

# C-AllView

Ruggedised PTZ Camera

# Installation Manual



**GAMZ**<sup>®</sup>

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## Introduction

The Camera unit is designed with harsh and difficult environments in mind and to provide enhanced features over a normal speed dome camera.

These added benefits are:

- Flat toughened glass window – scratch resistant, maintenance-free and optically correct
- Integral Wiper – to clean away rain and deposits caused by wind, sea spray and road traffic
- Hard anodised aluminium castings, with optional powder coating to prevent corrosion in the harshest of marine environments
- M4 marine grade stainless steel case fastenings
- Optional Washer System
- Optional Infra Red Led illumination system
- Day night switching by external contact closure (optional alarm interface)
- Multiple native protocols - coaxial and RS485
- Optional RS485 alarm interfaces

## Safety Warning



**Installation of this product should only be carried out by a competent and suitably qualified engineer. If you are in doubt, you should refer the installation to a suitably qualified person.**

## Packing List

Included in the Rugged Camera kit:

- 1x Camera unit & Power-Supply
- 1x 4"/101.6mm PCD adaptor & mounting bolts to Camera Unit
- 1x 10m composite cable and IP67 connector
- 1x Installer Manual

### Parts not included:

Mounting hardware – e.g. nuts and bolts for 4" PCD adaptor to tower / bracket

Washer Nozzle & Bracket

Washer pump & Hose

Infra Red Lamps

## Disclaimer

The manufacturer reserves the right to change specifications and procedures integral to the operation, control and programming of this product at any time and without prior notice.

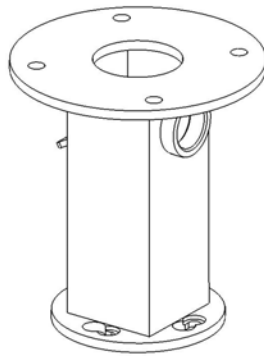
This manual relates to firmware version 0.2.6

## Mounting

The Camera unit is designed to be mounted upright or inverted. By the nature of its manufacture, it is a heavy item, thus it requires a substantial and stable mounting. Each Camera unit is supplied with a 4" (101.6mm) PCD mounting adaptor to allow mounting to industry standard brackets, tower and columns.

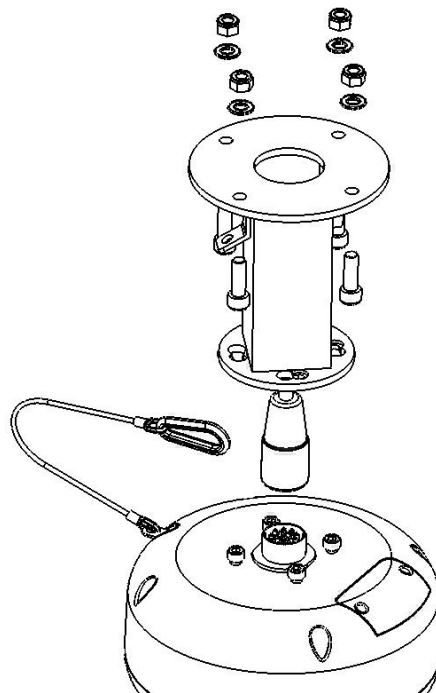
The adaptor has two cable entry points:

1. A pass-through hole in the plate to allow cabling through a column or tube type mounting.
2. A M25 conduit thread in the side wall to permit flexible conduit to be connected to the adaptor.




**Figure 1**

This adaptor should have the composite cable threaded through it before it is mounted to the column or bracket. The cable should be dressed such that approx 25~35mm of the weatherproof connector is protruding out of the smaller plate that connects to the Camera unit.




**Figure 2**

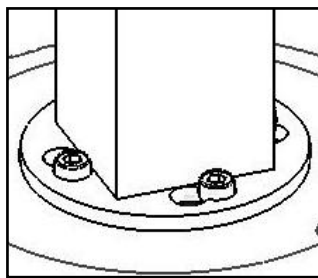
The 4" (101.6mm) PCD plate should then be mounted to bracket or tower using M8 bolts, washers and Ny-Loc type nuts.

 It is important that this type of nut is used to prevent injury should the bolts work loose in operation, due to vibration.

A stainless steel wire lanyard and clip is provided as a safety measure should any of the bolts that hold the body of the Camera unit to the adaptor bracket work loose.

 Always use the lanyard to support the Camera unit during installation and ensure that it is connected and in use when the Camera unit mounting is complete.

Insert the connector into the socket on the Camera unit, and screw home the retaining ring.



Push the connector back into the adaptor bracket and align the allen head bolts with the keyhole slots.

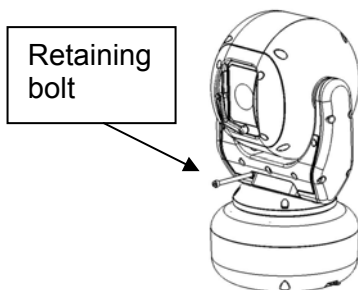
Push the heads through the keyholes and turn the Camera unit body so that the bolt heads drop into their respective receptacles. The bolts should then be tightened to approx 1.6Kg/m.

 Do not over tighten bolts

Figure 3


## Offset Mounting

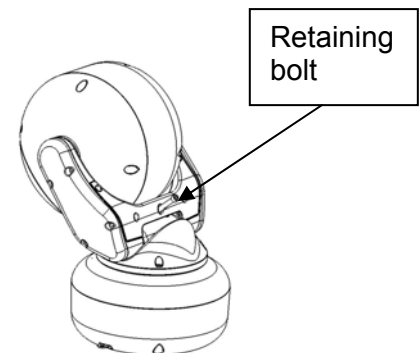
When mounting upright, an offset can be added to allow the camera field of view to clear the pan motor section of the housing.



Unscrew and withdraw the M5 socket head retaining bolt from the middle of the front of the yoke.

Tip the tilt housing and yoke assembly forward. Re-insert the bolt from the rear and screw home. The Torque figure is approx 0.97Kg/m

 Do not over tighten the bolt



## Power Supply

The Camera unit can accept a wide range of power supply input voltages. The applicable range is 20-36Vdc or 14-26Vac. It draws 15W peak and 5W when idle. This however does not take account of any optional heating or cooling devices in the Camera unit, nor optional IR lighting systems.

