

PRODUCT DATASHEET

AX404

4-Channel Stereo Power Amplifier

4×400W @ 8Ω | 2×1100W Bridge | Low Distortion | Intelligent Cooling | 2U Rack

The AX404 is a high-performance 4-channel professional power amplifier delivering 4×400W at 8Ω in stereo mode and 2×1100W in bridge configuration. Engineered for superior audio clarity with ultra-low distortion, intelligent thermal management, and comprehensive circuit protection, it provides the driving force for demanding live sound reinforcement, installed fixed audio, and high-output PA systems. The dual heat-sink 2U chassis integrates cleanly into standard 19-inch rack installations.



4×400W @ 8Ω STEREO	1100W BRIDGE / PAIR	4 CHANNELS	H CLASS-H	<0.05% THD+N	>105dB S/N RATIO	2U RACK-MOUNT
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KEY FEATURES

- ✓ **4×400W Multi-Channel Output** — Four independent output channels each delivering 400W at 8Ω — drive four speaker zones simultaneously from a single rack unit
- ✓ **2×1100W Bridge Mode** — Bridge any two channels to deliver 1100W for high-output subwoofers, large-format main speakers, or long speaker line runs requiring maximum headroom
- ✓ **Ultra-Low Distortion** — Advanced Class-H amplifier topology maintains extremely low THD across the full output range for transparent, high-fidelity sound reproduction
- ✓ **Intelligent Thermal Management** — Variable-speed cooling fan adjusts automatically based on internal temperature — quieter operation at low loads, full cooling when driven hard
- ✓ **Full Protection Circuit Suite** — Comprehensive protection including short-circuit, overload, over-temperature, DC fault, and turn-on muting prevents damage to both amplifier and connected speakers
- ✓ **Signal & Clip LED Metering** — Per-channel SIGNAL and CLIP indicator LEDs provide real-time level monitoring at the front panel for quick system status checks during operation
- ✓ **Balanced XLR / TRS Input** — Balanced inputs on all four channels reject common-mode noise and hum interference from long cable runs — ideal for installed audio and live touring
- ✓ **2U Rack-Mount Chassis** — Standard 2U 19-inch rack chassis with dual side-mounted heat sinks and top ventilation for clean integration into any professional rack system

INSTALLATION NOTES

- ▶ Install in 2U rack; ensure at least 1U clearance above and below for ventilation — do not block top vents
- ▶ For bridge mode: connect input to CH1 (or CH3); bridge output from CH1+ and CH2- (or CH3+/CH4-) terminals
- ▶ Match speaker impedance to output setting — never run 2Ω loads; minimum 4Ω per channel stereo
- ▶ Set input sensitivity switch to match source signal level (0.775V / 1V / 1.4V)
- ▶ Allow 30-minute warm-up before full-power operation for optimal performance and protection circuit stability

TECHNICAL SPECIFICATIONS

MODEL	AX404	AMPLIFIER CHANNELS	4-channel
OUTPUT POWER @ 8Ω	4×400W (stereo)	OUTPUT POWER @ 4Ω	4×650W (stereo)
BRIDGE OUTPUT @ 8Ω	2×1100W	AMPLIFIER CLASS	Class-H
FREQUENCY RESPONSE	20Hz – 20KHz (±0.5dB)	THD+N	<0.05% (1KHz, rated power)
S/N RATIO	>105dB (A-weighted)	DAMPING FACTOR	>300 (@ 8Ω, 1KHz)
INPUT SENSITIVITY	0.775V / 1V / 1.4V (selectable)	INPUT IMPEDANCE	20KΩ balanced
INPUT CONNECTORS	XLR balanced + TRS 6.35mm	OUTPUT CONNECTORS	Binding posts (speakON optional)
COOLING	Variable-speed fan	PROTECTION	Short-circuit, overload, DC, thermal
INPUT POWER	AC 220V / 50Hz	POWER CONSUMPTION	≤1800W (full load)
RACK FORMAT	2U, 19-inch standard	DIMENSIONS (W×H×D)	482 × 88 × 420 mm
WEIGHT	14.5 kg	CERTIFICATIONS	CE, 3C, ISO 9001
WARRANTY	24 Months		

1600W TOTAL OUTPUT

4 channels at 400W each delivers 1600W total system power in stereo mode — sufficient headroom for demanding live sound, installed venues, and high-SPL applications.

