



## **Pressurized Spectra® IV Series**



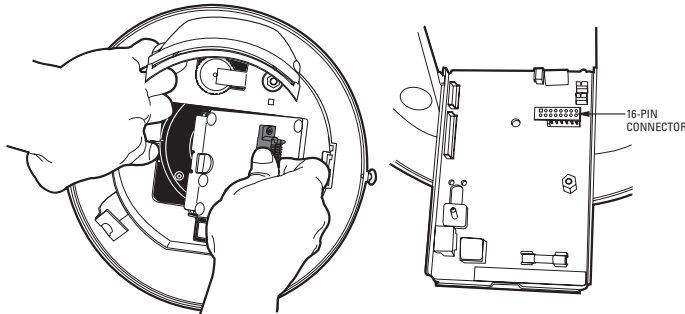
**Pendant Back Box  
with Fiber Optic Option**

**C3422M-B (3/08)**

# Preinstallation

**NOTE:** This manual is designed to be a reference tool for the installation of your system. For best results and ease of installation, the dome system should be assembled, pressurized, and tested before installation. A Pressurized Spectra® IV cable harness (supplied with the back box) is required to test and monitor the pressurized dome.

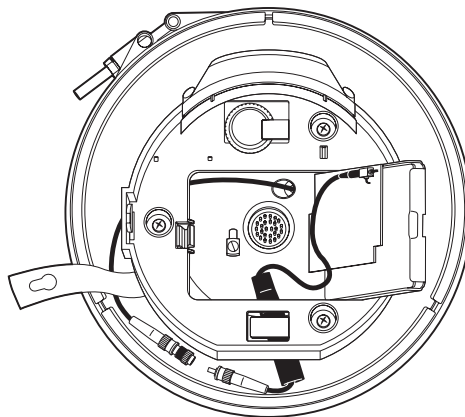
1. Install the fiber optic module: Open the hinged door to the back box by pushing the tab lock towards the wall of the unit and lifting the door open. Remove the plug from the 16-pin connector. Install the module in the 16-pin connector. Secure the module to the circuit board standoff using the screw and lock washer provided.



**Figure 1.** Installing the Fiber Optic Module

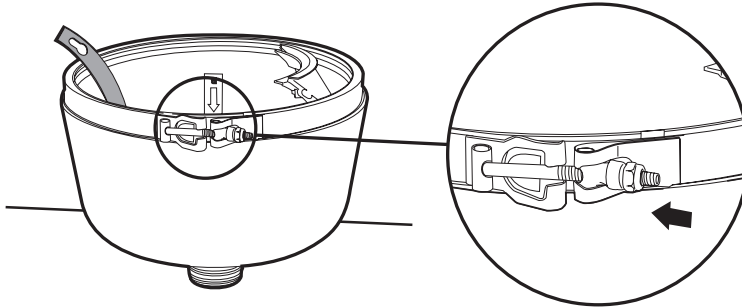
2. Connect the back box fiber optic connector to the mating connector on the module. Be sure to route the fiber optic cables between the plastic housing and the outer wall of the back box before attaching the two connectors. Follow all applicable instructions provided by the manufacturer of the fiber optic module.

**NOTE:** All bends in the fiber optic cable must be 1-inch diameter or greater.



**Figure 2.** Connecting the Back Box Fiber Optic Connector

3. Loosen the V-band attached to the back box and let it hang to the side.

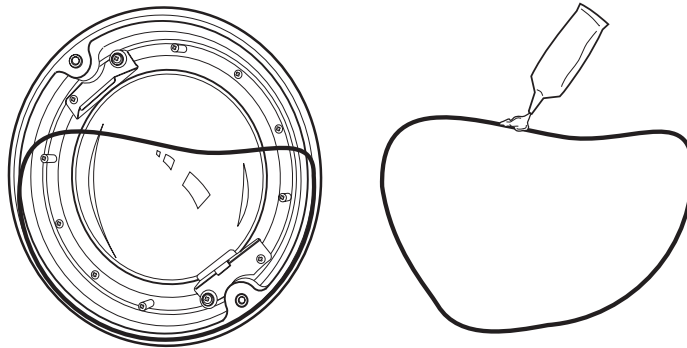


**Figure 3.** Loosening the V-band

4. Prepare the lower dome for installation:
  - a. Remove the O-ring from the lower dome.
  - b. Lightly apply O-ring lubricant (supplied) to the O-ring.
  - c. Reinstall the O-ring in the groove on the trim ring.

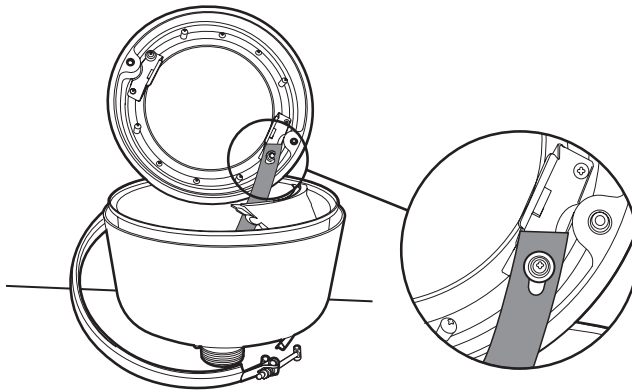
**NOTES:**

- Repeated assembly of the unit, without exercising extreme caution to protect the integrity of the O-ring and sealing surfaces, will result in increased refilling cycles. Plan carefully to minimize service accesses.
- Use the supplied O-ring lubricant to ensure an airtight seal when installing the lower dome.



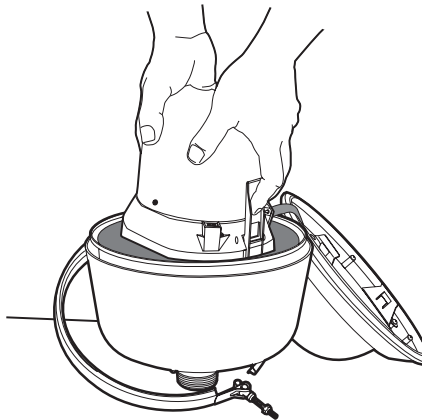
**Figure 4.** Applying O-Ring Lubricant

5. Attach the back box leash to the lower dome, and let the lower dome hang to the other side of the back box.



**Figure 5. Attaching the Back Box Leash**

6. Install the dome drive. Refer to Table A for a list of compatible dome drives and back boxes.
  - a. Set the DIP switches located on the base of the dome drive. Refer to the labels located on the base of the dome drive or to *Switch Settings* on page 12.
  - b. Line up the blue and red tabs with the blue and red arrows on the hinged door inside the backbox.
  - c. Push in the tabs. Insert one side and then the other side. Continue pushing until both sides of the dome drive click into place.

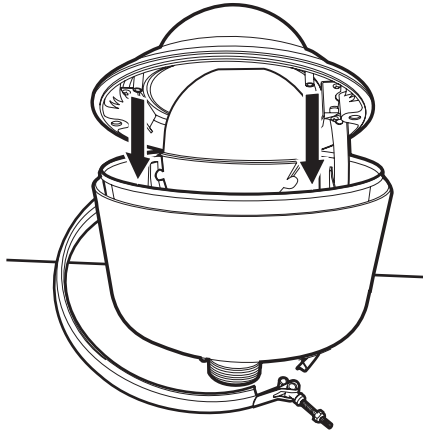


**Figure 6. Installing the Dome Drive**

**Table A.** Spectra Dome Drive and Back Box Compatibility

Dome Drive	Back Box		
	Spectra II	Spectra III	Spectra IV
Spectra II®	•		
Spectra III™	•	•	•
Spectra IV	•	•	•

7. Install the lower dome:
  - a. Position the lower dome so that the blower duct inside the back box is between the studs attached to the inside of the lower dome.
  - b. Install the V-band around the lower dome and then tighten the fastener of the V-band.
  - c. Test the operation of the unit before pressurizing the dome.



**Figure 7.** Installing the Lower Dome

8. Pressurize the inside of the dome with nitrogen:
  - a. Remove the cap from the Schrader valve of the dome. Place the air chuck from the charging kit over the Schrader valve.

**NOTE:** You may use your own charging equipment or Pelco's EH8000RKIT recharge kit. If you are using your own equipment, adjust the regulator for an output pressure of 12 psi (83 kPa).

- b. Open the tank valve of the charging kit. Fill the dome with nitrogen for a *minimum of five minutes* to replace the oxygen inside the dome with nitrogen.
  - c. Remove the air chuck and then replace the Schrader valve cap.

