The LMS-D24 digital loudspeaker management system is a compact and powerful DSP based 2-in 4-out audio processing unit, ideally suited to live sound and fixed installation applications, and designed for use with Turbosound loudspeakers and associated bass enclosures and subwoofers.

The LMS-D24 combines the functions of multiple conventional produts in a compact 1U high, 19" high rack unit. It provides tailored equalisation and crossover functions specific to Turbosound Aspect series, QLight™ and HiLight systems, TCS and TFM series monitor enclosures. To achieve this, the LMS-D24 provides two inputs and four outputs, configured by factory presets, in addition to a total of 40 user-defined presets to enable use with a variety of loudspeakers.

High performance limiters, delays (up to 400ms input, 80ms output), equalisation, gain, polarity, and crossover filter controls are accessible to the user in order to match specific operating environments.

It provides exceptional audio quality through the use of carefully optimised processing and high performance converters for better than 111dB of dynamic range, 96kHz sampling rate and minimal filtering.

It employs audio-grade capacitors in the analogue signal path for true audiophile performance and superior accuracy. The LMS-D24 features LF shelving filters to allow adjustment of the response in order to match variations of the acoustic conditions such as half space environments like floor monitor applications, or for close coupling of loudspeaker arrays. Input delays of up to 400ms, and output delays of up to 80ms can be set up on each output (mono) or pair of outputs (stereo) with fine resolution of 21µs steps to ensure perfect driver alignment.

The LMS-D24 is designed for quick setup and adjustment via an easy-to-use menu structure accessed by front panel buttons and rotary encoders. A high resolution back-lit LCD display provides the user interface to the menu options and parameters being adjusted.

The LMS-D24 is equipped with a switching power supply that automatically adjusts to mains input voltages from 85 volts to 240 volts, allowing it be used anywhere in the world without inconvenient mains transformer adjustment.

FEATURES

Superior audio quality

96kHz DSP

Switching power supply

High performance limiters

Electronically balanced

Factory pre-set programs

40 User-defined presets

Compact 1U rack package

APPLICATIONS

Concert touring

Permanent installations

Floor monitoring

◯Turbosound®

INPUTS	Two, electronically balanced
INPUT IMPEDANCE	>10k ohms
MAX INPUT LEVEL	+20dBu
OUTPUTS	Four, electronically balanced
OUTPUT IMPEDANCE	<100 ohms, ground balanced
MAX OUTPUT LEVEL	+20dBu into a 600 ohm load
SAMPLE RATE	96kHz
FREQUENCY RESPONSE	10Hz ~ 40kHz ±1dB (filters disabled), 10Hz ~ 20kHz ±0.25dB (filters disabled)
DYNAMIC RANGE	>111dB (A weighted, 22kHz bandwidth), >108dB (un-weighted, 22kHz bandwidth)
THD	<0.01% (+10dBu, 20Hz - 20kHz, 30kHz bandwidth)
GAIN	+15dB ~ -30dB and mute, 0.2 db steps
OUTPUT CH SOURCE	Input A, Input B and SUM
HP FILTER FREQ	Off, 10Hz ~ 25.4kHz, 1/36 octave steps
LP FILTER FREQ	10Hz ~ 25.4kHz and off, 1/36 octave steps
HP/LP FILTER TYPE	12, 18 & 24dB/octave Bessel and Butterworth, 12d, 24dB and 48dB/octave Linkwitz-Riley, 4th order & 8th order Hardman
MAXIMUM DELAY	Input 60ms, output 20ms
LIMITER	High performance limiter, adjustable threshold in 0.2dB steps, automatic time constants
EQ FREQUENCY	10Hz ~ 25kHz, 1/36 octave steps
EQ GAIN	+15dB ~ -15dB, 0.2dB steps
EQ WIDTH	5.0 ~ 0.1 octave bandwidth, 1/36 octave steps
AUDIO INPUTS	3-pin female XLR
AUDIO OUTPUTS	3-pin male XLR
SERIAL COMMS	9-pin female 'D' type
NETWORK COMMS	Future option on RJ45 (XLR chassis type)
POWER CONNECTOR	3-pin IEC
MAINS POWER	Universal switch-mode PSU, 85v ~ 240v AC, 50 ~ 60Hz
CONSUMPTION	<25 watts
SIZE (H X W X D)	44mm x 482mm x 254mm (1.75" (1U) x 19" x 10") excluding connectors
NET WEIGHT	2.7kg (5.9 lbs)

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