

VCL Orbiter Gold/Lite

Quick Reference Guide



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1. Introduction

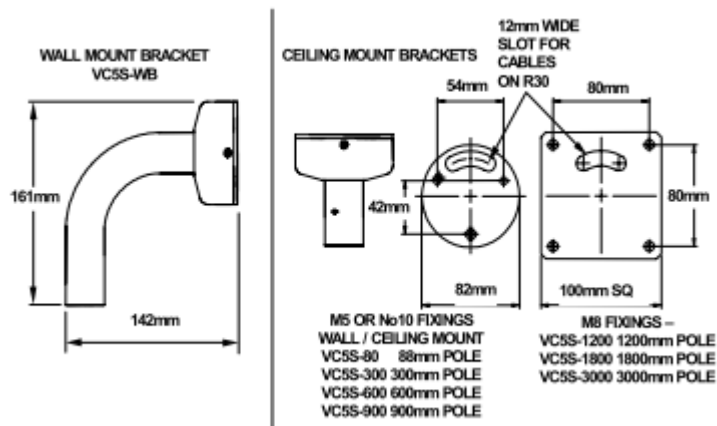
This guide provided by Maxey Moverley Limited contains programming instructions to aid onsite engineers in tackling common problems when installing Orbiter Gold/Lite cameras.

This information has been compiled from publicly available documentation in conjunction with the observations of Maxey Moverley Limited.

2. Installation

2.1 Ceiling and Wall Mounted Models

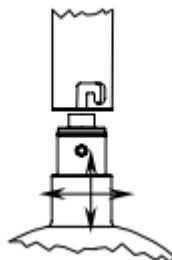
Figure 1. Below, details the ceiling and wall mount brackets, including dimensions.



Step 1

Attach the bracket (wall or ceiling type) using fixings which are appropriate for the surface and able to support the weight of the Orbiter Gold/Lite (1.1kg) as shown in Figure 2.

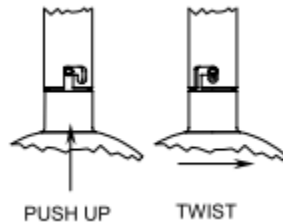
Figure 2. Push up pole – Align to lug slot.



Step 2

Align the lug on the Orbiter Gold/Lite with the slot on the bracket. Carefully push the Orbiter Gold/Lite into the bracket and twist clockwise. Allow to drop into the retainer, see Figure 2.

Figure 3. Fitting the Orbiter Gold/Lite into the bracket



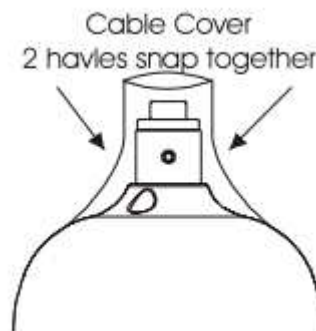
Step 3

Fit the M3 CSK safety locking screw into the bracket to lock the Orbiter Gold/Lite in place. This is ESSENTIAL for the safe operation of the Orbiter Gold/Lite. (The hole for the screw is on the opposite side of the pole to the slot.)

Step 4

Attach the cable cover. This is supplied in two halves which snap together over the neck of the Orbiter Gold/Lite as shown in Figure 4, below.

Figure 4. Fitting the Cable Covers.



3. Setting up the Orbiter Gold/Lite

3.1 Wiring Details

The Orbiter Gold/Lite is designed for speed of installation and set up and so the wall and ceiling mount brackets are supplied pre wired. Customer wiring is via an internal terminal block PCB which is located inside the base plastic cover.

Note: The terminal block is accessed by removing the two M3 CSK head screws, using appropriate tool.

