HA−6400
Côr™ Home Automation Programming Camera

Technical Supplement

PROGRAMMING CAMERA

Côr supports selected IP cameras. Contact your supplier for the correct model(s).

Installation Steps using the Homeowner's Wi−Fi Router (Recommended)

When first installing the IP camera to the Côr Home Automation panel, you will need to connect the IP camera via an Ethernet connection from the homeowner's Wi−Fi router at the beginning. Once you have scanned the IP camera to the Côr Home Automation, the IP camera can be placed anywhere in the home.

Before you proceed, there are a couple of things to keep in mind.

1. You will need access to the homeowner's Wi−Fi network to complete the installation process and should let the homeowner enter their Wi−Fi password as needed.
2. These steps assume that the Côr panel has already been setup on the network and accessible on the Côr Smart Home app.
3. The homeowner is using a compatible 802.11N Router. We recommend that you have a TP−Link Wireless N Router 907−012040−1−R (SYSTXXXGWR01) on hand in the event you need to connect the Ethernet from the homeowner's current router to this router.

INSTALLER TIP

As more connected devices are added in a home, there may be situations where the homeowner's router may become "congested" with all the network traffic. This may result in a longer than expected time for the Côr panel to scan or recognize the camera's IP address. It may be good practice to power cycle the homeowner's router, if possible, to clean up any latent IP address.

Step 1

Power up the camera using the transformer power supply included in the camera packaging. Note that the camera may take 1−2 minutes to boot up once it receives power.

Step 2

Connect an Ethernet cable from the homeowner's Wi−Fi Router to the Ethernet RJ45 PoE port on the camera.

Step 3

Go to the Côr panel and obtain the IP address of the panel by tapping on **Menu > 8 >** Installer 4−digit PIN then **6**.

1. MENU 8
2. INSTALLER CODE ENTER
3. 6
4. MENU MENU

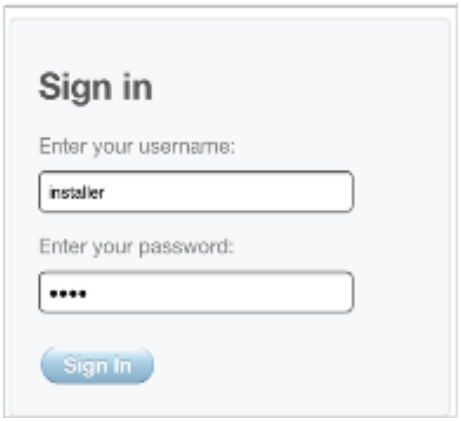
NOTE: Write down the camera IP address for reference in connecting the camera using the Wi−Fi.

Step 4

Using your smartphone, tablet device, or laptop computer, select the homeowner's Wi−Fi network in your Wi−Fi settings. Have the homeowner type the password for their Wi−Fi network that you selected.

Step 5

Launch your Web Browser and type in the panel IP address field to sign in as the installer.

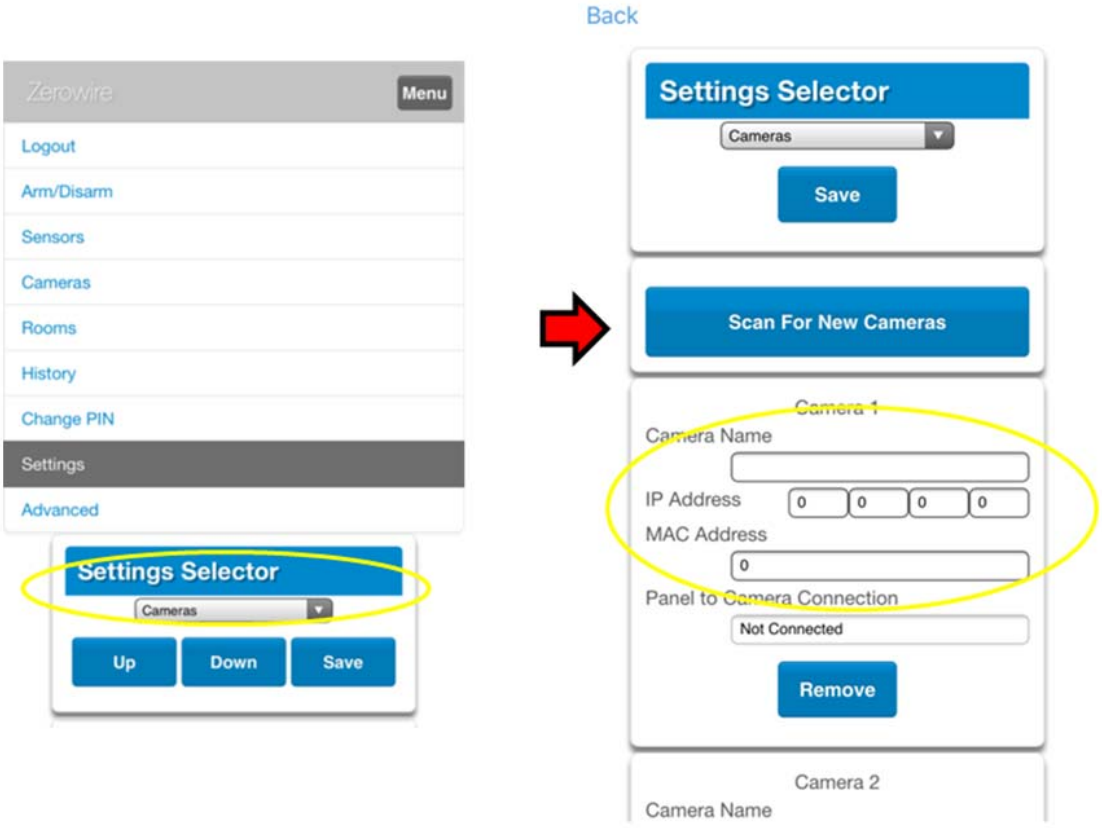


Step 6

Once logged on the Côr Web Server, select **Cameras** from the drop down list in the **Settings** menu.

In the camera section, click on **Scan For New Camera**. Once the IP Address and MAC Address are automatically populated in the respective fields, assign a name to the camera in the **Camera Name** field.

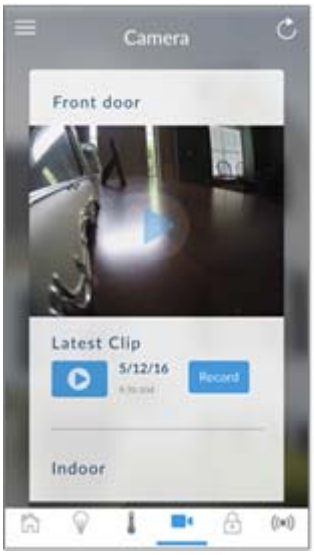
Write down the camera IP address for reference in connecting the camera using Wi–Fi.



Press **Save** after you have entered all the information.

Step 7

Verify the camera is connected to the Côr Home Automation system by going to the Homeowner Côr Smart Home app and pressing the camera icon at the bottom of the menu bar to access the Wi–Fi cameras. Pressing the Play icon in the center picture of the video will allow you to view live video streams from the camera.



The camera is now connected to the network via Ethernet!

Additional Steps – IP Camera Connection via Wi–Fi and not Ethernet

These additional steps will walk you through the installation of the IP Camera in the event the homeowner wants to place the camera in a location that will not allow the Ethernet cable to reach.

Before you proceed, there are a couple of things to keep in mind.

1. You will need access to the homeowner's Wi–Fi network to complete the installation process and should let the homeowner enter their Wi–Fi password as needed.
2. Depending on the location of IP Camera, you may need to install a Wi–Fi repeater/extender (sold separately) to improve the Wi–Fi signal between the camera and router.
3. These additional steps assume the camera is still connected to the panel using the router Ethernet cable based on the previous steps.

