



# **Instruction Manual**

IPCAI918

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ZipNVR.com



# **Table of Contents**

Introduction	3
Key Features - IPCAI915 & IPCAI918	3
Essential Tools and ZipFinder	3
Mounting and SD Card Installation	5
Bullet	_
Bullet	5
Setup Options	6
PoE ZIP NVR	6
Non-PoE ZIP NVR	7
Setup and Al Features	8
PID = Perimeter Intrusion Detection	10
LCD = Line Crossing Detection	12
PD & VD = Pedestrian Detection and Vehicle Detection	14
FD = Facial Detection	17
Al Setup	20
IPCAI915 / IPCAI918 Browser Menu Settings	21
Motorised Zoom & Focus	31
ZIP NVR and DVR	31
Standalone	31
Extra Resources	32
ZipNVR.com Website	32
Adding IP Cameras	32
ZIP Firmware	32
General Maintenance	33
Specification	34
IPCAI918	34



#### 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 <a href="Extra Resources">Extra Resources</a>.

### 1.1 Key Features - IPCAI915 & IPCAI918

- Alarm input and output
- Audio input and output
- Supports H264 and H265
- Supports ONVIF (Profile S, Profile G, Profile T)
- Micro SD Slot
- Built-in ANPR
- Privacy Mask
- Pedestrian and vehicle detection
- Facial detection
- Motion Detect
- IP66
- NDAA Compliant

## 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** 





## **Mounting and SD Card Installation**

Note:-

IPCAI020 does not have an SD card slot.

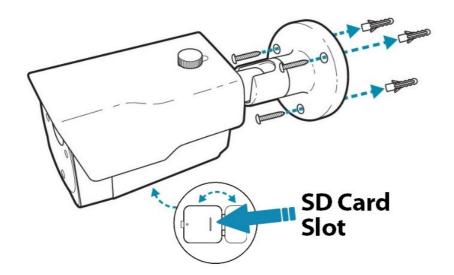
For local recording on the camera itself an SD card must be installed.

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

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

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

#### 2.1 Bullet



A template is provided in the box for marking the hole positions for the fixing screws.



## **Setup Options**

## 3.1 PoE ZIP NVR

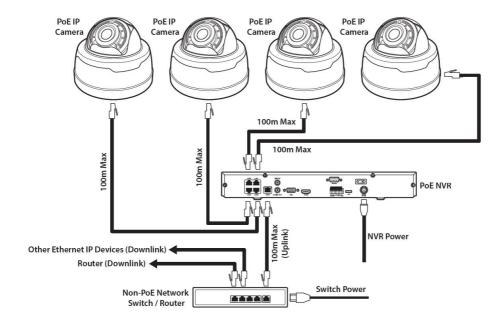
When connecting to a **ZIP PoE NVR** plug the camera directly into the NVR's built in PoE switch.

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:-

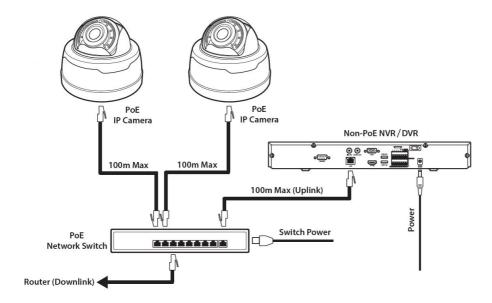
#### Video > IP Channels > PoE Mode





### 3.2 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 Extra Resources of for more information on Adding IP Cameras manually to a ZIP Recorder.



## **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.

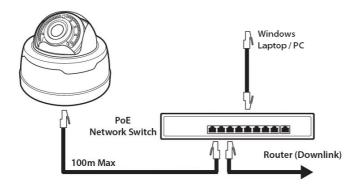
Follow the steps below for configuring the settings directly in the camera via a browser for standalone setup.

