

Aune S17 Pro EVO

Aune S17 Pro EVO Headphone Amp Instruction Manual

Brand: Aune

Model: S17 Pro EVO

1. INTRODUCTION

The Aune S17 Pro EVO is a high-performance headphone amplifier and pre-amplifier designed for audiophiles. It features a fully-discrete, pure Class-A, fully-balanced circuit design, offering exceptional sound quality and powerful output for a wide range of headphones and in-ear monitors (IEMs). This manual provides essential information for setting up, operating, and maintaining your S17 Pro EVO to ensure optimal performance and longevity.

2. KEY FEATURES

- **Twin JFET & High Output Power:** Features Twin JFET input transistors for rich sound and 2 pairs of output transistors per channel (16 total), delivering up to 7.5W to drive all types of headphones and IEMs with ease.
- **Pure Class-A Operation with Dual Current/Gain Levels:** Offers 50mA/100mA per transistor (100mA/200mA per channel quiescent current) for mellow, warm, and smooth audio. Includes low gain for IEMs and high gain for power-hungry headphones.
- **R2R Electronic Volume Chip:** Utilizes a JRC R2R electronic volume chip and dedicated op-amps for 4-way balanced R2R volume control, ensuring high precision, excellent channel balance, wide soundstage, and accurate positioning.
- **Rigorous HiFi Component Selection:** Built with high-quality components such as electrolytic capacitors, ceramic capacitors, organic thin-film capacitors, and communication-grade PCBs for superior sound.
- **Intelligent Thermal Management:** Features 2-color display for current level/temperature and overheat protection. Automatically switches from 100mA Class A to 50mA Class A mode if the device temperature reaches 69°C.
- **Powerful & Rich-Sounding Design:** Incorporates a 50W low-ripple toroidal transformer and dual-power design, separating digital and analog circuits to prevent interference. A 19200µF capacitor array contributes to powerful and rich audio.
- **Aesthetic Tuning:** Sound tuning is based on real instrument sounds and music pieces, resulting in a natural and musical signature.
- **Voltage Requirement:** Designed for 110V voltage. Using excessive voltage will damage the product.

3. PRODUCT OVERVIEW

The Aune S17 Pro EVO is meticulously designed with a focus on both performance and user experience. Below are descriptions of its physical layout and internal components.

