

MP2515 MP2530

Professional Class-D Power Amplifier



Description

The series professional power amplifiers represent a new milestone in Class D amplification, featuring advanced Class D amplifier modules and highly efficient SMPS power modules. This combination provides this series with exceptional efficiency and reliability, as well as an impressive power density, delivering unprecedented power within a standard 1U chassis space.

Features

- Compact and lightweight 1U standard chassis design.
- Class D amplifier module with fixed switching frequency and soft-switching LLC resonant power supply module.
- Active Power Factor Correction (PFC) technology, ensuring stable operation across the full voltage range (90-264V).
- High-efficiency speaker back-EMF absorption system, unique peak limiter, and ripple elimination network.
- Temperature-controlled variable-speed fan with front-to-rear airflow.
- Rear panel connection mode selection (stereo/parallel/bridge), with input sensitivity switch options (0.775V/1V/32dB).
- Comprehensive circuit protection, including soft start, DC, subsonic, high-frequency, overheat, short circuit, and power-on/off muting.
- Powerful and rich low frequencies with deep extension, transparent, clear, and pleasant mid-high frequencies.
- Integrated amplifier and power modules, with over 85% of components processed through mechanical automation, ensuring product consistency.
- Suitable for mobile performances, portable sound reinforcement, KTV, bars, concert halls, stadiums, and arenas.

Specifications

Model	MP2515 MP2530
Input Impedance	Balanced/Unbalanced $>$ 20k Ω / $>10k\Omega$
Total Harmonic Distortion	≤0.05%
Frequency Response	20Hz-20kHz (±0.5dB)
Signal-to-Noise Ratio	>110dB
Damping Factor	≥700
Slew Rate	>30V/us

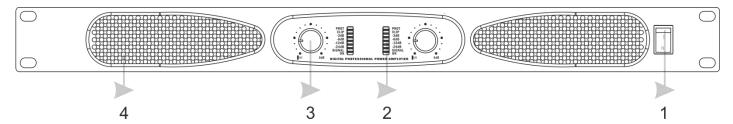
Input Sensitivity	0.775V/1V/32dB
Minimum Load Impedance	≥2Ω
Airflow Path	from front to back

Protection Function

Soft Start, VHF, DC, Short Circuit, Overload, Peak/Distortion Limiting, Overheat.

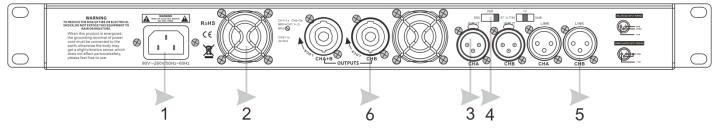
Front / Rear Panel

Front Panel



- 1. Power Switch: 1 for ON, 0 for OFF.
- 2. Status Indicator LEDs: ON indicates normal operation for the channel; -3dB indicates the output signal level is at -3dB from the maximum value; CLIP indicates the limiter circuit is active; PROT indicates any protection circuit is engaged; -24dB shows the output is at -24dB from full power (and so on).
- 3. Volume Potentiometer: Rotate left to decrease volume, right to increase. In stereo mode, CH1 and CH2 volume are controlled independently. In bridge/parallel mode, CH1 controls the volume attenuation for both channels while CH2 control is disabled. It is recommended to keep the volume at maximum (OdB) during operation.
- 4. Dust-Filtered Air Intake: Ensure this vent remains unobstructed. The internal dust filter should be cleaned approximately every six months.

Rear Panel



- 1. Power Socket with Fuse Holder.
- 2. Fan Cooling Vent.
- 3. Signal Input XLR Connector: Balanced input, with pin 1 for ground, pin 2 for positive signal, and pin 3 for negative signal.
- 4. Independent and Bridge/Parallel Toggle Switch: ST represents stereo mode, where each channel operates independently; BRG and PAR represent bridge and parallel modes.
- 5. Signal Pre-Output.
- 6. Signal Output Terminal.

Note: In dual-channel mode, the system can operate at 4-16 Ω . In bridge mode, it can operate at 8-16 Ω . It is not recommended to use bridge mode at 4 Ω , as this effectively means each channel is driving 2 Ω , which may shorten the amplifier's lifespan or cause unnecessary malfunctions.