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



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



- 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:-

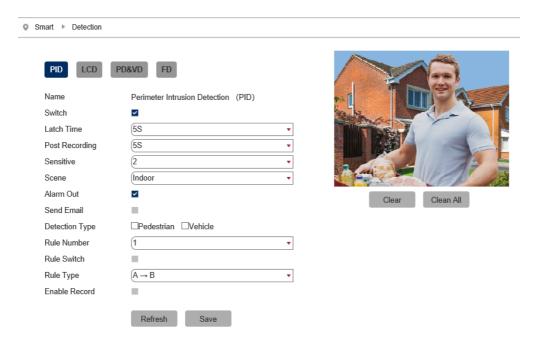
User Name	admin
Password	777777

6. Go to Remote Setting > Smart > Detection



#### 4.1 PID = Perimeter Intrusion Detection

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



#### **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.* 

**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.

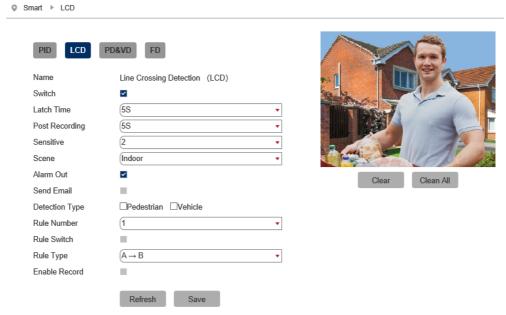
**Enable Record** - Tick to enable recording when the event is triggered.

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



### 4.2 LCD = Line Crossing Detection

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



#### **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->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.

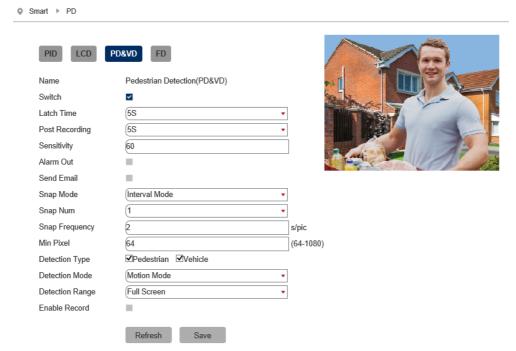
**Enable Record** - Tick to enable recording when the event is triggered.

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



#### 4.3 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.



#### **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.

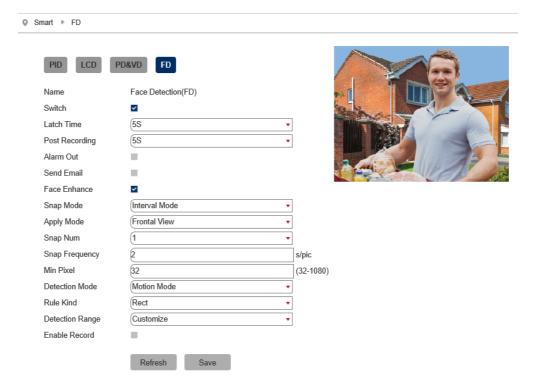
Un-Tick to disable recording when the event is triggered.



#### 4.4 FD = Facial Detection

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

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



#### **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.

### 4.5 Al Setup

See the ZIP NVR full manual for more information on AI setup; Note: AI Features will vary depending on model