3.1 Front Panel



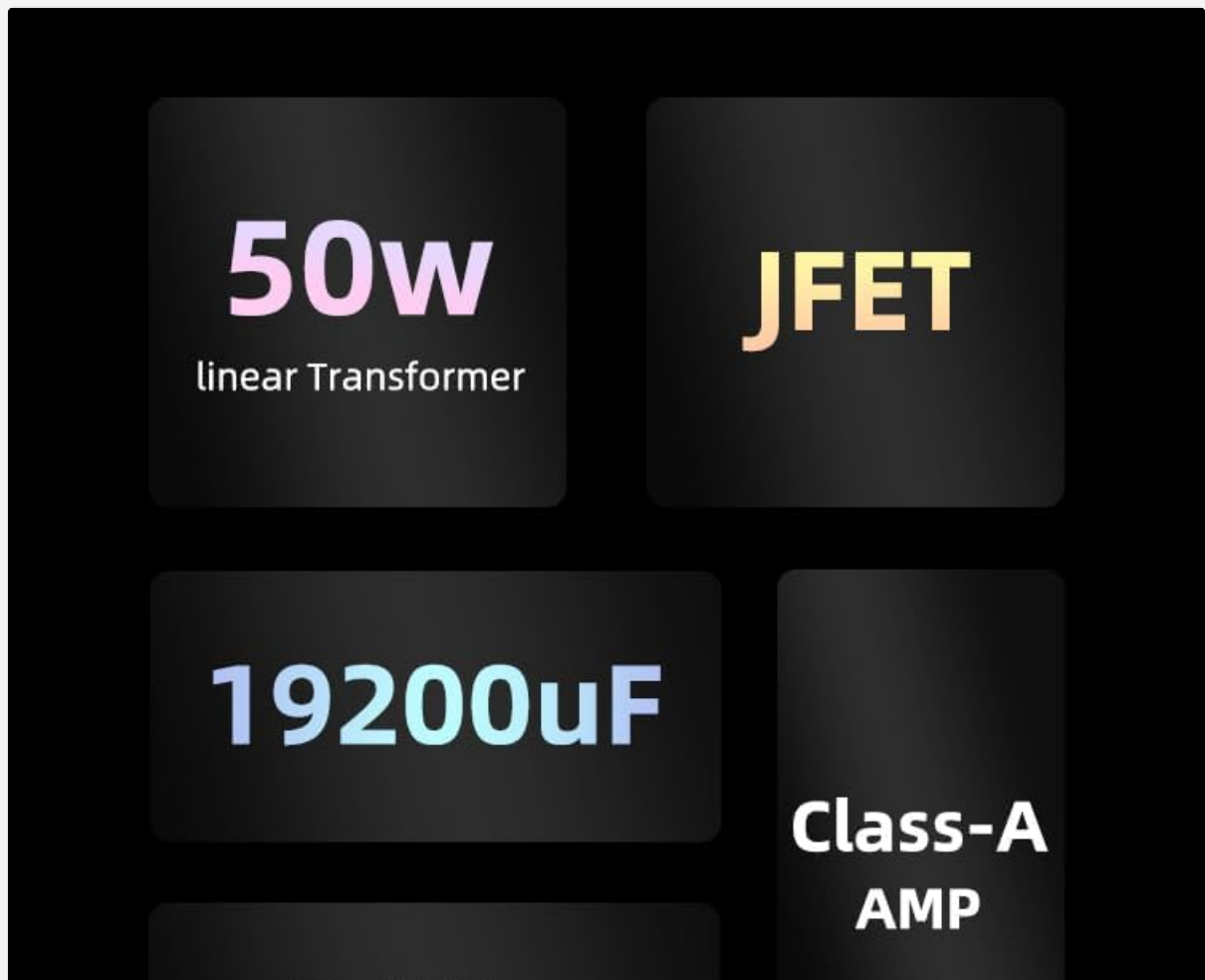
S17Pro VS S17Pro EVO			
Differences	S17 Pro	S17 Pro EVO	Remarks
Total number of device components	635	657	Total number of device components
Switching between the output mode of the headphone amplifier/preamp	NO	YES	Allows independent selection to switch between headphone amplifier output or preamp output
Independent volume adjustment for headphone amplifier/preamp mode	NO	YES	The current volume for headphone amplifier mode and preamp mode can be independently stored
Automatic screen-off	NO	YES	Option to enable or disable the automatic screen-off
			



Image 3.1.1: Front view of the Aune S17 Pro EVO Headphone Amp. This image displays the silver-colored unit with its central display screen, volume knob on the right, and various headphone output jacks on the left.

- **Display Screen:** A central screen shows current settings, volume level, input source, and operating mode.
- **Volume Knob:** A large rotary knob on the right controls the output volume.
- **Headphone Outputs:** Includes 6.35mm, 4.4mm balanced, and XLR 4-pin balanced headphone jacks for versatile connectivity.
- **Input/Output Selection Buttons:** Buttons for selecting input sources and switching between headphone and pre-amp output modes.

