

# **CE 4000**

ngineered from the bottom up for topnotch performance and unmatched reliability, the Crown® CE 4000 amplifier represents the wave of the future for power amplifiers. Designed using Crown's patented, award-winning Class I (BCA® Balanced Current Amplifier) engineering, the CE 4000 provides superior power output, increased efficiency, legendary Crown sound and extraordinary reliability.

The CE 4000 not only handles but excels at handling 2-ohm loads. In repeated stress tests, the CE 4000 continued to perform at levels 12 dB into clip, long after the competition had shut down

Designed for the utmost in flexibility, the CE 4000 features selectable on-board high-and low-pass filter sets, so you can easily add a sub-bass system. Additional signal control is available via Crown's optional SST (System Solution Topologies) modules, which offer a wide variety of active crossover configurations. Your choice of dual output connectors is also available: Neutrik® Speakon® plus 5-way barrier block, 5-way barrier block plus binding strip, or dual Neutrik Speakon.

Weighing in at a mere 34 pounds, the CE 4000 is easy to transport and set up. What's more, Crown's enhanced, switch-mode power supply (featuring power factor correction) results in a universal power supply, so you can plug it in anywhere. And with the lowest cost per watt of any amp in its class, the CE 4000 is the obvious choice for serious musicians everywhere.

For more details about the Crown CE 4000 amplifier, 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**

Note: All measurements are in Stereo mode with 8-ohm loads and an input sensitivity of 26-dB gain at 1-kHz rated power unless otherwise specified.

### **Power**

**Load Impedance:** Safe with all types of loads. Rated for 2, 4 and 8 ohms in Stereo mode, 4 and 8 ohms in Bridge-Mono mode.

#### Voltage Gain to 1-kHz, 8-ohm rated output:

39.0-dB gain at 0.775-volt sensitivity;

33.8-dB gain at 1.4-volt sensitivity;

26-dB gain at 3.46-volt sensitivity.

**Required AC Mains:** 50/60 Hz , 100-240VAC (±10%).



## CE SERIES



#### **Features**

- Patented, award-winning Class I (BCA) technology delivers high efficiency and superb sound.
- Extremely reliable; keeps running under the harshest of conditions.
- Switch-mode power supply with PFC (powerfactor correction) allows universal use.
- Sub-bass output via integral 4-position highpass and 3-position low-pass filter sets for each channel.
- Compatible with Crown SST (system solution topologies) input modules.
- Choice of dual output connectors: 5-way binding post plus Neutrik® Speakon®, 5-way binding post plus barrier strip, or dual Neutrik Speakon.
- 3-speed Fan On Demand.
- · Weighs just 34 pounds.
- The best three-year "No-Fault" fully transferable warranty in the business! It even covers round-trip ground shipping in the U.S. for all warranty work.

#### **AC Line Current.**

**100 Volts**: 8.5 A; **120 Volts**: 7.1 A; **230-240 Volts**: 3.7 A;

**At Idle:** Amp draws no more than 140 watts.

**AC Line Connector:** 15A IEC Connector with Country-Specific Cord and Plug.

## **Output Power:**

CE 4000	*1 kHz Power
2 ohm Dual	1400W**
4 ohm Dual	1200W
8 ohm Dual	600W
4 ohm Bridge-Mono	2800W**
8 ohm Bridge-Mono	2400W
*1 kHz Power: refers to maximum averagat 1 kHz with 0.5% THD.	e power in watts
**≥ 200-V line voltage provides 1800W (2 and 3600W (4 ohm bridge-mono)	2 ohm dual)

## Performance

**Frequency Response:** ±0.25 dB from 20 Hz to 20 kHz at 1 watt.

**Phase Response:** ±15 degrees deviation from linear phase from 20 Hz to 20 kHz at 1 watt.

**Signal to Noise Ratio**, **A-Weighted**: Better than 100 dB below rated 1-kHz power.

**Total Harmonic Distortion (THD):** ≤ 0.5% at 1 kHz rated power, band-limited 20 Hz to 20 kHz.

Intermodulation Distortion (IMD): (60 Hz and 7 kHz at 4:1) Less than 0.5% at rated power to 30 dB below rated power at 8 ohms.

**Damping Factor\*:** Greater than 700 from 10 Hz to 400 Hz.

\*Measured using binding-post output connectors.

**Crosstalk:** Better than 50 dB below rated power, 20 Hz to 10 kHz.

**Common Mode Rejection (CMR):** Better than 70 dB from 20 Hz to 1 kHz.

DC Output Offset (Shorted Input): ±10 mV.

