



**BU-3028-IVS**

# **Trip Zone Guide**

**Version 1.0**

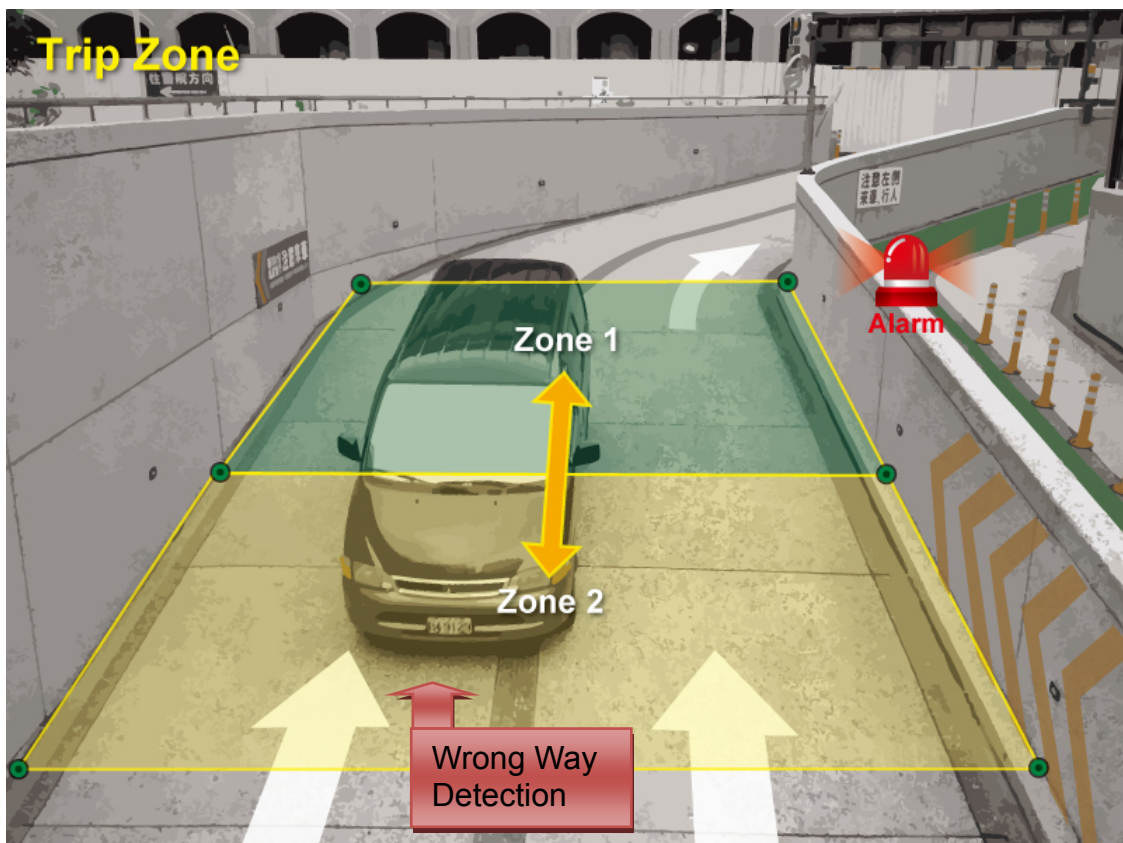


# BU-3028-IVS Trip Zone Guide

## 1. Overview

The BU-3028-IVS has built-in video analytic function for Trip Zone. It is a standalone function built into the camera's firmware without the need for external software or device. The Trip Zone function can be used to detect people or vehicles crossing the restricted area or boundary. This guide will focus on using BU-3028-IVS's "Trip Zone" function in places like one-way traffic, railway station platform, exit of parking lot, highways, privacy or military instruction.

The Trip Zone function works by defining 2 zones on the video image. When the system detects an object crossing the center border between 2 zones, it will send an alert message to notify the administrator within seconds. It can detect object from "Zone1 to Zone2", "Zone2 to Zone1", or both directions.



The important factors for successful installations are:

- Choose the appropriate camera viewing angle.
- Choose the appropriate camera height (distance).