#### **Full Instruction Manual**



https://systemq.com/PDF/manual/xZIP4.pdf



## IPCAI915 / IPCAI918 Browser Menu Settings

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

For Al Settings please see Al Setup 20

Channel	Live	Name	Customise Name
		Date Format	DD/MM/YYYY / MM/DD/YYYY /
			YYYY/MM/DD
		Time Format	24Hour / 12Hour
		Flicker Control	<b>50Hz</b> / 60Hz
		Transparency	1 ~ 128 (Default <b>64</b> )
		Show Name	Enable / Disable
		Show Time	Enable / Disable
		OSD Self-	Enable / Disable
		adaptive	
		Refresh / Save	
	Image Control	IR-CUT Mode	Automatic Mode / Colour Mode /
			Black White Mode / Image Mode /
			Schedule
		Corridor Mode	Disable / Enable
		Angle Trad	<b>180</b> / 0
		Mirror	Disable / Vertical / Horizontal / All
		Exposure	Disable / HLC / BLC / WDR
		Compensation	
		White Balance	Automatic Mode / Manual
		Shutter	Automatic Mode / Manual
		Time Exposure	<b>1/5</b> / 1/8 / 1/15 / 1/25 / 1/50 / 1/100 /
		·	1/150 / 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 /
			1/5000 / 1/10000 / 1/12000 / 1/20000
		3D Noise	1/5000 / 1/10000 / 1/12000 /
		Reduction	1/5000 / 1/10000 / 1/12000 / 1/20000 <b>Auto</b> / Disable / Manual
		Reduction Refresh / Save / D	1/5000 / 1/10000 / 1/12000 / 1/20000 <b>Auto</b> / Disable / Manual
	Privacy Mask	Reduction Refresh / Save / D Privacy Mark	1/5000 / 1/10000 / 1/12000 / 1/20000 <b>Auto</b> / Disable / Manual
		Reduction Refresh / Save / [ Privacy Mark Refresh / Save	1/5000 / 1/10000 / 1/12000 / 1/20000 Auto / Disable / Manual Default Untick / Tick
	Privacy Mask ROI	Reduction Refresh / Save / D Privacy Mark	1/5000 / 1/10000 / 1/12000 / 1/20000  Auto / Disable / Manual  Default  Untick / Tick  MainStream / SubStream /
		Reduction Refresh / Save / Defrivacy Mark Refresh / Save Stream Type	1/5000 / 1/10000 / 1/12000 / 1/20000 Auto / Disable / Manual  Default Untick / Tick  MainStream / SubStream / MobileStream
		Reduction Refresh / Save / D Privacy Mark Refresh / Save Stream Type Region ID	1/5000 / 1/10000 / 1/12000 / 1/20000 <b>Auto</b> / Disable / Manual Default <b>Untick</b> / Tick <b>MainStream</b> / SubStream / MobileStream <b>1</b> ~ 8
		Reduction Refresh / Save / Defresh / Save / Defresh / Save Refresh / Save Stream Type Region ID Enable Region	1/5000 / 1/10000 / 1/12000 / 1/20000  Auto / Disable / Manual  Default  Untick / Tick  MainStream / SubStream / MobileStream  1 ~ 8  Disable / Enable
		Reduction Refresh / Save / D Privacy Mark Refresh / Save Stream Type Region ID	1/5000 / 1/10000 / 1/12000 / 1/20000  Auto / Disable / Manual  Default  Untick / Tick  MainStream / SubStream / MobileStream 1 ~ 8  Disable / Enable  Lowest / Lower / Low / Medium /
		Reduction Refresh / Save / Defresh / Save / Defresh / Save Refresh / Save Stream Type Region ID Enable Region ROI Level	1/5000 / 1/10000 / 1/12000 / 1/20000  Auto / Disable / Manual  Default  Untick / Tick  MainStream / SubStream / MobileStream 1 ~ 8  Disable / Enable  Lowest / Lower / Low / Medium / Higher / Highest
		Reduction Refresh / Save / Defresh / Save / Defresh / Save Refresh / Save Stream Type Region ID Enable Region	1/5000 / 1/10000 / 1/12000 / 1/20000  Auto / Disable / Manual  Default  Untick / Tick  MainStream / SubStream / MobileStream 1 ~ 8  Disable / Enable  Lowest / Lower / Low / Medium /





		Refresh / Save		
Record	Encode	Mainstream	Resolution (IPCAI918)	3840 x 2160 / 3072 x 1728 / 2592 x 1944 / 2592 x 1520 / 2304x1296 / 1920x1080 / 1280 x 960 / 1280x720
			Resolution (IPCAI915)	2592 x 1944 / 2592 x 1520 / 2304x1296 / 1920x1080 / 1280 x 960 / 1280x720
			FPS	1 ~ 25 (Default <b>25</b> )
			Video Code Type	<b>H.265</b> / H.264
			Video Code Level	Main Profile
			Bitrate Control	CBR / VBR
		Bitrate Mode	Predefined / User- Defined	
			Bitrate	256 / 320 / 384 / 448 / 512 / 640 / 768 / 896 / 1024 / 1280 / 1536 / 1792 / 2048 / 3072 / 4096 / 5120 / 6144 / 8192 / <b>10240</b> / 12288 / 16384
			l Frame Interval	1 ~ 100 (Default <b>50</b> )
			Audio	Enable / <b>Disable</b>
			Refresh / Save	
		Substream	Resolution	1920 x 1080 / 1280x720 / 640x480 /
			FPS	1 ~ 25 (Default <b>25</b> )
			Video Code Type	<b>H.265</b> / H.264
			Video Code Level	Main Profile
			Bitrate Control	CBR / VBR
			Bitrate Mode	Predefined / User Defined
			Bitrate	128 / 160 / 192 / 224 256 / 320 / 384 / 448 512 / 768 / <b>1024</b> / 1536 / 2048 / 3072 / 4096
			Audio	Untick / Tick
			l Frame Interval	1 ~ 100 (Default <b>50</b> )



