

## **MD-3025-IVS**

# iMotion Detection Guide

Version 1.0



# MD-3025-IVS iMotion Detection Guide

#### 1. Overview

The MD-3025-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 MD-3025-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 <sup>,</sup> 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.

Air Live IP Wizard II V	ersion 1.0.0.3		Interface : 192.168.0.23	
Device Title	IP Address	Port	MAC	
Airlive BU-3026-IVS	192.168.0.103	80	00-FC-FC-B0-30-26	
Airlive MD-3025-IVS	192.168.0.86	80	00-0D-0D-A0-00-01	
SEARCH	Device		User Name: admin	
VIEW	Device Name: Airlive	MD-3025-IV		=)
LAN IN WIRELESS	DHCP: WiFi:Ethe	Wired ON rnet Only Connected	Off-Lin	ıe

- 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.

ir Live			
Configuration	🚳 Video		
Back to Home	Video Profile Exposu	re Image WDR Overlay	
Network			
Video	Intelligent Analysis Mod	le: Enable 🖌 🕜	
Audio	ROI: Disable	✓ Ø	
Event	Main Stream ——		
Storage	Video Resolution:	1920×1080 (1080P) 💌	
System	Main Stream :	H264 💌	High Profile 🗸 🗸
Status	Frame Rate:	O Auto	25 fps
Video Analytics	Rate Control	◉ Video Quality (VBR)	Very High 🔽
ridoo / inalytico		O Bitrate (CBR)	1500 kbps 🕜

#### 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.

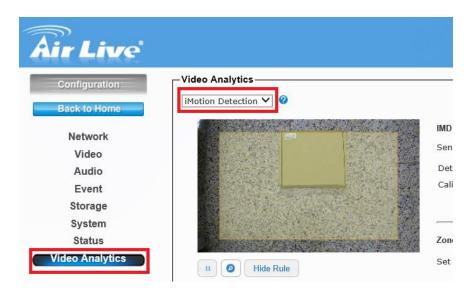
Main Stream	Main Stream Frame	Second Stream Frame
Resolution	Rate	Rate
1920x1080	25FPS	15FPS



Network Video Audio	Intelligent Analysis Mode ROI: Disable N Main Stream	Enable V	
Event Storage System	Video Resolution: Main Stream:	1920x1080 (1080P)     ✓       H264     ✓	High Profile
Status Video Analytics	Frame Rate: Rate Control	<ul> <li>Auto</li> <li>Video Quality (VBR)</li> <li>Bitrate (CBR)</li> </ul>	<ul> <li>● 25 fps ∨</li> <li>Very High ∨</li> <li>1500 kbps ?</li> </ul>
	GOV: Second Stream	30 V	
	Video Resolution: Second Stream: Video Quality: Frame Rate: Apply Cancel	320x192 (QVGA)MJPEGVery HighO AutoIs fps	

#### **3.4 Configure iMotion Detection Function**

Please go to "Video Analytics" menu and select "iMotion Detection"



Below is the main page of iMotion Detection.

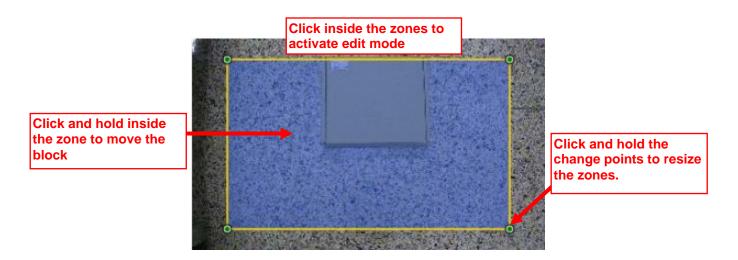


	IMD Settings	
	Sensitivity:	MODERATE V
	Detect:	$\bigcirc$ People $\bigcirc$ Vehicles $\textcircled{oldsymbol{\Theta}}$ Anything
	Calibration:	People Vehicles
	Event Conditions:	Interval User Define V 10 SEC V Set Event Action Zone Set
	Zone Settings	T
Statistics Chart Display	Set Zones	Add Zone         Delete Zone         Delete All         Enable
Apply Cancel Default		

