

E-SM84A / E-SM164A 8/16 Channel Video Matrix Switchers

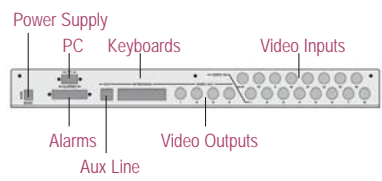


Our new **E-SM** range of video matrix switchers are ideal for small to large installations. They allow easy switching of any video input signal to a video output. Switching can be controlled manually or via a trigger from an alarm input. Other features include RS485 interface for control from a keyboard controller as well as on-screen-display menu for configuration. This matrix is microprocessor controlled and allows the video switching of 8 (16) cameras to 4 outputs. The "On Screen" programming allows full configuration of the matrix..



E-SM84A / E-SM164A

The switching is controlled by a max of 4 remote keyboards in RS485, up to max 1200 m (3900ft). Eight (16) alarm contacts can be associated with the corresponding video inputs. In case of alarm, the alarmed video input can displayed on the video output. The reset of an alarm situation is performed through keyboard, external contact or time-out. Furthermore it is possible to control the video switching by a VCR trigger signal.



Rear View

The serial protocol can be provided for users wanting to interface a matrix to a PC or another make of controller. E-SM84A and E-SM164A are suitable for 19" rack mounting.

- ⊕ Control via RS485 from a Keyboard (E-DCJ or E-DCTEL)
- ⊕ Privacy zone features (on fixed cameras, not on VCR recordings)

MODEL	E-SM84A	E-SM164A
Video Inputs	8	16
Video Outputs	4 independent	4 independent
Alarm Contacts	8	16
Relay	Yes	Yes
Trigger VCR	Yes	Yes
Alarm Reset	Yes	Yes
Date/Time	Yes	Yes
Serial Ports	4x RS485 serial inputs	4x RS485 serial inputs
Alarm buzzer	Yes	Yes
Alarm relay	Yes	Yes
On screen menu	Yes	Yes
19" Rack Mount	Yes	Yes

E-SM328A 32 Channel Video Matrix Switcher



Expanding on our excellent range of matrix switching units, the **E-SM328A** is a 32 input, 8 output matrix. Fully configurable, the matrix is capable of switching 32 inputs to 8 independent outputs.



It has a variety of video sequences which can be programmed by day, night or holiday cycle. On the alarm side, the E-SM328A provides 32 alarm inputs and 8 relay outputs. Events can be initiated on alarm input including moving a PTZ camera to a preset position or starting a particular monitor sequence.

The matrix's two RS485 lines are for communication with the E-SM16 advanced multiplexer or for telemetry connection to a PTZ camera or speed dome. They can also be used to connect additional matrixes in a slave/master or parallel setup. With the master/slave configuration, the master matrix can accept max 4 inputs from each slave matrix. In a parallel setup, up to 9 matrixes can be connected. A keyboard connected to the master is able to control all cameras connected to any of the slaves or to the master.



The E-SM328A is fully controllable via the E-DCJ or E-DCT control keyboards.

- ⊕ 32 Composite Video Inputs, 8 Video Outputs - 1Vp-p 75ohm (BNC)
- ⊕ 32 Alarm Inputs & 8 x (50VAC/VDC @ 0.5A Relay Outputs) - (2 x DB25 Connectors)
- ⊕ 32 Programmable sequences
- ⊕ 4 x RS485 Interfaces for Keyboard Control (Max 8 Keyboards Supported)
- ⊕ 2 x RS485 Interfaces for External Camera or Multiplexer Telemetry Control
- ⊕ 1 x RS232 Interface for PC Setup & Config
- ⊕ Video loss detector
- ⊕ 28 Character On-Screen Test Camera Labeling
- ⊕ Camera Privacy Masking
- ⊕ Setup via OSD or via a Windows PC
- ⊕ 2U 19" Rack Mountable
- ⊕ **Compatible Keyboards:** E-DCJ & E-DCT
- ⊕ **Operating Temp:** 0° to 45° C
- ⊕ **Power:** 12VDC (24W)
- ⊕ **Dimensions:** 180 x 430 x 94 mm

MODEL	Description
E-SM328A	32 Channel Video Matrix Switcher

E-VT1050 Real-Time 2-Channel Picture-In-Picture Unit

The **E-VT1050** is a 2 Channel Video Input Picture-In-Picture Unit. It is ideal for customers wanting to overlay one camera image over another or for customers not wanting to use a quad unit for only 2 cameras.

