Microphone Amplifier Module DIY-5532-V2



This microphone amplifier module is a high-quality solution for audio projects requiring reliable amplification and signal processing. Built around the NE5532 IC, it provides precise sound amplification, making it suitable for applications like voice recording, audio streaming, and DIY audio projects. With easy connections and stable components, the module is ideal for both beginners and professionals.

Technical Specifications:

- Chip: NE5532 Dual Op-Amp
- Operating Voltage: DC 12-35V, single supply
- Operating Current: Over 600mA, suitable for high-power applications
- Gain:
 - Standard: 5x amplification
 - Enhanced: 10x amplification when R5 and R6 are changed to 100K Ohm
- Frequency Response: 20Hz 20kHz (ideal for high-quality audio applications)
- Signal-to-Noise Ratio: >= 90 dB (depends on power supply and environment)
- Input Type: Electret microphone or line-in signal
- Output: Line-level audio output for external audio processing
- Power Indicator: LED to monitor operational status
- Mounting Hole: 4 x 3.0 mm for secure mounting
- PCB Dimensions: 50 x 40 x 16 mm, compact for flexible integration

Key Features:

- Flexible Configuration: Gain can be adjusted easily by changing resistor values.
- High Compatibility: Suitable for audio and microphone applications in DIY projects, voice control systems, and audio processing.
- Easy Connections: Multiple 3-pin connectors for quick and easy wiring.