



- ☒ Touring
☐ Installation

2CH



- ▶ Small to medium-scale touring systems, FOH
- ▶ Small-scale subwoofers
- ▶ Full-range loudspeakers
- ▶ Stage monitoring for
- ▶ Concert halls
- ▶ Live clubs
- ▶ Corporate events

2-channel mode			mono-bridged mode	
2 Ω / Ch	4 Ω / Ch	8 Ω / Ch	4 Ω / Ch pair	8 Ω / Ch pair
10,000 W	6,000 W	3,000 W	20,000 W	12,000 W

EIAJ Test Standard @ 1 kHz, 1%, THD

While safe and stable with 2 Ω loads like all K Series models, the **Dx20K** is optimized for 4 Ω loudspeakers. Built on the same unique technologies as its much more powerful siblings, it also occupies only a single space in a 19" rack, yet at even less depth, and weighing as little as 12 kg. 26.5 lb/

Better still, the **Dx20K** can be equipped, at the factory or anytime later, with an optional state of the art DSP board for extensive sound management functionality IIR FIR filters safety features like TruePower™ limiting and LiveImpedance™, as well as the convenient Active DampingControl are intuitively manageable with the free PC software Armon a Pro Audio Suite via the standard RS485 communication port.¹⁾

All features added up, plus versatility and usability along with the sonic performance taken into account, the **Dx20K** represents a highly attractive mix and an exceptionally great value for almost any sound professional, no matter what type of loudspeaker it is connected to. So, it must not surprise that the **Dx20K** is one of the best selling amplifier models in the entire range.

✓ Legendary efficiency

- ▶ Unequaled Class D design with fixed switching frequency
- ▶ Universal switch mode power supply with PFC (Power Factor Correction)
- ▶ Space and weight saving: only one rack space (1 RU) and 12kg/26.5 lb
- ▶ Green Audio Power®: More amplifier output power from the AC mains power distribution due to 85% efficiency

✓ Outstanding performance and operational safety:

- ▶ Excellent sonic quality by design, including amp clip limiters and patented ripple cancellation network
- ▶ Numerous amp, system, venue parameters can be configured/ locked/ and monitored; i.e. AC mains voltage/current draw to protect from breaker tripping

✓ Communication:

- ▶ Fully digitally controlled amplifier providing feedback of status information
- ▶ RS485 serial communication port standard on board, for amplifier control and monitoring via Armon a Pro Audio Suite™ software¹⁾
- ▶ Proven reliability, yet downloadable log file of all functional fault events with time-related trace

✓ Practically versatile:

- ▶ Mono-bridgeable amplifier channels; switch for linking analog signal inputs
- ▶ AC inrush current limiting; channel output voltage limiting
- ▶ Digital gain attenuator for gain/sensitivity selection

✓ Front panel interactive LCD display for local access and

✓ Front panel SmartCard reader/writer for firmware updates and preset

✓ Front-to-rear airflow cooling with variable-speed fan, temperature

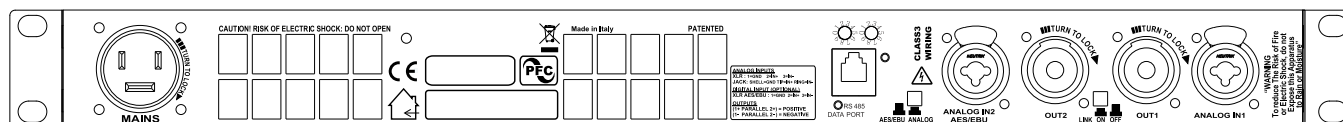
✓ Full protection circuitry: over/under AC voltage; troublesome signals, clipping(VHF, long-term RMS); DC; thermal; short circuit; mute at power on/off

✓ Full four years warranty

✓ Options & accessories:

- ▶ SmartCard, for firmware updates or preset storage
- ▶ Power Control Hub, RS485 distribution and remote Power-on unit for up to eight DM Series amplifiers, 19" /1 RU
- ▶ DSP Board, for DSP integration:
 - Optional top-grade DSP with high dynamic range and extensive feature set
 - Separate input/output EQ's with numerous filters of various types up to 48 dB oct IIR linear phase FIR and hybrid FIR IIR
 - Sophisticated limiter system comprising peak, RMS voltage, RMS current, and TruePower™ limiting
 - Speaker wire compensation with Active DampingControl™
 - LiveImpedance™ load monitoring with regular musical signal
 - AES3 digital audio signal input via XLR
- ▶ KAESOP Board /Ethernet(AES3 interface)

1) Serial communication is relatively slow, hence; max 4 amps can be monitored simultaneously, and information is reduced. e.g. no signal level metering,