The RCPS1 Camera unit power supply is capable of providing sufficient current to run the Camera unit and a 24VAC washer pump (Typical example Dennard WW5 or WW25). This supply also has built-in transient suppression and individually fused outputs for the Camera and Washer units, as well as spark-gap protection for video and data connections. Each output fuse has positive indication of failure, so a blown fuse is instantly identified.

**The RCPS1 pcb layout is shown below in Figure 4.**

The pcb has a number of connector strips for terminations in and out of the camera plus power output terminals and a ground lug.

## Camera unit Composite Cable ~ RCPS1 connections

Connections for the Camera unit Composite cable should be made to the terminals as follows:

URM70 Video:

Connect the centre core to the terminal marked **"VIDEO"**

Connect the screen to the terminal marked **"GND"**

Power:

Connect the **Red** 20AWG cable to the terminal marked **PTZ 1P**

Connect the **Black** 20AWG cable to the terminal marked **PTZ 1N**

Washer:

Connect one **White** 20AWG cable to the upper terminal marked **AUX1**

Connect the other **White** 20AWG cable to the upper terminal marked **AUX2**

RS485 data:

Connect the **Yellow** 26AWG cable to the upper terminal marked **DATA 5**

Connect the **Blue** 26AWG cable to the upper terminal marked **DATA 6**

Earth:

Connect the **Green/Yellow** cable to the Earth stud adjacent to the **BNC output socket**.

The IR Lamp and Ethernet terminals are reserved for future use.

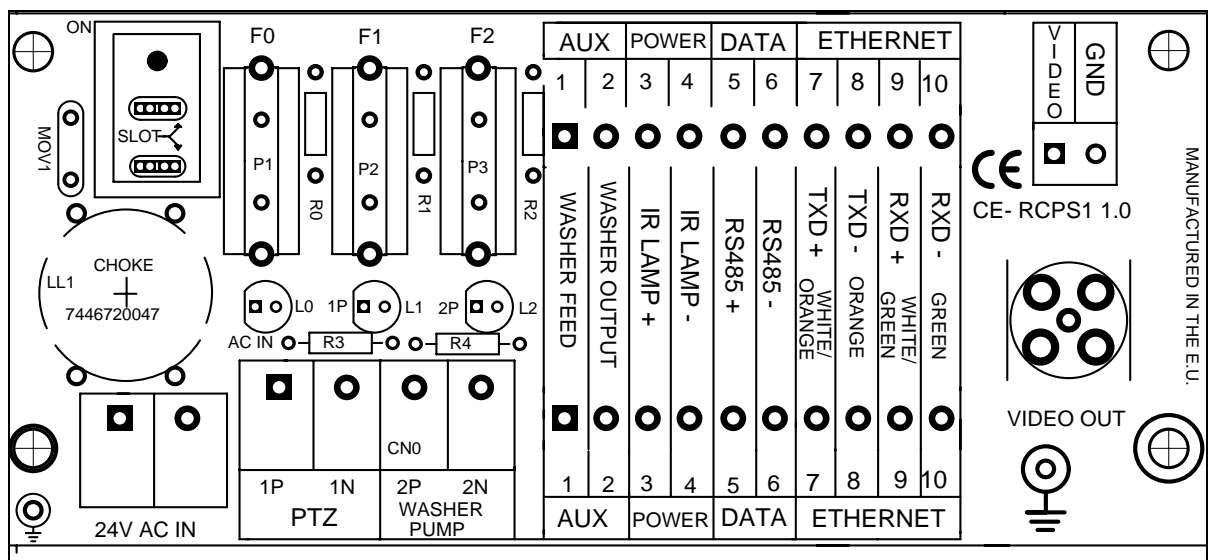


Figure 4

## RCPS1 System Side Connections

Video:

The Video output from the RCPS1 and Camera unit is available on the pcb mounted BNC socket. Connect the coaxial cable back to the monitor / matrix or DVR to this socket. If the Camera unit and control system are configured to use coax based telemetry, it will pass through this connector.

Data:

Connect **RS485A** (RS485+) to the lower terminal marked **DATA 5**


Connect **RS485B** (RS485-) to the lower terminal marked **DATA 6**


Power:

Connect 240VAC Live the to the mains input marked L

Connect 240VAC Neutral the to the mains input marked N

Connect 240VAC Earth the to the mains input marked E

 The supplier installed mains input cable to the RCPS1 should have an isolator fitted and be fused according to its gauge and local electrical regulations.

 Failure to observe such regulations may result in injury or death

## Telemetry Control

The Camera unit is designed to be added to any telemetry controlled system by providing compatibility to a number of industry standard control protocols. This can be done by directly using the on-board protocols or by adding a third party protocol converter to interface between an incompatible control protocol and one of the on-board protocols.

Telemetry control is by RS485 or Co-axial video telemetry.

Due to the limitations or software changes of the some of the protocols, it is not always possible to implement all of the features of the Camera unit with the Original Manufacturers protocol, thus some features on a manufacturers keyboard, may limit the way the Camera unit can operate.

Using RS485 based telemetry camera addresses are limited to 127 addresses.

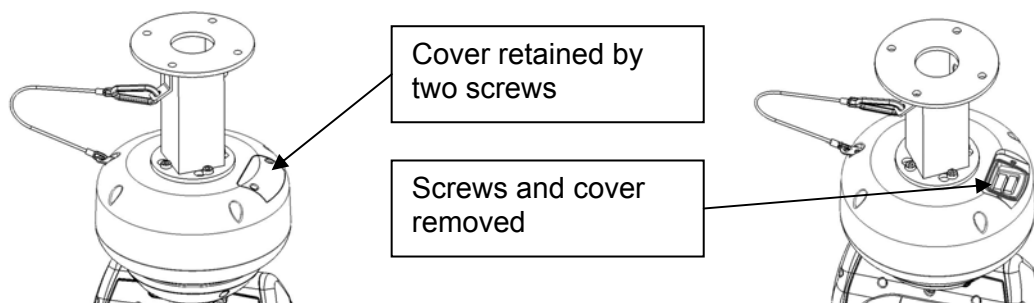
## On-Board Protocols

The Camera unit has the following on board protocols:

- American Dynamics / Sensormatic RS422 (uni-directional only)
- BBV Coaxial Telemetry
- CBC C-Dome RS485
- DeView [VTC]
- Kalatel DP
- Overview RS485
- Pelco Co-Axitron
- Pelco D 2400 baud
- Pelco P 4800 baud
- Pelco P 9600baud

## DIL Switches

All addressing and protocol selection is set by 2 banks of 8way DIL switches located on the main body of the housing, underneath a removable weatherproof cover.