INSTALLER TIP

As more connected devices are added in a home, there may be situations where the homeowner's router may become "congested" with all the network traffic. This may result in a longer than expected time for the Côr panel to scan or recognize the camera's IP address. It may be good practice to power cycle the homeowner's router, if possible, to clean up any latent IP address.

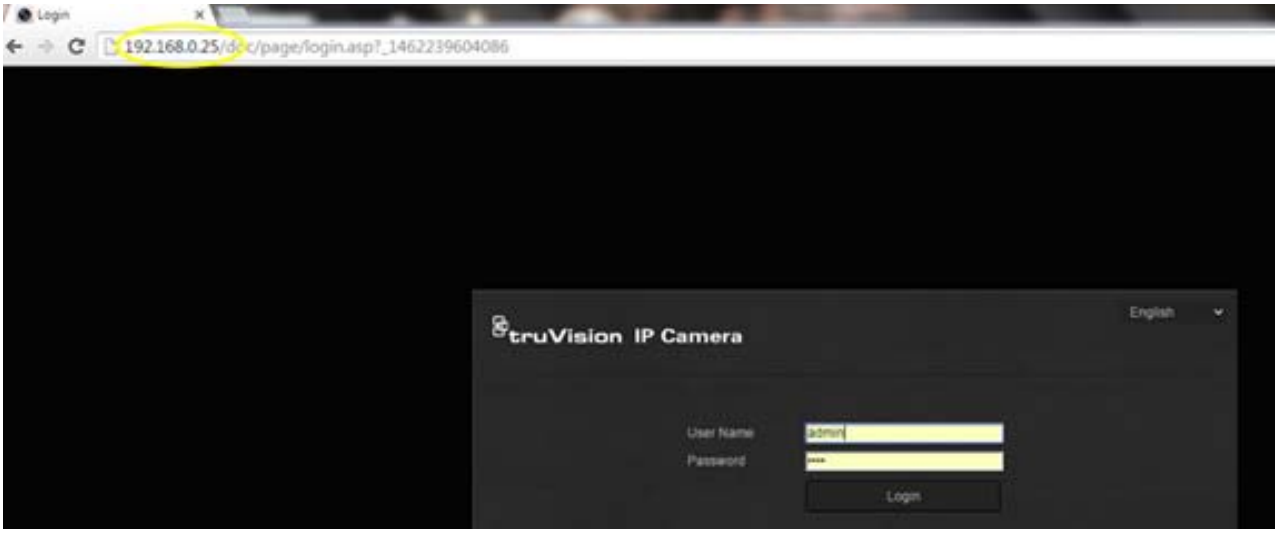
Step 8

Using your smartphone, tablet device, or laptop computer, select the homeowner's Wi–Fi network in your Wi–Fi settings.

NOTE: Ask the homeowner to enter their password if needed.

Step 9

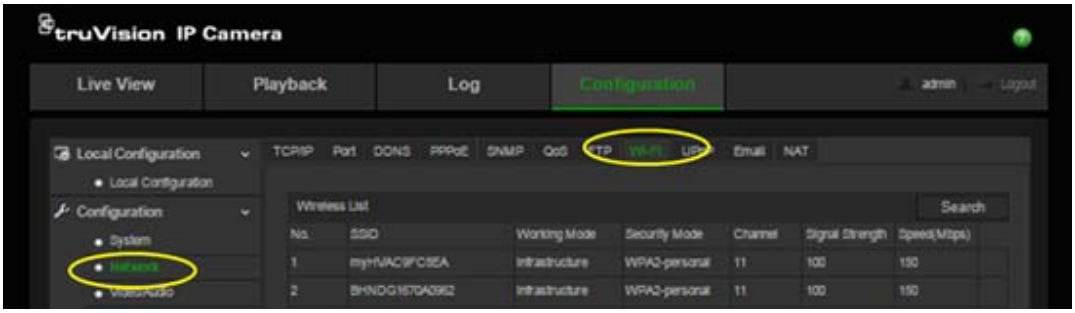
Launch your Web Browser and type the *IPv4 Address* of the camera from step 6 in the address field and hit **Enter**.



Login into the truVision IP Camera web browser using the following credentials:
User Name: **admin** (Case Sensitive)
Password: **1234**

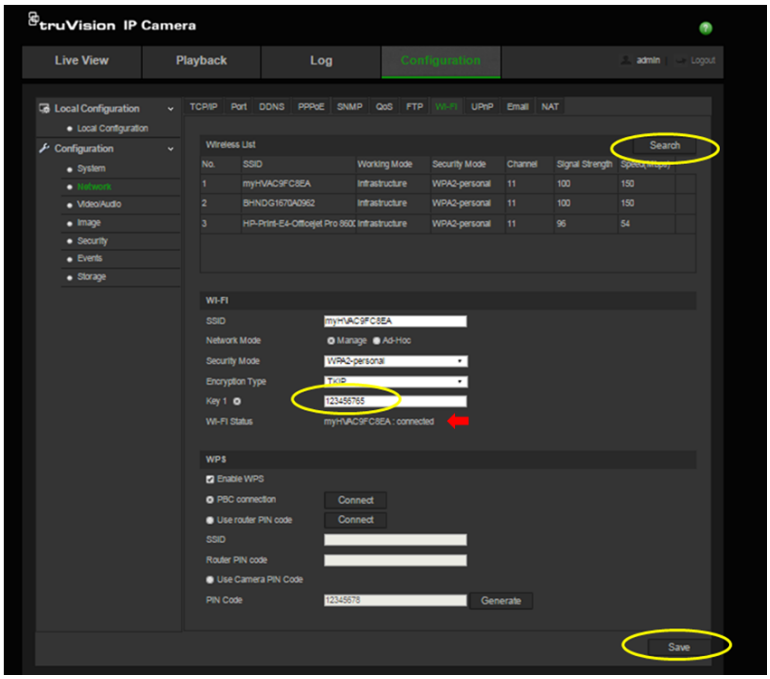
Step 10

From the *Configuration* menu folders listed to the left of the screen, select **Network**. Then select the **Wi–Fi** tab in the *Network* folder.



Step 11

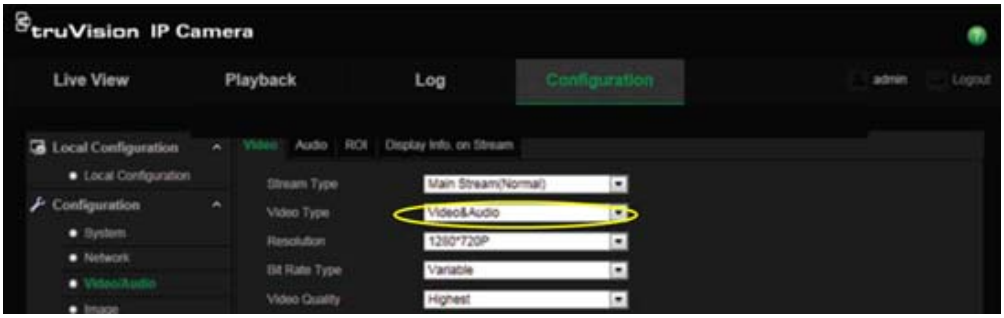
Locate and click the name of the homeowner Wi–Fi network from the *Wireless List*.
Have the homeowner type the password for their Wi–Fi network that you selected in the **Key 1** field box.
Press the **Save** button on the bottom right of the screen after you enter the Wi–Fi password.



NOTE: Confirm **Wi–Fi** Status shows "connected" after you clicked **Save**.

Step 12 (optional)

By default, the audio is turned off because many states have laws around audio recording. While still logged into the Camera IP in TruVision, change the audio setting under **Configuration > Video/Audio**. Under the *Video Type* drop down menu, select **Video&Audio**. Click **Save**.



Step 13

Disconnect the Ethernet cable to the camera and place the camera in the desired location.

Verify the camera is connected to the Côr Home Automation system by going to the Homeowner Côr Smart Home app and pressing the camera icon  at the bottom of the menu bar to access the Wi–Fi cameras.

