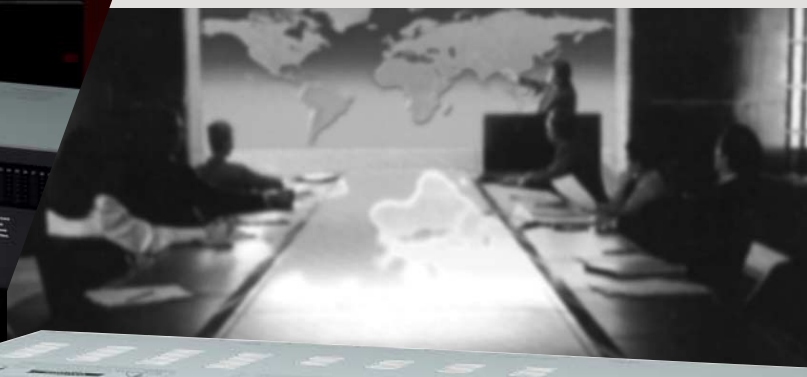
TOA

D-2000 SERIES
DIGITAL MIXING SYSTEM

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

Expandable a operation, a system contr



D-2008SP

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.

D-2012C

Creating the ideal sound environment

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 dvanced functions and rol capabilities

User-friendly design facilitates operation by any user

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.

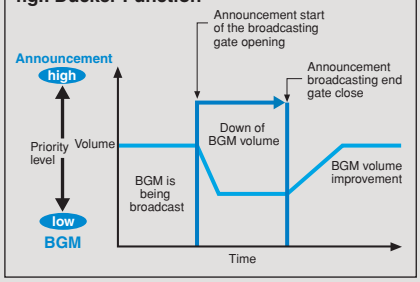
24-bus matrix

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.

fig.: Ducker Function



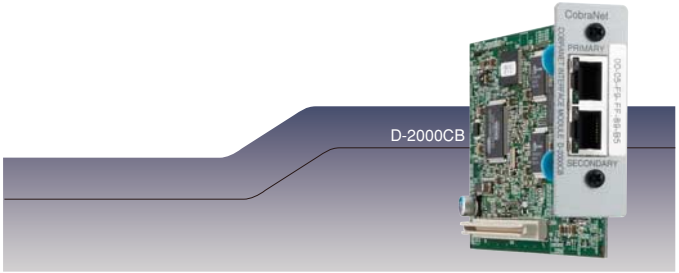
Display of signal flow

Operation screen of software

Matrix setting screen

D-911

*1 AMX is a registered trademark of AMX Corporation.
*2 Crestron is a registered trademark of Crestron Electronics, Inc.
*3 CobraNet is a registered tradmark of Cirrus Logic Corporation.



ll-in-one designs ideal offering easy dvanced functions and ol capabilities

Input Modules

Mic/Line Input Modules (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

Digital Input Modules

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 : 0.008% 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
- 2-channel stereo line output
- Coaxial RCA jack
- Applicable Format: S/PDIF

D-972AE
- 4-channel line output
- XLR connectors
- Applicable Format: AES/EBU

Remote Control Modules

Remote Control Modules

D-981
- 8 inputs/8 outputs
- Removable terminal block connectors

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

CobraNet Interface Module

*CobraNet was developed by Cirrus Logic, a US company and is a network protocol utilizing Ethernet networks to perform high-quality multi-channel digital transmission. It allows using existing Ethernet equipment such as CAT-5 switching hubs.

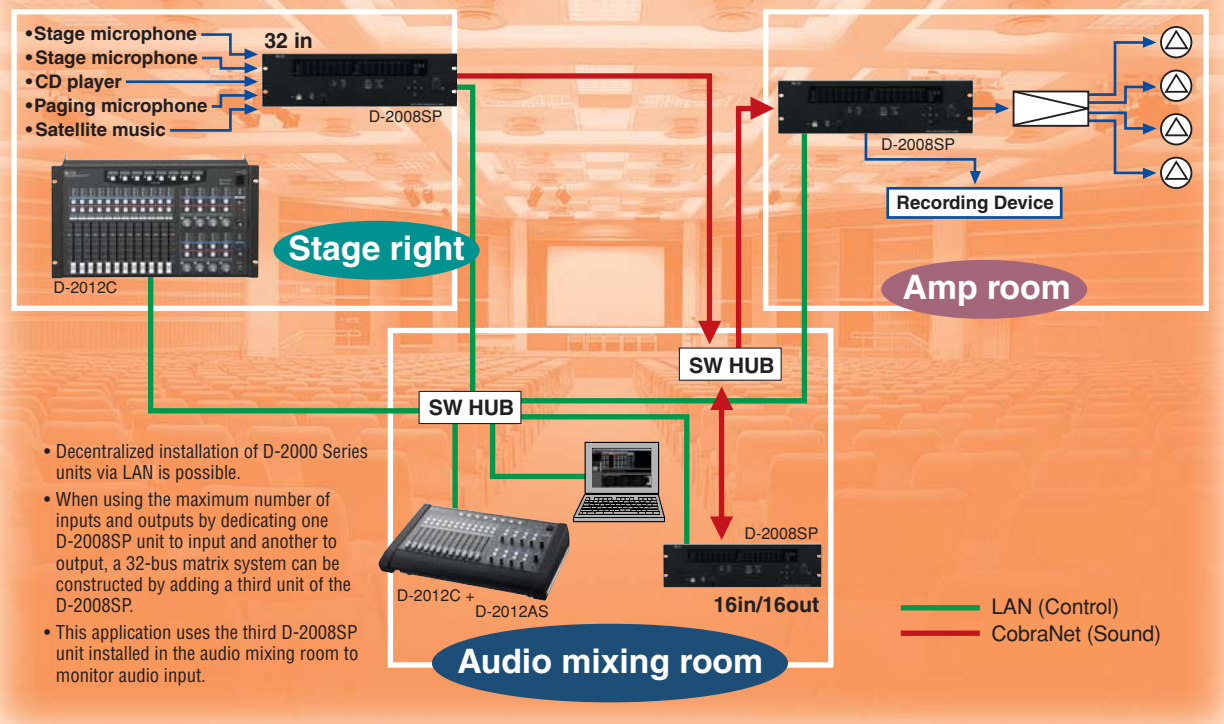
D-2000CB
- Allows audio transmission among D-2008SPs.

VCA Fader Unit

D-911

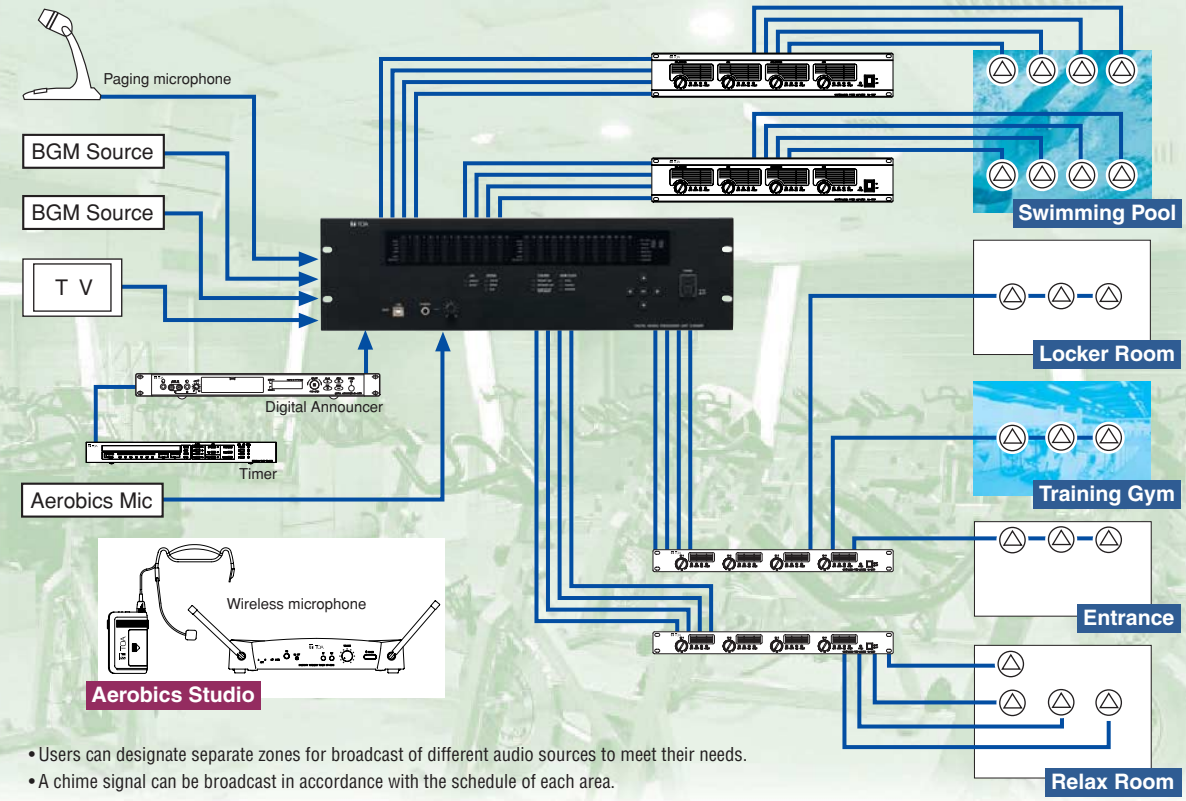
VCA Fader Unit for controlling 12 inputs/ 8 outputs, channel gains and 8 contact controls when used with the D-984VC.

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

*1 0dB = 0.775V

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 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: 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 Vista, 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 I/F: 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 Mic: -50/-36dB*1, 2.6kΩ, electronically-balanced Line: -10dB*1, 2.6kΩ/+4dB*1, 7kΩ, electronically-balanaced Connector: XLR-3-31 equivalent Phantom power supply (48V DC, can be used when set for the Mic) Ground lift switch
A/D Converter	24 bit
THD	0.008% or less (+4dB*1 input)

■D-2000DA1 Line Output Module

Output	4 channels, +4dB*1/-10dB*1 (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, paint, 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 I/F	CobraNet: 100BASE-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 Cirrus Logic Corporation.

Human Society with Sound & Communication

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Specifications are subject to change without notice.
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