



ULTRA SERIES

IQ-PIP-LITE

The Crown® IQ-PIP-LITE is a PIP™ (Programmable Input Processor) input module for PIP2™ compatible amplifiers.* It connects the amplifier to a 100 Mb Ethernet network allowing it to be remotely controlled and monitored via System Architect or IQwic software.

The IQ-PIP-LITE is a HiQnet or TCP/IQ series component. This means it connects to a HiQNet system or IQ Network via 100 Mb Ethernet. This provides faster IQ communications than the previous current loop, IQ bus, connectivity method. With HiQnet or TCP/IQ, a large (or small) system can be interconnected using standard off-the-shelf 100 Mb Ethernet components (Switches, Network Interface Card, and cables). The IQ-PIP-LITE can also be connected to the same network used to pass CobraNet™ audio.¹

The audio path in the IQ-PIP-LITE is processed totally in the analog domain without the inherent noise induced by analog-to-digital conversions. While DSP-type functions cannot be supported with this type of architecture, the standard SmartAmp™ feature set is. These features include input compressors, multimode output limiters, error reporting and load monitoring.

The IQ-PIP-LITE requires System Architect Software available from www.harmanpro.com or IQwic software available from www.iqaudiosystems.com.

Using the IQ-PIP-LITE with the IQ-PIP-USP2 Adapter

The IQ-PIP-USP2 Adapter allows many older Crown PIP-compatible amplifiers (i.e., Macro-Tech® 00 Series, Com-Tech 00 Series, and Studio Reference Series amplifiers) to access the power and versatility of the Crown IQ-PIP-LITE module.

The IQ-PIP-USP2 Adapter can be installed into the following Crown amplifier models:

CT-200**, CT-400**, CT-800**, CT-1600**
 MA-600, MA-1200, MA-2400
 MA-3600VZ, MA-5000VZ***
 MA-24x6, MA-36x12
 Macro Reference**
 Studio Reference I
 Studio Reference II

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

* A PIP2™-compatible amplifier is necessary to use the IQ-PIP-LITE. To determine if the amplifier is PIP2 compatible, look for the **PIP2** logo on the back of the amplifier. The IQ-PIP-LITE is NOT compatible with older Crown PIP amplifiers unless a USP2 adapter is first installed in the amplifier.

¹ Note that the IQ-PIP-LITE cannot receive or transmit CobraNet audio. Please use the IQ-PIP-USP3/CN if this function is desired.



Features

- A Programmable Input Processor with TCP/IQ and HiQnet (connects to an IQ System or HiQnet system via 100 Mb Ethernet)
- Remote control and monitoring of PIP2-compatible Crown amplifiers and some PIP1-compatible Crown amplifiers
- Faster IQ communications than the IQ bus
- Can be connected to the same network used to pass CobraNet audio
- Implements SmartAmp features: Input compressors, multimode output limiters, error reporting and load monitoring
- AUX connector configurable for AUX input, AUX output, or Listen Bus
- Three Year, No-Fault, Fully Transferable Warranty completely protects your investment and guarantees its specifications

**Important: Some of the first generation Com-Tech Series and Macro-Reference amplifiers have soldered 16-pin ribbon and 5-pin signal cable connections, rather than the modular type. If you find that your original Com-Tech Series or Macro-Reference amplifier has the soldered type cable connections, contact the Crown Technical Support Group for installation instructions.

***Important: Some newer MA-5000VZ amplifiers are already PIP2-compatible and can accept the IQ-PIP-LITE directly. Older MA-5000VZ amplifiers are not PIP2-compatible. Those amplifiers have soldered 16-pin ribbon and 5-pin signal connections, rather than the modular type. If you find that your MA-5000VZ amplifier has the soldered type cable connections, contact the Crown Technical Support Group for installation instructions.

Important: The IQ-PIP-USP2 Adapter is designed for use with the IQ-PIP-USP2 module and IQ-PIP-LITE ONLY, and will NOT work with the IQ-PIP-USP2/CN or any other PIP module.

Specifications

General

Connectors: See Figure 1 on other side.

Network: RJ-45 connector forming an IEEE 802.3 Ethernet NIC connection.

AUX: RJ-11.

