

INSTRUCTION MANUAL

SB-5470M

4x2 Component Video HDTV Matrix Routing Switcher w/
Rackmount Brackets



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 Matrix Switcher Series

Thank you for purchasing the SB-5470M Component-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-5470M is a 4x2 Matrix Switcher that switches (4) Inputs Component (YPbPr), and Left and Right Analog Audio with IR remote. SB-5470M is a rugged 4x2 switcher, offering flawless and seamless switching and crystal-clear distribution of all HDTV video formats as well as audio signals. SB-5470M accepts up to (4) different input sources and you can seamlessly switch (select) any of these inputs to drive (2) outputs, without any signal degradation. It is universally compatible with all HDTV formats: 480i, 576i, 480p, 576p, 1080i, 720p and 1080p.

The SB-5470M is a versatile and compact state of the art switcher of choice when you need high-quality and reliable switching. The switch can be controlled by its front-panel manual control button, or IR remote, and convenient front-panel LEDs indicate which input has been selected for both outputs.

Metal Chassie with removable rack mount brackets (included).

PACKAGE CONTENTS

Check that you have the following components;

- SB-5470M 4x2 Matrix Switcher
- IR Remote control
- Rack Mounts
- Users Guide
- AC/DC Adapter: 12VDC@420mA
AC/DC Adaptor Types: CE/UL/SAA/BS

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 (4) inputs to (2) outputs Component Video (YPBPR) Matrix Switcher
- Component Video (YPBPR) & Stereo Audio (AR/AL) Input/Output signals
- Higher video bandwidth 250MB each path signals
- Supports HDTV high definition resolutions 480i/p, 576i/p, 720p, 1080i/p
- Compatible with all component video devices, Plasma TV displays and HDTVs
- Supports desktop with ear mounts and 19 inch rack mount type panel
- Universal Power Supply 12VDC@420mA, 50/60Hz
- Also can be used for Composite Video switching (will not do conversion between Component or Composite)

SPECIFICATIONS

- **Type of Switcher:** (4) In to (2) Out, Component Video-Audio Matrix Switcher
- **Input Ports:**
 - (4) Component Video (RGB, YPbPr)
 - (4) Left and Right Audio (RCA-Phono)
- **Output Ports:**
 - (2) Component Video (RGB, YPbPr)
 - (2) Left and Right Audio (RCA-Phono)
- **Video Bandwidth:** 250MHz (-3dB), 60mVpp
- **Video Supported:** Higher resolution formats 480i/p, 720p & 1080i/p
- **Audio Supported:** Stereo Audio (AR/AL), 20Hz ~ 20KHz
- **Low All Hostile Crosstalk:** -83dB@5MHz
- **Controls:** IR remote & select buttons on the front panel
- **Chassis Material:** Metal
- **Dimensions (WxDxH):** 12 x 6 x 1.75 in
- **Weight:** 3.1 lb (Unit only) / 4.6 lb (Net)
- **Safety Approvals:** CE, FCC, RoHS (2002/95/CEC)
- **Power Supply:** 12VDC@420mA (Uses Universal Switch Type 50/60Hz)

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

OPERATING THE UNIT

Once you have connected the switcher, you must be certain that the inputs are being fed to the appropriate signals and are not suffering from signal loss due to cabling problems or problems with the source device.

If the input signals to the switcher are appropriate, switch the power switch to <ON> and you should see and hear the signals on the devices you have connected to the various output connectors of the switcher.

POWER AND CONNECTIONS

This unit is not disconnected from the AC power source as long as it is connected to the wall outlet. The off state for this unit is called standby mode. In standby mode the unit is designed to consume a reduced quantity of power compared to normal operating modes.

