

CAM800 External IR Dome Camera

These IR WDR dome cameras produce exceptional quality images using the Sony 1/3" Super HAD CCDII providing 650 TVL resolution. The cameras are equipped with 30 x IR Leds and the camera has an 2.8 ~ 12mm varifocal lens. The cameras have an RS485 up the co-ax connection for changing the OSD menu specifications using a CAM802 remote control. NiteDevil and Privacy Masking features are also included.



Features

1/3" SONY Super HAD CCD II

650 TVL

2.8mm ~ 12mm varifocal lens

30 x IR LEDs

NiteDevil functionality using Sense-Up

3 colours – Cool White – Iridium Silver – Graphite Grey

OSD menu with RS485 remote updating with RS485 Remote

Control (CAM802) Optional Extra



CAM802

Mounting the Camera

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

Powering the Camera

The dome is dual voltage and runs on 24vAC or 12V DC regulated power supply. The camera is provided with a fly lead with a mini power jack plug. 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 460mA add approximately 50% so use a power supply of 700mA or above. The camera is not polarity sensitive so connections can be either way round.

Connecting the camera to control equipment

The dome camera comes with a fly lead for power and video out. Connect the camera to control equipment via a female BNC-BNC lead. 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. Now adjust the Zoom control first and then Focus control on back of camera. Adjust position of IR guns to provide best IR coverage according to the focus distance set.

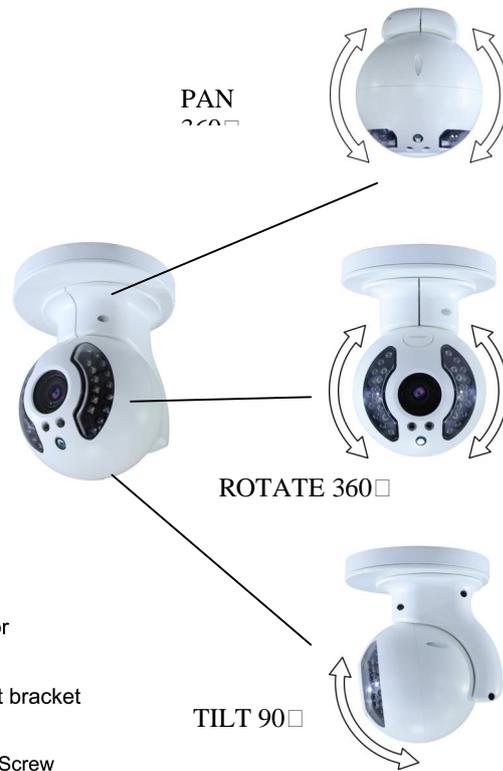
RS485 connectivity

An RS485 facility is provided to allow menu updates using an RS485 remote control via the co-ax cable. This device is a CAM802 and is connected on the video line, so that there is no need to access the camera joystick to change camera settings. Note that the CAM802 requires two AAA batteries. If there are problems viewing the menus then check that the batteries are fully charged.

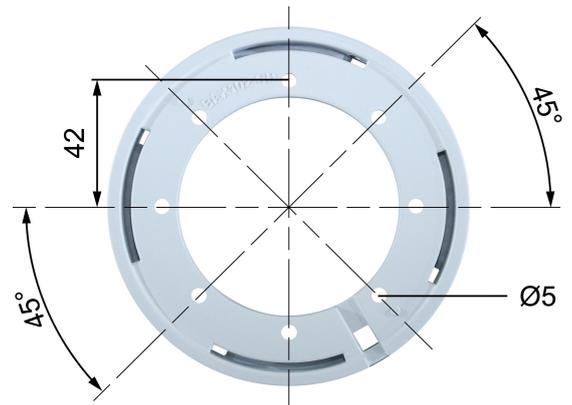
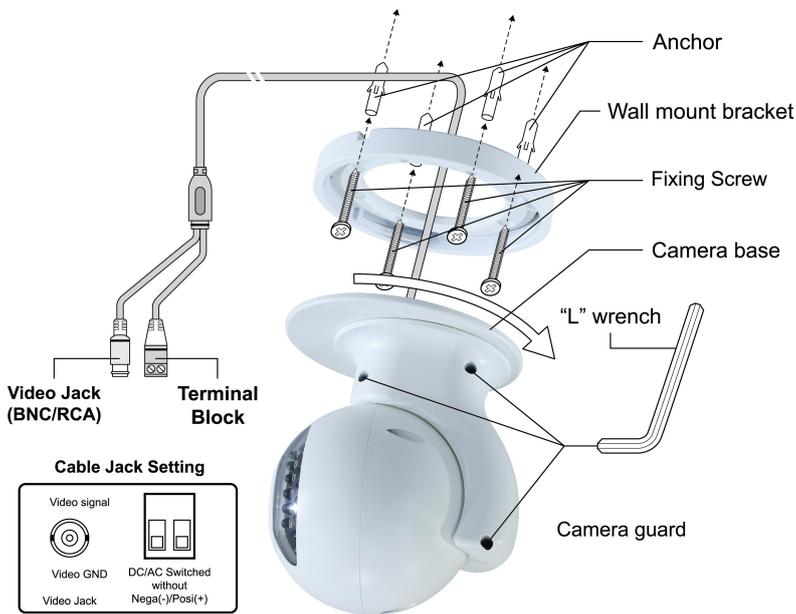
Camera Details