A picture-in-picture unit is also very useful for covert applications where two different cameras are used to survey the same area at different angles. Selection between the 2 video inputs is via manual front panel control or via an alarm input.



E-VT1050 Front View



E-VT1050 Rear View



Picture-in-Picture

- ⊕ 2 Asynchronous Video inputs
- ⊕ Video Input: 1 Vp-p 75 ohm (2 x BNC)
- ⊕ Video Output: 1 Vp-p 75 ohm (2 x BNC)
- ⊕ Alarm Input & Output
- ⊕ Automatic Gain Control
- ⊕ 1024x768 Resolution
- ⊕ Adjustable picture-inpicture window size & location
- ⊕ Real-Time Image Display
- ⊕ **Power:** 12VDC @ 1A
- ⊕ **Dimensions:** 285 (W) x 235 (D) x 44 (H) mm

MODEL	Description
E-VT1050	Real-Time 2-Channel Picture-In-Picture Unit

E-713/714/703/704 Monochrome & Colour Quad Processors

The **E-703IE-704** and **E-713IE-714** are high quality, low cost 4 channel quad processors. They accept normal composite video inputs and feature two video outputs, a fixed quad output and a switchable video output.

Models **E-704** and **E-714** have built-in timel/date generators and alarm I/O. These user-friendly quads feature front panel control and have standard BNC connectors for input and output.

E-704 Quad Processor - Front



Video Input

Monitor Out Quad Out

SPECIFICATIONS	E-703	E-704	E-713	E-714
Colour or Monochrome	Colour	Colour	Monochrome	Monochrome
Video Inputs	4 Video Inputs (Composite Video 1Vp-p 75ohm)	4 Video Inputs (Composite Video 1Vp-p 75ohm)	4 Video Inputs (Composite Video 1Vp-p 75ohm)	4 Video Inputs (Composite Video 1Vp-p 75ohm)
Video Outputs	2 Video Outputs (1 switched & 1 quad)	2 Video Outputs (1 switched & 1 quad)	2 Video Outputs (1 switched & 1 quad)	2 Video Outputs (1 switched & 1 quad)
Adjustable Video Gain	-	-	Yes	Yes
Alarm In	-	4	-	4
Alarm Out	-	1	-	1
Power	12VDC (+/-10%)	12VDC (+/-10%)	12VDC (+/-10%)	12VDC (+/-10%)
Power Consumption	6W	6W	3W Max	3W Max
Dimensions	240 x 44.4 x 151	240 x 44.4 x 151	240 x 44.4 x 151	240 x 44.4 x 151
Resolution	720 (H) x 576 (V)	720 (H) x 576 (V)	720 (H) x 576 (V)	720 (H) x 576 (V)
Weight	1,25kg	1,3kg	1,25kg	1,3kg
On-Screen-Display Menu	-	Yes	-	Yes
Camera Title	-	Yes	-	Yes
Real-Time Refresh Rate	Yes	Yes	Yes	Yes
Time/Date Stamp	-	Yes	-	-

MODEL	Description
E-713	Monochrome Quad Sequential Processor - 4 camera inputs
E-714	Monochrome Quad Sequential Processor - 4 camera inputs & alarm I/O
E-703	Colour Quad Sequential Processor - 4 camera inputs
E-704	Colour Quad Sequential Processor - 4 camera inputs & alarm I/O

E-904AL / E-908AL Sequential Alarm Switcher



These sequential switching units allow you to connect 4 or 8 cameras to one monitor. Each camera has a switch enabling you to bypass, lock on, or automatically scan all cameras. Dwell time is adjustable from 0.5 to 15 seconds, and a LED indicator displays the active camera's station number.

In addition to the video input, these units have 4/8 alarm inputs. When activated, it locks onto the camera where the alarm occurred. An alarm output can be used to activate a buzzer or alarm.



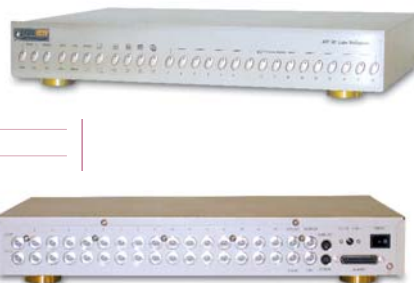
MODEL	Description
E-904AL	4 camera switching box - with timer & alarm activation
E-908AL	8 camera switching box - with timer & alarm activation

E-707 16 Channel Duplex Colour Multiplexer with Motion Detection

The **E-707** is designed for full duplex multiplexing, which means that all 16 cameras can record/display playback simultaneously. Multi-screen display formats are supported in full screen, quad, 7, 10, 13 and 16 channel modes. Playback can be done in full screen, quad or 16 channel modes with normal analog or DVRs supported.

