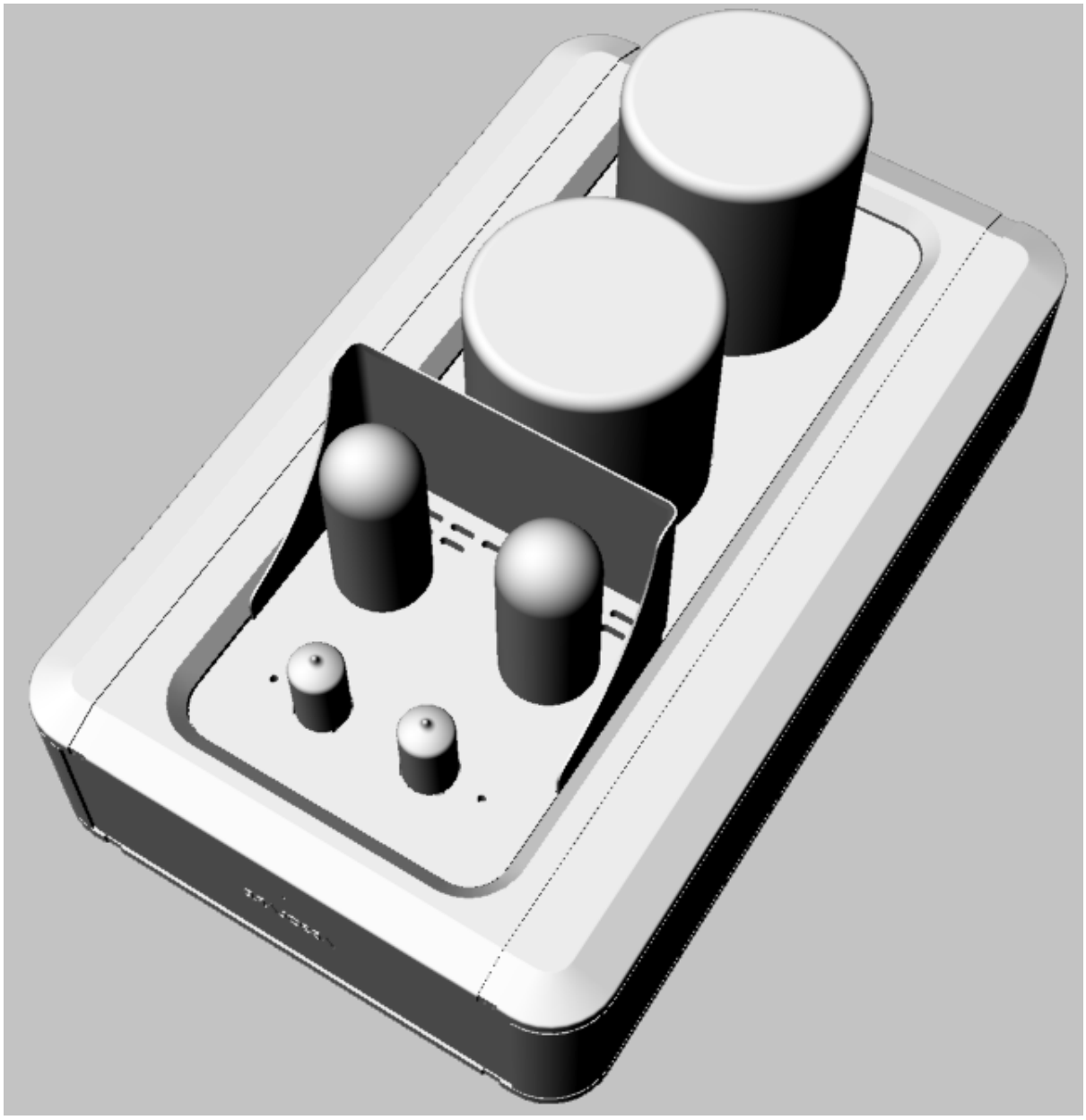
ABSOLARE SET Mono Amplifier

User Manual



Contents

1. General Description

The Absolare SET Mono Amplifier is a Class A, zero feedback, two-piece monoblock Parallel Single Ended Triode stereo amplifier with an all tube, point-to-point construction signal path. Transformer balanced (XLR) and unbalanced (RCA) input versions are available.

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 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.

- **Do not operate the amplifier without an output load.** 4 – 8Ω speaker or an equivalent load must be connected to binding posts when the amplifier is operating.

