

OPTI-CAM

CCTV OBSERVATION & VCR SYSTEM

System Installation Instructions
(4PI170)
(FOR ENGINEER USE ONLY)



TECHNICAL HELP-LINE



0151 549 7500

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Our policy is one of continued improvement and we reserve the right to vary details without prior notice.**

OPTI-CAM INSTRUCTIONS

For your own safety read the following instructions carefully before you try to plug this equipment into the mains supply

INSTALLATION

SAFETY WARNINGS

Electrical connection

Check that the voltage on the rating plate matches the voltage in your premises. The rating plate is on the rear of the main unit. If the mains plug fitted to this equipment is not suitable for your application, remove the plug and replace it following the instructions as follows.

Ensure you throw the old plug away immediately to prevent anyone from plugging it into a wall socket which would be VERY DANGEROUS.

The wires of the mains lead fitted to this equipment are :

BLUE Neutral
BROWN Live

As the colours of the wires in the mains lead fitted to this equipment may not correspond with the coloured markings of the terminals in the plug.

- The wire which is coloured blue must be connected to the terminal which is marked with the letter "N".
- The wire which is coloured brown must be connected to the terminal which is marked with the letter "L".
- Do **NOT** connect any wire to the earth terminal of a three pin plug.

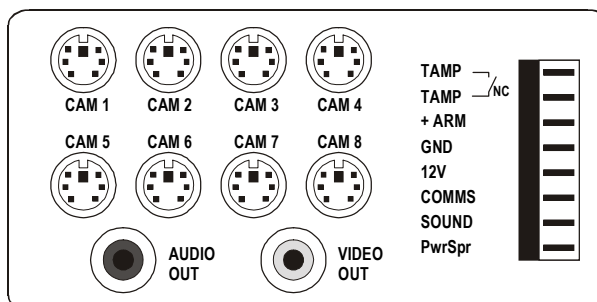
FURTHER CONSIDERATIONS & PRECAUTIONS

- If the terminals in the plug are not marked or you are in doubt about the correct connection, consult a qualified electrician.
- If the mains lead needs replacing a qualified electrician should replace it with an appropriate power cord.
- Only 5 amp replacement fuses which are ASTA approved to BS 1362 should be fitted.
- This equipment is double insulated and therefore an earth connection is not required.
- **CAUTION** – To prevent electric shock, do not remove covers.
- **CAUTION** – There are no serviceable parts inside this product that you can repair yourself. Always consult your supplier for further advice on service and repairs.
- Do **NOT** put equipment in a hot or humid place (to avoid the risk of fire and electric shock)
- Do **NOT** connect the main equipment to the power supply if it has come from a cold environment to a warm room as this can lead to condensation inside the unit which could lead to serious damage. **ALWAYS WAIT FOR ABOUT TWO HOURS TO ALLOW IT TO REACH ROOM TEMPERATURE.**
- Put the equipment on a steady, flat surface.
- Make sure there is good ventilation all around the equipment of a minimum of 50mm (2"). **DO NOT BLOCK THE EQUIPMENT'S VENTILATION GRILLS**
- Only clean the unit with a soft, lint-free cloth. Do **NOT** use aggressive or alcohol based cleaning agents.
- Do **NOT** place any naked flame sources and liquids (e.g. vases) on the equipment. Keep equipment clear of any liquid sources which could drip or splash on to it.

Installing Cameras

See camera instructions on how to wire the cameras using the prepared leads supplied.

The 6 pin mini DIN simply plugs into any of the 8 camera inputs on the rear of main unit.



6 Pin Mini DIN

Looking into the socket from the rear, going clockwise starting from 2 O'clock.

Pin	Signal	Description
1	PIR	Signal in, pulled internally to 5V, pulled low (to GND) when active.
2	VIDEO	1V pk-pk PAL Video in from camera
3	GND	0V
4	NC	Not Connected
5	AUDIO	4V pk
6	12V	12V 250mA max per camera

Installing Main Unit To Monitor (not supplied)

Connectors

Phonos

Audio Out is 0.8V pk Audio out to TV/monitor

Video Out is 1V pk-pk PAL Video out to TV/monitor

Installing Remote Keypad (RKP) To Main Unit

The remote keypad should normally be mounted in a convenient position.

Fix the keypad in place by following these steps:

Loosen the retaining screw in the lower edge of the remote keypad housing, and separate the front and rear parts.

Choose the cable entry point. Two small 10mm diameter knockouts in the back of the housing permits the rear entry of concealed wiring. Four knock-outs around the edge of the rear case permit cable entry from any side via mini-trunking.

