







ZIP AI IP Camera

## IPCAI538

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ZipNVR.com

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## 1 Introduction

The ZIP AI Cameras provide triggering with smart detection features such as *line crossing*, *pedestrian detection*, *facial detection*.

Only one smart detection feature can be enabled at any given time.

*Facial recognition* can be set when connected to a compatible ZIP NVR with iSENSE firmware.

In order to use the ZIP AI cameras with a ZIP NVRs the latest iSENSE firmware is required, please see Extra Resources 28.

### 1.1 Key Features

- Alarm input and output\*
- Audio input and output\*
- Supports H264 and H265
- Supports ONVIF (Profile S, Profile G, Profile T)
- SD card\*
- Perimeter intrusion
- Line crossing
- Pedestrian and vehicle detection
- Facial detection
- IP66 (Excluding the IPCAI020)

\*On selected models

### **1.2 Essential Tools and ZipFinder**

To install this product you will need:

- Laptop / Windows PC
- Screwdriver
- Drill
- Hammer
- ZIP NVR or DVR
- PoE Switch / 12V DC power supply
- Ethernet CAT5/5e/6 Cable

#### ZipFinder - IP Camera Configuration Tool

ZipFinder is a Windows PC software for discovering and configuring IP cameras a network.

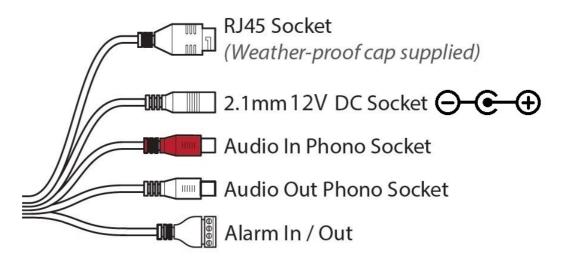
Use ZipFinder on non-PoE installs, to help problem solving issues such as forgotten or unknown IP Addresses.

To download visit ZipNVR.com

1	Search	0:0000				Filtrator fi	nder	ŝ
No.	P	Media Port	Web Post	Channel	Device Type	Device	nuer	Г
1	192 168 2 201	8285	85	1	IP-CAMISIOR	V620.00		ł
2	102 169 2 164	0003	80	1	IP.CAMEISR	12123_161222	265 255 265 3	
	102 168 2 168	6993	89	1	P.CAMISOW	V2123_161222	265 256 255.0	
E 4	192 168 2 158	0003	99	1	IP.CAM530W	V2122_161207	255.255.0.0	
E 5	192 168 2 159	9993	80		IP-CAM630W	V2.1.2.3_161222	255 255 255 0	
E 4	102 168 2 156	0993	84	1	IP-CAM8158	V2.1.2.2_161207	255 255 255 0	
8 7	102.158.2.152	9993	80	1	IP-CAMB158	12122_101207	255.255.255.0	
1	102 168 2 162	9901	84	9	IP-CAMB 158	V2133_170110	255 255 255 0	
•	102 160 2 142	9084	84	•	IP-CAMBOW	V2.12.3_101222	255 216 265 3	
UserIn	to aveg admin	Devorinto	132 105 2 210	Media Port. 42	_	Alle Funt 10		

## 2 Connections and Dimensions

### 2.1 IPCAI538 Vandal Dome 2.8-12mm



#### Powering the camera

**Option 1** - Power the camera from 12V DC (via the 2.1mm DC Socket), the current consumption is 400mA. The camera is polarity sensitive so connections must be correctly made.

Option 2 - Power the camera using a PoE 48V RJ45 Socket

When connecting to a **ZIP PoE NVR** plug the camera directly into the NVRs built in PoE switch.



\*Dimensions Exclude Bracket

## 3 Mounting and SD Card Installation

Note:-

IPCAI020 does not have an SD card slot.

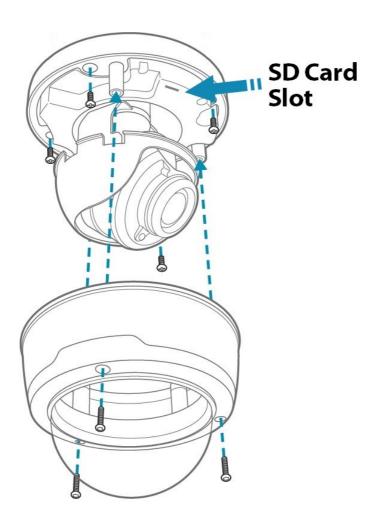
For local recording on the camera itself an SD card must be installed.

Recording time will vary dependent upon: SD card size and encoding settings  $32GB \ SD \ Card \approx 31 \ hours$  $64GB \ SD \ Card \approx 62 \ hours$  $128GB \ SD \ Card \ (MAX) \approx 124 \ hours$ 

The camera can be set to only record when triggered via *motion detection*, *alarm input* or *AI smart*, this maximises the recording time achievable.

