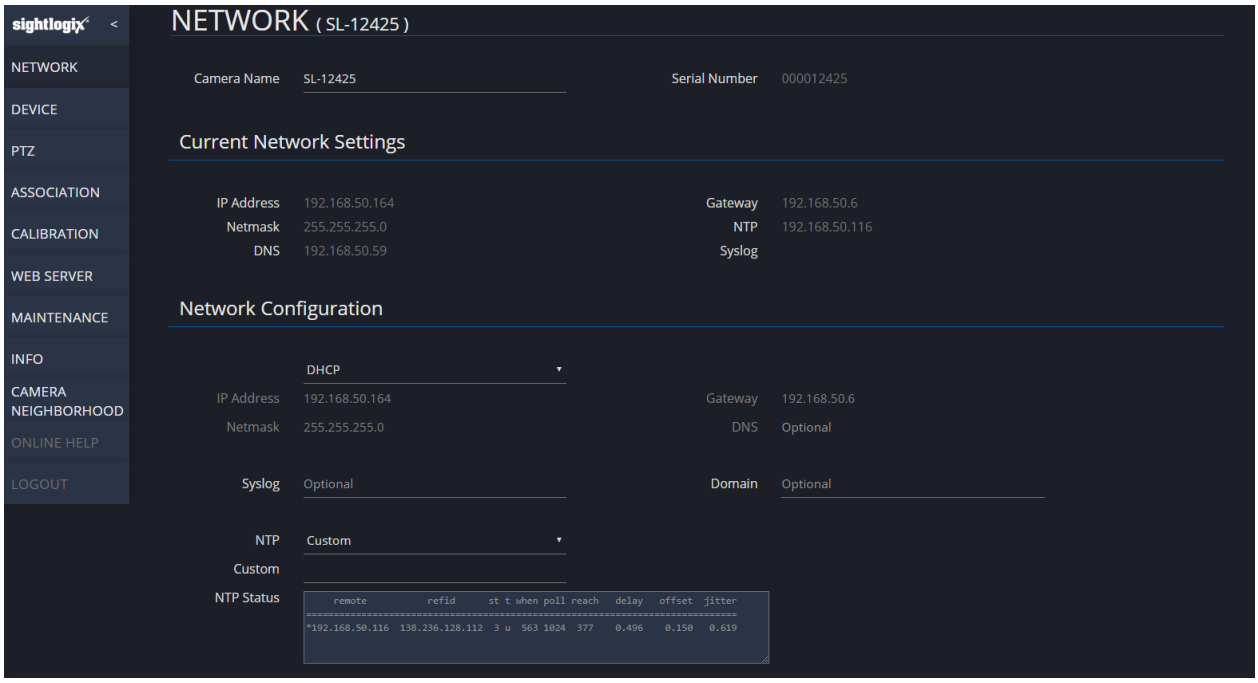
Saving Parameters



- 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 device.
- 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



Set the IP Address

Now that your workstation can communicate with the device, 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

NTP is required for SightTracker operation and for secure authentication to ONVIF PTZs. Both the SightTracker and PTZ should use the same NTP server. Changing NTP reboots the device.

Two NTP options are provided:

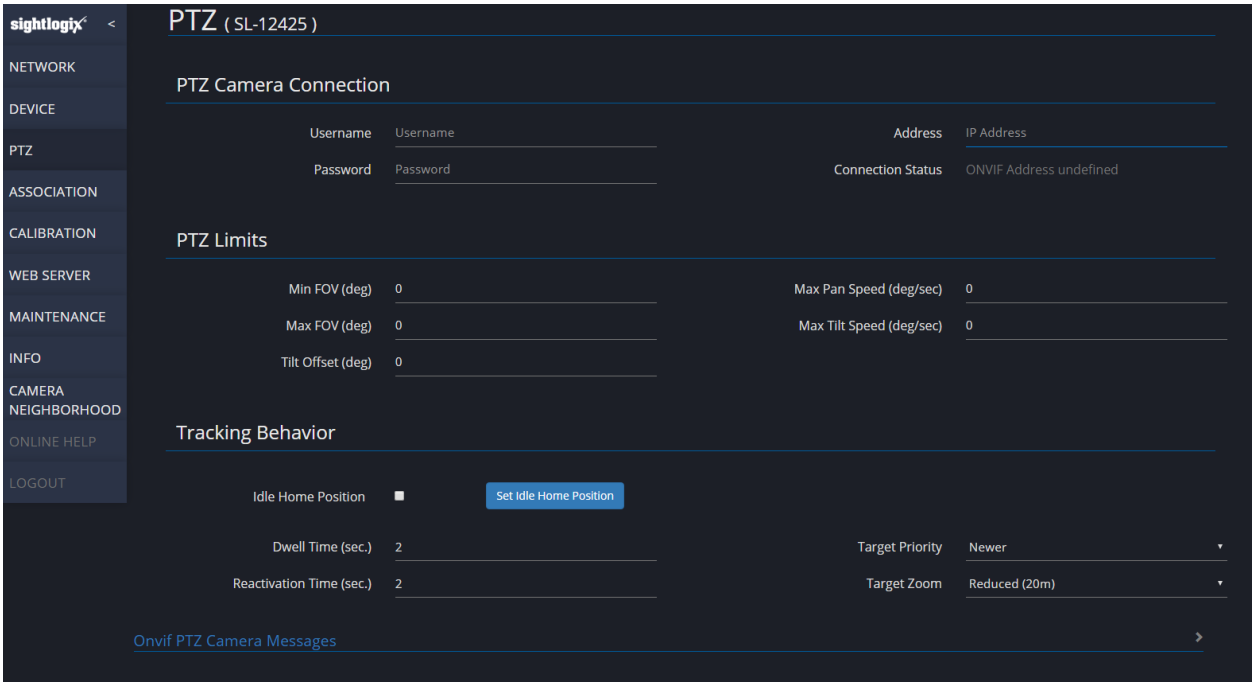
- If Internet is available, choose a preset NTP from the drop-down menu.
- If you are running a local NTP server, choose Custom and enter its dotted-decimal IP address or hostname

6. Mount Your SightTracker

Once networking settings have been made, SightTrackers can be physically mounted in a convenient location anywhere on the network. They are ruggedized and designed for indoor or outdoor use.

- SightTrackers come equipped with an interface plate suitable for attaching to a wall or pole. If attaching to a pole, SightLogix provides a Pole Mount Adapter (SL-MNT-ST3).
- For best performance, co-locate each PTZ associated with a SightTracker on the same pole as the SightSensor(s). Also mount your PTZ at 7 meters or higher.

7. Click PTZ to Add Your PTZ Camera



- Enter your PTZ camera's login credentials and it's IP address under the PTZ Camera Connection section and click Save
    - **PTZ Limits** are entered automatically for some camera types and show a range of values for camera's field of view (in degrees) and the maximum speed allowed for panning and tilting (in degrees per second). If values are not entered, refer to your camera manual and enter the information here.
    - Enter an offset if a perfectly horizontal camera is reporting a tilt (this may occur due to some factory adjustments). When a camera is looking at the horizon, the tilt offset reported in the camera tab of the site map should be 0. Enter a value equal to the offset. This will be subtracted from the offset commands sent to the camera (e.g., if the tilt offset reported for the horizon is +1.4, insert +1.4 as the offset).
- Configure Tracking Behavior

- Click the Idle Home Position button to return to the home position after 30 seconds of idle time (if desired). Click Set Idle Home Position to store the PTZ's current position as the home position (if desired).
- Dwell Time: Enter the minimum number of seconds the PTZ will remain on a given target.
- Reactivation Time: Choose the length of time after a user takes manual control before the SightTracker can follow targets.
- Set the Target Priority drop down to prioritize targets followed:
  - Change the default priority of targets to be one of the following: Newer (default), Closer (closer to the PTZ camera), Faster, Bigger, Older, Farther, Slower, or Smaller.
  - In case of multiple targets, a SightTracker will track the newest one by default. If it's currently tracking a target and a new target appears, the PTZ camera will aim at the new target. Note that if two SightTrackers are associated with the same SightSensor and are set to the same priority, they will track the same target even in the case of multiple targets.
- Select a zoom setting: Normal, to view a 12-meter scene around the target (default), Enlarged (8-meter scene), and Reduced (20-meter scene).