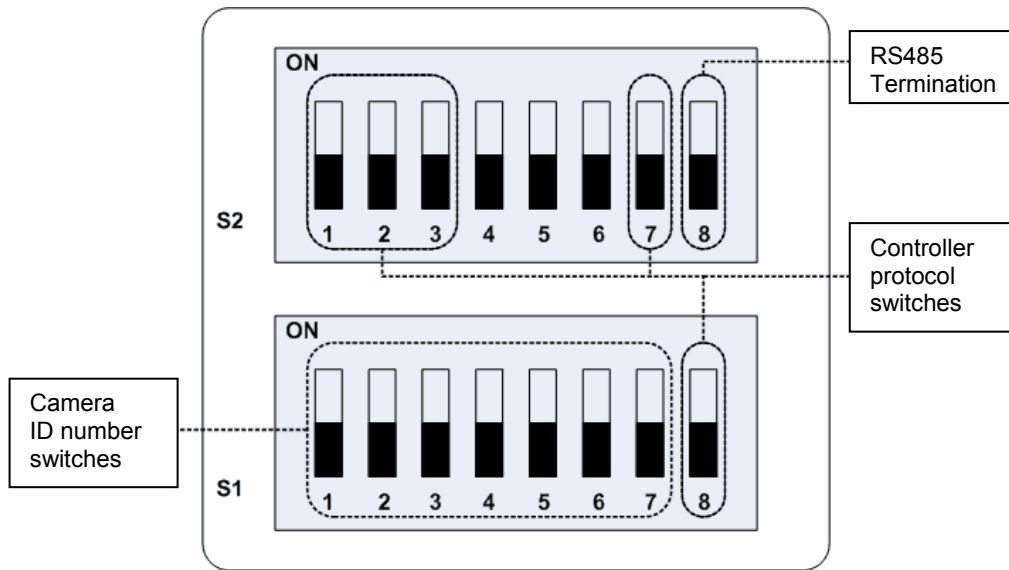


Figure 5

### Protocol Settings

The Protocol selection is made on Switches S1-8, S2-1, S2-2, S2-3 and S2-7

The protocol selection is defined by the following table.

Coax based protocols do not use the RS485 address, so this can be left in the Address 0 state.

Description	Protocol No.	S1-8	S2-1	S2-2	S2-3	S2-7
Dennard/ Overview RS485	0	Off	Off	Off	Off	Off
Pelco P 9600	1	On	Off	Off	Off	Off
Pelco P 4800	2	Off	On	Off	Off	Off
Kalatel DP	5	On	Off	On	Off	Off
Sensormatic RS422	6	Off	On	On	Off	Off
VTC / DeView RS485	9	On	Off	Off	On	Off
Pelco D 2400	10	Off	On	Off	On	Off
CBC C-dome RS485	12	Off	Off	On	On	Off
Pelco Coaxitron	24	Off	Off	Off	On	On
BBV coax	31	On	On	On	On	On

Figure 6

### RS485 Address Settings

RS485 address settings are set by S1-1 to S1-7 and provide binary addresses to a camera id of 127.

S2-8 is for termination of the RS485 bus. Set to **ON** to enable termination at the camera.

The camera addressing is defined as below (a "-" indicates switch in **OFF** position):

Address	S1-1	S1-2	S1-3	S1-4	S1-5	S1-6	S1-7	Address	S1-1	S1-2	S1-3	S1-4	S1-5	S1-6	S1-7
0	-	-	-	-	-	-	-	64	-	-	-	-	-	-	ON
1	ON	-	-	-	-	-	-	65	ON	-	-	-	-	-	ON
2	-	ON	-	-	-	-	-	66	-	ON	-	-	-	-	ON
3	ON	ON	-	-	-	-	-	67	ON	ON	-	-	-	-	ON
4	-	-	ON	-	-	-	-	68	-	-	ON	-	-	-	ON
5	ON	-	ON	-	-	-	-	69	ON	-	ON	-	-	-	ON

