



BU-3028-IVS

**iMotion Detection
Guide**

Version 1.0



BU-3028-IVS iMotion Detection Guide

1. Overview

The BU-3028-IVS has built-in video analytic function for intelligent motion detection. It is a standalone function built into the camera's firmware without the need for external software or device. The iMotion detection function can be used to detect specific or any moving objects. This guide will focus on using BU-3028-IVS's "iMotion Detection" function to do moving object detection in places like warehouse, school, store or super market.

There are 3 specific enhancements in iMotion Detection compared with Motion Detection.

- Ability to distinguish motion from people, vehicle, or user defined object size.
- Define the detection areas with polygons.
- Ability to define event interval.

The iMotion Detection works by defining 1~4 zones on the video image. When a person or object crosses the border or moves into the zone, the camera will detect the object immediately.



The important factors for successful iMotion Detection installations are:

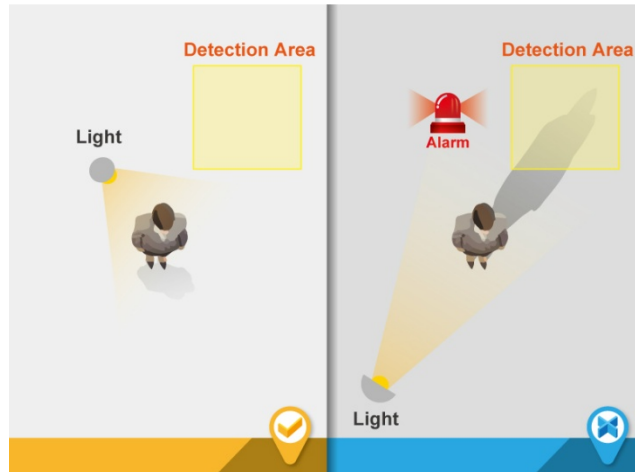
- Choose the appropriate installation location and avoid any obstacle like shadow of tree or building showing in the detecting area.
- Choose the appropriate resolution and frame rate.

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

2. Hardware Installation Guidelines

- It is recommended to have at least 2.6 meter of vertical clearance (from floor to ceiling) for best performance. However, if your environment cannot meet the recommended conditions, it can still work with reasonable accuracy.
- The followings are basic installation guidelines for best iMotion Detection.

