SM328B
SYSTEM VIDEO MATRIX PAL/NTSC

MAIN FEATURES

- 32 video inputs (composite PAL/NTSC 1Vpp) with video loss detection
- 8 video outputs (composite PAL/NTSC 1Vpp) with OSD character (free text, date and time)
- 32 alarm inputs, 8 relay outputs,1 buzzer
- Day/night sequences (32-step each) for each monitor
- Aux A can be used to connect more SM328B matrix in Master/Slaves or Parallel systems
- Privacy video masking function
- 4 RS485 keyboard inputs RJ11 connectors (max 8 keyboards)
- 2 Aux RS485 lines output to control telemetry and other third parties devices
- VCR Trigger input to connect a time lapse VCR
- On alarm: actions on monitors (sequences and cameras) and on telemetry (scan on home positions or patrol)
- Camera exclusion feature if the monitor is used in public places

DESCRIPTION

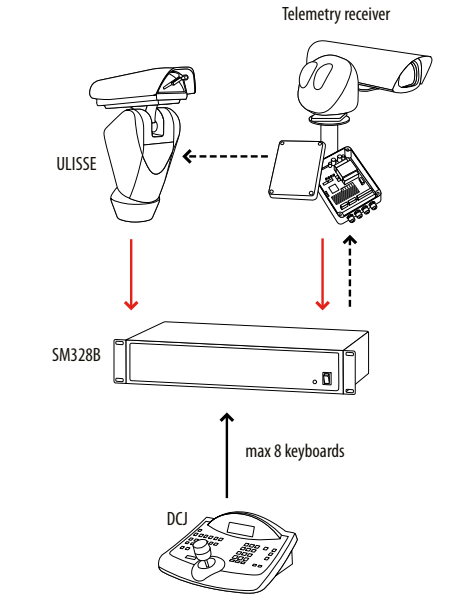
The video matrix SM328B offers a solution for the collection and management of images, capable of switching 32 video inputs to 8 independent outputs and activating 32 different synchronized sequences among several monitors, with day, night or holidays cycles.The matrix provides 32 alarm inputs and 8 relays outputs controlled by events or alarm contacts (alarm groups). Alarms can be reset through a keyboard, external contacts or automatic timed reset. The matrix can be easily configured through an OSD or through a PC.

In applications like shopping malls, department stores and banks where monitors are shown to the public as a deterrent, an important feature of the matrix is the camera exclusion. If the operator recalls a video input or acts on a PTZ camera, the selected camera can be excluded and/or replaced by another video input from the switching sequence of any public monitor.

Following an alarm condition, in addition to a buzzer or on screen text, the SM328B is capable of intelligent actions: we can program on alarm actions on monitors (sequences and cameras) and on telemetry (scan or home position or patrol). For privacy reasons the video inputs can also be masked on fixed cameras. The matrix is equipped with 2 RS485 serial outputs.

Through these outputs we can perform telemetry or other matrix control. It is also possible to connect additional matrix in Master/Slave or Parallel systems. In a Master/Slave system the master matrix can receive 4 outputs from every Slave (max. 4). See layout 2. In a Parallel system, up to 9 matrix can be connected together. See layout 3. In a Master/Slave system, Master keyboards can control all system cameras; Slave keyboards control only local cameras. In a Parallel system each keyboard can control all system cameras.

The DCJ keyboard, microprocessor controlled, allow you to directly control cameras, switching sequences and alarm conditions.



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

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

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

TECHNICAL DATA

GENERAL

Max. 32 video inputs

24 characters text identification for each camera

Max. 8 video outputs; one of these is optionally used for controlling the switching from video recorder

32 independent automatic 32-step sequences

Max. 8 keyboards

Complete setup OSD or by PC software

Setup menu in four languages (Italian, English, French and German)

Video signal masking on fixed camera for privacy purposes

Camera exclusion feature if monitor is displayed in public areas

On alarm: actions on monitors (sequences and cameras recall) and telemetry (scan on Home position or Patrol)

Telemetry control on RS485 auxiliary line and on coaxial cable

Complete event log channel

Easy matrix control by PC

DATE AND TIME

3 time ranges: day, night or holidays

At a weekly level, single days show 4 different time of starting/ending the daily sequence

Management of 16 days for variable holidays

Management of 8 closing terms

Automatic management of daylight saving time (automatic for Europe/America/etc. and user defined)

TIME EVENTS

- 64 time events max within 24 hours which allows:
- enable/disable keyboards
- enable/disable alarm contacts
- enable/disable single relays