3.2 Rear Panel



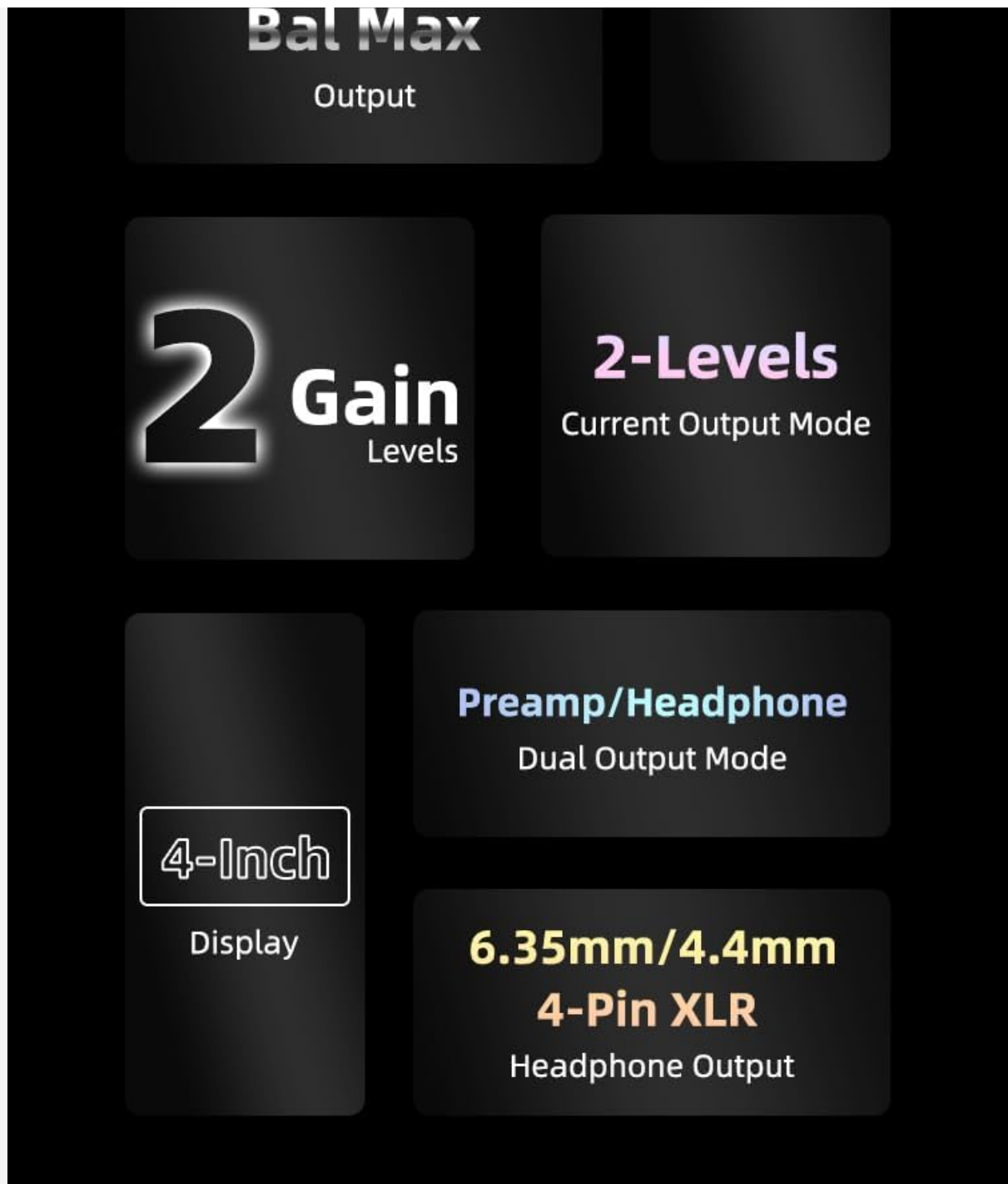


Image 3.2.1: Rear view of the Aune S17 Pro EVO Headphone Amp. This image highlights the comprehensive array of input and output ports, including XLR, RCA, optical, coaxial, and USB connections, along with the power input.

- **Analog Inputs:** XLR and RCA inputs for connecting external audio sources.
- **Digital Inputs:** Optical, Coaxial, and USB inputs for digital audio sources.
- **Preamp Outputs:** XLR and RCA outputs for connecting to power amplifiers or active speakers.
- **Power Input:** AC adapter input (110V only).

3.3 Internal Components

Two Gain Levels Drive Your Headphones and IEMs Well and Properly

The S17 Pro EVO has two gain levels, and has set different output amplitudes. The low gain takes advantage of the class-A amp's feature that the transistors are always working in the linear area, to drive the IEMs well and properly, while the high gain is as high as 7.5W and thus can drive headphones well with big power.

Load	Single-Ended Output	Balanced Output
32Ω	2050mW	7500mW
300Ω	235mW	918mW
600Ω	117mW	459mW
90Ω	765mW	2970mW



Image 3.3.1: Rigorous HiFi Component Selection. This image shows a detailed view of the internal circuit board, highlighting key components such as main filter electrolytic capacitors, Twin JFETs, WIMA decoupling capacitors, FK electrolytic capacitors, and high-quality SMT capacitors, all contributing to the device's audio performance.

The S17 Pro EVO features a robust internal design with carefully selected components to ensure high-fidelity audio reproduction. This includes a 50W low-ripple toroidal transformer, a 19200μF capacitor array, Twin JFET input transistors, and a 3-dimensional cooler structure for stable Class-A operation.