Figure 5. Mounting options for Orbiter Gold/Lite

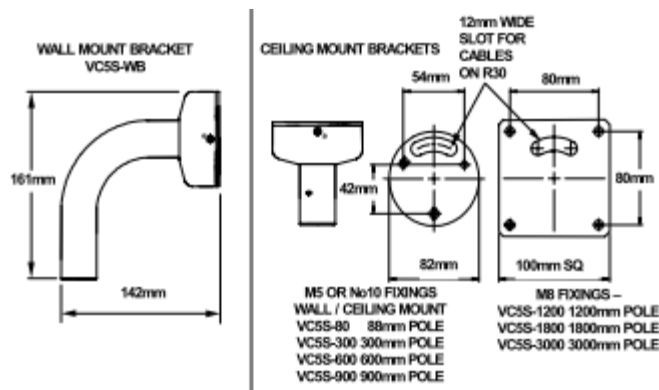
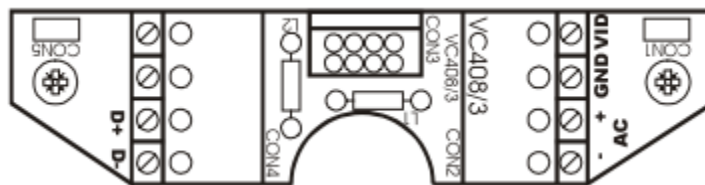


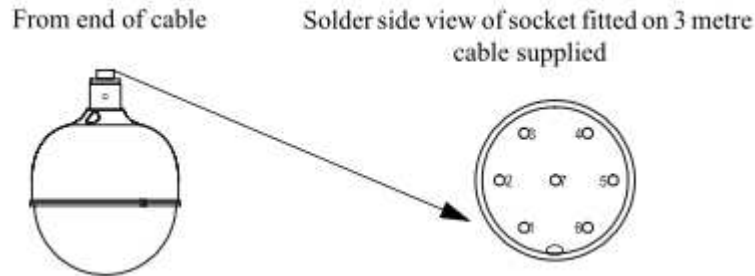
Figure 6. Terminal block details



3.2 Table 1 – VC408 Terminal Block PCB

TWISTED PAIR		'DATA IN COAX'	
SG	(Not Used)	SG	(Not Used)
SYN	(Not Used)	SYN	(Not Used)
D+	Twisted Pair Telemetry	D+	(Not Used)
D-		D-	(Not Used)
VID	Video Signal	VID	Video Signal
VG	Video Ground	VG	Video Ground
+V (AC)	24V AC	+V (AC)	24V AC
0V (AC)	24V AC	0V (AC)	24V AC

Figure 7. Wiring details for the Orbiter Gold/Lite (False ceiling mount)

