



**AVERTX**<sup>®</sup>

SMART ANALYTICS  
QUICK START GUIDE

## ABOUT THIS GUIDE

The information in this document is for **Analytics Setup only**. Before configuring analytics, please first follow the quick installation guide included with the camera or recorder.

## VIDEO TUTORIALS

Step-by-step video tutorials on how to configure analytics and alerts are available online at [avertx.com/analytics](http://avertx.com/analytics). Scan the QR Code to visit.

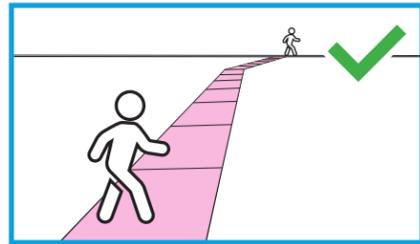


## INSTALLATION RECOMMENDATIONS

For best results with AvertX Smart Analytics, install your camera using these guidelines:

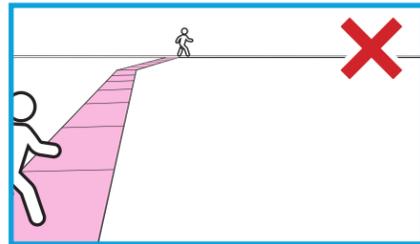
- The area in which you would like to detect persons or vehicles is called the primary detection area and should be the majority of the camera's picture.
- Install the camera approximately 10'-12' off the ground and as close to the primary detection area as possible.
- Place your cameras in locations with as few obstructions as possible. Objects such as bushes, trees and structures will limit the effectiveness of person and vehicle detection.
- Detection accuracy decreases as the speed of the person or vehicle increases. Place your cameras at choke points such as gates or driveways where people and vehicles naturally slow down.
- Person and vehicle detection distance decreases with illumination levels. Place your cameras in areas with adequate lighting.

### CORRECT INSTALLATION

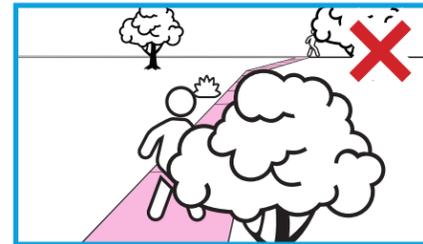


Primary detection area (pink) is centered and free of obstructions.

### INCORRECT INSTALLATION



Primary detection area (pink) is not the focus of the image. Reposition the camera so the primary detection area is the focus of the image.



Primary detection area (pink) is blocked by obstructions. Reposition the camera so the trees do not obstruct the camera image.

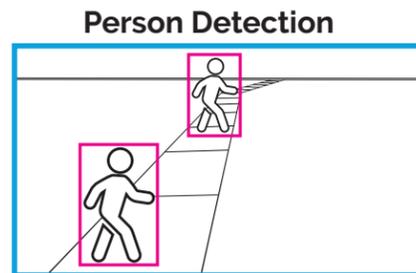
## DEFAULT SETTINGS

AvertX Smart Analytics default settings are set to deliver good results in standard installations. Out of the box, the camera is configured to provide accurate detection of persons and vehicles in the ranges listed below. For peak performance, AvertX recommends you adjust analytics detection settings for your environment. See page 3 for instructions.

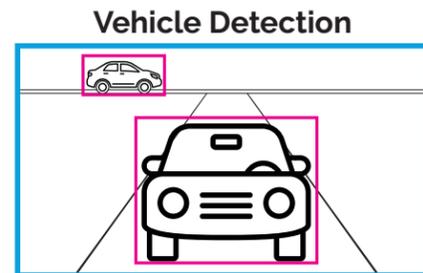
When the camera detects motion, a green box will outline the object in motion. If the object is confirmed as a person or vehicle, the box will flash to red. Detection boxes are only displayed in the Low video stream.

