

**VIDEO** SWITCHER'S MANUAL



Milestone's "VIDEO" Switcher is a device that helps person/s to share multiple Video source with single / multiple projector.

| Models Available : |                              |  |  |
|--------------------|------------------------------|--|--|
| ML 401 VIDEO       | 4 VIDEO input > 1 VIDEO out  |  |  |
| ML 402 VIDEO       | 4 VIDEO input > 2 VIDEO out  |  |  |
| ML 802 VIDEO       | 8 VIDEO input > 2 VIDEO out  |  |  |
| ML 1602 VIDEO      | 16 VIDEO input > 2 VIDEO out |  |  |

| Features:     |   |  |
|---------------|---|--|
| Installation  | Easy to Install 100% Plug and Play Unit   |  |
| Sharing       | 2/4/8/16 input with > single or dual Projectors / Plasma  |  |
| Compatibility | 100 % compatible to Composite Video output  |  |
| Selection     | <ul> <li>Channels Selectable from:</li> <li>Individual front panel local key pad</li> <li>Individual Remote key pad (optional)</li> <li>RF Remote Controller (optional)</li> <li>IR Remote Controller (optional)</li> <li>RS232C Interface (Not applicable to ML401AV)</li> <li>RS485 / 422 Interface (optional)</li> </ul> |  |
| Indication    | LED Indication for working channel  |  |
| Video Input   | Composite Video inputs  |  |
| Video Output  | Gain Control output for it's optimal viewing (Not for ML401AV)  |  |



| Technical Specifications   |             |             |             |              |  |
|----------------------------|-------------|-------------|-------------|--------------|--|
| Models                     | ML401 Video | ML402 Video | ML802 Video | ML1602 Video |  |
| VIDEO I/P (RCA)            | 4           | 4           | 8           | 16           |  |
| VIDEO O/P (RCA)            | 1           | 2           | 2           | 2            |  |
| Selected input indication  | LED         | LED         | LED         | LED          |  |
| Power indication           | LED         | LED         | LED         | LED          |  |
| Key Pad Selection          | 1 to 4      | 1 to 4      | 1 to 8      | 1 to 16      |  |
| Remote contact closer Port | D9M x 1     | D9M x 1     | D9M x 1     | D9M x 2      |  |
| RS232 Interface port       | N/A         | D9F x 1     | D9F x 1     | D9F x 1      |  |
| Gain controlled Output     | N/A         | Yes         | Yes         | Yes          |  |
| Operating by Remote        | 50 Meter    | 50 Meter    | 50 Meter    | 50 Meter     |  |
| Mains Input (AC.)          | 230 V       | 230 V       | 230 V       | 230 V        |  |
| Dimension (Table Top)      | 288x130x52  | 288x130x52  | 288x130x68  | N/A          |  |
| Dimension (Rack Mount)     | 19" 1U      | 19" 1U      | 19" 2U      | 19" 2U       |  |
| Weight for (Table top)     | 1700g       | 1900g       | 2200g       | N/A          |  |
| Weight for (Rack Mount)    | 2900g       | 3450g       | 4200g       | 4700g        |  |

(# = Optional)

All above units are available in 19"-1U or 19"-2U size at extra cost

## Operation:

There are two options to operate this unit

- A. Manual Mode
- B. Scan Mode

Note: Above mode (B) is not available in ML401AV (VIDEO) Switcher.



#### A. Manual Mode Installation:

#### Selection of Manual mode:

To use the switcher in manual mode keep slide switch on manual mode on back panel of the unit.

## Local Keypad:

Select the required channel from the front panel keypad.

### Remote contact closure / remote keypad

Rear panel has a D9 Male connecter, where you can connect Milestone RF/IR/ cable through remote contact closure or you can connect programmable any other key pad or remote which is available in market.

The connecter diagram for D9 male connector is as follows:

| D-9 Male | Channels |
|----------|----------|
| 1        | CH1      |
| 2        | CH2      |
| :        | :        |
| :        | :        |
| 8        | CH8      |
| 9        | GRD      |

Note: to select channel 1, short 1 and 9 through contact switch or use Milestone's remote keypad / RF remote controller / IR remote controller.

#### Remote RS232 Interface

D9 female connector from rear panel is used for selecting the switcher through RS232 interface.



# The pin configurations are:

| D-9 Male | Channels |
|----------|----------|
| 3        | RX       |
| 5        | GRD      |

The simple command used for selecting the channels is

| Input Channel | Decimal | ASCII  |
|---------------|---------|--------|
| Channel 1     | 1!      | 31, 21 |
| Channel 2     | 2!      | 32, 21 |
| ÷             | :       | ÷      |
| :             | :       | :      |
| Channel 8     | 8!      | 38, 21 |

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

### B. Scanning Mode: (Auto Switching):

For scanning mode, keep slide-switch in scan position on back panel. Scanning time for each channel is 5 seconds.

In scan mode scanning of all Video inputs are done regardless of the Source are ON or OFF.

Please check earthing before installing the switcher to avoid ghost images and flickering & communication port problems