ZIP

Instruction Manual

ZIP AI IP Camera

IPCAI905

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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
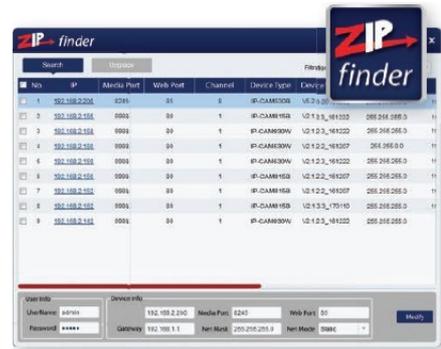
2 Connections and Dimensions

2.1 IPCAI905 Varifocal Bullet 2.8-12mm
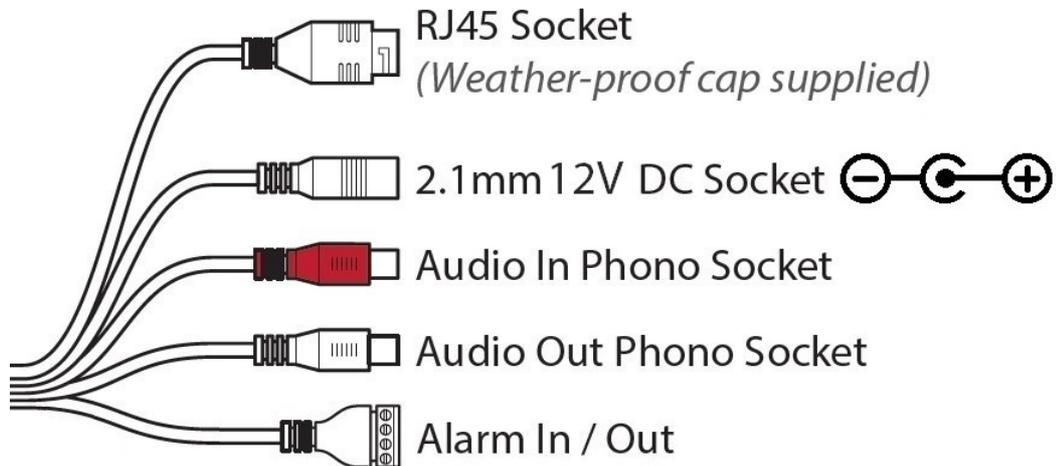
Powering the camera

Option 1 - Power the camera from 12V DC (via the 2.1mm DC Socket), the current consumption is 750mA. 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 ≈ 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 *AI smart*, this maximises the recording time achievable.

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

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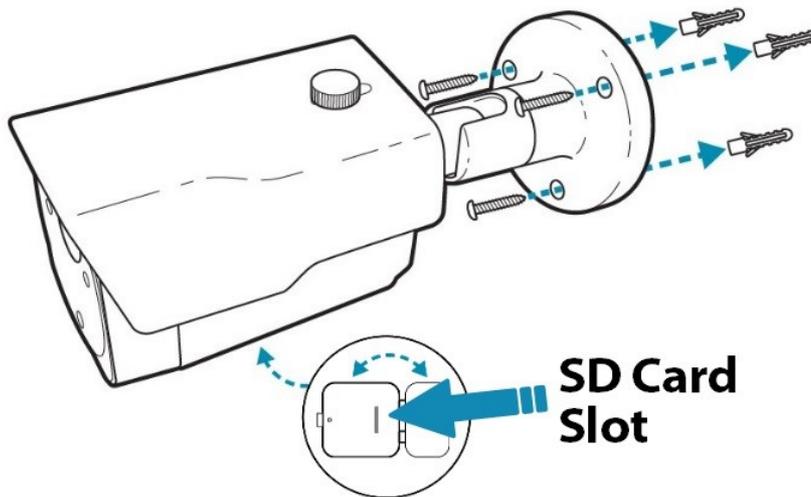
A template is provided in the box for marking the hole positions for the fixing screws.

