Introduction:

This 4x4 HDMI Matrix Switch is designed to work as a true matrix switch for multiple sources and displays. Each output allows you to select any of 4 input sources at any time. Every source is accessible at all times by any displays, using manual switch buttons or the IR remote control provided.

The Matrix Switch lets any input to be routed to any output; or the same input to be routed to all outputs or any combination. Full High-Resolution 1080p signals can be sent through from a distance of 30M (max.) over 28awg HDMI cables (HDMI-in HDMI-out) or 50M (max.) over Cat.5e/6 cables (HDMI-in Cat.5-out).

The Switch completely eliminates the need to move around input and output cables. In addition, RS-232 control allows the switch to be upgraded by any computerized control software. This Matrix Switch provides you operational flexibility, easy control and convenience.

Specification:

Product	4x4 HDMI Matrix Switch	4x4 HDMI Cat. 5 Matrix Switch
HDMI Version	1.3b	1.3b
HDMI Source Input Port	4	4
Display Device Output Port	4 (HDMI)	8 (Cat. 5)
Source Port Connector	19 pin HDMI	19 pin HDMI
HDCP Compliant	Yes	Yes
Display Device Selection	IR Remote Control	IR Remote Control
Device Port LED	16	16
Single Link Range - TV	1080p / 1920x1200	1080p / 1920x1200
- PC	VGA, SVGA, XGA, SXGA & UXGA	VGA, SVGA, XGA, SXGA & UXGA
Deep Color	12 bits	12 bits
Video Bandwidth	Up to 2.25GHz	Up to 2.25GHz
Vertical Frequency Range	50 ~120 Hz	50~120 Hz
Audio Performance	SCAD PCM (7.1ch), Dolby Digital,	SCAD PCM (7.1ch), Dolby Digital,
	True HD DTS-HD & Master Audio	True HD DTS-HD & Master Audio
Lip Sync	Yes	Yes
Switching Mode	Manual Buttons or IR Remote Control	Manual Buttons or IR Remote Control
Signal Extension	Up to 30M over HDMI Cables	Up to 50M over Cat.5e/6 Cables
Power Consumption (max.)	15 Watts	15 Watts
Operation Temperature	0°C to 70°C.	0°C to 70°C.
Switching Power Adapter	5V 3.0A	5V 3.0A
Housing	Metal	Metal
Dimension (mm)	420 x 160 x 44mm	420 x 160 x 44mm
Weight (g)	1900g	2000g
HDMI Cables	Optional	Optional

Features:

- Compatible with HDMI V-1.3b, HDCP V-1.2 and DVI V-1.1
- · Sends up to four video inputs to any four HDMI displays
- · Supports 2.25Gbps signaling rate for 480i/p, 720i/p, 1080i/p with 12-bit color depth
- Extends video up to 30M at 1080p over HDMI Cables and 50M over CAT-5/6 cables
- · Each port supports both Video and Audio signals
- · Enable to upgrade a new software version via Serial RS-232 port
- · Plug-n-Play and Rack-mountable
- · Supports multiple HD displays for multiple sources, such as Blu-Ray DVD players, HDMI enabled PCs or Notebooks, Digital Projectors, PlayStation 3, A/V Receivers and Set Top Boxes
- Encloses a Remote Control for operational flexibility, easy control and convenient use
- · Eliminates a hassle for disconnection and reconnection with different sources
- · LED indications for operation/power modes
- · ROHS Compatible and 260°C Reflow Rated

4x4 HDMI V-1.3 Matrix Switch



4x4 HDMI V-1.3 Over Cat. 5 Matrix Switch



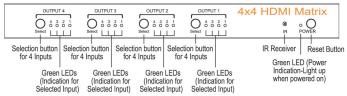
HDMI 1.3 Matrix Features Supported:

- · SCAD PCM (7.1ch), Dolby Digital, True HD DTS-HD & Master Audio
- · Deep Color (XV Color)
- · 2.25 GHz (up to 12 bit YUV 444 @ 1080p)
- · Lip-Sync Pass Through
- · Color Space Conversion
- · CEC Pass Through

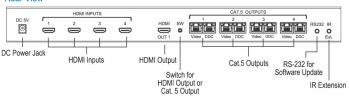
The Package includes:

- 1) HDMI V-1.3 Matrix Switch
- 2) IR Remote Control
- 3) 5V DC Power Supply
- 4) User's Manual
- 5) IR Extension Cable (Optional)

Panel View - 4x4 HDMI V-1.3 Over Cat. 5 Matrix Switch

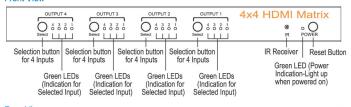


Rear View

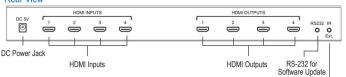


Panel View - 4x4 HDMI V-1.3 Matrix Switch

Front View



Rear View



Remote Control



- (b) --→ Power On/Off of the Switch
- ① ---> Press this button when selecting HDMI source # 1 (of Output 1, 2, 3, 4)

IR Extension

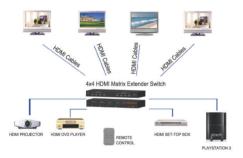
- 2 ---> Press this button when selecting HDMI source # 2 (of Output 1, 2, 3, 4)
- ③ ---> Press this button when selecting HDMI source # 3 (of Output 1, 2, 3, 4)
- ④ --> Press this button when selecting HDMI source # 4 (of Output 1, 2, 3, 4)

Application:

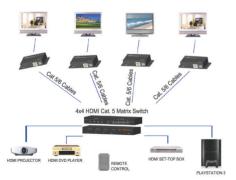
- · Switching from Digital-Video (DVI) or Digital-Audio Visual (HDMI) Sources
- · Play Station 3, Blu-ray DVD Players
- · Digital TV, HDMI Flat Panel Monitors, HDTV
- · DVD Players, Satellite Receivers, Set-Top Boxes
- · Digital Projectors
- · Audio / Video Receivers
- · HDMI Enabled PCs / Notebooks and other HDMI-enabled devices

Application Diagram

4x4 HDMI 1.3 Matrix Switch



4x4 HDMI 1.3 Over Cat. 5 Matrix Switch



Instructions for Installation:

Installation Steps - How to connect / set up:

- Simply connect the 4 HDMI sources to the Matrix Switch's inputs and 4 HDMI displays to the Matrix Switch's outputs. (For 4x4 HDMI Over Cat.5 Matrix Switch, you will have to use Cat.5e/6 cables to link the HDMI Matrix Switch - Transmitter and 4 single HDMI Over Cat.5e/6 Receivers.)
- 2) Plug the power supply into the Switch's power port.
- Once the sources, the Switch and the Displays are all properly connected and powered, you simply select what sources you want to see on any of the TVs connected.
- 4) Use the Remote Control Unit to select /change the sources.

Trouble Shooting

Problems	Solutions	
Switch is not in operation	Make sure that the power supply is properly connected with the switch. Check to see if the LED light is on.	
No pictures/ signals or poor images	1. Make sure that the video display is HDCP compliant. 2. If you are using HDMI copper cable, overall length of the cable should not be longer than 15ft (that is the distance from DVD to the matrix switch and from the matrix switch to a TV). Longer HDMI copper cables will result in no or poor resolution. The HDMI Repeater is recommended to use for a distant connection - over 15ft. 3. Make sure all HDMI connectors are tightly secured to all HDMI ports. 4. Turn off and again, turn on all the equipments.	
Remote Control unit is not in operation	Make sure that the power supply is properly connected with the switch. Check to see if the LED light is on.	
Programming Universal Remote Control	A Remote Control Unit has unique codes. To program your own Universal Remote Control, make sure to learn feature of your Universal Remote Control Unit.	

