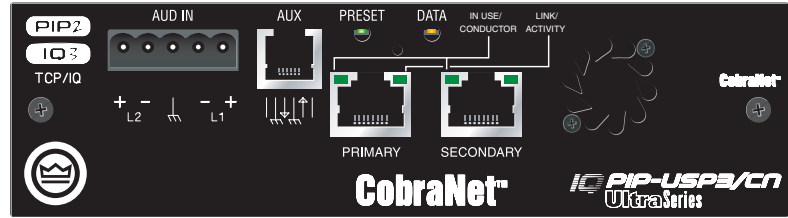




IQ-PIP- USP3/CN



ULTRA SERIES



The Crown® IQ-PIP-USP3/CN is a 3rd generation DSP-based 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. In addition, the USP3/CN allows the transport of real-time digital audio via CobraNet over the same Ethernet network.


The USP3/CN is a HiQnet and TCP/IQ series component and connects to the audio control/monitor network using a standard 100Mb Ethernet hardware (switches, Network Interface Cards, and cables). CobraNet™ audio is available over the same 100Mb Ethernet network, providing a simple to install, single plug solution for audio distribution, control, and monitoring.

The USP3/CN's SHARC DSP processor gives the user an enormous amount of digital signal processing. Audio routing, faders, meters, polarity & mute, input compressors, filters, delays, multimode output limiters, error reporting, and load monitoring are all available. A built in noise generator and sine-wave generator provide noise masking and test capabilities. The enhanced AUX port capability allows the user to interface with the amplifier to provide external manual control and monitoring.

Offering crisp, clear sound and the wide dynamic range possible with CobraNet, the IQ-PIP-USP3/CN provides unprecedented power and flexibility in one compact—and very affordable—module.

The IQ-PIP-USP3/CN requires Harman Pro System Architect software or IQwic software available from www.iqaudiosystems.com.

For more details about the Crown IQ-PIP-USP3/CN, contact the Crown Technical Support Group at 800-342-6939 or 574-294-8200. Also, visit the Crown Audio website at www.crownaudio.com.

* You must have a PIP2-compatible amplifier to use the IQ-PIP-USP3/CN. To determine if your amplifier is PIP2-compatible, look for the  logo on the back of the amplifier. The IQ-PIP-USP3/CN is NOT compatible with older Crown PIP amplifiers, and cannot be used with CT210 or MA3600 amplifiers

Specifications

General

Internal Controls: A Reset/Presets switch, accessible with a straightened paper clip through the PIP panel, selects the next user preset if pressed for less than 2 seconds, resets the PIP to preset "0" if pressed for more than 2 seconds.

Features

- 100Mb Ethernet single-plug solution for CobraNet audio, and HiQnet or TCP/IQ control and monitoring
- Analog audio inputs allow CobraNet network audio input, CobraNet audio backup, or a hard-wire emergency override of CobraNet audio
- "Listen Bus" amplifier output monitor via CobraNet
- 24 bit digital to analog conversion with 32 bit, floating point DSP processing
- 64 assignable filters with 9 different filter types including all-pass filters
- Over 2 seconds of delay available per channel
- Input compressors and output limiters for each channel
- Dual, uncorrelated noise generators for noise masking
- Sine generator
- Load supervision
- Full error reporting
- Firmware upgrades via the network
- 10 user selectable presets
- Reliable FLASH memory backup of all parameters
- Three Year, No-Fault, Fully Transferable Warranty completely protects your investment and guarantees its specifications

Connectors:

Balanced Audio Input Connector

Single 5-pin removable barrier-strip connector for both channels.

AUX Connector

Configurable for AUX input or AUX output. Listen Bus is available through CobraNet.

Network Connector

The dual RJ45 CobraNet connectors allow a Primary & Secondary connection to the 100Mb Ethernet network. Should the Primary connection lose link activity with the network, the USP3/CN will automatically switch to the Secondary connection to ensure uninterrupted audio and control. The indicators on the RJ45 connectors display network information concerning the Ethernet and CobraNet connections.

Indicators:

Preset Indicator

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

IQ Data Indicator

Flashes when the IQ-PIP-USP3/CN receives a valid command that is addressed to the IQ-PIP-USP3/CN.

Switches:

Reset/Presets 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.

Memory Backup: 512 kbyte non-volatile FLASH memory for backup of run-time parameters, presets, and program storage. Capable of greater than 10 year data retention and estimated 20+ year life-cycle.

Communications: 100Mb Fast Ethernet conforming to IEEE 802.3.

Power Requirements (provided by the amplifier): +24VDC @ 350mA, -24VDC @ 30mA. < 8.7 Watts.

Overall Audio Performance:

DSP Processing: 32 bit, Floating Point, 665 μ s latency.

DAC Conversion: 24 bit, 135 μ s latency.

