

HDR-4X4 PLUS V2

4 PORT 4K 30HZ HDMI MATRIX SWITCH



USER MANUAL



Designed and Manufactured in the USA

Smart-AVI

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TECHNICAL SPECIFICATIONS

VIDEO	
Video Amplifier Bandwidth	1.65 Gbps
Input Video Signal	1.2 volts
Input DDC Signal	5 volts
Max Resolution	3840x2160 (4K)
HDMI Connector	HDMI Type A 19 pin female
CONTROL	
Front Panel	4 buttons and DIP switch
IR	Remote control
DB9	Female RS232 or RS422 @ 9600bps
OTHER	
Power Requirements	12V
Power Connector	2.1mm DC jack (center +ve)
Dimensions	7.1" W x 1.1" H x 2.8" D
Weight	4.05 lbs

WHAT'S IN THE BOX?

PART NO.	Q-TY	DESCRIPTION
HDR-4X4-PLUS-V2	1	HDMI 4x4 Router
Remote Control	1	
12V	1	Power Adapter
	1	User Manual

FRONT AND BACK



Front panel

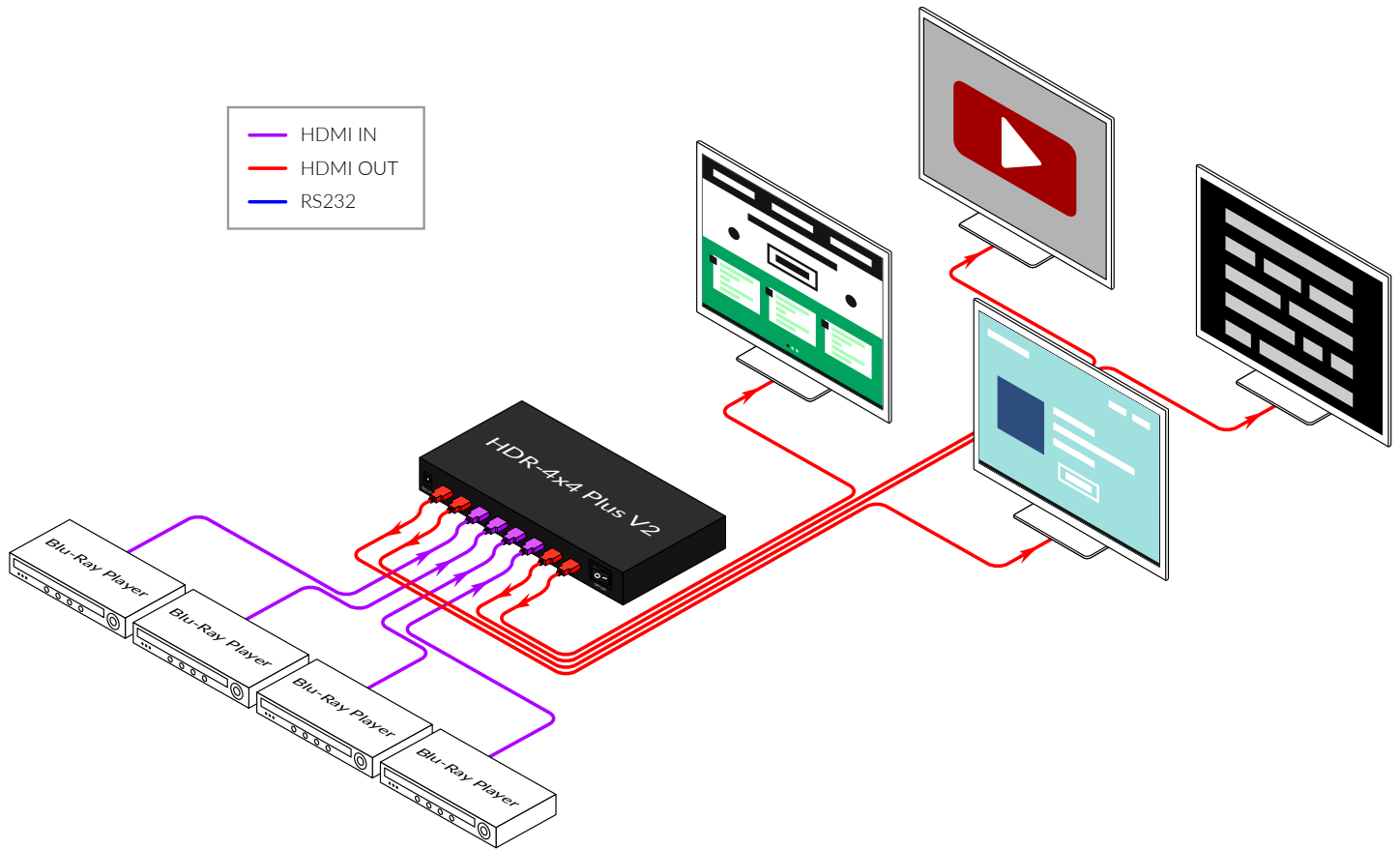


Back panel

INSTALLATION

1. Turn off all input devices and displays.
2. Connect male to male HDMI cables to the input devices or sources and the “IN” ports on the HDR-4X4 Plus V2.
