## Professional Sound




## Speakers

Line Array / Modular Type / Type A \& Type C

Powerful 2-way modular speaker offers multiple configuration and installation options.

## SYNE-Drivern

Line Array Type A and Type C feature TOA proprietary "Sync-Drive" wave guide technology, to provide a uniform, high frequency sound field offering excellent sound clarity and minimal interference.

|| Sound coverage options
$\qquad$ contiguration with a 5 -degree taper specifically designed to transmit sound over distance as well as a 15-degree taper contiguration which provides greater short range coverage. Both contigurations nay be combined as required to achieve uniform
sound coverage in various environments.


Common Features
Powerful 1 -way modular speaker units
Phase wave front control technology for high-frequency sound range that is attenuation-free and high fidelity Adjustable sound coverage by connecting a number of speakers and combining speakers with different dispersion angle Simple maintenance - complete driver replacement is possible from the speaker's rear
Splash-proof version (IPX4) available

Type A Features
High power handling - High: 450W, Low: 180W
Subwoofer with 40 cm ( $18^{\prime \prime}$ ) cone speaker


Type C Features

- Single or bi-amp mode

Compact and high power handling - 360 w (sinveramp model) High: 360W, Low: 180W (bi-amp mode) Subwoofer with 38 cm (15"- conp code



## Speakers



## Line Array / Modular Type / Type C



Accessories


## Speakers

Line Array / Variable Dispersion Array Speaker / HX-7 \& HX-5

Powerful \& Compact variable dispersion
line array with flexible installation options
Thanks to its award-winning enclosure design, employing four modules per unit, the HX Series allows precise adjustment of sound dispersion angles.
The series offers pristine clarity in a wide range of applications from sports venues, auditoriums, concert halls and challenging houses of worship. With the HX Series you're getting affordable quality and stellar performance
HX Series configuration allows the variable directivity control and
ow-frequency dispersion control comparable to using a larg
constant-driectivity horn speal


## Adjustable Dispersion



|| Advantage of multi-unit configuration


HX-7 Features
Variable dispersion line array with SYNC-Drive wave guide technology
Power handling: 750W Continuous Program@ 8 ohm
One module is composed of $2 \times 5.5^{\prime \prime}$ LF speakers and waveguid
loaded 1 " $H F$ compression driver
Built-in isophasic wave-front control horn ensures precise HF control and superior reproduction of HF sounds
Adjustable dispersion angle $0,15,30,45$ and $60^{\circ}\left(60^{\circ}\right.$ requires optional HY -60D)
$0^{\circ}$ mode facilitates the most effective line array set-up.
Easily adjustable vertical dispersion angle
Maximum four speaker units can be stacked
Splash-proof version (IPX4) available


HX-5 Features
More compact and affordable choice
Power handling: 600W Continuous Program@8 ohms
One module is composed of $1 \times 4.72^{\prime \prime}$ cone-type LF driver and $3 \times 1^{\prime \prime}$ balanced dome tweeters
Adjustable dispersion angle $15,30,45$ and $60^{\circ}$
Maximum four speaker units can be stad
Splash-proof version (IPX4) available


## Speakers

Line Array / Variable Dispersion Array Speaker / HX-7


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## Speakers

Line Array / Variable Dispersion Array Speaker / HX-7


Line Array / Variable Dispersion Array Speaker / HX-5


## Speakers

Line Array / Active Line Array / SR-D8

## DSP beam steering with instant simulation

 and high speed communicationAs well as processing both analog and digital audio input, this innovative speaker harnesses 8 built-in digital amplifiers to project sound waves to targeted areas with greater precision than is possible with conventional speakers. By digitally shaping the width and angle of acoustic beams, it can steer sound precisely to desired areas without requiring a change of installation location

Features

- A tota of 16 speakers (in up to 4 stacks) can be controlled as a single unit via GUl-operated software A wealth of DSP functions, including gain, mute, compression, delay, auto-mixing, high/low pass filters, high/low shelving filters and a notch filter
Equipped with two analog audio input terminals and four digital audio input terminals fo
CobraNet connection, the speaker supports $6 \times 2$ matrix mixing.
Coverace: Horizon- $90^{\circ}$, Vertical Beam Width - $45^{\circ}$. Vertical Beam Angle - $\pm 45^{\circ}$ (Adjustable via
dedicated GUI software)


Beam width: $30^{\circ} /$ Beam angle: $-20^{\circ}$

|| Beam split in two directions


Unique GUI software for designing a perfect matching acoustic field
Adjusting mixing and DSP parameter settings, running simulations, and communicating-all can be done through the same GUI interface. The highly intuitive GUI enables quick and easy adjustment of settings, with a simulated graph of the sound pressure distribution providing a visual check of coverage areas according to the settings.The simulation function-along with the exceptionally high communication speeds-allows users to immediately see and hear the results of changing the parameter settings.


Preset View
sers can display presets of settings by their allocated number or ame; load presets onto speakers; or store settings on speakers using heir preset numbers.

Contents View -
Through this window, users can precisely adjust settings for each func tion selected in the Operation window.



DSP View
Users can adjust a number of signal processing functions independently for eac
speaker, including settings for speaker, including settings for muting, gain
adjustment, high- and low-pass filters, and compressors.


Beam Steering View By setting parameters such as speaker
location, audience position, and beam angle location, audience position, and beam angle
and width, users can control the vertical and widrh, users can control the vertica from a speaker. Users can also see a from a speaker. Users can also see an
instant visual simulation of how changes to the settings affect the steering of the beams.

# Speakers 

Line Array / Active Line Array / SR-D8


Sturdy impact-resistant construction ideal for the installation in small- or medium-scale indoor sports facilities.

## Features

|l Coverage Area Example
2 -way Line Array speaker in which woofers and tweeters are arranged vertically in close proximity to each another Excellent speech clarity
Internal two-way passive crossover network circuitry for single-amplifier operation Speaker's downward angle adjustable with accessory mounting bracket. Ootional MT-So601 Matching Transtormer tor upe in hioh-impedance applications. Safety wire supplied to prevent the speaker from falling during

## installation work and after installation.



## Speakers

Slim Line Arrays / Type S

## Slim Line Arrays / Type S

Versatile operation and installation
features enhance sound
reinforcement applications
Features
Sync-Drive technology creates ideal linear sound source
2-way slim line array for permanent installation
Single or bi-amp mode

- Power handling - 600 W (single amp mode) / High:240W, Low: 240 W (bi-amp mode)
- Composed of $8 \times 10 \mathrm{~cm}\left(4^{4}\right)$ LF drivers and $24 \times \mathrm{HF}$ drivers

Up to 2 speakers can be stacked
-Splash-proof version(IPX4) available
High impedance - compatible by using the optional MT-S060