6	-	ON	ON	-	-	-	-	70	-	ON	ON	-	-	-	ON
7	ON	ON	ON	-	-	-	-	71	ON	ON	ON	-	-	-	ON
8	-	-	-	ON	-	-	-	72	-	-	-	ON	-	-	ON
9	ON	-	-	ON	-	-	-	73	ON	-	-	ON	-	-	ON
10	-	ON	-	ON	-	-	-	74	-	ON	-	ON	-	-	ON
11	ON	ON	-	ON	-	-	-	75	ON	ON	-	ON	-	-	ON
12	-	-	ON	ON	-	-	-	76	-	-	ON	ON	-	-	ON
13	ON	-	ON	ON	-	-	-	77	ON	-	ON	ON	-	-	ON
14	-	ON	ON	ON	-	-	-	78	-	ON	ON	ON	-	-	ON
15	ON	ON	ON	ON	-	-	-	79	ON	ON	ON	ON	-	-	ON
16	-	-	-	-	ON	-	-	80	-	-	-	-	ON	-	ON
17	ON	-	-	-	ON	-	-	81	ON	-	-	-	ON	-	ON
18	-	ON	-	-	ON	-	-	82	-	ON	-	-	ON	-	ON
19	ON	ON	-	-	ON	-	-	83	ON	ON	-	-	ON	-	ON
20	-	-	ON	-	ON	-	-	84	-	-	ON	-	ON	-	ON
21	ON	-	ON	-	ON	-	-	85	ON	-	ON	-	ON	-	ON
22	-	ON	ON	-	ON	-	-	86	-	ON	ON	-	ON	-	ON
23	ON	ON	ON	-	ON	-	-	87	ON	ON	ON	-	ON	-	ON
24	-	-	-	ON	ON	-	-	88	-	-	-	ON	ON	-	ON
25	ON	-	-	ON	ON	-	-	89	ON	-	-	ON	ON	-	ON
26	-	ON	-	ON	ON	-	-	90	-	ON	-	ON	ON	-	ON
27	ON	ON	-	ON	ON	-	-	91	ON	ON	-	ON	ON	-	ON
28	-	-	ON	ON	ON	-	-	92	-	-	ON	ON	ON	-	ON
29	ON	-	ON	ON	ON	-	-	93	ON	-	ON	ON	ON	-	ON
30	-	ON	ON	ON	ON	-	-	94	-	ON	ON	ON	ON	-	ON
31	ON	ON	ON	ON	ON	-	-	95	ON	ON	ON	ON	ON	-	ON
32	-	-	-	-	-	ON	-	96	-	-	-	-	-	ON	ON
33	ON	-	-	-	-	ON	-	97	ON	-	-	-	-	ON	ON
34	-	ON	-	-	-	ON	-	98	-	ON	-	-	-	ON	ON
35	ON	ON	-	-	-	ON	-	99	ON	ON	-	-	-	ON	ON
36	-	-	ON	-	-	ON	-	100	-	-	ON	-	-	ON	ON
37	ON	-	ON	-	-	ON	-	101	ON	-	ON	-	-	ON	ON
38	-	ON	ON	-	-	ON	-	102	-	ON	ON	-	-	ON	ON
39	ON	ON	ON	-	-	ON	-	103	ON	ON	ON	-	-	ON	ON
40	-	-	-	ON	-	ON	-	104	-	-	-	ON	-	ON	ON
41	ON	-	-	ON	-	ON	-	105	ON	-	-	ON	-	ON	ON
42	-	ON	-	ON	-	ON	-	106	-	ON	-	ON	-	ON	ON
43	ON	ON	-	ON	-	ON	-	107	ON	ON	-	ON	-	ON	ON
44	-	-	ON	ON	-	ON	-	108	-	-	ON	ON	-	ON	ON
45	ON	-	ON	ON	-	ON	-	109	ON	-	ON	ON	-	ON	ON
46	-	ON	ON	ON	-	ON	-	110	-	ON	ON	ON	-	ON	ON
47	ON	ON	ON	ON	-	ON	-	111	ON	ON	ON	ON	-	ON	ON
48	-	-	-	-	ON	ON	-	112	-	-	-	-	ON	ON	ON
49	ON	-	-	-	ON	ON	-	113	ON	-	-	-	ON	ON	ON
50	-	ON	-	-	ON	ON	-	114	-	ON	-	-	ON	ON	ON
51	ON	ON	-	-	ON	ON	-	115	ON	ON	-	-	ON	ON	ON
52	-	-	ON	-	ON	ON	-	116	-	-	ON	-	ON	ON	ON
53	ON	-	ON	-	ON	ON	-	117	ON	-	ON	-	ON	ON	ON
54	-	ON	ON	-	ON	ON	-	118	-	ON	ON	-	ON	ON	ON
55	ON	ON	ON	-	ON	ON	-	119	ON	ON	ON	-	ON	ON	ON
56	-	-	-	ON	ON	ON	-	120	-	-	-	ON	ON	ON	ON
57	ON	-	-	ON	ON	ON	-	121	ON	-	-	ON	ON	ON	ON

58	-	ON	-	ON	ON	ON	-	122	-	ON	-	ON	ON	ON	ON
59	ON	ON	-	ON	ON	ON	-	123	ON	ON	-	ON	ON	ON	ON
60	-	-	ON	ON	ON	ON	-	124	-	-	ON	ON	ON	ON	ON
61	ON	-	ON	ON	ON	ON	-	125	ON	-	ON	ON	ON	ON	ON
62	-	ON	ON	ON	ON	ON	-	126	-	ON	ON	ON	ON	ON	ON
63	ON	ON	ON	ON	ON	ON	-	127	ON	ON	ON	ON	ON	ON	ON

Figure 7

## RS485 Termination

If the Camera unit is installed using a RS485 based control system, care needs to be taken to ensure the RS485 bus is terminated properly to prevent erratic operation. The maximum length of cable that be used on one cable section in 1.2Km. There is a maximum number of 32 devices that can reside on a cable section. All devices must be un-terminated, with the exception of the last unit which must have its RS485 termination set to **ON** (S2-8 ON)

CAT5 cable or any cable that meets or exceeds the requirements for EIA RS485 may be used for RS485 telemetry control

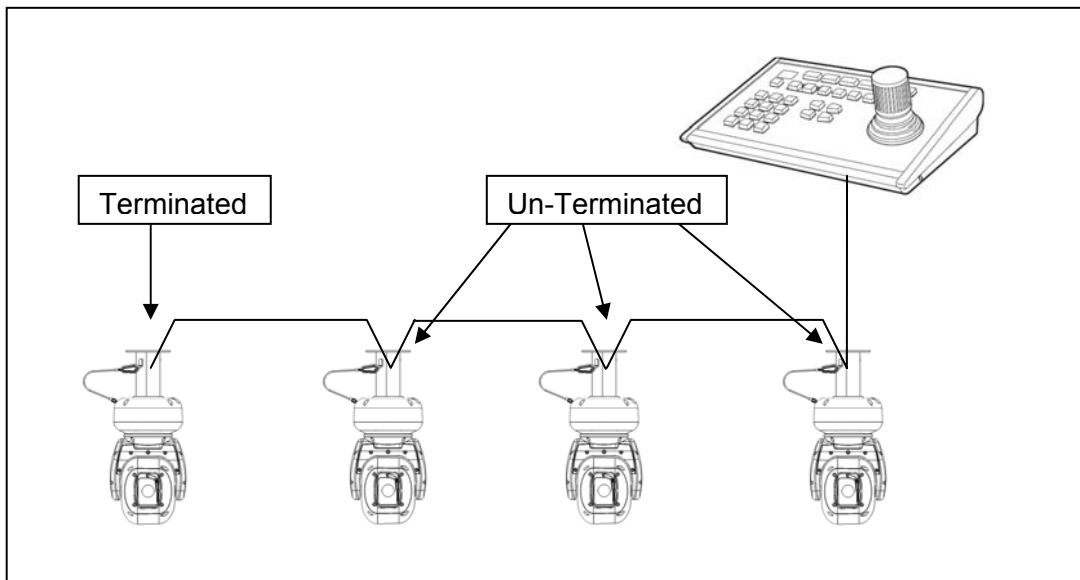


Figure 11

## Keyboard Operation

Where possible, manufacturer key sequences have been implemented to make the control of the camera unit as close as possible to the “normal” telemetry system implemented by the OEM manufacturer, i.e. presets and tours can be programmed and recalled in the same way from the manufacturers control system.

