

The IED 3200 Series:
**Digital audio processing and
control for global applications**



IED... changing the way you LOOK at audio

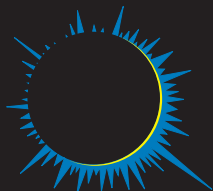
Now You're In Control!

The **3200 Series** is the **UNIVERSAL** digital audio control and distribution system from the pros at IED. It's powered by the industry's most advanced digital signal processing. The **IED SoftTools** suite configures the signal flow and creates the control surfaces. These system tools provide the power to design, create, and control an entire audio system for any facility, large or small.

Reliability is enhanced with:

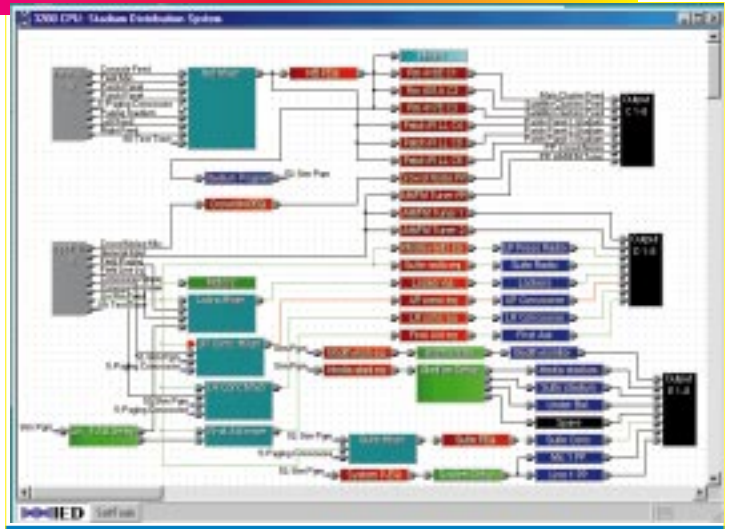
- ▶ 32-bit digital signal processing
- ▶ Modular construction
- ▶ Hot-swappable cards (replace or exchange cards without shutting down the system)
- ▶ Ethernet / 10baseT / 100baseT control
- ▶ Distributed Digital Processing (DDP) provides more processing power by distributing DSP resources across every input card, output card, and CPU card
- ▶ Interface to external control systems
- ▶ Digital throughput delay, at worst case, is less than 2 milliseconds
- ▶ Configurable software
- ▶ Attachable cable lacing system
- ▶ Individual pluggable connectors

Each **3200 Series** frame can contain up to **72 channels** of audio inputs and/or outputs (eight per card, nine cards per frame). Multiple frames link together. The hardware's modular construction allows for easy configuration, plus the cards are **"hot-swappable"** so that cards may be replaced without shutting off the entire system.

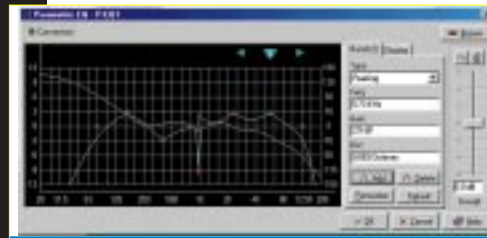


The system is configured via **IED's SoftTools™** program, which creates signal flows and control surfaces for the entire system in the software domain. **IED** can create the graphical user interface to accommodate the various skill levels of different types of users. What's more, **SoftTools** configuration software can run either connected to or disconnected from the hardware. Once the system is configured, the 3200 system can operate independently from the configuration PC.

The **SoftTools** signal flow editor provides simple tools to design, create, and configure any size audio system. The "Node Connect" feature manages and moves signal flow lines to keep an organized diagram with no confusing diagonal node connections.