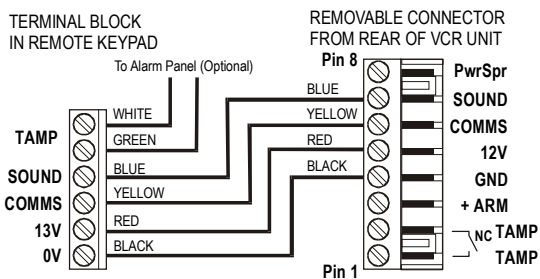
Offer the rear housing up to the mounting surface, and mark out the 2 screw positions using the holes provided.

Drill and plug the mounting surface as necessary, then fix the rear housing to the surface.

Run a 6 core alarm cable from the Opti-Cam to the keypad. The keypad connection terminals can be found on the PCB which is held in the front part of the housing. See the wiring diagram below for details of connection. Optionally, the keypads TAMP connections can be wired to the alarm panels Tamper loop for additional security.

Fix the front to rear housing, and tighten the retaining screw.

Connect the other end of the 6 core cable to the main VCR unit. A pluggable connector block located in the rear of the unit can be removed for ease of wiring.



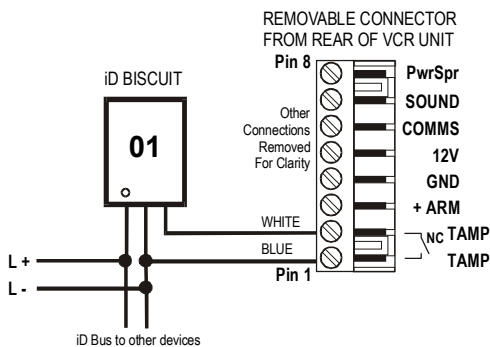
WIRING DIAGRAM - Remote keypad to main VCR unit

Pin	Signal	Description
1	Tamp	Tamp in. Connect tamper loop from Alarm panel through here
2	Tamp	Tamp out
3	Arm	Positive Arm input (12V in puts the unit into Out Mode)
4	GND	0V
5	12V	12V @ up to 0.65A
6	COMMS	COMMS to Remote Keypad (RKP) and Lighting controller
7	SOUND	Sound to Remote Keypad (RKP)
8	PWR SPK	Power Speaker driver for up to 4 x 16Ω

Connecting Power Speakers (not supplied)

Wire terminal 8 'PWR SPK' and terminal 5 '12V' on the Ancillary connector to your extension speakers.

Connecting to an Alarm Panel (not supplied)



WIRING DIAGRAM - iD Alarm Panel connection to main VCR unit

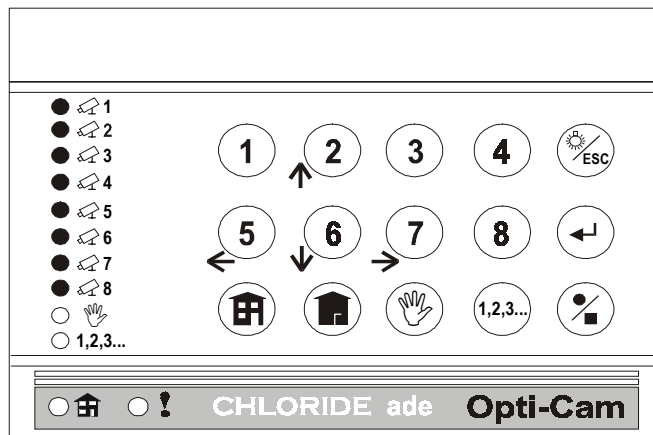
The Tamper terminals 1 and 2 link through a Normally Closed (NC) contact relay. The tamper loop from an alarm panel may be wired through these contacts. Optionally an iD point could be wired to it so that the alarm panel can flag a system event in its log. The Arm input can accept the Set output from an Alarm panel. GND must also be wired as 0V reference. When the alarm panel is set by the user, the system will automatically switch to OUT mode and revert back to what ever mode the system was in prior to arming when the Alarm panel is unset. The systems exit timer will still be obeyed.

Connecting Lighting controllers

The lighting controllers are wired the same as the Remote Keypads. The SOUND input is not used by the controller, but the terminal is provided as a convenient spur point for other keypads. The Address jumper selects which group of lights the controller operates. With Jumper fitted (default), the controller operates lights 1 to 4. With Jumper OUT, the controller operates lights 5 to 8.

