



External IR Dome Camera

Feature packed low-cost eyeball camera suitable for any environment. Capture high quality images with the 2.8-12mm 700TVL varifocal mega pixel lens. Continue to record clear images at night thanks to the 36 IR LEDs which provide an impressive 30m IR range.

Mounting The Camera

The camera is for outdoor mounting on a wall or under a lintel.

Powering The Camera

The CAM077 requires a regulated 12V DC power supply providing 350mA. You should always allow additional headroom to account for any extra loads such as auto iris lenses, heater kits or IR LEDs. As a rule of thumb you should add 30% on top of the minimum current consumption of the camera. Taking this into account **we recommend a regulated 12V DC PSU providing no less than 500mA.**

Connecting The Camera

The eyeball camera comes with a fly lead for power and video out. To reduce installation time the video out lead is terminated into a female BNC socket connector. This allows the installer to effortlessly connect the camera to control equipment via a male BNC-BNC lead. Remember that the Video out from the camera is like any other electrical circuit and requires two wires to complete the circuit. When using a co-ax type cable such as RG59 or similar, the outer braid of the co-ax provides the "0V GROUND" connection and the inner core provides the "Video" connection. The camera's power lead is terminated into a standard 2.1mm DC socket.

Accessing The Camera's Menu

The camera's menu system can only be accessed using a REM088 up the co-ax in-line controller.

Features

- Vandalproof Dome with 36 IR LEDs
- 700TVL
- 1/3" Sony Exview II
- 2.8-12mm Megapixel lens
- Up the Co-ax OSD control
- Digital Wide Dynamic Range

Specification

FUNCTION	SPECIFICATION
CCD	1/3" Sony Exview CCD II
Resolution	700TVL - 976(H) x 582(V)
Lens	2.8-12mm
IRs	36 x IRs up to 30m range
Day/Night	Electronic
Video Output	1V p~p, 75Ω
Video Connection	BNC
Power/Current	12V DC (± 10%) 350mA
Power Connection	2.1mm DC Socket
Auto Shutter	PAL: 1/50s ~ 1/10000s
S/N Ratio	More than 50dB
Weatherproof	IP66
Operating Temp.	-10°C ~ +50°C
Dimensions	120mm(D) x 93mm(H)

Options Available

PART CODE	DESCRIPTION
CAM077B	700TVL Eyeball, Black
CAM077W	700TVL Eyeball, White

Other Products To Consider



2.8-12mm Varifocal 720TVL IR Dome Camera With WDR & UTC. Available In Grey & White
CAM086U



Up The Co-ax In-line Controller
REM088

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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. The big benefit of configuring a camera via UTC is that it can be done next to the DVR. 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. As the controller is only in place during setup you only need to buy one. You can use a single remote to configure all cameras one at a time. You can then keep the remote in your toolbox and use it on future installs.

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 4. SHARPNESS: 0 - 255 2. BRIGHTNESS: 0 - 255 5. HUE: 0 - 255 3. CONTRAST: 0 - 255 6. GAIN: 0 - 255
ATR (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: 1/4 - 4/4 ENABLE: SET EXCLUSION AREA, LONG PRESS TO SAVE AND EXIT TOP: 0 - 288 BOTTOM: 0 - 288 LEFT: 0 - 468 RIGHT: 0 - 468
NEXT	DISPLAY MENU PAGE 2
SAVE ALL	SAVE ALL CURRENT SETTINGS
EXIT	EXIT MENU

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

Menu Page 2

Menu Item	Options
PRIVACY	ON / OFF ON: 1. AREA SEL: 1/4 - 4/4 TOP: 0 - 288 BOTTOM: 0 - 288 LEFT: 0 - 468 RIGHT: 0 - 468 2. COLOUR: 1 - 8 3. TRANSP: 0.00 - 1.00 4. MOSAIC: ON / OFF
DAY/NIGHT	EXT1 / EXT2 / AUTO / COLOUR / B/W AUTO: 1. BURST: ON / OFF 2. DELAY CNT: 0 - 255 3. DAY→NIGHT: 0 - 255 4. NIGHT→DAY: 0 - 255 B/W: 1. BURST: ON / OFF 2. SMART IR: ON / OFF 3. MODE: AUTO / CENTRE 4. LEVEL: 0 - 31
NR	1. NR MODE: Y/C / OFF / Y / C Y: Y LEVEL: 0 - 15 YC: Y LEVEL: 0 - 15 C LEVEL: 0 - 15 Y: Y LEVEL: 0 - 15 C: 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
BACK	BACK TO MENU PAGE 1
SAVE ALL	SAVE ALL CURRENT SETTINGS
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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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