

- ☒ 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
3,000 W	2,800 W	1,500 W	6,000 W	5,600 W

EIAJ Test Standard, 1 kHz, 1% THD

While safe and stable with 2 Ω loads like all K Series models, the **Dx60** 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 9 kg/19.8 lb

Better still, the **Dx60** 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 **Dx60** 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 **Dx60** 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 9kg/19.8 lb
- ▶ Green Audio Power®: More amplifier output power from the AC mains power distribution due to $\eta > 85\%$ 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

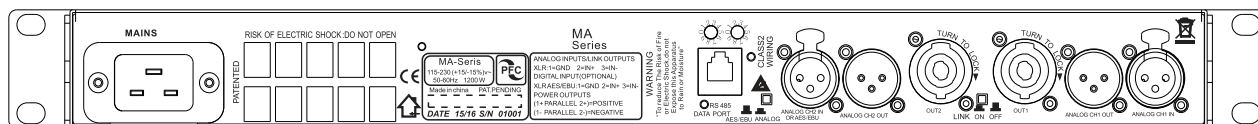
✓ Full protection circuitry: over/under AC voltage; troublesome signals, clipping(VHF, long-term RMS); DC; thermal; short circuit; mute at power on/off

✓ 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,



Specifications

General		2			
Number of channels					
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
		3,000 W	2,800 W	1,500 W	6,000 W
Max output voltage / current		165 V _{peak} / 102 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		75 W	1.3 A	64 W	1.12 A
1/8 of max output power @ 4 Ω		813 W	4 A	813 W	8 A
1/4 of max output power @ 4 Ω		1,625 W	7.4 A	1,625 W	14.8 A
Thermal					
Environmental operating temperature		0° - 45° C / 32° - 113° F			
Thermal dissipation		Fan, continuously variable speed, temperature controlled, front to rear airflow			
Idle		382 BTU/h		96 kcal/h	
1/8 of max output power @ 4 Ω		836 BTU/h		211 kcal/h	
1/4 of max output power @ 4 Ω		1,390 BTU/h		326 kcal/h	
Audio					
Gain, selectable		26 dB	29 dB	32 dB	35 dB
Input Sensitivity @ 8 Ω		5.30 V	3.75 V	2.66 V	1.88 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)		>106 dBA (20 Hz - 20 kHz, A weighted)			
Crosstalk separation		> 70 dB @ 1 kHz			
Input Impedance		10 k Ω balanced			
THD+N/SMPT E IMD/DIM 100 IMD		<0.3% from 1 W to full power (typically <0.05%)			
Slew rate		50 V/μs @ 8 Ωinput filter bypassed			
Damping factor @ 8 Ω		>5000 @ 20-200 Hz			
DSP (optional)					
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; mains switch			
Network data port AESOP incl. AES3		2 x RJ45 with activity LEDs			
Maintenance		SmartCard reader/writer for firmware updates and preset storage. Easily accessible dust filter foam behind two steel covers			
Rear Panel					
Audio signal input connectors		Analog: 2 x balanced Neutrik® XLR female; AES3: use channel 2 XLR			
Audio signal output connectors		Analog: 2 x balanced Neutrik® XLR male			
Loudspeaker output connectors		2 x Neutrik® Speakon NL4MD			
Network data port RS485		1 x RJ45 with 2 recessed rotary encoders for ID selection			
Aux voltage		1 x 2-pin Phoenix P. 3.81mm			
AC mains		IEC20A with IEC20A Schuko for EU, IEC20A/American 15 A pin plug			
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 380 mm / 15"			
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		9 kg (19.8 lb)			

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

2) External high-pass filter required.