

GODIYMODULES Mod-Red532-001

GODIYMODULES Dual NE5532 Preamplifier Board Instruction Manual

Model: Mod-Red532-001

INTRODUCTION

This manual provides essential information for the proper setup, operation, and maintenance of your GODIYMODULES Dual NE5532 Preamplifier Board. This pre-amplifier is designed with two NE5532 operational amplifiers, dedicating one amplifier per channel for enhanced audio performance compared to single operational amplifier designs. It features a built-in single power supply to dual power supply chip, allowing it to function with a single power input while providing dual power supply characteristics internally. The board incorporates large-capacity filter capacitors and a rectifier circuit, enabling compatibility with both AC and DC power sources.

Please read this manual thoroughly before using the product to ensure optimal performance and longevity.

SAFETY INFORMATION

- Always ensure the power supply voltage and polarity are correct before connecting to the board. Incorrect voltage or polarity can damage the device.
- Avoid touching electronic components while the board is powered to prevent electric shock or damage to sensitive parts.
- Do not expose the board to moisture, extreme temperatures, or static electricity.
- Handle the board with care to prevent physical damage to components or solder joints.
- If you are unsure about any installation or operation step, consult a qualified technician.

PACKAGE CONTENTS

Verify that all items are present in your package:

- 1 x Dual NE5532 Preamplifier Board
- 2 x Signal Lines

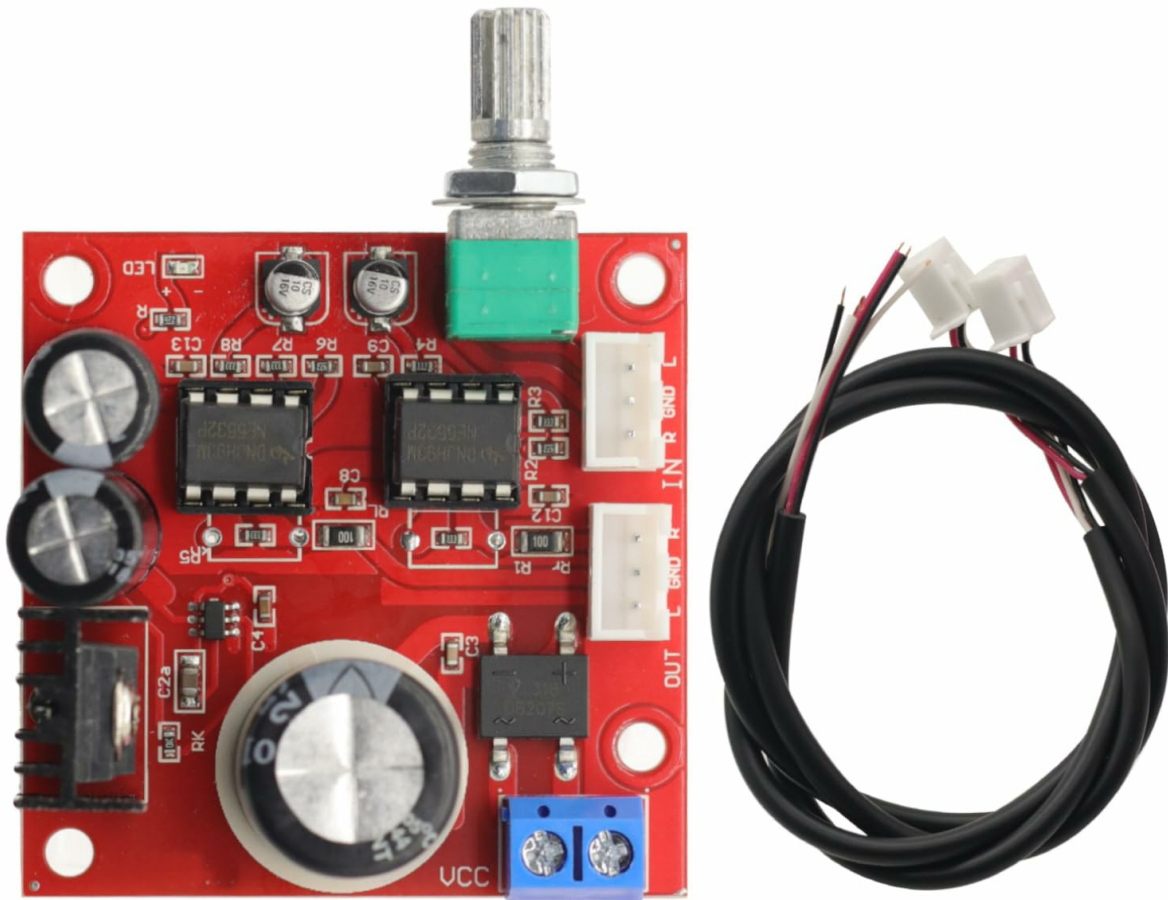


Image: The Dual NE5532 Preamplifier Board shown with the two included signal lines.