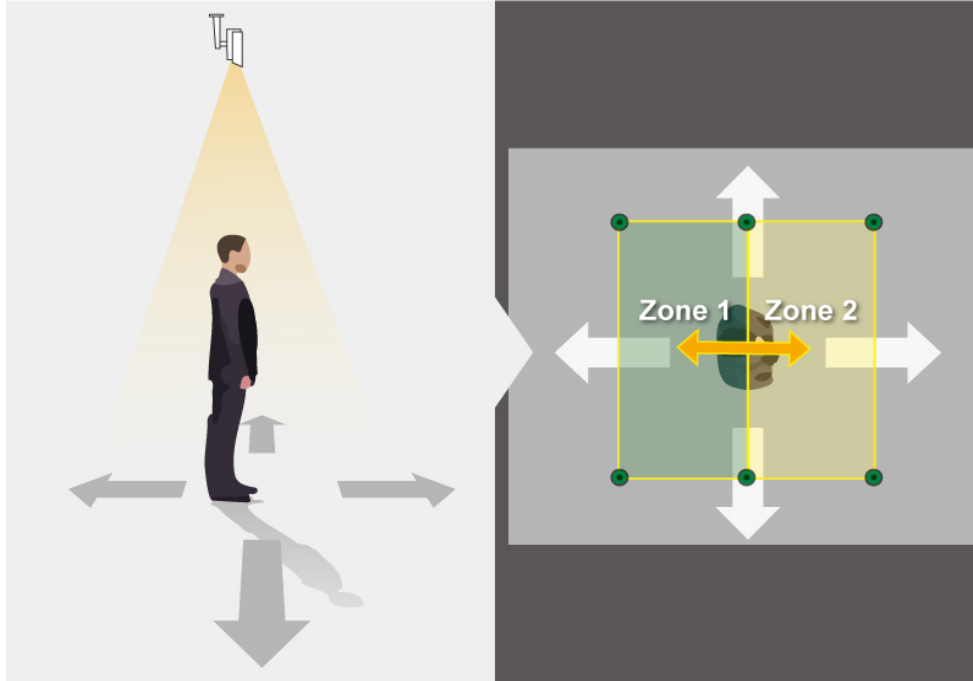
We will guide you through the procedure in the following articles.

## 2. Hardware Installation Guidelines

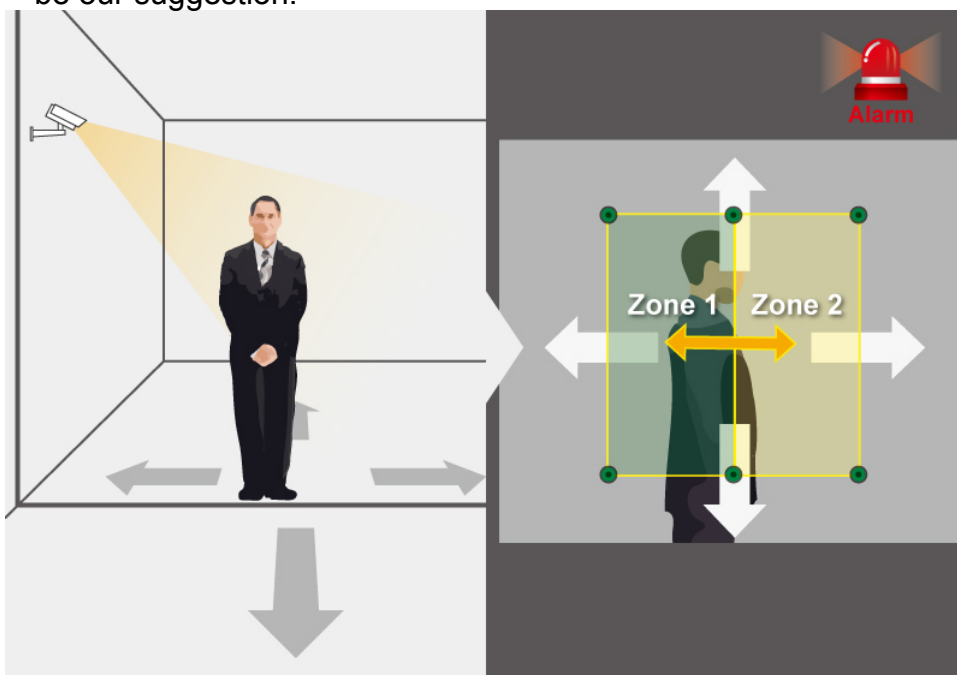
- The followings are basic installation guidelines for best Trip Zone function. However, if your environment cannot meet the recommended conditions, it can still work with reasonable accuracy.