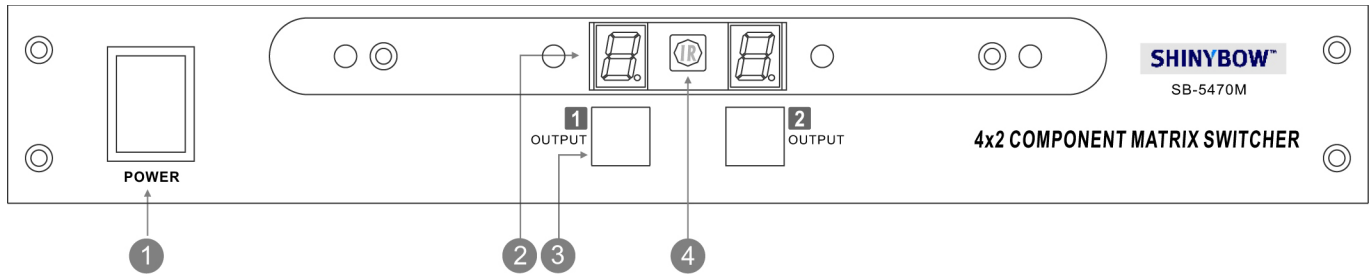
When it is not using the unit for a long period of time, insure that the AC power cord is disconnected from the wall outlet. The AC wall outlet should be installed near to the unit and be easily accessible. Do not plug in or attempt to operate an obviously damaged unit.

CONNECTING THE HARDWARE

Please study the panel drawings and become familiar with the signal input-output power requirements plus any controls present. Before using the SB-5470M, please take the time to make certain that the device you wish to connect to its inputs is functioning properly in all respects. Verify that the video and audio signals are present and are being displayed properly on a suitable device. If all is well, connect the appropriate cables between the output of the device you wish to distribute to output(s) of the SB-5470M to the various devices you wish to feed a signal to. Lastly, connect the AC to DC adaptor, connect the DC connector to the SB-5470M first and then plug the adaptor into a functional AC outlet.

PANEL DESCRIPTION

FRONT PANEL



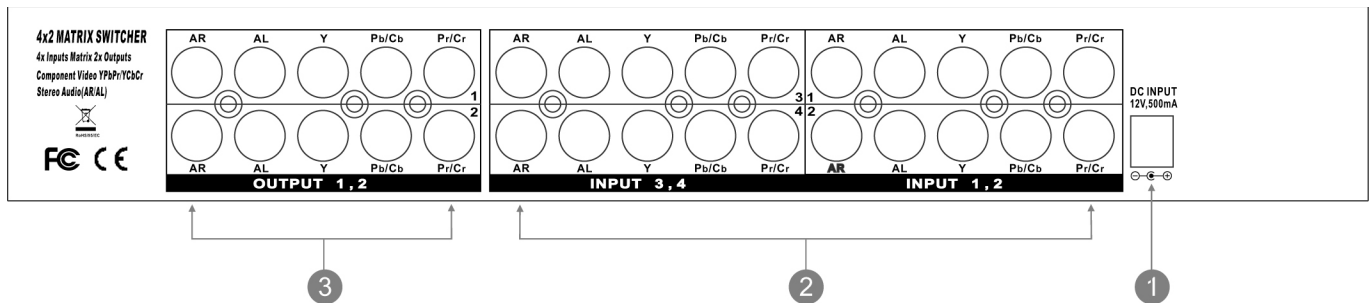
1. POWER ON SWITCH: The power switch turns the unit on and off. The LED will illuminate red to indicate that the switcher is ON and is receiving power.

2. OUTPUT SOURCES STATUS LED DISPLAY: Output channels 1 to 4 LED display will illuminate red to indicate that a video source is present on that input.

3. UP/DOWN SELECT INPUT SOURCES: Setup the input sources 1 ~ 4 channels.

4. IR SENSOR: The IR sensor receives IR commands from the supplied remote controller.

BACK PANEL



1. DC POWER INLET: The switcher is fitted with a DC power plug input connector. Please ensure that the plug used is of an approved type and is of sufficient current carrying capacity with the correct voltage and connector polarity. 12Volt DC power supply 420mA Max.

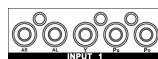
POWER JACK:

DC Jack - Inner OD Ø 2.1mm (+)
Outside OD Ø 5.5mm (GND)
Power input -12VDC@420mA

2. INPUTS- 1~4 COMPONENT-AUDIO: Connects a Component Video (YPBPR)/Stereo Audio signal source device to the 4x2 switcher.

Input 1~ 4 port source signals:

- Component Video (YPBPR), (3) RCA connectors
- Stereo Audio (AR/AL), (2) RCA connectors

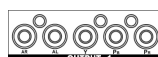


Component Video (YPBPR) via (3) RCAs
Stereo Audio (AR/AL) via (2) RCA connectors
Note: With (6) RCA female connectors.

