

COPLAND CTA407 Integrated tube amplifier

The amplifier is the interface between your signal sources and loudspeakers – whatever is lost at this point is lost forever and conversely, whatever is introduced is also amplified. Amplifiers are also products for everyday use. Some successfully deviate from the conventional; they remind us of the virtue of striving for excellence through original thinking and a desire to push beyond 'adequate' to acheive the exceptional.

There is a distinctive mood of luxurious puritanism to be found in the appearance of most Copland amplifiers. However, with the CTA407 tube amplifier we have augmented this simplicity, introducing an intelligent complement of electronics to support the audio stages of the amplifier.

The forty LED diodes on the front panel (10 for each tube) are the visual part of the CTA407 tube bias and diagnostic system. And yes, the LEDs can be turned off if you don't want to read the status of your power tubes on the fly.

The CTA407 will automatically adjust for any tube in the 6550/KT88/KT120/KT150 family. The CTA407 servo system is not only a lossless automatisation of the bias adjustment – it is an integrated part of the CTA407 internal high-pass filtering, closely matched to the transfer function of the amplifying circuitry and a vast improvement to the overall fidelity of the amplifier.

The CTA407 employs five line-level inputs including a tape monitor loop and a built-in RIAA phono circuit accommodating moving magnet and moving coil cartridges. It is a direct development of the CTA405 amplifier, an object of desire for audiophiles worldwide since its launch more than a decade ago.

The push-pull output stages consist of a pair of matched power tubes in fixed ultra-linear configuration, providing the low distortion of triodes and the power of tetrode valves.

A pair of 6550 or KT-family tubes in push-pull configuration can deliver more than 100W of audio power. Moderating the power output, the CTA407 delivers 2x50W in high-biased Class A/AB mode. In practice, this means that the amplifier can deliver most of its power in Class A state.

Due to the outstanding quality of the output transformers, superb linearity is achieved before feedback is employed, reducing the requirements for internal lag compensation networks, and ensuring high stability after the 18dB negative feedback loop is closed.

The CTA407 provides an extraordinarily accurate reproduction of music without tending towards listening fatigue, featuring strong dynamics and wide flexibility in the choice of speakers. The vanishingly low perceived noise from the amplifier itself is blissful to hear, especially for owners of high-efficiency speaker systems.

The CTA407 uses a motor-driven volume control and can be fully controlled by the Copland RC102A remote control.

CTA407 Specifications

12BH72pcs.ECC831pcs.Rated power50W / channel 4 / 8 ohms.THD.Less than 0.8 $ imes$ tall levels
Rated power 50W / channel at 4 / 8 ohms.
THD. Less than 0.8 % at all levels
THD. Less than 0.8 % at all levels
Frequency response 10 Hz 150 kHz - 3 dB
Input sensitivity Line 200 mV for rated power
Input sensitivity Phono 2,5 mV for rated power
Input impedance Line 50 K ohms
input impedance Line 50 K offins
Input impedance Phono 47 K ohms
input impedance Phono 47 K onitis
S/N ratio (IHF-A): 100 dB
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Decision 200.14
Power consumption 300 W
Nominal mains voltage 115V or 230V / 240V
Factory set for destination country only
Mains voltage range +/- 12 %
Dimensions (mm.) 435 (W) 215 (H) 390 (D)
Weight 22 kg