



## PRODUCT SPECIFICATION

# Genex® Multiplexer MONOCHROME, DUPLEX



### Product Features

- Full Duplex Operation
- “Covert” Feature Allows Selected Cameras to be Recorded, but not Displayed During Live Viewing or Playback. Viewing or Playback of “Covert” Cameras can be Password Protected
- Simultaneous Viewing of Up to 16 Cameras While Recording or Playing Tapes
- Advanced Digital Video Processing, Including Advanced Image Re-sizing and Digital Filtering. Provides High Quality Multi-Camera and Zoom Displays
- Looping Inputs
- Multi-Camera Display Modes – PIP (2), Quad (4), Nine (9) and Sixteen (16) Camera Displays
- Advanced Activity Detection – Programmable Detection Mask and Sensitivity Levels for Each Camera
- Four VCR Compatibility Modes – Standard, Auto Tracking, VCR Matching, and Custom
- Playback of Other Manufacturers' Tapes\* (see note on back)
- Menu Programming for Quick, Easy Setup
- Multi-language Support; English (Default), French, Spanish, or German
- On-Screen Alphanumeric Display – 12 Character Camera Titles, Time, Date, and Alarm
- Three Independent Monitor Outputs
  - Main Output – Full-Screen Call-up, Multi-Camera Displays, VCR Playback and Sequencing
  - Spot Monitor Output – Full-Screen Call-up, Sequencing, Activity and Alarms
  - AUX Monitor Output – Full-Screen Sequencing, Activity and Alarms
- Alarm Handling – Priority or Exclusive Alarm Recording and Display
- Remote Control via RS-485 Communications Port
- Pan/Tilt and Lens Control via Coaxitron® (see note on back)

The **Genex**® high performance, monochrome duplex multiplexer utilizes the latest in digital video processing technology, providing high-quality recordings and outstanding multi-camera displays.

Available in 9- or 16-channel versions, **Genex** can multiplex up to 9 or 16 cameras for recording on a single VCR. During recording and playback any camera may be viewed independently or combined in a multi-camera display.

Unlike most multiplexers, **Genex** contains a powerful re-sizing engine which uses patented Active Image™ technology to provide broadcast quality, image re-sizing for both multi-camera and zoom displays. This technology allows **Genex** to provide higher quality images with less aliasing.

**Genex** allows live or recorded cameras to be displayed full-screen or combined with others in a picture-in-picture, quad, nine, or sixteen camera display. Cameras may also be displayed sequentially in either full-screen or multi-camera format. An adjustable zoom mode provides full control of digital magnification of any camera for closer examination.

An advanced activity detector can prioritize cameras for faster recording and display independent of record or playback speeds. Two additional monitor outputs (Spot and AUX) can be used to display full-screen cameras manually, sequentially, or as a result of alarms and activity detection.

**Genex** is easy to use, offers intuitive push-button controls for operation and password-protected, on-screen menus for easy system setup.



MX4009MD (TOP)  
MX4016MD (BOTTOM)



International Standards Organization Registered Firm ISO 9001 Quality System



## TECHNICAL SPECIFICATIONS

### MODELS

|            |                                                                   |
|------------|-------------------------------------------------------------------|
| MX4009MD   | 9-channel, monochrome duplex multiplexer, RS-170, 120 VAC, 60 Hz  |
| MX4009MD-X | 9-channel, monochrome duplex multiplexer, CCIR, 230 VAC, 50 Hz    |
| MX4016MD   | 16-channel, monochrome duplex multiplexer, RS-170, 120 VAC, 60 Hz |
| MX4016MD-X | 16-channel, monochrome duplex multiplexer, CCIR, 230 VAC, 50 Hz   |

### VIDEO

|                 |                                                               |
|-----------------|---------------------------------------------------------------|
| Input Level     | 1 Vp-p, composite                                             |
| EIA RS-170      | 525 lines, 60 fields/second                                   |
| CCIR            | 625 lines, 50 fields/second                                   |
| Digital Image   | 768(H) x 512(V) pixels full screen                            |
|                 | 8-bit luminance, 256 shades of gray                           |
| Geometric Error | Less than 1 percent, all modes                                |
| Resizing        | Multi-element horizontal and vertical finite impulse response |

|                     |                          |
|---------------------|--------------------------|
| Analog Processing   |                          |
| Bandwidth           | 20 MHz                   |
| Character Generator | Programmable, bit mapped |