			Refresh /		
			Save		
		Mobilestream	Enable	Enable / Disable	
		Mobilestream	Resolution	<b>640x480</b> / 320x240	
			FPS	1 ~ 25 (Default <b>25</b> )	
				<b>H.265</b> / H.264	
			Video Code Type	H.265 / H.264	
			Video Code Level	Main Profile	
			Bitrate Control	CBR / VBR	
				Predefined / User	
				Defined	
			Bitrate	128 / 160 / 192 / 224 / 256 / 320 / 384 / 448 / <b>512</b> / 768 / 1024 / 1536	
			Audio	Untick / Tick	
			I Frame		
			Interval	1 ~ 100 (Default <b>50</b> )	
			Refresh / Save		
	Record / Capture	Stream Mode	MainStream /		
	i toodia / Captaio	Record	Enable / Disable		
	PreRecord	Enable / Disable			
		Netbreak	Disable / Enable		
	Schedule				
	Scriedule	Refresh / Save / D			
Event	Setup	Motion	Enable	Enable / Disable	
LVCIIL	Setup	IVIOLIOTI	Sensitivity	1 ~ 8 (Default <b>3</b> )	
	Alarm	Motion	Latch Time	<b>5s</b> / 10s / 20s / 30s	
	Alaitti			OFF / <b>5s</b> / 10s / 20s /	
			Post Recording	30s	
			Send Email	Enable / <b>Disable</b>	
			FTP Picture		
				Enable / <b>Disable</b>	
			Upload FTP Video	Enable / <b>Disable</b>	
			Upload		
				Enable / <b>Disable</b>	
			Cloud Video	Enable / <b>Disable</b>	
				Enable / <b>Disable</b>	
			Alarm Out		
				Enable / <b>Disable</b>	
			<b>-</b>	Enable / Disable	
			Event Push	Enable / Disable	
		0 15 : "	Save / Schedu	1	
		Sound Detection		<b>5s</b> / 10s / 20s / 30s	
			Post	OFF / <b>5s</b> / 10s / 20s /	
			Recording	30s	
			Send Email	Enable / <b>Disable</b>	





