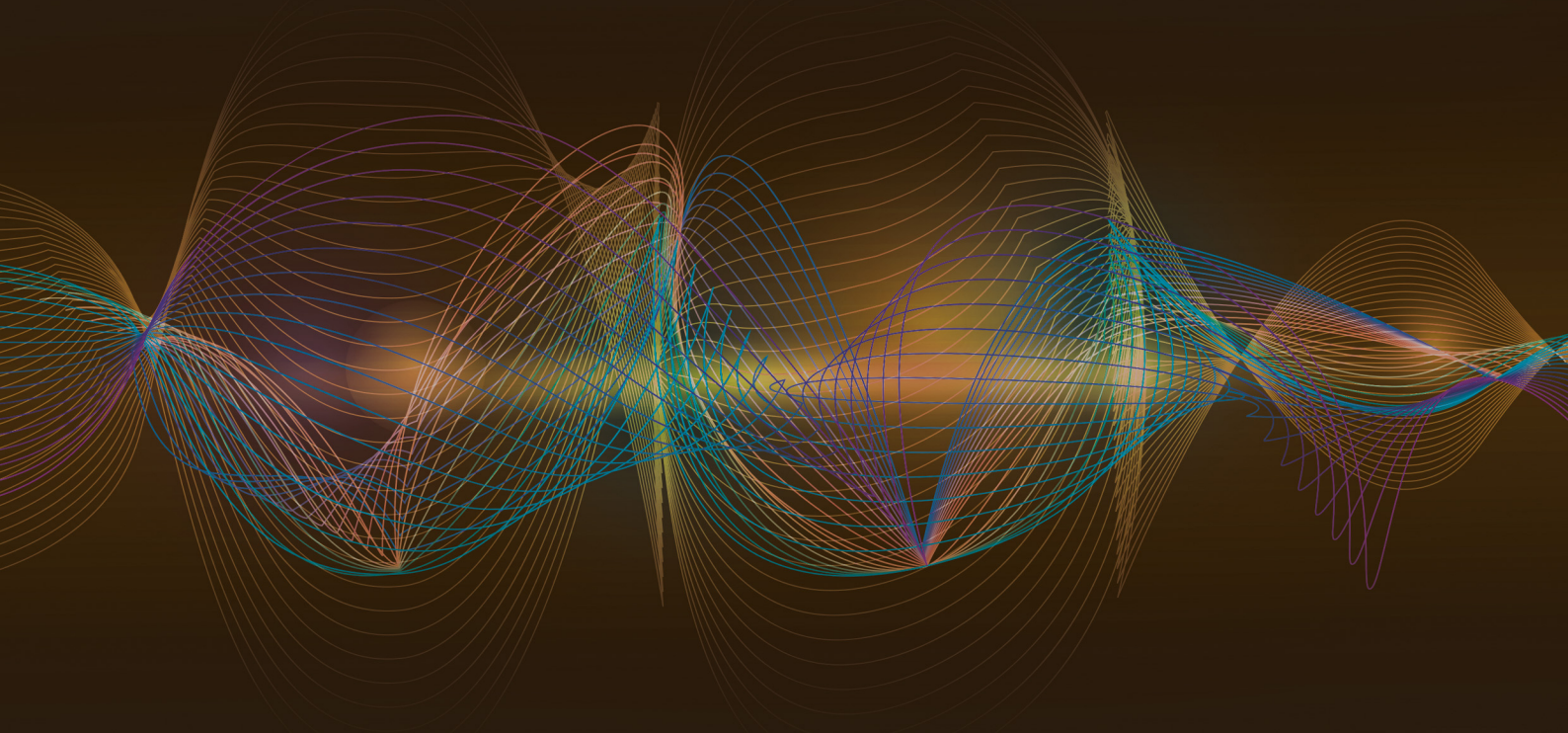


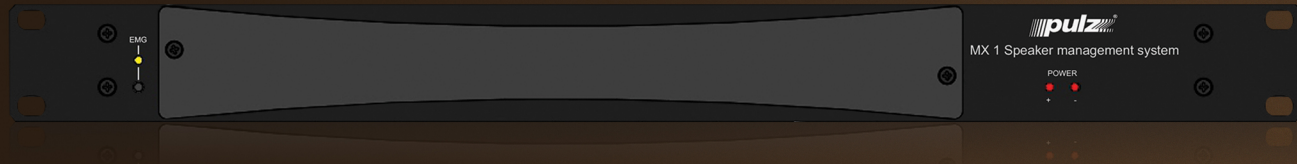
CINELINE

pulz[®]



