visuall
SURVEILLANCE SYSTEMS

INSTALLATION AND OPERATION INSTRUCTIONS

Please read these instructions before attempting to connect and operate this product

- **Ideal for home and light commercial applications**
- **Quick & Easy to Install and Use**
- **Automatic recording of intruders/ callers on most VCR**
- **Camera activation upon detection of movement**
- **IR illuminations ensuring clear image in darkness (B/W camera)**
- **Weatherproof camera suitable for internal & external uses**
- **Real Time Recording - No need to watch blank videotapes for hours**

Other System Options:
CAM1VC – As above with Colour Camera

CAM1V

Automatic TV Observation& VCR Recording System

FOREWORD

Thank you for purchasing the Visuall CAM1V system. This high quality surveillance security system is purposely designed to be easy to install using only conventional tools. The system will provide long term reliability.

The system is supplied with one camera either B&W or Colour depending on which kit has been purchased.

SAFETY WARNINGS

Before proceeding with the installation, please note the following safety warnings; -

1. For safety, the Camera operates at 12 volts. The system contains a transformer which is connected to the 240 volts mains supply.
2. There is no user serviceable parts in the Camera. The unit should be disconnected from the mains before removing cover.
3. The use of safety goggles is advised when drilling holes and hammering home cable clips. Before drilling walls, check for hidden electricity cables and water pipes.

TOOLS REQUIRED

Hammer, terminal Screwdriver, drill and No. 10 Drill bit

INTRODUCTION

The CAM1V Automatic Camera System is a professional, cost-effective solution for a requirement of Camera surveillance and automatic VCR recording on most domestic VCRs. The system can be used with professional Time Lapsed VCRs and Monitors. The system is ideal for Domestic and Light Commercial installation.

The system is ideal for use when the property is unoccupied. If the property is unoccupied over night or even for a longer period and there is a requirement to record visitors or intruders, simply have the VCR on standby ready to record and CAM1V system will start and stop the VCR, only when the built in camera PIR detects movement, avoiding the need to review hours of uneventful video tape recording.

When movement is detected, the system will automatically start your VCR recording, and the VCR will continue to record whilst the PIR is activated, the system will stop the VCR approximately 30 seconds after the last activation is detected and be ready for the next activation.

The CAM1V Camera contains a library of IR codes to control most popular brands of VCRs worldwide. The system is easily set to control the VCR by selecting the correct code using the dip switches contained in the Camera. *(See the supplementary sheet of List of VCR Brands and Codes later.)*

WHERE TO USE THE SYSTEM

Domestic use:
The system is triggered by movement within the range of the camera PIR. This is excellent for monitoring a child's nursery, or an unoccupied room from which an intruder may gain entry. The camera when sited outside the property such as garden, garage, and entrance will also be triggered by anybody entering the range of the Camera. The PIR operates at 90 degree x 15M at 2.2m mounting height.

Light commercial use:
The system can provide constant view/recording of any area which may be vulnerable to theft, using a standard TV and VCR equipment.

Temporary use:
The quick installation makes the system useful for temporary use in vulnerable areas. Useful in the work place to protect secure and restricted areas, i.e. computer rooms and drug storage areas.

TESTING THE SYSTEM

1. We recommend you to fully test the Automatic VCR recording before mounting the Camera outside or in it's final position.

The system comes with a **Connection Lead Set**. This lead set enable all cable to be connected at one site.

a) Connect the Scart lead of the **Connection Lead Set** to the SCART input on the rear of the VCR. (See figure 4.)
b) Plug in the mains adaptor and connect the Jack plug to the mains socket on the **Camera Connection lead Set**.
DO NOT SWITCH THE MAINS ON AT THIS STAGE.
c) Connect the camera cable DIN Plug to the **Connection Lead Set** camera DIN socket.
d) The final lead of the Connection Lead Set is a 3m Infrared Signal lead. This infra red LED emits the IR signals to your VCR to start or stop the unit recording, so it must be aimed at the front of your VCR where the VCR Infrared Sensor is located or in clear sight of the VCR.
e) If the camera has already been mounted, place the front of the camera to face the wall so no movements can be detected. If not turn the unit face down to prevent activation at this time.
f) Plug the transformer to mains to turn the Camera on.
g) Switch the VCR to the AV channel and the TV to the channel normally used to view video tapes. The Camera picture will now be seen on screen.

