

The DD+ / DQ+ series is designed for the most demanding live audio users, whether in touring rigs or fixed installations. Five models with two channel and five model with four channel offers range in power from 750 watts to 2600 watts per channel at four ohm all in 2 RU space chassis that are only 455 mm (17.91") deep and 10 kg (22 lbs).

The DD+ / DQ+ models are based on Class D output circuit controlled by a modulator patented by KIND Audio. The great advantages of this technology are: low heat dissipation, compact size, and KIND sonic integrity. Reactive "back EMF" from the speaker is recycled to the power supply, and an efficiency higher than 85% keeps AC power needs to a minimum, while delivering more energy to the speaker. Thanks to the high efficiency the DD+ / DQ+ series dramatically reduce power distribution demands compared to older high power amplifiers.

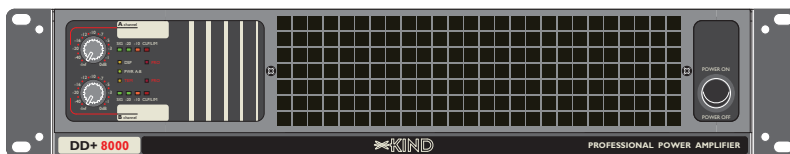
In addition to higher power, the DD+ / DQ+ Series offers higher input voltage, multiple selectable input gains, and with the four channel models a very high power density.

For those users who simply want a high performance amplifier to go with their existing processor or console, the DD+ / DQ+ series is an ideal choice, offering high power, excellent value, and zero signal latency. The DD+ / DQ+ series have an open input architecture and can have as option a Digital Signal Processing board (KIND DSP board-I) and a remote control that allows monitoring of all key amplifier parameters: power on/off, channel mutes, and channel solo functions.

The high efficient global power supply is regulated (R-SMPS), works anywhere in the world and offers PFC (Power Factor Correction). The regulated power supply easily deals with a very high variation in the AC mains voltage: it can drop by up to 20% below its nominal level e.g. to 180VAC instead of 230VAC without any loss of the amplifier's rated output power.

DD+ / DQ+ Series incorporates comprehensive warning and protection features to safeguard the amplifier and all connected loudspeaker drivers. Front-panel indicators give clear warnings when any potential problems are detected. Protection measures are enabled only when critical thresholds are passed or at start-up. Additionally, a soft-start circuit limits initial current draw when amplifier is turned on. The complete protection / warning suite includes: Short circuit, open circuit, thermal, RF protection, mains over / lower voltage, on/off muting, DC fault shutdown, clip limiter. Under normal use these features are inaudible and all protection methods are independent for each channel. The L.S.C. protection constantly monitors the current at the amplifier's output. When load's current exceed the amplifier's limit, the output voltage will be automatically re-adjusted to keep the output devices in a security condition. An additional circuit, with automatic reset, shut down the amplifier's channel if a full short is made between a positive output and GND. The temperature management system sense the output devices temperature. In case of inadequate ventilation or overload, the hi-temp LED start to blinking and a level compensation process will be enabled. This protection safeguard the amplifier and prevent the definitive muting for overtemperature.

The cooling is front to back airflow. All DD+ / DQ+ models are built in the same chassis size, with common back panel layouts to facilitate easy racking and hookup.



### DD+ / DQ+ Benefits

- Light Weight and high power density: 10 kg - 2x4kW / 11.5kg - 4x2.5kW in a 2U chassis
- R-SMPS, regulated switchmode power supply with PFC for highest efficiency and improved audio performance
- Two and four channel versions
- Class D output circuit for high efficiency and sonic transparency
- All channels bridgeable
- Strong Reduction of kW/hr needed and power distributions demands, **this is GREEN POWER**
- Low Heat Dissipation
- Flow-thru air path and solid aluminum heat sinks for maximum cooling
- Clip Limiters
- Multiple selectable (from rear panel) input gains  
26 - 29 - 32 - 35 - 38 - 41 - 44dB
- Selectable (from rear panel) low-freq. HP Filters (30Hz or 75Hz)
- Tamper-proof optional DSP board
- Neutrik Speakon™ Outputs
- Stepped Gain controls Knobs
- Continuously variable speed fans
- Front accessible (removable) dust filter
- Craftsmen built in Galliate, Italy
- 3 year Warranty

