

## SB-5604UA

4:2 HDMI 4K2K Routing Switcher with Microphone / Auxiliary Audio



Input : 4x HDMI, 4x Stereo Audio (AR/AL), 2x AUX, 1x MIC

PRO SWITCHER

Output : 1x HDMI + 1 Preview port, 1x S/PDIF, 1x Stereo Audio (AR/AL)



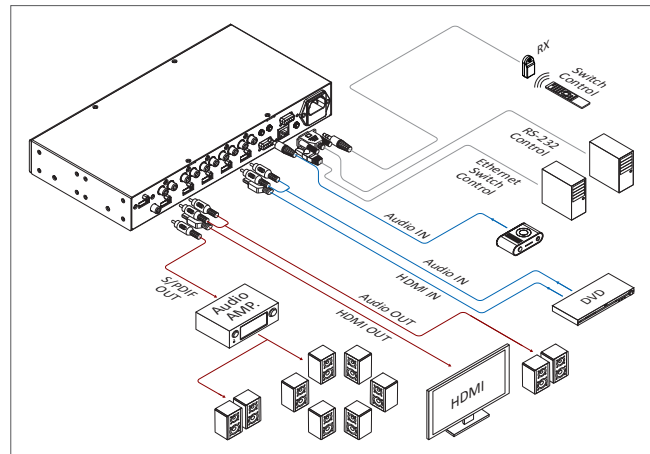
Ear Rack : 1U-300L

03

### INTRODUCTION

The SB-5604UA is a professional 4x2 ULTRA HD HDMI 4K2K@60Hz Routing Switcher. HD Video supporting (4) HDMI Inputs to (2) HDMI and (1) SPDIF Outputs. Supporting (4) Stereo Audio, (2) Auxiliary Audio (analogue audio) and (1) Microphone Inputs to (1) Stereo Audio (AR/AL) Output. These features can be easily configured and controlled. Supports HD/3D/4K2K video up to 60Hz frame rate. 6G signal supports a wide frequency range of 25MHz ~ 600MHz (3840x2160) TMDS clock. HDMI 1.4/2.0 and CEC/HDCP 1.4/2.2 compliant, with CE/FCC and RoHS certifications. Menu function keys for control: Menu, Exit, EDID, and Audio. Control is provided via front panel push buttons, IR remote, RS-232 or TCP/IP (not a web-browser). An R-S232 Windows GUI interface is provided for switch control (Windows only).

### DIAGRAM TYPICAL



### FEATURES

- Switch supports ULTRA HD 4x2 HDMI 4K2K-60Hz and 7x1 Audio/Microphone/Auxiliary audio
- Inputs : UHD (4) In : (4)x HDMI  
Audio (7) In : (4) Stereo Audio, (1) Microphone and (2) Auxiliary Audio
- Outputs: UHD (2) Out : (1) HDMI (4K2K-60Hz), (1) Preview port (4K2K-30Hz), (1) SPDIF(5.1)  
Audio (1) Out: (1)x Stereo audio (AR/AL)
- HDMI Digital Video is with a wide frequency range of 25MHz ~ 600MHz TMDS clock. w/ embedded HDCP, DVI format, HDMI 1.4/2.0 and CEC/HDCP 1.4/2.2 compliant
- Worldwide EDID control modes for full SD/HD Audio and HD/3D/4K2K Video up to 4K2K@60Hz frame rate
- Input Video stream in RGB, YCC 4:4:4 or YCC 4:2:2 is converted to YCC 4:2:0
- Digital Audio Support : Dolby TrueHD, Dolby Digital, Dolby Digital Plug/ex, DTS, DTS-HD, DTS-HD Master, DTS-EX, PCM, PCM2, LPCM2
- Supports ARC (Audio Return Channel) via SPDIF output port connected to a source device
- Supports (1) Microphone and (2) Auxiliary Audio (Analog stereo audio) sources
- Audio output supports audio balance (0~50) and volume control (1~100 levels) with mute audio functions
- Supports (14) world wide control function keys : Full function front panel controls: (4) HDMI SW/ (4) Audio SW/ Menu/ Enter/ Lock/ (2) AUX/ MIC
- Support EDID Modes :
  - Embedded EDID modes : 480p/ 720p/ 1080p/ 4K2K@30Hz/ 4K2K@60Hz
  - External modes : Learning mode
- Automatic scanning of input status via LED display on the front panel
- Using the build-in HDMI signal booster function, the HDMI output is capable of driving cable lengths for 1080p up to 98 feet (30M) & 4K2K(60Hz) up to 66 feet (20M)
- Provide IR remote control Frequency (38KHz)
- Various User Interface Controls :
  - Windows based GUI via RS232 interface control driver for 2000/XP/WIN7-32/WIN7-64/WIN10
  - Front panel push button
  - IR wireless remote controller
  - Ethernet switch control
  - Third Party RS232 control (via simple ASCII)
- Universal type power supply switch 100~240VAC, 50/60Hz