### 1. Make sure the appropriate viewing angle.

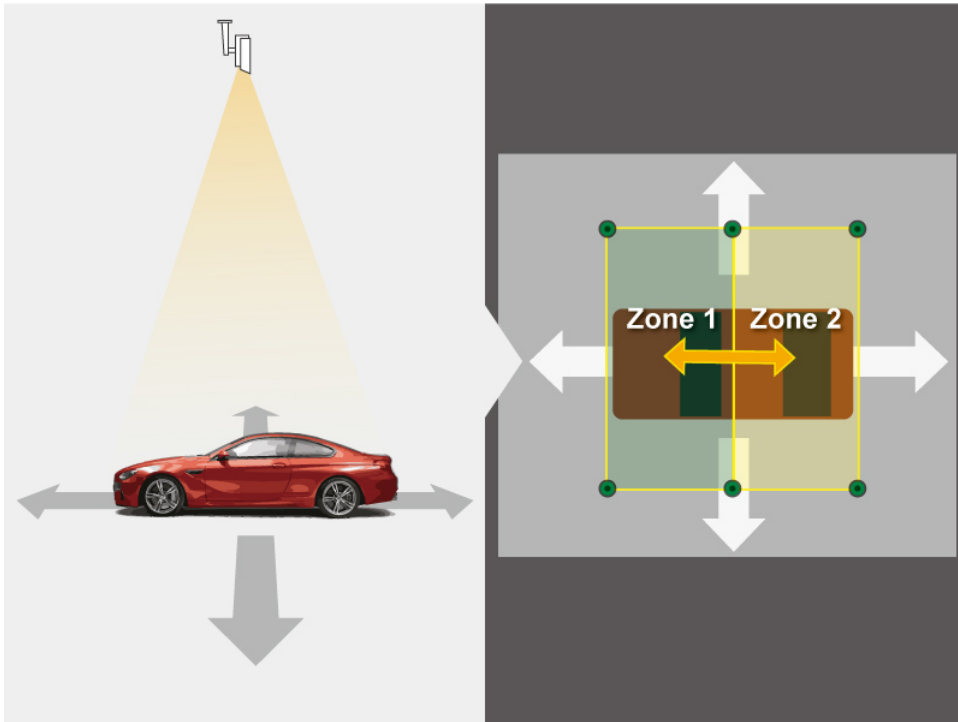
- For human beings, camera can be installed from right above the area to the side of the area.



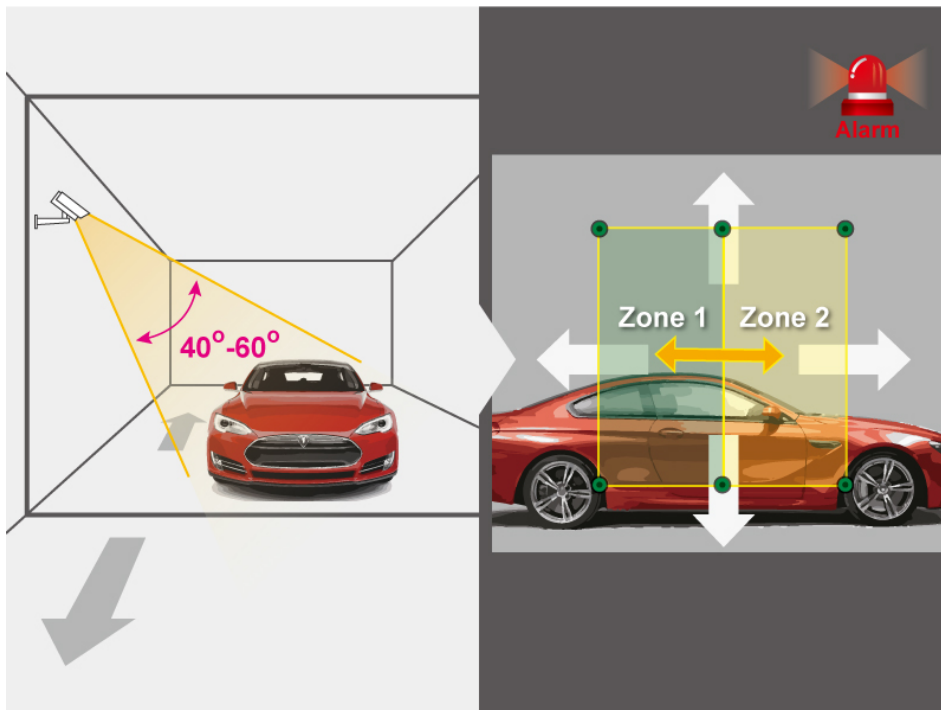
- If you install the camera to the side of the area, horizontal detection will be our suggestion.



