

This product is the perfect observation system for CCTV system, whether it is at home or work, you can watch and listen to the desired area. The camera is supplied without any leads so that you can customise the installation for your exact needs.

## PACKAGE CONTENTS

Please check and familiarise yourself with the contents

- CCD camera with audio
- Fixing kit containing 2 plastic wall plugs, 2 screws and a cable tie.

## DESIGNING THE SYSTEM

1. The first step is to design your camera system by deciding what equipment is required for the installation. (e.g. Time Lapse video recorder, video switcher, monitor, etc.)
2. The camera requires a 12V do regulated power supply providing a minimum of 100mA for the 1861 B&W camera, or 200mA for the 1869 Colour camera.
3. Once you know what equipment you are using you will need to purchase the right type of connectors for the equipment to be used. Usually phono plugs or BNC plugs will be used.
4. Choose a suitable cable for the installation. 4core alarm cable is suitable for connecting the camera up to 100 metres away from your CCTV equipment. If you intend to run the camera cable along side other cables, such as in a conduit, we advise you to use a screened cable to prevent interference on the sound and camera picture.

## INSTALLING THE CAMERA

We recommend that you temporarily connect your camera to your TV before completing the installation to help determine the best position for the camera.

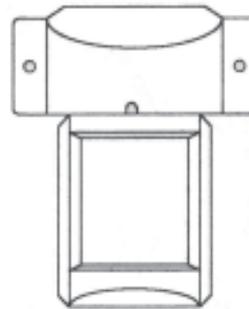
1. Unscrew the base of the camera from the lid using the four screws and then make a small hole in the grommet just large enough to push the camera cables) through.
2. Connect the cables to the camera using the table below to make a note of the colours used and the function of each wire.

Cable Colour	Terminal Label	Connection
	RED	+12V dc
	BLK	0V (GND)
	YEL	Video
	BLU	Audio

Note that the 0V connection should be used to provide the ground (GND) signal for the video and audio signal.

3. Connect the power, video and audio connectors on the other end of the cable into the CCTV equipment.
4. Check all connection thoroughly.
5. Switch the power on to all the equipment.
6. Select the camera input on the device that the camera is connected to. You should now see and hear the camera's output.
7. You can now check the camera's view in different positions enabling you to choose the best position for your property.

## SITING THE CAMERA



The camera is suitable for indoor or outdoor use. Please bear in mind the following points when choosing a mounting position.

- The camera must be positioned so that it **will not point directly into the sun** (sunrise and sunset) or any bright light, as this may cause damage to the camera.
- The best viewing angle is achieved at greater heights with the camera pointing down.
- Avoid viewing areas where **half the area is in bright sunlight and the other half is dark**, such as in the shadow of a building. All types of cameras have difficulty in 'seeing' with such a large lux level variation.
- Bear in mind not to position the camera too far away from door entrances as you may not be able to hear any speech or sound.
- The camera will work in low light conditions, but ensure a light is fitted near to the camera for night-time operation.

## INSTALLING THE CAMERA

1. Once the camera position is chosen, switch the power off.
2. Remove the wires from the camera.
3. Run the camera cable from the CCTV equipment to the desired mounting position.
4. Re-connect the wires to the camera as shown in the table on the previous page.
5. Place the cable tie provided around the outer insulation of the cable to prevent the cable from being pulled through the grommet.
6. Screw the lid back onto the camera using the four screws.
7. Screw the camera to the chosen surface using the plastic wall plugs and screws provided.
8. Re-apply power and select the camera input. Any slight adjustments to the viewing angle of the camera can now be made by panning and tilting the camera. Once this is complete, the camera can be locked into position by tightening the screw above the camera lens. Do not over-tighten as this may stop you from loosening the screw to make any slight adjustments in the future.

## WARRANTY

This product has a 2 Year parts and labour warranty. The warranty does not cover any damage caused by incorrect installation, unauthorised additions or modifications to the product, faults resulting from other manufacturers equipment malfunctioning, or natural disasters (including lightning damage). In the unlikely event that you encounter a problem with this product, it should be returned direct to Vottek, or the Voltek distributor from where the product was purchased. Products covered by the warranty will be repaired free of charge. A small charge will be made for units not within the warranty.

## SPECIFICATIONS

General	
Operating voltage	12V dc
Video signal	75W EIA composite video
Operating temperature	-10°C to +40°C
Weatherproofing	IP54
Overall size	89W x 100H x 83D (mm)
Total package weight	0.25Kg

### 1861 B&W Camera

Current consumption	100mA
Camera	B&W CCD
Lens	3.6mm - 90° angle
Resolution	420 horizontal TV lines
Minimum illumination	0.1 lux

### 1869 Colour Camera

Current consumption	150mA
Camera	Colour CCD
Lens	3.6mm - 70° angle
Resolution	330 horizontal TV lines
Minimum Illumination	4 lux