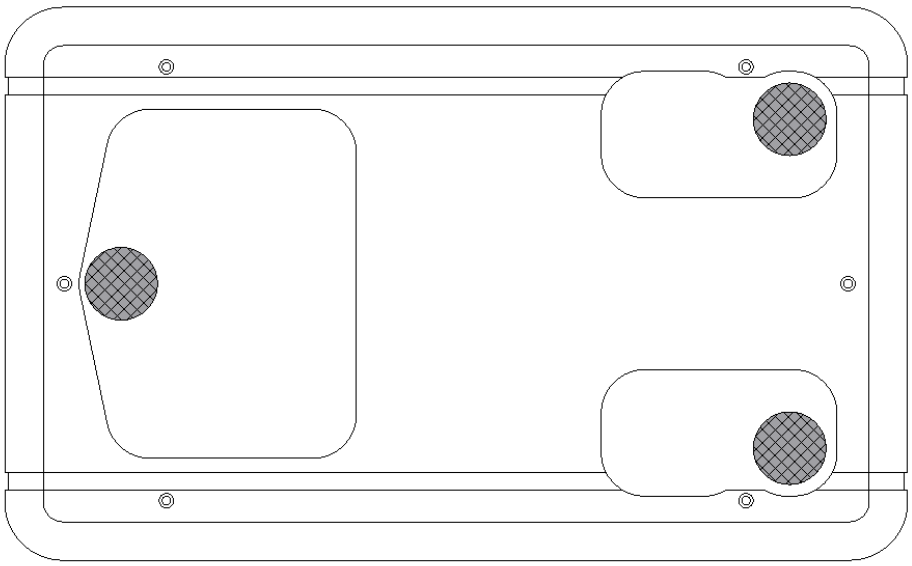
3. Unpacking and Placement

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 SET 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.

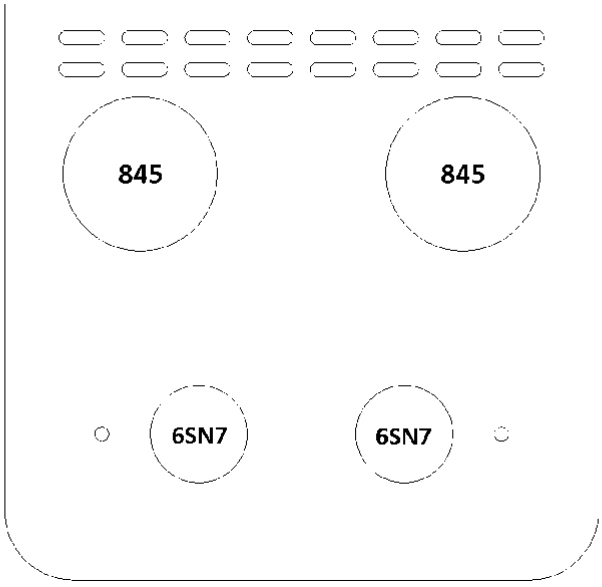
Each SET Mono Amplifier is designed to be supported by separate support feet. They do not have support feet fixed in place. Feet can affect the sound quality significantly. Feet must be positioned underneath each unit in direct contact with the aluminum base plate – not the leather clad MDF covers. There 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.



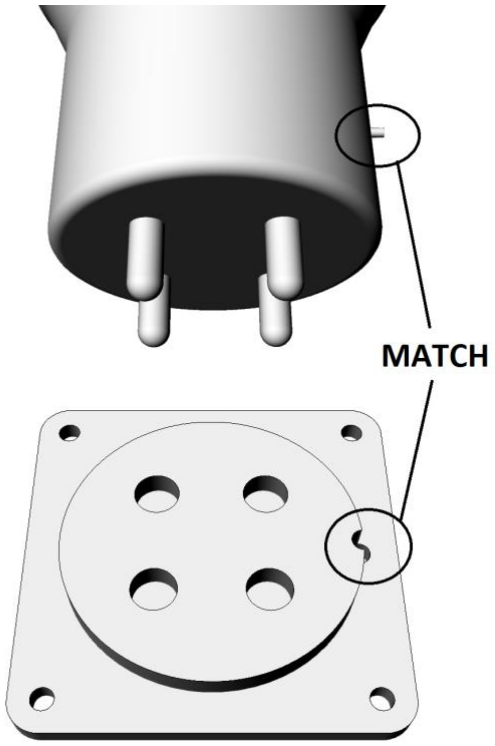
4. Installing the Tubes

There are total of 4 tubes in each monoblock. Placement of tubes is shown below:

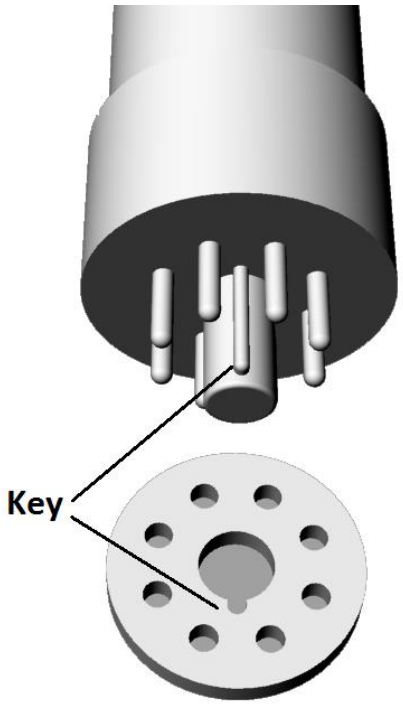


The large 845 output tubes must be installed in correct orientation. The small indicator pin on the lower side of the tube base must be aligned with the small hole on the right-side of the tube socket, as illustrated in the figure below.

CAUTION: Incorrect positioning of 845 tube may seriously damage the amplifier!



6SN7GTB tubes have a small bump in the center as a key for correct positioning. Align it with the corresponding notch in each 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

RCA only version has only one RCA input connector. Balanced (XLR) version has both RCA and XLR input connectors. There is a toggle switch on the rear panel (marked **SEL**) that enables you to select between RCA or XLR. With the gain switch (marked **GAIN**) you can by-pass the input transformer. It is advised to employ input transformer when using the XLR/balanced input. The input transformer will decrease the sound level due to level differences of balanced and unbalanced connection standards, but a true balanced input (with transformer) has the advantage of rejecting the environmental noise induced onto the input cables.

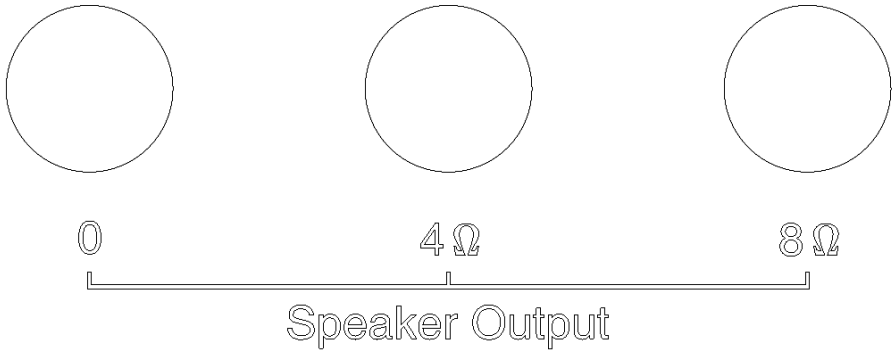
5.3. Speaker Cables

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 overtight them, the higher friction of the polyethylene should safely secure the cables in place.

There are two impedance options for speaker connection. You should use the closest matching output with your speaker manufacturer's recommended value. Since the output is transformer coupled, there is no output power difference when using 4 or 8Ω speakers.

Always use a combination of either 0 + 4Ω, or 0 +8Ω binding posts.

NEVER connect speaker cables in a combination of 4Ω + 8Ω terminals.



6. Operating the Unit

6.1. General Operation

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

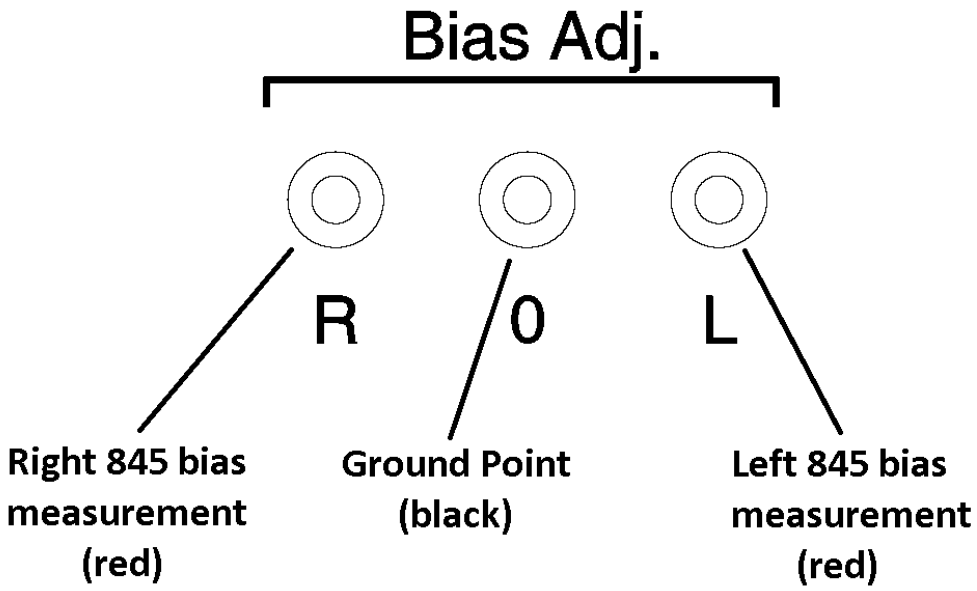
If you have changed 845 output tubes, you should first minimize the bias settings (by rotating the adjustment screws counter-clockwise) before turning-on the amplifiers and then re-adjust the bias settings. Please refer the bias settings section (6.2).