NOTE: The camera may need to be powered cycle if the app does not show video.

In the event the app does not recognize the camera, scan the camera again per Step 6 or manually enter the IP and MAC address of the camera.

Installation Steps if the Homeowner does not have a Wi–Fi Router

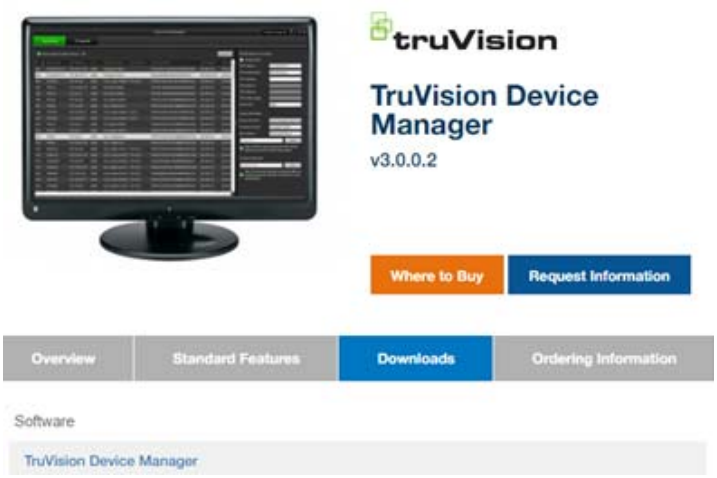
Use the installation steps below to add supported IP camera to the Côr Home Automation system when the homeowner does not have an available Wi–Fi router. **Please note that you will need to have your own router (does not need to have a Network connection).** Once the camera has been connected to the same network as the Côr panel, proceed with adding the camera to the Côr panel in Step 9.

Also reference Camera Setup Instructions in Section 8.

Step 1

If you do not have truVision Device Manager, you will need to have the configuration program* installed on your laptop computer before you can begin. Included in the camera packaging is a small CD that you can use to install the program on your laptop computer.

The latest version software program can also be located at http://www.interlogix.com/video/product/truvision–device–manager in the ***Software*** section under the ***Downloads*** tab.



To begin installing the program, launch the Application file* and follow the steps in the Setup Wizard. Make sure to also install the WinPCap software that is part of the installation setup package.

**PC version only at this time.*

Step 2

Power up the camera using the transformer power supply included in the camera packaging. Note that the camera may take 1–2 minutes to boot up once it receives power.

Step 3

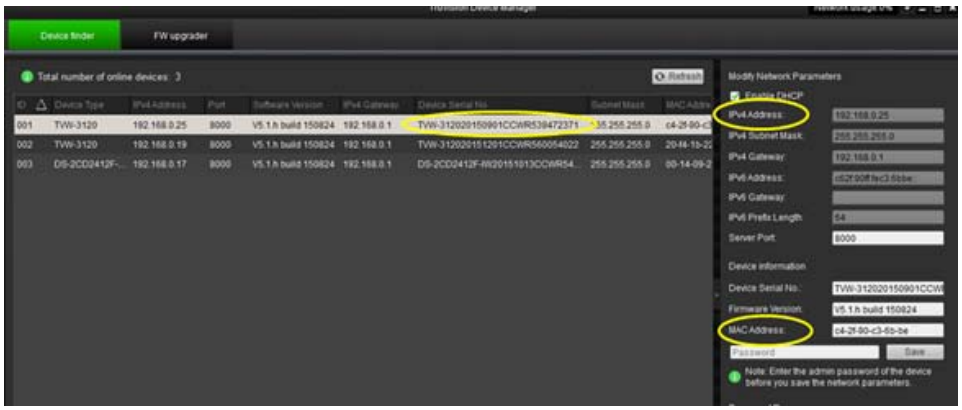
Connect an Ethernet cable from a Wi–Fi Router to the Ethernet RJ45 PoE port on the camera.

Step 4

From your laptop computer, open the Wireless Network setting and connect to the Router network. Locate and launch the truVision Device Manager icon on your laptop computer.

The program will list cameras that are visible on the network.

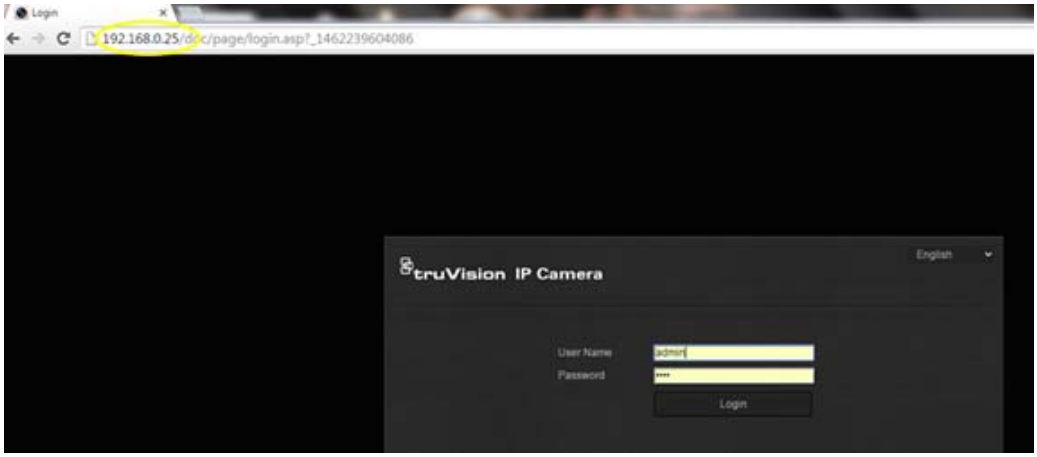
Select the camera from the list that matches the Device Serial No. displayed on the screen to the serial number of the camera. The serial number can be located on the label of the camera box and is represented by a 9 digit number i.e. 539472371.



Once you have selected the camera, the parameters of that camera will be displayed in the fields to the right of the screen. Write down the *IPv4 Address* and *MAC Address* associated with the camera.

Step 5

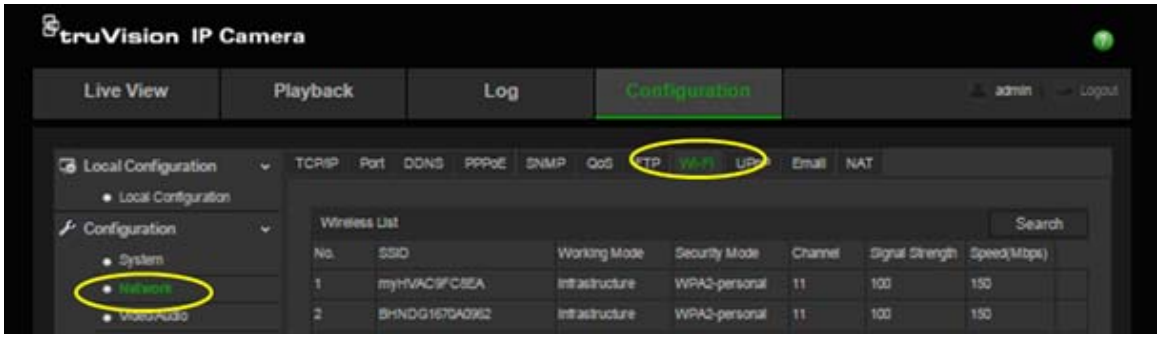
Launch the web browser using the connected Router network and type the *IPv4 Address* of the camera in the address field and hit **Enter**.



Login into the truVision IP Camera web browser using the following credentials:
User Name: **admin** (Case Sensitive)
Password: **1234**

Step 6

From the *Configuration* menu folders listed to the left of the screen, select **Network**. Then select the **Wi–Fi** tab in the *Network* folder.