Mounting Options
$\underset{\substack{\text { Two speakers connected } \\ \text { SR-EPL/EFAWP }}}{\substack{\text { Then }}}$

$\underset{\substack{\text { Hanging } \\ \text { SR-SA4 }}}{\substack{\text { For rotection } \\ \text { SR-PPP4 }}}$


|  |  | Aricle number |
| :---: | :---: | :---: |
|  | Flying Bracket | SR-FB4* |
|  | Extension Plate | SR-EP4* |
| $8$ | Extension Plate, outdoor use | SR-EP4WP |
|  | Wall Mounting Bracket | SR-WB4* |
|  | Wall Mounting Bracket, outdoor use | SR-WB4WP |

On the wall
SR-WB4WBAWP
Horizontally adiustable to max. $30^{\circ}$


On the stand
SR-FS4


## Speakers

Slim Line Arrays / Type H
Ultra slim enclosure for clearly intelligible speech

Features
-Syno-Drive technology creates ideal linear sound source

- Full-range ultra slim line array speaker for permanent installation

Type H consists of 4 models : short model (SR-H2S/H2L) and long version (SR-H3LH3S)

- Power handling - 180W (SR-H2L/H2S) /360W (SR-H3LH3S)

Short length models contain $9 \times 7 \mathrm{~cm}\left(2.8^{\prime \prime}\right)$ ful-range speakers, while the taller long models come with 16 speakers
Atractive and narrow 84 mm design allows speakers to fit in well with the interior décor

- Up to 2 speakers can be stacked (SR-H3L + SR-H2L or SR-H3L + SR-H3L
- High impedance - compatible by using the optional MT-SO601







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## Speakers

Coaxial Arrays / HS Series

Affordable coaxial array speaker for both permanent installation and portable application


Mounting Options


## Speakers

Wide Dispersion Speaker / F Series Ceiling Type

Expanded listening coverage area through extra-wide dispersion characteristics

Most noticeable has always been the high-frequency roll-off that resulted from limited speaker dispersion characteristics. The F-Series provides well-balanced audio reproduction without treble attenuation over an expanded listening area thanks to the extra-wide dispersion characteristics that are part of the overall speaker design. Perceived speaker directionality and beaming tendencies are minimized, resulting in a natural, well-balanced sound over a wide area at all levels. Conventiona speakers exhibit high frequency roll-off characteristics as the distance between speaker and listener increases. An idea ceiling mounted speaker's response characteristics should include wide dispersion and non-frequency dependen directionality and this ceiling speaker series proves that

\section*{| 6.5" coaxial 60 m |
| :--- |
| -2852 C |}



$\underset{\text { F-2352C }}{\substack{\text { 5" coaxial } \\ \text { Bow }}}$






5" full-range 30 w


| 4" full-range |
| :--- |
| - 6 w |



Speakers
Wide Dispersion Speaker / F Series Ceiling Type

| Co-axial type <br> EASE |  |  | $\rightarrow$ |
| :---: | :---: | :---: | :---: |
| Specifications | F-2852C | F-2352C | F-2352SC |
| Rated Input | 60w | 30W | 6 W |
| Tap Settings | $100 \mathrm{~V}: 60 \mathrm{~W}, 30 \mathrm{~W}, 15 \mathrm{~W}, 3 \mathrm{~W}$ 70V: 60W, 30W, 15W, 7.5W, 1.5W $25 \mathrm{~V}: 7.5 \mathrm{~W}, 3.7 \mathrm{~W}, 1.9 \mathrm{~W}, 0.9 \mathrm{~W}, 0.2 \mathrm{~W}$ $8 \Omega$ | 100V: 30 W, 10W, 3W, 1W <br> 70V: $30 \mathrm{~W}, 15 \mathrm{~W}, 5 \mathrm{~W}, 1.5 \mathrm{~W}, 0.5 \mathrm{~W}$ $25 \mathrm{~V}: 3.7 \mathrm{~W}, 1.9 \mathrm{~W}, 0.6 \mathrm{~W}, 0.2 \mathrm{~W}, 0.06 \mathrm{~W}$ $8 \Omega$ | $100 \mathrm{~V}: 6 \mathrm{~W}, 3 \mathrm{~W}, 1 \mathrm{~W}, 0.5 \mathrm{~W}$ $70 \mathrm{~V}: 6 \mathrm{~W}, 3 \mathrm{~W}, 1.5 \mathrm{~W}, 0.5 \mathrm{~W}, 0.25 \mathrm{~W}$ 25V: $0.75 \mathrm{~W}, 0.4 \mathrm{~W}, 0.2 \mathrm{~W}, 0.06 \mathrm{~W}, 0.03 \mathrm{~W}$ $8 \Omega$ |
| Sensitivity (1W, 1m) | 91 dB | 90dB | 89dB |
| Max SPL (Rated input, 1m) | 109dB | 105dB | 97dB |
| Frequency Response | $60 \mathrm{~Hz}-20 \mathrm{kHz}$ | 70Hz-20kHz | $80 \mathrm{~Hz}-20 \mathrm{kHz}$ |
| Mounting Hole Diameter | 8250 mm | ه200mm | ه200mm |
| Speaker Component | Low: 6" cone-type, High: Dome-type | Low: 5" cone-type, <br> High: Balanced dome-type | Low: 5" cone-type <br> High: Balanced dome-type |
| Color | Bafli: black/Rim: whit/Punched net: white |  | Baffle: black/Rim: white/Punched net: white/Dust proof bag: black |
| Dimensions | ¢280 $\times 227$ (D) mm | ¢230 $\times 229$ (D) mm | ¢230 $\times 154$ (D) mm |
| Full-range type EASE |  |  |  |
| Specifications | F-2322C | F-122C | F-1522sc |
| Rated Input | 30w | 30w | 6 W |
| Tap Settings | 100V: $30 \mathrm{~W}, 10 \mathrm{~W}, 3 \mathrm{~W}, 1 \mathrm{~W}$ 70V: $30 \mathrm{~W}, 15 \mathrm{~W}, 5 \mathrm{~W}, 1.5 \mathrm{~W}, 0.5 \mathrm{~W}$ $25 \mathrm{~V}: 3.7 \mathrm{~W}, 1.9 \mathrm{~W}, 0.6 \mathrm{~W}, 0.2 \mathrm{~W}, 0.06 \mathrm{~W}$ $8 \Omega$ | 100V: 30 W, 10W, 3W, 1W 70V: 30 W, 15 W, 5 W, 1.5W, 0.5W 25V: 3.7W, $1.9 \mathrm{~W}, 0.6 \mathrm{~W}, 0.2 \mathrm{~W}, 0.06 \mathrm{~W}$ 8 | $\begin{aligned} & 100 \mathrm{~V}: 6 \mathrm{~W}, 3 \mathrm{~W} \\ & 70 \mathrm{WW}, 3 \mathrm{~W}, 1.5 \mathrm{~W} \\ & 25 \mathrm{~V}: 0.75 \mathrm{~W}, 0.4 \mathrm{~W}, 0.2 \mathrm{~W} \\ & 8 \Omega \end{aligned}$ |
| Sensitivity (1W, 1m) | 90dB | 90dB | 88dB |
| Max SPL (Rated input, 1m) | 105dB | 105dB | 96dB |
| Frequency Response | $70 \mathrm{~Hz}-20 \mathrm{kHz}$ | $70 \mathrm{~Hz}-20 \mathrm{kHz}$ | $65 \mathrm{~Hz}-18 \mathrm{kHz}$ |
| Mounting Hole Diameter | 8200mm | 8200mm | ه135mm |
| Speaker Component | $5^{\text {c }}$ cone-type | 5" cone-type | 4" cone-type |
| Color | Baffle: black/Rim: whit/Punched net: white |  | Baffle: black/Rim: white/Punched net: white/Dust proof bag: black |
| Dimensions | $8230 \times 200$ (D) mm | ¢230 $\times 229$ (D) mm | ه155 $\times 117$ (D) mm |

