

Features

- ◆ Very low cost
- ◆ B&W electronics
- ◆ Ultra small compact design
- ◆ Reasonable Low light capability
- ◆ Infra red sensitive (B&W Models)
- ◆ Built in audio microphone

These ultra small low cost CCTV cameras are ideal for budget applications. The cameras are designed to be built into other equipment such as covert cameras, toys or models. Please note that the camera has been set up for

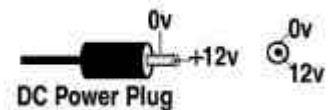
indoor use and to work in low light. This means that if this particular model of camera is used outdoors in bright sunshine, the picture may “white out”. Please be aware of this restriction.

Positioning the Camera

As with all CCTV 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 CCTV camera, plan the installation so that the person you are trying to identify will walk directly towards the camera. If you are building the camera into another item please take great care fastening the camera in position as the camera is a very delicate item and is easily broken.

Connecting and Testing the Camera

To do this, the camera requires a 12V 100mA+ **high quality regulated power supply**; a recommended unit is any of the ‘**ANTIHUM**’ series of power supplies that are specifically made for getting the best out of CCTV installations. The camera’s DC 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*. If you have a PP3 battery you can use that to power the camera and a special PP3 adapter lead has been supplied with your camera. A PP3 battery will run the camera typically for about 5 hours; this is of course dependent on the state of the battery and the type of battery. The camera’s operating voltage is 8-12V DC. As with all 12V CCTV cameras, do not run the camera off a 13.8V intruder alarm PSU as you will damage the camera or shorten its life expectancy.

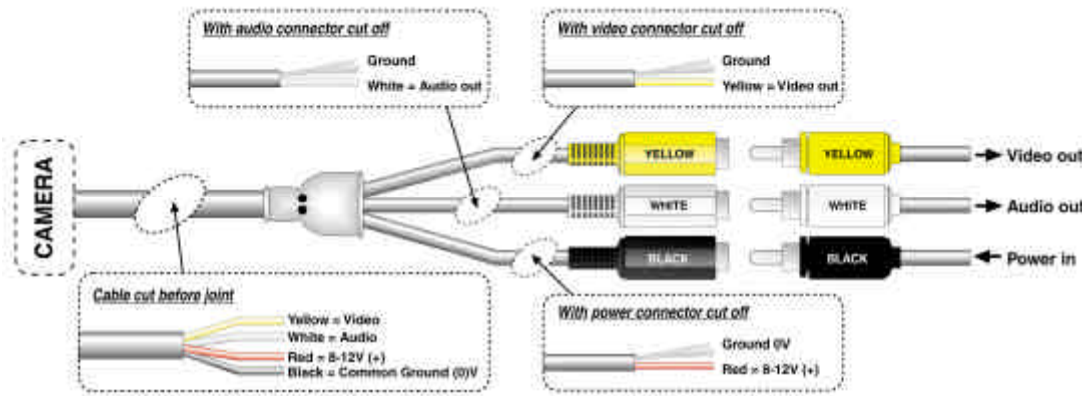


You can connect the camera to any suitable switcher, quad, DVR, VCR or monitor that uses the industry standard 1Volt peak-peak 75Ω input. The camera will usually be supplied with a pre-connected Phono connector that can connect directly into the video input of other CCTV equipment, using the Phono to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

An alternative method of connecting the camera is to use the scart input of a modern TV or VCR. To do this you simply connect the phono output of the camera to the phono input of a “Scart adapter”. This is a readily available lead. If you have connected the camera into the Scart connector of a modern TV or VCR then you will need to switch the TV or VCR on to the AUDIO-VIDEO channel (AV) to see the camera picture. Obviously the camera will require powering.

PLEASE NOTE – Some of the cameras may be supplied with a red Phono plug instead of white for the audio connector. A useful diagram is shown of the core colours if the connectors are cut off the camera.

If you are going to build this camera into another device as a covert camera or similar then please check the camera’s functions and operation before commencing work, don’t start fault finding after bastardising the camera or other equipment! When you first connect the camera it is recommended that you connect the camera directly to the VIDEO INPUT of the monitor you are using to prove the camera and power supply are functioning correctly. When you connect the power supply to the camera, with the monitor switched on, you should now see the camera picture on the monitor. Once you have concluded the camera and power supply are working satisfactorily you can proceed to installing the camera with any other equipment in your system such as a quad or switcher. If you fail to get a picture after you introduce other CCTV equipment such as a switcher, quad, DVR or VCR, go back to basics and connect the camera directly to the monitor to ensure you get a picture. You can then eliminate item by item in your full system to identify the cause of the problem.



It is not recommended that you cut off the connectors from the camera as this may cause the camera to be connected incorrectly and damage it. If connectors are cut off the camera then the warranty is void so you do this at your own risk. A useful diagram is shown of the core colours if the connectors are cut off the camera.

Trouble shooting.

The camera 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 12V @ 100ma per camera CONTINUOUSLY.

To check that your power supply is functioning correctly use a multimeter set on DC volts (above 12V) and connect the probes to the power supply output plug (the plug polarity is shown in diagram 1). The meter should read between 12-13V. If the meter shows a negative voltage the power supply output plug could be wired incorrectly or you may have the leads of the multimeter reversed. To make sure the multimeter is working correctly, connect it to a known voltage and polarity such as a battery.

If you find that the power supply is giving out more than 13.5V you may be using a non-regulated power supply and must stop using it with the camera immediately or you may cause permanent damage to the camera. This rule applies to most 12V CCTV cameras.

2 – Make sure the lead that you connect between the camera and the monitor has no shorts or open circuits.

If you are making up your own 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

Element	CMOS Black & White
Lens	3.7mm 72°
Audio	Built in microphone
T.V. lines	320 TVL
Min Illumination	0.5 lux
Power Voltage	8-12V dc - Must be regulated power supply
Current Consumption	100mA @ 12V
IR LEDS	NO
Mounting	For OEM use
Housing	Plastic – Black finish
Size	24 x 13 x 16 mm
Weight	Camera 38g

All specifications are approximate the sellers 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, the sellers 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.