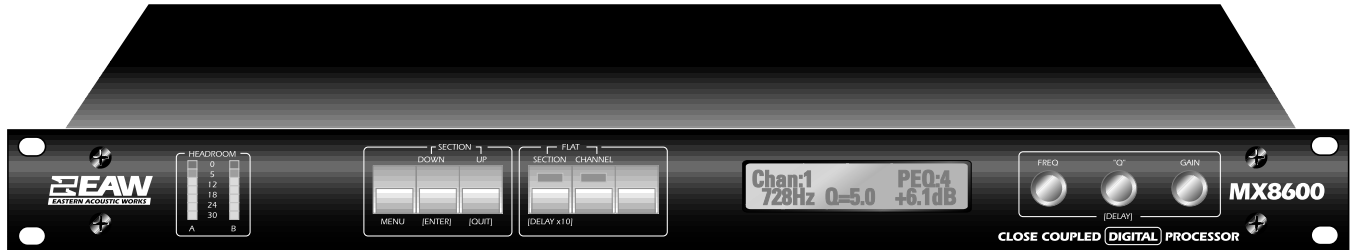




TECHNICAL SPECIFICATIONS MX8600



DESCRIPTION

The new MX8600 Close Coupled Digital Signal Processor is designed to optimize the performance of a wide range of EAW loudspeakers, incorporating a number of exclusive EAW authorized parameters and factory presets. In addition, it supplies dozens of programmable memories, protected by a security lock-out function. MIDI capability allows external control and the linking of master and slave MX8600's via a personal computer.

Each MX8600 includes two inputs and four outputs, selectable in a variety of input/output configurations. Typical configurations include mono 3-way plus sub, mono 3-way plus independent sub in/out, mono 4-way, and stereo 2-way. Each output includes one to three bands (depending on configuration) of parametric equalization, delay, limiting, level adjustment, and variable high- and low-pass filters that can be set for various slopes and responses. In addition to the individual output equalization, each input features a 4-band parametric equalization section for overall system adjustment.

A convenient front panel design features three velocity-sensitive rotary encoders for adjustment, with channel and section "flat" keys allowing A/B comparison or EQ to be pre-set and dropped in. All filter information is displayed on a backlit LCD display, while headroom is indicated via LED meters.

FEATURES

- Carefully optimized Double Precision processing plus a 40-bit internal data path for exceptional dynamic range and sonic performance.
- A flexible 2 input, 4 output multi-mode format featuring a choice of 2-way and 3-way + Sub Crossovers.
- All parameters feature precision resolution capabilities - 1/24 octave frequency steps, 0.1dB gain increments and 100 different Q settings.
- Four high performance limiters, offering a wide range of control over Attack, Release and Threshold parameters. A limiter display function provides four 'over-limit' meters simultaneously on the LCD display.
- Variable high and low pass filters for each output which can be set for 12, 18 or 24dB / octave slopes and a choice of Bessel, Butterworth or Linkwitz-Riley responses. Independent control over high & low pass functions allows asymmetric crossover functions to be created.
- Polarity reverse selectable for each output.
- Three velocity-sensitive rotary encoders provide an easy to use control format with all filter information displayed simultaneously on a backlit LCD display.
- Channel and section 'Flat' keys which allow direct A/B comparison of settings. This feature also permits equalization to be pre-set and then dropped in.
- Delay of up to 682mS can be independently set for each output with a minimum increment of 21 uS.
- MIDI capabilities for external control & linking master/slave units, selectable operating level and multi-level security lock-out function.
- Full 103dB dynamic range, high sampling rate and minimal filtering.
- Wide range digital control of level for each output. Mute can be applied to any output.





TECHNICAL SPECIFICATIONS MX8600

SPECIFICATIONS

Part Number	998297	High and Lowpass Filters	1 of each per output
Product Group	E	Frequency (HPF)	10Hz - 16kHz, 1/24 octave steps
Inputs	Two electronically balanced	Frequency (LPF)	60Hz - 22kHz, 1/24 octave steps
Input Impedance	> 10k ohms	HPF & LPF Response	Bessel/Butterworth 12/18/24dB per octave and Linkwitz-Riley 24dB per octave
CMRR	>65dB 50Hz - 10kHz	Limiter Threshold	+20dBu to -27dBu (dependant on operating level)
Outputs	Four electronically balanced	Limiter Attack time	1 to 99 milliseconds
Output Source Impedance	< 60ohms	Limiter Release time	4, 8 or 16 times the attack time (Slow, Medium, Fast)
Output Min. Load	600ohm	Operating level	Headroom selectable +3dB, +8dB, +15dB & +20dB
Output Max. Level	+20dBm into 600 ohm load	Display	2 x 20 character backlit LCD
Frequency Resp.	+/- 0.5dB 20Hz - 20kHz	Headroom meter	2 x 7 point, -30dB to clip
Dynamic Range	>103dB 20Hz -20kHz. unwt'd	Input Connectors	3 pin female XLR
Distortion	< 0.02% @ 1kHz, +18dBm	Output Connectors	3 pin male XLR
Maximum Delay	682 mS (min. increment 21 uS)	MIDI Connectors	In/Out/Thru - 5 pin DIN
Output gain	Adjustable +15dB to -40dB in 0.1dB steps and mute	Power Connector	3 pin IEC
Input gain	Adjustable 0dB to -40dB in 0.1dB steps (crossover modes only)	Power	110/220 VAC (15% @ 50/60Hz)
Parametric Filters	One to three sections per output (depending on configuration); four sections per input	Power Consumption	< 20 watts
Filter gain	+15dB to -30dB in 0.1dB steps	Weight	3.5kg Net (4.8kg Shipping)
Center frequency	20Hz - 20kHz, 1/24 octave steps (240 positions)	Size	1.75"(1U) X 19" X 11.8" (44 X 482 X 300mm) excluding connectors
Filter Q	0.4 to 128 (Sections 1 & 2 switchable to shelving response)	Optional Interfaces	RS232 (9-way DEE), RS422 (9-way DEE) and RS485 (8-way RJ45 x 2)
Low frequency shelving	20Hz - 1kHz	Options	Output balancing transformers, relay bypass, Digital I/O
High frequency shelving	1kHz - 20kHz		
Shelf gains	+/-15dB in 0.1dB steps		