

# **ABSOLARE Hybrid Stereo Amplifier**

## **User Manual**



# ABSOLARE

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## 1. General Description

The Absolare Hybrid Stereo Amplifier is a tube input / solid state output hybrid design, dual-mono stereo amplifier. 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 Stereo 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.

- **This Amplifier is not bridgeable.**

- **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 to 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 unit.

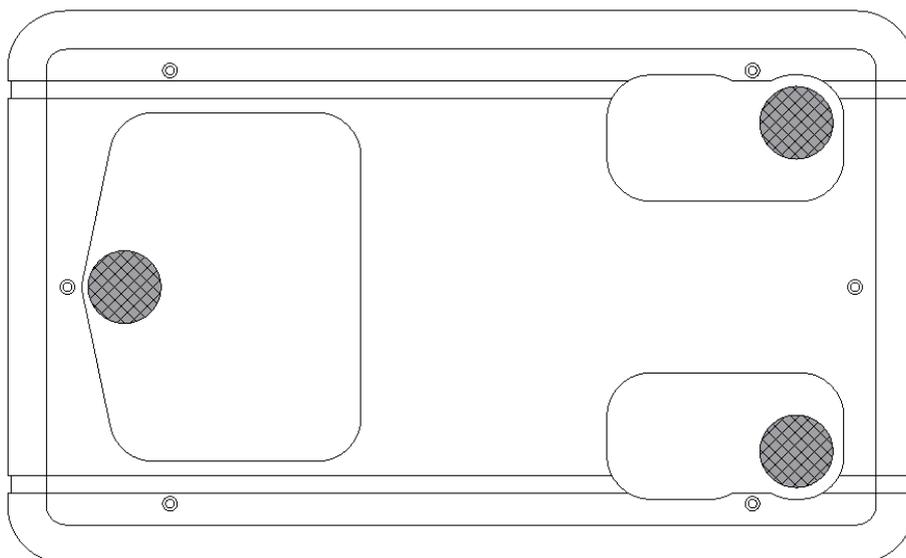
### 3. Unpacking and Placement

After opening the top cover of the box, remove the upper layer of hard foam material. You can then lift the Hybrid Stereo Amplifier from its box cradling it with the cloth that is underneath the chassis. Retain the cloth and all packing materials for future use.

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

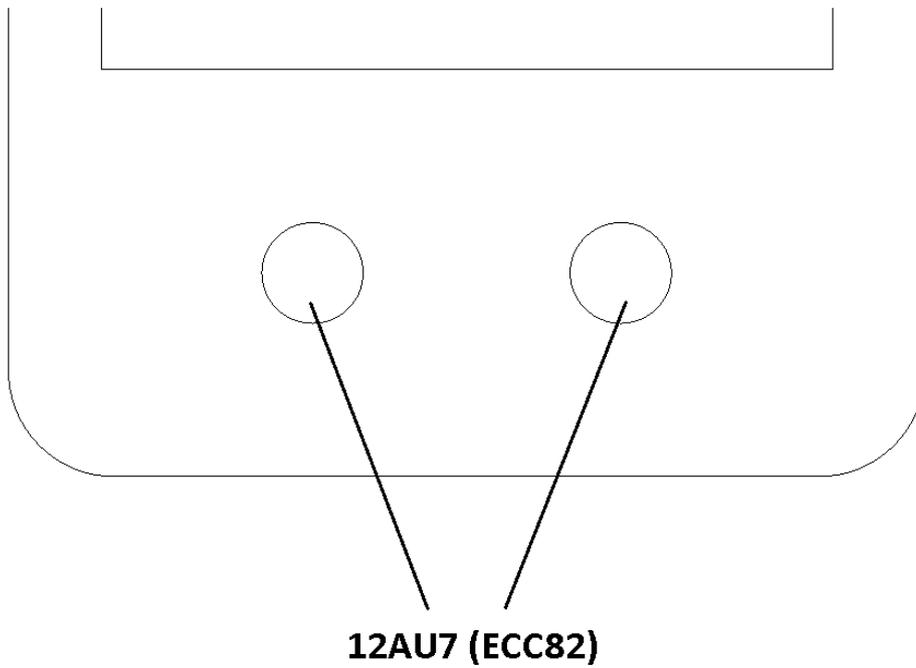
The Hybrid Stereo Amplifier is designed to be supported by separate support feet. It does not have support feet fixed in place. Feet can affect the sound quality significantly. Feet must be positioned underneath the Amplifier in direct contact with the aluminum base plate – not the leather clad MDF covers. 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 the 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.