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
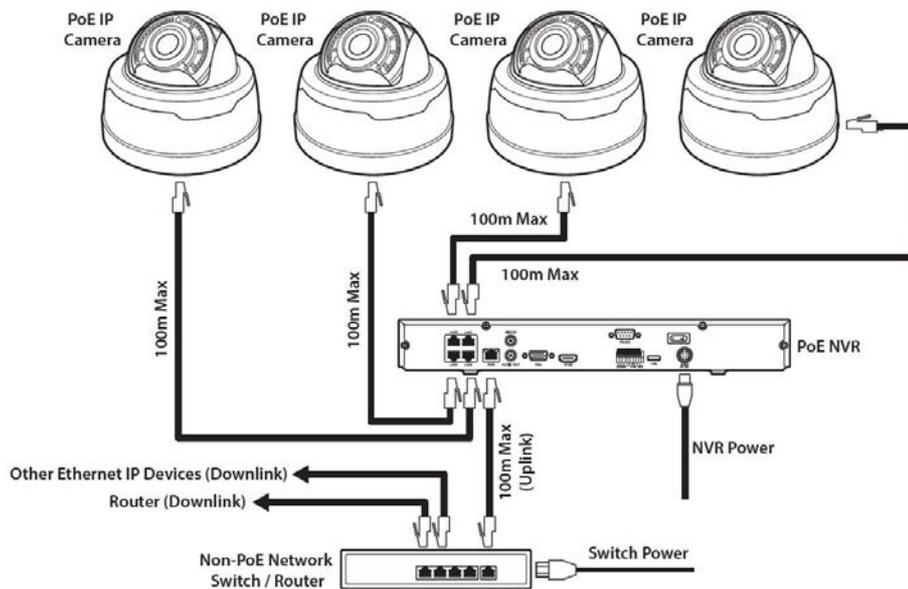
4.2 Non-PoE ZIP NVR

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.
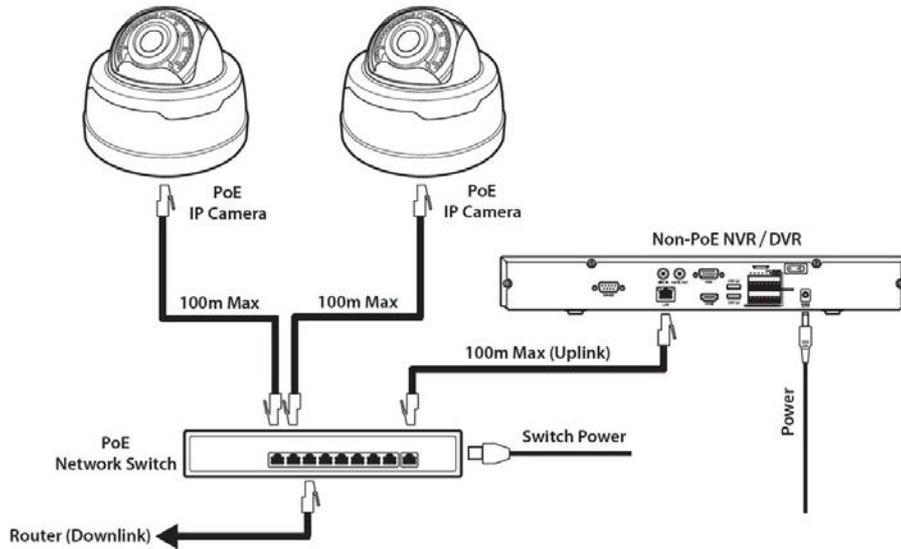
See Extra Resources 28 for more information on **Adding IP Cameras manually** to a ZIP Recorder.

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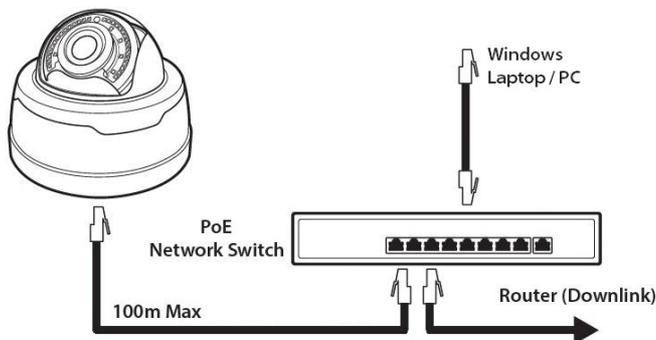
2. Using ZipFinder on a Windows Based PC/ Laptop **Search** and then tick the camera

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**

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.

