

DPA480P is a cost-effective 4-IN/8-OUT digital speaker management system. Designed to be catered for any crossover configuration, it provides the suitable processing and control for live application use. It offers 4 analog inputs, and 8 analog outputs, managed by a powerful MARANI® DSP Engine, in addition to 24 Bit AD/DA Converters. Each input channel provides a choice of EQ with a 30-band Parametric Filters, gain control, noise gate function, RMS compressor, and configurable delay. Each output offers up to 7-band of parametric

equalization in to the crossover filters which themselves provide slopes from 6dB/Octave 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. The control remote PC software allows simultaneous control up to 32 units, setting all parameters and showing real time levels.



Features

Outstanding Performance

Excellent sonic performance with 24bit high end converters coupled with 48kHz 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

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

Control

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 24 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



Audio

Analog Input	-----	4 x XLR electronically balanced
Analog Output	-----	8 x XLR electronically balanced
Minimum 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 - 48kHz

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
Front Panel	-----	2x24 character LCD display with LED backlight 7-LED meter per input channel -20dBu to +15dBu, clip 7-LED meter per output channel -15dBu to +15dBu, clip and limiter mode Blue LED (Edit) per channel Red LED (Mute) per channel NAV/PM1 Rotary encoder push button switch PM2, PM3, ENTER, ESC, UTILITY push button switches EDIT/MUTE push button per channel USB type B connector
Rear Panel	-----	4 x XLR female connector (Input) 8 x XLR male connector (Output) 2 x Rs485 Connector 1 x Ground-lift toggle switch IEC C13 16A connector; Power on/off switch
Mains AC	-----	90-240VAC (50/60Hz) - 40W
Dimensions	-----	19"x 1.75"x 9" (483x44x229mm) 1RU
Weight, Net / Shipping	-----	7.71 lbs (3.5 Kg) / 8.82 lb (4 Kg)