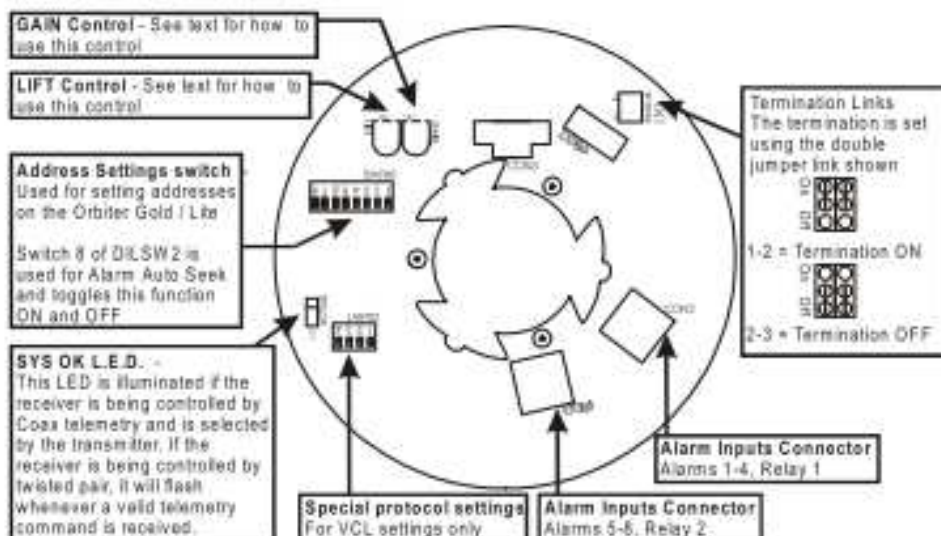


3.3 Table 2 – Pin Descriptions of Pin Outs For False Ceiling

TWISTED PAIR			'DATA IN COAX'		
Pin 1	Green	24V AC	Pin 1	Green	24V AC
Pin 2	Red	24V AC	Pin 2	Red	24V AC
Pin 3	Blue	Data +	Pin 3	Blue	
Pin 4	Yellow	Data -	Pin 4	Yellow	
Pin 5	Coax Screen	Video Ground	Pin 5	Coax Screen	Video Ground
Pin 6	Coax Core	Video Signal	Pin 6	Coax Core	Video Signal
Pin 7	(Not Used)		Pin 7	(Not Used)	

4. Settings on the Top Board

Figure 8. The Orbiter Gold/Lite top board



LED D17 will illuminate if the receiver that is being controlled by Coax telemetry is selected by the transmitter and the coax telemetry is satisfactory. If the receiver is being controlled by twisted pair telemetry, LED D17 will flash whenever a valid telemetry command is received.

VR1 (LIFT) and VR2 (GAIN) are factory set. They are designed to improve the picture quality transmitted by the Orbiter Gold/Lite when long cable runs are involved and a degradation of picture quality occurs. Before adjusting either the LIFT or GAIN, ensure that the iris is correctly adjusted.

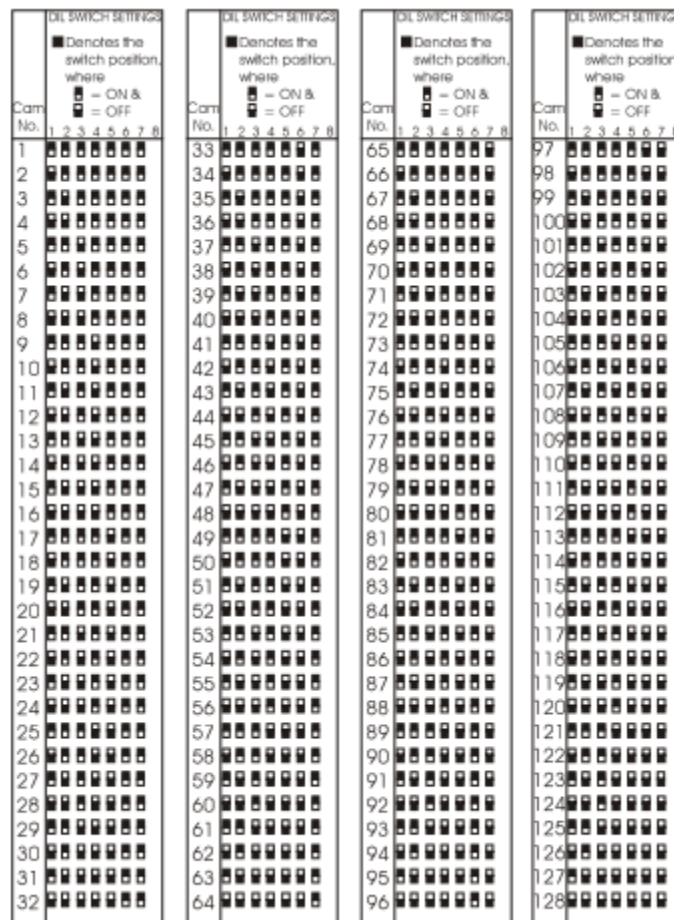
If the image is 'smearing' due to a long cable run, then the LIFT pot may be adjusted to sharpen the image. If the contrast of the image is low, (caused by an attenuated video signal), make adjustments by turning the GAIN pot.

