

HDMI v1.3 2in:2out
Matrix Selector - **ID# 825**



Operation Manual

Introduction

Thank you for purchasing the HDMI v1.3 2in:2out Matrix Selector. While HDMI products are getting more and more popular in the market people usually have more than one HDMI devices and sources in one place. The HDMI v1.3 2in:2out Matrix Selector provides the excellent solution for connecting all the devices and sources together for your convenience use, it also provides you a variety of choices on where to play your images with remote controller. Further, the HDMI v1.3 2in:2out Matrix Selector can transfer Deep Color video and bit stream digital audio with maximum performance and it supports HDMI 1.3, HDCP 1.1 and DVI 1.0.

Applications

- Multi-source with multi-display control.
- Home entertainment integration.
- Multi-task project presentation.
- Showroom Display.
- Advertising display control.

System Requirements

HDMI input device(s) and HDMI output device(s) with HDMI cables.

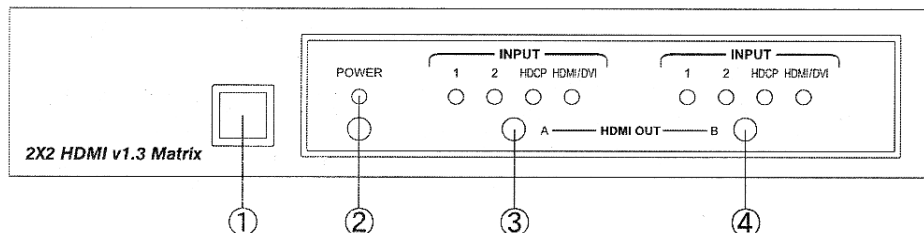
Features

- HDMI 1.3, HDCP 1.1 and DVI 1.0 compliant.
- Supports digital video formats in Deep Color 12bit and new lossless compressed (Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio) digital audio.
- The HDMI input is compensated, clock / phase adjusted, and jitter eliminated so the output is a brand new standard HDMI signal.
- Supports input source LED indicators on each output select.
- Compatible with all HDMI sources and displays.
- Supports a wide range of PC and HDTV resolutions from VGA to UXGA and 480i to 1080p.
- Supports RS-232 control.
- Supports IR remote control and IR extender.
- Dolby Digital, DTS digital audio transmission (32-192 kHz Fs sample rate).
- Supports LPCM7.1 channels output from each independent HDMI ports.
- HDMI cable distance test with 1080p/8-bit & 12-bit resolution, the Input/ Output can run up to 15/15 meters.
- Switchable EDID function for choosing the native resolution to display.
- Define HDCP, HDMI and DVI source. The LED light will light up to define the input sources's format.
- When HDMI signal progresses through the system, it is re-timed, and level-compensated.

Operating Functions and Controls

- High performance HDMI 1.3 Matrix of 2 (two) input and 2 (two) output with remote control for you to link with your favor HDMI devices to enjoying movies, music, or games at once.

Front Panel



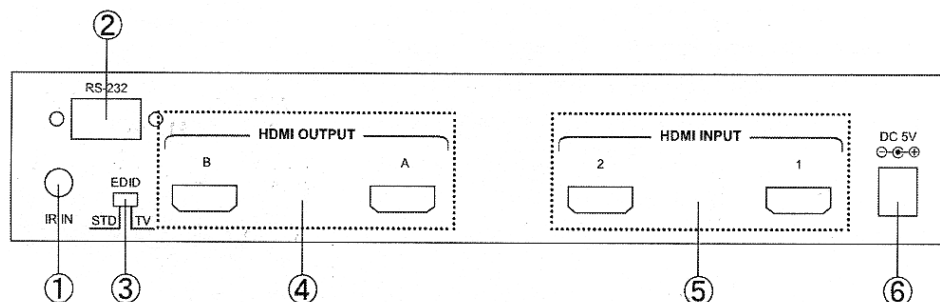
(1) . Remote control sensor.

(2) . Power switch & LED Indicator: Green LED will illuminate when the power is turned on and Red LED will illuminate when power is turned off.

(3) Input Select/Indicators (A): Press the HDMI out "A" button repeatedly to switch to your desired source and the LED will illuminate to indicate which input source is being selected and routed to HDMI A output. Also, when the input source is HDMI/DVI the HDMI/DVI LED will illuminate, if the input source with the HDCP protection the HDCP LED will illuminate.

