Instruction Manual

NiteDevil 24C Camera

IPCND705

Get Full Colour Images at Night !!

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Introduction

The all new NiteDevil® 24C can stay in full colour around the clock using the minimal amount of natural light to produce superb full colour images. It really is a game changer in performance and should be used as a part of any CCTV system requiring full colour images in key areas around entrances etc.

With built in dual IR and white light you can choose how the camera best works in your install. Using white light to give visual warning or using IR illumination to get a more discreet set up.

A built in microphone means you can see and hear what's happening, recording the audio & video on your NVR for the best possible CCTV evidence.

Dual PoE and 12V means you can power and connect the camera to POE NVRs in seconds using one simple CAT5/6 cable for video, power and audio. If your system doesn't support PoE use the 12V input or a PoE injector such as our POE200.

1.1 Key Features

o Full Colour 24/7
o Sees in Low Light
o NiteDevil® Tech
o 2MP or 5MP
o Stunning Images
o ONVIF
o White or Grey Case
o IP66 In & Outdoor
o Dual PoE/12V
o Dual IR & White Light
o Wide-Angle 3.6mm
o Built-in Mic
o Metal Case
o Motion Detect
o Picture Flip

1.2 Essential Tools and ZipFinder

To install this product you will need:
• Laptop / Windows PC
• Screwdriver
• Drill
• 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

RJ45 Socket
(Weather-proof cap supplied)
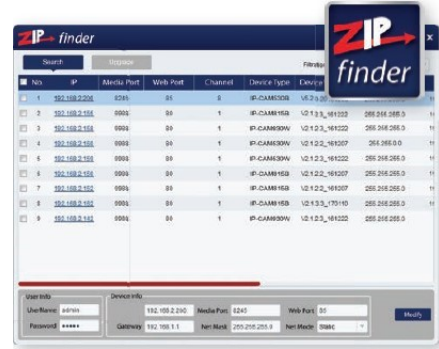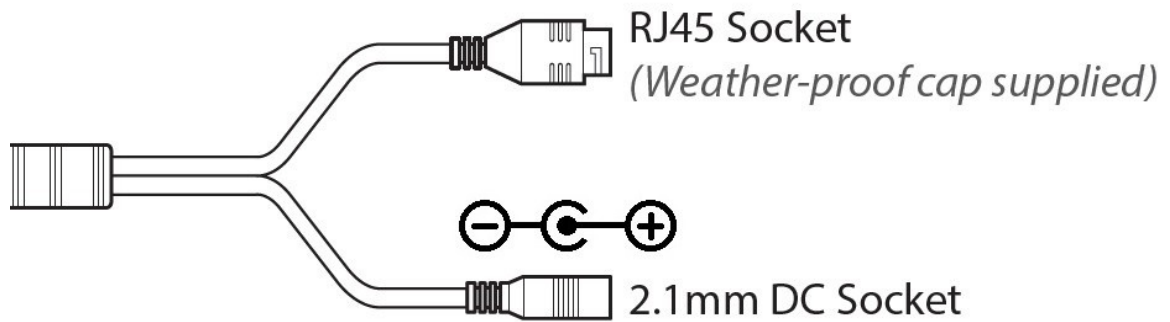
2.1mm DC Socket

Powering the camera

Option 1 - Power the camera from 12V DC (via the 2.1mm DC Socket), the current consumption is 400mA.

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

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

When connecting 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.