ALARMS

24 characters alarm message per contact out of 32 contacts

32 alarm contacts, which can be configured one by one, 4 types of reset per contact:

- Time automatic reset, from 1 second to 1 hour from the contact enabling
- Reset from keyboard, after the authorised operator has entered a password
- External reset, after closing one contact
- Automatic reset for continual type alarm contacts, when the alarm signal stops

When an alarm is enabled, each output can independently proceed to acknowledge it (by selecting a cycling sequence or a fixed camera) or neglect it

Alarm contacts are selectable as NO or NC and are acknowledged based the enabling time range (day, night, or their combination)

The alarm contacts can be enabled/disabled even from a time event. Priority management based on the acknowledgement order, in case of multiple alarms. Warning buzzer and management of 8 relays on alarm

On alarm action on monitors (sequences and cameras) and on telemetry receivers (scan or home position or patrol)

SYSTEM SECURITY

Optional management of videoloss and videotape video recorder

Keyboards can be time enabled/disabled based on the prescriptions of the matrix configuration

Trigger VCR and some DVR management

Supplied with instruction manual, 1 power cable, 1 serial cable 9 pins, 2 DB25 connectors, set-up disk, power supply

MECHANICAL

Steel enclosure

Epoxypolyester powder painting, RAL7036 and black colours

Dimensions: Dimensions: 2U, 180x430x94mm (7x17x3.7in) Rack 19”

2 DB25 connectors (alarms and relays)

6 RJ11 connectors (4 RJ11 for keyboards and 2 RJ11 for telemetry line)

1 DB9 female connector (PC and serial printer)

Power supply jack-connector

32 BNC video inputs

8 BNC video outputs

2 BNC connectors (VCR trigger and alarms reset)

Unit weight: 5kg/11lb

ELECTRICAL

External wide range power supply

- IN 100-240Vac - OUT 12Vdc, 47/63Hz, 2A

Consumption: 24W

32 inputs 75 Ohm 1Vpp (PAL/NTSC)

8 outputs 75 Ohm 1Vpp (PAL/NTSC)

Bandwidth: > 6MHz

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

Signal/noise ratio: >47dB@5.5MHz

Relay contacts: 50Vac/dc 0.5A max

PROTOCOLS

Telemetry Line

PELCO D (2400, 4800, 9600, 19200 baudrate)

VIDEOTEC (1200, 9600 baudrate)

VIDEOTEC MACRO (1200, 9600, 19200, 38400 baudrate)

PELCO is registered trademark.

The product may be interfaced with devices not manufactured by VIDEOTEC. It is possible that the interface protocols have changed or are in a different configuration from earlier tested units by VIDEOTEC. VIDEOTEC recommends a test prior to installation. VIDEOTEC will not be liable for any installation costs or lost revenues in the event a compatibility problem will occur.

COMMUNICATIONS

4 serial inputs RS485 for the reception of data from max 8 remote keyboards at a max distance of 1200m (3900ft)

2 auxiliary RS485 lines outputs for telemetry and other devices control at a max distance of 1200m (3900ft). Auxiliary A can be used to connect more matrix in master-slave or parallel systems

Serial input PC RS232 at a max distance of 15m (49ft) for matrix set-up, loading configuration from matrix to PC for analyzing the current settings and matrix control

ENVIRONMENT

Indoor

Operating temperature: 0°C / +45°C (+32°F / +113°F)

CERTIFICATIONS

CE: EN60950-1, EN55022 Class B, EN50130-4

FCC Part 15, Class B

RELATED PRODUCTS

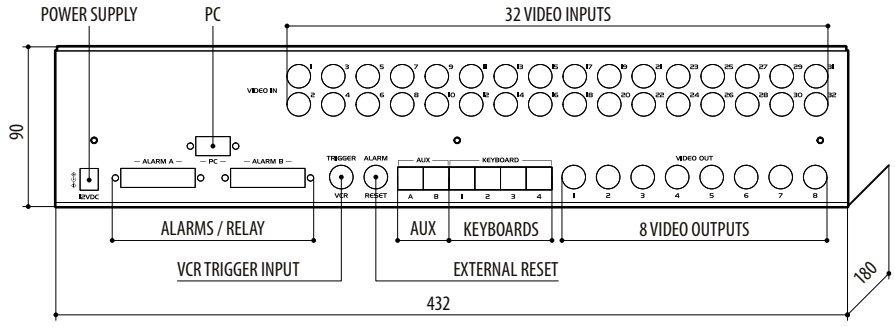
DCJ	Keyboard for video and telemetry control
DTMRX224	DTMRX224 Telemetry receiver 12 functions, 24Vac
DTMRX2	DTMRX Telemetry receiver 12 functions, 230Vac
DTRX324	DTRX324 Telemetry receiver 17 functions for PTH311 + preset
DTRX3	DTRX3 Telemetry receiver 17 functions for series PTH300 + preset
DTRXDC	Telemetry data receiver, 13 functions
ULISSE	Integrated positioning unit

