



Champ-2 Power Amplifier

APart



APart's Champ series realizes what many in the audio industry deemed impossible: an amplifier without cooling fans that is capable of delivering high-end musical sound, high dynamics, high reliability.

No fan

Power amplifiers have to operate in demanding circumstances. Places where the air is full of dust, nicotine or grease. Because power generates heat, power amplifiers typically have fans to keep their electronic circuits cool.

Unfortunately, these cooling fans are a major headache in the use of high-power amplifiers. They tend to be noisy, and if -or rather, when- the fan breaks down because of dust collection, the amplifier overheats and ultimately fails.

A fanless amplifier seems the logical thing, but -until now-, the idea never seemed to work for high quality amps with high output power. The electronics of a typical class AB amplifier with high output simply produce more heat than the unit is able to dissipate. Thus, installers stick to fan-cooled models and get out of bed to replace a fried amplifier ...

Unique heat sinks

Especially for the CHAMP-series, APart introduces the unique, custom-designed side mount heat sinks. In combination with a self-supporting low resonance frame, they make it possible to create a discrete high power amplifier without a noisy and dust-collecting fan inside the enclosure.

This means: less maintenance, no annual fan or dust filter exchange procedure, no more amplifier cleanout, and no more unwanted noise from cooling fans. Champ-2 uses a clever GH topology which has about 30% better efficiency compared with a class AB amplifier. Because of this, Champ-2 can rely on convection cooling only, a unique feature in its output power class!



APC power management circuitry gets the best out of an amplifier

APC power management circuitry has been designed especially for Champ series amplifiers. It is one of the most intelligent amplifier protection circuits ever designed, simply because it does the job without interfering with the typical dynamic character of music.

APC allows the user to preset the power potential of the amplifier, while maintaining high power reserves and thus producing high, clean power. It constantly analyses incoming music signals and keeps dynamics alive. An additional ultra fast peak limiter avoids amplifier clipping. With APC, your system is always in control, including your speakers.

All the components in Champ-2 are audiophile grade quality. Thanks to the tube emulation circuitry, the unit produces an exceptionally warm sound, which considerably reduces listeners' fatigue.

The striking design and technical innovations of the Champ series are setting new industry standards...whether it is for AV, studio, gigs, home or catering applications: experience the pure musical power of CHAMP-2!

TECHNICAL SPECIFICATIONS

RATED OUTPUT POWER, BOTH CHANNELS DRIVEN:

Dynamic program power, both channels driven

Bridge-mono operation 8 ohm	750 W
2 channel mode 8 ohm	200 W / ch
2 channel mode 4 ohm	350 W / ch
2 channel mode 2.7 ohm*	450 W / ch

Dynamic capacity at 2 ohm*, both channels driven	600 W / ch
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**a 2.7 ohm load can be seen as 3 pieces of 8 ohm speakers in parallel (or even 6 pcs of 16 ohm speakers).*

A 2 ohm load is technically possible but not recommended for long term use at high power.

SINE WAVE POWER, BOTH CHANNELS DRIVEN (not recommended, for reference only)

This amplifier is designed for an audiophile music experience, not for lab testing !

Bridge-mono operation 8 ohm	350W
2 channel mode 8 ohm	120W / ch
2 channel mode 4 ohm	180 W / ch
2 channel mode 2.7 ohm	200 W / ch



TECHNICAL SPECIFICATIONS

GENERAL TECHNICAL SPECIFICATIONS:

Input impedance / sensitivity unbalanced (RCA) / 4 ohm	10 Kohm / 1 V 0dBV
Input impedance / sensitivity balanced (XLR) / 4 ohm	20 Kohm / 1 V 0 dBV
Frequency response (0, -0.5 dB)	10 Hz - 50 kHz
THD	< 0.05 %
IMD	< 0.06 %
Noise	>100 dBA
Gain	30 dB (36 dB in bridged mode)
Damping factor	>200
Dynamics and level control	APC, switchable for 2-3 or 4-8 ohms
Power amp circuit design	High current, high voltage class G
Efficiency (dynamic program of 10 dB, 1 V input)	70 %
Protection circuits	DC, HF, clip, overcurrent, short-circuit
Temperature protection	95°C/ch + transformer 105°C
Cooling	convectonal, no fan
Power consumption	15VA idle, 600VA full program, 1KVA peak
Mains power requirements	230VAC, 50Hz

PHYSICAL SPECIFICATIONS

Net dimensions (cm) (W x H x D)	48.3 x 4.4 x 36
Gross dimensions (cm) (W x H x D)	56 x 10 x 55
Net weight	7.5 kg
Gross weight	9.0 kg