PoE IP Camera

PoE NVR

100m Max

CAT5e/ CAT6
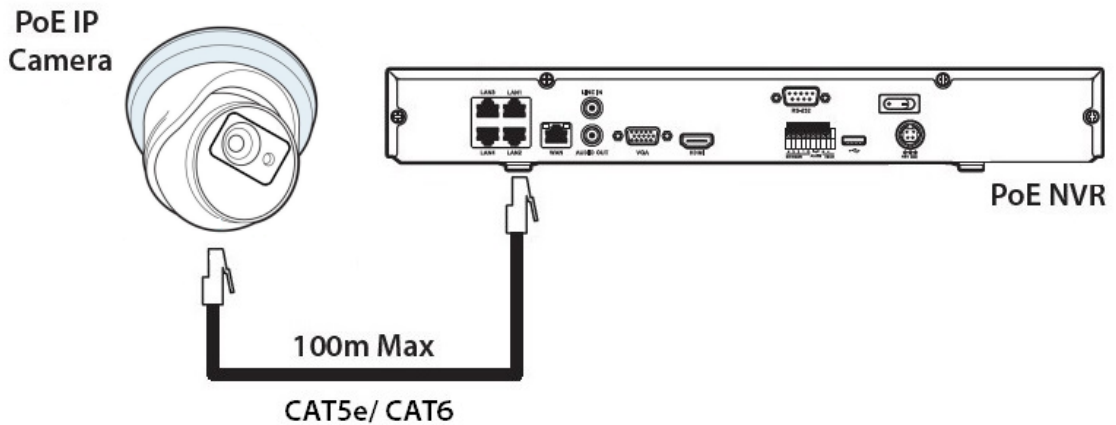
Mounting
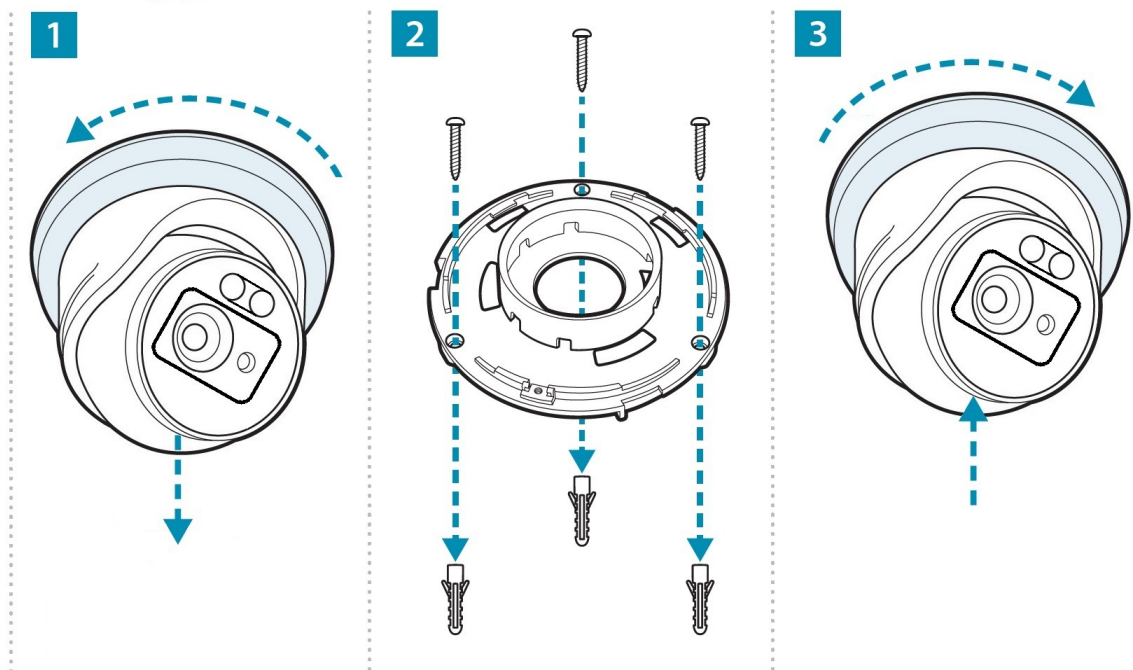
SD Card

The SD Card can be found on the rear of the eyeball, a small gasket will need to be removed to install the SD card.

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.

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.

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
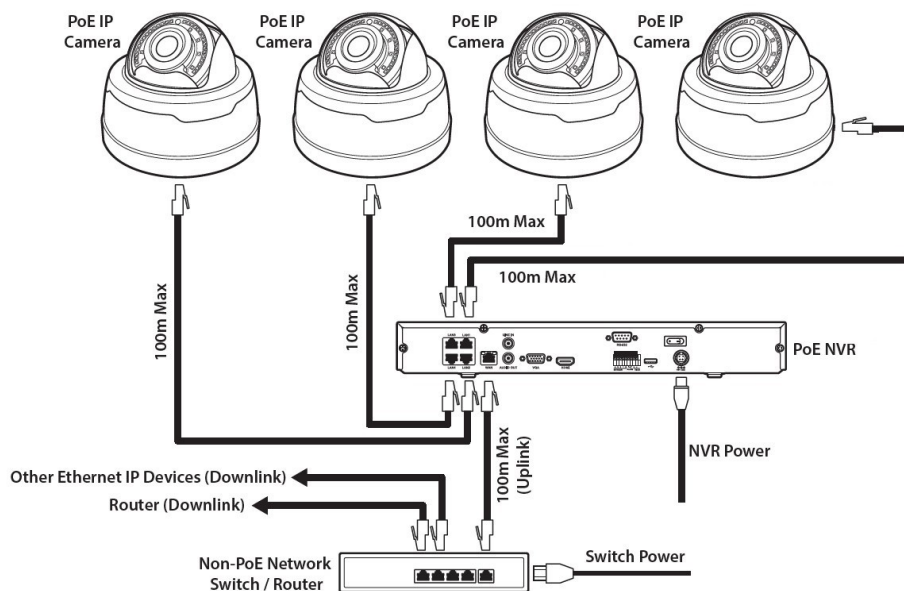
5.2 Non-PoE ZIP NVR

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.
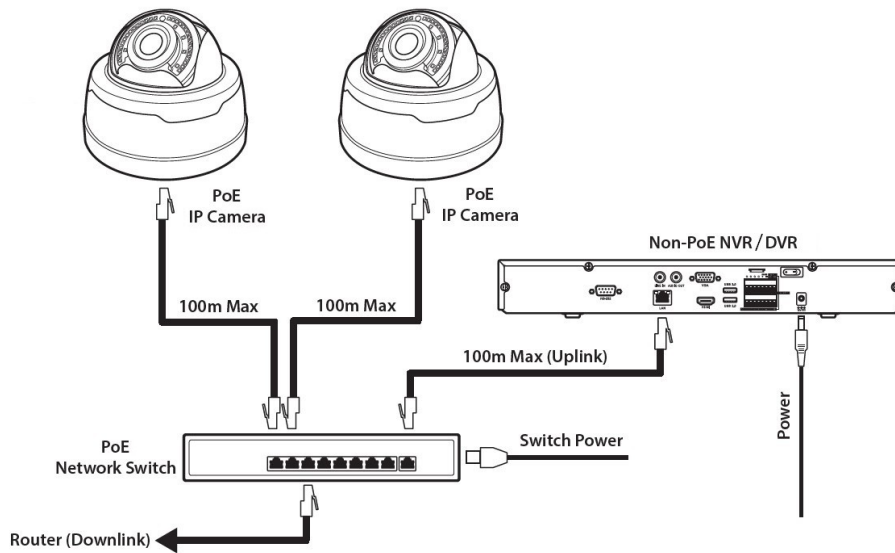
See Extra Resources ⌐25⌐ for more information on **Adding IP Cameras manually** to a ZIP Recorder.