Where it has not been possible to implement all of the Camera unit features with a manufacturer’s protocol, the extra features can be accessed through the camera unit on-screen-menu.

**Note** – OE manufacturers may update software or protocols in their keyboards without prior warning, This may change the way in which the Camera unit behaves in relation to keyboard operation. The manufacturer accepts no responsibility for such changes in OE Manufacturer software/protocols.

## On Screen Menu Access

Using the following sequences, the Camera unit OSD menu can be accessed. The MENU sequence will open the OSD and the SELECT sequence will accept the current data displayed.

### Overview

Menu: Recall Preset 94  
Select: Recall Preset 1

### Pelco (All types)

Menu: Store preset 95  
Select: Iris Open or Recall Preset 1

### DeView

Menu: ENT (to open) / ESC (to exit)  
Select: ENT

### CBC C-Dome (RS485)

Menu: Recall Preset 95  
Select: Recall Preset 1

### American Dynamics / Sensormatic RS422

Menu: Recall / Store Preset 94  
Select: Recall Preset 0

### Kalatel

Menu: Recall / Store preset 64 or Menu  
Select: Recall Preset 0

### BBV TX400 (Coax)

Menu: Shift (or #) + 1  
Select: Recall Preset 1

### BBV TX1000

Menu: Shift + Wash  
Select: Recall Preset 1

### BBV TX1500

Menu: 1 then #  
Select: Recall Preset 1

### Dedicated Micros DS/BX range:

Menu: \* 8 8 9 10 10 2 or \*\* (depending on S/W version)  
Select: Recall Preset 1

# Menu Structure

## Camera On-Screen-Display



POSITION 1 TEXT  
A B C D E F G H I J K L M N O P Q R S T U V W X  
Y Z a b c d e f g h i j k l m n o p q r a t u v  
w x y z 0 1 2 3 4 5 6 7 8 9

In this guide the yellow border indicates the item is flashing

Selecting the arrow will take the user to the previous screen

This arrow deletes the last item selected by the user

This arrow confirms the item selection and returns the user to the appropriate menu

## Opening screen



Selecting **RUN** from the **MAIN MENU** allows a user to go to a pre-set position or start a tour. There are 32 pre-set positions, 8 slow tours (**S**), 8 fast tours (**F**) and 4 one-minute mimic (**M**) tours. When a programmed position or tour is selected the menu will be cleared from the screen and the unit will execute the appropriate function.

## Run Menu Screen

*RUN menu screen*



If a position or tour is not set a message will be displayed, **POSITION NOT SET** or **TOUR NOT SET**, respectively. **WASH** moves the unit to the wash position, if it has been set, and starts the screen wash process. **WIPE** activates the wiper for 5 seconds.

## Setup Screen

*Start up screen*



The **SETUP** menu gives the operator full access to set up presets and tours as well as other features of the unit. **SETUP** menu is password protected

*SETUP first screen – Password menu*



The default password is "AAAAAA"; once entered 6 stars displays on the screen and the **SETUP** menu appears. If the **PASSWORD** menu is re-displayed it means the incorrect password has been entered. When the correct password is entered, the following screen is shown:

*SETUP menu screen*



Selecting any of the above options will then reveal sub-menus relative to the chosen option

## Motion Setup

### Setting Preset Positions

Once the password is correctly entered, the above screen is displayed. Selecting **MOTION** from **SETUP** menu allows an operator to set up preset positions and tours:

*MOTION Menu Screen*



Selecting a position takes the operator to the **FORMAT POSITION** menu.

*FORMAT POSITION menu screen*



The **FORMAT POSITION** menu allows the operator to setup a preset position. The top line of this menu displays the position number and its status. **STORE CURRENT VIEW** sets the current unit view to the currently selected position number. **GOTO POSITION** leaves the menu structure and moves the unit to the position. **EDIT POSITION TEXT**

takes the operator to the **EDIT POSITION TEXT** menu. **DELETE POSITION** removes the position and resets its status.

## Editing Position Text

*EDIT POSITION menu screen*



In the **EDIT POSITION TEXT** menu custom text can be entered which will be displayed on the screen when at the position.

**NOTE:** **GOTO POSITION**, **EDIT DEFAULT TEXT** and **DELETE POSITION** will only function if the position has been set.

## Setting Preset Position Tours

*MOTION Menu screen*



Selecting a slow (**SX**) or fast (**FX**) tour from the **MOTION** menu takes the operator to the **SETUP TOUR** menu. A slow tour has a dwell time of 6

seconds and travel time between positions of 10 seconds. A fast tour has a dwell time of 6 seconds and a travel time between positions of 1 second.

*SETUP TOUR menu screen*



**EDIT TOUR** takes the operator to the **EDIT TOUR** menu. **SETUP TOUR** menu displays the selected tour and its status. **START TOUR** will exit the menu structure and execute the currently selected tour. **DELETE TOUR** will delete the currently selected tour.

NOTE: **START TOUR** and **DELETE TOUR** will only function if the selected tour has been set.

*EDIT TOUR menu screen*



In the **EDIT TOUR** menu, the tour can be setup by selecting the positions wanted for that tour. Each tour can contain up to 8 positions. Selecting the forward arrow ► confirms the new tour setup, whereas the backward arrow ◀ deletes the last position from the tour.

## Programming Mimic Tours

First selecting the **MOTION** option from the **SETUP** menu and the following screen is displayed:

*MOTION menu screen*



Selecting a mimic (**MX**) tour from the **MOTION** menu takes the operator to the **SETUP MIMIC TOUR** menu.

