



# NiteDevil HD-SDI Cameras

Stunning 1080p HD-SDI cameras with built in NiteDevil™ technology.



**Anti-Vandal**  
CAM320



**Traditional**  
CAM341-344



**Covert**  
CAM350-351



**Mini Bullet**  
CAM360-362



**All-In-On IR**  
CAM380

**Handbook &  
Instructions**



**CAM380** - 2.1 Megapixel All-In-One IR  
with a 2.8 - 11mm lens.

## Introduction

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The ever impressive NiteDevil technology is now built into a wide range of our HD-SDI cameras.

Our incredible 2.1 megapixel HD-SDI cameras record 1080p broadcast quality images at 25fps, that's 20x the quality of the average analogue alternative. Connect these cameras to one of our HD-SDI DVRs and you'll have an unrivalled CCTV system.

We offer a variety of HD-SDI cameras to suit any environment, from tiny module cameras and mini bullets to external all-in-one IR cameras.

As well as new systems, our HD-SDI cameras and alien DVRs offer a potential upgrade opportunity as they are designed to work over co-ax. By using co-ax cable already installed for an old analogue system it's easy to make the transition to HD-SDI.

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## Features

- 1080p at 25fps
- Low light 0.02 Lux (Sens-up)
- Dual Voltage, 12V DC, 24V AC
- Digital 64x Zoom
- Privacy Masking
- Wide Dynamic Range
- Internal Wiring

With its 1080p high-res image quality, this camera outputs the same stunning images as you would get from an HD TV programme. Additional NiteDevil technology gives it great low light performance.

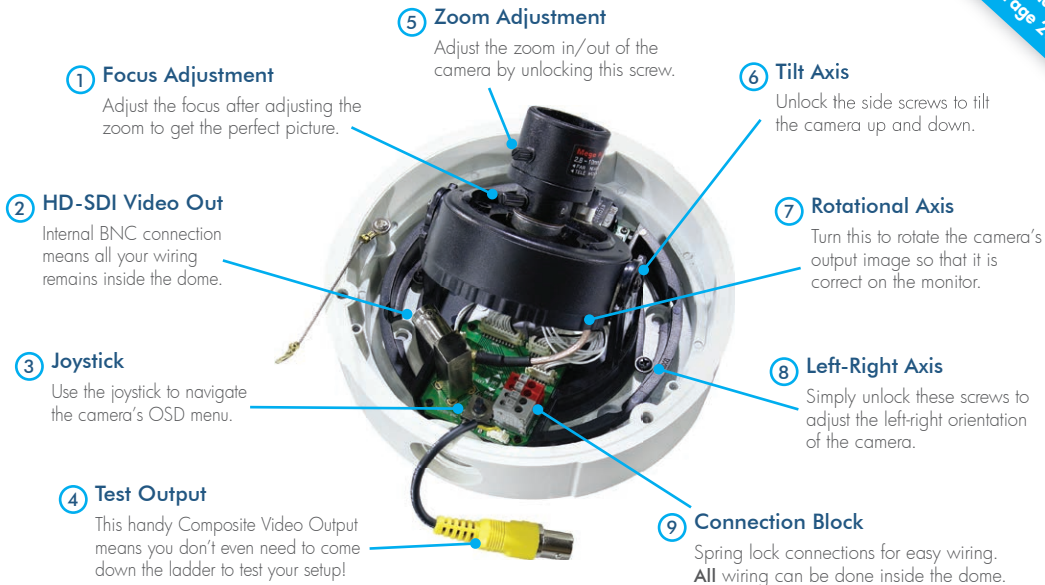


FUNCTION	SPECIFICATION
Imaging Sensor	1/3" 2.1M Megapixel COMS
Resolution	1080p 25fps
Lens Type	2.8 - 11mm Vari-focal
Min. Illumination	0.02 Lux (Sens-up)
Input Voltage	12V DC/24V AC (Dual Voltage)
Current Consumption	150mA (12VDC) / 120mA ( 24VDC)

FUNCTION	SPECIFICATION
SN Ratio	More than 50dB
IP Rating	IP66
Gain Control	Automatic
Video Connection	HD-SDI BNC Socket
Power Connection	Terminal Strip
Dimensions	144mm Dia x 100.5mm

# CAM320 - Inside The Camera

OSD  
Menu &  
Settings Guide  
Starts On Page 20



## 1 Focus Adjustment

Adjust the focus after adjusting the zoom to get the perfect picture.

## 5 Zoom Adjustment

Adjust the zoom in/out of the camera by unlocking this screw.

## 6 Tilt Axis

Unlock the side screws to tilt the camera up and down.

## 2 HD-SDI Video Out

Internal BNC connection means all your wiring remains inside the dome.

## 7 Rotational Axis

Turn this to rotate the camera's output image so that it is correct on the monitor.

## 3 Joystick

Use the joystick to navigate the camera's OSD menu.

## 8 Left-Right Axis

Simply unlock these screws to adjust the left-right orientation of the camera.

## 4 Test Output

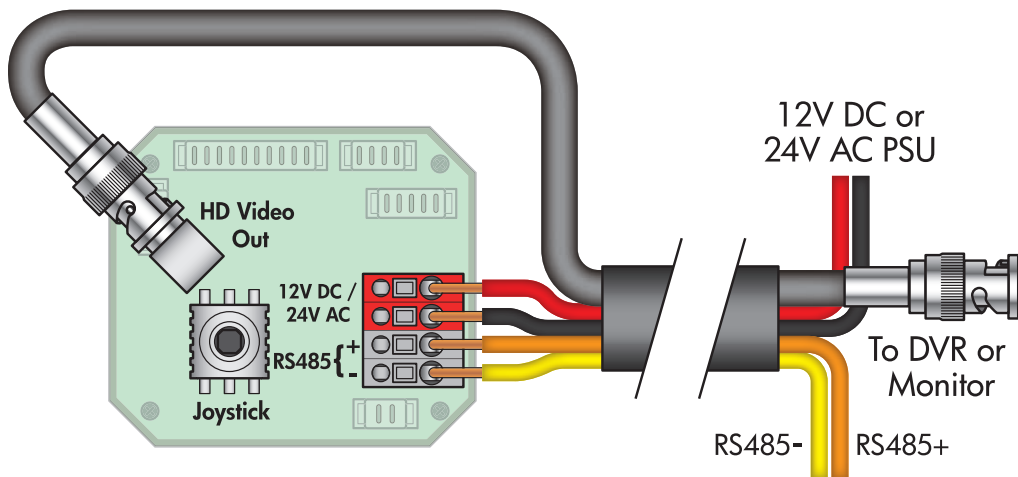
This handy Composite Video Output means you don't even need to come down the ladder to test your setup!

