

SPECTRA MINI SERIES DOME SYSTEM, NTSC/PAL

TECHNICAL SPECIFICATIONS

SECURITY SYSTEM

DIVISION -- 28 ELECTRONIC SAFETY AND SECURITY

LEVEL 1___28 20 00 ELECTRONIC SURVEILLANCE

LEVEL 2___28 23 00 VIDEO SURVEILLANCE

LEVEL 3___28 23 29 VIDEO SURVEILLANCE REMOTE DEVICES AND SENSORS

PART 2 - PRODUCTS

2.01 GENERAL

- A. All equipment and materials used shall be standard components that are regularly manufactured and used in the manufacturer's system.
- B. All systems and components shall have been thoroughly tested and proven in —actual use.
- C. All systems and components shall be provided with the availability of a toll-free (U.S. and Canada), 24-hour technical assistance program (TAP) from the manufacturer.- The TAP shall allow for immediate technical assistance for either the dealer/installer or the end user at no charge for as long as the product is installed.
- D. All systems and components shall be provided with a one-day turnaround repair express and 24-hour parts replacement. The manufacturer on warranty and nonwarranty items shall guarantee the repair and parts express.

2.02 SPECTRA MINI DOME SYSTEM

- A. The Spectra® Mini incorporates many well-known features from Pelco's full-size Spectra III™ dome system into a cost effective, small, 4.1-inch diameter dome bubble form factor. The easy-to-install dome system shall be mounted to the surface of ceilings or recessed into hard ceilings and suspended tile ceilings. A high resolution camera shall transmit video over coaxial cable or unshielded twisted pair (UTP) wires. Pan/tilt operation shall be performed with Pelco's controllers that transmit D, P, or Coaxitron® protocols. For non-Pelco controllers, a translator board shall be installed. On-screen programming shall allow easy setup of the miniature dome's many features.
- B. Variable speed capabilities of the Spectra Mini shall range from a fast motion of 140 degrees per second to a smooth "creep" speed of 0.4 degrees per second. The system shall be capable of continuous 360 degrees rotation and shall have an auto flip feature that allows the dome to rotate 180 degrees and reposition itself for uninterrupted viewing of any subject that passes directly beneath the dome's location.
- C. Optional diagnostic/installation tools shall include a remote monitor kit (IPS-RMK) and a remote monitor cable. These accessories shall allow the installer to view video, control PTZ, and perform system setup and software upgrades at the installation site. The IPS-RMK is a stand-alone kit consisting of a 5.6-inch TFT LCD monitor, Palm™ OS-compatible handheld device and interface cable, carrying case, and the remote monitor cable.
- D. The Spectra Mini CCTV camera dome system shall meet or exceed the following design and performance specifications.

2.03 MECHANICAL

A. The miniature positioning system's variable speed/high speed pan and tilt drive unit shall meet or exceed the following design and performance specifications:

1. Vertical Tilt	Unobstructed tilt of +2° to -92°
2. Manual Control Speed	Pan speed of 0.4° to 80° per second, and pan at 100° per second in turbo mode. Tilt operation shall range from 0.7° to 40° per second
3. Automatic Preset Speed	Pan speed of 140° and a tilt speed of 80° per second
4. Presets	64 presets. Pan speed of 140° per second and tilt speed at 80° per second. For variable speed operation an appropriate controller is required.
5. Preset Accuracy	+/- 0.5°
6. Proportional Pan/Tilt Speed	Continually decreases pan and tilt speeds in proportion to the depth of zoom
7. Automatic Power-Up	User-selectable to the mode of operation the dome will assume when power is cycled
8. Zones	Four zones with up to 20-character labeling for each, with ability to blank the video in the zone
9. Motor	Continuous duty, variable speed, operating at 18 to 30 VAC, 24 VAC nominal
10. Limit Stops	Programmable auto, random and frame scanning
11. Window Blanking	One programmable window blanking area
12. Patterns	One on-screen, programmable pattern including pan, tilt, zoom, and preset functions; pattern programming through control keyboard following instructions in the on-screen menu.
13. Pattern Length	One pattern of user-defined length, based on dome memory
14. Autosensing	Automatically sense and respond to protocol utilized for controlling unit whether Coaxitron or RS-422 P or D protocols; accept competitors' control protocols with the use of optional translator cards
15. Menu System	Built-in for setup of programmable functions; multilingual, including English, French, Italian, Spanish, Portuguese, and German, and alternative languages in Russian, Turkish, Polish, and Czechoslovakian
16. Auto Flip	Rotates dome 180° at bottom of tilt travel
17. Password Protection	Programmable settings with optional password protection
18. Diagnostics	On-screen diagnostic system information
19. Display Setup	User-definable locations of all labels and displays; user-selectable time duration of each display
20. Azimuth/Elevation/Zoom	On-screen display of pan and tilt locations and zoom ratio
21. RJ45-10 Jack	Pigtail Connector for UTP video, power, and data supplied

