

## I - T E C H   S E R I E S

# I-Tech Series



**T**he 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. CobraNet™ input available in optional CN models, coming soon.

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 green 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.

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](http://www.crownaudio.com).

### Features

- **Global Power Supply with PFC (Power Factor Correction)** works anywhere in the world.
- **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 AC current drain.
- **Onboard DSP with 24-bit, 96 kHz Cirrus Logic A/D and D/A converters.**
- **Pushbutton presets simplify setup.** Custom presets for various loudspeakers can be downloaded.
- **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 an RJ-45 connector for TCP/IQ networking. Analog and digital thru connectors. CobraNet input available in optional CN models, coming soon.
- **Labels on rear panel are color coded** to group similar functions under common colors.
- **Light weight due to aluminum construction**, special internal construction and switching power supply.
- **Management controller**, two discrete thermal zones with variable-speed fans, 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.)	<b>2,500W</b>
4-ohm Dual (per ch.)	<b>3,000W</b>
8-ohm Dual (per ch.)	<b>1,500W</b>
4-ohm Bridge	<b>5,000W</b>
8-ohm Bridge	<b>6,000W</b>

20 Hz - 20 kHz Power refers to guaranteed minimum 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 full-bandwidth 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 at 8 ohms): > 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 (shorted input):** < ± 3 mV.

**Input Impedance** (nominal): 20 kilohms balanced, 10 kilohms unbalanced.

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

**Latency** (analog, digital inputs): 1.13 mS analog, 2.36 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.

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

### I-T4000

20 Hz - 20 kHz  
Power

2-ohm Dual (per ch.)	<b>1,800W</b>
4-ohm Dual (per ch.)	<b>2,000W</b>
8-ohm Dual (per ch.)	<b>1,250W</b>
4-ohm Bridge	<b>3,600W</b>
8-ohm Bridge	<b>4,000W</b>

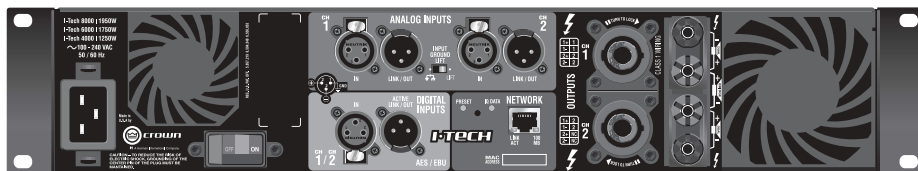
20 Hz - 20 kHz Power refers to guaranteed minimum power in watts with 0.35% THD.

### I-T8000

20 Hz - 20 kHz  
Power

2-ohm Dual (per ch.)	<b>3,500W</b>
4-ohm Dual (per ch.)	<b>4,000W</b>
8-ohm Dual (per ch.)	<b>2,100W</b>
4-ohm Bridge	<b>7,000W</b>
8-ohm Bridge	<b>8,000W</b>

20 Hz - 20 kHz Power refers to guaranteed minimum power in watts with 0.35% THD.



## 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: 1/2/4/8/16 ohms. Bridge Mono: 2/4/8 ohms.

**Input Sensitivity** (referenced to 8 ohm rated output): Adjustable in 0.1V steps from 1.4V to 7.75V.

**Voltage Gain** (referenced to 8 ohm rated output):  
I-T4000: 37.1 dB to 22.2 dB  
I-T6000: 37.9 dB to 23.0 dB  
I-T8000: 39.3 dB to 24.5 dB

**Required AC Mains:** Universal AC input, 100-240VAC, 50/60 Hz ( $\pm 15\%$ ). 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 amplifier 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.

**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 is present at the power cord and the amplifier circuit breaker is in the "on" position.

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

**LCD Control Screen:** Integrated LCD with white LED backlight, controls amplifier setup and operation.

**Normal mode:** Attenuation in 0.5 dB steps, Mute/Unmute, Front Panel Lockout.

**Basic Menu:** LCD Contrast, CH1 Sensitivity, CH2 Sensitivity, Speaker Preset, Dual/Bridge mode, Input Y.

**Advanced Features Menu:** Attenuator Limits, Attenuator Link, Clip Limiter, Peak Voltage Limiter, Average Power Limiter, Pink Noise Generator, AES/EBU Input Trim, Input Source, Maximum Analog Input, Amplifier Label Edit, CH1 Label Edit, CH2 Label Edit.

**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):** Speed-sensitive rotary encoders, 0.5 dB steps, range 0 to -90 dB. 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 range is indicated above IEC inlet.

**Reset Switch/Circuit Breaker:** If the current draw of the amplifier exceeds safe limits, this breaker automatically disconnects the power supply from the AC mains. The switch resets the circuit breaker.

**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-clocking 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.

**Network Connector:** This Ethernet connector accepts an RJ-45 connector for TCP/IQ networking. 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 fans, 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 (12.7 kg) net, 36 lbs (16.3 kg) shipping.

**Included Accessories:** Rear rack ears with integral EZ-Rack Pin, rack screws, operation manual, power cords, foam air filter.



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### 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.