Camera Positioning



Camera Installation



Wall Mount Bracket

Fit the Wall Mount Bracket and then swivel the camera base to attach camera to bracket and use the L wrench to lock the camera in place.

ZOOM and FOCUS adjustment

Adjust zoom control first to establish viewing frame required then sharpen with focus control.

SPECIAL NOTE:

After setting the zoom and focus controls please use the small rubber seal to limit possible condensation problems.



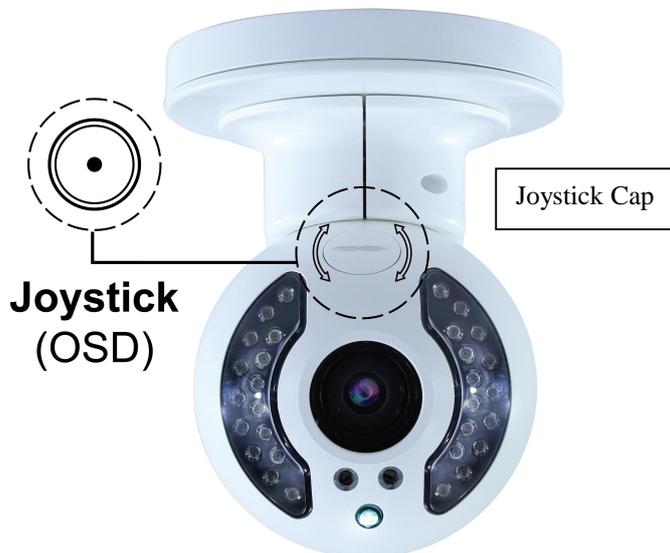
Camera Menu Joystick and connection for Auxiliary monitor

Remove the Joystick Cap by turning anti-clockwise.

Refer to instructions following on using the menu system.

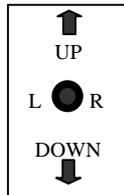
The Auxiliary connection lead is provided with the camera to allow a test/auxiliary monitor to be connected for setup purposes.

When refitting the joystick cap make sure it is fitted tight to avoid condensation problems.



CAM800 Cyclops IR Camera with Up the Coax RS485
OSD Menu

The CAM890 has an on screen display menu. This can be accessed using the small joystick controller on the camera flylead.



Press the centre button straight down to enter the menu and use Left, Right, Up and Down to move through and amend menu settings.

The following menu display is shown:



EXP Exposure	Lens	DC / ELC
	HBLC / D-WDR	BLC / HLI / D-WDR
	AGC	Off / Low / Middle / High
	3D DNR	Off / Low / Middle / High
	Sense Up	Auto / Off / x2 / x4 / x8 / x16 / x32 / x64 / x32 / x64 / x128 / x256 / x512
	Exit	
WB Colour	W B Mode	ATW / Manual / AWC > Push / AWC
	R - Y Gain	0 ~ 256
	B - Y Gain	0 ~ 256
	Exit	
D&N Day & Night	D&N Mode	Auto / Colour / B&W / EXT
FUNC Function	Mirror	
	Sharpness	
	LSC	On (0 ~ 30) / Off
MOT Motion	Motion	On / Off
	Area Sel	Top / Bottom / Left / Right
	Sensitivity	0 ~ 30
	Display	Off / Icon / Trace
	Hold Time	0 ~ 15 secs
	Alarm	On / Off
PVM Privacy Masking	Mask 1 ~ Mask 8	On / Off
	Exit	
SET Setup	Title	Off / On : 64 characters
	DPC	Off / Manual: White or Black 0 ~ 255 / DPC Level 0 ~ 255
	OLPF	650 / 850
	Monitor	CRT / LCD
	Gama	0.45 / 0.60 / 1.0 / User
	Exit	
SYS System	Camera ID	0 ~ 255
	Communi.	Protocol : PELCO-D Baud Rate : 2400 / 4800 / 9600 Return
	Language	
	Exit	
EXIT	Factory Set	
	Save & Exit	
	Exit	

EXPOSURE



E. SHUTTER

AUTO <move joystick Right>
 1/50, 1/100, 1/120FLK, 1/250,
 1/500, 1/1000, 1/2000,
 1/4000,1/10000, 1/100000
 AUTO <move joystick Left>
 X2, X4, X8, X16, X32, X64,
 X128, X256, X512, X1024.

