DSi Series

Engineered from the ground up for un-matched quality and performance, the Crown® DSi Series of power amplifiers offers three models of 500W, 800W, and 1200W per channel at 4 ohms. Onboard digital signal processing includes crossovers, EQ filters, delay and output limiting. Rear panel HD-15 connector provides easy input/output connectivity between DSi amplifiers and the new DSi-8M System Monitor.

The intuitive front panel LCD screen guides installers through a setup process—featuring presets for the industry-standard JBL cinema loudspeaker systems—to make configuration quick and easy.

At the touch of a button, Crown's DSi cinema amplifiers deliver perfectly matched performance with each award-winning JBL Screen-Array system, making this the ultimate cinema solution.

Your investment in a DSi-Series amplifier is backed by Crown's Three-Year, No-Fault, Fully Transferable Warranty.

For more details about the Crown DSi 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

Output Power: See power charts below.

Voltage Gain at 1kHz, 8 ohm rated output:

DSi 1000: 26 dB
DSi 2000: 26 dB
DSi 4000: 26 dB

Frequency Response: ±0.25 dB from 20 Hz to 20 kHz at 1 watt into 4 ohms.

Phase Response (at 1 watt, 20 Hz to 20 kHz): ±15°.

Load Impedance: Safe with all types of loads. Rated for 2 to 8 ohms in Stereo mode, 4 to 16 ohms in Bridge-Mono mode.

Features

- Includes three models of 500W, 800W, and 1200W per channel at 4 ohms
- Automatic presets for popular JBL cinema speaker systems for quick, easy configuration
- Intuitive front-panel LCD screen guides installers through setup
- Onboard digital signal processing includes crossovers, EQ filters, delay, and output limiting
- Computer connectivity via USB allows fast setup and configuration with HiQnet™ System Architect™ software
- Rear-panel HD-15 connector provides easy input/output connectivity between DSi amplifiers and new DSi-8M System Monitor
- Switch-mode universal power supply
- All products fill 2U rack spaces and weigh under 19 pounds
- Barrier strip outputs, removable Phoenix-style input
- Three-Year, No-Fault, Fully Transferable Warranty completely protects your investment and guarantees its specifications

Sensitivity:

At 8 ohm rated output:
DSi 1000: 2.35V
DSi 2000: 3.09V
DSi 4000: 3.61V

At 4 ohm rated output:
DSi 1000: 2.24V
DSi 2000: 2.84V
DSi 4000: 3.47V

At 2 ohm rated output:
DSi 1000: 1.88V
DSi 2000: 2.24V
DSi 4000: 2.84V

Signal to Noise Ratio (below rated 8-ohm power at 1 kHz): 105 dB (A weighted).

Damping Factor: Better than 500 from 20 Hz to 500 Hz.

Crosstalk: > 80 dB below rated power, 20 Hz to 1 kHz.

Common Mode Rejection (CMR): > 45 dB from 20 Hz to 1 kHz.

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

Input Impedance (nominal): 20 k ohms, balanced;10 k ohms, unbalanced.

Maximum Input Signal: +22 dBu typical.

AC Line Voltage and Frequency Configurations Available: 100V, 120V-240V, 50/60 Hz.

AC Line Current:
DSi 1000: 6.5A
DSi 2000: 6.9A
DSi 4000: 8.0A
At Idle: Draws no more than 90 watts.

Operating Temperature: 0° C to 40° C at 95% relative humidity (non-condensing).

DSP Section

EQ: 6 parametric filters per channel with adjustable Q, boost/cut ±15 dB. Also adjustable high and low shelving filters.

Filters: Highpass and lowpass per channel. Butterworth 12/18 dB per octave and Linkwitz-Riley 24 dB per octave. High and low shelving filters, one per channel.

DSi 1000	1 kHz Power
2 ohm Stereo (per channel)	700W*
4 ohm Stereo (per channel)	500W
8 ohm Stereo (per channel)	275W
4 ohm Bridge-Mono	1,400W*
8- ohm Bridge-Mono	1,000W

*With 1% THD.

DSi 2000	1 kHz Power
2 ohm Stereo (per channel)	1,000W*
4 ohm Stereo (per channel)	800W
8 ohm Stereo (per channel)	475W
4 ohm Bridge-Mono	2,000W*
8- ohm Bridge-Mono	1,600W

*With 1% THD.

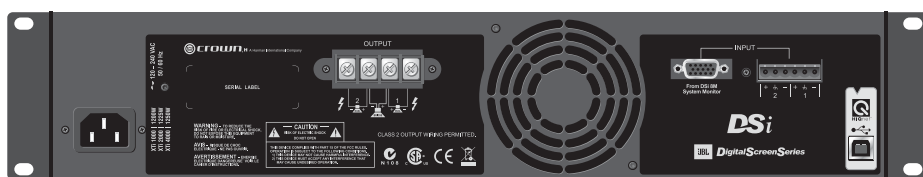| DSi 4000	1 kHz Power
2 ohm Stereo (per channel)	1,600W*
4 ohm Stereo (per channel)	1,200W
8 ohm Stereo (per channel)	650W
4 ohm Bridge-Mono	3,200W*
8- ohm Bridge-Mono	2,400W

*With 1% THD.

Delay: Up to 50 msec total delay per channel.

Output Limiter: Prevents clipping and protects loudspeakers. Choice of –3, –6, or –12 dB threshold per channel.

Presets: 5 user-definable loudspeaker presets and 15 factory-default JBL system presets.

Front Panel Controls and Indicators

Level: Detented rotary level control, one per channel.

Power Switch: On/off switch applies AC power to the amplifier.

Sel/Prev/Next Buttons: Three buttons near the LCD screen are used to access menu items.

LCD Screen: Backlit liquid crystal display shows speaker presets and signal processing.

Signal Indicator: Green LED, one per channel, flashes when a very low-level signal is present at input.

–10 Indicator: Green LED flashes when output signal exceeds –10 dB below clip.

–20 Indicator: Green LED flashes when output signal level exceeds –20 dB below clip.

Ready Indicator: Green LED, one per channel, illuminates when the amplifier is ready to produce audio.

Clip Indicator: Red LED, one per channel, turns on at the threshold of audible distortion.

Temp/Fault Indicator: Red LED, one per channel, illuminates under Fault or excessive temperature conditions.

Power Indicator: Blue LED illuminates when the amplifier has been turned on and has power.

Rear Panel Controls and Connectors

AC Line Connector: NEMA 5-15P (15A).

Input Connector: Two 3-pin removable Phoenix-type connectors each accept a balanced line-level input signal.
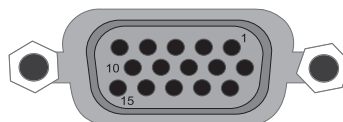
Output Connectors: 4-position barrier strip with connectors for dual louspeakers or bridge-mono loudspeaker.

HiQnet USB Connector: Type B, connects to a HiQnet network.

HD-15 Connector: For cinema I/O compatibility with DSi-8M System Monitor. See Figure 1.

Protection

DSi-Series amplifiers are protected against shorted, open or mismatched loads; overloaded power supplies; excessive temperature; chain destruction phenomena; excessive output current, and input overload damage. They also protect loudspeakers from input/output DC, large or dangerous DC offsets and turn-on/turn-off transients

Construction

Chassis: Steel.

Cooling: Proportional speed fan with front-to-rear airflow.

Dimensions: EIA Standard 19-in. rack mount width (EIA RS-310-B), 3.5 in. (8.9 cm) high and 12.25 in. (31.11 cm) deep behind mounting surface.

Net Weight:
19 lb (8.6 kg)

Shipping Weight:
22 lb (10.0 kg)

PRELIMINARY

PIN
1 Ch1 Inverting Input
2 NC
3 Ch1 Output Voltage Monitor
4 NC
5 NC
6 Chassis Ground
7 Ch1 Non-Inverting Input
8 Ch2 Non-Inverting Input

PIN
9 NC
10 Signal Ground
11 Ch2 Inverting Input
12 NC
13 Ch2 Output Voltage Monitor
14 NC
15 NC

Figure 1. HD-15 Pin Assignments

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.