

DPA360A is a High End 3-IN/6-OUT digital speaker management system which maintains the same high quality hardware present in former QRT versions. 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 3 analog inputs, 6 analog outputs, managed by a powerful MARANI M716 DSP Engine, for a full 96kHz processing. In addition to high performance 24 bit AD/DA Converters. Each input channel provides a choice of EQ with 18-band Parametric EQ, 3 ALL PASS Filter, Gain control, Noise Gate, RMS Compressor, Internal Generator, White/ Pink Noise Generator, and configurable Delay. Each output offers up to 7-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 and configurable Delay. The **DPA360A** supports a full matrix mixing mode where inputs may be routed/mixed in any ratio to any output. For remote configuration and control the **DPA360A** 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.

DPA3655QRT: it is a special version of the DPA360A, 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
3 inputs, 6 outputs with full matrix mixing

Top-grade DSP Engine

18 band parametric equalization + 3 ALL PASS Filter per input channel
7 band parametric equalization per output channel
Each band can be switched to Bell, Shelving, HP/LP, Band Pass, Notch Filter
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 310 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 connection (DPA360A)/Ethernet Interface (DPA3655QRT) 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

Applications

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



Audio

Analog Input	3 x XLR electronically balanced
Analog Output	6 x XLR electronically balanced
Minimum Load	150 ohm
THD+N	0.001% at 1kHz 0dBu
S/N	>110dB
Frequency Response	20Hz - 20kHz; -0.5dBu at 20Hz and 20kHz
AD & DA Converters	1x AK5388 24bit, 3x AK4396 24bit - 96kHz

DSP & Processing

DSP Engine	MARANI M716
DSP Resolution	24bit (data) x 24 bit (coeff.), 54 bit accumulation registers, 96 bit precision on intprocessing data
Parametric Equalization	18 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
Headroom on Internal Overflow Processes	12 dB
Routing	Full matrix mixing mode
Delay	310 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
Front Panel	2x24 character LCD display with green LED backlight 7-LED meter per input channel -15dBu to +15dBu, clip and limiter mode 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
Rear Panel	3 x XLR female connector (Input) 6 x XLR male connector (Output) 1 x XLR female connector for RS485 (Input) - DPA3655QRT: 1 x RJ45 for Ethernet connection (10/100 TCP-IP) 1 x XLR male connector for RS485 (Output) - DPA3655QRT: USB type B connector on the front panel USB type A connector - DPA3655QRT: USB type B connector on the front panel 2 x Ground-lift toggle switch 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)