COMMISSIONING

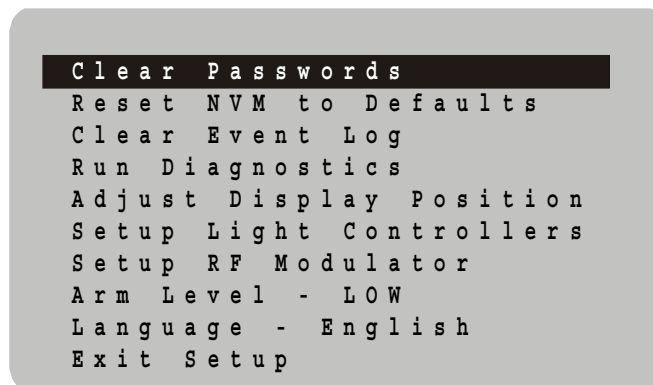
Take a moment to familiarise yourself with the remote keypad button layout, shown below.



Commissioning menu

This menu is accessed by pressing and holding the **ESC** key then pressing the **←** together during PIR stabilisation at power up. The unit will scan through all cameras connected and will store in its non-volatile memory which cameras are present and which are not (Settings will be kept even in the event of a mains failure). The unit needs to know what cameras are installed so that it knows when to set its tamper output (normally connected to an existing intruder alarm system which would sound the alarm if a camera goes missing).

The following menu will then be displayed on the monitor screen:-



Function

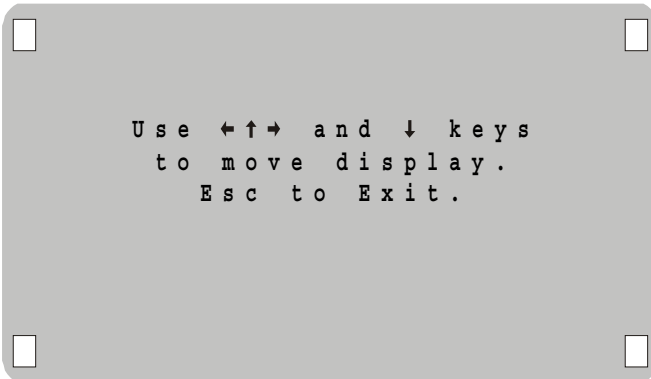
Allows various system variables to be reset to defaults, including passwords, menu options and event log. It allows simple system testing and On Screen Display text positioning.

Using

Use Up and Down arrow keys to highlight desired operation, and press **←** to execute.

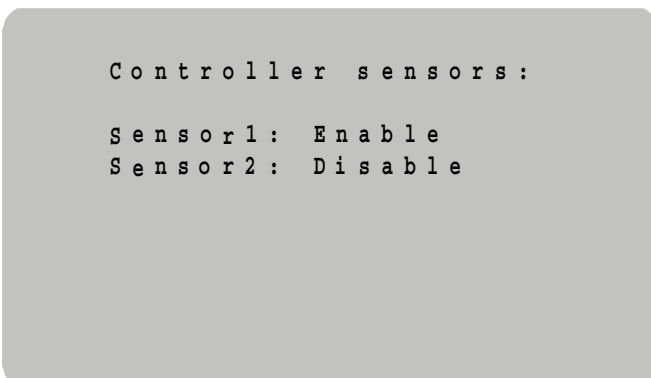
- **Clear Passwords** – clears any password set for Engineer and User Set-up menus. This is used when passwords have been forgotten.
- **Reset NVM to Defaults** – this resets all the Non-volatile memory (NVM) user configurable settings to manufactured defaults, to return the unit to a known predictable behaviour. In case you still experience unpredictable results see trouble shooting section at rear of manual.
- **Clear Event Log** – Clears the event log. The event log is a list of noteworthy events, so reasons for certain actions can be deduced. Clearing it, deletes such history.

- **Run Diagnostics** – Simply runs a sequence of simple tests to ensure the main functional systems are working. It is not exhaustive but may give a hint as to why it is not working as expected. On completion press **ESC** button to return to main menu.
- **Adjust Display Position** – The On Screen Display text has been positioned for optimal viewing on most monitors, however in the event your monitor crops the text on either edge and has no features to adjust it, you may adjust it here.



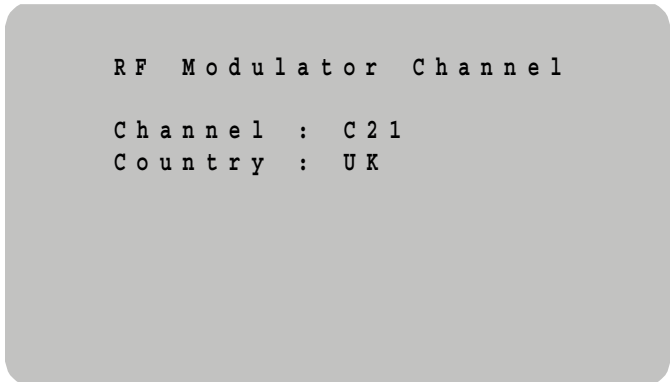
Use **↑**, **↓**, **←** and **→** buttons to move the text about. The blocks ■ in the corners marks the extent of the text. If you still cannot view all blocks refer to monitor instructions on how to adjust vertical and horizontal extent. Failing that, either connect a better monitor, or adjust so you can see the top blocks, as most of the information is displayed here.

