SM328B SYSTEM VIDEO MATRIX PAL/NTSC

MAIN FEATURES

32 video inputs (composite PAL/NTSC 1Vpp) with video loss detection

 ${\rm 8}$ 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.





Telemetry receiver



---→ 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: $0^{\circ}C / +45^{\circ}C (+32^{\circ}F / +113^{\circ}F)$

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 (12.1ll	b) 26.5x17.5x49cm (10x7x19	lin)-

TECHNICAL DRAWINGS

Sizes in millimeters.





Matrix 328 Setup File Options Language ?									
🗅 🗁 🔒 🖺) 칠 🛷								
-Keyboard Enabling Keyboard 1	Keyboard 2		K	eyboard 3			Keyboard 4		
ALWAYS ENABLED	OPENING PERIOD		•	ISABLED		-	OPENING F	ERIOD	
Keyboard 5	Keyboard 6			IOT CONNECTI	ED		Keyboard 8		
ALWAYS ENABLED	ALWAYS ENABLED		-	DENING PERIO DENING PERIO LOSING PERIO LWAYS ENABL	DD		ALWAYS EI	NABLED	1
Relay Enabling Relay 1	Relay 2			elav 3			Relav 4		
ON ALARM	ALWAYS CLOSED			LOSED ON CLI			ON ALARM		
	_,				o sinta i En		ON ALARM		
ALWAYS OPEN	Relay 6			elay 7 IN ALARM		•	CLOSED ON CLOSED ON ALWAYS CL ALWAYS OF	CLOSING	
Master Monitor Show Messages	Camera Exclusion	⊂Substitut	ive Cam	era					
YES 💌	MANUAL	⊙ 1	O 5	0.9	O 13	O 17	C 21	C 25	C 29
	Autoreturn	C 2	C 6	C 10	C 14	C 18	C 22	C 26	C 30
	2	03	0.7	O 11	O 15	C 19	C 23	C 27	C 31
		C 4	C 8	C 12	C 16	C 20	C 24	C 28	C 32
							<< Pre	vious	>> Next

EXAMPLE: ENABLING THE KEYBOARD

Matrix 328 Setup File Options Languag	e ?			<u>-0×</u>
Receivers Decoding				
[01] Text 01	1 [09] Text 09	9	17 .	
[02] Text 02	2 ÷ [10] Text 10	10 ÷ [18] Text 18	18	
[03] Text 03	3 🕂 [11] Text 11	11 [19] Text 19	18 ÷	
[04] Text 04	4 [12] Text 12	12 -		
[05] Text 05	5			
[06] Text 06				
[07] Text 07 [08] Text 08	7 15] Text 15	15		
Use Aux Lines				
Line A	D	Line B Protocol		
Protocol Macro	Baud 38400	Protocol None	•	
None Macro			_	
Videotec Pelco D				
Mux Videotec Javelin B/N				
Javelin Color				<< Previous >> Next
EXAMPLE: TELEMETRY AN	ID AUX SETUP			



Matrix 328 Setup File Options Language ?		<u>= ×</u>
Alarm Contacts	Description CActions on Monitors	
🗹 01:Alarm 01 🔹	Address of Monitors	
✓ 02:Alarm 02 ✓ 03:Alarm 03 ✓ 04:Alarm 04	Alarm Contacts Type 1 Sequence 02:01,02, r Normally Open C Normally Closed 2 Neglected	,03,04 🗾
05:Alarm 05 06:Alarm 06 07:Alarm 07 08:Alarm 08	Enabled 3 Camera 01 : Front o	door cam. 💌
 ✓ 09:Alarm 09 ✓ 10:Alarm 10 ☐ 11:Alarm 11 	C Opening Period C Closing Period 4 Neglected Reset Keyboards 5 Sequence	
□ 12:Alarm 12 □ 13:Alarm 13 ☑ 14:Alarm 14 □ 15:Alarm 15	Image: Continue Image: Continue	
□ 15.Alarm 15 □ 16:Alarm 16 □ 17:Alarm 17 □ 18:Alarm 18	Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Fixed matrix Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Seconds Image: Se	
19:Alarm 19 20:Alarm 20	Action on Receivers	
21:Alarm 21 22:Alarm 22	Receiver Action Scan No. Action No. Action No. A 1 Scan 1 Unchanged 5 0	Action On Event
23:Alarm 23 24:Alarm 24		
25:Alarm 25 26:Alarm 26		
Exter Alarm Reset		Unchanged 💌
POSITIVE		
	3 4 5 6	evious >> Next
	6 7 💌	



SM328B