4. SETUP

Follow these steps to set up your Aune S17 Pro EVO.

- 1. Power Connection:** Connect the provided AC adapter to the power input on the rear panel of the S17 Pro EVO. Ensure the power source is 110V to prevent damage.
- 2. Source Connection:**
 - For digital sources (e.g., computer, streamer), connect via USB, Optical, or Coaxial input.
 - For analog sources (e.g., DAC, CD player), connect via XLR or RCA inputs.
- 3. Output Connection:**
 - For headphones, plug your headphones into the desired 6.35mm, 4.4mm balanced, or XLR 4-pin jack on the front panel.
 - For external power amplifiers or active speakers, connect via the XLR or RCA preamp outputs on the rear panel.
- 4. Initial Power On:** Once all connections are secure, turn on the S17 Pro EVO using the power button.

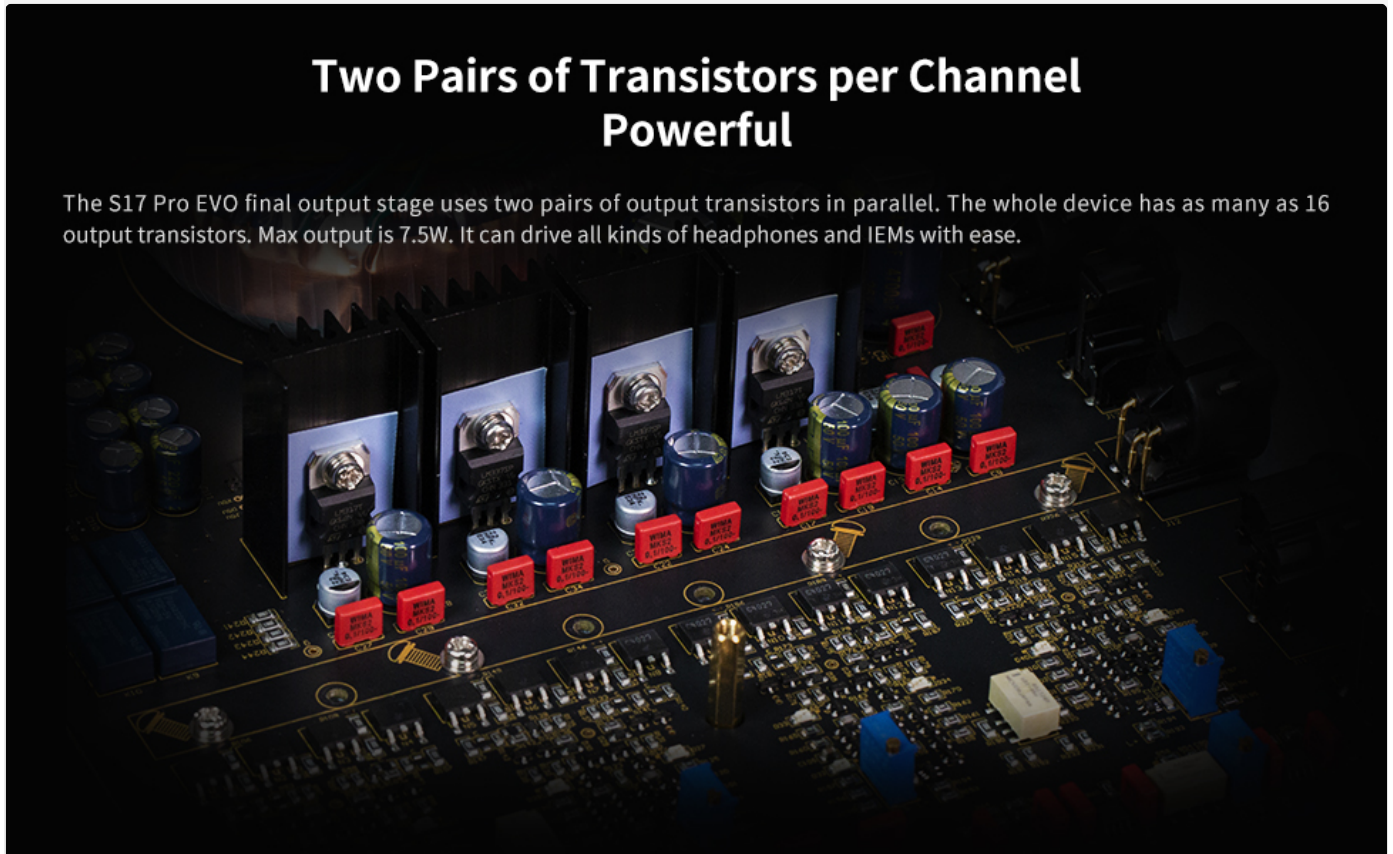
5. OPERATING INSTRUCTIONS

This section details how to operate your Aune S17 Pro EVO.

