



*OPERATING MANUAL*  
*FOR*  
*HDMI SWITCHER (NEW)*

Milestone Electronics Pvt. Ltd.

## HDMI SWITCHER

HDMI SWITCHER by Milestone is a device that helps person/s to share computers, laptops, DVD player, DVR, camera with single or multiple projector or monitor or LCD or Plazma, providing single or simultaneous displays having HDMI Ports.

### Models available

ML 201 HDMI	2 HDMI Inputs with 1 HDMI output
ML 202 HDMI	2 HDMI Inputs with 2 HDMI outputs
ML 401 HDMI	4 HDMI Inputs with 1 HDMI output
ML 402 HDMI	4 HDMI Inputs with 2 HDMI outputs
ML 801 HDMI	8 HDMI Inputs with 1 HDMI output
ML 802 HDMI	8 HDMI Inputs with 2 HDMI outputs

### Features

<b>INSTALLATION</b>	Easy to install – plug and play kind. <ul style="list-style-type: none"><li>● HDTV Compatible</li><li>● Can work with DVI inputs &amp; outputs</li><li>● Uses Equalization &amp; re-clocking technology.</li></ul>
<b>SHARING</b>	2/4/8 Inputs with single or multiple projectors or monitor or LCD or Plazma
<b>COMPATIBILITY</b>	Fully compatible to full HD Ports (1080P).
<b>CONTROL OPTIONS</b>	Channels Controlled by <ul style="list-style-type: none"><li>· Individual Local keypad</li><li>● Build in IR Remote with IR Extender connector</li><li>● Individual remote keypad (optional). (IR, RF of Wired)</li><li>● Remote contact closure.</li><li>● RS232C interface.</li><li>● RS422/RS485 interface (optional).</li><li>● Ethernet (Option).</li><li>● Active Inputs selected automatically in auto mode.</li><li>● Scan mode &amp; Manual mode also present.</li></ul>
<b>INDICATION</b>	LED indication for working set.

# SPECIFICATIONS

MODEL	201 HDMI	202 HDMI	401 HDMI	402 HDMI	801 HDMI	802 HDMI
INPUT CONNECTORS	HDMI × 2	HDMI × 2	HDMI × 4	HDMI × 4	HDMI × 8	HDMI × 8
OUTPUT CONNECTOR	HDMI × 1	HDMI × 2	HDMI × 1	HDMI × 2	HDMI × 1	HDMI × 2
DIP SWITCH	-	-	4	4	8	8
LED INDICATION	1, 2, Scan, PWR	1, 2, Scan, PWR	1 to 4, Scan, PWR	1 to 4, Scan, PWR	1 to 8, Scan, PWR	1 to 8, Scan, PWR
KEYPAD SELECTION	1 to 2	1 to 2	1 to 4	1 to 4	1 to 8	1 to 8
REMOTE KEYPAD / CONTACT CLOSURE	D9M× 1	D9M× 1	D9M× 1	D9M× 1	D9M× 1	D9M× 1
BUILT IN IR REMOTE	Yes	Yes	Yes	Yes	Yes	Yes
IR EXTENDER CONNECTOR FOR REMOTE SENSOR	EP × 1	EP × 1	EP × 1	EP × 1	EP × 1	EP × 1
RS 232 INTERFACE	D9F × 1	D9F × 1	D9F × 1	D9F × 1	D9F × 1	D9F × 1
OPERATING DISTANCE FOR REMOTE KEYPAD	30 M	30 M	30 M	30 M	30 M	30 M
MAINS INPUT (DC)	5V/1A	5V/2A	5V/1A	5V/2A	5V/2A	5V/2A
DIMENSION TABLE TOP (mm)	120 x 125x50	120 x 125x50	182 x 125x50	182 x 125x50	310 x 125x50	310 x 125x50
WEIGHT	700 g	900 g	1000 g	1300 g	1200 g	1500 g
OPERATING MODE						
1) MANUAL	Yes	Yes	Yes	Yes	Yes	Yes
2) AUTO	Yes	Yes	Yes	Yes	Yes	Yes
3) SCAN	Yes	Yes	Yes	Yes	Yes	Yes
4) RS232	Yes	Yes	Yes	Yes	Yes	Yes
5) BUILT IN IR REMOTE	Yes	Yes	Yes	Yes	Yes	Yes
6) IR/RF REMOTE (EXTERNAL UNIT) (OPTIONAL)	Yes	No	Yes	Yes	Yes	Yes

## OPERATION

### ◆ Local Keypad

Select the required channel from the front panel keypad.