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.

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

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->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.

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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.

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.

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	**50Hz** / 60Hz
		Transparency	1 ~ 128 (Default **64**)
		Show Name	**Untick /** Tick
		Show Time	**Untick /** Tick
		Refresh / Save	
	Camera Settings	IR-CUT Mode	**Auto** / Colour Mode / Black White Mode / Schedule (B/W)
		IR-CUT Delay	1 ~ 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 Reduction	**Auto** / Disable / Manual
		DWDR	**Untick /** Tick
		HLC	**Untick** / Tick
		AGC	1 ~ 128 (Default **64**)
		White Balance	**Auto** / Manual / Indoor
		Shutter	**Auto** / Manual
		Time Exposure (max)	1/5 / **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 / 1/20000 / 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 (1-19)	**12**
		Refresh / Save	
Record	Record Settings	Stream Mode	**MainStream** / SubStream
		Record	**Tick /** Untick
		PreRecord	**Tick /** Untick

		Normal Schedule	**Customise Schedule**	
			Refresh / Save / Default	
		Event Schedule	**Customise Schedule**	
			Refresh / Save / Default	
Capture	Capture	Normal Interval	**5S** / 10S / 30S / 1Min / 10Min / 30Min / 1Hour	
		Alarm Interval	**5S** / 10S / 30S / 1Min / 10Min / 30Min / 1Hour	
		Auto Capture	**Untick** / Tick	
		Manual Capture	**Untick** / Tick	
		Refresh / Save		
	Capture Schedule	**Customise Schedule**		
Network	Network	Type	**DCHP** / PPPoE / 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 (Client Port, HTTP Port)	
		Refresh / Save		
	Encoding	Mainstream	Resolution	2592x1944 / 2592x1520 / 2304x1296 / **1920x1080** / 1280x720
			FPS	1 ~ 20 (Default **12**)
			Video Code Type	**H.264** / 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 / **2048** / 3072 / 4096 / 5120 / 6144 / 8192
			Audio	**Untick** / Tick
			I Frame Interval	1 ~ 80 (Default **24**)
			Refresh / Save	
		SubStream	Resolution	**1280x720** / 640x480 / 320x240

			FPS	1 ~ 20 (Default **10**)
			Video Code Type	**H.264** / H.265
			Video Code Level	**Main Profile** / Baseline / High Profile
			Bitrate Control	**CBR** / VBR
			Bitrate Mode	**Predefined** / User Defined
			Bitrate	128 / 160 / 192 / 224 / 256 / 320 / 384 / 448 / 512 / 640 / 768 / 896 / **1024**
			Audio	**Untick** / Tick
			I Frame Interval	1 ~ 80 (Default **20**)
			Refresh / Save	
		MobileStream	Enable	**Tick /** Untick
			Resolution	**640x480** / 320x240
			FPS	1 ~ 20 (Default **10**)
			Video Code Type	**H.265** / 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 / **256** / 320 / 384 / 448 / 512 / 640 / 768 / 896 / 1024 / 1280 / 1536
			Audio	**Untick** / Tick
			I Frame Interval	1 ~ 80 (Default **20**)
			Refresh / Save	
	Email Settings	Email	**Untick** / Tick	
		Encryption	**Disable** / SSL / TLS / Auto	
		SMTP Port	**25 /** Customise	
		SMTP Server	**Customise**	
		User Name	**Customise**	
		Password	**Customise**	
		Sender Email	**Customise**	
		Receiver1	**Customise**	
		Receiver2	**Customise**	
		Receiver3	**Customise**	
		Interval	1Min / 3Min / 5Min / 10Min	
		Refresh / Save / Test Email / Cancel		
	ZIP DDNS	DDNS	**Untick** / Tick	
		Server	**NO_IP** / DYNDNS	