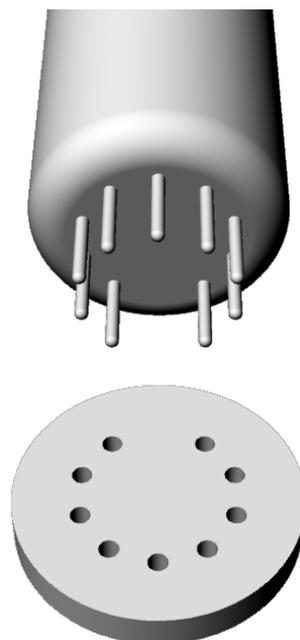


## 4. Installing the Tubes

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

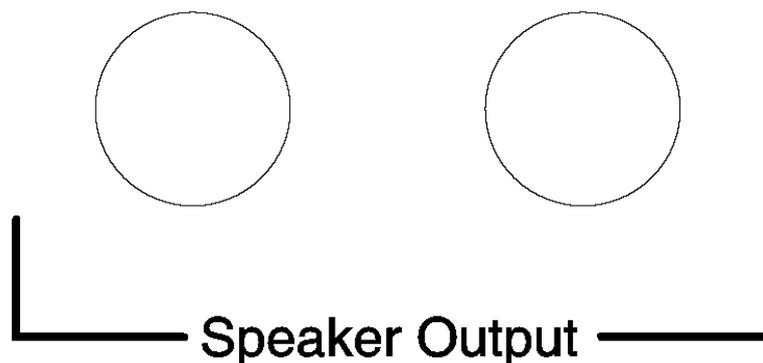
You can connect 1 unbalanced and 1 balanced source devices at the same time. The selector switch is in between the input connectors.

### 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  $4\Omega$  impedance or above. The Hybrid Mono Amplifier can maintain output specifications into impedance variations down to  $2.5\Omega$ .

**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 the Absolare Hybrid Stereo Amplifier, be sure that all tubes are installed and all cables are connected securely.

After turning the 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.

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

There is a built-in thermal protection. If the output devices become too hot, output power is reduced. It is heard as distorted sound.

Hence much of the voltage gain occurs in tube section, overall sound quality and character is very dependent of the tube choice.

There is requirement for matching tubes to optimise performance. You can try different types / brands of tubes in the left and right positions. The 12AU7 is a twin triode tube, it is better to use tubes with closely matched internal triodes.

### 6.2. SEL Switch

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

You may hear a loud pop noise when switching capacitor coupled tube sources due to DC charge/discharge currents.

### 6.3. GAIN Switch

At **LOW** position, gain switch attenuates the sound level by -6dB. This compensates for actual pro-level balanced sources. It can also be used to enable wider volume adjustment range with highly sensitive speakers.

The gain setting affects both channels equally.

## 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, tube heaters 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 grounding of power, input cables and source

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

## 8. Technical Specifications

- Input Sensitivity: 1.0 Volts @ Hi-gain setting, 2.0 Volts @ Low-gain setting
- Tubes: 2 x 12AU7 (ECC82 or compatible)
- Inputs: 1 RCA unbalanced + 1 XLR balanced
- Input impedance: 10 k $\Omega$  RCA input, 20 k $\Omega$  XLR input
- Output Power: 275 Watts @ 4 $\Omega$ , 175 Watts @ 8 $\Omega$
- Speaker impedance: 4 – 8  $\Omega$
- Gain: 29 dB @ Hi-gain setting, 23 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), excl. feet
- Weight: 33 kg / 73 lbs., net

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