(4) Input Select/Indicators (B): Press the HDMI out "B" button repeatedly to switch to your desired source and the LED will illuminate to indicate which input source is being selected and routed to HDMI B output. Also, when the input source is HDMI/DVI the HDMI/DVI LED will illuminate, if the input source with the HDCP protection the HDCP LED will illuminate.

Rear Panel



(1) IR IN: Place the IR receiver cable in front of the displays and then using sources remote control to control sources through IR receiver cable.

(2) RS-232: Connect the COM port of your PC for the distant control over RS-232 channel. Detail specification in section 8.

(3) EDID: EDID control switch, the default factory setting is on TV. Leave as it is when the displays are working properly. Switch to STD to use built-in EDID.

Note:

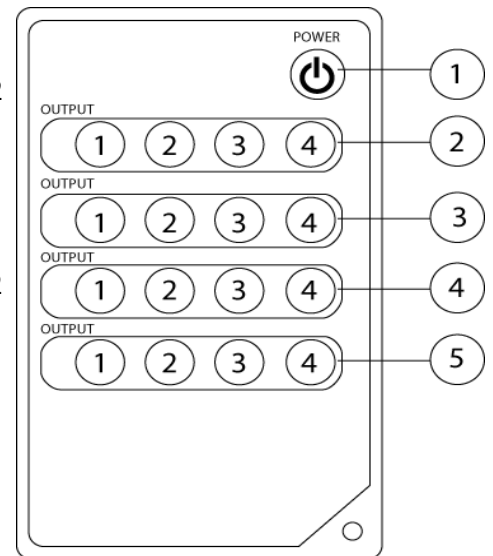
1. STD means using internal EDID, TV means using external EDID.

2. When EDID switch to TV, the unit will detect the first HDMI output source's EDID and record in the unit. If the first detected output source is DVI it will pass to next source, until the first HDMI been detected. The detection priority is HDMI v1.3 > HDMI v1.2 > DVI.
3. When EDID is on STD the unit will use built-in EDID which support:
Video -3 1080p 12-bit (max) but not supporting xvYCC
Audio -4 PCM2
4. Your EDID selection will only activated when the unit is repluyg and power on.
- (4) HDMI OUTPUT A&B:** Connect each of these output port to the HDMI display(s). The device supports repeater function and each output port can supports 16 key sets of KSV and 2 outputs can support a total of 32 key sets of KSV.
- (5) HDMI INPUT 1 & 2:** Connect these input ports to HDMI or DVI output port of your source equipment such as DVD player or set-top-box.
- (6) DC 5V:** Plug the 5V DC power supply into the unit and connect the adaptor to AC wall outlet.

Remote Controls and Functions

- 1. Power:** Press the button to turn on/ff the unit.
- 2. Input Select for HDMI OUT A:** Press 1 or 2 to select the desired input source for HDMI OUT A.
- 3. Input Select for HDMI OUT B:** Press 1 or 2 to select the desired input source for HDMI OUT B.
- 4. Input Select for HDMI OUT C:** Press 1 or 2 to select the desired input source for HDMI OUT C.
- 5. Input Select for HDMI OUT D:** Press 1 or 2 to select the desired input source for HDMI OUT D.

*Notes: Selection 3&4 are not functioning for this model.



RS-232 Protocols Pin Assignment

The connection between Switcher and remote controller with RS-232 modem cable.

Switcher			Remote Controller	
PIN	Definition		PIN	Definition
1	NC	----->	1	NC
2	TxD		2	Rx
3	RxD		3	Tx
4	NC		4	NC
5	GND		5	GND
6	NC	<-----	6	NC
7	NC		7	NC
8	NC		8	NC
9	NC		9	NC

