AMX 8.8CN

Automixer & DSP Processor
with Cobranet port

MEDIA TECHNOLOGY SYSTEMS

The AMX88.CN is a 1U rack mount Automatic Microphone Mixer with 8 analog mic/line inputs, 8 analog line level outputs, 16 CobraNet® input streams and 16 CobraNet® output streams. The internal DSP processing provides a 16 channel AutoMixer with signal processing for AGC, EQ, High Pass, Low Pass, Compressor and Delay on analog input and output channels, including remote triggering of camera positioning presets. In addition, 3 AMX8.8CNís can be combined to make a 42x24 matrix.

The unique benefit of the AMX8.8CN is to combine the price point of a simple Automixer product with the networking capability of a CobraNet® port. The cost savings of the AMX8.8CN were generated by stripping out all the ancillary contact closures, digital I/O ports, serial ports, relays, VCAís and wall controller ports found on other CobraNet® products.

In a typical system, one or more AMX8.8CN's provides the mixing and processing needs of an individual meeting room, while the CobraNet® port offers integration with the DSP in the control room for large Hotel Banqueting or Convention Center events. The AMX8.8CN saves budget by replacing the costly CobraNet® interfaces in each meeting room, as well as reducing the load on the control room DSP. This benefits the Installer (sells more network solutions), Consultant (meets budget) and Customer (better value).

KEY BENEFITS

Value Engineered:
Eliminating the unnecessary control ports allows AMX8.8CN to ship at half the cost of most CobraNet® DSP Interfaces.

Works with any brand of CobraNet® DSP:
The manual controls for phantom power and gain avoids any need to integrate remote control features with a 3rd party brand CobraNet® DSP processor.

Pro-Audio compliant:
Meets audio performance and signal interfacing needs for both consumer and professional audio applications

APPLICATIONS
- Hotels/Hospitality
- Convention Centers
- Corporate Meeting rooms
- Classrooms and Lecture rooms

SPECIFICATIONS

Inputs/Outputs:
- 8 Analog Mic/Line Inputs and 8 Analog Line level Outputs
- 16 CobraNet® Inputs, 16 CobraNet® Outputs

Frequency response: 20Hz-20kHz, +/-3dB

THD: <1%

Input level: +4dBu nominal: +22dBu Clip

Output level: +4dBu nominal: +22dBu Clip

Input sensitivity: -56dBu (nominal) at maximum gain produces +4dBu (nominal). +4dBu (nominal) at minimum gain produces +4dBu (nominal)

Maximum gain: 60dB

Input: 6kohms balanced and RF filtered. EIN 20Hz-20kHz, less than 119dBu (+56dB gain setting)

Output: 150 ohms balanced, 600ohm minimum load

Hum and Noise: >70dB below rated output

Connectors:
- All Analog I/O: Balanced 3.5mm Euroblock connectors
- Network: Split CobraNet® audio LAN port and Ethernet control LAN ports for VLAN traffic with professional standard Ethercon LAN connectors
- RS485 serial bridge I/O port: 3.5mm Euroblock connector

Phantom Power: Front panel switchable phantom power of +24volts on each input

Indicators:
- Front panel bicolor LEDís for input and outputs with -20dbu (green) and -3dBu (red) trigger levels.
- Front panel red LED on each channel to indicate Phantom Power.
- Front panel Blue LED to indicate presence of 24volt DC supply.

DSP: AGC, Automixer, Compressor, HP/LP, Crossover and 3/8 band Parametric elements

Power Supply: External 24volt AC supply, 12watts

Control and Monitoring: SNMP, TELNET

Control Software: MTS-GUI, MTS-CONTROL, CN Discovery (CNDISCO)

Size: Front panel 480mm (w) x 43.7mm (h), Rear panel 430mm (w) x 43.7mm (h), Chassis 220mm deep overall.

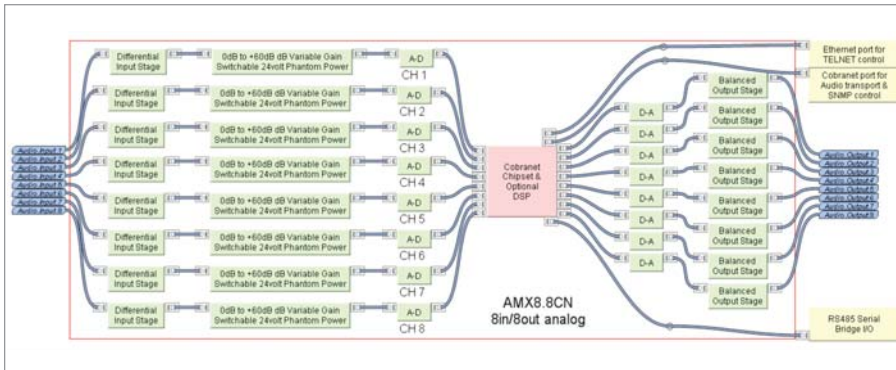**Weight:** AMX8.8CN: 2.4kg (510x280x100mm & 3.0 kg Packed)

