

## Features

- 2.8 - 12mm Vari-Focal Dome
- 2 Megapixel Lens
- 700 TVL
- 21 IR LEDs
- 20m IR Range
- Up the Co-ax OSD control
- Wide Dynamic Range
- 12V DC
- Digital Noise Reduction

## Specification

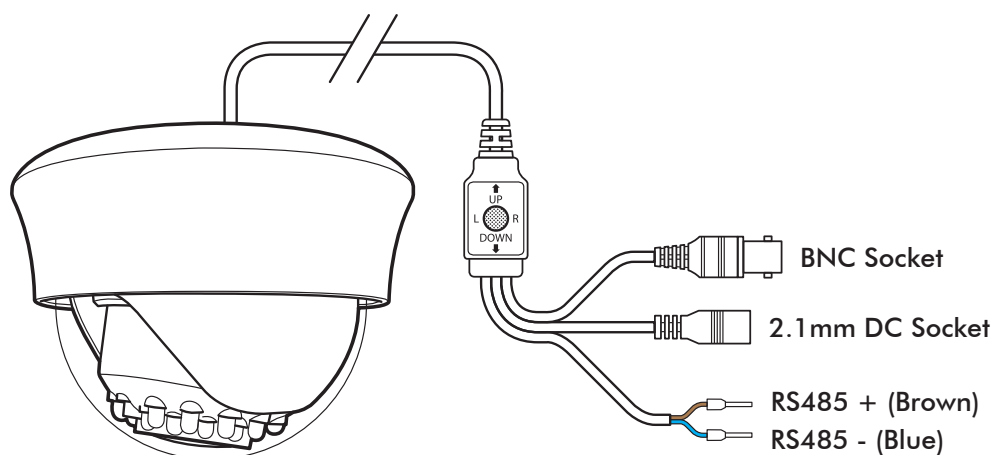
FUNCTION	SPECIFICATION
CCD	1/3" Sony Super HAD II
Resolution	700TVL
Lens	2.8 - 12mm Vari-Focal (2M Pixel)
Min. Illumination	0.001 Lux (0 Lux IR On)
IR LEDs	21
IR Range	20m
Video Output	1v p ~ p, 75Ω
Video Connection	BNC
Power/Current	12vDC (± 10%) 350mA
Power Connection	2.1 mm Socket
S/N Ratio	More than 52dB
Gain Control	Automatic
Operating Temp.	-10°C ~ +50°C
Dimensions	127mm(D) x 95mm(H)

## Internal Vari-Focal IR Dome WDR, UTC & RS485

Internal dome camera fitted with a 2.8-12mm 2 mega pixel lens captures high resolution 700TVL images in light levels as low as 0.001 Lux. The CAM533UW continues to capture clear images at night thanks to its 21 IR LEDs giving a 20m IR range. This impressive dome camera also features wide dynamic range, up the co-ax telemetry, on screen display and digital noise reduction. Ideal for shops and stock rooms.

## Connecting The Camera

The CAM533UW comes with moulded connections for video, power and RS485 data. There is a BNC socket for connecting the video, a 2.1 mm DC socket for connecting the power and 2 small wires for an RS485 connection. **Note** - the RS485 wires are polarity sensitive and must be connected as shown below.



## Options Available

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CAM533UW	Internal 700TVL IR Dome

## Other Products To Consider



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**CAM526UW**



Up The Co-ax In-line Controller  
**REM088**

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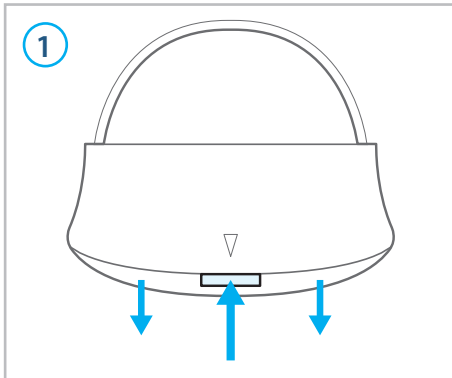
For more information on menu options and what they do see online tip 295 ▶▶▶



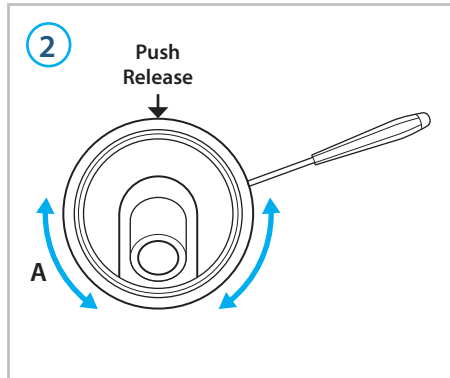
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## Removing The Housing