	<del></del>		T	
			FTP Picture	Enable / <b>Disable</b>
			Upload	,
			FTP Video	Enable / <b>Disable</b>
			Upload	/ <b>_</b>
				Enable / <b>Disable</b>
			Cloud Video	Enable / <b>Disable</b>
			Alarm Out	Enable / <b>Disable</b>
				Enable / <b>Disable</b>
			Event Report	Enable / <b>Disable</b>
			Event Push	
	Event Push	Enable	Enable / <b>Disab</b>	le
		Name	Customise	
		Push Way	HTTP / UDP	
		Username	Customise	
	Password	Customise		
	Server Address	Customise		
	Port	Customise (D	efault 123)	
		URL	API/AlarmEver	
		Method	POST / GET	
		Interval	<b>OFF</b> / 1 Min / 5	Min / 10 Min
		Save / Refresh	ļ	
AI – Setup	FD (Face		Enable / <b>Disable</b>	
	Detection)	Dynamic Marking	Enable / Disable	
	,			/ Realtime Mode /
			Interval Mode	
		Apply Mode	Frontal View	Multi View /
		,	Customize	
		Min Pixel	32 ~ 1080 (De	fault <b>64</b> )
		Max Pixel	320 ~ 1080 (D	efault <b>640</b> )
		Detection Mode	,	
		D C LC C LI O I I I VIO G C	Static Mode /	Motion Mode
			Rect / Line	Motion Mode
		Rule Kind	Rect / Line	
		Rule Kind Detection Range	Rect / Line	
	PD & VD	Rule Kind Detection Range Save / Refresh	Rect / Line Full Screen / (	Customize
	PD & VD (Person &	Rule Kind Detection Range Save / Refresh Enable	Rect / Line Full Screen / ( Enable / Disab	Customize I <b>le</b>
	PD & VD (Person & Vehicle	Rule Kind Detection Range Save / Refresh Enable Sensitivity	Rect / Line Full Screen / ( Enable / Disable 0 ~ 100 (Defa	Customize  le ult 60)
	(Person &	Rule Kind Detection Range Save / Refresh Enable Sensitivity Dynamic Marking	Rect / Line Full Screen / ( Enable / Disable of a 100 (Defate of a 100 (De	Customize  Ile  ult 60)
	(Person & Vehicle	Rule Kind Detection Range Save / Refresh Enable Sensitivity Dynamic Marking	Rect / Line Full Screen / G Enable / Disab 0 ~ 100 (Defai Enable / Disab Default / Realt	Customize  le ult 60)
	(Person & Vehicle	Rule Kind Detection Range Save / Refresh Enable Sensitivity Dynamic Marking Snap Mode	Rect / Line Full Screen / 0 Enable / Disab 0 ~ 100 (Defaine and the content of th	Customize  Ple  ult 60)  ble  ime Mode / Interval
	(Person & Vehicle	Rule Kind Detection Range Save / Refresh Enable Sensitivity Dynamic Marking Snap Mode Min Pixel	Rect / Line Full Screen / G Enable / Disable 0 ~ 100 (Defaile / Disable Default / Realte Mode 64 ~ 1080 (Defaile Possible Possibl	Customize  Ile  ult 60)  ble  ime Mode / Interval  fault 64)
	(Person & Vehicle	Rule Kind Detection Range Save / Refresh Enable Sensitivity Dynamic Marking Snap Mode Min Pixel Max Pixel	Rect / Line Full Screen / 0 Enable / Disable 0 ~ 100 (Defaile / Disable / Disable / Default / Realte Mode 64 ~ 1080 (Defaile / Default / Defaile /	Customize  Ile  ult 60)  ole  ime Mode / Interval  fault 64)  efault 640)
	(Person & Vehicle	Rule Kind Detection Range Save / Refresh Enable Sensitivity Dynamic Marking Snap Mode Min Pixel Max Pixel Detection Type	Rect / Line Full Screen / ( Enable / Disable 0 ~ 100 (Defaile / Disable / Disable / Disable / Default / Realte Mode 64 ~ 1080 (Defaile / Defaile /	Customize  Ile  Ult 60)  Dile  ime Mode / Interval  fault 64)  efault 640)  Vehicle / OFF /
	(Person & Vehicle	Rule Kind Detection Range Save / Refresh Enable Sensitivity Dynamic Marking Snap Mode Min Pixel Max Pixel Detection Type	Rect / Line Full Screen / 0 Enable / Disable 0 ~ 100 (Defaile Default / Realte Mode 64 ~ 1080 (Defaile 320 ~ 1080 (Defaile Default Mode) Pedestrian & Person / Vehice	Customize  Ile  ult 60)  ole  ime Mode / Interval  fault 64)  efault 640)  Vehicle / OFF /  le
	(Person & Vehicle	Rule Kind Detection Range Save / Refresh Enable Sensitivity Dynamic Marking Snap Mode Min Pixel Max Pixel Detection Type Detection Mode	Rect / Line Full Screen / 0 Enable / Disable 0 ~ 100 (Default / Realt Mode 64 ~ 1080 (Default / Realt Mode) 320 ~ 1080 (Default / Realt Mode) Pedestrian & Person / Vehice	Customize  Die Lit 60) Die Lime Mode / Interval  Fault 64) Default 640)  Vehicle / OFF / Lie / Static Mode
	(Person & Vehicle	Rule Kind Detection Range Save / Refresh Enable Sensitivity Dynamic Marking Snap Mode Min Pixel Max Pixel Detection Type Detection Mode Detection Range	Rect / Line Full Screen / 0 Enable / Disable 0 ~ 100 (Default / Realt Mode 64 ~ 1080 (Default / Realt Mode) 320 ~ 1080 (Default / Realt Mode) Pedestrian & Person / Vehice	Customize  Die Lit 60) Die Lime Mode / Interval  Fault 64) Default 640)  Vehicle / OFF / Lie / Static Mode
	(Person & Vehicle Detection)	Rule Kind Detection Range Save / Refresh Enable Sensitivity Dynamic Marking Snap Mode Min Pixel Max Pixel Detection Type Detection Range Save / Refresh	Rect / Line Full Screen / 0 Enable / Disable 0 ~ 100 (Default / Realt Mode 64 ~ 1080 (Default / Realt Mode) 320 ~ 1080 (Default / Realt Mode) Pedestrian & Person / Vehice Motion Mode Full Screen / 0	Customize  Die Lit 60) Die Lime Mode / Interval  Fault 64) Default 640)  Vehicle / OFF / Le / Static Mode  Customize
	(Person & Vehicle	Rule Kind Detection Range Save / Refresh Enable Sensitivity Dynamic Marking Snap Mode Min Pixel Max Pixel Detection Type Detection Mode Detection Range	Rect / Line Full Screen / 0 Enable / Disable 0 ~ 100 (Default / Realt Mode 64 ~ 1080 (Default / Realt Mode) 320 ~ 1080 (Default / Realt Mode) Pedestrian & Person / Vehice	Customize  Die Lit 60) Die Lime Mode / Interval  Fault 64) Default 640)  Vehicle / OFF / Le / Static Mode  Customize



