



by **Schneider** Electric

# INSTALLATION

## Spectra IV IP Series SD4E Dome System



**In-Ceiling  
Heavy-Duty In-Ceiling  
Pendant (shown)**

**C3468M (4/10)**



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# Important Notices

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## LEGAL NOTICE

SOME PELCO EQUIPMENT CONTAINS, AND THE SOFTWARE ENABLES, AUDIO/VISUAL AND RECORDING CAPABILITIES, THE IMPROPER USE OF WHICH MAY SUBJECT YOU TO CIVIL AND CRIMINAL PENALTIES. APPLICABLE LAWS REGARDING THE USE OF SUCH CAPABILITIES VARY BETWEEN JURISDICTIONS AND MAY REQUIRE, AMONG OTHER THINGS, EXPRESS WRITTEN CONSENT FROM RECORDED SUBJECTS. YOU ARE SOLELY RESPONSIBLE FOR INSURING STRICT COMPLIANCE WITH SUCH LAWS AND FOR STRICT ADHERENCE TO ANY/ALL RIGHTS OF PRIVACY AND PERSONALTY. USE OF THIS EQUIPMENT AND/OR SOFTWARE FOR ILLEGAL SURVEILLANCE OR MONITORING SHALL BE DEEMED UNAUTHORIZED USE IN VIOLATION OF THE END USER SOFTWARE AGREEMENT AND RESULT IN THE IMMEDIATE TERMINATION OF YOUR LICENSE RIGHTS THEREUNDER.

## REGULATORY NOTICES

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### RADIO AND TELEVISION INTERFERENCE

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You may also find helpful the following booklet, prepared by the FCC: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402.

Changes and modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission's rules.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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This offer is valid for a period of three (3) years from the date of the distribution of this product by Pelco.

# Description

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Spectra® IV IP was designed with ease of installation and ease of maintenance in mind. Each dome system consists of three components: a back box, a dome drive, and a lower dome. Spectra IV IP back box options include the following models: environmental in-ceiling (ideal for outdoor soffits), indoor in-ceiling, standard and environmental pendant, heavy-duty, and stainless steel. Depending on the dome drive model with which it will be used, a back box can be ordered with or without built-in back box memory. This memory can be used to store camera and location-specific dome settings, including labels, presets, patterns, and zones.

## MODELS

BB4E-F	In-ceiling, black, with back box memory
BB4E-F-E	In-ceiling, black, environmental, with back box memory
BB4E-PB	Pendant mount, black, standard, with back box memory
BB4E-PG	Pendant mount, gray, standard, with back box memory
BB4E-PG-E	Pendant mount, gray, environmental, with back box memory
BB4EHD-F	Heavy-duty, in-ceiling, gray, with back box memory
BB4EHD-PG	Heavy-duty, pendant, gray, with back box memory
BB4EHD-PG-E	Heavy-duty, environmental pendant, gray, with back box memory
BB4E-PSG-E	Stainless steel, environmental pendant, gray 316 SS, with back box memory

## PARTS LIST

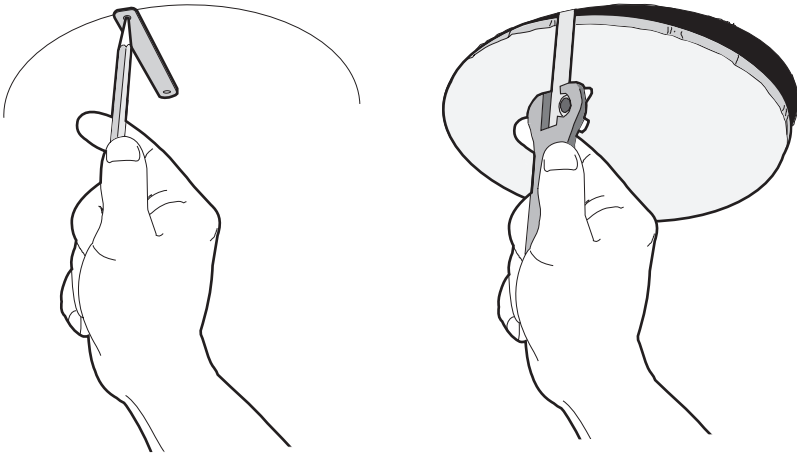
Qty	Description
1	Back box
1	Thread compound (pendant, heavy-duty pendant, and stainless steel models only)
8	Screws, 10-32 x 3-inch, Phillips flat head (heavy-duty in-ceiling model only)
1	Important Safety Instructions manual
1	Installation manual
1	Operation/Configuration manual
1	Resource disc

# Mounting

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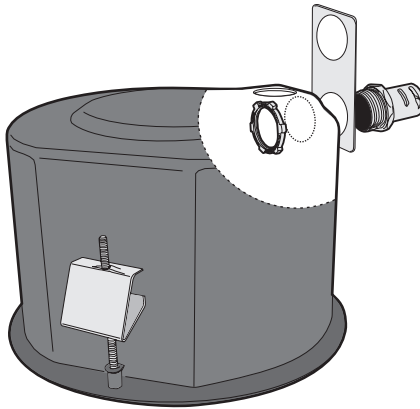
## IN-CEILING

1. Prepare the ceiling (refer to Figure 1):
  - a. Locate the center point of the mounting location, and insert the compass tool into the ceiling.
  - b. Place the end of a pencil in the hole on the end of the compass tool, and draw a circle.
  - c. Cut out the circle.



**Figure 1.** Preparing the Ceiling

2. Attach a conduit fitting (not supplied), lock nut (not supplied), and safety chain bracket (refer to Figure 2).
3. Install a safety chain/cable (not supplied), which will support up to 16 pounds (7.3 kg).