- **Setup Light Controllers** – This dialogue is to set up what controller has a daylight sensor attached.



Use **↑** & **↓** buttons to select controller, and **←** & **→** or **↵** keys to enable or disable the sensors. Press **ESC** to exit dialogue. Note, if no sensor is fitted then daylight control will not be possible. If a sensor is enabled on a controller which has no sensor fitted, then the default setting on the controller is used, and no day light control will be possible.

- **Setup RF Modulator** – This dialogue is to set up any RF modulator which may be attached for distributed UHF. Useful for mixing into TV signals for distribution in domestic premises. This dialogue is only relevant if an Opti-Cam RF modulator is fitted.



Use **↑** & **↓** buttons to select item, and **←** & **→** buttons to change settings. Press **ESC** to exit dialogue. The channel can be altered between C21 to C69. The country setting controls how the modulator is configured for the appropriate country.

- **Arm Level** – this allows the observation system to be controlled by a security panel using their 'SET' feature. Communicating panels or panels with programmable outputs which can be programmed to output 'SET' conditions while the panel is SET are preferred. Their respective SET output and GND outputs should be connected to +ARM and GND on the main units connector block, if the user wishes to be able to put the system into OUT mode when the Alarm panel is set. HIGH – Logic level >1.6V to 16V LOW – Logic level 0V to 0.6V Select the Arm logic level (Low or High) by using the **←** & **→** buttons.
- **Language – English** – Select language (if available) by using the **←** & **→** buttons. English is displayed by default.
- **Exit Setup** – This exits the commissioning menu. The only way to return is to repeat the entry mode described above.

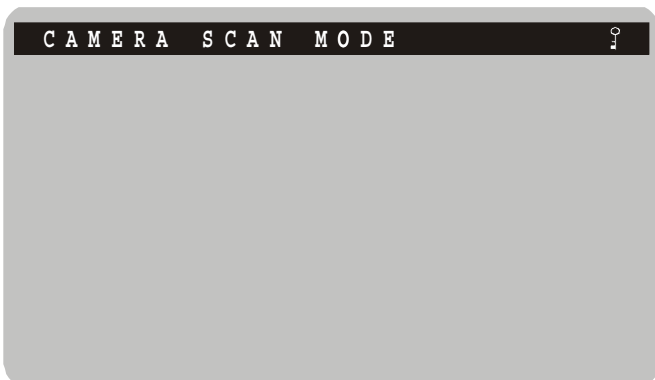
ENG. - (Engineer Setup menu)

This menu allows the user access to more advanced features and should only be changed by the system administrator / manager. These functions are only required if the system requires fine tuning.

Function

Select required dialogue for more advanced user or engineer options:—

- **CAMERA** – allows you to define the personality of each camera connected on a per camera basis.
- **SCAN** – allows you to define lists for automatic and manual sequencing.
- **MODE** – allows modes of operation to be defined.
- **🔑** – allows you to change the engineer password.



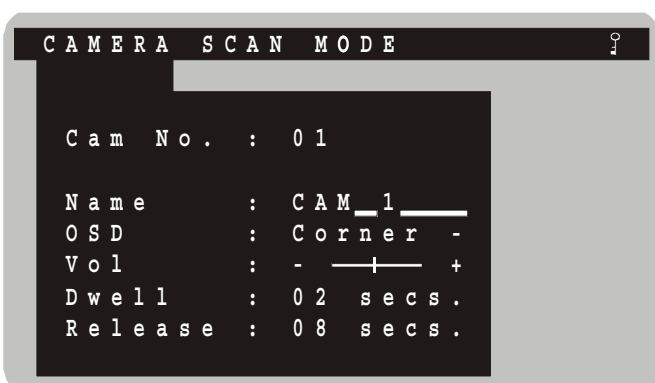
CAMERA

Editing

Use ← & → buttons to highlight menu option, ↵ to select, and ESC to return to user menu.

Function

Allows the personality of each camera to be edited.



Editing

Use ← & → buttons to navigate, and ↑ & ↓ buttons to alter fields. Use Cam 1 button to move to next camera, and ↵ or ESC to exit you from the dialog.

- **CAMERA** – Using ↑ & ↓ buttons selects the camera channel of interest. This is so you can see which camera is pointing at what so you can give it a suitable **NAME** (optional), **OSD** position, **VOLUME** level, **DWELL** and **RELEASE** times.
- **NAME** – Use ↑ & ↓ buttons to cycle through the numbers, symbols and letter of the alphabet. Cam 3 toggles case, Cam 4 and Cam 8 buttons page up and down through character set.