Remove power from the camera when inserting / removing the SD card.

## 3.1 Dome



## 4 Setup Options

### 4.1 PoE ZIP NVR

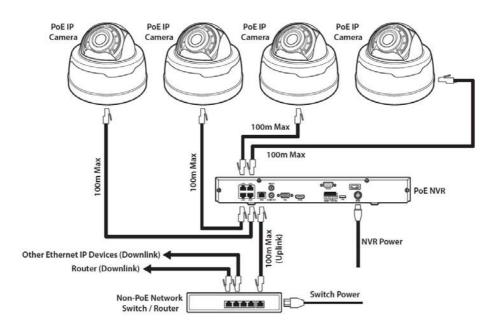
When connecting to a **ZIP PoE NVR** plug the camera directly into the NVR's built in PoE switch.

The camera should automatically become visible after being connected for approximately 1 minute.

The 100m distance for a camera can be increased when the PoE Mode is set to EPoE.

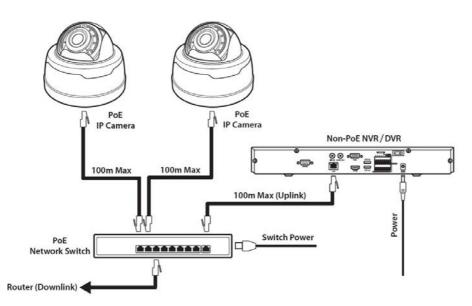
In the menu on a ZIP PoE NVR go to:-

#### Video > IP Channels > PoE Mode



## 4.2 Non-PoE ZIP NVR

When connecting cameras to a **Non-PoE NVR**, they are first connected to an external network switch which is in-turn connected to the NVR as shown below.



See <u>Extra Resources</u> for more information on Adding IP Cameras manually to a ZIP Recorder.

## 5 Setup and Al Features

The AI smart features can be configured in a ZIP recorder or directly in the browser interface of the camera (standalone)

Only one smart detection feature can be enabled at any given time.

# See the NVR or DVR manual for information on configuring these features with a ZIP recorder.

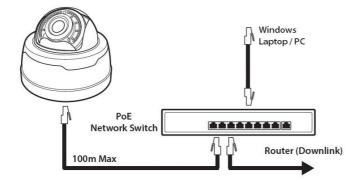
Follow the steps below for configuring the settings directly in the camera via a browser for standalone setup.

You will need ...

- Windows Based PC/ Laptop connected to router/ PoE switch
- ZipVision Pro App on Mobile Device
- PoE Switch connected to Network/ Router
- Ethernet network cable
- ZipFinder software, available via this link below:-

www.softcctv.com/store/Item/Zip-Finder-IP-CCTV-Security-Camera-Discovery-Tool

1. Plug the camera's RJ45 port with a network cable into a PoE switch



2. Using ZipFinder on a Windows Based PC/ Laptop Search and then tick the camera

ZP- finder								
Sea	irch	Upgrade	Con	fig				
No.	IP	Media Port	Web Port	Channel				
☑ 1	<u>192.168.10.1</u>	8240	80	1				

3. Select Net Mode = **DCHP**, then click **Modify** 

Web Port			Modify
Net Mode	DHCP	•	

4. Search again, to get the updated IP address.

5. **Select** the IP address of the camera, Internet Explorer will pop-up, and ask to download and install the plug-in.

6. **Download**, **install** and follow the steps for the plug-in installation, then re-load the browser by **selecting** the IP address again.

5. Login to the IP Camera, the default login details are:-

User Name	admin	
Password	777777	

6. Go to **Remote Setting > Smart > Detection** 

#### **5.1 PID = Perimeter Intrusion Detection**

Perimeter intrusion detection can be set to trigger an alarm event when movement is detected in a set area.

PID LCD	PD&VD FD		
Name Switch Latch Time Post Recording Sensitive Scene Alarm Out Send Email Detection Type Rule Number	Perimeter Intrusion Detection (PID)	Clear Clean Al	
Rule Switch Rule Type Enable Record	(A → B Refresh Save		

#### Key Settings

Switch - Tick to enable this feature.

Un-Tick to disable this feature.

**Latch Time** - This determines how long the alarm event is deemed to be activate once triggered. Options are 5, 10, 20 and 30 seconds.

**Post Recording** - This determines how long the camera will record for after the alarm event has ended. Options are 5, 10, 20 and 30 seconds.

**Sensitivity** - Determines how much activity or movement is required to generate an event. Options are **1** - **4**.

 $\mathbf{1}$  = Lowest sensitivity level, a significant amount of movement is needed to trigger

4 = Highest sensitivity level, only a small amount of moment is needed to trigger

Scene - Set for light level location to improve detection. Options are indoor or outdoor.

