## COPLAND

# **CTA405**



**USER GUIDE** 

### Introduction

We would like to take this opportunity to thank you for selecting the CTA405 amplifier. We at Copland wish you many enjoyable hours in the company of fine music. Please read this owners manual before operating the equipment.

## **CAUTION !**

Various regulation agencies require us to bring the following information to your attention. Please read carefully.

WARNING ! To prevent fire or shock hazard, do not expose this unit to rain or moisture.

- ! Check that the transport protection of the output valves has been removed. as described below under "installation".
- ! Check that your supply voltage is the same as indicated
- I Dangerous voltage inside. Do not open the cabinet. There are no user serviceable parts inside. Repairs should be carried out by qualified service personnel only.
- I Ensure that no objects or fluids pass through the ventilation openings. If liquid is spilt into the amplifier, disconnect from the mains and consult a qualified service technician.

#### Installation

Open the carton and remove the amplifier from its plastic bag. The AC-power cord is placed in the bottom of the carton. Before placing the unit in your home read this carefully.

To prevent the output valves from disconnecting and being damaged during transport, a piece of red foam plastic has from the factory been placed between the output tubes and the top cover of the chassis.

The reed foam plastic are clearly visible through the ventilation holes in the top cover. Please make sure that the protective foam plastic has been removed before use of the amplifier.

Do not subject the amplifier to high mechanical vibration, the valves are sensitive to this. The trouble free life of an electronic instrument is greatly extended by providing sufficient ventilation to prevent the build up of high internal temperatures that cause deterioration. Allow enough clearance so that cool air can enter at the top. With adequate ventilation the amplifier can be mounted in any position.

The recommended minimum space is 45 cm deep, 45 cm wide and 30 cm high.

## Input / Outputs

Use shielded cables to connect the signal source to the amplifier input. To minimise the possibility to hum the shielded cables should run parallel to each other or loosely twisted together. Locate the cables away from speaker leads and AC power cords. Selection of the proper gauge wire to connect the loudspeakers reserves the quality of sound reproduction for which the loudspeakers has been designed. If undersize wire is used, resistance is added to the amplifier/loudspeaker combination, which adversely affects the performance. Added resistance causes reduction of the damping characteristics. All connections is made on the back panel of the amplifier.

#### **AC Power**

The amplifier AC power cord is plugged into a 110/120/220/240 volt 50/60 Hz wall outlet. The right voltage is indicated on the back panel just beside to the AC power inlet.

#### **Front Panel**



**1. Source Selector :** Selects the appropriate input signal source.

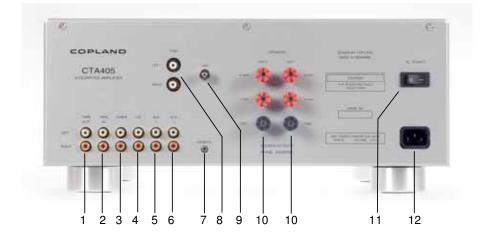
**2. Tape Monitor :** If you have connected a tape recorder or a cassette deck to the "tape in" on the back of the unit, then switching Tape will make it possible to listen to tapes. If your tape recorder has a monitor capability (usually requires a separate playback head), then you can monitor your tape recording as it is being recorded by switching the tape button.

NOTE : When the Tape monitor is engaged it bypasses the Selector Switch. Regardless of witch source the selector is set for, you only hear the tape if the Tape Monitor is accidentally left on, none of the inputs on the Source Selector will operate.

**3 : Power switch :** By pressing this key, the amplifier will switch cyclically between operation and standby mode. **Power** on or **Stand By** will be indicated in the display.

**4 : Audio Level :** To adjust the volume to the desired listening level. Turn the control clockwise to increase the volume.

### **Back Panel**



**1 : Tape out :** The record output jack permits recording directly any signal being reproduced by the amplifier.

**2 : Tape in :** Connect with the playback outputs of the tape recorder or cassette deck.

- **3 : Tuner :** Accepts the signal from a tuner.
- 4: CDP: Input for a CD player.
- 5: AUX 1: Input for any high output device.
- 6: AUX 2: Input for any high output device.
- 7: 12V remote : DC jack for remote on/off operation of CD-player.

8: **Phono/RIAA**: For the input from a Turntable. The amplifier is designed for a magnetic pickup (cartridge), or high output MC (Moving Coil).

9: Ground: Earth connection for any device that needs to be grounded.

**10 : Speaker output terminals :** Signal phase are inverted at the speaker terminals. For correct phase, speaker should therefore be connected in the following way. Connect the leads from the left loudspeaker to the black left and common to the red left. Connect the leads from the right loudspeaker to the black right and common to the red right.

11: AC Power: Mains power. I = ON. O = OFF

12: AC Power: The AC Power Cord is plugged here.

## Maintenance

The amplifier is build for a long lifetime, and no special care needs to be taken apart from what is already described under installation. However the heart of the amplifier is the Valves / Tubes and like a light bulb, they have a limited lifetime and can therefore after a period affect the performance of the amplifier. You should therefore after 4000 playing hours, or if the amplifier changes sound, contact your service agent for replacement of valves.

## **Warranty and Service**

Copland provides a warranty to the first purchaser for a period of one year. Copland usually commissions the Copland agency in the country in which the amplifier was purchased to carry out any warranty work. Following consent from Copland in a particular case, the warranty service may also be claimed at an agency in another country.

## **Specifications**

Output power :	2x50W
Speaker impedance :	4 & 8 ohms
Line input impedance :	50 K ohms
Phono input impedance :	47 K ohms
Line sensitivity :	220 mV
Phono sensitivity :	3 mV
Frequency response :	5 Hz -100kHz -3dB
T.H.D :	Better than 0,4 %
Signal / noise ( IHF-A ) :	Better than 90dB
Phase :	Inverting
Vacuum tubes :	4 pcs.KT88. 2 pcs.12BH7. 3 pcs.E83CC. 2 pcs.6922.
Power consumption :	250 W
Shipping weight :	24 Kg.