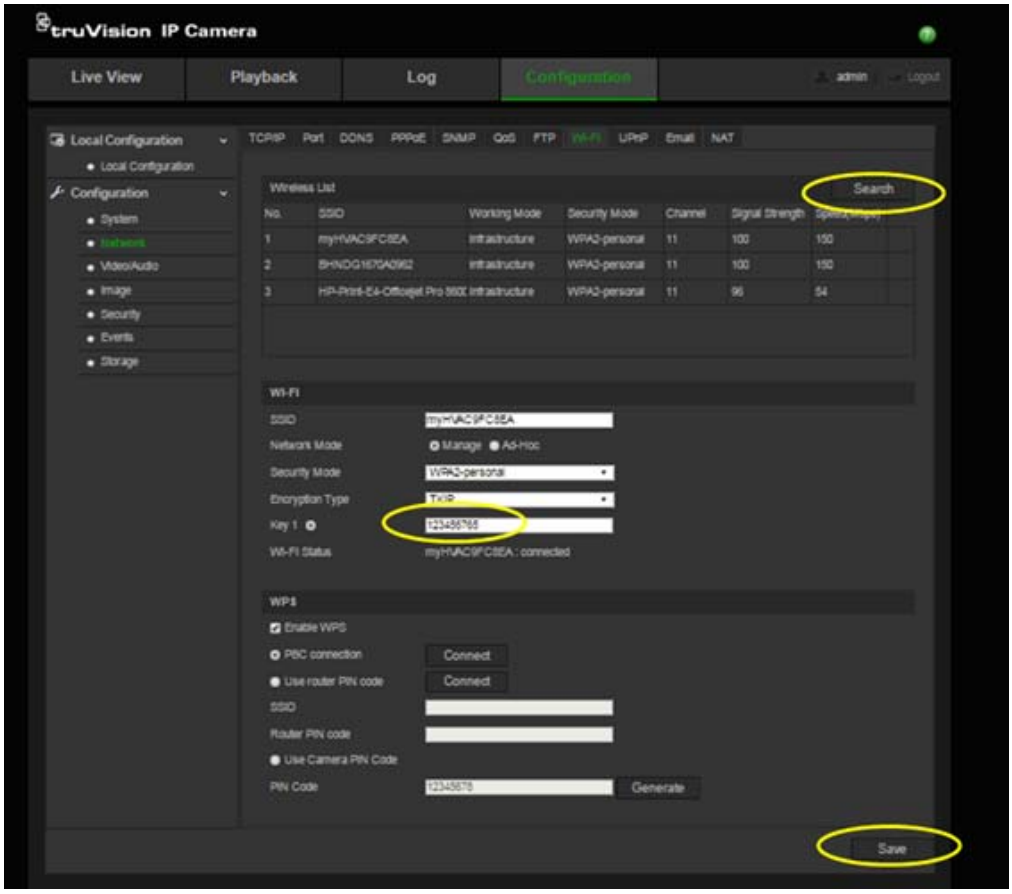


Step 7

Locate and click the name of the Wi–Fi network that you wish to use from the *Wireless List*.

Have the homeowner type the password for their Wi–Fi network that you selected in the **Key 1** field box.

Press the **Save** button on the bottom right of the screen after you enter the Wi–Fi password.



Step 8

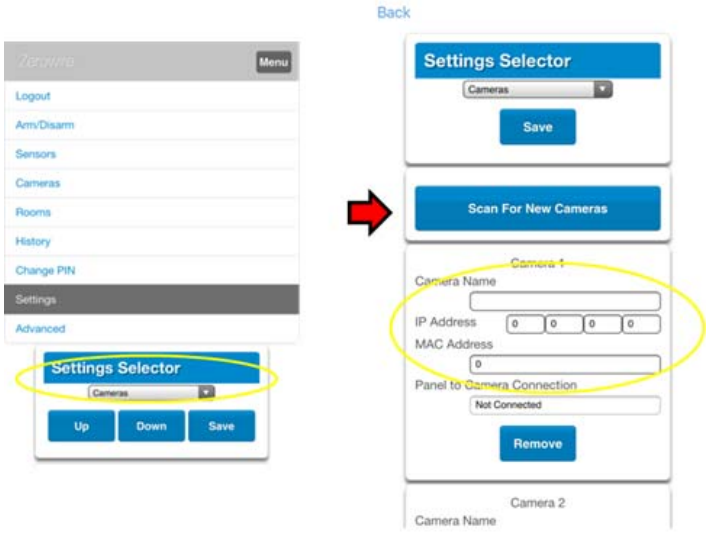
Login to the Côr Web Server from your laptop computer using the IP address announced from the Côr panel (**Menu > 8 > [Installer PIN] > Enter** then **6**).

Once logged on the Côr Web Server, select **Cameras** from the drop down list in the **Settings** menu.

In the camera section, click on **Scan For New Camera**. Once the IP Address and MAC Address are automatically populated in the respective fields, assign a name to the camera in the ***Camera Name*** field.

Press **Save** after you have entered all the information.

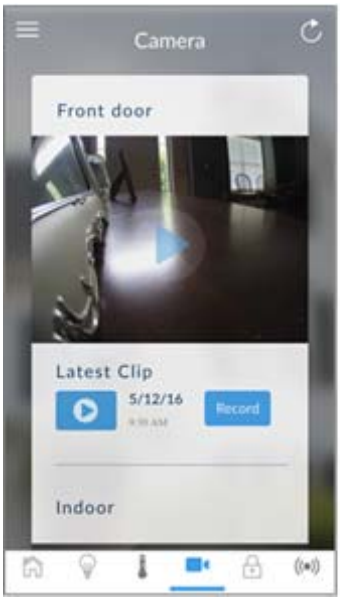
NOTE: You can also manually type in the ***IPv4 Address*** and ***MAC Address***.



NOTE: Alternatively, you can manually enter the IP and MAC address. It may take a few minutes before the camera is connected depending on the network congestion of the router.

Step 9

Verify the camera is connected to the Côr Home Automation system by going to the Homeowner Côr App and pressing the camera icon at the bottom of the menu bar to access the Wi–Fi cameras. Pressing the Play icon in the center picture of the video will allow you to view live video streams from the camera.



You are now connected to the network via Wi–Fi!

Using an Outdoor Camera's Output for Recording Video

Overview:

This document explains how to connect the outdoor camera's output via a hardwire Sensor input to trigger the camera to record video whenever outdoor motion is detected.

The advanced IP cameras are equipped with alarm input and output (I/O). With the IO interface, the IP camera can send a signal to the Côr Panel for associated alarm action such as recording a video.

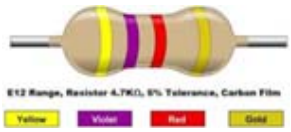
Requirements:

1. Côr panel (with latest firmware)
2. TVW–3120 Outdoor camera
3. Wireless Door/Window sensor with hardwire inputs
   a. Standard Size (60–362N–10–319.5) includes EOL in packaging
   b. **Or** Micro size (TX–E231)
4. Z–Wave® device (optional)

Use the following specifications for the external contact:

- Maximum wire length: 26 ft (8 m)
- Wire: Stranded, 22–gauge (0.7112 mm)
- Switches: Hermetically sealed external switches (sealed reed switches) that supply a minimum 250 ms open or close on alarm

Please note that you need to use the End of Line (EOL) resistor in this connection. The function of EOL resistor is to prevent the intruder from cutting the cable (wires) or short circuit the cable (wires). The EOL resistor should be installed in the end of IP camera.



NOTE: For UL listed installations, the EOL resistor must be UL listed, manufactured by Edwards part number EOL–4k7L, and rated 4.7Kohm.

