



External Vari-focal IR Dome Camera

The classic IR eyeball camera updated with all the latest features. A 700TVL 2 Mega Pixel lens delivers quality images in any light thanks to the true day/night mechanical IR cut filter. Up the co-ax OSD control makes it easy to configure the camera during installation or to adjust settings at a later date. The camera packs WDR, digital zoom, privacy masking and motion detection. The tough anti-vandal externally rated CAM084 also houses 36 IR LEDs providing an impressive 35m IR range.

Mounting The Camera

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

Powering The Camera

The CAM084U 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 video out, power & RS485 data. 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. The RS485 connection is terminated into two pins for connecting to a terminal block. The Brown wire is positive and the Blue wire is negative.

Features

- 2.8 - 12mm Vari-focal (2MP) Lens
- 700TVL
- True Day/Night Mechanical IR
- 36 IR LEDs
- 35m IR Range
- Wide Dynamic Range
- Up The Co-ax OSD Control
- Anti Vandal

Specification

FUNCTION	SPECIFICATION
CCD	SHARP Colour CCD
Resolution	700TVL
Lens	2.8-12mm
IRs	36 x IRs up to 35m range
Day/Night	Mechanical
Video Output	1V p~p, 75Ω
Video Connection	BNC
Power/Current	12V DC (± 10%) 350mA
Power Connection	2.1mm DC Socket
Weatherproof	IP66
Operating Temp.	-10°C ~ +50°C
Dimensions	118mm(D) x 98mm(H)

Options Available

PART CODE	DESCRIPTION
CAM084UG	700TVL Eyeball, Grey
CAM084UW	700TVL Eyeball, White

Other Products To Consider



Extra Deep Base For The CAM084U Eyeball Camera. Available In Grey & White
SEE811



Up The Co-ax In-line Controller
REM088

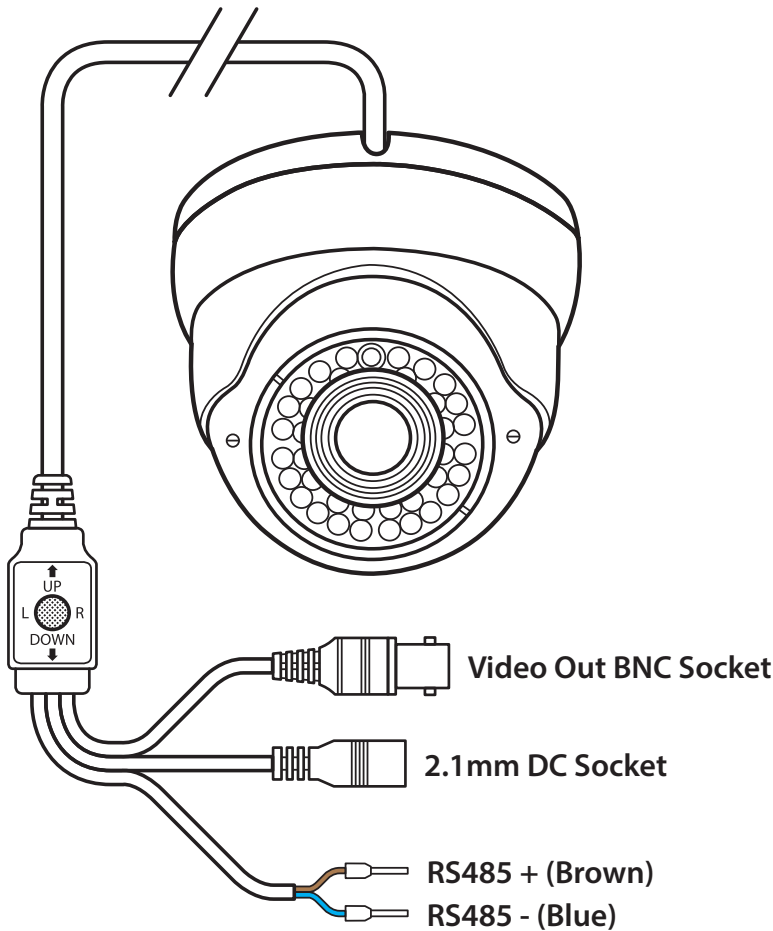
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Continued on next page ▶▶▶



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Accessing The Camera's Menu

The camera's menu system can be accessed in three ways. The first method is by using a REM088 up the co-ax in-line controller. The second method is via an RS485 connection by pressing 'Iris Open' (Iris +) on the control equipment. The third method is by simply pressing the joystick on the in-line controller.

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.

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



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OSD Menu

Default settings are highlighted in **Blue**.