- **OSD** (On Screen Display) – Use ↑ & ↓ buttons to cycle through the OSD modes available. This controls where the camera, date, time and current operating mode is displayed on the screen. **B** or - allow the background setting to be changed. This simply toggles between ' - ' for transparent background and ' **B** ' black background for the text.
- **VOL** – A simple slider, ↓ down to reduce volume, and ↑ to increase volume.
- **DWELL** – Sets in seconds how long it stays on a camera before switching to the next camera. Used when in **Scan mode** or **IN** and **OUT** modes when multiple cameras have been triggered.
- **RELEASE** – Sets in seconds how long a triggered camera stays in the triggered camera list.

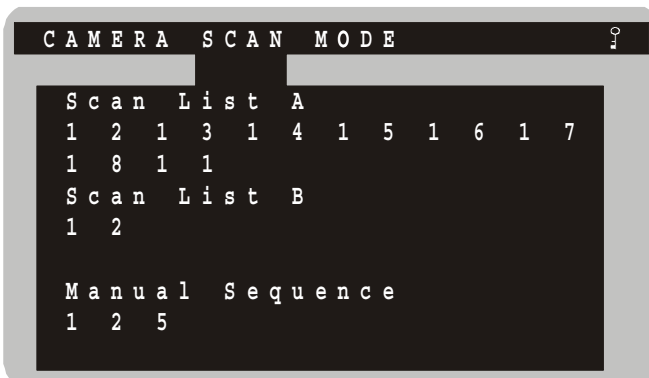
SCAN

Function

Two scan list options are available to accommodate different circumstances, such as monitoring Exit and Entry points or monitoring the workplace.

Any camera can be put in the list as many times as you like so you can keep returning to a high priority camera more frequently. Up to 24 camera numbers can be put into a list.

- **Scan List A** – is a sequence of cameras the system will automatically sequence through when in Scan mode and scan list A is selected.
- **Scan List B** – is a sequence of cameras the system will automatically sequence through when in Scan mode and scan list B is selected.
- **Manual Sequence** – is a sequence the system will follow when the manual button is repeatedly pressed.



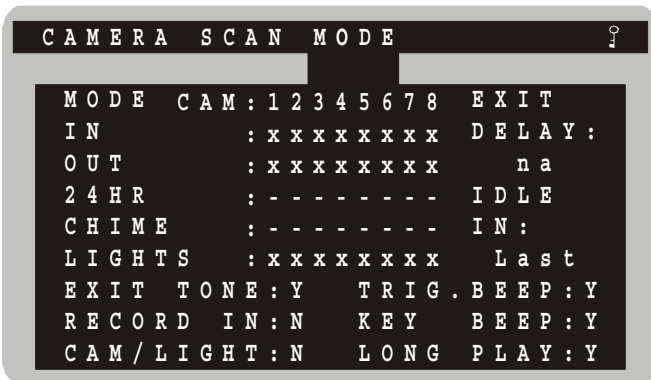
Editing

Use ↑, ↓, ← and → buttons to navigate these sequences. Pressing ↵ allows you to start editing the sequence from the highlighted camera number onwards. Use the camera select buttons 1..8 to directly enter the camera sequence. When you have entered the sequence press ↵ to finish the sequence at that point in the list (if more cameras follow the one highlighted, they will be deleted), or press ESC to make no more changes and leave intact any further cameras which follow.

MODE

Function

This allows the assignment of cameras to the various modes, **IN** and **OUT**. Also **24HR** points can be set which will always causes a record event regardless of operating mode. **CHIME** points can be set on cameras covering doorways.

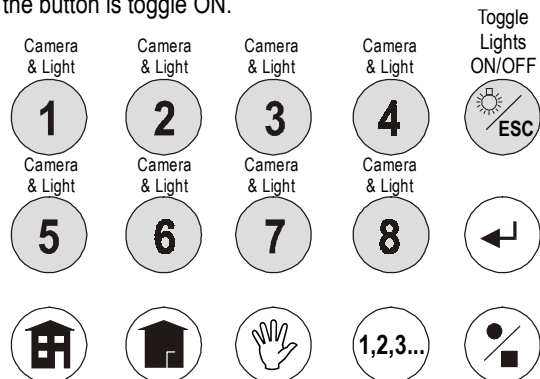


Editing

Use **↑**, **↓**, **←** and **→** buttons to move between fields, to toggle tick boxes to enter into edit mode when over a numeric field such as the exit delay.