Accessories


## Speakers

Wide Dispersion Speaker / F Series Box

Compact two-way speaker designed for high efficiency, wide range and high power input handling capacity.


Speakers
Wide Dispersion Speaker / F Series Box


Mounting Options



## Speakers

Design Speaker / H Series

Easy to install. Easy to aim.
And easy on the eyes.


The building's design calls for speakers that can be aimed, but the building's architect is balking at ugly boxes and brackets. TOA has a solution. With H Series, we've taken a whole new approach to mounting speakers-we eliminated the brackets. Our $\mathrm{H}-1$ and $\mathrm{H}-2$ are designed to be mounted into the wall or ceiling, then aimed to deliver quality sound exactly where you need it. And our HB-1 subwoofer hides neatly between standard 16 -inch-on-center wall studs. All H Series grilles are attractive, simple, and uncluttered, and can be painted to match-and disappear into-any architecture. The H-3 Wide Dispersion Model offers $140^{\circ}$ of horizontal coverage and mounts with a standard two-gang electrical box. Offices restaurants, stores, atriums, foyers, hallways, pew backs: H Series speakers are ideal for any environment where both sound quality and appearance are critical.


Install Plate


Attach Speaker Assembly


Aim Speaker and lock


Snap on cover

Common features :
Sleek and atractive, no brackets required Paintable grilles ble
into architecture

## H-1 Features

-Flush-mount speaker

- Wall or ceiling mount
- Rotate within housings for flexible aiming
$1^{\prime \prime}$ balanced dome tweeter and $3^{\prime \prime} \times 2^{\prime \prime}$ cone woofer
Either low impedance (4 $4 / 16 \Omega$ ) or high impedance ( $70 \mathrm{~V} / 100 \mathrm{~V}$ ) operation


Up to $90^{\circ}$ locking driver positioning adjustment.


## H-2/H-2WP Features

- Surface-mount speaker on the wall or ceiling

Rotate within housings for flexible aiming
Weather-proof version available ( $\mathrm{H}-2 \mathrm{WP}$ )

- 1 " balanced dome tweeter and 4 " cone woofer

Either low impedance (48/16К) or high impedance (70V/100V) operation


H-3/H-3WP Features
Surface-mount speaker on the wall
Weather-proof version available ( $\mathrm{H}-3 \mathrm{WW}$ )

- 1 " soft dome tweeter with neodymium magnet and $2 \times 4^{\prime \prime}$ cone woofers - Either low impedance $(8 \Omega / 16 \Omega)$ or high impedance $(70 \mathrm{~V} / 100 \mathrm{~V})$ operation



## Speakers

Design Speakers

## PE, PJ Series


for a perfect harmony with
architecture and decor.

The PE and PJ Series are bass-reflex HIPS resin enclosure 5 " ( 12 cm ) cone-type speakers. The PE-304 and PJ-304 also includes a balanced dome tweeter. They have an outstandingly stylish design that is inspired by the finest lighting fixtures allowing them to be harmoniously installed with lighting equipment.


Ready-to-install BGM Speakers featuring compact cubic design with versatile sound.

Features
Consists of a set of 4 satellite speakers and a subwoofer, which are individually fitted with its own mounting brackets.
Available in two colors (black or white), which can be selected to suit the room interior Con ana ngly encern periomance.
The mounting brackets stred onto the sateelite speakers can be for 1 speaker or 2 speakers installation.
Horizontal and vertical angles can be easily adiusted during installations onto ceilings or walls.

Subwoofer Satellite Speaker


Rear View


Mounting Options


## Power Amplifiers

Digital Amplifier / DA Series

The power supply unit is the heart of the amplifier. To ensure consistently high performance and reliable operation, TOA engineers have given the DA Series a system that provides power independently to each of the four channels.

This testifies to TOA's attitude to product development, which is always totally motivated by the desire to provide highquality products that offer worry-free use.

Never compromise ? that's the TOA philosophy

4-Channel Power Amplifier DA-550F (CE301/CU version) DA-500F-HL (CU version)
DA-500FH ICE301 version


Matching Transformer
мт-251н


Lher 250 us

## Features

- High reliability
The DA amplifier has a compreenensive protection circuitry for protection against
excessive current tlow due to overload short circuit, unusual $D C$ voltage output. and power amplifier heat sink temperature rise ( over $100^{\circ} \mathrm{C}$ ), temperature rise inside the unit (over $80^{\circ} \mathrm{C}$ ).
- Amplifier with lightweight design installation has become much easier thanks to the lightweight design.

Extremelic high amplification efficiency of $80-90 \%$, resulting in reduction in power Extremely yigh amplificitation efficiency of $80-900 \%$ resulting in reduc
consumption by more than $60 \%$ compared with Class-AB amplifiers.

Stands up to extended hours of operation. The DA amplifier has undergone a large anumber of rigorous tests to prove its durability. In addition,TOA has been conducting a "non-stop driving test" of the DA Series

- Compact design

The DA-250 Series is 1 -unit size, and they can be efficiently mounted on a rack, so
hey require only a small installation space. Because the amplifiers do no They requiru only a small installation space. Because the
generate much heat, units can be stacked together in a rack.

