

ABSOLARE Hybrid Mono Amplifier

User Manual



ABSOLARE

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1. General Description

The Absolare Hybrid Mono Amplifier is a tube input, solid state output, hybrid design monoblock power amplifier, supplied in matched pairs for stereo amplification. The single ended tube input section is inspired by the Absolare Preamplifier using two 12AU7/ECC82 (or compatible) tubes. The output section is all solid-state.

2. Safety Issues and Warnings

- **Be sure the voltage setting of the unit matches the applied voltage to power input.** Operating voltage is fixed and must only be changed by an authorized service agent.

- **Do not connect unbalanced subwoofer input terminals to speaker outputs!** Absolare Hybrid Mono Amplifier has a balanced output stage. Neither of the speaker output terminals should be connected to ground. Doing so may permanently damage the amplifier. Please consult your dealer about correct subwoofer connection.

- **Do not short circuit the speaker terminals.** The output is protected for short circuits, but speaker damage may occur from electrical pulses when the connectors touch each other.

- **Do not touch tubes while operating.** Tubes are extremely hot devices and contain very high voltages.

- **Do not open bottom covers.** There are no user serviceable parts inside the units..

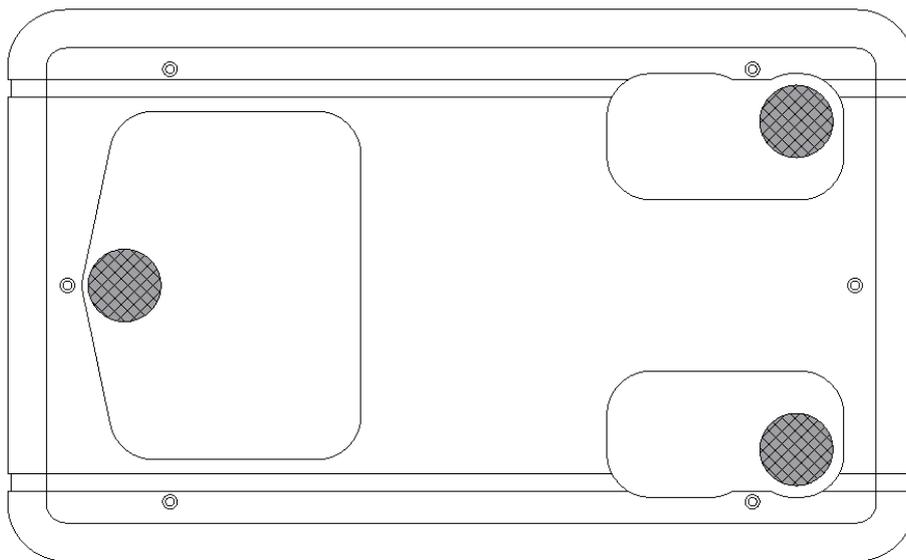
3. Unpacking and Placement

Each monoblock Amplifier is packed in a separate box. After opening the top cover of each box, remove the upper layer of hard foam material. You can then lift each Amplifier from its box cradling them with the cloth that is underneath the chassis. Retain the cloth and all packing materials for future use.

Each Hybrid Mono Amplifier may become very hot during operation. You should always place them on support feet and leave at least 2 inches (5 cm) clearance above each Amplifier to allow sufficient ventilation.