## 9 Connection Block

Spring lock connections for easy wiring. All wiring can be done inside the dome.

For more info, tips and advice visit [nitedevil.com](http://nitedevil.com)

## CAM320 - Connecting The Camera Using RG59+4 (PTZ Combo Cable)



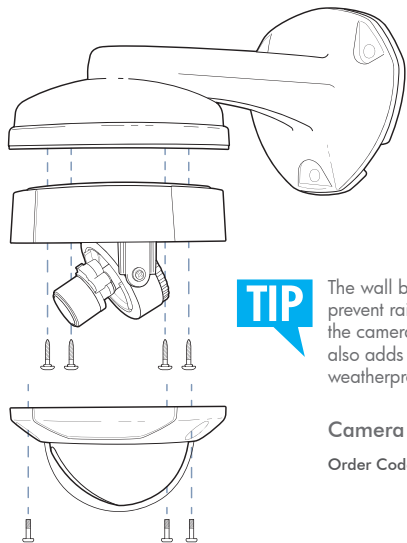
**TIP**

The power connection terminals (marked in red) are **not** polarity sensitive, therefore the power can be connected either way round. However, the RS485 connections **are** polarity sensitive and must be connected as shown in the diagram above.

RS485 Keyboard  
or Test Monitor  
to control OSD

# CAM320 - Mounting The Camera

The camera can be mounted on a wall, ceiling or attached to an optional wall bracket.



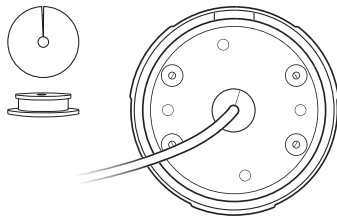
**TIP**

The wall bracket helps prevent rain obscuring the camera's vision and also adds additional weatherproofing.

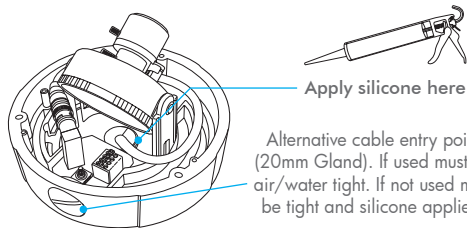
Camera & Bracket

Order Code: **CAM325**

To ensure that the camera is weatherproof, a rubber grommet is provided through which the cable enters the camera.



Prior to the end of the installation you need to additionally seal the grommet with a flexible silicone product. This is because the rubber grommet may shrink or get stressed over time.



Alternative cable entry point (20mm Gland). If used must be air/water tight. If not used must be tight and silicone applied.



## Features

- 1080p at 25fps
- True Day-Night
- Wide Dynamic Range
- Choice of 12V, Dual Voltage or 240V
- 0.02 Lux (Sens-up)
- Mirror / Privacy Function
- Motion Detection

A stylish high performance NiteDevil camera in a traditional style features Wide Dynamic Range and OSD Menu for mirror, privacy & motion detect functions. Offering superb results even at night, this camera can recognize a car number plate using its built-in high sensitivity backlight compensation.

FUNCTION	SPECIFICATION
Imaging Sensor	1/3" 2.1 Megapixel
Resolution	1080p 25fps
Lens Type	2.8 - 12mm Option Available
Min. Illumination	0.02 Lux (Sens-up)
Input Voltage	12V DC / 24V AC / 240V AC

FUNCTION	SPECIFICATION
Current Consumption	150mA
SN Ratio	More than 50dB
Video Connection	HD-SDI BNC Socket
Power Connection	Terminal Strip
Dimensions	65mm x 60mm x 119.6mm (ex Lens)



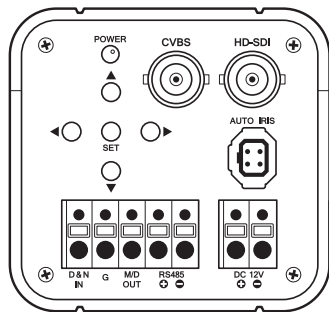
# CAM341-344 - Connecting The Camera

OSD  
Menu &  
Settings Guide  
Starts On Page 20

## CAM241 - 12V DC

Use a 12V DC regulated power supply providing a minimum of 150mA per camera (200mA recommended). Allow headroom per camera to be on the safe side, especially taking into account any extra load such as adding an auto-iris lens.

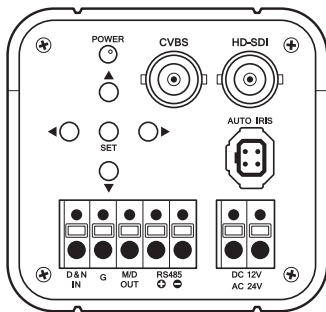
The camera has a polarity sensitive terminal connection. Incorrectly connecting the power may damage the camera.



## CAM243 - 12V DC/24V AC

The CAM243 is a dual voltage camera. This camera is not polarity sensitive so the positive and negative wires can be connected either way round.

If you choose to use a 12V DC supply, it must be a regulated power supply providing a minimum of 150mA per camera (200mA recommended).

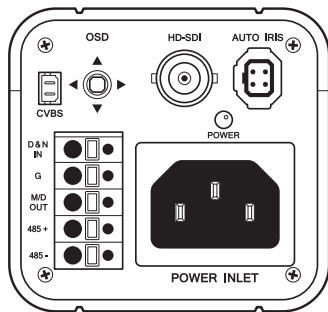


## CAM245 - 240V AC

The CAM245 is a mains 240V AC powered camera and a mains power cable is required.



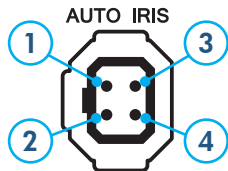
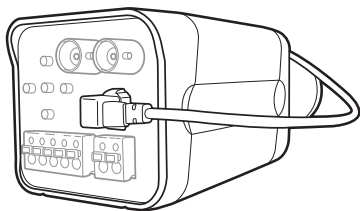
CAM241 & CAM243 can be wired in much the same way as the CAM320 on page 4.