Specifcations

General	Number of channels	2				
	Output power	stereo mode		mono-bridged mode		
	EIAJ Test Standard, 1 kHz, 1% THD	2 Ω/ch	4 Ω/ch	8 Ω/ch	4 Ω	8 Ω
		10,000 W	6,000 W	3,000 W	20,000 W	12,000 W
	Max output voltage / current	225 V _{peak} / 125 A _{peak}				
AC Mains Power						
	Power supply	Universal, regulated switch mode with PFC (Power Factor Correction)				
	Operating voltage	100-240 V ±10%, 50/60 Hz				
	Power factor cos φ)	>0.95 @ >500 W				
	Consumption / current draw	@ 230 V		@ 115 V		
	Idle	90 W	1.31 A	92 W	1.34 A	
	I/8 of max output power @ 4Ω	1,625 W	7.9 A	1,625 W	15.8 A	
Thermal	I/4 of max output power @ 4Ω	3,250 W	14.7 A	3,250 W	29.3 A	
	Environmental operating temperature	0° - 45° C / 32° - 113° F				
	Thermal dissipation	Fan, continuously variable speed, temperature controlled, front to rear airflow				
	Idle	682 BTU/h		172 kcal/h		
	I/8 of max output power @ 4Ω	1,590 BTU/h		402 kcal/h		
Audio	I/4 of max output power @ 4Ω	2,498 BTU/h		631 kcal/h		
	Gain, selectable	26 dB	29 dB	32 dB	35 dB	
	Input Sensitivity @ 8Ω	7.37 V	5.22 V	3.68 V	2.62 V	
	Max input level	27 dBu	24 dBu	21 dBu	18 dBu	
	Gate	-52 dBu	-55 dBu	-58 dBu	-61 dBu	
	Frequency response	20 Hz - 20 kHz (1 W @ 8 Ω, ±0.5 dB)				
	S/N ratio (amplifier section)	>110 dBA (20 Hz - 20 kHz, A weighted)				
	Crosstalk separation	> 66 dB @ 1 kHz				
	Input Impedance	10 k Ω balanced				
	THD+N/SMPTE IMD/DIM 100 IMD	<0.5% from 1 W to full power (typically <0.05%)				
	Slew rate	50 V/μs @ 8 Ω, input filter bypassed				
	Damping factor @ 8Ω	>5000 @ 20-200 Hz				
DSP	A/D converter	Dual 24bit 96 kHz Tandem® architecture with 127 dBA of dynamic range and THD <0.005% (20 Hz - 20 kHz)				
	D/A converter	Dual 24bit 96 kHz Tandem® architecture with 122 dBA of dynamic range and THD <0.003% (20 Hz - 20 kHz)				
	Memory	8 MB (RAM) plus 2 MB (flash for presets)				
	Presets	50 stored locally + 150 stored on a smartcard				
	Digital audio input	AES3 (glitchless fallback to analog audio selectable)				
	Delay for time alignment	up to 4 s on the input section, up to 32 ms per output, sample-by-sample stepping				
	Crossover filters	Butterworth, Linkwitz-Riley, Bessel, Arbitrary Asymmetric, 6dB/oct to 48dB/oct (IIR), linear phase (FIR), hybrid (FIR+IIR)				
	Output equalizer	16 fully parametric filters per channel, IIR: peaking, hi/lo shelving, hi/lo pass eq, band pass, band stop, all pass. Custom FIR up to 384 taps @ 48 or 96 kHz				
	Input equalizer	Three layers (PEQ, raised cosine, shelving), 32 filters each + group filters, up to 256 filters per channel				
	Cable compensation network	up to 2 Ω negative/positive wire compensation (Active DampingControl™)				
	Limiters	Power limiter (TruePower™, RMS voltage, RMS current) + Peak Limiter				
Front Panel	Indicators	7 meter LEDs: 5 x green, 1 x yellow, 1 x red, top yellow and red show alarm with protect description on LCD panel				
	Controls	4 pushbuttons, function depending on user menu				
	Power switch	Mains switch				
	Network data port AESOP incl. AES3	2 x RJ45 with activity LEDs				
	Maintenance	SmartCard reader/writer for frmware updates and preset storage. Easily accessible dust filter foam behind two steel covers				
Rear Panel	Audio signal input connectors	Analog: 2 x balanced Neutrik® Combo XLR female/1/4" jack; AES3: use channel 2 XLR				
	Loudspeaker output connectors	2 x Neutrik® Speakon NL4MD				
	Network data port Ethernet	2 x RJ45 with activity LEDs				
	Aux voltage	1 x 2-pin Phoenix P. 3.81mm				
	AC mains	AMP CPC 45A on rear panel; AMP CPC 45A connector mounted on a 3 x 5mm² (10AWG) cable				
	Controls	1 x link switch, linking analog inputs 1 and 2; AES3/analog input switch				
Construction	Dimensions	W 483 mm / 19", H 44.5 mm / 1 RU, D 475 mm / 18.7"				
	Chassis	1 mm / 0.04" steel chassis and removable dust cover ; 3 mm / 0.12" steel front panel, screw hole protection, side reinforcement & rear support				
	Weight	12 kg (26.5 lb)				

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