



Instruction Manual

IP-CAM890

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ZipNVR.com

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Introduction

1.1 Key Features - IP-CAM890

Attractive Compact IP Eyeball with Face Recognition & Detection
2.8-12mm IP Eyeball With iSense

- ANPR Built-in
- Facial Recognition*
- Micro SD Card Slot
- Audio In - Audio Out
- Human Detect & Vehicle Detect
- Perimeter Intrusion Detect
- Line Crossing Detection
- Stationary Object Detect
- Cross Counting
- Facial Recognition*
- Crowd Density Detect
- Queues Length Detect
- 2.8-12mm Motor lens
- 5MP
- IR
- Perfect for ZIP NVR Kits

1.2 Essential Tools and ZipFinder

To install this product you will need:

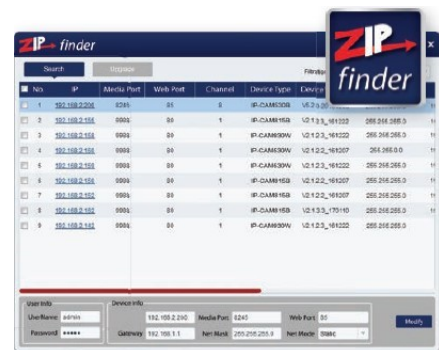
- Laptop / Windows PC
- Screwdriver
- Drill
- Hammer
- ZIP NVR or DVR
- PoE Switch / 12V DC power supply
- Ethernet CAT5/5e/6 Cable

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



Connections and Dimensions

2.1 IP-CAM890



Powering the camera

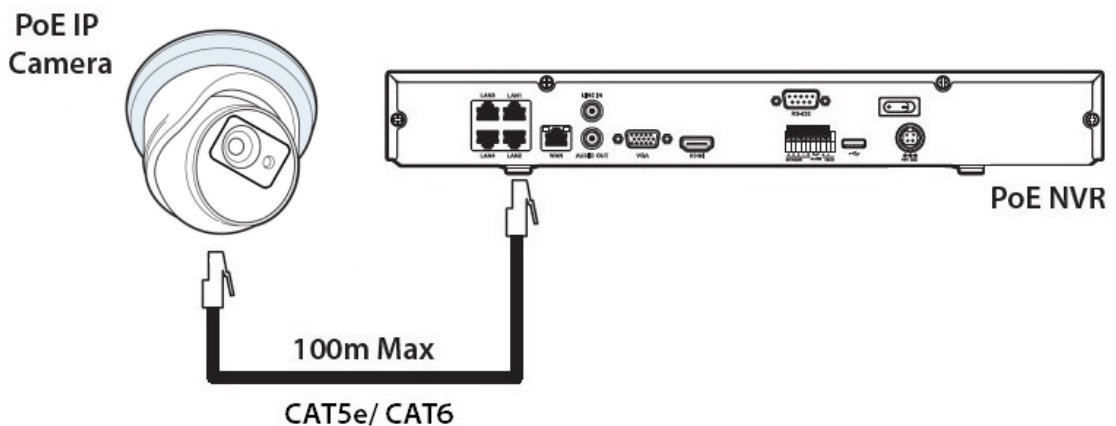
Option 1 - Power the camera from 12V DC (via the 2.1mm DC Socket), the current consumption is 750mA.

The camera is polarity sensitive so connections must be correctly made.