**Send Email** - Email alert via SMTP can be triggered and send a snapshot image of the event. *Note:- Email Settings required to be set up in Network Menu for this feature.* 

**Rule Number** - Up to 4 areas can be set independently in the image area. Use this to enable / disable each of the 4 rules.

Rule Switch - Tick to enable or disable the detection that rule for the rule number selected.

Rule Type - The determines how the direction of moment over the perimeter is handled.

A to B (A > B) = Only movement in the direction A to B will trigger. B to A (B > A) = Only movement in the direction B to A will trigger. A or B (A <->B) = Any moment direction over the perimeter will trigger.

Enable Record - Tick to enable recording when the event is triggered.

Un-Tick to disable recording when the event is triggered.

#### 5.2 LCD = Line Crossing Detection

Line crossing detection can be set to trigger an alarm event when movement is detected across a custom line

PID LCD	PD&VD FD	
Name	Line Crossing Detection (LCD)	
Switch		
Latch Time	5S •	The second
Post Recording	55 🔹	
Sensitive	2 *	
Scene	Indoor 🗸	
Alarm Out		Clear Clean All
Send Email		Clear Air
Detection Type	Pedestrian Vehicle	
Rule Number	1	
Rule Switch		
Rule Type	$(A \rightarrow B)$	
Enable Record		

#### Key Settings

Switch - Tick to enable this feature.

Un-Tick to disable this feature.

**Latch Time** - This determines how long the alarm event is deemed to be activate once triggered. Options are 5, 10, 20 and 30 seconds.

**Post Recording** - This determines how long the camera will record for after the alarm event has ended. Options are 5, 10, 20 and 30 seconds.

**Sensitivity** - Determines how much activity or movement is required to generate an event. Options are **1** - **4** 

1 = Lowest sensitivity level, a significant amount of movement is needed to trigger

4 = Highest sensitivity level, only a small amount of moment is needed to trigger

Scene - Set for light level location to improve detection. Options are indoor or outdoor.

**Send Email** - Email alert via SMTP can be triggered and send a snapshot image of the event. *Note:- Email Settings required to be set up in Network Menu for this feature.* 

**Detection Type** - Tick to enable, options are pedestrian, vehicle. (Both can be enabled simultaneously)

**Rule Number** - Up to 4 areas can be set independently in the image area. Select the number to control the setting of that specific area.

Rule Switch - Tick to enable or disable the detection that rule for the rule number selected.

Rule Type - The determines how the direction of moment over the perimeter is handled.

A to  $B(A \rightarrow B) = Only$  movement in the direction A to B will trigger. B to  $A(B \rightarrow A) = Only$  movement in the direction B to A will trigger. A or B(A < ->B) = Any moment direction over the perimeter will trigger.

Enable Record - Tick to enable recording when the event is triggered.

Un-Tick to disable recording when the event is triggered.

### 5.3 PD & VD = Pedestrian Detection and Vehicle Detection

Pedestrian detection and vehicle detection can be set to trigger an alarm event in a custom area when it detects pedestrians, vehicles or both.

PID LCD	PD&VD FD	
Name	Pedestrian Detection(PD&VD)	
Switch		
Latch Time	(5S	
Post Recording	5S	
Sensitivity	60	
Alarm Out		
Send Email		
Snap Mode	Interval Mode	
Snap Num	(1	
Snap Frequency	2	s/pic
Min Pixel	64	(64-1080)
Detection Type	Pedestrian Vehicle	
Detection Mode	Motion Mode	
Detection Range	Full Screen	· ·
Enable Record		

#### Key Settings

Switch - Tick to enable this feature.

Un-Tick to disable this feature.

**Latch Time** - This determines how long the alarm event is deemed to be activate once triggered. Options are 5, 10, 20 and 30 seconds.

**Post Recording** - This determines how long the camera will record for after the alarm event has ended. Options are 5, 10, 20 and 30 seconds.

**Sensitivity** - Determines how much activity or movement is required to generate an event. Options are **1** - **4** 

1 = Lowest sensitivity level, a significant amount of movement is needed to trigger

4 = Highest sensitivity level, only a small amount of moment is needed to trigger

**Send Email** - Email alert via SMTP can be triggered and send a snapshot image of the event. *Note:- Email Settings required to be set up in Network Menu for this feature.* 

Snap Mode - Set how the camera will capture thumbnail snapshots when triggered.

**Default** = Will only capture a snapshot when subjects are first detected. Additional thumbnail snapshots will only be captured if the subject leaves the camera's image and returns

**Realtime:** Only capture a snapshot from just before the subject leaves the image.

**Interval Mode** = Customize how many and how often thumbnail snapshots are captured using the **snap num** and **snap frequency** fields.