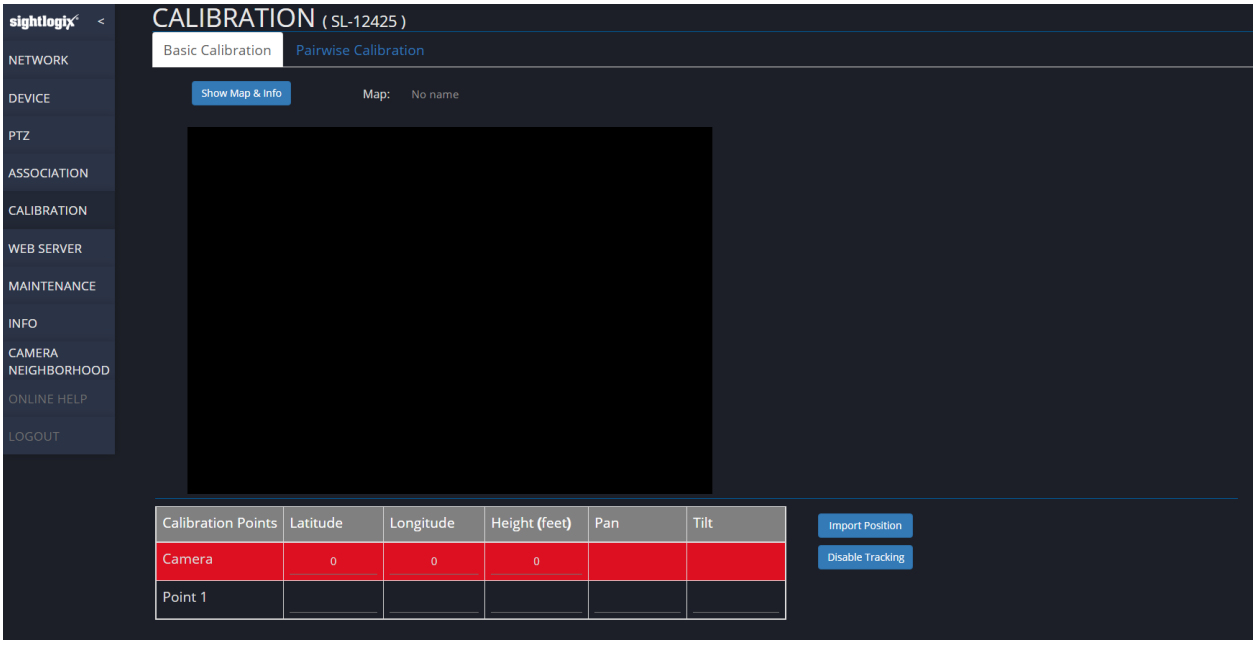
8. Click ASSOCIATION to Add SightSensors

- Select a calibrated SightSensor from the left, or control-click to select multiple cameras.
- Use the single arrow to move selected cameras or the double arrows to move all cameras from Not Associated to Associated (or from Associated to Not Associated).
- Click Save

9. Ensure your PTZ camera has been added to your VMS

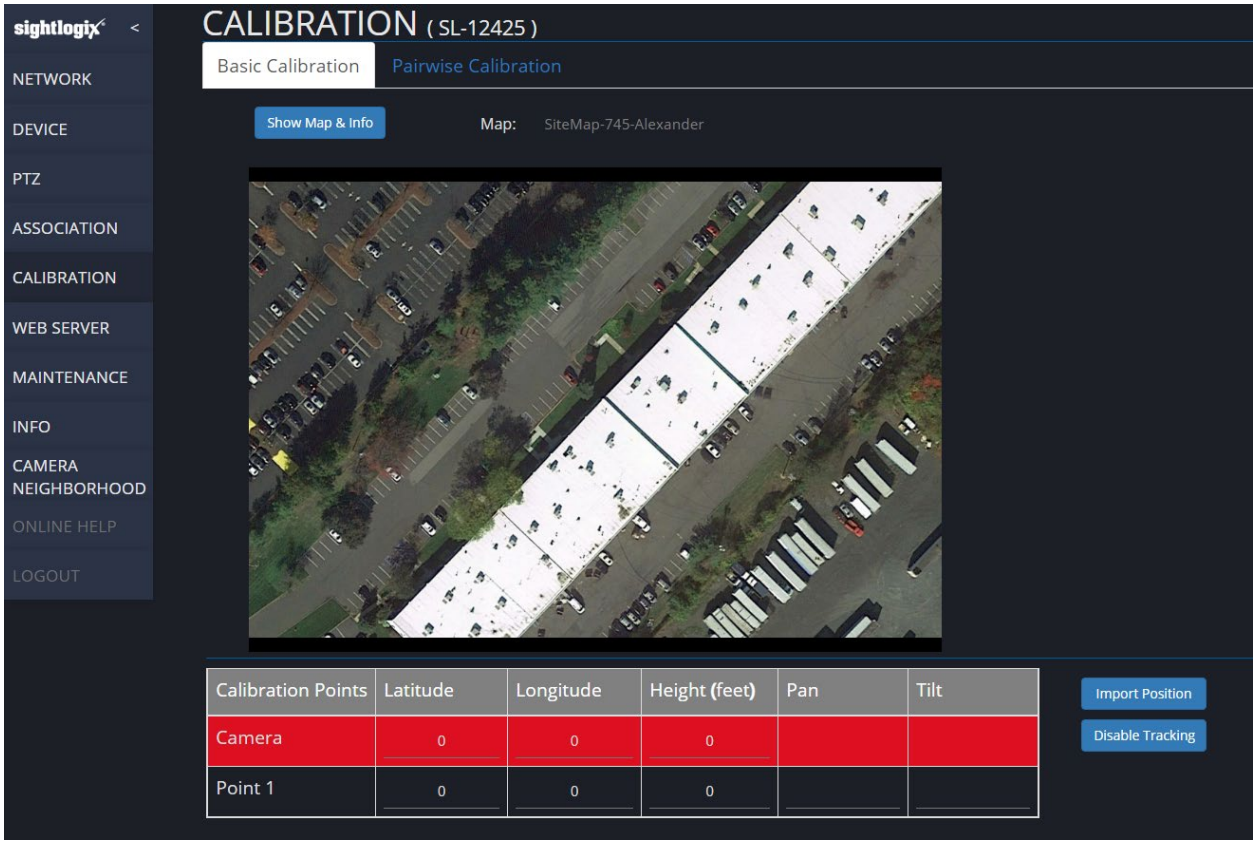
You will use your VMS system to view video and steer your PTZ as part of the Calibration process, next.

10. Click CALIBRATION to Calibrate Your SightTracker



Performing a Basic Calibration

- Ensure that the Basic Calibration tab has been selected, as shown.
- 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.
- Basic Calibration lets you associate a chosen location on a site map with the position and orientation of the PTZ.
- Click the Show Map & Info button to reveal the Map upload options.
- 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 uploaded site map is displayed, as shown. Click/drag the map to reposition; use your mouse scroll wheel to zoom in/out.



- Click Disable Tracking to prevent your PTZ from moving during your calibration process.
- Click the Camera row from the Calibration Points table to turn the row RED.
- Enter your SightSensor's height above the ground in the Height field.
- 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.
- Click the Point 1 row in the Calibration Points table to activate it and turn it BLUE.
- In the site map, double-click at the location of a landmark.
    - As with SightSensors, choose a point at ground level next to a landmark or other permanent object and always select a point that can be easily identified in both the site map and the camera view.
- Using a VMS, zoom and orient the PTZ camera so the selected landmark is at the center of the image.
- Click Import Position to load Pan/Tilt values.
- Click Save.
- The heading of the table will be colored Green after the Calibration is complete

- Click Enable Tracking when done.
- Use Test Mode to confirm that your SightSensor and SightTracker calibrations are allowing targets to be tracked by your PTZ.
    - Open a WebConfig session using the IP address of an associated SightSensor.
    - Click the CALIBRATION tab.
    - Click Test Mode button.
    - Click a location in the SightSensor's Image at right.
    - Confirm that your PTZ automatically positions on the target.
    - If needed, you can improve your SightTracker's performance by adding a Pairwise Calibration, below.

Performing a Pairwise Calibration

The pairwise calibration more precisely aligns the GPS coordinates within the view of a dome camera with the GPS coordinates used to calibrate an associated SightSensor. This is an optional procedure but is recommended to:

- Associate more than one SightSensor with your SightTracker
- Address uneven terrain
- Improve SightTracker performance

Pairwise calibration associates three chosen points in the associated SightSensor image with the position and orientation of the PTZ Camera.

- Click Pairwise Calibration.
- Click Disable Tracking (if necessary)
- Select an associated SightSensor from the row. You will repeat for each one.

Good Pairwise Calibrations are achieved by choosing widely spaced points that cover a large percentage of the SightSensor field of view.

Ideally, pick two points at the extreme ends of the path you expect targets to take (if applicable) and the third as widely spaced from the other two as possible, as shown.

- Select Point 1 in the Calibration Points window. The row turns BLUE.
- Mark a point in the camera image.
- Using a VMS, zoom and orient the PTZ camera so the selected point is at the center of the image.
- Click Import Position.
- Repeat for Point 2 and 3.
- Click Save.
- The heading of the table will be colored Green after the Calibration is complete
- Repeat this process for each associated SightSensor.
- When done, click Enable Tracking (located on the Pairwise Calibration page for convenience; serves the same function as Enable Tracking on the ASSOCIATION page).
- Use Test Mode to confirm that your SightSensor and SightTracker calibrations are allowing targets to be tracked by your PTZ.
    - Open a WebConfig session using the IP address of an associated SightSensor.
    - Click the CALIBRATION tab.
    - Click Test Mode button.
    - Click a location in the SightSensor's Image at right.