Baud Rate: 9600 bps

Data bit: 8 Bits

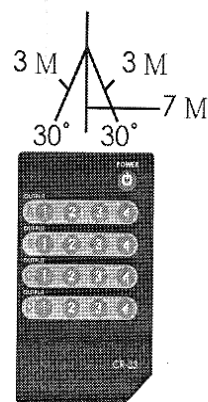
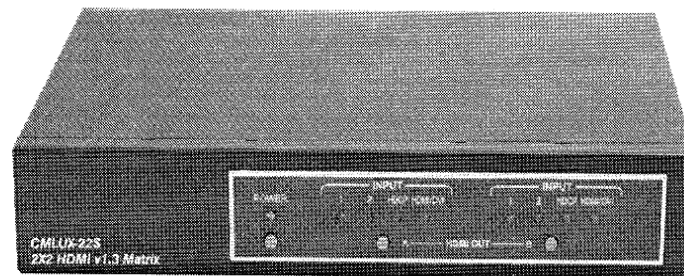
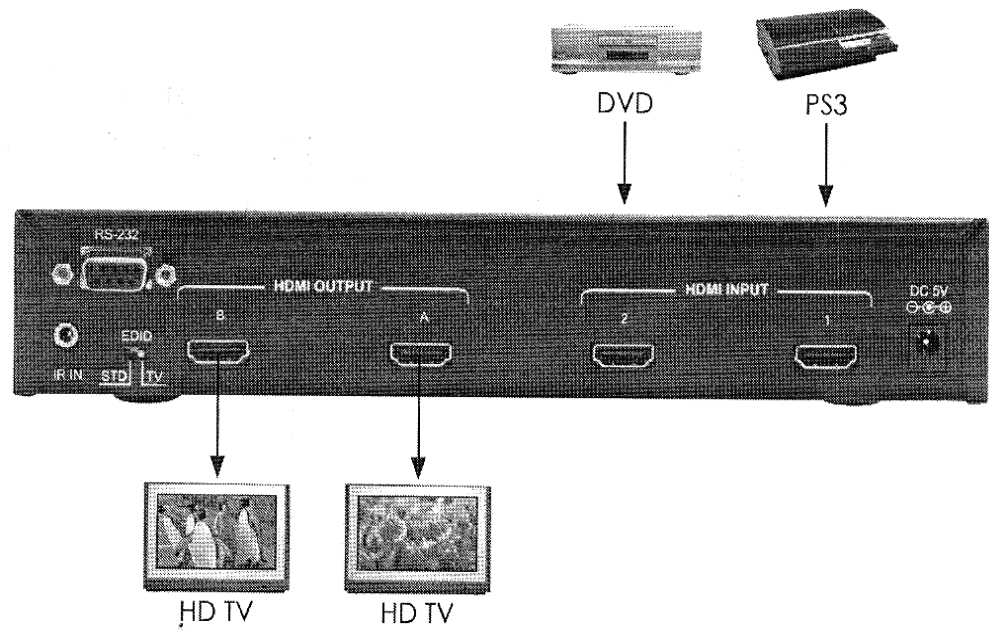
Parity: None

Stop Bit: 1 bit

Commands

COMMAND	ACTION
POWER 00	Power Off (standby)
POWER 01	Power On
PORT 11	Output A select Input1
PORT 12	Output A select Input2
PORT 13(No Function)	
PORT 14(No Function)	
PORT 21	Output B select Input1
PORT 22	Output B select Input2

Connection and Installation



Specifications

Frequency bandwidth	2.25Gbps (single link)
Input ports	2 x HDMI female ports,
Output ports	4 x HDMI female ports
EDID	Standard, TV/Moving Port 1
HDMI Audio output	PCM2, PCM5.1, PCM7.1, Dolby5.1, DTS5.1, DD+, DTrueHD, DTS-HD
HDMI Cable in	1080p 8bit (10M), 1080p 12bit (10M)
HDMI Cable out	1080p 8bit (10M), 1080p 12bit (6M)
Color Space	RGB_24/36, YCbCr 4:4:4_24/36, YCbCr 4:2:2,xvycc
IR	Yes
Deep Color	1080p 12bit
HDMI Resolution	480I-1080p 50/60, 1080p 24, VGA-UXGA
DVI Resolution	480I-1080p 50/60, 1080p 24, VGA-UXGA
Power Supply	5VDC/3.2A (US/EU standards, CE/FCC/UL certified)
Dimensions (mm)	240(W) x 169(D) x 43(H)
Weight(g)	1260
Chassis Material	Metal
Silkscreen Color	Black
Operating Temperature	0°C - 40°C
Power Consumption	9W (Max)