- For vehicles, camera can be installed from right above the area to 45 degrees oblique angle.



- For 45 degrees angle, you can choose a horizontal or vertical detection.



## 2. Make sure the appropriate camera height (distance) at wide angle.

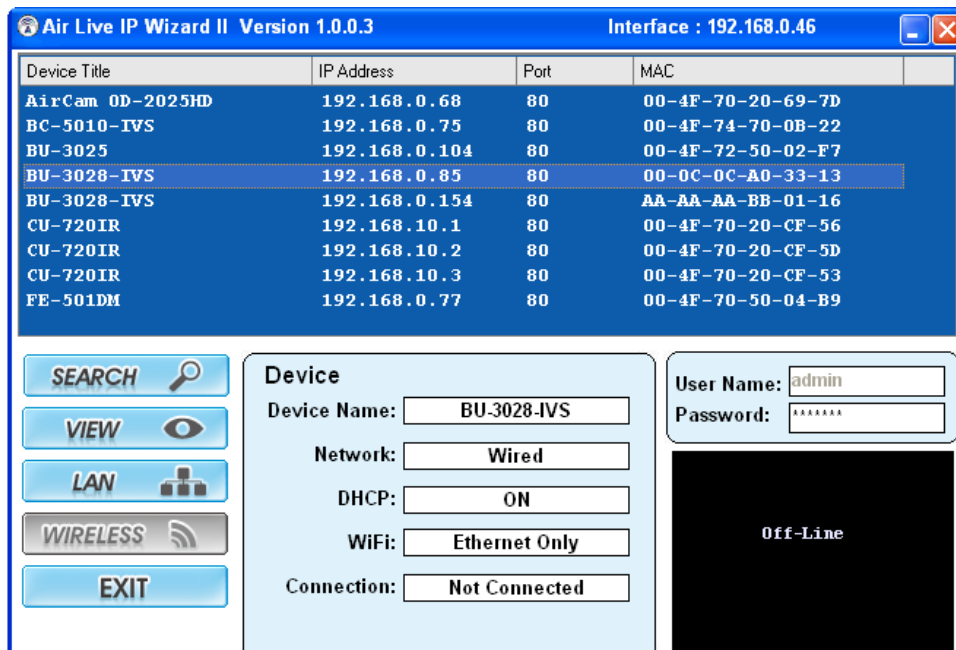
People		Vehicles	
Viewing Angle	Distance (Min.)	Viewing Angle	Distance (Min.)
90 degrees on top	2.5M	90 degrees on top	9M
45 degrees	3M	45 degrees	5M
horizontal	3M	horizontal	Not Recommend

## 3. Camera Configuration

### 3.1 Finding camera using AirLive IP Wizard

The IPCAM default IP address is 192.168.1.100, but this address can change when there is DHCP server(router) in your network. Therefore, please install AirLive IP Wizard to find your camera.

1. Install the “AirLive IP Wizard” from the installation CD or download it from [this link](#).
2. Run the “setup.exe” and open the AirLive IP Wizard.
3. The IP Wizard will auto search and list out the camera found. Double click on the camera that you want to configure.



4. The IPCAM’s web configuration will open automatically after double click. Please enter the “admin” for username and “airlive” for password.

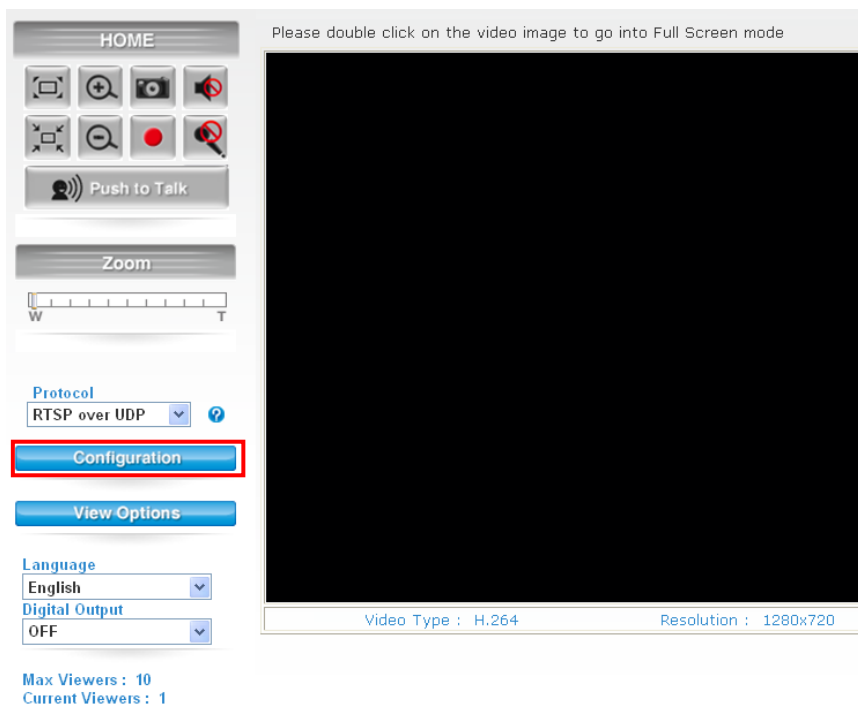
5. After entering the correct username and password. You will enter the camera's web configuration page. When prompted to install "Media Control" from "OvisLink Corp", please select "Yes" to install.

### 3.2 Enable Camera's Video Analytic function

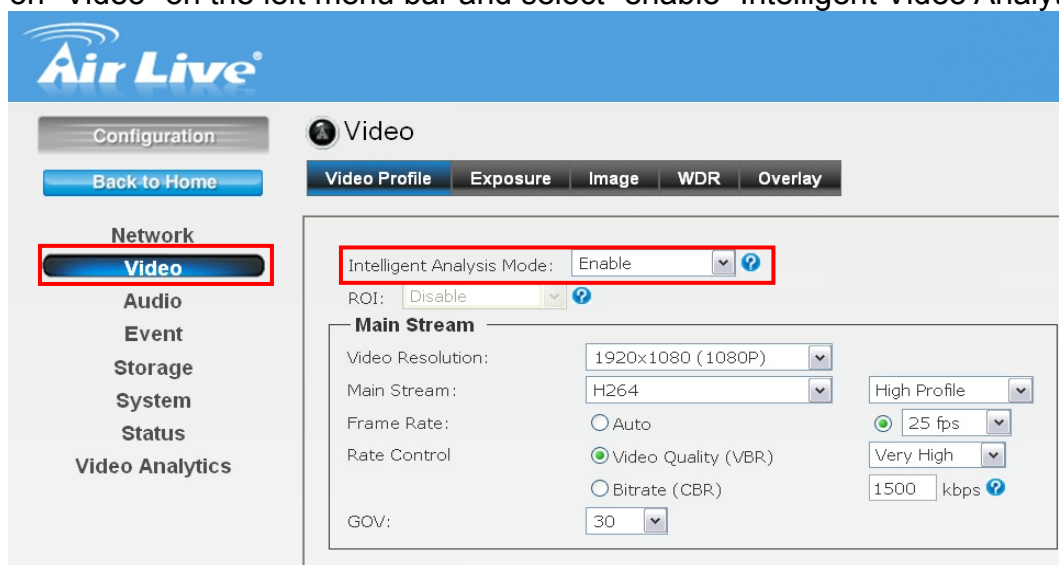
Please use Internet Explorer as the default browser. If you are using IE 11, please go to "Setup->Compatibility View Settings" and add the camera's IP address to the list.

Please follow the step below to enable camera's video analytics function.

