

SPECIFICATIONS

Operating Temperature Range	-5 to +35°C (-41 to +95 °F)
Operating Humidity Range	5 to 90 % RH (no condensation)
Input Video Signal	0.5-1.0 volts p-p
Input DDC Signal	5 volts p-p (TTL)
Signaling Rate	2.25 Gbit/s
Video Format Supported	1080p(24/60) / 1080i/ 720p /576p /480p /576i /480i
Max Deep Color	12bit
Audio Format Supported	Up to DTS-HD, Dolby trueHD
Output Video	HDMI 1.3
Maximum Transmission Distance	< 50 feet
CAT5/6 Transmission Distance	1080p can be extended to CAT5e 130 feet or CAT6 160 feet.
Lip Sync	YES
Switching Time	Under 5 second (source/ TV dependant)
CEC	YES
Power Consumption	12 watts (Max)
Dimensions	14.4 in x 4.4 in x 1.8 in
Weight	4.1 lbs

*Note: Specifications are subject to change without notice. Dimensions and weight are approximate.

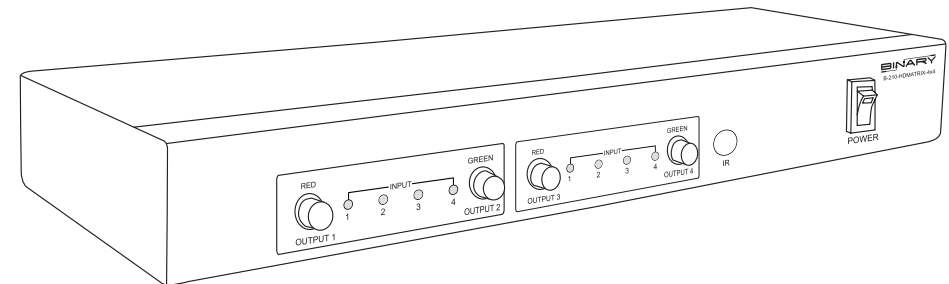
BINARY

engineered by
Snap
av

OWNER'S MANUAL

>> **Binary™ HDMI 4X4 Matrix Switch, HDMI Version 1.3**

B-210-HDMATRIX-4X4



Welcome to the Binary™ brand of products

The B-210-HDMATRIX-4x4 is a 4-by-4 HDMI true matrix switcher. It allows any HDMI source to be shown on any of the four outputs simultaneously.

You may also use the B-210-HDMATRIX-RECVR to extend the HDMI signal to the display over 2 CAT5/6 cables. The B-210-HDMATRIX-RECVR has the ability to receive HDMI signal and transmit IR from the TV location back to the Matrix. Equalization and amplification settings also ensure HDMI signals' transmission through long cable without quality loss.

The four CAT5/6 extender outputs are in parallel to the four HDMI port outputs and can be used simultaneously if needed.

IMPORTANT SAFETY INSTRUCTIONS

1. Read and follow all instructions and warnings in this manual. Keep for future reference.
2. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers).
3. Do not install the unit near water or where moisture is present.
4. Clean with a dry cloth.
5. Unplug this apparatus during lightning storms or when unused for long periods of time.
6. Protect the power cord from being walked on or pinched particularly at plug, convenience receptacles, and the point where it exits from the apparatus.
7. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
8. To completely disconnect this equipment from the AC mains, disconnect the power supply cord plug from the AC receptacle.

CAUTION: To reduce the risk of electrical shock, inspect the premises carefully. Do not use the unit if proper equipment grounding cannot be verified.

FEATURES

- Allows up to four HDMI audio/video devices to be independently switched to four HDMI monitors, HDTVs, projectors, or multiple surround sound receivers.
- The four outputs can show the same or different sources simultaneously.
- The four outputs all include one HDMI-A connector and one dual RJ-45 connector. They can output simultaneously.
- Support high-definition resolutions 1080p (24/60 Hz), 1080i, 720p and other standard video formats.
- Each port supports HDMI or DVI inputs.
- Port for external infrared receiver extension.
- Four switching modes: panel buttons, local IR, IR call back from remote rooms, and RS232.
- IR emitter for IR call back function to control the HDMI source from remote rooms.
- HDCP compliant.
- CEC Compliant.
- HDMI 1.3 version.

