

CYENNE
AUDIO

Contralto

High performance class-A headphone amplifier

USER'S MANUAL

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1

SAFETY



Caution

This symbol indicates care should be taken otherwise damage occurs



Warning

This symbol indicates danger for fire and potentially fatal injury

There is risk of fire and lethal electric shock when mishandled. Read carefully for safe use.

- a. Place the device in a clean and dry room.
- b. Only use indoors, the equipment is not waterproof.
- c. Do not use near to water, e.g. in a bathroom, swimming pool, moist basement etc.
- d. Don't install in place hotter than 40 degrees Celsius, such as a kitchen, boiler room etc.
- e. Power only from standard mains voltage, see backside label on product for correct voltage.
- f. This equipment needs to be grounded with a safety earth from a 3 pin wall outlet. Do not interrupt the safety earth connection (e.g. to solve ground loop problems).
- g. Place equipment on a stable surface in such way it doesn't fall and cause injuries.
- h. Route the cables so people will not accidentally step on them and make the equipment tip over.
- i. Route the power cord in a way it cannot be worn out, gets pinched, gets walked over, to avoid damage to the power cord.
- j. Handle the power cord with care. Unplug by holding the plug, never pull the wire.
- k. Unplug the equipment immediately if the power cord looks damaged, the equipment doesn't work properly, has become wet or has been dropped, looks damaged. Contact a qualified service technician for help before using the equipment again.
- l. Do not remove the cover, modify or disassemble the equipment.
- m. Unplug the equipment when not in use for a long period of time and during severe storms.
- n. To clean, use soft, damp, cloth; do not spray anything on the equipment or use aggressive agents like benzene, thinner, insect spray as this will damage the casing finish and might cause fire.
- o. Don't place objects filled with liquids such as vases near the equipment.
- p. Please disconnect your system from the mains before attempting to clean your unit.



CAUTION:
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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DESCRIPTION

The Contralto is an advanced headphone amplifier designed to drive a large variety of headphones. There is a large current reserve to driver low-impedance headphones and high voltage reserve to drive the new category of 300 Ohms headphones. The build-in microprocessor will remember your settings and automatically adjust the internal components for maximum performance.

The Contralto has line-outputs to connect to other amplifiers so conventional amplifiers and speakers or another headphone amp can be used without re-plugging cables.

2.1 Sound inputs

Sound from pre-amps, CD players, media players and turntable preamps can be used.

- A. Right XLR input for balanced signals. XLR is the preferred way to connect the Contralto, especially when the signal cables are longer than about two meters. The balanced inputs are immune for hum and other interference cables can pick up.
- B. Left XLR input.
- C. One set of cinch (RCA) inputs. The red on top is the right channel. This is an un-balanced signal and is the most common source signal for consumer audio.

NB: the Contralto's inputs are switched; they both can be left connected without loss of audio quality.

2.2 Line outputs

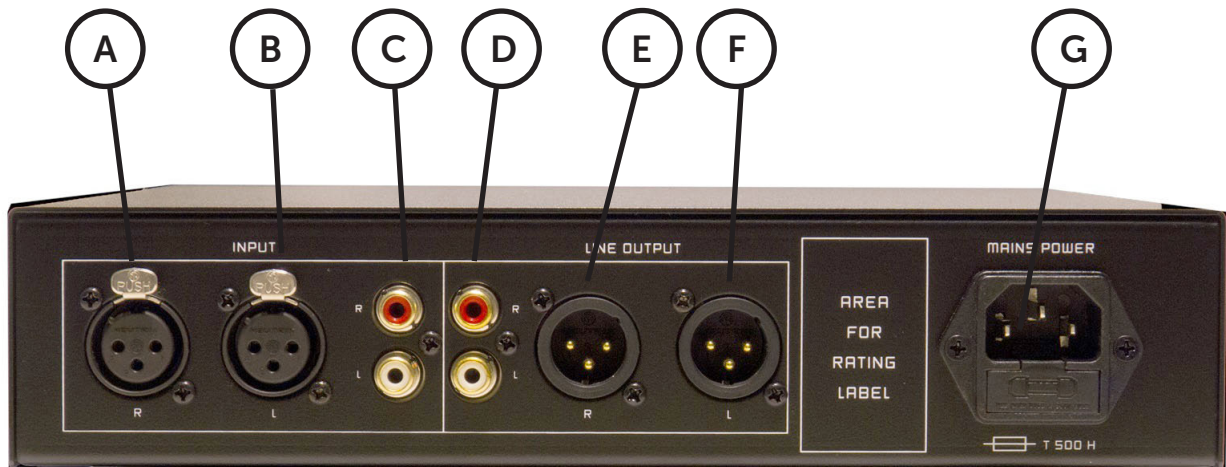
To connect the Contralto to another amplifier if needed. Both outputs follow the volume control

- D. Right XLR output for balanced signal.
- E. Left XLR output.
- F. Cinch (RCA) outputs. Top is right channel.