1. Prevent from any shadow comes into detection area.



2. Avoid any moving merchandise, decoration or flash lights in the detection area.



3. Make sure there is enough illumination.

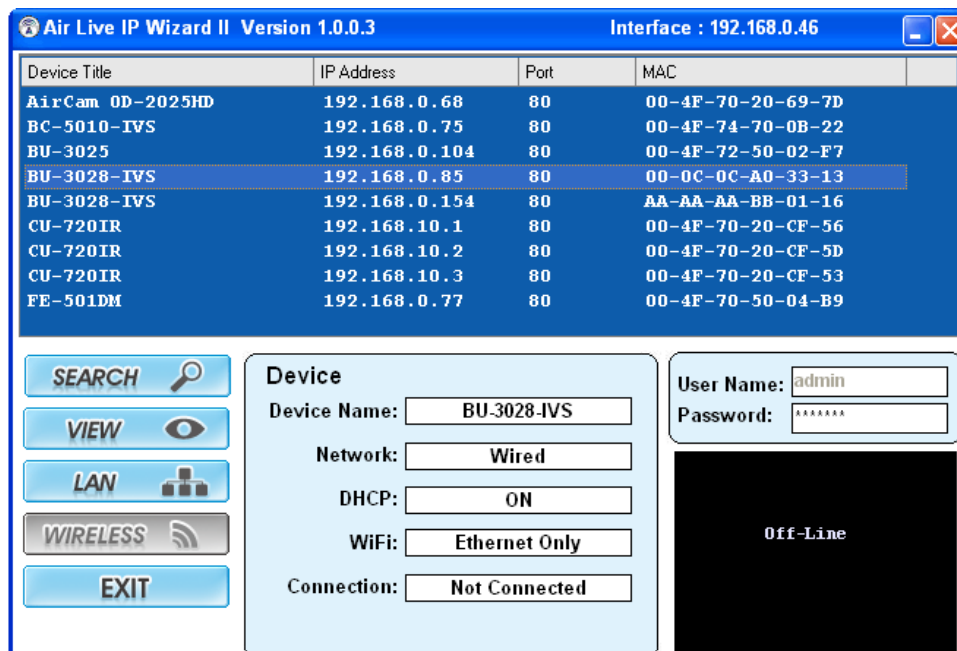


3. Camera Configuration

3.1 Finding camera using AirLive IP Wizard

The IPCAM's 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.



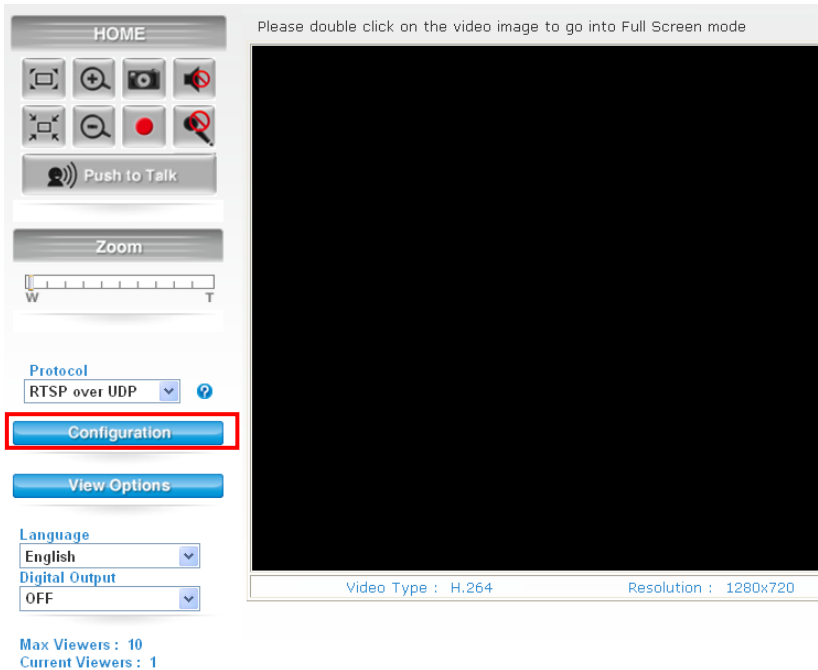
4. The IPCAM's web configuration will open automatically after double click. Please enter the “admin” for username and “airlive” for password.
5. After entering the correct username and password. You will enter the camera's web configuration page. When prompted to install “Media Control” from “OvisLink Corp”, please select “Yes” to install.

3.2 Enable Camera's Video Analytic function

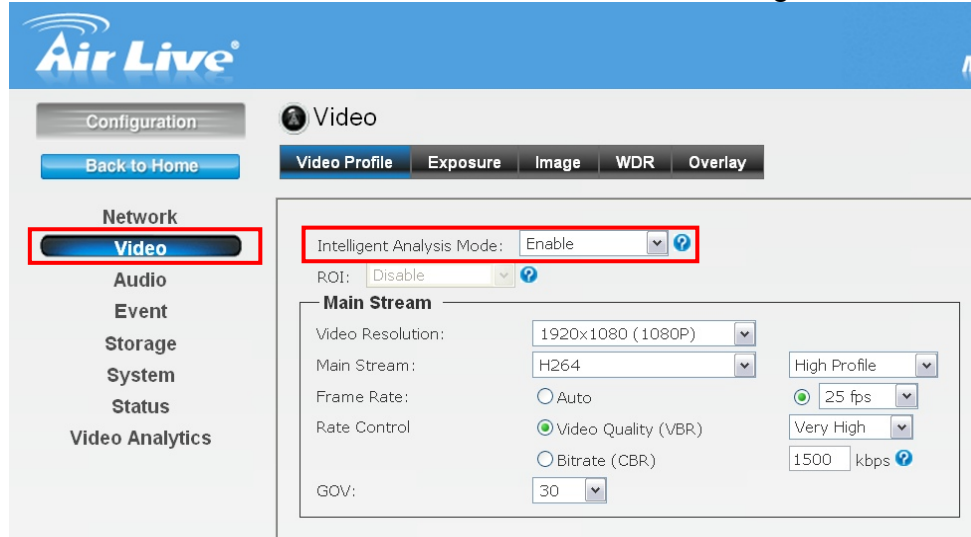
Please use Internet Explorer as the default browser. If you are using IE 11, please go to “Setup->Compatibility View Settings” and add the camera's IP address to the list.

