



4.7-104mm IP PTZ 22x Zoom - 2MP - White

IP-PTZ622W

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ZipNVR.com

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1 Introduction

1.1 Key Features

The IP-PTZ622 has a 22x optical zoom with auto-focus and a 2MP (1080p) sensor.

The PTZ supports 360° endless rotation, up to 300 deg/sec pan speed, up to 100 deg/sec tilt speed. With on board features compatible with the Zip NVR and DVR.

1.2 Essential Tools and ZipFinder

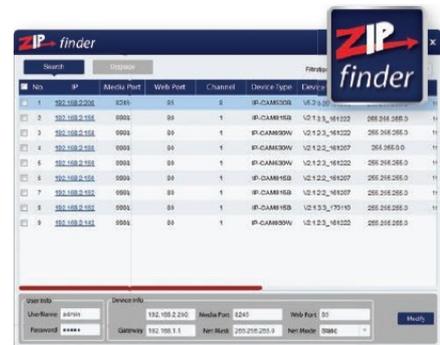
- Laptop / Windows PC
- Screwdriver
- Drill
- Hammer
- ZIP NVR or DVR
- PoE Switch / 12V DC power supply
- Ethernet CAT5/5e/6 Cable

ZipFinder - IP Camera Configuration Tool

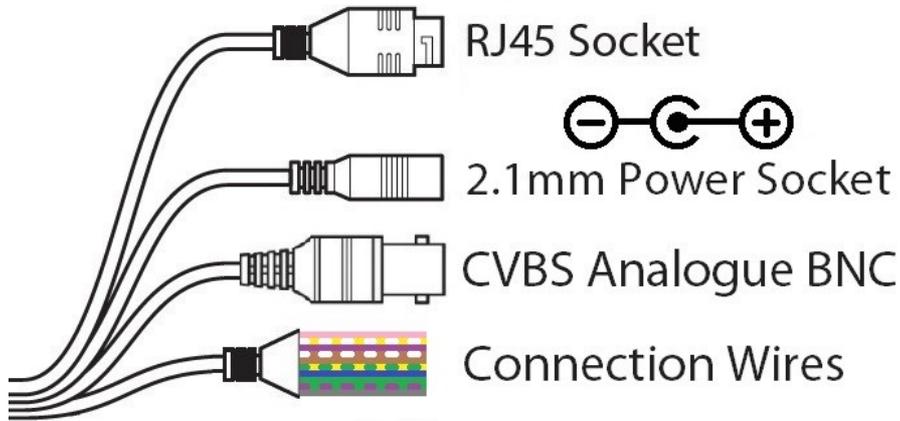
ZipFinder is a Windows PC software for discovering and configuring IP cameras a network.

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



Powering the camera

Option 1 - Power the camera from 12V DC / 24V AC (via the 2.1mm Power Socket).

Option 2 - Power the camera using the PoE(48V) RJ45 Socket.