3. Connect the displays to the “OUT” ports on the HDR-4X4 Plus V2.
4. Power on the input devices and the displays.
5. Connect the power cord and power-on the HDR-4X4 Plus V2.

Note: Each input and output can support up to 12V. Do not connect extenders that are powered by HDMI.

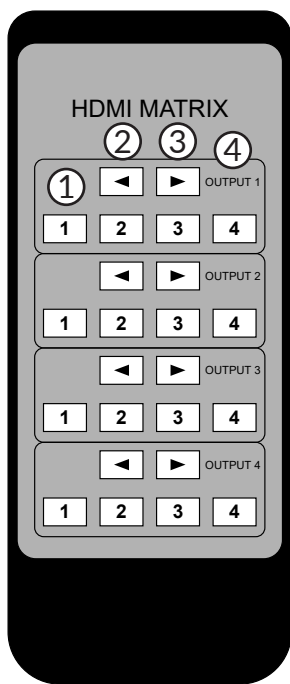


EDID SETTING

Position 1	Position 2	Position 3	Function
0	0	0	3D 4K 60 Hz HDR 2 CH
0	0	1	3D 4K 60 Hz 7.1 CH
0	1	0	3D 4K 30 Hz 2 CH
0	1	1	3D 4K 30 Hz 7.1 CH
1	0	0	2D 1080p stereo 2CH
1	0	1	2D 1080p 7.1CH
1	1	0	3D 1080p stereo 2CH
1	1	1	2D 1080p DVI

NOTE: The dial switch to dial downward is 1, dial upward is 0.

REMOTE CONTROL



1. Switch to one specific Input port
2. Return to last Input port
3. Move forward one Input port
4. Output port

4X4 matrix supports IR control and there are four sets of control button to use to switch & control the four Output port;

- ②, ③ are used to move back or forward one Input port;
① is used to directly switch to one Input port.