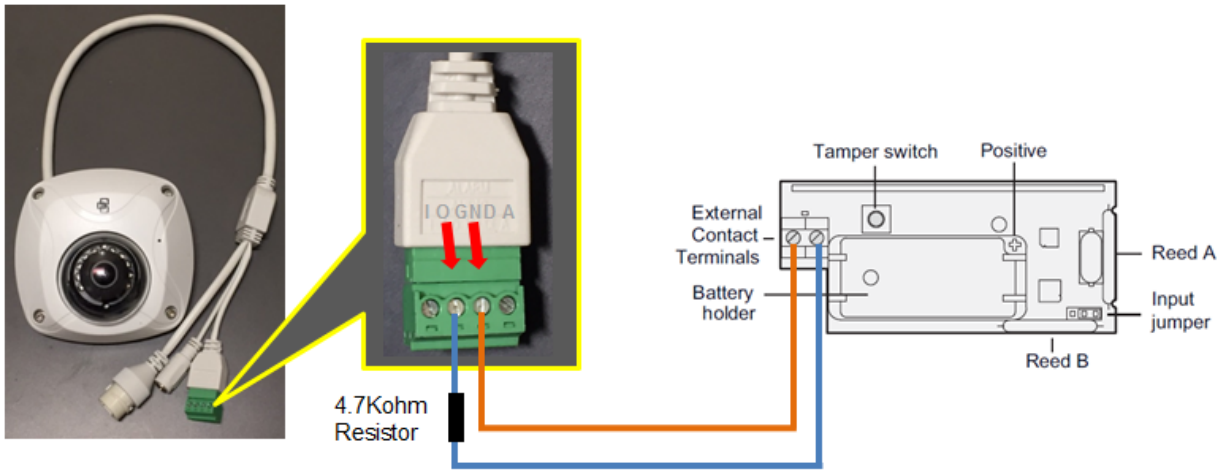
Wiring – Adding Sensor to the Outdoor Camera TVW–3120

Wire the Sensor as **Normal Open (NO)** with the correct EOL resistor.

Côr panel hardwire Sensor:	3.3Kohm in Parallel connection
Door/Window Sensor 60–362N–10–319.5:	4.7Kohm in Series connection
Door/Window Sensor TX–E231:	No resistor

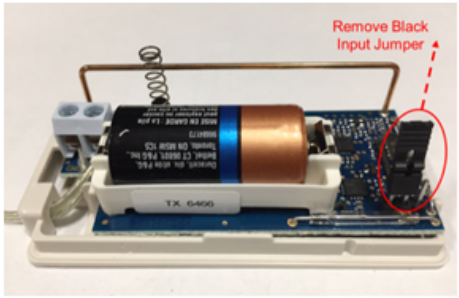
*Consult the Côr or Sensor manual for more information.

Door/Window Sensor 60-362N-10-319.5



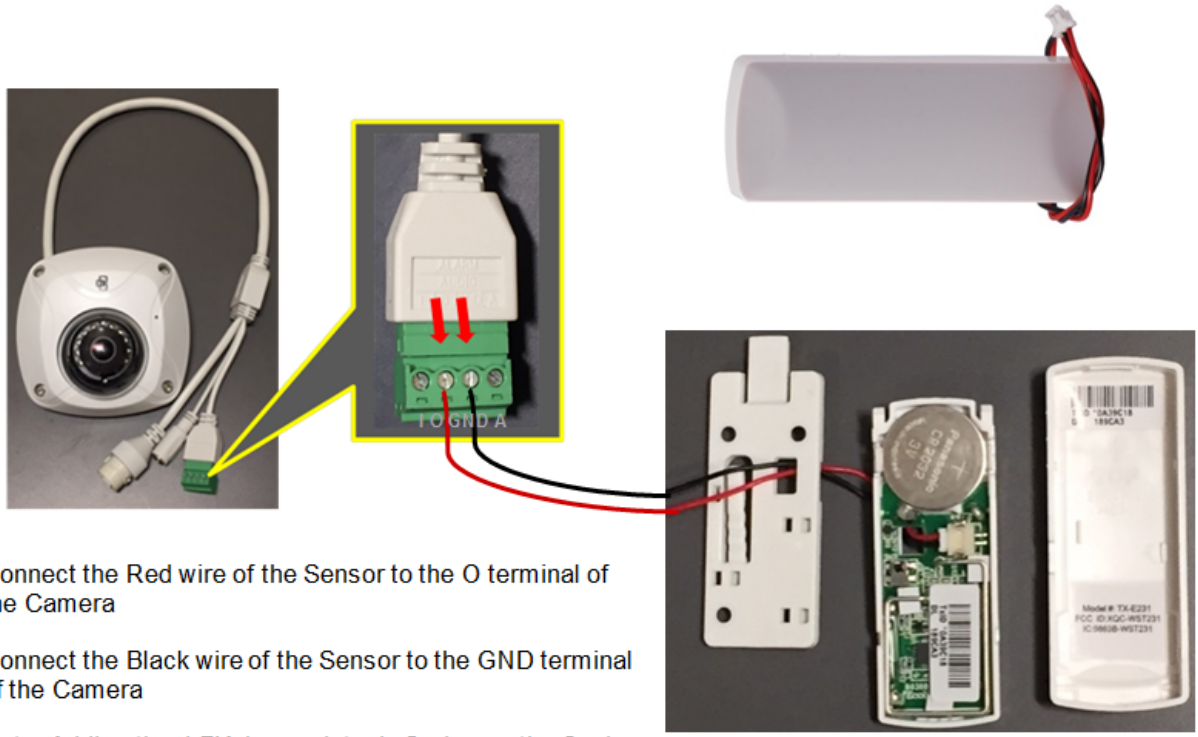
- Connect the GND terminal of the camera to the GND terminal of the Sensor
- Connect the O terminal of the camera to the O terminal of the Sensor
- Add the 4.7Kohm resistor in Series on the O wire

Note: If the wiring is done incorrectly, the Sensor will always show fault.



NOTE:
Make sure to remove the black Input Jumper by pulling up on the tab

Micro Door/Window Sensor TX-E231 (Alternative)



- Connect the Red wire of the Sensor to the O terminal of the Camera
- Connect the Black wire of the Sensor to the GND terminal of the Camera

Note: Adding the 4.7Kohm resistor in Series on the O wire is optional

SCENARIO 1:

Use the alarm output of the camera to tell the Côr panel to record a video when the camera detects motion.

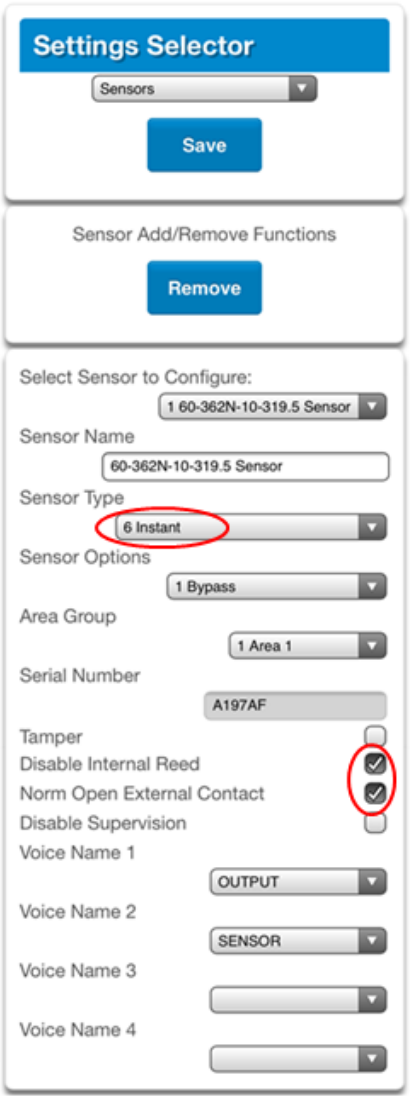
Step 1

Learn the wireless sensor wired to the outdoor camera into the panel.

