

## CNP888 Network Audio Processor



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The CNP888 is a 1U CobraNet multipurpose mixing, routing, and processing device which simultaneously handles up to 16 audio channels in a CobraNet network system. It utilizes the SHARC processor (2.4GFLOPS) to manipulate audio signal with 40-bit floating-point precision using DigiSpider's NSP-100 software.



### FEATURES

- Powerful DSP processing capability
- Gain from 0dB up to +66dB (12 steps) and 48V phantom power individually selectable for each MIC/Line input.
- 8 different DSP preset mode can be selected via the front panel.
- Configured and controlled by the NSP-100 software using SNMP network protocol .
- Providing CobraNet port.
- Audio data sharing with: TR2000,TR800,CFM, and the third party standard CobraNet compliant products.
- The feedback inhibitor could detect and inhibit the howl frequency automatically.
- The Wise Mixer could automatically modify the ratio of each input channel in the output mix volume according the different input volumes. The channel which its input volume is more aloud, its ratio in the mixer output volume is bigger.
- Easy installation
- Easy operation
- Flexible configuration
- All CNP888 process parameters can be stored in flash memory
- Contains multiple virtual audio devices

## DSP FUNCTIONS

The CNP888's digital signal processing (DSP) implements the following audio processing blocks:

- Delays: 50 ms, 100 ms, 200ms, 500 ms, 1000 ms
- Routers: 4×4, 8×8, 16×16
- Mixers: 4×1, 4×4, 8×1, 8×8, 16×8
- Dynamics: Levelers, Compressors, Limiters, Noise Gates, Expanders
- Signal Generator: Sine, White Noise, Pink Noise
- Equalizers: Parametric Equalizers, Graphic Equalizers
- Filters: High-pass, Low-pass, Shelf
- Crossovers: 2-way, 3-way, 4-way
- Level Meters: 1-channel, 2-channel, 8-channel
- Feedback inhibitor: 4 band; 8 band; 16 band; 32 band;
- Wise Mixer: 8x8, 16x16;

## DESCRIPTIONS

CNP888 have 8 Mic/Line audio input channels and 8 Line audio output channels, 8 CobraNet receive channels and 8 CobraNet transmitter channels. It can process 16 audio channels that from the local audio input and the CobraNet input, then output the processed signals to its line output ports and the Cobranet output.

## CONNECTING

You can select CNP888 models for many different applications:

If you need to process a large number of the local analog audio signals and also the digital audio signals from the CobraNet, then output the processed audio signals locally available in analog form, the CNP888 will meet your needs. An application of the CNP888 is shown in Figure 1.