RS232 COMMANDS

Command	HEX	Feedback	Description
cir 1e\r\n	63 69 72 20 31 65 0D 0A	s1x\r\n "x" is 0~3	Output port 1: select the input port plus 1
cir 1d\r\n	63 69 72 20 31 64 0D 0A	s1x\r\n "x" is 0~3	Output port 1:Select the input minus 1
cir 00\r\n	63 69 72 20 30 30 0D 0A	s10\r\n	output 1 select input 1
cir 01\r\n	63 69 72 20 30 31 0D 0A	s11\r\n	output 1 select input 2
cir 02\r\n	63 69 72 20 30 32 0D 0A	s12\r\n	output 1 select input 3
cir 03\r\n	63 69 72 20 30 33 0D 0A	s13\r\n	output 1 select input 4
cir 06\r\n	63 69 72 20 30 36 0D 0A	s2x\r\n "x" is 0~3	Output port 2: select the input port plus 1
cir 05\r\n	63 69 72 20 30 35 0D 0A	s2x\r\n "x" is 0~3	Output port 2:Select the input minus 1
cir 08\r\n	63 69 72 20 30 38 0D 0A	s20\r\n	output 2 select input 1
cir 09\r\n	63 69 72 20 30 39 0D 0A	s21\r\n	output 2 select input 2
cir 0a\r\n	63 69 72 20 30 61 0D 0A	s22\r\n	output 2 select input 3
cir 0b\r\n	63 69 72 20 30 62 0D 0A	s23\r\n	output 2 select input 4
cir 0e\r\n	63 69 72 20 30 65 0D 0A	s3x\r\n "x" is 0~3	Output port 3: select the input port plus 1
cir 0d\r\n	63 69 72 20 30 64 0D 0A	s3x\r\n "x" is 0~3	Output port 3:Select the input minus 1
cir 10\r\n	63 69 72 20 31 30 0D 0A	s30\r\n	output 3 select input 1
cir 11\r\n	63 69 72 20 31 31 0D 0A	s31\r\n	output 3 select input 2
cir 12\r\n	63 69 72 20 31 32 0D 0A	s32\r\n	output 3 select input 3
cir 13\r\n	63 69 72 20 31 33 0D 0A	s33\r\n	output 3 select input 4
cir 16\r\n	63 69 72 20 31 36 0D 0A	s43x\r\n "x" is 0~3	Output port 4: select the input port plus 1
cir 15\r\n	63 69 72 20 31 35 0D 0A	s4x\r\n "x" is 0~3	Output port 4:Select the input minus 1
cir 18\r\n	63 69 72 20 31 38 0D 0A	s40\r\n	output 4 select input 1
cir 19\r\n	63 69 72 20 31 39 0D 0A	s41\r\n	output 4 select input 2
cir 1a\r\n	63 69 72 20 31 61 0D 0A	s42\r\n	output 4 select input 3
cir 1b\r\n	63 69 72 20 31 62 0D 0A	s43\r\n	output 4 select input 4
bc \r\n	63 69 72 20 31 62 0D 0A	s1x\r\n, s2x\r\n, s3x\r\n, s4x\r\n "x" is 0~3	Read the status of the matrix
mrp 0 0\r\n	6D 72 70 20 30 20 30 0D 0A	mrp 00 00\r\n	Output 1 select IR input 1
mrp 0 1\r\n	6D 72 70 20 30 20 31 0D 0A	mrp 00 01\r\n	Output 1 select IR input 2
mrp 0 2\r\n	6D 72 70 20 30 20 32 0D 0A	mrp 00 02\r\n	Output 1 select IR input 3
mrp 0 3\r\n	6D 72 70 20 30 20 33 0D 0A	mrp 00 03\r\n	Output 1 select IR input 4
mrp 1 0\r\n	6D 72 70 20 31 20 30 0D 0A	mrp 01 00\r\n	Output 2 select IR input 1
mrp 1 1\r\n	6D 72 70 20 31 20 31 0D 0A	mrp 01 01\r\n	Output 2 select IR input 2
mrp 1 2\r\n	6D 72 70 20 31 20 32 0D 0A	mrp 01 02\r\n	Output 2 select IR input 3
mrp 1 3\r\n	6D 72 70 20 31 20 33 0D 0A	mrp 01 03\r\n	Output 2 select IR input 4
mrp 2 0\r\n	6D 72 70 20 32 20 30 0D 0A	mrp 02 00\r\n	Output 3 select IR input 1
mrp 2 1\r\n	6D 72 70 20 32 20 31 0D 0A	mrp 02 01\r\n	Output 3 select IR input 2
mrp 2 2\r\n	6D 72 70 20 32 20 32 0D 0A	mrp 02 02\r\n	Output 3 select IR input 3
mrp 2 3\r\n	6D 72 70 20 32 20 33 0D 0A	mrp 02 03\r\n	Output 3 select IR input 4
mrp 3 0\r\n	6D 72 70 20 33 20 30 0D 0A	mrp 03 00\r\n	Output 4 select IR input 1
mrp 3 1\r\n	6D 72 70 20 33 20 31 0D 0A	mrp 03 01\r\n	Output 4 select IR input 2
mrp 3 2\r\n	6D 72 70 20 33 20 32 0D 0A	mrp 03 02\r\n	Output 4 select IR input 3
mrp 3 3\r\n	6D 72 70 20 33 20 33 0D 0A	mrp 03 03\r\n	Output 4 select IR input 4
mrp 4 0\r\n	6D 72 70 20 34 20 30 0D 0A	mrp 04 00\r\n	All output select IR input 1
mrp 4 1\r\n	6D 72 70 20 34 20 31 0D 0A	mrp 04 01\r\n	All output select IR input 2
mrp 4 2\r\n	6D 72 70 20 34 20 32 0D 0A	mrp 04 02\r\n	All output select IR input 3
mrp 4 3\r\n	6D 72 70 20 34 20 33 0D 0A	mrp 04 03\r\n	All output select IR input 4