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

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

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



Dimensions



*Dimensions Exclude Bracket

Mounting and SD Card Installation

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

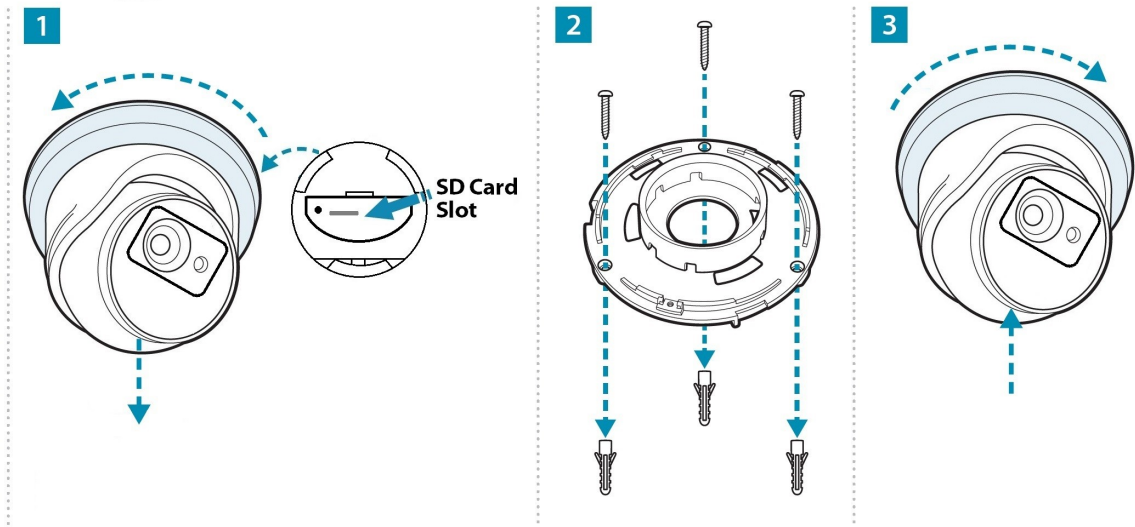
128GB SD Card (MAX) ≈ 124 hours

256GB SD Card (MAX) ≈ 248 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 Eyeball



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

Setup Options

4.1 PoE ZIP NVR

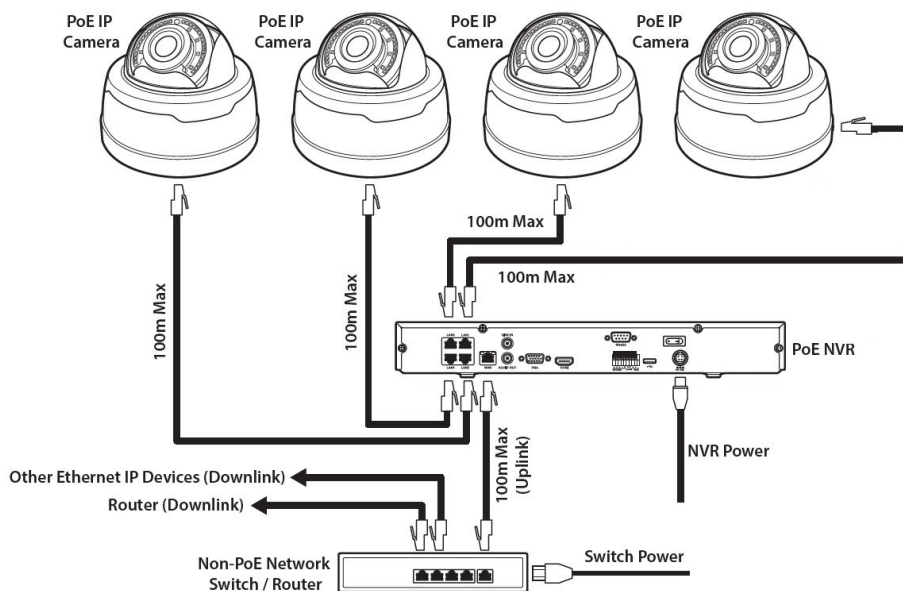
When connecting to a **ZIP PoE NVR** plug the camera directly into the NVR's built in PoE switch.

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.

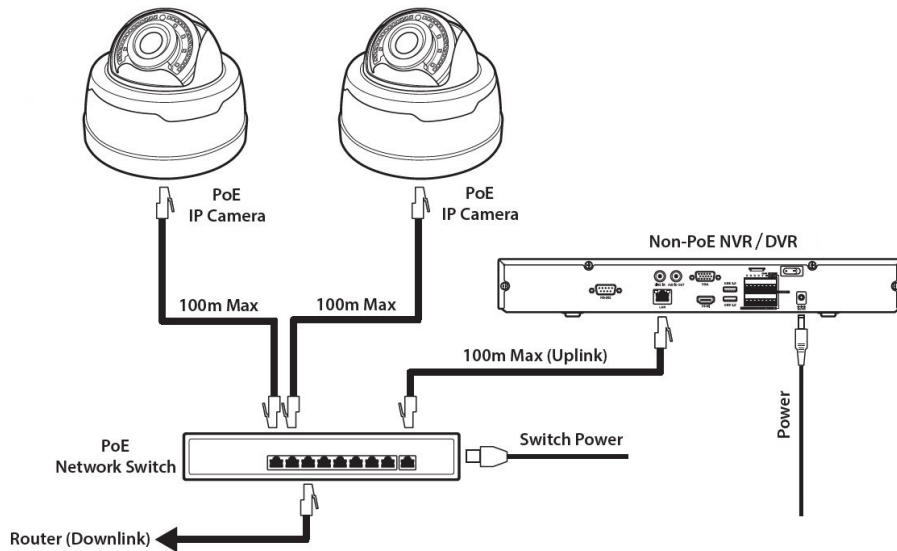
In the menu on a ZIP PoE NVR go to:-

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](#) ²⁰ for more information on **Adding IP Cameras manually** to a ZIP Recorder.

