



### Futuristic Camera With IR Guns, WDR, RS485 & UTC

The CAM890U is an external anti-vandal camera with two additional "IR Guns" providing useful additional illumination, helping the camera see up to an impressive 80m range. Ideal for low light surveillance in businesses and homes.

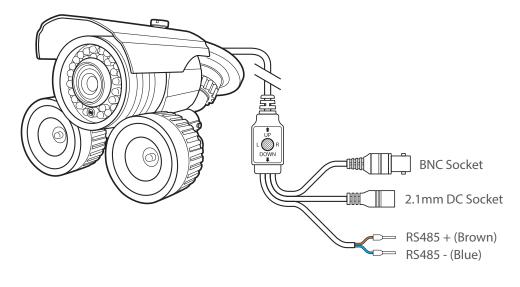
### Mounting The Camera

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

## Powering The Camera

The CAM890 requires a 12V DC regulated power supply and has a standard 2.1 mm 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 1A, add at least 30%, so use a power supply of around 1.5A.

# Connecting The Camera To Control Equipment



#### **Features**

- 720 TVL
- Externally Rated IP66
- 2 Powerful IR Guns
- RS485 & Up The Co-ax Control
- Cable Managed Bracket
- 80m IR Range
- Super Wide Dynamic Range
- 8-20mm Manual Zoom Lens
- 2 Mega Pixel Lens

#### **Specification**

FUNCTION	SPECIFICATION
CCD	1/3" Sony Super HAD II
Resolution	720TVL
Lens	8-20mm Manual Zoom
Min. Illumination	0.001Lux (0Lux IR On)
Video Output	1v p ~ p, 75Ω
IR LEDs	36 + 2 High Power IR Guns
IR Range	Up to 80m
Power/Current	12vDC (± 10%) 1A
Power Connection	2.1mm Socket
S/N Ratio	More than 52dB
Gain Control	Automatic
Operating Temp.	-10°C ~ +50°C
Dimensions	255 x 144 x 86mm

#### **Options Available**

PART CODE	DESCRIPTION
CAM890UG	720TVL IR Gun Camera Grey
CAM890US	720TVL IR Gun Camera Silver
CAM890UW	720TVL IR Gun Camera White

#### Other Products To Consider



720TVL External IR camera With 2 IR Guns & Real Wide Dynamic Range CAM892U



2.8-12mm Vari-focal 700TVL Dome Camera With RS485 OSD Control CAM520W

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### 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 via 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.

#### **OSD** Menu

MAIN MENU	SUB MENU	OPTION		
LENS			DC / VIDEO / MANUAL	
		DC:	1. BRIGHTNESS: 1 $\sim$ 100 2. IRIS SPEED: 1 $\sim$ 5	3. RETURN
		MANUAL:	1. BRIGHTNESS: $1 \sim 100$	2. RETURN
EXPOSURE	SHUTTER		1/50, 60 / AUTO / FLK / MANUA	L
		MANUAL:	1. LEVEL: X2 ~ X256 ~ 1/50, 60 ~100000	2. RETURN
	AGC		OFF (DAY & NIGHT COLOUR) / L	OW / MIDDLE / HIGH
	SENSUP		OFF / AUTO	
		AUTO:	1. SENSUP: X2 ~ X256	2. RETURN
BACKLIGHT			OFF / DWDR / BLC / HSBLC	
		DWDR:	1. LOW LEVEL: 0 ~ 5 2. HIGH LEVEL: 0 ~ 15	3. RETURN
		BLC:	1. VALUE: LOW / MIDDLE / HIGH 2. AREA: SINGLE / DOUBLE (POSITION, SIZE)	3. DEFAULT 4. RETURN
		HSBLC:	1. GAIN: 0 ~ 100 2. MODE: NIGHT ONLY / ALL DAY 3. MASK LEVEL: 0 ~ 100	(ON: POSITION, SIZE)
WHITE BAL			ATW / AWB / AWC → SET / MAN	NUAL (BLUE, RED)
		MANUAL:	1. BLUE: 0 ~ 100 2. RED: 0 ~ 100	3. RETURN
DAY & NIGHT			AUTO / EXT / B/W / COLOUR	
		AUTO:	1. DELAY: 0 ~ 15 2. D → N (AGC): 16 ~ 255	3. N → D (AGC): 0 ~ 239 4. RETURN
		EXT:	1. DELAY: 0 ~ 15	2. RETURN
		B/W:	BURST: ON / OFF     IR SMART: ON / OFF	3. IR LED: ON 4. RETURN

