



### Application Examples

- AES/EBU frontend for RME's digital I/O-cards (with ADAT optical I/O)
- TDIF frontend for RME's digital I/O-cards (with ADAT optical I/O)
- AES and ADAT frontend for DTRS machines
- 8-channel AES, TDIF and ADAT input and output for digital mixers with ADAT/TDIF port
- Operation of 4 SPDIF or AES devices with different sample rates and clock references in any digital audio network
- Triple format converter AES/TDIF/ADAT with added SPDIF TOSLINK I/O
- Converts Double and Quad Wire to Single Wire and vice versa, even with simultaneous sample rate conversion
- 8-channel sample rate converter up to 192 kHz
- Supported Modes: Double and Quad Wire, S/MUX and S/MUX4

### I/O Connectivity

- 4 x AES/EBU I/O (XLR)
- 2 x ADAT I/O (optical)
- 2 x TDIF I/O (D-sub)
- 1 x SPDIF I/O (optical)
- 1 x Word Clock I/O

This outstanding unit consists of three 8-channel format converters with AES/EBU, ADAT and TDIF I/Os. Switchable 24 bit/192 kHz sample rate converters allow for an 8-channel sample rate conversion and clock decoupling of the highest quality. Double Wire, Quad Wire, S/MUX and S/MUX4 are fully supported for unsurpassed compatibility.

The ADI-192 DD offers full 24 bit audio resolution at any sample rate. The three output formats ADAT, TDIF and AES independently access the three input formats ADAT, TDIF and AES. Thanks to free selection of inputs, signals can be copied and distributed between all connected devices - without the need to change any cables. Due to the unlimited input selection, the unit not only transfers data to the same output format, but can also be operated as quad AES/EBU sample rate converter.

Four XLR AES/EBU inputs and outputs each, and two ADAT and TDIF inputs and outputs allow full 8-channel operation even at 96 kHz with 24 bit resolution. At 192 kHz, there are eight AES channels and four ADAT and TDIF channels.

Professionals will love the fact that the ADI-192 DD supports Double Wire, Quad Wire, S/MUX and S/MUX4, making it compatible with all methods of increasing sample rates for high-class recordings by sample multiplexing on all platforms. The unit can also convert between these formats, even along with SRC. If more than 8 channels are required, several units can be cascaded and synchronized with sample accuracy by word clock. The ADI-192 DD also features an automatic distribution mode. If only one of the four AES inputs is used, the device will copy these two channels to the other three AES outputs. 48 LEDs clearly display the current status of the incoming and outgoing signals and the processing performed within the unit. RME's SyncCheck technology indicates whether the input signal is locked and whether all inputs are synchronized.

The AES output signal can be given a "consumer" or "professional" status. The first AES output is also available as optical TOSLINK.

RME's SteadyClock™ enables the ADI-192 DD to be operated without additional word clock connection and guarantees excellent clock quality in every situation. Due to the highly efficient jitter reduction, any clock signal (even AES and word clock) can be improved and refreshed, and subsequently be used as reference clock at the word clock output. Intelligent Clock Control (ICC) will retain the last valid sample frequency even in case of a loss of the input signal. All settings are retained when the device is switched off.

### Specifications

- Input AES/EBU: 4 x XLR, transformer balanced, highly sensitive input stage (< 0.3 Vpp), SPDIF compatible, max. 192 kHz Single Wire
- Output AES/EBU: 4 x XLR, transformer balanced, 4.5 Vpp, max. 192 kHz Single Wire
- Input ADAT optical: 2 x TOSLINK, 24-bit, Bitclock PLL
- Output ADAT optical: 2 x TOSLINK, 24-bit
- Input/Output TDIF: 2 x D-sub 25 pin, 24-bit
- Input/Output SPDIF front: 2 x TOSLINK, 24-bit, max. 192 kHz
- Input Word Clock: Signal Adaptation Circuit (functional from 1.2 Vpp)
- Output Word Clock: BNC, low impedance driver stage, 4 Vpp into 75 Ohms, short-circuit-proof
- Sync sources: Internal, ADAT optical in, AES/EBU in, TDIF in, word clock in
- Varipitch: by input signal or word clock
- Sample frequencies: 444.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz, variable (sync/word clock)
- Sample rate range: AES, word clock: 28 kHz-204 kHz, ADAT/TDIF 30 kHz - 54 kHz
- Jitter: Internal clock < 1 ns, external clocks < 1 ns
- Jitter sensitivity: all PLLs operate error-free even at 100 ns
- Jitter suppression: >30 dB (2.4 kHz)
- SRC dynamic ratio: 140 dB RMS unweighted, 143 dBA
- SRC THD+N: < -140 dB
- Sample rate ratio: max. 7:1 / 1:7
- Power supply: Internal switching mode PS, 100V - 240V AC, 20 Watt

The ADI-192 DD is the unsurpassed all-in-one solution for any format and sample rate conversion, from 2 to 8 channels.



ADI-192 DD