5.1 Basic Operation

- **Power On/Off:** Press the power button on the front panel to turn the unit on or off.
- **Input Selection:** Use the input selection buttons on the front panel to cycle through available audio sources (USB, Optical, Coaxial, XLR, RCA). The selected input will be displayed on the screen.
- **Volume Control:** Rotate the large volume knob on the right side of the front panel to adjust the output volume. The volume level is shown on the display.
- **Output Mode Selection:** The S17 Pro EVO can function as a headphone amplifier or a pre-amplifier. Use the dedicated button to switch between headphone output and pre-amp output.

5.2 Gain and Current Modes



Two Pairs of Transistors per Channel Powerful

The S17 Pro EVO final output stage uses two pairs of output transistors in parallel. The whole device has as many as 16 output transistors. Max output is 7.5W. It can drive all kinds of headphones and IEMs with ease.

Image 5.2.1: Class-A Current Adjustable Two Levels. This diagram explains the two levels of Class-A current (A-L/A-H) and their benefits for different headphone types, ensuring optimal performance.

- **Gain Levels:** The S17 Pro EVO offers two gain levels.
 - **Low Gain:** Ideal for sensitive IEMs, ensuring they operate within the linear area of the Class-A amplifier.
 - **High Gain:** Provides up to 7.5W of power, suitable for driving demanding headphones with high impedance.
- **Current Modes (50mA/100mA):** The device operates in Class-A mode with adjustable quiescent current.
 - **100mA Mode:** A high current Class A operation mode for maximum performance. Note that this mode may cause a slow temperature rise.
 - **Overheat Protection:** If the device temperature reaches 69°C, the S17 Pro EVO will automatically switch to 50mA Class A current mode to prevent overheating, while still maintaining excellent sound quality.

5.3 Display and UI

R2R Electronic Volume Chip Precise, and More

The S17 Pro EVO uses the R2R electronic volume chip from JRC and the dedicated op-amps to build the 4-ways balanced R2R volume control. High control precision, great channel balance, wide soundstage, accurate positioning.