Note: the line-outputs might give a plop when the unit is turned off. Don't connect the Contralto directly to an end-amplifier without volume control.

2.3 Power

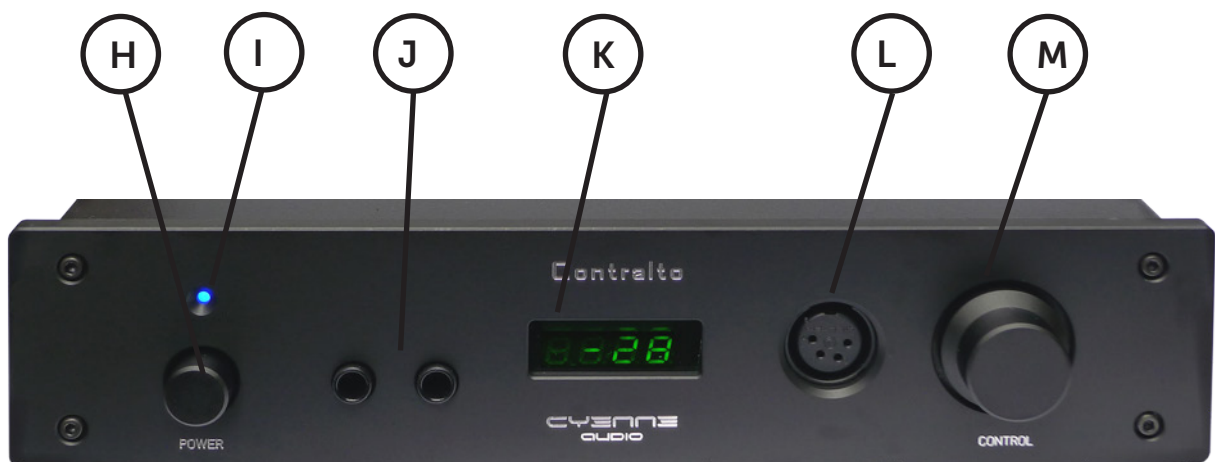
- G. To connect the power cord to the wall outlet. On the lower side, there is a replaceable fuse. This fuse blows when there is a problem with the Contralto or the wrong mains voltage was applied.



2.4 Front panel

The front has 6 main parts:

- H. Power push button to power on and off.
- I. Power indicator. Lights when power button is on.
- J. Dual jack plugs, 2 headphones can be used at the same time
- K. Display for volume and to navigate the menu system.
- L. Balanced headphones plug for balanced cabled headphones
- M. Multi-function-dial. Can work as volume knob or by pushing it, changes settings.



2.5 Display

- A. Volume attenuation level. 0 dB is the loudest with the relay volume option installed. With the electronic VR board option, the maximum is +6 dB (boost).
- B. Menu when the volume knob is pressed and held. See chapter 4 for more information.



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UNPACKING & USE



Review the safety chapter before proceeding

Unpack the product carefully. The box should contain:

- Contralto main unit
- Power cord
- This instruction manual

If anything missing, check the box again carefully. Some content might have shifted during transport and might be on the bottom of the box. If there really is something missing, contact your dealer or us for advice.

3.1 Placement

The Contralto becomes quite hot in normal use and needs ventilation. Don't place it on top of a heat generating device such as a (power) amplifier. You can place it safely on top of a Cyenne Audio DAC. The rubber in the feet might leave a permanent mark on some type of surfaces, don't place directly on top of antique furniture or other expensive surfaces.

3.2 Connect your sources



Make sure the Contralto is switched off before making any connection. Risk of hearing and equipment damage.



Set the volume to -40 dB before playing music for the first time to avoid hearing damage and damage to you headphones.

The Contralto is a powerful headphone amplifier to allow enough headroom for high quality dynamic music but can cause permanent and irreversible hearing damage when played too loud for extended periods of time. Do not use the Contralto to overpower background sounds in a noisy environment as this will likely raise the sound level above a safe level.