How to Login via Browser

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

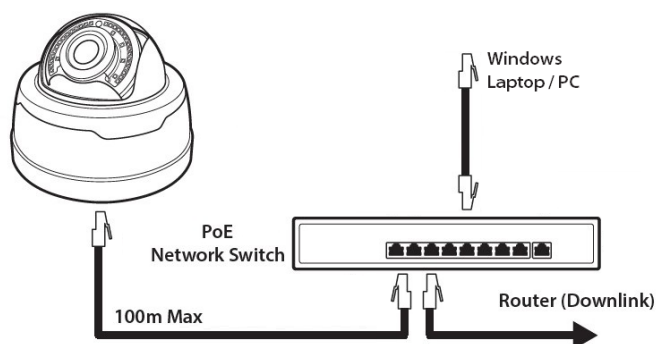
NOTE If the PC being used is on a different IP range to the PC then add the IP range of the camera to the PC using the below guide:-

PDF Version :- http://www.cctvmanuals.com/pdf/tips/How_to_add_an_IP_Range.pdf

HTML Version :-

http://www.cctvmanuals.com/tips/How_to_add_an_IP_Range/index.html

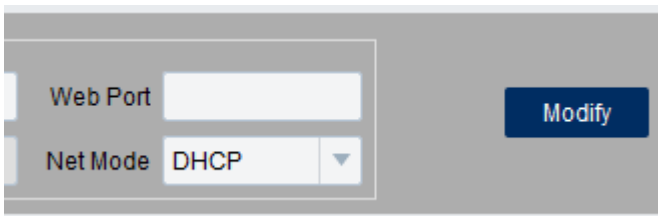
1. Plug the camera's RJ45 port with a network cable into a PoE switch



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:-

Default IP	192.168.10.1
DCHP	Off
User Name	admin
Password	777777

Browser Menu Settings

6.1 IP-CAM890

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

Channel	Live	Name	Customise Name	
		Date Format	DD/MM/YYYY / MM/DD/YYYY / YYYY/MM/DD	
		Time Format	24Hour / 12Hour	
		Flicker Control	50Hz / 60Hz	
		Transparency	1 ~ 128 (Default 64)	
		Show Name	Untick / Tick	
		Show Time	Untick / Tick	
		Refresh / Save		
		Image Control	IR-CUT Mode	Automatic Mode / Colour Mode / Black White Mode / Image Mode / Schedule
	Corridor Mode		Disable / Enable	
	Angle Trad		180 / 0	
	Mirror		Disable / Vertical / Horizontal / All	
	Exposure Compensation		Disable / HLC / BLC / WDR	
	White Balance		Automatic Mode / Manual	
	Shutter		Automatic Mode / Manual	
	Time Exposure		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	
	3D Noise Reduction		Auto / Disable / 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	Lowest / Lower / Low / Medium / Higher / Highest	
		Non-ROI Fps (1-19)	12	
		Refresh / Save		

Record	Encode	Mainstream	Resolution	2880 x 1620 / 2560 x 1440 / 2304x1296 / 1920x1080 / 1280 x 720 / 1280x720
			FPS	1 ~ 25 (Default 25)
			Video Code Type	H.265 / H.264
			Video Code Level	Main Profile
			Bitrate Control	CBR / VBR
			Bitrate	256 / 320 / 384 / 448 / 512 / 640 / 768 / 896 / 1024 / 1280 / 1536 / 1792 / 2048 / 3072 / 4096 / 5120 / 6144 / 8192
			I Frame Interval	1 ~ 100 (Default 50)
			Audio	Enable / Disable
			Refresh / Save	
			Substream	Resolution
		FPS	1 ~ 20 (Default 20)	
		Video Code Type	H.265 / 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 / 1024 / 1536 / 2048 / 3072 / 4096	
		Audio	Untick / Tick	
		I Frame Interval	1 ~ 80 (Default 50)	
		Refresh / Save		