*SETUP MIMIC TOUR menu screen*



The top line of the **SETUP MIMIC TOUR** menu displays the currently selected mimic tour and its status. **RECORD NEW MIMIC TOUR** takes the operator to the **RECORD MIMIC TOUR** screen. **START TOUR** leaves the menu structure and starts the currently selected mimic tour. **DELETE TOUR** deletes the currently selected mimic tour.

*RECORD NEW MIMIC TOUR menu screen*



After selecting **RECORD NEW MIMIC TOUR** the unit can be moved to the starting position of the tour, and recording started by pressing the **SELECT** button. If the operator cancels the recording they are taken back to normal joystick operation.

## **Video Setup**

*SETUP menu screen*



Selecting **VIDEO** from the **SETUP** menu takes the operator to the **VIDEO SETTINGS** menu.

*VIDEO SETTINGS menu screen*



From the **VIDEO SETTINGS** menu the operator can change the following options:

**PICTURE MODE:** toggles between **COL/MON**, **MONO** and **COLOUR**. This sets up which display mode is used by the camera.

**POSITION FOCUS:** toggles between **AUTO** and **MANUAL**. This controls the operator's ability to adjust the focus of the camera using the control panel when setting preset positioning.

**NEAR FOCUS:** toggles between **OFF** and **ON**. The latter is not recommended, because with near focus enabled the camera may focus on the inside of the window.

**SHUTTER SPEED:** toggles between **AUTO**, **NORMAL**, **1/10000**, **1/3500**, **1/1000** or **1/215** of a second.

**DIGITAL ZOOM:** toggles between **ON** and **OFF**.

**FREEZE FRAME:** toggles between **ON** and **OFF**. When the freeze frame is on the camera will only change its display each time it arrives at a new position.

**VIDEO GAIN** and **VIDEO LIFT:** both have 8 settings between 1 and 8. This allows for the picture to be set up depending on variation in cable lengths and the environment that the unit is in.

## Joystick Setup

SETUP menu screen



Selecting **JOYSTICK** from the **SETUP** menu takes the operator to **JOYSTICK SETTINGS** menu, which allows them to adjust the control settings of the unit.

JOYSTICK SETTINGS menu screen



From the **JOYSTICK** menu the following features can be adjusted:

**ZOOM DIVIDE BY:** toggles between **ON** and **OFF** controls whether the speed of the unit is scaled with zoom or not.

**LINEAR SPEED:** toggles between **1** and **8**. This is a speed factor of the unit irrespective of zoom. **8** is the fastest speed **1** is the slowest.

**PAN/TILT DIRECTION:** toggles between **NORMAL** and **REVERSE** and manages joystick control of the unit.

**L/R** (left/right) **CURSOR**: toggles between **NORMAL** and **REVERSE** for horizontal control within the menu structure.

**U/D** (up/down) **CURSOR**: toggles between **NORMAL** and **REVERSE** for vertical control within the menu structure.

**FLIP MODE**: toggles between **OFF**, and **B-FLIP** (bottom flip), to control the unit operation when it reaches the vertical point. **B-FLIP** performs a 180 degree pan rotation.

**UNIT MOUNTING**: toggles between **UPRIGHT**, **HANGING**, and **INCLINE** to match the install position of the unit

## Privacy Zones

*SETUP menu screen*



Selecting **PRIVACY** from the **SETUP** menu takes the operator to the **SETUP PRIVACY ZONE** menu.

*SETUP PRIVACY ZONE menu screen*



The unit can store 24 privacy zones. The camera can only display 8 privacy zones on the screen at any one time. If there are more than 8 privacy zones in view only the first 8 will be displayed.

Selecting a zone number from the **SETUP PRIVACY ZONE** menu takes the operator to the **FORMAT PRIVACY ZONE** menu.

The top line of the **FORMAT PRIVACY ZONE** menu displays the selected zone number and its status.

*FORMAT PRIVACY ZONE menu screen*



**SET ZONE ON CURRENT VIEW** re-assigns the zone location to the current unit view. **GOTO ZONE** exits the menu structure and takes the operator to the location of the currently selected zone. **DELETE ZONE** deletes the currently selected privacy zone. **DELETE ALL ZONES** will delete all set privacy zones.

*NOTE:* **GOTO ZONE** and **DELETE ZONE** only function if the currently selected patch has been set.

## Alarm Setup

*SETUP menu Screen*



Selecting ALARMS from the **SETUP** menu takes the operator to the **ALARM SETUP** menu where alarm actions, masks and holidays can be formatted.

*ALARMS SETUP menu screen*



Selecting an alarm takes the operator to the **FORMAT ALARM** menu.

## Setting Alarm Actions

*FORMAT ALARM menu screen*



On the top line of the **FORMAT ALARM** menu, the currently selected alarm number is displayed along with its status. **SELECT NEW ALARM ACTION** takes the operator to the **ALARM ACTION** menu. **DELETE ALARM ACTION** cancels the action set for the currently selected alarm.

*ALARM ACTION menu screen*



In **ALARM ACTION** menu, any position, tour or mimic tour can be selected as the alarm action. Additionally, by selecting IR the camera can be forced to Monochrome mode.

### Alarm Activated Infra-Red Switching

Selecting **IR** as an alarm action will force the camera to monochrome mode while the selected alarm input is active. This should be used when

operating the camera with supplementary Infra Red lighting, to ensure that light source and camera switch at the same time. This will prevent the camera from hunting between colour and monochrome mode. The drive for this should be a clean, voltfree contact, otherwise damage to the alarm card may occur.

## Alarm Masks

*ALARM SETUP menu screen*



An alarm mask sets the time to which an alarm is **INACTIVE**. Alarm masks control the individual days of the week and pre-programmed dates (**HOLIDAYS**) that an alarm is **INACTIVE**. By default, all alarms are **ACTIVE**.

Selecting an alarm mask from the **ALARM SETUP MENU** takes the operator to the **ALARM MASK SETUP** menu.

*ALARM MASK SETUP menu screen*



The top line of the **ALARM MASK SETUP** menu displays the currently selected alarm mask and its status. By selecting **EDIT ALARM MASK** the operator is taken to the **EDIT ALARM MASK** menu. **DELETE ALARM MASK** deletes the currently selected alarm mask. **DELETE ALL ALARM MASKS** deletes all the alarm masks that have been set up.