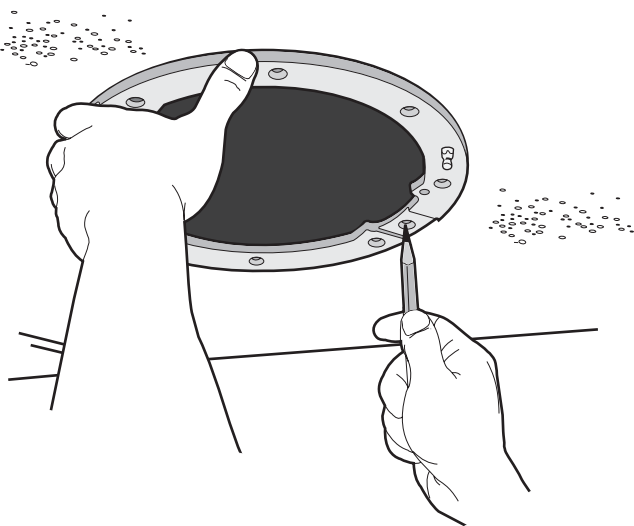


**Figure 2.** Attaching the Conduit Fitting, Lock Nut, and Safety Chain Bracket

4. Open the hinged door to the back box by pushing the tab lock toward the wall of the unit and lifting the door open.
5. Pull the wiring into the back box through the conduit fitting.
6. Connect all required wiring (refer to *Wiring* on page 12).
7. Install the back box by compressing the spring clips and pushing the back box through the hole.
8. Tighten the screws until you hear a clicking noise.

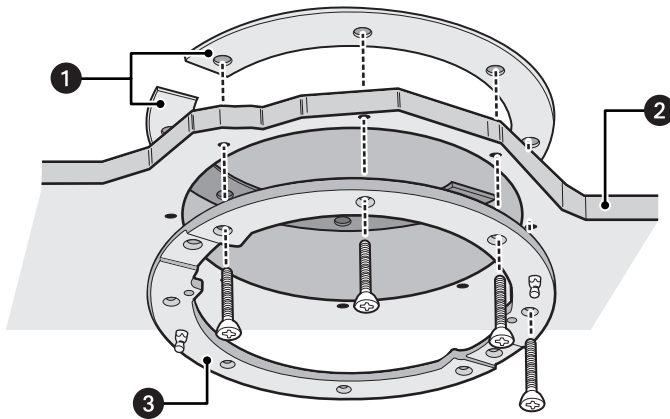
## HEAVY-DUTY IN-CEILING

1. Prepare the ceiling (refer to Figure 1 on page 8):
  - a. Locate the center point of the mounting location, and insert the compass tool into the ceiling.
  - b. Place the end of a pencil in the hole on the end of the compass tool, and draw a circle.
  - c. Cut out the circle.
2. Use the mounting ring as a template to mark the screw hole pattern onto the mounting surface.
3. Prepare the holes.



**Figure 3.** Marking the Screw Hole Pattern

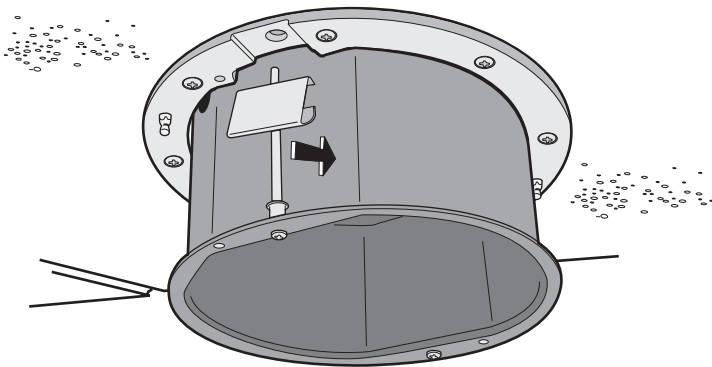
4. Install the mounting plates (refer to Figure 4 on page 10). Use the eight 10-32 x 3-inch screws (supplied) to install the mounting ring and the two back mounting plates.
  - a. Line up the mounting ring with the eight fastener holes.
  - b. Feed one back mounting plate through the hole in the ceiling. Line up the plate with the four fastener holes.
  - c. Install fasteners through the mounting ring, ceiling, and out the back mounting plate.
  - d. Install the second back mounting plate.



**Figure 4.** Installing the Plates

- 1 Back Mounting Plates
- 2 Ceiling
- 3 Mounting Ring

5. Attach a conduit fitting (not supplied), lock nut (not supplied), and safety chain bracket (refer to Figure 2 on page 8).
6. Install a safety chain/cable (not supplied), which will support up to 16 pounds (7.3 kg).
7. Open the hinged door to the back box by pushing the tab lock toward the wall of the unit and lifting the door open.
8. Pull the wiring into the back box through the conduit fitting.
9. Connect all required wiring (refer to *Wiring* on page 12).
10. Install the back box by compressing the spring clips and pushing the back box through the hole (refer to Figure 5).
11. Tighten the screws until you hear a clicking noise.



**Figure 5.** Installing the Heavy-Duty In-Ceiling Back Box

## PENDANT, HEAVY-DUTY PENDANT, AND STAINLESS STEEL

1. Install the mount for the pendant dome. Refer to the instructions supplied with the mount.

**NOTE:** If the mount is outdoors, make sure it is properly sealed to keep moisture out.

2. Open the hinged door to the back box by pushing the tab lock towards the wall of the unit and lifting the door open.
3. Pull the wiring into the back box.
4. Connect all required wiring (refer to *Wiring* on page 12).

5. Screw the back box onto the mount (refer to Figure 6). If outdoors, apply thread compound (supplied) to the threads on the back box.

