AI-303 USB DAC Amplifier Silver

250149

SRP 799,00 €

The TEAC AI-303 audio amplifier with only 215mm width footprint accommodates a compact and high-performance amplifier module, Bluetooth® receiver supporting DAC®, Qualcomm® aptX™ HD and USB audio input to playback Hi-Res sound source such as DSD256 and PCM 384/32 from PC/Laptop, iPhone, Android phone and tablets, thanks to USB-C connector. The HDMI interface ARC/eARC allows you to enjoy high quality TV sound with your favorite speakers, while a pair of LINE inputs fit your existing Hi-Fi system and the 4-pole headphone out with ground-separate circuit realizes upper class headphone listening.

Colour

PRODUCT DETAILS

Connecting from TV with a single HDMI cable
The only connection between the AI-303 and a TV is an HDMI cable. Supporting ARC/eARC and HDMI CEC, volume control and power on/off of the AI-303 can be controlled from a TV remote, while receiving PCM 192/24 Hi-Res audio as long as the TV supports the resolution. Thanks to its small footprint, installing the AI-303 on a TV cabinet is possible.

* Please set the digital output to "PCM" in the output settings of the TV.

Supporting DSD512 and PCM 384/32 Hi-Res audio formats
In order to maximize studio master quality sound quality of the digital source, the D/A converter on the AI-303 equips two types of digital filters and x2Fs, x4Fs, and x8Fs up-conversion processing to pursue your preferred sound.

Wide range of digital inputs, HDMI, USB-C, Coaxial, and Optical
Connections with the digital sources are up-to-dated. The AI-303 equips an HDMI for TV, a USB-C for PC/Laptop and Coaxial/Optical for conventional digital music players, maximizing potential of each digital source with the high performance D/A converter.

Built-in Bluetooth® receiver supporting LDAC®, and Qualcomm® aptX™ HD
The Bluetooth® receiver is employed for easy wireless connection with a smartphone, supporting high-resolution wireless codecs including LDAC®, LHDC, and Qualcomm® aptX™ HD, in addition to other standard Bluetooth® codecs such as Qualcomm® aptX™, AAC, and SBC. The LEDs on the front panel indicate which codec is engaged when connection is established.

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USB-C for versatile USB connection with PC, Smartphone and Tablet
The AI-303 also supports wide variety of digital devices such as smartphone/tablet and portable digital audio player that support USB Audio 2.0, via a self-powered USB-C port allowing auto device detect when the device equips a USB-C. Most Android devices and recent iPad Air/iPad Pro that equip USB-C port allow single USB-C cable connection without extra devices.

1. * An additional USB Adapter from Apple is required when connecting to an iPhone.
2. * When connecting to an Android device, "OTG Connection" must be turned on or "USB Debug" must be turned on from the developer option menu.

A two pairs of audio inputs for flexibility
A two pairs of LINE inputs even fits your existing audio system including CD players and analog turntables.

* Analog turntable must be equip a built-in Phono amplifier.

High performance Ncore® power amplifier from Hypex
The compact AI-303 accommodates a high energy efficient and high performance Ncore® power amplifier designed by Hypex, borrowed from upper model, delivering clear and crisp sound with rich musicality.

4-pole Headphone output with Ground-separate
The headphone amplifier circuit is designed as separated ground on both Left and Right channels from the pre-amplilfier section to headphone jack which is 4-pole type. By separating the both grounds, the channel separation is significantly improved while realizing clear sound stage.

1. * Ground-separate connection is available with Headphones with a 4-pole plug.
2. * Headphones with a conventional 3-pole plug is also compatible.
3. * 3 Pin assignment of the 4-pole jack: Tip: L+, Ring: R+, Ring: L–, Sleeve: R–

Coupling Capacitor Less Circuit headphone amplifier
The headphone amplifier employs the Coupling Capacitor Less Circuit (CCLC) design, which eliminates these negative effects caused by capacitors and provides a high-dimensional headphone listening environment with sufficient low-frequency range and good response, while conventional headphone amplifier design that employs output stage coupling (or removal of DC signal) inevitably affects the sound due to capacitors, such as sound changes, phase delays, and low-frequency level drops.

More natural headphone listening with Crossfeed
The Crossfeed function provides natural sense of sound source deployment on Headphone listening, while emphasizing presence of the center source to improve lack of center sound and clarifies human voice range such vocal, narration and dialogues. The Crossfeed effect is adjustable with the CROSSFEED knob on the front panel.

MQA full decoding
The AI-303 supports MQA full decoding to enjoy studio master quality sound, from any digital inputs USB-C, HDMI, Coaxial and Optical inputs from MQA streaming and MQA CD from CD player via digital connection.

Various DAC modes with SoC
The AI-303 equips a dedicated SoC for digital processing, and various digital processes including MQA decoding are performed on the SoC. For studio master quality sound, the digital filters required for analog conversion are also processed in the SoC instead of in the D/A converter.
In addition to an FIR filter with short delay and slow roll-off characteristics, an RDOT filter with natural timbre and sound field reproducibility based on analogy completion technology using fluency theory is available for the digital filter, which can be said to be the key to tone. In combination with up-conversion, subtle differences in sound nuance varies by type of filters are realized.