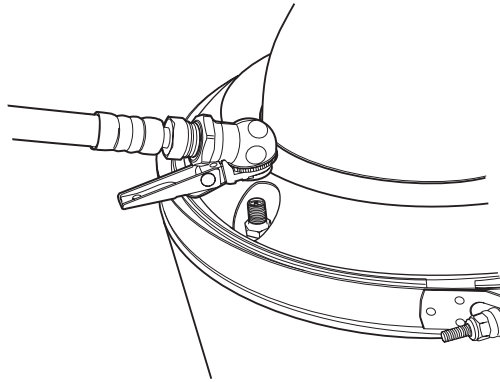
- d. Refer to the *Operation/Programming* manual (C3412M) for instructions on how to view the current readings for temperature and pressure. Record the initial temperature and pressure readings of the dome in the space provided below:

Initial Temperature \_\_\_\_\_

Initial Pressure \_\_\_\_\_

**NOTES:**

- Record the initial temperature and pressure readings for future reference. It is normal for changes in temperature to cause dome pressure to rise and fall.
- You must perform an annual refill to be consistent with the intent of the application.

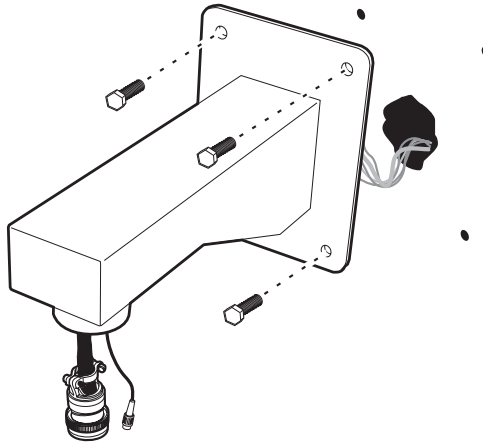


**Figure 8.** Pressurizing the Dome

# Site Installation

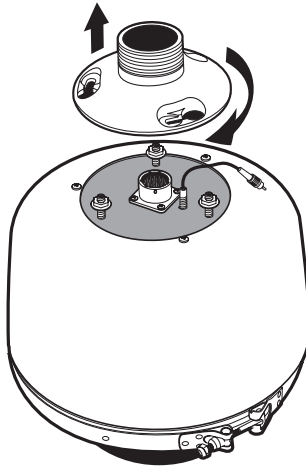
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1. Feed a fiber optic cable (not supplied) and the supplied wiring harness into the front of the mount and out the back of the mount. Connect the wires as required. Refer to Table B, Table C, and Table D on page 10, and Table E on page 11 for cable and wiring information. Fasten the mount to the mounting surface (refer to the instructions supplied with the mount).



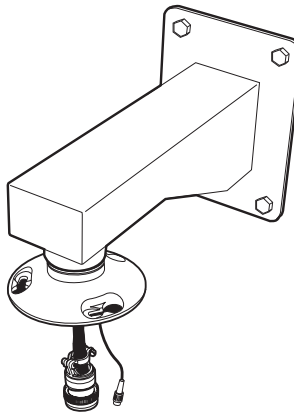
**Figure 9.** Wiring the Mount

2. Remove the back box mounting plate: Loosen the nuts on top of the back box until they reach the locking material at the end of the studs, and then turn the mounting plate clockwise and lift.



**Figure 10. Removing the Back Box Mounting Plate**

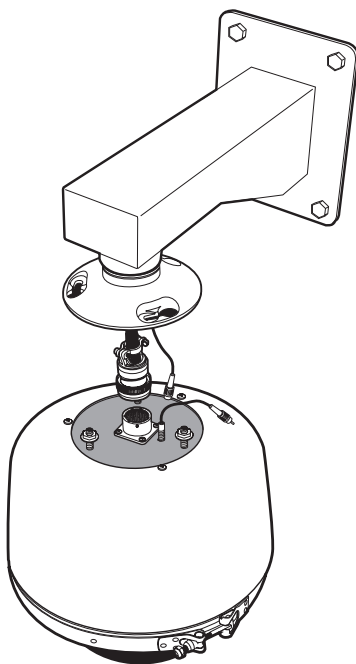
3. Thread the wiring from the mount through the mounting plate, and then attach the mounting plate to the mount. If outdoors, apply thread compound (supplied) to the threads on the mounting plate.