**NOTE:** Thread compound must be applied. Not doing so may prevent the units from being separated in the future.

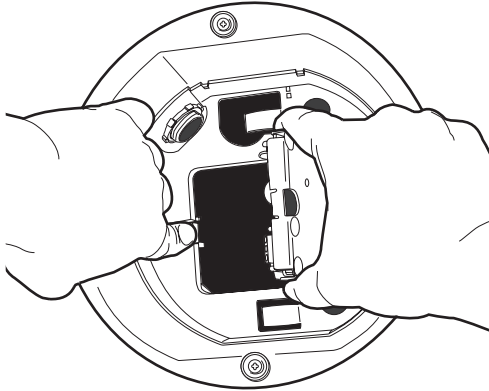


**Figure 6.** Attaching the Pendant Back Box to the Mount

# Wiring

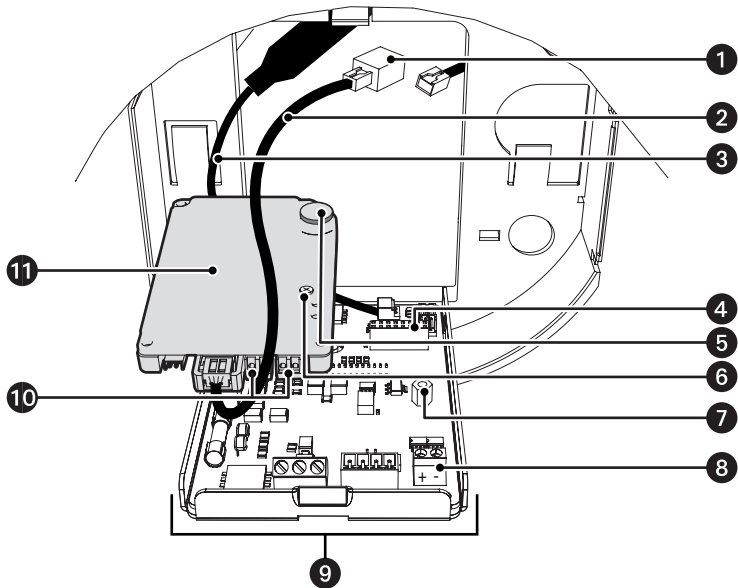
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1. Open the hinged door to the back box by pushing the tab lock toward the wall of the unit and lifting the door open (refer to Figure 7).



**Figure 7.** Back Box Door

2. Remove the TXB-N from the back box circuit board (refer to Figure 8):
  - a. Loosen the captive screw on the TXB-N.
  - b. Carefully unplug the TXB-N from the back box circuit board.



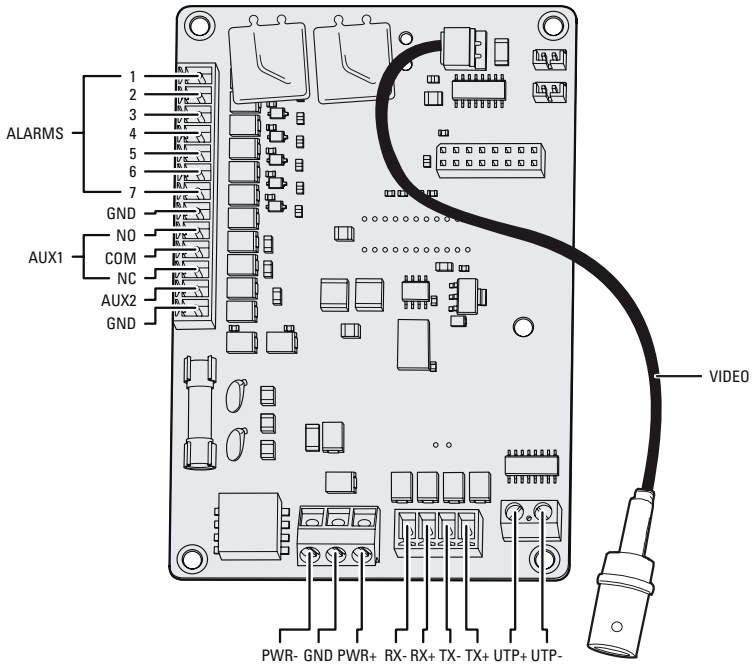
**Figure 8.** Removing the TXB-N

- |                       |                          |
|-----------------------|--------------------------|
| 1 RJ-45 Connector     | 7 Standoff               |
| 2 Ethernet Cable      | 8 UTP Connector          |
| 3 Video Coaxial Cable | 9 Back Box Circuit Board |
| 4 16-Pin Connector    | 10 Audio Connectors      |
| 5 Heat Sink Standoff  | 11 TXB-N                 |
| 6 Captive Screw       |                          |

3. Connect the auxiliary, alarm, and other wiring to the back box circuit board (refer to Figure 9).

**NOTES:**

- **Aux 1:** Maximum 2 A at low voltage (<40 V)  
**Aux 2:** Maximum 30 mA at 32 VDC
- If you are installing an environmental back box in a railway application, attach a ground wire from the circuit board power connector to a structural ground using at least 18-gauge wire.