### ◆ Remote contact closure/ remote keypad

Rear panel has a D9 male connector (select), operational at a distance of 50 meters. Milestone's remote keypad or any other remote contact closure can be connected at this connector such as IR Remote, RF Remote etc.

The connector diagram for D9 male connector is as follows:

D-9 MALE-1 Pin No.	CHANNELS
1	CH1
2	CH2
3	CH3
4	CH4
5	CH5
6	CH6
7	CH7
8	CH8
9	GRD

**Note 1:** To select any channel, short respective pin to ground i.e. pin no. 9 through contact switch or use Milestone's remote keypad.

- ◆ **Auto Mode:** Rear Panel has Auto ON Switch to enable or disable the feature of Auto mode. In Auto mode whichever cable is inserted in the input channel, that channel gets selected automatically.

◆ **Remote RS232 interface**

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

The pin configurations are

D-9 FEMALE	SIGNAL
2	Tx
3	Rx
5	GRD

The simple commands used for selecting the channels are

CHANNEL	ASCII	HEX
CHANNEL 1	1!	31, 21
CHANNEL 2	2!	32, 21
CHANNEL 3	3!	33, 21
CHANNEL 4	4!	34, 21
CHANNEL 5	5!	34, 21
CHANNEL 6	6!	34, 21
CHANNEL 7	7!	34, 21
CHANNEL 8	8!	38, 21

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

**Note:** Whenever any Channel is selected either through front panel or also the factory respective LED lights up & also the same above RS232C Command is send via Tx line of RS232.

- ◆ **IR Remote:** - All the new switcher has IR sensor on the front panel. IR-8 Remote is provided with the equipment to select the channels. On the rear side one EP Connector (IR.EXT,) is provided for connecting IR sensor cable which can be extended upto 30Mts.

- ◆ **SCANNING MODE**

For scanning mode, keep slide-switch at the rear panel in scan position before powering ON the unit. Set the DIP SWITCH for the Channels to be Scanned (see the note below). PWR ON the unit & check SCAN LED. Scanning time for each channel is 20 seconds (default).

To stop the scanning press any channel key from the remote keypad. To start scanning press scan Key (Mute) from the remote keypad. Front Panel has LED to indicate Scan mode status.

**Note:** The I/P channels will be scanned depending on the DIP Switch setting (not for 201HDMI & 202HDMI) eg. for scanning 1, 3 & 5, Keep the DIP Switch 1,3 & 5 ON. Rest all OFF.

The Scan time can also be set using DIP Switch (not for 201HDMI & 202HDMI).

- 1) PWR OFF the unit.
- 2) Set the DIP Switch as per Table 1.
- 3) Press key No.1 from the front panel.
- 4) Keeping the key no.1 pressed PWR ON the unit
- 5) If the timer is set properly Scan LED will start blinking.
- 6) PWR OFF the unit.
- 7) Set the DIP Switch for the channels to be scanned.
- 8) PWR ON the unit (with scan mode ON).
- 9) The I/Ps will start scanning depending on the time set.

**TABLE 1**

DIP Switch (1□ON, 0□OFF)

<b>1 2 3 4</b>	<b>TIME</b>
0 0 0 0	20 Secs
1 0 0 0	10 Secs
0 1 0 0	20 Secs
1 1 0 0	30 Secs
0 0 1 0	40 Secs
1 0 1 0	50 Secs
0 1 1 0	60 Secs
1 1 1 0	70 Secs
0 0 0 1	80 Secs
1 0 0 1	90 Secs
:	
:	
:	
0 1 1 1	140 Secs
1 1 1 1	150 Secs

Note: Please do not use 201HDMI, 401HDMI, 801HDMI if Source (e.g. Laptop) & destination (TV) are 4K. Use only when source is settable to 1080P & below.

---X---X---X---X---

