

Supplemental to New Product Information (SNPI)

AX-505

Integrated Stereo Amplifier



**Delivering all the dynamics of your music,
a high performance integrated amplifier with balanced input capability**

■ Features at-a-glance

- 115W + 115W of max output power, via a Hypex Ncore power amplifier module tuned by TEAC
- MUSES8920 op-amps for high quality sound
- Independent resistor-ladder type volume control
- Large capacity toroidal-core power transformer and Schottky barrier diodes
- CCLC headphone amplifier circuit for linear sound
- 4-pole headphone jack supporting ground-separate connection
- Dual level meters with a 4-step dimmable backlight
- Passive-cooling for silent operation
- Small footprint and full-metal body for rigidity, stability and elegance



| | | |
|--------------------------------------|------------------------------------------------------------|---------------|
| Brand | TEAC | |
| Series | Reference 505 series | |
| Model | AX-505-B | AX-505-S |
| Color | Black | Silver |
| UPC code | 43774033751 | 43774033768 |
| EAN code | 4907034222452 | 4907034222469 |
| Overall dimensions (W x H x D) NW | 290 x 81.6 x 264 / 11.4" x 3.2" x 10.4" 4.2kg / 9.3 lbs | |
| Carton dimensions (W x H x D) GW | 440 x 190 x 340 / 17.3" x 7.5" x 13.4" 5.5kg / 12.1 lbs | |
| Quantity per Master Carton | 1 | |

■ Product overview

The AX-505 is a stereo integrated amplifier that delivers 115W + 115W of output power but occupies just an A4-size footprint.

In the power amplifier section we've employed a cool-running and energy-efficient option, a TEAC-tuned Ncore module by Hypex from Netherlands. Its clear sound with low distortion and high Signal-to-Noise ratio reproduces Hi-Res audio content with true dynamism and musical verve.

In addition, the AX-505 also provides high quality headphone listening, via an integrated headphone amplifier, one that that supports 'ground separate' connection.

Admittedly more 'eye-candy' than a functional necessity, a pair of eye-catching level meters on the front panel track musical volume levels as they ebb and flow. The user experience is further enhanced by the presence of a well-damped volume control finished with a machined aluminum knob for precise volume adjustment. A Passive-cooling design, for completely silent operation, allows the listener to focus on their music without the distraction of irritating fan noise.

Combine this state-of-the-art stereo integrated amplifier with TEAC's latest standalone DAC unit, the UD-505, or the NT-505 USB DAC/Network Player and you can revel in all the benefits of high-spec, Hi-Res audio, such as DSD512 and PCM 768kHz content.

● Ncore power amplifier by Hypex, specially tuned by TEAC

The AX-505 is based around a high-performance, energy-efficient Hypex Ncore power amplifier module which delivers 115W+ 115W of output power from a small unit. This isn't a standard Ncore module... it has been carefully tuned by TEAC to deliver maximum musical expression from the full breadth of musical repertoire.



ncore
audio power by hypex

● Carefully selected parts, exclusively designed for hi-fi applications

From MUSE op-amps in the analogue section - which fundamentally determines the amplifier's sound quality - to ladder-resistor type volume controls, our engineers have carefully chosen all key components from 'made for hi-fi' ranges, wherever possible.

● XLR balanced inputs

The AX-505 is equipped with a pair of XLR balanced analogue audio inputs, designed to help minimise external noise picked up as an analogue audio signal travels down the interconnect cable.



● CCLC headphone amplifier circuit for maximum linearity

The AX-505 is also equipped with a 4-pole headphone output jack that supports 'ground-separate' connection for excellent channel separation during headphone listening. The CCLC (Coupling Capacitor-less Circuit) headphone amplifier circuit design, meanwhile, eliminates coupling condensers in the circuit's output stage. This reduces sonic colouration during processing, so delivering a more authentic audio signal to your headphones.

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- **A high capacity toroidal-core power transformer**

In the power supply section, the AX-505 employs a high capacity toroidal-core power transformer along with Schottky barrier diodes in the rectifying circuit. The advantage of Schottky barrier diodes over conventional types is that they supply cleaner and more stable current, reducing rectifier noise in every part of the amplifier’s circuitry.

- **Passive-cooling design for silent operation**

It makes no sense for an amplifier to deliver excellent sound to loudspeakers while generating spurious operating noise from a cooling fan. That is why our engineers paid special attention to the AX-505’s circuit and cabinet design, creating a parts layout that would allow for the natural removal of heat, so achieving a compact but powerful amplifier that doesn’t require a cooling fan.

