

# Pelco Spectra

## Quick Reference Guide



## Contents

1. INTRODUCTION	2
1.1 Description	2
2. SWITCH SETTINGS	2
2.1 SW1 Receiver Address	3
2.2 SW2 Switches 1-3 – Special Systems Settings	3
2.3 SW2 Switches 2-5 – Serial Port Settings	3
2.4 SW2 Switches 6-8 – Baud Settings	4
3. DOME DRIVE INSTALLATION	4
4. TABLE A – SWITCH SETTINGS FOR SW1 P – TYPE CONTROL	5
5. TABLE B – SWITCH SETTINGS FOR SW1 D – TYPE CONTROL	6
6. TECHNICAL SUPPORT HELPLINE	13
7. REVISION HISTORY	14

## 1. Introduction

This guide provided by Maxey Moverley Limited contains programming instructions to aid onsite engineers in tackling common problems when installing Pelco Spectra cameras.

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

### 1.1 Description

High Definition, Integrated High-Speed Dome Positioning System

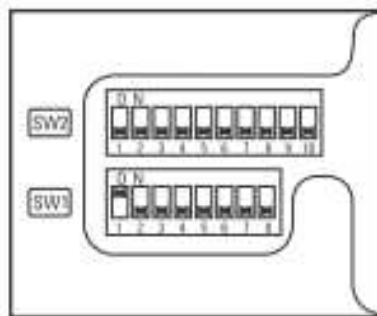
Based on the Sarix technology platform, the Spectra HD family of high-speed dome positioning systems delivers unparalleled image quality. These all-digital systems provide the look and feel of traditional Spectra series domes while taking video quality, control and responsiveness to a whole new level. Available in both 1080p and 720p resolutions, Spectra HD comes standard with built-in analytics, up to 20x or 30x optical zoom, USB expansion slots and, of course, 360° continuous pan rotation for the precision and control you demand.

## 2. Switch Settings

Before installing the dome drive, configure the receiver address, termination, and baud setting. The DIP switches used to configure these settings are located on the base of the dome drive.

Figure 1 shows the default settings for the DIP switches. Switch SW1-1 (SW1, switch 1) is set to the ON position. All other switches are set to the OFF position.

**Figure 1.** Default Switch Settings



## 2.1 SW1 Receiver Address

Set the SW1 switches for the address of the dome drive. The following information is required to set the dome drive address:

P-Type: Default address is 2. Refer to Table A for address settings that use P-type control. Maximum number of receiver is 32.

D-Type: Default address is 2. Refer to Table B for address settings that use D-type control. Maximum number of receivers is 254.

## 2.2 SW2 Switches 1-3 – Special Systems Settings

### AD-32 Pre-set Systems

SW2-1 should be set on the ON position if an AD-32 controller and Pelco's TXB-AD translator board are used to control the dome system.

### CM9502 Setting

If a CM9502 matrix system is used with the dome drive, set SW2-2 to the ON position.

### Vicon System

The Vicon protocol is not currently available; SW2-3 is reserved for future use.

## 2.3 SW2 Switches 4-5 – Serial Port Settings

### RS422 Setting (Default)

SW2-4 and SW2-5 should both be set to the OFF position for RS422 setting.

For control, only two wires should be connected to the RX- and RX+ connectors on the circuit board inside the back box. For bidirectional control, four wires should be connected to the RX-, RX+, TX- and TX+ connectors on the circuit board inside.

### RS485, 4 Wire Setting

SW2-4 should be set to OFF and SW2-5 should be set to ON if a four wire serial port connection is used with RS485.

**NOTE:** This setting is most commonly used with Pelco Endura systems.

### RS485, 2 Wire Setting

SW2-4 and SW2-5 should both be set to the ON position if a two wire special port connection is used with RS485.

The setting is used to allow the Spectra dome system to transmit and receive commands on the same pair of wires. Only two wires should be connected to the RX- and RX+ connectors on the circuit board inside the back box.

