



***OPERATING MANUAL***  
***FOR***  
***VGA MATRIX SWITCHER***

Milestone Electronics Pvt. Ltd.

# VGA MATRIX SWITCHER

MATRIX SWITCHER by Milestone is a device that helps person/s to share Computer with two/four/eight projectors providing different displays or simultaneous displays.

## Models available

ML- 404 MATRIX VGA	4 Inputs with 4 VGA outputs
ML- 804 MATRIX VGA	8 Inputs with 4 VGA outputs
ML- 808 MATRIX VGA	8 Inputs with 8 VGA outputs

## Features

<b>INSTALLATION</b>	Easy to install - plug and play kind.
<b>SHARING</b>	4/8 Input with four/eight projectors.
<b>SELECTION</b>	Channel selectable from <ul style="list-style-type: none"><li>● Individual front panel local keypad.</li><li>● Individual remote keypad (optional).</li><li>● Remote contact closure.</li><li>● RS232C interface.</li><li>● RS422/RS485 interface (optional).</li><li>● Remote IR/RF Control (external unit-optional).</li></ul>
<b>VGA/AUDIO SWITCHING</b>	Separately & Simultaneously Selectable through RS232C port.
<b>POWER ON STATUS</b>	Previous Selection retained at power ON.
<b>INDICATIONS</b>	LCD display indication for the connected I/P and O/P.
<b>OUTPUTS</b>	Separate amplified VGA output.

## SPECIFICATIONS

<b>MODEL</b>	<b>404 MVGA</b>	<b>804 MVGA</b>	<b>808 MVGA</b>
<b>INPUT CONNECTORS</b> • <b>D15 (F) VGA</b>	4	8	8
<b>OUTPUT CONNECTORS</b> • <b>D15 (F) VGA</b>	4	4	8
<b>LED INDICATION</b> • <b>TRANSITION</b>	TR	TR	TR
<b>LCD INDICAION</b>	1	1	1
<b>KEYPAD SELECTION</b>	1 to 4	1 to 8	1 to 8
<b>REMOTE KEYPAD / CONTACT CLOSURE (SELECT)</b>	D9M × 1	D9M × 1	D9M × 1
<b>RS 232 INTERFACE</b>	D9F × 1	D9F × 1	D9F × 1
<b>OPERATING DISTANCE FROM REMOTE KEYPAD</b>	30 M	30 M	30 M
<b>MAINS INPUT (AC)</b>	230 V	230 V	230 V
<b>DIMENSION 19"</b>	1U	1U	2U
<b>WEIGHT</b>	3000g	3200 g	3500 g

## OPERATION

### ◆ Local Keypad (1 to 8)

Select the required channel from the front panel keypad as per the procedure given below.

CHANNEL	KEYPRESS
CH 1 □ O/P1	1 & 1
CH 2 □ O/P1	2 & 1
:	:
:	:
CH 8 □ O/P1	8 & 1
CH 1 □ O/P2	1 & 2
CH 2 □ O/P2	2 & 2
:	:
CH 8 □ O/P2	8 & 2
CH 1 □ O/P3	1 & 3
CH 1 □ O/P4	1 & 4
:	:
:	:
CH 8 □ O/P4	8 & 4
:	:
CH 8 □ O/P8	8 & 8

When the 1<sup>st</sup> key is pressed, TR LED (Transition LED) gets ON and after 2<sup>nd</sup> key is pressed the respective channel gets selected and TR LED goes OFF. If TR LED is ON it means it is waiting for 2<sup>nd</sup> key to be pressed. If 2<sup>nd</sup> key is not pressed for 5 Secs. TR gets OFF and waits for 1<sup>st</sup> key to be pressed again (Normal Condition).

To blank output press Key1 for 2 Secs. Similarly blanking upto output port 8.

◆ **LCD Display**

Unit has 16 X 2 digit LCD display. Top line indicates I/P channel & Bottom line indicates O/P channel. The position of O/P channel indication remains the same. When selected, I/P channel changes.

◆ **Remote contact closure/ remote keypad (Select).**

Rear panel has a D9 male connector, operational at a distance of 50 meters. Milestone’s remote keypad or any other remote contact closure can be connected at this connector.

The connector diagram for D9 male connector is as follows:

D-9 MALE	CHANNELS
1	Key 1
2	Key 2
:	:
:	:
8	Key 8
9	GRD

**Note:** To select key 1, short 1 and 9 through contact switch or use Milestone’s remote keypad and use the same procedure as in ‘Local Keypad’ mode.

◆ **Remote RS232 interface (RS232)**

D9 female connector from rear panel is used for selecting the switcher through RS232C Interface.

The pin configurations are

<b>D-9 FEMALE</b>	<b>SIGNAL</b>
3	Rx
5	GRD

The simple commands used for selecting the channels are:

<b>CHANNEL</b>	<b>DECIMAL</b>	<b>ASCII</b>
CH 1 <input type="checkbox"/> O/P 1	1*1!	312A3121
CH 2 <input type="checkbox"/> O/P 1	2*1!	322A3121
:	:	:
CH 8 <input type="checkbox"/> O/P 1	8*1!	382A3121
:	:	:
CH 1 <input type="checkbox"/> O/P 2	1*2!	312A3221
CH 2 <input type="checkbox"/> O/P 2	2*2!	322A3221
:	:	:
CH 8 <input type="checkbox"/> O/P 2	8*2!	382A3221
:	:	:
CH 1 <input type="checkbox"/> O/P 3	1*3!	312A3321
:	:	:
CH 8 <input type="checkbox"/> O/P 3	8*3!	382A3321
:	:	:
CH 1 <input type="checkbox"/> O/P 4	1*4!	312A3421
:	:	:
CH 8 <input type="checkbox"/> O/P 4	8*4!	382A3421
CH 8 <input type="checkbox"/> O/P 8	8*8!	382A3821
O/P 1 <input type="checkbox"/> Blank	0*1!	302A3121
:	:	:
O/P 8 <input type="checkbox"/> Blank	0*8!	302A3821

Communication parameters are 9600 baud, no parity, 8-bit, and 1 stop bit.