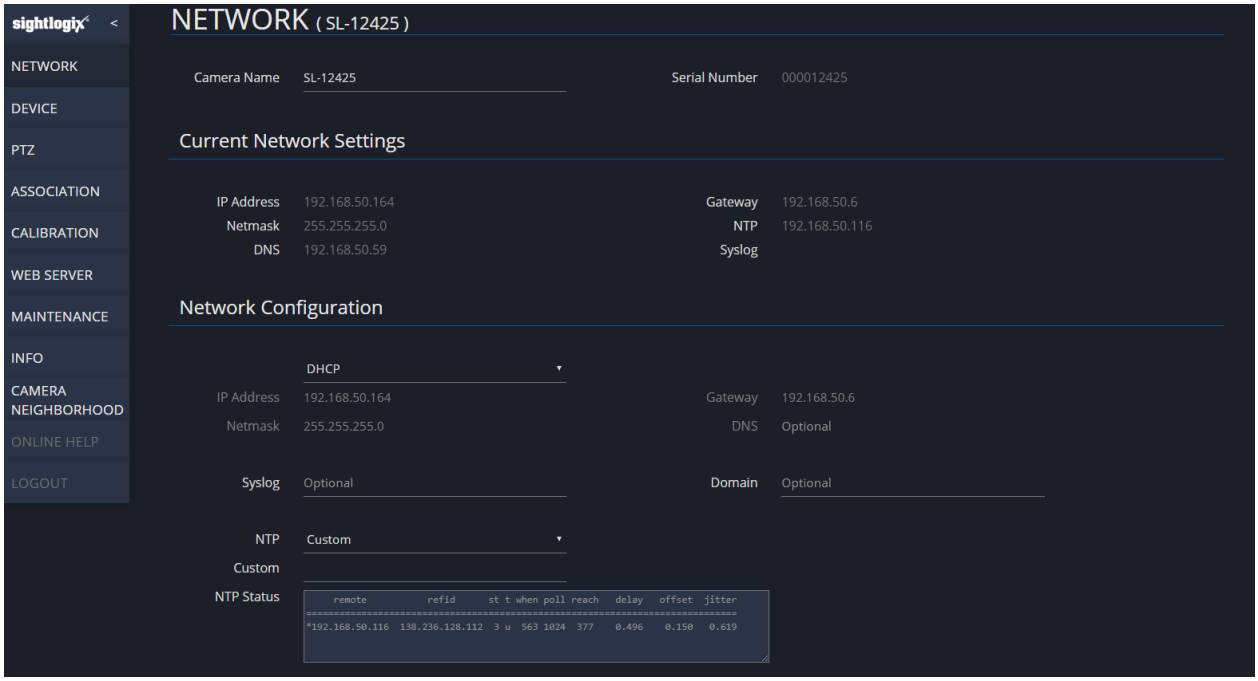
- Confirm that your PTZ automatically positions on the target.

This completes installation of the SightTracker device for the most common settings.

- Refer to the following section for a detailed overview of each WebConfig page and field option.
- Refer to the final section of this guide for troubleshooting.

WEBCONFIG REFERENCE

NETWORK PAGE PARAMETERS



Camera Name – Default enters device serial number in this field. It can be changed to a name for the device 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 device and is unique to that device.

Current Network Settings

IP Address, Gateway, Netmask, NTP, DNS and Syslog – are all parameters acquired from the network based on the device 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 device will default after 30 seconds to a Static address of 192.0.0.99. The device 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 device with accurate, synchronized, real-time clock information. While not necessary in all installations it is needed if the

device 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 fight-hand corner of the video.

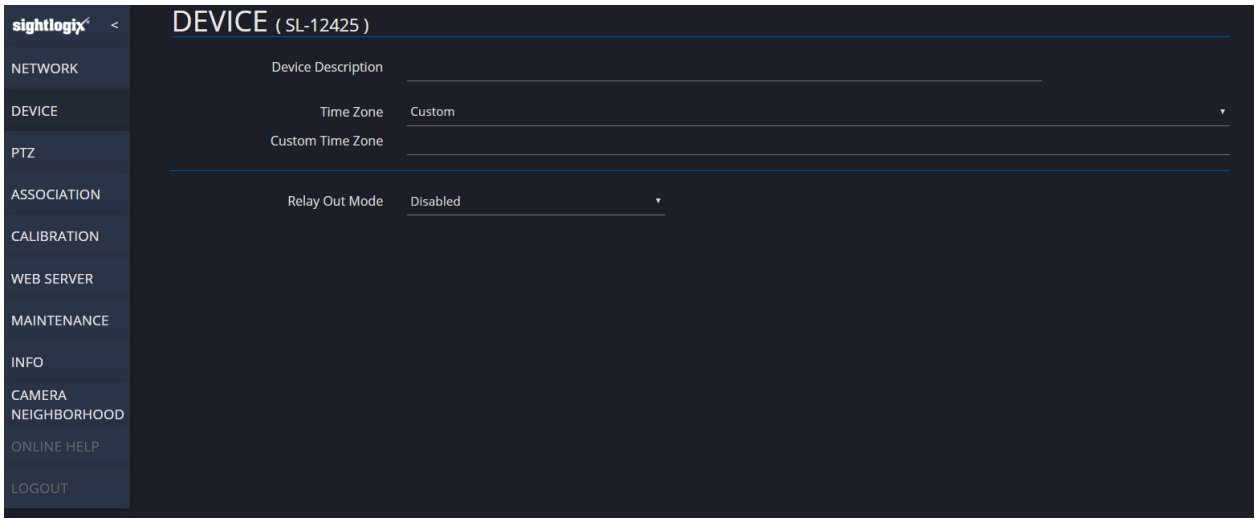
The NTP Address field defaults to Custom where you can enter an NTP site address as a dotted-decimal IP address or hostname, or an address can be selected from the drop-down menu of the three sites listed where NTP service may be available (pool.ntp.org, time.nist.gov, or time.google.com) through Internet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

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 device to be accessed, which can be helpful for troubleshooting. Changing this parameter will cause a reboot of the device.

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



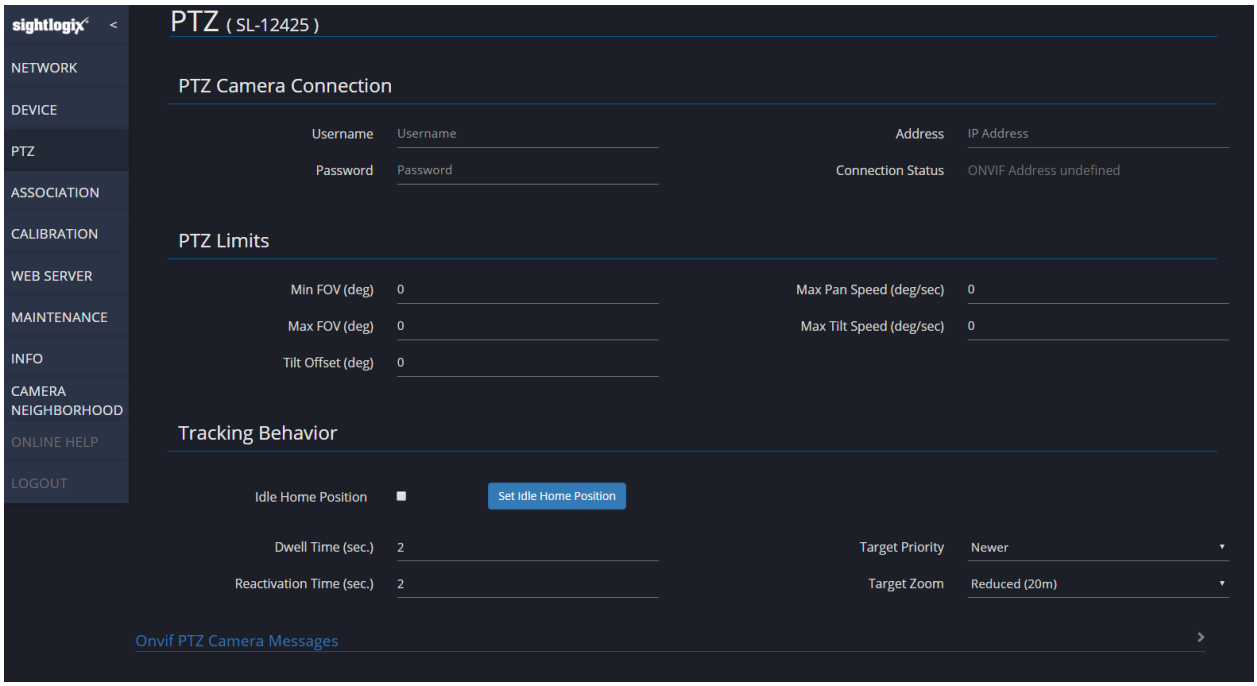
Device Description – is a description of specifics about this device which appears on the INFO page under Description. It can contain up to 1024 characters.

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.

Relay Out Mode – defines the event that will activate the relay output contacts on the device's interface terminals. The options are "Disable" or no action, "Alarm" activated when a detection

alarm is generated, or “Day/Night” activated when device automatically switches between day and night modes.

PTZ PAGE PARAMETERS



PTZ Camera Connection fields are used for your PTZ camera’s login credentials and setting its IP address. **Connection Status** shows the status of the PTZ.

PTZ Limits are entered automatically for some camera types and show a range of values for camera’s field of view (in degrees) and the maximum speed allowed for panning and tilting (in degrees per second). If values are not entered, refer to your camera manual and enter the information here.

Tilt Offset - Enter an offset if a perfectly horizontal camera is reporting a tilt (this may occur due to some factory adjustments). When a camera is looking at the horizon, the tilt offset reported in the camera tab of the site map should be 0. Enter a value equal to the offset. This will be subtracted from the offset commands sent to the camera (e.g., if the tilt offset reported for the horizon is +1.4, insert +1.4 as the offset).

Idle Home Position returns the PTZ to the home position after 30 seconds of idle time.

Set Idle Home Position stores the PTZ’s current position as the home position.

Dwell Time is the minimum number of seconds the PTZ will remain on a given target.

Reactivation Time is the length of time after a user takes manual control before the SightTracker can follow targets.

Target Priority drop down prioritizes targets: Newer (default), Closer (closer to the PTZ camera), Faster, Bigger, Older, Farther, Slower, or Smaller.

In case of multiple targets, a SightTracker will track the newest one by default. If it's currently tracking a target and a new target appears, the PTZ camera will aim at the new target. Note that if two SightTrackers are associated with the same SightSensor and are set to the same priority, they will track the same target even in the case of multiple targets.

Target Zoom can be set to normal, to view a 12-meter scene around the target (default), Enlarged (8-meter scene), and Reduced (20-meter scene).