## 2.4 SW2 Switches 6-8 – Baud Settings

Pelco's D-type controllers are set for 2400 baud. The default setting for the dome drive is 2400 baud. If you are using a Pelco D-type controller, do not reset SW2 switches 1 through 3 or SW2 switches 6 through 8.

P-type controllers can operate at 2400, 4800 and 9600 baud. Set the SW2 switches (6,7 and 8), located on the base of the dome drive, to the same baud as the P-type controller.

Switch Number	SW2-6	SW2-7	SW2-8
<b>2400 Baud (default for D-type control)</b>	Off	Off	Off
<b>4800 Baud (default for P-type control)</b>	On	Off	Off
<b>9600 Baud</b>	Off	On	Off

### SW2 Switch 9 – Coax/UTP Cable

SW2-9 should be set to the OFF position (default) if you are using coax cable. If you are using unshielded twisted pair (UTP) cable, set SW2-9 to the ON position.

### SW2 Switch 10 – Termination Setting

When connecting more than one Spectra 4/Spectra 4 SE dome system to a single controller, terminate the unit farthest from the controller. Termination is only required for the last dome in the series.

The dome drive is shipped from the factory in the unterminated (OFF) position. To terminate the dome drive, set SW2-10 to the ON position.

**NOTE:** Dome termination is not required for Coaxitron control.

## 3. Dome Drive Installation

Install the dome drive. Line up the blue and red tabs with the blue and red arrows on the hinged door inside the back box. Push the tabs in. Insert one side and then the other side. Continue pushing on the ends of the tabs until both sides click into place. Refer to figure 2.

**Figure 2.** Dome Drive Installation



#### 4. Table A - Switch Settings for SW1 P- Type Control

Spectra Address	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
3	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
4	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
5	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
6	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
7	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
8	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
9	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
10	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
11	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
12	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
13	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
14	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
15	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
16	ON	ON	ON	ON	OFF	OFF	OFF	OFF
17	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
18	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
19	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
20	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
21	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
22	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
23	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
24	ON	ON	ON	OFF	ON	OFF	OFF	OFF
25	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
26	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
27	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
28	ON	ON	OFF	ON	ON	OFF	OFF	OFF
29	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
30	ON	OFF	ON	ON	ON	OFF	OFF	OFF
31	OFF	ON	ON	ON	ON	OFF	OFF	OFF
32	ON	ON	ON	ON	ON	OFF	OFF	OFF

## 5. Table B - Switch Settings for SW1 D - Type Control

Spectra Address	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
1	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
3	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
4	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
5	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
6	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
7	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
8	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
9	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
10	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
11	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
12	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
13	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
14	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
15	ON	ON	ON	ON	OFF	OFF	OFF	OFF
16	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
17	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
18	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
19	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
20	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
21	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
22	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
23	ON	ON	ON	OFF	ON	OFF	OFF	OFF
24	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
25	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
26	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
27	ON	ON	OFF	ON	ON	OFF	OFF	OFF
28	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
29	ON	OFF	ON	ON	ON	OFF	OFF	OFF
30	OFF	ON	ON	ON	ON	OFF	OFF	OFF
31	ON	ON	ON	ON	ON	OFF	OFF	OFF
32	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
33	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
34	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
35	ON	ON	OFF	OFF	OFF	ON	OFF	OFF

Spectra Address	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
36	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
37	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
38	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
39	ON	ON	ON	OFF	OFF	ON	OFF	OFF
40	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
41	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
42	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
43	ON	ON	OFF	ON	OFF	ON	OFF	OFF
44	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
45	ON	OFF	ON	ON	OFF	ON	OFF	OFF
46	OFF	ON	ON	ON	OFF	ON	OFF	OFF
47	ON	ON	ON	ON	OFF	ON	OFF	OFF
48	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
49	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
50	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
51	ON	ON	OFF	OFF	ON	ON	OFF	OFF
52	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
53	ON	OFF	ON	OFF	ON	ON	OFF	OFF
54	OFF	ON	ON	OFF	ON	ON	OFF	OFF
55	ON	ON	ON	OFF	ON	ON	OFF	OFF
56	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
57	ON	OFF	OFF	ON	ON	ON	OFF	OFF
58	OFF	ON	OFF	ON	ON	ON	OFF	OFF
59	ON	ON	OFF	ON	ON	ON	OFF	OFF
60	OFF	OFF	ON	ON	ON	ON	OFF	OFF
61	ON	OFF	ON	ON	ON	ON	OFF	OFF
62	OFF	ON	ON	ON	ON	ON	OFF	OFF
63	ON	ON	ON	ON	ON	ON	OFF	OFF
64	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
65	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
66	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
67	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
68	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
69	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
70	OFF	ON	ON	OFF	OFF	OFF	ON	OFF