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

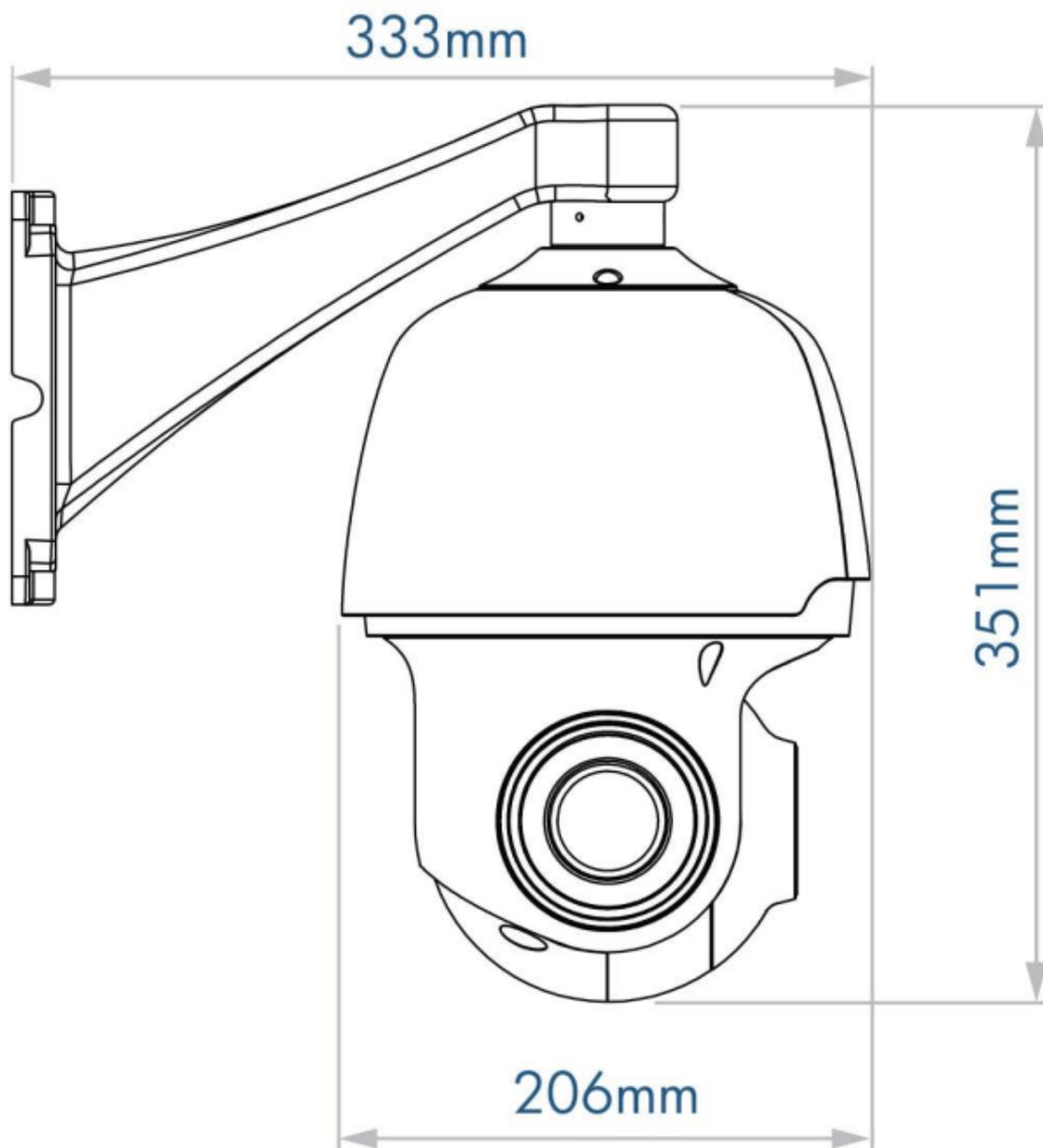
When connecting to a **ZIP Non-PoE NVR or DVR** plug the camera into a separate PoE switch

See [Setup Options](#) ⁵

Connection Wires

AUDIO IN	Pink
AUDIO OUT	White/Yellow
AUDIO GND	Purple
RS485+	White/Brown
RS485-	Brown
Ground	Yellow/Green
ALARM IN	Blue
ALARM GND	Green/Purple
ALARM OUT+	Green
ALARM OUT-	Grey

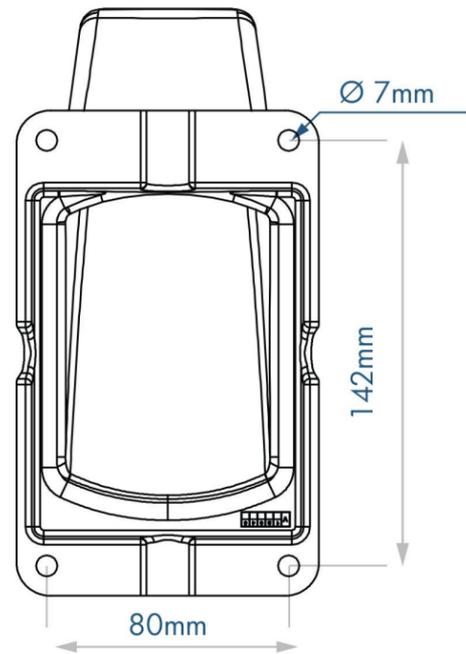
3 Dimensions



4 Mounting

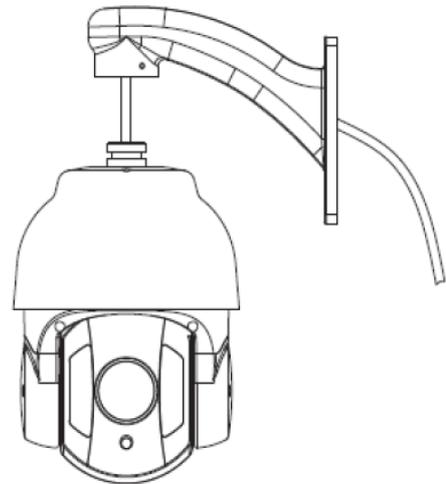
1. Mark the hole positions using the mounting bracket or using the measurements on the diagram to the right.