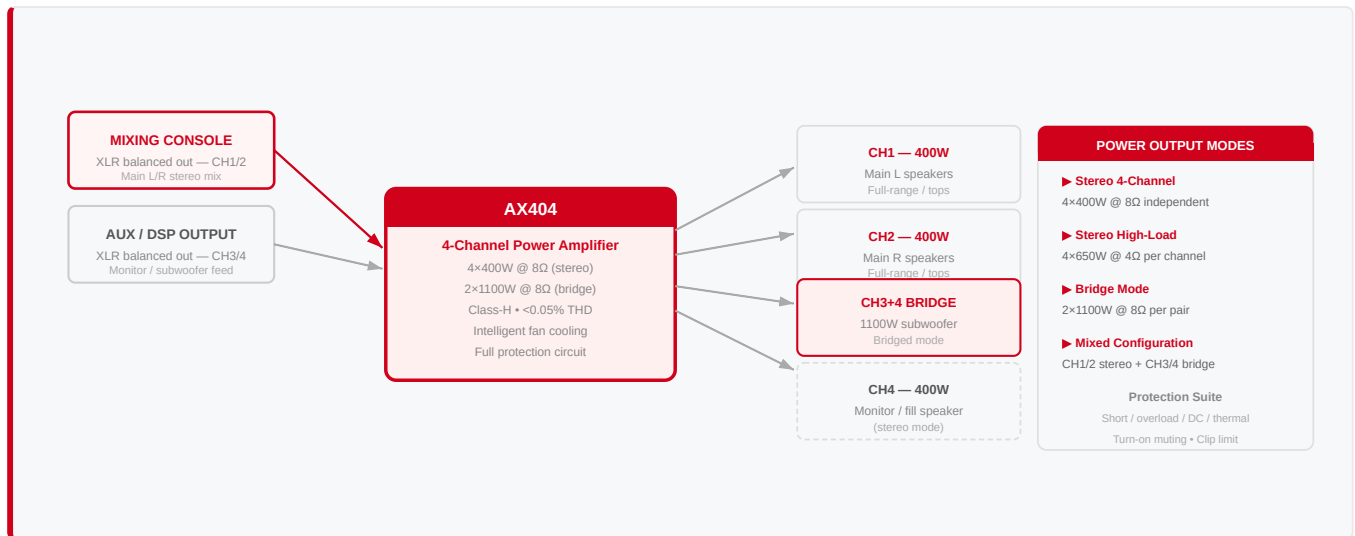
BRIDGE MODE FLEXIBILITY

Bridge any two channels to deliver 1100W for a subwoofer or high-output speaker — run CH1/2 stereo and CH3/4 bridged simultaneously for a complete sound system from one unit.

CLASS-H EFFICIENCY

Class-H topology modulates the supply voltage with the signal, dramatically reducing heat dissipation compared to Class-AB — cooler, quieter, and more energy-efficient at all output levels.

SYSTEM SIGNAL FLOW & OUTPUT CONFIGURATION



TYPICAL APPLICATION SCENARIOS

<p>Live Events Stage & Concert PA</p>	<p>Worship Churches & Mosques</p>	<p>Government Auditoriums & Halls</p>	<p>Education Theatres & Lecture Halls</p>
<p>Retail Large Stores & Malls</p>	<p>Hospitality Ballrooms & Venues</p>	<p>Industrial Factory PA Systems</p>	<p>Corporate Conference Halls</p>

WHY C-YARK

<p>10+ YEARS IN PA</p>	<p>CE CERTIFIED</p>	<p>ISO 9001 QUALITY</p>	<p>3C COMPLIANT</p>
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<p>ORDERING INFO</p> <p>AX404 — 4-Channel Power Amplifier Includes: rack ears, power cable Format: 2U 19-inch rack-mount Weight: 14.5 kg</p>	<p>COMPATIBLE WITH</p> <p>BC-1115C 120W Mixing Amplifier CY-BS02B PA Management Software C-8000 Conference Controller Any XLR balanced source output 4–16Ω passive speakers</p>	<p>NOTES</p> <p>Specifications subject to change without prior notice. Never connect loads below 4Ω per channel in stereo mode. © C-YARK · Guangzhou Quanzhiyun Electronic Technology Co., Ltd. DS-AX404-EN-052026</p>
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