**Minimum Detection Size:** The size of an object that will trigger an event when that object is at the furthest desired distance from the camera

**Maximum Detection Size:** The size of an object that will trigger an event when that object is at the closest desired distance from the camera



Minimum Detection Size: 1/3 height of image  
Maximum Detection Size: 1/2 height of image



Minimum Detection Size: 1/4 height of image  
Maximum Detection Size: 2/3 height of image

## CONFIGURING PERSON AND VEHICLE DETECTION

### ACCESSING CAMERA SETUP MENU

To adjust analytics settings, you will need to access the local camera setup menu.

**To connect to camera setup menu:**

1. With the camera connected to a ProConnect recorder, enter the recorder's **Setup** menu.
2. In the Cameras tab, click on the camera you would like to adjust.
3. Click on the IP Address in the Camera Information column on the right side.
4. Enter User Name and Password to log into the camera.

**Note:** Camera passwords can be found by clicking on the eye icon  next to the password field in the recorder camera menu.

### ADJUSTING PERSON AND VEHICLE DETECTION

#### Step 1: Choose Person or Vehicle Analytic Regions

The local camera setup menu will load to the Analytics tab by default. Select Person or Vehicle Detection to adjust detection settings.

#### Step 2: Set Detection Area

Detection area defines the area in an image where Smart Analytics will be performed. Modifying this area can mask out parts of the scene you do not want to trigger a detection event. To adjust the detection area, click a corner point and drag to the new position.

**To create a detection area:**

1. Click on **Detection Area**.
2. Click on the image to set the first point of the detection area.
3. Move to the next point and click to set. Repeat to complete the shape.

#### Step 3: Set Minimum and Maximum Size

Detection boxes are used to set the minimum and maximum sizes of objects you would like to detect using Smart Analytics in the image. To adjust the Min/Max size, click a corner point and drag to the new position.

**Minimum Size**

To create a Minimum (Min) Size detection box:

1. Click on **Min Size**.
2. Click and drag a box representing a person or vehicle at the furthest distance from the camera to detect.

**Maximum Size**

To create a Maximum (Max) Size detection box:

1. Click on **Max Size**.
2. Click and drag a box representing a person or vehicle at the closest distance from the camera to detect.

#### Step 4: Set Threshold

[Range 0-10 sec] Threshold is the amount of time, in seconds, a person or vehicle must be detected in the detection area to trigger an event. For example, if threshold is set to 2, an event is triggered when a person or vehicle has been detected for 2 seconds.

**TIP:** AvertX recommends a threshold of 0-1 for most scenes.

#### Step 5: Set Sensitivity

Range [1-100] The value of the sensitivity defines how sensitive the system is to objects which can trigger events.

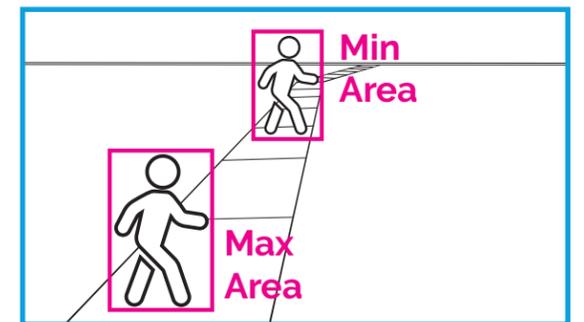
- Setting the sensitivity too high can result in increased false alerts.
- Setting the sensitivity too low can result in missed events.

**TIP:** AvertX recommends a sensitivity range of 85 to 95 for person and vehicle detection accuracy in most scenes.

#### Step 6: Click Save

### TIPS FOR CONFIGURING PERSON AND VEHICLE DETECTION

- When setting Min and Max Size area detection boxes, draw a box around an actual person or vehicle at the closest and furthest point you would like to detect.



- You may want to use a helper to assist making adjustments to the analytics settings. Your helper can stand in the closest and furthest detection areas to set person detection boxes and can assist when adjusting Threshold and Sensitivity by moving around the scene.
- Green and Red boxes will display in the analytic preview window and can give feedback on the effectiveness of the settings changes.