Drill the holes and install the wall plugs.



2. Feed the PTZ cable loom through the bracket, then secure using the short screws provided.

Attach the safety cable from the bracket to the dome.



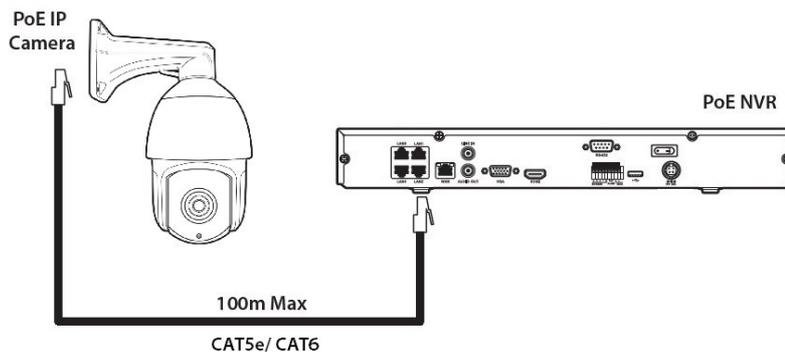
3. Fit the PTZ to the wall using the screws provided. Ensure the PTZ cable enters via a lower position so that water does not run down to the camera.

Use silicon sealant around the base and where the cable enters the PTZ. The connections for the camera need to be installed in a waterproof box or similar.

5 Setup Options

5.1 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.

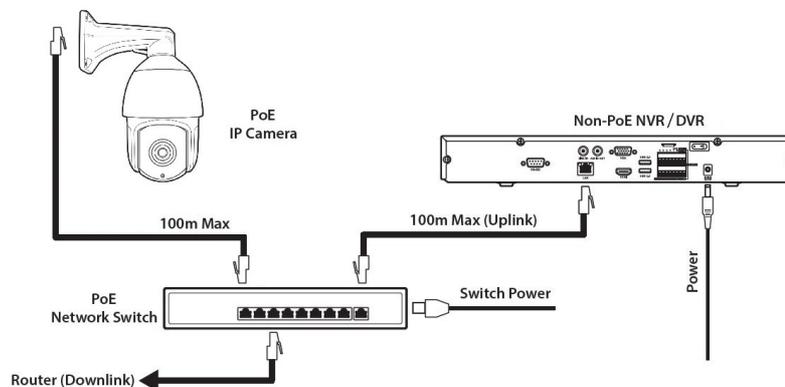
EPoE (Extended PoE)

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

5.2 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](#) ¹⁹ for more information on **Adding IP Cameras manually** to a ZIP Recorder.

6 PTZ Controls via ZIP NVR or DVR

The PTZ Control screen allows for adjust adjust the zoom, focus, PTZ movement and call presets or create new ones.

1. Click on the image in Live view
2. Click on the PTZ button

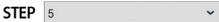
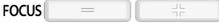


Camera can be selected using the channel option at the top left of the screen.



6.1 PTZ Controls Explained

The buttons on the left hand panel are used to control the camera's movement, zoom and focus

Icon/Control	Name	Function
	Directions	The direction buttons are used to control the left/right and up/down movement of the PTZ camera.
	Auto Cruise	Press to start 360° auto scan. The PTZ will rotate constantly until pressed again. This is compatible with 2 speeds; Slow (speed = 0) , Fast (speed = anything above 0).
	Speed	Speed dictates how fast the camera moves around. Set the speed anywhere from 0 to 100 with 100 being the fastest.
	Step	The Step number determines how much the focus will change when focus +/- is used. A step number of 1 will only make minute adjustments allowing for fine tuning where as a step number of 20 will make larger more noticeable adjustments.
	Zoom	Press + to zoom the camera lens in and - to zoom the camera lens out.
	Focus	As default the camera will use the built in auto-focus, however the camera can be manually focussed by pressing +/-.
	Iris	As default the camera will automatically adjust its exposure with the built in iris, however Iris + and - allow you to manually open or close the camera's iris so you can control the amount of light hitting the image sensor.
	Auto Focus	The Auto Focus button will automatically focus the camera's image.
	Restore	Clicking the Restore button will adjust the zoom back to the previous focal length. The camera's image can then be re-focused using the Auto Focus button.

6.2 PTZ Preset Controls

The Preset screen is where you can create presets, call presets and manage cruises.