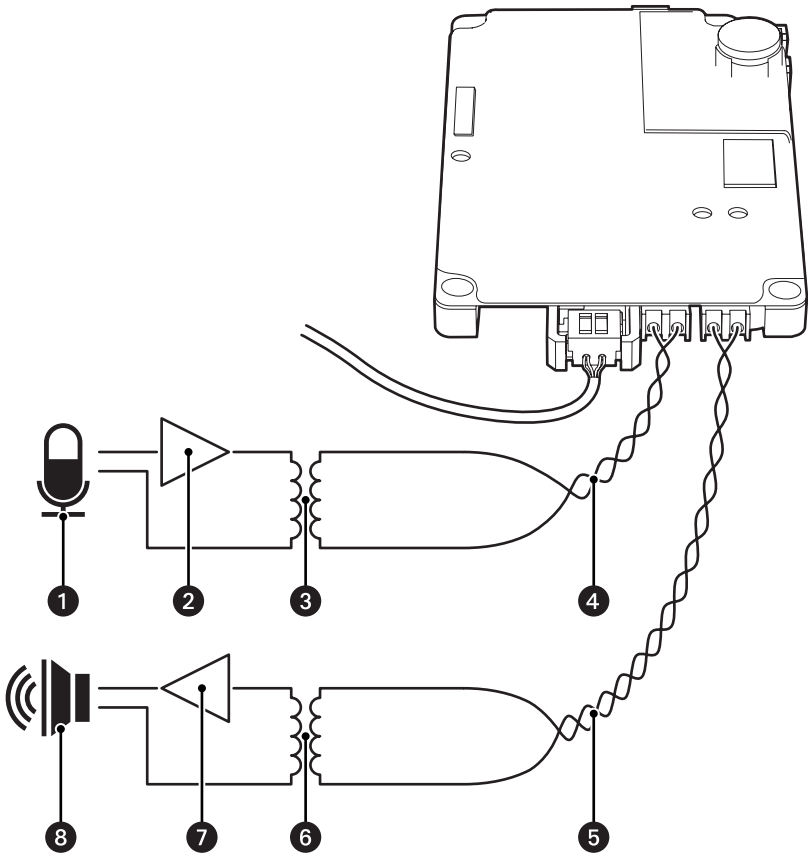


**Figure 9.** Connect the Wiring to the Circuit Board

- If you plan to use the audio functions, install your audio cables into the audio line-in and line-out connectors on the TXB-N.

**NOTES:**

- To take full advantage of the distance and noise immunity benefits of audio, you must use a 600-ohm impedance matching transformer and twisted pair cable (refer to Figure 10).
- A stable power supply is required for optimal audio performance.



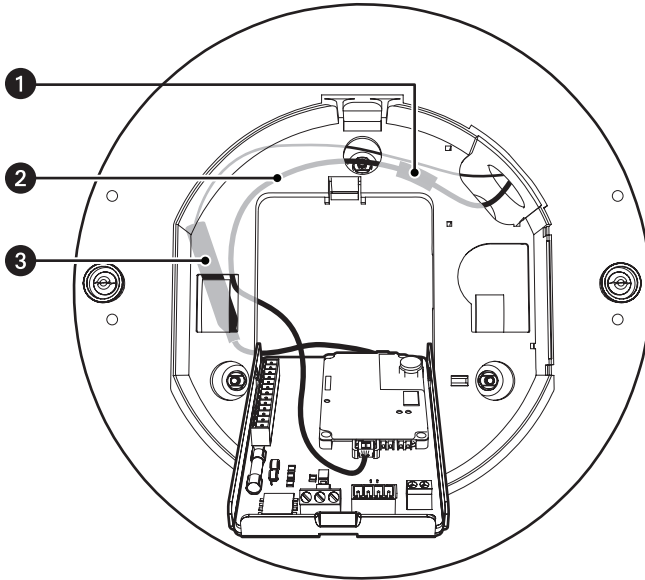
**Figure 10.** Connecting Audio to the TXB-N

- |  |  |
|--|--|
| 1 Microphone                             | 5 Line-Out Audio Twisted Pair Cable      |
| 2 Amplifier                              | 6 600-Ohm Impedance Matching Transformer |
| 3 600-Ohm Impedance Matching Transformer | 7 Amplifier                              |
| 4 Line-In Audio Twisted Pair Cable       | 8 Speaker                                |

5. Reinstall the TXB-N:
  - a. Plug the TXB-N into the 16-pin connector located on the back box circuit board.
  - b. Secure the TXB-N to the standoff on the circuit board using the captive screw on the TXB-N.
6. Plug your network Ethernet cable into the RJ-45 connector on the TXB-N to connect the Spectra IV dome system to your existing network.

**⚠ WARNING:** An electrical short in the back box may occur if the metal BNC connector on the video coaxial cable is not completely covered by the protective boot.

7. Perform one of the following options:
  - **View video using both analog and IP connections:** Connect the video coaxial cable from the back box circuit board to the coaxial cable coming in from the outside. Make sure that the BNC connector is completely covered by the protective boot.
  - **View video using only the IP connection:** Make sure that the BNC connector is completely covered by the protective boot and is out of the way of the back box door.
8. Before closing the interconnect door, ensure that no wires are between the top of the heat sink standoff and the back box (refer to Figure 11 on page 16). Both the video coaxial cable and the Ethernet cable need to be routed carefully to ensure clearance for the heat sink standoff.
9. Close the interconnect door and snap the tab lock into place.



**Figure 11.** Routing the Cables in the Back Box

- ① RJ-45 Connector
- ② Ethernet Cable
- ③ Video Coaxial Cable

**Table A. Video Coaxial Cable Requirements**

Cable Type*	Maximum Distance
RG59/U	750 ft (229 m)
RG6/U	1,000 ft (305 m)
RG11/U	1,500 ft (457 m)

\*Cable requirements:

- 75-ohm impedance
- All-copper center conductor
- All-copper braided shield with 95 percent braid coverage

Refer to Table B for the recommended maximum distances for 24 VAC and 24 VDC applications, which are calculated with a 10 percent voltage drop. (Ten percent is generally the maximum allowable voltage drop for AC- or DC-powered devices.)