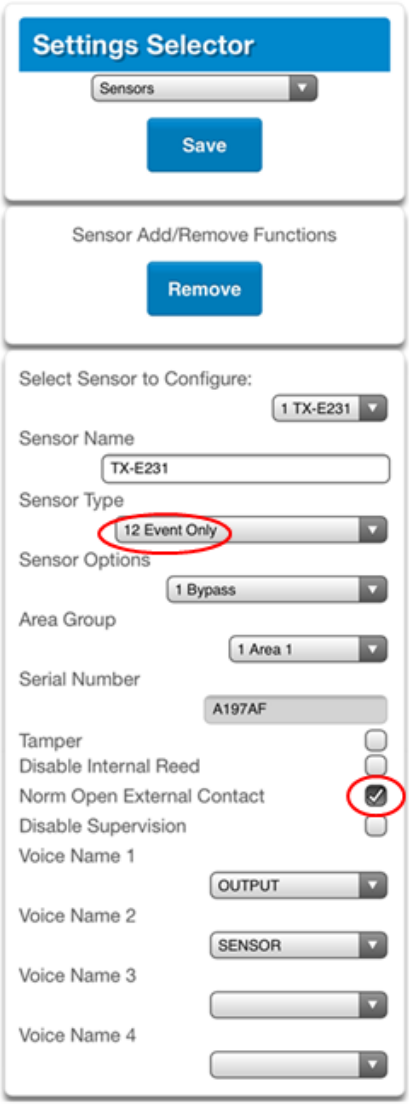
Go to **Settings > Sensors > Select Sensor to Configure** (first open slot from drop down menu) **> Learn**

NOTE: If using the hardwire sensor of the panel, make sure that under **Setting > System > Disable Internal Reed** is *unchecked.*

Setup for **60-362N-10-319.5 Sensor**



Setup for **TX-E231 Sensor**



For the purpose of this demo, the 60–362N–10–319.5 Sensor will be an **Instant** perimeter. This can be set to whatever Sensor type/option you desire. The **TX–E231 Sensor** needs to be set to **Event Only**.

To make it work like a traditional interior follower, set the *Sensor Type* as **Follower** and *Sensor Option* as **Bypass Stay**.

The Sensor will fault whenever the camera detects motion.

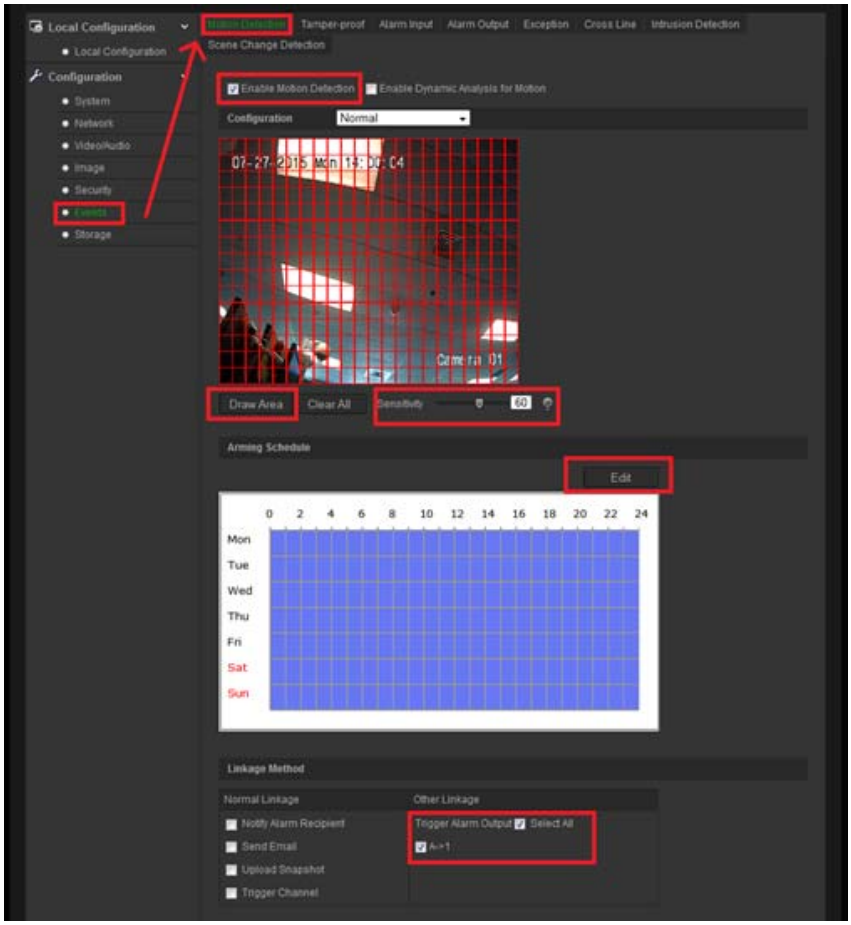
NOTE: The sensor will remain faulted for 5 seconds (this is the default setting of the alarm output of the camera).

Step 2

Configuring the Motion Detection settings for the camera.

Log into the browser page of the camera. (Reference the *Programming Camera* section for further information).

Select **Configuration > Events > Motion Detection** as shown below.



Check **Enable Motion Detection.**

Select **Start Draw**. Drag inside the video image to create the red grid. The red grid is the area that the camera will look for motion. Adjust the **Sensitivity** as needed. The light bulb next to Sensitivity will light up when the camera detects motion.

Ensure that the Day/Hour Grid is a blue color as shown above. This will ensure that the camera will detect motion 24/7. If needed, click on the **Edit** button and change the schedule accordingly. For Period 1 set the **Start Time** to **00:00**. Set the **End Time** to **24:00**. Select **Copy to Week**, then press **Copy**. Press **Ok**.

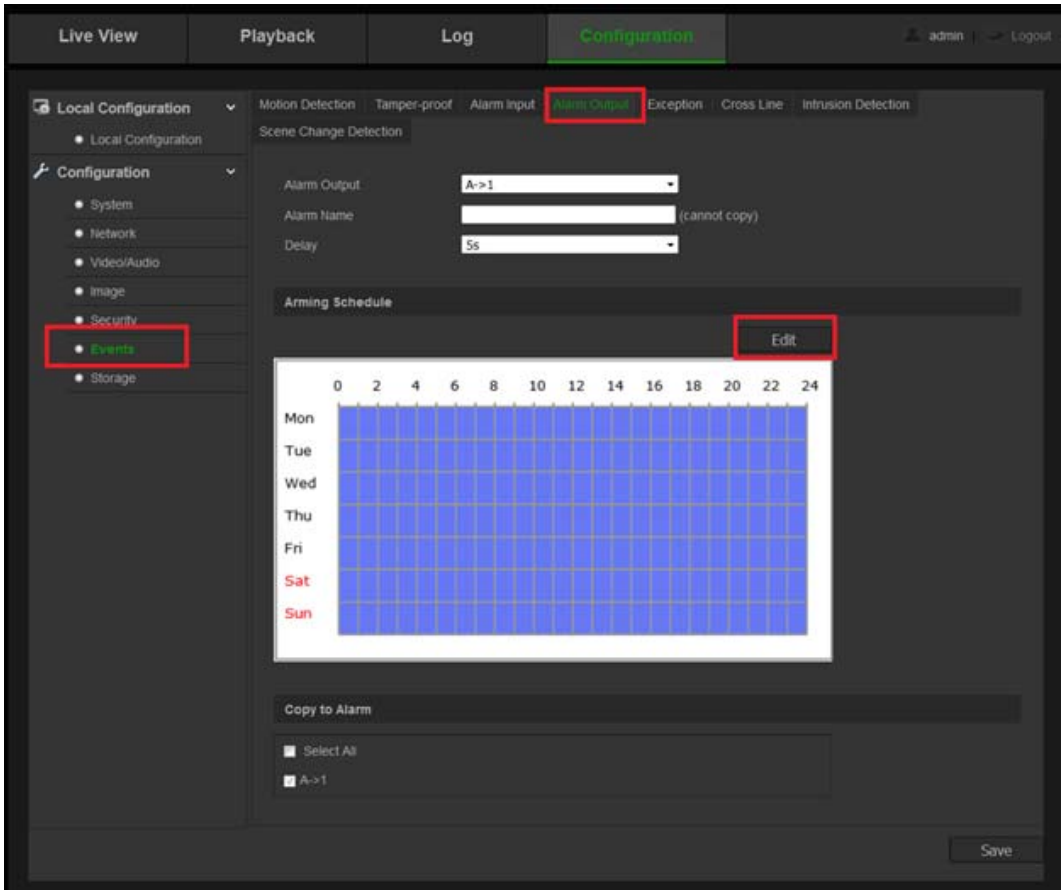
Make sure the **Trigger Alarm Output A–>1** is checked.

