TOA

DIGITAL SPEAKER PROCESSOR

DP-SP3
(CE/CE-AU/CE-GB)

■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

Version	CE/CE-GB	CE-AU
Power Source	220-240 V AC, 50/60 Hz	220-240 V AC, 50 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 X 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) X 44 (H) X 289 (D) mm (18.98" X 1.73" X 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, rack mounting screw ×4, CD-ROM (containing setup software) ×1	

TOA Corporation   DWG No: GDP00JB1

DIGITAL SPEAKER PROCESSOR
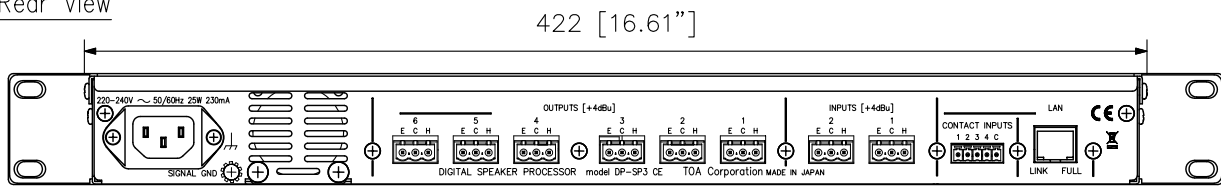
DP-SP3
(CE/CE-AU/CE-GB)

Personal Computer Requirements

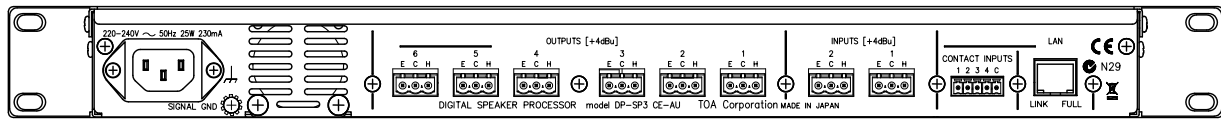| Requirements	CPU: Pentium 4, 1.0 GHz or faster Memory: Windows XP/512 MB or more, Other OS/1.0 GB or more Display: 1024 × 768 resolution or higher Free Hard Disk Space: 16 MB or more, however 600 MB or more is required for the 32-bit version or 1.5 GB or more for the 64-bit version when ".NET Framework" is not yet installed Optical Drive: CD-ROM drive Network Adapter: 10BASE-T or faster connection
OS	Windows XP Service Pack 3 or later, Windows Vista (32/64-bit) Service Pack 1 or later, Windows 7 (32/64-bit)
Required Component	.NET Framework 4 Client Profile

※ Windows is a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.
※ Pentium is a trademark of Intel Corporation.
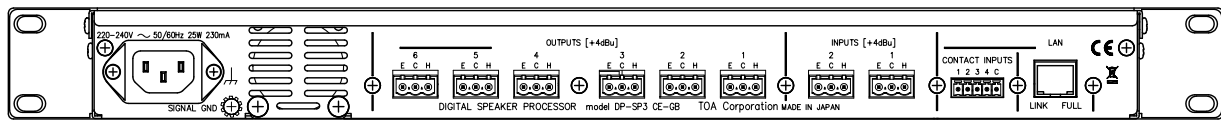※ Other company names and products are also trademarks of individual companies.
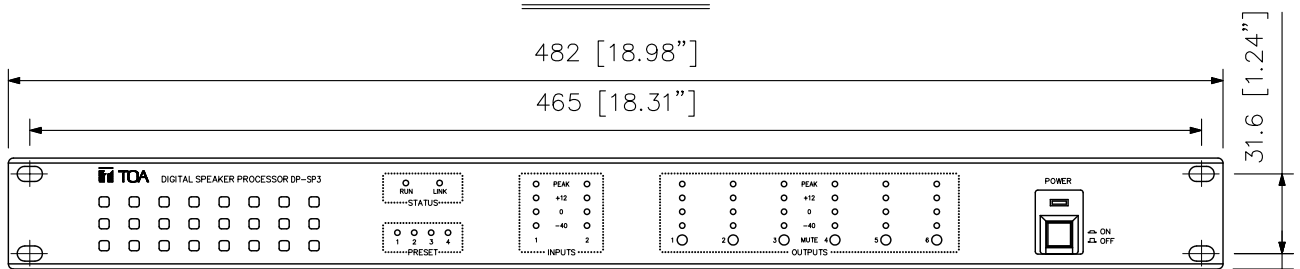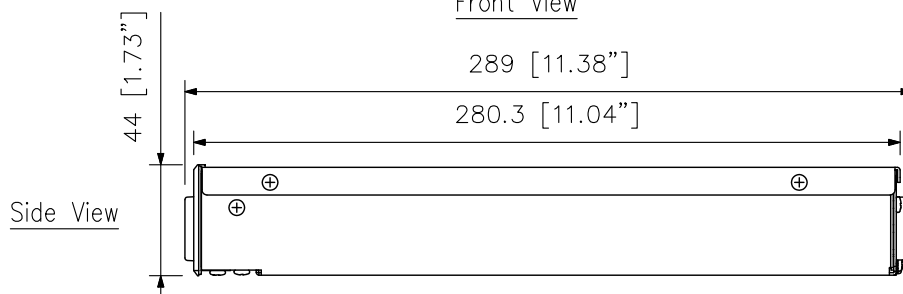
■APPEARANCE

Rear View

422 [16.61"]

CE version

CE-AU version

CE-GB version

482 [18.98"]

465 [18.31"]

31.6 [1.24"]

6.1 [0.24"]

Front View

289 [11.38"]

280.3 [11.04"]

44 [1.73"]

Side View

Version	CE	CE-AU	CE-GB
AC plug			

UNIT: mm   SCALE: 1/3

13B

TOA Corporation

DWG No: GDP00JC1