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:-

https://softcctv.com/helpdesk/kb/faq.php?id=571

1. Plug the camera's RJ45 port with a network cable into a PoE switch
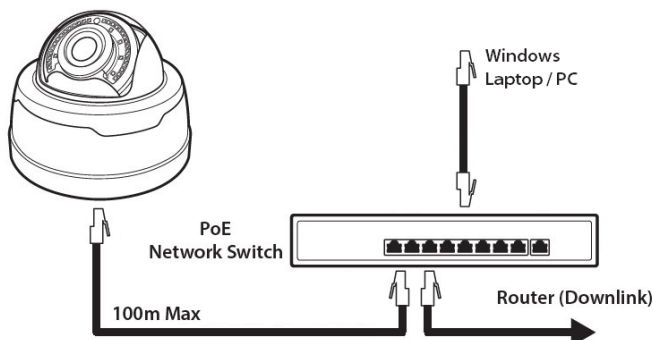
2. Using ZipFinder on a Windows Based PC/ Laptop **Search** and then tick the camera

3. Select Net Mode = **DCHP,** then click **Modify**
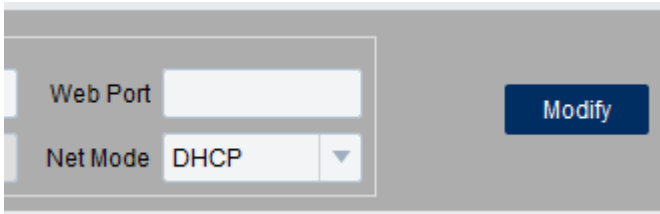
4. **Search** again, to get the updated IP address.

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**

Browser Menu Settings

7.1 IPCND705

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

Video	Live		Name	Camera (user editable)
	Image Control		Date Format	DD/MM/YYYY / MM/DD/YYYY / YYYY/MM/DD
			Time Format	24 Hour / 12 Hour
			Flicker Control	50Hz / 60Hz
			Show Name	Enable / Disable
			Show Time	Enable / Disable
			Save / Refresh	
	Image Control		Image Setting	Full Colour Mode / Day / Night Mode / Schedule
			White Light	Manual / Automatic mode / Schedule / OFF
			Angle Trad	180 / 0
			Mirror	Disable / Vertical / Horizontal / All
			Backlight	WDR / HLC / Back Light / Disable
			White Balance	Automatic mode / Manual
			Shutter	Automatic mode / Manual
			Time Exposure	1/5 to 1/200000 / Flickerless
			Defog	OFF / Automatic mode / Manual
			3D Noise Reduction	OFF / Automatic Mode / Manual
			Save / Default / Refresh	
	Privacy Mask		Enable / Disable	
Record	Encode	Mainstream	Resolution	2880 x 1620 / 2560 x1440 / 2304 x 1296 / 1920 x 1080 / 1280 x 720
			FPS	1 -25
			Video Code Type	H.265 / H.264 / H.264+ / H.265+
			Video Code Level	Main Profile
			Bitrate Control	CBR / VBR
			Bitrate Mode	Predefined / User-Defined
			Bitrate	256 to 8192
			I Frame Interval	1 to 100
			Audio	Enable / Disable
			Save / Refresh	
		Substream	Resolution	1280 x 720 / 640 x 480 / 320 x 240
			FPS	1 -25

			Video Code Type	H.265 / H.264 / H.264+ / H.265+ / MJPEG
			Video Code Level	Main Profile / Baseline / High Profile
			Bitrate Control	CBR / VBR
			Bitrate Mode	Predefined / User-Defined
			Bitrate	128 to 4096
			I Frame Interval	1 to 40
			Audio	Enable / Disable
			Save / Refresh	
		Mobilestream	Enable	Enable / Disable
			Resolution	640 x 480 / 320 x 240
			FPS	1 – 25
			Video Code Type	H.265 / H.264 / H.264+ / H.265+
			Video Code Level	Main Profile
			Bitrate Control	CBR / VBR
			Bitrate Mode	Predefined / User-Defined
			Bitrate	8 to 1536
			I Frame Interval	1 to 100
			Audio	Enable / Disable
			Save / Refresh	
	Record	Record	Stream Mode	Mainstream / Substream
			Record	Enable / Disable
			PreRecord	Enable / Disable
			Netbreak	Enable / Disable
			Save / Refresh	
		Schedule	User Definable	
			Save / Refresh	
Event	Setup	Motion	Enable	Enable / Disable
			Sensitivity	1 to 8
			Save / Refresh	
		Deterrence	Save / Default / Refresh	
	Alarm	Post Recording	OFF / 5s / 10s / 20s / 30s	
		Send Email	Enable / Disable	
		FTP Picture Upload	Enable / Disable	
		Enable Record	Enable / Disable	
		Deterrent	Enable / Disable	
		Save / Schedule / Refresh		
AI	Setup	PD & VD	Enable	Enable / Disable
			Sensitivity	0 to 100
			Dynamic Marking	Enable / Disable
			Snap Mode	Default / Realtime Mode / Interval Mode
			Min Pixel	64 – 1080
			Max Pixel	320 – 1080