- **Full-metal body for rigidity, stability and elegance**

It’s not just the front panel that’s firmly attached to the robust steel inner chassis – the top and side panels are affixed to it, too. This high standard of construction helps reduce mechanical vibration via heavy parts. A compact design with an A4-sized footprint, the AX-505 fits comfortably into even the smallest of modern spaces.

- **Plenty of inputs for maximum versatility**

On the rear panel, connectors are located with a wide pitch between them, in order to allow the use of interconnects with bulky plugs. Three set of RCA analogue inputs offer you the potential of creating a full-scale hi-fi system, even if you start off using the AX-505 as part of a relatively minimalist desktop PC audio set-up.



The AX-505 is also equipped with a set of wide-pitch, diagonally offset (for easy wiring) screw-type speaker terminals, capable of accommodating high quality AWG8 gauge cables and banana plugs.

- **User-friendly interface for ease of use**

In order to provide a more tactile response, the AX-505 employs a volume control with a machined aluminum knob for precise volume control, while a classic toggle is used to switch the amplifier on and off. The remote control, topped with a luxurious aluminum cover, allows you to adjust volume in 0.5dB steps at moderate volumes.



- **Dual level meters that track the pulse of your music**

A pair of level meters that dance in time as volume levels change help add a visual dimension to your music while enhancing the amplifier’s considerable aesthetic appeal. A 4-step dimmer which can disable the meters or further emphasise movement (by increasing sensitivity by +20dB), can be chosen according to preference.



Even if the level meters are disabled and the backlight is switched off, you can still easily tell if the unit is turned on or off from distance, simply by noting the position of the toggle-type power switch.

■ Key Features

- 115W + 115W of max output power from a Hypex Ncore power amplifier module, tuned by TEAC
- MUSES8920 op-amps for high quality sound
- Independent resistor ladder-type volume controls
- Large capacity toroidal-core power transformer with Schottky barrier diodes
- CCLC headphone amplifier circuit for linear sound
- 1/8inch (3.5mm) 4-pole headphone jack supporting 'ground-separate' connection
- Dual level meter with 4-step dimmable backlight
- Passive-cooling design for silent operation
- Full-metal body for rigidity, stability and elegance
- Compact design with an A4-sized footprint
- XLR balanced analogue input
- Three sets of unbalanced RCA analogue audio inputs with a wide-pitch connector layout
- A set of gold-plated, screw-type speaker terminals compatible with AWG8 cable and banana plugs
- Auto power-saving
- Remote control included
- RoHS compliant

■ Specifications

Analog audio inputs

Balanced

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|-----------------|-----------------------|
| Connector | XLR (2:HOT), x 1 pair |
| Max input level | 3.0Vrms |

Unbalanced

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|-----------------|---------------------------------|
| Connector | RCA Pin x 3 pairs (gold-plated) |
| Max input level | 2.5Vrms |

Audio outputs

Speakers

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|-----------------------------|-------------------------------------------------------------------------|
| Connector | Screw-type x 1 set (gold-plated, compatible with AWG8 and Banana plugs) |
| Supported speaker impedance | 4 to 8 ohms |

Headphone output

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|----------------------------|------------------------------------------------|
| Connector | 1/8" (3.5mm) 4-pole stereo headphone jack x 1 |
| Connection | Ground separate |
| Max output power | 360mW + 360mW (32 ohms loaded, THD 10%, JEITA) |
| Frequency response | 5Hz to 150kHz (-3dB) |
| Signal-to-Noise ratio | 115dB |
| Total harmonic distortion | 0.003% (output power 30mW, 32 ohms loaded) |
| Compatible impedance range | 16 - 600ohms |

Audio performance

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| Rated output power | 115W + 115W (4 ohms, 1kHz, THD 0.8%) |
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| | 70W + 70W (8 ohms, 1kHz, THD 0.8%) |
| Total harmonic distortion | 0.002% (8 ohms, 1kHz, 12.5W, JEITA) |
| Signal-to-Noise ratio | 110dB (8 ohms, 1kHz, IHF-A) |
| Frequency response | 10Hz to 50kHz (-5dB, XLR input 1V, 8 ohms, JEITA) |

General

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|----------------------------------|---------------------------------------------------------------|
| Operating power | AC 120V, 60Hz (US/Canada) AC 220-240V, 50/60Hz (UK/Europe) |
| Power consumption | 56W |
| Models for Europe and USA/Canada | |
| Overall dimensions (W x H x D) | 11 1/2" x 3 1/4" x 10 1/2" (290 x 81.6 x 264mm) |
| Net weight | 9 3/8 lbs. / 4.2 kg |

Included items

- Remote control (RC-1332) x1
- AAA batteries x 2
- AC power cable x1
- Owner's Manual (including Warranty)

■ Rear Panel

