

iXO

iXO-MF Mainframe



The Wheatstone Commercial Audio iXO is an expandable DSP audio platform using router based audio mixing and signal processing via an intuitive software interface. This unique architecture allows for much quicker system configuration and design, allowing you to create highly complex audio systems in minutes. No more dragging or dropping, or having to monitor the DSP resource meter while you design your system. All of the processing is there where you need it and is available to use, *at any time*.

The heart of the iXO system is the iXO-MF Mainframe: a four rack-unit high card cage with internal power supply which has fifteen universal front loading card slots and can accommodate any of the input, output, logic I/O, and DSP cards that are available in the iXO product line. Input and output cards are equipped with 8 audio channels each. All iXO DSP card variations can accommodate up to 32 channels of audio.

A single iXO-MF can be configured to create a 32 x 32 system. Two iXO-MF's can be linked together to create a maximum system size of 64 x 64. Multiple iXO systems can be linked together via an optional Wheatnet switch to create system sizes up to 3072 x 3072. Any input source can go to any output destination.

The intuitive iXOverture software provides all system configuration and control via PC, and allows complete viewing and control of all system audio components such as: mixing, automixing, dynamics, equalizers, filters, crossovers, delay, speaker processors, routing, remote controls, logic, diagnostics, etc. Once a system configuration file is created and uploaded into the associated iXO-MF system, it can be controlled via third party control system such as AMX and Crestron, via computer, and/or by dedicated Wheatstone remote control panels.

