crown

I-Tech Series

The Crown® I-Tech™ Series offers amazing power, light weight and ease of use for touring sound applications.

Onboard DSP (Digital Signal Processing) provides a wide array of signal processing (compression, limiting, filters, and so on). This greatly reduces the need for rack components and rack wiring. The DSP features 24-bit, 96 kHz A/D and D/A converters. All models in the I-Tech Series are compatible with the IQ Network® and TCP/IQ networking. Digital audio and IQ control signals connect to the amp via a single cable (in CobraNet®-ready models).

Pushbutton DSP presets simplify the setup. Custom presets can be downloaded into the amplifier, making it easy to configure for various loudspeaker arrays.

The Global Power Supply works anywhere in the world, and offers PFC (Power Factor Correction). It is a switching power supply for reduced weight.

I-Tech amplifiers provide amazing power: up to 8 kW continuous and 10 kW peak in a 2U rack space. They have the highest output voltage in the industry (200V peak), which provides clean transient peaks. The 3rd-generation patented Class I (BCA) circuitry couples power efficiently to the load and provides low current drain.

A front-panel control screen shows advanced diagnostics and status information. All controls are set from the front panel. A comprehensive array of indicators provide accurate diagnostics: Power, Data, Bridge, along with Ready, Signal, Clip, Thermal and Fault for each channel. An AC mains indicator in the power switch glows red when AC power is present.

Input connectors include analog XLR and digital AES/EBU. Analog and digital thru connectors are provided. Output connectors are Speakon and 5-way binding posts.

The rear overlay has color-coded sections.

Advanced protection includes a management controller and two discrete thermal zones with variable-speed, forced-air cooling.

For more details about the Crown I-Tech Series, contact Crown Customer Service at 800-342-6939 or 574-294-8200. Also, visit the Crown Audio website at www.crownaudio.com.

Features

- **Global Power Supply works anywhere in the world. Has PFC (Power Factor Correction).**
- **High power density, up to 8000 watts in a 2U chassis.**
- **Highest output voltage in the industry (200V peak) provides clean transient peaks.**
- **3rd-generation patented Class I (BCA) circuitry couples power efficiently to the load and provides low current drain.**
- **Onboard DSP with 24-bit, 96 kHz Cirrus Logic A/D and D/A converters.**
- **Pushbutton presets simplify setup. Custom presets can be downloaded.**
- **Digital audio and control signals on a single cable (in CobraNet-ready models, coming soon).**
- **Front-panel control screen with advanced diagnostics and status information. All controls are set from the front panel.**
- **Comprehensive array of indicators provide accurate diagnostics: Power, Data, Bridge, along with Ready, Signal, Clip, Thermal and Fault for each channel.**
- **AC mains indicator in power switch glows green when AC power is present.**
- **AES/EBU digital audio input. Ethernet connector accepts standard network cables for TCP/IQ networking or CobraNet (in CN models). Analog and digital thru connectors.**
- **Rear overlay has color-coded sections.**
- **Light weight due to aluminum construction, internal construction and switching power supply.**
- **Management controller, two discrete thermal zones with variable-speed, forced-air cooling.**
- **Advanced protection circuitry guards against: shorted outputs, DC, mismatched loads, general overheating, under/over voltage, high-frequency overloads and internal faults.**
- **Three Year, No-Fault, Fully Transferable Warranty completely protects your investment and guarantees its specifications.**

I-T6000

	20 Hz - 20 kHz Power*
2-ohm Dual (per ch.)	**2,500W**
4-ohm Dual (per ch.)	**3,000W**
8-ohm Dual (per ch.)	**1,500W**
4-ohm Bridge	**5,000W**
8-ohm Bridge	**6,000W**

*20 Hz - 20 kHz Power: refers to maximum average power in watts with 0.35% THD.

I-T4000

	20 Hz - 20 kHz Power*
2-ohm Dual (per ch.)	**1,800W**
4-ohm Dual (per ch.)	**2,000W**
8-ohm Dual (per ch.)	**1,250W**
4-ohm Bridge	**3,600W**
8-ohm Bridge	**4,000W**

*20 Hz - 20 kHz Power: refers to maximum average power in watts with 0.35% THD.

I-T8000

	20 Hz - 20 kHz Power*
2-ohm Dual (per ch.)	**3,500W**
4-ohm Dual (per ch.)	**4,000W**
8-ohm Dual (per ch.)	**2,100W**
4-ohm Bridge	**7,000W**
8-ohm Bridge	**8,000W**

*20 Hz - 20 kHz Power: refers to maximum average power in watts with 0.35% THD.

Specifications

Performance

Minimum Guaranteed Power: See power charts at left.

Frequency Response (at 1 watt, 20 Hz - 20 kHz): ±0.25dB.

Signal to Noise Ratio below rated power, A-weighted: > 105 dB

Total Harmonic Distortion (THD) at full rated power: < 0.35%.

Intermodulation Distortion (IMD) 60 Hz and 7 kHz at 4:1, from full rated output to –35 dB: < 0.35%.

Damping Factor (20 Hz to 100 Hz): > 5000.

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

Common Mode Rejection (CMR) (20 Hz to 1 kHz): > 50 dB.

DC Output Offset: < 3 mV.

Input Impedance (nominal): 10 kilohms balanced, 5 kilohms unbalanced.

Maximum Input Level: +15 dBu or +22 dBu, depending on input sensitivity.

Latency (analog, digital inputs)**:** 1.05 mS analog, 2.29 mS digital (44.1 kHz).

A/D, D/A Converters: 24-bit 96 kHz Cirrus Logic.

Digital Input: AES/EBU, 16-24 bit, 32-48 kHz. Onboard sample rate converter. Optional CobraNet input coming soon.