1. Click on "Configurations" on left menu bar



2. Click on "Video" on the left menu bar and select "enable" Intelligent Video Analytics.



### 3.3 Setting Resolution and Frame Rate

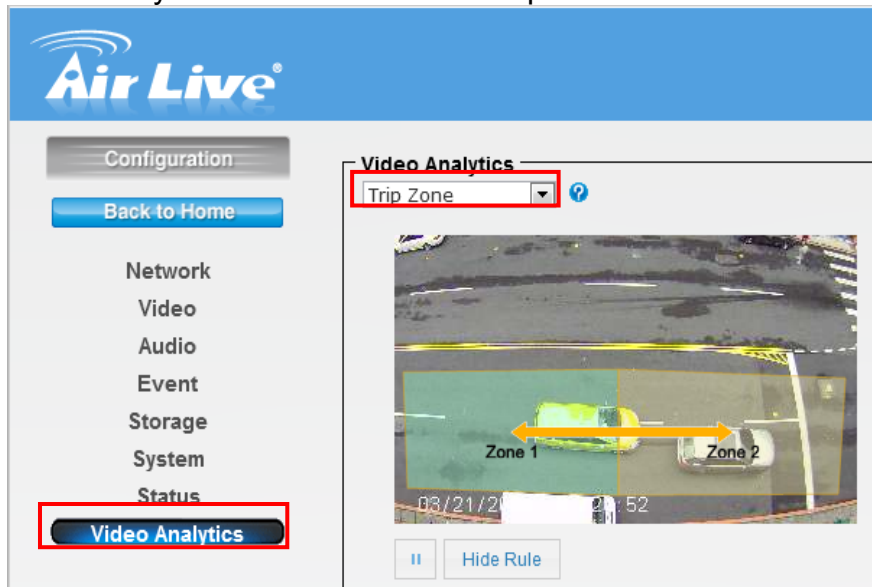
On the video page, it is important to set the resolution and frame rate correctly.

**!** Please remember to click on “Apply” button after finish settings.

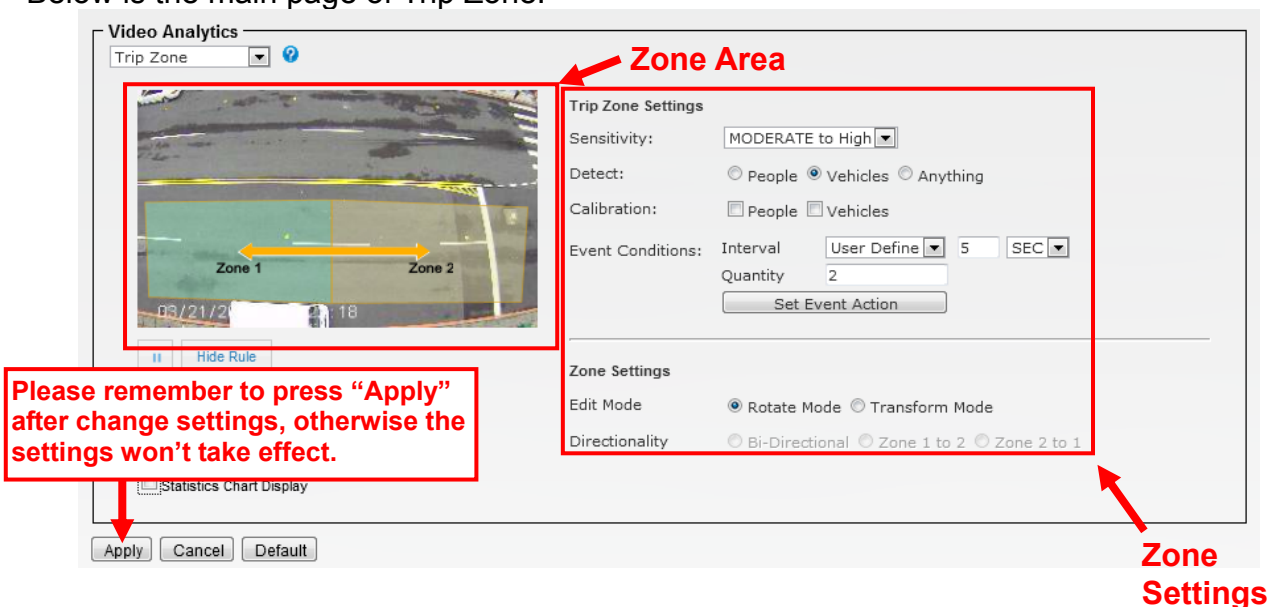
Installation Site	Main Stream Resolution	Main Stream Frame Rate	Second Stream Frame Rate
highways, railway station platform or military instruction	720P	15FPS	15FPS
exit of parking lot, one-way traffic or privacy property	1080P	15FPS	15FPS

### 3.4 Configure Trip Zone Function

Please go to “Video Analytics” menu and select “Trip Zone”.



