

Cinema digital power amplifier in Class D with 2- to 4-channel output, using an interleaved PFC and LLC dual-rail supply, for driving screen channels, surrounds and subwoofers¹



01 FEATURES • Performance | ▲ Engineering | ■ Economy & Maintenance

- Internal sampling rate up to 384 kHz, for excellent signal-to-noise ratio and sound quality.
 - Pulse-by-pulse over-current detection: protects the output MOSFETs pulse by pulse.
 - ▲ AI-assisted thermal simulation design. Industrial-grade 4-layer PCB with 2 OZ copper.
 - A 1.5U chassis at 8.9 kg keeps rack deployment economical.
- Current power management: automatic limiting under abnormal load.
 - ▲ Interleaved PFC with an LLC dual-rail supply, balancing component density against power density.
 - High-grade components (NICHICON, NEUTRIK, CANARE, TEAPO, BMC, IXYS, SILAB).

02 OVERVIEW

The DH Series is SOVOX's high-end, patented amplifier line.

It uses interleaved PFC and an LLC DC-DC dual-rail supply, balancing component density against power density and feeding the output stage with ample current. Total power exceeds 10000 W across 2 to 4 channels, per-channel output from 1000 W to 5500 W.

Pulse-by-pulse over-current protection keeps the output MOSFETs within their safe current limits. Average output current is monitored continuously: programme material is discontinuous, so any abnormal average current or load condition engages limiting automatically.

Components are world-class: NEUTRIK connectors, TEAPO electrolytic capacitors, MIRCOMETALS and EPCOS magnetics, industrial-grade MOSFETs, Faratronic film capacitors and a 2 OZ copper industrial PCB.

The front panel shows load indicators (loudspeaker connected) and input signal indicators (signal present).

03 APPLICATIONS

Screen channels · Surround channels · Subwoofers (LFE) · High-power-density rack deployment

04 SPECIFICATIONS Three models · one digital amplification platform; unlisted figures are common to all three

MODEL	DH4100	DH4130	DH2230
AMPLIFIER CLASS	Class D		
CHANNELS	4	4	2
RATED OUTPUT POWER (8 Ω)	4 × 1000 W	4 × 1300 W	2 × 2300 W
RATED OUTPUT POWER (4 Ω)	4 × 1900 W	4 × 2600 W	4 × 4600 W
OUTPUT POWER (2 Ω)	4 × 2500 W	4 × 2900 W	2 × 5400 W
FREQUENCY RESPONSE	20 Hz-20 kHz (±0.35 dB @1 W)		
TOTAL HARMONIC DISTORTION THD	0.05% (1 kHz @1 W)		
DYNAMIC RANGE	112 dB (A-weighted)		
DAMPING FACTOR	> 300		
INPUT SENSITIVITY / IMPEDANCE	1.40 V · 20 kΩ balanced / 10 kΩ unbalanced		
VOLTAGE GAIN	36.1 / 33.1 / 30.1 dB	36.9 / 33.9 / 30.9 dB	39.7 / 36.7 / 33.7 dB
INPUT CONNECTORS	NEUTRIK XLR (male × 4 · female × 4)		
OUTPUT CONNECTORS	NEUTRIK speakON NL4 × 4		
COOLING	Temperature-controlled fan × 3		
PROTECTION	Fault · Distortion · Load · Output · Input · Standby · Power indicators		
POWER SUPPLY	AC 100-240 V, 50 / 60 Hz		
RACK HEIGHT	1.5U (66 mm)		
DIMENSIONS W×H×D (mm)	W483 × H66 × D404	W483 × H66 × D404	W483 × H66 × D404
NET WEIGHT	8.9 kg		

SPECIFICATION NOTES

- 1 Output power figures are continuous (RMS) outputs at the stated impedance. An amplifier's continuous output should be at least the AES 100-hour rating of the loudspeaker it drives, and its output at the matching impedance should not exceed the loudspeaker's program power, to avoid clipping and driver damage (see the relevant loudspeaker specification sheet).

2 Frequency response and THD are measured at 1 W output; dynamic range is A-weighted. Readings taken under different conventions are not directly comparable. Figures shown without a channel split are common to all three models.

3 Voltage gain is given as three selectable values, corresponding to the front-panel gain / sensitivity selection. A rack height of 1.5U equals 66 mm (1U = 44.45 mm).

4 ⚠ Pending confirmation by R&D: the DH2230 is a two-channel model, yet its 4 Ω cell reads '4 × 4600 W' and its 2 Ω cell reads '2 × 5400 W / 4 Ω', inconsistent with the channel count and likely a typo; the output connector is recorded as 'speakON NL4 × 4' for all three models, which should be checked against the DH2230's actual channel count. Parameters on this page are taken from the R&D-revised specification workbook; where a later R&D revision differs, the latest revision prevails.