

The DDX / DQX series is designed for the most demanding live audio users, whether in touring rigs or fixed installations. Seven models with two channel and six model with four channel offers range in power from 450 watts to 1900 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 DDX / DQX models are based on Class D output circuit controlled by a TeoTon technology 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 DDX / DQX series dramatically reduce power distribution demands compared to older high power amplifiers.

In addition to higher power, the DDX / DQX Series offers higher input voltage, selectable sensitivity, and with the four channel models a high power density.

For those users who simply want a high performance amplifier to go with their existing processor or console, the DDX / DQX series is an ideal choice, offering high power, excellent value, and zero signal latency. The DDX / DQX series have an open input architecture and can have as option a Digital Signal Processing board (KIND DSP board-1) 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.

DDX / DQX 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 DDX / DQX models are built in the same chassis size, with common back panel layouts to facilitate easy racking and hookup.



DDX / DQX Benefits

- Light Weight and high power density: 10 kg - 2x2kW / 11.5kg - 4x1.5kW 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 / TeoTon technology for high efficiency and sonic transparency
- All channels bridgeable
- Strong Reduction of kW/hr needed and power distributions demands
- Low Heat Dissipation
- Flow-thru air path and solid aluminum heat sinks for maximum cooling
- Clip Limiters
- Two selectable input gains (26 dB, 32 dB)
- Selectable low-freq. Filters (30Hz or 75Hz)
- Tamper-proof optional DSP board
- Neutrik Speakon™ Outputs
- Stepped Gain controls Knobs
- Continuously variable speed fans
- Front accessible dust filter
- Craftsmen built in Galliate, Italy
- 3 year Warranty