*EDIT ALARM MASK menu screen*



The **EDIT ALARM MASK** menu allows the operator to setup the days (**H** – stands for holiday), and the start and end time for the mask. A day which is selected for an alarm mask will have an **X** under it.

## Alarm Holidays

*ALARM SETUP menu screen*



Selecting an alarm holiday from the **ALARM SETUP** menu takes the operator to the **FORMAT ALARM HOLIDAY** menu.

*FORMAT ALARM HOLIDAY menu screen*



The top line of the **FORMAT ALARM HOLIDAY** menu displays the currently selected alarm holiday and its status. If the holiday has been set the date of the holiday will be displayed as the status. By selecting **EDIT HOLIDAY** the operator is taken to the **EDIT ALARM HOLIDAY** menu. **DELETE ALARM HOLIDAY** deletes the currently selected alarm holiday. **DELETE ALL ALARM HOLIDAYS** deletes all the alarm holidays that have been set up.

*EDIT HOLIDAY menu screen*



By selecting **EDIT HOLIDAY** the operator is taken to the **EDIT ALARM HOLIDAY** menu, where the date of the alarm holiday can be adjusted.

## Display Options

*DISPLAY OPTIONS menu screen*



From the **DISPLAY OPTIONS** menu the following features can be adjusted:

**INFO DISPLAY:** toggles between **ON** and **OFF** to control whether the unit information is displayed on the screen.

**INFO ALIGNMENT:** toggles between **LEFT** and **RIGHT** to control where on the screen the unit information is displayed.

**ERROR DISPLAY:** toggles between **ON** and **OFF** to control whether error warnings are displayed.

**LANGUAGE:** selects the language which the menu structure is displayed in.

**POS TEXT ALIGN:** toggles between **LEFT** and **RIGHT** to control where on the screen the position text is displayed.

**DFLT POS TEXT:** toggles between **ON** and **OFF** to govern if the default position text is displayed at positions which do not have position text assigned to them.

## Default Position Text

*DISPLAY OPTIONS menu screen*



Selecting **EDIT DEFAULT POS TEXT** from the **DISPLAY OPTIONS** menu takes the operator to the **EDIT DEFAULT POS TEXT** menu, where the default position text can be edited.

*EDIT DEFAULT POS TEXT menu screen*



This text is used when a preset position has no display text of its own and is accompanied by the position number.

## Error Reporting

*DISPLAY OPTIONS menu screen*



Selecting **DISPLAY ERROR LIST** from the **DISPLAY OPTIONS** menu takes the operator to the **ERROR LIST** menu, which displays the errors that have occurred, and the date and time of their occurrence.

*DISPLAY ERROR LIST menu screen*



**CNT** (count) is the number of times an error has occurred, and **DATE** and **TIME** display when that error has last occurred. The 1st 3 lines display: the 1st error since error logging started (**1ST**); the 1st error since the unit was powered up (**After Power Up**); and the last error (**LST**) that occurred. **CLEAR ALL ERRORS** clears the error log from the unit memory. Selecting **▶** takes the operator to the next page of errors and **◀** takes the operator to the previous page of errors.

## Time and Date Setup

*DISPLAY OPTIONS menu screen*



Selecting **DATE AND TIME SETUP** from the **DISPLAY OPTIONS** menu takes the operator to the **DATE AND TIME** menu.

*DATE AND TIME SETUP menu screen*



In **DATE AND TIME** menu, selecting **DATE FORMAT** changes the displayed date format between **OFF**, **SHORT**, **MEDIUM** and **LONG**. Selecting **TIME FORMAT** changes the time format between **OFF**, **SHORT** and **LONG**.

*DATE AND TIME menu screen*



Selecting **EDIT DATE** option from the **DATE AND TIME** menu takes the operator to the **EDIT DATE** menu where the date can be set.

*EDIT DATE menu screen*



*DATE AND TIME menu screen*



Selecting **EDIT TIME** option from the **DATE AND TIME** menu takes the operator to the **EDIT TIME** menu where the time can be set.

*EDIT TIME menu screen*



## Special Settings

SETUP menu screen



**SPECIAL SETTINGS** menu gives access to the technical features of the unit.

### Special Settings - Overview

SPECIAL SETTINGS menu screen



From the **SPECIAL SETTINGS** menu the following features can be adjusted:

**POWER FAIL:** toggles between **P/T/JOY**, **P/T** and **OFF** and controls what action is stored when the unit is re-powered up. **P/T/JOY** means that the unit will return to a position, tour or joystick position, **P/T** will return to a tour or a position and **OFF** executes no power fail action.

**HOST POLLING:** toggles between **ON** and **OFF**. This is used for some control panels that require a heartbeat.

**CLEAR MEMORY ERRORS:** checks and repairs any errors in the memory

**RUN MEMORY TEST:** tests the validity of the unit's memory

**RELOAD FACTORY DEFAULTS:** resets the unit to its default settings, after which the dome will reset so as to recalibrate the encoder

**RESET HEAD:** power cycles the unit

**HOME SERVOS:** homes the unit to its closest calibration point

**SOFTWARE VERSION:** displays information about the unit's software

## Time Out Time

*SPECIAL SETTINGS menu screen*



By selecting **TIMEOUT TIME** from the **SPECIAL SETTINGS** menu, the operator can set the time after which the unit executes its timeout action.

*TIMEOUT TIME menu screen*



## Timeout Action

*SPECIAL SETTINGS menu screen*



By selecting **TIMEOUT ACTION** from the **SPECIAL SETTINGS** menu the operator can set which default action the unit will execute after a user timeout has occurred.

*TIMEOUT ACTION menu screen*



Any tour or preset position can be set as the timeout action.

## Changing the Password

*SETUP menu screen*



**CHANGE PASSWORD** menu allows the user to change the password used to enter the **SETUP** menu

*CHANGE PASSWORD screen*



The first step is to enter the old password to proceed.

*ENTER NEW PASSWORD screen*



Enter the new password.

