

HDR-8X8-Plus

User Manual



HDMI 4K 8x8 Switch Matrix

Connect up to eight different HDMI video sources
to eight different outputs.

Smart-AVI
SMART AUDIO VIDEO INNOVATION

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What's in the box?

PART NO.	QTY	DESCRIPTION
HDR-8X8-Plus	1	4K Resolution 8x8 HDMI Switch Matrix
PS12VDC3A & CCPWR06	1	Power Supply
RMHDR8X8	1	IR Remote
HDR8X8-PLUS-EAR	2	Mounting Brackets
User Manual	1	Quick Start Guide

Introduction

The HDR-8X8-PLUS HDMI switch matrix connects up to 8 HDMI sources to up to 8 display devices and facilitates the creation of different connection schemes. With high reliability, low power consumption and high bandwidth (supports HDMI 1.4 features). The user can control the switch matrix operation by front panel buttons, PC serial port, or web browser via RJ45 (local area network). The input/output connection status is displayed on the front LCD. The HDR-8X8-PLUS has 4K resolution.

Layout

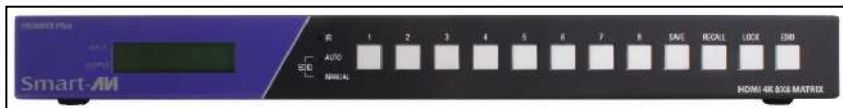


Figure 2-1: Front Panel

Control Panel
Status LCD



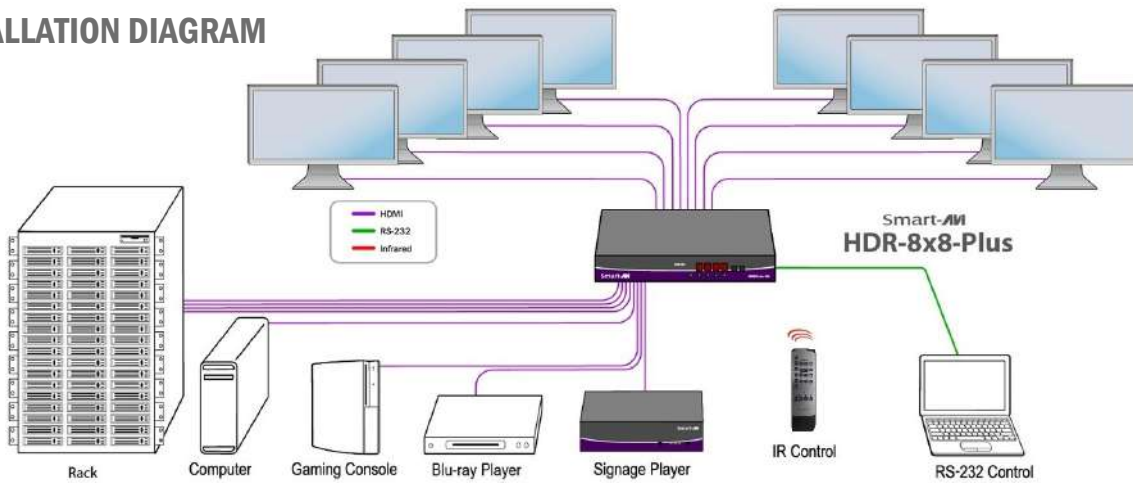
Figure 2-2: Rear Panel

HDMI inputs
HDMI outputs
RJ45 Jack
RS232 Port
Power IN
Power Switch

CONNECTING THE HDR-8X8-PLUS

1. Connect HDR-8X8-PLUS HDMI input to signal sources such as PC or DVD players.
2. Connect the HDR-8X8-PLUS HDMI outputs to displays, monitors, or projectors.
3. Connect HDR-8X8-PLUS to power supply.
4. Press the On/Off switch to activate the HDR-8X8-PLUS.
5. Switch between signals with either front-panel controls, or via PC with RS232 and TCP/IP web support

INSTALLATION DIAGRAM



Using the Front Control Panel

Switch between input signals easily with corresponding numeric buttons. Backlit SAVE, RECALL, LOCK, and EDID function buttons enhance control, as well.



Figure 3-1: Front Control Panel

Numbered Buttons

1,2,3,4,5,6,7,8 respectively corresponding with HDMI output 1 through 8. Click on each output button to toggle the input selected for that output.

Lock

The LOCK button restricts switching with front-panel buttons. It can be deactivated by pressing the LOCK button again.

Save

Assign and store connected signals (ex: signal 1, 2, etc). Recall Switch between recently used signals.

EDID Learning

Press the EDID learning front-panel button to acquire information about connected display/monitors. Once pressed, the EDID button will illuminate and LED indicators will light up.