Furthermore, when the RDOT filter is selected with the up-converter turned off, the D/A converter operates as a NOS (Non Over Sampling) D/A converter. in NOS mode, pre-echo and post-echo due to impulse response are suppressed and fluctuations in the time axis direction are eliminated, enabling faithful analog conversion to the input waveform. This enables analog conversion with high fidelity to

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the input waveform.

High-quality analog volume with ladder type attenuator
Unlike conventional volume circuit, the front volume circuit of the AI-303 is designed not to pass the music signal directly.
By reading the value of the volume knob, the circuit reproduces the value with a resistive ladder type attenuator on the circuit board, thereby transmitting the music signal to the amplifier in the shortest path and maintaining the purity of the signal.
The system also achieves low distortion and high S/N even when the volume is attenuated, so that the original clear sound of the sound source is delivered even at low volume levels without loss of sound quality.
In the last, but least, the level difference of the Left and Right channels (gang error) and crosstalk between both channels are minimized.

Asynchronous mode to eliminate USB transmission jitter
When used as a USB DAC, the AI-303 operates in asynchronous mode, where the input signal timing is regulated by the on-board clock, the connection with PC/Laptop and the AI-303 realizes purer digital signal transmission without affecting USB transmission jitters.

“Bulk Pet” digital audio transmission
When sending a huge amount of digital data of high-resolution sound sources through a USB cable, the conventional transmission method causes a large uneven processing load on both the sending PC and the receiving USB DAC, which may result in problems such as sound interruption. However, "Bulk Pet" realizes stable data transfer by averaging the processing load on both sides to transfer a certain amount of data consistently. Since the sound quality also changes as the load status of the PC changes, you are able to select your preferred sound quality from four pre-set transfer modes.

Three-point support stress-less feet
TEAC’s unique three-point support foot "Stress-less Foot" is employed to enable stable installation without being affected by even the slightest distortion of the floor surface. Unlike conventional foot, the Stress-less foot is designed not to fix to the chassis directly, allowing it to vibrate freely to achieve a more natural sound.
The foot, made of machined steel, is not firmly fixed, but is mounted hanging from the bottom, enabling a more natural and rich sound with a sense of sound source deployment similar to that of a conventional pinpoint spike foot.

Bluetooth® multipoint connection for two
The built-in Bluetooth® receiver engages connections with two difference devices at the same time. For example, when playing songs from a smartphone, the AI-303 can switch to another just like input source select without having annoying reconnection steps.

* Simultaneous playback is not supported.

Subwoofer Preout
A Subwoofer Preout is equipped for versatility and future system expansion, and making the AI-303 as a core of your home theater system.

Full metal cabinet design
The entire chassis is composed of aluminum/steel panels that are resistant to incoming aerial noise, thereby suppressing the intrusion of electromagnetic noise emitted from PCs and other devices. 1A clean, noise-free internal environment is achieved even in harsh environments for audio equipment. Furthermore, the 8mm-thick aluminum panels that wrap the metal chassis from both sides prevent torsion and distortion, resulting in a strong and stable build.

Features at a glance

- Connecting from TV with a single HDMI cable
- Supporting DSD512 and PCM 384/32 Hi-Res audio formats
- Wide range of digital inputs, HDMI, USB-C, Coaxial, and Optical
- USB-C for versatile USB connection with PC, Smartphone and Tablet
- Built-in Bluetooth® receiver supporting LDAC, and Qualcomm® aptX™ HD
- USB-C for versatile USB connection with PC, Smartphone and Tablet
- A two pairs of audio inputs for flexibility
- High performance Ncore® power amplifier from Hypex
- 4-pole Headphone output with Ground-separate

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- Coupling Capacitor Less Circuit headphone amplifier
- More natural headphone listening with Crossfeed
- MQA full decoding
- Various DAC modes with SoC
- High-quality analog volume with ladder type attenuator
- Asynchronous mode to eliminate USB transmission jitter
- “Bulk Pet” digital audio transmission
- Three-point support stress-less feet
- Bluetooth® multipoint connection for two
- Subwoofer Preout
- Full metal cabinet design

Included accessories

- Power cord
- Remote control (RC-1337)
- AAA batteries × 2
- Owner's manual
- Warranty

Specs

Product Attributes

EAN:	4907034223862
Manufacturer number:	AI-303-S
Product weight:	3.0 kilograms

Audio Inputs

Optical/Toslink:	1
RCA:	2
Input level & impedance RCA:	10k
USB-C:	1
Wireless:	Bluetooth
HDMI eArc:	1

Amplification

THD at rated ouput (4):	0.03
THD at rated output (8):	0.03
S/N ratio:	100
Speaker impedance:	4-8
Frequency response:	2-70000
A/B output:	false
Channels:	2

Audio Outputs

Power & impedance 3.5mm jack:	220mW + 220mW (32 1kHz THD 1% JEITA)
Subwoofer pre-out:	1

Audio Codecs & Formats

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Bluetooth codecs:	AAC aptX aptX HD LDAC LHDC SBC
Bluetooth version:	4.2
Max. Bluetooth pairings:	8

Energy Management

Power consumption:	63

Dimensions and Weight

Product height:	6.1
Product width:	21.5
Product length:	25.7
Product weight:	2.3
Packsize height:	16
Packsize width:	33.7
Packsize length:	39.3

Control Methods

Controls:	On Device Remote Control

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