



PRO 8|30 DSP EVO

TECHNICAL DATA SHEET

HI-END eight-channel amplifier with 12-channel DSP

90 W × 4 + 170 W × 4 / 4 Ω

FEATURES

- Multi-channel HI-END Class AB power amplifier with DSP.
- 12-channel DSP processing at 96 kHz / 24 bit.
- Eight-channel operation with bridged output available at 4 Ω.
- Output stage based on two identical N-channel MOSFETs.
- Independent input settings for each channel via DIP switch.
- High-level inputs with autosense.
- Optical Toslink input and EXT_CARD connector.
- Four DSP-processed analog outputs.

POWER SUPPLY

Supply voltage	10–16 V
DC-DC converter topology	Unregulated push-pull, 50 kHz
On-board fuse / standby current	1 × 150 A / < 2 mA
Overall efficiency	> 65%
REM output	10–16 V (100 mA)

OUTPUT

RMS power, 4 Ω: CH1–4 / CH5–8	90 W × 4 / 170 W × 4
RMS power, 2 Ω: CH1–4 / CH5–8	115 W × 4 / 220 W × 4
Bridged, 4 Ω: CH1–4 / CH5–8	230 W × 2 / 440 W × 2
DSP-processed analog outputs	4 × 2 V RMS

SIGNAL INPUT

Analog input settings	Settings via DIP switch Independent for each channel
Low-level sensitivity	2 V RMS
High-level sensitivity	15/30 V RMS; 15 V RMS (SB)
Input impedance, LL / HL	10 kΩ / 600 Ω or approx. 6 Ω
Low-level ground reference	Fully floating / approx. 6 Ω
Autosense (high-level inputs only)	Off / BTL
Digital inputs	Optical Toslink / EXT_CARD connector

CONNECTIONS

Power supply	Gold-plated terminal block
Speaker output	Gold-plated terminal block
Analog inputs / outputs	12 gold-plated RCA connectors
Optional remote controls	DSP-RCD / DSP-RC mini / GLADIATOR
PC connection	USB-C (battery supply required)

PCB

Base material	FR4 (135 °C)
Solder mask	Matte black
Layers	4
Copper thickness	70 μm
Surface finish	Gold

APPEARANCE

Dimensions	500 × 205 × 55 mm
Weight	5.2 kg
Finish	Black / Titanium

CEA-2006-A SPECIFICATIONS

Rated power at 14.4 V, 4 Ω, < 1% THD+N	90 W × 4 (CH1–4) / 170 W × 4 (CH5–8)
S/N at 1 W / 4 Ω	> 73 dBA

THD

THD at 4 Ω, stereo	< 0.05% (1 kHz, 90% rated power)
THD at 2 Ω, stereo	< 0.055% (1 kHz, 90% rated power)

OTHER ELECTRICAL CHARACTERISTICS

Mute delay	3 s
Channel bias, CH1–4 / CH5–8	50 mA / 100 mA
Idle current (no signal, 14.4 V)	1.8 A
Thermal shutdown current	0.2 A
Battery-to-secondary ground decoupling	0 Ω
Battery-to-chassis ground decoupling	100 mA PTC (approx. 7 Ω)
Bandwidth (–3 dB at 1 W)	20 Hz–20 kHz
S/N (AP filter 10 Hz–22 kHz, rated power)	100 dB (A-weighted)
Equivalent input noise (AP filter 10 Hz–22 kHz)	< 7.5 μV (A-weighted)
Channel separation (ref. 10 W)	> 66 dB
Fan start / stop	50 / 45 °C
Thermal shutdown / restart	90 / 70 °C
Damping factor at 4 Ω	> 105
Start-stop operation	Down to 7.5 V for up to 300 ms

DSP FEATURES

Onboard DSP	294.912 MHz, 32 bit
Sample rate / resolution	96 kHz / 24 bit
Gain range per channel	–125 to +18 dB
Parametric EQ bands (CH1–12)	30
Presets	4
HP frequency range per channel	10–20000 Hz
LP frequency range per channel	10–20000 Hz
HP / LP filter slope per cell	6–12 dB/oct
Cascaded HP / LP slope (CH1–12)	Up to 60 dB/oct
Band-pass support	Supported
Variable Q factor	0.5–40
Time delay	0–15 ms, in 0.01 ms steps
Phase inversion per channel	0° / 180°

NOTE: this amplifier is designed to play music on real speakers. It is not rated to drive static signals on pure resistive loads. Data is subject to change without notice.
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