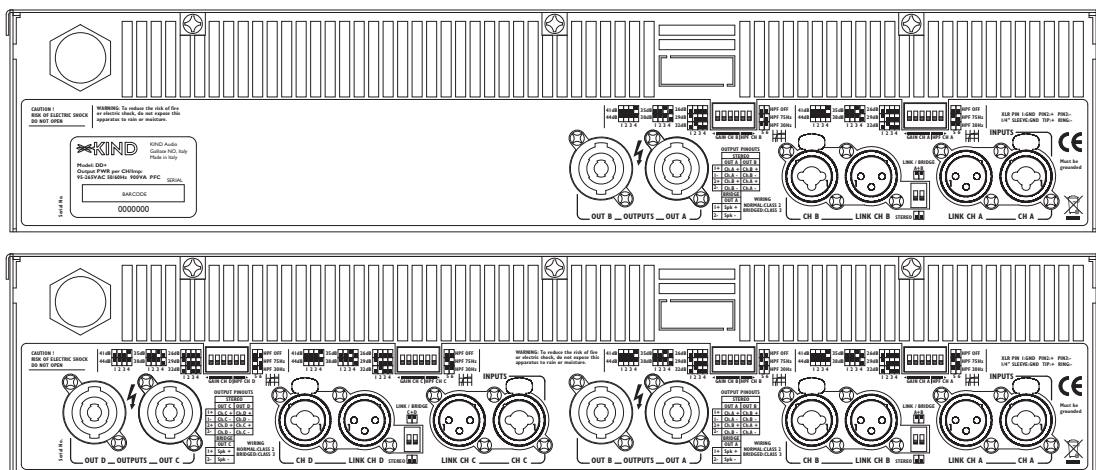
# Specifications

# Preliminary Information

Model	DD+ 3600	DD+ 4000	DD+ 5000	DD+ 6400	DD+ 8000	DQ+ 5000	DQ+ 6000	DQ+ 7000	DQ+ 8000	DQ+ 10000
Number of channels	2	2	2	2	2	4	4	4	4	4
<b>Power Output Per Channel<sup>1)</sup></b>										
16 ohms per ch. (all channels driven)	310 W	430 W	560 W	620 W	830 W	260 W	310 W	430 W	550 W	610 W
8 ohms per ch. (all channels driven)	550 W	750 W	1050 W	1250 W	1500 W	450 W	550 W	750 W	1000 W	1250 W
4 ohms per ch. (all channels driven)	1000 W	1250 W	1850 W	2200 W	2600 W	750 W	1000 W	1250 W	1700 W	2100 W
2.7 ohms per ch. (all channels driven)										
2 ohms per ch. (all channels driven)	1800 W	2000 W	2500 W	3200 W	4000 W	1250 W	1500 W	1750 W	2000 W	2500 W
<b>Power Output Bridged<sup>1)</sup></b>										
16 ohms per ch.	1100 W	1500 W	2100 W	2500 W	3000 W	900 W	1100 W	1500 W	2000 W	2500 W
8 ohms per ch.	2000 W	2500 W	3700 W	4400 W	5200 W	1500 W	2000 W	2500 W	3400 W	4100 W
4 ohms per ch.	3600 W	4000 W	5000 W	6400 W	8000 W	2500 W	3000 W	3500 W	4000 W	5000 W
<b>Performance With Gain</b>	32 dB	32 dB	32 dB	32 dB	32 dB	32 dB	32 dB	32 dB	32 dB	32 dB
THD+N 20 Hz - 20kHz for 1 W @ 4 ohms	<0.2%	<0.2%	<0.2%	<0.2%	<0.2%	<0.2%	<0.2%	<0.2%	<0.2%	<0.2%
THD @ 1 kHz 1dB below clipping @ 4 ohms	<0.35%	<0.35%	<0.35%	<0.35%	<0.35%	<0.35%	<0.35%	<0.35%	<0.35%	<0.35%
Signal to Noise Ratio	>102 dBA	>101 dBA	>101 dBA	>100 dBA	>100 dBA	>101 dBA	>101 dBA	>100 dBA	>100 dBA	>100 dBA
Frequency Response (1 W @ 8 ohms) +0/-1dB	20Hz - 20kHz	20Hz - 20kHz	20Hz - 20kHz	20Hz - 20kHz	20Hz - 20kHz	20Hz - 20kHz	20Hz - 20kHz	20Hz - 20kHz	20Hz - 20kHz	20Hz - 20kHz
Damping Factor @ 8 ohms load, 10 Hz to 200 Hz	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200
Output Slew rate @ 8 ohms (input filter bypassed)	45V / $\mu$ s	45V / $\mu$ s	45V / $\mu$ s	45V / $\mu$ s	45V / $\mu$ s	45V / $\mu$ s	45V / $\mu$ s	45V / $\mu$ s	45V / $\mu$ s	45V / $\mu$ s
Input Impedance Balanced / Unbalanced	20k / 10kOhm	20k / 10kOhm	20k / 10kOhm	20k / 10kOhm	20k / 10kOhm	20k / 10kOhm	20k / 10kOhm	20k / 10kOhm	20k / 10kOhm	20k / 10kOhm
Input CMRR	>50 dB	>50 dB	>50 dB	>50 dB	>50 dB	>50 dB	>50 dB	>50 dB	>50 dB	>50 dB
<b>Gain and Level</b>										
Input Sensitivity @ 4 ohms (32 dB gain) +/- 3 %	1.59 V	1.78 V	2.16 V	2.36 V	2.56 V	1.38 V	1.59 V	1.78 V	2.07 V	2.30 V
Input Gain Selectable (DIP switches on rear panel)	26, 29, 32, 35, 38, 41, 44dB									
Default Gain	32 dB									
Level Adjustment (per channel)	Front panel potentiometer, 21 pos. stepped gain from -Inf to 0 dB									
<b>Front panel Indicators</b>										