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| 22. BNC connector | Female BNC connector for coaxial video |
| 23. Remote Data Port Compatibility | Ability to control and setup unit and to upload new operating code and language file updates through optional remote data port that is located in area with easy access. Compatible with personal computers and PDAs such as Palm and iPAQ |
| 24. UTP Compatibility | Unit shall have an unshielded twisted pair circuit for video transmission up to 750ft |
| 25. Third-Party Control Systems | Ability to plug in optional board that converts control signals from selected third-party controllers |
| 26. Power Consumption | Maximum 21 VA |
| 27. Installation/Maintenance | The Spectra Mini's compact design integrates the "dome drive" and "top cap" into one comprehensive unit reducing the number of components to make installation and maintenance simple |
- B. The miniature positioning system shall contain an integrated optics package (IOP) that shall meet or exceed the following design and performance specifications:
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| 1. Single Format | NTSC/PAL |
| 2. Scanning System | 2:1 interlace |
| 3. Image Sensor | 1/4-inch interline CCD |
| 4. Effective Pixels | |
| a. NTSC | 768 (H) X 494 (V) |
| b. PAL | 752 (H) X 582 (V) |
| 5. Horizontal Resolution | |
| a. NTSC | >470 TVL |
| b. PAL | >460 TVL |
| 6. Minimum Illumination | 3.0 lux |
| 7. Synchronization System | AC line lock, phase adjustable via remote control, V-sync |
| 8. White Balance | Automatic with manual override |
| 9. Shutter Speed | Automatic (electronic iris)/manual – 1/60-1/30,000 |
| 10. Gain Control | Automatic with manual override |
| 11. Video Output | 1.0 to 1.2 volt peak to peak, 75 ohms, adjustable |
| 12. Video Signal-to-Noise | >50 dB |
| 13. Lens | F1.8 (F=4.2-42 mm optical) 10X optical zoom, 8X digital zoom |
| 14. Zoom Speed (optical range) | 1.5/2.5/4.3 seconds (menu selectable) |
| 15. Horizontal Angle of View | 46.4° wide zoom
5.0° telephoto zoom |
| 16. Focus | Automatic with manual override |
| 17. Iris Control | Automatic with manual override |

2.04 ENVIRONMENTAL

- A. The miniature positioning system's top cap and dome drive shall be integrated into one comprehensive unit that shall meet or exceed the following design and performance specifications:

1. Top Cap	The top cap shall be manufactured from anodized cast aluminum and shall contain heat sink flanges for increased heat dissipation to allow the dome to be passively cooled
2. Dome Drive	ABS plastic
3. Trim Ring and Surface Mount Ring	ABS plastic
4. Bubble	Acrylic
5. Finish	White or black
6. Light Attenuation	
a. Smoked	1/2 F-stop light loss
b. Clear	Zero light loss
7. Environment	Indoor
8. Operating Temperature	32° to 122°F (0° to 50°C)
9. Unit Weight	1.75 lb (0.79 kg)
10. Dimensions	
a. With TXB	4.98" H x 6.19" W (12.85 x 15.72)
b. Without TXB	5.13" H x 6.19" W (13.03 x 15.72)

2.05 OPTIONAL ACCESSORIES

1. IPS-RMK	Remote monitor kit. Stand-alone kit consisting of a 5.6-inch TFT LCD monitor, Palm OS compatible handheld, cables and carrying case
2. IPS-CABLE	Remote monitor cable and software kit consisting of the Spectra III remote monitor interface cable and necessary software for use with a PC (Windows 95, 98, Me, 2000), Palm OS compatible handheld or iPaq Series Pocket PC.
3. IPS-MINIADPT	Adapter cable required to use IPS-RMK and IPS-CABLE
4. TXB Series	Translator boards are for the AD Manchester, Phillips (Burle), Sensormatic, and Vicon protocols
5. SPM4-W	The Spectra Mini shall be pendant mounted by utilizing the white SPM4-W pendant mount adapter
6. SPM4-B	The Spectra Mini shall be pendant mounted by utilizing the black SPM4-B pendant mount adapter
7. SWM4-W	The Spectra Mini shall be wall mounted by utilizing the white SWM4-W wall mount
8. SWM4-B	The Spectra Mini shall be wall mounted by utilizing the black SWM4-B wall mount

2.06 MANUFACTURER'S WARRANTY

Repair or replacement of defective parts shall be for a period of two years from the date of shipment, including continuous motion modes

2.07 CERTIFICATIONS AND RATINGS

- A. FCC, Class B
- B. CE, Class B

2.08 PELCO MODEL NUMBERS

- A. SD4-W0 Indoor dome system, white, smoked bubble, NTSC
- B. SD4-W1 Indoor dome system, white, clear bubble, NTSC
- C. SD4-W0-X Indoor dome system, white, smoked bubble, PAL
- D. SD4-W1-X Indoor dome system, white, clear bubble, PAL
- E. SD4-B0 Indoor dome system, black, smoked bubble, NTSC
- F. SD4-B1 Indoor dome system, black, clear bubble, NTSC
- G. SD4-B0-X Indoor dome system, black, smoked bubble, PAL
- H. SD4-B1-X Indoor dome system, black, clear bubble, PAL