

INSTRUCTION MANUAL

SB-5582

8x2 Component Video/Stereo Audio Matrix Switcher + RS-232



SHINYBOW™ USA
MULTIMEDIA AUDIO AND VISUAL



SAFETY INFORMATION



1. To ensure the best results from this product, please read this manual and all other documentation before operating your equipment. Retain all documentation for future reference.
2. Follow all instructions printed on unit chassis for proper operation.
3. To reduce the risk of fire, do not spill water or other liquids into or on the unit, or operate the unit while standing in liquid.
4. Make sure power outlets conform to the power requirements listed on the back of the unit. Keep unit protected from rain, water and excessive moisture.
5. Do not attempt to clean the unit with chemical solvents or aerosol cleaners, as this may damage the unit. Dust with a clean dry cloth.
6. Do not use the unit if the electrical power cord is frayed or broken. The power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
7. Do not force switched or external connections in any way. They should all connect easily, without needing to be forced.
8. Always operate the unit with the AC ground wire connected to the electrical system ground. Precautions should be taken so that the means of grounding of a piece of equipment is not defeated.
9. AC voltage must be correct and the same as that printed on the rear of the unit. Damage caused by connection to improper AC voltage is not covered by any warranty.
10. Turn power off and disconnect unit from AC current before making connections.
11. Never hold a power switch in the "ON" position.
12. This unit should be installed in a cool dry place, away from sources of excessive heat, vibration, dust, moisture and cold. Do not use the unit near stoves, heat registers, radiators, or other heat producing devices.
13. Do not block fan intake or exhaust ports. Do not operate equipment on a surface or in an environment which may impede the normal flow of air around the unit, such as a bed, rug, carpet, or completely enclosed rack. If the unit is used in an extremely dusty or smoky environment, the unit should be periodically "blown free" of foreign dust and matter.
14. To reduce the risk of electric shock, do not remove the cover. There are no user serviceable parts inside. Refer all servicing to qualified service personnel. There are no user serviceable parts inside.
15. When moving the unit, disconnect input ports first, then remove the power cable; finally, disconnect the interconnecting cables to other devices.
16. Do not drive the inputs with a signal level greater than that required to drive equipment to full output.
17. The equipment power cord should be unplugged from the outlet when left unused for a long period of time.
18. Save the carton and packing material even if the equipment has arrived in good condition. Should you ever need to ship the unit, use only the original factory packing.
19. Service Information Equipment should be serviced by qualified service personnel when:
 - A. The power supply cord or the plug has been damaged.
 - B. Objects have fallen, or liquid has been spilled into the equipment.
 - C. The equipment has been exposed to rain.
 - D. The equipment does not appear to operate normally, or exhibits a marked change in performance.
 - E. The equipment has been dropped, or the enclosure damaged.

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Component Video/Stereo Audio Matrix Switcher Series

Thank you for purchasing the SB-5582 Component Video/Stereo Audio Matrix Switcher. You will find this unit easy to install and highly reliable but it is essential that you read this manual thoroughly before attempting to use this switcher.

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INTRODUCTION

The SB-5582 is a high speed 8x2 Matrix routing switcher for Component Video (YPbPr/YCbCr) signals. Offering a -3dB signal bandwidth greater than 250 Mhz, maximum 325MHz and channel switch times of less than 25ns with 1% settling. With -83dB of crosstalk and -98dB isolation (@5MHz). It is one of the most innovative Composite/Stereo Audio switching products on the market today. SB-5582 supports 19 inch rack mount which is included. It has (8) individual inputs with (2) individual outputs. Because it is a matrix router, any input may be routed to any output; or the same input may be routed to all outputs or any combination. It completely eliminates the need to constantly move around audio and video input and output cables. The SB-5582 matrix switcher is ideally suited for High Definition Television applications. Control is provided via front push buttons with LED readout or IR remote controller. A RS-232 interface is provided for interfacing with third party control. A Windows-based control software package is included to provide complete control of the SB-5582 from a PC.

PACKAGE CONTENTS

Check that you have the following components:

- SB-5582 Switcher
- IR Remote control
- Rack Mount Bracket
- RS-232 driver CD (All Windows Operating Systems)
- Users Guide
- AC/DC Adapter: 12VDC@2A

CONFORMANCE TEST REPORT

FOR **EN 61000-6-1 / EN 61000-6-3** 

REPORT NUMBER: ET94S-04-238-01

FOR **FCC 47 CFR/Part 15 Subpart B** 

REPORT NUMBER: ET94S-04-238-02


FOR **VCCI** 

REPORT NUMBER: ET94S-04-238-03

Model Number: SB-5582

Comment Number : SB-5526, SB-5544, SB-5548, SB-5560, SB-5562, SB-5564, SB-5582, SB-5584, SB-5644



Input: Component Video (YPbPr/YCbCr/RGB) / Stereo Audio System (R/L)
Output: Component Video (YPbPr/YCbCr/RGB) / Stereo Audio System (R/L)
Power Supply: DC+12V@2A 

SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

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FEATURES & SPECIFICATIONS

FEATURES

- Supports (8) Inputs to (2) Outputs Component Video Audio Matrix Switcher
- Supports HDTV resolutions 480i, 480p, 576p, 720p, 1080i and 1080p
- Video Bandwidth: 325MHz (-3dB), 200mVpp
- Excellent Video (Component), Digital Audio and Stereo Audio performance
- Audio Frequency Response: 20Hz ~ 20KHz
- Low All Hostile Crosstalk of -83dB@5Mhz
- Excellent ESD Rating: Exceeds 4000V
- Switching Component Video YPBPR and Stereo Audio signals
- Suitable for full HD high resolution video player devices and LCD/Plasma monitor displays
- Direct selection and confirm via front push buttons with LED readout
- Infrared: IR remote control (38KHz)
- Supports RS-232 interface control driver for Windows 95/98/2000/XP
- A Windows-based control software driver package
- RS-232 protocol list with manual attached
- Enclosure type: Supports 19 inch ear mount & 1RU rack mountable panel
- Supports lower power consumption full load under 800mA
- Power supply offers a universal type 100~230VAC switch