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.

Main Stream Resolution	Main Stream Frame Rate	Second Stream Frame Rate
1920x1080	25FPS	15FPS

Network
Video
Audio
Event
Storage
System
Status
Video Analytics

Intelligent Analysis Mode: ?
ROI: ?

Main Stream

Video Resolution:
Main Stream:
Frame Rate: Auto 25 fps
Rate Control: Video Quality (VBR)
 Bitrate (CBR) kbps ?
GOV:

Second Stream

Enable Second Stream
Video Resolution:
Second Stream:
Video Quality:
Frame Rate: Auto 15 fps

3.4 Configure iMotion Detection Function

Please go to “Video Analytics” menu and select “iMotion Detection”

Air Live

Configuration
Back to Home

Network
Video
Audio
Event
Storage
System
Status
Video Analytics

Video Analytics
iMotion Detection ?

IMD
Sen
Det
Cali
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Set

|| ? Hide Rule

Below is the main page of iMotion Detection.

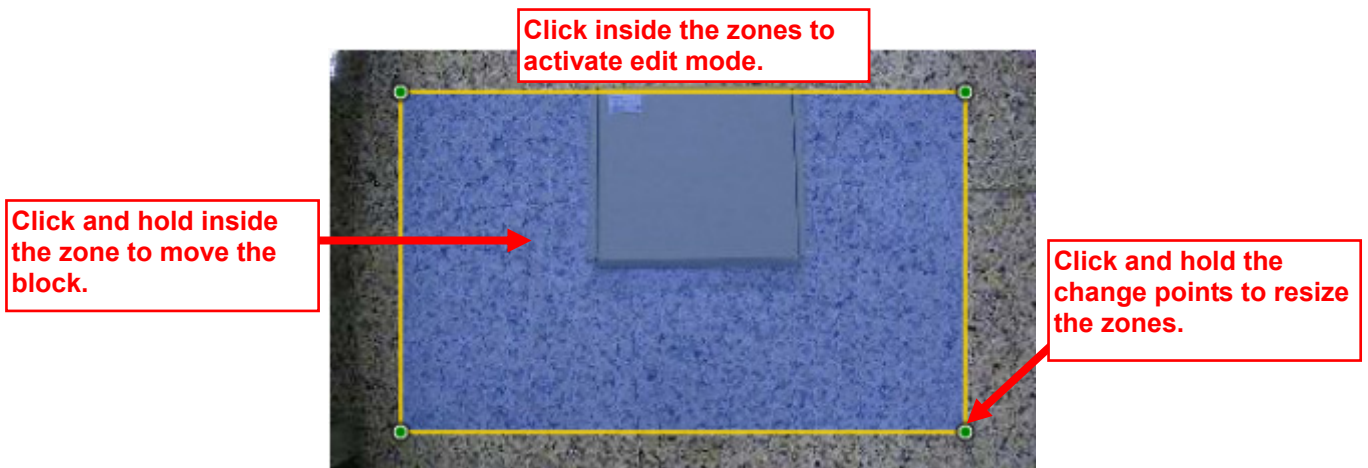


Please remember to press "Apply" after change settings, otherwise the settings won't take effect.

