

MATRIX SWITCHER - ALF-SM62T

6 x 2 4K Presentation Switcher with Matrix Outputs.



DESCRIPTION

The ALF-SM62-T is a professional 6x2 4K presentation switcher kit consists of a switcher and an HDBaseT Receiver.

The switcher is a 6 input multi-format (3 HDMI, 2 VGA, and 1 DP) 4K presentation switcher that switches video signals to an HDMI and an HDBaseT output. The HDBaseT output supports PoH and can connect to compatible HDBaseT receiver up to a maximum of 70 meters (230 feet).

The switcher supports video resolutions up to UHD (4Kx2K@30Hz 4:4:4). With multiple built-in EDID settings, including an EDID pass-through option, the highest quality digital video signal will be routed directly to the display. When a VGA video signal is connected, the video signal will be scaled up to 1920x1200.

The switcher supports stereo and multichannel audio on the HDMI/DP inputs. The analog audio paired with the VGA inputs is embedded into the digital video stream. In addition to the audio embedded in the HDMI and HDBT output stream, which may be muted, the audio is simultaneously de-embedded to an amplifier, a digital optical audio output, and four analog audio outputs: two 3-pin phoenix connectors, a 3.5mm mini jack, and a 5-pin phoenix connector.

The switcher features multiple methods of control. When set to Auto, the switcher will automatically switch to the newest source device added to the switcher; when the active source is removed, the switcher will switch to the first detected input. The switcher can be manually controlled via the front panel, IR, RS232, and GUI.

FEATURES

- The transmission distance between the switcher and HDBaseT receiver can up to 70m at 1080p, and 40m at 4K video.
- Supports auto-switching.
- HDMI input supports 4Kx2K@30Hz 4:4:4, HDCP2.2.
- VGA video resolution can be selected as 1024x768, 1280x720, 1280x800, 1360x768, 1920x1080 or 1920x1200.
- The MIC and LINE input can be mixed to audio outputs.
- 3-type microphone input, supports condenser microphone, dynamic microphone and wireless microphone.
- Supports audio matrix: 1 MIC input, 1 LINE input, 1 HDMI embedded audio input, 1 HDBT embedded input, 2 unbalanced audio outputs (3-pin phoenix connectors), 1 balanced/unbalanced audio output (3-pin phoenix connector), 1 analog stereo audio output (3.5mm mini-jack), 1 digital optical audio output (SPDF) and 1 2x20 watt@4Ω amplifier. The balanced/unbalanced audio output, analog stereo audio output and digital optical audio output have come from the same input audio.
- Supports embedded EDID selection and customized EDID.
- Supports 48V PoH for simplified wiring.
- Controllable via front panel buttons, IR Remote, RS232 & GUI.
- Supports online software upgrading.

TECHNICAL SPECIFICATIONS

6x2 4K Presentation Switcher

Video Input

| | |
|-----------------------|-------------------------------------------------------------|
| Input | : (3) HDMI; (1) DP; (2) VGA |
| Input Connector | : (3) Female HDMI; (1) DisplayPort; (2) Female VGA (15-pin) |
| Input Video Signal | : HDMI, DP, VGA |
| HDMI Input Resolution | : Up to 4Kx2K@30Hz 4:4:4 |
| DP Input Resolution | : Up to 4Kx2K@30Hz |
| VGA Input Resolution | : Up to 1920x1200@50/60Hz |

Video Output

| | |
|------------------------|------------------------------------------------------------------------------------|
| Output | : (1) HDMI; (1) HDBT |
| Output Connector | : (1) Female HDMI; (1) RJ45 |
| Output Video Signal | : HDMI, HDBaseT |
| HDMI Output Resolution | : Up to 4Kx2K @30Hz 4:4:4 |
| HDBT Output Resolution | : Up to 4Kx2K @30Hz 4:4:4 |
| VGA Scaling Resolution | : 1024x768, 1280x720, 1280x800, 1360x768, 1920x1080, or 1920x1200 can be selected. |