## **Controls & Connectors**

**Level:** A 31-step detented rotary level control for each channel located on the front panel.

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

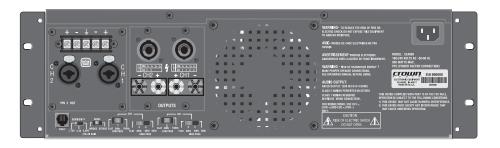
**Mode:** Turn power off before switching. A two-position switch located on the back panel below the input connectors which, when turned to stereo, operates the amplifier as two independent channels. When "Bridge-Mono" mode is selected, the amplifier bridges the two output channels for twice the output voltage.

**Sensitivity:** A three-position switch located on the back panel next to the Mode switch. Switchable among 0.775 volts or 1.4 volts for full output into an 8-ohm load (default setting), or 3.46 volts for a fixed voltage gain of 26 dB.

**Fault Jack:** A back-panel RJ-11 jack that may be remotely monitored to signal amplifier Fault condition. An LED or other signalling device (not supplied) may be used.

### Filter Switches:

**Low Pass:** A three-position switch for each channel located on the back panel below the input and output modules. Switchable among settings for Flat, 80 Hz and 100 Hz. Filter rolloff is 24-dB per octave.



**High Pass:** A four-position switch for each channel located on the back panel below the input and output modules. Switchable among settings for Flat, 30 Hz, 40 Hz and 50 Hz. Filter rolloff is 18-dB per octave.

#### **Indicators**

**Signal:** A green LED for each channel which flashes when a very low-level signal (>–40 dBm) is present at input. May be used for troubleshooting cable runs.

**Clip:** A red LED for each channel which turns on when distortion becomes audible in the amplifier output.

**Fault:** Normally off, this red indicator will blink under five different conditions:

- 1. When the amplifier is first powered up, until the unit is ready for operation.
- 2. If the heatsinks reach a temperature above normal working limits.
- 3. If the transformer thermal protection circuit is activated.
- 4. If amplifier output wires develop a short-circuit.
- 5. Should the amplifier output stage become non-operational.

This circuit may be monitored remotely by plugging a simple switching circuit using an LED or other signaling device into the backpanel RJ-11 (Fault) jack. Under some conditions, the output of the amplifier will be muted.

**Power:** A green LED that turns on when the amplifier has been turned on and has power.

## Input/Output

Input Connector (standard module): One Neutrik Combo connector for each channel which features a balanced ¼-inch (6.35-mm) phone jack and a 3-pin female XLR connector, in parallel with a barrier strip termination.

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

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

**Input Sensitivity:** 0.775 volts or 1.4 volts for standard 1-kHz power, or fixed 26-dB gain.

**Output Connectors** (three options available):

**CE4D Module:** Two 5-way binding posts in parallel with two Speakon<sup>®</sup> connectors (standard domestic configuration).

**CE4E Module:** Four Neutrik Speakon<sup>®</sup> NL4MP (mates with NL4FC) output connectors (standard export configuration).

**CE4C Module:** Barrier strip outputs in parallel with two 5-way binding posts.

## Speakon® Wiring Configuration:

OUTUT PIN ASSIGNMENT				
PIN	СН		PIN	СН
1+	2		1+	1
1-	2		1-	1
2+			2+	2
2-			2-	2
CH	l-2		CH-1	

#### **Output Signal**,

Stereo: Unbalanced, two-channel;

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

#### **Protection**

CE 4000 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, large or dangerous DC offsets and turn-on/turn-off transients.

**CE 4000** 

## Construction

Rugged steel chassis is formed into a durable package any stagehand could love. Coated with environmentally friendly powder for long life and ease of maintenance.

Cooling: Three-speed proportional speed fan.

**Dimensions:** EIA Standard 19-inch rack mount width (EIA RS-310-B), 5.25-inch (13.34-cm) height and 16.25-inch (36.56-cm) depth with additional 1-inch rear rack ears.

**Weight:** The CE 4000 net weight is 33.3 pounds (15.1 kg). Shipping weight is 39.3 pounds.

## Options

## SST Modules

Crown's optional SST (System Solution Topologies) modules can improve the fidelity and versatility of your audio system. They feature a variety of professional signal routing and filtering capabilities. Your amplifier may have come with an SST module already factory-installed, or your choice of SST modules can be easily added to the amplifier by any authorized Crown Service Center. For more information, visit the Crown website at www.crownaudio.com.

## **Output Connector Options**

See these options under Output Connectors.

## **Handle Kit**

Handles complement your amplifier's appearance, aid in transportation, and the placement in or removal from racks. They are available from Crown's Sales Department.



H A Harman International Company

Crown Audio, Inc. P.O. Box 1000 Elkhart, IN 46515-1000 TEL: 574-294-8200 FAX: 574-294-8FAX www.crownaudio.com

Specifications subject to change without prior notice.

BCA and Crown are registered trademarks of Crown International, Inc. Other trademarks are the property of their respective owners. Printed in U.S.A.

© 2003 Crown Audio, Inc.

## 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.

5/03 131791-3