Note: You do not (cannot) tune in the camera picture to the TV/VCR, the picture is automatically on the AV channel. Many VCR/TV remote controls have a specific button marked 'AV', others use Channel ')'. If you have a Scart socket on your VCR/TV you definitely have an 'AV' button, although it may have a different description, see VCR/TV handbook.

2. Testing the Unit
a) Activate the system by moving in front of the PIR.
b) Wait for approx. 10 seconds for the unit to send the correct infrared codes to start VCR.

Once the VCR has started turn the Camera/PIR face away from possible activation and after 30 seconds the system will stop the VCR ready for the next activation.

If your VCR does not start check all connections and settings, and re-test.
It is possible that the unit does not have your code, please contact the Helpline for further information.

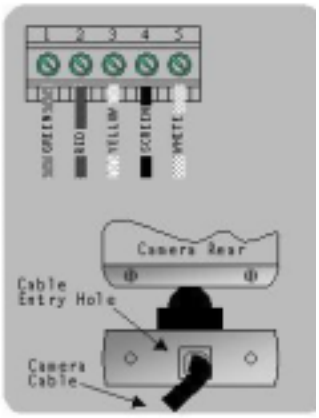
If your VCR started quickly you do not have to change any further settings – go to 'Installing the Camera' section.
If the delay between activating the PIR and your VCR starting to record was unacceptably long, it is possible to change the code to your specific VCR and it will start immediately upon activation, see next section.

We recommend you adjust the settings and test the unit before mounting the Camera in an external position.

NOTE: Many UK brands are manufactured by one or more of the manufacturers listed. If your VCR operated correctly but your brand of VCR is not listed contact the Helpline for further information.

CAMERA INSTALLATION

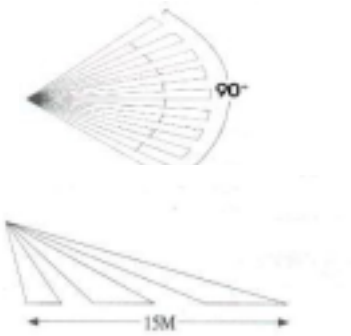
We recommend you do not fit the Camera in the final position until you have checked and/or adjusted the system to operate with your VCR.



1 GREEN: PIR Trigger
2 RED: + 12V Positive
3 YELLOW: Audio
4 SCREEN: 75Ω Video Screen & GND
5 WHITE: Video

Figure 1

PIR Range



- **Ensure the camera is not facing direct sunlight.**
- **The Camera must not be installed above radiators or in an area where rapid changes of temperature may take place.**
- Prepare the Camera for installation, running the cable between the VCR site and the place where the Camera is to be installed.
- The cable is normally pre-connected. If not, then connect it to the Camera as per the wiring diagram. (see figure 1). An ideal mounting height is between 2.2 – 2.5 metres.
- At this stage, do not fix the camera into it's final position. The final mounting position will be decided once it is possible to view the picture on the TV. See above for passive Infrared detection range.
- Mark and drill out the camera screw holes and fix the camera to the wall using the plugs and screws provided. After positioning the front of the camera at an optimum direction allowing maximum coverage, turn the locking nut clockwise to lock the camera in position. (see figure 3).
- Connect the camera cable mini DIN plug to the **Connection Lead Set** camera socket.
- Switch the mains.
- Switch both the VCR and the TV to the AV channel. The Camera picture will now be on screen.

The Camera has built in audio so you can record sound as well as the picture. B&W Camera also have built in Infrared light which should give facial recognition in complete darkness within and up to 3M distance.

