SM164B

SYSTEM VIDEO MATRIX PAL/NTSC

VIDEOTEC

DESCRIPTION

The SM164B matrix is a microprocessor remote-controlled video matrix which allows the video switching of 16 cameras on 4 outputs.

A OSD programmable password ensures protection from improper use of the matrix.

The switching is controlled by a maximum of 4 remote keyboards in RS485. The keyboards, remote up to maximum distance of 1200m (3937ft), allows the video switching and matrix set-up, on screen and telemetry control through the same matrix.

16 alarm contacts can be associated with the corresponding video inputs.

In case of alarm, the alarmed video input can be displayed on the video outputs. The alarm contacts are independent and configured as Normally Open (NO) or Normally Closed (NC). The reset of an alarm situation is performed through keyboard, external contact or time-out.

The telemetry control can be performed on coax cable on the 16 video inputs and on the RS485 serial output. Furthermore, it is possible to control the video switching by a VCR trigger signal.

MAIN FEATURES

16 video inputs

4 independent video outputs with text generator

Telemetry over the coax on the 16 video inputs and on auxiliary serial output (RS-485)

Controllable by PC (RS-232)

16 alarm inputs, one output contact, trigger VCR and alarm reset

4 RS-485 serial inputs for max. 4 remote keyboards

Privacy video masking function

TECHNICAL DATA

GENERAL

Max 16 cameras

Max 4 monitors

Max 4 remote keyboards

On screen display video programming

Menu in 4 languages (Italian, English, French and German)

Different switching sequences for each video output

Identification texts for each output

Date and time management

Types of alarm reset: manual from keyboard, external, timed automatically

Completely configurable alarm inputs for all 16 video inputs

VCR trigger management

Alarm condition warning buzzer

Relay can be activated by each alarm

Telemetry control on RS485 auxiliary line and on coaxial cable

Video signal masking on fixed camera for privacy purposes

Input 75 Ohm load disconnectable

Equipped with wide range power supply, 3 power cables, 2 RJ11 telephone cables, 2 junction boxes RJ11 jack, DB25 connector

MECHANICAL

Steel enclosure

Epoxypolyester powder painting, RAL7036 colour

Dimensions: Rack 19", 1U, 432x45x180mm (17x1.8x7in)

1XDB25 connector (alarm)

5 connectors RJ11 (4 for keyboards and 1 for telemetry line)

1xpower supply jack connector

1xDB9 female connector (PC)

16 inputs BNC video

4 BNC video outputs

Unit weight: 3.5kg (7.7lb)

ELECTRICAL

Power supply:
- IN from 100Vac up to 240Vac, 50/60Hz - OUT 12Vdc, 1.25A

Consumption: 15W max

16 inputs 75 Ohm 1Vpp (PAL/NTSC)

4 outputs 75 Ohm 1Vpp (PAL/NTSC);

Bandwidth: > 6MHz

Lower cut-off frequency: (-3dB): 9Hz

Signal/Noise ratio: > 48dB@5.5MHz

Relay contact: 50Vac, 0.3A

SERIAL COMMUNICATIONS

Telemetry transmission on coax cable on the 16 video inputs (min distance 5m (16.4ft) and max 350m (1148ft)

Telemetry data transmission on serial output RS485 for a max distance of 1200m (3937ft)

4 serial inputs RS485 for the reception of data from max 4 remote keyboards from a max distance of 1200m (3937ft)

Serial input RS232 for firmware update and PC control from a max distance of 15m (49ft)

Protocols (Telemetry Line):
- PELCO D (2400, 4800, 9600, 19200 baud)
- VIDEOTEC (1200, 9600 baud)
- VIDEOTEC MACRO (1200, 9600, 19200, 38400 baud)

PELCO is registered trademark.

ENVIRONMENT

For installation indoors

Operating temperature: from 0°C (32°F) up to +40° (104°F)
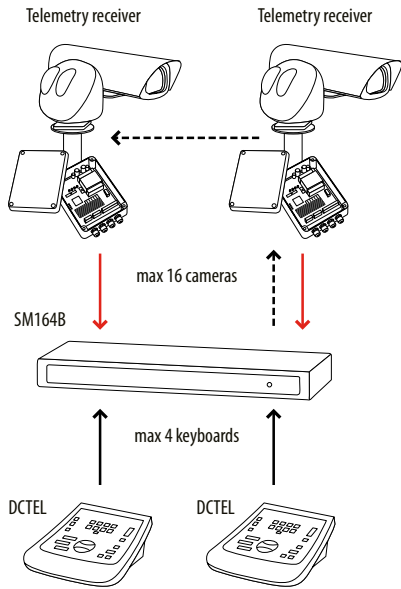
CERTIFICATIONS

Electrical safety (CE): EN60950-1

Electromagnetic compatibility (CE): EN50130-4, EN55022 (Class B), EN61000-6-3, FCC Part 15 (Class B)

EAC certification

RELATED PRODUCTS

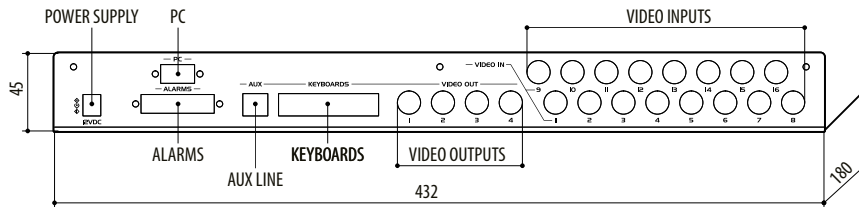|	
DCTEL	Matrix and telemetry control keyboard
DCJ	Keyboard for video and telemetry control
DTMRX224	Telemetry receiver 12 functions, 24Vac
DTMRX2	Telemetry receiver 12 functions, 230Vac
DTRX324	Telemetry receiver 17 functions, 24Vac
DTRX3	Telemetry receiver 17 functions, 230Vac
DTCOAX	Over the coax board (only thru SM series matrix)
ULISSE	Integrated positioning unit

PACKAGE

Model Number	Weight	Dimensions (WxHxL)	Master carton
SM164B	3.7kg (8lb)	51.5x18.5x11.5cm (20x7x5in)	10

Telemetry receiver   Telemetry receiver

max 16 cameras

SM164B

max 4 keyboards

DCTEL   DCTEL

⟶ Twisted pair RS485 (max distance 1200m / 3937ft)

---→ Twisted pair RS485 (max distance 1200m / 3937ft) telemetry only

⟶ Video-coax only (max distance 350m / 1148ft)

TECHNICAL DRAWINGS

The dimensions of the drawings are in millimetres.

POWER SUPPLY   PC   VIDEO INPUTS

45

12VDC   ALARMS   AUX   KEYBOARDS   VIDEO OUT   VIDEO IN

180

ALARMS   **KEYBOARDS**   VIDEO OUTPUTS

AUX LINE

432

SM164