DIP SWITCH FOR EDID SETTING

Position 1	Position 2	Position 3	Function
Off	Off	Off	EDID Auto mix: Simultaneously press and hold the Output 1 and Output 4 buttons for three seconds to initiate EDID mix. Lights will flash to confirm the EDID auto mix is on. The matrix will mix the EDID data of all HDMI sink devices that choose the same source, and forward this mixed EDID to the HDMI source device. This allows all the connected device to have video and audio they can display or output. For example, if one TV is 1080p Stereo, and the other is 1080i 5.1 audio, the mixed EDID will be 1080i Stereo Audio.
Off	Off	On	Copies the EDID data from the Output to the Input. For example, when Output 3 selects Input 1, press and hold the Output 3 button for three seconds and the EDID information will be copied to Input 1. This can be done for each input.
Off	On	Off	1080p video with Stereo audio (using embedded EDID)
Off	On	On	1080i video with Stereo audio (using embedded EDID) This setting can be used when the display is an older model that cannot support 1080p.
On	Off	Off	1080p video with 5.1 audio (using embedded EDID)
On	Off	On	1080p video with 7.1 audio (using embedded EDID)

* Refer to your TV's manual for maximum resolution and audio capabilities.

WARRANTY

2-Year Limited Warranty

This Binary™ Product has a Two-Year Limited Warranty. This warranty includes parts and labor repairs on all components found to be defective in material or workmanship under normal conditions of use. This warranty shall not apply to products which have been abused, modified or disassembled. Products to be repaired under this warranty must be returned to SnapAV or a designated service center with prior notification and an assigned return authorization number (RA).

IR TALKBACK CONTROL

Users can control the matrix via the IR call back system.

This function can be disabled or enabled.

Enable the function- Default: (IR will pass-through, and will control matrix)

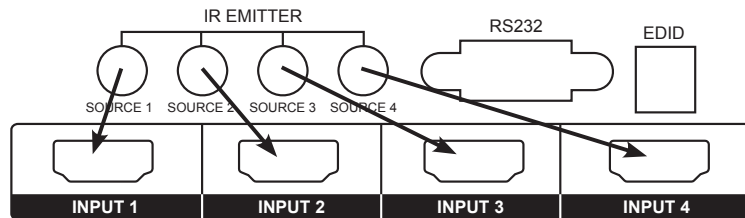
- Press the Output 2 and Output 4 buttons at the same time for 3 seconds.
- After all the Output LEDs flash once, the function is enabled.

Disable the function: (IR will pass-through, but will not allow control of matrix)

- Press the Output 2 and Output 4 buttons at the same time for 3 seconds.
- After all the Output LEDs flash twice, the function is disabled.

IR WITH CAT5/6 RECEIVER

The 4x4 matrix can receive IR signals from the CAT5/6 extenders and pass the IR signal to the appropriate HDMI source.



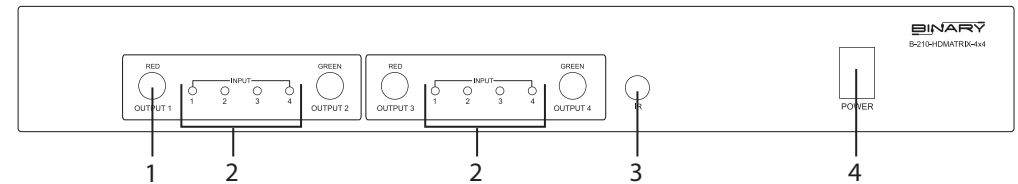
There are four IR emitter outputs. The IR outputs are linked to the source inputs which allows for intelligent IR control of sources that might have the same IR commands. For example: If Output 1 selects Input 3, IR will only be sent to IR Output 3. This is important when using multiple Cable boxes or SAT receivers that operate with the same IR commands. Be sure to cover the emitters with IR hoods to ensure IR bleed-over does not interfere with other devices.