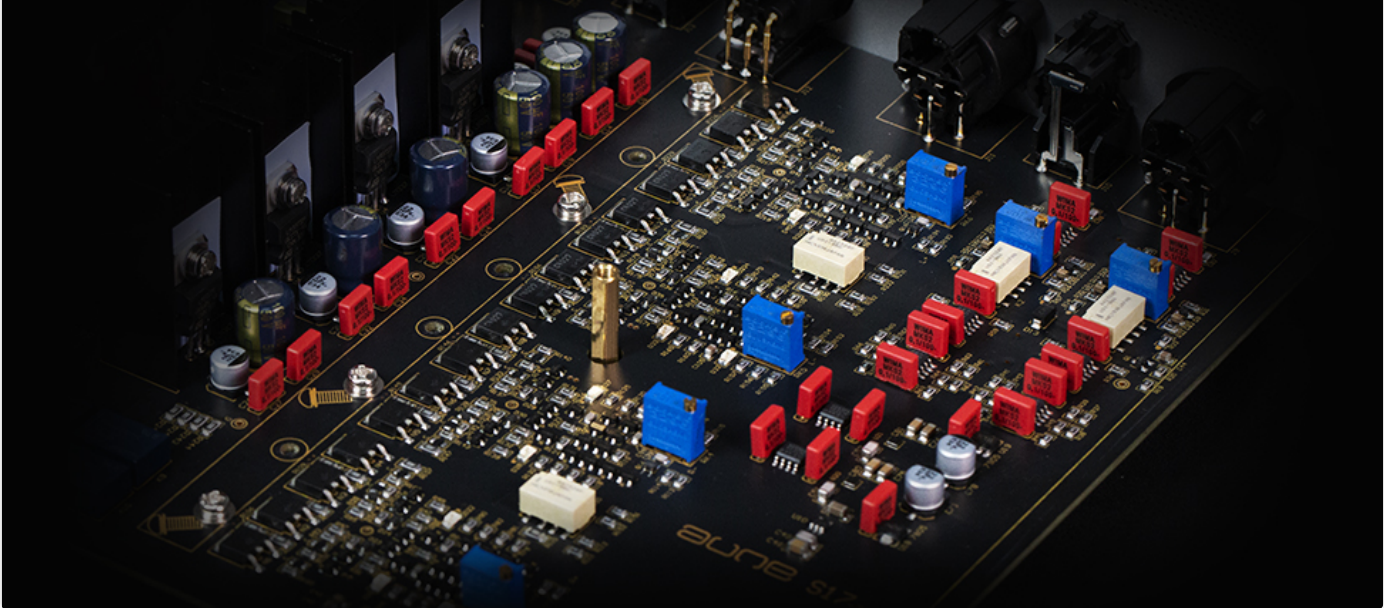


Image 5.3.1: Two Colors to Present Current Level and Temperature. This image shows the S17 Pro EVO's display, indicating current levels (A-L Low Current and A-H High Current) and temperature using different color schemes for clear visual feedback.

The S17 Pro EVO features a user-friendly interface with a clear display. The display uses two colors to indicate the current level and temperature, providing immediate visual feedback on the device's operating status.

5.4 Official Product Video: Aune S9c Pro DAC with Headphone Amp (UI Demonstration)

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Video 5.4.1: This video demonstrates the user interface and basic operations of an Aune DAC/Headphone Amp, including input selection, output mode switching (Line Out/Headphone Out), tuning modes (Standard/Pure), and volume adjustment. While featuring the S9c Pro, the UI elements and operational principles are similar to the S17 Pro EVO, providing a helpful visual guide for users.

6. TECHNICAL SPECIFICATIONS

Feature	Specification
Brand	Aune
Model Name	S17 Pro EVO
Color	Silver
Compatible Devices	Guitar, Keyboard, All (Audio Sources)
Output Wattage	7.5 Watts
Product Dimensions (D x W x H)	14"D x 11"W x 2.76"H
Power Source	AC adapter (110V)

Feature	Specification
Output Channel Quantity	5
Amplifier Type	Solid State, Pure Class-A, Fully-Discrete, Fully Balanced
Connector Type	3.5mm Jack, 6.35mm Jack, Coaxial, RCA, XLR, 4.4mm Balanced
Manufacturer	aune

7. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit. Avoid using liquid cleaners or solvents, as they may damage the finish or internal components.
- **Ventilation:** Ensure the unit has adequate ventilation. Do not block the ventilation holes on the top or sides of the device. Proper airflow is crucial for maintaining optimal operating temperature, especially during high-current Class-A operation.
- **Storage:** When not in use for extended periods, store the S17 Pro EVO in a cool, dry place away from direct sunlight and extreme temperatures.

8. TROUBLESHOOTING

If you encounter issues with your Aune S17 Pro EVO, refer to the following common troubleshooting steps:

- **No Power:**
 - Check if the power cable is securely connected to both the unit and the wall outlet.
 - Ensure the power outlet is functional.
 - Verify that the correct 110V power adapter is being used.
- **No Sound:**
 - Confirm that the correct input source is selected on the S17 Pro EVO.
 - Check all audio cable connections (input and output) for proper seating.
 - Ensure the volume is not set to minimum or muted.
 - If using headphones, ensure they are fully plugged into the correct jack.
 - If using preamp outputs, verify that your connected power amplifier or active speakers are powered on and set to the correct input.
- **Sound Distortion or Poor Quality:**
 - Check the audio source for quality issues.
 - Ensure audio cables are not damaged or improperly connected.
 - If using high gain with sensitive headphones/IEMs, try switching to low gain.
- **Unit Overheating:**
 - Ensure adequate ventilation around the unit. Do not place it in an enclosed space.
 - The device has built-in overheat protection and will automatically switch to a lower current mode if necessary. This is normal operation.

9. WARRANTY & SUPPORT

The Aune S17 Pro EVO comes with a **2-year warranty** from the date of purchase. For warranty claims, technical support, or further assistance, please contact Aune customer service or your authorized dealer. Keep your proof of purchase for warranty validation.