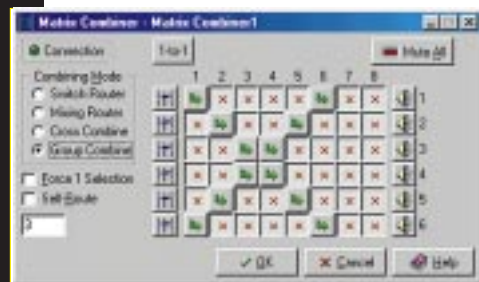
IED SoftTools Signal Flow Editor



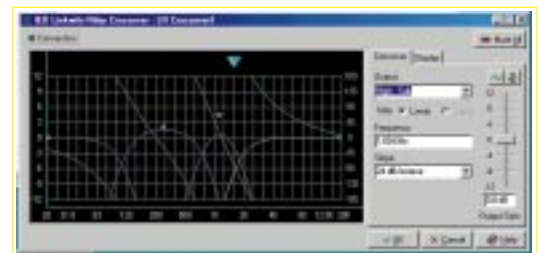
IED SoftTools Parametric EQ Setup



IED SoftTools Automatic Mixer Setup



IED SoftTools Matrix Combiner Setup



IED SoftTools Linkwitz-Riley Crossover Setup

The **SoftTools** control surface screens provide precise and simple controls for signal processing functions. **IED's** patented automatic mixer technology has been implemented into the digital domain.

3208AD Analog to Digital Input Card

- ▶ Eight inputs per card, mic level or line level, software configured
- ▶ 32-bit audio processing
- ▶ Phantom power
- ▶ Digital processing functions include: mixers, automatic mixers, programmable gain controls, matrix combiners, compressors, limiters, parametric EQs, crossovers, Linkwitz-Riley crossovers, multi-channel delays, meters, and more.



3208DA Digital to Analog Output Card

- ▶ Eight outputs per card, line level out or 8 watt power amplifier out
- ▶ 32-bit audio processing
- ▶ Line level outputs are electronically balanced designed to drive long lines of twisted pair with minimum high frequency rolloff
- ▶ Power amplifier outputs deliver 8 watts into 8 ohms
- ▶ Digital processing functions include: mixers, automatic mixers, programmable gain controls, matrix combiners, compressors, limiters, parametric EQs, crossovers, Linkwitz-Riley crossovers, multi-channel delays, meters, and more.



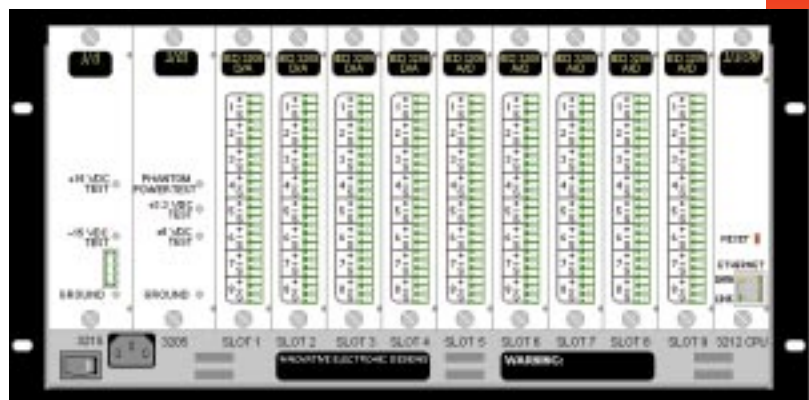
3200CPU Central Processing Unit

- ▶ Integral CPU for system management and control. After the download of initial system configuration, an external PC is not required for normal system operation
- ▶ 10BASE-T/100BASE-T Ethernet port
- ▶ RS232 port , RS485 port
- ▶ IEDLink for connection between frames
- ▶ Digital processing functions include: mixers, automatic mixers, programmable gain controls, matrix combiners, compressors, limiters, parametric EQs, crossovers, Linkwitz-Riley crossovers, multi-channel delays, meters, and more.



3200MF Mainframe System

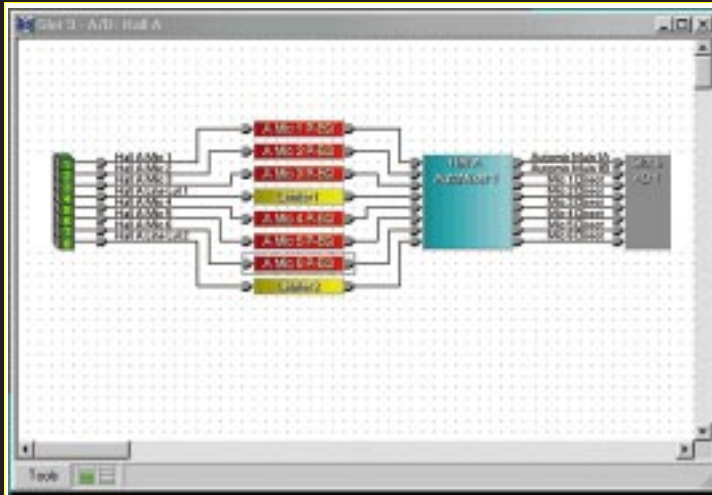
- ▶ Five EIA Rack Space Units (8-3/4 inches)
- ▶ Includes internal power supply cards, 3205 (+5V, +48V) and 3215 (+/-15V)
- ▶ Integral cooling system
- ▶ Wire lacing system
- ▶ Hot swappable circuit cards



