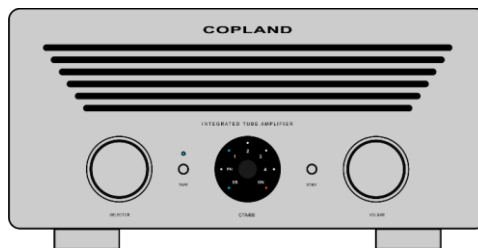


COPLAND

CTA408

USER GUIDE

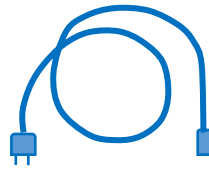


What's in the Box



X 4

POWER TUBES



POWER CORD



REMOTE CONTROL



USER GUIDE



AMPLIFIER

GETTING STARTED

Open the carton and remove the amplifier from its plastic bag. Before placing the unit in your home, read this carefully.

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 your supply voltage is the same as indicated.

! Dangerous voltage inside. Do not open the cabinet without disconnecting the mains power cord.

! There are no user serviceable parts inside. Repairs should be carried out by qualified service personnel only.

! Ensure that no objects or fluids pass through the ventilation openings.
If liquid is spilled into the amplifier, disconnect from the mains and consult a qualified service technician.

Do not subject the amplifier to high mechanical vibration, the tubes are sensitive to this.

Allow adequate clearance so that cool air can enter at the chassis ventilation holes.

Never place the amplifier on a carpet or similar surface that obstructs air circulation through the unit.

The trouble-free life of an amplifier is greatly extended by providing sufficient ventilation to prevent build-up of high internal temperatures that cause deterioration.

The recommended minimum ventilation space is 50 cm wide and 40 cm high.

Installation

The KT150 power tubes have been carefully matched at the factory and the tube bias has been set accordingly.

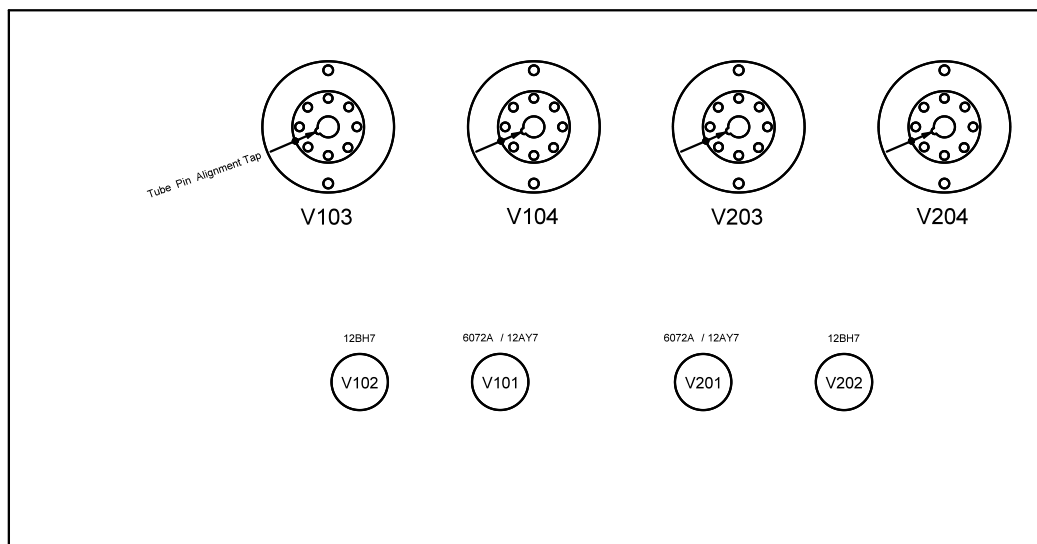
To prevent the output tubes from damage and disconnecting, the power tubes are not installed during transport.

The box of each KT150 tube is marked with the number corresponding to its correct location on the amplifiers main circuit board.

Each tube should be placed in the appropriate socket before use as shown on the drawing below.

Be careful that the KT150 tube pin alignment tap meets the matching groove on the tube socket before pressing the tube down the socket.

Tube positioning



Input / Outputs

Apart from the headphones, all connections are on the back panel of the amplifier.

