Speaker Management Systems

DPA Series - DPA480P

DPA480P is a cost-effective 4-IN/8-OUT digital speaker management system catering to any crossover configuration with its suitable processing and control for live application use. 4 analog inputs and 8 analog outputs are managed by a powerful MARANI® DSP Engine, in addition to 24 Bit AD/DA Converters. Each input channel provides 30 PEQ, gain control, noise gate function, RMS compressor, and configurable delay. Each output offers 7 PEQ with the crossover filters whose slopes from 6dB up to 48dB/Octave. Each output path also features peak limiter, HP/LP Filters, and driver alignment delay. The DPA480P supports a full matrix mixing mode where inputs may be routed/mixed in any ratio to any output. For remote configuration and control the DPA480P can be connected via USB or RS485 connections to remote control PC software.



Features

Outstanding Performance

Excellent sonic performance with 24bit high end converters coupled with 96kHz sample rate
4 inputs, 8 outputs with full matrix mixing

Top-grade DSP Engine

30 band parametric equalization per input channel
7 band parametric equalization per output channel
Each band can be switched to Bell, Hi/Lo-Shelving, HP/LP, Band Pass, Notch and All Pass filters
Crossover filters with slopes from 6dB/Octave up to 48dB/ Octave including Butterworth, Bessel, Linkwitz-Riley
Each output features a dynamic range controller composed of a Peak Limiter
Adjustable Delay time up to 420.998 ms for every input channel , up to 128.998 ms for every output channel

Direct PC/Network Connection and Control

Front panel USB connector for direct PC communications
Rs485 connection for system setup, monitoring and control via fully manageable remote PC software

Front panel interactive LCD display for local access and configuration
Simultaneous control up to 32 units via PC software
Up to 24 storable user presets
Security Lockout

Applications

- Auditoriums
- Convention Centers
- Houses of Worship
- Stadiums and Arenas
- Theaters
- Touring Musicians
- Performing Art Centers
- Stage Monitoring System digital

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Audio

Analog Input	4 x XLR electronically balanced
Analog Output	8 x XLR electronically balanced
Minimun Load	150 ohm
THD+N	0.001% at 1kHz 0dBu
S/N	>106dBA
Frequency Response	20Hz - 20kHz; -0.5dBu at 20Hz and 20kHz
AD & DA Converters	24bit - 96kHz

DSP & Processing

DSP Engine	MARANI® DSP
DSP Resolution	24bit (data) x 24 bit (coeff.), 54 bit accumulation registers
	96 bit precision on intermediate processing data
Parametric Equalization	30 filters per input; 7 filters per output
Filter Type	Bell, Hi/Lo-Shelving, HP/LP, Band Pass, Notch and All Pass Filters selectable
Filter Gain	From -15dBu up to +15dBu by 0.5dBu resolution steps
Center Frequency	from 20Hz up to 20kHz with 1Hz resolution steps
Filter Q/BW	Bell Q: 0.4~128; Shelving/HP/LP Q: 0.1 ~ 5.1; BP/Notch/All Pass Q: 4 ~ 104
Input&Output Level	From -18dB to +12dB by 0.1dBu resolution steps;
Crossover Section HPF/LPF	Butterworth 6/12/18/24/36/48 dB per octave
	Bessel 12/24 dB per octave
	Linkwitz-Riley 12/24/36/48 dB per octave
Input Noise Gate	Threshold from -80dBu up to -50dBu
	Attack time from 1ms up to 1000ms;Release time from 10ms up to 1000ms
Input RMS Compressor	Threshold from -14dBu up to +16dBu and Byp
	Ratio 2:1~32:1; Knee: 0% ~ 100%; Makeup from -12dB to +12dB
	Attack time from 5ms up to 200ms;Release time from 0.1 sec up to 3 sec
Output Peak Limiter	Threshold from -14dBu up to +16dBu and Byp
	Attack time from 1ms up to 900ms;Release time from 0.1 sec up to 5 sec
Input&Output Polarity	Normal (0°) or Inverted (180°)
Input&Output Mute	ON / OFF
Delay	420.998 ms per input channel; 128.998 ms per output channel

General

Device Presets	24 User Presets
Dimensions	19"x 1.75"x 9" (482x44x230mm) 1RU
Weight, Net / Shipping	7.71 lbs (3 Kg) / 8.82 lb (3.5 Kg)