Camera Selection

You can select which camera you want to control from the **Camera** drop down list.

Preset Controls Explained

The buttons in the left hand panel are used to position the camera when saving preset locations, creating presets, calling presets, removing presets and starting/stopping cruises. The options available and functions may vary depending on the capabilities of the PTZ itself.

Icon/Control

Name

Function



Directions

The direction buttons are used to control the left/right and up/down movement of the PTZ camera.



Auto Cruise

Press to start 360° auto scan. The PTZ will rotate constantly until pressed again. This is compatible with 2 speeds; Slow (speed = 0) , Fast (speed = anything above 0).

Icon/Control	Name	Function
No. <input type="text" value="001"/>	Preset Number	Enter a preset number to assign a new preset position or to call an existing preset.
Time <input type="text" value="003"/>	Dwell Time	When creating a new preset position the Dwell Time determines how long the PTZ will stay in that position during a cruise.
	Set Preset	After positioning the camera, entering the preset number and dwell time press to set a preset in the Preset List.
	Clear Preset	Press to delete the last saved preset
	Go To	Press to call the preset currently showing in the Preset Number field.
<input type="button" value="Start Cruise"/> <input type="button" value="Stop Cruise"/>	Start Cruise / Stop Cruise	The Start Cruise button will start to cycle through the saved preset positions in the Preset List. The PTZ will stay in each position for the defined Dwell Time then move on to the next position. The cruise will repeat until Stop Cruise is pressed.
<input type="button" value="Save"/>	Save	Click Save to save the current Preset List.

Total Presets

The Total number shows the total number of presets currently in Preset List.

Preset List

The Preset List displays all of the previously set and saved presets in numeric order.

No.	Time	Clear	GO TO
1	10		
2	15		
3	15		

No.: This column shows the Preset Number assigned to the previously saved camera position.

Time: The Time column shows how long the camera will stay in the preset position before moving on to the next position during a cruise.

Clear: The Clear button allows you to delete the a preset from the Preset List.

Go To: Clicking the arrow icon in the Go To column will move the camera to the previously saved position.

7 Preset Functions

Preset No.	Action
200	Start Tour 1
201	Start Tour 2
202	Start Tour 3
203	Start Tour 4
204	Start Pattern 1
205	Start Pattern 2
206	Start Pattern 3
207	Start Pattern 4
208	Start Pattern 1 Recording
209	Start Pattern 2 Recording
210	Start Pattern 3 Recording
211	Start Pattern 4 Recording
212	Stop Pattern Recording
213	Set Line Scan Start Point
214	Set Line Scan End Point
215	Start Line Scan at Low Speed
216	Start Line Scan at Medium Speed
217	Start Line Scan at High Speed
218	Start Default Cruise (360° Scan)

8 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	
		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		
Network	Network	Type	D CHP / 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		U ntick / Tick		
UPNP		U ntick / Tick		
Multicast		U ntick / Tick		
P2P Switch		U n tick / T ick		
Port Range		1024 ~ 65535 (Client Port, HTTP Port)		
		Refresh / Save		
	Encoding	Mainstream	Resolution	1920x1080 / 1280x960 / 1280x720
			FPS	1 ~ 20 (Default 12)
Video Code Type			H.264 / H.265	
Video Code Level			Main Profile / Baseline / High Profile	
Bitrate Control			C BR / VBR	
Bitrate Mode			P redefined / User Defined	
Bitrate			256 / 320 / 384 / 448 / 512 / 640 / 768 / 896 / 1024 / 1280 / 1536 / 1792 / 2048 / 3072 / 4096 / 5120 / 6144 / 8192	
Audio			U ntick / 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	C BR / VBR	
		Bitrate Mode	P redefined / User 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 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	
	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 Login	Untick / Tick (No username or password required)	
		Instruction: rtsp://IP:Port/ch01/A A:0(MainStream), 1(SubStream), 2(MobileStream)		
		Refresh / Save		
	FTP Settings	FTP Enable	Untick / Tick	
		Server	Customise	
		Port	21 / Customise	
		Username	Customise	
		Password	Customise	
		DIR Name	Customise	
		Transfer Images	Untick / Tick	
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 Covered	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	Tick / Untick	
		Output Volume	0 ~ 10 (Default 5)	
		Input Volume	0 ~ 10 (Default 5)	
		Audio Code Type	G711A / G711U / G726 16K	
		Refresh / Save		