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.

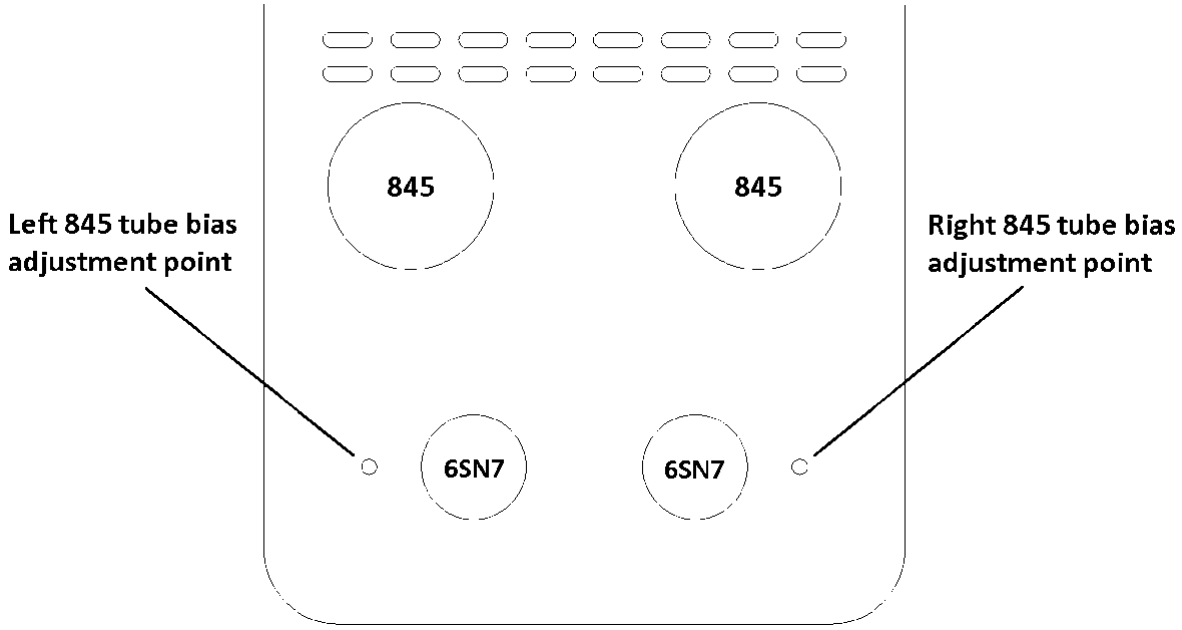
Absolare SET Mono Amplifiers will be ready to operate approx. 40 seconds after turning on the power, but attain full performance in 15 to 30 minutes.

6.2. Setting the Bias Levels

Measurement points for the bias levels are at the back panel:



You have to adjust left and right 845 tube bias levels in each Amplifier separately. Measurement is done via a multimeter at 20V DC setting. Insert black (-) probe into black socket and red (+) probe into the appropriate (left or right) red socket. You should read a value about 15V for each tube. If the readings are different, then adjust the bias level via potentiometers near the 6SN7GTB tubes. A small flat screwdriver will be necessary to access internal bias trim pots.



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
Power light is on but 845 tube heaters are not glowing	- Tube orientation is wrong, turn-off unit immediately and correct the installation - Tube(s) are defective
Power light is on, tube heaters are glowing, but no sound	- Check the input cables, speaker cables and source - Internal fuse for 845 tubes may be blown out. Call your dealer
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

- Zero Feedback, Parallel Single-Ended Triode Architecture
- Point-to-point construction
- Tubes: 2 x 845, 2 x 6SN7GTB (for each unit)
- Output power: 52 Watts
- Input: 1 x RCA (transformer balanced XLR optional)
- Input Sensitivity: 1.25 Volts (balanced input 1.25 / 5 Volts)
- Gain: 21 dB @ 4Ω tap, 24 dB @ 8Ω tap
- Input impedance: 75 kΩ
- Speaker impedance: 4–8Ω
- Bandwidth: 20Hz – 20kHz within +/- 1.0 dB
- Dimensions: 38.2 x 64.8 x 29.7 cm / 15" x 25.5" x 11.7" (W x D x H), excl. feet
- Weight: 42.2 kg / 93 lbs., net (each monoblock)

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