Snap Num - Set how many snapshots are captured for each event

1 = Will capture a single snapshot when the subject is first detected.

2 = Will capture a snapshot when the subject is first detected and one further snapshot at the interval as set by the snap frequency, if the subject is still present.

3 = Will capture a snapshot when the subject is first detected and two further snapshots, one further snapshot at the interval as set by the snap frequency, if the subject is still present.

**Unlimited** = Will continuously capture a snapshot at the interval as set by the snap frequency, if the subject is still present.

**Snap Frequency -** Customise how often the camera will capture a snapshot (in seconds), this is a timer which will remain active as long as the subject is present. If the subject leaves the camera's image and returns a snapshot will be captured and the timer will reset.

**Min Pixel** - Set the minimum trigger size, this can be set as a minimum width between 64 pixels to 1080 pixels. Customize the size depending on how far away the camera is away from the subject.

**Detection Type** - Tick to enable, options are pedestrian and vehicle. (Both can be enabled simultaneously)

Detection Mode - How the detection will handle motion and stationary objects.

**Motion mode** = Will only detect moving subjects.

**Static mode** = Will detect moving subjects but also stationary pedestrians and vehicles are in the alarm area.

Detection Range - Set the detection area for the image

**Customize** = Customise a defined detection area

**Full Screen** = Set to Monitor the entire image

Enable Record - Tick to enable recording when the event is triggered.

Un-Tick to disable recording when the event is triggered.

### 5.4 FD = Facial Detection

Facial detection can be set to trigger an alarm event in a custom area when it detects a face/

AI Face Recognition is available on these model NVRs:- ZIP108, ZIP116, ZIP208, ZIP308, ZIP216 and ZIP226.

PID LCD	PD&VD FD		
Name	Face Detection(FD)		
Switch			
Latch Time	(5S		
Post Recording	(5S		
Alarm Out			
Send Email	¥		
Face Enhance			
Snap Mode	(Interval Mode		
Apply Mode	Frontal View	•	
Snap Num	(1	•	
Snap Frequency	2		s/pic
Min Pixel	32		(32-1080)
Detection Mode	(Motion Mode		
Rule Kind	Rect	•	
Detection Range	Customize	•	
Enable Record			

#### **Key Settings**

Switch - Tick to enable this feature.

Un-Tick to disable this feature.

**Latch Time** - This determines how long the alarm event is deemed to be activate once triggered. Options are 5, 10, 20 and 30 seconds.

**Post Recording** - This determines how long the camera will record for after the alarm event has ended. Options are 5, 10, 20 and 30 seconds.

**Send Email** - Email alert via SMTP can be triggered and send a snapshot image of the event. Note:- Email Settings required to be set up in Network Menu for this feature. Snap Mode - Set how the camera will capture thumbnail snapshots when triggered.

**Default** = Will only capture a snapshot when subjects are first detected. Additional thumbnail snapshots will only be captured if the subject leaves the camera's image and returns

**Realtime:** Only capture a snapshot from just before the subject leaves the image.

**Interval Mode** = Customize how many and how often thumbnail snapshots are captured using the **snap num** and **snap frequency** fields.

Snap Num - Set how many snapshots are captured for each event

1 = Will capture a single snapshot when the subject is first detected.

2 = Will capture a snapshot when the subject is first detected and one further snapshot after the period of time specified in the snap frequency field if the subject is still present.

3 = Will capture a snapshot when the subject is first detected and two further snapshots, one further snapshot after the period of time specified in the snap frequency field if the subject is still present.

**Unlimited** = Will continuously capture a snapshot at the interval as set by the snap frequency, if the subject is still present.

**Snap Frequency -** Customise how often the camera will capture a snapshot (in seconds), this is a timer which will remain active as long as the subject is present. If the subject leaves the camera's image and returns a snapshot will be captured and the timer will reset.

Apply Mode - Customise the face detecting viewing angle for the most accurate face detection.

Frontal View - The camera optimizes the detection for straight on.

Multi Angle - The camera detects detects faces at various angles.

Customise - Customise to set up bespoke detection angles/

**Roll Range** - How far somebody can tilt their head (ear towards their shoulder) and still be detected as a face. Set the angle from 0 degrees so that a face would have to be straight to 180 degrees so that the face can be tilted 90 degrees to either side.

**Pitch Range** - How far a person can look up or down and still be detected. At 0 degrees the subject would have to be looking directly at the camera. At 180 degrees the subject can be looking towards the ground or towards the sky and could still be detected.

**Yaw Range** - How far somebody can be looking to the side and still be detected. At 0 degrees the subject would have to be looking directly at the camera. At 180 degrees the subject can be side on to the camera and could still be detected.

