K1
K2

K SERIES

K-Series amplifiers deliver more power and sound while using less energy than conventional amplifiers. And it's all in a durable, maintenance-free package that's just two rack spaces high.

Using patented Balanced Current Amplifier (BCA®) circuitry, Crown® K-Series amplifiers give you massive amounts of power while generating just one-tenth the heat of conventional amplifiers. In fact, the powerful K2® amplifier can deliver an amazing 1,250 watts per channel into 2 ohms (and that's a very solid 2 ohms)!

Because of their incredible efficiency, K-Series amplifiers require no internal cooling fan and feature a closed chassis. Of course, no fan means no fan noise. In addition, the closed chassis makes these amplifiers virtually immune to environmental problems such as dust, cigarette smoke, stage fog and spilled liquids. In practical, everyday terms, the K-Series amplifiers are essentially maintenance-free. As with all convection-cooled amplifiers, varying operating levels and loads may require additional air movement in high ambient temperature conditions.

K-Series amplifiers are so energy efficient—more than twice that of conventional switching amps—they require significantly less energy to deliver their massive power into virtually any load, no matter how difficult. In addition, each amplifier is equipped with a "green" circuit that further reduces energy use during idle periods. Energy draw is so low—only 12 watts or less—the amplifier may be kept in a continual ready state at minimal cost. This efficiency means you'll realize significant savings over the life of the amplifier, reducing the cost of ownership, as well as enabling more K-Series amplifiers to be plugged into a single AC circuit, reducing installation costs.

Features

- Accurate, uncolored sound with very low distortion for the best in music and voice reproduction
- High damping factor for tight, clean bass response
- Advanced design for energy conservation
- Mono mode switches allow you to set up your amps/speakers in the configuration that best suits your needs—with combined amp inputs, combined amp outputs, or both.
- Advanced protection circuitry guards against: shorted outputs, open circuits, DC, mismatched loads, general overheating,high-frequency overloads and internal faults
- Extremely versatile, handling a wide range of speaker impedances and outputs
- Exclusive BCA® (Balanced Current Amplifier) power design provides super efficiency for quiet, fan-free operation
- Switchable input sensitivity
- "Soft start" feature prevents the K-Series amplifier from drawing large currents when it is first turned on so you don't need to delay power-on of your amps
- Uniquely molded, cast-aluminum front panel provides exceptional air circulation for your K-Series amplifier
- Three-year, No-Fault, Fully Transferable Warranty completely protects your investment and guarantees its specifications

Best of all, the K Series delivers all of the superior sound that Crown is known for—tight, chest-slamming low end, crystal-clear highs and a well-defined midrange. Several exceptional product reviews concur that the K Series delivers fantastic sound.

The K Series stands above the rest as the performance leader in convection-cooled designs.

For more details about the Crown K Series, contact the Crown Technical Support Group at 800-342-6939 or 574-294-8200. Also, visit the Crown Audio website at www.crownaudio.com.

Specifications

The following applies to 120-VAC, 60-Hz units in Stereo mode with 8-ohm loads and an input sensitivity of 26 dB gain unless otherwise specified. Specifications for units supplied outside the U.S.A. may vary slightly at different AC voltages and frequencies.

Power

Output Power: See power charts below.

K1	*1 kHz Power
2 ohm Stereo (per channel)	**750W**
4 ohm Stereo (per channel)	**550W**
8 ohm Stereo (per channel)	**350W**
4 ohm Bridge-Mono	**1,500W**
8 ohm Bridge-Mono	**1,100W**

*1 kHz Power: refers to maximum average power in watts at 1 kHz with 0.1% or less TRUE THD.

K2	*1 kHz Power
2 ohm Stereo (per channel)	**1,250W**
4 ohm Stereo (per channel)	**800W**
8 ohm Stereo (per channel)	**500W**
4 ohm Bridge-Mono	**2,500W**
8 ohm Bridge-Mono	**1,600W**

*1 kHz Power: refers to maximum average power in watts at 1 kHz with 0.1% or less TRUE THD.

Voltage Gain:

K1: 31.55 dB gain at 1.4 volt sensitivity; 26 dB gain at 2.65 volt sensitivity.
K2: 32.88 dB gain at 1.4 volt sensitivity; 25 dB gain at 3.0 volt sensitivity.

Line Voltage Requirements: Universal power supply can be configured to operate with 100,120, 200, 220, 230, 240, 250VAC at 50 or 60 Hz. Adapters are acquired through an Authorized Service Center.

Performance

Frequency Response: ±0.25 dB from 20 Hz to 20 kHz. The frequency response is band limited with an 8 Hz double-integrated 3rd-order Butterworth high-pass filter and a 30 kHz 7th-order Gaussian low-pass filter.