			Detection Type	Pedestrian & Vehicle / OFF / Person / Vehicle
			Detection Mode	Motion Mode / Static Mode
			Detection Range	Full Screen / Customize
			Save / Refresh	
		PID	Enable	Enable / Disable
			Sensitivity	1 to 4
			Dynamic Marking	Enable / Disable
			Detection Type	Pedestrian & Vehicle / Person / Vehicle
			Rule Number	1 to 4
			Rule Enable	Enable / Disable
			Rule Type	A→B / B→A / A←→ B
			Save / Refresh	
		LCD	Enable	Enable / Disable
			Sensitivity	1 to 4
			Dynamic Marking	Enable / Disable
			Detection Type	Pedestrian & Vehicle / Person / Vehicle
			Rule Number	1 to 4
			Rule Enable	Enable / Disable
			Rule Type	A→B / B→A / A←→ B
			Save / Refresh	
		SOD	Enable	Enable / Disable
			Sensitivity	1 to 4
			Dynamic Marking	Enable / Disable
			Rule Number	1 to 4
			Rule Enable	Enable / Disable
			Rule Type	Legacy / Lost / Lost & Legacy
			Save / Refresh	
		CC	Enable	Enable / Disable
			Sensitivity	1 to 4
			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	Enable	Enable / Disable
			Rule Number	1
			Rule Enable	Enable / Disable
		CD	Enable	Enable / Disable

			Sensitivity	1 to 4
			Dynamic Marking	Enable / Disable
			Min Pixel	32 – 1080
			Max Pixel	640 – 1080
			Max Detection Number	1 - 500
			Detection Range	Full Screen / Customize
			Rule Number	1
			Save / Refresh	
		QD	Enable	Enable / Disable
			Sensitivity	1 to 4
			Dynamic Marking	Enable / Disable
			Min Pixel	32 – 1080
			Max Pixel	320 – 1080
			Max Detection Number	1 – 100
			Max Pro Time	60
			Detection Range	Full Screen / Customize
			Rule Enable	Enable / Disable
			Save / Refresh	
	Alarm	PD&VD / PID / LCD / SOD / CC / CD / QD	Post Recording	OFF / 5s / 10s / 20s / 30s
			Send Email	Enable / Disable
			FTP Picture Upload	Enable / Disable
			Enable Record	Enable / Disable
			Deterrent	Enable / Disable
			Save / Schedule / Refresh	
	Statistics	Human & Vehicle Detection Cross Counting Statistics	Date	
			Intelligent	
			Search	
			Export	
			Report Type	Daily report / Weekly Report / Monthly report / Annual report
			Detection Type	Motion / Person / Vehicle
			Cross Type	Cross in / Cross out
			System Time	User-definable
			Column Chart / Line Chart	
		Heat Map Statistics	Report Type	Daily report / Weekly Report / Monthly report / Annual report
			Date	User-definable
			Start Hour	
			End Hour	
			Space Heat Map / Time Heat Map	
			Spatial density legend	L – H
Network	General	General	DCHP	Enable / Disable
			IP Address	User-definable

			Subnet Mask	User-definable	
			Gateway	User-definable	
			DNS 1	User-definable	
			DNS 2	User-definable	
			Multicast – Mainstream	Enable / Disable	
			Save / Refresh		
		PPPoE	Enable PPPoE	Enable / Disable	
			Username	User-definable	
			Password		
			IP Address		
			Save / Refresh		
		Port Configuration	HTTP Port	Enable / Disable	User-definable
			Client Port		
			HTTPS Port		
			RTSP Port		
			Muticast Port	1024 – 65535	
			P2P Enable	Enable / Disable	
			Save / Refresh		
		Email	Email	Enable / Disable	
			Encryption	OFF / SSL / TLS / Automatic mode	
			SMTP Port	1 - 65535	
			SMTP Server	User-definable	
			Username		
			Password		
			Sender		
			Receiver 1		
			Receiver 2		
			Receiver 3		
			Interval		
			Save / Test / Refresh		
		FTP	FTP Enable	Enable / Disable	
			Server	User-definable	
			Port	1 – 65535	
			Username	User-definable	
			Password	User-definable	
			Transfer Images	Enable / Disable	
			Save / Refresh		
		RTSP	RTSP Enable		
			Anonymous Login	Enable / Disable	
			Instruction: rtsp://IP:RtspPort/ch01/A A: 0(main stream), 1(sub stream), 2(mobile stream)		
			Save / Refresh		
		DDNS	DDNS	Enable / Disable	
			Server	NO_IP / DYNDNS	