Button Combinations

- SAVE + n: Save the current connected status to item n. (n=1,2,3,4,5,6,7,8)
- RECALL+ n: Recall item n connection status to current display. (n=1,2,3,4,5,6,7,8)
- EDID + 1: AUTO LED light. Default EDID "SMEDID" is selected.
- EDID + 2: MANUAL LED light. Local monitor in output port 1 EDID is learned.

IR Remote Control

Switching Inputs to Outputs:

When using the remote control the output port or display must be selected first, followed by the input port or source.

- Press the output button first.
- Then press the input button.

It will take a few seconds for the signal to appear on the display.

Resetting to Factory Default:

- Press the Reset button.
- Press the All button.

The default setting is:

INPUT	1	2	3	4	5	6	7	8
OUTPUT	1	2	3	4	5	6	7	8

EDID Selection:

- Press the EDID button followed by the 1 button for AUTO
- Press the EDID button followed by the 2 button for MANUAL

Save Configuration:

- Assign all connected sources to the desired displays.
- Press the SAVE button
- Press a single number to name the configuration.

You can save up to 8 configurations.

Recall Configuration:

- Press the Recall button
- Press the number button you assigned to the configuration you want to load.

It will take a few seconds for the signals to appear on the displays.

NOTE: Empty ports in your saved configurations may cause a reset to factory defaults.

NOTE: Activate the HDR-8X8-Plus with the On/Off switch on the back. The power on, off button on the remote is not functional at this time.

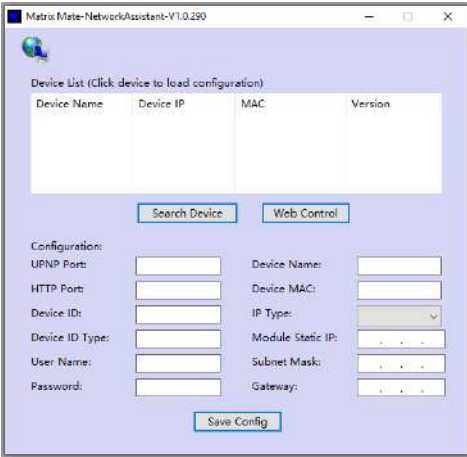


Figure 4-1

LAN (TCP-IP) Control

To enable TCP-IP control, connect an ethernet cable to the HDR-8X8-Plus ethernet port. Refer to page 5 for port information. By default, the HDR-8X8-Plus will connect to the network using DHCP.

Download Matrix Mate-NetworkAssistant software and execute to locate your IP address. Click the Search button. After a few seconds your IP address should appear.



Enter the IP address in a browser of your choice and the Web Control login screen should appear as shown in figure 5-1.

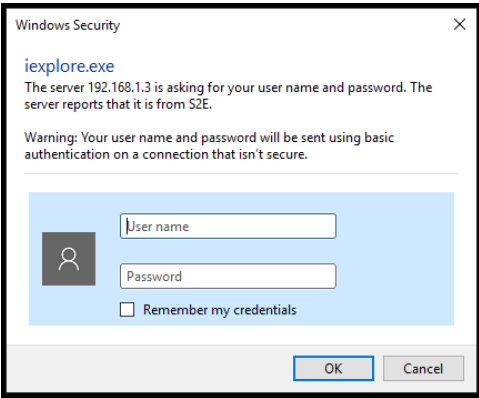


Figure 5-1: SmartAVI HDR-8X8-Plus Login Webpage

The default Username and Password is admin. After logging in successfully, you will be brought to the control screen shown in Figure 5-2.

Control Webpage

To switch an input for an output, select the desired input to the right of the desired output.



Figure 5-2: Control Webpage

Smart Control Pro (RS-232)

The HDR-8X8-Plus may also be controlled via RS-232 operation using Smart Control Pro; this feature requires an RS-232 card installed on your computer or a USB to RS-232 adapter. First connect the RS-232 cable between your PC and the HDR-8X8-Plus.

Launch the “Smart Control Pro” application. When the dialog box appears, select “No” when prompted if you wish to load an existing configuration.

Next the screen in Figure 6-1 will appear. Under “Router Type”, select HDR 8x8. “Inputs” and “Outputs” box should both read “8”.

Under “Com Port”, select the com port that you have connected to the HDR-8X8-Plus.

If you don’t know the COM port number:

From the “Start Menu” select “Control Panel”.

From “Control Panel” select “Device Manager”.

From “Device Manager” select “Ports (COM & LPT)”.

You should see the COM port number listed.

Change “Router Timeout” to 1 second.

Leave all other settings as the defaults and hit “OK”.