LENS DC / ELC
 DC ↵ Direct Drive Lens or ELC ↵ Electronic Lens

BRIGHT

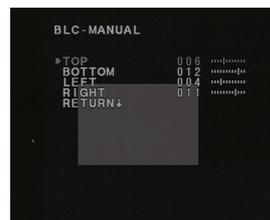
Set brightness 001 ~ 100

DC REF

An Auto Iris requires a DC Reference 000 ~ 020

HBLC / D-WDR OFF / BLC ↵ / HLI / D-WDR ↵

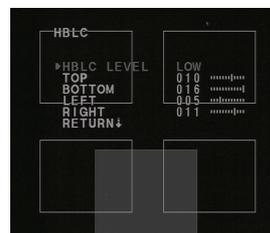
BLC



BLC

Backlight compensation allows you to draw a box in area where there is bright light.

HLI



HLI

High Level Backlight Compensation can be set to LOW, MIDDLE or HIGH and is used to reduce strong bright light by drawing up to four mask areas. Particularly helpful for reducing car headlights for number plate recognition.

MODE NIGHT / ALL DAY
 SET LEVEL 001 ~ 100
 GRAY MODE GRAY / D GRAY / BLACK
 MASK SELECT MASK1 / MASK2 / MASK3 / MASK4

HBLC LEVEL LOW / MIDDLE / HIGH

D-WDR



D-WDR

Digital Wide Dynamic Range is used to merge light and dark areas using the twin elements in the CCD. This is useful when there is bright light and dark shadows in the picture.

D - WDR LEVEL 000 ~ 020

AGC



Automatic Gain Control
OFF / LOW / MID / HIGH

3D DNR



3D Digital Noise Reduction
OFF / LOW /MID / HIGH / AUTO

When using SENSE - UP noise can be created and this option will reduce its effect.

SENSE - UP



SENSE - UP
OFF <move joystick left> AUTO
OFF <move joystick right> X2 / X4 / X8 / X16 / X32 / X64 X128 / X256 / X512 /

This feature is the NiteDevil functionality and holds the shutter open slightly longer in order to capture more light.

EXIT

EXIT
Press down to exit menu.

COLOR

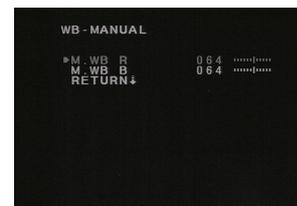


COLOR
WB MODE / R-Y GAIN / B - Y GAIN / EXIT

WB MODE ATW (Auto Tracking White Balance)
 <move joystick to right> MANUAL ↗ /
 AWC-PUSH / AWC

R - Y GAIN Adjust Red Yellow gain 1 ~ 255
 (Default 128)

B - Y GAIN Adjust Blue Yellow gain 1 ~ 255
 (Default 128)



M. WB R Manual Red gain
M. WB B Manual Blue gain

FUNCTION



FUNCTION

MIRROR OFF / ON

Reverse video picture

SHARPNESS 000~030 Default 018

Set sharpness level

MONITOR MODE 1 / MODE 2

Use Mode 2 for LCD monitor or Mode 1 for CRT monitor

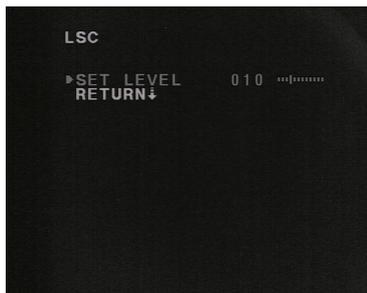
GAMMA 0.45 ~ 1.00 Default 0.45

LSC OFF / ON ↕

Lens Shading Compensation

EXIT

LSC



LSC

SET LEVEL 0 ~ 30 Default 010

Lens Shading Compensation compliments the quality of the lens by increasing the gain of the screen angle. Increasing the LSC level will increase the brightness around an object.

MOTION



MOTION

This option displays an alarm warning on the monitor to advise that motion has been detected. Up to 4 areas can be set.

Can select ICON or TRACE mode and set the time for the warning.