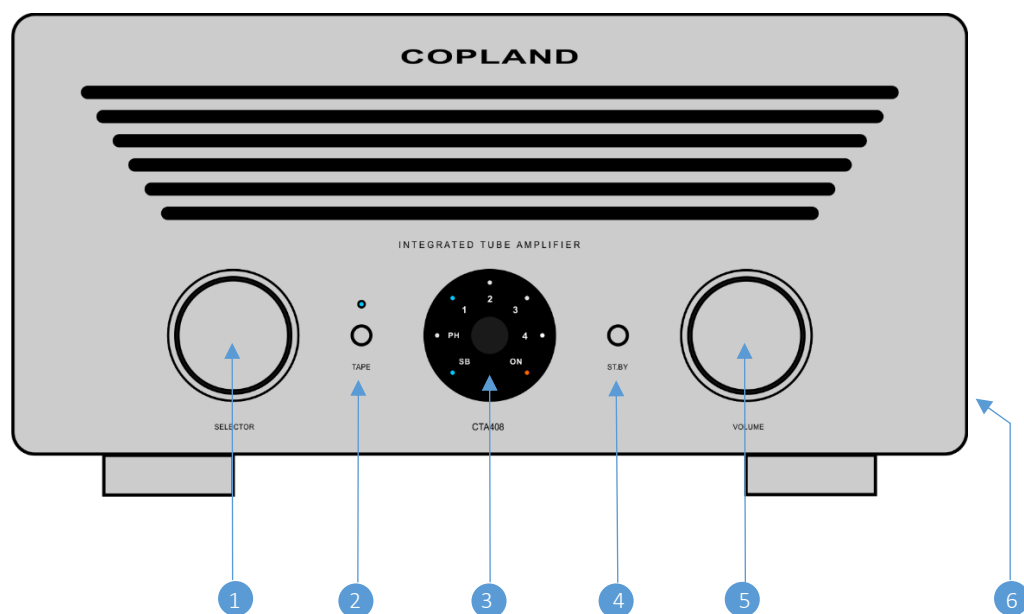
Use shielded cables to connect the signal source to the amplifier input. To minimise the possibility of hum, the shielded cables should run parallel to each other or loosely twisted together. Locate the cables away from speaker leads and AC power cords.

AC Power

The amplifier AC power cord is plugged into an 115V/120V/230V/240Volt 50/60 Hz wall outlet. The right voltage is indicated on the back panel beside to the AC power inlet.

! Check that your supply voltage is the same as indicated.

Front Panel



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

2. Tape Monitor: If you have connected a tape recorder 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), you can monitor your tape recording as it is being recorded by switching the tape button.

The Tape Monitor function can also be useful when adding an Equalizer / Room-correction unit in the signal chain.

A blue lamp right above the tape key indicates Tape Monitor activated.

NOTE: When the Tape Monitor is engaged, it bypasses the Selector Switch. Regardless of which source the selector is set for, you only hear the tape input.

If the Tape Monitor is accidentally left on, none of the inputs on the Source Selector will operate.

3. Display: The display shows the selected source input.

A flashing ‘ON’ lamp indicates that the amplifier is under its 30 seconds start up procedure.

