PRESENTATION SWITCHER'S MANUAL

PRESENTATION SWITCHER

A unit whereby multiple VGA, COMPOSITE VIDEO & SVIDEO inputs along with their respective AUDIO can be switched to individual respective gain Controlled outputs along with their AUDIO.

PRESENTATION SWITCHER by Milestone is available in three models as follows:

Models	Inputs	Outputs
ML440PS	4 VGA / AUDIO, 4 C-VIDEO / AUDIO	2 VGA, 2 C-VIDEO, 2 AUDIO
ML422PS	4 VGA / AUDIO, 2 C-VIDEO / AUDIO, & 2 S-VIDEO / AUDIO	2 VGA, 2 C-VIDEO, 1 S-VIDEO, 2 AUDIO
ML444PS	4 VGA / AUDIO, 4 C-VIDEO / AUDIO, & 4 S-VIDEO / AUDIO	2 VGA, 2 C-VIDEO, 1 S-VIDEO, 2 AUDIO

INSTALLATION	
Compatibility	Fully compatible to VGA, SVGA & EVGA monitors & PC stereo audio output and standard C-Video and S-Video outputs
Selection	Channel selectable from • Individual front panel local keypad. • Wired remote keypad (optional). • RF Wireless remote keypad (optional). • Remote contact closure. • RS232C interface. • RS422/RS485 interface (optional). • Active PCs selected or scanned in auto/scan mode.(VGA)
Indication	LED indication for working set.
VGA Output	2 Gain controlled outputs
C-Video Output	2 Gain controlled outputs
S-Video Output	1 S-VIDEO output
Stereo Audio Output	2 Stereo output for O/P1.
Cables	• Standard VGA cables for VGA I/P & O/P. • Standard stereo Audio cables (as used with PC) for Audio I/P and O/P. • Standard S-Video and C-Video Cable
Operations	3 Modes – Scan, Manual / RS232C & Auto.

Models:

Technical Specifications	ML-440PS	ML-422PS	ML-444PS
<u>Input Connecters</u>			
VGA – (D-15 Female)	4	4	4
VIDEO – (RCA)	4	2	4
S-Video – (4 pin Mini Din)	0	2	4
Audio – 3 pin Captive scr.	8	8	12
<u>Output connectors</u>			
VGA – (D-15 Female)	2	2	2
VIDEO – (RCA)	2	2	2
S-Video – (4 pin Mini Din)	0	1	1
Audio – 3 pin Captive scr.	2	2	2
<u>LED Indication</u>			
Power	1	1	1
VGA-Audio	1 to 4	1 to 4	1 to 4
C-Video-Audio	1 to 4	1, 2	1 to 4
S-Video-Audio	0	1, 2	1 to 4
<u>Keypad Selection</u>			
VGA-Audio	1 to 4	1 to 4	1 to 4
C-Video-Audio	1 to 4	1, 2	1 to 4
S-Video-Audio	-	1, 2	1 to 4
Clear	CLR	CLR	CLR
RF Remote Controller	D9M × 1	D9M × 2	D9M × 2
Remote Contact Closure (Cable through)	D9M × 1	D9M × 2	D9M × 2
RS 232 interface /	D9F × 1	D9F × 1	D9F × 1
Gain Controlled VGA & Video Output	YES	YES	YES
Operating distance from remote keypad.	50 M	50 M	50 M
Mains input (AC)	230 V	230 V	230 V
Dimension	19"-2U RACK	19"-2U RACK	19"-2U RACK
WEIGHT	1970 g	2300 g	4770 g

REAR PANNEL CONNECTORS DETAILS

1. 3 Pin Captive screw for Audio
   a) Left pin   – Right Audio
   b) Center pin   – Ground
   c) Right pin   – Left Audio

2. Standard 4 pin Mini DIN for S-Video
3. Standard RCA for C-Video
4. Standard D15 Female for VGA.

HOW TO USE THE UNIT

a) Keep the switch (at the rear panel in the required mode as described in output.

b) Connect VGA along with Audio inputs to Laptops or Computers.

c) Connect C-Video along with Audio to CD or DVD player or Camera.

d) Connect S-Video along with Audio CD or DVD player or Camera.

e) Connect one VGA output & one Audio output to the VGA and its Audio input of the Projector.

f) Select the required channel using various selection methods [Front panel keypad, Remote (Wired or Wireless) Keypads, RS232C, etc.]

g) When VGA and its Audio O/P is selected, other O/P (i.e. C-Video & S-Video) is disabled which enables the Projector to work in Auto scan mode i.e. either VGA or C-Video or S-Video inputs comes to the projector, it will select in Auto mode.

h) To disable all O/P's use "CLR" button on the front panel.

OPERATION

A. MANUAL MODE & RS232C MODE

Keep <u>slide-switch</u> to manual position

♦ **Local Keypad**

Select the required channel from the front panel keypad.

♦ **Remote contact closure/ remote keypad**

Rear panel has two 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 –1 (for source 1 to 8)	Channels
1	CH1-VGA Audio 1
2	CH2-VGA Audio 2
3	CH3-VGA Audio 3
4	CH4-VGA Audio 4
5	CH5- C-Video, Audio 1
6	CH6- C-Video, Audio 2
7	CH7- C-Video, Audio 3
8	CH8- C-Video, Audio 4
9	GRD

D-9 Male –2 (for source 8 to 12, & Clear s/w)	Channels
1	CH9- S-Video, Audio 1
2	CH10- S-Video, Audio 2
3	CH11- S-Video, Audio 3
4	CH12- S-Video, Audio 4
8	Switch / Clear Function - C-Video, Audio 1
9	GRD

Note: **1.** To select VGA Audio1, short 1and 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 RS232C Interface.

The pin configurations are:

D-9 Male	Signals
3	RX
5	GRD

The simple command used for (RS232) selecting the channels is as follows:

Channel / Input	Decimal	ASCII
Channel 1 - VGA Audio 1	1!	31, 21
Channel 2 - VGA Audio 2	2!	32, 21
Channel 3 - VGA Audio 3	3!	33, 21
Channel 4 - VGA Audio 4	4!	34, 21

Channel / Input	Decimal	ASCII
Channel 5 – Video Audio 1	5!	35, 21
Channel 6 – Video Audio 2	6!	36, 21
Channel 7 – Video Audio 1	7!	37, 21
Channel 8 – Video Audio 2	8!	38, 21
Channel 9 – S-Video Audio 1	9!	39,21
Channel 9 – S-Video Audio 2	a!	61,21
Channel 9 – S-Video Audio 3	b!	62,21
Channel 9 – S-Video Audio 4	c!	63,21
Clear	g!	67,21

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