3. OUTPUTS- 1~ 2 COMPONENT-AUDIO: Connects a Component Video (YPBPR)/Audio signal direct to the female RCA connector. This connector supports component video & audio to a HDTV display device.

Output 1~ 2 display port signals:

- Component Video (YPBPR), (3) RCA connectors
- Stereo Audio (AR/AL), (2) RCA connectors



Component Video (YPBPR) via (3) RCAs
Stereo Audio (AR/AL) via (2) RCA connectors
Note: With (5) RCA female connectors.

REMOTE CONTROL/INSTALLATION

REMOTE CONTROL

1. SWITCH POWER ON OR OFF:

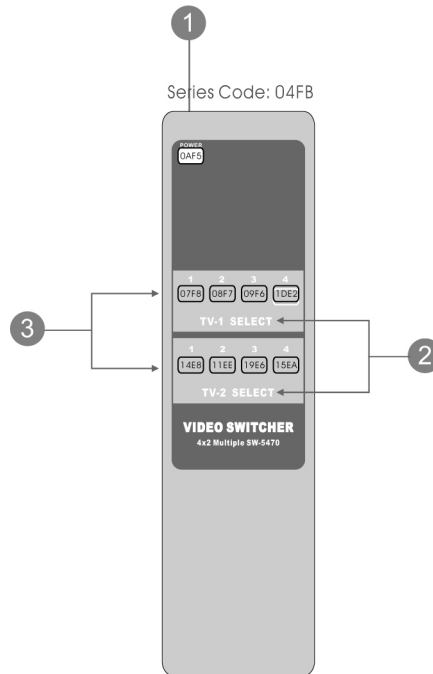
Controller with a separate power ON and OFF

2. OUTPUT 1~ 2 : OUTPUT TO TV DISPLAYS:

Output -1~2: TV-1~2 Component Video (YPBPR) HDTV Display

3. INPUT 1~ 4 : INPUT VIDEO SOURCES SELECTION:

Input -1~4: AV-1~4 Component Video (YPBPR) Signal source device



INSTALLING

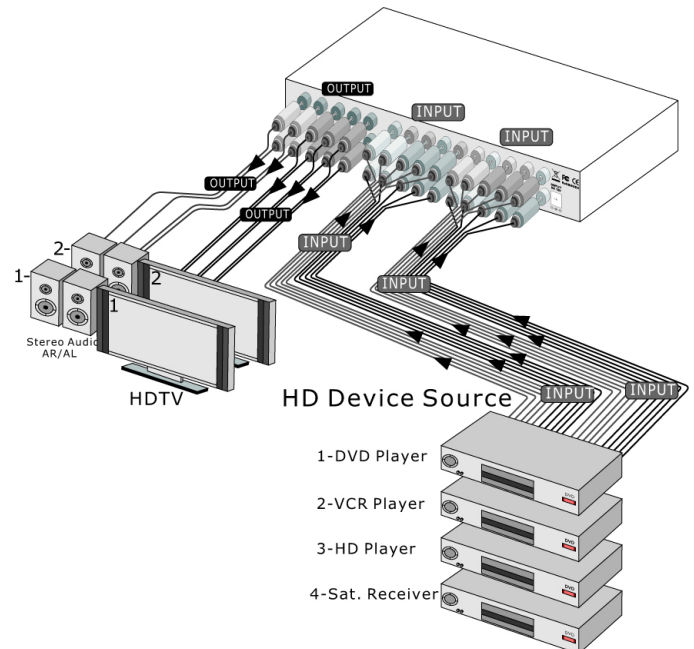
4x Component sources to 2x Component Output Matrix Switcher

INPUTS 1~ 4 PORT COMPONENT SOURCES :

COMPONENT VIDEO: Component Video(YPBPR) with RCA
AUDIO: Stereo Audio (AR/AL), with RCA

OUTPUT 1~ 2 PORT HDTV DISPLAY SIGNALS :

COMPONENT VIDEO: Component Video(YPBPR) with RCA
AUDIO: Stereo Audio (AR/AL), with RCA



SB-5470M SUPPORTS (4) COMPONENT INPUTS MATRIX TO (2) SWITCH OUTPUTS.

SUPPORTS FRONT PANEL DIRECT SELECTION & CONTROL IR REMOTE CONTROL

LIMITED WARRANTY

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