SPECIFICATIONS

- **Type of Switcher:** (8) Inputs to (2) Outputs Component Video Audio Matrix Switcher
- **Video Bandwidth:**
 - 325MHz, (-3dB) 200mVpp
 - 380MHz, (-3dB) 2Vpp
 - R=325MHz, G=325MHz, B=325MHz
 - Digital=110MHz
 - Audio=60MHz
- **Audio Bandwidth:** 60MHz, (-3dB) (Audio-Right=60MHz, Audio-Left=60MHz)
- **Audio Frequency Response:** 20Hz ~20KHz
- **Gain Flatness:** 90Mhz , 0.1dB
- **Differential Gain Error:** 0.01%, 0.1dB
- **Differential Phase Error:** 0.02, 0.1dB (RL=150W)
- **Fast Settling Time:** 15ns to 0.1%
- **All Hostile Crosstalk:** -84dB@5MHz, -54dB@50MHZ
- **Channel Crosstalk:** -56dB@100Mhz
- **Slew Rate:** 1000V/us, G=+1, 2VStep
- **High OFF Isolation:** -100dB@10MHz
- **Output Current:** 100mA
- **Low Power CMOS:** 550uA Quiescent Current
- **Controls:** IR Remote Controller (38KHz), Front panel selection buttons with LED readout and RS-232 PC control
- **Safety Approvals :** CE, FCC, RoHS (2002/95/EC)
- **Dimensions (WxDxH):** 17.5 x 8 x 1.75 in
- **Power Supply:** 12VDC@2A
- **Weight:** 5.3 lb (Unit only) / 7.7 lb (Net)

As product improvements are continuous, specifications are subject to change and without notice.

TYPICAL HOOKUP AND OPERATION

SB-5582



FRONT VIEW:

Power SW: ON/OFF
(4) channels LED Display
(2) Channel's SW

REAR VIEW:

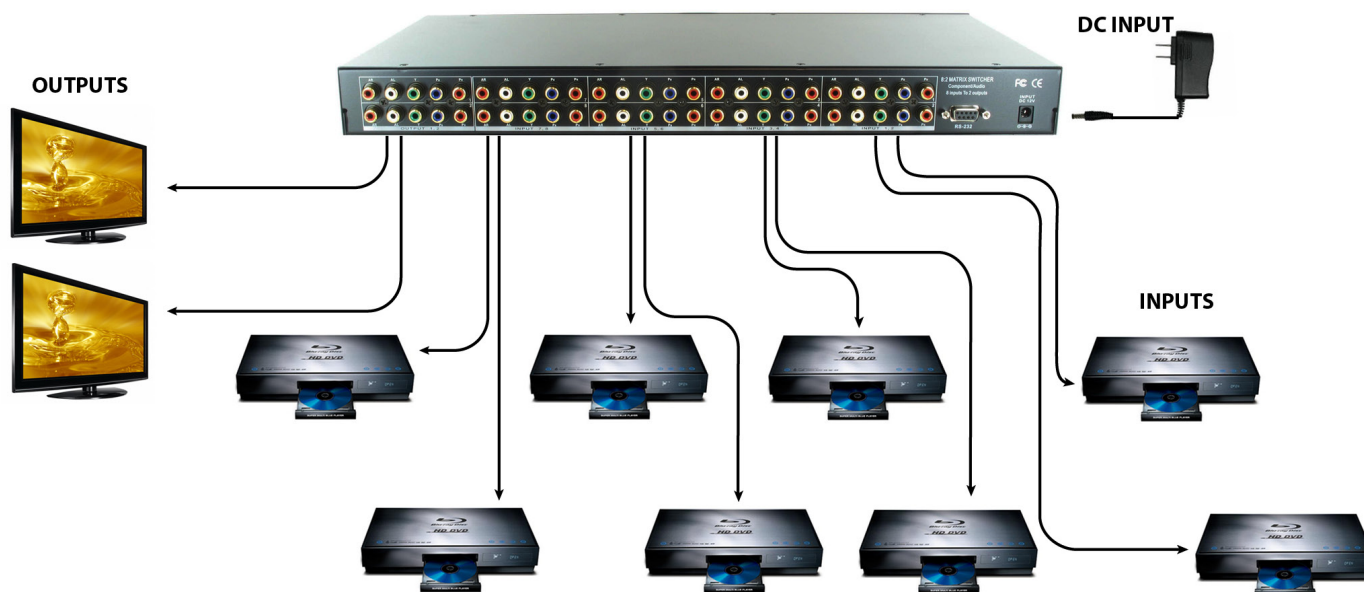
Input: (8) Component Video/Stereo Audio (RCA)
Output: (2) Component Video/Stereo Audio (RCA)
Power Supply: DC12V@2A

Safeguards and Precautions

- A. Keep this unit away from fire, extremely hot areas, water or moisture of any kind.
- B. Do not place this unit on any support that is not firm, level and strong.
- C. Do not service the unit yourself. Opening the unit's housing will void the warranty.
- D. Servicing must be by Shinybow or by an authorized technician.
- C. Illegal duplication of copyrighted material is strictly prohibited by Federal Laws.

8X2 COMPONENT VIDEO/STEREO AUDIO MATRIX SWITCHER

APPLICATIONS: DVD Player, Video CD, VCR Player, Handycam, CCD Camera, Video Game System, Satellite Receiver



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