Each of the chanenels has. its own power supply. If the power supply of Channel
should fail, this wort' aftect the operation of Channel 2 . It is also possible to use the either channel as a spare amplifier.
Dual-Channel Power Amplifier

DA-250F (CE301/CU version)
DA-250FH (CEE301/CU version)

## 1) <br> 12F:

(1) 20 21) -正

Mixer Power Amplifiers
Mixer Amplifier / A-5000

Stylish, reliable with unmatched performance The TOA A-5000 series offers the ability to control your music just the way you want it with built-in digital signal processors (DSP) that boast high efficiency and durability.

A-5006 60 w


Features
U-half size compact and simple hardware for easy setting -Hi-Low-Z speaker connection
60 W and 120 W models
$-2 \times$ mic/line inputs with mute
Intuitive GUI software for sound optimization
High pass filter and 4 -point Parametric Equalizer for each inpu - Feedback Supressor for input 1 and 2

Compressor for each input 1 and 2
Manual and Auto Mute
0-point filer for each output (High-pass/Low-pass/PEQ)
5 -point speaker Parametric Equalizer with built-in preset EQ


## Mixer Amplifier / MX-6224D

Mosque sound made simple - pray with faith.


Features


Mixers / DSP
TOA's Mixers and Digital Signal Processors at a glance


II TOA's proprietary digital technology - Automatic Resonance Control (ARC)

An advanced measurement and processing algorithm
that improves speech intelligibility and sound quality in facilities with challenging acoustic environments.

Automatically identifies room mode frequencies and applies an inverse response curve to compensate for the measured room response


With the touch of a button Auto suppression of resonance

PC or any special microphone is unneecessary for measurement and setting. It can be easily done with existing sound equipment and microphone.

Melts with ARC. DP-K1, M-864D and M-633D

## Digital Mixer / D-901



Fully modular, cost-effective digital mixer incorporating matrix capability and speaker filter function as well as mixing function.


12-input, 8 -bus, 8 -output channel configuration ( $12 \times 8$ matrix) with easy operatio Can be expanded as application requires
Convenient front panel controls and display make it easy to perform all functions and conf parameter settings without requiring a $P C$
narameter setting configurations in memory for instant recall when required



VCA fader unit for controlling 12 inputs/8 outputs, channe gains and 8 contact controls when used with the D984VC

| Specifications | D-901 |
| :---: | :---: |
| Power Source | (US/314L) $100-120 \mathrm{~V}$ AC, 50/60Hz, (CE/315H)230V AC, 50/60Hz, (CE-GB)220-230V AC, 50/60Hz, (KR)220V, 60Hz |
| Power Consumption | (US/314L)40W, (CE/315H/CE-GB)27W, (KR)26.94W |
| Frequency Response | $20 \mathrm{~Hz}-20 \mathrm{kHz}, \pm 1 \mathrm{~dB}$ ( $\pm 4 \mathrm{dBu} 1 \mathrm{lmput})$ |
| Input | Max. 12 channels, modular construction (modules optional) |
| Output | Max. 8 channels, modular construction (modules optional) |
| Signal Processing | Feedback suppression function, audo mixing function(ducker, NOM attenuation), parametric equalizer, high-pass filter, lowpass filter, notch filter, all-pass filter, high shelving filter, low shelving filter, horn equalizer, crossover filter, compressor/auto-le veler, delay, matrix ( $12 \times 8$ ), Crosspoint gain |
| Preset Memory | 16 |
| Auxiliary Function | Protect function |
| Control | RS-232C, D-sub connector (9 pins), remote control module (option) |
| Front Panel Section | Preset memory recall key: 8, LCD screen, screen shift key (up/down/left/right), setting knob, Input level indicator: dual colour LED, output level indicator: dual colour LED, channel selector key: 12 (input channel selection), 8 (output channel selection), Channel volume control: 1 (input channel selection), 1 (output channel selection) |
| Rear Panel | Input module slot: 6 (input/output module slot: 2), Output modul e slot: 2 , Remote control module slot: 1 |
| Finish | Panel: aluminum, hair-line finish, black / Others: pre-coated steel plate, black, $30 \%$ gloss |
| Dimensions ( $\mathrm{W} \times \mathrm{H} \times \mathrm{D}$ ) | $482.6 \times 132.6 \times 320 \mathrm{~mm}$ (excluding projection), 3 units |
| Weight | 6.9 kg |

## Mixers / DSP

Digital Mixing System / D-2000 Series


Expandable all-in-one designs offering easy operation, advanced functions and system control capabilities

Expandable to a massive 128 input/output configuration, the D-2000 Series includes various modules and peripherals tha 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


## Features

- 32 preset memories for user convenience

Up to 32 different routing and parameter configurations can be stored for frequent changes in staging, seating and speaker arrangements
Inturive GUI
Mixing console offers easy user operation
See page 41 for applicable
See page 41 for applicable modules.



## Mixers / DSP

Digital Mixer / Modules for D-2000, D-901 and DP-K1

Mic/Line Input Modules (Monaural)


Mic/Line Input Modules (Stereo)


Line Output Modules


Remote Control Modules


Digital Input Module


CobraNet Interface Module



## Digital Matrix Mixer / M-9000M2



Unparalleled DSP mixer ideal for multi-zone paging, music distribution and room-combining applications.


## Features

Easily configured custom systems with up to 8 mic/line inputs and 8 outputs. Dual Channel Digital Signal Processor (DSP) on Input \& Output channels Enhanced GUI programming interface for PC configuration and uploading/ downloading of settings using RS-232 connection.
$32 \times$ onemer
$32 \times$ Paging memories
Four control inputs/Four control outputs
Up to 16 remote controllers can be connected


Mixers / DSP
Digital Matrix Mixer / Modules for M-9000M2

Dual Mic/Line Input Module with DSP

Ambient Noise Controller Module


AN-001T
Automatically adiusts output gain to compensate for
changes in ambient noise level - Each input canben eassisigneded to control a specific output - Each input can be assigned to control a specific out
TWw inputs with
2 24VIC phantom power for condenser mics
14 preset gain ratios
Accessory sensing mic
-Acaessory sensing microop

Dual Line Output Expansion odule with DSP

|  | Two Balanced Line Outputs - Digital Signal Processing Bass / Treble • Loudness High and Low Pass Filters Compressor <br> TOA speaker EQ presets Removable Terminal Block - Maximum three per chassis |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

RS-485 Control Modules


Allows use of up to 16 BS -485 remole control panels Bididiectional $\mathrm{RS-465}$ communication provides contion
and status feedoack display for each remote tunction and siatus teedaback cisplay yor each hem
Dual ports allows independent home runs
tor Ior up to 8 modulese each
$24 V$ VC power adaper
$24 \mathrm{~V} D \mathrm{power}$ adap
for ach 1 port used
May be used in any oontrol option slot on
Oooom 2 mainfame in addititon to a C-001t when spare slots are available

Line Input Module with DSP
elephone Zone Paging Module
 nput/Output Control Module


Digital Matrix Mixer / M-9000M2

| Specifications | M-9000M2 |
| :--- | :--- |
| (CU) |  |
| Power Source |  |

Optional Accessories



- Muttisegment LED indiíasial
volume evel status

Mixers / DSP
Digital Mixer / M-633D


Acoustic perfection at a touch
With just the touch of a button, the M-633D automatically eliminates unpleasant reverberation and feedback to deliver clear, highly articulate sound. This new-concept digital stereo mixer is next-generation unique.

