



Manuals.plus /

› EMB /

› EMB Pro PA-6400 Rack Mount Professional Power Amplifier Instruction Manual

EMB PA-6400

EMB Pro PA-6400 Professional Power Amplifier

Instruction Manual

INTRODUCTION

Thank you for choosing the EMB Pro PA-6400 Professional Power Amplifier. This amplifier is designed to deliver reliable and powerful audio performance for various applications, including PA systems, bands, and clubs. Please read this manual thoroughly before operating the unit to ensure proper setup, optimal performance, and safety.

SAFETY INSTRUCTIONS

- Ensure the amplifier is connected to a grounded power outlet.
- Do not expose the unit to rain or moisture to prevent electric shock or fire.
- Do not open the amplifier casing. There are no user-serviceable parts inside. Refer all servicing to qualified personnel.
- Ensure adequate ventilation around the unit to prevent overheating. Do not block ventilation openings.
- Avoid placing the unit near heat sources or in direct sunlight.
- Always disconnect the power cord before cleaning or servicing.
- Use only attachments/accessories specified by the manufacturer.

PACKAGE CONTENTS

- EMB Pro PA-6400 Power Amplifier
- AC Power Cord
- Instruction Manual

FRONT PANEL CONTROLS



Figure 1: Front Panel View

This image shows a close-up of the amplifier's front panel, highlighting the controls and indicators.

1. **Power Switch:** Toggles the amplifier's power ON/OFF.
2. **Channel A Volume Knob:** Adjusts the output volume for Channel A.
3. **Channel B Volume Knob:** Adjusts the output volume for Channel B.
4. **Power Indicator LED:** Illuminates when the amplifier is powered ON.
5. **Signal Indicator LED:** Illuminates when an audio signal is detected on the respective channel.
6. **Clip Indicator LED:** Illuminates when the input signal is too high, indicating potential audio clipping. Reduce the input volume to prevent distortion.
7. **Protect Indicator LED:** Illuminates when the amplifier is in protection mode due to overheating, short circuit, or other faults.

REAR PANEL CONNECTIONS



Figure 2: Rear Panel View

This image displays the rear panel of the amplifier, showing all input, output, and power connections.



Figure 3: Audio Inputs and Outputs

A detailed view of the XLR, 1/4 inch, Speakon, and Banana Binding Post connections.



Figure 4: Power Input and Cooling Fan

This image focuses on the AC power input, voltage selector, and the cooling fan.

1. **Channel A/B Audio Inputs (XLR & 1/4"):** Connect your audio source (e.g., mixer, preamplifier) to these inputs using either XLR or 1/4" (6.35mm) cables.
2. **Channel A/B Outputs (Speakon & Banana Binding Post):** Connect your passive speakers to these outputs. Use Speakon connectors for secure connections or banana binding posts for bare wire or banana plug connections.
3. **Voltage Selector Switch (115V/230V):** Select the appropriate voltage for your region. Ensure this is set correctly before connecting to power.
4. **AC Power Input:** Connect the provided AC power cord here.
5. **Cooling Fan:** Provides front-to-rear airflow to keep the amplifier cool during operation. Ensure it is not obstructed.

SETUP

1. **Placement:** Place the amplifier in a well-ventilated area, preferably in a standard 19-inch rack. Ensure sufficient space around the unit for airflow.
2. **Voltage Selection:** Before connecting the power cord, verify that the voltage selector switch on the rear panel is set to the correct voltage for your region (115V or 230V).
3. **Connect Audio Sources:** Connect your audio source (e.g., mixer, equalizer) to the Channel A and Channel B audio inputs on the rear panel using XLR or 1/4" cables.
4. **Connect Speakers:** Connect your passive speakers to the Channel A and Channel B outputs on the rear panel. Use Speakon cables for secure connections or banana plugs/bare wire with the binding posts. Ensure correct polarity (+ to + and - to -).
5. **Power Connection:** Connect the AC power cord to the amplifier's AC power input and then to a grounded power outlet.
6. **Initial Volume Settings:** Turn both Channel A and Channel B volume knobs on the front panel to their minimum (fully counter-clockwise) position before powering on.

OPERATING

1. **Power On:** Flip the Power Switch on the front panel to the ON position. The Power Indicator LED should illuminate.
2. **Adjust Volume:** Start playing audio from your source. Slowly increase the Channel A and Channel B

volume knobs on the front panel to your desired listening level.

- 3. Monitor Indicators:** Observe the Signal and Clip indicator LEDs. The Signal LED should flash with the audio. If the Clip LED illuminates frequently, reduce the volume from your audio source or the amplifier's volume knobs to prevent distortion and potential speaker damage.
- 4. Protection Mode:** If the Protect LED illuminates, the amplifier has entered protection mode. Immediately turn off the amplifier, disconnect it from power, and check for any issues such as short-circuited speaker cables, overheating, or incorrect impedance. Allow the unit to cool down if overheating is suspected.
- 5. Power Off:** Before disconnecting any cables or powering down your audio source, turn both Channel A and Channel B volume knobs to their minimum position. Then, flip the Power Switch to the OFF position.

MAINTENANCE

- Cleaning:** Use a soft, dry cloth to clean the exterior of the amplifier. Do not use liquid cleaners or solvents.
- Ventilation:** Regularly check that the cooling fan and ventilation openings are free from dust and obstructions. Use compressed air to clear dust if necessary.
- Cable Inspection:** Periodically inspect all audio and power cables for any signs of wear or damage. Replace damaged cables immediately.
- Storage:** If storing the amplifier for an extended period, ensure it is in a cool, dry place, protected from dust and extreme temperatures.

TROUBLESHOOTING

Problem	Possible Cause	Solution
No power	Power cord not connected; Power switch OFF; No power from outlet.	Check power cord connection; Turn power switch ON; Check power outlet.
No sound output	Volume knobs too low; Input cables disconnected; Speaker cables disconnected/faulty; Audio source issue.	Increase volume; Check all cable connections; Test audio source; Check speaker functionality.
Distorted sound (Clip LED on)	Input signal too high; Amplifier volume too high.	Reduce volume from audio source; Reduce amplifier volume.
Protect LED on	Overheating; Short circuit in speaker cables; Speaker impedance too low.	Turn off and allow to cool; Check speaker cables for shorts; Ensure speakers meet impedance requirements.
Excessive humming/noise	Ground loop; Faulty cables; Interference.	Ensure all equipment is properly grounded; Replace cables; Move away from interference sources.

SPECIFICATIONS



Figure 5: Product Dimensions

This image provides a visual representation of the amplifier's dimensions.

- **Model:** PA-6400
- **Brand:** EMB Pro
- **Output Power:** 3200 Watts (Max Peak)
- **Output Circuitry:** Class A/B
- **Inputs:** XLR, 1/4" (6.35mm)
- **Outputs:** Speakon, Banana Binding Post
- **Controls:** AC Power Switch, Channel A/B Gain Knobs
- **Indicators:** Power, Signal, Clip, Protect LEDs
- **Cooling:** Single fan (front to rear airflow)
- **Dimensions (W x D x H):** 18.9 x 11.42 x 3.54 inches
- **Weight:** 18.5 pounds
- **Material:** Metal
- **Color:** Black
- **Power Source:** Corded Electric

WARRANTY & SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or contact EMB Pro customer service directly. Keep your proof of purchase for any warranty claims.