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	2 3
Click right mouse button to complete a zone when you finish a last position setting.	6 5 4

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

#### Calibration

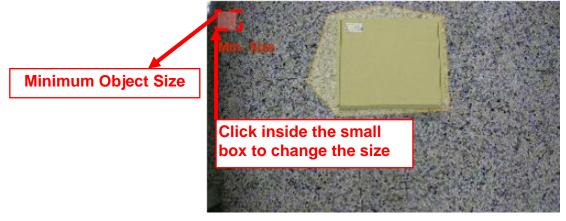
"Anything" is our recommendation and you don't need to do the calibration. However, you could also choose "People" or "Vehicles" to set "Calibration" when the camera cannot detect objects accurately.

You can perform calibration by checking the "people" in the calibration field.



Sensitivity:	MODERATE	$\checkmark$		
Detect:		/ehicles 〇 Anyth	ing	
Calibration:	People 🗆 \	/ehicles		
Event Conditions:	Interval Use	Define 💙 10	SEC 🗸	
	Set Event A	ction		
	ae	24		
Zone Settings				

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

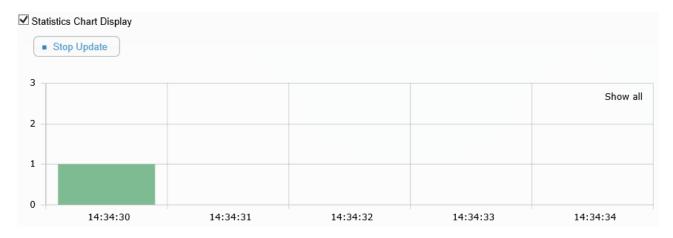


Click on "Min. Size" window to change the size of the minimum object.■ Min Size: Object smaller than this size will not be detected.



#### 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.)



Network Video Audio Event Storage System	Media Format O One Snapshot I H.264 Video	Pre Event: Post Event:	5 ✓       Second       5 ✓	
Status				
Video Analytics	FTP Server			
video Analytics	Enable			
	Mail Server			
	Enable SMTP 🗸			
	A set of the set of	and the states		
	SMTP Mail Server :	mail.test.com		Port: 25
	Sender Email Address:	Tester@test.com		1
	Receiver #1 Email Address:	Tester@test.com		1
	Receiver #2 Email Address:		]	1 I
	Subject:	iMotion Detection	]	1
	My Mail Server Requires A	uthentication	_	I.
	User Name:	Tester		
	Password:	••••		
	Test SMTP			
	Requires SSL Encryption			
	STARTTLS			

3. Go to "Video Analytics" and "iMotion Detection". You can change the "Interval" to have the time interval between events.

-Video Analytics					
	IMD Settings Sensitivity: Detect: Calibration: Event Conditions: Int	People	Define 💙 10	thing	
II (2) Hide Rule	Zone Settings				
Statistics Chart Display	Set Zones	Add Zone	Delete Zone	Delete All	Enable
Apply Cancel Default					

4. 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 Name Status	Add Edit Delete
Please remember to save setting	s after you add or edit event.
Event Settings Event Name: iMotionDetection	✓ Enable
Schedule	
○ Always ● From 07 ♥ : 00 ♥ To 21 ♥ Sun ♥ Mon ♥ Tue ♥ V	
Trigger 🕜	
□ Motion Detection ☑ Video Analytics IMD ✓	Digital Input 1 Low V Digital Input 2 Low V Tamper Detection
Action	
Enable FTP	Enable SD CARD     Trigger digital output for     1     Seconds     Enable TCP     Audio File Playback     Enable HTTP
Save Cancel	