

PSG AUDIO RS151, RS118, DM-1608

PSG AUDIO EAW RS151 Loudspeaker, RS118 Subwoofer, and DM-1608 Mixer Bundle Instruction Manual

Model Numbers: RS151, RS118, DM-1608

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your PSG AUDIO EAW RS151 Powered Loudspeaker, RS118 Subwoofer, and DM-1608 Mixer Bundle. This professional audio system is designed for high-quality sound reinforcement in various live sound and stage applications. Please read this manual thoroughly before setup and operation to ensure optimal performance and longevity of your equipment.

The bundle includes:

- (2) EAW RS151 1500W 15" Powered Loudspeakers
- (2) EAW RS118 Subwoofers
- (1) PSG AUDIO DM-1608 Digital Mixer
- (2) Subwoofer Covers
- (2) Speaker Poles
- (4) XLR Cables



Figure 1.1: Complete PSG AUDIO EAW RS151, RS118, and DM-1608 Bundle.

2. SAFETY INFORMATION

Always observe the following safety precautions to prevent electric shock, fire, or injury:

- **Power Supply:** Connect the units only to the specified power supply voltage. Ensure the power cord is not damaged or pinched.
- **Grounding:** Always use a grounded power outlet. Do not defeat the grounding plug.
- **Moisture:** Do not expose the equipment to rain or moisture. Do not place objects filled with liquids on the units.
- **Ventilation:** Ensure adequate ventilation. Do not block ventilation openings.
- **Servicing:** Do not attempt to service the units yourself. Refer all servicing to qualified service personnel.
- **Placement:** Place loudspeakers and subwoofers on stable, level surfaces or use appropriate speaker poles and stands. Ensure proper weight distribution when stacking.
- **Hearing Protection:** Prolonged exposure to high sound pressure levels can cause permanent hearing damage. Use hearing protection when operating the system at high volumes.

3. SETUP GUIDE

Follow these steps to set up your audio system:

3.1. Unpacking and Inspection

Carefully unpack all components and inspect them for any signs of damage. Retain the original packaging for future transport or storage.

3.2. EAW RS151 Powered Loudspeaker Setup

The EAW RS151 is a 1500W 15" powered loudspeaker. It can be used as a main FOH speaker or as a stage monitor.



Figure 3.1: EAW RS151 Powered Loudspeaker.



Figure 3.2: EAW RS151 Rear Panel.

1. **Placement:** Position the RS151 loudspeakers on the included speaker poles, or directly on a stable surface. If using as stage monitors, place them on the floor at the desired angle.
2. **Power Connection:** Connect the power cable to the AC inlet on the rear panel of each RS151 and then to a grounded power outlet. Do not power on yet.
3. **Audio Input:** Connect an XLR cable from the output of the DM-1608 mixer to the INPUT connector on the rear panel of each RS151.

3.3. EAW RS118 Subwoofer Setup

The EAW RS118 subwoofers provide extended low-frequency response for your system.



Figure 3.3: EAW RS118 Subwoofer.

1. **Placement:** Place the RS118 subwoofers on a stable, level surface, typically on the floor in front of or to the sides of the stage.
2. **Power Connection:** Connect the power cable to the AC inlet on the rear panel of each RS118 and then to a grounded power outlet. Do not power on yet.
3. **Audio Input:** Connect an XLR cable from the subwoofer output of the DM-1608 mixer (or a dedicated mixer output) to the INPUT connector on the rear panel of each RS118.

3.4. PSG AUDIO DM-1608 Mixer Setup

The DM-1608 is a digital mixer that serves as the central control unit for your audio system.



Figure 3.4: PSG AUDIO DM-1608 Digital Mixer.

1. **Placement:** Place the DM-1608 mixer on a stable, flat surface in a location accessible to the operator.
2. **Power Connection:** Connect the power adapter to the mixer and then to a grounded power outlet.
3. **Input Sources:** Connect your microphones, instruments, or other audio sources to the input channels of the DM-1608 using appropriate cables.
4. **Output Connections:** Connect the main outputs of the DM-1608 to the EAW RS151 loudspeakers and the subwoofer outputs to the EAW RS118 subwoofers using the provided XLR cables.

4. OPERATING INSTRUCTIONS

4.1. Powering On the System

1. Ensure all connections are secure.
2. Turn on the DM-1608 mixer first.
3. Next, turn on the EAW RS118 subwoofers.
4. Finally, turn on the EAW RS151 loudspeakers.