# ENABLING PERSON OR VEHICLE NOTIFICATIONS

Email Alerts and Push Notifications for analytics, motion and sensors are set through the Macros function in the ProConnect recorder and sent to the AvertX Connect cloud gateway for delivery. You will need a valid AvertX Connect account and access to a web browser with an internet connection to complete setup. For Push Notifications, you will also need the AvertX Connect Mobile app.

## ENABLING SENDING EVENTS TO AVERTX CONNECT:

1. Log into your recorder either on the local console or on a web browser using AvertX Connect.
2. Go to the **Setup** menu, and then the **AvertX Connect** tab.
3. Select **Send all Event Data to AvertX Connect** to enable alert notifications.
4. Select **Send Event Images to AvertX Connect** to receive an image with the alert. Deselecting this option reduces the amount of data sent if your network has bandwidth limitations.

**Note:** These options are selected by default when you register your recorder with AvertX Connect.

## ENABLING ALERTS ON YOUR RECORDER:

### Step 1: Add a Macro:

1. Click the **Macros** tab on the side menu.
2. Click **Add a Macro**.
3. Enter a macro name in the **Macro Name** field.
4. Check the **Enable Macro** box.

### Step 2: Create a Trigger:

1. Select the drop down under the **Schedule** option to modify when a trigger is in effect. For more information on schedules, see the Schedule section of the manual.
2. Select **Analytics** under the **Event Class** drop down.
3. Select the appropriate **Event Type** in the **Event Type** dropdown that corresponds with the desired analytic event class.
4. Select All or the IP camera in the **Source** drop down list. If All is selected, all cameras will trigger the macro event.

**TIP:** You can set up multiple triggers by clicking the **Add New Trigger** button.

### Step 3: Create an Action:

1. Select the desired schedule under the **Schedule** dropdown.
2. Select the action type **Send to AvertX Connect** under the Type dropdown.
3. Set the duration of the event to trigger the action in the **When Event Duration Exceeds** field.

4. If an additional action is added they will happen in order and can be dragged and dropped to reorder for priority.
5. Click **Save** to complete macro setup.

**Note:** You can set up multiple Actions by clicking the Add New Action button.

## ENABLING ALERTS IN AVERTX CONNECT:

1. To enable email or push notification alerts to specific users, go to **connect.avertx.com** and **Login**.
2. Click on **Manage Users** in the Main Menu.
3. Click on the user you wish to receive alerts.
4. In the User Profile, select **Receive by Email** or **Receive by Push Notification** (or both) for Health, Motion, Sensor or Vehicle and Person Detection Alerts.

Users > Bruce Woods > User Profile

User Profile | User Permissions | Recorder Access

First Name: Bruce

Middle Name:

Last Name: Woods

Language: English

**Alert Notification Options**  
Email and Push Notifications are sent once every 5 minutes at a maximum of 12 per hour. These thresholds apply to each alert type.

**Health Alerts**  
 Receive by Email  Receive by Push Notification

**Motion Alerts (configured on the recorder)**  
 Receive by Email  Receive by Push Notification

**Sensor Alerts (configured on the recorder)**  
 Receive by Email  Receive by Push Notification

**Vehicle and Person Detection Alerts (configured on the recorder)**  
 Receive by Email  Receive by Push Notification

Phone Number (Phone numbers from locations other than USA and Canada must contain country code)  
[Placeholder] [Edit Phone Number](#)

5. Click **Save** to complete. The email address associated with this account will now receive alerts.

**TIP:** AvertX Connect features **Health Alerts** that you may want to enable at this time. Health Alerts will send email or push notifications on the following system health events:

- Video Loss (after 6 hrs)
- Recorder Not Reporting (after 12 hrs)
- Recorder Not Recording (after 12 hrs)
- Missing Hard Drive