## 

## Feature

The M-633D features 6 monaural inputs 3 stereo inputs, 2 monaural outputs, 1 stereo output, and 1 stereo recording output Ideal for medium-size places of worship and sports arenas
Provides attomatic audio adiustment with push-button ease. You don't have to be a sound technician to onerate the M-633D and there's no need for complex PC settings.
Features an Automatic Resonance Control function, a Feedback Suppression function, and an Automatic Clipguard function for enhanced sound intelligibility -Packs all the necessary functions in a compact 1 U size.

## Functions Automatic Resonance Control (ARC) An advanced measurement and processing algoritimm improves speech intelligibitity and sondd quality in foilitios with lousticall challenging enviranments. This tunctictiols also automatically identifies room mode trequencies and applies an inverse response curve to compensate for the measured room response.

| ecifications | M-633D |
| :---: | :---: |
| Power S | (CU) 122 V AC, 60Hz, (CE/CE-GB)220-240V AC, 50/60Hz, (KR)220V AC, 60Hza |
| Power Consumption | (CU) $13 W$, (CE/CE-GB/KR) 14 W |
| Frequency Response | $20 \mathrm{~Hz}-20 \mathrm{kHz}$ |
| Input | 6 monaural input channels, selectable independently from 3 types of inputs for each channel: LINE, MIC or PHANTOM, LINE: $-10 \mathrm{dBu}, 2.4 \mathrm{k} \Omega$, MIC: $-46 \mathrm{dBV}, 2.4 \mathrm{k} \Omega$, PHANTOM: $-46 \mathrm{dBV}, 2.4 \mathrm{k} \Omega$, supplies $+24 \mathrm{~V} \mathrm{DC} / 10 \mathrm{~mA}$, electronically balanced, removable terminal block (3 pins), phone jack, 3 stereo inputs (L, R): $-10 \mathrm{dBV} / 10 \mathrm{k} \Omega$, RCA jack, stereo mini jack |
| Output | 2 monaural outputs: 0 dBV , electronically balanced, removable terminal block (3 pins) 1 stereo output (L, R): OdBV, electronically balanced, removable terminal block (3 pins) 1 stereo recording output (L,R): - 10 dBV , RCA jack |
| Bus Line | Monaural channel $\times 2$, stereo channel $\times 1$ |
| Distortion | 0.03\% or less |
| Sampling Frequency | $48 \mathrm{kHz} / 24 \mathrm{~b}$ its |
| Signal Processing | Automatic resonance control (ARC), feedback suppressor (FBS), automatic clipguard (ACG), automatic mute |
| S/N Ratio | 90 dB or more (IHF-A weighted) |
| Finish | Front: Aluminum, black / Case: Precoated steel sheet, black |
| Dimensions ( $\mathrm{W} \times \mathrm{H} \times \mathrm{D}$ ) | $420 \times 44 \times 341.3 \mathrm{~mm}$ |
| Weight | 4 kg |

## Digital Mixer / M-864D



A fader-type Digital Stereo Mixer permitting analog-feel parameter setting as well as PC or LAN operation.


Features
ural and $7 \times$ stereo ) and 5 ouput channels per un
Equipped with digital signal processing functions such as Automatic Resonance Control(ARC), Feedback Suppressor(FBS), Advanced
Furnished with acoustic measuring instrument Can be operated without need for use of a PC , by conalog


Mixers / DSP


Creates richer, more vibrant sound environments by maximizing the performance of each speaker in the system.

## 

## Features

- Digital Speaker Processor for clear, high-quality and realistic sound, with a full sense of presence
- Essential audio processing tools: Compressor, Parametric Equalizer, Output Delay and Mute

10 filters on each input and 12 filters on each output
Any combinations of parametric equalizer and high/ow pass, and high/low shelving filters, as well as all-pass, notch filters and CD horn equalizer are possible - 2 inputs \& 6 outputs, processor can work with a 3 -way multi-amp system

2 -way linkage with $\mathrm{M}-864 \mathrm{D}$ digital mixer's preset switching possible.

| Specifications | DP-SP3 |
| :---: | :---: |
| Power Source | (CU) $100-120 \mathrm{~V}$ AC, 60Hz, (CE/CE-GB)220-240V AC, 50/60Hz |
| Power Consumption | 25w |
| Frequency Response | $20 \mathrm{~Hz}-20 \mathrm{kHz}, \pm 1 \mathrm{~dB}$ |
| Sampling Frequency | $96 \mathrm{kHz/24}$ bits |
| Dynamic Range | Over 110 dB |
| Distortion | $0.03 \%$ or less, $1 \mathrm{kHz},+4 \mathrm{~dB}$ input/output ( $20 \mathrm{~Hz}-20 \mathrm{kHz}$ BPF) |
| Crosstalk | -80 dB or less, 1 kHz |
| Input | 2 channels, +4 dBu (Max. +24 dBu ), 10kR, electronically-balanced, removable terminal block (3P) |
| Output | 6 channels, +4 dBu (Max. +24 dBu ), applicable load $600 \Omega$ or more, electronically-balanced, removable terminal block (3P) |
| Equalizer/Filter | Parametric equalizer: $20 \mathrm{~Hz}-20 \mathrm{kHz}, \pm 15 \mathrm{~dB}, \mathrm{Q}: 0.267-69.249$, Filer: High-pass filer: $20 \mathrm{~Hz}-20 \mathrm{kHz}, 6 \mathrm{~dB} /$ oct. $12 \mathrm{~dB} /$ oct. Low-pass filter: $20 \mathrm{~Hz}-20 \mathrm{kHz}, 6 \mathrm{~dB} /$ oct, $12 \mathrm{~dB} / / 0 \mathrm{ct}$, Notch fileer: $20 \mathrm{~Hz}-20 \mathrm{kHz}$ Q: $\mathrm{Q} 8.651-69.249$, All-pass filer: $20 \mathrm{~Hz}-20 \mathrm{kHz}, \mathrm{Q}: 0.267$ 69.249 , High-shelving filter: $20-20 \mathrm{kHz}, \pm 15 \mathrm{~dB}$, Low-shelving filer: $20-500 \mathrm{~Hz}, \pm 15 \mathrm{~dB}$, Horn equalizer: $20 \mathrm{kHz}, \mathrm{O}-18 \mathrm{~dB}$ in 0.5 dB steps |
| Crossover | 2 ways, 3 ways, 4 ways, Crossover filter: $20 \mathrm{~Hz}-20 \mathrm{kHz}, 6 \mathrm{~dB} /$ oct, $12 \mathrm{~dB} /$ oct, $18 \mathrm{~dB} /$ oct, $24 \mathrm{~dB} /$ oct, -15 to +12 dB , polarity switchable <br> Delay: $0-170,656 \mathrm{~ms}$ in 0.01 ms steps |
| Compressor | Threshold: -20 to +20 dBu 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, $\infty: 1$, Attack time: $0.2 \mathrm{~ms}-5 \mathrm{~s}$, Release time: $10 \mathrm{~ms}-5 \mathrm{~s}$ |
| Delay | Delay time: $0-682.656 \mathrm{~ms} \mathrm{in} 0.01 \mathrm{~ms} \mathrm{steps}$ |
| Matrix | $2 \times 6$ |
| Crosspoint Gain | $-\infty$ to 0 dB in 1 dB steps |
| Function | Input PAD ( -14 dB ) control, analog output attenuator ( $-\infty$ 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 $\times 6$ |
| Contact Inputs | 4 channels, open voltage: 5 V DC, short-circuit current: 5 mA , removable terminal block (5P), control function: preset memory selection, volume control, and mute |
| Network | Network I/F: 1 channel of 10BASE-T/100 BASE-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 (between DP-SP3 and switching hub) |
| Finish | Panel: Aluminium, hairine, black / Case: Surface-treated steel plate |
| Dimensions ( $\mathrm{W} \times \mathrm{H} \times \mathrm{D}$ ) | $482 \times 44 \times 289 \mathrm{~mm}$ |
| Weight | 3.1 kg |