*CONFIRM NEW PASSWORD screen*

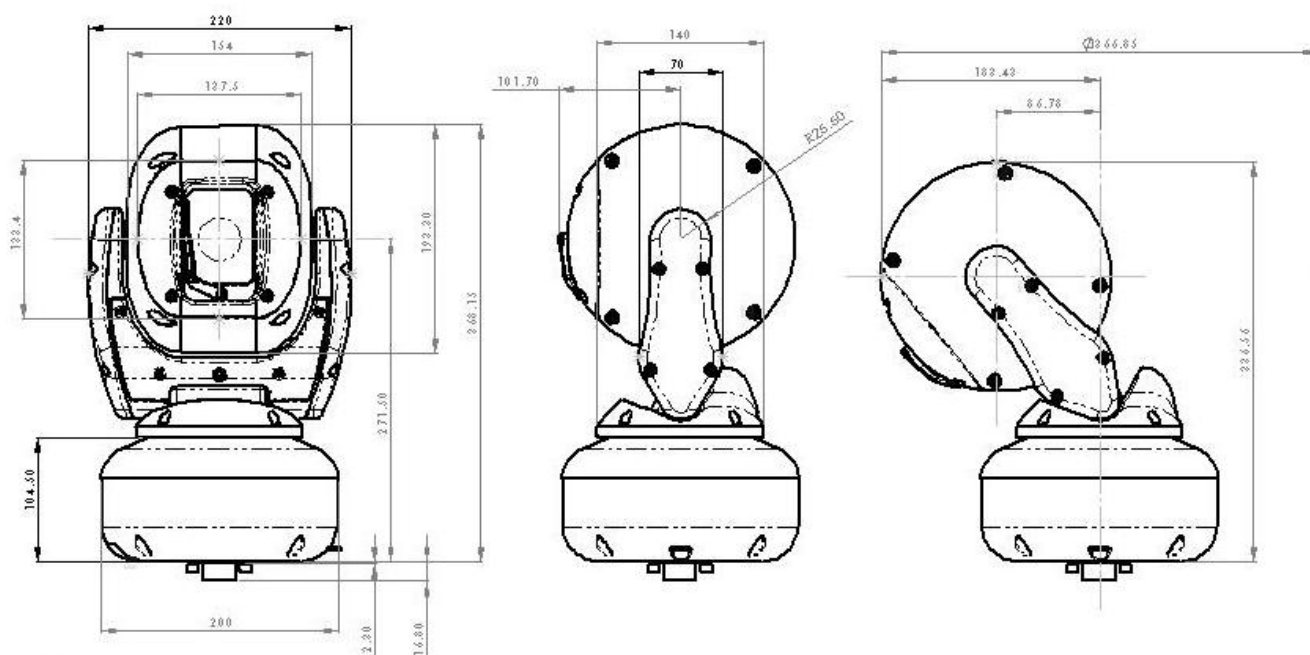


After the new password is entered, it must be entered again to confirm the password, to prevent an error.

## Specifications

Construction	Die-Cast hard anodised, powder coated aluminium, with A4 stainless fittings.	
IP Rating	IP67	
Turning Diameter Height Height with 4" p.c.d. adaptor	Normal	Offset
	220mm / 8.66"	370mm / 14.57"
	370mm / 14.57"	340mm / 13.86"
Weight (with 4"PCD)	7Kg (8Kg) 15.43lb (17.63lb)	
Camera unit	Sony FCB-EX480CP 1/4" ExView HAD Day/Night with removable IR-Cut Filter	
Lens unit	18x optical zoom, f=4.1 mm (Wide) to 73.8 mm (Tele), F1.4 to F3.0	
Resolution	460tvl	
Minimum Illumination	0.7Lux (Colour) 0.1 Lux (Colour – Slow Shutter) 0.01 Lux (Mono – Slow Shutter)	
Signal to Noise Ratio	≥50dB	
Rotation	Pan	Tilt
	360° Continuous >180°/sec [excluding ramp]	290° >180°/sec [excluding ramp]
Presets	32 + WASH preset (accuracy 0.05°)	
Tours	8 Fast Preset, 8 Slow Preset, 4x 60 second Mimic	
Tilt Flip	Configurable – Off, Bottom-Flip	
Privacy Zones	24, Spherically calculated (Max 8 onscreen simultaneously)	
Telemetry	Coaxial or RS485 half duplex – multiple protocols	
Alarms	64, with optional external alarm card	
Connection	10m Composite cable with 19Way IP67 Neptune connector	
Power	20-36Vdc or 14-26Vac. 15W peak	
Operational Temp (without optional heating / cooling)	-10 to +50°C (14 to 122°F)	

## Dimensions – Camera Unit



## Dimensions – 4" PCD Adaptor

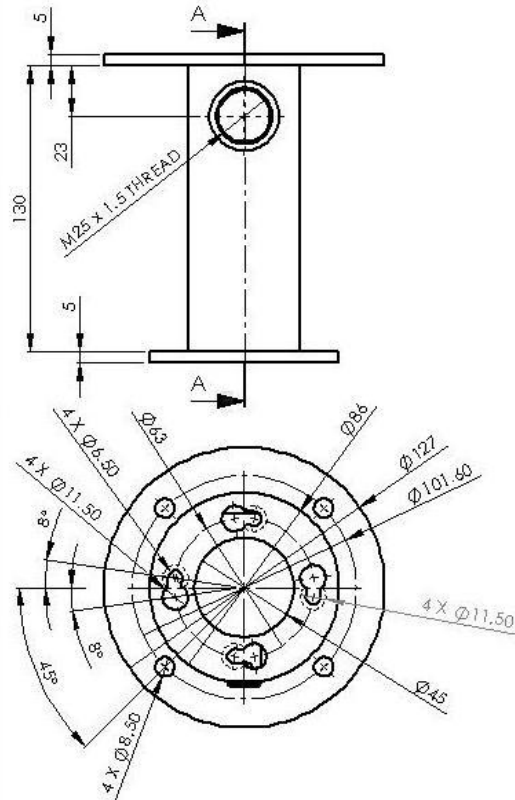


Figure 9

## WEEE statement



This equipment contains electrical or electronic components that must be recycled properly to comply with Directive 2002/96/EC of the European Union regarding the disposal of waste electrical and electronic equipment (WEEE). Contact your local supplier for procedures for recycling this equipment.



## **Installer Notes:**

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