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		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 Login	**Untick** / Tick (No username or password required)	
		Instruction: rtsp://IP:Port/ch01/A A:0(MainStream), 1(SubStream), 2(MobileStream)		
		Refresh / Save		
Alarm	Motion Detection	Enable	**Untick** / Tick	
		Sensitivity	1 ~ 8 (Default **3**)	
		Alarm Out	**Untick** / Tick	
		Latch Time	**5S** / 10S / 20S / 30S	
		Post Recording	**5S** / 10S / 20S / 30S	
		Send Email	**Untick** / Tick	
		Enable Record	**Tick /** Untick	
		Refresh / Save		
	Alarm Settings	Alarm Input	**OFF** / NC / NO	
		Latch Time	**5S** / 10S / 20S / 30S	
		Send Email	**Untick** / Tick	
		Alarm Out	**Untick** / Tick	
		Enable Record	**Untick** / Tick	
		Post Recording	0S / **5S** / 10S / 20S / 30S	
		Refresh / Save		
	Lens	Enable	**Tick /** Untick	
		Sensitivity	1 ~ 6 (Default **3**)	
		Send Email	**Untick** / Tick	
		Alarm Out	**Untick** / Tick	
		Latch Time	**5S** / 10S / 20S / 30S	
		Refresh / Save		
Device	SD Card	SD Card Overwrite	**Auto** / Close	
		Refresh / Save		
	Audio Settings	Enable Audio	**Untick** / Tick	
		Output Volume	0 ~ 10 (Default **5**)	
		Input Volume	0 ~ 10 (Default **5**)	
		Audio Code Type	**G711A** / G711U / G726 16K	
		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	
		Time Format	**24Hour** / 12Hour	
		DST / NTP / Synchronize		
		Daylight Saving Time	**Tick /** Untick	
		Daylight Saving Time	**Week** / Date	
		Time Offset	**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	
	Info	Device Name		
		Serial No.		
		Hardware Version		
		Software Version		
		IE Client Version		
		MAC Address		
		Refresh		
Tools	Firmware Update	Upgrade file path		
		Scan		
		Upgrade		
	Load Default	Camera	**Tick /** Untick	
		Record	**Untick** / Tick	
		Network	**Untick** / Tick	
		Alarm	**Untick** / Tick	
		Device	**Tick /** Untick	
		System	**Tick /** Untick	
		Tools	**Tick /** Untick	
		Smart	**Tick /** Untick	
		Simple / All / Save		
	Reboot	Auto Reboot	**Untick** / Tick	
		Reboot	**Customise**	
		Refresh / Save / Reboot		
	Import and Export	Import File	Scan / Import	
		Export Path	Scan / Import	
Smart	Detection	PID	Name	Perimeter Intrusion Detection (PID)

			Switch	**Untick** / Tick
			Latch Time	**5S** / 10S / 20S / 30S
			Post Recording	**5S** / 10S / 20S / 30S
			Sensitive	1 / **2** / 3 / 4
			Scene	**Indoor** / Outdoor
			Alarm Out	**Tick /** Untick
			Send Email	**Untick** / Tick
			Detection Type	Pedestrian &/or Vehicle
			Rule Number	**1** / 2 / 3 / 4
			Rule Switch	**Untick** / Tick
			Rule Type	**A>B** / A<B / A<>B
			Enable Record	**Untick** / Tick
			Refresh / Save	
		LCD	Name	Line Crossing Detection (LCD)
			Switch	**Untick** / Tick
			Latch Time	**5S** / 10S / 20S / 30S
			Post Recording	**5S** / 10S / 20S / 30S
			Sensitive	1 / **2** / 3 / 4
			Scene	Indoor
			Alarm Out	**Tick /** Untick
			Send Email	**Untick** / Tick
			Detection Type	Pedestrian &/or Vehicle
			Rule Number	**1** / 2 / 3 / 4
			Rule Switch	**Untick** / Tick
			Rule Type	**A>B** / A<B / A<>B
			Enable Record	**Untick** / Tick
			Refresh / Save	
		PD & VD	Name	Pedestrian Detection (PD&VD)
			Switch	**Untick** / Tick
			Latch Time	**5S** / 10S / 20S / 30S
			Post Recording	**5S** / 10S / 20S / 30S
			Sensitive	0 ~ 100 (Default **60**)
			Alarm Out	**Untick** / Tick
			Send Email	**Untick** / Tick
			Snap Mode	**Interval Mode** / Realtime Mode / Default
			Snap Num	**1** / 2 / 3 / Unlimited
			Snap Frequency	**2 /** customise
			Min Pixel	64 ~ 1080 (Default **64**)
			Detection Type	Pedestrian &/or Vehicle
			Detection Mode	**Motion Mode** / Static Mode
			Detection Range	**Full Screen** / Customize
			Enable Record	**Untick** / Tick