II System Example B


Mixers / DSP
Digital Audio Processor / DP-K1


Advanced Automatic Resonance Control (ARC) for Finer Acoustic Compensations


## Features

One DP-K1 unitit s capable of making acoustic adjustments for up to 8 broadcast areas - Measurements can be made at up to 8 measurement points per area for finer acoustic compensations

- Essential audio processing tools -- compressors, gates, crossovers, multi-band filtering, parametric, high/ow-pass, all-pass and notch filters, horn EQ, Eight busheving and output delay
for zoning or room-col
- PC software for offsite programming and settings


See page 41 for applicable modules.


## Ambient Noise Controller / DP-L2

Automatic and Accurate Input and Output
Sound Level Adjustment
The DP-L2 is a digital audio processor with an ambient noise control (ANC) function that makes automatic changes in its output sound levels depending on the amount of surrounding noise, and an automatic level control (ALC) function tha automatically adjusts the input signal level so it is appropriate at all times.
BGM and announcements remain audible and understandable at all times, with no annoying loudness for customers and employees.

|l Automatic Level Control (ALC)

| Automatic level control function maintains input signal at a constant level by adjusting input signals to appropriate levels when the sound level is too low. Sound volume is controlled without losing nuances of speech or compromising background |
| :---: |
|  |  |
|  |  |
|  |  |
|  |  | sound level is too low. Sound volume is

controlled without losing nuances of speech or compromising background
music sound quality.

Specifications

## Power Source

 Power Consumption Sampling Frequency Dynamic Range DistortionA/D, D/A Converter

| Dimensions (W $\times \mathrm{H} \times \mathrm{D})$ | $482 \times 44 \times 303 \mathrm{~mm}$ |
| :--- | :--- |
| Weight | 37 kg |

Weight

Over 108 dB (IHF-A weighted) | Input | Sensor Input, Inputt $1 \& 2$ (removate terminal hlock) |
| :--- | :--- | :--- | Output Monitor Output, Output $1 \& 2$ (removable terminal block 3 pins)

$\begin{array}{lll}\text { Signal Processing } & \left.\begin{array}{l}\text { Automatic level control, ambient noise control, maximum output signal level control, input level indicator, output level indicator } \\ \text { Phantom power switch (sensor inout). key lock function ground lits switch (INPIT }\end{array} \text {, NPUT }\right)\end{array}$ Other Features Phantom power switch (sensor input), key lock function, ground lift switch (INPUT T, INPUT 2), inputtoutput bypass function | Finish | Pre-coated steel plate, black, $30 \%$ gloss |
| :--- | :--- |
| Dimens |  |

| DP-L2
(CU) $110-120 \mathrm{~V} \mathrm{AC}, 50 / 60 \mathrm{~Hz}$. (CE301/CE-GB/315H) $220-240 \mathrm{~V} \mathrm{AC}, 50 / 60 \mathrm{~Hz}$ ${ }_{2}^{20 \mathrm{~W}}$
48 kHz
$20 \mathrm{~Hz}-20 \mathrm{kHz}, \pm 1 \mathrm{~dB}$
Over 108dB (IHF-A wei

3.7 kg

## Wireless Microphone Systems

Digital Wireless

TA $\begin{aligned} & \text { TOA } 5000 \text { Series is the ultimate choice for the presenter, offering } \\ & \text { increedible intilligibility so your audience won' miss a single word. You } \\ & \text { can be assured that with To As continuous commitiment to research } \\ & \text { and development we will always provide wireless soltions that allow }\end{aligned}$ and development, we will always p

Voice clarity and comfort for any speaking scenario

Features
Up to 32 simultaneous channels *Region dependen
15 compatible channels per $6 \mathrm{MHz}, 20$ compatible channels per 8 MHz TV channel
Approx. 100 m operating range (line of sight)
Signal stability is assured using the digitial diversity method.
Control of perioperals is possible using contact output

D5000 Advantages
DSP for HIGH QUALITY SOUND and RELIABLE operatio


SYSTEM DESIGN capability for SECURE and INTERFERENCE-FREE operation

- CODE setting helps multichannel operation


Antenna reception level check (Walk Test) using Maintenance Software

Encryption setting prevents exposure of confidential info


Visualize the level and frequency of undesired signals using Maintenance Software



## Wireless Microphone Systems

16 Channel Wireless Solution / TOA 5000 Series

The Series lineup consists of microphones operating on a single battery, as well as microphones and a transmitte powered by rechargeable batteries. Battery chargers have also been added, for use with TOA-exclusive batteries. The chargers are available in different capacities, while the transmitter is now a standalone unit, to allow users to select the type of microphone best suited to their needs. The WT-5100 receiver, a new addition to the 5000 Series, expands the range of applications, including museums, conferences and theaters, and enhances the Series' versatility and usability.