SETUP

1. Power Supply Connection

The preamplifier board supports a wide range of power inputs:

- **AC Voltage:** 5V to 16V
- **DC Voltage:** 6V to 24V

Connect your power source to the designated power input terminals on the board. Ensure correct polarity for DC power. The board is designed with a rectifier circuit and filter capacitors for stable operation with both AC and DC inputs.

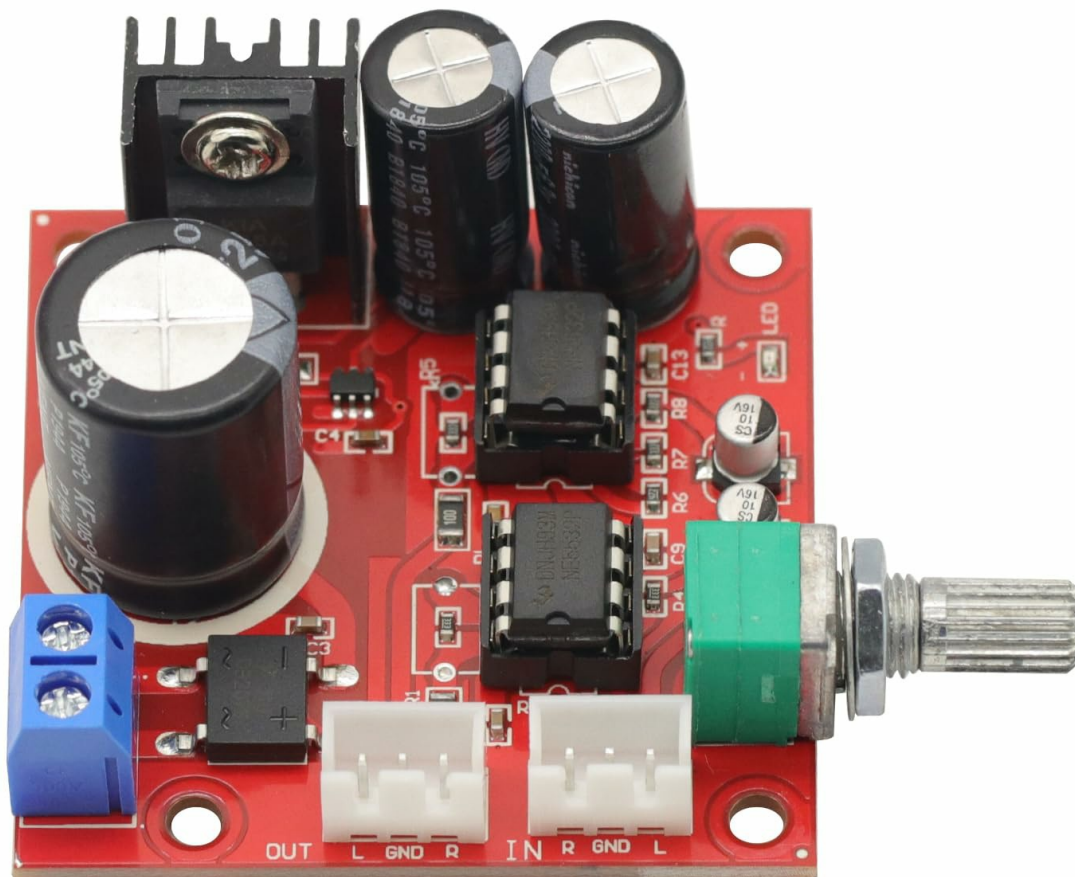


Image: Overview of the preamplifier board, highlighting power input (blue terminal block on the left) and audio connections.

2. Audio Input and Output Connections

Connect your audio source (e.g., microphone, audio player) to the "IN" terminals (L, GND, R) and your audio output device (e.g., amplifier, speakers) to the "OUT" terminals (L, GND, R). Use the provided signal lines or appropriate audio cables.

3. Magnification Adjustment (Optional)

The board features R1 and R5 as magnification setting resistors. The default magnification is approximately 5 times. You can adjust the magnification by changing these resistors.

- **Resistance Range:** 5k Ω to 100k Ω .
- A larger resistance value will result in higher magnification.
- If using plug-in resistors, carefully remove the original surface-mount chip resistors by soldering and then solder the new plug-in resistors onto the pads at both ends of the patch position.