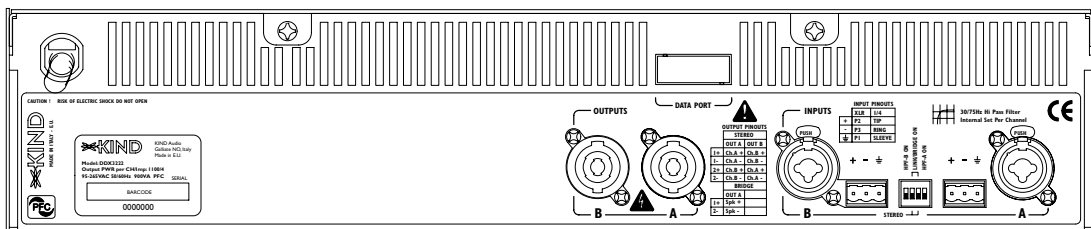
Specifications

Model	DDX1522	DDX2022	DDX2422	DDX3222	DDX3622	DDX4022	DDX3842	DQX3024	DQX4024	DQX3044	DQX4044	DQX4844	DQX6044
Number of channels	2	2	2	2	2	2	2	4	4	4	4	4	4
Power Output Per Channel¹⁾													
16 ohms per ch. (all channels driven)	150 W	180 W	230 W	280 W	360 W	440 W	570 W	150 W	180 W	230 W	280 W	360 W	440 W
8 ohms per ch. (all channels driven)	280 W	350 W	450 W	550 W	700 W	850 W	1100 W	280 W	350 W	450 W	550 W	700 W	850 W
4 ohms per ch. (all channels driven)	450 W	600 W	750 W	1000 W	1200 W	1600 W	1900 W	450 W	600 W	750 W	1000 W	1200 W	1500 W
2.7 ohms per ch. (all channels driven)							2400 W			1000 W	1300 W	1550 W	1850 W
2 ohms per ch. (all channels driven)	750 W	1000 W	1200 W	1600 W	1800 W	2000 W	- 2)	750 W	1000 W	- 2)	- 2)	- 2)	- 2)
Power Output Bridged¹⁾													
16 ohms per ch.	560 W	700 W	900 W	1100 W	1400 W	1700 W	2200 W	560 W	700 W	900 W	1100 W	1400 W	1700 W
8 ohms per ch.	900 W	1200 W	1500 W	2000 W	2400 W	3200 W	3800 W	900 W	1200 W	1500 W	2000 W	2400 W	3000 W
4 ohms per ch.	1500 W	2000 W	2400 W	3200 W	3600 W	4000 W	- 2)	1500 W	2000 W	- 2)	- 2)	- 2)	- 2)
Performance With Gain													
THD+N 20 Hz - 20kHz for 1 W @ 4 ohms	<0.1%	<0.1%	<0.1%	<0.1%	<0.1%	<0.1%	<0.1%	<0.1%	<0.1%	<0.1%	<0.1%	<0.1%	<0.1%
THD @ 1 kHz 1dB below clipping @ 4 ohms	<0.2%	<0.2%	<0.2%	<0.2%	<0.2%	<0.2%	<0.2%	<0.2%	<0.2%	<0.2%	<0.2%	<0.2%	<0.2%
Signal to Noise Ratio	>102 dBA	>102 dBA	>102 dBA	>102 dBA	>101 dBA	>101 dBA	>101 dBA	>101 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	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	>200	>200	>200
Output Slew rate @ 8 ohms (input filter bypassed)	45V / μ s	45V / μ s	45V / μ s	45V / μ s	45V / μ s	45V / μ s	45V / μ s	45V / μ s	45V / μ s	45V / μ s	45V / μ s	45V / μ s	45V / μ 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	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	>50 dB	>50 dB	>50 dB
Gain and Level													
Input Sensitivity @ 4 ohms (32 dB gain) +/- 3 %	1.07 V	1.23 V	1.37 V	1.59 V	1.74 V	2.01 V	2.19 V	1.07 V	1.23 V	1.37 V	1.59 V	1.74 V	1.95 V
Input Gain Selectable (all channels, internal jumpers)	26, 32 dB	26, 32 dB	26, 32 dB	26, 32 dB	26, 32 dB	26, 32 dB	26, 32 dB	26, 32 dB	26, 32 dB	26, 32 dB	26, 32 dB	26, 32 dB	26, 32 dB
Default Gain	32 dB	32 dB	32 dB	32 dB	32 dB	32 dB	32 dB	32 dB	32 dB	32 dB	32 dB	32 dB	32 dB
Level Adjustment (per channel)	Front panel potentiometer, 21 pos. stepped gain from -80 to 0 dB												
Front panel Indicators													
Common	Active on (normal status), Active off (mute); Hi temperature (blinking for power reduction and on for mute); Internal option board present												
Per channel	Signal output -35 dB, -20 dB, -10 dB; Clip / Limit; Protect												
Connectors and switches													
Input connectors (per channel)	Balanced: Neutrik Combo™ (XLR and 1/4" jack), XLR pin 2 and TRS tip positive, and 3-pin detachable Europlug (Phoenix)												
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 4 position DIP switches	Ch. A / B (C / D) High Pass Filter 30/75 Hz on; Ch.'s A+B (C+D) link/Bridge on												
Power (on/off)	switch on front panel												
Output Circuitry													
Class D / TeoTon™ technology													
Power Supply													
(R-SMPS) Regulated Switch Mode Power Supply with PFC (Power Factor Correction); The unit works anywhere in the world													
Cooling													
Two fans, front to rear air flow, temperature controlled speed; front panel removable dust filter													
Amplifier and Load Protection													
Short circuit, open circuit, thermal, RF protection, mains over / lower voltage. On/off muting, DC fault shutdown, clip limiter													
Power													
Operating voltage	95 - 265V AC - 50/60 Hz, min. power up voltage 80 V;												
Current draw @ 230 V AC 1/8 power 4 ohms	1.3 A	1.5 A	1.8 A	2.2 A	2.5 A	3.2 A	3.7 A	2.0 A	2.5 A	3.0 A	3.9 A	4.5 A	5.5 A
Current draw @ 230 V AC 1/3 power 4 ohms	2.2 A	2.7 A	3.3 A	4.2 A	5.0 A	6.5 A	7.6 A	3.9 A	5.0 A	6.1 A	8.0 A	9.5 A	11.7 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	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: 15 A, NEMA-15												
Options													
Digital Signal Processing board (KIND DSP board-1), handles													
Dimensions (W/H/D)													
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")													
Weight - Net / Shipping													
10 kg (22 lbs.) / 13 kg (28.6 lbs) 11.5 kg (25.3 lbs) / 14.5 kg (31.9 lbs)													
Approvals													
CE EN55103-1 (Emissions), EN55103-2 (Immunity), EN60065, Class I (Safety)													

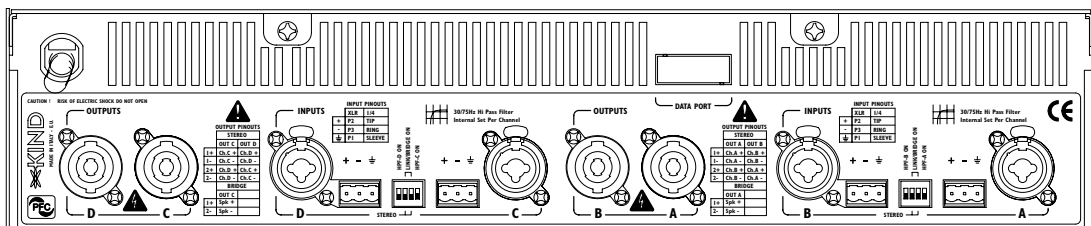
Note 1) EIA 1kHz - 1% THD @ 230 V AC

Note 2) The amplifier will be fully operational at 2 ohm loads (or at bridge-mode at 4 ohm loads), but due to physical constraints in the construction the hi temp protection may occur and max. output power will not be significantly higher than running the amplifier at 4 ohm loads (or at bridge-mode at 8 ohm loads) and therefore not stated here.

All specifications are subject to change without notice.



DDX Model



DQX Model



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

Via Montello, 19 - 28066 Galliate (NO) ITALY - Tel. +39 0321 865271 - Fax +39 0321 861674 - e-mail: info@kindaudio.com

kindaudio.com

Item no. TDS-DDXDQX-V01-06/03/08