| $\begin{aligned} & \text { Receiver } \\ & \text { WT-5800 } \end{aligned}$ | mex |  | $\left.\right\|_{\text {Receiver }} ^{\text {WT-5810 }}$, |
| :---: | :---: | :---: | :---: |
| Features |  | Features | Features |
| - Up to 64 selectable frequencies <br> (Up to 16 Simultaneous channels) <br> - Frequency scan function <br> - Adjustable 7 -step squelch function <br> - Supplied audio mixing input and audio mixing output <br> - Antenna distribution output <br> - Two-line LCD display <br> - Indication of transmitter's battery life <br> - Half-rack size body |  | - Up to 64 selectable frequencies <br> (Up to 16 Simultaneous channels) <br> - Frequency scan function <br> - Adjustable 7 -step squelch function <br> - Supplied audio mixing input and audio mixing output <br> - Two-line LCD display <br> - Indication of transmitter's battery life <br> - Half-rack size body | - Up to 16 selectable frequencies <br> (Up to 16 Simultaneous channels) <br> - Frequency scan function <br> - Adjustable 7 -step squelch function <br> - Supplied audio mixing input and audio mixing output <br> - Indication of transmitter's battery life <br> - Compact portable design |
| Specifications | \| WT-5800 | WT-5805 | WT-5810 |
| Power Source | $A C$ mains (supplied AC-DC adapter must be used) |  |  |
| Channel Selectable | 64 channel capability (Max. 16 Simultaneous channels) |  | Space diversity |
| Diversity System | Space divercity (true diversity) |  |  |
| Mixing Output | MIC: $-600 \mathrm{AB}^{*} 1$, 6000 , balanced, XLR-3-31 type connector <br> LINE: - $20 \mathrm{~dB}{ }^{*+1}, 6002$, unbalanced, phone jack |  |  |
| Mixing Input | $-20 \mathrm{~dB}{ }^{*}$, $10 \mathrm{k} \Omega$, unbalanced, phone jack |  |  |
| Antenna Input | $75 \Omega$, BNC (phantom powering for antenna) 9V DC, 30mA (max.) |  | - |
| Antenna Output | 750, BNC (Gain OdB) |  |  |
| Receiving Sensitivity | 90 dB or more, $\mathrm{S} / \mathrm{N}$ ratio (20dB/VV input, 40kHz deviation) |  |  |
| Squelch Sensitivity | 18-40dBuV variable |  |  |
| Squelch System | Using together of noise SQ, carrier SQ and tone SQ |  |  |
| Indicator | Audio (6 step), RF (6 step), ANT ABB, Audio (peak), battery alarm |  | ANT A/B, Audio (peak), battery alarm |
| S/N Ratio | 110 dB or more (A-weight, unbalanced output) |  | 104 dB or more (A-weight, unbalanced output |
| Harmonic Distortion | 1\% or less (typical) |  |  |
| Frequency Response | $100-15 \mathrm{kHz}, \pm 3 \mathrm{~dB}$ |  |  |
| Dimensions | $210(\mathrm{~W}) \times 44(\mathrm{H}) \times 205.1(\mathrm{D}) \mathrm{mm}$ |  | $206(\mathrm{~W}) \times 40.6(\mathrm{H}) \times 152.7$ (D) mm |
| Weight |  |  | 590 g |

Receiver
WT-4820

16 Channel Wireless Solution / TOA 5000 Series


## Wireless Microphone Systems

Optional Accessories

TOA D5000 Series/5000 Series common options
Lavalier Microphone
YP-M5300

## 24 Channel Wireless Solution / TRANTEC S5.5 Series

CTRANTEEC TRANTEC Wireless Microphone Systems S5 and S4 Series The Trantec $S 5$ and $S 4$ Series is synonymous with quality among vocalists, musicians and theatrical performers. Additionally, presenters and the like also enioy the wide variety of accessories that Trantec has
to offer, allowing them to meet their professional needs.


## Features

Up to 1400 selectable frequencies ( 24 Simultaneous channels)
Interactive USB based computer control and monitoring for all aspects of performance
Integral triple tone grip/noise and signal strength mute circuit for protection against external interference
-Simple programming of transmitter with built-in Infra-red data link
Clear and intuitive LCD display
Audio Low-cut, High-boost and phase reversal
Indication of transmitter's battery life
Professional metal enclosure

| Pecifications | 55.5-RX |
| :---: | :---: |
| Diversity System | Space diversity (true diversity) |
| Audio Output | Line: - $22 \mathrm{~dB}^{*}$ / Mic: $62 \mathrm{~dB}^{*}$ <br> Line/Mic selectable, $600 \Omega$, balanced, XLR-3-32 type connector. Headphone: max. $100 \mathrm{~mW} 16 \Omega$, unbalanced phone jack - $28 \mathrm{~dB}^{*}, 600 \Omega$, unbalanced, phone jack |
| Receiving Sensitivity | 0 dBV or less (12 dB SINAD) |
| Squelch Sensitivity | $6-36 \mathrm{~dB} \mathrm{~V} \mathrm{variable}$ |
| Squelch System | Using together of noise SQ, carrier SQ and tone SQ |
| Indicator | LCD, Power lamp, Mute lamp, ANT ABB lamp |
| S/N Ratio | 110 dB or more (A-weight) |
| Harmonic Distortion | 1\% or less (typical) |
| Frequency Response | $50 \mathrm{~Hz}-20 \mathrm{kHz}, \pm 3 \mathrm{~dB}$ |
| Dimensions | 210 (W) $\times 46$ (H) $\times 210$ (D) mm (excluding antenna) |
| Weight | 1.3kg |



## Wireless Microphone Systems

12 Channel Wireless Solution / TRANTEC S5.3 Series


Wireless Microphone Systems Wireless Starter Pack / TRANTEC S4.04 Series


## Trantec Optional Accessories

TRANTEC Series Optional Microphones

| $\begin{aligned} & \text { Lavalier Microphone } \\ & \text { for S5S Series MIC-X2 } \\ & \text { for S4 Series MIC-LP2 } \end{aligned}$ | $\begin{aligned} & \text { Lavalier Microphone } \\ & \text { for 55 Series MIC-X55 } \\ & \text { for S4 Series MIC-SJ55 } \end{aligned}$ | $\begin{aligned} & \text { Glasses Frame Microphone } \\ & \text { for 55 Series MIC-X690H } \\ & \text { for S4 Series MIC-SJ690H } \end{aligned}$ | $\begin{aligned} & \text { Lavalier Microphone } \\ & \text { for S5 Series MIC-X212-BE (Beige) } \\ & \text { MIC-X212-BK (Black) } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Headworn Microphone <br> for 55 Series MIC-X33 <br> for S 4 Series MIC-SJ33 |  | $\begin{aligned} & \text { Headworn Microphone } \\ & \text { for S5 Series MIC-X22-B-R (Black) } \\ & \text { MIC-X22-P-R (Pink) } \\ & \text { for } 54 \text { Series MIC-SJ22-B-R (Black) } \\ & \text { MIC-SJ22-P-R (Pink) } \end{aligned}$ | $\begin{aligned} & \text { Headworn Microphone } \\ & \text { Her S5 Series MC-XEM77 } \\ & \text { for } 4 \text { Series MIC-SJEM77 } \end{aligned}$ |
|  |  |  |  |