Network: Onboard TCP/IQ, compatible with standard 100 Mb Ethernet hardware.

I-Tech Series

DSP: 24-bit conversion with 32-bit, floating-point DSP processing. Has 64 assignable filters with 9 different filter types. Includes all-pass filters, over 2 seconds of delay available per channel, and dual uncorrelated-noise and sine-wave generators.

Load Supervision: Monitors the average impedance on the output of the amplifier. If the impedance falls outside the specified high/low limits, this function alerts the user via the front panel display, and via the IQwic software when amp is on an IQ Network.

Error Reporting: Reports clip errors, thermal errors, fault conditions and load monitoring errors for each channel via the front panel display and via IQwic software when amp is on an IQ Network.

Attenuators: Speed sensitive, continuously variable rotary encoder, 0.5 dB steps, range 0 to –90 dB.

Load Impedance (Note: Safe with all types of loads):
Stereo: 1/2/4/8 ohms.
Bridge Mono: 2/4/8/16 ohms.

Input Sensitivity (referenced to 8 ohm rated output): Adjustable in 0.1V steps from 1.4V to 9.7V .

Voltage Gain (referenced to 8 ohm rated output): 32 dB gain to 26 dB gain).

Required AC Mains: Universal AC input, 100-240VAC, 50/60 Hz (±15%). Maximum AC mains voltage 277VAC.

AC Line Connector: Five cordsets supplied with amplifier (USA, UK, European, Australia, India).

Front Panel Controls and Indicators

Bridge Mode Indicator: Yellow LED illuminates when the LCD control screen is set to Bridge-Mono mode.

Ready Indicator: Green LED, one per channel, illuminates when the channel is initialized and ready to produce audio output. Indicator is off when the amplifier is in standby mode via the IQ system.

Signal Indicators: Three green LEDs per channel indicate the amplifier's input and output signal levels.

Signal: input signal is above –40 dBu.
–20 dB: amplifier output is 20 dB below clipping.
–10 dB: amplifier output is 10 dB below clipping.

Clip Indicator: Red LED, one per channel, illuminates when the channel's output signal reaches the onset of audible clipping. The Clip Indicator also will illuminate during Thermal Level Control (TLC) limiting or when the input compressor/limiter is protecting the amplifier from input overload.

Thermal Indicator: Red LED, one per channel, illuminates when the channel has shut down, or is very near shutting down, due to thermal stress or overload.

Fault Indicator: Red LED, one per channel, flashes when the amplifier output channel has stopped operating.

Data Indicator: Yellow LED indicates IQ Network data activity. Data indicator flashes only when the amplifier is polled for data, or is polled to see whether it is online

Power Indicator: Blue LED indicates amplifier has been turned on and AC power is available. The LED will flash when the AC line voltage is 15% above or below the nominal rated value.

AC Mains Present Indicator: Green indicator built into power switch indicates AC power present at the power cord.

LCD Control Screen and Controls: These let the user adjust the amplifier's attenuation and muting, configure the amp, set up error monitoring (such as temperature and load supervision), and recall DSP presets. The presets allow the user to quickly reconfigure the amp for various applictions.

LCD Control Screen: Integrated LCD with white LED backlight, controls amplifier setup and operation.
  Normal mode: controls amplifier attenuators in 0.5 dB steps.
  Main menu (amplifier setup): Bridge, Y-input, recall preset, LCD contrast, input sensitivity.
  Advanced menu: Attenuator limit, attenuator link, clip limiter, output voltage limiter, output power limiter, pink noise generator, monitor, input, max input.

Menu/Exit Button: "Menu" enters the main menu. "Exit" gets out of the Menu.

Next Button: Selects the next item in the Menu.

Prev. Button: Selects the previous item in the Menu.

Level Controls (Encoders): These two knobs affect the Channel-1 and Channel-2 output levels. They also select Menu items and adjust parameter values that are displayed on the LCD Control Screen.

Power Switch: Push-on/push-off switch with built-in green AC mains present indicator.

Back Panel Controls, Indicators and Connectors

Power Cord Connector: Standard 20 amp IEC inlet. Voltage is indicated above IEC inlet.

Switch/Circuit Breaker: Resets the circuit breaker that protects the power supply.

Output Connectors: Two high-current, 50A Neutrik® Speakon® NL4MLP (mates with NL4FC), one per channel. Two pairs of high-current, 60A color-coded 5-way binding posts (for banana plugs, spade lugs or bare wire). Two male XLR passive analog loop through. XLR active/re-clocked AES/EBU digital loop through.

Analog Input Connectors: A 3-pin female XLR connector for each channel.

Digital Input Connector: A 3-pin female XLR connector that accepts a digital signal in the AES/EBU format.

Ground Lift Switch: Isolates input ground from AC ground.

Ethernet Connector: This connector accepts an RJ-45 connector for IQ TCP/IQ networking and optional CobraNet® transport from a standard network cable. Built into the connector is a yellow LINK ACT indicator that shows network activity, and a green 100Mb indicator that shows a 100Mb network connection.

Data Indicator: Yellow LED indicates IQ Network data activity. Data indicator flashes only when the amplifier is polled for data, or is polled to see whether it is online.

Preset Indicator: Yellow LED flashes to signal the number of the current preset if active.

Construction

Cooling: Dual-zone, microprocessor controlled, continuously variable speed, front-to-back airflow.

Front Panel: Cast aluminum with integrated handles.

Dimensions: 19 in. (48.3 cm) W x 3.5 in. (8.9 cm) H x 16.2 in. (41.1 cm) D.

Weight: 28 lbs (10.5 kg) net, 36 lbs (13.4 kg)shipping.

Included Accessories: Rear rack ears with integral EZ-Rack pin, cable retention bar, rack screws, owner's manual, power cords, foam air filter.