

SMSL VMV P2

SMSL VMV P2 High-Resolution Headphone Amplifier

INSTRUCTION MANUAL

1. INTRODUCTION

Thank you for purchasing the SMSL VMV P2 High-Resolution Headphone Amplifier. This device is designed to deliver exceptional audio performance for your headphones and pre-amplification needs. Please read this manual thoroughly before operating the unit to ensure proper usage and to maximize its potential. Keep this manual for future reference.

2. SAFETY INSTRUCTIONS

- **Power Supply:** Connect the unit only to an AC power outlet that matches the voltage specified on the unit. Ensure the power cord is securely plugged in.
- **Ventilation:** Do not block any ventilation openings. Ensure adequate airflow around the unit to prevent overheating.
- **Water and Moisture:** Do not expose the unit to rain, moisture, or excessive humidity. Do not place objects filled with liquids, such as vases, on the unit.
- **Heat Sources:** Keep the unit away from heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- **Cleaning:** Unplug the unit from the power outlet before cleaning. Use a dry, soft cloth only. Do not use liquid cleaners or aerosol cleaners.
- **Servicing:** Do not attempt to service this product yourself. Refer all servicing to qualified service personnel.
- **Cables:** Ensure all audio cables are connected correctly and securely before powering on the unit.

3. PRODUCT FEATURES

- Switchable gain control between high, medium, and low levels. Low gain is specifically optimized for In-Ear Monitors (IEMs).
- Ultra-compact design, ideal for desktop headset systems.
- Fully balanced design with a 4-way ultra-low distortion precision linear feedback circuit.

- High-quality relay and no impact sound design for clean audio transitions.
- Comprehensive protection features including DC, overvoltage, and overload protection.
- Built-in high-efficiency and low-noise power supply system.

4. CONTROLS AND CONNECTIONS

4.1 Front Panel



Image: Front view of the SMSL VMV P2, showing headphone outputs and control knob.

- **6.35mm Unbalanced Headphone Output:** Standard headphone jack for unbalanced connections.
- **4.4mm Balanced Headphone Output:** Pentaconn balanced headphone jack for balanced connections.
- **Volume Control Knob:** Adjusts the output volume for headphones and pre-outputs. Press to cycle through input sources or access menu options.
- **Input/Menu Button:** Used to select input sources or navigate menu settings.

4.2 Rear Panel



Image: Rear view of the SMSL VMV P2, displaying input and output ports, and power switch.

- **Balanced Inputs (XLR):** Left and Right XLR inputs for balanced audio sources.
- **Unbalanced Inputs (RCA):** Left and Right RCA inputs for unbalanced audio sources.
- **Balanced Pre-Outputs (XLR):** Left and Right XLR outputs for connecting to a power amplifier or active speakers.
- **Unbalanced Pre-Outputs (RCA):** Left and Right RCA outputs for connecting to a power amplifier or active speakers.

- **AC Power Inlet:** Connect the provided AC power cable here.
- **Power Switch:** Main power toggle for the unit.

5. SETUP

1. **Placement:** Place the VMV P2 on a stable, flat surface with adequate ventilation. Avoid placing it near strong electromagnetic fields or heat sources.
2. **Power Connection:** Ensure the power switch on the rear panel is in the OFF position. Connect the provided AC power cable to the AC power inlet on the rear panel and then to a suitable wall outlet.
3. **Source Connection:**
 - For **Balanced Input:** Connect your audio source (e.g., DAC, preamplifier) to the XLR INPUTS on the rear panel using high-quality XLR cables.
 - For **Unbalanced Input:** Connect your audio source to the RCA INPUTS on the rear panel using high-quality RCA cables.
4. **Output Connection:**
 - For **Headphones:** Connect your headphones to either the 6.35mm unbalanced or 4.4mm balanced headphone output on the front panel.
 - For **Pre-Output:** If using the VMV P2 as a preamplifier, connect the XLR PRE-OUTPUTS or RCA PRE-OUTPUTS to your power amplifier or active speakers.
5. **Initial Power On:** After all connections are made, flip the power switch on the rear panel to the ON position. The unit will power on.