# CAM341-344 - Fitting The Camera Lens

## Auto-Iris Direct Drive Connections

Auto Iris type lenses require the 4-pin connector to be attached to the camera. It is important that this connector is wired correctly. If you bought the lens from System Q and it's a direct drive lens, this will be pre-wired and you can simply plug the lens into the camera.



1. DAMPING-
2. DAMPING+
3. DRIVE
4. GND

## C or CS Mount Lenses

Most lenses are available in 2 different mounting options - C mount and CS mount.

CS mount lenses are now the most popular size as they are shorter and more compact than C mount lenses. Most cameras are now manufactured to accept CS mount lenses. Before fitting the lens you need to verify that you are using a CS mount lens with the camera. You can confirm this with your lens supplier or the literature that came with your lens, check the instructions or packaging to see if your lens is a C or a CS mount version.

If your lens is a C mount type you can still fit it to the camera by following the instructions under the heading **Using a C Mount lens**.

## Using a CS Mount lens

If you are using a standard CS mount lens you can screw the lens straight into the camera without the need for the C-CS adapter ring (supplied).

## Adjusting the inner focus ring

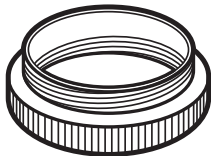
Once you have fitted the lens, if you have a picture on the monitor but cannot correctly focus the lens by the fine focal adjust on the

# CAM341-344 - Fitting The Camera Lens

lens itself, you may need to alter the inner adjusting ring that is screwed into the end of the camera. To do this you will need a small Allen key. This ring enables the lens to either “sit” a little closer or a little further away from the camera to get a sharp focused image when using lenses from different manufacturers.

To adjust the inner focus ring you will need to slacken the ring by loosening the grub screw(s) with an Allen key. This is a trial and error process by moving the ring in or out say ½ turn then locking it again and trying to refocus the lens. It is possible (with common sense!) to work out whether the lens needs to be nearer or further away from the camera by watching for improvements in focus at each attempt.

**NOTE** If it appears that the lens will never be in focus then it is possible that you are trying to fit a **C-mount** lens on the camera, not a **CS-mount** lens. If this is the case you will have to add the adapter ring to the lens that was provided free with the camera. The adapter ring looks like this:



C-mount to CS-mount  
adapter ring

## Using a C Mount Lens

If you are using a C mount lens you will need to add the C-CS mount adapter ring. This ring effectively moves the C mount lens an extra 5mm away from the camera body to achieve the correct focusing of the lens. Once you have fitted the adapter ring you can carefully screw the lens to the camera. If the picture is out of focus, try focusing it in using the focus adjust on the lens itself. If you can nearly get the focus right but not quite (because the lens runs out of adjustment) then you probably need to adjust the inner focus ring with the Allen key. See **Adjusting the inner focus ring** left.

It is important that you never force a lens when it becomes tight on the camera or you may damage one or the other device. A C-mount lens fitted on a CS-mount camera may protrude too far into the camera and cause irreparable damage.



**CAM350**  
Baud Camera



**CAM351**  
Pinhole Camera

## Features

- 1080p at 25fps
- Low light 0.02 Lux (Sens-up)
- Motion Detect
- Privacy Masking
- Just 35.5mm Wide
- Wide Dynamic Range
- Mounting Bracket Included

NiteDevil HD-SDI covert camera module with on screen display for mirror, privacy & motion detect functions. The light sensitivity of the NiteDevil is so good that it can retain a colour picture in very low light conditions making it ideal for dark and low light applications. (FREE fixing bracket)

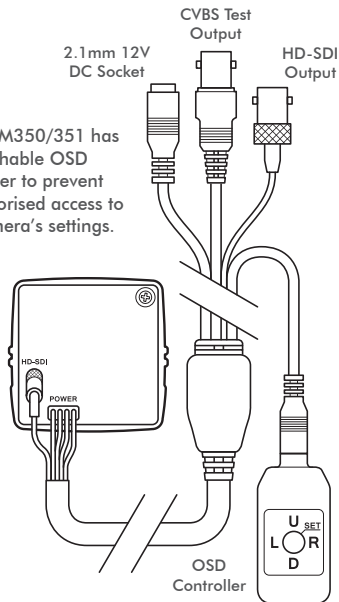
FUNCTION	SPECIFICATION
Imaging Sensor	1/3" 2.1 Megapixel
Resolution	1080p 25fps
Lens Type	3.7mm Board / 4.5mm Pinhole
Min. Illumination	0.02 Lux (Sens-up)
Input Voltage	12V DC

FUNCTION	SPECIFICATION
Current Consumption	150mA
SN Ratio	More than 50dB
Video Connection	HD-SDI BNC Socket (Moulded)
Power Connection	2.1mm 12V DC Socket (Moulded)
Dimensions	38 x 35.5mm

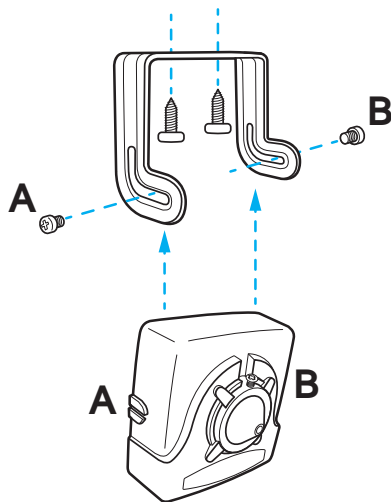
# CAM350/351 - Connecting & Mounting

**TIP**

The CAM350/351 has a detachable OSD controller to prevent unauthorised access to the camera's settings.



The CAM350/351 is supplied with a free mounting bracket that can be easily fixed to virtually any surface.