### ELECTRICAL

|                    |                                                                            |
|--------------------|----------------------------------------------------------------------------|
| Operating Voltage  | 120 VAC (+15/-30%), 50/60 Hz or 230 VAC (+15/-30%), 50/60 Hz               |
| Power              | Less than 25 watts                                                         |
| Video Inputs       | Nine or sixteen<br>BNC, looping with programmable termination 75 ohms Hi-Z |
| Monitor Outputs    | Three                                                                      |
| Main               | BNC, 75 ohms                                                               |
| Spot               | BNC, 75 ohms                                                               |
| AUX                | BNC, 75 ohms                                                               |
| VCR Inputs/Outputs | One each                                                                   |
| VCR In             | BNC, composite, 75 ohms                                                    |
| VCR Out            | BNC, composite, 75 ohms                                                    |
| Alarm Inputs       | Sixteen individually programmable for NO or NC                             |
| Alarm Output       | 1 Form-C relay, 0.5A continuous, 1A momentary                              |

### GENERAL

|                       |                                                          |
|-----------------------|----------------------------------------------------------|
| Environmental         |                                                          |
| Operating Temperature | 32 to 122°F (0 to 50°C)                                  |
| Relative Humidity     | 90% non-condensing                                       |
| Desktop Dimensions    | 1.75" H x 17.2" W x 12.2" D<br>(4.45 x 43.69 x 30.99 cm) |

|                       |                                                                                                              |
|-----------------------|--------------------------------------------------------------------------------------------------------------|
| Rack Mount Dimensions | 1.75" H x 19" W x 12.2" D<br>(4.45 x 48.26 x 30.99 cm)<br>(Rack ears and screws provided for rack mounting.) |
|-----------------------|--------------------------------------------------------------------------------------------------------------|

|                 |                             |
|-----------------|-----------------------------|
| Unit Weight     | 10 lb (4.53 kg) approximate |
| Shipping Weight | 14 lb (6.34 kg) approximate |

### CERTIFICATIONS

- ◆ CE, Class B (MX4009MD-X, MX4016MD-X)
- ◆ UL listed to Standard 2044 (MX4009MD and MX4016MD)
- ◆ cUL listed to Standard CSA 22.2 No. 1-94 (MX4009MD and MX4016MD)
- ◆ FCC, Class A (MX4009CD and MX4016CD)

### OPTIONAL ACCESSORIES

|             |                                                                                                                                                                                       |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| KBD4000**   | Full-function keyboard controller; joystick control of pan/tilt functions. Use with Genex multiplexer and server. (See C1918 spec)                                                    |
| KBD4000V**  | Same as KBD4000 except has 5-inch (12.7 cm) integrated video display, 120 VAC, 60 Hz. (See C1918 spec)                                                                                |
| KBD4002**   | Same as KBD4000 except keypad control of pan/tilt functions. (See C581 spec)                                                                                                          |
| MX4000SVR   | Multiplexer server, 120 VAC, 60 Hz, for use with NTSC and RS-170 format multiplexers. Provides centralized control of up to 8 multiplexers by one or more operators. (See C1919 spec) |
| MX4000SVR-X | Same as MX4000SVR except 230 VAC, 50 Hz, for use with PAL and CCIR format multiplexers. (See C1919 spec)                                                                              |

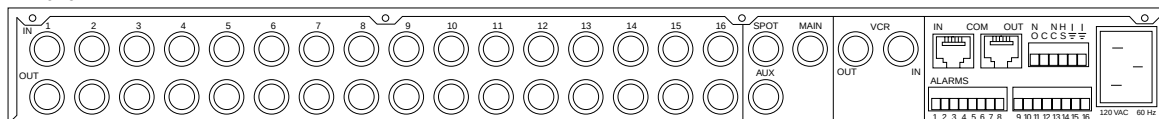
#### Notes:

\* Pelco Genex multiplexers can normally decode tapes made with other manufacturer's multiplexers. However, Dedicated Micros models DM/SPG4/S/N/090 and DM/SPC4/D/N/6M must be properly programmed to create tapes that are compatible with Genex multiplexers. Tapes made with DM model SPR2AS/C/M/M are incompatible. (Refer to TechTip 00-3038 for details.)

\*\* When used with 15-bit (standard) Coaxitron® receivers such as the CX9000 Series, the PT7700, and the ED25/27/28/29, the KBD4000 supports all pan, tilt and lens functions and AUX on/off. It will not set or call presets, or support preset scan.

When used with the 32-bit extended Coaxitron® receivers such as Intercept®, Spectra®, and Legacy® LRD41C21/LRD41C22 Series, the KBD4000 will support all of the functions above, including set and call presets and patterns. It will not support programming of preset or pattern labels. If labels for presets or patterns are required, they would need to be programmed with a different control such as the MPT9500.

MX4016MD REAR VIEW



Note: Model MX4009MD has two rows of 9 BNCs only.

Indicates change or addition since last revision.

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