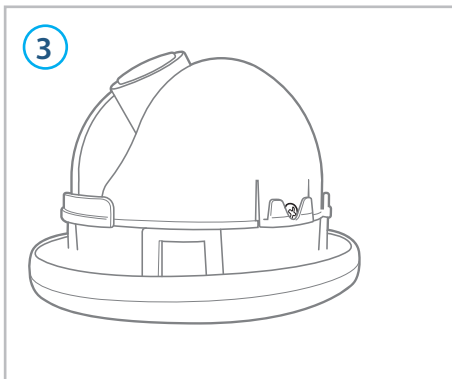
Before mounting or positioning the camera you will first need to remove the camera housing by following the 3 quick steps below.



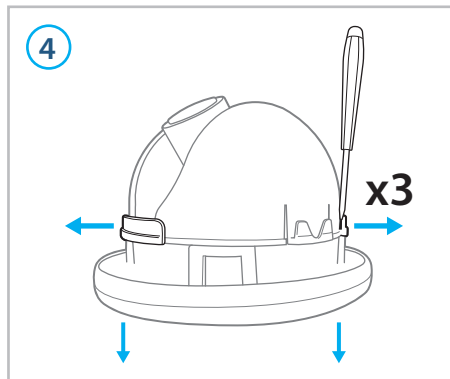
Press and hold in the push release and then gently pull the base away from the camera. This will produce a small gap between the base and the camera. **Do not attempt to pull the base off of the camera.**



Place the tip of a small slotted screwdriver into the gap and work your way around the camera releasing the two holding clips located at potions A and B. The top housing can then be removed from the base.

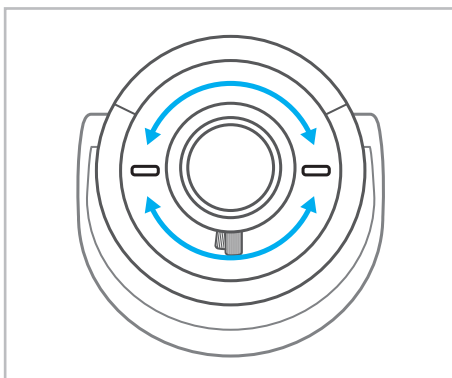


Remove the small screw from both sides of the black plastic dome.



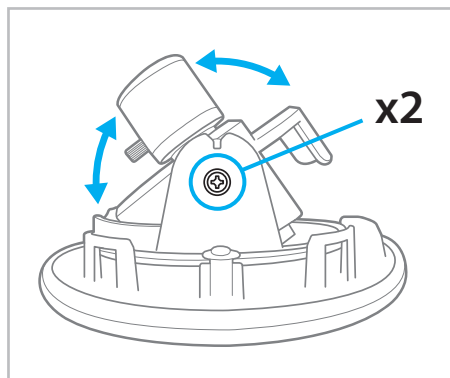
Finally, the black plastic dome now has 3 clips holding it in place. Use a small slotted screwdriver to force the clips outwards whilst gently pulling the dome away from the base.

## Rotating The Lens Mount



There are 2 small tabs either side of the lens on the lens mount. Using these 2 tabs, rotate the lens mount as required.

## Tilting The Lens Mount



Loosen the small screw on either side of the camera lens mount. Tilt the lens as required and then tighten the screws again to secure.

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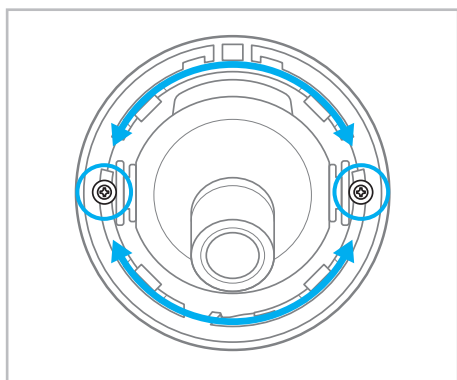
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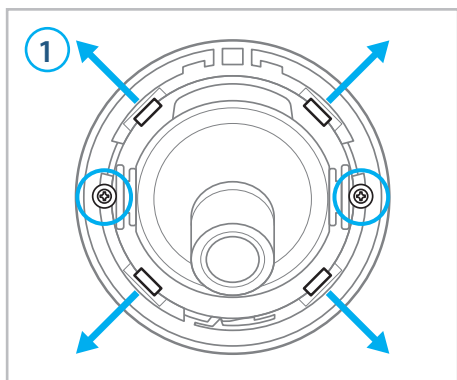
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## Rotating The Camera Module

