

ALTMANN DA

SUPERLATIVE 24 BIT / 96 KHZ DIGITAL TO ANALOG CONVERTERS

KEY FEATURES:

- **AUTHENTIC SOUND REPRODUCTION SYSTEM (ASRS)**
- **24, 20, 16 BIT SUPPORTED AUDIO INPUT WORD LENGTHS**
- **32 .. 96 kHz SUPPORTED INPUT SAMPLING FREQUENCIES**
- **INTEGRATED PHASE LINEAR OVERSAMPLING FILTER**
- **ULTRALINEAR HIGH PRECISION CONVERSION**
- **HIGH SPEED ANALOG OUTPUT**
- **ULTRA CLEAN EXTERNAL POWER SUPPLY**

FEATURES:

- professional high-definition, high-resolution digital to analog converter
- TOSLINK, ST, XLR, CINCH, BNC digital inputs, analog stereo outputs (CINCH & XLR)
- supports all common professional and consumer data transmission formats
- separate voltage regulators for different circuit domains, external power supply & filter
- highest performance converter circuits supply audio output at max. 800 kHz/24bit
- high precision I/V conversion
- high line driving capabilities, ultra short internal signal lines
- rugged aluminium / steel housing ensures outstanding endurance
- version with selected components available (ALTMANN DA-S)
- fully DVD (24bit/96kHz) compatible, upgrade kit to 192kHz in schedule



ALTMANN DA-MR and POWER SUPPLY
50% of original size

DESCRIPTION:

The ALTMANN DA is a high performance digital to analog converter for professional and high-end audio applications. It is designed using the latest available technology, and implements a new approach of analog post-processing and output interface, resulting in ultra high speed line driving and unrivalled performance.

The ALTMANN DA implements the ASRS design topology which is capable to supply the most authentic and pleasing audio reproduction.

The ALTMANN DA is covered by a 5 years limited warranty.

TECHNICAL DATA:

- resolution:	16, 20, 24 bit
- supported sampling frequencies:	between 30 kHz .. 96 kHz
- compatibility:	AES/EBU, IEC 958, S/PDIF, EIAJ CP340/1201
- oversampling:	8x at all supported sampling frequencies
- sampling output:	up to 800kHz (typ. 768kHz with a 96kHz source)
- sampling freq. synchronization	automatically & click-free
- dynamic range	112dB typ
- supported power input	110V/220V, 50Hz/60Hz versions available
- overall power supply capacity	> 69400 µF
- digital inputs (DA-M):	2xToslink, 2xCinch, 1xST optical, 1xBNC, 1x XLR
- analog outputs:	1x stereo XLR gold, 1x stereo Cinch gold
- integr. preamplifier (DA-R)	high-grade stereo volume control

AUTHENTIC SOUND REPRODUCTION SYSTEM (ASRS):

Since every gain device, by nature, injects a specific amount of distortion into the signal-chain, the output signal will be degraded to a specific extent.

A DAC chip may be seen as a gain device with exceptionally high distortion in general, and particularly with a high out of band distortion.

In all common DA converters, the - out of band part - of the generated distortion will partially be removed by analog post processing circuitry. The residual distortion is then 'glued' inside the output signal and cannot be removed in following processing steps.

This residual distortion generates sonic artifacts, that prevent even the most advanced digital equipment to faithfully reproduce certain natural sound sources, such as: vocals, strings, horns/reeds, pianos, organs, acoustic & electric guitars, drums, etc.

Until today, recording engineers and large parts of the audiophile community complain about artifacts in digital sound reproduction, and there is a consistent tendency to use high quality analog equipment, whenever possible.

The ASRS design topology overcomes the limitations of all existing DAC systems by implementing proprietary filter elements, that remove distortions directly from the chip-surface of all gain devices, before the signal can leave the specific component.

This effective reduction of residual signal corruption promotes a perfectly authentic reproduction of all sound sources, while maintaining an unrivalled level of overall performance.

The ASRS design topology is implemented into all ALTMANN DA models.

The ASRS design topology is a proprietary development by AMM.

PERFORMANCE OF BASE MODEL:

ALTMANN DA (non selected) performance parameters, measured on Audio Precision System Two:

- SNR	120dBV weighted & unweighted
- Phase deviation	+1° max. at low frequency
- channel crosstalk	-115 dB
- multitone distortion	-115dBV .. -130dBV

AVAILABLE VERSIONS:

ALTMANN DA:	base model, digital inputs: 1xToslink, 1xCinch (non switchable) analog outputs: 1x stereo XLR gold, 1x stereo Cinch gold selected components available (ALTMANN DA-S)
ALTMANN DA-M:	same as ALTMANN DA but with multiple versatile digital inputs (see above), switchable on the front-panel selected components available (ALTMANN DA-MS)
ALTMANN DA-R:	same as ALTMANN DA but with integrated preamplifier and high-grade volume control on front panel for direct drive of a Power Amplifier.
ALTMANN DA-MR:	top machine with multiple versatile digital inputs (switchable on front) & integrated preamplifier with high-grade volume control on front. selected components available (ALTMANN DA-MRS)

APPLICATIONS:

- CD & DVD mastering / premastering
- recording studio / control room
- high quality broadcast applications
- high end consumer audio

Since the ALTMANN DA delivers unsurpassed performance with CD, DAT, DVD and direct digital sources, it is at home in professional and high-end consumer applications that demand for ultimate sound reproduction, reliability and ease of operation.

Additional information and user manuals can be accessed on our web-site: www.altmann.haan.de