Click **Save** at the bottom when finished.

Step 3

Configure the Alarm output of the camera

Go to **Alarm output** and press **Edit**. For Period 1 set the **Start Time** to **00:00**. Set the **End Time** to **24:00**. Select **Copy to Week**, then press **Copy**. Press **Ok**.



The grid will appear in blue as shown above. This will ensure that the alarm output will trip whenever there is motion.

Step 4

Create an automation scene when the sensor is tripped.

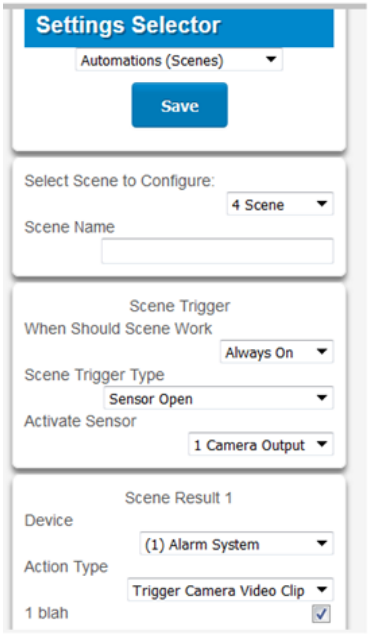
Log into the Côr panel and go to **Settings > Automations** (or **Scenes**).

Create an Automation scene that activates when the sensor wired to the camera is opened.

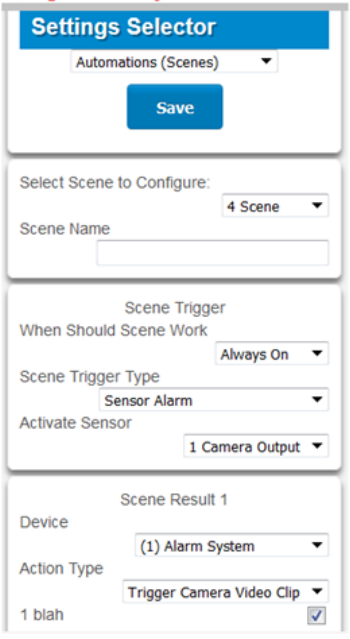
This will record a video clip when the camera detects motion. The Côr Smart Home app will be able to view these clips. You can also have it activate/deactivate Z-Wave devices.

Setup for **60-362N-10-319.5 Sensor**

You can create one or both scenes depending on when you want to record



Only triggers when the camera's sensor is **faulted**



Only triggers when the camera's sensor is in **Alarm**

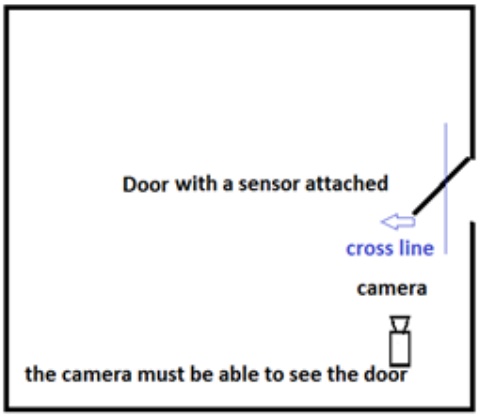
Setup for **TX-E231 Sensor**

SCENARIO 2:

Use the camera's cross line detection to turn on a Z–Wave Light only when you enter a room. The light will turn off when you exit the room.

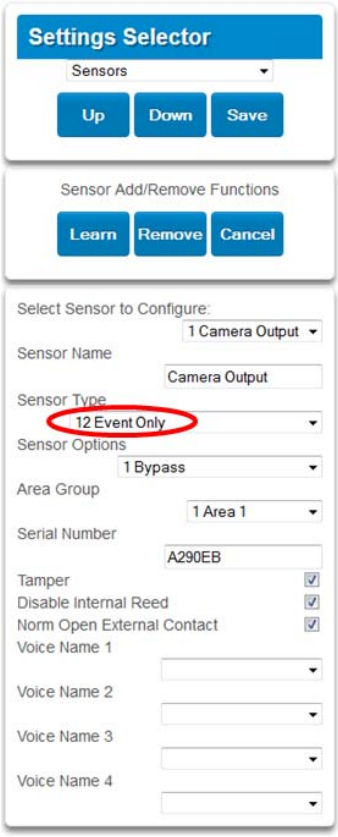
In addition to the panel and camera (with optional RF sensor wired) in the previous demo, you will need a Z–Wave light and an ***additional RF Door/Window sensor*** (or other hardwire sensor of the panel).

Sensor/Camera placement

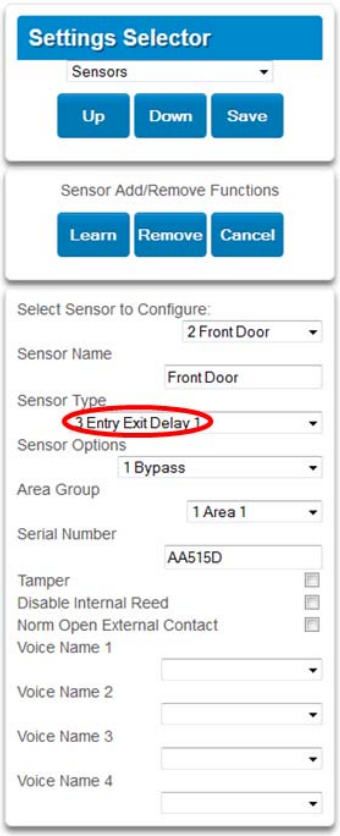


Step 1

Configuring Sensors



For the purpose of this demo, the Sensor Name (Camera Output) > **Sensor Type** is set to ***Event Only*** (no longer causes an alarm on the panel) and the other Sensor Name (Front Door) > **Sensor Type** will be an ***Entry/Exit Delay***



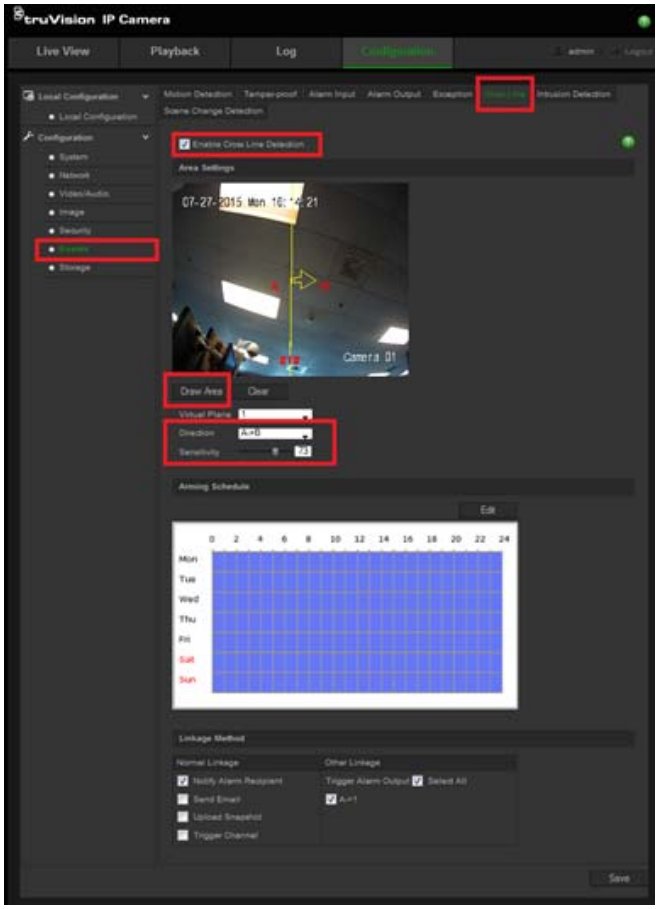
Step 2

Configure Camera's Cross Line Detection

The cross line function of the camera allows the camera's output to trip when a certain line is crossed. It can be configured to trip when the line is crossed from right to left, left to right, or both.