		Mobilestream	Enable	Enable / Disable
			Resolution	640x480 / 320x240
			FPS	1 ~ 20 (Default 20)
			Video Code Type	H.265 / 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 / 1024 / 1536 / 2048 / 3072 / 4096
			Audio	Untick / Tick
			I Frame Interval	1 ~ 80 (Default 50)
			Refresh / Save	
	Record / Capture	Stream Mode	MainStream / SubStream	
		Record	Tick / Untick	
		PreRecord	Tick / Untick	
Schedule	Customise Schedule			
	Refresh / Save / Default			
Event	Setup	Motion	Enable	Enable / Disable
			Sensitivity	1 ~ 8 (Default 3)
		Sound Detection	Enable	Enable / Disable
			Rise	Disable / Enable
			Rise Sensitivity	1 ~ 100 (Default 50)
			Sound Intensity	1 ~ 100 (Default 50)
			Decline	Disable / Enable
			Decline Sensitivity	1 ~ 100 (Default 50)
	Save / Schedule / Refresh			
	Alarm	Motion	Latch Time	5s / 10s / 20s / 30s
			Post Recording	OFF / 5s / 10s / 20s / 30s

			Send Email	Enable / Disable
			FTP Picture Upload	Enable / Disable
			Cloud Picture	Enable / Disable
			Alarm Out	Enable / Disable
			Enable Record	Enable / Disable
			Event Report	Enable / Disable
		Save / Schedule / Refresh		
		Sound Detection	Alarm Type	OFF / Normally-Open / Normally-Close
			Latch Time	5s / 10s / 20s / 30s
			Post Recording	OFF / 5s / 10s / 20s / 30s
			Send Email	Enable / Disable
			FTP Picture Upload	Enable / Disable
			Cloud Picture	Enable / Disable
		Alarm Out	Enable / Disable	
		Enable Record	Enable / Disable	
		Event Report	Enable / Disable	
	Save / Schedule / Refresh			
	Event Push	Enable	Enable / Disable	
		Name	Customise	
		Push Way	HTTP / UDP	
	Username	Customise		
	Password	Customise		
	Server Address	Customise		
	Port	Customise (Default 123)		
	URL	API/AlarmEvent/EventPush		
	Method	POST / GET		
	Interval	OFF / 1 Min / 5 Min / 10 Min		
Save / Refresh				
AI – Setup	FD (Face Detection)	Enable	Enable / Disable	
		Dynamic Marking	Enable / Disable	

		Face Enhance	Optimal Mode / Realtime Mode / Interval Mode
		Apply Mode	Frontal View / Multi View / Customize
		Min Pixel	32 ~ 1080 (Default 64)
		Max Pixel	320 ~ 1080 (Default 640)
		Detection Mode	Static Mode / Motion Mode
		Rule Kind	Rect / Line
		Detection Range	Full Screen / Customize
		Save / Refresh	
	PD & VD (Person & Vehicle Detection)	Enable	Enable / Disable
		Sensitivity	0 ~ 100 (Default 60)
		Dynamic Marking	Enable / Disable
		Snap Mode	Default / Realtime Mode / Interval Mode
		Min Pixel	64 ~ 1080 (Default 64)
		Max Pixel	320 ~ 1080 (Default 640)
		Detection Type	Pedestrian & Vehicle / OFF / Person / Vehicle
		Detection Mode	Motion Mode / Static Mode
	PID (Perimeter Intrusion Detection)	Enable	Enable / Disable
		Sensitivity	1 to 4 (Default 2)
		Dynamic Marking	Enable / Disable
		Detection Type	Motion / Pedestrian & Vehicle / Person / Vehicle
		Rule Number	1 to 4
		Rule Enable	Enable / Disable
		Rule Type	A→B / B→A / A↔→ B
		Save / Refresh	
	LCD (Line Crossing Detection)	Enable	Enable / Disable
		Sensitivity	1 to 4 (Default 2)
		Dynamic Marking	Enable / Disable
		Detection Type	Motion / Pedestrian & Vehicle / Person / Vehicle
Rule Number		1 to 4	
Rule Enable		Enable / Disable	
Rule Type		A→B / B→A / A↔→ B	
Save / Refresh			
SOD (Stationary Object)	Enable	Enable / Disable	