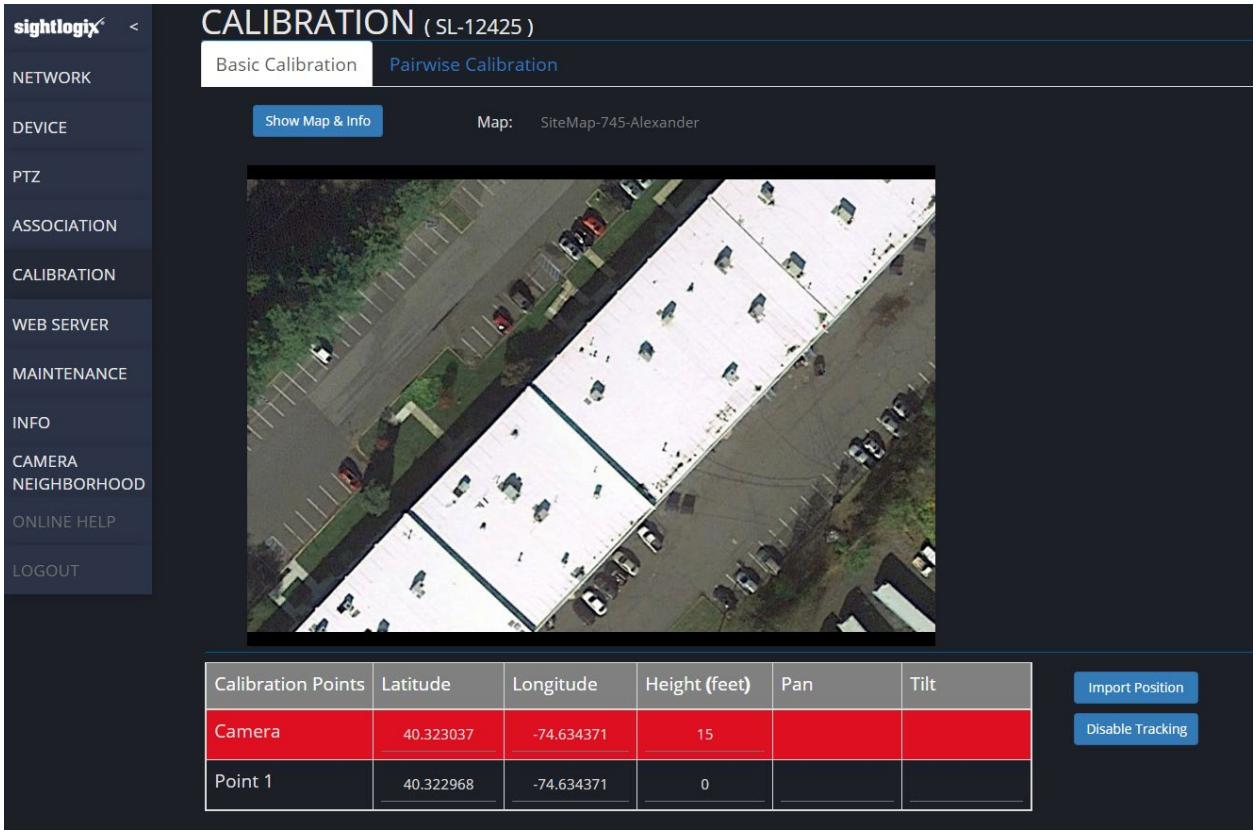
ONVIF PTZ Camera Messages displays the results of the most recent communications with the PTZ Camera.

ASSOCIATION PAGE PARAMETERS

Associating a SightTracker with a SightSensor enables GPS target data to be relayed to the SightTracker so it can properly aim the PTZ camera. Each SightTracker can be associated with up to 20 SightSensors, allowing PTZ cameras to provide close-up views of targets detected by all neighboring devices. SightSensors can provide target data for up to 20 SightTrackers, allowing multiple PTZs to provide coverage of an area.

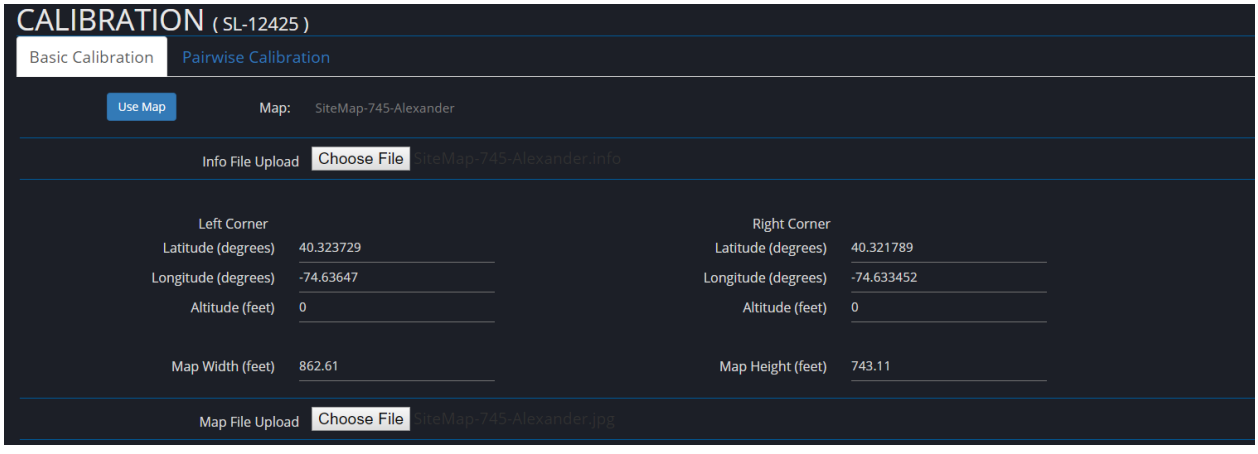
Not Associated shows the list of configured SightSensors. Control-clicking and use the arrows to move between Not Associated and **Associated** columns.

CALIBRATION PAGE – BASIC CALIBRATION PARAMETERS



Basic Calibration - Used to associate a chosen calibration location on a site map with the position and orientation of the PTZ Camera.

Show Map & Info allows a site map jpeg to be loaded along with associated GPS information. Clicking this button shows the following options:



Map shows the name of the map (from the name of the info file)

Info File Upload is used to upload a text file defining GPS coordinates of site map jpeg. The name of this file is used to name the site. The details of the file are used to complete the rest of the fields

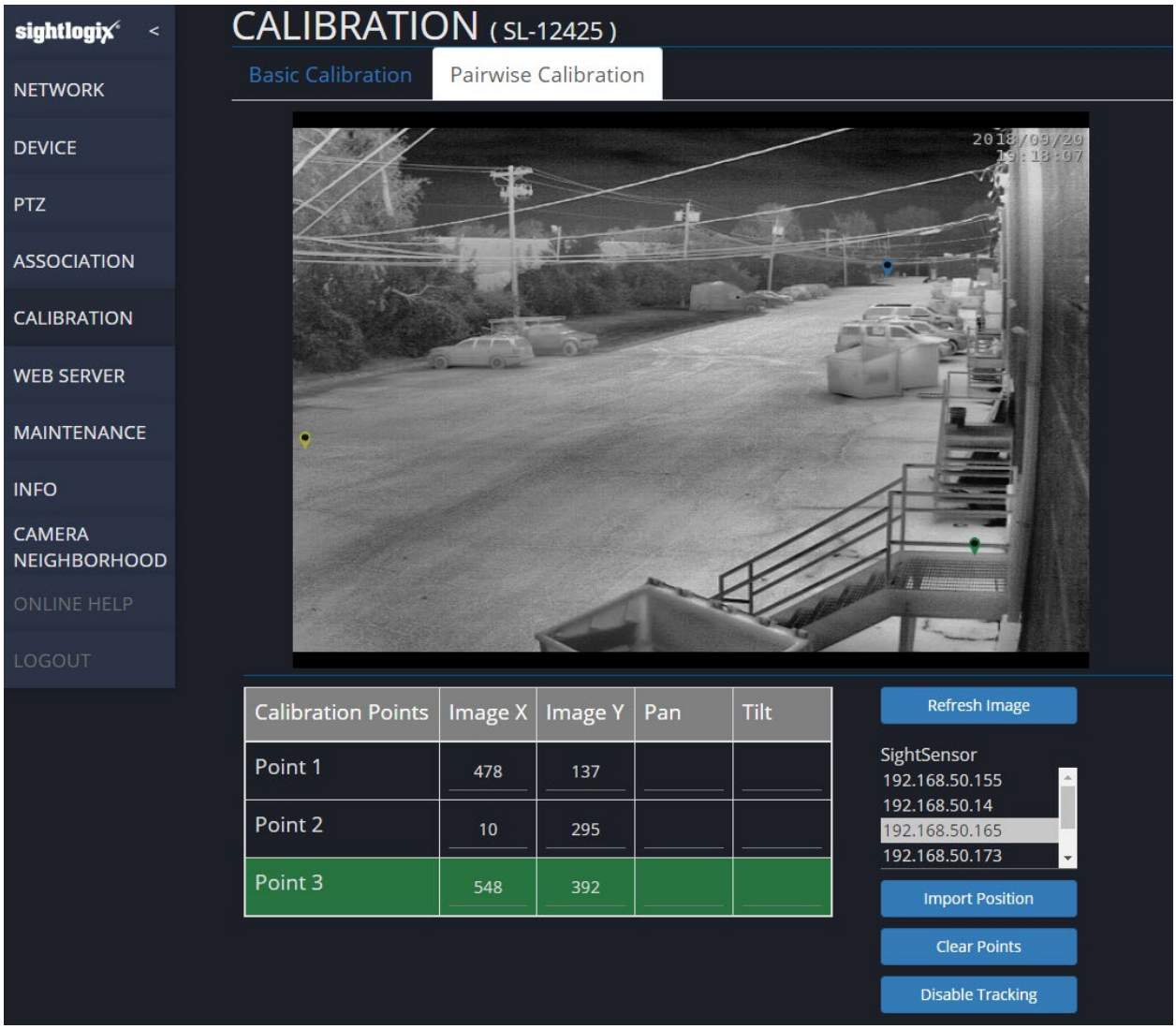
Use Map stores the site map and hides the details.

