

AI 1.10
USER MANUAL

Tube Amplifier AI 1.10



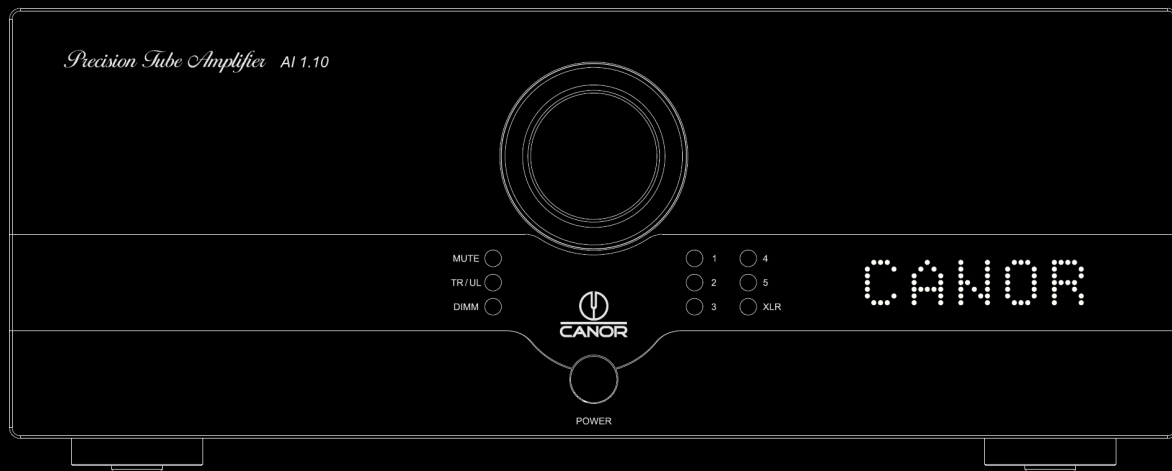
MUTE
TR/UL
DIMM


CANOR



CANOR, spol. s.r.o., Družstevná 39, 080 06 Prešov, Slovakia
canor-audio@canor-audio.com / + 421 51 7710 396 / www.canor-audio.com

CANOR AI 1.10 Tube Integrated Amplifier User Manual



Dear Music Lover,
thank you for purchasing our CANOR AI 1.10 Integrated Tube Amplifier. To preserve and maintain the best characteristics of your amplifier, we recommend you carefully read the following lines.

SAFETY INSTRUCTIONS

Please read before putting the device into operation.

1. Read the instructions – all safety information and instructions should be read before using the amplifier.
2. Keep the user manual – the safety and user instructions manual should be stored for possible later use.
3. Follow the instructions – all safety and user instructions should be followed.
4. Water and moisture – the AI 1.10 amplifier should not be placed near water, for example near bathtubs, swimming pools, kitchen sinks, etc...
5. Accessories – do not use accessories not recommended by the manufacturer.
6. Placement – do not place a device on an unstable pad. The device may fall, which can cause serious injuries to children or adults, as well as damage to the device. Use only pads or racks recommended by the manufacturer or pads sold to dealers with this device. Any placement of the device should be in accordance with the manufacturer's instructions and only accessories recommended by the manufacturer should be used.
7. Ventilation – the unit should be placed the way to ensure proper airflow. That means it is not allowed to place the amplifier on a sofa, or on upholstered furniture. The amplifier may not be covered over when in operation; it would otherwise prevent proper airflow around the vent holes of the amplifier.
8. Heat – amplifier must be placed to avoid the heating effect from heat sources, for example, radiators or stoves, or other heat-producing equipment. The distance from the back wall of the unit may not be less than 20 cm, and 20 cm above the area of AI 1.10 may not be any barrier. Alongside the unit should be ensured 20 cm minimum distance from other objects.
9. Power source – the device must be connected only to a main supply for what it is designed for.
10. Power cord – it is necessary to pay particular attention to a power cord, it must be positioned to avoid setting foot on it and ensure it is protected against mechanical damage.
11. If you do not use the amplifier for a longer period – you should disconnect the power cord from the mains supply, or at least turn off the main power switch located on the back panel.
12. Objects containing liquid – do not place these objects (vases, flowerpots), so that they can fall on the amplifier and, eventually, prevent the liquid from being leaked out on the amplifier.
13. Damages requiring service – equipment should be repaired only by qualified service if:
 - a. The power cord is damaged.
 - b. The device dropped into the water or was poured.
 - c. The device was exposed to rain.
 - d. The device works incorrectly.
 - e. The device fell on the ground or is otherwise mechanically damaged.
14. Repairs – all repairs must be entrusted to a qualified service.
15. General warning – use the device only in accordance with this user guide.