Other features include on-screen display menu, title generator, motion detection, adjustable video gain, picture-in-picture and video loss notification.

MODEL	E-707
Camera input signal	PAL composite video
VCR input signal	Composite 1 Vp-p 750 BNC S-Video Y 1 Vp-p 75ohm S JACK; C 0.8 Vp-p 75ohm S JACK
Camera loop back	Composite 1Vp-p 75ohm BNC, 16 channels
Monitor output	Composite 1 Vp-p 75ohm BNC, 2 output
VCR output	Composite 1 Vp-p 75ohm BNC S-Video Y 1 Vp-p 75ohm S JACK; C 0.8 Vp-p 75ohm
Alarm input	TTL input, Hi (5V), Low (GND)
Alarm output	COM, NO, NC.
Motion Detection	Digital 15 x 14 Grid
VCR trigger output	5V TTL output
Picture-In-Picture	Moveable Block
Refresh Rate	Real Time 25 fps (Single Picture) 0.133 sec/channel (All 16 Channels)
Power Consumption	DC12V, 10W
Dimensions (mm)	432 (W) x 76 (H) x 311 (D)



E-SPI6C Triplex Multiplexer with Real-Time Multi-Channel Display

The **E-SPI6C** is an advanced 16 channel multiplexer. It allows one to connect, record and/or display up to 16 video signals. The real time, high resolution triplex operation allows viewing, recording and playback of all images simultaneously.

REAL-TIME DISPLAY SPEED

Unlike other multiplexers, this product features an amazing 400 fps total display speed. Thus it is possible to view the 16 cameras images simultaneously in real-time (25 fps per channel). Such a feature makes it ideal for use in large matrix video systems and for video wall control room system applications. Images can be displayed in single full-screen or in a range of user-programmable multiscreens with configurable camera titles.

RECORDING

For recording purposes, the E-SPI6C can be connected to an analog type lapse recorder or a single channel DVR. It has internal software motion detection and hardwire alarm inputs which can be used to trigger in-turn an external recorder. Up to 120 alarm events are stored onboard.

REMOTE CONTROL

The E-SPI6C can be remotely controlled via RS485 from a PC or joystick controller such as our E-DCJ or E-DCT.



MODEL	E-SP16C		
Multi-Display Formats	Single, 2x2, 3x3, 12 +1, 4x4	Motion Detection	16Hx12V (192-Point Grid) Selectable Per Ch
Resolution	720 x 576 (PAL)	Alarm Inputs	16 x Dry Contact TTL/CMOS
Display Frame Rate	400 fps	Alarm Outputs	2 x Relay Out
Time/Date	Yes	Serial Interface	1 x RS485 (for E-DCJ/E-DCT Keyboard Control)
Operation	Triplex	Power	12VDC @ 2.5A
Video Inputs	16 Composite Video (BNC) + VCR In	Housing	1U 19" Rack Mount
Looping Outputs	16 (BNC)	Dimensions	433 x 55 x 307 mm
Video Output	Main Monitor, Spot Monitor, VCR Out		
SVideo	S-Video Main Monitor Output & VCR Output		

E-DV-K633 Time Lapse Recorder - Up to 1280 hours

The **E-DV-K633** is a video cassette recorder for general purpose CCTV applications.

It features a standard composite video input and output, making it suitable for interfacing with a quad, multiplexer, switcher or video-output camera. Unlike a standard video recorder, the **E-DV-K633** features a special 40 hour 'real-time' recording mode. This mode allows the unit to record video onto a standard cassette tape but at a much higher density. Which in turn means a higher framefield recording rate. It also features standard time-lapse modes of up to 1280 hours. Recording speed in the 18 hour mode is typically 16 fps and 10 fps in the 30 hour mode.

Control of the VCR is via an on-screen-display menu with VCR controls or via a IR remote control. Alarm activation features are quite extensive with more than one alarm input, a panic-button input, as well as alarm output and tape-end output. Recording can also be done in series with more than one VCR. This allows recording to continue from one machine to another when one VCR's tape has ended. Specially designed for mobile applications, the **E-DV-K633** features compact dimensions and 12VDC operation, just right for operating in the boot of a car or any other means of transport.