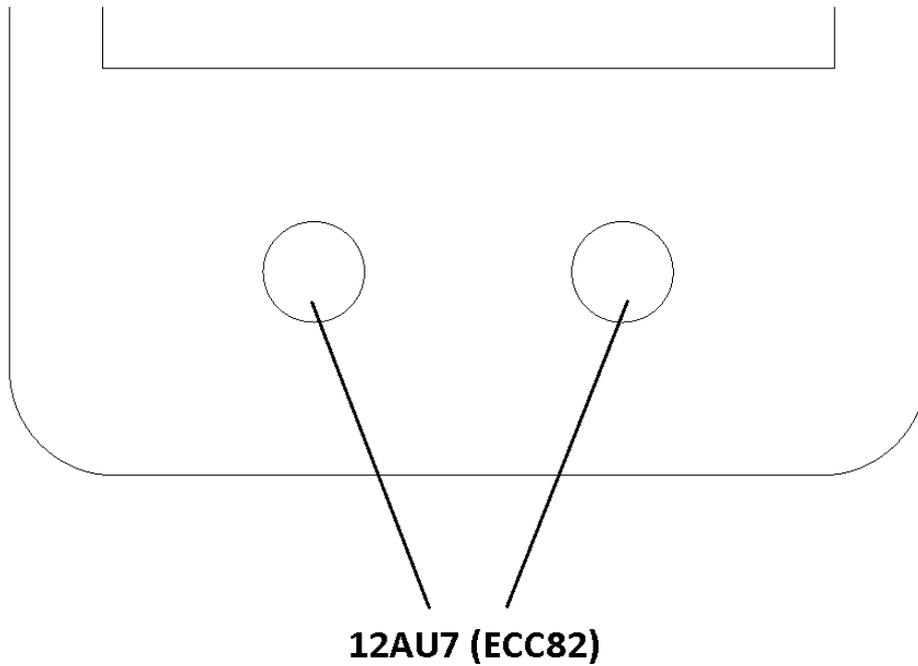
Each Hybrid Mono Amplifier is designed to be supported by separate support feet. They do not have support feet fixed in place. Feet can affect the sound quality significantly. Feet must be positioned underneath each unit in direct contact with the aluminum base plate – not the leather clad MDF covers. There are three areas where the aluminum base plate is exposed through openings in the leather clad MDF bottom plate. You can use either three or four feet.

After each Amplifier has been placed in its final position, it can be lifted in turn to locate the support feet – firstly lifting the back (for 2 feet) and then the front (for 1 or 2 feet) to be placed underneath the chassis. Adjusting their position will also affect the sound to varying degrees, depending on the type of rack, location or interaction with other equipment. For the most situations, the arrangement as shown in the diagram below is a good starting point.

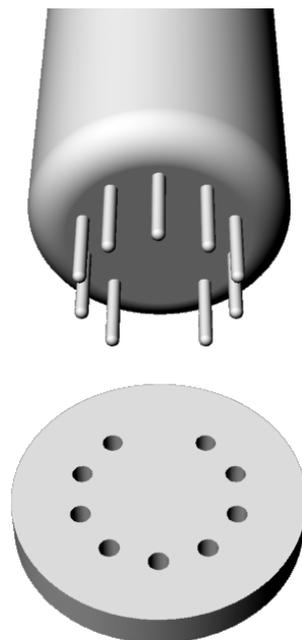


4. Installing the Tubes

There are two 12AU7 (ECC82) twin triode tubes in the input stage. Do not remove the tubes while the unit is operating.



12AU7 / ECC82 tubes have one missing pin acting as a correct positioning key. Align the missing pin with the missing hole in the tube socket while inserting.



5. Connecting the Cables

5.1. Power cables

AC power input is via a standard IEC inlet socket. Operating voltage must only be changed by an authorized service agent.

The quality of the power cable will affect the sound quality accordingly.

5.2. Signal Cables

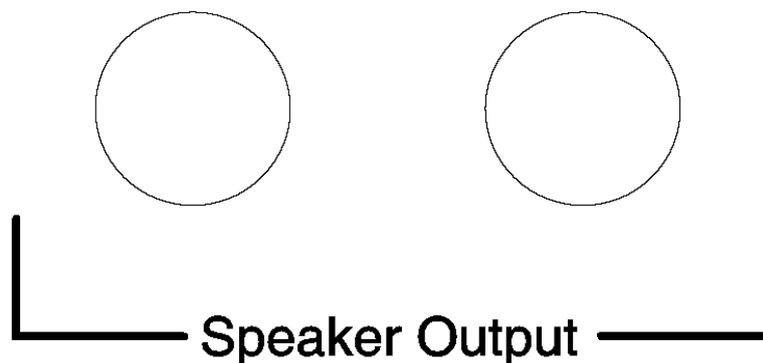
You can connect 1 unbalanced (RCA) and 1 balanced (XLR) source device at the same time. The selector switch is above the input connectors.

