

AM6403

8-CH Power Amp Home Theater Karaoke



Description

The AM6403 is a compact and lightweight power amplifier designed for high-end home theaters and fixed installation applications. It can also be configured to match various load impedances, allowing flexible and personalized system setups with different speaker models and application scenarios.

The AM6403 adopts a newly designed power supply solution optimized for reduced weight and size. Combined with an efficient cooling system featuring patented heat dissipation technology, the amplifier is 40% lighter than traditional amplifiers with comparable power.

It also features a distinctive and refreshing industrial design, with the entire front panel presenting a three-dimensional structural form that creates a strong sense of depth and visual dynamism, making it ideal for private clubs, karaoke lounges (KTV), and similar entertainment spaces.

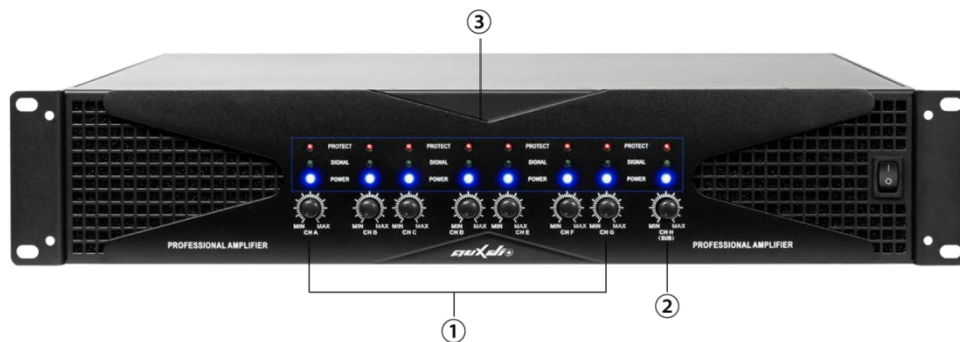
Features

- Comprehensive Protection: Short circuit, overload, overcurrent, DC, soft start, fuse, and transformer overheat protection.
- Intelligent Constant Power Control: Automatically limits output when load is below rated range for stable and reliable operation.

- Resonant Soft Switching (ZVS): Eliminates switching spikes (di/dt) for improved efficiency and reduced interference.
- Advanced Class H Design: Up to 93% efficiency with stable 4 Ω load driving and Hi-Fi level audio performance.
- Dual-Loop Resonant Power Supply: Reduces power interference and ensures cleaner waveforms with smoother sound quality.
- Premium Components: Matched transistors, low-noise ICs, and precision components for accurate and refined sound reproduction.
- Efficient Heat Dissipation: High-density copper heat sinks with intelligent temperature control for enhanced stability.
- Smart Thermal Protection: Automatic temperature compensation maintains safe operation under all conditions.

Specifications

Model	AM6403
Rated Power (RMS 8 Ω)	7×400W + 800W
Rated Power (RMS 4 Ω)	7×600W + 1200W
Frequency Response	20Hz-20kHz (±0.5dB)
Output Circuit	Class H
THR	≤0.05%@8 Ω 1KHz
SNR	≥105dB
Slew Rate	40V/ μ s
Damping Factor	>550
Channel Separation	>100dB@8 Ω 1KHz
Input Sensitivity	0.775V / 1.44V
Input Impedance	20k Ω (Balanced) / 10k Ω (Unbalanced)
Protection Function	DC, Short Circuit, Overheat, Soft Start
Front Panel Controls	AC Power Switch; Power (Blue), Signal (Green), Protect (Red) Indicators
Product Volume	0.05m ³
Chassis Height	2U
Product Dimension (W×D×H)	483mm×460mm×88mm
Package Dimension (W×D×H)	585mm×565mm×145mm
Net Weight	21.5kg
Gross Weight	23.0kg



No.	Interface Name	Description
①	Channel A–G Volume Control (Input Attenuation)	Adjusts the input signal gain for channels A–G individually, enabling independent volume control and preventing signal overload and distortion.
②	Channel H Volume Control (Subwoofer Input Attenuation)	Adjusts the input signal gain for the subwoofer channel (Channel H), allowing precise bass level control to match different subwoofer sensitivities.
③	Protection Indicator (Red)	Indicates DC output protection and short-circuit protection status.
	Signal Indicator (Green)	Indicates amplifier output. Lights up when there is signal output.
	Power Indicator (Blue)	Lights up when the amplifier is powered on.



No.	Position	Interface Name	Description
① ② ③ ④ ⑤ ⑥ ⑦	Channels A, B, C, D, E, F, G (Left)	SPEAKON Output Connector	Connects standard loudspeakers. Supports 400W @ 8Ω and 600W @ 4Ω. Provides amplified audio output for Channels A–G.
	Channels A, B, C, D, E, F, G (Right)	3-pin XLR Female Audio Input	Used to input audio signals for Channels A–G, delivering signals to be amplified.
⑧	Channel H (Left)	3-pin XLR Female (Subwoofer Input)	Used to input subwoofer audio signals for Channel H.
	Channel H (Right)	Subwoofer Output Connector	Connects subwoofers. Supports 800W @ 8Ω and 1200W @ 4Ω. Provides amplified subwoofer output.