



CTA405-A INTEGRATED VALVE AMPLIFIER

The CTA405-A is an integrated valve amplifier with five line-level inputs, including a tape monitor loop, and a built-in RIAA phono circuit accommodating moving magnet and high output moving coil cartridges.

The CTA405 was first launched nearly a decade ago and ever since, it has been an object of desire for audiophiles all around the world.

Now, employing pairs of matched KT120 tubes and a dedicated power supply, enhanced dynamic resolution is obtained, especially when driving speakers of low efficiency.

The current capacity of the power tubes allows the output stage to run in highly biased class A/AB mode.

In order to reduce the increased heat from the huge KT120 valves, a fan running at low speed has been installed inside the amplifier. The noiseless fan is mounted with shock absorbers on a plate made from machined aluminium.

Due to the outstanding performance of the Copland multifilar wound 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 CTA405-A employs motor driven volume control and can be fully controlled by the Copland system remote control unit.

Specifications

CTA405-A

Vacuum Tubes:	Kt120 (4), 2BH7 (2), 6922(2), E83CC (3)
Rated Power:	50W / Channel at 4 / 8 ohms
THD:	Less than 1 % at all Levels
Frequency Response:	10 Hz 100 kHz - 3 dB
Input Sensitivity Line:	350 mV for Rated Power
Input Sensitivity Phono:	3,5 mV for Rated Power
Input Impedance Line:	33 K ohms
Input Impedance Phono:	47 K ohms
S/N Ratio (HF-A):	More than 95 dB
Power Consumption:	250 W
Nominal Mains Voltage:	115V or 230V. Factory set
Mains Voltage Range:	+/- 12 %
Dimensions (mm):	430 (W), 185 (H), 390 (D)
Weight:	27 kg

www.copland.dk



COPLAND



CDA825 CD-PLAYER

As a result of our quest to refine the musical capabilities of the CD-medium and our constant efforts to understand and target the underlying technological requirements, we believe that the introduction of the CDA825 offers a significant improvement of sound reproduction from CD-media.

In order to provide further isolation between the data-extraction parts (drive, servo and error correction) and the reproduction parts (DAC, analog and output filtering); a digital buffer containing two seconds of musical data has been included in the signal path between the drive mechanism and the DAC's. The purpose of this digital buffer is to isolate the drive from the DAC's.

The data, as they are extracted from the drive, are not completely equidistant in time; there are slight variations (jitter) imposed in the time domain. By absorbing these slight time variations at the

input side of the buffer, the memory of the buffer is used as a data-pool from which the extracted data are clocked out towards the DAC's at an absolutely constant rate (completely equidistant in time) - and consequently the jitter in the data is eliminated.

The dynamic resolution of the CDA825 is extraordinary in the sense that musical energies, related to complex amplitude modulations, appear to flow with an unconstrained mobility and acceleration.

Whether it is a small acoustical trio or a large orchestral outburst, the complexity of harmonics and the fidelity of time dimensions remain intact.

Everything remains in place and with exceptional resolution.



Specifications

Frequency Response:	20Hz-20kHz +/- 0,1dB
S/N Ratio (IHF-A curve):	Better than 100dB
Phase Linearity:	Less than 0,2" (20Hz-20kHz)
Dynamic Range:	Better than 100dB
THD:	Less than 0.01%
D/A Converter:	24 bit. Dual Differential
Output Analog:	Single Ended : 2,4 V RMS
Balanced:	4,8V RMS
Output Digital:	S/PDIF (RCA) 0,5V p-p / 75 ohms
Power Consumption:	40 W
Nominal Voltage:	115V or 230V. Factory set
Mains Voltage Range:	+/- 12%
Dimensions (mm):	430 (W), 100 (H), 390 (D)
Weight:	12 kg

CDA825



CTA305 PRE-AMPLIFIER

Intended to be at the centre of a high performance audio system, the CTA305 is a flexible control amplifier which features switching of five line-level inputs, including a tape monitor loop, and a built in RIAA phono circuit accommodating moving magnet and high output moving coil cartridges.

For the listener with a large investment in LPs, this amplifier provides an opportunity to recover more nuances from irreplaceable records. Besides amplifying the signal a few times and providing the facility of switching input sources, the primary purpose of the preamplifier is to control the sound level while matching the impedances between the signal source and the power amplifier.

The amplifying and buffering circuitry of the CTA305 is composed by reliable type 6922 low noise valves. High quality

polypropylene and polystyrene capacitors are used exclusively in the signal path of the CTA305, These capacitors eliminate blurring of sonic details caused by dielectric losses and dynamic changes of capacitors found in conventional components.