## OSD Menu Continued On Next Page ▶▶▶





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MAIN MENU	SUB MENU	OPTION		
SMART 3D NR			ON / OFF	
		ON:	1. VALUE: 1~ 200 2. SMART NR: ON / OFF 3. SMART LEVEL: 1 ~ 200	4. SENSITIVITY: 0 ~ 100 5. RETURN
F-DNR			OFF / MANUAL / AUTO	
		MANUAL:	1. LEVEL: 0 ~ 31 2. COLOUR GAIN: 0 ~ 10 3. EDGE GAIN: 0 ~ 10	4. GAMMA: 0.05 ~ 1.00 5. RETURN
		AUTO:	1. DETECT LEVEL: $0 \sim 5$	2. RETURN
FUNCTION			FOR THE FUNCTION MENU SEE	BELOW
EXIT			SAVE / RESET / CANCEL	

### **Function Menu**

MAIN MENU	SUB MENU		OPTION	
MOTION			ON / OFF	
		ON:	1. AREA: 1 ~ 4 2. AREA DISPLAY: ON / OFF (ON: POSITION, SIZE)	3. VALUE: 0 ~ 100 4. MOTION VIEW: ON / OFF 5. RETURN
PRIVACY			ON / OFF	
		ON:	1. AREA: 1 ~ 8 2. AREA DISPLAY: ON / OFF (ON: TOP LEFT, TOP RIGHT, BTM LEFT, BTM RIGHT, POSITION)	
D-EFFECT	D-ZOOM		ON / OFF	
		ON:	1. RANGE: X1.0 ~ X32.0 2. PAN: -100 ~ 100	3. TILT: -100 ~ 100 4. RETURN
	SMART		ON / OFF	
	D-ZOOM	ON:		4. TIME: 0 ~ 15 5. RETURN
	DIS		ON / OFF	
	FREEZE		ON / OFF	
	MIRROR		OFF / MIRROR / V-FLIP / ROTAT	Е
	NEG. IMAGE		ON / OFF	
IMAGE ADJ	SHARPNESS		1. 0 ~ 31	
	MONITOR		CRT / LCD	
		CRT	1. PED LEVEL: 0 ~ 63 2. COLOUR GAIN: 0 ~ 255	3. RETURN
		LCD	1. GAMMA: 0.05 ~ 1.00 2. PED LEVEL: 0 ~ 63	3. COLOUR GAIN: 0 $\sim$ 255 4. RETURN
	LENS SHADING		ON / OFF	
		ON	1. LEVEL: 0 ~ 60 2. H-CENTER: 0 ~ 255	3. V-CENTER: 0 ~ 255 4. RETURN
	DEFECT		1. SENSUP: X4 ~ X128 2. DIFF: 0 ~ 3 3. THRESHOLD: 0 ~ 4	4. START 5. RETURN

## Function Menu Continued On Next Page ▶▶▶

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MAIN MENU	SUB MENU	OPTION	
COMM ADJ	CAM TITLE	ON / OFF	
		ON: CAM TITLE	
	PROTOCOL	PELCO-D / PELCO-P / SPD-S / DONG YANG / NIC P	
	RS485	1. CAM ID: 1 ~ 255	
SYNC		1. INT	
LANGUAGE		ENGLISH / KOREAN / JAPANESE / CHINESE / RUSSIAN / FRENCH / SPANISH / ITALIAN / PORTUGUESE / DUTCH / GERMAN / POLISH / TURKISH / HEBREW / ARABIC	

# **Fault Finding**

The table below describes common problems and possible solutions.

	- 41 -	2 41 21 .		
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.		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 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:		
		A. Video loss in Composite cable as run too long usually you would get a picture up to aroun120mtrs (Remedied by fitting a video amp).		
		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.		
		C. No Video signal down CAT5 or CAT5+2. Check you have used a "pair of cores" not individual cores from different pairs.		
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 omits an electromagnetic field which can cause colour roll.	Move the camera further away form any fluorescent lighting.		

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



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