MOTION OFF / ON

Switch motion option on or off

AREA SEL AREA 1 ~ 4

Select up to 4 different areas for motion

SENSITIVITY 0 ~ 30 Default 25

Set motion sensitivity

DISPLAY OFF / TRACE / ICON

Trace displays selected window in area and ICON displays when motion detected.

HOLD TIME 0 ~ 15 Default 3 secs

Displays warning for time set

PRIVACY



PRIVACY

This option allows the setting of up to 8 privacy masking areas that can be opened in up to 8 different colours to mask off areas that are not to be viewed.

MASK 1 ~ 8 ON / OFF

MASK x



MASKx

DOT SEL L_TOP / L_BOT / R_BOT / R_TOP
Sets position of privacy masking area.

DOT XY
Draw box size.

MOVE XY
Move box to position.

COLOR SET BLACK / GRAY / WHITE / RED
/ GREEN / BLUE / MAGENTA / CYAN
Set box colour.

SETUP



SETUP

TITLE OFF / ON
Switch on to add a title display up to 64 characters.

← → When in Modify mode can move text

CLR Removes all text

POS Move text to a position

RET Return to previous menu

TITLE



MANUAL DPC (Dead Pixel Compensation)
OFF / MANUAL

This option compensates for dead pixels and can be run periodically.



MANUAL DPC

WHITE THR White threshold 0 ~ 255 Def 150
BLACK THR Black threshold 0 ~ 255 Def 030
DPC LEVEL Sets DPC Level 0 ~ 255 Def 030

AUTO DPC

Automatically runs dead pixel compensation

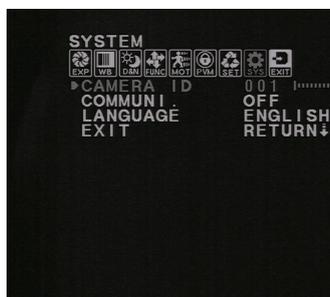


OLPF 650 / 850

Optical Low Pass Filter is used to blur straight lines by 1 pixel
Set 650 for IR cut filter or 850 for IR-PASS

OSD COLOR BLUE / GREEN / RED / WHITE / BLACK /
GRAY / MAGNETA / CYAN

SYSTEM



SYSTEM

This menu allows the use of the RS485 connections on the camera to change the menu settings. There is also an option to change the language for the menu.

CAMERA ID 000 ~ 255 Default 001
Ensure each camera accessed by RS485 has a unique ID number set.

COMMUNI OFF / ON
Set to allow RS485 connection and change baud rate.

LANGUAGE ENGLISH / CHINESE /
JAPANESE / ITALIAN / RUSSIAN /
PORTUGUESE / SPANISH / GERMAN /
FRENCH

PROTOCOL PELCO-D

BAUD RATE 2400 / 4800 / 9600 / 19200



RS485 Menu Control

Using the RS485 to change menu settings can be a good option. Note the zoom and focus are manually set but all the menu settings can be changed using the RS485. On this camera you can utilise the RS485 controller (CAM802 – Optional Extra) and connect in the video line to enable menu changes close to the DVR rather than at the camera, which may be installed out of easy access. The CAM802 uses the video co-ax as a carrier so therefore does not require an additional RS485 cable, nor does it require the RS485 setup in the camera. If you wish to use direct access using RS485 up the co-ax i.e without the CAM802 controller, then you will need DVR equipment using up the co-ax telemetry. This is generally third party PELCO-C equipment and you will need to setup the telemetry in the System Settings menu.

CAM800 Camera Specifications

Sensor	1/3" SONY Super HAD CCD II	IR Trigger	Under 10 Lux by CDS sensor
Resolution	PAL: 752 (H) x 582 (V)	Video Output	1v p ~ p, 75Ω
TV Lines	650 TVL Day / 700TVL Night	AGC	Automatic
Min.Illumination	0.0002 Lux (0 Lux with IR LEDs on)	Power/Current	12vDC 460mA IRs on / 24vAC
S/N Ratio	More than 52dB	Lens	2.8mm ~ 12mm manual zoom lens
Scan Frequency	15.625KHz / 50Hz	White Balance	AWC /
Scan System	2:1 interface	Dimensions	Base 120mm x L 150mm
Sync. System	Internal, Negative sync	Weight	2600gms
Elect. Shutter	PAL: 1/50s ~ 1/100,000s	Storage Temp	-30°C ~ +60°C
Gama	0.45	Operating Temp	-10°C ~ +50°C
IR Specs	30 IR LEDs - Max 20 metres range	RS485 control	Use CAM802 (optional extra) or by using PELCO-C equipment



WEE/CG0783SS

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