Calibration Points table is used to select a row before placing pin on map to set GPS position.

Import Position button loads the current Pan/Tilt values from the PTZ Camera.

Disable Tracking button is used to Disable/Enable SightTracker tracking. This is useful when calibrating to prevent the PTZ from moving.

CALIBRATION Page – Pairwise Calibration



Pairwise Calibration associates three chosen Calibration points in the associated SightSensor image with the position and orientation of the PTZ Camera.

Calibration Points table is used to select a row before placing pin on map to set GPS position of the SightTracker or three calibration points.

Refresh Image button updates the background image by taking a snapshot from the camera's live scene.

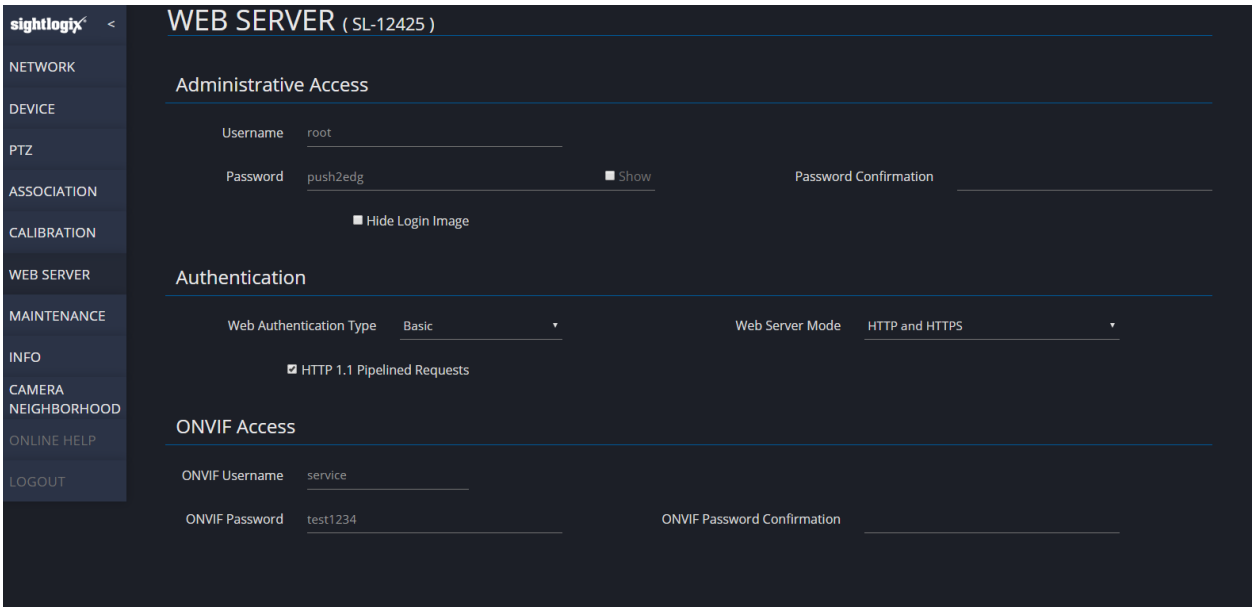
SightSensor table is used to select an associated SightTracker to complete the calibration.

Import Position button loads the current Pan/Tilt values from the PTZ Camera.

Clear Points button clears the pairwise points for the selected camera.

Disable Tracking button is used to Disable/Enable SightTracker tracking. This is useful when calibrating to prevent the PTZ from moving.

WEB SERVER PAGE PARAMETERS



Administrative Access

Username – enter a unique user name to sign in to this device (default is "root")

Password – enter a unique password to sign into this device (default is "push2edg")

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

Hide Login Image – Check this box if you want to hide the snapshot showing the device's debug information from the login page.

Authentication (Device 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 *Installing the SightLogix Self-Signed Certificate* in the Troubleshooting section of this guide for instructions.

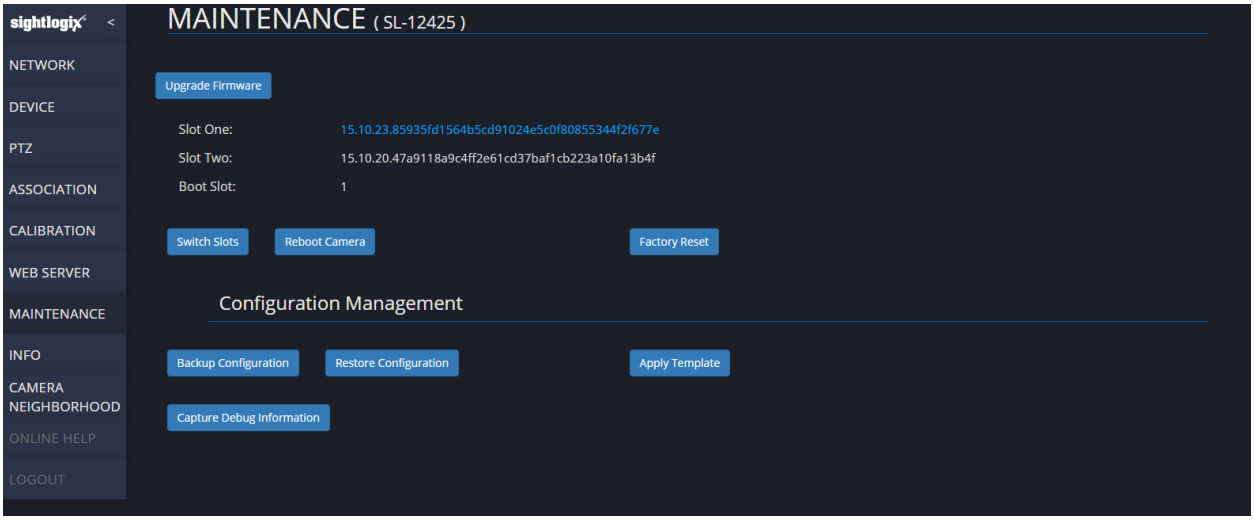
ONVIF Access

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 device to the newly loaded software (which will then be the blue text). To upgrade the other slot, repeat the process again.

*(**Note:** the device 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 device to reboot and run the firmware from the other slot.

Reboot Camera Box – when selected will cause the device 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 device 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.

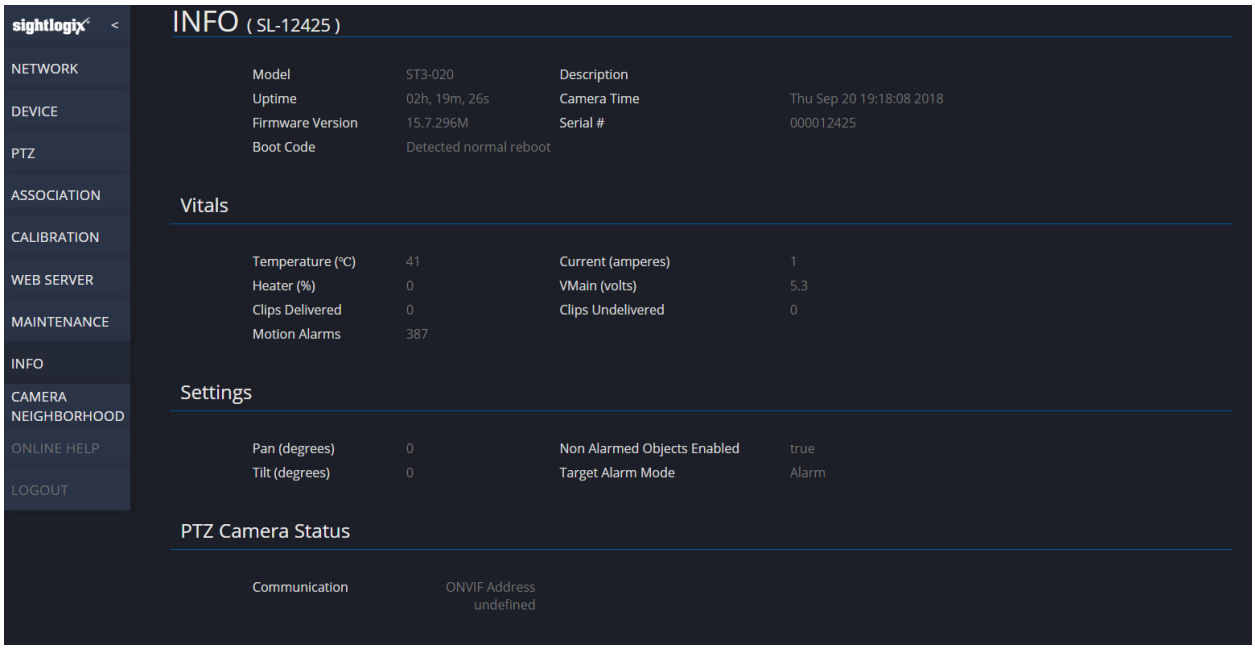
Restore Configuration Box – Clicking on this box will bring up a window to select the configuration file to be loaded to the device. The serial number in the backup file must match the device you are restoring to. If you are restoring a backup file to a different device, i.e. a replacement device with 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 device 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 device. This aids in setting up multiple devices that would want to use the same basic configuration. A template is made by setting up one device 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 device specific data like name, IP configuration, device 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 device and as such there is no input of information on this page. The information is divided into three areas: INFO – general device information, VITALS – key operating information, and SETTINGS – status of device setting.