The manufacturer declines any liability should these safety measures not be observed. To help you avoid an electric shock, do not expose the amplifier to rain or moisture!

DELIVERY CONTENT

- Shipping packaging
- CANOR AI 1.10 Tube Integrated Amplifier
- Remote Control (CR2032 battery required)
- Power cord
- Set of precisely selected KT88 tubes
- Textile gloves
- TX10 screwdriver/screws
- CANOR AI 1.10 user manual and tube installation guide

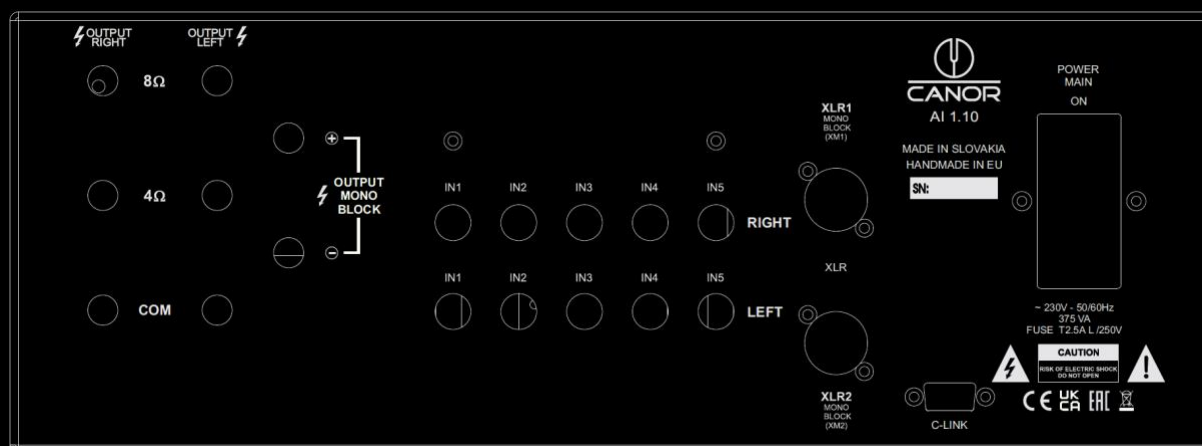
FRONT PANEL

- **VOLUME KNOB** – Amplifier volume control knob.
- **POWER** – Turning on and off the amplifier.
- **MUTE** – An instant muting of the volume. Subsequent pressing results in default volume.
- **TR / UL** – Pressing this button switches between a triode and an ultra-linear mode. Short press shows the selected mode („Triode“ or „U-linear“) on a display. Repeated pressing selects the other mode. The default mode is Triode.
- **DIMM** – Sets the display brightness in steps. From a turned-off display to its maximum brightness. After turning it on, the display is in its middle brightness level. In the state of a turned-off display while operating the device with function keys the display lights up and after a few seconds, the display turns off again.
- **1, 2, 3, 4** – Input selector.
- **XLR** – Input selector for Monoblock mode only.

** It is highly recommended to stop or pause the source of the signal in case you are switching between Triode and Ultra-linear mode.*

BACK PANEL

- **LEFT / RIGHT SPEAKER OUTPUTS** – 4 and 8 Ohm separated terminals.
- **MONOBLOCK OUTPUT** – A pair of terminals only for Monoblock set-up.
- **IN1, IN2, IN3, IN4, IN5** – Left / Right RCA inputs.
- **XLR1, XLR2** – XLR input only for Monoblock set-up.
- **C-LINK** – Communication interface for Monoblock set-up.
- **POWER** – Mains power inlet / mains switch with mains fuse.



REMOTE CONTROL

Do not expose the sensors of your remote control to direct sunlight or to other strong light sources. Remote control operates at an angle of 60 ° to about 5 meters. Aim your remote control at the sensor on the device. There may not be any obstacles in the way between the sensor and remote control. If the appliance is placed behind glass, it may result in shortening the operating distance of a remote control (according to the color and strength of the glass). The keys on the remote control have the same function as the keys on the front panel of the device.

The remote control is equipped with features for the amplifier and the CD player:

Amplifier / Preamplifier features

- **ON / OFF** – Turning on and off the amplifier.
- **DIMM** – Sets the display brightness in steps.
- **◀IN** – Input selector.
- **IN▶** – Input selector.
- **- VOLUME +** – Volume control keys.
- **MUTE** – Instant muting of the volume.