- ⊕ Time Lapse Recorder
- ⊕ **Recording Horiz Resolution:** 250 TVL (Colour) or 300 TVL (Monochrome)
- ⊕ **Cassette Format:** VHS 1/2" standard Cassettes
- ⊕ High Density Recording/Playback
- ⊕ **Video Recording modes:** 3/6/18/30/48/72/168/240/720/960/1280 hours
- ⊕ **Video Recording speeds:** 3/6 (50fps), 18 (16.67fps), 30 (10fps), 48(3.13fps), 72 (2.08fps), 168 (0.89fps)
- ⊕ **Audio Recording:** Supported in 3/6/18 & 30 hour modes
- ⊕ Schedule, Manual or Alarm activated recording
- ⊕ **Rewind Time:** Within 3 min using an E-180
- ⊕ On-Screen-Display Menu & Digital Counter Display
- ⊕ **Video Input:** 1V p-p 75 ohm (BNC)
- ⊕ **Video Output:** 1V p-p 75 ohm (BNC)

- ⊕ **Audio Input:** 47kOhm~8.8dBm, unbalanced (RCA)
- ⊕ **Audio Output:** 1.5kOhm~7.8dBm, unbalanced (RCA)
- ⊕ **Alarm I/O:** 2 x Alarm Input, Panic Input, Alarm Output, Tape End Output
- ⊕ Alarm Buzzer
- ⊕ RS232 interface for PC or matrix control
- ⊕ **Power:** 220VAC
- ⊕ **Operating Temp:** -5°C to +40°C
- ⊕ **Weight:** 4 Kg's
- ⊕ **Dimensions:** 290(W) x 360(L) x 90(D) mm



MODEL	Description
E-DV-K633	Time Lapse Recorder

E-DV-K611 12VDC Mobile Time Lapse Recorder

The **E-DV-K611** is a video cassette recorder for 12VDC operated and/or mobile applications. Compact in size the recorder features a standard input and output, making it suitable for interfacing with any of our covert cameras.

Unlike a standard video recorder, the **E-DV-K611** features a special 40 hour 'real-time' recording mode. This mode allows the unit to record video onto a standard cassette tape but at a much higher density. Which in turn means a higher framefield recording rate.

It also features standard time-lapse modes of up to 960 hours. Recording speed in the 18 hour mode is typically 16 fps and 10 fps in the 30 hour mode.

Control of the VCR is via an on-screen-display menu with VCR controls or via a IR remote control. Alarm activation features are quite extensive with more than one alarm input, a panic-button input, as well as alarm output and tape-end output.

Recording can also be done in series with more than one VCR. This allows recording to continue from one machine to another when one VCR's tape has ended.



- ⊕ Time Lapse Recorder for Stationary Use
- ⊕ **Recording Horiz Resolution:** 250 TVL (Colour) or 300 TVL (Monochrome)
- ⊕ **Cassette Format:** VHS 1/2" standard Cassettes
- ⊕ High Density Recording/Playback
- ⊕ **Video Recording modes:** 3/6/18/30/48/72/168/240/720/960 hours
- ⊕ **Video Recording speeds:** 3/6 (50fps), 18 (16.67fps), 30 (10fps), 48(3.13fps), 72 (2.08fps), 168 (0.89fps)
- ⊕ **Audio Recording:** Supported in 3/6/18 & 30 hour modes
- ⊕ Schedule, Manual or Alarm activated recording
- ⊕ **Rewind Time:** Within 3 min using an E-180
- ⊕ On-Screen-Display Menu & Digital Counter Display
- ⊕ **Video Input:** 1V p-p 75 ohm (BNC)
- ⊕ **Video Output:** 1V p-p 75 ohm (BNC)
- ⊕ **Audio Input:** 47kOhm~8.8dBm, unbalanced (RCA)
- ⊕ **Audio Output:** 1.5kOhm~7.8dBm, unbalanced (RCA)
- ⊕ **Alarm I/O:** 2 x Alarm Input, Panic Input, Alarm Output, Tape End Output
- ⊕ Alarm Buzzer
- ⊕ RS232 interface for PC or matrix control
- ⊕ **Power:** 12VDC @ +/-3.33A
- ⊕ **Operating Temp:** -5°C to +40°C
- ⊕ **Weight:** 4 Kg's
- ⊕ **Dimensions:** 240 x 91 x 280 mm

MODEL	Description
E-DV-K611	12VDC Mobile Time Lapse Recorder