



**THECNICAL SHEET**  
**Color multiplexer mod. DigiMATRIX**

**ST-DGM-02E**

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**EQUIPMENT CODE :**

CODE	INPUTS	LOOPING BNC	OUTPUTS
DGM.9C	9	NO	2
DGM.9CL	9	YES	4
DGM.16C	16	NO	2
DGM.16CL	16	YES	4

**SHORT DESCRIPTION :**

Colour multiplexer with 9 or 16 inputs and 2 or 4 independent digital outputs. Four outputs equipment have looping BNC on inputs.

**FEATURES :**

DigiMATRIX is a family of digital video equipment that joint typical features of digital matrices and of multiplexers.

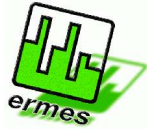
DigiMATRIX are available in four different versions according with the above table. All outputs are fully digital and they allow to display pictures in several format: full screen, split 4, split 6, split 8, split 9, split 10 (only for 16 inputs equipment), split16 (only for 16 inputs equipment) and Picture In Picture.

Each video output is equipped with a character generator that encrusts into the video signal the date, the hour, the video camera number and 20 character alphanumeric string when the full screen display format is selected.

Video selection on each output is carried out manually by means of keyboard fitted on the front of the equipment or by means of remote keyboard (we advice to use KEY.32 or KEY.32S - not included). In addition, it is possible to select video cameras automatically according with time schedule, external alarms or motion detection.

In fact, DigiMATRIX equipment come with digital motion detector and external alarm inputs that allow to select automatically video cameras on outputs; motion detector is singularly settable for each camera with 16x16 enabling grid, size and sensitivity.

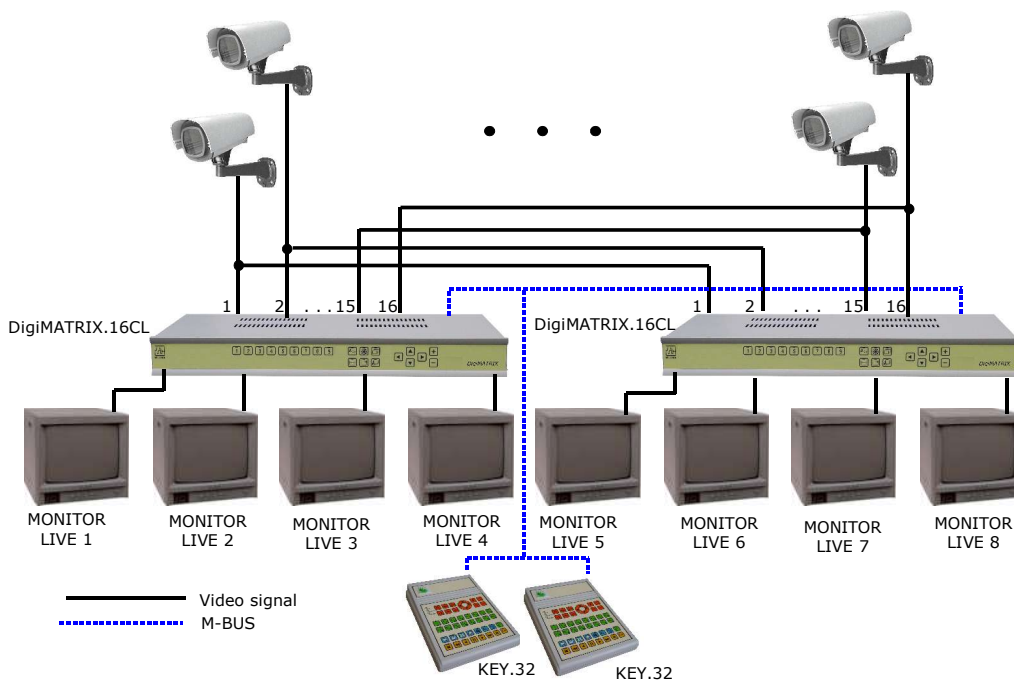
The user can set priority between the 3 automatic selection criteria (time scheduling, motion detector, external alarms), and, in

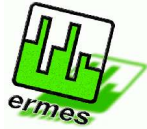


addition, he can chose the mode how motion detector and external alarms perform the video selection:

- CHANGE mode. It substitutes the camera displayed with cameras associated to the alarm or to the motion detector
- ADD mode. It creates and executes an automatic switching sequence that includes all cameras with motion detector and external alarms
- INTERLEAVE mode. When the DigiMATRIX is executing an automatic switching sequence, if an external alarm or a motion detection happens, DigiMATRIX creates a new automatic switching sequence that includes alarmed cameras, cameras alarmed by motion detector and cameras included in the previous automatic switching sequence.