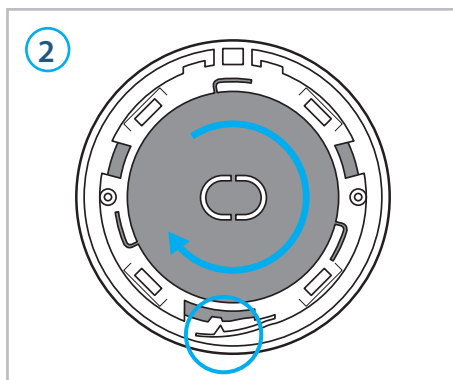


Looking from above the camera, loosen the screws either side of the camera module. Rotate the module as required then tighten the screws to secure.

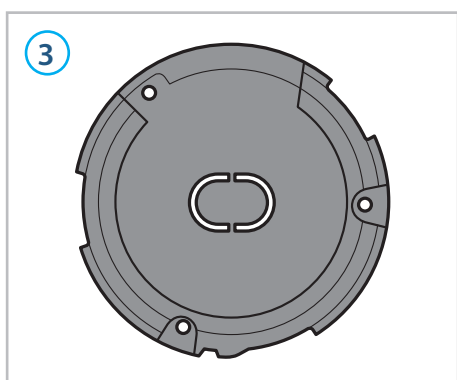
## Mounting The Camera



Remove the 2 screws holding the camera module. Push the four clips which hold the camera module in place outwards whilst gently pulling the module away from the base.



Pull down the clip which secures the black mounting plate. Twist the mounting plate clockwise and remove from the base.



Once removed the mounting plate can be fixed to the mounting surface.

**Note:** Take care when mounting the camera to soft materials such as ceiling tiles. Applying too much pressure when reassembling the camera could damage the mounting surface.

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For more information on menu options and what they do see online tip 295 ▶▶▶



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## Powering The Camera

The dome requires a 12V DC regulated power supply and has a standard 2.1mm DC socket for connecting the power. It is recommended to use a power supply that is rated higher than the current consumption of the camera i.e. the current consumption is 350mA add approximately 30% so use a power supply of 500mA or above.

## Accessing The Camera's Menu

The camera's menu system can be accessed and controlled in three ways. The first method is using the in-line joystick on the camera's video lead. The second method is to use an up the Co-ax controller which can be done whilst next to the DVR. The third method is to use RS485 control equipment such as a keyboard or DVR.

## Up The Co-ax Menu Control

Up the Co-ax otherwise known as UTC is a method of controlling the cameras OSD using the Co-ax cable. This is achieved using a REM088 in-line controller. The big benefit of configuring a camera via UTC is that it can be done next to the DVR and monitor. The Co-ax cable carrying the camera's video is simply connected to the controller which is then connected to the DVR. Once the camera has been setup, the controller can be removed and the camera is then connected to the DVR as normal.

## Menu Page 1

Menu Item	Options
LENS	AUTO / MANUAL AUTO: 1. TYPE: DC / VIDEO 3. SPEED: 0 - 255 2. MODE: AUTO / OPEN / CLOSE
SHUTTER/AGC	AUTO / MANUAL AUTO: HIGH LUMINANCE 1. MODE: SHUT+AUTO IRIS / AUTO IRIS 2. BRIGHTNESS: 0 - 255 LOW LUMINANCE 1. MODE: AGC / OFF 2. BRIGHTNESS: X0.25 - X1.00 MANUAL: 1. MODE: SHUT+AGC 3. AGC: 6.00 - 44.80 2. SHUTTER: 1/50 - 1/10000
WHITE BAL	ATW / PUSH / USER1 / USER2 / ANTI CR / MANUAL / PUSH LOCK ATW: 1. SPEED: 0 - 255 3. ATW FRAME: X0.50 - X2.00 2. DISPLAY CNT: 0- 255 4. ENVIRONMENT: INDOOR / OUTDOOR USER1: USER1 WB 1. B-GAIN: 0 - 255 2. R-GAIN: 0 - 255 USER2: USER2 WB 1. B-GAIN: 0 - 255 2. R-GAIN: 0 - 255 MANUAL: 1. LEVEL: 0-255
BACKLIGHT	OFF / BLC / HLC
PICT ADJUST	1. MIRROR: ON / OFF 5: HUE: 0 - 255 2. BRIGHTNESS: 0 - 255 6: GAIN: 0 - 255 3. CONTRAST: 0 - 255 7: DEFOG: OFF / LOW / MID / HIGH 4. SHARPNESS: 0 - 255

Menu page 1 continued on next page.

