

DX68

4-Channel Power Amplifier for Portable and Permanently Installed Applications

POWRT



- ✓ Touring
- ✓ Installation

4CH



- ▶ Small to medium-scale systems, portable and installed
- ▶ Stage monitoring
- ▶ Hotels, restaurant and bars
- ▶ Amusement parks, themed entertainment
- ▶ Houses of worship, auditoriums
- ▶ Educational facilities
- ▶ Live and dance clubs
- ▶ Mobile DJ's

Equally versatile in both portable and installed system configurations, and with its 4 channels delivering up to 6,800 W all neatly packed in one single rack unit weighing just over 7 kg / 16 lb, the **DX68** is a flexible, cost-effective solution for small to medium sound systems.

Minimum heat dissipation makes the **DX68** suitable for hot or otherwise challenging environments.

Added the legendary sound quality thanks to Powrt's unique, patented Class D output stage design, the **DX68** represents a fantastic value, practically as well as commercially.

The **DX68** comes with 4 years warranty and, like all Powrt products, is entirely designed and made

4-channel mode				mono-bridged mode
4 Ω / Ch	8 Ω / Ch	70 V ¹⁾	100 V ²⁾	8 Ω / Ch pair
1,700 W	1000 W	1,000W	1,250 W	3,400 W

EIAJ Test Standard, 1 kHz, 1% THD

Legendary Powrt efficiency:

- ▶ Compact and space saving: 4 channels in 1 RU at 358 mm / 14.1" depth
- ▶ Green Audio Power®: minimal "carbon footprint" and operational cost of electricity
- ▶ More watts, less weight: up to 6,800 W in 7.3 kg / 16 lb

Unique Powrt technology for efficient, reliable performance:

- ▶ Switch mode power supply, internally switchable 230/115 V nominal
- ▶ Fixed frequency switch mode amplifier output stages
- ▶ Patented amplifier output filters with ripple cancellation network

Driving distributed line systems:

- ▶ Able to drive 100 V distributed lines directly without the need for transformers¹⁾

Optimized for 4 Ω loads, thus ideally matching real-world scenarios in targeted applications

Fully protected circuit design:

- ▶ AC protection: shuts down power supply when AC mains voltage is outside operating range
- ▶ Clip limiter: prevents severely clipped waveforms from reaching loudspeakers, while still maintaining full peak power output
- ▶ DC protection: protects against infrasonic signal at the outputs
- ▶ VHF protections: protects the loudspeakers against destructive non-audible, non-musical high frequency signals
- ▶ Short circuit protection: protects the amplifier from short circuit or similar events on the outputs; with automatic protection reset
- ▶ Thermal protection: mutes outputs once output devices reach 75 °C / 167 °F; automatic unmute once temperature is down to 65 °C / 149 °F

Temperature controlled continuous variable speed fan, front to rear airflow

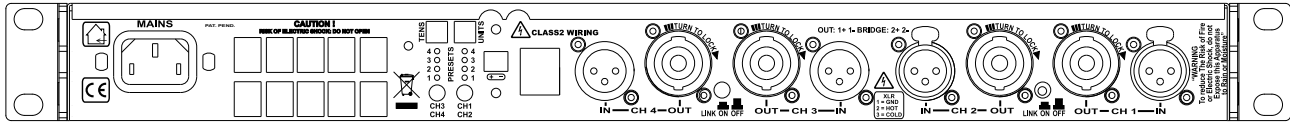
Recessed stepped level attenuators

Full four years warranty

Also available as **DX68** HDSP+ETH with integrated DSP and Ethernet comm port

1) External high-pass filter and output voltage limiter required.
2) External high-pass filter required.

