

**Features**

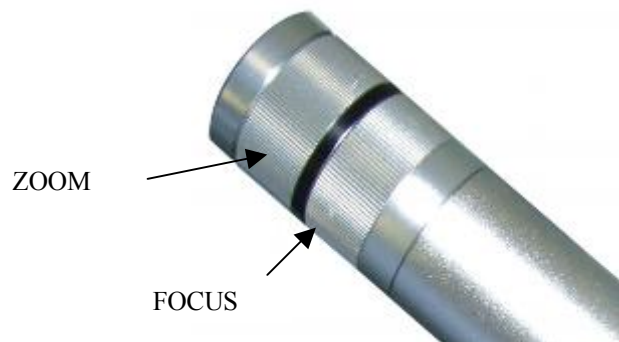
- ◆ 1/3" Sony SuperHAD Colour CCD
- ◆ Small compact design
- ◆ Low light capability (0.5 lux approximately)
- ◆ Free mounting bracket provided
- ◆ IP66 Rating for external use
- ◆ Vari-focal lens 4~9mm or 9~22mm
- ◆ 420 TVL
- ◆ 12vDC 160mA



This External tube camera provides an ideal solution for discrete external surveillance. Its small diameter enables it to be fitted in a small pre-drilled aperture for more discrete surveillance and the bracket supplied provides a ready made conventional mounting option.

**Positioning the Camera**

The CAM185 has a 4~9mm vari-focal lens and the CAM186 has a 9~22mm vari-focal lens. To adjust the focus distance turn the zoom control by twisting the camera top part of the camera body to the required setting and then adjust the clarity by twisting the focus control.



As with all CCD cameras avoid directing the camera at any object or surface containing bright spots that may cause flare on the resulting camera picture. To reduce flaring, try to ensure that the camera is looking at a scene with uniform brightness and not a dark scene with one well-lit area. Otherwise, the "electronic iris" will become confused and the camera will "average" the picture to a dark scene and show the bright spot as a flared image. When trying to identify a person with a CCD camera, plan the installation so that the person you are trying to identify will walk directly towards the camera.

**Fastening the Camera to the Wall**

The camera bracket has 3 holes used to fasten it to the wall using the appropriate screws.

The camera body itself attaches to the bracket by the threaded insert at the end of the camera.

### Connecting and Testing the Camera

The camera requires a 12V 160mA+ **high quality regulated power supply**. The camera's D.C input connector is a 2.1mm size DC Socket and the middle pin is the 12V+ and the outer case is 0V or ground – *please ensure your power supply is regulated and has the same connector configurations or you may damage the camera and void the guarantee.*

You can connect the camera to any suitable switcher, quad, DVR, VCR or monitor that uses the industry standard 1Volt peak-peak 75Ω input. The camera is supplied with a pre-connected BNC connector that can connect directly into the video input of other CCTV equipment by a suitable BNC-BNC lead.

It is not recommended that you cut off the connectors from the camera as it may cause the camera to be connected incorrectly and damage it.

### Troubleshooting.

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

1 – The camera cannot function without the correct working power supply. The power supply **MUST** be regulated and be capable of supplying 160mA per camera CONTINUOUSLY.

2 – Make sure the BNC –BNC lead you connect between the camera and the monitor has no shorts or open circuits. If you are making up your own BNC-BNC lead don't forget the lead must have two wires connected to complete the circuit, video AND GROUND, without both of them it won't function correctly. If in doubt swap your lead with a pre-wired commercial one, as faulty leads are the main cause of problems.

### SPECIFICATIONS

External Camera	Bullet	CAM185	CAM186
Element		1/3" Sony SuperHAD Colour CCD	
Lens		4~9mm vari-focal	9mm~22mm vari-focal
Video Output		1.0v p~p, 75	
T.V. lines		420 TVL	
Min Illumination		0.5 lux @ F1.2	
Power Voltage		12V dc - Must be regulated power supply	
Current Consumption		160mA @12V	
Iris Control		Auto Electronic 1/100000 second	
Mounting		Bracket Included	
Housing		Metal – alloy – Silver finish	
Size		26mm Diameter – 103mm Length	

#### WARNING

Under no circumstances remove or disconnect the lens on this camera or any pre-connected plugs or socket attached to it, as doing so will void all guarantees.



This symbol on the products and/or accompanying documents means that used electronic equipment must not be disposed 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.

*All specifications are approximate. Kovert.com reserves the right to change any product specification or features without notice. Whilst every effort is made to ensure that these instructions are complete and accurate, kovert.com cannot be held responsible in any way for any losses, no matter how they arise, from errors or omissions in these instructions, or the performance or non-performance of the camera or other equipment that these instructions refer to.*