PACKAGE

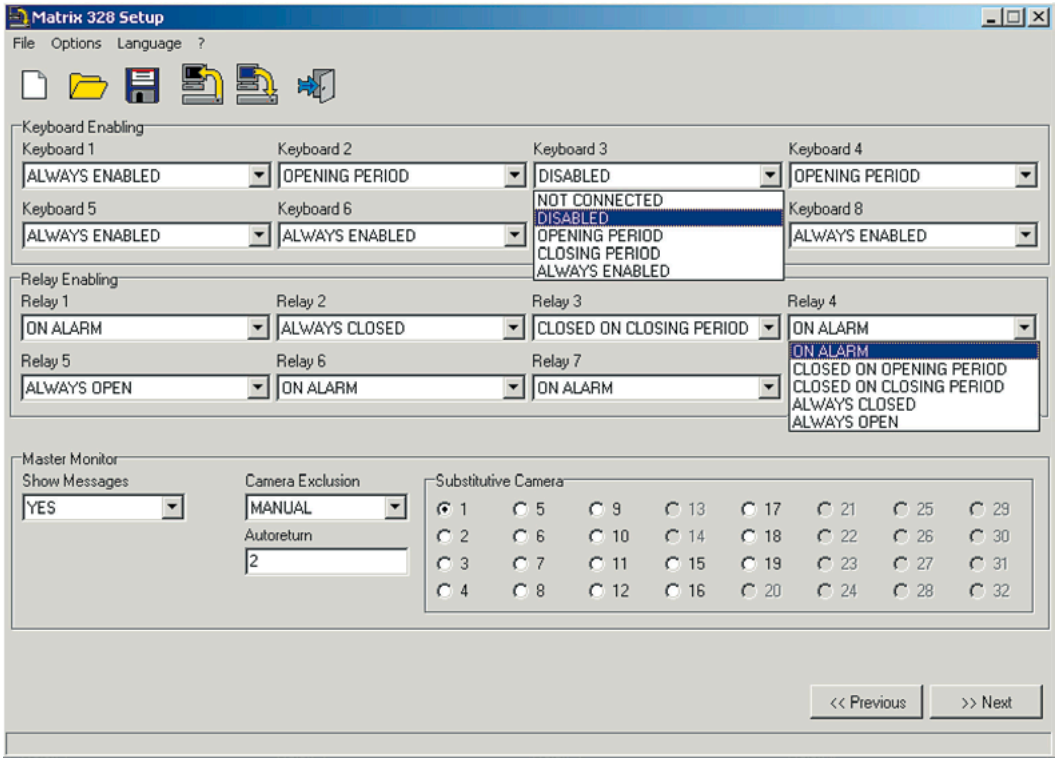
Model Number	Weight	Dimensions (WxHxL)	Master carton
SM328B	5.5kg (12.1lb)	26.5x17.5x49cm (10x7x19in)	-