Spectra Address	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
71	ON	ON	ON	OFF	OFF	OFF	ON	OFF
72	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
73	ON	OFF	OFF	ON	OFF	OFF	ON	OFF
74	OFF	ON	OFF	ON	OFF	OFF	ON	OFF
75	ON	ON	OFF	ON	OFF	OFF	ON	OFF
76	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
77	ON	OFF	ON	ON	OFF	OFF	ON	OFF
78	OFF	ON	ON	ON	OFF	OFF	ON	OFF
79	ON	ON	ON	ON	OFF	OFF	ON	OFF
80	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
81	ON	OFF	OFF	OFF	ON	OFF	ON	OFF
82	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
83	ON	ON	OFF	OFF	ON	OFF	ON	OFF
84	OFF	OFF	ON	OFF	ON	OFF	ON	OFF
85	ON	OFF	ON	OFF	ON	OFF	ON	OFF
86	OFF	ON	ON	OFF	ON	OFF	ON	OFF
87	ON	ON	ON	OFF	ON	OFF	ON	OFF
88	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
89	ON	OFF	OFF	ON	ON	OFF	ON	OFF
90	OFF	ON	OFF	ON	ON	OFF	ON	OFF
91	ON	ON	OFF	ON	ON	OFF	ON	OFF
92	OFF	OFF	ON	ON	ON	OFF	ON	OFF
93	ON	OFF	ON	ON	ON	OFF	ON	OFF
94	OFF	ON	ON	ON	ON	OFF	ON	OFF
95	ON	ON	ON	ON	ON	OFF	ON	OFF
96	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
97	ON	OFF	OFF	OFF	OFF	ON	ON	OFF
98	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
99	ON	ON	OFF	OFF	OFF	ON	ON	OFF
100	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
101	ON	OFF	ON	OFF	OFF	ON	ON	OFF



Spectra Address	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
102	OFF	ON	ON	OFF	OFF	ON	ON	OFF
103	ON	ON	ON	OFF	OFF	ON	ON	OFF
104	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
105	ON	OFF	OFF	ON	OFF	ON	ON	OFF
106	OFF	ON	OFF	ON	OFF	ON	ON	OFF
107	ON	ON	OFF	ON	OFF	ON	ON	OFF
108	OFF	OFF	ON	ON	OFF	ON	ON	OFF
109	ON	OFF	ON	ON	OFF	ON	ON	OFF
110	OFF	ON	ON	ON	OFF	ON	ON	OFF
111	ON	ON	ON	ON	OFF	ON	ON	OFF
112	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
113	ON	OFF	OFF	OFF	ON	ON	ON	OFF
114	OFF	ON	OFF	OFF	ON	ON	ON	OFF
115	ON	ON	OFF	OFF	ON	ON	ON	OFF
116	OFF	OFF	ON	ON	ON	ON	ON	OFF
117	ON	OFF	ON	ON	ON	ON	ON	OFF
118	OFF	ON	ON	ON	ON	ON	ON	OFF
119	ON	ON	ON	ON	ON	ON	ON	OFF
120	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
121	ON	OFF	OFF	OFF	ON	ON	ON	OFF
122	OFF	ON	OFF	OFF	ON	ON	ON	OFF
123	ON	ON	OFF	OFF	ON	ON	ON	OFF
124	OFF	OFF	ON	ON	ON	ON	ON	OFF
125	ON	OFF	ON	ON	ON	ON	ON	OFF
126	OFF	ON	ON	ON	ON	ON	ON	OFF
127	ON	ON	ON	ON	ON	ON	ON	OFF
128	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
129	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
130	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
131	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
132	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
133	ON	OFF	ON	ON	OFF	OFF	OFF	ON
134	OFF	ON	ON	ON	OFF	OFF	OFF	ON