Note. Over adjustments of either the GAIN or the LIFT pot will result in further image quality degradation.

5. Address Settings

The addresses for each Orbiter Gold/Lite are set as shown in the table below. Set the poles on DILSW2 to the desired position for each address.

Figure 9. Address Settings



Cam No.	1	2	3	4	5	6	7	8
1	ON	ON	ON	ON	ON	ON	ON	ON
2	ON	ON	ON	ON	ON	ON	ON	ON
3	ON	ON	ON	ON	ON	ON	ON	ON
4	ON	ON	ON	ON	ON	ON	ON	ON
5	ON	ON	ON	ON	ON	ON	ON	ON
6	ON	ON	ON	ON	ON	ON	ON	ON
7	ON	ON	ON	ON	ON	ON	ON	ON
8	ON	ON	ON	ON	ON	ON	ON	ON
9	ON	ON	ON	ON	ON	ON	ON	ON
10	ON	ON	ON	ON	ON	ON	ON	ON
11	ON	ON	ON	ON	ON	ON	ON	ON
12	ON	ON	ON	ON	ON	ON	ON	ON
13	ON	ON	ON	ON	ON	ON	ON	ON
14	ON	ON	ON	ON	ON	ON	ON	ON
15	ON	ON	ON	ON	ON	ON	ON	ON
16	ON	ON	ON	ON	ON	ON	ON	ON
17	ON	ON	ON	ON	ON	ON	ON	ON
18	ON	ON	ON	ON	ON	ON	ON	ON
19	ON	ON	ON	ON	ON	ON	ON	ON
20	ON	ON	ON	ON	ON	ON	ON	ON
21	ON	ON	ON	ON	ON	ON	ON	ON
22	ON	ON	ON	ON	ON	ON	ON	ON
23	ON	ON	ON	ON	ON	ON	ON	ON
24	ON	ON	ON	ON	ON	ON	ON	ON
25	ON	ON	ON	ON	ON	ON	ON	ON
26	ON	ON	ON	ON	ON	ON	ON	ON
27	ON	ON	ON	ON	ON	ON	ON	ON
28	ON	ON	ON	ON	ON	ON	ON	ON
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123	ON	ON	ON	ON	ON	ON	ON	ON
124	ON	ON	ON	ON	ON	ON	ON	ON
125	ON	ON	ON	ON	ON	ON	ON	ON
126	ON	ON	ON	ON	ON	ON	ON	ON
127	ON	ON	ON	ON	ON	ON	ON	ON
128	ON	ON	ON	ON	ON	ON	ON	ON

6. Coax Telemetry

Coax telemetry Orbiter Gold/Lites do not require an address setting, therefore the settings of positions 1-7 on DILSW2 are ignored. Position 8 controls the alarm feature.

7. Alarm Settings

Switch 8 of the 8 way DIL switch DILSW2 is used to toggle the Orbiter Gold/Lites alarm setting. When the switch is 'ON' the Orbiter Gold/Lites alarm inputs are enabled and set to the default settings as shown in the table below. If switch 8 is 'OFF' then the alarms are not automatically enabled, but can be enabled and adjusted using a MaxCom with local alarm menus.

ALARM	INPUT-TYPE	PRESET	TIME-OUT
1	Normally Open	1	10 Seconds
2	Normally Open	2	10 Seconds
3	Normally Open	3	10 Seconds
4	Normally Open	4	10 Seconds

8. Technical Support Helpline

For help and guidance with installation issues, that are not covered within this guide please contact our dedicated customer technical helpline on **01527 522299** and speak to one of our specially trained technicians who will be happy to assist you.

9. Revision History

Revision	Date	Author	Amendments	Comments
1	24/04/13	DS	First draft	Issued for internal review
1.1	14/05/2013	DS	Agreed format/content	Issued for distribution