## CAM360/362 - Mini HD-SDI Bullets



**CAM362**

Internal Bullet With  
4.5mm Pinhole Lens



**CAM360**

External Bullet With  
3.7mm Board Lens

### Features

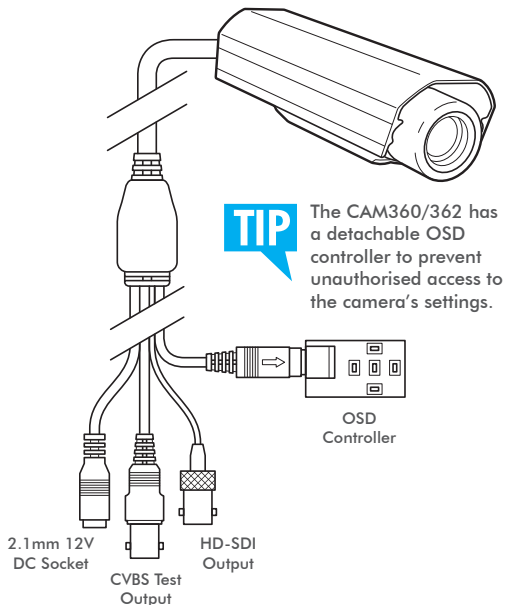
- 1080p at 25fps
- Low light 0.02 Lux (Sens-up)
- Digital 64x Zoom
- Choice Of Lenses
- Privacy Masking
- Wide Dynamic Range
- Removable Sun Shield
- Anti Vandal
- Bracket Included

The NiteDevil HD-SDI mini bullet cameras are a great option when broadcast quality pictures are desired in discreet or covert applications. Ideal for tight spaces measuring less than 12cm.

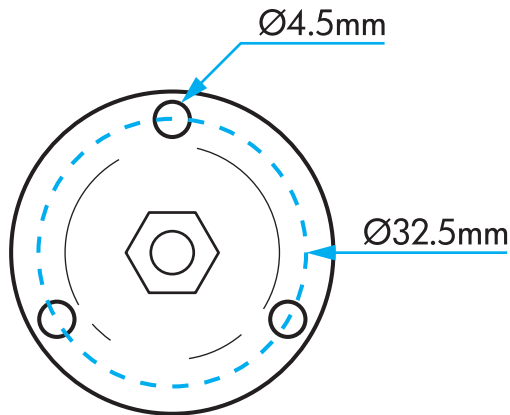
FUNCTION	SPECIFICATION
Imaging Sensor	1/3" 2.1 Megapixel
Resolution	1080p 25fps
Lens Type	3.7mm Board / 4.5mm Pinhole
Min. Illumination	0.02 Lux (Sens-up)
Input Voltage	12V DC
Current Consumption	150mA

FUNCTION	SPECIFICATION
SN Ratio	More than 50dB
Video Connection	HD-SDI BNC Socket (Moulded)
Power Connection	2.1mm 12V DC Socket (Moulded)
IP Rating	IP66 (CAM360 Only)
Mounting Bracket	Supplied
Dimensions	35mm x 125mm (Including Sunshield)

# CAM360/362 - Connecting & Mounting



The CAM360/362 is supplied with a free mounting bracket. A fixing hole diagram is shown below to help when fitting the camera bracket.



# CAM380 - External HD-SDI All-In-One IR Camera

**CAM380W**  
Polar White

## Features

- 1080p at 25fps
- 2.8 - 11mm Vari-focal Lens
- Built-In IR LEDs
- True Day Night
- True Wide Dynamic Range
- 62 x Digital Zoom PIP
- Dual Voltage, 12V DC, 24V AC

**CAM380G**  
Graphite Grey

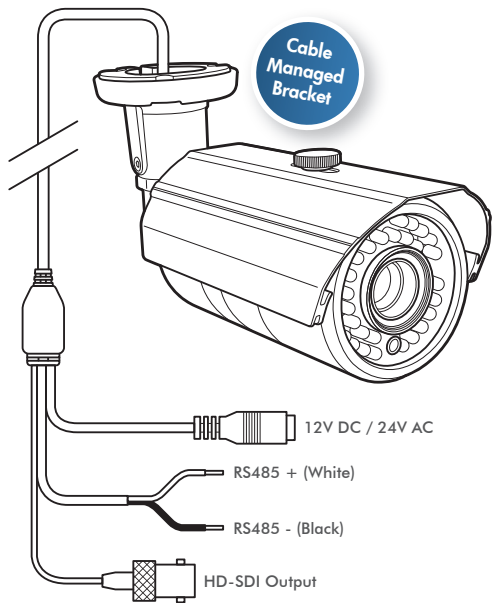
If you had any doubts over which model of HD-SDI camera to install then this is a winning choice! The CAM380 has all the low light surveillance benefits of NiteDevil technology and a Wide Dynamic Range with the added functionality of 40 IR LEDs.

FUNCTION	SPECIFICATION
Imaging Sensor	1/3" 2.1M Panasonic Megapixel CMOS
Resolution	1080p 25fps
Lens Type	2.8 - 11mm Vari-focal
Min. Illumination	0 Lux (IRs On)
Input Voltage	12V DC/24V AC (Dual Voltage)
Current Consumption	170mA IR Off / 300mA IR On

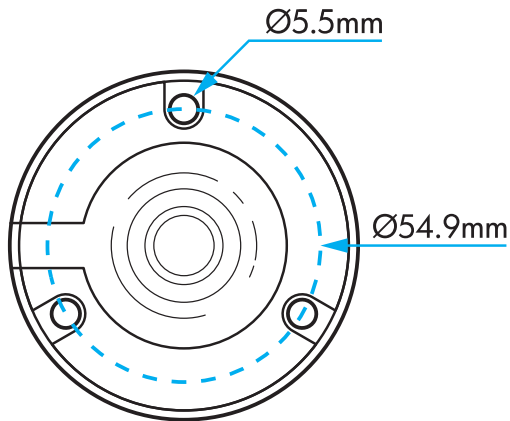
FUNCTION	SPECIFICATION
SN Ratio	More than 50dB
IP Rating	IP66
Gain Control	Automatic
Video Connection	HD-SDI BNC Socket
Power Connection	2.1mm Socket
Dimensions	78mm Dia x 140mm (Ex Sunshield)