Audio Input

| | |
|---------------------------|-------------------------------------------------------------------------|
| Input | : (2) Stereo analog audio for VGA; (1) LINE audio; (1) Microphone audio |
| Input Connector | : (2) 3.5mm stereo jacks; (2) 3-pin phoenix connectors |
| De-embedded Audio Input | : HDMI and HDBT audio |
| Input analog Audio Format | : PCM |
| Audio Input Impedance | : >10kΩ |

Audio Output

| | |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Output | : (2) Unbalanced analog audio (AUDIO 1 and AUDIO 2); (1) L/R balanced/unbalanced analog audio (AUDIO 3); (1) Stereo analog audio (AUDIO 3); (1) Digital optical audio (AUDIO 3); (1) Power amplifier |
| Output Connector | : (2) 3-pin phoenix connectors; (1) 5-pin phoenix connector; (1) 3.5mm stereo jack; (1) SPDIF; (1) 4-pin/5 mm phoenix connectorAudio |
| Output Analog Audio Format | : PCM |
| Output Digital Audio Format | : PCM/Dolby/DTS |

TECHNICAL SPECIFICATIONS CONTINUED

6x2 4K Presentation Switcher

Audio Output continued

| | |
|------------------------------------|-------------------------------|
| Audio Output Impedance | : 70 Ohms |
| Frequency Response | : 20 Hz to 20 kHz, ± 3 dB |
| Common Mode Rejection Ratio (CMRR) | : >70 dB at 20 Hz to 20 kHz |
| Signal to Noise Ratio (SNR) | : 80 dB (Max) |

Control

| | |
|-------------------|---------------------------------------------------------------------------------------------------|
| Control port | : (1) EDID; (1) IR IN; (1) FIRWARE; (1) RS232; (1) TCP/IP |
| Control Connector | : (1) 3-pin DIP switch; (1) 3.5mm mini jack; (1) Micro USB; (1) 3-pin phoenix connector; (1) RJ45 |

General

| | |
|-----------------------|--------------------------------------------------------|
| Transmission Distance | : HDBT OUT: $1080p \leq 70m$; $4K \times 2K \leq 40m$ |
| Operation Temperature | : $0 \sim +40^{\circ}C$ |
| Storage Temperature | : $-10 \sim +55^{\circ}C$ |
| Relative Humidity | : $10\% \sim 90\%$ |
| External Power Supply | : $100V \sim 240V$ AC, 50/60Hz |
| Power Consumption | : 40W (Max) |
| Dimension (W*H*D) | : 436.4mm x 44mm x 236.5mm |
| Net Weight | : 2.4kg |

HDBaseT Receiver

Input

| | |
|-----------------|---------------------------------------------------------------|
| Input Signal | : (1) IR; (1) HDBaseT; (1) RS232 |
| Input Connector | : (1) 3.5mm mini jack; (1) RJ-45; (1) 3-Pin phoenix connector |

Output

| | |
|------------------|---------------------------------------------------------------------|
| Output | : (1) HDMI; (1) IR; (1) RS232 |
| Output Connector | : (1) Female HDMI; (1) 3.5mm mini jack; (1) 3-Pin phoenix connector |

General

| | |
|-----------------------|--------------------------------------------------------------------|
| Resolution Range | : Up to $4K \times 2K @ 30Hz$ |
| Transmission Mode | : HDBaseT |
| Transmission Distance | : $1080P \leq 70m$; $4K \times 2K \leq 40m$ |
| Bandwidth | : 10.2Gbps |
| HDMI Standard | : Support HDMI1.4 and HDCP2.2 |
| Impedance | : 75Ω |
| Operation Temperature | : $0 \sim +40^{\circ}C$ |
| Storage Temperature | : $-10 \sim +55^{\circ}C$ |
| Relative Humidity | : $10\% \sim 90\%$ |
| External Power Supply | : Input: $100VAC \sim 240VAC$, 50/60Hz Output: DC 24V, 1.25A |
| Power Consumption | : 11W |
| Dimension (W*H*D) | : 115mm x 16mm x 84mm |
| Net Weight | : 150g |

SYSTEM DESIGN