There are 2 ways to connect the Contralto to your source, choose one:

- 1) Use the XLR balanced input. This is the preferred way as this offers the best rejection of interference.
- 2) Use the cinch (RCA) inputs. Make sure to use high quality cable and keep the cable length under 2 meters to avoid hum and other interference.

3.3 Connect your headphones



You can connect two headphones at the same time using the two Jack plugs or one balanced set of headphones through the balanced connector. Use what your headphones require.

Don't use 'balanced to jack' converter cables (or the other way around) as they degrade sound quality.

3.4 Connect the power



Connect one side to the Contralto and then plug the other side into the wall outlet.

For your own safety, make sure any replacement cable you like to use (e.g. audiophile power cables) is fully compliant with local safety regulations and has safety earth connection.

The Contralto needs to be used with 3 pin power cables and wall outlets with safety earth connection.



Read the safety hints in chapter one.



The included power cord is not certified to be run through a wall, under a floor, trough conduit, under carpet etc. Consult a certified electrician if there is no power socket nearby.

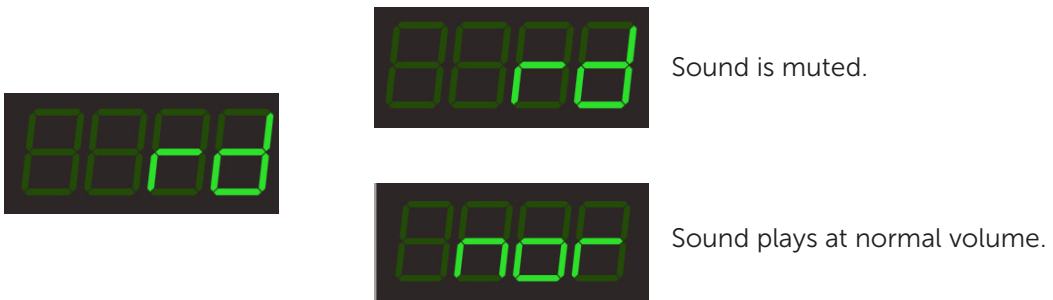
4

THE MENU SYSTEM

Navigating the menu

- 1) Press and hold the volume knob for longer than 2 seconds. While holding, the Contralto shows the menu options until the knob is released.
- 2) Release the knob to select the desired menu item.
- 3) Turn the knob to changed the selected setting.
- 4) Press the knob or wait until the menu disappears to store the setting.

Mute the sound by briefly pressing the knob. Note: RD stands for ReDuced (volume)



Set the input where the source is connected to



Change headphone sensitivity (maximum output voltage).



High output level selected for 150 Ohm or higher headphones. The full output voltage is available.



Normal range of output level selected from 32 Ohms to 150 Ohms. Default setting.



Setting for very sensitive headphones and earbuds.

Set the line-output mode to variable or fixed level. This setting can only be changed when using the electronic VR board option



Line-output level is fixed.

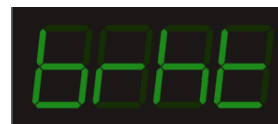


Line-output level follows volume control setting.

Changing display and power LED brightness



Display brightness higher.



Display brightness lower.

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RECYCLING

Recycling information

This product's packaging materials are recyclable and can be reused. Please dispose of any materials in accordance with the local recycling regulations.

When discarding the unit, comply with local rules or regulations.

Batteries should never be thrown away or incinerated but disposed of in accordance with the local regulations concerning chemical waste.

For EU customers: This product and the accessories packed together constitute the applicable product according to the WEEE directive except batteries.

This product is RoHS 2014 compliant and lead free.



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TROUBLE SHOOTING

- 1) No power. Power LED is off
 - a. Try pushing the power switch again.
 - b. Check if the power cord is firmly fit.
 - c. Try another wall outlet.
 - d. Check / replace fuse on backside (this is rare). Please replace the fuse with the value and type specified (H 500 T).

- 2) No sound
 - a. No input signal, check source, cables.
 - b. Input cable was inserted into the wrong plug on source. Like inserted into video output or a digital audio outputs of the DVD player.
 - c. Source is powered off, check if source is on.
 - d. Wrong input selected, select correct input.
 - e. Volume level too low. Increase the volume level till -20 dB.
 - f. Headphones plug not fully inserted, push the plug in.
 - g. Source is not playing anything, start playback.