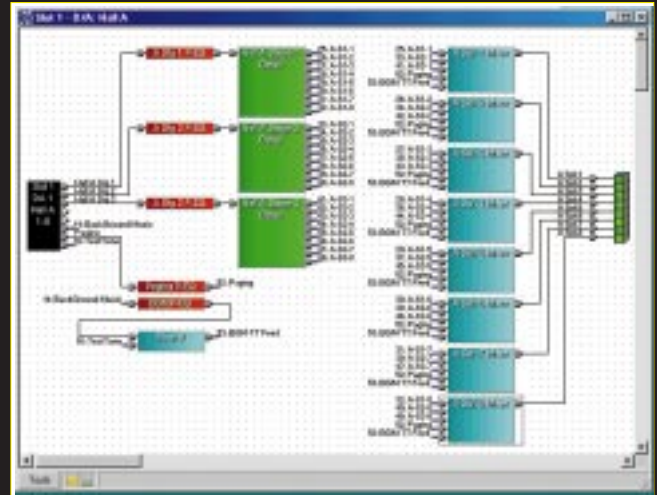
3200 Rear Connection View from IED SoftTools

Example of Distributed Digital Processing (DDP) in the 3200

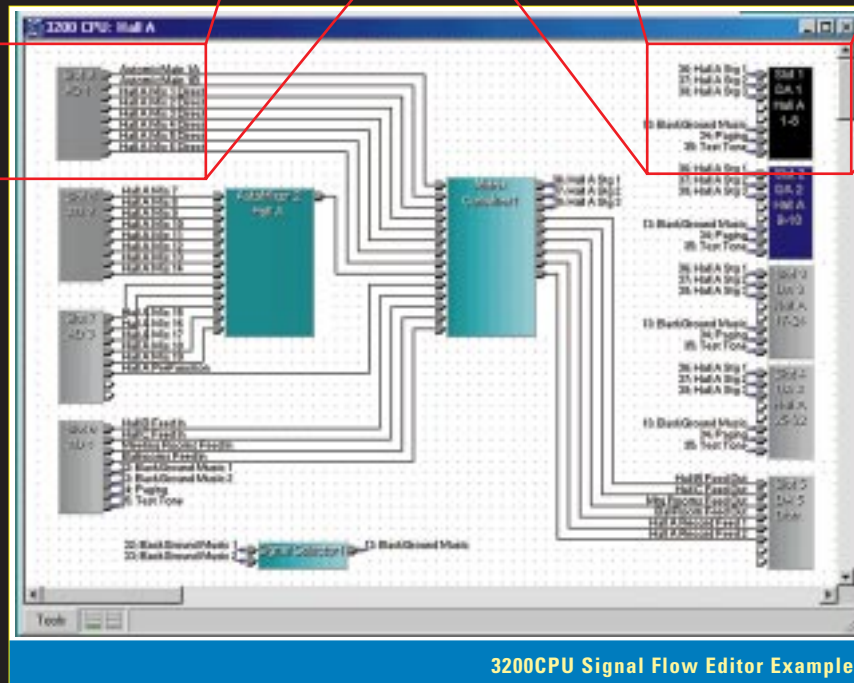
More resources means more power. DDP in the 3200 provides configurable digital processing across every card in the system: the input cards, the output cards, and the global CPU.



3208AD Signal Flow Editor Example



3208DA Signal Flow Editor Example



3200CPU Signal Flow Editor Example



Innovative Electronic Designs

9701 Taylorsville Road • Louisville Kentucky 40299
502.267.7436 • fax:502.267.9070 • www.iedaudio.com