**Table B. 24 VAC/24 VDC Wiring Distances**

AC/DC Total VA/ Total Watts	Wire Gauge			
	20 AWG (0.5 mm <sup>2</sup> )	18 AWG (1.0 mm <sup>2</sup> )	16 AWG (1.5 mm <sup>2</sup> )	14 AWG (2.5 mm <sup>2</sup> )
23 VA/ 15 W	123 ft (38 m)	196 ft (60 m)	311 ft (95 m)	495 ft (151 m)
73 VA/ 65 W	39 ft (12 m)	62 ft (19 m)	98 ft (30 m)	156 ft (48 m)

**NOTE:** Input power for the dome is 24 VAC or 24 VDC. Using 24 VAC input power, power consumption is 23 VA per dome for indoor models and 73 VA for outdoor models. Using 24 VDC input power, power consumption is 0.7 A (15 W) for indoor models and 3 A (65 W) for outdoor models.

Use a 24 VAC transformer with the following minimum VA:

- **40 VA per dome:** For indoor models (without heater)
- **100 VA per dome:** For outdoor models (with heater)

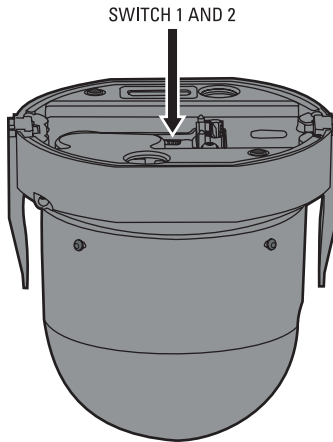
# Installing the Dome Drive

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1. Perform one of the following options:

- **View video using both analog and IP connections:** Set the DIP switches on the top of the Spectra IV dome drive (refer to Figure 12). For DIP switch settings, refer to the labels located on the top of the dome drive, or refer to *Switch Settings* on page 28.
- **View video using the IP connection:** You do not need to set the DIP switches.

**NOTE:** When connecting more than one Spectra dome to a single controller, terminate the unit farthest from the controller. To terminate the dome drive set the SW2-10 switch to the ON position.



**Figure 12.** Setting the DIP Switches

2. Install the dome drive.



**WARNING:** Improper installation of the dome drive can be dangerous and can seriously damage the equipment.

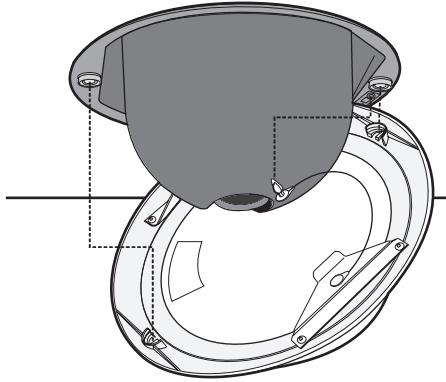
- a. Align the blue and red tabs with the blue and red labels on the back box.
- b. Push in the red tab and insert that side of the dome drive first.
- c. Push in the blue tab and insert the dome drive into the back box the remainder of the way.
- d. Continue pushing on the ends of the tabs until both sides click firmly into place.

# Installing the Lower Dome

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## IN-CEILING

1. Snap the clip on the end of the trim ring leash into the hole on the lip of the back box (refer to Figure 13).

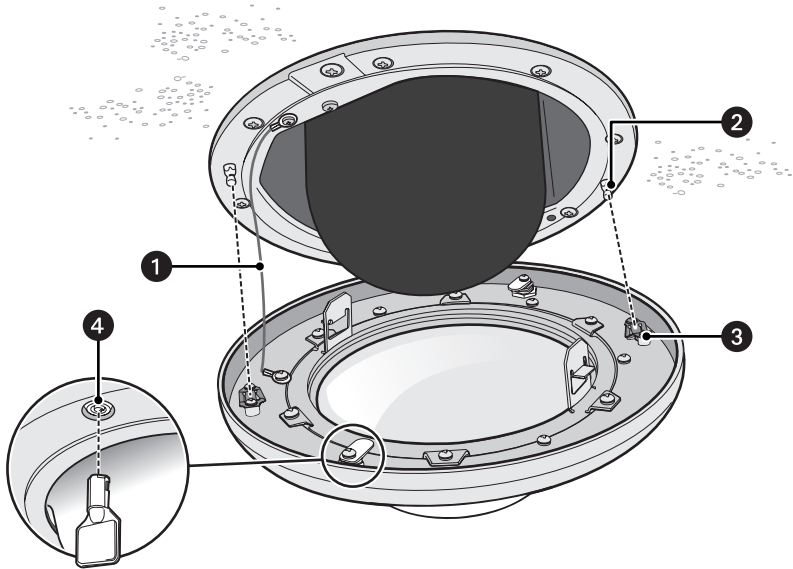


**Figure 13.** Installing the In-Ceiling Lower Dome

2. Snap the trim ring into the plastic snap washers on the mounting screws.

## HEAVY-DUTY IN-CEILING

1. Snap the clip of the lower trim ring leash into the hole on the lip of the back box (refer to Figure 14).
2. Insert both keys in the barrel locks. Turn the keys clockwise to the unlocked position.  
**NOTE:** Keys cannot be removed from the lock while in the unlocked position.
3. Align the ball studs, located on the mount ring, with the ball stud receivers, located on the inside of the lower dome. Push the lower dome into the back box.
4. Hold and turn both keys to the locked position.