- IN** – A 'X' under the respective camera number includes that camera in the **IN** mode. When in **IN** mode, any of these cameras which are subsequently triggered will cause that camera to be automatically selected and recorded. If multiple cameras are triggered, then the system will cycle through all those cameras until they have been in the triggered list for their prescribed release time, defined in the camera dialog.
- OUT** – A 'X' under the respective camera includes that camera in the **OUT** mode. When in **OUT** mode, any of these cameras which are subsequently triggered will cause that camera to be automatically selected and recorded. If multiple cameras are triggered, then the system will cycle through all those cameras until they have been in the triggered list for their prescribed release time, defined in the camera dialog.
- 24HR** – A 'X' here signifies what cameras generate a record event irrespective of mode. This is useful if you wish to guard areas which are out of bounds to anyone, like hazard areas, dangerous/hazardous material storage etc.
- CHIME** – A 'X' here causes that camera to generate a chime. This allows you to be selective about the points you wish to make a sound. Useful for alerting your attention to people entering restricted areas, or door entry points. It may be useful to note, that these points are obeyed even if no camera exists. You may just want a door contact or movement sensor connected to points listed here.
- LIGHTS** – A 'X' here will simply activate lights assigned to camera inputs without necessarily generating a record event, e.g. by including it under the **IN**, **OUT** or **24HR** lists. In other words, you may just want to wire a PIR up to activate a selection of lights. A simple mechanical switch could also be wired across the PIR input to keep the selected lights on (i.e. a low voltage manual override switch, useful for wiring into outdoor situations where expensive weatherproof high voltage switches would otherwise be needed).
- EXIT TONE** – Tick 'Y' for yes, if you want it to beep at you when you exit. Exiting is invoked by pressing the button.

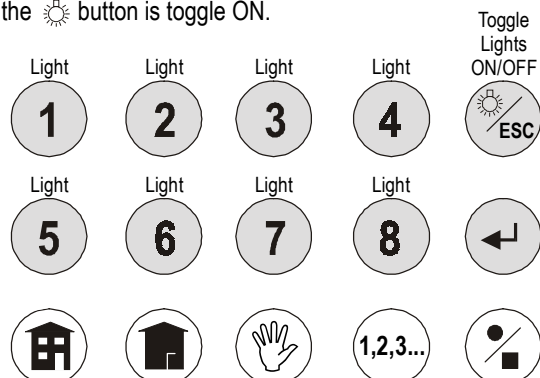
- RECORD IN** – Tick 'Y' for yes, if you want the system to record triggered cameras in the **IN** mode. This then behaves like the **OUT** mode but without exit delay. Tick 'N' for no, if you wish the system to simply switch to triggered cameras without recording.
- CAM/LIGHT** – Tick 'Y' for yes, if you require to manually switch the associated camera light/s **ON** and **OFF** via the remote keypad. This will also depend upon how you have associated the cameras and lights in the **LIGHTS** option. The keypad button options will then be as shown below when the button is toggle **ON**.



Note : The light button acts as a shift key and will only stay active for 5 seconds at a time.

Tick 'N' for no, if you wish the button numbers to directly correspond to the light number.

The keypad button options will then be as shown below when the button is toggle **ON**.



- TRIG. BEEP** – Tick 'Y' for yes if you wish cameras enabled for the currently selected mode to generate a beep. Cameras not generating a record event because they were not listed do not generate a Bleep.
- KEY BEEP** – Tick 'Y' for yes if you wish audio facility at the keypad. These include different tones for different functions.
- LONG PLAY** – This applies to the Video Tape Recorder (VCR), and if ticked 'Y' for yes, will set the VCR to record in Long play. i.e. an E240 tape will record 8 hours of video and audio. If ticked 'N' for no, then standard record times apply, i.e. an E240 will last 4 hours, but will give better record quality. **IMPORTANT -The VCR will not obey this setting if a tape is not in the machine.** Refer to the VCRs display to ensure it matches your requirements. If it gets out of step, insert a tape, then switch the machine off, wait 3 seconds and switch back on.

- **EXIT DELAY** (Top Right-hand side of menu) – Press **←** to go into edit mode.
The exit delay time is in minutes and seconds.
Once in edit mode, use the **↑** & **↓** buttons to adjust the time in 10 second intervals. Use the **←** & **→** buttons to adjust in 1 minute intervals up to a maximum time of 30 minutes. If set to 'na', then manual setting of the system to OUT mode will take just 10 seconds.
If set to OUT mode remotely by an intruder alarm panel, then the effect is immediate. Otherwise manual and remote setting obeys the exit time.
Timer set is always immediate and silent.
- **IDLE IN** – Controls how the system behaves in the IN mode, when no cameras have been triggered.
Press **←** to go into edit mode, then use **↑** & **↓** buttons to select the desired option as defined in the table below. Press again to accept change, or **ESC** to abort change.