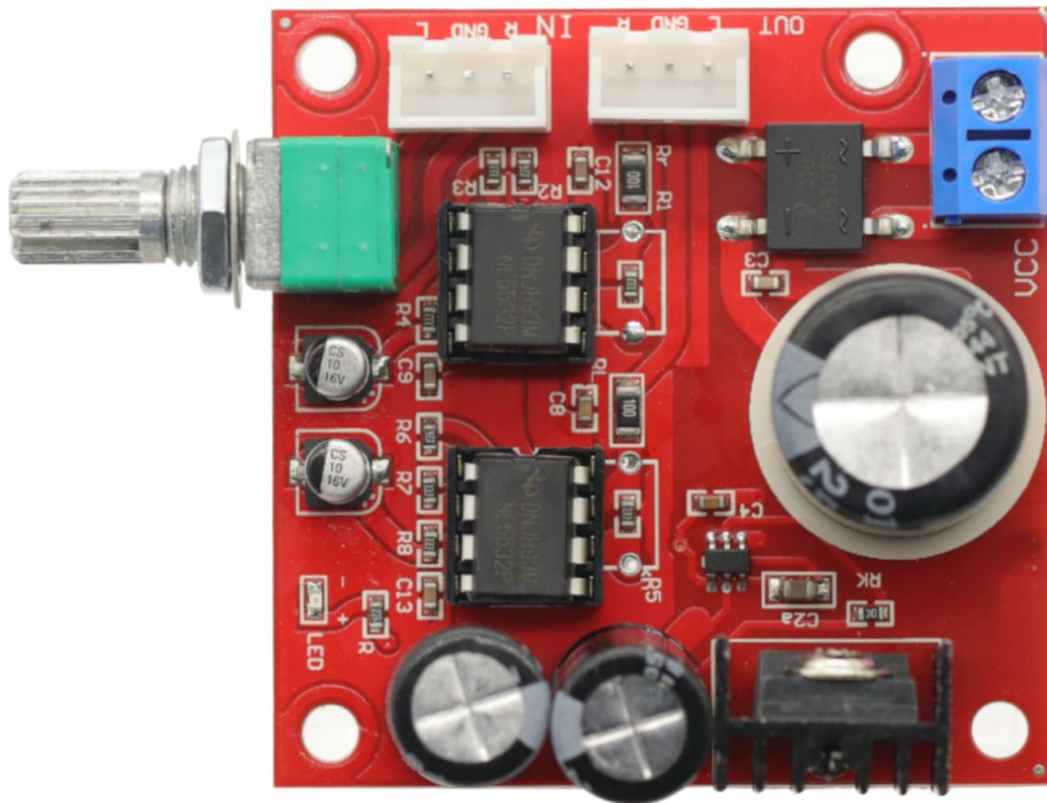


Image: Detailed view of the board. R1 and R5 resistors are located near the NE5532 operational amplifier chips, allowing for magnification adjustment.

OPERATING INSTRUCTIONS

1. Power On

Once all connections (power, audio input, audio output) are securely made, apply power to the board. An LED indicator (if present) should illuminate, indicating the board is powered.

2. Volume Control

Adjust the potentiometer (rotary knob) on the board to control the output volume. Start with the volume at a low setting and gradually increase it to your desired level to avoid sudden loud sounds.

3. Audio Playback

Begin playing audio from your connected source. The preamplifier will boost the signal before sending it to your output device.

MAINTENANCE

- Keep the board clean and free from dust. Use a soft, dry brush or compressed air for cleaning.
- Periodically check all connections to ensure they are secure.
- Store the board in a dry, cool environment when not in use.
- The NE5532 operational amplifier chips are socketed, allowing for easy replacement or upgrade with other pin-compatible ICs if desired.

TROUBLESHOOTING

- **No Sound:**
 - Check all power and audio connections. Ensure they are firmly seated and correctly wired.
 - Verify the power supply is providing the correct voltage (AC 5-16V or DC 6-24V).
 - Ensure the audio source is playing and the output device is powered on and set to the correct input.
 - Adjust the volume potentiometer on the board.
- **Hum or Hissing Noise:**
 - Check for proper grounding of all audio components.
 - Ensure audio cables are shielded and not running parallel to power cables.
 - Move the unit or cabling away from potential sources of electromagnetic interference (RFI), such as power transformers, motors, or wireless devices.
 - Verify the power supply is stable and free from ripple.
- **Distorted Sound:**
 - Reduce the input signal level if it is too high.
 - Check the magnification setting (R1, R5 resistors); if it's too high for your application, consider reducing it.
 - Ensure the output device (e.g., amplifier) is not overdriven.

SPECIFICATIONS

Feature	Detail
Working Voltage (AC)	5V - 16V
Working Voltage (DC)	6V - 24V
Operational Amplifier	Dual NE5532 (one per channel)
PCB Size	50mm x 50mm
Overall Board Height	Approximately 23mm
Magnification Adjustment	Via R1, R5 resistors (5kΩ-100kΩ, default ~5x)
Power Supply Conversion	Built-in single to dual power supply chip
Filter Capacitors	Large-capacity with rectifier circuit
Number of Channels	2
Item Weight	1.44 ounces (approx. 40.8 grams)

Feature	Detail
Model Number	Mod-Red532-001

WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the seller's policies or contact GODIYMODULES directly through their official channels. Keep your purchase receipt as proof of purchase.