UD-301-X USB DAC Preamplifier, Black

243559

SRP 449,00 €

Shrinking high-performance audio into a desktop-friendly package, this is a full-fledged dual monaural DAC (digital to analogue converter)

Colour

PRODUCT DETAILS

Supports DSD128 Native playback
The UD-301-X is equipped with a USB port supporting DSD Native playback. This directly converts DSD signals into an analogue waveform in ASIO2.1 and DoP formats, without changing the PCM format. In addition, asynchronous transfer mode is also supported for accurate data transfer by referencing the more accurate on-board clock of the AI-301DA-X. Furthermore, a free TEAC HR Audio Player allows users to play back Hi-Res files such as DSD128 and PCM192/32 from Windows/Mac without the need for complicated configuration.

USB streaming supporting asynchronous transfer mode
As digital audio data travels from a computer to the UD-301-X via a USB cable, timing control for sending/receiving data packets is defined by the UD-301-X's internal clock which is much more accurate than that of most computers. This asynchronous transfer mode theoretically eliminates signal-compromising jitter, and allows digital audio signals to travel in electrically 'cleaner' conditions.

Up to 192kHz up-conversion
When handling digital audio signals of 96kHz or less, you are able to up-convert them to double or quadruple the original signal sampling frequency. Even when playing back a conventional CD (which is 44.1kHz), a smoother analogue audio signal is obtained by up-converting to a higher sampling frequency. This up-conversion function can be disabled, according to the user's preference.

Dual monaural design to eliminate signal interference
In order to process Hi-Res audio data under the best conditions, the UD-301-X employs a dual monaural circuit design whereby each of the left and right channels comprises its own single monaural circuit. This circuit design avoids mutual interference between left and right channels and enables improved stereo playback.

High-performance BurrBrown PCM1795 32-bit DACs
At the heart of its digital audio section, the UD-301-X uses a pair of 32-bit processing DACs (digital to analogue converters), namely BurrBrown PCM1795s, one for each channel. These high-performance DACs are capable of processing large amounts of data such as DSD128, rendering more accurate playback of Hi-Res audio sources.

MUSES8920 Op-amps for high quality analogue audio processing
On the analogue processing side, key to defining final sound quality, the MUSES8920 Op-amps

© 2026 ATS trade & service GmbH. All rights reserved. Note: Specifications and design are subject to change

developed by New Japan Radio Corporation are employed to process the I-V conversion which turns output current from the DACs into voltage signals. A dual-monaural approach is also applied to this stage of processing.

CCLC for dual-mono headphone amplifier circuit
When listening to Hi-Res music via the UD-301-X's dual-monaural headphone amplifier circuit, the CCLC (Coupling Capacitor-Less Circuit) delivers a rich bass sound and quick transient responses. Conventional headphone amplifier circuits cannot avoid reduction of low frequencies and misalignment of phase caused by high-pass filtering within capacitors as they couple output stages.

Also works as a standalone headphone amplifier
In addition to its dual monaural headphone amplifier circuit design, the UD-301-X further strengthens its credentials as a headphone amplifier by offering the ability to disable XLR and RCA outputs on the rear panel. This limits power supply to the headphone amplification process, so maximizing its potential for headphone output. The UD-301-X offers ease of use as a headphone amplifier because the headphone volume is always varied by the master volume control on the front panel, regardless of the output mode (fixed, variable or disabled).

Toroidal-core power transformer for plenty of power
The UD-301-X features an energy-efficient Toroidal-core power transformer to deliver plenty of stable current to every single part of the circuit, including two high-performance DACs (digital to analogue converters) that carry out ultra-high-speed processing. Even when there are sudden dynamic swings, where large amounts of current are required instantly, the UD-301-X's power supply will prove equal to the task.

Robust aluminum body, and small footprint
A 215mm width and 238mm depth creates a footprint that allows you to place the unit in the smallest of spaces, while the full-metal body provides excellent rigidity and minimizes the adverse effects of vibration on final sound quality.

XLR Balanced outputs
The UD-301-X is capable of working as a high-performance DAC with professional audio equipment and high-end audio units, as well as with consumer hi-fi components, thanks to its pair of XLR Balanced output terminals.

Pre-amplifier mode to connect with power amplifier
The output from both XLR Balanced and RCA Unbalanced outputs can be set to, fixed, variable or disabled, depending on your needs. This flexibility, among other things, allows you to connect to power amplifiers for a separates-based system or, indeed, active speakers when the unit is set to variable mode.

Features at a glance

- Supports DSD64 and DSD128 native playback (on USB Input)
- Supports PCM 192kHz/24-bit playback
- Asynchronous Transfer Mode
- Up-conversion to 192kHz (user defeatable)
- Dual 32-bit BurrBrown PCM1795 DACs
- Dual monaural circuit design
- Dual MUSES8920 Op-amps
- Dual monaural CCLC Headphone amplifier circuit
- Toroidal-core power transformer
- Full-metal body
- USB Audio input
- Coaxial digital audio output
- Optical digital audio output
- XLR analogue balanced output (Output level: Fixed, Variable, Disabled)
- RCA analogue unbalanced output (Output level: Fixed, Variable, Disabled)
- Headphone output (1/4" Stereo phone jack)
- Detachable power cable
- Auto-power saving
- RoHS compliant

Included accessories

- Power cord

© 2026 ATS trade & service GmbH. All rights reserved. Note: Specifications and design are subject to change

- Owner's Manual (including warranty)

Specs

Product Attributes

EAN:	4907034222438
Manufacturer number:	UD-301-X/B
Product weight:	2.8 kilograms
Pieces per master carton:	60 Piece

© 2026 ATS trade & service GmbH. All rights reserved. Note: Specifications and design are subject to change