6. OPERATING INSTRUCTIONS

1. **Power On/Off:** Use the main power switch on the rear panel to turn the unit on or off.
2. **Input Selection:** Press the Input/Menu button on the front panel to cycle through the available input sources (Balanced, Unbalanced). The selected input will be displayed on the unit's screen (if applicable, based on typical SMSL design).
3. **Volume Adjustment:** Rotate the large volume control knob on the front panel clockwise to increase volume and counter-clockwise to decrease volume. Start with a low volume setting before playing audio to prevent sudden loud sounds.
4. **Gain Control:** The VMV P2 features switchable gain settings (Low, Middle, High). This allows you to match the amplifier's output to the sensitivity of your headphones. Access this setting via the menu system (typically by pressing and holding the volume knob or input button, then rotating the knob to select).
 - **Low Gain:** Recommended for highly sensitive headphones or IEMs to prevent hiss and provide finer volume control.
 - **Middle Gain:** Standard setting for most headphones.
 - **High Gain:** For less sensitive, high-impedance headphones that require more power.
5. **Listening:** Once the input is selected, volume is set, and headphones are connected, begin playing audio from your source. Adjust the volume to a comfortable listening level.

7. MAINTENANCE

- **Cleaning:** Use a soft, dry, lint-free cloth to wipe the exterior of the unit. Do not use abrasive cleaners, waxes, or solvents.
- **Dust:** Regularly dust the unit, especially around ventilation openings, to ensure proper airflow.

- **Storage:** If storing the unit for an extended period, disconnect it from power and store it in a cool, dry place, away from direct sunlight and extreme temperatures.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No power	Power cable not connected; Power switch off; Outlet issue	Check power cable connection; Ensure power switch is ON; Test outlet with another device.
No sound	Incorrect input selected; Volume too low; Headphones not connected; Source not playing; Faulty cables	Select correct input; Increase volume; Connect headphones securely; Verify source playback; Check/replace cables.
Distorted sound	Volume too high; Incorrect gain setting; Faulty cables; Source issue	Reduce volume; Adjust gain setting (try lower gain); Check/replace cables; Test with a different audio source.
Humming/Buzzing noise	Ground loop; Interference from other electronics; Faulty cables	Ensure all components are on the same power circuit; Move unit away from other electronics; Try different cables.

9. SPECIFICATIONS

Inputs:

Balanced x1, Unbalanced x1

Headphone Outputs:

4.4mm Balanced x1, XLR 4 Pin x1, 6.35mm Unbalanced x1

Pre-Outputs:

Balanced x1, Unbalanced x1

Output Power:

12W x 2 (16 Ω); 6W x 2 (32 Ω); 700mW x 2 (300 Ω); 350mW x 2 (600 Ω)

SNR:

133dB

Dynamic Range:

133dB

THD+N:

-123dB, 0.00006% (1kHz, 32 Ω)

Input Impedance:

47k Ω

AMP Output Impedance:

Near 0 Ω

Pre-output Impedance:

Balanced 44 Ω ; Unbalanced 22 Ω

Frequency Response:

20Hz - 100kHz (-0.5dB)

Gain:

Unbalanced: Low (-9dB), Middle (0dB), High (18dB)

Balanced: Low (-3dB), Middle (6dB), High (24dB)

Power Consumption (EN60065):

<60 W

Dimensions (WxHxD):

280 x 51 x 235.7mm

Weight:

3.25kg / 7.16lbs

ASIN:

B0CHM4BNHS

Date First Available:

September 8, 2023

Manufacturer:

SMSL

10. WARRANTY AND SUPPORT

This product is covered by a manufacturer's warranty. For specific warranty terms and conditions, please refer to the documentation included with your purchase or contact your retailer. For technical support, troubleshooting assistance, or service inquiries, please contact the authorized SMSL distributor or retailer from whom you purchased the product. Please have your product model and purchase date available when contacting support.