

the Architect's Range

CAM102

External Infra-Red Dome Style Camera

This NEW exciting *Architect's Range* of external 3.5mm – 8mm Day/Night varifocal I.R Ball cameras are produced in a range to suite the building environment. Finished in four metallic colours, Iridium Silver, Graphite Grey, Soft Champagne and Classic Copper and with their futuristic design, they will look impressive in any location*.

These cameras produce stunning pictures. The unique 3-d axis allows easy installation with easy front access for adjustment and precision positioning, and this camera is *IP67* rated.



This camera is fitted with 28 infrared illuminators and provides up to 20 metres of good directional low light surveillance through a special anti-reflection glass front.

Architect's Range of Colours

*The new exciting Architect's Range of metallic finished cameras are supplied in four colours to match a variety of uses both indoors and out, blending in with its surroundings. Choose from the following:

Iridium Silver		Indoors: Modern retail & offices	
		Outdoors: Modern & Industrial Buildings	
Graphite		Indoors: Dark Surfaces – Pubs & Clubs	
	suits	Outdoors: Brickwork & Dark Surfaces	
Soft Champagne	ns	Indoors: Traditional ceilings	
		Outdoors: Stonework & Brickwork	
Classic Copper		Indoors: Brickwork & Wood Finishes	
		Outdoors: Brickwork & Wood Finishes	

Installation Instructions

Connecting dome to 12v DC power

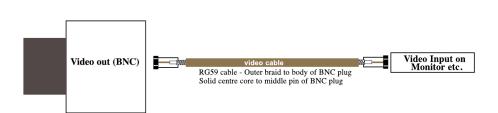
The camera is provided with a 2.1mm Mini Jack plug on a fly lead that allows you to connect the power supply to it. When powering these dome cameras with a 12V DC power supply, ensure that the supply is regulated. It is recommended to use a power supply that is rated higher than the current consumption of the camera i.e. allows 25%-30% minimum headroom, so for these cameras a minimum requirement would be a continuous rating of 1.5A or higher per camera. This prevents the PSU from running at its maximum rating for long periods of time.



Connecting the camera to video control equipment.

The dome camera comes with a fly lead for power and video out. To reduce installation time, the video out lead is terminated into a male BNC connector. This allows the installer to effortlessly connect the camera to control equipment via a female 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 "OV GROUND" connection and the inner core provides the "Video" connection.





It is recommended that when you are first setting up the cameras that you use a short BNC-BNC cable to link the camera directly to the monitor and to set it up at the same time. This allows you to both understand the camera and get the very best out of this great product, as you will be able to adjust the camera whilst looking at the monitor screen. Obviously whilst you are setting up the camera, it does need to be powered!

- 1) Carefully unscrew the outer fixing ring to dismantle dome releasing the ball collar, dome ball and dome base.
- Secure the dome base using the screws provided.
- 2) Connect video to BNC plug and 12v DC power to mini 2.1 power jack plug.
- 3) Reassemble dome.
- 4) Adjust Near/Far Zoom Controller and Tele/Wide viewing angle by turning adjusters on front of camera.

Special Note

When this unit is in use, avoid direct eye contact with the infrared lights.

The unit's outer glass front can heat up to $50 \,^{\circ}$ C when in use and care should be taken to ensure that this dome is fitted where it cannot be easily touched. It must also not be fitted in close proximity of any flammable materials.

The front glass on the dome is a special anti- Infra-red Reflection glass and must be carefully cleaned with a soft dry cloth to avoid scratching.

Note that infrared light is polarised light and therefore acts rather like a torch beam with a narrow angle of illumination. If this dome is used with a wider angle setting then it may be necessary to purchase additional Infrared lighting.



Technical Specifications

Architect's Range colours	CAM102R - Classic Copper CAM102C - Soft Champagne CAM102S - Iridium Silver CAM102G - Graphite Grey	CAM105R - Classic Copper CAM105C - Soft Champagne CAM105S - Iridium Silver CAM105G - Graphite Grey		
Image Sensor	1/3" Sony Super-Had CCD			
Horizontal Resolution	420TVL High Resolution	530TVL Ultra High Resolution		
Effective Pixels	PAL 500 x 582			
Scanning system	PAL 625 lines – 2:1 interlaced			
Video Output	1.0V p-p Composite. 75 ohms			
S/N Ratio	More than 50dB			
Lens	3.5 ~ 8mm vari-focal lens			
Min. Illumination (IRs off)	0.1 Lux at F1.6			
Backlight Compensation	Automatic (On/Off)			
Shutter Speed	PAL: 1/50 ~ 1/100,000 sec			
Gamma Correction	r = 0.45 or more			
White Balance	ATW-Auto Tracing White Balance			
Power Source	12 volt DC			
Operating Current	140mA LEDs OFF 510mA LEDs ON			
Infra Red LEDs	28 x 850nm I.R LEDs - 15 metre range			
Housing	Vandalproof, weatherproof (IP67) and tamperproof with inner bracket built-in			
Operating Temperature	-10°C ~ 50°C			
Ball Type Bracket	Maximum 360° Angle rotation - 180° Pan rotation - 90° Tilt			

Troubleshooting

This camera is built to the highest standards and every unit is fully tested prior to packing. If you experience an installation problem you need to investigate your cabling, connections, power supply and monitor. If you fail to get a picture or there is picture interference on a monitor you need to check the following things:

No Picture

The camera cannot function without the correct working power supply. The power supply must be regulated and capable of supplying 1.5A per camera constantly. First check that the power supply is functioning correctly using a multimeter set on DC volts (above 12v) and connect the probes to the power supply's output. The meter should read between 12-13 volts. If the meter shows a negative voltage the psu could be wired incorrectly or you may have the meter leads reversed. To ensure the multimeter is working correctly, connect it to a known voltage and polarity such as a battery. If you find that the supply is more than 13 volts you may be using a non-regulated power supply and you must stop using it immediately as it may cause permanent damage to the camera.

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 BNC-BNC lead, do not forget the lead must have two wires connected, to complete the circuit, a video and a ground. If in any doubt, change the lead for a pre-wired commercial one, as faulty leads are invariably the main cause of problems.

Interference on the camera picture

This is usually caused by poor or inadequate cabling, not observing the correct wiring techniques and for 12v DC cameras the use of an unregulated or poorly regulated power supply. If you want a good picture quality and require the camera to work to its full potential, do not use an intruder alarm PSU with 12v DC cameras. If you suspect you have a PSU problem with a 12v DC camera, the best way to check this is to power your system using a fully charged 12v lead acid battery to give 12v totally regulated supply. If this solves the problem then you need to change the PSU for a better quality one.



Picture out of focus

The focus and zoom controls on this camera are situated on the front of the camera and both can be adjusted using a small screwdriver.



This symbol on the products and/or accompanying documents means that used electronic equipment must not be mixed with general household waste. For treatment, recovery and recycling please return this unit to your trade supplier or local designated collection point as defined by your local council.

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