			Hostname	User-definable	
			Username	User-definable	
			Password	User-definable	
		IP Filter	Enable	Enable / Disable	
			Type	Enable Allow List / Enable Block List	
			Restricted Type	Allow list/ Block List	
			Save / Delete / Refresh		
Storage	Disk	Select Disk			
		Overwrite	OFF / Auto		
		Save / Format Hard Disk / Refresh			
	Audio	Enable Audio	Enable / Disable		
		Output Volume	0 – 8		
		Input Volume	0 – 8		
		Audio Code Type	G711A / G711U		
		Save / Refresh			
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	Set by week / set by date
			Start Time	User-definable	
			End Time	User-definable	
			Time Offset	1Hour / 2 hours	
			Save / Refresh		
	Multi-User	Customize Each user	Password (Edit)	Username	User-definable
				Password	User-definable
				Password Strength	User-definable
				Confirm	
		Refresh			
	Maintain	Log	Log Type	System / CON. / Alarm / Account / Record / Storage / Network / All	Search
			Start Time	User-definable	
			End Time	User-definable	
		Load Default	All / Video / Record/ Event / AI / Network/ Storage / System		

			Save / Refresh		
		Upgrade	Path	Search Local Files	Upgrade
		Save / Load	Import File	Search Local Files	Import
			Export File Name	Search Local Files	Export
		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			
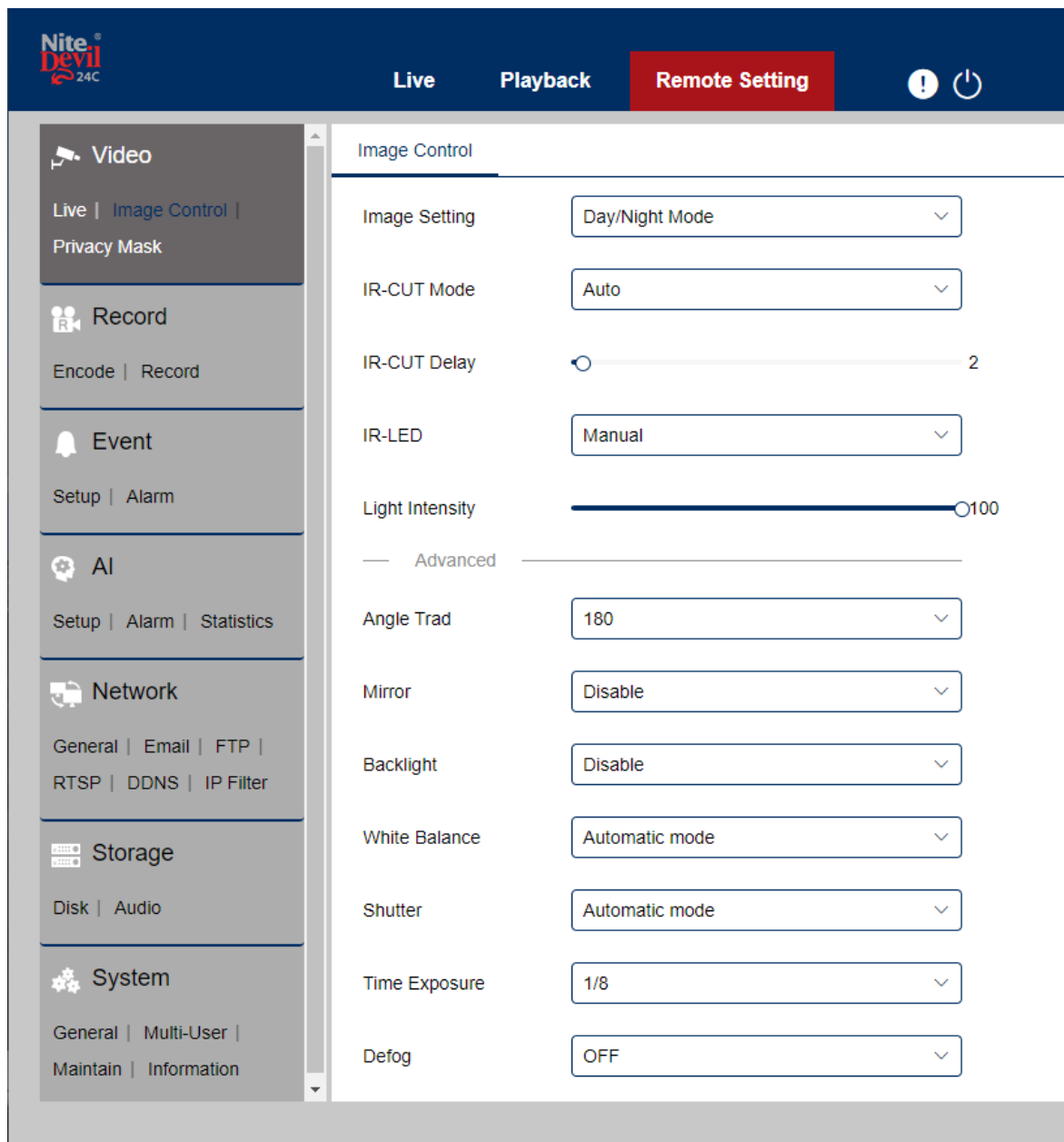
Customising the Day / Night Setting to IR

Once logged into the camera browser interface:-

Go To *Remote Settings > Video > Image Control > Image Settings*

e.g. Day / Night mode if want the camera to B&W & use the IR

Suggested setting : IR Cut to Auto.

