



This NEW exciting *Architect's Range* of external 3.5mm – 8mm Day/Night varifocal I.R Ball cameras are produced in a range to suit 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 outdoors. There is now a camera that will blend in with its surroundings. Choose from the following:*

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

Installation Instructions

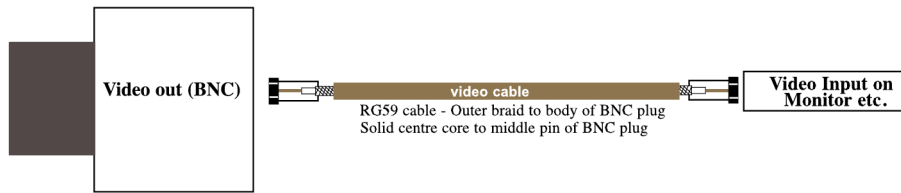
Connecting dome to 12v DC power

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 "0V 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.
- 5) Lock the ball collar and outer fixing ring using the Allen grub screws supplied.
- 6) Ensure that you do not attempt to reposition the ball after fitting the Allen grub screws or you will damage the dome case.

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°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.