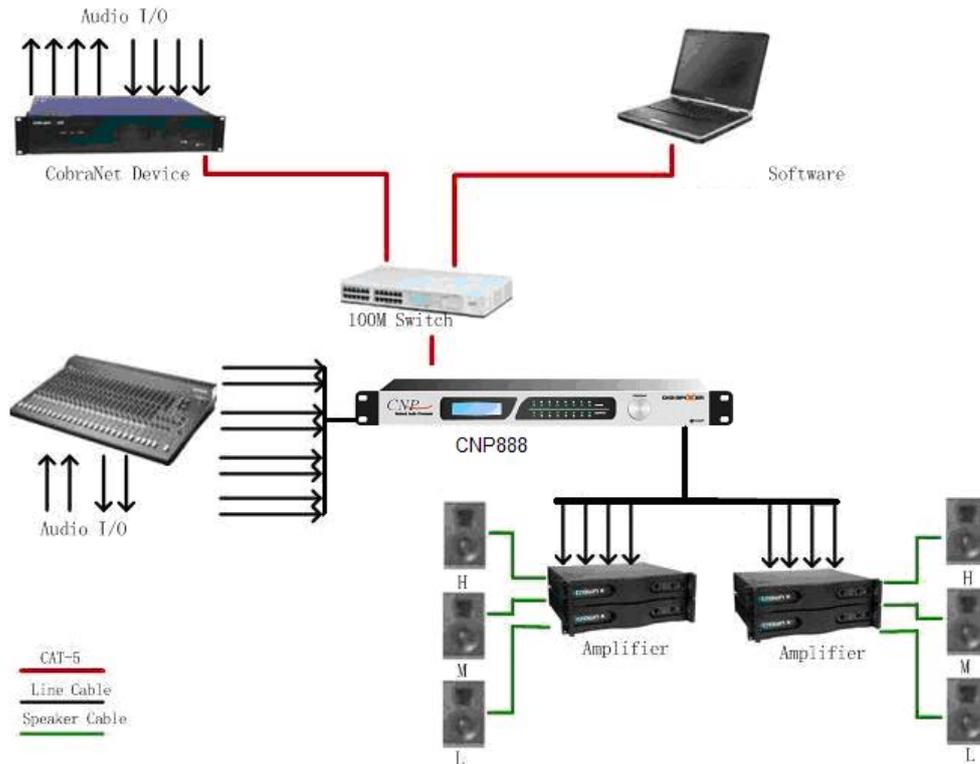


Figure 1: Connecting the CNP888

## NSP-100 SOFTWARE

The NSP-100 software provides real-time control of the CNP888 and the other equipment offered by DigiSpider. This software provides many virtual DSP functions such as delays, routers, mixers, dynamic controllers, crossovers, equalizers, etc. The main NSP-100 interface is shown in Figure 2. For further information about NSP-100 software, please refer to the NSP-100 USER MANUAL.

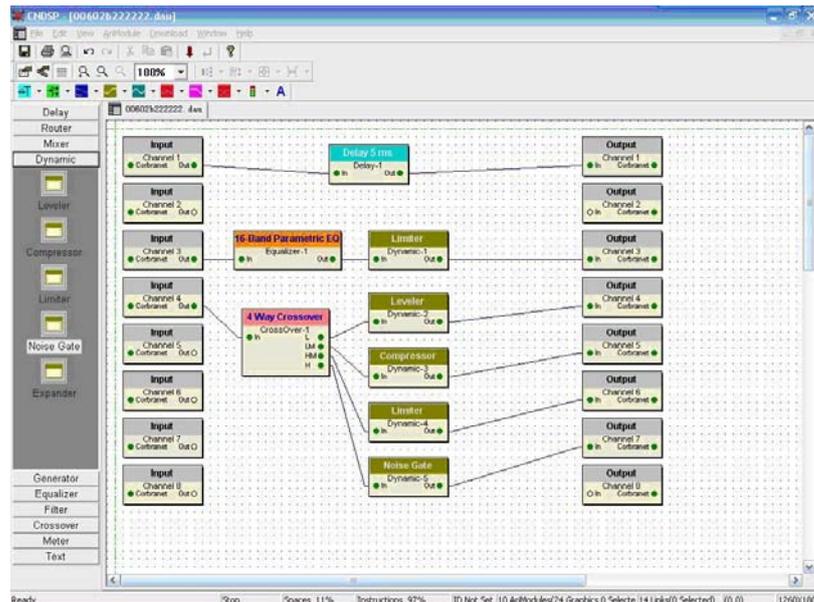


Figure 2: NSP-100 software

## SPECIFICATIONS

- Frequency Response:  $\pm 0.2$  dB, 20 Hz–20 kHz
- THD + N:  $< 0.01\%$  @ +4dBu 1KHz
- Dynamic Range: 103dBA, 101dB
- Maximum Input Level: +30 dBu, balanced
- Maximum Output Level: +24 dBu, differential
- Input Impedance: 6.3 k $\Omega$
- Output Impedance: 100  $\Omega$ , designed to drive a minimum load of 600  $\Omega$
- DSP Capability: 2.4GFLOPS; 40-bit floating-point; 2Mbits on-chip, dual-ported SRAM; 4Mbits mask-programmable ROM.

## Interfaces and Others

- 8 Line/Mic audio input channels (balanced) and 8 line audio output channels (balanced)
- 8 Corbranet receive channels and 8 Cobranet transmit channels
- 1xRJ45, 1xRS232, 1xRS485
- 1xGPIO port: 8 analog voltage or TTL level control input;
- Power Supply: 100–240V AC, 50/60Hz
- Power Consumption: less than 30 W
- Dimensions (LxWxH): 430 x 291 x 44.5 mm without rack mounts