Model – lists the model number of the camera

Description – lists the **Camera Description** entry from the CAMERA 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 device. (This information is only valid if NTP is provided)

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

Serial # - list the serial number of this device

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 device (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

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

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

Clips Delivered - the total number of video clips delivered to the Motion On Event Server defined on the Camera 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 Camera page.

SETTINGS

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

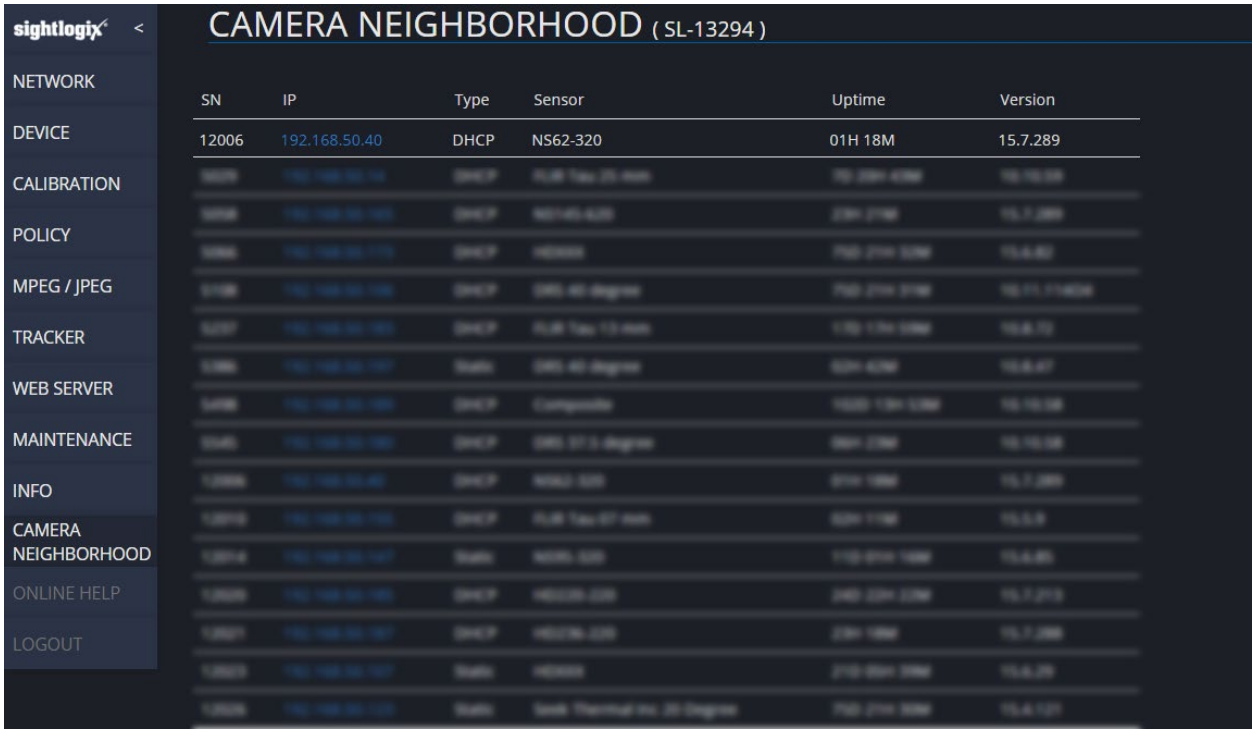
Non Alarmed Objects Enabled – indicates the status of check box on TRACKER page to report Nonalarmed Objects (true = box checked)

Tilt (degrees) – lists the degrees of forward device 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

PTZ Camera Status – shows the status of the ONVIF PTZ Camera controlled by the SightTracker.

CAMERA NEIGHBORHOOD PAGE PARAMETERS



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

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.

