

**DESCRIPTION**

The Q-2008SPD Digital Mixing Processor Unit is designed to have up to 32 audio inputs and outputs in total, and to be mounted in an EIA standard equipment rack (3U size). A built-in powerful signal processing function permits the unit to be used as both a mixer and a signal processor.

Its audio input/output and control ports can accept optional plug-in modules, making the unit have a maximum of 32 inputs or 32 outputs and up to 2 control modules. Using the following optional modules enables the unit to perform their functions: Two D-983s for providing a maximum of 48 contact inputs and 32 contact outputs, and D-984VC for VCA control. Other feature includes Dante that enables audio data transfer between multiple Q-2008SPD units. Each function is set by the dedicated setting software on a PC. Setting contents can be stored in the unit's internal memory as preset memory, which can be recalled by the Q-2008SPD without using a PC.

The D-2012C, when connected, remotely controls the Q-2008SPD's basic operations such as volume control.

**SPECIFICATIONS**

\* 0 dB = 0.775 V

Power Source	100 - 240 V AC, 50/60 Hz
Power Consumption	78 W
Frequency Response	20 Hz - 20 kHz, $\pm 1$ dB (+4 dB* input)
Sampling Frequency	48 kHz
Input and Output	Input: Max. 32 channels, modular construction (modules optional) Output: Max. 32 channels, modular construction (modules optional) Monitor bus: 1 stereo input, 1 stereo output Connector: RJ45 connector Connection cable: Shielded Category 5 or higher twisted pair LAN cable (CAT5-STP) Maximum cable distance: 100 m (between Q-2008SPD and D-2012C) Headphone: 1 stereo
Signal Processing	
Feedback Suppression Function	12 filters (auto + dynamic), maximum 4 bus channels
Auto-Mixing Function	Ducker (automatic muting), NOM attenuation
Auto-Mixing Group	4 groups
Equalizer/Filter	Parametric equalizer: 20 Hz - 20 kHz, $\pm 15$ dB, Q: 0.267-69.249 Filtering: 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 6 - 20 kHz, $\pm 15$ dB Low shelving filter 20 - 500 Hz, $\pm 15$ dB Horn equalizer 20 kHz, 0 to +18 dB (0.5 dB steps) Crossover filter: 20 Hz - 20 kHz, 6 dB/oct, 12 dB/oct, 18 dB/oct, 24 dB/oct
Compressor/Auto-Leveler	(Compressor mode) Threshold: -20 to +20 dB (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, 5:1, 7:1, 8:1, 10:1, 12:1, 20:1, $\infty$ :1 Attack time: 0.2 ms - 5 s Release time: 10 ms - 5 s Gain: $-\infty$ - +10 dB Knee type: hard knee, soft knee 1, soft knee 2 (Auto-leveler mode) Target level: -20 to +10 dB (1 dB steps) Maximum gain: 0 to +20 dB (1 dB steps) Attack time: 10 ms - 10 s Release time: 100 ms - 10 s
Output Delay	Delay time: 0 - 1360 ms (0.021 ms steps)
BUS Delay	Delay time: 0 - 677 ms (0.021 ms steps)
Matrix	Input: Max. 34 ( 32 + 2 ) channels $\times$ 24 buses, Output: Max. 44 (24 + 4 + 16) buses $\times$ 32 channels
Dante Matrix	Input: Max. 16 channels $\times$ 24 buses, Output: Max. 28 (24 + 4) buses $\times$ 16 channels
Crosspoint Gain	$-\infty$ - 0 dB (1 dB steps)
Preset Memory	32
Auxiliary Function	Key Locking function
LAN	Network I/F: 10BASE-T/100BASE-TX (Automatic-Negotiation) Connected via a switching hub Network protocol: TCP/IP Connection cable: Shielded Category 5 or higher twisted pair LAN cable (CAT5-STP) Maximum cable distance: 100 m (between Q-2008SPD and switching hub)
Control	RS-232C: D-sub connector (9 pins) Used for external control Module: Remote control module slot: 2

### SPECIFICATIONS

Dante	1000BASE-T, PRIMARY/SECONDARY 2 system, RJ45 connector, Enables decentralized installation, Audio transmission only Connection cable: Shielded twisted pair (STP) Cat 5e or higher LAN cable Max extend distance: 100 m (328.1 ft) (connected via a switching hub) Input/Output: 16 channels, 24 bit Sampling Frequency: 48 kHz
Operating Temperature	+5 °C to +40 °C (41 °F to 104 °F)
Finish	Panel: Aluminum, hair-line finish, black Case: Surface-treated steel plate
Dimensions	482 (W) × 132.6 (H) × 343.4 (D) mm (18.98" × 5.22" × 13.52")
Weight	6.3 kg (13.89 lb)
Accessory	Power cord (2 m (6.5 ft)) ×1, Rack mounting screw ×4, CD (Set-up software) ×1, Module mounting screw (spare) ×4, Blank panel (preinstalled on the module slot) ×8
Option	Mic/line input module: D-2000AD1, D-921E, D-921F, D-922E, D-922F Stereo select input module: D-936R Digital input module: D-923AE Line output module: D-971E, D-971M, D-971R, D-2000DA1 Digital output module: D-972AE CobraNet interface module: D-2000CB Remote control module: D-981, D-983 VCA control module: D-984VC

\* Dante is a registered trademark of Audinate Corporation.