Signal to Noise (A-weighted): > 100 dB below rated power.

Damping Factor: > 3,000 from 10 to 400 Hz.

Controls

Level: A calibrated rotary level control for each channel located on the front panel.

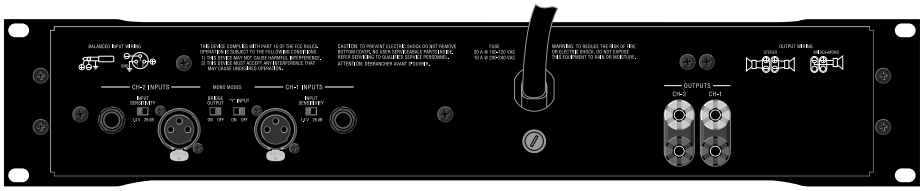
Power: An on/off rocker switch located on the front panel.

Input Sensitivity: A two-position switch for each channel located on the back panel near each channel's input connectors.

Bridge Output: An on/off switch located on the back panel between the input connectors which, when turned on, bridges the two output channels for twice the output voltage.

RECORDING BROADCAST

K1
K2



"Y" Input: An on/off switch located on the back panel between the input connectors which, when turned on, parallels the two input channels.

Indicators

TLC: A TLC (thermal level control) LED for each channel which turns on with a dim glow shortly before the amplifier needs help dissipating heat.

Clip: An orange LED for each channel which turns on when distortion of any type becomes audible in the amplifier output.

IOC: A yellow LED for each channel which serves as a distortion indicator. The IOC indicators include a pulse-stretching feature that helps make them more noticeable even with rapid transient signals

Signal: A green LED for each channel which flashes dimly when a very low-level signal (as low as 10 mW) is present in the output. They flash brightly when a louder signal (at least 1 watt) is present at the output.

Enable: A green LED that turns on when the amplifier has been turned on and has power. When first turned on, there will be a brief two-second delay while the amplifier performs a quick turn-on diagnostic. Then the Enable indicator will turn on to its full brightness. If no signal is present, the Enable indicator will switch to a dim level.

Input/Output

Input Connectors: One balanced ¼-inch (6.35-mm) phone jack and one 3-pin female XLR connector for each channel.

Input Stage: Input is electronically balanced and employs precision 1% resistors.

Input Impedance: Nominally 20 k ohms, balanced. Nominally 10 k ohms, unbalanced.

Output Connectors: Two sets of color-coded binding posts for banana plugs, spade lugs or bare wire (European models do not accept banana plugs.)

DC Output Offset: ±10 millivolts.

Output Signal

Stereo: Unbalanced, two-channel.

Bridge-Mono: Balanced, single-channel. Channel 1 controls are active; Channel 2 should be turned down.

Protection

K-Series amplifiers are protected against shorted, open or mismatched loads; overloaded power supplies; excessive temperature, chain destruction phenomena, input overload damage and high-frequency blowups. They also protect loudspeakers from input/output DC, DC offset and turn-on/turn-off transients.

TLC protection circuitry protects the amplifier from excessive heat by subtly and dynamically reducing the gain only when necessary to reduce heat levels. Transformer overheating (an extremely unlikely event) will result in a temporary shutdown; when it has cooled to a safe temperature, the transformer will automatically reset itself. Controlled slew rate voltage amplifiers prevent RF burnouts, and input overload protection is provided by the input current limit.

Out-of-band low-pass and high-pass filters protect the amplifier and loads from subsonic frequencies below 8 Hz and ultrasonic frequencies above 30 kHz.

Turn On: State-of-the-art "soft start" feature prevents the amplifier from drawing a large inrush current when it is first turned on and no dangerous artifacts are produced by the amplifier. (However it is recommended that all equipment ahead of the amplifier be turned on first since they may produce turn-on transients.)

Construction

Cast-aluminum front panel with durable finish and Lexan labels. Aluminum chassis with durable black finish.

Cooling: High-performance passive convection cooling system allows the amplifier to drive 2 ohm loads to high music sound levels (6 dB into clip) in a 40° C (104° F) ambient environment .

Dimensions: Standard 19-inch (48.3-cm) rack mount width (EIA RS-310-B), 3.5 inches (8.9 cm) high and 16 inches (40.6 cm) deep behind front mounting surface.

Net Weight:

K1: 32 lb (14.6 kg).
K2: 38 lb (17.3 kg).

Shipping Weight:

K1: 38 lb (17.3 kg).
K2: 44 lb (20.0 kg).

Center of gravity approximately 6 inches (15.2 cm) behind front mounting surface.