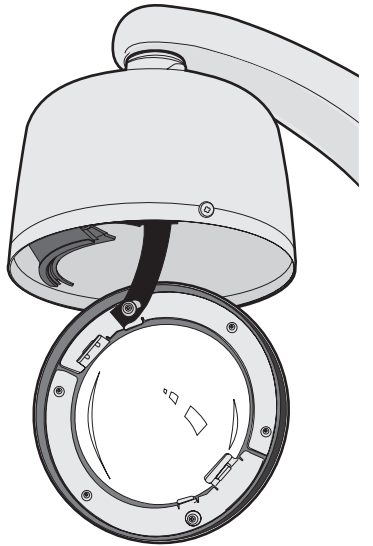


**Figure 14.** Installing the Heavy-Duty In-Ceiling Lower Dome

- 1 Trim Leash
- 2 Ball Stud
- 3 Ball Stud Receiver
- 4 Barrel Key Lock

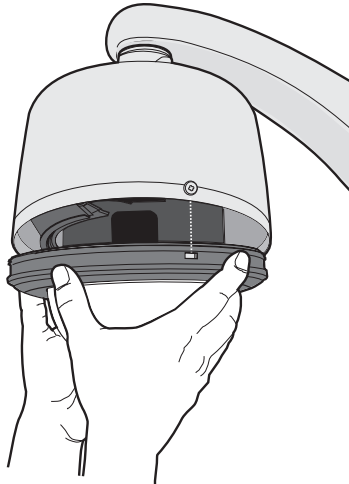
## PENDANT

1. Attach the back box leash to the lower dome (refer to Figure 15).



**Figure 15.** Attaching the Leash to the Pendant Lower Dome

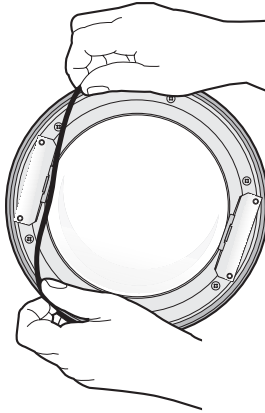
2. Push the lower dome into the back box.
3. Tighten the captive Phillips pan head screws to secure the lower dome.



**Figure 16.** Installing the Pendant Lower Dome

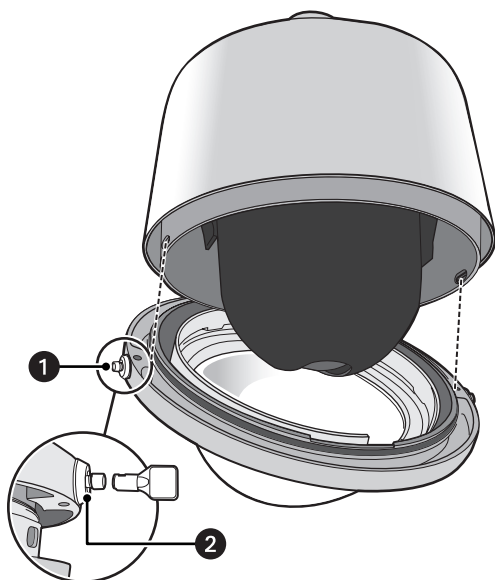
## HEAVY-DUTY PENDANT

1. Attach the back box leash to the lower dome (refer to Figure 15 on page 21).
2. Lightly apply O-ring lubricant (supplied with the lower dome) to the O-ring, and then install the O-ring in the groove on the trim ring of the lower dome (refer to Figure 17).



**Figure 17.** Installing the O-Ring

3. Align the barrel locks in the lower dome with the holes located on each side of the back box (refer to Figure 18 on page 23).
4. Push the lower dome into the back box.
5. Press in the pins of the barrel locks to secure the lower dome.

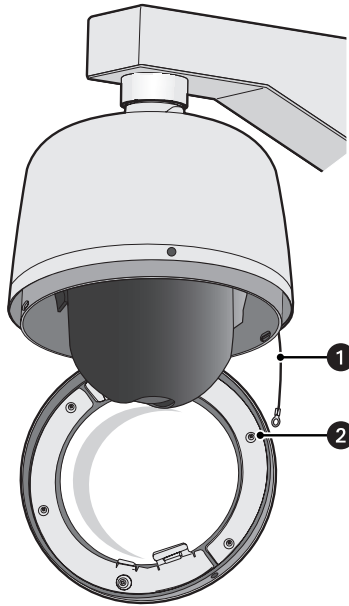


**Figure 18.** Installing the Heavy-Duty Pendant Lower Dome

- ❶ Barrel Lock
- ❷ Center Pin

## STAINLESS STEEL

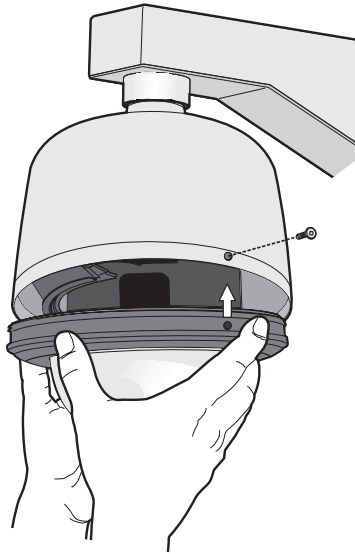
1. Attach the back box leash to the lower dome using the nearest retainer screw (refer to Figure 19).



**Figure 19.** Attaching the Leash to the Stainless Steel Lower Dome

- 1 Leash
  - 2 Retainer Screw
2. Lightly apply O-ring lubricant (supplied with the lower dome) to the O-ring, and then install the O ring in the groove on the trim ring of the lower dome (refer to Figure 17 on page 22).
  3. Remove the two lower dome mounting screws, and apply a drop of Loctite® 222MS (supplied with lower dome) to each screw.

4. Push the lower dome into the back box, line up the mounting screw holes, and install the two mounting screws (refer to Figure 20).