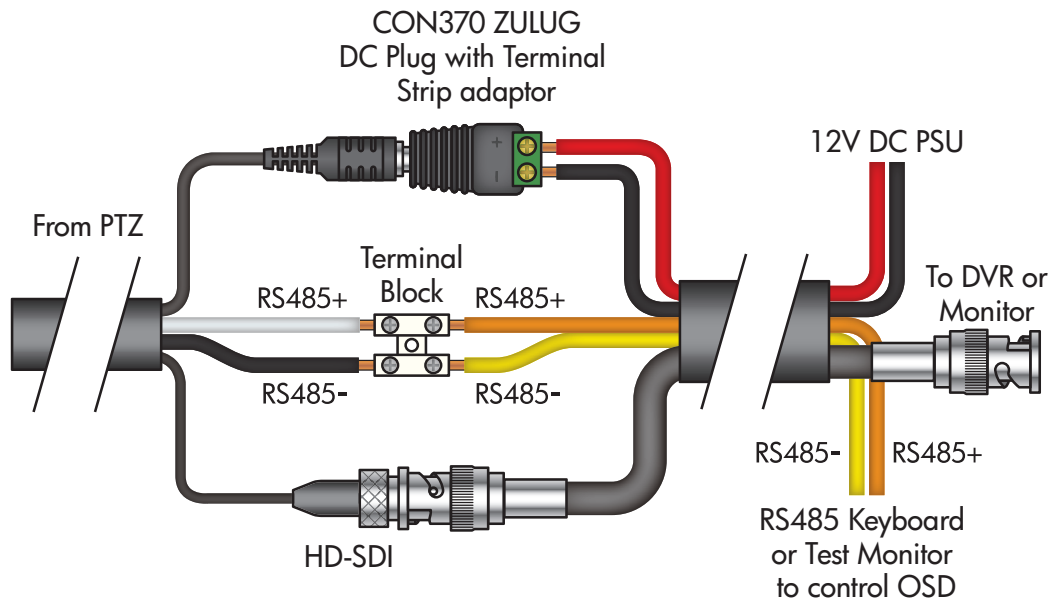
## CAM380 - Connecting & Mounting



The CAM380 comes fitted with an adjustable cable managed bracket. Below is a diagram to help when mounting the camera.

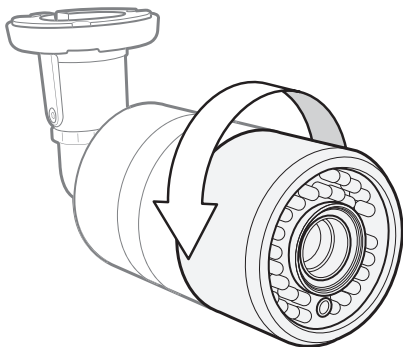


## CAM380 - Wiring with RG59+4 (PTZ Combo Cable)



## CAM380 - Camera Adjustments

The CAM380's menu controls, zoom and focus adjustments and CVBS test output are all cleverly hidden away inside the camera. To access these features simply unscrew the front end of the camera to reveal the lens and PCB.

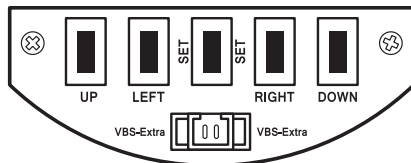


**TIP**

When screwing the front back onto camera, make sure the seal is as tight as possible to prevent moisture entering the camera.

Once the front end of the camera has been removed you are then able to adjust the camera's lens and menu settings.

Behind the IR LEDs you will see the menu control buttons and test output as shown below. A flylead is supplied with the camera for connecting the camera to a test monitor.



Tables showing the CAM380's menu structure and options available can be found on [pages 21 - 27](#).

**TIP**

Don't install or configure on a damp or humid day as moisture may get trapped inside the camera.

# Accessing The Menus

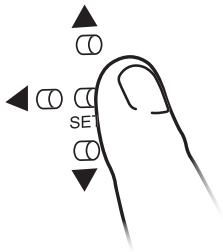
To make life easier, all the HD-SDI cameras covered in this book have virtually the same simple menu system.

You can access the menus in the camera in two ways:

- 1 Menu control buttons on the rear of the camera or OSD menu controller.
- 2 RS485 control using a keyboard, DVR, or CCTVMate test monitor.  
(CAM320 & CAM341-344)

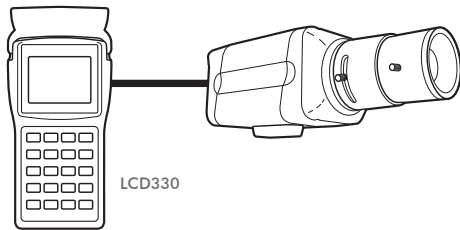
## Menu Control Buttons

To access the menus using the Menu control buttons or OSD menu controller, simply press the SET button down and the menu will pop up on the camera's image. Use the arrow keys to navigate through the menus. Selection is made by pressing the set button.



## RS485

The CAM320 and the CAM341-344 range also has traditional RS485 Pelco-D control and has terminals to connect the RS485 control device to. PTZ keyboards, some DVRs or the CCTVMate test monitor all have RS485 control outputs that can control the camera. This method can be useful to adjust cameras remotely that are connected to DVRs.



**TIP** When using a test monitor you must use the CVBS test output. Test monitors only accept analogue signals, connecting to the camera's HD-SDI output will not work.

# Main Menu



## Menu Structure

The following table shows the menu structure of the HD-SDI cameras covered in this book. Although all the cameras have an almost identical menu system, a few options may not be available on every camera.



## CAM350/351 & CAM380

The menu structure for these models differs slightly from the other cameras covered in this book. Menu options unique to these cameras will be identified with the CAM350 icon shown to the right.