Common	Active on (normal status), Active off (mute); Hi temperature (blinking for power reduction and on for mute); Digital Signal Processor (DSP) present									
Per channel	Signal output -35 dB, -20 dB, -10 dB; Clip / Limit; Protect									
<b>Connectors and switches</b>										
Input connectors (per channel)	Balanced: Neutrik Combo™ (XLR female and 1/4" jack), XLR pin 2 and TRS tip positive, and XLR male for link, pin 2 positive									
Output connectors (per channel)	Neutrik Speakon™ (bi-wiring connected)									
Output bridge mode per two channels	A+B - ch. A is signal input source; C+D - ch. C is signal input source.									
Rear panel 2 position DIP switches	Ch.'s A+B (C+D) link/Bridge on									
Rear panel 6 position DIP switches	Ch. A / B (C / D) High Pass Filter 30 / 75 Hz on; Gain multiple selection									
Power (on/off)	switch on front panel									
<b>Output Circuitry</b>	Class D									
<b>Power Supply</b>	R-5MPS) Regulated Switch Mode Power Supply with PFC (Power Factor Correction); The unit works anywhere in the world									
<b>Cooling</b>	Two / three fans, front to rear air flow, temperature controlled speed; front panel removable dust filter									
<b>Amplifier and Load Protection</b>	Short circuit, open circuit, thermal, RF protection, mains over / lower voltage. On/off muting, DC fault shutdown, clip limiter									
<b>Power</b>										
Operating voltage	95 - 265V AC - 50/60 Hz, min. power up voltage 80 V;									
Current draw @ 230 V AC 1/8 power 4 ohms	2.2 A	2.6 A	3.6 A	4.2 A	4.9 A	3.0 A	3.9 A	4.7 A	6.2 A	7.6 A
Current draw @ 230 V AC 1/3 power 4 ohms	4.2 A	5.2 A	7.4 A	8.7 A	10.2 A	6.1 A	8.0 A	9.9 A	13.2 A	16.2 A
Current draw @ 230 V AC, idle	0.5 A	0.5 A	0.5 A	0.5 A	0.5 A	0.5 A	0.5 A	0.5 A	0.5 A	0.5 A
Soft start / Inrush current draw @ 230 V AC	Yes / max. 2 A									
AC cordset	230 V CE: 16 A, CEE7; 115 V ETL: 18A/NEMA LS-30P									
<b>Options</b>	Digital Signal Processing board (KIND DSP board-I), handles									
<b>Dimensions (W/H/D)</b>	W: 483 mm (19"), H: 88.9 mm (3.5" - 2 RU), Overall with optional handles D: 490 mm (19.29"), From front mounting rails D: 455 mm (17.91")									
<b>Weight - Net / Shipping</b>	10 kg (22 lbs.) / 13 kg (28.6 lbs)					11.5 kg (25.3 lbs) / 14.5 kg (31.9 lbs)				
<b>Approvals</b>	CE EN55103-1 (Emissions), EN55103-2 (Immunity), EN60065, Class I (Safety)									

Note 1) EIA 1kHz - 1% THD @ 230 V AC

All specifications are subject to change without notice.



DD+ Model

DQ+ Model



KIND is a trademark of A&G S.r.l.

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Item no. TDS-DD+DQ+VPreliminary05/12/08