DigiMATRIX comes with a new protocol on the M-BUS and it uses new KEY.32 and KEY.32S remote keyboards that allows to control up to 15 DigiMATRIX by means of the same keyboard. This feature and the looping inputs present on DigiMATRIX allow to expand in very easy way outputs of the system. The following picture shows a system that use two DigiMATRIX-16CL in order to obtain system with 16 cameras and 8 monitors controlled by means of two keyboards.





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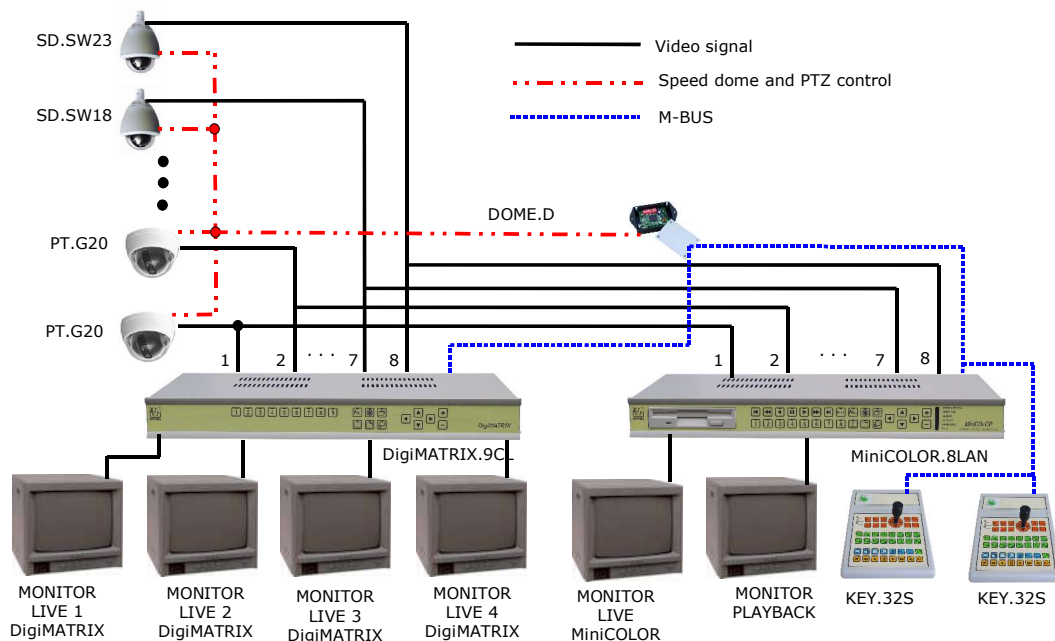
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In order to carry out this system, you must set the first keyboard as master and the second keyboard as slave; obviously, you can use only one keyboard for controlling the entire system or, if you need, you can add 6 keyboards in order to carry out a system with one keyboard for each output.

This new protocol can be installed on all ERMES equipment in order to carry out systems where one or more keyboards can control more than one equipment.

The following picture shows a system where two keyboards KEY.32S control one DigiMATRIX-9CL and one MiniCOLOR-8LAN in order to obtain 5 live monitors and one playback monitor.

In addition, this system, thanks to the DOME.D protocol adapter located on the M-BUS, can control speed domes or P/T/Z cameras.



In addition, thanks to new features of KEY.32 and KEY.32S, you can control playback from MiniCOLOR-8LAN by remote.



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**SPECIFICATIONS:**

Camera video inputs	:BNC connectors
Demultiplexer video inputs	:BNC connectors
Digital Video output	:BNC connectors
Video signal	:1Vpp PAL
Digital output bandwidth	:7 Mhz / -3db
Digital picture	:720x512 pixels (858 sample/row) - 65.536 colours
Alarms	:16 (D connector 25 pin female)
Auxiliary keyboard	:two inputs for manual video selection control by low cost push button
Remote keyboard	:Up to 4 (one for each output)
ID data on output	:3 rows with 20 characters each for date, hour, camera number, camera ID message and site ID message
Time data	:real-time clock with backup battery
Activity Detector	:on each input independently settable
Activity grid	:16 x 16 (256 areas)
Signalling output	:100 mA-30 Volt – function settable
Data storage	: FLASH EPROM
Software storage	:FLASH EPROM (upgradable on field)
Microprocessor	:16 bit - 30 MHz
Parameters setting	:by front panel and On Screen Menu
Power supply	:220 Vac / 20 VA with external adaptor
Case	:desk 420 x 87 x 305 mm