

OCTAVA™

4x2 HD Matrix Switch

PRO HD HOME THEATER SERIES

Model: HDMX42

Installation Guide

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Application Diagram

Description:

The Octava 4x2 HDMI Matrix Switch allows you to display 4 HD sources on 2 HD displays! View any 16 combination of 4 sources on 2 displays for the ultimate HD viewing experience. Optical Digital Audio Output is included for integration with your surround sound audio system.

The Octava 4x2 HDMI Matrix is 3D support, Full 1080P and is 1 RU Rack mountable for professional installations.

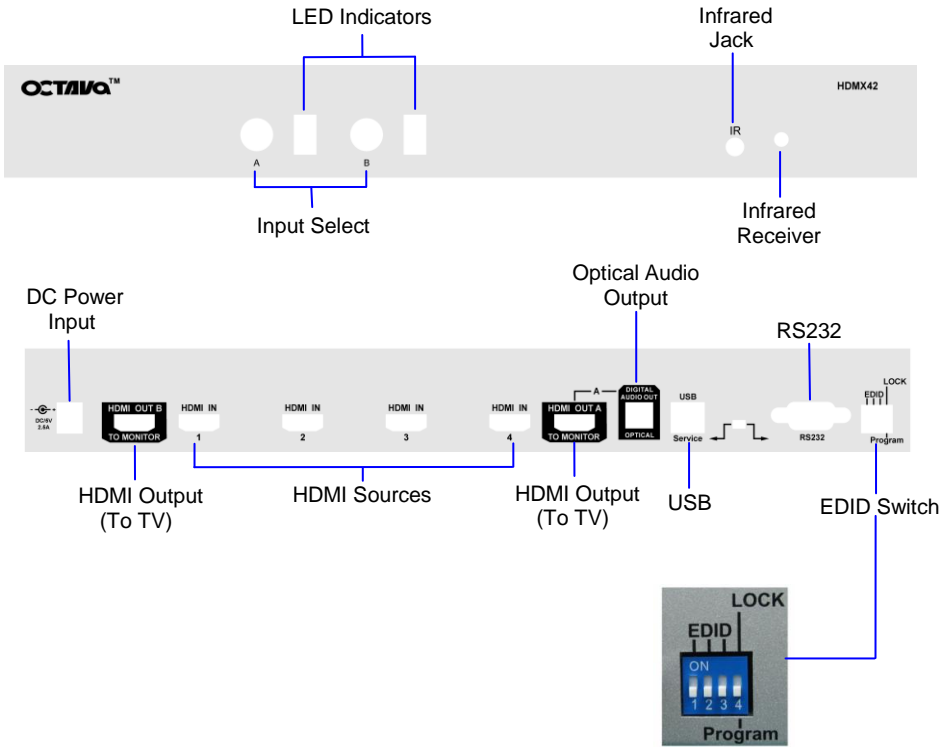
The HDMX42 incorporates EDID management for customization to your theater system. RS-232 serial interface is provided for integration with 3rd party control systems.

Features:

- Watch ANY 4 HD programs simultaneously on 2 Displays!
- 3D support , 1080P
- 4 HDMI inputs, 2 HDMI outputs.
- Optical Audio Output for integration with surround sound system
- 1 RU mountable
- EDID Management. USB service port for customization needs
- Supports high resolution video 480p, 720i/p, 1080i/p
- Remote Control (IR) included.
- External IR Jack for extension
- RS-232 Control Program Included

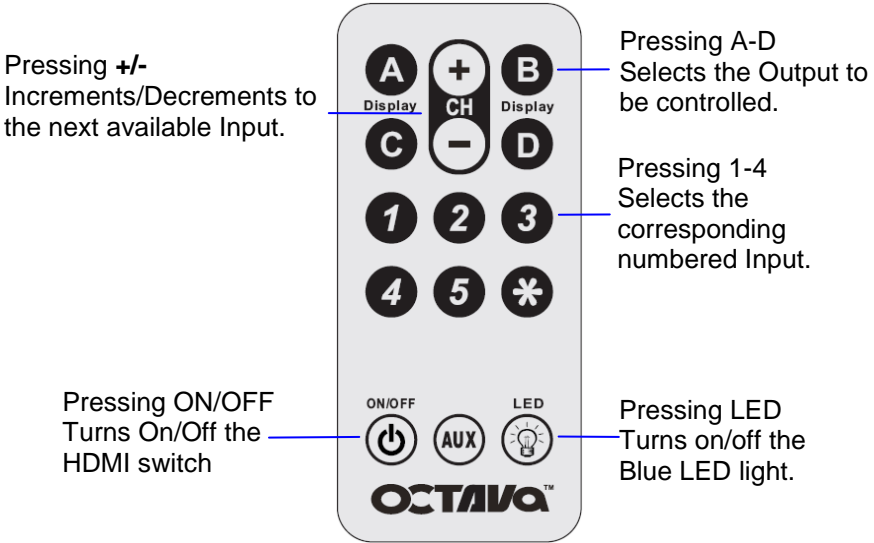
Installation:



- 1) Connect the Monitor to the HDMI OUT A
- 2) Connect the second monitor/projector to HDMI OUT B
- 3) Connect the HDMI sources to the HDMI INPUTS
- 4) Connect the DC power adapter.