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

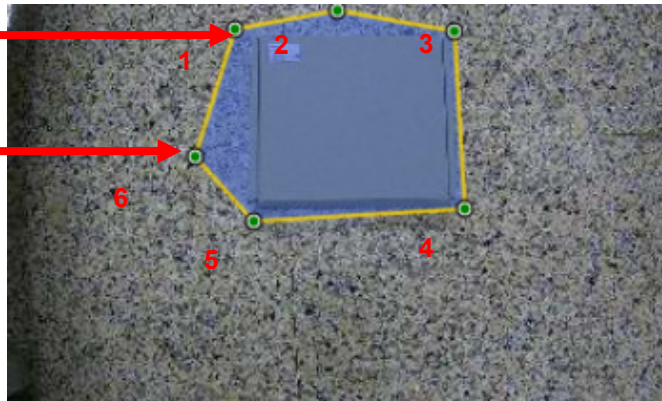
- This is the default zone setting. When you click inside the "Zone Area", you can move and resize the zone by holding the "inside zone" and the "change points".



- Create another zone: When you press "Add Zone" button, you can create up to 4 zones to fit your need.

Click left mouse button to set each position.

Click right mouse button to complete a zone when you finish a last position setting.



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

Calibration

“Anything” is our recommendation and you don’t need to do the calibration. However, you could also choose “People” or “Vehicles” to set “Calibration” when the camera cannot detect objects accurately.

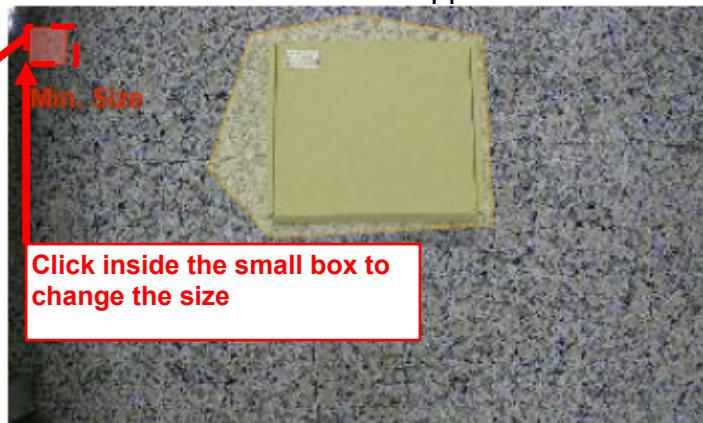
You can perform calibration by checking the “people” in the calibration field.

The screenshot shows the 'IMD Settings' panel on the right side of the interface. The 'Calibration' field has the 'People' checkbox checked. Below it, the 'Event Conditions' are set to 'Interval' with a 'User Define' dropdown, a value of '10', and a unit of 'SEC'. A 'Set Event Action' button is located below these settings. The 'Zone Settings' section at the bottom includes buttons for 'Add Zone', 'Delete Zone', 'Delete All', and 'Enable'.

On the Zone Area, a window label “Min Size” will appear.