**Min Pixel** - Set the minimum trigger size, this can be set as a minimum width between 64 pixels to 1080 pixels. Customize the size depending on how far away the camera is away from the subject.

Detection Mode - How the detection will handle motion and stationary objects.

**Motion mode** = Will only detect moving subjects.

**Static mode** = Will detect moving subjects but also stationary pedestrians and vehicles are in the alarm area.

**Rule Kind** - Set to trigger an alarm event when a face is detected in a set area or set to trigger an alarm event when a face is detected across a custom line.

**Rect** - Face detection within a set area.

To create a custom detection area;

- 1. Set the **rule kind** drop down list to **rect**.
- 2. Set the **detection area** drop down list to **customise**.
- 3. Click on the camera's image to set the top left corner of the detection area.
- 4. Click the position to set the bottom left corner.
- 5. Click the position to set the bottom right corner.
- 6. Click to set the top right corner of the detection area.

**Line** - Face detection across a custom line. Customise the direction the line is crossed before a capture so the camera will monitor for face on entry or as people exit.

To set up line crossing face detection follow these steps:

- 1. Set the rule kind drop down list to line.
- 2. Click on the camera's image to start the line crossing.
- 3. Click to stop the line crossing.

4. Finally select which direction a person crosses the line before face detection is triggered from the **rule type** drop down list, from side **A** to **B** (**A->B**) or from side **B** to **A** (**B->A**).

**Detection Range** - Set the detection area for the image.

**Customize** = Customise a defined detection area

**Full Screen** = Set to Monitor the entire image

Enable Record - Tick to enable recording when the event is triggered.

Un-Tick to disable recording when the event is triggered.

## 6 Browser Menu Settings

The menu be configured directly in the browser interface of the camera (standalone), in Remote Setting you will find the menu settings.

Camera	OSD Menu	Name	Customise Name
		Flicker Control	<b>50Hz</b> / 60Hz
		Transparency	1 ~ 128 (Default <b>64</b> )
		Show Name	Untick / Tick
		Show Time	Untick / Tick
		Refresh / Save	•
	Camera Settings	IR-CUT Mode	Auto / Colour Mode / Black White Mode /
	0		Schedule (B/W)
		<b>IR-CUT</b> Delay	$1 \sim 36$ (Default 2)
		IR-LED	Auto / Off / On
		Flip	Untick / Tick
		Mirror	Untick / Tick
		Corridor Mode	Untick / Tick
		Angle Rotation	180 / 0
		Backlight	Untick / Tick
		3D Noise	Auto / Disable / Manual
		Reduction	
		DWDR	Untick / Tick
		HLC	Untick / Tick
		AGC	1 ~ 128 (Default <b>64</b> )
		White Balance	Auto / Manual / Indoor
		Shutter	Auto / Manual
		Time Exposure	1/5 / <b>1/8</b> / 1/15 / 1/25 / 1/50 / 1/100 / 1/150 /
		(max)	1/180 / 1/200 / 1/240 / 1/250 / 1/300 /
			1/360 / 1/480 / 1/500 / 1/600 / 1/700 /
			1/1000 / 1/1500 / 1/2500 / 1/5000 /
			1/10000 / 1/12000 / 1/20000 / Flickerless
		Defog Mode	Disable / Auto / Manual
		Refresh / Save /	Default
	Privacy Mask	Privacy Mark	Untick / Tick
		Refresh / Save	
	ROI	Stream Type	MainStream / SubStream / MobileStream
		Region ID	1~8
		Enable Region	Disable / Enable
		ROI Level	Worst / worse / bad / normal / better / best
		Non-ROI Fps	12
		(1-19)	
		Refresh / Save	
Record	Record Settings	Stream Mode	MainStream / SubStream
		Record	Tick / Untick
		PreRecord	Tick / Untick