Detection)	Sensitivity	1 to 4 (Default 2)
	Dynamic Marking	Enable / Disable
	Rule Number	1 to 4
	Rule Enable	Enable / Disable
	Rule Type	Legacy / Lost / Lost & Legacy
	Save / Refresh	
CC (Cross Counting)	Enable	Enable / Disable
	Sensitivity	1 to 4 (Default 2)
	Dynamic Marking	Enable / Disable
	Type	Person / Motion / Vehicle
	Alarm Number	1 to 255
	Start Time	User definable
	End Time	User definable
	Rule Number	1
	Rule Enable	Enable / Disable
	Rule Type	A→B / B→A
	Save / Refresh / Reset Count	
HM (Heat Map)	Enable	Enable / Disable
	Rule Number	1
	Rule Enable	Enable / Disable
	Save / Refresh	
CD (Crowd Density)	Enable	Enable / Disable
	Sensitivity	1 to 4 (Default 2)
	Dynamic Marking	Enable / Disable
	Min Pixel	64 ~ 1080 (Default 64)
	Max Pixel	320 ~ 1080 (Default 640)
	Max Detection Number	1 ~ 500 (50)
	Detection Range	Customize / Full Screen
	Rule Number	1
	Rule Enable	Enable / Disable
	Save / Refresh	
QD (Queue Depth)	Enable	Enable / Disable
	Sensitivity	1~ 4 (Default 60)
	Dynamic Marking	Enable / Disable
	Min Pixel	64 ~ 1080 (Default 64)
	Max Pixel	320 ~ 1080 (Default 640)
	Max Detection Number	1 ~ 500 (50)
	Max Pro Time	1 ~ 3600 (60)
	Detection Range	Customize / Full Screen

	Rule Number	1
	Rule Enable	Enable / Disable
	Save / Refresh	
LPD (License Plate Detection)	Enable	Enable / Disable
	LDP Enhance	Enable / Disable
	Day Time Level	0~ 255 (Default 220)
	Night Time Level	0~ 255 (Default 99)
	Sensitivity	1~ 100 (Default 60)
	Dynamic Marking	Enable / Disable
	Snap Mode	Default / Realtime Mode / Interval Mode
	Min Pixel	64 ~ 1080 (Default 64)
	Max Pixel	320 ~ 1080 (Default 640)
	Detection Type	European license plate / American license plate
	Detection Mode	Static Mode / Motion Mode
	Detection Range	Customize / Full Screen
		Save / Refresh
RSD (Rare Sound Detection)	Enable	Enable / Disable
	Sensitivity	1~ 100 (Default 60)
	Detection Type	Baby Crying Sound / Dog Barking / Gunshot
	Save / Refresh	
AI Schedule	Customise Schedule	
	Save / Refresh	
Alarm - FD / LPR / PD&VD / PID / LCD / SOD / CC / CD / QD / LPD / RSD	Post Recording	OFF / 5s / 10s / 20s / 30s
	Send Email	Enable / Disable
	FTP Picture Upload	Enable / Disable
	Cloud Picture	Enable / Disable
	Alarm Out	Enable / Disable
	Enable Record	Enable / Disable
	Event Report	Enable / Disable
	Save / Schedule / Refresh	
Statistics	Human & Vehicle Detection	Select Date & Day / Intelligent / Search / Export
	Cross Counting Statistics - Report Type	Daily Report / Weekly Report / Monthly Report / Annual Report
	Detection Type	Motion / Person / Motor Vehicle / Non-motorised Vehicle
	Cross Type	Cross In / Cross Out
	System Time	Select Date

		Column Chart / Line Chart	
		Heat Map	Daily Report / Weekly Report / Monthly Report / Annual Report
		Statistics – Report Type	
		Date	Customise
		Start Hour	Customise
		End Hour	Customise
		Space Heat Map /Time Heat Map	
		Spatial Density Legend	
		Search	
Network	General	DHCP	Enable / Disable
		IP Address	192.168.10.1 Test
		Subnet Mask	255.255.255.0
		Gateway	192.168.10.254
		IPv6 DHCP	-
		IPv6 Address	-
		IPv6 Gateway	-
		DNS 1	192.168.10.254
		DNS 2	-
		IPv6 DNS 1	192.168.10.254
		IPv6 DNS 2	-
		Multicast Main stream	Enable / Disable
		Video Encryption Transmission	Enable / Disable
		Save / Refresh	
		PPPoE	Enable PPPoE
	Username		User-definable
	Password		
	IP Address		
	Save / Refresh		
	SNMP	Enable	Enable / Disable
		SNMP Version	User-definable
		SNMP Port	
		Read Community	
		Write Community	
		Trap IP Address	
		Trap Port	
		Save / Refresh	
	Port Configuration	HTTP Port	Enable / Disable
		Client Port	User-definable
		HTTPS Port	
		RTSP Port	
		Muticast Port	1024 – 65535
		P2P Enable	Enable / Disable