### Personal Computer Requirements

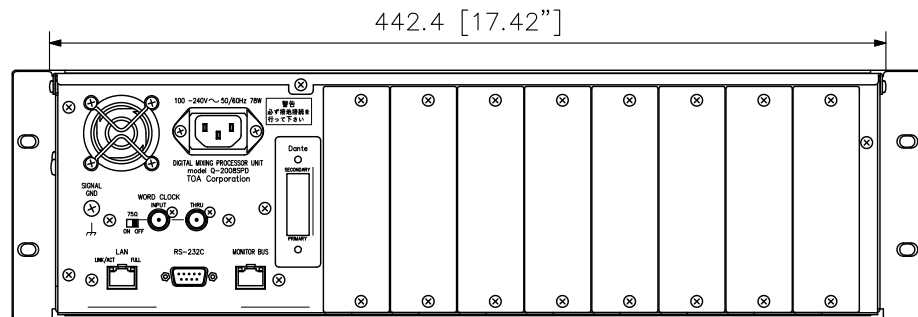
CPU	Intel Pentium4 2 GHz or higher
Memory	1.5 GB or more (2 GB or more recommended)
Display	1024 × 768 resolution or higher
Free Hard Disk Space	16 MB or more (for D-2000 Setting Software installation) 500 MB or more (when ".NET Framework" needs to be installed)
LAN Card	Compatible to 10BASE-T or faster connection
OS	Windows XP SP2 or later, Windows Vista (32/64-bit edition), Windows 7 (32/64-bit edition)
Required Component	.NET Framework 3.5 SP1

\* Pentium is a registered trademark of Intel Corporation.

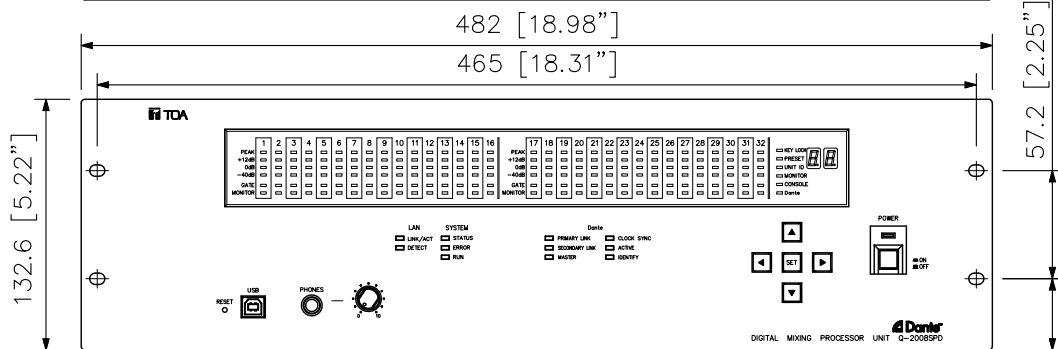
\* Windows is a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

### APPEARANCE

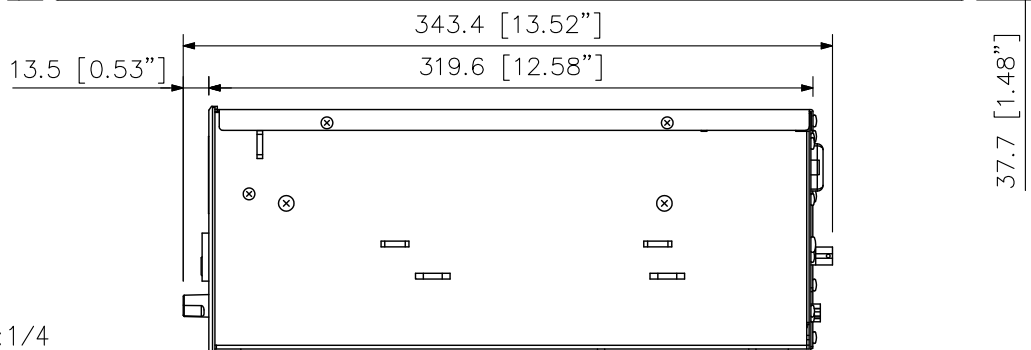
Rear View



Front View



Side View



UNIT:mm SCALE:1/4