TROUBLESHOOTING

No Power

- Make sure that the power adapter is securely connected to the power connector of the unit.
- Check the output voltage of the power supply and make sure that the voltage value is around 12VDC.
- Replace the power supply.

No Video

- Check if all the video cables are connected properly.
- Connect the computer directly to the monitor to verify that your monitor and computer are functioning properly.
- Restart the computers.

Keyboard is not working

- Check if the keyboard is properly connected to the unit.
- Check if the USB cables connecting the unit and the computers are properly connected.
- Try connecting the USB on the computer to a different port.
- Make sure that the keyboard works when directly connected to the computer.
- Replace the keyboard.

Mouse is not working

- Check if the mouse is properly connected to the unit.
- Try connecting the USB on the computer to a different port.
- Make sure that the mouse works when directly connected to the computer.
- Replace the mouse.

No Audio

- Check if all the audio cables are connected properly.
- Connect the speakers directly to the computer to verify that the speakers and the computer audio are functioning properly.
- Check the audio settings of the computer and verify that the audio output is through the speakers.

TECHNICAL SUPPORT

For product inquiries, warranty questions, or technical questions, please contact info@smartavi.com.

LIMITED WARRANTY STATEMENT

A. Extent of limited warranty

SmartAVI, Inc. warrants to the end-user customers that the SmartAVI product specified above will be free from defects in materials and workmanship for the duration of 1 year, which duration begins on the date of purchase by the customer. Customer is responsible for maintaining proof of date of purchase.

SmartAVI limited warranty covers only those defects which arise as a result of normal use of the product, and do not apply to any:

- a. Improper or inadequate maintenance or modifications
- b. Operations outside product specifications
- c. Mechanical abuse and exposure to severe conditions

If SmartAVI receives, during applicable warranty period, a notice of defect, SmartAVI will at its discretion replace or repair defective product. If SmartAVI is unable to replace or repair defective product covered by the SmartAVI warranty within reasonable period of time, SmartAVI shall refund the cost of the product.

SmartAVI shall have no obligation to repair, replace or refund unit until customer returns defective product to SmartAVI.

Any replacement product could be new or like new, provided that it has functionality at least equal to that of the product being replaced.

SmartAVI limited warranty is valid in any country where the covered product is distributed by SmartAVI.

B. Limitations of warranty

To the extent allowed by local law, neither SmartAVI nor its third party suppliers make any other warranty or condition of any kind whether expressed or implied with respect to the SmartAVI product, and specifically disclaim implied warranties or conditions of merchantability, satisfactory quality, and fitness for a particular purpose.

C. Limitations of liability

To the extent allowed by local law the remedies provided in this warranty statement are the customers sole and exclusive remedies.

To the extent allowed by local law, except for the obligations specifically set forth in this warranty statement, in no event will SmartAVI or its third party suppliers be liable for direct, indirect, special, incidental, or consequential damages whether based on contract, tort or any other legal theory and whether advised of the possibility of such damages.

D. Local law

To the extent that this warranty statement is inconsistent with local law, this warranty statement shall be considered modified to be consistent with such law.

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SMART AUDIO VIDEO INNOVATION

NOTICE

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