	Normal Schedule	Customise Sch	edule			
		Refresh / Save /	Default			
	Event Schedule	Customise Sch	edule			
		Refresh / Save / Default				
Capture	Capture	Normal Interval <b>5S</b> / 10S / 30S / 1Min / 10Min / 30Min /				
1	1		1Hour			
		Alarm Interval	<b>5S</b> / 10S / 30S / 1N	/lin / 10Min / 30Min /		
			1Hour			
		Auto Capture	Untick / Tick			
		Manual Capture	Untick / Tick			
		Refresh / Save				
	Capture Scheduk	Customise Sch	edule			
Network	Network	Туре	DCHP/PPPoE/S	static		
		Client Port	8240			
		HTTP Port	80			
		IP Address	192.168.10.1			
		Subnet Mask	255.255.255.0			
		Gateway	192.168.10.254			
		DNS 1	192.168.10.254			
		DNS 2	Untick / Tick			
		UPNP	Untick / Tick			
		Multicast	Untick / Tick			
		P2P Switch	Untick / Tick			
		Port Range	1024 ~ 65535 (Clie	ent Port, HTTP Port)		
		Refresh / Save				
	Encoding	Mainstream	Resolution	3840x2160 / 3072x172		
				/ 2592x1944 /		
				2592x1520 / 2304x129		
				/ <b>1920x1080</b> /		
				1280x720		
			FPS	1 ~ 20 (Default 12)		
			Video Code Type	<b>H.264</b> / H.265		
			Video Code Level	Main Profile / Baseline		
				High Profile		
			Bitrate Control	CBR / VBR		
			Bitrate Mode	Predefined / User		
				Defined		
			Bitrate	256 / 320 / 384 / 448 /		
				512 / 640 / 768 / 896 /		
				1024 / 1280 / 1536 /		
				1792 / <b>2048</b> / 3072 /		
				4096 / 5120 / 6144 /		
			4 11	8192 / 10240 / 12288		
			Audio	Untick / Tick		
			I Frame Interval	1 ~ 80 (Default <b>24</b> )		
			Refresh / Save			

		SubStream	Resolution	1920x1080 / 1280x720 / 640x480 /
				320x240
			FPS	$1 \sim 20$ (Default <b>10</b> )
			Video Code Type	H.264 / H.265
			Video Code Level	Main Profile / Baseline /
			V Meo Code Level	High Profile
			Bitrate Control	CBR / VBR
			Bitrate Mode	Predefined / User
			Diffute Widde	Defined
			Bitrate	128 / 160 / 192 / 224 /
				256 / 320 / 384 / 448 /
				512 / 640 / 768 / 896 /
				1024 / 1280 / 1536 /
				1792 / 2048 / 3072 /
				4096
			Audio	Untick / Tick
			I Frame Interval	1 ~ 80 (Default <b>20</b> )
			Refresh / Save	· · · · · · · · · · · · · · · · · · ·
		MobileStream	Enable	Tick / Untick
			Resolution	<b>640x480</b> / 320x240
			FPS	1 ~ 20 (Default <b>10</b> )
			Video Code Type	<b>H.265</b> / H.264
			Video Code Level	Main Profile / Baseline /
				High Profile
			Bitrate Control	CBR / VBR
			Bitrate Mode	Predefined / User
				Defined
			Bitrate	8 / 16 / 24 / 32 / 48 /
				64 / 80 / 96 / 128 / 160 /
				192 / 224 / <b>256</b> / 320 /
				384 / 448 / 512 / 640 /
				768 / 896 / 1024 /
			A 1'	1280 / 1536
			Audio	Untick / Tick
			I Frame Interval	1 ~ 80 (Default <b>20</b> )
		<b>D</b>	Refresh / Save	
	Email Settings	Email	Untick / Tick	
		Encryption	Disable / SSL / TL	S / Auto
		SMTP Port	25 / Customise	
		SMTP Server	Customise	
		User Name Password	Customise Customise	
		Password Sender Email	Customise Customise	
		Receiver1	Customise Customise	
			Customise Customise	
		Receiver2	Customise	

		Deceiver?	Createrniae	
		Receiver3	Customise	
		Interval	11Min / 3Min / 5Min / 10Min	
		Refresh / Save / Test Email / Cancel		
	ZIP DDNS	DDNS	Untick / Tick	
		Server	NO_IP / DYNDNS	
		Host Name	Customise	
		Username	Customise	
		Password	Customise	
	IP Filter	Refresh / Save / Add / Del		
		Filter Mode	Allow all IP connections / Allow the selected IP connections / Block the selected IP	
			connections	
	RTSP Port	RTSP	Tick / Untick	
		RTSP Port	1240 / Customise	
		Anonymous	Untick / Tick (No username or password	
		Login	required)	
			/IP:Port/ch01/A A:0(MainStream),	
		1	(MobileStream)	
		Refresh / Save	× //	
Alarm	Motion Detection	Enable	Untick / Tick	
		Sensitivity	1 ~ 8 (Default <b>3</b> )	
		Alarm Out	Untick / Tick	
		Latch Time	<b>58</b> / 108 / 208 / 308	
		Post Recording	<b>58</b> / 108 / 208 / 308	
		Send Email	Untick / Tick	
		Enable Record	Tick / Untick	
		Refresh / Save		
	Alarm Settings	Alarm Input	OFF / NC / NO	
		Latch Time	<b>58</b> / 108 / 208 / 308	
		Send Email	Untick / Tick	
		Alarm Out	Untick / Tick	
		Enable Record	Untick / Tick	
		Post Recording	08 / 58 / 108 / 208 / 308	
		Refresh / Save		
	Lens	Enable	Tick / Untick	
		Sensitivity	$1 \sim 6$ (Default <b>3</b> )	
		Send Email	Untick / Tick	
		Alarm Out	Untick / Tick	
		Latch Time	<b>5S</b> / 10S / 20S / 30S	
		Refresh / Save	00710072007500	
Device	SD Card	SD Card	Auto / Close	
		Overwrite		
		Refresh / Save		
	Audio Settings	Enable Audio	Untick / Tick	
	Auto Settings	Output Volume	$0 \sim 10$ (Default 5)	
		Input Volume	$0 \sim 10$ (Default 5)	