**Figure 11. Attaching the Mounting Plate**

4. Attach the wire harness connector to the mating connector located on the top of the back box. Connect the fiber optic cable. Insert the studs and nuts on top of the back box into the mounting plate, turn the back box counterclockwise, and then tighten the three nuts.





**Figure 12.** Attaching the Wire Harness Connector

**Table B. Fiber Optic Cable Types**

<b>Spectra Model</b>	<b>Cable Type</b>	<b>Connector</b>
Single mode (PRS models)	9/125 $\mu\text{m}$ cable	ST type
Multimode (PRM models)	62.5/125 $\mu\text{m}$ cable	ST type

**Table C. 24 VAC Wiring Distances**

The following are the recommended maximum distances for 24 VAC applications and are calculated with a 10-percent voltage drop. (Ten percent is generally the maximum allowable voltage drop for AC-powered devices.)

<b>Total VA</b>	<b>Wire Gauge</b>			
	<b>20 AWG (0.5 mm<sup>2</sup>)</b>	<b>18 AWG (1.0 mm<sup>2</sup>)</b>	<b>16 AWG (1.5 mm<sup>2</sup>)</b>	<b>14 AWG (2.5 mm<sup>2</sup>)</b>
73	39 ft (12 m)	62 ft (19 m)	98 ft (30 m)	156 ft (48 m)

**NOTES:**

- Input power for the dome is 24 VAC only. Power consumption is 73 VA per dome.
- Use a 24 VAC transformer with a minimum of 100 VA.

**Table D. UTP Wiring Distances**


<b>Receiver</b>	<b>Maximum Distance</b>
Active (video only)	0 to 3,000 ft (0 to 914.4 m)
Passive (video, Coaxitron <sup>®</sup> , and Pelco V-Sync)	0 to 750 ft (0 to 228.6 m)

**NOTE:** As a minimum, UTP requires Cat5, 100-ohm twisted pair cable.

**Table E.** Configuration of Wire Harness

<b>Pin</b>	<b>Wire Color</b>	<b>Function</b>
<b>9-Conductor Cable</b>		
A	Black	Alarm 1
B	Red	Alarm 2
C	White	Alarm 3
D	Green	Alarm 4
E	Brown	Alarm 5
F	Orange	Alarm 6
G	Yellow	Alarm 7
H	Violet	Ground
–	Blue	Not Used
<b>5-Conductor Cable</b>		
J	Black	Relay N.O. (Aux. 1)
K	Red	Relay N.C. (Aux. 1)
L	Green	Relay Common (Aux. 1)
M	Brown	Ground
N	White	Auxiliary 2
<b>Cat5 Cable</b>		
P	Green	TX+
R	White/Green	TX-
S	Blue	RX+
T	White/Blue	RX-
U	Orange	UTP Video (+)
V	White/Orange	UTP Video (-)
W	Brown	Spare
X	White/Brown	Spare
<b>Coaxial Cable</b>		
Y	Coaxial Core	Video Out
Z	Coaxial Shield	Video Shield
<b>Individual Wires</b>		
a	White	24 VAC (AC HI)
b	Black	24 VAC (AC LO)
c	Green/Yellow	Earth Ground

# Switch Settings

 **WARNING:** If you are using Pelco D or Pelco P protocol control, your system may not operate if the baud rate and address switches are not set correctly. The switches are set at the factory at the defaults for Pelco D protocol control (2400 baud and address 1).

**Table F. Switch Settings for SW2**

<b>Special Systems</b>										
Switch Number	1	2	3	4	5	6	7	8	9	10
AD-32 Preset System	ON									
CM9502 Setting		ON								
Vicon	Not currently available; SW2-3 is reserved for future use.									