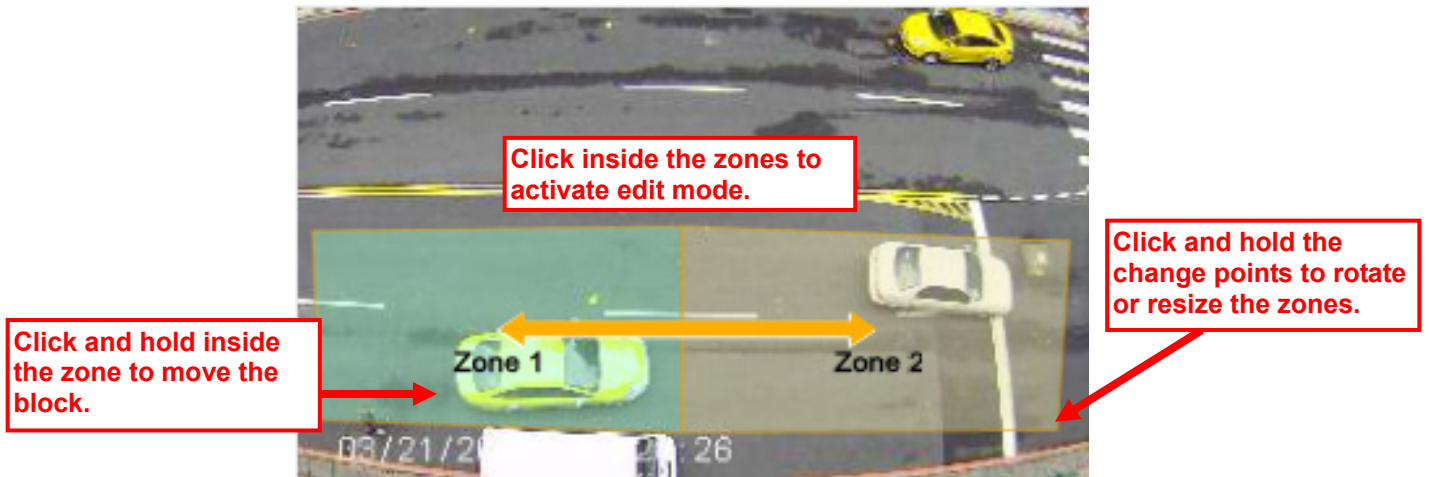
Below is the main page of Trip Zone.



The first step is to set the zones according to your environment. The controls are separated in Zone Area and Zone Settings as indicated above.

## Zone Settings

- Rotate Mode: this is the default mode. When you click inside the “Zone Area”, you can rotate, move, and resize the zone by holding the “change points”.



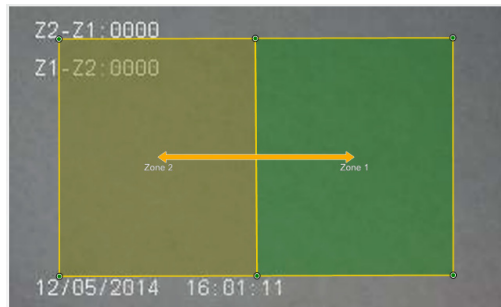
- Transform Mode: In this mode, you can freely change the shape of the zones to fit your installation site.



- Directionality: The camera’s Trip Zone function can detect an object crossing from one zone to another. You can choose to detect from Zone1 to Zone2, Zone2 to Zone 1, or both directions. **You must first click on the zone block inside the Zone Area first before you are allowed to choose the direction.**

※ **Please enlarge the Zone 1 and Zone 2 as big as possible. The bigger zone is more accuracy.**



