

SB-5604

4x1 HDMI Routing Switcher w/ RS-232 w/ Remote



IMPORTANT WARRANTY INFORMATION.

If you remove the HDMI screw posts, you must use the provided HDMI Locking Post replacement screws to keep the internal HDMI jack secure. Removing the HDMI screws without installing the HDMI Locking Post replacement screws will void your warranty.



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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HDMI Routing Switcher Series

Thank you for purchasing the SB-5604 4x1 HDMI Routing 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-5604 is a HDMI switch featuring equalized TMDS inputs and pre-emphasized TMDS outputs for high definition digital of TMDS signal. This switcher supports data rates up to 1.65Gbps, enabling 1080p HDMI formats and UXGA (1600x1200) DVI resolutions and is ideally suited for high definition LCD televisions or plasma display applications. Control is provided via front push buttons with LED readout or the IR remote controller. A RS-232 interface is provided for interfacing with third party control. An Input cable equalizer enables use of long cables at the input (up to 65 feet of 24 AWG cable at 1080p). A Windows-based control software package is included to provide complete control of the SB-5604 from a PC.

PACKAGE CONTENTS

Check that you have the following components;

- SB-5604 Switcher
- IR remote control
- RS-232 Software (All Windows Operating Systems)
- HDMI Locking Post Replacement Screws
- Users Guide
- AC/DC Adapter: 12VDC@1250mA

Input: (4) HDMI
Output: (1) HDMI
Power Supply: DC +12V@1250mA



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.

DISCLAIMERS

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LOOK A PUPPY!! NOW READ THIS!!



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FEATURES & SPECIFICATIONS

FEATURES

- 3D Enabled
- Inputs: (4) HDMI Inputs
- Outputs: (1) HDMI Output
- Supports high resolution inputs up to 1080p
- PC resolutions to 1920x1200
- Supports 250Mbps to 1.65Gbps data rates
- Equalized inputs for operation for 1080p with a 65 ft/20M long HDMI cable
- HDCP Compliant
- HDMI 1.3, 1.2, HDCP 1.1 and DVI 1.0 compliant
- Ideal for professional HDMI component integration
- Wireless remote control
- RS-232 PC control with a Windows based control software included FREE
- Easy to install and simple to operate

SPECIFICATIONS

- **Type of Switcher:** (4) Inputs to (1) Output HDMI-DVI Switcher
- **Complete Solution:** Fully buffered inputs and outputs
- **Data Rates:** 250Mbps to 1.65Gbps
- **Pixel Clocks:** 25Mhz to 165MHz
- **HDMI Cable Distance:** 65 feet at 1080p
- **Globally Switchable Audio Distortion:** 50Ω on termination
- **Single-Supply:** Operation 3.3V
- **Compatible Standard:** HDCP, HDMI receiver and DVI
- **Infrared Frequency:** 38KHz
- **HDTV Support:** 1080p HDMI formats and UXGA 1600x1200 resolution
- **Bundling Modes:** Multiple channel
- **Switch Featuring:** TMDS inputs and outputs
- **Link Switch:** 4x1 single HDMI-DVI
- **Power Supply:** Approval by CSA, TUV, CE, UL
- **Regulatory Approvals:** CE, FCC, RoHS (2002/95/EC)
- **Dimensions (WxDxH):** 8.25 x 4.5 x 1 in
- **Weight:** 1.5 lb (Unit only) / 3.1 lb (Net)
- **Power Supply:** 12VDC@1250mA

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

TYPICAL HOOKUP AND OPERATION

SB-5604



FRONT VIEW:

Input Select: 1~4 buttons
Signal Booster: button
Power SW: ON/OFF

REAR VIEW:

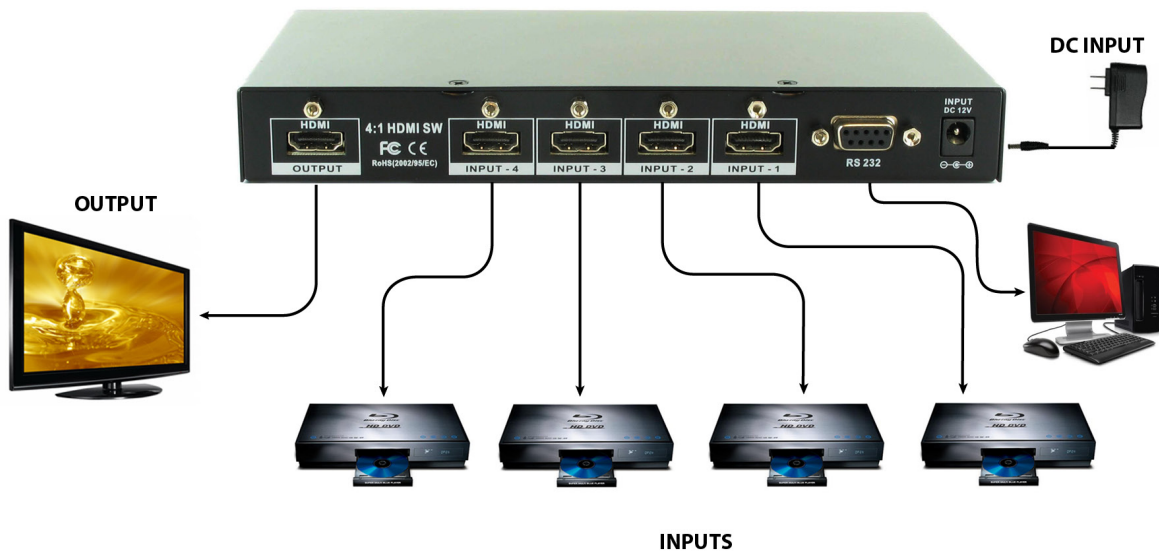
Both of the HDMI AV inputs will have the same signal that has been selected by automatically scanning switching logic of the HDMI switcher. This one output is provided for convenience. If you remove the HDMI screw posts, you must use the provided HDMI Locking Post replacement screws to keep the internal HDMI jack secure. Removing the HDMI screws without installing the HDMI Locking Post replacement screws will void your warranty.

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.

4X1 HDMI ROUTING SWITCHER

APPLICATIONS: Multi-Input Displays, Projectors, A/V Receivers, Set-Top Boxes, HDTV TV's



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