MAIN MENU	SUB MENU	OPTION
LENS		DC / VIDEO / MANUAL
		DC: 1. MODE: INDOOR / OUTDOOR 2. RETURN: RET / END
EXPOSURE	SHUTTER	AUTO / MANUAL / FLK
		MANUAL: 1. LEVEL: 1/25 ~ 1/50000 / x2 ~ x60 2. RETURN: RET / END
	AGC	LOW / MIDDLE / HIGH
	AGC 	0 ~ 15
	SENS-UP	AUTO / OFF
		AUTO: 1. SENS-UP: x2 ~ x60 2. RETURN: RET / END
	BRIGHTNESS	1 ~ 100
	D-WDR / ACCE	OFF / LOW / MIDDLE / HIGH
	D-WDR 	ON / OFF
DEFOG	OFF / LOW / MIDDLE / HIGH	



MAIN MENU	SUB MENU	OPTION
EXPOSURE (CONTINUED)	DEFOG 	ON / OFF ON: 1. POS / SIZE: POSITION → SIZE → RET / AGAIN 3. DEFAULT 2. GRADUATION: OFF / LOW / MIDDLE / HIGH 4. RETURN: RET / END
	BACKLIGHT	OFF / BLC / HSBLC BLC: 1. GAIN: LOW / MIDDLE / HIGH 3. DEFAULT 2. AREA: POSITION → SIZE → RET / AGAIN 4. RETURN: RET / END HSBLC 1. SELECT: AREA1 ~ 4 4. MODE: ALL DAY / NIGHT 2. DISPLAY: ON / OFF 5. BLACK MASK: ON / OFF ON: POSITION → SIZE → RET / AGAIN 6. DEFAULT 3. LEVEL: 0 ~ 100 7. RETURN: RET / END
BACKLIGHT 		OFF / WDR / BLC / HSBLC (FOR HSBLC SEE ABOVE) WDR: NOT SUPPORTED BLC: 1. GAIN: LOW / MIDDLE / HIGH 3. DEFAULT 2. AREA: POSITION → SIZE → RET / AGAIN 4. RETURN: RET / END
WHITE BAL		ATW / AWC → SET / INDOOR / OUTDOOR / MANUAL MANUAL: 1. BLUE: 0 ~ 100 3. RETURN: RET / END 2. RED: 0 ~ 100
DAY & NIGHT		AUTO / COLOUR / B&W / EXT AUTO: 1. DELAY: 0 ~ 60 3. N → D (AGC): 0 ~ 100 2. D → N (AGC): 0 ~ 100 4. RETURN: RET / END



MAIN MENU	SUB MENU	OPTION
DAY & NIGHT (CONTINUED)		<b>B&amp;W:</b> <ol style="list-style-type: none"> <li>BURST: ON / OFF</li> <li>IR SMART: ON / OFF                             <ol style="list-style-type: none"> <li>LEVEL: 0 ~ 16</li> <li>AREA: POSITION → SIZE → RET / AGAIN</li> <li>RETURN: RET / END</li> </ol> </li> <li>IR LED: ON / OFF</li> <li>IR PWM: 0 ~ 100</li> <li>RETURN: RET / END</li> </ol>
		<b>EXT:</b> <ol style="list-style-type: none"> <li>DELAY: 0 ~ 20</li> <li>EXT ACTIVE: LOW / HIGH</li> <li>RETURN: RET / END</li> </ol>
NR	2DNR	ON / OFF
	3DNR	ON / OFF
		<b>ON:</b> <ol style="list-style-type: none"> <li>S-LEVEL: 0 ~ 100</li> <li>E-LEVEL: 0 ~ 100</li> <li>RETURN: RET / END</li> </ol>
	3DNR 	ON / OFF
		<b>ON:</b> <ol style="list-style-type: none"> <li>SMART NR: ON / OFF                             <ol style="list-style-type: none"> <li>SENSITIVITY: 0 ~ 100</li> <li>RETURN: RET / END</li> </ol> </li> <li>LEVEL: 0 ~ 100</li> <li>START.AGC: 0 ~ 100</li> <li>END.AGC: 0 ~ 100</li> <li>RETURN: RET / END</li> </ol>
LEVEL	0 ~ 100	
SMART NR	ON / OFF	
SPECIAL	SEE PAGE 15	



MAIN MENU	SUB MENU	OPTION	
ADJUST	SHARPNESS	1. SHARPNESS: ON / OFF 2. LEVEL: 0 ~ 100 3. RESOLUTION: ON / OFF 4. RETURN: RET / END	
	MONITOR	LCD / CRT	
		LCD:	1. GAMMA: AUTO / USER1 / USER2 / 0.45 ~ 1 2. BLUE GAIN: 0 ~ 100 3. RED GAIN: 0 ~ 100 4. RETURN: RET / END
		CRT:	1. BLACK LEVEL: -30 ~ +30 2. BLUE GAIN: 0 ~ 100 3. RED GAIN: 0 ~ 100 4. RETURN: RET / END
	OSD	1. TEXT COLOUR: 1 ~ 8 2. OUTLINE: ON / OFF 3. RETURN: RET / END	
	LSC	ON / OFF	
	NTSC/PAL	NTSC / PAL	
ADJUST		1. SHARPNESS: 0 ~ 15 2. MONITOR: LCD / CRT LCD: 1. GAMMA: USER / USER+Y / 0.45 ~ 1 / AUTO 2. ADAPT LEVEL: 0 ~ 100 3. BLUE GAIN: 0 ~ 100 4. RED GAIN: 0 ~ 100 5. RETURN: RET / END CRT: 1. BLACK LEVEL: -30 ~ +30 2. BLUE GAIN: 0 ~ 100 3. RED GAIN: 0 ~ 100 4. RETURN: RET / END 3. LSC: ON / OFF ON: 1. SCAN 2. RETURN: RET / END 4. VIDEO OUT: PAL / NTSC 5. RETURN: RET / END	
RESET		1. FACTORY 2. RETURN: RET / END	
EXIT		SAVE & EXIT	



# Special Menu



## Special Sub Menu

The following table shows the 'Special' sub menu structure. Although all the cameras have an almost identical menu system, a few options may not be available on every camera.



## CAM350/351 & CAM380

The menu structure for these models differs slightly from the other cameras covered in this book. Menu options unique to these cameras will be identified with the CAM350 icon shown to the right.