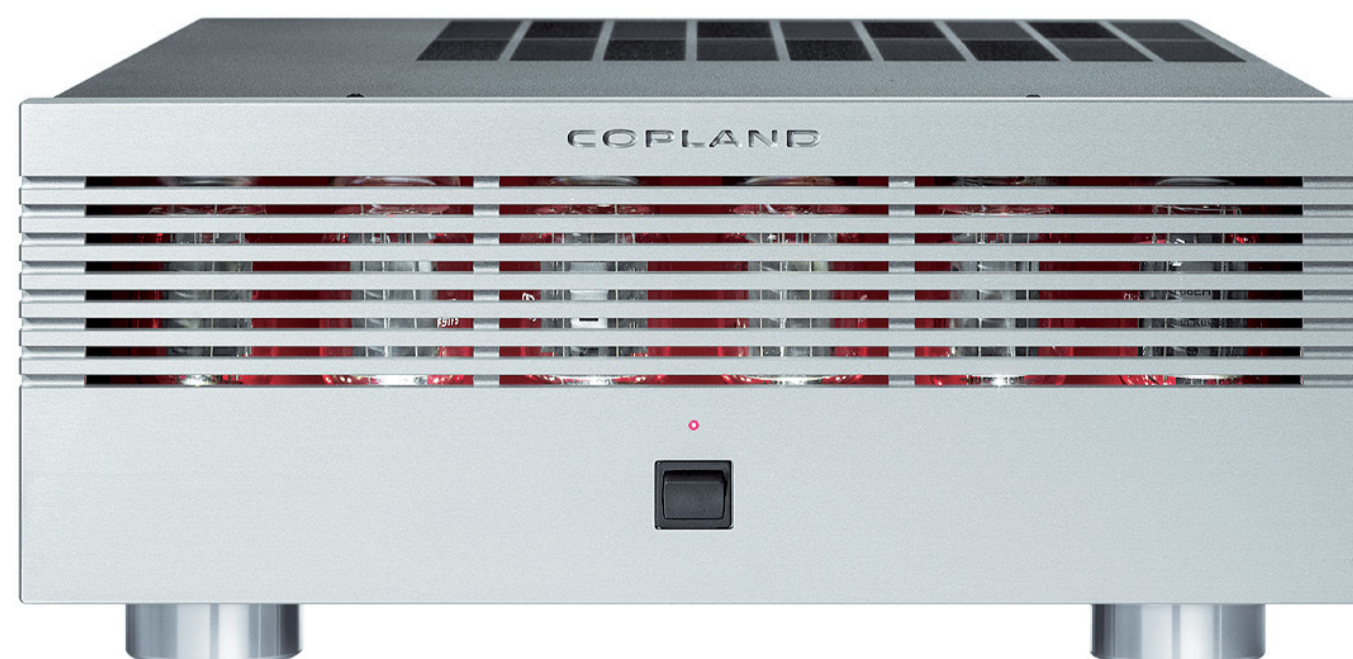
Discrete dc power supply regulators with nearly zero output impedance provide stable plate voltages. By also employing regulated supply voltage to the filaments of the valves, the working conditions for the valves handling the delicate audio signals are completely stable from a dc point of view, unaffected by the fluctuations of the ac-line voltage.

The CTA305 employs motor driven precision volume control and can be fully operated from the Copland remote control unit.

Specifications

Vacuum Tubes:	12AX7 (2), 6922 (2)
Output Voltage:	Rated 2 V, max. 40 V
THD:	Line – less than 0.1 % (output 1 V)
Input Sensitivity:	Phono – 2.7 mV (output 1 V) CD, line – 300 mV (output 1 V)
Input Impedance:	Phono – 47 K ohms, line 50 K ohms
Output Impedance:	Less than 600 ohms
S/N Ratio (IHF-A):	Phono > 80 dB, line > 95 dB
Power Consumption:	40 W
Nominal Mains Voltage:	115 V or 230 V (+/- 12 %)
Dimensions (mm):	430(W), 86(H), 390(D)
Weight:	7 kg

CTA305



CTA506 POWER AMPLIFIER

The CTA506 power plant is based on the KT120 power valves. These valves are a new variant of the legendary 6550 / KT88 power valves and a pair of KT120 tubes in push-pull configuration can deliver incredible quantity of headroom and dynamic.

To prevent excessive loading of the amplifying stages of the amplifier, CTA506 employs efficient buffer circuitries as a method of partitioning the load from the amplifying valves. The buffers are current amplifiers with very low distortion and they do not amplify the signal, they only make it stronger.

In order to isolate power supply fluctuations of the power stage from entering the input and driver stages of the amplifier, the CTA506 employs active valve regulation by the use of two 6550 power valves, one of the valves dedicated to the driver stages and the other regulating the amplifying stages with only a fraction of deviation from the voltage chosen to operate the valves in this application.

The huge thermionic power valves used in this construction are very attractive to look at; we have therefore decided to make them clearly visible by situating the valves behind lateral perforations on the frontpanel, thus creating what we consider to be a stunning design to match the sonic virtues of this amplifier.

Specifications

Vacuum Tubes:	Kt120 (4), 6550 (2), 12BH7 (4), ECC81 (2)
Rated Power:	90W / Channel. 20Hz to 20kHz
THD:	Less than 1% at all Levels
Frequency Response:	5 Hz to 100 kHz - 3 dB
Input Sensitivity:	1,5 V for Rated Power
Input Impedance:	100 K ohms
Overall Neg. Feedback:	17 dB
Output Taps:	16 ohms, 8 ohms, 4 ohms
S/N Ratio (IHF-A):	More than 100 dB
Output Polarity:	Non-inverting
Power Consumption:	600 W
Nominal Mains Voltage:	120V, 230V or 240V. Factory set
Dimensions (mm):	430 (W), 190 (H), 390 (D)

CTA506