		Audio Code	G711A / G711U	J / G726 16K	
		Туре			
		Refresh / Save			
	Log	Major Type	Selectable	Search	
	-	Start Time	Selectable		
		End Time	Selectable		
System	Date/ Time	System Time	Customise		
		Date Format	DD/MM/YYYY / YYYY/MM/DD /		
			MM/DD/YYYY	7	
		Time Format	24Hour / 12Hou	ır	
		DST / NTP / S	DST / NTP / Synchronize		
		Daylight Saving	g Tick / Untick		
		Time			
		Daylight Saving	Week / Date		
		Time			
		Time Offset	1Hour / 2Hour	1Hour / 2Hour	
		Start Time	Customise		
		End Time	Customise		
		Refresh / Save			
	Users	Select User	Username	Customise	
			Password	Customise	
			Confirm	Customise	
			Active	Tick / Untick	
			Password	Tick / Untick	
			Refresh / Save	I	
	Info	Device Name			
		Serial No.			
		Hardware Version			
			Software Version		
		IE Client Version			
		MAC Address			
		Refresh			
Tools	Firmware Upda		Upgrade file path		
		Scan			
		Upgrade			
	Load Default	Camera	Tick / Untick		
		Record	Untick / Tick		
		Network	Untick / Tick		
		Alarm	Untick / Tick		
		Device	Tick / Untick		
			Tick / Untick		
		System	Tick / Untick		
		System Tools	Tick / Untick		
		System Tools Smart	Tick / Untick Tick / Untick		
	Reboot	System Tools	Tick / Untick Tick / Untick		

		Refresh / Save	e / Reboot	
	Import and	Import File	Scan / Import	
	Export	Export Path	Scan / Import	
Smart	Detection	PID	Name	Perimeter Intrusion
				Detection (PID)
			Switch	Untick / Tick
			Latch Time	<b>5S</b> / 10S / 20S / 30S
			Post Recording	<b>5S</b> / 10S / 20S / 30S
			Sensitive	1 / 2 / 3 / 4
			Scene	Indoor / Outdoor
			Alarm Out	Tick / Untick
			Send Email	Untick / Tick
			Detection Type	Pedestrian &/or Vehicl
			Rule Number	1/2/3/4
			Rule Switch	Untick / Tick
			Rule Type	A>B / A <b a<="">B</b>
			Enable Record	Untick / Tick
			Refresh / Save	
		LCD	Name	Line Crossing Detectio
				(LCD)
			Switch	Untick / Tick
			Latch Time	<b>5S</b> / 10S / 20S / 30S
			Post Recording	<b>5S</b> / 10S / 20S / 30S
			Sensitive	1 / <b>2</b> / 3 / 4
			Scene	Indoor
			Alarm Out	Tick / Untick
			Send Email	Untick / Tick
			Detection Type	Pedestrian &/or Vehicl
			Rule Number	1/2/3/4
			Rule Switch	Untick / Tick
			Rule Type	A>B / A <b a<="">B</b>
			Enable Record	Untick / Tick
			Refresh / Save	
		PD & VD	Name	Pedestrian Detection
				(PD&VD)
			Switch	Untick / Tick
			Latch Time	<b>5S</b> / 10S / 20S / 30S
			Post Recording	<b>5S</b> / 10S / 20S / 30S
			Sensitive	0 ~ 100 (Default <b>60</b> )
			Alarm Out	Untick / Tick
			Send Email	Untick / Tick
			Snap Mode	Interval Mode /
				Realtime Mode / Defau
			Snap Num	1 / 2 / 3 / Unlimited
			Snap Frequency	2 / customise
			Min Pixel	64 ~ 1080 (Default 64