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## Menu Page 1 Continued

Menu Item	Options
DWDR	ON / OFF ON: 1. LUMINANCE: LOW / MID / HIGH      2. CONTRAST: LOW / MID LOW / MID / MID HIGH / HIGH
MOTION DET	ON / OFF ON: 1. DETECT SENSE: 0 - 127      3. MOTION AREA: ON / OFF 2. BLOCK DISP: ON / OFF / ENABLE      4. AREA SEL: ENABLE: SET EXCLUSION AREA,      TOP: 0 - 288 LONG PRESS TO SAVE AND EXIT      BOTTOM: 0 - 288 LEFT: 0 - 468 RIGHT: 0 - 468
NEXT	DISPLAY MENU PAGE 2
SAVE ALL	SAVE ALL CURRENT SETTINGS
EXIT	EXIT MENU

## Menu Page 2

Menu Item	Options
PRIVACY	ON / OFF ON: 1. AREA SEL: 1/4 - 4/4      2. COLOUR: 1 - 8 TOP: 0 - 288      3. TRANSP: 0.00 - 1.00 BOTTOM: 0 - 288      4. MOSAIC: ON / OFF LEFT: 0 - 468 RIGHT: 0 - 468
DAY/NIGHT	EXT1 / EXT2 / AUTO / COLOUR / B/W AUTO: 1. BURST: ON / OFF      3. DAY→NIGHT: 0 - 255 2. DELAY CNT: 0 - 255      4. NIGHT→DAY: 0 - 255 B/W: 1. BURST: ON / OFF      3. MODE: AUTO / CENTRE 2. SMART IR: ON / OFF      4. LEVEL: 0 - 31
DNR	1. NR MODE: Y/C / OFF / Y / C      Y: Y LEVEL: 0 - 15 YC: Y LEVEL: 0 - 15      C: C LEVEL: 0 - 15 C LEVEL: 0 - 15
CAMERA ID	ON / OFF ON: SET CAMERA'S ID (NAME) AND THE POSITION OF THE ID ON-SCREEN
SYNC	INT
LANGUAGE	ENGLISH / JAPANESE / GERMAN / FRENCH / RUSSIAN / PORTUGUESE / SPANISH / CHINESE
CAMERA RESET	RESET CAMERA TO FACTORY DEFAULTS
COMMUNICATION	1. PROTOCOL: PELCO-D      3. BAUDRATE: 2.40 / 4.80 / 2. ADDRESS: 0 - 254      9.60 / 19.20 / 38.40 / 57.60 / 115.20
BACK	BACK TO MENU PAGE 1
SAVE ALL	SAVE ALL CURRENT SETTINGS
EXIT	EXIT MENU

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## Fault Finding

The table below describes common problems and possible solutions.

Fault	Possible Cause	Possible Solution
Interference On The Camera Picture	Poor or inadequate cabling or an unregulated or poorly regulated power supply.	Make sure you are using a regulated 12V DC power supply.
No Picture	The camera cannot function without the correct working power supply.	<p>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.</p> <p>Step 2 Check there is and image at the camera end with a test monitor. If there is a picture here but not at the DVR it could be one of the following:</p> <p>A. Video loss in Composite cable as run too long usually you would get a picture up to around 120mtrs (Remedied by fitting a video amp).</p> <p>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.</p> <p>C. No Video signal down CAT5 or CAT5+2. Check you have used a "pair of cores" not individual cores from different pairs.</p>
One Camera Picture Overlaid On Another Using CAT5	Camera cores and pairs mixed up.	Check you have used a "pair of cores" not individual cores from different pairs.
The Picture's Colour Changes Constantly	Fluorescent lighting emits an electromagnetic field which can cause colour roll.	Move the camera further away from any fluorescent lighting.

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