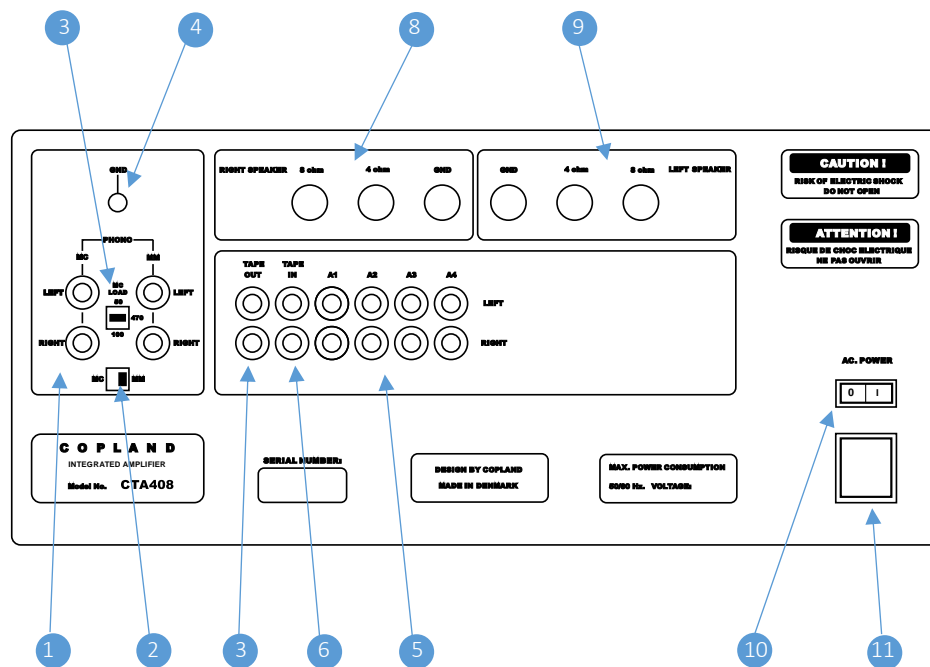
When the ‘ON’ lamp stops flashing, the amplifier sound stages starts operating after another 20 seconds.

4. Power Switch: Pressing this key, the amplifier will switch cyclically between operation and standby mode. Power On and Stand By are indicated in the display.

5. Audio Level: To adjust the volume to the desired listening level, turn the control clockwise to increase the volume.

6. Headphone output terminal.

Back Panel



1. **Phono/RIAA Section:** Accepts input from a Turntable. The amplifier is designed for a MM magnetic pickup (cartridge) or MC (Moving Coil).
2. **Phono Input Selector switch:** MM (magnetic) pickup cartridge or MC (Moving Coil). The switch should only be operated when the amplifier is turned off.
3. **Impedance Load Selector Switch:** Load impedance for MC (Moving Coil) cartridge. The switch should only be operated when the amplifier is turned off.
4. **Ground:** Earth connection for any device that needs to be grounded.
5. **A1, A2, A3, A4:** Standard analog inputs.
6. **Tape In:** Connect with the playback outputs of a tape recorder.
7. **Tape Out:** The record output jack permits recording directly any signal being reproduced by the amplifier.
8. **Speaker Output Terminals:** Right Channel
9. **Speaker Output Terminals:** Left Channel
10. **AC Power:** Mains power. I = ON. O = OFF
11. **AC Power connector with fuse holder:** 115V/120V/230V/240V AC, depending on country.

Maintenance

The CTA408 is built for a long lifetime, and no special care needs to be taken, except from what is already described under installation. However, the heart of the amplifier is the tubes, and like a light bulb, they have a limited lifetime. After a period of time, they may affect the performance of the amplifier. The tubes are operated around 50% of their full nominal power, which considerably increases their life expectancy. The lifetime of the tubes should be at least 4000 hours, assuming that the amplifier is switched on and off a couple of times per day.

Fuse

The CTA408 employs a 20 mm glass fuse circuit breaker inside the IEC-AC socket at the back.
The fuse value is 5A.T (10A.T for USA)

Warranty and Service

Copland provides a warranty to the first purchaser for a period of two 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: 2x75W into 3,5 ohms or 8 ohms load.

Nominal speaker impedance: 4 & 8 ohms

Line input impedance: 50 K ohms

Phono input impedance: 47 K ohms (MM)
50, 100, 470 Ohms (MC)

Line Inputs sensitivity: 250 mV

Phono sensitivity: 3.0 mV (MM)
0.26 mV (MC)

Frequency response: 10 Hz - 80 kHz -3dB

T.H.D: Better than 0.9 %

Signal / noise IHF-A): Better than 90dB

Phase: Non-Inverting

Overall Feedback: 15 dB

Headphone amp. Gain: 17.5 dB
Headphone amp. Out imp. 9 ohms
Headphone amp. T.H.D. Better than 0.05 %
Headphone amp. Freq. resp. 10 Hz – 200 kHz / -3dB

Vacuum tubes: 4 pcs. KT150
2 pcs.12BH7
2 pcs. 6072A / 12AY7

Power consumption: Max.400 W

Dimensions: 435mm (w) x 220mm (H) x 460mm (D)

Shipping weight: 25 Kg.