PACKAGE CONTENTS

- 4x4 Matrix Switcher
- 12VDC Power Supply
- 1 IR Remote Control.
- Rack ears for mounting
- Owner's Manual

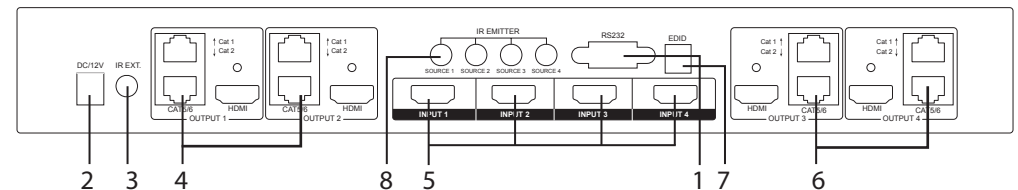
OPTIONAL ACCESSORIES:

- Binary™ HDMI 2 CAT Extenders B-210-HDMATRIX-RECVR (x4)
- Episode® IR Receivers (for main unit and each B-210-HDMATRIX-RECVR)
- Episode® IR Emitter Cables. (x4)
- Binary™ Cables B3-MonoMini (for IR)



FRONT PANEL

1. Output selector
2. Input indicator for Output port 1 to 4
3. IR window
4. Power switch



BACK PANEL

1. RS232 port.
2. Power input (12V DC @ 1Amp)
3. IR input for IR receiver
4. Output 1 and 2 with HDMI and CAT5/6
5. Source Input ports 1 to 4 with corresponding IR emitter
6. Output 3 and 4 with HDMI and CAT5/6
7. DIP switch for EDID setting
8. IR Outputs for corresponding inputs

INSTALLATION

1. Connect the HDMI sources into the input connectors of the switcher.
2. Connect the HDMI outputs directly to local displays or use the CAT5/6 extender for remote displays.
3. Power on the input sources.
4. Connect the power supply into the switcher and turn on the display you want to watch.
5. Use the IR remote or push the button to choose the desired input source. Optional infrared receiver extension, IR emitter and RS232 ports are available for additional control.

OPERATION

FRONT PANEL CONTROL

The front panel control can be used for switching inputs to the various outputs. There are two groups of LEDs. Output 1 and Output 2 share the first group of 4 LEDs, Outputs 3 and 4 share the second group. Each LED is a Red-Green-Yellow tri-color LED. Each output is represented by a toggle button; pushing the button toggles which input is being routed to the output. If the two output ports which share the same 4 LEDs select the same input source, the LED will be yellow. For example, in Figure 1, the LEDs light status indicates that Output 1 selects Source 1, Output 2 selects Source 3. Figure 2 shows that both Output 3 and Output 4 select Source 2.

Figure 1

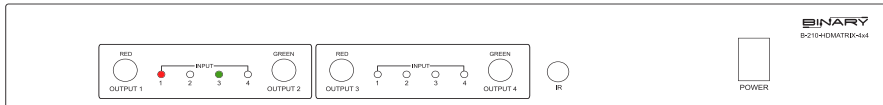
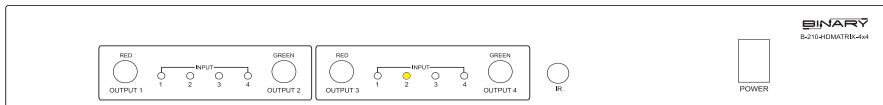


Figure 2

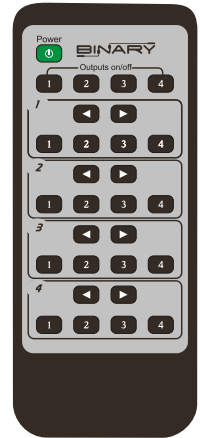


LOCAL IR REMOTE CONTROL

User can control the HDMI route of the matrix by using the included IR remote control.

There are four group key pads for four output ports. For each output port source selection, there are 4 number keys and two arrow keys. Press number key to select specific input port. Left arrow will toggle backward, while the right arrow will toggle forward through the input selection.

There are also discrete power commands for each output as well as a system power command.



IR EXT. INPUT

The IR Extender input can be used to add an Episode® external IR receiver near the location of the switcher.

This input is for control of the switcher only, and will not send IR commands to sources.