Minimum Object Size

Click inside the small box to change the size

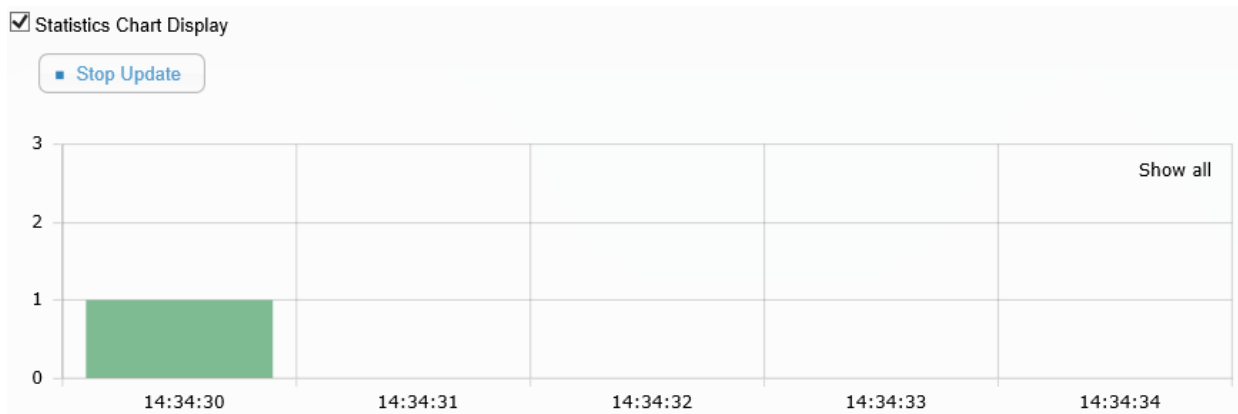


Click on “Min. Size” window to change the size of the minimum object.

■ Min Size: Object smaller than this size will not be detected.

Other Important Settings

- Detect: Please keep on “Anything” for an accurate detection.
- Sensitivity: “Moderate” is the recommended settings
- 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.