Now enter a 'New' code and repeat the same code for the 'Confirm'. This ensures you don't accidentally mistype a code, then not know what code to unlock the system.
If no user code is wanted, simply press **←** for both 'New' and 'Confirm'.

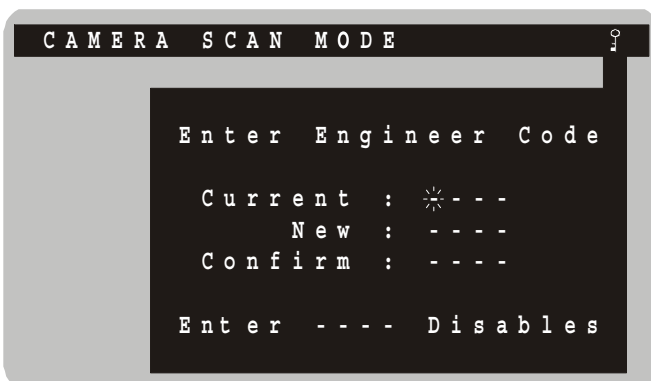
IDLE IN options

Option	Operation during idle state
Cam 1	Return to camera 1
Cam 2	Return to camera 2
Cam 3	Return to camera 3
Cam 4	Return to camera 4
Cam 5	Return to camera 5
Cam 6	Return to camera 6
Cam 7	Return to camera 7
Cam 8	Return to camera 8
Blank	Display blank screen (with time and date)
Check	Rapid scan mode to check for missing cameras. Useful when recording in the IN mode for fully autonomous checking. This option is the same as that used in OUT mode.
Last	Stay on last camera triggered. Useful for following movement.

Engineer Password

Function

This allows the Engineer to enter a password to keep other users out of the Engineer set-up menu.
The default password is blank and unless changed using this function will not be requested by the system.



Editing

To enter a code simply type in 4 digits (1..8 for each digit using the camera select buttons) then press **←**.
You are required to type in the 'Current' code before assigning a new one. If no code currently exists, then simply press **←**.

TROUBLE SHOOTING GUIDE

This trouble shooting guide is broken down into hardware related problems to help you identify your problem and give suitable remedies.

If the fault is not listed check that your application is within specifications detailed at the front of this manual.

If all else fails then get in touch with your equipment supplier.

Problem	Remedy
Lights don't operate when movement sensors are triggered.	<ol style="list-style-type: none"> 1. First ensure PIRs are functioning. One trick is to set all PIRs you want to test as Chime points (Eng.Menu- Mode dialog). That way the system will beep when the PIR is activated. If it doesn't refer to '<i>Installing Cameras in Installation section</i>'. 2. Next ensure the lights you want activating are assigned to the camera (User Menu. Lights dialog). 3. Ensure if a value other than na (Not Applicable) is set for the light in the LEV column, then the light will only come on automatically when the light sensor senses a level below that set. If is set to na then the light is turned ON.
Lights come on during day light hours.	<ol style="list-style-type: none"> 1. Has a daylight sensor been fitted. This is an LDR in a little plastic dome which should be fitted on the roof. 2. Has System been correctly informed of which controller has the sensor. See commissioning menu for Light Controller set-up
Manual control of lights doesn't seem to work as expected.	<ol style="list-style-type: none"> 1. You may have the CAM/LIGHT association set to 'Y' in the MODE dialogue under the Engineering menu. That means lights will operate in accordance with the light and camera association defined in the LIGHTS dialogue under the User menu. If you want button 1 to operate light 1 and button 2 to operate light 2, ensure CAM/LIGHT is set to 'N'.
One or more lights don't operate at all.	<ol style="list-style-type: none"> 1. Check the fuses in the Lighting Controller. 2. Check the mains LED status in the lighting controller. (This should only be done by a qualified electrician as it exposes live parts). If the LED is off, then the power to the lighting controller has been interrupted, so check isolation switch / fuse.
No lights come on, and the LED status in the Lighting controller remains unchanged when lights are being requested to turn on/off.	<ol style="list-style-type: none"> 1. Ensure correct continuity in the wires connecting Opti-Cam and the Lighting controller. The cable resistance should not exceed 10Ω.