Turn off Deterrence LED

Once logged into the camera browser interface:-

To turn deterrence LED off also

Go to *Remote Settings > Event > Setup > Deterrence > Light > Select Off > Select SAVE*

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.

Note :- Additional features (SOD, CC, HM, CD and QD) will be added at a later date.

10.1 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.
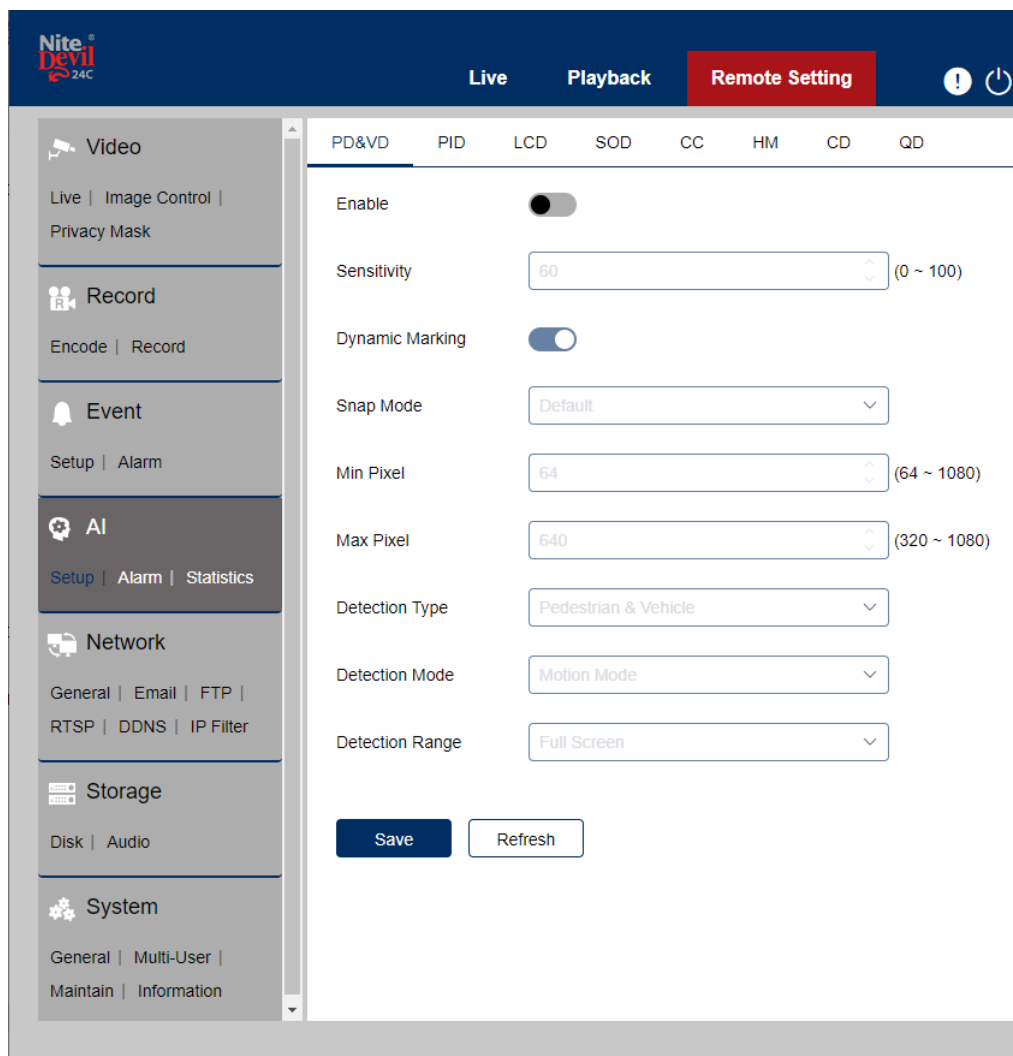
Enable - Enable / Disable this AI feature.

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.

Dynamic Marking - Enable / Disable - Shows an overlay of the triggering area when triggered.

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 / Max Pixel - Set the 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 - Options are motion, pedestrian, vehicle or both pedestrian and vehicle.

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.