MENU ITEM	SUB MENU	SUB MENU OPTIONS
EXPOSURE	LENS	ELC / DC
		ELC: E.SHUTTER: AUTO / 1/50 / 1/100 / 1/120FLK / 1/250 / 1/500 / 1/1000 / 1/2000 / 1/4000 / 1/10000 / 1/100000 BRIGHT: 001~100 (38)
	DC: E.SHUTTER: AUTO / 1/50 / 1/100 / 1/120FLK / 1/250 / 1/500 / 1/1000 / 1/2000 / 1/4000 / 1/10000 / 1/100000 BRIGHT: 001~100 (38) DC REF: 000~020 (10)	
	HSLC/D-WDR	OFF / BLC / HLI / D-WDR
		BLC: BLC MODE: AUTO / MANUAL MANUAL: TOP: 000~015 BOTTOM: 001~016 LEFT: 000~015 RIGHT: 001~016 BLC WEIGHT: OFF / LOW / MID / HIGH
	HLI: MODE: NIGHT / ALL DAY SET LEVEL: 001~100 (10) GRAY MODE: GRAY / B.GRAY / BLACK MASK SEL: MASK1 / MASK2 / MASK3 / MASK4 MODE: OFF / ON ON: TOP: 000~034 BOTTOM: 000~034 LEFT: 000~048 RIGHT: 000~048	
	D-WDR: D-WDR LEVEL: 000~020 (000)	
	AGC	OFF / LOW / MID / HIGH
	2DNR	OFF / LOW / MID / HIGH
COLOUR	WB MODE	ATW / MANUAL / AWC▶PUSH↓ / AWC MANUAL: M. WB R: 000~128 (064) M. WB B: 000~128 (064)
	R-Y GAIN	000~255 (128)
	B-Y GAIN	000~255 (128)
DAY & NIGHT	D&N MODE	AUTO / COLOUR / B&W / EX-CDS
		AUTO: BURST: OFF / ON DAY▶NIGHT: 007~030 (021) NIGHT▶DAY: 006~029 (015) DWELL TIME: 000~015 (001)
		EX-CDS: BURST: OFF / ON DAY▶NIGHT: 000~255 (120) NIGHT▶DAY: 000~255 (102) SMART IR: AUTO / OFF AUTO: LEVEL: 001~040 (010) DWELL TIME: 000~015 (001)
	C-SUP	000~100 (050)
	A-SUP	000~100 (060)

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OSD Menu Continued

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FUNCTION	MIRROR	OFF / ON
	SHARPNESS	000~030 (018)
	MONITOR	MODE 1 / MODE 2
	GAMMA	0.45 / 0.60 / 1.00 / USER USER: LEVEL: 0.20~1.00 (0.20)
	LSC	OFF / ON ON: SET LEVEL: 000~030 (10)
MOTION	MOTION	OFF / ON
	AREA SEL	AREA 1: ON / OFF AREA 2: ON / OFF AREA 3: ON / OFF AREA 4: ON / OFF ON: TOP: 000~035 BOTTOM: 002~027 LEFT: 000~060 RIGHT: 002~062
	SENSITI.	001~030 (025)
	DISPLAY	OFF / ICON / TRACE
	HOLD TIME	003~015 (003)
	ALARM	ON / OFF
	PRIVACY	MASK 1: OFF / ON MASK 2: OFF / ON MASK 3: OFF / ON MASK 4: OFF / ON MASK 5: OFF / ON MASK 6: OFF / ON MASK 7: OFF / ON MASK 8: OFF / ON ON: DOT SEL: L_TOP / L_BOT / R_BOT / R_TOP DOT XY: ADJUSTABLE MOVE XY: ADJUSTABLE COLOUR SET: GRAY / BLACK / WHITE / RED / GREEN / BLUE / MAGENTA / CYAN
SETUP	TITLE	ON / OFF ON: ENTER CAMERA TITLE (NAME)
	MANUAL DPC	MANUAL / OFF MANUAL: LEVEL: 000~255 (100)
	AUTO DPC	OFF / AUTO AUTO: DPC LEVEL: 001~255 (200) DPC RUN↓: PRESS SET
	OLPF	650 / 850
	OSD COLOUR	BLUE / MAGENTA / CYAN / GRAY / BLACK / WHITE / RED / GREEN
SYSTEM	CAMERA ID	000~255 (001)
	COMMUNI.	ON / OFF ON: PROTOCOL: PELCO-D BAUD RATE: 2400 / 4800 / 9600 / 19200
	LANGUAGE	ENGLISH / SIMPLIFIED CHINESE / TRADITIONAL CHINESE / KOREAN / JAPANESE / ITALIAN / RUSSIAN / TURKISH / SPANISH / GERMAN / FRENCH
EXIT	FACTORY SET	NO / YES (RESTORE CAMERA TO DEFAULT SETTINGS)
	SAVE & EXIT	EXIT SAVING CHANGES
	EXIT	EXIT DISCARDING CHANGES

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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.
Can't Control Camera's OSD Via Rs485	RS485 data cables incorrectly	The RS485 terminals are polarity sensitive. Ensure RS485 wires are connected to the correct terminal.
	Incorrect Settings	Ensure the camera ID, protocol and baud rate match on both the camera and control equipment.

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