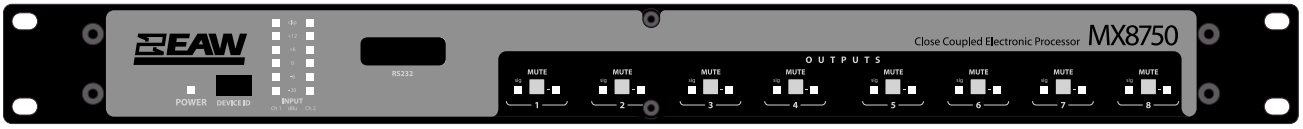
TECHNICAL SPECIFICATIONS MX8750



DESCRIPTION

The MX8750 Digital Electronic Processor is designed to optimize the performance of a wide range of EAW loudspeakers. It is a cost effective, single-rack space, processor with fully controllable confiuration and signal processing functions. It is designed for use in single or two channel modes with bi-amplified and tri-amplified loudspeakers along with subwoofers. The MX8750 has two input channels each with eight outputs that can be configured in any combination of input to output. Its functions include crossover filters, parametric equalization, shelving EQ, HP and LP filters, delay, polarity and limiting. The range and quantity of processing finctions assures being able to achieve optimum system performance. The MX8750 is controlled by using EAW software and a Windows PC with an RS-232 or midi interface. There is a full complement of level and status indicatores plus individual output mutes for setting-up and troubleshooting systems.

FEATURES

- Fully controllable configurations and signal processing functions
- Digital processing for precise settings
- 6 bands of parametrice EQ on each input, 5 on each output and 7 crossover types ensure optimum performance
- Each EQ band is selectable between full parametric or first and second order hi/lo shelving filters
- Active balanced input and outputs with XLR connectors

CLOSE COUPLED ELECTRONIC PROCESSING™

The concept of Closed Coupled Electronic Processing™ (CCEP™) is central to the EAW design process. EAW engineers integrate electronic signal processing into the total loudspeaker system but we recognize that electronics can only improve performance after all other electro-mechanical factors have been optimized. The MX8750 processor is capable of providing complex asymetrical crossovers, delay compensation, parametric equalization, LPF ands HPF filtering, shelving EQ and limiting. While all parameters are fully adjustable, the MX8750 can be configured using factory-determined settings for a particular loudspeaker system.

CONFIGURATIONS

The MX8750 processor is field configured (Close Coupled™) for a particular EAW loudspeaker system. If you have any questions please contact an authorized EAW sales agent or the factory to be certain that you have correctly configured the processor to your system.

SPECIFICATIONS

Input Type	Two (2): Active balanced
Input Impedance	18k Ohms
Max. Input Level	+20dBu
Output Type	Eight (8): Active balanced
Output Impedance	112 Ohms
Max. Output Level	+20 dBu
Frequency Response	±.25dB, 20Hz-20kHz
Total Harmonic Distortion	<.01% @ 1kHz, +20dBu
Dynamic Range	.110dB, 2-20kHz, unweighted
Output Noise	<-90dBu, unweighted
EQ Filters	
EQ Filter Type	Parametric Bell and Shelving (6dB/oct. & 12dB/oct.)
EQ Filter Number	6 per input, 5 per output
Q	.25 to 64
EQ Frequency Resolution	1/24 octave
Level Range	+15/-30dB, 0.1dB increments
Crossover Filters	
Crossover Filter Type	Butterworth, Bessell,Linkwitz-Riley
Slope	12dB/oct., 18dB/oct., 24dB/oct.
Number	2 per output
Frequency Resolution	1/24 octave
Level Range	+12dB/-infinite, 0.1dB increments
Limiter	
Limiter Threshold	-20dBu to +20 dBu, 1db increments
Limiter Ratio	1.2;1, 1.5;1, 2;1, 3;1, 4:1, 6;1, 10:1, 20;1, inf:1
Limiter Attack	1 ms/dB, 100 ms/dB, 500 ms/dB
Limiter Release	20 ms/dB, 100 ms/dB. 500 ms/dB
Delay	
Input Delay	300 msec max., 1 msec increments
Output Delay	20 msec max., 20 us increments
Digital Processing	
A/D converters	24 Bit, 128x oversampling
D/A Converters	24 bit, 128x oversampling
Sample rate	48kHz
DSP Processing	24 Bit, 56 Bit Accumulator, 200 MIPs
Propagation Delay	1.46 msec

EASTERN ACOUSTIC WORKS
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EAW products are continually improved. All specifications are therefore subject to change without notice. • PUB# 888xxx(A) MX8750/2 PP Feb2001 • Printed In USA

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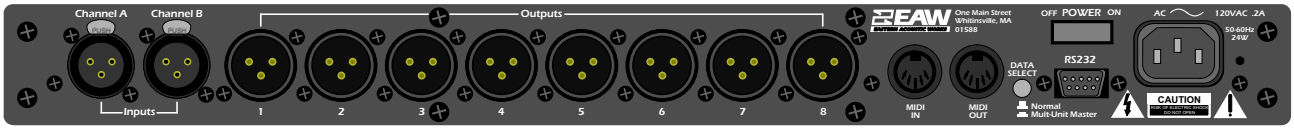
REAR PANEL



SPECIFICATIONS CONTINUED

Power requirements	120v version: 90-125VAC, 50-60Hz, 24w	
	240v version: 180-250VAC, 50-60Hz, 24w	
Weights	**pounds**	**kilograms**
Net Weight	8.5	3.9
Shipping Weight	10	4.5
Dimensions	**inches**	**millimeters**
Length	19	483
Height	1.75	44
Depth	6	152
Environmental	**40-120 degrees F.**	
Digital Control	RS232 on 9-pin Dsub connector at 9600 Band (Front and Rear panel), mid in and out	

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