Channel 1 and Channel 2 balanced inputs: 3-pin, 5mm removable barrier blocks.

Indicators: A yellow DATA indicator flashes when the IQ-PIP-LITE receives a valid command that is addressed to the IQ-PIP-LITE. A green PRESET indicator flashes to indicate the selected and active user preset. A yellow LINK ACT indicator (integrated in the network connector) indicates a valid

Ethernet link when lit and the presence of Ethernet traffic when flashing. A green 100 MB indicator (integrated in the network connector) indicates a valid 100 Megabit connection.

Memory Backup: 4 Megabit nonvolatile FLASH memory for backup of run-time settings, presets, and program storage. Capable of 10,000 write cycles.

Power Requirements: No external power is required. 160 mA at +24 VDC and 50 mA at -24 VDC. When installed into a Crown PIP2 compatible amplifier, the unit receives ± 24 VDC from the amplifier.

Total Power Dissipation: 4.6 watts.

Audio

Please note: The audio specifications are referenced to 0.775 V (0 dBu). Measurements were made at the output of the IQ-PIP-LITE module itself.

Input Impedance: Normally 20 kilohms balanced and 10 kilohms unbalanced.

Maximum Input Level: +20 dBu.

Dynamic Range: >110 dB (A-weighted, 20 Hz to 20 kHz).

Frequency Response: ±0.5 dB from 20 Hz to 20 kHz.

Common Mode Rejection (CMR): 50 dB typical.

Total Harmonic Distortion + Noise (THD+N): < 0.05% (1 kHz, 0 dBu).

Data Acquisition: Eight channel, 12 bit Analog to Digital Converter running at 100 K samples per second.

Input/Output Monitor Accuracy: Typically ±1 dB.



INSTALLED



TOURING

IQ-PIP-LITE

Controls, Indicators and Connectors

A. Balanced Audio Input Connectors

3-pin removable barrier-strip connectors, one per channel.

B. Preset Indicator

Signals the number of the current preset, if active, by flashing a series of flashes equal to the current preset number.

C. Reset/Preset Switch

Used to change presets, restore settings to factory default or restore all the presets to the factory defaults. During operations of the switch, the Data indicator flashes as an aid to the user.

D. IQ Data Indicator

Flashes when the IQ-PIP-LITE receives a valid command that is addressed to the IQ-PIP-LITE.

E. AUX Connector

Configurable for AUX input, AUX output, or Listen Bus.

F. Network Connector

The network connector is a standard RJ-45 connector that allows the IQ-PIP-LITE to connect to an Ethernet network. Connection is made using a standard CAT 5 cable to a network switch port. The Link Activity LED indicates data activity on the network line. The 100 MB LED indicates that the data is at 100 Megabits.

G. Mounting Holes

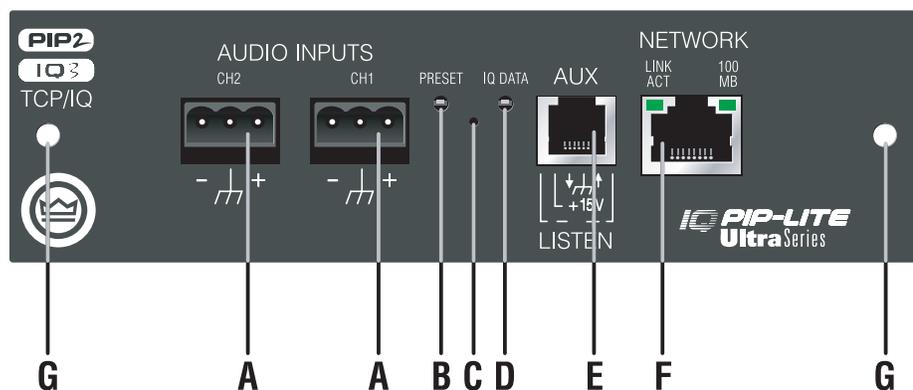


Figure 1. Front Panel Indicators and Connectors

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

Crown offers a Three-Year, No-Fault, Fully Transferable Warranty for every new Crown IQ component—an unsurpassed industry standard. With this unprecedented No-Fault protection, your new Crown IQ component is warranted to meet or exceed original specifications for the first three years of ownership. During this time, if your unit 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 unit.

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.



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