			Refresh / Save	
		FD	Name	Face Detection (FD)
			Switch	**Untick** / Tick
			Latch Time	**5S** / 10S / 20S / 30S
			Post Recording	**5S** / 10S / 20S / 30S
			Sensitive	0 ~ 100 (Default **60**)
			Alarm Out	**Untick** / Tick
			Send Email	**Untick** / Tick
			Face Enhance	**Tick /** Untick
			Snap Mode	**Interval Mode** / Realtime Mode / Optimal Mode
			Apply Mode	**Frontal View** / Multi Angle / Customize
			Snap Num	**1** / 2 / 3 / Unlimited
			Snap Frequency	**2 /** customize
			Min Pixel	32 ~ 1080 (Default **32**)
			Detection Mode	**Motion Mode** / Static Mode
			Rule Kind	**Rect** / Line
			Detection Range	**Full Screen** / Customize
			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.**

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

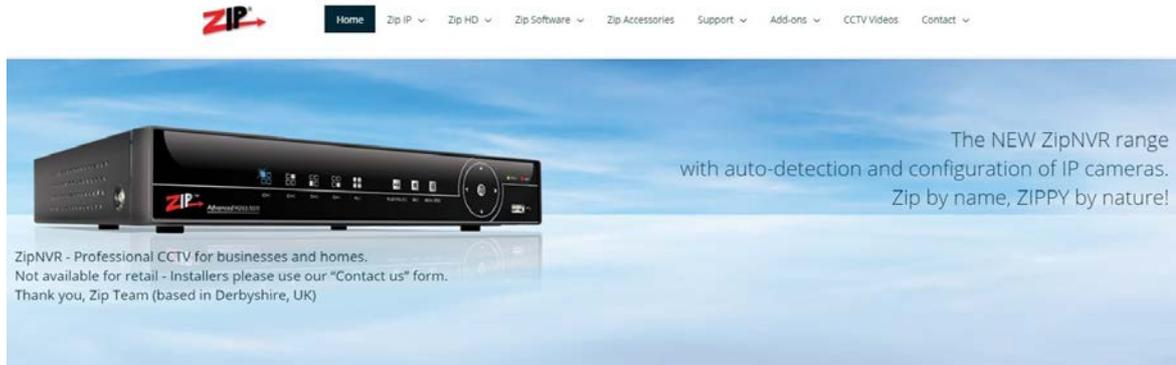The camera will automatically focus once the zoom button is released.

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:-

www.zipdvr.com

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 IPCAI905

Image Sensor	1/ 2.7" Progressive CMOS
Resolution	5MP 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 Reduction	3D DNR
Video Compression	H.264 / H.265
Video Bitrate	8Kbps ~ 8Mbps
Stream Options	Mainstream, SubStream & MobileStream
Smart Feature	Perimeter Intrusion, Line Crossing, Pedestrian and Vehicle Detection, Facial Detection, Facial Recognition
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
Input Voltage	PoE or 12V DC 750mA(PSU Required)
Consumption	8W Max
Operating Temperature	From -30 to 60 deg°C
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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