<b>Serial Port Settings</b>										
Switch Number	1	2	3	4	5	6	7	8	9	10
RS422				OFF	OFF					
RS485, 4-Wire				OFF	ON					
RS485, 2-Wire				ON	ON					

<b>Pelco D and Pelco P Protocol Baud Rate</b>										
Switch Number	1	2	3	4	5	6	7	8	9	10
2400 Baud (Default for Pelco D Protocol Control)						OFF	OFF	OFF		
4800 Baud (Default for Pelco P Protocol Control)						ON	OFF	OFF		
9600 Baud						OFF	ON	OFF		

<b>Video Cable Type</b>										
Switch Number	1	2	3	4	5	6	7	8	9	10
Coax Cable									OFF	
UTP Cable									ON	

<b>Dome Termination</b>										
Switch Number	1	2	3	4	5	6	7	8	9	10
Terminated										ON
Not Terminated										OFF

**Table G. Switch Settings for SW1, Pelco P Protocol Control**

**NOTE:** For Coaxitron controls, SW1 is not used; set all switches to the OFF position. For Pelco D protocol control systems, refer to Table H on page 13.

SPECTRA ADDRESS	SWITCH SETTING				
	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5
1	OFF	OFF	OFF	OFF	OFF
2	ON	OFF	OFF	OFF	OFF
3	OFF	ON	OFF	OFF	OFF
4	ON	ON	OFF	OFF	OFF
5	OFF	OFF	ON	OFF	OFF
6	ON	OFF	ON	OFF	OFF
7	OFF	ON	ON	OFF	OFF
8	ON	ON	ON	OFF	OFF
9	OFF	OFF	OFF	ON	OFF
10	ON	OFF	OFF	ON	OFF
11	OFF	ON	OFF	ON	OFF
12	ON	ON	OFF	ON	OFF
13	OFF	OFF	ON	ON	OFF
14	ON	OFF	ON	ON	OFF
15	OFF	ON	ON	ON	OFF
16	ON	ON	ON	ON	OFF

SPECTRA ADDRESS	SWITCH SETTING				
	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5
17	OFF	OFF	OFF	OFF	ON
18	ON	OFF	OFF	OFF	ON
19	OFF	ON	OFF	OFF	ON
20	ON	ON	OFF	OFF	ON
21	OFF	OFF	ON	OFF	ON
22	ON	OFF	ON	OFF	ON
23	OFF	ON	ON	OFF	ON
24	ON	ON	ON	OFF	ON
25	OFF	OFF	OFF	ON	ON
26	ON	OFF	OFF	ON	ON
27	OFF	ON	OFF	ON	ON
28	ON	ON	OFF	ON	ON
29	OFF	OFF	ON	ON	ON
30	ON	OFF	ON	ON	ON
31	OFF	ON	ON	ON	ON
32	ON	ON	ON	ON	ON

**Table H. Switch Settings for SW1, Pelco D Protocol Control**

**NOTE:** For Coaxitron controls, SW1 is not used; set all switches to the OFF position. For Pelco P protocol control systems, refer to Table G on page 13.

SPECTRA ADDRESS	SWITCH SETTING							
	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

SPECTRA ADDRESS	SWITCH SETTING							
	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
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

SPECTRA ADDRESS	SWITCH SETTING							
	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
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
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	SWITCH SETTING							
	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	OFF	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
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

SPECTRA ADDRESS	SWITCH SETTING							
	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
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	OFF	ON	ON	ON	OFF
117	ON	OFF	ON	OFF	ON	ON	ON	OFF
118	OFF	ON	ON	OFF	ON	ON	ON	OFF
119	ON	ON	ON	OFF	ON	ON	ON	OFF
120	OFF	OFF	OFF	ON	ON	ON	ON	OFF
121	ON	OFF	OFF	ON	ON	ON	ON	OFF
122	OFF	ON	OFF	ON	ON	ON	ON	OFF
123	ON	ON	OFF	ON	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	OFF	OFF	OFF	OFF	ON
133	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
134	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
135	ON	ON	ON	OFF	OFF	OFF	OFF	ON
136	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
137	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
138	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
139	ON	ON	OFF	ON	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

SPECTRA ADDRESS	SWITCH SETTING							
	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
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
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

SPECTRA ADDRESS	SWITCH SETTING							
	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
191	ON	ON	ON	ON	ON	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
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

SPECTRA ADDRESS	SWITCH SETTING							
	SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	SW1-6	SW1-7	SW1-8
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
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