SPECIAL MENU	SUB MENU	OPTION	
CAM TITLE		ON / OFF	
		ON: INPUT CAMERA NAME	
D-EFFECT	FREEZE	ON / OFF	
	MIRROR	OFF / MIRROR / V-FLIP / ROTATE	
	D-ZOOM	ON / OFF	
		ON: 1. PIP: ON / OFF 2. D-ZOOM: x2 ~ x64 3. PAN&TILT: PIP → D-ZOOM	4. DEFAULT 5. RETURN: RET / END
	SMART D-ZOOM 	1. SELECT: AREA1 ~ 2 2. DISPLAY: ON / OFF ON: POSITION 3. SENSITIVITY: 0 ~ 60	4. D-ZOOM: x2 ~ x62 5. TIME: 0 ~ 15 6. DEFAULT 7. RETURN: RET / END
	NEG IMAGE	ON / OFF	
DIS 	NOT SUPPORTED		




SPECIAL MENU	SUB MENU	OPTION
MOTION		ON / OFF ON: 1. SELECT: AREA1 ~ 3 2. DISPLAY: POSITION → SIZE → RET / AGAIN 3. SENSITIVITY: 0 ~ 60 4. MOTION VIEW: ON / OFF 5. DEFAULT 6. RETURN: RET / END
PRIVACY		ON / OFF ON: 1. SELECT: AREA1 ~ 8 2. DISPLAY: ON / OFF ON: POSITION → SIZE → RET / AGAIN 3. COLOUR: 1 ~ 16 4. DEFAULT 5. RETURN: RET / END
PRIVACY 		1. SELECT: AREAR1 ~ 8 2. DISPLAY: INV / MOSAIC / COLOUR / OFF INV: POSITION → TOP LEFT → TOP RIGHT → BOTTOM LEFT → BOTTOM RIGHT → RET / AGAIN MOSAIC: POSITION → TOP LEFT → TOP RIGHT → BOTTOM LEFT → BOTTOM RIGHT → RET / AGAIN COLOUR: POSITION → TOP LEFT → TOP RIGHT → BOTTOM LEFT → BOTTOM RIGHT → RET / AGAIN 3. COLOUR: 0 ~ 16 4. TRANS: 0 ~ 3 5. DEFAULT 6. RETURN: RET / END
LANGUAGE		ENG / JPN / CHN1 / CHN2
LANGUAGE 		ENG / JPN / CHN1 / CHN2 / KOR / GER / FRA / ITA / SPA / POL / RUS / POR / NED / TUR / HEB / ARB

## Special Menu Continued



- Options with this icon relate to the CAM350/351 & CAM380 Only

SPECIAL MENU	SUB MENU	OPTION
DEFECT		1. LIVE DPC: ON / OFF / AUTO 2. LEVEL: 0 ~ 60 3. STATIC DPC: ON / OFF 4. START 5. LEVEL: 0 ~ 60 6. SENS-UP: x2 ~ x60 7. RETURN: RET / END
DEFECT	 LIVE DPC	ON / OFF / AUTO ON: 1. LEVEL: 0 ~ 100 2. RETURN: RET / END
	STATIC DPC	ON / OFF ON: 1. START 2. LEVEL: 0 ~ 60 3. SENS-UP: x2 ~ x30 4. AGC: 0 ~ 8 5. RETURN: RET / END
RS485		1. CAM ID: 0 ~ 255 2. ID DISPLAY: ON / OF ON: POSITION 3. BAUD RATE: 2400 / 4800 / 9600 / 19200 / 38400 4. RETURN: RET / END
VERSION		FIRMWARE VERSION
RETURN		RET / END

# Getting The Most Out Of The NiteDevil HD-SDI Range What the menu options do

The NiteDevil HD-SDI range has a comprehensive menu system that allows you to set up the camera to get the most out of it in different demanding situations, below is a guide to some of the key functions:

## Backlight

This helps make items in front of a bright scene (such as a window on a bright sunny day) clearer to see by increasing their brightness and making the background darker.

## Exposure

This alters the speed of the shutter on the camera and adjusts its sensitivity. For maximum sensitivity at night, turn the “SENS-UP” to 256, however this will have some “motion trail” on the image in low light due to the long exposure time of the camera. In automatic mode, the Sens-Up is set at 8X and suits most applications with good results.

## White Balance

This allows the colour adjustment of the camera to be set up so objects appear a natural colour.

## Day & Night

This setting allows you to lock the camera in a colour or B&W mode or have it automatically switch. You can also adjust the smart IR function that limits IR glare.

## Motion

Allows the camera to display a warning when it detects video motion in the image.

## Privacy

Allows the user to “block out” areas in the picture so that the installation complies with the Data Protection Act and avoids infringing other people’s privacy rights.

## D-Zoom

Allows the camera to be set to digitally zoom in on an area if the optical lens is not quite enough.

## Smart D-Zoom



Allows the camera to be set up to “automatically” zoom in when it detects movement. This can be used to get a closer view of faces or number plates.



Movement detected



Automatic Digital Zoom

## Mirror

Allows the camera’s picture to be flipped along its horizontal or vertical axis. Enabling the correct camera picture to be displayed when used for different applications including as a reversing aid.

# Fault Finding

The camera is built to the highest standards and every unit is fully tested prior to packing so if you experience an installation problem you need to investigate your cabling, connections, power supply and monitor. If you do fail to get a picture on a monitor you need to check the following things.

## Interference on the camera picture

This is usually caused by poor or inadequate cabling, not observing the correct wiring techniques and for 12V DC powered cameras the use of unregulated or poorly regulated power supply.

## Can't control via 2 wire RS485

- A. RS485 wires crossed over, try swapping around.
- B. Wrong protocol and baud rate selected.

## Test monitor doesn't display an image

Make sure the test monitor is connected to the camera's CVBS test output and not the HD-SDI output.

## No picture

The camera cannot function without the correct power supply.

- Step 1** Test that the camera has the correct voltage supplying it, you must do this with the camera connected so that there is load on the PSU. The camera should have at least 10.5V DC connected to it.
- Step 2** Check there is a picture coming out of the CVBS test output at the camera. If there is a picture here but not at the DVR it could be one of the following:
  - A. Video loss in Composite cable as run too long usually you would get a picture up to around 100mtrs (Remedied by fitting a repeater).
  - B. Ensure that the BNC - BNC lead that you connect between the camera and monitor has no shorts or open circuits. If you are making your own lead, don't forget the lead must have two wires connected to complete the circuit, Video and Ground.

