TOA

DIGITAL SPEAKER PROCESSOR

DP-SP3(CU)

■DESCRIPTION

The DP-SP3 is a 1U rack mountable Digital speaker processor having 2 inputs and 6 outputs.
It features digital signal processing functions such as Equalizer, Crossover, Matrix, Compressor, and Delay.
Other functions include input PAD, analog output attenuator, output MUTE, EQ characteristic library for TOA speakers,
and contact input terminals. When connected to a LAN, settings and operations of the DP-SP3 can be performed
on a PC with the supplied DP-SP3 PC Software installed.
It can be mounted in an EIA component rack (1U size).

■SPECIFICATIONS

* 0 dB = 0.775 V

Power Source	100-120 V AC, 60 Hz
Power Consumption	25 W
Frequency Response	20 Hz - 20 kHz, ±1 dB
Sampling Frequency	96 kHz
Dynamic Range	110 dB or more
Distortion	0.03 % or less, 1 kHz, +4 dB* input/output, 20 Hz - 20 kHz BPF
Crosstalk	-80 dB or less, 1 kHz
Input	2 channels, +4 dB* (max. +24 dB*), 10 kΩ, electronically-balanced, removable terminal block (3P)
Output	6 channels, +4 dB* (max. +24 dB*), applicable load 600 Ω or more, electronically-balanced, removable terminal block (3P)
AD Converter	24 bits
DA Converter	24 bits
Preset Memory	16
Signal Processing Section	
Equalizer/Filter	Parametric equalizer: 20 Hz - 20 kHz, ±15 dB, Q: 0.267 - 69.249 Filter: High-pass filter: 20 Hz - 20 kHz, 6 dB/oct, 12 dB/oct Low-pass filter: 20 Hz - 20 kHz, 6 dB/oct, 12 dB/oct Notch filter: 20 Hz - 20 kHz, Q: 8.651 - 69.249 All-pass filter: 20 Hz - 20 kHz, Q: 0.267 - 69.249 High-shelving filter: 5 - 20 kHz, ±15 dB Low-shelving filter: 20 - 500 Hz, ±15 dB Horn equalizer: 20 kHz, 0 - 18 dB in 0.5 dB steps
Crossover	2 ways, 3 ways, 4 ways Crossover filter: 20 Hz - 20 kHz, 6 dB/oct, 12 dB/oct, 18 dB/oct, 24 dB/oct, -15 to +12 dB, polarity switchable Delay: 0 - 170.656 ms in 0.01 ms steps
Compressor	Threshold: -20 to +20 dB* in 1 dB steps Ratio: 1:1, 1.1:1, 1.2:1, 1.3:1, 1.5:1, 1.7:1, 2:1, 2.3:1, 2.6:1, 3:1, 4:1, 7:1, 8:1, 10:1, 12:1, 20:1, ∞:1 Attack time: 0.2 ms - 5 s Release time: 10 ms - 5 s
Delay	Delay time: 0 - 682.656 ms in 0.01 ms steps
Matrix	2 × 6
Crosspoint Gain	-∞ to 0 dB in 1 dB steps
Function	Input PAD (-14 dB) control, analog output attenuator (-∞ to 0 dB in 1 dB steps) control, EQ characteristic library for TOA speakers, input/output level indicator (4-point LED indicator), output MUTE switch ×6
Control	
Contact input	4 channels, open voltage: 5 V DC, short-circuit current: 5 mA, removable terminal block (5 P), control function: preset memory selection, volume control, and mute

Network	Network I/F: 1 channel of 10BASE-T/100BASE-TX (auto-negotiation)
	              RJ45 connector, connection via switching hub
	Network protocol: TCP/IP
	Connection cable: Shielded Cat. 5 or higher twisted pair cable for LAN
	              (Cat. 5-STP or better)
	Maximum cable length: 100 m (109.36 yd) (between DP-SP3 and switching hub)

Operating Temperature	0 ℃ to +40 ℃ (32 ℉ to 104 ℉)
Operating Humidity	90 %RH (no condensation)
Finish	Panel: Aluminum, hairline, black, Case: Surface-treated steel plate
Dimensions	482 (W) × 44 (H) × 289 (D) mm (18.98" × 1.73" × 11.38")
Weight	3.1 kg (6.83 lb)
Accessories	Power supply cord ((2 m (6.56 ft)) ×1, removable terminal plug (3P) ×8, removable terminal plug (5P) ×1, CD-ROM (containing setup software) ×1

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Personal Computer Requirements

Requirements	CPU: Pentium 4, 1.0 GHz or faster Memory: 1.0 GB or more Display: 1024 × 768 resolution or higher Free Hard Disk Space: 16 MB or more, 　　　　　　　　　　however 600 MB or more is required for the 32-bit version or 　　　　　　　　　　1.5 GB or more for the 64-bit version when 　　　　　　　　　　".NET Framework" is not yet installed Optical Drive: CD-ROM drive Network Adapter: 10BASE-T or faster connection
OS	Windows 7 (32/64-bit edition) Windows 10 (32/64-bit edition)
Required Component	.NET Framework 4 Client Profile

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※ Pentium is a trademark of Intel Corporation.
※ Other company names and products are also trademarks of individual companies.

■APPEARANCE

422 [16.61"]

Rear View

482 [18.98"]

465 [18.31"]

31.6 [1.24"]

Front View

6.1 [0.24"]

Bottom View

44 [1.73"]

289 [11.38"]

280.3 [11.04"]

Side View

AC plug

UNIT:mm   SCALE:1/3

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DWG No: GDP00MC1-2