Detection	Concitivity	4 to 4 (D of out 2)
Detection)	Sensitivity	1 to 4 (Default 2)
		Enable / Disable
	Detection Type	Motion / Pedestrian & Vehicle /
	D. I. NI. I	Person / Vehicle
	Rule Number	1 to 4
	Rule Enable	Enable / Disable
	Rule Type	$\mathbf{A} \rightarrow \mathbf{B} / \mathbf{B} \rightarrow \mathbf{A} / \mathbf{A} \leftarrow \rightarrow \mathbf{B}$
	Save / Refresh	
LCD (Line	Enable	Enable / <b>Disable</b>
Crossing	Sensitivity	1 to 4 (Default <b>2</b> )
Detection)	Dynamic Marking	Enable / Disable
	Detection Type	<b>Motion</b> / Pedestrian & Vehicle / Person / Vehicle
	Rule Number	1 to 4
	Rule Enable	Enable / Disable
	Rule Type	$\mathbf{A} \rightarrow \mathbf{B} / \mathbf{B} \rightarrow \mathbf{A} / \mathbf{A} \leftarrow \rightarrow \mathbf{B}$
	Save / Refresh	
SOD (Stationary		Enable / <b>Disable</b>
Object	Sensitivity	1 to 4 (Default <b>2</b> )
Detection)		Enable / Disable
_ = = = = = = = = = = = = = = = = = = =	Rule Number	1 to 4
	Rule Enable	Enable / Disable
	Rule Type	Legacy / Lost / Lost & Legacy
CC (Cross	Save / Refresh	Enable / <b>Disable</b>
CC (Cross	Enable	
Counting)	Sensitivity	1 to 4 (Default 2)
		Enable / Disable
	Туре	Person / Motion / Vehicle
	Alarm Number	1 to 255
	Start Time	User definable
	End Time	User definable
	Rule Number	1
	Rule Enable	Enable / <b>Disable</b>
	Rule Type	$A \rightarrow B / B \rightarrow A$
	Save / Refresh / F	
HM (Heat Map)	Enable	Enable / <b>Disable</b>
	Rule Number	1
	Rule Enable	Enable / Disable
	Save / Refresh	
CD (Crowd	Enable	Enable / <b>Disable</b>
Density)	Sensitivity	1 to 4 (Default <b>2</b> )
		Enable / Disable
	Min Pixel	64 ~ 1080 (Default <b>64</b> )
	Max Pixel	320 ~ 1080 (Default <b>640</b> )
	Max Detection	1 ~ 500 ( <b>50</b> )
	Number	,
	Detection Range	Customize / Full Screen





