

SONIFEX

RB-SP1
Digital Splitter and Combiner

Catalogue ²⁰¹⁶





RB-SP1 Digital Splitter and Combiner

The RB-SP1 can be used for interfacing stereo and mono signals to digital mixing desks by splitting the left and right signals of a stereo XLR to two separate XLR's, and vice versa by combining them.

The RB-SP1 can interface between them, either combining the signals from 2 XLR's into 1, or splitting the signal from 1 XLR into 2.

The RB-SP1 (digital splitter & combiner) is also used to interface legacy double sampling pieces of equipment. Some older equipment uses 2 x AES/EBU connectors for double sampling with each connector carrying an

audio signal at a normal frame rate, whilst other equipment has a single connector using twice the frame rate.

Additionally, a sample rate converter on the second digital input can be used to convert the sample rate of the secondary input to that of the primary input. The RB-SP1 can handle sample rates up to 96kHz and sample sizes of 16, 20 and 24 bit.

There are two types of operation : Split 96, and Stereo/Mono. These each have three different switch modes : Split, Bypass and Combine. Download the product



Category: Digital Audio Converters.

Product Function: Splits a stereo digital

handbook for further information on what this product can do.

Both inputs and outputs can be selected as either AES/EBU or S/PDIF with the resultant digital level following the switch selection.

Specification For RB-SP1

Audio Specification

Input Impedance: 110Ω ±20% balanced (AES/EBU)

Input Impedance: 75Ω ±5% unbalanced (S/PDIF)

Signal Level: 3V/10V peak to peak min/max (AES/EBU)
0.5V ±20% peak to peak (S/PDIF)

Bit Depth: Up to and including 24 bit

Distortion & Noise: -114dB THD + N at 1kHz, ref 0dB FS

Output Impedance: 110Ω ±20% balanced (AES/EBU)

audio signal to mono and combines two mono signals to make a stereo signal.

Typical Applications: To combine two mono digital channels, e.g. telco, to a stereo input for a mixer.

Features: 2 x AES/EBU & S/PDIF I/O, up to 96kHz operation.

Output Impedance: 75Ω ±5% unbalanced (S/PDIF)

Sample Freq Range: 30-100kHz (i.e. including 32kHz, 44.1kHz, 48kHz, 64kHz, 88.2kHz and 96kHz)

Dynamic Range: 120dB

Connections

Audio Inputs: 2 x AES/EBU XLR 3 pin female (balanced)
2 x S/PDIF RCA phono female (unbalanced) (Input button selects between AES/EBU and S/PDIF)

Audio Outputs: 2 x AES/EBU XLR 3 pin male (balanced)
2 x S/PDIF RCA phono female (unbalanced). (Output button selects between AES/EBU and S/PDIF)

Mains Input: Filtered IEC, continuously rated 85-264VAC @ 47-63Hz, max 10W

Fuse Rating: Anti-surge fuse 1A 20 x 5mm

Equipment Type

RB-SP1: Digital splitter & combiner

Physical Specification

Dimensions (Raw): 48cm (W) x 10.8cm (D) x 4.2cm (H) (1U)
19" (W) x 4.3" (D) x 1.7" (H) (1U)

Dimensions (Boxed): 58.5cm (W) x 22.5cm (D) x 7cm (H)
23" (W) x 8.9" (D) x 2.8" (H)

Weight: Nett: 1.6kg Gross: 2.2kg
Nett: 3.5lbs Gross: 4.8lbs



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