Switch Number	1	2	3	4
Name	EDID switch	EDID switch	EDID switch	Programming/LOCK switch
Function	EDID MODE select	EDID MODE select	EDID MODE select	Programming/LOCK
				Down= EDID Programming mode Up= Locked

Remote Control Guide:



Button	Function	Notes
+, -	Increments/Decrements to the next available Source	
1,2,3,4	Selects the corresponding numbered source.	
	Turns ON/OFF the LED light.	
	Turns ON/OFF the HDMI switch	
Other	Not used	

Octava's Remote control uses discrete code so can be easily integrated with most Universal Remote Controls such as Logitech's Harmony.

Basic Quick Start:

Use the remote control to select the Display that you wish to control followed by the Input (DVD, Settop) that you wish to watch.

For example:

-Pressing **Display B**, “2” will switch Input 2 to HDMI Out B.

-To connect **DISPLAY A to IN1 and DISPLAY B to IN3** you simply follow this sequence

Step 1) **Display A, 1 (this will set Display A to Input 1)**

Step 2) **Display B, 3 (this will set Display B to Input 3)**

Here are some more examples:

Output Selection (Step 1)	Input Selection (Step2)	Result
DISPLAY A	“2”	Display A switches to Input 2
DISPLAY B	“1”	Display B switches to Input 1
DISPLAY A	“+”	Display A increments to next available Input
DISPLAY B	“-”	Display B decrements to next available Input

Special Configuration:

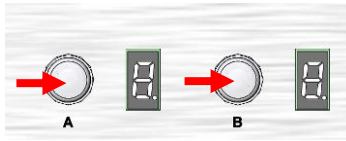
Distribution Amp Mode:

The HDMX42 can be configured to function as a distribution amp where Out A and B displays the same source.

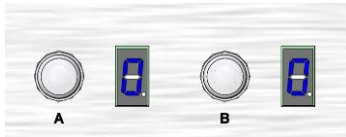
To set the HDMX42 to Distribution Amp mode:

- 1) Press A and B for 5 seconds. Both LED will flash "0"

Press A and B for 5 seconds



LED will flash "0"

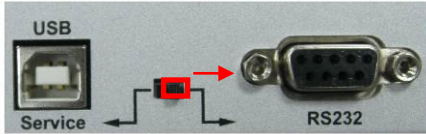


Matrix Mode:

To re-set the HDMX42 back to Matrix mode, simply repower the HDMX42.

RS232 Control Commands:

The Octava HD Matrix can be easily integrated with 3rd Party control systems via RS232 control. The following shows the control protocol:



Set the switch to RS-232 side as shown.

RS-232 protocol	
Baud Rate	9600
Data Bits	8
Parity Check	none
Stop Bits	1
Flow control	none

Basic controls					
Note: The commands are in HEX. No spaces between HEX codes.					
	HEX CODE				
Port Status	0x02	0x30	0x30	0x31	0x03
Turn ON LED	0x02	0x30	0x30	0x33	0x03
Turn OFF LED	0x02	0x30	0x30	0x34	0x03
Turn ON Power	0x02	0x30	0x30	0x35	0x03
Turn OFF Power	0x02	0x30	0x30	0x36	0x03

Switching Commands

Note: The commands are in HEX. No spaces between HEX codes.

Output A Switching Commands	HEX CODE				
Select OUT A to Input port 1	0x02	0x32	0x31	0x31	0x03
Select OUT A to Input port 2	0x02	0x32	0x31	0x32	0x03
Select OUT A to Input port 3	0x02	0x32	0x31	0x33	0x03
Select OUT A to Input port 4	0x02	0x32	0x31	0x34	0x03
Output B Switching Commands					
Select OUT B to Input port 1	0x02	0x32	0x32	0x31	0x03
Select OUT B to Input port 2	0x02	0x32	0x32	0x32	0x03
Select OUT B to Input port 3	0x02	0x32	0x32	0x33	0x03
Select OUT B to Input port 4	0x02	0x32	0x32	0x34	0x03

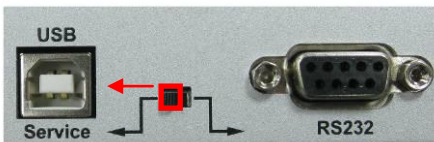
For Example:

Turn OFF LED Send: 02 30 30 34 03 (in hex, no space)

USB Service Port:

The USB port is for service and EDID updates if needed.

