

ADD A

PRELIMINARY INFORMATION



The ADDA is a high resolution Analog to Digital and Digital to Analog converter. Its concept originates from the top-range D&R broadcast consoles I/O units. It is designed to be used in demanding recording and broadcast applications, where the audio converters need to be 24 bit and sample rates up to 96kHz are a necessity.

Modern hard-disk recording systems deliver the kind of impressive performance and track capacity that can measure up to the best studio equipment available. Nonetheless, the high quality of today's processing options can't be exploited to full effect when used with standard sound cards, because the A/D converters in these cards easily distort, and because interference generated from the clock frequencies inside the computer housing degrades the signal-to-noise ratio. The remedy is to use a high-quality converter housed in an external device so that the signal can be patched into the computer / harddisk system without loss or hassle. The ADDA Master converter is the answer to convert stereo analog

signals into digital, the line input of the ADDA can be connected directly to the mixing console's output, thereby preserving the sound quality of the analog signals as well as their impressive dynamic range. From the ADDA's digital outputs, the signal would then be routed to a master recorder or to a digital I/O card. In addition, the ADDA is equipped with a Word Clock in/output of the type used for professional audio and broadcasting applications.

MAIN FEATURES

- 96k 24bit A/D with 120dB dynamic range and extremely low THD.
- Sample Rate Converter with bit reduction and dither to reduce 96/88.2K 24bit recordings to 48/44.1K 16/20bit for CD masters.
- Built in 96/48K high quality D/A to monitor digital signals or record to analog tape.
- 50dB range 32 element stereo signal meter with Vu or Peak display and Vu or Peak hold .
- Inputs from AES, SPDIF, Optical, Outputs to Optical, AES, SPDIF.
- Selection of Noise shaped dither and bit rounding to reduce 96/48/44.1K recordings to 24, 20, 18 or 16 bits.

GENERAL SYSTEM PARAMETERS.

Level specs in dB full scale for digital and dBu for analog data.
0dBu=0.775Vrms
Sampling rate: 32kHz to 96kHz +/- 20ppm .(internally synchronised).
Headroom: between 9 and 20dB.

A/D and D/A CONVERTERS.

A/D Crystal 24 bit Delta Sigma, 128x over sampling
Dynamic range: typically 120 dB
THD+Noise: 105 dBfs
Inputs : +/- 20dB adjustable.
D/A Burr-Brown 24 bit .
Dynamic range: typically 117 dB
THD+Noise: 107 dBfs

LINE INPUTS

Input sensitivity: -20dB to.+20dB
Line inp. bal 10kOhm +/- 20dB gain range.
CMRR: Line input max.. gain: 50Hz 50dB

DIGITAL INPUTS

AES/EBU (AES3), S/P-DIF, Optical (toslink)
16/18/20/24 bit, 32kHz to 96kHz (built in sample rate converter).
THD+N: -117 dBfs @1kHz, 0dBfs
Dynamic Range: 128 dB.
Input impedance: 110 Ohm (XLR) 75Ohm (cinch)
Clock input: 75Ohm TTL.

DIGITAL OUTPUTS.

AES/EBU(AES3), S/P-DIF, Optical (toslink), Coax, active at the same time.
16/18/20/24 bit, 32kHz to 96kHz (System clock or sample rate conversion to corresponding input clock).
Output level: 2 to 5 volt
Output impedance: 110 Ohm
Clock output: 75Ohm TTL.

CLOCK

System clock internally 32kHz, 44.1kHz, 48kHz, 64 kHz, 88.2 kHz, 96 kHz, 20ppm.
Frame clock: BNC in/out 75Ohm TTL

OVERALL:

Frequency response: 20-20.000 Hz
Crosstalk: less than -90dB

DIMENSIONS AND WEIGHT.

10 kg 22lbs
Dimensions: 483x250x44mm

D&R Electronica Weesp b.v.

Rijksweg 15B,
1382GS Weesp-The Netherlands
Phone: +31 - 294-418 014
Fax: +31 - 294-416 987
Website: <http://www.d-r.nl>
E-mail: info@d-r.nl



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