

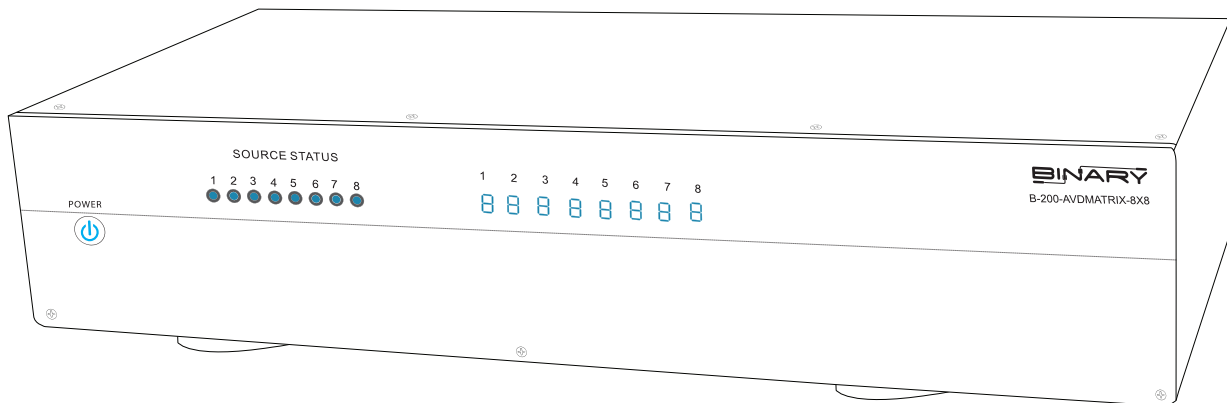


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OWNER'S MANUAL

>> **Binary™ Component 8X8 Matrix
Switcher with Analog and Digital Audio**

B-200-AVDMATRIX-8X8



WELCOME TO THE BINARY™ BRAND OF PRODUCTS

This product is engineered to provide years of exceptional reliability. Binary™ is one of the most highly regarded brands available today. We appreciate your business and we stand committed to providing our customers with the highest degree of quality and service in the industry.

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

- 8 inputs to 8 outputs True Matrix Switcher
- Component Video (Y/Pb/Pr), Digital(PCM), Stereo Audio(L/R)
- High Video Bandwidth (325 MB each path signal)
- Supports all HDTV resolutions: 480i, 480p, 576i, 576p, 720p, 1080i, 1080p
- Common channel Digital Audio (PCM) or Composite Video compliant
- Compatible with all Component Video display devices
- Controllable via IR or RS-232
- Rack mount ears included
- Power supply 12Volt DC, Switching 100~230VAC, 50/60Hz included

INTRODUCTION

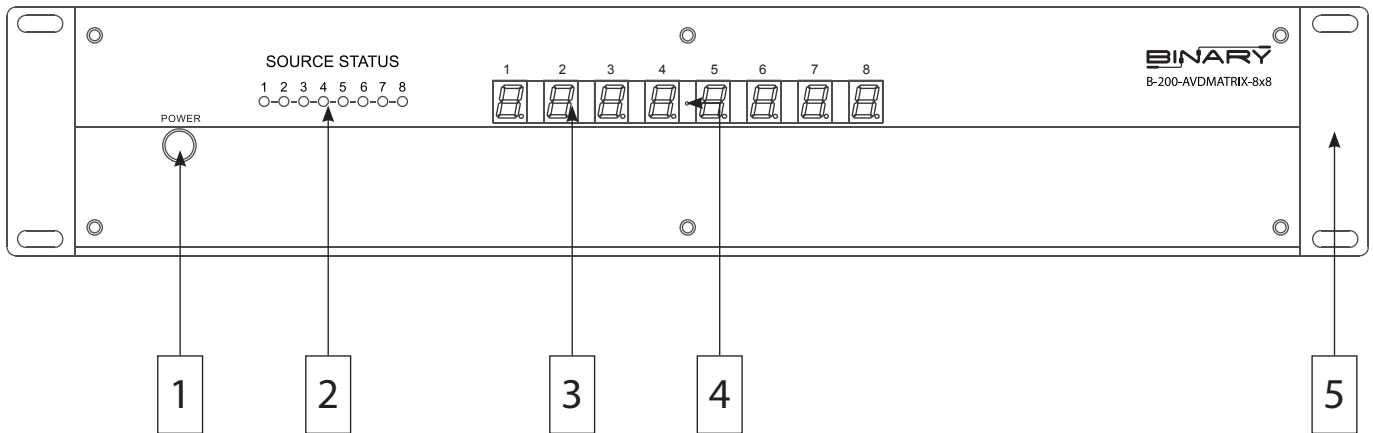
The B-200-AVDMATRIX-8X8 is a true Matrix Routing Switcher for Component Video, Digital Audio, and Stereo Audio signals. It provides 8 individual Component inputs with 8 individual Component outputs. This matrix router allows any component A/V source to be shown on any of the eight outputs independently or simultaneously.