# 10 Reasons the alienHero<sup>HD</sup> DVR is great value for money

alienHero HD 8ch



1. **1080p Recording** (*broadcast quality*)
2. **Built-in Video Analytics** (*finds evidence instantly!*)
3. **High Definition HDMI Output** (*along with VGA*)
4. **Easy to Use Interface** (*said to be best in class*)
5. **AutoPort Plug-and-Play** (*for easy internet setup*)
6. **Compact Space Saving Case** (*slim modern design*)
7. **Free Dynamic DNS Setup** (*saves you time*)
8. **Full Alarm Inputs** (*8 on the 8 way*) - (*triggered how you want*)
9. **Bespoke Software Available** (*you want it, we write it*)
10. **Video Tagging** (*tag recording with keywords such as "theft"*)

#### Order Codes

4ch 2TB: ALIEN674N

8ch 2TB: ALIEN678N

## Other Products To Consider - HD-SDI Transmission Solutions

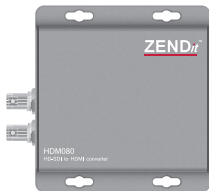
### HDMI To HD-SDI Converter



Order Code: **HDM070**

Converts the output of a HDMI source to HD-SDI. This would for example allow the output of a DVD player to be recorded by a HD-SDI DVR. An RG59 output allows you to send the HDMI signal over coax then convert it back again.

### HD-SDI To HDMI Converter



Order Code: **HDM080**

Converts a HD-SDI cameras signal to HDMI for direct connection to a HDMI monitor.

You can also use the HDM080 with the HDM070 to send HDMI signals over coax.

### HD-SDI Repeater plus 2-way distributor



Use to amplify an HD-SDI signal to transmit further and or distribute one signal to two outputs.

Order Code: **HDM120**

### HD-SDI Repeater plus 4-way distributor



Use to amplify an HD-SDI signal to transmit further and or distribute one signal to four outputs.

Order Code: **HDM140**

# Other Products To Consider - HD-SDI Accessories

## HDMI Monitors



HDMI LED-backlit LCD monitor in a range of sizes with HDMI, VGA & DVI inputs.

22" Monitor: [LCD822](#)

24" Monitor: [LCD824](#)

27" Monitor: [LCD827](#)

## HDMI Socket Adaptor



This adjustable HDMI socket adaptor is great for saving space on rack mount installations.

Order Code: [VID500](#)

## HDMI Leads



- High Quality CCTV Images
- 24k Gold Connections
- Range Of Sizes

Our HDMI leads have 24k gold connections for great image quality.

1m HDMI Lead: [VID501](#)

2m HDMI Lead: [VID502](#)

3m HDMI Lead: [VID501](#)

4m HDMI Lead: [VID504](#)

5m HDMI Lead: [VID510](#)

## Megapixel Direct Drive Lenses



Megapixel direct drive lenses offer the lens quality needed to capture stunning HD images.

3.5-8mm DC Iris 1/3": [MPL300](#)

2.8-12mm DC Iris 1/3": [MPL312](#)

5-50mm DC Iris 1/3": [MPL350](#)

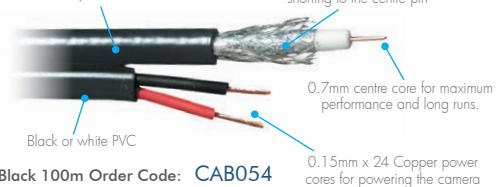


# Other Products To Consider - Cable & Accessories

## Antihum RG59+2

Cables can be separated for fast, easy installation

Glued foil sheath provides maximum protection against interference and prevents "loose" foil shorting to the centre pin

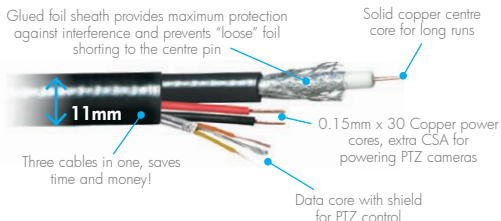


Black 100m Order Code: CAB054

White 100m Order Code: CAB040

## Antihum RG59+4

Glued foil sheath provides maximum protection against interference and prevents "loose" foil shorting to the centre pin



Black 150m Order Code: CAB060

## 3pc BNC Crimps



Use with the BNC Crimp Tool ▶▶▶

These traditional 3-piece BNC crimp-on plugs are the popular choice for CCTV Installers.

100pk: CON430

100pk Individually Wrapped:  
CON450

## Interceptor CCTV Housing Kit



Order Code: CCT470

Attractive housing, dual voltage, low current heater, strong cable managed bracket, accessories and fixings tub, 3x A4 CCTV warning signs with free registration onto the Who Is Watching Me data compliance scheme.

## Other Products To Consider - Useful Tools

### BNC Ratchet Crimp



Crimps - 2pc✓ 3pc✓ Mini 3pc✓



Order Code: TOO980

Learn how to crimp a BNC! See online tip 248

### CCTV Test Monitor

**cctvmate.com**



- PTZ Control Testing
- DC/AC Voltage Tester
- RS485 Data Test Function
- 29 Protocols Supported
- Check Video Signal Strength
- 12V Camera Power Function
- Up to 10 Hours Battery Life
- Network Cable Testing
- Monitor Output Testing

Kit includes:



Carry case, DC/AC Voltage probes, RS485 Data test cable, Camera power cable, BNC Lead, Neck strap, Network cable tester & PSU.

Order Code: LCD330

## Other Products To Consider - Rack Mount Power Supplies

### 12V DC 10-Amp PSU With 18 Outputs



Regulated 12V DC 10 Amp 1.5U rack mount power supply with 18 outputs. Each output supplies up to 1.1A with a maximum output of 10A across all ports.

Order Code: POW560

### 12V DC 20-Amp PSU With 18 Outputs



Regulated 12V DC 20 Amp 1.5U rack mount power supply with 18 outputs. Each output supplies up to 2A with a maximum output of 20A across all ports.

Order Code: POW562

### 24V AC 10-Amp PSU With 18 Outputs



A 24V AC 10 Amp 1.5U rack mount power supply with 18 outputs. Each output supplies up to 1.1A with a maximum output of 10A across all ports.

Order Code: POW565

### 24V AC 20-Amp PSU With 18 Outputs



A 24V AC 20 Amp 1.5U rack mount power supply with 18 outputs. Each output supplies up to 2A with a maximum output of 20A across all ports.

Order Code: POW566

For more information visit [www.antihum.com](http://www.antihum.com)



## NiteDevil CCTV - Cameras That See In The Dark!

You can find **everything you need** and more at [nitedevil.com](http://nitedevil.com)

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As well as information and spec on all our cameras, we offer a wide range of support to help you get the most out of your NightDevil equipment.

- Live Chat
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- Tools
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- Training Courses
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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 collection point as defined by your local council.