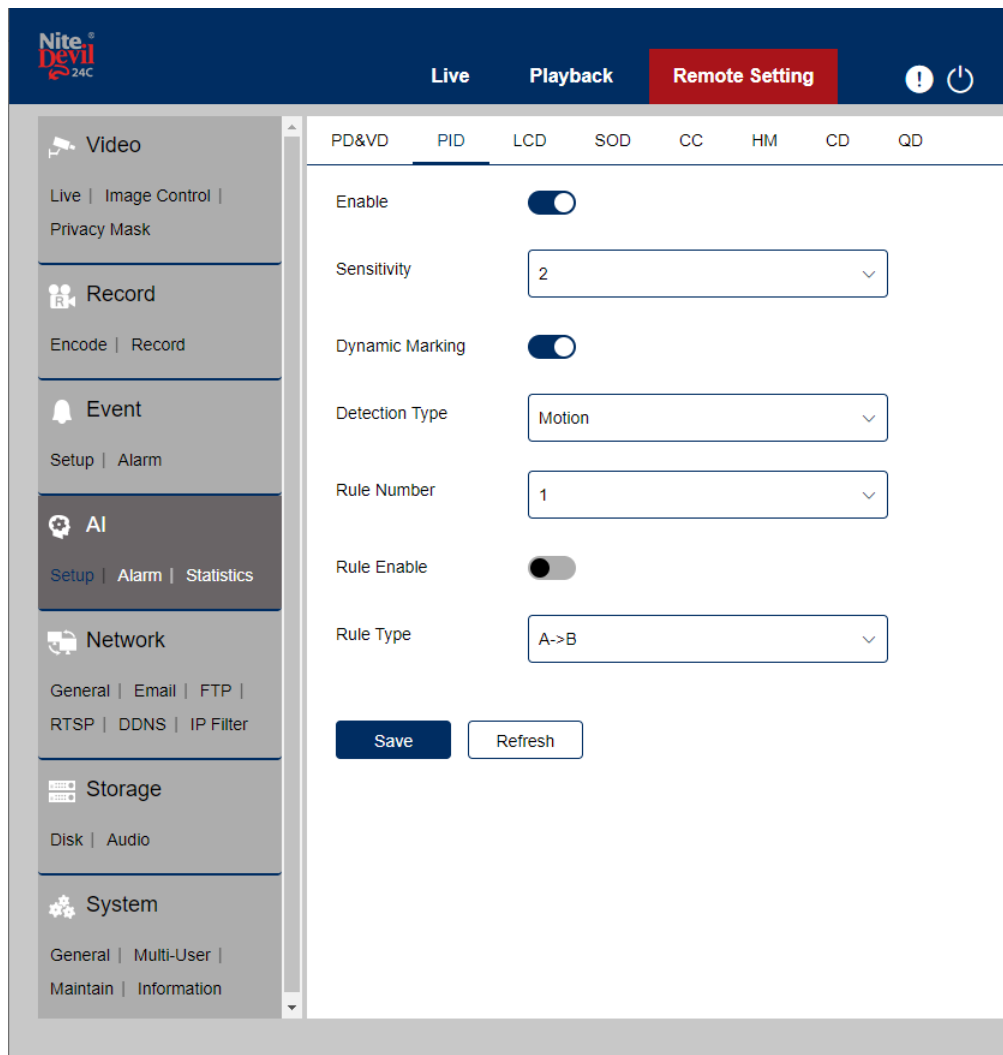**Detection Range** - Set the detection area for the image.

Customize = Customise a defined detection area.

Full Screen = Set to Monitor the entire image.

10.2 PID = Perimeter Intrusion Detection

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

Nite Devil 24C	Live Playback **Remote Setting** ⓘ ⏻

PD&VD   **PID**   LCD   SOD   CC   HM   CD   QD

Video
Live | Image Control | Privacy Mask

Record
Encode | Record

Event
Setup | Alarm

AI
Setup | Alarm | Statistics

Network
General | Email | FTP | RTSP | DDNS | IP Filter

Storage
Disk | Audio

System
General | Multi-User | Maintain | Information

Enable   ⬤

Sensitivity   2

Dynamic Marking ⬤

Detection Type   Motion

Rule Number   1

Rule Enable   ⬤

Rule Type   A->B

Save   Refresh

Enable = **Enable / Disable** this AI feature.

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.

Dynamic Marking - Enable / Disable - Shows an overlay of the triggering area when triggered.

Detection Type - Options are motion, pedestrian, vehicle or both pedestrian and vehicle.