	D I N I	[ <sub>4</sub>
	Rule Number	1 = 11 /D: 11
	Rule Enable	Enable / Disable
OD (O	Save / Refresh	Frakla / Dia abla
QD (Queue	Enable	Enable / Disable
Depth)	Sensitivity	1~ 4 (Default <b>60</b> )
		Enable / Disable
	Min Pixel	64 ~ 1080 (Default <b>64</b> )
	Max Pixel	320 ~ 1080 (Default <b>640</b> )
	Max Detection	1 ~ 500 ( <b>50</b> )
	Number	4 0000 (00)
	Max Pro Time	1 ~ 3600 (6 <b>0</b> )
		Customize / Full Screen
	Rule Number	1
	Rule Enable	Enable / Disable
	Save / Refresh	
LPD (License	Enable	Enable / <b>Disable</b>
Plate Detection)	LDP Enhance	Enable / <b>Disable</b>
	Day Time Level	0∼ 255 (Default <b>220</b> )
	Night Time Level	0~ 255 (Default <b>99</b> )
	Sensitivity	1~ 100 (Default <b>60</b> )
	Dynamic Marking	Enable / Disable
	Snap Mode	<b>Default</b> / Realtime Mode / Interval
		Mode
	Min Pixel	64 ~ 1080 (Default <b>64</b> )
	Max Pixel	320 ~ 1080 (Default <b>640</b> )
	Detection Type	European license plate / American
		license plate
		Static Mode / Motion Mode
	Detection Range	Customize / Full Screen
	Save / Refresh	
RSD (Rare	Enable	Enable / <b>Disable</b>
Sound	Sensitivity	1~ 100 (Default <b>60</b> )
Detection)	Detection Type	<b>Baby Crying Sound</b> / Dog Barking / Gunshot
	Save / Refresh	
Al Schedule	Customise Sched	ule
	Save / Refresh	
Alarm - FD / LPF	Post Recording	OFF / <b>5s</b> / 10s / 20s / 30s
/ PD&VD / PID /	Send Email	Enable / Disable
LCD/SOD/	FTP Picture	Enable / Disable
CC/CD/QD/	Upload	
LPD / RSD	Cloud Picture	Enable / <b>Disable</b>
	Alarm Out	Enable / <b>Disable</b>
	Enable Record	Enable / Disable
	Event Report	Enable / <b>Disable</b>
	Save / Schedule /	
 -		



	Statistics		Select Date & Day / Intelligent /
		Detection	Search / Export
		Cross Counting	
			tMonthly Report / Annual Report
		Туре	
		Detection Type	Motion / Person / Motor Vehicle /
			Non-motorised Vehicle
		Cross Type	Cross In / Cross Out
		System Time Select Date	
		Column Chart / Li	ne Chart
		Heat Map	Daily Report / Weekly Report /
		Statistics –	Monthly Report / Annual Report
		Report Type	
		Date	Customise
		Start Hour	Customise
		End Hour	Customise
		Space Heat Map	/Time Heat Map
		Spatial Density L	•
		Search	
Network	General	DHCP	Enable / Disable
		IP Address	<b>192.168.10.1</b> Test
		Subnet Mask	255.255.255.0
		Gateway	192.168.10.254
		IPv6 DHCP	132.100.10.234
		IPv6 Address	- 
			-
		IPv6 Gateway DNS 1	102 169 10 251
			192.168.10.254
		DNS 2	-
		IPv6 DNS 1	192.168.10.254
		IPv6 DNS 2	-
		Multicast Main	Enable / <b>Disable</b>
		stream	
			Enable / Disable
		Transmission	
		Save / Refresh	<u></u>
	PPPoE	Enable PPPoE	Enable / <b>Disable</b>
		Username	User-definable
		Password	
		IP Address	
		Save / Refresh	
	SNMP	Enable	Enable / <b>Disable</b>
		SNMP Version	User-definable
		SNMP Port	]
		Read Community	1
		Write Community	<b>1</b>
		Trap IP Address	1
		Trap Port	1
		Save / Refresh	I.
		Dave / Nellesil	





	Dout	LITTO David	Chable /
	Port	HTTP Port	Enable /
	Configuration	Client Dort	Disable User-definable
		Client Port	User-delinable
		HTTPS Port	-
		RTSP Port	1004 05505
		Muticast Port	1024 – 65535
		P2P Enable	Enable / Disable
		Save / Refresh	
	Email	Email	Enable / <b>Disable</b>
		Encryption	Disable / SSL / TLS / Auto
		SMTP Port	25 / Customise
		SMTP Server	Customise
		User Name	
		Password	
		Sender Email	
		Receiver1	
		Receiver2	
		Receiver3	
		Interval	1Min/3Min/5Min/10Min
		Refresh / Save /	
	FTP Settings	FTP Enable	Untick / Tick
		Server	Customise
		Port	21 / Customise
			Customise
		Username	Customise
		Password	-
		DIR Name	Untials / Tials
		Transfer Images	Untick / Tick
	DTOD D (	Refresh / Save	
	RTSP Port	RTSP	Tick / Untick
		RTSP Port	1240 / Customise
		Anonymous Logi	n <b>Untick</b> / Tick (No username or
			password required)
			IP:Port/ch01/A A:0(MainStream),
		1(SubStream), 2	(MobileStream)
		Refresh / Save	
	DDNS	DDNS	Untick / Tick
		Server	NO_IP / DYNDNS
		Host Name	Customise
		Username	
		Password	
		Refresh / Save	<u> </u>
	IP Filter	Enable	Enable / <b>Disable</b>
		Filter Mode	Allow all IP connections / Allow the
		I III.GI IVIOGE	selected IP connections / Block the
			selected IP connections
		Refresh / Save	Journal CollineCtions
Storage	Disk		
Storage	ואוטן	Disk Information	



