



## VGA AUDIO SWITCHER'S MANUAL



Milestone's "VGA Audio" Switcher is a unit whereby multiple (2/4/8/16) VGA + Audio can be switched to two (2) or multiple (simultaneous) VGA + Audio output. The switchers are user configurable for Manual or Auto switching (Scanning) Modes. This auto switching can be enable or disable via rear panel slide switch. Auto switching allows any input of the switcher to be selected automatically when the switcher detects a sync signal (sync signal detection).

**Models Available :**

ML 202 VGA + Audio	2 VGA + Audio input > 2 VGA + Audio out
ML 402 VGA + Audio	4 VGA + Audio input > 2 VGA + Audio out
ML 802 VGA + Audio	8 VGA + Audio input > 2 VGA + Audio out
ML 1602 VGA + Audio	16 VGA + Audio input > 2 VGA + Audio out

**Features :**

Installation	Easy to Install 100% Plug and Play Unit
Sharing	2/4/8/16 CPU with Audio > 2 Projectors or Monitors and 2 stereo output
Compatibility	100 % compatible to VGA, SVGA, XGA, EVGA, & Stereo audio of PC
Selection	Channels Selectable from : <ul style="list-style-type: none"> <li>• Individual front panel local key pad</li> <li>• Individual Remote key pad (<i>optional</i>)</li> <li>• RF Remote Controller (<i>optional</i>)</li> <li>• RS232C Interface</li> <li>• RS485 / 422 Interface (<i>optional</i>)</li> <li>• Active PCs selected or scanned in Auto / Scan Mode</li> </ul>
Indication	LED Indication for working channel
VGA Output	Gain Control output for it's optimal viewing
Audio Output	Normal stereo output on output 1 Gain controlled output (2 times) on output 2
VGA Cables	Standard VGA Cables for I/P and O/P
Audio Cables	Standard Stereo Audio Cables for I/P and O/P



<b>Models:</b>				
Technical Specifications	ML202 VA	ML402 VA	ML802 VA	ML1602 VA
VGA I/P (D15 Female)	2	4	8	16
VGA O/P (D 15 Female)	2	2	2	2
Audio I/P (Captive screw)	2	4	8	16
Audio O/P (Captive screw)	1	1	1	1
Audio O/P (3.5mm Stereo)	1	1	1	1
I/P indication	LED	LED	LED	LED
Power indication	LED	LED	LED	LED
Key Pad Selection	1 to 2	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	D9F x 1	D9F x 1	D9F x 1	D9F x 1
Gain controlled VGA out	Yes	Yes	Yes	Yes
Gain controlled Audio out	Yes	Yes	Yes	Yes
Operating by Remote	30 Meter	30 Meter	30 Meter	30 Meter
Mains Input (AC.)	230 V	230 V	230 V	230 V
Dimension (Table Top)	183x130x58	288x130x52	288x130x68	N/A
Dimension (Rack Mount)	19" 1U	19" 1U	19" 2U	19" 2U
Weight for (Table top)	1700g	1950g	2300g	N/A
Weight for (Rack Mount)	3000g	3500g	4250g	4770g

**Operation :**

There are three options to operate this unit

- A. Manual Mode
- B. Scan Mode
- C. Auto Scan Mode (Sync detection)

*Note : Above mode ( B and C ) is not available in ML202 VGA / VGA Audio 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 key pad .

Remote contact closure / remote keypad

Rear panel has a D9 Male connector, 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 connector 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.

**Remote RS232 Interface**

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

We can also give you ML204 / 404 / 804 / 203.  
Model 203 is special standby output.

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\*\*For switchers optimal result use 4+3 class II electronic VGA Cable\*\*

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The pin configurations are:

D-9 Male	Channels
3	RX
5	GRD

The simple command used for selecting the channels is

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 PCs are done regardless of the PCs are ON or OFF.*

**C. Auto Scanning Mode:**

In this mode scanning will be done for activated PCs only. (It detects the sync signal) So if you have connected PC 1-3 & 4 then in that case it will go from 1 to 3 and 4 and It will not select channel 2.

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**\*\* Please check earthing before installing the switcher to avoid ghost images and flickering\*\***

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