		Save / Refresh		
Email	Email	Enable / Disable		
	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 / Test			
	FTP Settings	FTP Enable	Untick / Tick	
		Server	Customise	
Port		21 / Customise		
Username		Customise		
Password				
DIR Name				
Transfer Images		Untick / Tick		
Refresh / Save				
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			
DDNS	DDNS	Untick / Tick		
	Server	NO_IP / DYNDNS		
	Host Name	Customise		
	Username			
	Password			
Refresh / Save				
HTTPS	Certificate Type	Default / Custom		
	Refresh / Save			
IP Filter	Enable	Enable / Disable		
	Filter Mode	Allow all IP connections / Allow the selected IP connections / Block the selected IP connections		
	Refresh / Save			
Storage	Disk	Disk Information		
		Refresh / Save / Format Hard Disk		
Audio	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		
	Cloud	Cloud Storage	Enable / Disable	
		Cloud Type	Dropbox	
		Driver Name	Customise (Default IP-PTZ650W)	
		Refresh / Save / Activate Cloud		
System	General	Date and Time	Time Setting mode	Static / NTP server 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 Address	Time.windows.com / time.nist.gov / pool.ntp.org / Define User
			Save / Synchronize computer time / Refresh	
		Daylight Saving Time	Daylight saving time	Enable / Disable
			Start Time	User-definable
			End Time	User-definable
			Time Offset	1Hour / 2 hours
		Save / Refresh		
		Multi-User	Customize Each user	Password (Edit)
				Password
				Password Strength
				Confirm
	Refresh			
	Maintain	Log	Log Type	System / CON. / Alarm / Account / Record / Storage / Network / All
			Start Time	User-definable
			End Time	User-definable
		Load Default	All / Video / Record/ Event / All / Network/ Storage / System	
		Save / Refresh		

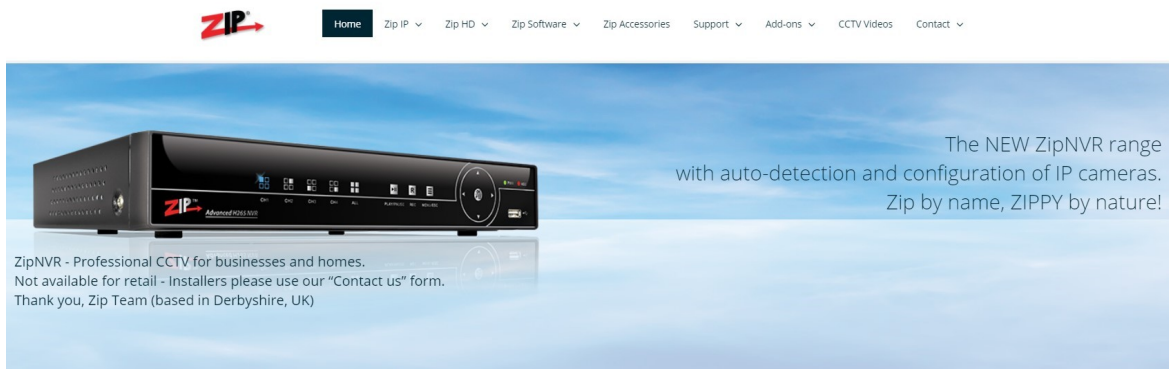
		Upgrade	Path	Search Local Files
		Save / Load	Import File	Search Local Files
			Export File Name	Search Local Files
		Auto Reboot	Auto-maintenance	Enable / Disable
			Time	Date / Week / Month
				Mon / Tues / Wed / Thur / Fri / Sat / Sun
				Time
				Save / Refresh / Reboot
		Information	Device ID	
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

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 to a ZIP recorder

How to guide on Adding IP Cameras:-

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

7.3 AI 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>

7.4 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.

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.

Specifications

9.1 IP-CAM890

Image Sensor	1/ 2.7" Progressive CMOS
Resolution	5MP 2880(H)×1620(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, Licence 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 256GB)
Audio (RCA)	1 Input / 1 Output
Input Voltage	PoE or 12V DC 750mA (PSU Required)
Consumption	9W Max
Operating Temperature	From -30 to 55 deg°C
Backlight Control	BLC / D-WDR
Use	IP66 For External Use
Framerate	25fps (@50hz) / 30fps (@60hz)

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.



WEE/CG0783SS

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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