

DPA260A

2 In - 6 Out Speaker Management System

DPA260A is a High End 2-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. Providing for any crossover configuration it offers 2 analog inputs, 6 analog outputs and a digital S/PDIF input, 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 30-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 DPA260A supports a full matrix mixing mode where inputs may be routed/mixed in any ratio to any output. For remote configuration and control the DPA260A 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.

DPA2655QRT: it is a special version of the DPA260A, 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, 6 outputs with full matrix mixing

Top-grade DSP Engine

30 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 480 ms for every input channel and 270 ms for each output channel

Direct PC/Network Connection

Rear panel USB connectorfor direct PC communications

Rs485 connection(DPA260A)/Ethernet Interface (DPA2655QRT) 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
- · 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 -----2 x XLR electronically balanced Analog Output ------ 6 x XLR electronically balanced

Digital Input ------ 1 SPDIF; Gain OdBu Minimun Load ------ 150 ohm THD+N ------ 0.001% at 1kHz OdBu

S/N ----->110dBA

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, 24bit (data) x 96 bit (coeff.)

DSP Resolution ----- 24bit (data) x 24 bit (coeff.), 54 bit accumulation registers,

96 bit precision on intermediate processing 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 +18dB 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 OdBu 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----- 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 Front Panel -----

2x24 character LCD display with green 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

2 x XLR female connector (Input)

6 x XLR male connector (Output) 1 x RCA connector (SPDIF input)

1 x XLR female connector for RS485 (Input) -1 DPA2655QRT:1 x RJ45 for Ethernet connection 1 x XLR male connector for RS485 (Output) -1 (10/100 TCP-IP)

USB type A connector ----- DPA2655QRT: 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)

Specifications subject to change without notice Designed in Italy Assembled in China DPA260A