**Figure 20.** Installing the Stainless Steel Lower Dome

# Troubleshooting

To use your dome, refer to the operation and configuration manual.

If the following instructions fail to solve your problem, contact Pelco Product Support at 1-800-289-9100 (USA and Canada) or +1-559-292-1981 (international) for assistance. Be sure to have the serial number available when calling.

Do not try to repair the unit yourself. Leave maintenance and repairs to qualified technical personnel only.

**Table C. Troubleshooting the Spectra IV IP Dome System (1 of 2)**

<b>Problem</b>	<b>Possible Causes</b>	<b>Suggested Resolution</b>
Dome does not start properly after installation.	The circuit board fuse may need to be replaced.	Check the fuse on the circuit board inside the back box for continuity. Replace the fuse if needed.
	The back box may not be receiving proper voltage.	Check the wiring with a volt meter to ensure that the back box is receiving proper voltage.
Dome starts correctly, but you do not have accurate control.	Switch settings on the dome drive are set incorrectly.	Check the signal with a volt meter or an oscilloscope. <b>NOTE:</b> This step will not apply if you are using Coaxitron control. Ensure that the switch settings on the dome drive are set correctly (refer to <i>Switch Settings</i> on page 28.)
No video is displayed.	Power is not connected.	Check the power connector.
	Video cable is not connected.	Check the video connector.
	TXB-N module is not inserted properly.	Reinstall the TXB-N module. Make sure the pins on the module are inserted correctly.
Spectra IV information (model, firmware, Pelco P and Pelco D protocol addresses, and communication settings) does not appear after the configuration cycle.	The unit cannot complete its configuration cycle.	Refer to <i>Troubleshooting</i> in the Installation/Operation manual shipped with the Spectra IV dome drive.
The audio signal is weak.	You are not using the correct type of transformer.	Be sure you are using a 600-ohm impedance matching transformer.
	The wiring distance connecting the audio equipment may be too long.	Test the equipment using a shorter wiring distance.
	The gain is not properly adjusted.	If you are using an external amplifier and it has an adjustable gain, increase the gain until the signal is acceptable.

**Table C.** Troubleshooting the Spectra IV IP Dome System (2 of 2)

<b>Problem</b>	<b>Possible Causes</b>	<b>Suggested Resolution</b>
There is an echo when audio is received.	The speaker volume is too high.	Lower the speaker volume.
	The microphone and the speaker are too close together.	If your call station does not have built-in echo cancellation, move the microphone and speaker farther apart.
	Your call station does not have built-in echo cancellation.	Use a call station with built-in echo cancellation.

# Switch Settings

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

**Table D. 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 or Pelco P Protocol Baud Rate</b>										
Switch Number	1	2	3	4	5	6	7	8	9	10
2400 Baud (Default for D-type Control)						OFF	OFF	OFF		
4800 Baud (Default for P-type 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
Coaxial Cable									OFF	

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

**Table E. Switch Settings for SW1, Pelco P-Type Control**

**NOTE:** For Coaxitron controls, SW1 is not used; set all switches to OFF. For Pelco D-type control systems, refer to Table F on page 30.

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
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 F. Switch Settings for SW1, Pelco D-Type Control**

**NOTE:** For Coaxitron controls, SW1 is not used; set all switches to OFF. For Pelco P-type control systems, refer to Table E on page 29.

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
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
36	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
37	ON	OFF	ON	OFF	OFF	ON	OFF	OFF

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

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

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

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

SPECTRA ADDRESS	SWITCH SETTING							
	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
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

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

(Dome Drive Only)

Input Voltage	18 to 32 VAC; 24 VAC nominal 22 to 27 VDC; 24 VDC nominal	
Input Power	23 VA nominal (indoor, without heater) 73 VA nominal (outdoor, with heater)	
24 VAC	0.7 A nominal (indoor, without heater) 3 A nominal (outdoor, without heater)	
24 VDC		
Fuse	1.25 A	
Auxiliary Outputs	2	
Alarm Inputs	7	
Relay Contacts	<u>AUX 1</u>	<u>AUX 2 Output</u>
Type	Form C	Open collector transistor output
Voltage	Low voltage (<40 V)	32 VDC maximum
Current	2 A maximum	150 mA maximum

## AUDIO

Streaming	Bi-directional: full or half duplex
Input/Output	Terminal block, analog for microphone and speaker; 600-ohm differential; 1 V <sub>p-p</sub> maximum signal level
Compression	G.711 PCM 8 bit, 8 kHz mono at 64 kbit/s

## IN-CEILING

Construction	
Back Box	Plastic
Dome Drive	Aluminum, thermoplastic
Lower Dome	Acrylic
Cable Entry (Back Box)	0.75-inch conduit fitting
Pan Movement	360° continuous pan rotation
Vertical Tilt	Unobstructed +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
Environment	
In-Ceiling	Indoor
Environmental In-Ceiling	Outdoor
Operating Temperature	
In-Ceiling Indoor	32° to 122°F (0° to 50°C)
Environmental In-Ceiling	(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; prevents icing at sustained minimum of -50°F (-45°C); de-ices 0.1 inch (2.5 mm) within 3 hours after power-up
Weight (approximate)	
Back Box	
In-Ceiling Indoor	1.50 lb (0.68 kg)
Environmental In-Ceiling	2.10 lb (0.95 kg)
Dome Drive	3.30 lb (1.48 kg)
Lower Dome	
In-Ceiling Indoor	0.20 lb (0.09 kg)
Environmental In-Ceiling	0.60 lb (0.27 kg)

\*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 configurable fixed speeds.