CD Player features

- **ON / OFF** – Turning on and off the amplifier.
- **DIMM** – Sets the display brightness in steps.
- **|<< BACKWARD** – One short press jumps to the beginning of a track. If playback time lasts longer than 5 seconds, further pressing results in jumping one track back. When pressed for a longer time playback moves smoothly backwards.
- **>>| FORWARD** – A short press skips one track forward, when pressed for a longer time, playback moves smoothly forward.
- **▶||** – Resumes and pauses CD playback.
- **■** – Ceases CD playback.
- **INPUT** – Input selector.
- **REPEAT** – Allows you to cyclically opt for single-track repeat, entire disc repeat, or disable repeat.



BASIC FUNCTION OF REPRODUCTION

Plug the power cord in AI 1.10. Turn on the AI 1.10 with the Power Main switch, which is located on the back panel. When you turn on the main switch, the AI 1.10 will set into standby mode - the red LED on the front panel lights up. After pressing the Power button (on the front panel or the remote control) controlled turning-on sequence gets initiated, which consists of preheating the tubes, thereby extending their life span. The cooling cycle is carried out when the unit is turned off, if the main switch on the back panel is not turned off, i.e. after turning off via the button on the front panel, or remote control, and a 45-second countdown to cooling without indication begins. If you turn on the unit at this time, the cooling will continue and will be indicated by a flashing red LED. When the cooling cycle is over the main toroidal transformer gets connected (the CANOR logo lights up), and then the slow start-up of voltage begins. This cycle lasts 45 seconds and then the red LED stops flashing, and an output relay connects the signal to the last selected input if the main power supply does not get disconnected.

During the first turning on or disconnecting of the main power supply IN1 input gets preselected and the volume level is set to -44dB. Volume is being set in 63 steps by 1dB. The highest volume is 0dB, the lowest being -63 dB. Another step is MUTE. You can control the volume with a big control knob on the front panel. The volume is being controlled by a relay attenuator with an accuracy of concurrence better than 0.05dB. You can connect both 4- and 8-Ohm loudspeakers. The amplifier has separated terminals for each type.

MONOBLOCK MODE

As the amplifier has all its basic functions controlled electronically, we have capitalized on this advantage and adjusted amplifier control the way in order to be able to use a stereo amplifier as a monoblock. We therefore developed a special protocol and a C-link communication interface.

This solution benefits from a great advantage, hence the monoblocks do not need a control preamplifier and AI 1.10 can thus be used as an integrated stereo amplifier and as a monoblock. Attenuators ensure absolute channel concurrence. Two AI 1.10 get connected by a data cable via a C-link bus and at this moment one amplifier becomes a MASTER and the other one a SLAVE. The MASTER amplifier then takes over the entire control of both amplifiers synchronous-wise. SLAVE amplifier has all the control elements turned off.

Interconnecting two AI 1.10 amplifiers by a data cable must be carried out when both amplifiers are turned off!! Caution! Make all connections only if the device is disconnected from the mains!

SPECIFICATIONS

Stereo output power	2 x 40 W / 4, 8 Ohm – Ultralinear 2 x 20 W / 4, 8 Ohm – Triode
Monoblock output power	1 x 80 W / 8 Ohm – Ultralinear 1 x 40 W / 8 Ohm – Triode
Input sensitivity:	500mV
Frequency range	10 – 50 000 Hz - 0,5 dB / 5 W
Input impedance	30 kOhm
Stereo Inputs	5 x RCA
Monoblock Inputs	2 x XLR
Total Harmonic Distortion	< 0,05 % / 1 kHz, 5 W
THD Monoblock	< 0,008 % / 1 kHz, 5 W
Signal-to-noise ratio	> 95 dB
Signal-to-noise ration monoblock	> 100dB
Tube Complement	1 x 12AX7, 2 x 12AT7, 4 x KT88
Power	230 V / 50 Hz / 375 VA
Dimensions (W x H x D)	435 x 170 x 485 mm
Weight (net)	26 kg

CAUTION!

The Waste Electrical and Electronic Equipment Directive Regulation of the European Union 2002 / 96 / EC governs the issue of separate waste collection.

This device may not be disposed of in unsorted municipal waste. Devolve the appliance into a collection center for recycling and disposal of electrical and electronic equipment waste. Correct disposal of waste does not cause negative impacts on the environment and human health. You will thus contribute to the protection of the environment.

EUROPEAN COMMUNITY DIRECTIVES

This product is designed and manufactured to comply with existing laws of the European Community. This product is certified by a testing laboratory and bears the CE mark.

GUARANTEE CONDITIONS

Your CANOR AI 1.10 power tube amplifier is guaranteed against any defect in materials and workmanship for 24 months from the date of purchase except for audio vacuum tubes that are covered by warranty for three months.

The warranty only applies if an original proof of purchase and acknowledged certificate of warranty can be furnished. The warranty covers defects in materials and labour but does not cover misuse, unauthorized modifications, and external causes such as acts of nature.



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