

Speaker Management Systems

DPA Series - DPA240A

DPA240A is a High End 2-IN/4-OUT digital speaker management system. Designed for maximum versatility, it provides all the processing and control necessary for both live and fixed installation use. Proving for any crossover configuration, it offers 2 analog inputs, 4 analog outputs, managed by a powerful MARANI® DSP Engine, for a full 96kHz processing, in addition to high performance 24 bit AD/DA Converters. Each input channel provides 30 PEQ, 3 ALL PASS Filter, Gain control, Noise Gate, RMS Compressor, Internal Generator, White/ Pink Noise Generator, and configurable Delay. Each output includes 7 PEQ, in

addition to the crossover filters with slopes from 6 up to 48dB/Octave. Each output path also features Peak Limiter and configurable Delay. The DPA240A supports a full matrix mixing mode where inputs may be routed/mixed in any ratio to any output. For remote configuration and control the DPA240A can be connected via USB or RS485 connections.

DPA2448QRT: it is a special version of the DPA240A, where the remote control can be selected between the USB connection on the front panel or the TCP/IP one, located on the Rear Panel, replacing the RS485.



Features

Outstanding Performance

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

channel and 270 ms for each output channel
Phase correction per input and output channel
12dB Headroom internal overflow processes

Top-grade DSP Engine

30 band parametric equalization + 3 ALL PASS Filter per input channel
Each band can be switched to Bell, Shelving, HP/LP, Band Pass, Notch Filter
Crossover filters with slopes from 6 up to 48dB/ Octave including Butterworth, Bessel, Linkwitz-Riley
Process Overflow limiting
Each output features a precision dynamic range controller composed of a Limiter working on RMS value of the limiter's input

Direct PC/Network Connection and Control

Rear panel USB connector for direct PC communications
Rs485 connection(DPA240A)/Ethernet Interface (DPA2448QRT) for system setup, monitoring and control via fully manageable remote PC software

Front panel interactive LCD display for local access and configuration
Front panel 7-LED level meter indicators per channel
Simultaneous control up to 32 units via PC software
Up to 32 storable user presets
Security Lockout

Applications

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

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Audio

Analog Input	2 x XLR electronically balanced
Analog Output	4 x XLR electronically balanced
Minimum Load	150 ohm
THD+N	0.001% at 1kHz 0dBu
S/N	> 110dBA
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 intprocessing data
Parametric Equalization	30 PEQ filters per input + 3 ALL PASS; 7 filters per output
Input Gain	From -18dB to +12dB by 0.1dBu resolution steps
Output Gain	From -18dB to +12dB by 0.1dBu resolution steps
Filter Type	Bell, Shelving, HP/LP, Band Pass, Notch Filter
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 Type: Q from 0.4 up to 128 in 100 steps Shelv/Hp/LP Type: Q from 0.1 up to 5.1 in 100 steps BandPass/Notch Type: Q from 4 up to 104 in 100 steps
Crossover Section	HPF/LPF - Butterworth 6/12/18/24/36/48dB per octave Bessel 12/24dB per octave Linkwitz-Riley 12/24/36/48dB per octave
Internal Noise Generator	White/Pink Noise; Level from -40dBu to 0dBu
Input All Pass	Selectable as bypass, 1st and 2nd order
Input Noise Gate	Threshold from -80dBu up to -50dBu, or not active Attack time from 1ms up to 1000ms; Release time from 10ms up to 1000ms
Input RMS Compressor	Threshold from 20dBu up to -10dBu Ratio: 2:1 ~ 32:1; Knee: 0 ~ 100%; Makeup from -12dBu to +12dBu Attack time from 5ms up to 200ms; Release time from 0.1sec up to 3sec
Output Peak Limiter	Threshold from 20dBu up to -10dBu; Attack time from 1ms up to 900ms; Release time from 0.1sec up to 5sec
Routing	nothing, In A, In B, In A+B
Delay	480 ms 10.4us increment/decrement steps for each input, 270ms 10.4us increment/decrement steps for each output
Ground noise	-90 dBu

General

Device Presets	32 User Presets
Dimensions	19" x 1.75" x 9" (483x44x229mm) 1RU
Weight. Net/Shipping	7.71 lbs (3.5 Kg) / 8.82 lb (4 Kg)