

MADI.SRC

MADI SAMPLE RATE CONVERTER



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DirectOut
TECHNOLOGIES

MADI.SRC

offers best quality sample rate conversion of a complete MADI stream (64 audio channels) in real time. The device supports any source and destination sample rates from 30 kHz to 50 kHz and their multiples. High-end chips with a THD+N > 140dB and a frequency response linearity better than 0.025 dB guarantee excellent sound quality.

- Two I/O configurations are available:
- 1 x coaxial (BNC) & 1 x optical SC*
 - 2 x optical SC*

* multi-mode or single-mode

Both outputs carry the converted input signal and can be distributed twice.

The MADI.SRC is designed for use in environments where the highest possible quality sample rate conversion is at a premium. The stream is processed in real time and all output channels are phase and sample accurate to each other.

Split Mode

By activating the Split Mode function, the inputs and outputs can be used in combination to make use of all 32 stereo SRCs at higher sample rates. Depending on the SRC's setting this allows for conversion of more than 32 (@96 kHz) or 16 (@192 kHz) channels.

Clocking

Synchronisation can be achieved via word clock or AES3id (AES11), video reference, the MADI input signal as well as the internal clock.

Application

Thanks to its comprehensive feature set, the MADI.SRC is also a versatile device beyond ,simple' sample rate conversion. For instance in an environment where two digital systems do not use the same word clock source (e.g. FOH <> OB

TECHNICAL DETAILS

MADI Ports (I/O):	2 x SC-Socket multi-mode or 1 x SC-Socket multi-mode & 1 x coaxial BNC, 75 Ω
Sample Rates:	all rates from 30 kHz to 50 kHz and their multiples (standard rates: 44.1, 48, 88.2, 96, 176.4, 192 kHz +/- 12,5%)
MADI Formats (I/O):	48k Frame, 96k Frame, 56/64 channel, S/MUX
<i>SRC Performance</i>	
THD+N:	140 dB
Frequency Response Ripple:	< 0.025 dB
Latency:	< 140 samples
Word Clock:	2 x coaxial BNC (75 Ω switchable)
Video Reference:	1 x coaxial BNC (75 Ω switchable), black burst (PAL / NTSC)
USB:	USB 2.0 for firmware updates
Power Supply:	2 x 84 V to 264 V AC / 47 Hz to 63 Hz / safety class 1
Dimensions:	Width 19" (483 mm) Height 1 RU (44.5 mm) Depth 10" (254 mm)
Weight:	about 3 kg

van), the MADI.SRC can be used as decoupling unit to connect both asynchronous systems without any loss in sound quality. With the SRC switched off, the device works as a simple format converter and supplies the different MADI formats at the output ports (48k/96k Frame, 56/64 channels).

Safe operation

Thanks to two phase-redundant power supplies with separate IEC inlets and AC power switches on the rear panel the device offers the highest reliability.



Port Configurations:

