D-2000 SERIES
DIGITAL MIXING SYSTEM

Integrating high-performance mixing, matrixing and processing functions to meet a wide scope of sound reinforcement applications
Expandable operation, a system control

Expandable to a massive 128 input/output configuration, the D-2000 Series includes various modules and peripherals that can be combined to create the best possible sound in small to medium-size venues of all types, including hotel banquet and function rooms, indoor sports facilities, multipurpose halls and places of worship and many others.

Auto-mixing advantages

**NOM** (Number of Open Microphones) - automatically adjusts output level based on the total number of open microphones.

**Ducker function** (Auto-Mute function) - automatically works to attenuate outputs of channels with low priority.

Highly effective feedback suppression

The D-2000 Series provides feedback elimination for up to 4 channels. In addition, each channel can control 12 problem frequencies. This makes it convenient for feedback suppression in different areas of the same hall.

2 versatile suppression modes

Either presettable **Auto Mode** or realtime **Dynamic Mode** can be selected to suit the situation and eliminate feedback.

Essential audio processing

Delay, High-, Low-Pass and Notch Filters, Parametric Equalizers, Compressor/Auto Leveller, Gate, Crossovers and Crosspoint Gain.
all-in-one designs ideal offering easy advanced functions and control capabilities

32 preset memories for user convenience.
Up to 32 different routing and parameter configurations can be stored in memory and called up to handle venues such as multi-purpose halls and conference rooms that require frequent changes in staging, seating and speaker arrangements.

Intuitive GUI
The dedicated software’s graphic, visually attractive user interface helps streamline settings and adjustments.

Mixing console option
The D-2008SP can be connected via network to the D-2012C mixing console with 12 motorized faders and 8 rotary encoders. This enables simplified mixing operation that suit non-professional users. Using the D-2012C, allows input and output channel signal levels to be monitored, volume changes made as well as recalling preset memory settings, and contact control.

VCA control
D-2000 Series units used in conjunction with the optional D-911 VCA Fader Unit provides more of an analog mixer user interface.

RS-232C control
The RS-232C port allows external control when connected to external devices such as AMX*1 and Crestron*2 control units. This also allows full control over venue lighting and power curtains (blackout) from a central remote location. This feature is particularly suited for AV presentation rooms, conference rooms and hotel banquet rooms.

Configuration flexibility and intelligent functions provide solutions for any situation
User-specific configurations
The D-2000 Series fully modular design makes it a simple matter to create a configuration that meets specific user requirements.

24-bus matrix
Totally flexible input-to-output signal routing for zoning or room-combining as needed.

Extending operational use for more advanced applications
A 128 input/output system can be constructed by connecting four units of the D-2008SP using the CobraNet*3 module. LAN-connected D-2008SP units can be remotely operated from the console or PC software.

*1 AMX is a registered trademark of AMX Corporation.
*2 Crestron is a registered trademark of Crestron Electronics, Inc.
*3 CobraNet is a registered trademark of Cirrus Logic Corporation.
all-in-one designs ideal offering easy advanced functions and control capabilities

**Input Modules**

- **Mic/Line Input Module (Monaural type)**
  - **D-2000AD1**
    - 4-channel, XLR connectors
    - A/D converter: 24 bit
    - Phantom power supply (48V)
    - THD: 0.008% or less
  - **D-921E**
    - 2-channel, Removable terminal block
    - A/D converter: 24 bit
    - Phantom power supply (15V)
    - THD: 0.05% or less
  - **D-921F**
    - 2-channel, XLR connectors
    - A/D converter: 24 bit
    - Phantom power supply (15V)
    - THD: 0.05% or less
  - **D-922E**
    - 2-channel, Removable terminal block
    - A/D converter: 20 bit
    - Phantom power supply (15V)
    - THD: 0.05% or less
  - **D-922F**
    - 2-channel, XLR connectors
    - A/D converter: 20 bit
    - Phantom power supply (15V)
    - THD: 0.05% or less

- **Mic/Line Input Module (Stereo type)**
  - **D-936R**
    - 4-channel, RCA pin jack
    - A/D converter: 24 bit
    - THD: 0.05% or less
  - **D-923AE**
    - 2-channel line input
    - Applicable Format: AES/EBU
  - **D-937SP**
    - 1-channel stereo line input
    - Applicable Format: S/PDIF

- **Output Modules**
  - **Line Output Modules**
    - **D-2000DA1**
      - 4-channel, XLR connectors
      - D/A converter: 24 bit
      - THD: 0.005% or less
    - **D-971M**
      - 4-channel, XLR connectors
      - D/A converter: 24 bit
      - THD: 0.05% or less
    - **D-971E**
      - 4-channel, Removable terminal block
      - D/A converter: 24 bit
      - THD: 0.05% or less
    - **D-971R**
      - 4-channel, RCA pin jack
      - D/A converter: 24 bit
      - THD: 0.05% or less
  - **Digital Output Modules**
    - **D-961SP**
      - 4-channel line output
      - Coaxial RCA jack
      - Applicable Format: S/PDIF

**Remote Control Modules**

- **Remote Control Modules**
  - **D-981**
    - 8 inputs/8 outputs
    - Removable terminal block connectors
  - **D-983**
    - 24 inputs/16 outputs
    - RJ45 connectors
  - **D-984VC**
    - Interface to D-911 Remote Controller
    - Eight RJ-45 connectors
    - Control up to 12 inputs, 8 outputs

- **CobraNet Interface Module**
  - **D-2000CB**
    - Allows audio transmission among D-2008SPs.
  - **D-983**
    - 24 inputs/16 outputs
    - RJ45 connectors

- **VCA Control Module**
  - **D-984VC**
    - Interface to D-911 Remote Controller
    - Eight RJ-45 connectors
    - Control up to 12 inputs, 8 outputs

- **VCA Fader Unit**
  - **D-911**
    - VCA Fader Unit for controlling 12 inputs/8 outputs, channel gains and 8 contact controls when used with the D-984VC.
Municipal Hall Application

- Decentralized installation of D-2000 Series units via LAN is possible.
- When using the maximum number of inputs and outputs by dedicating one D-2008SP unit to input and another to output, a 32-bus matrix system can be constructed by adding a third unit of the D-2008SP.
- This application uses the third D-2008SP unit installed in the audio mixing room to monitor audio input.

Fitness Club Application

- Users can designate separate zones for broadcast of different audio sources to meet their needs.
- A chime signal can be broadcast in accordance with the schedule of each area.
Specifications

D-2008SP Digital Mixing Processor Unit

Power Source
AC mains, 50/60Hz

Power Consumption
76W

Frequency Response
20Hz – 20kHz, ±1dB (+4dB*1 Input)

Sampling Frequency
48kHz

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
Headphone: 1 stereo

Signal Processing
Feedback Suppression Function, Auto Mixing Function, Auto Mixing Group, Parametric equalizer
High-pass filter, Low-pass filter, Notch filter, All-pass filter, High shelving filter, Low shelving filter, Horn equalizer, Crossover filter, Compressor/Auto-Leveler, Output Delay, BUS Delay, Matrix, CobraNet Matrix, Crosspoint Gain

Preset memory
32

Auxiliary Function
Key Locking function

LAN
Network IF: 10BASE-T/100BASE-TX (Automatic-Negotiation) connected via a switching hub
Network protocol: TCP/IP
Connection cable: Shielded twisted pair (STP) Cat 5 or higher LAN cable
Maximum cable distance: 100m (109.36 yd) (between D-2008SP and switching sub)

Control
RS-232C, D-sub connector (9 pins) Used for external control
Module: Remote control module slot: 2

Operating Temperature
+5°C to +40°C (41°F to 104°F)

Dimensions
482 (W) × 132.6 (H) × 343.4 (D) mm (18.98" × 5.22" × 13.52")

Weight
6.3kg (13.89 lb)

Accessory
Power cord (2m (6.5 ft)) × 1, Rack mounting screw × 4, Module mounting screw (spare) × 4, Blank panel (preinstalled on the module slot) × 8, CD (Set-up software) × 1

Personal Computer Requirements

Personal computer
PC/AT compatible

Personal computer requirement
CPU: Pentium4 2GHz or more
Memory: 1.5GB or more (2GB or more recommended)
Display adapter: XGA (1024 x 768) or more
Network adapter: 10BASE-T or more

OS
Windows XP (SP2) or later

Other
NET Framework 3.5 SP1 (included in the supplied CD) installation required

*Pentium is a registered trademark of Intel Corporation.
*Windows, Windows Vista is a registered trademark of Microsoft Corporation.

D-2012C Remote Console Unit

Power Source
AC mains: 50/60Hz

Power Consumption
18W

Volume Adjustment
100 mm motorized fader × 12, Rotary encoder x 8

Line Input
1 channel (stereo), +10 to -20dB*1, 10kΩ, unbalanced, RCA Pin-jack

Headphone Output
Stereo 100mW + 100mW (32Ω load), standard stereo phone-jack

Monitor Bus
1 stereo input, 1 stereo output

LAN
Network IF: 10BASE-T/100BASE-TX (Automatic-Negotiation) RJ45 connector, Connected via a switching hub
Network protocol: TCP/IP
Connection cable: Shielded twisted pair (STP) Category 5 or higher LAN cable
Maximum cable distance: 100m (109.36 yd) (between D-2008SP and switching sub)

Control
RS-232C, D-sub connector (9 pins) Used for maintenance use

Dimensions
482 (W) × 266 (H) × 138 (D) mm (18.98" × 10.47" × 5.43")

Weight
6.6kg (14.55 lb)

Accessory
Power cord (2m (6.5 ft)) × 1, Rack mounting screw × 4, Fader knob (yellow) × 3, Fader knob (red) × 3, Cord clamp (fitting screw) × 1

D-2000AD1 Mic/Line Input Module

Input
4 channels, Mic/line selectable
Mics: 50-36dB**, 2.6kΩ, electronically-balanced
Line: -10dB*, 2.6kΩ/-4dB*, 7kΩ, electronically-balanced
Connector: XLR-3-31 equivalent
Phantom power supply (48V DC, can be used when set for the Mic) Gound lift switch

A/D Converter
24 bit

THD
0.008% or less (+4dB** input)

D-2000DA1 Line Output Module

Output
4 channels, +4dB**, /-10dB**
Changeable, adaptable load of 600Ω or more, balanced (electronically-balanced)/unbalanced (changeable), XLR-3-32 equivalent

D/A Converter
24 bit

THD
0.008% or less

D-2012AS Console Case (for desk-top use)

Finish
Side Panel: MDF, black, black, mat
Armrest: MDF, leather, black, mat
Decorative panel: Stainless steel, silver

Dimensions
505 (W) × 127.5 (H) × 333.4 (D) mm (19.88" × 5.02" × 13.13") (assembled)

D-2000CB CobraNet Interface Module

Network IF
CobraNet: 10BASE-TX, PRIMARY/SECONDARY 2 system, RJ45 connector, Enables decentralized installation, Audio transmission only
Connection cable: Shielded twisted pair (STP) Cat 5 or higher LAN cable (note: This network should be completely independent of other LAN.)
Number of D-2008SP connection: Max. 4
Switching sub stage: Max. 7
Max extend distance: 100m (328.1 ft) (connected via a switching hub)

Input
16 channels, 20/24 bit

Output
16 channels, 20/24 bit

*CobraNet is a registered trademark of Citrus Logic Corporation.

Specifications are subject to change without notice.
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Human Society with Sound & Communication

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