Dynamic Range: 103 dB typical (A-weighted, 20Hz–20kHz, audio sourced from muted CobraNet channel).

Distortion: < 0.05% THD+N, 20Hz–20kHz.

Frequency Response: \pm 0.5 dB, 20Hz–20kHz.

Input/Output Monitor Accuracy: Typically \pm 1dB.



INSTALLED



TOURING

IQ-PIP- USP3/CN

Balanced Audio Inputs:

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

Maximum Input Level: +20 dBu.

ADC Conversion: 18 bit, 312 μ s latency.

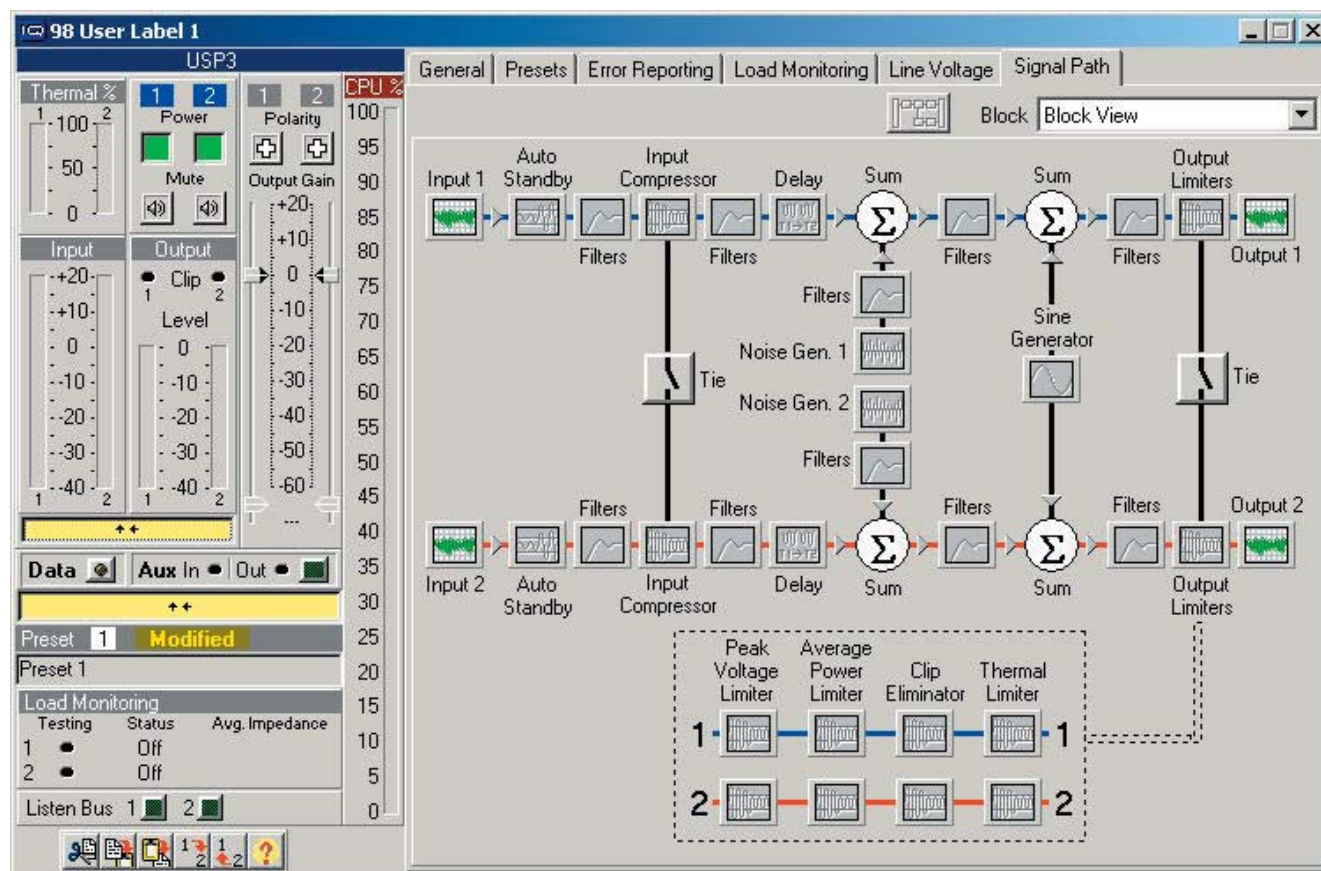
Signal to Noise Ratio: 70 dB typical (A-weighted, 20Hz-20kHz).

Crosstalk: > 60 dB @ 1kHz.

Common Mode Rejection (CMR): 50 dB typical.

Distortion: > 0.05% THD+N, 20Hz-20kHz.

Frequency Response: \pm 0.5 dB, 20Hz-20kHz.



IQ-PIP-USP3/CN Signal Flow Block Diagram



CROWN

H A Harman International Company

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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