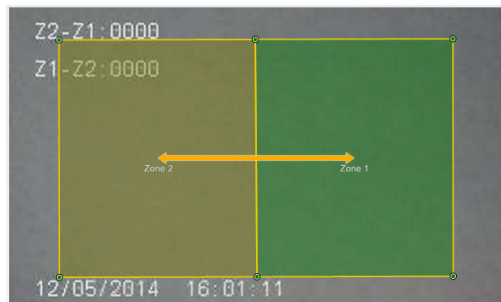


**Zone size is big.**

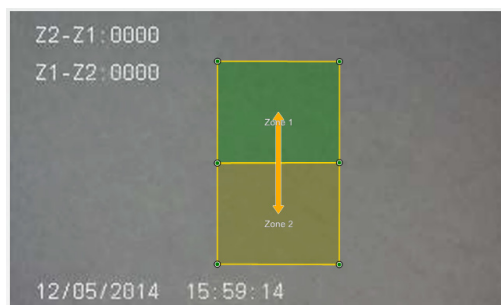


**Zone size is too small.**

※ **Please extend the length of the moving path as long as possible.**

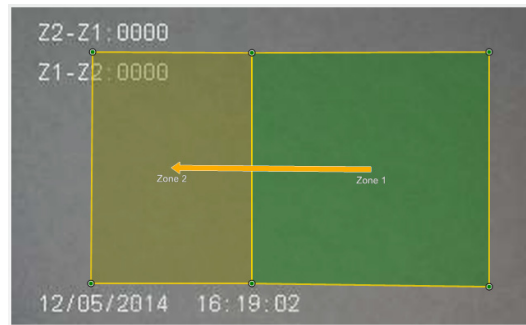


**The length of the moving path is longer.**



**The length of the moving path is too short.**

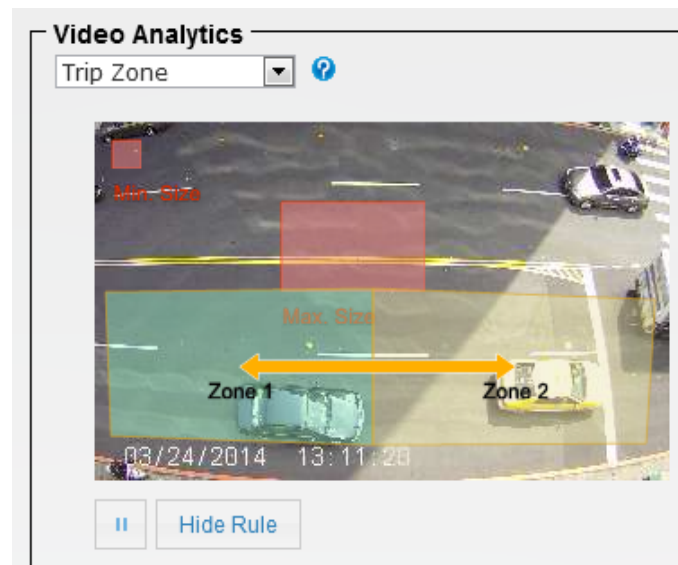
※ **If the wrong way direction is from Zone 1 to Zone 2, user can set bigger Zone 1 to increase the accuracy.**



**Zone 1 size is bigger.**

After you set the zone area correctly, the next step is to calibrate the object size according to your installation.

## Calibration



Click on either “Min. Size” or “Max. Size” window to change the size of the objects.

- Max. Size: Object larger than this size will be counted as more than one object.
- Min. Size: Object smaller than this size will not be counted.

## Other Important Settings

- Detect: Please choose “People” or “Vehicles” based on your detection environment.
- Statistic Chart Display: When enabled, it will show the result in a statistic graph. It is not recommended to turn on this function as it might use a lot of CPU resource which can influence the performance. If you use this function, please remember to **turn it off** after finish using it.



## Event Action

The camera's **Trip Zone** function can perform certain action when event conditions are met. For example; it can be set if any vehicle goes in the exit of parking lot. And it will send an alarm email to the center or operator.

### Example:

Setting if any vehicle goes into the exit of parking lot at 7am to 10pm, the camera will send an alarm email to control center with a subject message like "Wrong way. Please monitor it and do proper response".

1. Please make sure you have done the Mail Server setting and specific subject of email.
2. Go to "Video Analytics" and "Trip Zone". Change Interval to 1 second and quantity to "1". Then press "Apply" button to save settings.

**Trip Zone Settings**

Sensitivity:

Detect:  People  Vehicles  Anything

Calibration:  People  Vehicles

Event Conditions: Interval

Quantity

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**Zone Settings**

Edit Mode  Rotate Mode  Transform Mode

Directionality  Bi-Directional  Zone 1 to 2  Zone 2 to 1

3. Now, please click on "Set Event Action". Click on "Add". Then the following screen will appear. Please enter the data as shown below. Please remember to click on "Save" after finish settings.

**!** Note: The Event Name does not allow spaces in between words. Please enter the event name as one single word.

### Event List

	Event Name	Status
<input checked="" type="radio"/>	WrongWay	Enable

**!** Please remember to save settings after you add or edit event.

### Event Settings

Event Name: WrongWay  Enable

#### Schedule

Always  
 From 07 : 00 To 22 : 00 hh:mm  
 Sun  Mon  Tue  Wed  Thu  Fri  Sat

#### Trigger ?

Motion Detection   
  Digital Input 1 Low   
  Digital Input 2 Low   
  Tamper Detection  
 Video Analytics TZ ?   
 Periodically time 001 seconds

#### Action

Enable FTP   
 Enable SD CARD   
 Trigger digital output for 01 seconds  
 Enable EMAIL   
 Enable TCP   
 Audio File Playback  
 Enable Samba( Net Storage )   
 Enable HTTP