HPA TA240

HPA TA240 Public Address Amplifier User Manual

Model: TA240

1. Introduction

The HPA TA240 is a robust 240-watt Public Address (PA) amplifier designed for various sound reinforcement applications. It features 100V line output capability, multiple input channels, a 7-band equalizer, and essential functions like microphone priority and telephone paging. This manual provides detailed instructions for the safe and efficient operation of your TA240 amplifier.

2. Safety Information

Please read and understand all safety instructions before operating this equipment. Failure to do so may result in electric shock, fire, or damage to the unit.

- **Risk of Electric Shock:** Do not open the amplifier casing. There are no user-serviceable parts inside. Refer all servicing to qualified personnel.
- **Moisture Exposure:** Do not expose this equipment to rain or moisture. Keep it away from liquids and damp environments.
- **Fire Hazard:** For continued protection against the risk of fire, replace fuses only with the same type and rating as specified (FUSE 1A/250V).
- **Ventilation:** Ensure adequate ventilation around the unit. Do not block ventilation openings.
- **Power Source:** Connect the amplifier only to a power supply of 220V AC, 60Hz.

3. Product Overview

The HPA TA240 amplifier is equipped with a comprehensive set of controls and connections to manage your audio system effectively. Below is an image illustrating the rear panel connections and controls.



Figure 1: Rear panel of the HPA TA240 Public Address Amplifier. Note: The image displays 'TA120' but is illustrative of the TA240's rear panel layout.

The rear panel provides access to power input, speaker outputs, and various audio input/output connections. The front panel (not shown) typically houses master volume, equalizer controls, and input selection.

4. Setup and Connections

4.1 Power Connection

1. Ensure the amplifier's power switch is in the OFF position.
2. Locate the **AC INPUT** connector on the rear panel.
3. Connect the provided power cord to the AC INPUT and then to a standard 220V, 60Hz power outlet.
4. Verify the fuse rating (**FUSE 1A/250V**) matches the specified requirement.

4.2 Speaker Connections

The TA240 offers both 100V line (Hi-Z) and low impedance (Lo-Z) speaker outputs.

- **100V Line Output (Hi-Z):** For connecting 100V line speakers. Connect the common (COM) terminal to the negative (-) terminal of your speaker system and the appropriate 100V terminal (e.g., 1, 2, 3, 4, 5) to the positive (+) terminal of your speaker system. Ensure the total wattage of connected speakers does not exceed 240W.
- **Low Impedance Output (Lo-Z):** For connecting standard 4 Ohm speakers. Connect the**COM** terminal to the negative (-) terminal of your 4 Ohm speaker and the **4Ω** terminal to the positive (+) terminal.

4.3 Audio Input Connections

The amplifier features 6 input channels with various connection types:

- **Microphone Inputs (Channels 1-4):** Use XLR connectors for microphones. Channels 1 and 2 may offer Phantom Power and Priority functions (check front panel controls).
- **Line Inputs (Channels 4-6):** Use RCA or 1/4" TRS connectors for line-level sources such as CD players, tuners, or mixers.
- **Remote Mic Input:** Dedicated input for a remote microphone, often used for paging.
- **Tele-Paging Input:** Terminal block connection for telephone paging systems.
- **Music On Hold Input:** Input for background music sources.

4.4 Audio Output Connections

- **Pre-Amp Out:** Provides an unbalanced line-level output of the mixed signal, useful for connecting to external power amplifiers or recording devices.
- **Link In/Out:** Allows linking multiple TA240 units or other compatible amplifiers for system expansion.

- **AMP IN:** Direct input to the power amplifier section, bypassing the pre-amplifier.

5. Operating Instructions

5.1 Powering On/Off

1. Ensure all connections are secure before powering on.
2. Turn on the amplifier using the main power switch (usually located on the front panel).
3. When powering off, turn down all volume controls before switching off the unit.

5.2 Input Gain and Volume Control

- Each input channel (1-6) has a **GAIN** control to adjust the input sensitivity. Set this to achieve a strong signal without clipping.
- Individual channel volume controls (typically on the front panel) allow you to balance the levels of different audio sources.
- The **MASTER VOLUME** control adjusts the overall output level of the amplifier.

5.3 Equalizer

The TA240 features a 7-band graphic equalizer (typically on the front panel) to fine-tune the frequency response of the output audio. Adjust the sliders to boost or cut specific frequency ranges to optimize sound quality for your environment and speakers.

5.4 Special Functions

- **Microphone Priority:** Channels 1 and 2 often include a priority function. When activated, audio from these microphone inputs will automatically attenuate other active audio sources, making announcements clearer.
- **Phantom Power:** Channels 1 and 2 may offer switchable +48V phantom power for condenser microphones. Ensure phantom power is only enabled when using compatible microphones.
- **Music On Hold:** Adjust the **VOLUME** knob for the Music On Hold input to control the level of background music.
- **Chime:** The **CHIME** volume control adjusts the level of the built-in chime function, often used before announcements.
- **Remote Mic:** The **GAIN** control for the Remote Mic input adjusts its sensitivity.

6. 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 ventilation openings are clear of dust and debris to prevent overheating.
- **Fuse Replacement:** If the amplifier does not power on, check the fuse. Disconnect the power cord before attempting to replace the fuse. Only replace with a fuse of the exact same type and rating (1A/250V).
- **Storage:** If storing the unit for an extended period, ensure it is in a dry, cool environment, protected from dust.

7. Troubleshooting

This section addresses common issues you might encounter with your HPA TA240 amplifier.

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
No power	Power cord disconnected, power outlet faulty, fuse blown	Check power cord connection, try a different outlet, replace fuse (1A/250V) if blown.
No sound output	Speaker connections incorrect, master volume low, input volume low, incorrect input selected	Verify speaker wiring, increase master and input volumes, ensure correct input is selected.
Distorted sound	Input gain too high, master volume too high, faulty speaker	Reduce input gain and master volume. Check speaker for damage.
Microphone not working	Microphone not connected, phantom power off (for condenser mics), input gain low	Ensure microphone is securely connected. Activate phantom power if needed. Increase microphone input gain.

8. Specifications

- **Model:** TA240
- **Brand:** HPA
- **Power Output:** 240 W
- **Voltage:** 100 Volt (Line Output)
- **AC Input:** 220V, 60Hz, 167W
- **Fuse:** 1A/250V
- **Number of Channels:** 6 inputs
- **Equalizer:** 7-band
- **Item Weight:** 10.2 Kilograms
- **Package Dimensions:** 55.7 x 43 x 18.5 cm
- **Manufacturer:** HPA

9. Warranty and Support

For warranty information and technical support, please refer to the documentation provided with your purchase or contact your authorized HPA dealer. Keep your proof of purchase for warranty claims.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question