Spectra Address	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
135	ON	ON	ON	ON	OFF	OFF	OFF	ON
136	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
137	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
138	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
139	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
140	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
141	ON	OFF	ON	ON	OFF	OFF	OFF	ON
142	OFF	ON	ON	ON	OFF	OFF	OFF	ON
143	ON	ON	ON	ON	OFF	OFF	OFF	ON
144	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
145	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
146	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
147	ON	ON	OFF	OFF	ON	OFF	OFF	ON
148	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
149	ON	OFF	ON	OFF	ON	OFF	OFF	ON
150	OFF	ON	ON	OFF	ON	OFF	OFF	ON
151	ON	ON	ON	OFF	ON	OFF	OFF	ON
152	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
153	ON	OFF	OFF	ON	ON	OFF	OFF	ON
154	OFF	ON	OFF	ON	ON	OFF	OFF	ON
155	ON	ON	OFF	ON	ON	OFF	OFF	ON
156	OFF	OFF	ON	ON	ON	OFF	OFF	ON
157	ON	OFF	ON	ON	ON	OFF	OFF	ON
158	OFF	ON	ON	ON	ON	OFF	OFF	ON
159	ON	ON	ON	ON	ON	OFF	OFF	ON
160	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
161	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
162	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
163	ON	ON	OFF	OFF	OFF	ON	OFF	ON
164	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
165	ON	OFF	ON	OFF	OFF	ON	OFF	ON
166	OFF	ON	ON	OFF	OFF	ON	OFF	ON
167	ON	ON	ON	OFF	OFF	ON	OFF	ON

Spectra Address	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
168	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
169	ON	OFF	OFF	ON	OFF	ON	OFF	ON
170	OFF	ON	OFF	ON	OFF	ON	OFF	ON
171	ON	ON	OFF	ON	OFF	ON	OFF	ON
172	OFF	OFF	ON	ON	OFF	ON	OFF	ON
173	ON	OFF	ON	ON	OFF	ON	OFF	ON
174	OFF	ON	ON	ON	OFF	ON	OFF	ON
175	ON	ON	ON	ON	OFF	ON	OFF	ON
176	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
177	ON	OFF	OFF	OFF	ON	ON	OFF	ON
178	OFF	ON	OFF	OFF	ON	ON	OFF	ON
179	ON	ON	OFF	OFF	ON	ON	OFF	ON
180	OFF	OFF	ON	OFF	ON	ON	OFF	ON
181	ON	OFF	ON	OFF	ON	ON	OFF	ON
182	OFF	ON	ON	OFF	ON	ON	OFF	ON
183	ON	ON	ON	OFF	ON	ON	OFF	ON
184	OFF	OFF	OFF	ON	ON	ON	OFF	ON
185	ON	OFF	OFF	ON	ON	ON	OFF	ON
186	OFF	ON	OFF	ON	ON	ON	OFF	ON
187	ON	ON	OFF	ON	ON	ON	OFF	ON
188	OFF	OFF	ON	ON	ON	ON	OFF	ON
189	ON	OFF	ON	ON	ON	ON	OFF	ON
190	OFF	ON	ON	ON	ON	ON	OFF	ON
191	ON	ON	ON	ON	OFF	ON	OFF	ON
192	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
193	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
194	OFF	ON	OFF	OFF	OFF	OFF	ON	ON
195	ON	ON	OFF	OFF	OFF	OFF	ON	ON
196	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
197	ON	OFF	ON	OFF	OFF	OFF	ON	ON
198	OFF	ON	ON	OFF	OFF	OFF	ON	ON
199	ON	ON	ON	OFF	OFF	OFF	ON	ON
200	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
201	ON	OFF	OFF	ON	OFF	OFF	ON	ON

