

**DPA480** is a High End 4-IN/8-OUT digital speaker management system which maintains the same high quality hardware present in former DPA480 versions. Designed for maximum versatility, it provides all the processing and control necessary for both live and fixed installation use. Providing for any crossover configuration, it offers 4 analog inputs, 8 analog outputs and 2 digital S/PDIF inputs, managed by a powerful MARANI® DSP Engine, for a full 96kHz processing, in addition to 24 bit AD/DA Converters. Each input channel provides a choice of EQ with 30-band Parametric EQ, Gain control, Noise Gate, RMS Compressor, Internal White/ Pink Noise

Generator and configurable Delay. Each output offers up to 11-band of parametric equalization, in addition to the crossover filters which themselves provide slopes from 6dB/Octave up to 48dB/Octave. Each output path also features Peak Limiter, RMS Compressor and configurable Delay. A 12 dB Headroom is provided for internal overflow process. The **DPA480** supports a full matrix mixing mode where inputs may be routed/mixed in any ratio to any output. For remote configuration and control the **DPA480** can be connected via USB/RS485/TCP-IP connections. The control remote PC software allows simultaneous control up to 32 units, setting all parameters and showing real time levels, beside controlling directly via the front panel interactive LCD display.



### 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  
11 band parametric equalization per output channel  
Each band can be switched to Bell, Shelving, HP/LP, Band Pass, Notch Filter, All Pass  
Crossover filters with slopes from 6dB/Octave 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

Adjustable Delay time up to 480 ms for every input channel and 270 ms for each output channel

Phase correction per input and output channel

#### Direct PC/Network Connection

Rear panel USB connector for direct PC communications  
RS485/TCP-IP 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 32 storable user presets  
Security Lockout



### Audio

Digital Input	-----	2 SPDIF; Gain 0dBu
THD+N	-----	<0.005% at 1kHz 0dBu
S/N(A-Weighted)	-----	> 112dBA
Frequency Response	-----	20Hz - 20kHz; -0.5dBu at 20Hz and 20kHz
AD & DA Converters	-----	24bit - 96kHz
Max Input/Output Level	-----	+20 dB

### DSP & Processing

DSP Resolution	-----	54 bit accumulation registers, 96 bit precision on intermediate processing data
Parametric Equalization	-----	30 PEQ filters per input; 11 filters per output
Input&Output Gain	-----	From -18dB to +12dB by 0.1dBu resolution steps
Filter Type	-----	Bell, Shelving, HP/LP, Band Pass, Notch Filter, All Pass; Gain: +/-15dBu
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/All Pass: 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
Input Noise Gate	-----	Threshold: -80dBu ~ -50dBu, or not active Attack time: 1ms ~ 1000ms; Release time: 10ms ~ 1000ms
Input/Output RMS	-----	Threshold: 20dBu ~ -10dBu
Compressor	-----	Ratio: 2:1 ~ 32:1; Knee: 0 ~ 100%; Makeup: -12dBu ~ +12dBu Attack time: 5ms ~ 200ms; Release time: 0.1s ~ 3s
Output Peak Limiter	-----	Threshold: 20dBu ~ -10dBu; Attack time: 1ms ~ 900ms; Release time: 0.1s ~ 5s
Delay	-----	480 ms per each input, 270ms per output
Ground noise	-----	-90 dBu

### General

Device Presets	-----	User Presets: 32
Front Panel	-----	2x24 character LCD display with green LED backlight 7-LED meter per input channel -15dBu ~ +15dBu, clip and limiter mode 7-LED meter per output channel -15dBu ~ +15dBu, clip and limiter mode USB Type A Connector
Rear Panel	-----	4 x XLR female connector (Input) 8 x XLR male connector (Output) 1 x RJ45 connector 2 x RS45 connector 2 x Ground-lift toggle switch 2 x AES/EBU IEC C13 16A connector; Power on/off switch
Main 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)