- 3) Sound unexpectedly too loud or too soft.
 - a. Set the headphones sensitivity, see chapter 4.
 - b. Check if source has volume control. If it has, set it to the maximum un-distorted level.
 - c. If the source is a Cyenne Audio DAC, set the DAC's volume to 0 dB.

- 4) There is a buzz or hum in the sound. Probably due to ground loop.
 - a. Connect the Contralto, the sources and the amplifier to the same power strip.
 - b. Check if cables are connected properly and not half inserted etc.
 - c. Your setup includes a TV, many TV's are grounded trough the aerial or cable connection.
 - d. Disconnect the TV to test. If hum is gone now, ask your dealer for a antenna isolation transformer.
 - e. Use the balanced XLR inputs instead of cinch.

- 5) Display shows unusual characters, doesn't respond.
 - a. Power had brown-out or other large disturbance. Switch power off and on using the power knob.
 - b. Local wall outlet voltage is unstable or wrong voltage. Try other wall outlet.
 - c. If the display shows "----" then the unit is overheated. Switch off and install it in a cooler place.
If this problem persists, contact your dealer for service.

More information is available at http://www.cyenne-audio.com/en/7_support

If none of the above solves your problem or you still have questions, contact your dealer.

Declaration of conformity

We, the manufacturer / importer,

Cyenne Audio Co. Ltd.

Declare that the product

Kind of product: Audio Amplifier for headphones

Type designation: Contralto

Is in compliance with the essential requirements and other relevant provisions of the following directives:

RoHS Directive (2011/65/EU)

EMC Directive (2004/108/EC)

Low Voltage Directive (2006/95/EC)

ErP Directive (2009/125/EC)

The product is compatible with the following norms / standards:

EN 55013 (2001+ A1:2003+ A2:2006)

EN 55020 (2007+ A11:2011)

EN 61000-3-3 (2008)

IEC 61000-4-2 (2008)

IEC 61000-4-4 (2004+ A1:2010)

EN 60065 (2002+ A1:2006+ A11:2008+ A2:2010+ A12:2011)

EN 50564 (2011)

CE mark was first applied in: 2015

Intended use: indoor

Importer for the EU: Unique Music, Zwanenburg, info@uniquemusic.nl, +31 (06) 38 27 66 77

Check **www.cyenne-audio.com** for more information.

Specifications

Volume control:

- Attenuation from 0 till –50dB in steps of 1 dB using Omron relays under CPU control.
- Passive design with precision thin film resistors
- Options for other types of volume control, including click free IC volume control module.

Headphones output

- Dual Jack and balanced XLR 4 pin
- Impedance from 32 Ohms till 600 Ohms supported
- Maximum output power of 5000mW
- Maximum output voltage 12 Vrms into 100 Ohms, 10 Vrms into 32 Ohms.
- Selectable headphones drive. Low (+0dB), normal (+6dB), high (+14dB)

Input signal

- Cinch or balanced XLR 3 pin, typical 2 Vrms, max 8 Vrms input voltage
- Impedance 10 kOhm for cinch, 20 kOhm for balanced
- Input select switcher, both sources can be connected at the same time

Line output

- Balanced and un-balanced, 100 Ohm output impedance.
- Line output varies with the volume level
- Output is buffered, no loss of quality when downstream equipment is turned off

Amplifier

- Full discrete, class-A, MOSFET, output impedance 0.5 Ohm
- Distortion better than 0.01% (20 Hz - 20 kHz, THD+N) for closed loop operation
- Noise and hum, better than -110 dB @ 2Vrms output
- Wima, Rubycon and Nichicon capacitors, precision low-noise thin film resistors
- Ordering option: open loop output mode

Various

- Settings memory, memorizes volume, input select, display brightness
- LED display for volume and menu functions
- IR Remote control option
- Adjustable brightness for power LED and LED display
- Environment: relative humidity 10 – 90% non-condensing, temperature limits: 10C– 40C operating, -20C to 80C storage.
- Net weight: 3.2 kg, gross weight: 3.9 kg
- Dimensions: 280 x 60 x 280 mm (excluding protrusions). Same footprint as Cyenne Audio DAC's.
- Power supply: maximum 25 VA, available in 115 VAC and 230 VAC models. All model 50/60 Hz.
- Power cord, user's manual included