


 Touring

 Installation

2 CH


**DSP**  
optional


- ▶ Medium-scale touring systems, FoH & subwoofers
- ▶ Large-scale touring systems, MF/HF
- ▶ Stage monitoring for
- ▶ Arenas, concert halls, live clubs
- ▶ Corporate & open-air events

Like all K Series models, the **K6** is designed for, and absolutely stable with, 2 Ω loads. Hence, with multiple speakers/drivers in parallel, a single K6 is well capable of powering e.g. a major section of a medium-sized line array, or a number of full-range speakers, effectively reducing the number of amps needed for powering a specific system.

The **K6** can be software upgraded to become a K8, and even a K10, making it a safe investment that grows with the need for replacing the amp hardware. This fact reveals the otherwise hidden power density deriving from unique Powersoft technologies despite running off a single mains phase, while fitting into a single 19" rack unit and weighing only 12 kg/26.5 lb, all a result of efficiency exceeding 85%.

Better still, the **K6** 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 Armonia Pro Audio Suite™ via the standard RS485 communication port. <sup>1)</sup>

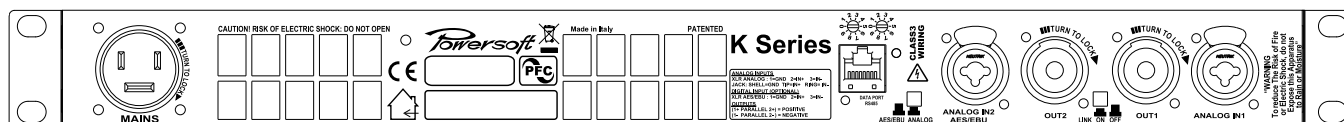
2-channel mode			mono-bridged mode	
2 Ω / Ch	4 Ω / Ch	8 Ω / Ch	4 Ω / Ch pair	8 Ω / Ch pair
3,600 W	2,500 W	1,300 W	7,200 W	5,000 W

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 12 kg/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 Armonia Pro Audio Suite™ software <sup>1)</sup>
  - ▶ Proven reliability, yet downloadable log file of all functional fault events with time-related trace
- ✓ **Safe investment: Step-up program allows smooth upgrade to K10**
- ✓ **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
- ✓ SmartCard reader/writer for firmware updates, preset storage, and Step-up
- ✓ 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; Step-up card
  - ▶ Armonia 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 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.

## 2-Channel Power Amplifier for High-Performance Touring



## Specifications

<b>General</b>					
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
	3,600 W	2,500 W	1,300 W	7,200 W	5,000 W
Max output voltage / current	153 V <sub>peak</sub> / 125 A <sub>peak</sub>				
<b>AC Mains Power</b>					
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	84 W	1.03 A	91 W	1.11 A	
1/8 of max output power @ 4 Ω	781 W	4.1 A	781 W	8.2 A	
1/4 of max output power @ 4 Ω	1,563 W	7.4 A	1,563 W	14.8 A	
<b>Thermal</b>					
Environmental operating temperature	0° - 45° C / 32° - 113° F				
Thermal dissipation	Fan, continuously variable speed, temperature controlled, front to rear airflow				
Idle	546 BTU/h		138 kcal/h		
1/8 of max output power @ 4 Ω	982 BTU/h		248 kcal/h		
1/4 of max output power @ 4 Ω	1,419 BTU/h		358 kcal/h		
<b>Audio</b>					
Gain, selectable	26 dB	29 dB	32 dB	35 dB	
Input Sensitivity @ 8 Ω	5.11 V	3.62 V	2.56 V	1.81 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 I00 IMD	<0.5% 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				
<b>DSP (optional)</b>					
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				
<b>Front Panel</b>					
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 firmware updates and preset storage. Easily accessible dust filter foam behind two steel covers				
<b>Rear Panel</b>					
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 RS485	1 x RJ45 with 2 recessed rotary encoders for ID selection				
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 5mm <sup>2</sup> (10AWG) cable				
Controls	1 x link switch, linking analog inputs 1 and 2; AES3/analog input switch				
<b>Construction</b>					
Dimensions	W 483 mm / 19", H 44.5 mm / 1.75", 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)				

Data is subject to change without notice.  
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