PACKAGE CONTENTS:

- 8x8 Matrix Switcher
- Owners Manual
- IR Remote Controller
- Rack mount ears (2U)
- RS232 Cable
- Power Supply 12V DC, 2Amp

OPTIONAL ACCESSORIES:

- B-RGBLR-350 - Cat-5 Balun for Component Video and Stereo Audio
- B-RGBD-500 - Cat-5 Balun for Component Video and Digital Coax Audio
- B-RGBIR-500 - Cat-5 Balun for Component Video and IR Flasher Pass Through
- B-200-RGBDTHD - Component and Digital Audio to HDMI Converter
- Binary™ Audio/ Video Cables



FRONT PANEL FEATURES

1. POWER ON SWITCH:

The power switch turns the unit on and off into standby mode. The LED will illuminate blue to indicate that the switcher is ON and is receiving power.

2. INPUT SOURCES STATUS:

Auto scans source inputs 1-8 and will display a blue LED on front panel to indicate that a video source is on.

3. OUTPUT SOURCES STATUS LED DISPLAY:

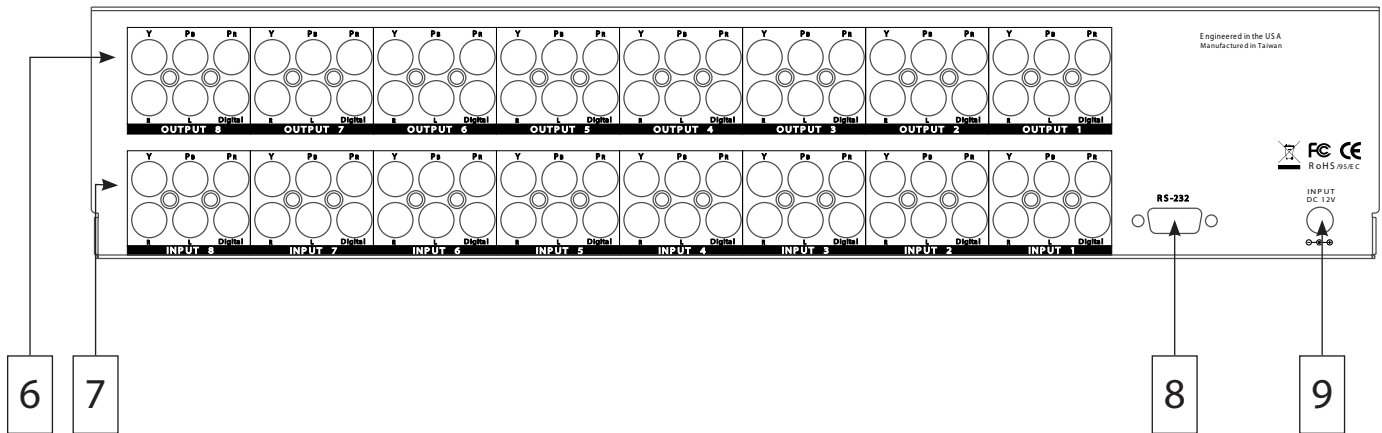
Numbered LEDs for each output that illuminates blue to indicate that a video output is on and which source is selected.

4. IR SENSOR:

The IR sensor is located between the 4 and 5 output LEDs. This sensor receives IR commands from the remote controller.

5. RACK MOUNT EARS (PAIR):

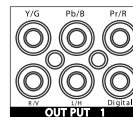
Removable - 2U high (included)



REAR PANEL FEATURES

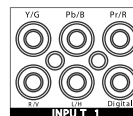
6. A/V OUTPUTS:

- (8) Component Video (Y/Pb/Pr),
- (8) Digital Audio (PCM), Stereo Audio (L/R)



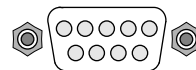
7. A/V INPUTS:

- (8) Component Video (Y/Pb/Pr),
- (8) Digital Audio (PCM), Stereo Audio (L/R)



8. RS-232 CONNECTION

Serial control port to allow for integration with control systems



9. DC POWER:

12 Volt DC power supply 2 amp
(Included)



INSTALLATION

1. Connect the component A/V sources into the input connectors of the switcher.
2. Connect the switchers A/V outputs directly to local displays or use any of Binary's™ extenders 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 to select the desired input source. An RS232 port is available for additional control when using third party integration systems.

NOTE: IR commands will not send out a message on the serial port as status changes. When writing 2-way drivers, please pull the status regularly as to ensure the control system accurately reflects the current settings.

TROUBLESHOOTING

1. No Video:
 - Ensure the power switch is on.
 - Confirm that the correct source is routed to the correct output.
 - Confirm that the source is powered on and connected to the correct input.
 - Confirm that the source is outputting a signal (using the Source Status LED) on the front of the unit.
 - Confirm the TV is on the correct input.
2. Poor Video (hum bars in picture, picture distortion, noise in picture)
 - The #1 cause of poor video quality is low-quality interconnects. Never use the interconnect cables that are included with DVD players, cable boxes, etc, as they are very susceptible to EMI and noise. We highly recommend using Binary™ Cables, which are designed for this application.
 - Confirm that the source is outputting video at the correct levels. You can try to bypass the switcher and connect the display directly to the source and confirm the source is outputting a clean signal
 - Confirm that the connections between the TV and the switcher are good.
 - If using a Balun, confirm that the CAT-5 is terminated with TIA-568b standards on both sides. You can also bypass the switcher by connecting the source directly to the Balun to ensure the noise is not an interference issue with the CAT5 or the Balun.
 - Confirm that the power for the switcher and source gear is clean and is not sharing a circuit with noisy devices (ceiling fans, refrigerators, florescent lights, etc)
 - Some homes that do not have adequate grounding can have ground loops between different circuits. In these cases, you can try to use a ground lift at the TV to eliminate ground loop issues that can create noise in Video.

IR REMOTE CONTROL

1. DISCRETE POWER ON
2. DISCRETE POWER OFF
3. DESTINATION: OUTPUTS 1-8
4. SOURCE: INPUTS 1-8

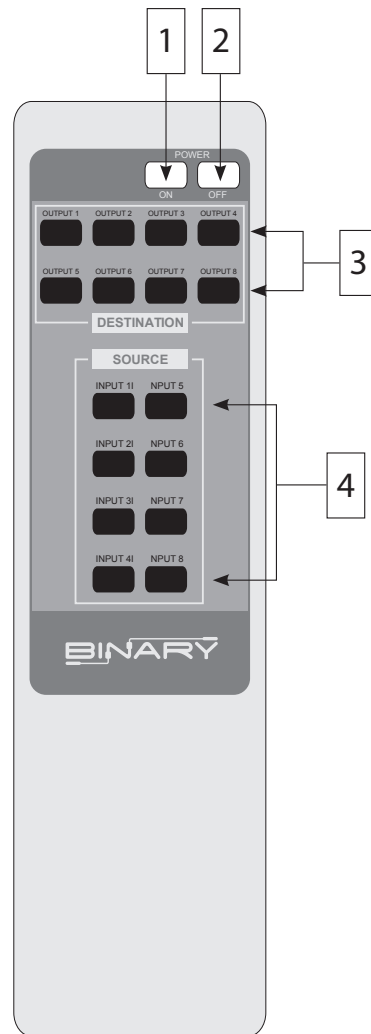
This remote provides discrete Power On and Off as well as discrete source selection. Switching commands must be sent in 2 strings (Output – Input).