To access the function, go to the camera's browser page, select **Configure > Events > Cross Line**.

NOTE: Disable the camera's motion detection function from the previous demo.



Select **Draw Area** and click and drag in the video to create a vertical line. This should be near the door. The arrow (set by the direction option) needs to be pointed into the room. See the previous diagram above. Make sure the **A–>1** is checked and the *Day/Hour Grid* is blue color.

Step 3

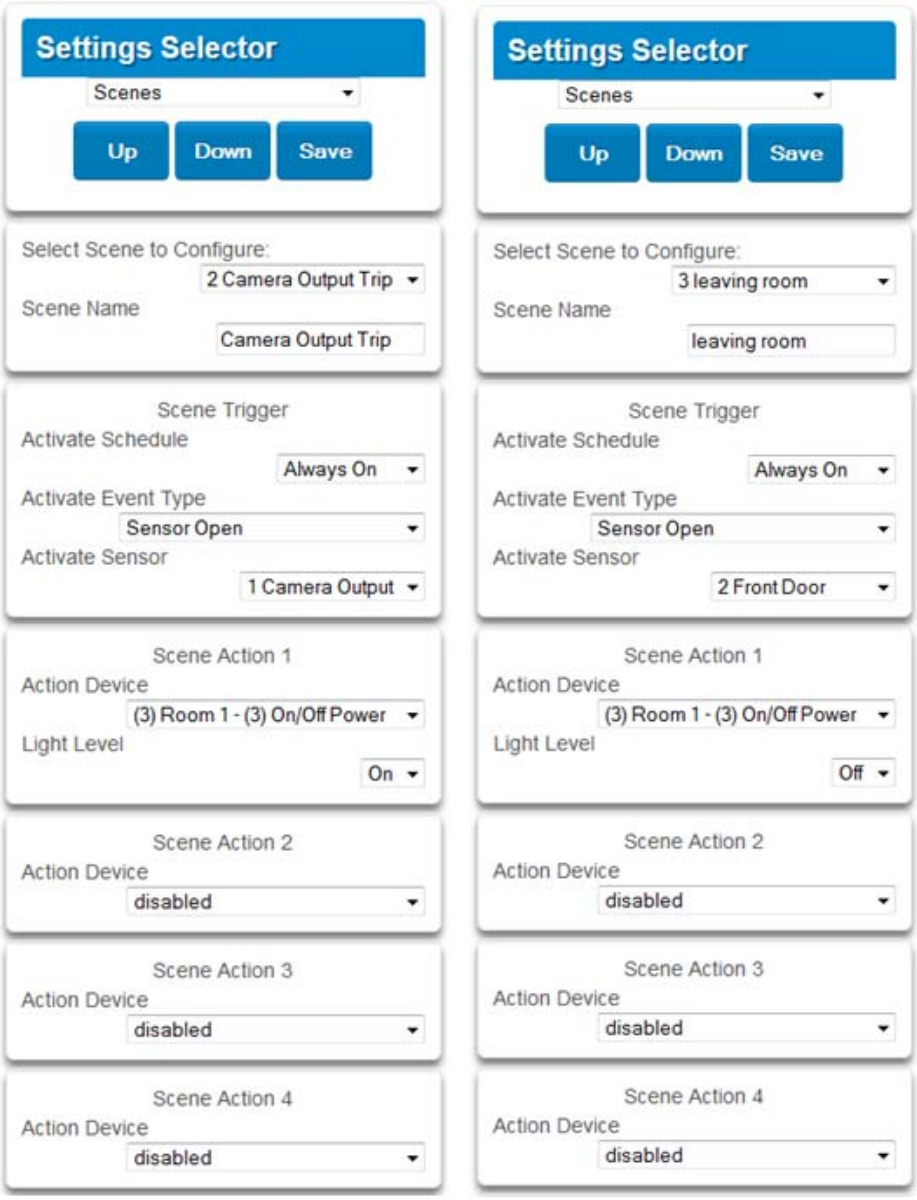
Automation / Scenes

You will create two (2) Automations.

The first Automation will activate when the camera output is tripped (only when the room is entered). This will turn the light on.

The second Automation activates when the door sensor is faulted. This will turn off the light.

This is simplified for demo purposes. If the light is manually turned on, it will briefly turn off when the door is opened and turn on when you walk through the camera's cross line.

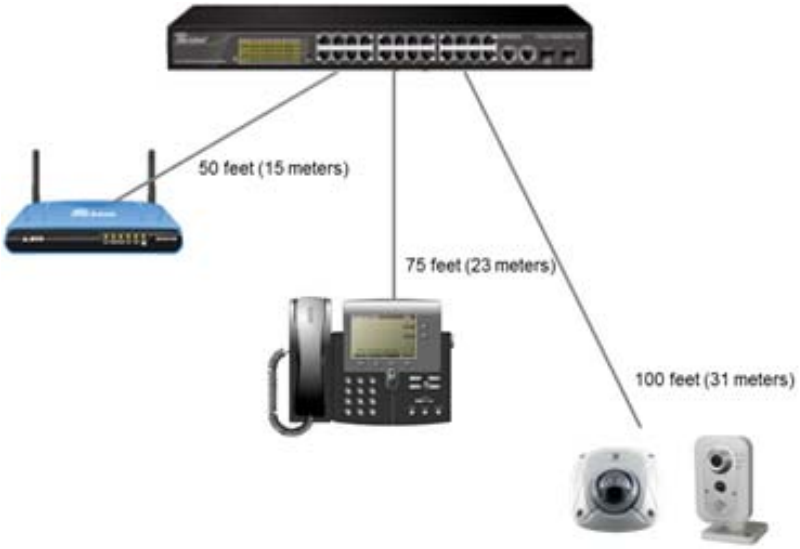

Settings Selector
Scenes
Up
Down
Save
Select Scene to Configure:
2 Camera Output Trip
Scene Name
Camera Output Trip
Scene Trigger
Activate Schedule
Always On
Activate Event Type
Sensor Open
Activate Sensor
1 Camera Output
Scene Action 1
Action Device
(3) Room 1 - (3) On/Off Power
Light Level
On
Scene Action 2
Action Device
disabled
Scene Action 3
Action Device
disabled
Scene Action 4
Action Device
disabled
Settings Selector
Scenes
Up
Down
Save
Select Scene to Configure:
3 leaving room
Scene Name
leaving room
Scene Trigger
Activate Schedule
Always On
Activate Event Type
Sensor Open
Activate Sensor
2 Front Door
Scene Action 1
Action Device
(3) Room 1 - (3) On/Off Power
Light Level
Off
Scene Action 2
Action Device
disabled
Scene Action 3
Action Device
disabled
Scene Action 4
Action Device
disabled

Using a Power of Ethernet (POE) Connection

The advanced IP cameras are designed to support 48V 802.3af standard POE, which supports 300 feet (100 meters) maximum distance, provided if the power source and cable also meet the requirement.

It is recommended to run POE wiring at 100 feet (31 meters) max distance to ensure enough power is provided to the camera.

Review the manufacturer's instruction for the POE switch about enabling POE if necessary.



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