TECHNICAL DRAWINGS

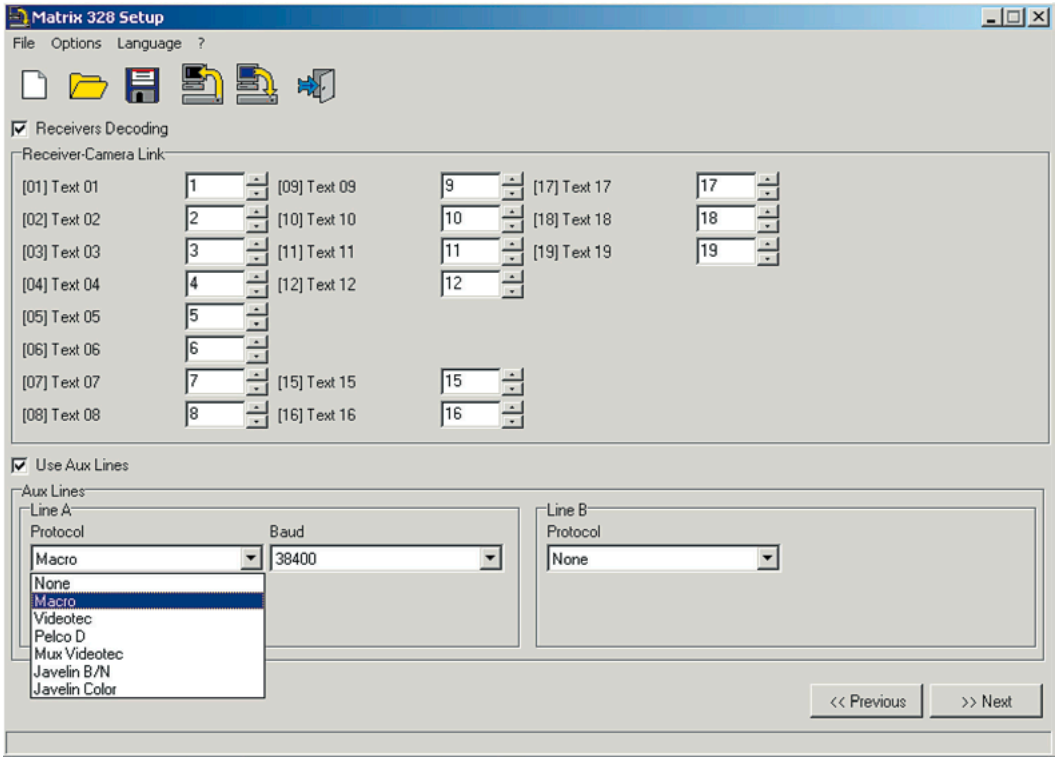
Sizes in millimeters.



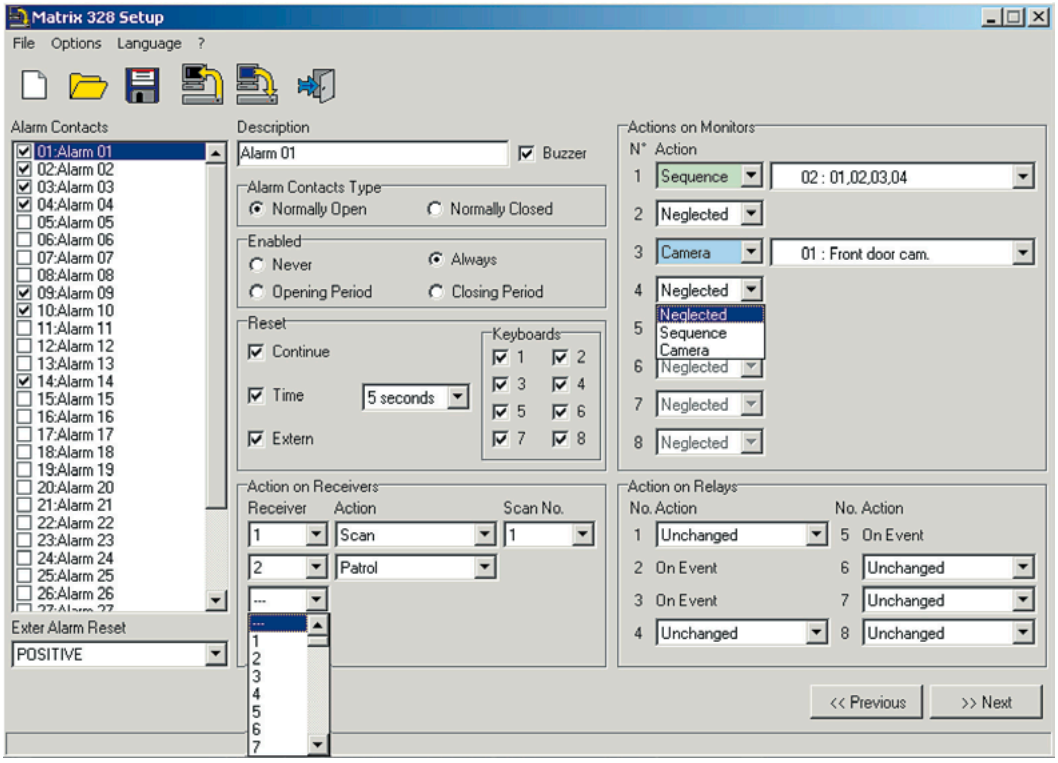
SM328



EXAMPLE: ENABLING THE KEYBOARD



EXAMPLE: TELEMETRY AND AUX SETUP



EXAMPLE: ALARMS SETUP