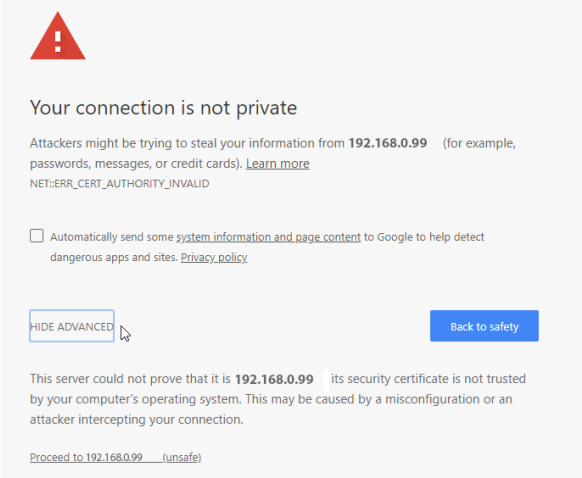
LOGOUT

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

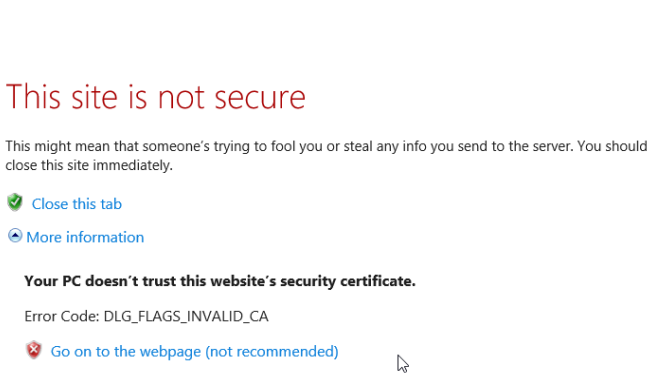
TROUBLESHOOTING

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



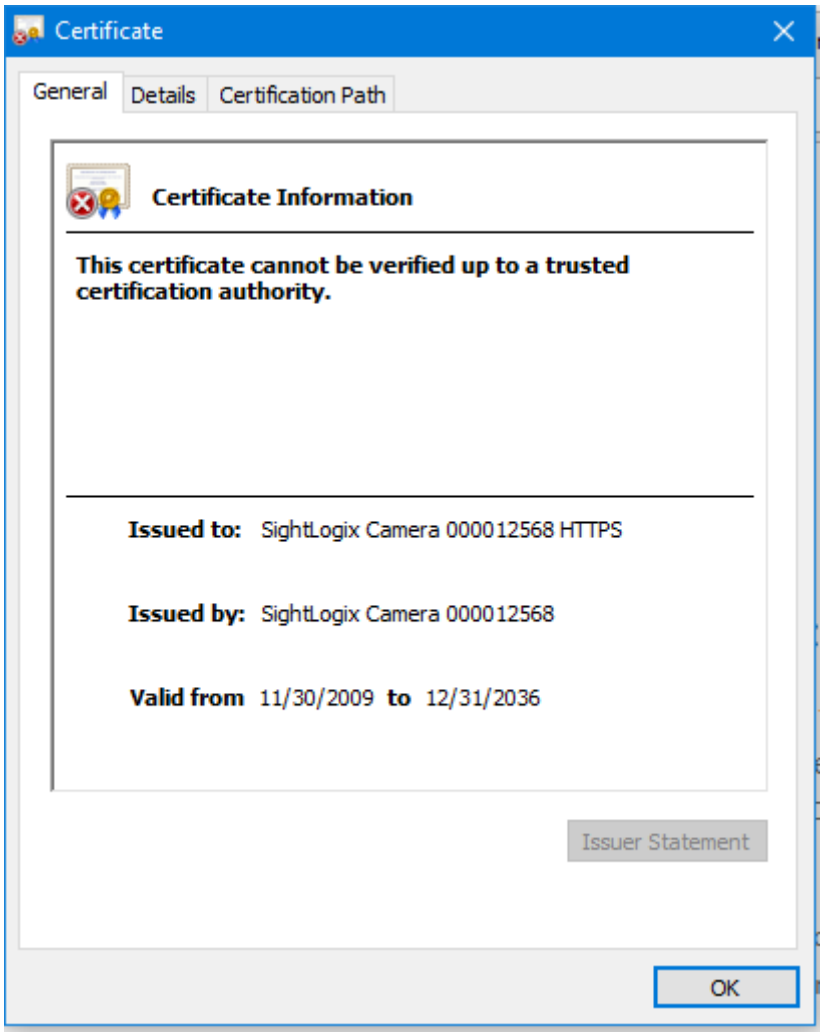
Security Warning – Internet Explorer

Note

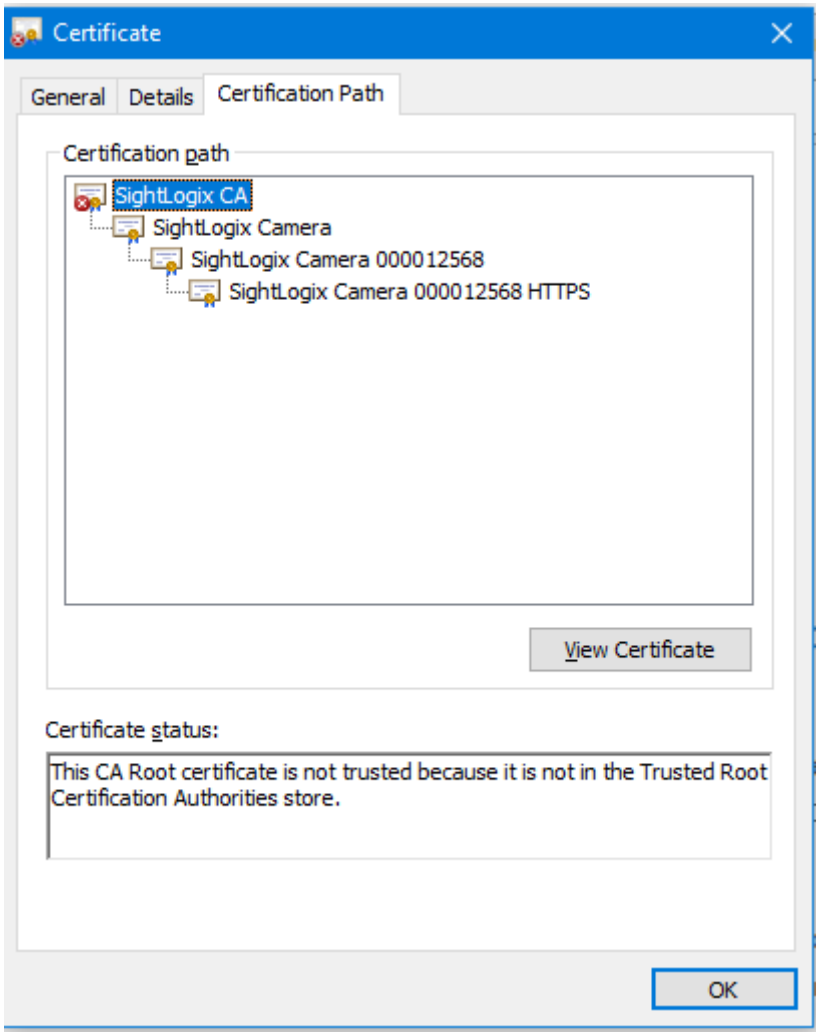
Microsoft Edge does not allow you to add a self-signed certificate. If you are using Edge to access WebConfig and receive a warning like the one above, click the three-dot menu on the upper right of the browser, select "Open with Internet Explorer" and follow the instructions below.

- 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"

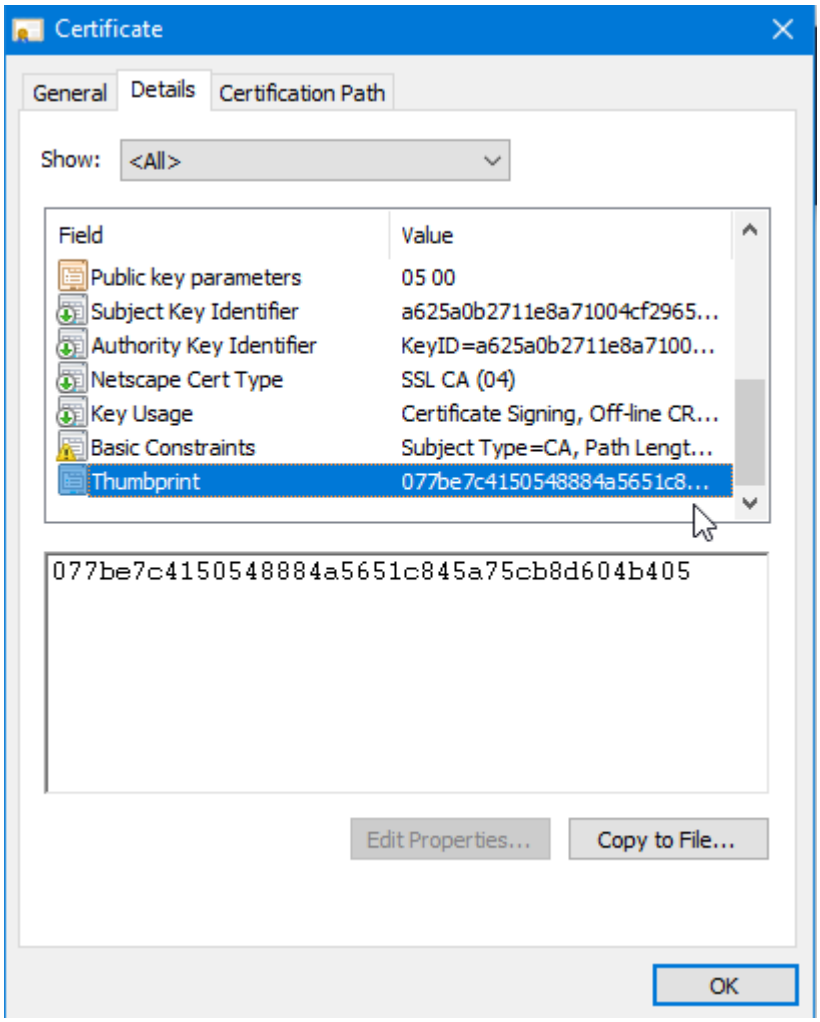
The Certificate window opens.


Certificate
General
Details
Certification Path
Certificate Information
This certificate cannot be verified up to a trusted certification authority.
Issued to: SightLogix Camera 000012568 HTTPS
Issued by: SightLogix Camera 000012568
Valid from 11/30/2009 to 12/31/2036
Issuer Statement
OK

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



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

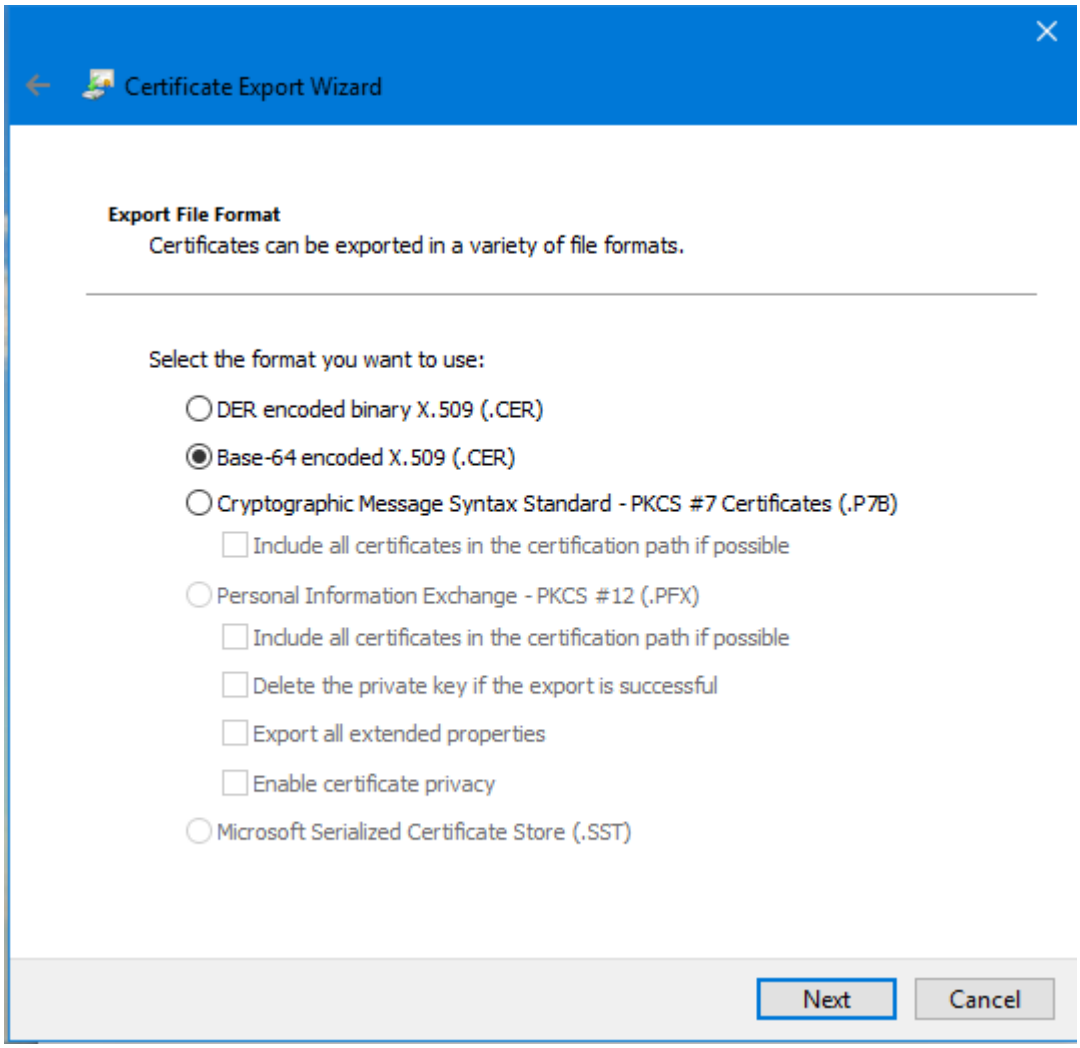


- Confirm that the thumbprint matches the SightLogix thumbprint:

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”