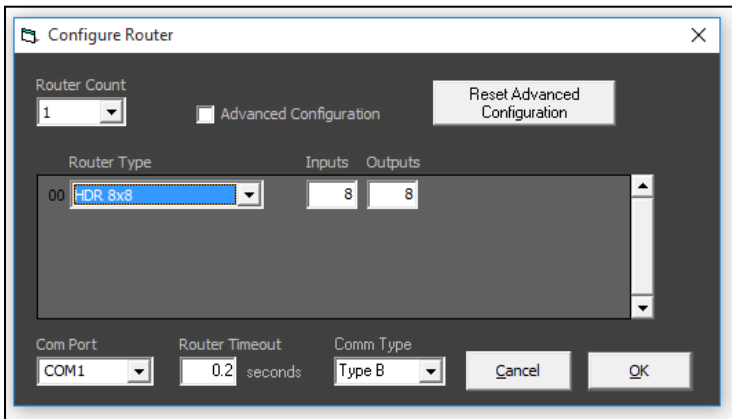


Figure 6-1: SmartControl Pro Configuration

Input/output routing should load automatically and be displayed by blue boxes in the grid as seen in Figure 6-2. Change output/input routing by clicking on the grid for the desired changes. Rename input names on the left and output names on the right. SmartControl Pro also allows you to save a macro. Hit the “Record Macro” button, set up the desired routing, then hit “Save Macro”. Next select one of the macro buttons above to assign the routing or hit “Cancel Macro” to cancel. Lastly, to save all input names, output names, macros, and initial configuration; hit “File” then “Save Configuration As”. Choose a location, name the configuration, and hit save. Now upon launching SmartControl Pro, you can choose to load an existing configuration to continue where you left off.

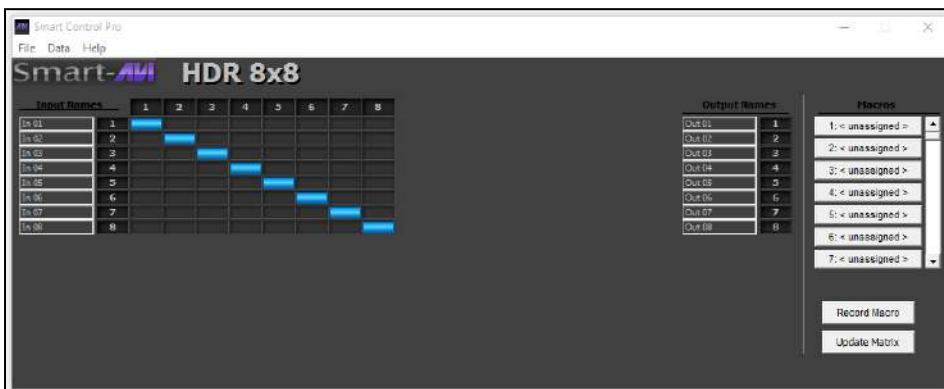


Figure 6-2: SmartControl Pro Routing

Technical Specifications

VIDEO	
Video Bandwidth	300 MHz
Resolution	Up to 4Kx2K@30Hz
HDMI Version	HDMI 1.4
Interface	HDMI-A
CONTROL	
Front Panel	Buttons
RS-232	DB9 (female)
TCP-IP	LAN accessible website
Remote Control	IR
MECHANICAL	
Height	2.0 in.
Width	17.25 in.
Depth	9.0 in.
Weight	5.6
POWER	
Max Consumption	20 W
Power Adapter	12 V / 3 A

Troubleshooting

If the screen flickers, check if the connection is reliable. Replace HDMI cable if necessary.

If Smart Control Pro cannot control the HDR-8X8-Plus, please ensure correct COM port number is selected.

If the POWER LED is not on and no picture is displayed, please check the power adapter and ensure it is connected well. Also check the power switch and ensure it is in the ON position.

LIMITED WARRANTY STATEMENT

A. Extent of limited warranty

1. Smart-AVI Technologies, Inc. warrants to the end-user customers that the Smart-AVI 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.
2. Smart-AVI 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
3. If Smart-AVI receives, during applicable warranty period, a notice of defect, Smart-AVI will at its discretion replace or repair defective product. If Smart-AVI is unable to replace or repair defective product covered by the Smart-AVI warranty within reasonable period of time, Smart-AVI shall refund the cost of the product.
4. Smart-AVI shall have no obligation to repair, replace or refund unit until customer returns defective product to Smart-AVI.
5. Any replacement product could be new or like new, provided that it has functionality at least equal to that of the product being replaced.
6. Smart-AVI limited warranty is valid in any country where the covered product is distributed by Smart-AVI.

B. Limitations of warranty

To the extent allowed by local law, neither Smart-AVI nor its third party suppliers make any other warranty or condition of any kind whether expressed or implied with respect to the Smart-AVI 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 Smart-AVI 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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