SIGNAL PROCESSING

MX1



The Pulz MX1 is a dedicated active cinema speaker management system designed to maximize the performance of the Pulz cinema speaker systems. It has 4 balanced inputs and 7/10 balanced outputs for the left, centre and right screen channels and one subwoofer channel in a 1U chassis. The system offers both tri-amp and biamp option depending on the type of daughter card selected. There are 4 daughter cards D1, D2, D3 and D4 perfectly configured for different Pulz speaker systems.

The filters are 24dB/octave Linkwitz Riley configured with low noise OPAMPS and close tolerance components. The additional features include subsonic rolloff, delays, CD horn EQ and screen loss equalisation. Externally accessible thumb wheel switches are provided for HF, LF and BM level settings.

The Pulz MX1 can be configured a number of daughter cards specifically designed for particular speaker systems ensuring the best performance. The MX1 also provides a subsonic and low pass filter for the subwoofer and optional bass management of the LCR speakers.

An EMERGENCY operational mode is provided in case of any failure to the centre speaker or amplifier. The centre signal is routed to the Left and Right speaker with proper balance to ensure running shows are not disrupted. This feature can be coupled with the Pulz PRMS system to auto trigger in case of centre channel failure of the audio system.

A sturdy rack mountable chassis, built in robust DC power supply and Phoenix type input output terminals ensures long-term reliability in all types of cinema projection booths.

SPECIFICATIONS:

Mains Voltage:	220-240V AC, 50Hz
Mains Fuse:	250V, 20mm, 300mA type
Inputs:	20KW Balanced Male 3-pin Phoenix
Outputs:	100W Balanced Male 3-pin Phoenix
Max. Output Level:	8V before clip (min load impedance 4KW)
Signal To Noise Ratio:	>102dB @ 2V output
Distortion:	1KHz 2V output 0.007% 1K W load 100Hz 2V output 0.003% 1KW load
LF phase:	Internally selectable
Subwoofer channel:	Fixed factory set filter 30Hz to 150 Hz 24dB/octave Linkwitz Riley Channel 1,2 and 3 signal summing internally selectable
Product dimensions (H X W X D):	43 mm X 482 mm X 267 mm (1.7" X 19" X 10.5")
Net Weight:	4 kg (9 lb)
Packed Weight:	5 kg (11 lb)

DAUGHTER BOARD OPTIONS:

MX1 D1:	Triamp - Energy Series - EM3, ESM4, ESM5, ESM6, ESM7
MX1 D2:	Biamp - Energy Series - EM3, ESM4, ESM5, ESM6, ESM7
MX1 D3:	Triamp - Isowave Series - M2, D4
MX1 D4:	Biamp - Isowave Series - M2, D4

DSS36



FEATURES

- 3 analog inputs and 6 analog outputs
- 24 bit A/D and D/A convertor
- 96kHz sampling rate
- 6 PEQ per input and 6 PEQ per output
- 8th order filters for crossover
- USB and optional Wireless connectivity
- Robust Linear power supply for high reliability and low noise spectrum

The DSS36 3-In, 6-Out Digital Speaker Processor is designed to deliver high quality DSP processing and superb audio quality and adequate control options for professional sound reinforcement for cinemas, fixed and touring installations, nightclubs, large venue sound systems and more.

The DSS36 features 24-Bit A/D converters 96kHz sampling rate and an array of DSP functions that include crossover, time delay features, compression, limiting, feedback control features and much more.

