



- Touring
- Installation

# 2CH



**DSP**  
optional



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

While safe and stable with 2 Ω loads like all K Series models, the **K3** is optimized for 4 Ω loudspeakers. Built on the same unique Powersoft 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 8 kg/17.7 lb.

Better still, the **K3** 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 Armonía Pro Audio Suite™ via the standard RS485 communication port.<sup>1)</sup>

All features added up, plus versatility and usability along with the sonic performance taken into account, the **K3** 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 **K3** is one of the best selling amplifier models in the entire Powersoft range.

2-channel mode			mono-bridged mode	
2 Ω / Ch	4 Ω / Ch	8 Ω / Ch	4 Ω / Ch pair	8 Ω / Ch pair
2,800 W	2,600 W	1,400 W	5,600 W	5,200 W

EIAJ Test Standard, 1 kHz, 1% THD

- ✓ **Legendary Powersoft 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 7kg/17.7 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 Armonía Pro Audio Suite™ software<sup>1)</sup>
  - ▶ 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 configuration
- ✓ Front panel SmartCard reader/writer for firmware updates and preset storage
- ✓ Front-to-rear airflow cooling with variable-speed fan, temperature controlled
- ✓ 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
  - ▶ Armonía Pro Audio Suite, free at [www.armoniasuite.com](http://www.armoniasuite.com)
  - ▶ Power Control Hub, RS485 distribution and remote Power-on unit for up to eight K Series amplifiers, 19"/1 RU
  - ▶ KDSP 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)

<sup>1)</sup> 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	
Number of channels	2
Output power	stereo mode
EIAJ Test Standard, 1 kHz, 1% THD	2 Ω/ch      4 Ω/ch      8 Ω/ch
	2,800 W      2,600 W      1,400 W
Max output voltage / current	165 V <sub>peak</sub> / 102 A <sub>peak</sub>
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
Idle	75 W      1.3 A
1/8 of max output power @ 4 Ω	813 W      4 A
1/4 of max output power @ 4 Ω	1,625 W      7.4 A
	@ 115 V
Idle	64 W      1.12 A
1/8 of max output power @ 4 Ω	813 W      8 A
1/4 of max output power @ 4 Ω	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/SMPTE IMD/DIM I00 IMD	<0.3% from 1 W to full power (typically <0.05%)
Slew rate	50 V/μs @ 8 Ω, input 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 / 1.75", 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	8 kg (17.7 lb)

Data is subject to change without notice.  
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