### SPECIFICATIONS

Type of Switcher	(4)x HDMI inputs to (2)x HDMI outputs, (7)x Audio inputs To (1)x Audio output Box
Inputs	Video : (4)x Ultra High Definition HDMI (4K2K@60Hz) Audio : (4)x Stereo Audio AR/AL, (1)x Microphone, (2)x Auxiliary Audio (analogue audio)
Output	Video : (1)x Ultra High Definition HDMI (4K2K@60Hz), (1)x SPDIF (Digital Audio 5.1) (1)x Preview port is limit to (4K2K-30Hz) Audio : (1)x Stereo Audio AR/AL (with balance and volume control)
HDMI / HDCP / CEC Support	HDMI 4K2K@60Hz, HDMI 1.4/2.0, HDCP 1.4/2.2 CEC Compliant
Video Bandwidth	Double Data Rates: bandwidth 600Mhz
Digital Video Support	HD/3D/4K2K video up to 4K2K@60Hz frame rate Input Video stream in RGB, YCC4:4:4 or YCC4:2:0 is converted to YCC4:2:0
Digital Audio Support	HDMI Multi Audio Formats 5.1 / 7.1, MAT(MLP), Dolby Digital, Dolby TrueHD, Dolby Digital Plus, DTS, DTS-ES 6CH, DTS-HD, DTS-HD-HRA, DTS-HD Master, (PCM-2CH) (7) EDID management Embedded EDID modes : (1): 720p, (2): 1080i, (3): 1080p, (4): 4K2K-30Hz, (5): 4K2K-60Hz Select LEARNING mode : Learning Destination EDID To Link Source
SPDIF Audio support	External HDMI Audio via SPDIF output
Source Status	Input status LEDs indicates presence of a live signal
IR External Distance	~984 feet / 300 meters maximum
Audio Breakaway	Output select different Video Audio function from separate sources
(14) Function Control Keys	HDMI source (1 thru 4), Audio source (1 thru 4), Menu, Lock, Enter, (2)x AUX, MIC 1x Select & Function buttons on front panel (Data status via LCM panel show out) 1x IR Remote Controller (switch control) 1x IR External port (switch control via 3.5mm OD Jack) 1x RS 232 series interface (switch control) 1x Ethernet series interface (switch control)
Switch Controls	
HDMI Signal Booster	Distance for 1080p up to 98 feet (30M), 4K2K@60Hz up to Cable 66 feet (20M)
Infrared Frequency	38 KHz
Firmware Update	Firmware update via RS232
HDMI I/O Connector	HDMI Type A - SMD 19pin Female Type
Temperature	Operating Temperature 32°F - 100°F (0°C - 32°C)
Safety Approvals	CE, FCC, REACH
Rack Mount Bracket	19 inch 1U High Rack Mount Bracket (1U-300L)
Dimension (WxDxH)	11.9" x 6.06" x 1.73" (304mm x 154mm x 44mm)
Weight	1.4 kg / 3.08 lb
Power Supply	AC 100~240V 50/60Hz (universal type supply)