An intuitive 2 X 24 back-lit LCD display helps navigate options through its extensive feature set and is also easy to see in dimly lit venues. The 8-LED for input/output displays level and status of the signal. The DSS36 will store up to 30 total presets. A preset file captures all current settings and stores complete control data for all channels and all audio functions.

SPECIFICATIONS:

Input Impedance	Balanced: 20K Ω
Output Impedance	Balanced: 100 Ω
PC Port	1 X USB (front panel), 2 X RS485, 1 X RJ45 (back panel)
CMRR	>63dBu at 1kHz
Input Range	\leq +25dBu
Frequency Response	20Hz – 20kHz(+/-0.5dB)
S/N Ratio	>118dB
THD	<0.01% output=0dBu/1kHz
Crosstalk of Channels	>88dB at 1kHz

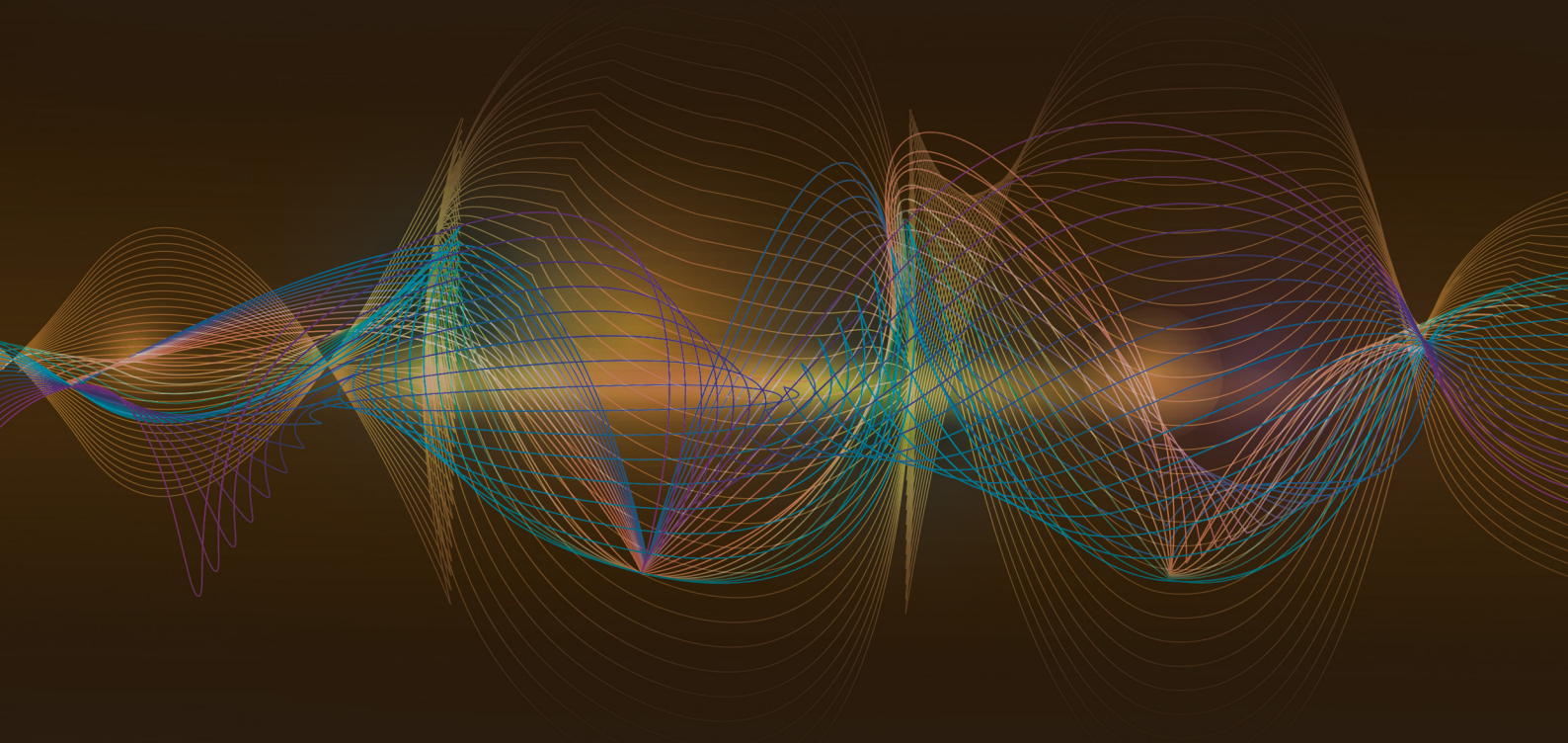
Functions of Input Channels

Input Mute	Mute/Unmute selection for each input channel
Input Delay	Each input channel has a separate delay control, adjustable range of 0-1000ms, step: 21us increment till 10ms, step size: 84us from 10ms-20ms, step: 0.5ms from 20-1000ms
Input Polarity	In-phase(+) or Reversed phase(-)
Input EQ	Each input channel has 6 parametric EQ
Input Gain	Input gain range: -80dB ~ +12dB, step size: 0.2dB
Input Compression	Threshold: -40dBu ~ +20dBu, step size: 0.5dBu; Compression ratio: 1.0:1 ~ 20:1, step: 0.1 for 1.0:1 ~ 2.0:1, step: 0.5 for 2.0:1 ~ 20.1; Attack time: 0.3ms ~ 200ms, Release time: 50ms ~ 5000ms
Automatic Gain Control	Threshold: -80dBu ~ +20dBu, Target: -80dBu ~ +20dBu, step size: 0.5dBu; Ratio: 1:1.0 ~ 1:20, step: 0.1 for 1:1.0 ~ 1:1.2, step: 0.5 for 1:1.2 ~ 1:20; Attack time: 0.3ms ~ 200ms, Release time: 50ms ~ 5000ms

Functions of Output Channels