5.3. Speaker Cables

Speaker binding posts can handle spade lugs, banana plugs or bare wire. Polyethylene knobs are chosen instead of metal ones to reduce extra conductor mass and eddy currents. Do not overtighten them, the higher friction of the polyethylene should safely secure the cables in place.

You can connect any speaker with 4Ω impedance or above. The Hybrid Mono Amplifier can maintain output specifications into impedance variations down to 2.5Ω .

CAUTION: Negative (black) speaker binding posts are not at ground level electrically. Do not connect them to chassis ground, or to each other in any way.



6. Operating the Unit

6.1. General Operation

Before turning on each Absolare Hybrid Mono Amplifier, be sure that all tubes are installed and all cables are connected securely.

After turning each Amplifier on, the power indicator LED on the front face plate will start to blink. You will not hear any sound until the indicator LED stops blinking to illuminate continuously which indicates all the capacitors are charged and internal voltages are stabilized.

Absolare Hybrid Mono Amplifiers will be ready to operate approx. 40 seconds after turning on the power but attain full performance after 15 to 30 minutes.

There is requirement for matching tubes to optimise performance. You can try different types / brands of 12AU7/ECC82 compatible tubes in left and right tube positions within each Amplifier. Different tubes will impact sound quality. It is important that the final selection of input tubes for one Amplifier are copied in the other Amplifier, so that both left channel and right channels are identical.

6.2. SEL Switch

Selects the active input connection, XLR or RCA connector. The unselected input is terminated with a 620Ω resistor.

6.3. 'PIN 1' Switch

Selects whether the number 1 pin of the XLR connector will be connected to ground (**GND**) or left unconnected (**FLOAT**). It is advised to set this switch to ground (**GND**). Since there is no strict standard on XLR grounding, it might be necessary to use this switch to solve some grounding problems. The XLR's outer connector casing is connected to each Amplifier's chassis.

6.4. GND Switch

Selects whether the input signal ground will be directly connected to the chassis or to a 'lifted' signal ground (a separate clean ground plane inside the amplifier, connected to chassis through a filter). It is advised to set this switch to **SIGNAL**, unless there is a ground related hum in your system.

6.5. GAIN Switch

The tube input stage and solid-state output stage are transformer coupled inside the amplifier. At **LOW** position, the gain switch attenuates the sound level by -6dB through a transformer setting.

7. Troubleshooting and Maintenance

Surface of the unit is dirty	- Clean with a slightly damp cloth.
No power light	- Check AC line voltage - Check the main fuse
Sound level is too high or too low	- Check gain selector
Power light is on, tubes are glowing, but no sound	- Check the input cables, speaker cables and source - Check input selector - Check if tube(s) are defective
Noise / hum in the sound	- Check for the correct grounding option switches on back panel - Check grounding of power, input cables and source

If the problem is persistent, contact your nearest ABSOLARE dealer.

8. Technical Specifications

- Input Sensitivity: 1.3 Volts @ Hi-gain setting, 2.6 Volts @ Low-gain setting
- Tubes: 2 x 12AU7 (ECC82 or compatible)
- Inputs: 1 RCA unbalanced + 1 XLR balanced
- Input impedance: 10 k Ω RCA input, 25 k Ω XLR input
- Output Power: 320 Watts min @ 4 Ω , 200 Watts min @ 8 Ω
- Speaker impedance: 4 – 8 Ω
- Gain: 31 dB @Hi-gain setting, 25 dB @Low-gain setting
- Bandwidth: 20Hz -20kHz within +/- 0.2dB, 15 Hz – 30 kHz +/- 1.0 dB
- Dimensions: 38.2 x 64.8 x 20 cm / 15" x 25.5" x 7.9" (W x D x H), each, excl. feet
- Weight: 34 kg / 75 lbs., net

ABSOLARE USA LLC

40 Pemberton Road, Nashua, New Hampshire, 03063

Phone: +212-229-1842

E-mail: info@absolare.com

ABSOLARE SERVICE EUROPE

Mozartstraat 157, 1962AL Heemskerk, Netherlands

Phone: +31 61 399 3049

E-mail: info@absolare.nl