The front panel offers manual control of microphone gain (0-60dB) and phantom power (+24volts) for each channel. The LED's show phantom power, Input and Output level (-20dbu-green, -3dBu-red). The Power LED (blue) shows presence of the external +24volt DC supply.

The rear panel shows the CobraNet® and LAN network ports. The CobraNet® port allows for Audio streaming and Control via SNMP. The LAN port allows for Configuration using the MTS GUI or control using TELNET.

The Euroblock input and output connectors accept a +4dBu nominal max/+22dBu peak balanced audio signal

The 3 pin RS485 connector can bridge incoming RS485 serial data on to the network where the AMX8.8CN acts as a conduit to other devices on the CobraNet® network. See Cirrus Logic Programmers Manual for full details of how to use this feature.
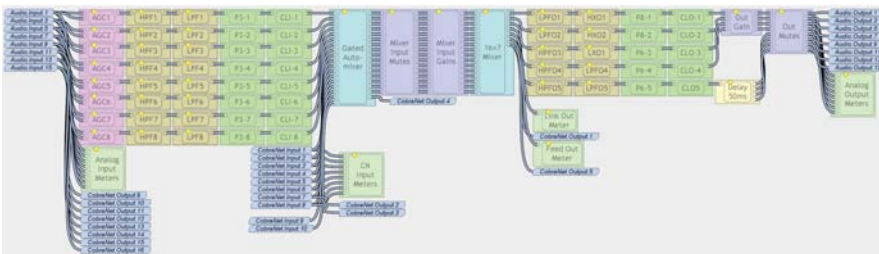

System block diagram (above) of the AMX8.8CN Analog I/O.

The AMX8.8CN internal signal processing provides a 16 channel Automatic microphone Mixer with 2 expansion ports (the AMX8.8CN uses CobraNet® channels for the transfer of Automixer control and audio linker signals). Up to three AMX8.8CN can be linked to provide an Automatic Microphone Mixer matrix size from 16x8, to 42x24. The AutoMixer is a gated type with ambient threshold sensing, where the gate 'active' indicator can be used to trigger camera-positioning presets.

The analog input processing includes an AGC, HP& LP filters, 3 band Parametric and Compressor on all 8 channels.

The AutoMixer has an 16x7 matrix, where the 7 outputs connect as follows..

- Matrix outputs 1,2 & 3 feed analog output channels 1,2 & 3, where each output an 8 band Parametric EQ, Compressor and High/Low pass filters that can be easily set up as 4th order Linkwitz-Riley filters for driving Left, Right and Sub bass frontal loudspeakers.
- Matrix output 4 feeds analog output channel 4, with standard High/Low pass filters, 6 band parametric EQ and compressor for (typically) driving the first (undelayed) row of ceiling loudspeakers.
- Matrix output 5 feeds analog output channels 5 to 8, where the processing (High/Low pass filters, 6 band parametric EQ and compressor) is connected to a 4-tap 50mS delay (see schematic below).
- Matrix output 6 is the mix sum of all local microphone inputs to link to other AMX8.8CN
- Matrix output 7 is a general-purpose mix sum to feed other CobraNet® devices. For example, the feed could be used to connect to remote ION0.2 feeding delayed loudspeaker clusters.

The MTS ION2.0 provides the AMX8.8CN with wall mount CobraNet® inputs. The ION2.0 also handles all signal input processing (AGC, EQ, Filters, Compressor etc). However, the AMX8.8CN can work with any brand of CobraNet® compliant input interface.

The AMX8.8CN can connect with a control room CobraNet® DSP in large venues. For example, the AMX8.8CN's can provide the local meeting room solution, or combine with the central DSP for 'breakout' Events.

The AMX8.8CN provides SNMP control of all parameters via the CobraNet® LAN port and TELNET control of all parameters via the Ethernet LAN port. The MTS GUI can be used to set up 8 presets, including a power up preset. MTS also provides a configurable system software package (MTS Control) that uses Stardraw Control as the core engine.

Further Enquiries