General

Problem	Remedy
No Picture on monitor	<ol style="list-style-type: none"> 1. Check System is switched ON. The display on the front should have some text/numbers on it, if it is on. 2. Ensure monitor is ON. Refer to its manual if in doubt. 3. Ensure correct leads connect between video out of Equipment to video in on monitor. 4. Ensure correct AV channel is selected on your TV / monitor.
Low volume on Cameras	<ol style="list-style-type: none"> 1. Use volume control in the Camera dialogue located under Engineering menu to adjust volume setting for each camera. 2. Check monitor / TV volume setting.
On Screen Text is being sheered at the top of the screen.	<ol style="list-style-type: none"> 1. You may have a problem with the length of cable. The video signal must be connected with low capacitance screened cable up to no further than 150m from Opti-Cam to the Camera. If the cable run is less than this, then check screen cable has been used. The camera cable supplied with the camera is of the correct type. 2. If the cable type and length is correct, and the problem does not occur on all cameras, then the camera may be faulty. As a work around, the OSD time and date may be moved to a different area of the screen, where it is not affected, and menus accessed while on a camera which doesn't give this problem.
The picture becomes very grainy in low light.	<ol style="list-style-type: none"> 1. Chloride Safety Systems black and white cameras work down to 0.1 lux. This is very dark, but in total darkness additional lighting is required. Our lighting controller can be used to provide automatic lighting when PIRs are activated.

PIRs

Problem	Remedy
PIRs don't seem to be working	<ol style="list-style-type: none"> 1. Set all cameras to CHIME and then walk in line of sight of each camera PIR and listen for chime. If it doesn't then they are not working. 2. If not working check wiring diagram. 3. If they are working, ensure you have them enabled in the respective IN, OUT, 24HR, CHIME and LIGHTS modes under the MODE dialogue located in the Engineer Menu.
PIR(s) seem only to trigger when a loud noise occurs.	<ol style="list-style-type: none"> 1. The microphone output from the camera has been connected to the PIR input into Opti-Cam. No damage should have arisen from this, but it is not recommended because the trigger levels cannot be guaranteed.

APPENDIX A

Observation Kit (8EP364)

This listed the components supplied in this kit :

CSS Part No.	Description
6EP366	System Control unit
6EP365	System Remote Keypad (Wired)
2PT126	Accessory Connector
2PT167	Twin Phono Plug to Phono Plug Lead 1.5m
2PT166	SCART Audio/Video IN to Phono Adapter
2PT165	BNC to Phono Adapter
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System Accessories

These are not supplied with the system kit but should be considered for system building or expansion

Compatible Cameras for use with The system

CSS Part No.	Description
OPT520	Internal/External black/white camera, 52° viewing
OPT900	Internal/External black/white camera, 90° viewing
OPT780	Internal/External black/white camera, 78° viewing
OPT780C	Internal/External colour camera, 78° viewing
OPT900/w	Internal/External black/white camera, 90° viewing
OPT520/w	Internal/External black/white camera, 52° viewing
OPT780/w	Internal/External black/white camera, 78° viewing
OPT780C/w	Internal/External colour camera, 78° viewing
ATC82	External black/white, 78° Vandal resistant
ATC80	78° Vandal resistant camera

All cameras come with a 15m cable with prepared end and 6pin Mini DIN plug (ATC31)

Additional PIRs

ADE/CSS Part No.	Description
ATC81	Additional vandal resistant PIR

Any PIR which has a normally open relay contact and can run off 12V can be used with the system.

Cables

CSS Part No.	Description
ATC13	15m camera extension (6pin Mini DIN male to female)
ATC14	25m camera extension (6pin Mini DIN male to female)
ATC15	50m camera extension (6pin Mini DIN male to female)
ATC31	15m camera cable with prepared end and 6pin Mini DIN male plug.
ATC43	100m cable drum (black). Ends are not prepared

OBSERVATION LOG BOOK

Installed By


.....

Date Commissioned

.....

User Set-up Log

TIMERS	TIME	FUNCTION	DAY (Mark with an 'x' as appropriate)						
			MON	TUE	WED	THU	FRI	SAT	SUN
1	:								
2	:								
3	:								
4	:								
5	:								
6	:								
7	:								
8	:								
9	:								
10	:								
11	:								
12	:								
13	:								
14	:								
15	:								
16	:								
17	:								
18	:								
19	:								
20	:								
21	:								
22	:								
23	:								
24	:								
25	:								
26	:								
27	:								
28	:								
29	:								
30	:								
31	:								
32	:								

LIGHTS	CAMERA (Mark with an 'x' as appropriate)								EXIT	LEVEL	
	1	2	3	4	5	6	7	8			
1											
2											
3											
4											
5											
6											
7											
8											

CAMERA												MODE						
CAM. NO.	NAME											DWELL	RELEASE	IN	OUT	24HR	CHIME	LIGHTS
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		

SCAN	SEQUENCE (Enter camera number(s) in the order you wish them to appear)																							
SCAN TYPE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
SCAN LIST A																								
SCAN LIST B																								
MANUAL SEQ.																								