## HEAVY-DUTY IN-CEILING

Construction	
Back Box	Aluminum
Dome Drive	Aluminum, thermoplastic
Lower Dome	Clear polycarbonate, 0.090-inch thick
Cage Thickness	0.12 x 0.30-inch cast stainless steel
Cage Color	Black, for maximum discreetness
Cable Entry (Back Box)	0.75-inch conduit fitting
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
Preset Speeds	
Pan	400°/sec
Tilt	200°/sec
Environment	Indoor only
Operating Temperature	32° to 122°F (0° to 50°C)
Weight (approximate)	
Back Box	2.17 lb (0.98 kg)
Dome Drive	3.30 lb (1.48 kg)
Lower Dome	0.20 lb (0.09 kg)
In-Ceiling	1.60 lb (0.73 kg)
In-Ceiling with Cage	3.60 lb (1.63 kg)

\*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 configurable fixed speeds.

## PENDANT

Construction	
Back Box	Aluminum
Dome Drive	Aluminum, thermoplastic
Lower Dome	Acrylic
Cable Entry (Back Box)	Through 1.5-inch NPT pendant mount
Pan Movement	360° continuous pan rotation
Vertical Tilt	Unobstructed +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
Environment	Indoor/outdoor
Operating Temperature	
Standard Pendant	(Assumes no wind chill factor)
Maximum	140°F (60°C) absolute maximum in shade; 122°F (50°C) sustained maximum in shade; 113°F (45°C) absolute maximum in direct sunlight; 95°F (35°C) sustained maximum in direct sunlight
Minimum	25°F (-4°C) sustained minimum
Environmental Pendant	(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; prevents icing at sustained minimum of -50°F (-45°C); de-ices 0.1 inch (2.5 mm) within 3 hours after power-up
Weight (approximate)	
Back Box	
Standard Pendant	2.40 lb (1.09 kg)
Environmental Pendant	3.50 lb (1.59 kg)
Dome Drive	3.30 lb (1.48 kg)
Lower Dome	0.20 lb (0.09 kg)

\*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 configurable fixed speeds.

## HEAVY-DUTY PENDANT


Construction	
Back Box	Aluminum
Dome Drive	Aluminum, thermoplastic
Lower Dome	Clear polycarbonate, 0.09-inch thick
Cage Thickness	0.12 x 0.30-inch cast stainless steel
Cage Color	Black, for maximum discreetness
Cable Entry (Back Box)	Through 1.5-inch NPT pendant mount
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
Preset Speeds	
Pan	400°/sec
Tilt	200°/sec
Environment	Indoor/outdoor
Operating Temperature	
Pendant	32° to 140°F (0° to 60°C) absolute maximum; 32° to 122°F (0° to 50°C) sustained maximum (Assumes no wind chill factor)
Environmental Pendant	140°F (60°C) absolute maximum; 122°F (50°C) sustained maximum
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	
Pendant	4.45 lb (2.02 kg)
Environmental Pendant	4.75 lb (2.15 kg)
Dome Drive	3.3 lb (1.48 kg)
Lower Dome	
Pendant	1.83 lb (0.83 kg)
Pendant with Cage	3.83 lb (1.74 kg)

\*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 configurable fixed speeds.

## STAINLESS STEEL

Construction	
Back Box	316 stainless steel; gray, polyurethane powder-coated finish
Dome Drive	Aluminum, thermoplastic
Lower Dome Trim Ring	316 stainless steel; black, polyurethane powder-coated finish
Bubble	Acrylic, clear or smoked
Cable Entry (Back Box)	Through 1.5-inch NPT pendant mount
Pan Movement	360° continuous pan rotation
Vertical Tilt	Unobstructed +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
Environment	Indoor/outdoor
Operating Temperature	Assumes no wind chill factor; for detailed test conditions, contact Pelco
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	4.75 lb (2.15 kg)
Dome Drive	3.3 lb (1.48 kg)
Lower Dome	1.83 lb (0.83 kg)

\*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 configurable fixed speeds.

 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
C3468M	4/10	Original version.

# 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:
  - Fiber optic products
  - Unshielded Twisted Pair (UTP) transmission products
  - CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models
- Three years:
  - Pelco-designed fixed network cameras and network dome cameras with Sarix™ technology.
  - Pelco-branded fixed camera models (CCC1390H Series, C10DN Series, C10CH Series, and IP3701H Series)
  - EH1500 Series enclosures
  - Spectra® IV products (including Spectra IV IP)
  - Camclosure® Series (IS, ICS, IP) integrated camera systems
  - DX Series digital video recorders (except DX9000 Series which is covered for a period of one year), DVR5100 Series digital video recorders, Digital Sentry® Series hardware products, DVX Series digital video recorders, and NVR300 Series network video recorders
  - Endura® Series distributed network-based video products
  - Genex® Series products (multiplexers, server, and keyboard)
  - PMCL200/300/400 Series LCD monitors
  - PMCL5xx Series FHD monitors
- Two years:
  - Standard varifocal, fixed focal, and motorized zoom lenses.
  - DF5/DF8 Series fixed dome products
  - Legacy® Series integrated positioning systems
  - Spectra III™, Spectra Mini, Spectra Mini IP, Esprit®, ExSite®, and PS20 scanners, including when used in continuous motion applications.
  - Esprit Ti and TI2500 Series thermal imaging products
  - Esprit and VW5700 Series window wiper (excluding wiper blades).
  - CM6700/CM6800/CM9700 Series matrix
  - Digital Light Processing (DLP®) displays (except lamp and color wheel). The lamp and color wheel will be covered for a period of 90 days. The air filter is not covered under warranty.
  - Intelli-M® eIDC controllers
- One year:
  - Video cassette recorders (VCRs), except video heads. Video heads will be covered for a period of six months.
- Six months:
  - 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.

2-10-10

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***PELCO***

by **Schneider** Electric

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