Crown's Three-Year, No-Fault, Fully Transferable Warranty

Crown offers a Three-Year, No-Fault, Fully Transferable Warranty for every new Crown amplifier—an unsurpassed industry standard. With this unprecedented No-Fault protection, your new Crown amplifier is warranted to meet or exceed original specifications for the first three years of ownership. During this time, if your amplifier fails, or does not perform to original specifications, it will be repaired or replaced at our expense. About the only things not covered by this warranty are those losses normally covered by insurance and those caused by intentional abuse. And the coverage is transferable, should you sell your amplifier.

See your authorized Crown dealer for full warranty disclosure and details. For customers outside of the USA, please contact your authorized Crown distributor for warranty information or call 574-294-8200.

crown

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Specifications subject to change without prior notice. Latest information available at www.crownaudio.com.

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K Series Calculated Data

K1: 8 Ohm Stereo Mode, or 16 Ohm Bridged Mono Mode				
Program Material	Power Draw Watts	Waste Heat BTU/Hr	Current Draw 120VAC	Current Draw 240VAC
Individual Speech	172	350	1.7A	0.9A
Acoustic/Chamber Music	255	392	2.6A	1.3A
Full Range Rock Music	337	434	3.4A	1.7A
Compressed Rock Music	419	476	4.2A	2.1A
Pink Noise	502	518	5.0A	2.5A

K1: 4 Ohm Stereo Mode, or 8 Ohm Bridged Mono Mode				
Program Material	Power Draw Watts	Waste Heat BTU/Hr	Current Draw 120VAC	Current Draw 240VAC
Individual Speech	219	374	2.2A	1.1A
Acoustic/Chamber Music	349	440	3.5A	1.8A
Full Range Rock Music	478	506	4.8A	2.4A
Compressed Rock Music	608	573	6.1A	3.1A
Pink Noise	737	639	7.4A	3.7A

K1: 2 Ohm Stereo Mode, or 4 Ohm Bridged Mono Mode				
Program Material	Power Draw Watts	Waste Heat BTU/Hr	Current Draw 120VAC	Current Draw 240VAC
Individual Speech	266	398	2.7A	1.3A
Acoustic/Chamber Music	443	488	4.4A	2.2A
Full Range Rock Music	619	579	6.2A	3.1A
Compressed Rock Music	796	669	8.0A	4.0A
Pink Noise	972	759	9.8A	4.9A

K2: 8 Ohm Stereo Mode, or 16 Ohm Bridged Mono Mode				
Program Material	Power Draw Watts	Waste Heat BTU/Hr	Current Draw 120VAC	Current Draw 240VAC
Individual Speech	202	365	2.0A	1.0A
Acoustic/Chamber Music	314	422	3.1A	1.6A
Full Range Rock Music	425	479	4.3A	2.1A
Compressed Rock Music	537	536	5.4A	2.7A
Pink Noise	649	594	6.5A	3.3A

K2: 4 Ohm Stereo Mode, or 8 Ohm Bridged Mono Mode				
Program Material	Power Draw Watts	Waste Heat BTU/Hr	Current Draw 120VAC	Current Draw 240VAC
Individual Speech	278	404	2.8A	1.4A
Acoustic/Chamber Music	466	500	4.7A	2.3A
Full Range Rock Music	655	597	6.6A	3.3A
Compressed Rock Music	843	693	8.5A	4.2A
Pink Noise	1031	789	10.4A	5.2A

K2: 2 Ohm Stereo Mode, or 4 Ohm Bridged Mono Mode				
Program Material	Power Draw Watts	Waste Heat BTU/Hr	Current Draw 120VAC	Current Draw 240VAC
Individual Speech	385	458	3.9A	1.9A
Acoustic/Chamber Music	678	609	6.8A	3.4A
Full Range Rock Music	972	759	9.8A	4.9A
Compressed Rock Music	1266	910	12.7A	6.4A
Pink Noise	1561	1060	15.7A	7.8A

The information provided on this page is calculated data based on driving both channels to rated output. Other parameters used in calculation include a conservative idle draw estimate of 90 Watts and a conservative estimation of efficiency at 85%. Information is provided for the purpose of getting an idea of current draw and heat produced. Actual performance will vary depending on environment, program material, load, signal, and AC mains voltage and frequency. Figures calculated for various program material use estimated duty cycles, taking into account the typical crest factor for each type of source material. Values of calculated current draw are intended to represent average draw corresponding to the thermal breaker requirements that should be met to handle the amplifier as a load on the AC mains. Peak current draw with dynamic program material may be significantly higher. Thermal information is provided to assist with calculating air conditioning needs. The above data should not be construed as specifications.