To make a selection:

1. Be sure the unit is on by pushing the ON button
2. Press the button for the desired output from DESTINATION choices 1-8.
3. Press the button for the desired input, from SOURCE choices 1-8.

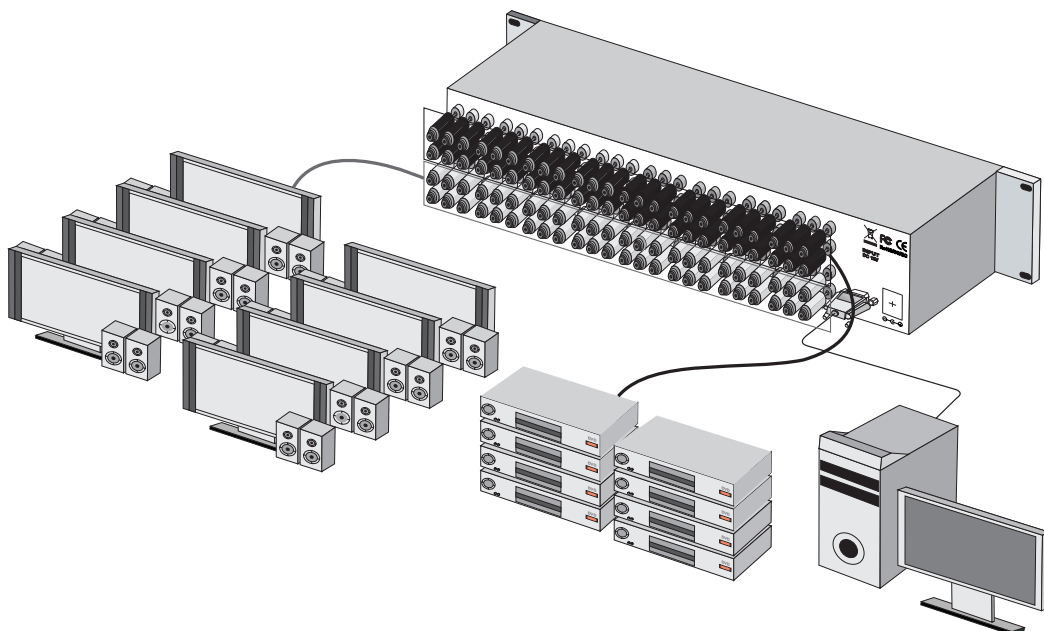
Example:

If you want to see Input 4 on Output 5, first press "5" in the DESTINATION section, then press "4" in the SOURCE section.



TYPICAL APPLICATION

8 Component sources to 8 Component Output Matrix Switcher
(DVD Players and TV's shown - a variety of components can be used including, but not limited to: Projectors, TVs, Blu-Ray Players, Cable boxes, Satellite, etc...)



SPECIFICATIONS

Type of Switcher	8 in to 8 out, Component Video-Digital-Audio Matrix Switcher
I/O Signals	Component Video (YPbPr) 0.5~1.0Vpp, DDC 5Vpp, Digital Audio (PCM), Via 1x RCA connector Stereo Audio (L/R), Via 2x RCA connector (Red/white)
Video Bandwidth	325MHz(-3db), 200mVp-p
Video Supported	480i/ 480p/ 576i/ 576p/ 720p/ 1080i/ 1080p
Audio Supported	Digital Audio (PCM) 110MB and Stereo Audio(L/R)
Crosstalk	-83 db@5MHz
Controls	IR remote, RS232
Gain control	60MHz 0.1 db gain flatness
Chassis Material	Metal
Safety Approvals	CE, FCC, RoHS (2002/95/EC), ErP.
Dimensions (LxWxH)	19" x 7.87" x 3.46"
Power Supply	12VDC / 2A (consumption 1.6A Max) Switching 50/60Hz, 100~230 VAC
Shipping Weight	5.42 lb

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

REGULATORY COMPLIANCE

This product complies with the relevant standards for CE, FCC and RoHS approval. The Power Adaptor/Supply has been tested for compliance with UL, CSA, and CE standards.

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).