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

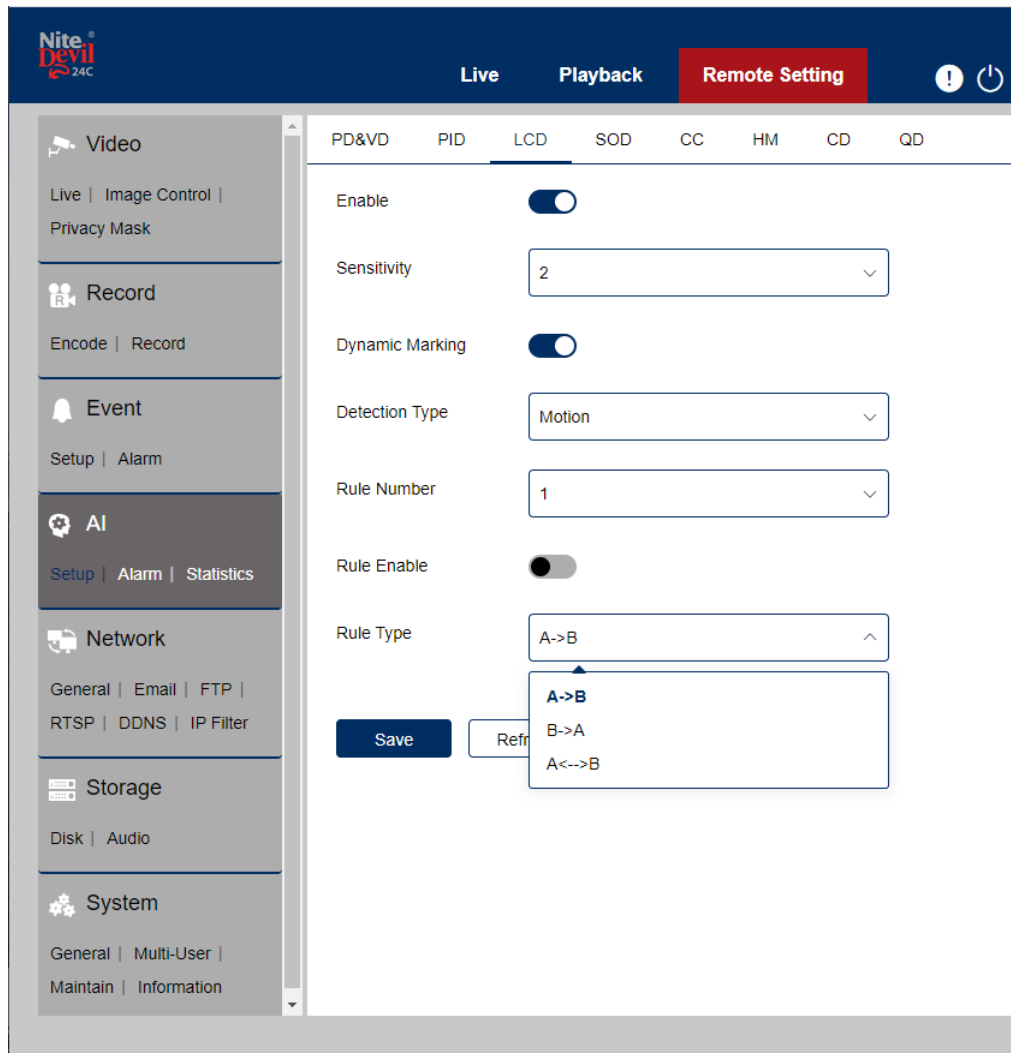**Rule Type** - The determines how the direction of moment over the perimeter is handled.

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.

10.3 LCD = Line Crossing Detection

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

Enable = **Enable / Disable** this AI feature.

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.

Dynamic Marking - Enable / Disable - Shows an overlay of the triggering area when triggered.

Detection Type - Options are motion, pedestrian, vehicle or both pedestrian and vehicle.

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 Enable - 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.
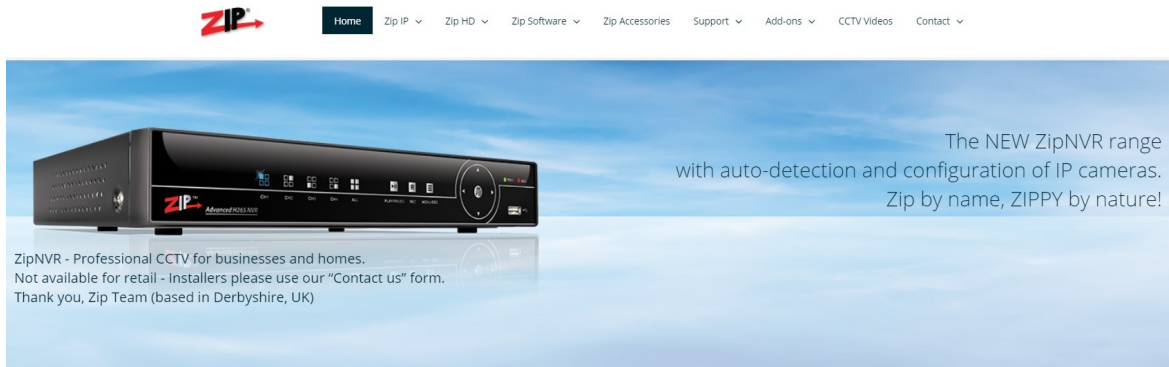**A or B (A<->B)** = Any moment direction over the perimeter will trigger.

Extra Resources

11.1 ZipNVR.com Website

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

www.zipdvr.com

11.2 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

11.3 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.

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

13.1 IPCND705

Resolution	5MP (2880 x 1620)
Lens Type	Wide Angle 3.6mm Fixed
Video Compression	H264 / H265
Bit Rate	8Kbps ~ 8Mbps
Shutter	1/5 ~ 1/20000s
Min. Illumination	Colour 24/7
Day/Night Function	Auto or Scheduled
Microphone	Built-in
IR LEDs	2x High Power
IR Range	Up to 30m
White Light	2x High Power
White Light Range	Up to 25m
Gain Control	Auto
Video Connection	RJ45 Socket
Onvif	Yes
Protocol	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP/RTSP
Other Protocols	SMTP, NTP, UPnP, SNMP, HTTPS, FTP
White Balance	Auto / Manual
Input Voltage	12V DC (400mA) / PoE 48V
Consumption	5W Max
Power Connection	12V – 2.1mm DC Socket / PoE – RJ45
IP Rating	IP66
Build	Metal
Dimensions	100mm x (H) 90mm

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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