Output Mute	Mute/Unmute selection for each output channel
Output Selection	Each input channel can be selected to routed to any output channel
Output Gain	Range: -80dB ~ +12dB, step: 0.2dB
Output Delay	Each input channel has a separate delay control, adjustable range of 0-1000ms, step: 21us increment till 10ms, step: 84us from 10ms-20ms, step: 0.5ms from 20-1000ms
Output Polarity	In-phase(+) or Reversed phase(-)
Crossover	Each output channel can be independently set as LPF or HPF. Filter type: Linkwitz-Riley, Bessel, Butterworth Crossover Frequency: 20Hz ~ 20kHz, Slope: 12dB/oct – 48dB/oct in increments of 6dB/oct
Compression	Threshold: -40dBu ~ +20dBu, step: 0.5dBu; Compression ratio: 1.0:1 ~ 20:1; step: 0.1 for 1.0:1 ~ 2.0:1, step: 0.5 for 2.0:1 ~ 20.1; Attack time: 0.3ms ~ 200ms, Release time: 50ms ~ 5000ms
Limiter	Threshold: -40dBu ~ +20dBu, step: 0.5dBu; Attack time: 0.3ms ~ 200ms, Release time: 50ms ~ 5000ms
Output EQ	Each output channel has 10 EQ's selectable to PEQ or Shelving Gain: -20db ~ +20db; Shelf Slope: 6db/12db; Frequency: 20Hz - 20kHz Bandwidth: 0.05oct ~ 3oct; step: 0.05oct; Gain: -20db~+20db, Step 0.1db 96kHz sampling frequency, 32-bit floating-point DSP
Processor Display	2 x 24 LCD, 8-LED for input/output level. Mute and editing functions can be displayed
Power	\leq 25W
Power Supply	AC110V/220V 50/60Hz
Product Dimension (H X W X D)	44 mm X 482 mm X 228 mm (1.7" X 19" X 9")
Net Weight	4.1 kg (9 lb)
Packed Weight	5 kg (11 lb)

sound matters



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Pulz reserves the right to make changes in specifications without prior notice.