Contact us for this feature.



Set the switch to
USB/Service side as shown.


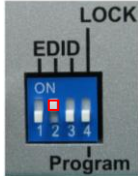


EDID Configuration:

The Matrix can be configured to 4 EDID settings.

It is recommended to keep the EDID in the default factory mode 1.

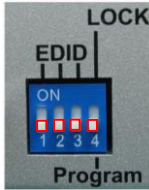
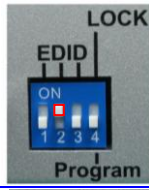

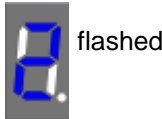
*Custom EDID mode can be downloaded via USB. Contact us for this feature.

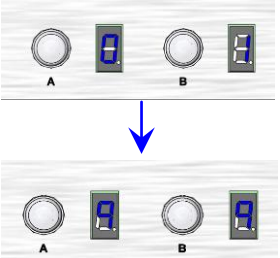

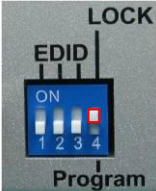
To change the EDID settings, please see section “*changing EDID settings*” for programming instructions.

Mode	Video	Audio	Description	Switch settings
1	480P,720 i/P, 1080 i/P	2 CH PCM, Bitstream (Dolby Digital, DTS)	Default Mode. Internal EDID	
2	Read EDID of all monitors/receivers and set: Video=Minimum Resolution of devices connected.	Read EDID of all monitors/receivers and set: AUDIO =Maximum capability of devices connected	External EDID	
3	480P,720 i/P, 1080 i	2 CH PCM	Basic Mode. Internal EDID	
4	480P, 720 i/P, 1080 i/P, + 3D specifier	2 CH PCM, Bitstream (Dolby Digital, DTS)	3D Mode. Internal EDID *Custom Mode	

Changing EDID mode:

It is recommended to keep the EDID in the factory default MODE1. If necessary, you may set to different EDID mode by following these instructions.

Step	Action		Notes
1	Disconnect all sources and display from Matrix		
2	Set switch 1,2,3,4 to down position as shown		
3	Set the EDID to the mode desired.(MODE 2 shown.)	See page 11 for other EDID modes	
4	Reset Power to the Matrix by disconnecting the power and reconnecting power.		
5	The LED will now indicate the EDID Mode that you will program.(mode 2 shown)	1= mode 1 2= mode 2 3= mode 3 4= mode 4	

6	Press the "A" button on the front panel. LED will count from "01"- "99" while programming.		
7	Wait. Programming is complete when LED indicates "11"		
8	Set the Program/ LOCK switch #4 to LOCK Position (UP)		
9	Connect all video sources and displays to Matrix and turn ON		
10	Re-power the Matrix.		

1 RU Rackmount :

The Octava 4x2 HD Matrix Switch can be installed in a 1 RU rack by simply installing the rack mounts included.



Disabling /Enabling Front Panel IR Remote Receiver:

To disable the front panel IR remote receiver-insert the plastic plug into the IR jack as shown.



Front panel
IR receiver –Enabled (normal mode)



Front panel
IR receiver -disabled

Warranty

Octava warrants the equipment purchased to be free from defects in material and workmanship under normal use and service for a period of 1 year. In the event applicable law imposes any implied warranties, the implied warranty period is limited to 1 year from the date of receipt. If Octava's equipment fails because of defects (1) year from the date of receipt, Octava will at its option, A) repair or replace the equipment, or B) request return of equipment for refund of the price paid for the product provided that the equipment has not been subjected to mechanical, electrical or other abuse or modifications.
Proof of sale required to claim warranty.

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Description	Specifications
Model	HDMX42
HDMI Inputs	4
HDMI Display Outputs	2
Optical Audio Output	1
Display Selection	Remote, Manual, RS232
Resolution	480P, 720 I/P, 1080 I/P
Video Data Rate	6.75 Gbps
Vertical Frequency Scan Rate	24 / 50 / 60 Hz
Dimension	13.58 x 4.1 x 1.67 inch (344.9 x 104.2 x 42.3mm)
DC adapter (included)	5VDC, 2.5A
Rackmount capable	1RU, Rack mounts included
Remote control (IR)	Infrared, discrete code.

For Questions and support:

Email: info@octavainc.com

URL: www.octavainc.com

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