		Refresh / Save / F	ormat Hard Di	sk		
	Audio	Enable Audio	Tick / Untick			
		Output Volume	0 ~ 10 (Defaul	t <b>5</b> )		
		Input Volume	0 ~ 10 (Defaul	t <b>5</b> )		
		Audio Code Type	<b>G711A</b> / G711	U / G726 16K		
		Refresh / Save				
	Cloud	Cloud Storage	Enable / <b>Disa</b> l	ble		
		Cloud Type	Dropbox			
		Driver Name	Customise (D	efault <b>IP-PTZ650W</b> )		
		Refresh / Save / A	Activate Cloud	,		
System	General	Date and Time	Time Setting	Static / NTP server		
-			mode	synchronization		
			Date Format	Day/Month/Year		
				Year-Month-Day		
				Month/Day/Year		
			Time Zone	GMT -12:00 to GMT +		
				13:00		
			Time Format	24Hour / 12 Hour		
			System Time	User-definable		
			Server	Time.windows.com /		
			Address	time.nist.gov/		
				pool.ntp.org / Define		
				User		
			Save / Synchronize computer time /			
			Refresh			
		Daylight Saving	Daylight	Enable / Disable		
		Time	saving time			
			Start Time	User-definable		
			End Time	User-definable		
			Time Offset	1Hour / 2 hours		
	N 4 10' 1 1	0 ( ; 5 )	Save / Refresh			
	Multi-User	Customize Each		Username		
		user	(Edit)	Password		
				Password Strength		
		D ( )		Confirm		
	B.4	Refresh	l. =	0 / /00N /		
	Maintain	Log	Log Type	System / CON. /		
				Alarm / Account /		
				Record / Storage /		
			Ot and Time	Network / All		
			Start Time	User-definable		
		Land Dafault	End Time	User-definable		
		Load Default	All / Video / Record/ Event / Al /			
			Network/ Stora			
		Lin ann a d	Save / Refrest			
		Upgrade	Path	Search Local Files		
		Save / Load	Import File	Search Local Files		



#### IPCAI918

		Export File Name	Search Local Files
	Auto Reboot	Auto- maintenance	Enable / Disable
		Time	Date / Week / Month Mon / Tues / Wed / Thur / Fri / Sat / Sun Time
			Save / Refresh / Reboot
Information	Device ID		
	Device Name		
	Device Type		
	Hardware Version	า	
	Software Version		
	Web Version		
	Mac Address		
	P2P ID		
	Refresh		



#### **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.

#### 6.1 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** -.

#### 6.2 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.



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** -.



## **Extra Resources**

## 7.1 ZipNVR.com Website

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

#### www.zipdvr.com



## 7.2 Adding IP Cameras

How to guide on Adding IP Cameras:-

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

#### 7.3 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.

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



## **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.



## **Specification**

## 9.1 IPCAI918

Image Sensor	1/ 2.8" Progressive CMOS
Resolution	8MP 3840(H)× 2160(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 45m
Digital Noise Reduction	·
Video Compression	H.264 / H.265
Video Bitrate	256Kbps ~ 16Mbps
Stream Options	Mainstream, SubStream & MobileStream
iSENSE AI Features	Perimeter Intrusion, Line Crossing, Pedestrian and Vehicle Detection, Facial Detection, Facial Recognition, Stationary Object detection, Cross Counting, Heat Map, Crowd Density, Queue Depth, Rare Sound Detection, License Plate Detection
System Compatibility	ONVIF (Profile S, Profile G, Profile T)
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
Security Compliancy	NDAA Compliant
Input Voltage	PoE or 12V DC 750mA (PSU Required)
Consumption	9W Max
Operating Temperature	From -35 to 60 deg°C
Backlight Control	BLC / WDR
Use	IP66 For External Use