OPERATING AND USING THE SYSTEM

The operation is very simple. The VCR should be left on the AV channel, to view the Camera picture turn the TV to the AV channel. To automatically record the Camera picture the VCR must be left in standby, and on the AV channel with a blank tape inserted. Always ensure the Infrared signal LED has clear line of site of the VCR.

Note: If you have the CAM1VC colour camera system, you should be aware that colour cameras require more light to ensure a good quality picture.

CHANGING THE INFRARED CODE SETTINGS

When purchased, the CAM1V Camera is factory set with dip switch 8 at the ON position at the rear of the Camera. (see Figure 2.) **DO NOT TOUCH ANY PART OF THE CAMERA PCB NOR REMOVE THE PROTECTIVE COVER.**

It is recommended to use this mode unless there is an absolutely unacceptable delay time in the VCR starting. Exactly how long it takes for the CAM1V system to activate your VCR, after the PIR is activated, depends on the brand of your VCR. For almost immediate VCR recording you must set the switches to the code for your specific brand of VCR.

The unit is supplied with a waterproof seal to cover the dip switches, this should be inserted only after adjusting and testing the unit for VCR activation.

IMPORTANT: When inserting the waterproof seal, place the Camera face down and carefully push the edge of the rubber seal in all the way round. **DO NOT PRESS AGAINST THE PIR LENS WHILE FITTING THE SEAL.**

Figure 2

SETTING A CODE FOR A SPECIFIC VCR

See the list of VCR codes sheet to find the brand and code for your VCR. Note down the code or codes that correspond to your VCR brand. Please note that some brands have more than one code, therefore, you may have to repeat the following steps to set the correct code.

Step-1 Ensure the Camera mains power is switched off. (***Ensure the VCR is in Standby and on the 'AV channel'***.)
Step-2 Using a thin terminal screw driver, set the dip switches to your VCR code. ***Note: Dip switch number 8 must be left in the 'ON' position.***
For example, if the VCR code is 146, only switches 1, 4, 6 & (8) must be in the 'ON' position.

Before testing ensure the Camera PIR is not being activated, then:-

Step-3 Turn on Camera power at mains.
Step-4 Activate PIR.
Step-5 **If your VCR both starts and stops, then the setting is correct for your VCR. Otherwise, if your VCR does not *start or starts but does not stop, try alternative codes until you find the correct code.***

REMARK: If you falied to findt acceptable code for your VCR, it might be helpful for you to try other codes under other VCR brands (this may be possible sometimes) one by one as well.

Step-6 Fit the waterproof seal and, install the camera in it's final permanent position.

FASTENING THE CAMERA IN POSITION

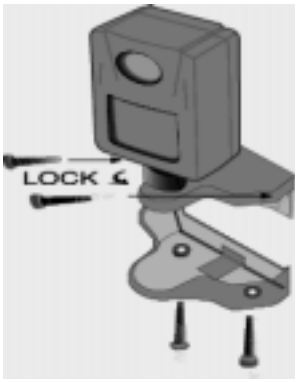


Figure 3

CABLE CONNECTION TO TV & VCR

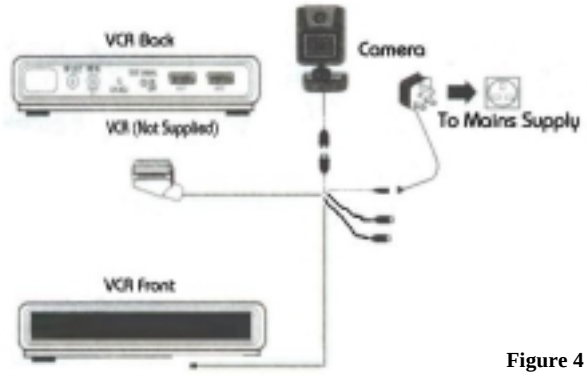


Figure 4

ACCESSORIES

CAMTG Time & date Generator
CAM13 15M Extension Cable
CAM14 25M Extension Cable
CAM15 50M Extension Cable

Technical
Help line
0151 5252 7374
Mon – Fri 9am – 5 pm
Visit Our web Site at – www.adeva.co.uk