		Refresh / Save			
	Log	Major Type	Selectable Search		
		Start Time	Selectable		
		End Time	Selectable		
	PTZ	Protocol	Pelco-D / Pelco-P		
		Baudrate	9600 / 4800 / 2400 / 1200		
		Data Bit	8 / 7 / 6 / 5		
		Stop Bit	1 / 2		
		Parity	None / Odd / Even / Mark / Space		
		Address	1 ~ 254 (Default 254)		
		PTZ Schedule	Enable	Untick / Tick	
	Type		Line Scan / Tour / Pattern Scan / Restore		
	Customise Schedule				
	Refresh / Save / Default				
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			
		MCU			
		P2P ID			
	Refresh				
	Smart Analysis	Report type	Daily report / Weekly report / Monthly report / Annual report		
		Alarm type	Cross Counting (CC) / Perimeter Intrusion Detection (PID) / Line Crossing		

			Detection (LCD) / Pedestrian Detection (PD&VD) / Face Detection (FD)		
		Statistical type	Number of in / Number of out / Number of in & out		
		Start time	Customise		
		List / Histogram / Line chart			
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					
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			

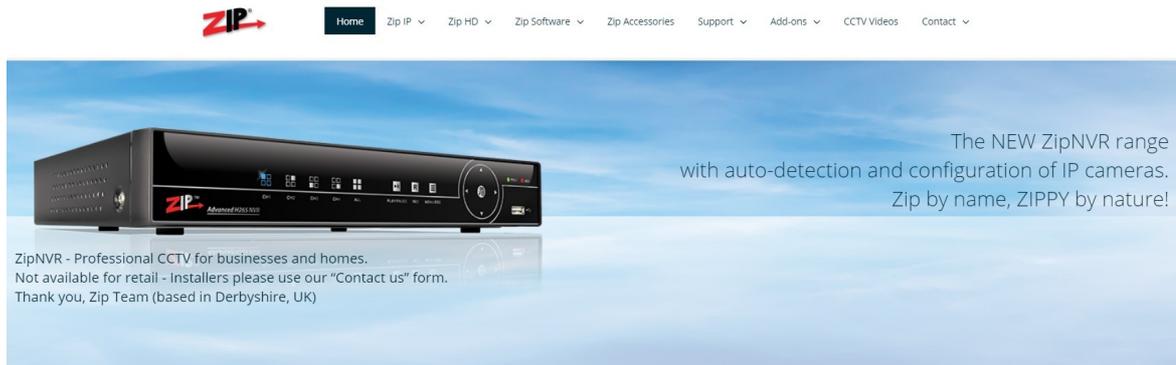
			Rule Switch	Untick / Tick
			Rule Type	A>B / A<B / A<>B
			Enable Record	Untick / Tick
			Refresh / Save	
		PD & VD	Name	Pedestrian Detection (PD&VD)
			Switch	Untick / Tick
			Latch Time	5S / 10S / 20S / 30S
			Post Recording	5S / 10S / 20S / 30S
			Sensitive	0 ~ 100 (Default 60)
			Alarm Out	Untick / 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	Untick / Tick
			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	

9 Extra Resources

9.1 ZipNVR.com Website

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

www.zipdvr.com



9.2 Adding IP Cameras

How to guide on Adding IP Cameras:-

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

9.3 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.

10 Specification

Image Sensor	1/ 2.8" Progressive CMOS
Resolution	2MP (1920x1080)
Lens Type	22X Optical Zoom (4.7mm – 104mm)
Shutter	1/5 ~ 1/20000s
Day/Night	Mechanical (True Day-Night)
Min. Illumination	AGC On: Color: 0.5 lux, B/W: 0.05 lux, 0 lux with IR
Video Compression	H.264 / H.265
Video Output	CVBS (Analogue) BNC Output
Alarm	1 Input / 1 Output
Audio (RCA)	1 Input / 1 Output
Connection	RJ45 10M / 100M Ethernet PoE
Protocols	TCP/IP,HTTP,DHCP,DNS,DDNS,RTSP,PPPoE,SMTP,NTP,UPnP,FTP
User Logins	Max 5 Simultaneous User Logins
PTZ Control	RS485 or Ethernet PTZ Control
IR Range	Up to 100m
Backlight Control	BLC / D-WDR
Pan Range	360°endless
Presets	255
Preset Speed	Max.300°/sec
Use	IP66 For External Use
Operating Temperature	-30°C~+60°C
Weight	Approximately 2kg
Input Voltage	PoE (48V) / 24V AC / 12V DC (12V PSU Supplied)
Consumption	Max 24W

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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