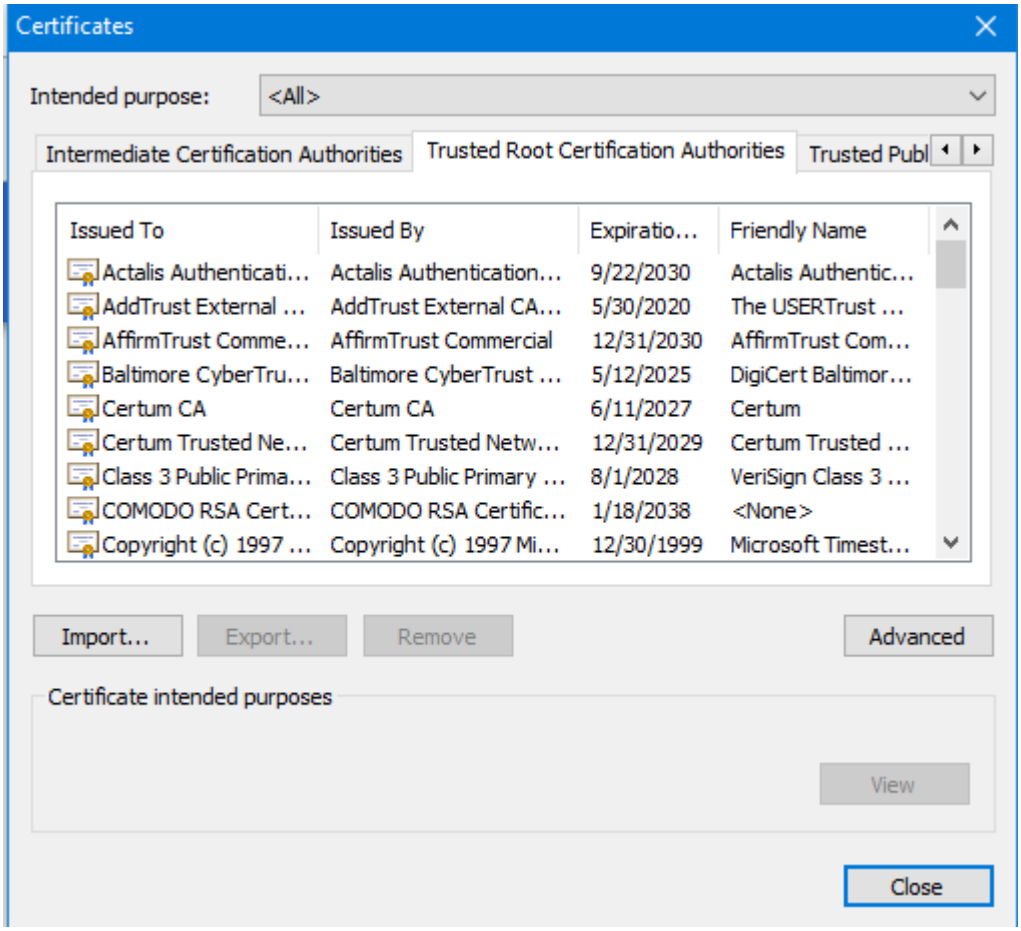


- Name the file (for example, SightLogix CA) and save to a location on our computer, such as your Downloads directory.

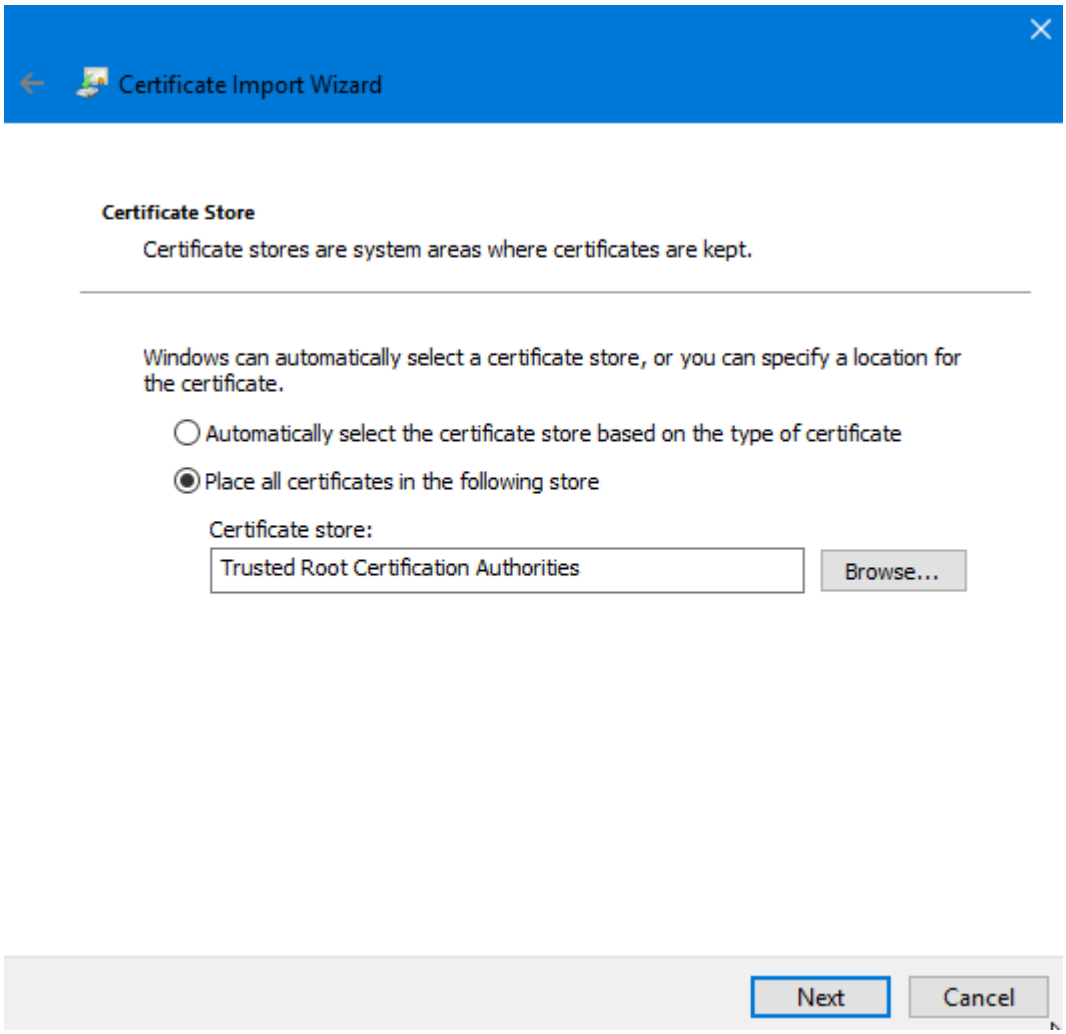
- Next, import the certificate into your computer's Trusted Root Certificates.
    - In Chrome, right-click *Not Secure* in the upper left of the browser and choose *Site Settings*, then scroll to Manage HTTPS/SSL certificates and settings
    - In Internet Explorer, click "Settings" ->"Internet Options"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

The Certificates window opens

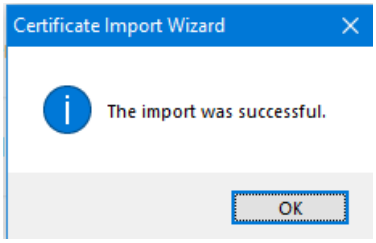
- Click the Trusted Root Certification Authorities tab



- 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.

DECODING THE FLASHING LEDS

Normal LED Progression

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

Solid Red

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

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

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

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

Device is attempting to find a network - approximately 4 seconds

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

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

Solid Green

Device 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 device has detected reset jumper shorting relay to Dry Input pins - 20 seconds

IP

Interpreting the Flashing IP

If the device successfully boots, after showing solid green for three seconds, the device 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 device reports 148
- 148 decimal 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 device does not show solid green for 3 seconds, the device 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 device. When it receives power, the LED will show solid red

Solid Red

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

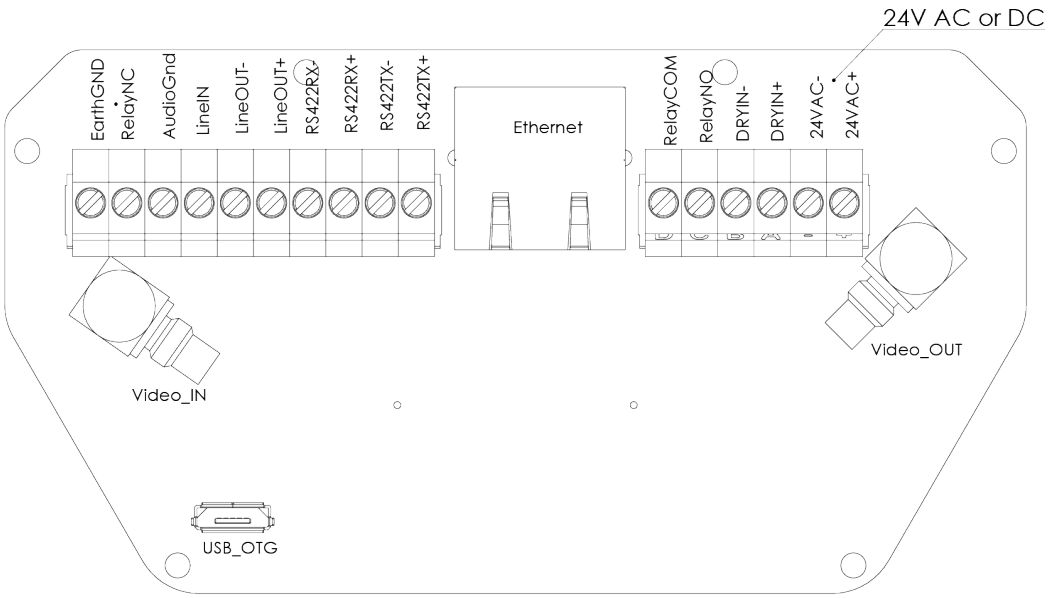
Alternating Red/Green

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

Flashing Green

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

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



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 such as analog PTZ
RS422RX+	Connect to RS422TX+ or RS232RX signal from external such as analog PTZ (DryIN- is ground for RS232)
RS422TX–	Connect to RS422RX- signal to external such as analog PTZ
RS422TX+	Connect to RS422RX+ or RS232TX signal to external such as analog PTZ (DryIN- is ground for RS232)
USB	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