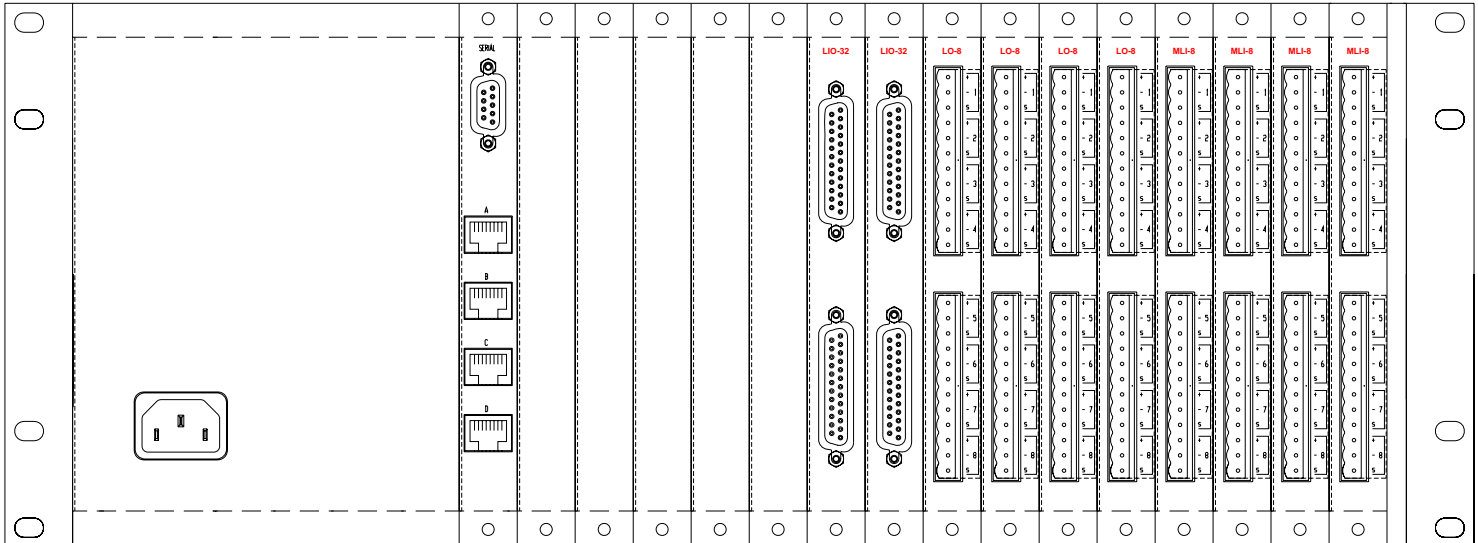
FEATURES

- 15 universal card slots for use by:
 - **MLI-8** 8-channel mic/line input card
 - **DI-8** 4-channel 75/110Ω AES/SPDIF input card (8 mono ch.)
 - **LO-8** 8-channel line output card
 - **DI-8** 4-channel 75/110Ω AES/SPDIF output card (8 mono ch.)
 - **LIO-32** Logic I/O (16 inputs, 16 outputs)
 - **DSP-IP** Input processing card
 - **DSP-Mx** Mixing card
 - **DSP-OP** Output processing card
 - **AEC-16** Acoustic Echo Cancellation and Noise Cancellation card
- Rugged and reliable broadcast quality power supply.
- Sturdy high grade aluminum chassis.
- Front loading, hot swappable cards.
- Removable vented front cover.

APPLICATIONS

- Stadiums
- Arenas
- Houses of Worship
- Multi-purpose facilities
- Distance Learning Centers
- Theme Parks
- Performing Arts Centers
- Courts of Law
- Auditoriums
- Hotel meeting room complexes
- Convention Centers
- Cruise Ships
- Conferencing Systems
- Casinos
- Large Scale Paging Systems
- Command & Control Centers

iXO-MF REAR PANEL DIAGRAM



iXO-MF SPECIFICATIONS

SPECIFICATIONS

ANALOG DIGITAL
FREQUENCY RESPONSE
 $\pm 1\text{dB} \pm 1\text{dB}$ (20Hz-20KHz)
MAXIMUM INPUT
 $+24\text{dBu } 0\text{dBFS}$
NOMINAL LEVEL
 $+4\text{dBu } -20\text{dBFS}$ (unity gain)
HEADROOM
 $+20\text{dB } +20\text{dB}$
THD+N (20Hz-20KHz)
 $< 0.01\%$ ($+4\text{dBu}$) $< 0.003\%$ ($+24\text{dBu}$)
 $< 0.002\%$ (-20dBFS)
NOISE
 $< -80\text{dBu } < -120\text{dBFS}$
DYNAMIC RANGE
 $104\text{dB } 120\text{ dB}$
CROSSTALK
 $< 100\text{dB } < 120\text{dB}$ (20Hz-20KHz)
A/D and D/A CONVERTERS
 24 bit
INPUT SAMPLE RATE
 variable, SRC (8K-96K)
OUTPUT SAMPLE RATE
 fixed: 44.1K or 48K
 (can be externally driven)
INPUTS
 20K line level BAL 75/110 AES/SPDIF
OUTPUTS
 10 line level BAL 75/110 AES/SPDIF+

INPUT SAMPLE RATE
 variable, SRC (8K-96K)
OUTPUT SAMPLE RATE
 fixed: 44.1K or 48K
 (can be externally driven)
INPUTS
 20K line level BAL 75/110 AES/SPDIF
OUTPUTS
 10 line level BAL 75/110 AES/SPDIF
X-Y CONTROLLERS
 up to 253 external hardware controllers
 (software controllers unlimited)
CONTROLLER DISPLAYS
 8-character, user programmable
AUTOMATION INTERFACE
 available via RS-485 or Ethernet;
 3rd party or Wheatstone
 (optional Event Scheduler software)
SALVOS
 via configuration software *
CONTROLLER SIGNAL VISIBILITY
 via configuration software *
SIGNAL FORMATS
 mono, stereo, 5.1 surround
 via configuration software *
POWER SUPPLY
 external, with optional redundant
 power supply & failsafe interface
MAXIMUM SIGNAL CAPACITY
 2048 channels
AES OUTPUT EYE PATTERN
 $\pm 500\text{mV}$, 10nsec to 155nsec

POWER CONSUMPTION
 (100-240VAC 50/60Hz):
 $< 200\text{ watts}$ (Maximum – fully loaded)

DIMENSIONS:
 height 7.0 inches (177.8mm)
 width 19.0 inches (483mm)
 depth 17.25 inches (438.15mm)
(depth with front panel on)

* included on software CD