4.2. Basic Operation of EAW RS151 Loudspeakers

The RS151 loudspeakers feature onboard bi-amplified electronics and DSP for enhanced performance.

- **Level Control:** Adjust the LEVEL knob on the rear panel to set the input sensitivity. Start with a low setting and gradually increase.
- **DSP Features:** The RS151 incorporates EAW's Focusing technology for tonal accuracy and DynO for dynamic optimization. These are factory-tuned for optimal performance.
- **Resolution Software:** For advanced configuration and system prediction, refer to the EAW Resolution software documentation (not included in this manual).

4.3. Basic Operation of EAW RS118 Subwoofers

The RS118 subwoofers are designed to complement the RS151 loudspeakers by extending the low-frequency range.

- **Level Control:** Adjust the level control on the subwoofer's rear panel to balance the bass output with the RS151 loudspeakers.
- **Phase Control:** If available, adjust the phase control to ensure proper alignment with the main loudspeakers.

4.4. Basic Operation of PSG AUDIO DM-1608 Mixer

Refer to the dedicated DM-1608 mixer manual for detailed operation. Key functions include:

- **Input Gain:** Adjust the gain for each input channel to achieve optimal signal levels without clipping.
- **EQ and Dynamics:** Utilize the onboard equalization and dynamics processing for sound shaping.
- **Faders:** Control the volume of individual channels and master outputs.
- **Routing:** Assign channels to various outputs (main, monitor, subwoofer).

4.5. Powering Off the System

1. Turn off the EAW RS151 loudspeakers first.
2. Next, turn off the EAW RS118 subwoofers.
3. Finally, turn off the DM-1608 mixer.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your audio system.

- **Cleaning:** Use a soft, dry cloth to clean the exterior surfaces of all units. Do not use abrasive cleaners, solvents, or waxes.
- **Grilles:** Periodically check speaker grilles for dust or debris accumulation. Use a soft brush or vacuum cleaner with a brush attachment to gently remove any buildup.
- **Connections:** Regularly inspect all cables and connectors for wear or damage. Replace any faulty cables immediately.
- **Storage:** When not in use, store the equipment in a dry, temperature-controlled environment. Use the provided subwoofer covers for protection.

6. TROUBLESHOOTING

This section addresses common issues you might encounter. For problems not listed here, contact PSG AUDIO support.

6.1. No Sound Output

- **Check Power:** Ensure all units (mixer, loudspeakers, subwoofers) are powered on and their power indicators are lit.
- **Check Connections:** Verify all audio cables (XLR) are securely connected from the mixer to the loudspeakers and subwoofers.
- **Check Levels:** Ensure master output levels on the DM-1608 mixer are up, and individual channel faders are not muted or at minimum. Check the LEVEL knobs on the RS151 and RS118 units.
- **Input Source:** Confirm the audio source connected to the mixer is active and producing sound.

6.2. Distorted Sound

- **Input Gain:** Reduce the input gain on the DM-1608 mixer channels if the signal is clipping (indicated by red peak lights).
- **Output Levels:** Lower the master output level on the mixer or the LEVEL knobs on the loudspeakers/subwoofers if they are overdriven.
- **Cable Integrity:** Inspect audio cables for damage.

6.3. Hum or Buzz

- **Ground Loop:** Ensure all equipment is connected to the same electrical circuit or use a ground lift adapter (use with caution and only if necessary).
- **Cable Shielding:** Use high-quality, shielded XLR cables.
- **Interference:** Keep audio cables away from power cables and sources of electromagnetic interference.

7. SPECIFICATIONS

7.1. EAW RS151 Powered Loudspeaker

- **Type:** 2-way Self-Powered Loudspeaker
- **Woofers:** 15-inch LF Transducer
- **Amplification:** Bi-amplified, 1500W (peak)
- **DSP:** EAW Focusing, DynO
- **Enclosure:** Portable Wooden Enclosure
- **Horn:** Constant Directivity HF Horn

7.2. EAW RS118 Subwoofer

- **Type:** Powered Subwoofer
- **Woofers:** 18-inch LF Transducer (inferred)
- **Amplification:** (Details not provided, typically matched to system)

7.3. PSG AUDIO DM-1608 Mixer

- **Type:** Digital Mixer
- **Channels:** 16-channel (inferred from DM-1608 model name)
- **Features:** (Refer to separate DM-1608 manual for detailed specifications)

8. WARRANTY AND SUPPORT

For warranty information and technical support, please contact PSG AUDIO directly or the authorized dealer from whom you purchased this product. Keep your proof of purchase for warranty claims.

Manufacturer: PSG Audio

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