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Specifications

General						
Number of channels		4				
Output power		4-channel mode				mono-bridged mode
EIAJ Test Standard, 1 kHz, 1% THD		4 Ω / Ch	8 Ω / Ch	70 V ¹⁾	100 V ²⁾	8 Ω / Ch pair
		1,700 W	1000 W	1,000 W	1,250 W	3,400 W
Max output voltage / current		135 V peak / 65 A peak				
AC Mains Power		Universal, regulated switch mode				
Power supply		115 V / 230 V (factory selection) 15%, 50 Hz - 60 Hz / < 34 A RMS				
Operating voltage / Inrush current		@ 230 V				@ 115 V
Consumption / current draw						
Idle		64 W	0.51 A	64 W	0.6 A	
1/8 of max output power @ 4 Ω		905 W	5.8 A	905 W	11.6 A	
1/4 of max output power @ 4 Ω		1,772 W	11.1 A	1,772 W	22.2 A	
Thermal		0 - 45 °C / 32 - 113 °F				
Environmental operating temperature		Fan, continuously variable speed, temperature controlled, front to rear airflow				
Thermal dissipation						
Idle		218 BTU/h		55 kcal/h		
1/8 of max output power @ 4 Ω		955 BTU/h		241 kcal/h		
1/4 of max output power @ 4 Ω		1,781 BTU/h		449 kcal/h		
Audio						
Gain		32 dB, 30 dB, 28 dB, 26 dB, 24 dB, 22 dB, 20 dB, 18 dB, 14 dB, 4 dB, - ∞ , user selectable				
Frequency response		10 Hz - 30 kHz (1 W @ 8 Ω , 3 dB)				
S/N ratio (amplifier section)		>110 dBA (20 Hz - 20 kHz, A weighted)				
Crosstalk separation		>70 dB @ 1 kHz				
Input sensitivity @ 8 Ω		1.94 V / 7.97 dBu				
Max input level		6 V / 17.8 dBu				
Input impedance		10 k Ω				
THD+N / SMPTE IMD		< 0.05% @ 1/2 of full power				
DIM100 IMD		typ. <0.005% (<0.02% @ >0.1W)				
Slew rate		40 V/ μ s @ 8 Ω , input filter bypassed				
Damping factor @ 8 Ω		>5000 @ 100 Hz				
DSP (optional)						
A/D converter		CS5381, 2 channels, 24 bit / 48 kHz, 120 dB SNR				
D/A converter		CS4398, 2 channels, 24 bit / 48 kHz, 120 dB SNR				
Frequency response @ -3 dB		7 Hz - 22 kHz				
THD		< 0.01% (20 Hz - 20 kHz)				
Presets		Bank of 4 presets, management and upload via Armon a Pro Audio Suite™				
Delay for time alignment		10 ms per output				
Crossover filters		Butterworth, Linkwitz-Riley, Bessel, 6 dB/oct to 48 dB/oct				
Output equalizer		up to 12 biquad fully parametric per channel: peaking, hi/lo shelving, hi/lo pass, band pass, band stop, all pass.				
Input equalizer		up to 5 biquad filters (PEQ, shelving, band pass, band stop, all pass)				
Limiters		Peak limiter, RMS limiter, frequency dependent RMS limiter				
Damping control		< 120 Hz, range 2 Ω				
System Delay		up to 170 ms for 2 IN/2 OUT or 340 ms for 1 IN/2 OUT				
Front Panel						
Indicators		4 LEDs per channel: 3 x green, 1 x red 2 status LEDs: 1 x green, 1 x yellow				
Controls		1 stepped level attenuator pot per channel; mains switch				
Maintenance		Dust filter foam behind front panel				
Rear Panel						
Audio signal input connectors		4 x balanced Neutrik® XLR female				
Loudspeaker output connectors		4 x Neutrik® Speakon NL4MD				
Network data port RS485		1 x RJ45 with activity LED with 2 rotary address switches				
DSP preset selection		2 x Pushbutton (stepping through bank of 4 presets) 2 x 4 LED preset indicators				
Aux voltage		1 x 2-pin Phoenix type MC 1.5/2-ST-3.81				
AC mains		IEC C13 16 A connector; AC mains cord with 3-pin plug 15 A for US, IEC Schuko 16 A for every other nation				
Controls		2 x link switch, linking analog inputs 1 & 2 and 3 & 4				
Construction						
Dimensions		W 483 mm / 19" , H 44.5 mm / 1.75" , D 358 mm / 14.1"				
Chassis		1 mm (0.04") steel chassis and steel removable dust cover, 3 mm (0.12") steel front panel, screw hole protection, steel side reinforcement & rear support				
Weight		7.3 kg / 16 lb				

1) External high-pass filter and output voltage limiter required.

2) External high-pass filter required.