# Specifications

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## GENERAL

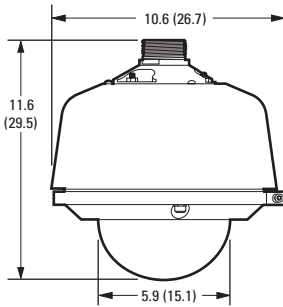
Construction	
Back Box	316L stainless steel
Dome Drive	Aluminum, thermoplastic
Lower Dome Trim Ring	316L stainless steel
Bubble	Polycarbonate, 0.09-inch thick
V-Band	316L stainless steel
Pressure Relief	Brass
Schrader Valve	Brass
Connector	Nickel-plated steel
Light Attenuation	
Smoked	f/1.0 light loss
Clear	Zero light loss
Pressurization	
Valve	Schrader
Pressure	8 psig (not factory pressurized)
Pressure Relief	10 psig
Pan Movement	360° continuous pan rotation
Vertical Tilt	+2° to -92°
Manual Pan/Tilt Speeds*	
Pan	0.1° to 80°/sec manual operation, 150°/sec turbo
Tilt	0.1° to 40°/sec manual operation
Preset Speeds	
Pan	400°/sec
Tilt	200°/sec
Operating Temperature	(Assumes no wind chill factor)
Maximum	140°F (60°C) absolute maximum; 122°F (50°C) sustained maximum
Minimum	-60°F (-51.1°C) absolute minimum; minimal icing at sustained minimum of -50°F (-45°C); prevents icing at sustained minimum of -40°F (-40°C); de-ices 0.1 inch (2.5 mm) within 3 hours after power-up
Weight (approximate)	
Back Box	10.2 lb (4.60 kg)
Dome Drive	3.3 lb (1.48 kg)
Lower Dome	3.3 lb (1.48 kg)

## ELECTRICAL *(Dome Drive Only)*

Input Voltage	18-32 VAC; 24 VAC nominal
	22-27 VDC; 24 VDC nominal

\*For variable-speed operation, an appropriate controller is required. With fixed-speed controllers, pan/tilt speed is 20°/sec. The CM6700/CM6800 controller with the KBD200A keyboard has programmable fixed speeds.

Input Power	
24 VAC	73 VA nominal (with heater)
24 VDC	3 A nominal (with heater)
Fuse	1.25 A
Auxiliary Outputs	2
Alarm Inputs	7



NOTE: VALUES IN PARENTHESES ARE CENTIMETERS;  
ALL OTHERS ARE INCHES.

## PRODUCT WARRANTY AND RETURN INFORMATION

### WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship **for a period of one year** after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years on fiber optic products and TW3000 Series unshielded twisted pair (UTP) transmission products.
- Three years on Spectra® IV products.
- Three years on Genex® Series products (multiplexers, server, and keyboard).
- Three years on DX Series digital video recorders, DVR5100 Series digital video recorders, DigitalSENTRY® Series hardware products, DVX Series digital video recorders, NVR300 Series network video recorders, and Endura® Series distributed network-based video products.
- Three years on Camclosure® and Pelco-branded fixed camera models, except the CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models, which have a five-year warranty.
- Three years on PMCL200/300/400 Series LCD monitors.
- Two years on standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM9700 Series matrix, and DF5/DF8 Series fixed dome products.
- Two years on Spectra III™, Spectra Mini, Esprit®, ExSite®, and PS20 scanners, including when used in continuous motion applications.
- Two years on Esprit and WW5700 Series window wiper (excluding wiper blades).
- Two years (except lamp and color wheel) on Digital Light Processing (DLP®) displays. The lamp and color wheel will be covered for a period of 90 days. The air filter is not covered under warranty.
- Two years on Intelli-M® eIDC controllers.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners, or preset lenses used in continuous motion applications (preset scan, tour, and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to a Pelco designated location. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental, or consequential damages (including loss of use, loss of profit, and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, sales order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product that does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.


Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

### RETURNS

To expedite parts returned for repair or credit, please call Pelco at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair) and designated return location.

All merchandise returned for credit may be subject to a 20 percent restocking and refurbishing charge.

Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid.

 The materials used in the manufacture of this document and its components are compliant to the requirements of Directive 2002/95/EC.



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 dealer for procedures for recycling this equipment.

### REVISION HISTORY

Manual #	Date	Comments
C3422M	9/06	Original version.
C3422M-A	11/06	Inserted Spectra III compatibility note. Added serial port settings to Table F.
C3422M-B	3/08	Added information to Preinstallation section regarding the use of O-ring lubricant to create an airtight seal.

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