I		
	Detection Type Pedestrian &/or V	<i>vehicle</i>
	Detection Mode Motion Mode / S	Static
	Mode	
	Detection Range Full Screen / Cus	stomize
	Enable Record Untick / Tick	
	Refresh / Save	
FD	Name Face Detection (F	D)
	Switch Untick / Tick	
	Latch Time <b>5S</b> / 10S / 20S / 3	80S
	Post Recording <b>5S</b> / 10S / 20S / 3	80S
	Sensitive $0 \sim 100$ (Default )	<b>50</b> )
	Alarm Out Untick / Tick	
	Send Email Untick / Tick	
	Face Enhance <b>Tick</b> / Untick	
	Snap Mode Interval Mode /	
	Realtime Mode / C	Optimal
	Mode	
	Apply Mode Frontal View / M	lulti
	Angle / Customize	•
	Snap Num 1 / 2 / 3 / Unlimite	d
	Snap Frequency 2 / customize	
	Min Pixel $32 \sim 1080$ (Defau	ılt <b>32</b> )
	Detection Mode Motion Mode / S	Static
	Mode	
	Rule Kind <b>Rect</b> / Line	
	Detection Range Full Screen / Cus	stomize
	Enable Record Untick / Tick	
	Refresh / Save	

## 7 Motorised Zoom & Focus

The vari-focal motorised zoom and focus is controlled electronically.

To control, this will differ depending on the setup of the camera, if being used with a ZIP recorder or standalone.

### 7.1 ZIP NVR and DVR

When using a ZIP NVR and DVR the zoom and focus for the motorised lens is controlled from PTZ control options on the live view.

To access the Control Menu via coaxitron:-

- 1. Click on the image in Live view
- 2. Click on the PTZ button at the bottom of the screen

Use the **zoom** + and **zoom** -, to zoom in and out.

The camera will automatically focus once the zoom button is released.

Focus can also be set manually using the focus + and zoom -.

#### 7.2 Standalone

When using the camera standalone the zoom and focus for the motorised lens is controlled from PTZ control options on the live view on the browser

Find the PTZ button at the top right in live.

~	PTZ Setting		
0	ZOOM		
	Step 5		
	FOCUS		
	Step 5		
	AutoFocus		
	Restore		
	Refresh		

Use the **zoom** + and **zoom** -, to zoom in and out.

The camera will automatically focus once the zoom button is released.

Focus can also be set manually using the focus + and zoom -.

## 8 Extra Resources

## 8.1 ZipNVR.com Website

The Zip NVR has a range of information on the cameras and NVRs, manuals, software, tools and support:-



## 8.2 Adding IP Cameras

How to guide on Adding IP Cameras:-

www.zipdvr.com/howto/TIP459-How-To-Add-IP-Cameras.html

## 8.3 ZIP Firmware

Firmware for the ZIP products are available online:-

www.zipdvr.com/firmware.html

Compare the firmware in the product against that available online.

AI Face Recognition is available on these model NVRs:- ZIP108, ZIP116, ZIP208, ZIP308, ZIP216 and ZIP226.

## 9 General Maintenance

- Routinely clean the camera to prevent dust build up as this can effect the performance of the camera. It is recommended to use a damp non-abrasive microfibre cloth.
- Routinely check the connections for power and data to ensure no water ingress and corrosion.
- Check that the cameras are firmly attached to the wall or mounting bracket.
- Check playback in the recorder to ensure the camera is recording and triggering properly.

## 10 Specification

## 10.1 IPCAI538

Image Sensor	1/2.8" Progressive CMOS
Resolution	8MP 2592(H)×1944(V)
Lens Type	2.8-12mm Motorised
Shutter	1/5 ~ 1/20000s
Day/Night	Mechanical (True Day-Night)
Min. Illumination	0 (With IR On)
IR Range	Up to 40m
Digital Noise	3D DNR
Reduction	
Video Compression	H.264 / H.265
Video Bitrate	8Kbps ~ 16Mbps
Stream Options	Mainstream, SubStream & MobileStream
Smart Feature	Perimeter Intrusion, Line Crossing, Pedestrian and Vehicle Detection,
	Facial Detection, Facial Recognition
System	ONVIF (Profile S, Profile G)
Compatibility	
Connection	RJ45 10M / 100M Ethernet PoE
SD Card	Micro SD Card Slot (up to 128GB)
Alarm	1 Input / 1 Output
Audio (RCA)	1 Input / 1 Output
Input Voltage	PoE or 12V DC 400mA (PSU Required)
Consumption	8W Max
Operating	From -30 to 60 deg°C
Temperature	
Backlight Control	BLC / D-WDR
Use	IP66 For External Use

## 11 Conditions

All specifications are approximate. System Q Ltd reserves the right to change any product specifications or features without notice. Whilst every effort is made to ensure that these instructions are complete and accurate, System Q Ltd cannot be held responsible in any way for any losses, no matter how they arise, from errors or omissions in these instructions, or the performance or non-performance of the equipment that these instructions refer to.



This symbol on the products and/or accompanying documents means that used electronic equipment must not be mixed with general household waste. For treatment, recovery and recycling please return this unit to your trade supplier or local designated WEE/CG0783SS collection point as defined by your local council.

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## ZipNVR.com