Spectra Address	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
202	OFF	ON	OFF	ON	OFF	OFF	ON	ON
203	ON	ON	OFF	ON	OFF	OFF	ON	ON
204	OFF	OFF	ON	ON	OFF	OFF	ON	ON
205	ON	OFF	ON	ON	OFF	OFF	ON	ON
206	OFF	ON	ON	ON	OFF	OFF	ON	ON
207	ON	ON	ON	ON	OFF	OFF	ON	ON
208	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
209	ON	OFF	OFF	OFF	ON	OFF	ON	ON
210	OFF	ON	OFF	OFF	ON	OFF	ON	ON
211	ON	ON	OFF	OFF	ON	OFF	ON	ON
212	OFF	OFF	ON	OFF	ON	OFF	ON	ON
213	ON	OFF	ON	OFF	ON	OFF	ON	ON
214	OFF	ON	ON	OFF	ON	OFF	ON	ON
215	ON	ON	ON	OFF	ON	OFF	ON	ON
216	OFF	OFF	OFF	ON	ON	OFF	ON	ON
217	ON	OFF	OFF	ON	ON	OFF	ON	ON
218	OFF	ON	OFF	ON	ON	OFF	ON	ON
219	ON	ON	OFF	ON	ON	OFF	ON	ON
220	OFF	OFF	ON	ON	ON	OFF	ON	ON
221	ON	OFF	ON	ON	ON	OFF	ON	ON
222	OFF	ON	ON	ON	ON	OFF	ON	ON
223	ON	ON	ON	ON	ON	OFF	ON	ON
224	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
225	ON	OFF	OFF	OFF	OFF	ON	ON	ON
226	OFF	ON	OFF	OFF	OFF	ON	ON	ON
227	ON	ON	OFF	OFF	OFF	ON	ON	ON
228	OFF	OFF	ON	OFF	OFF	ON	ON	ON
229	ON	OFF	ON	OFF	OFF	ON	ON	ON
230	OFF	ON	ON	OFF	OFF	ON	ON	ON
231	ON	ON	ON	OFF	OFF	ON	ON	ON
232	OFF	OFF	OFF	ON	OFF	ON	ON	ON
233	ON	OFF	OFF	ON	OFF	ON	ON	ON

Spectra Address	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
234	OFF	ON	OFF	ON	OFF	ON	ON	ON
235	ON	ON	OFF	ON	OFF	ON	ON	ON
236	OFF	OFF	ON	ON	OFF	ON	ON	ON
237	ON	OFF	ON	ON	OFF	ON	ON	ON
238	OFF	ON	ON	ON	OFF	ON	ON	ON
239	ON	ON	ON	ON	OFF	ON	ON	ON
240	OFF	OFF	OFF	OFF	ON	ON	ON	ON
241	ON	OFF	OFF	OFF	ON	ON	ON	ON
242	OFF	ON	OFF	OFF	ON	ON	ON	ON
243	ON	ON	OFF	OFF	ON	ON	ON	ON
244	OFF	OFF	ON	OFF	ON	ON	ON	ON
245	ON	OFF	ON	OFF	ON	ON	ON	ON
246	OFF	ON	ON	OFF	ON	ON	ON	ON
247	ON	ON	ON	OFF	ON	ON	ON	ON
248	OFF	OFF	OFF	ON	ON	ON	ON	ON
249	ON	OFF	OFF	ON	ON	ON	ON	ON
250	OFF	ON	OFF	ON	ON	ON	ON	ON
251	ON	ON	OFF	ON	ON	ON	ON	ON
252	OFF	OFF	ON	ON	ON	ON	ON	ON
253	ON	OFF	ON	ON	ON	ON	ON	ON
254	OFF	ON	ON	ON	ON	ON	ON	ON

## 6. 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.

## 7. Revision History

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