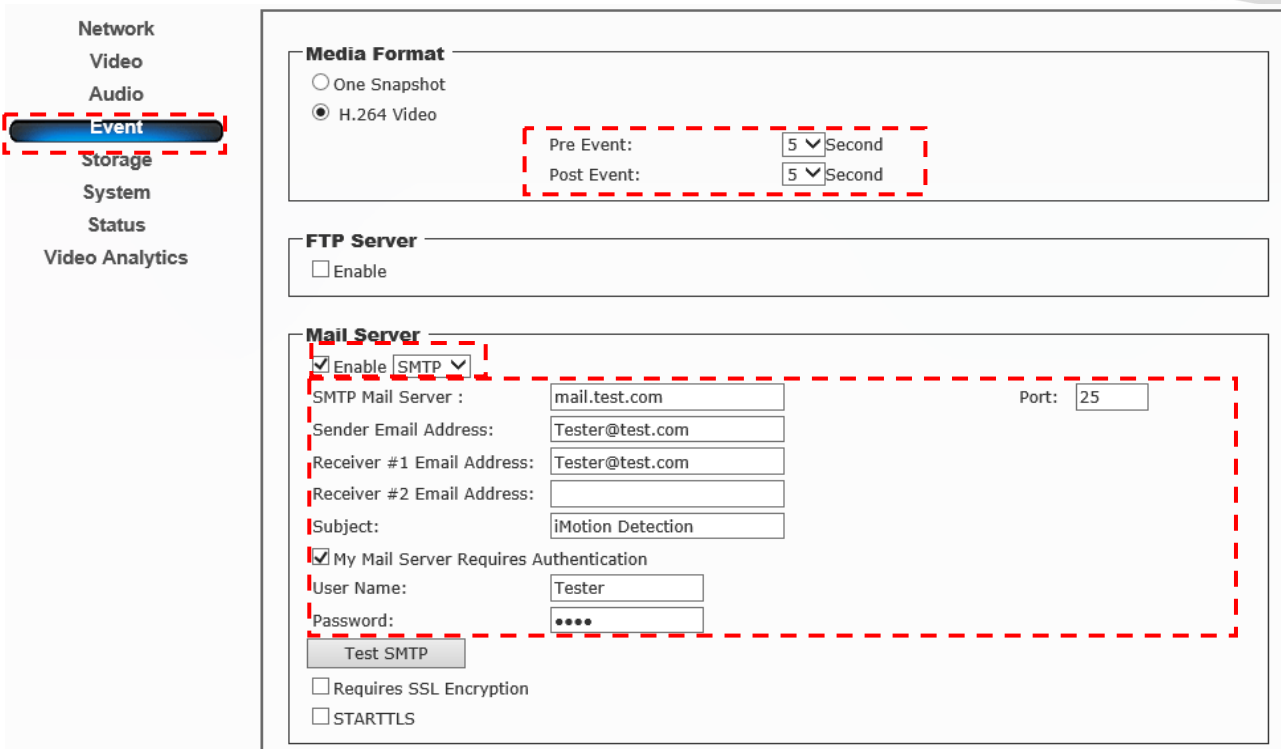
Event Action

The camera's iMotion Detection function can perform certain action when an event is met. For example, it can be set if any object is moving into the detection areas, it will start to record a video and send alarm email to user.

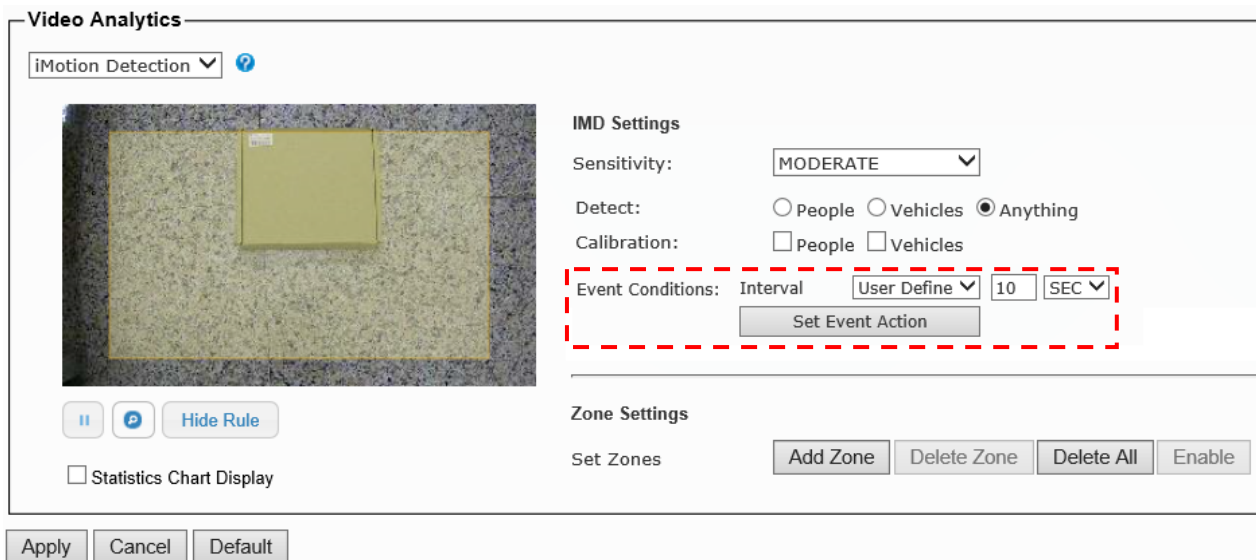
Example:

Setting if the object is moving into the detection areas between 7am to 9pm, the camera will record an event video and send an email to user.

1. Go to the camera's UI, select “Event->Media Format”, and choose recording period.
2. Check “Enable SMTP”, select SMTP or Gmail, and fill in all the relation data. (Please press “Test SMTP” button to make sure your setting is correct or not.)



- Go to “Video Analytics” and “iMotion Detection”. You can change the “Interval” to have the time interval between events.



- 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
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Event Settings

Event Name: Enable

Schedule

Always

From : To : hh:mm

Sun Mon Tue Wed Thu Fri Sat

Trigger

Motion Detection Digital Input 1 Digital Input 2 Tamper Detection

Video Analytics Periodically time seconds

Action

Enable FTP Enable SD CARD Trigger digital output for seconds

Enable EMAIL Enable TCP Audio File Playback

Enable Samba(Net Storage) Enable HTTP