TRANTEC Series Accessories

## Antenna Distributor

 s5-ADU

Whip Antenna
$\int_{\text {ANT-S4 }}^{\text {WTX-D/BTX-G }}$


Antenna Booster
W-7000


Wall Mount Antenna
YW-4500

$\left\lvert\, \begin{aligned} & \text { Helical Antenna } \\ & \text { for S4 Series ANT-S }\end{aligned}\right.$

$\|_{\text {PAN-1U19-TNC }}^{\text {TNC Rack Mount Panel }}$
PAN-1U19-
| Passive Antenna Splitter
ACC-SPLIT-2W
 Receiver Antenna
for S4. 16 Series ANT-S4. 16 RX-D/RX-G


Antenna Extension Cable Antenna Extension Cable
for S5/S4 Series LD-BNC-TNC

| Blank Panel
${ }_{\text {R }}^{\text {Rer } 55 \text { Series ANT-S5 RX-D/RX-G }}$
Directional Antenn

$\left\lvert\, \begin{aligned} & \text { Antenna Extension Cable } \\ & \text { for S4 Series LD-TNC ADU }\end{aligned}\right.$


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## Wired Microphones

Dynamic Microphones
Unidirectional Microphone
OM-1100
Features
In...........................................................

Dynamic hand-held microphone for general use

- Rigid diecast aluminum microphone body
.75 m phone plug cable supplied with unit
Microphone holder provided as standard accessory


Unidirectional Microphone

Features

Dynamic hand-held microphone torvocal/speech use

- Rigid diecast zinc microphone body

Switching and handling noise suppression
10 m phone plug cable supplied with unit
Microphone holder provided as standard access

- Balanced output for long distance connection


Dynamic hand-held microphone for speech use Rigid diecast zinc microphone body Switching and handling noise suppression 10 m phone plug cable supplied with unit Microphone holder provided as standard access
Balanced output for long distance connection


Suitable for vocal and speech application
Robust diecast zinc microphone body
Short type slide on/offt switch reduces handling noise XLR-connector (balanced) and 10 m cable with phone plus - Adapter for stand mount is provided

|Lavalier Microphone
EM-410
Features


Electret condenser microphone element for voice-oriented applications
such as lectures, presentations and religious services

- Designed for best performance when attached to the chest area


Electret condenser microphone for such speech applications as meetings, lectures, and religious services
Excellent high-frequency response of 60 to 20 KHz delivers clear output
High sensitivity ( $(-35 \mathrm{~dB}$ ) provides a satisfying tonal response
High sensitivity (-35dB) provides a satisfying tonal response
Gooseneck with tow adjustment points alow s more r fixable microphone positioning angles
Rejection of undesirable off-axis sound minimimizes possible feedback


## meetinglO Series

Integrated Audio Collaboration System / AM-CF1

Experience natural conversation
across multiple locations
The AM-CF1 integrated audio collaboration system, the latest cutting edge meetingIO series product from TOA, is a professional steerable microphone array system with integrated stereo soundbar. As such, AM-CF1 is the perfect all-in-one conferencing solution for small to medium size conference spaces with great return on investment. Built-in AEC (Acoustic Echo Cancellation), ANC (Ambient Noise Cancellation), and EQ maximize performance. Connectivity includes USB ports for direct integration with computers and webcams, Bluetooth, codec input/output, and stereo audio input/output. LED indicators identify presenter location and microphone gain level. It is truly real-time beam steering illuminated. Easy installation. Available in black and white. PoE plus operation or power supply driven.
Seven LED indicators behind the grille illuminate to
visually track presenter location, display microphone
gain level, and show microphone mute status.
The browser interface is available to make adjustments
to parameter settings such as mixer volume controls,
to parameter settings such as mixer volume controls,
audio processing, LED indicator management, control $/$ /
0 , presets, and voice tracking field adjustments for
coverage within a 20 foot range.


Talk to your audience, not to the microphone.

The AM-1 Real-time Steering Array Microphone System is equipped with a built-in sensor to detect and track sound sources, and it captures voices clearly and continuously from either side, above or below. This frees speakers to move back and forth in the vicinity of the podium, turn or tilt their heads to address different sections of the audience, or gesture haturally without concern for the location of the microphone. Placed unobtrusively on top of the podium or pulpit, this innovative voice-tracking microphone completely eliminates the interference and inconvenience of gooseneck or handheld mikes. Intuitive parameter setting by iPad* adds further convenience.

Features
Proven conferencing solution that's also widely in houses of worship, higher education facilities, courtrooms, and theatrical venues across the country Natural conversation without concern for speaker location or proper microphone usage Natural reproduction of sound without accentuating ambient noise such as rustling of papers - Uninterrupted line of sight for video and other production related requirements Easy installation and flexible placement including ceiling, wall, or tabletop applications Presets for changing room configurations and meeting layouts
Pad app for intuitive sel-and-orget configuration and ultimate real-time control in live production settings


| Array Microphone Unit | AM-1B/AM-1w |
| :---: | :---: |
| Power Source | 24 V DC (supplied from the Control Unit) |
| Microphone | Unidirectional electret condenser microphone |
| Directivity Angle | Horizontal $50^{\circ}\left(800 \mathrm{~Hz}-18 \mathrm{kHz}\right.$, Array mode), $180^{\circ}$ (Cardioid mode) Vertical: $90^{\circ}$ |
| Frequency Response | $150 \mathrm{~Hz}-18 \mathrm{kHz}$ |
| Maximum Input Sound Pressure | 100 dB SPL |
| Operation | Mute switch |
| Indicator | Microphone status indicator (output: green, mute: red) |
| Microphone Cable | Shielded twisted pair cable $10 \mathrm{~m}(32.81 \mathrm{ft})$ with connector equivalent to $\mathrm{TA}-3$ |
| Maximum Cable Length | 70 m (229.66 ft) (use of the AESIEBU cable) |
| Finish | Black or white (RAL.9016 equivalent) |
| Dimensions | $483.9(\mathrm{~W}) \times 22.1(\mathrm{H}) \times 64.9(\mathrm{D}) \mathrm{mm}$ excluding cable |
| Weight | 1.2 kg |
| Control Unit |  |
| Power Source | 24 V DC (supplied from an optional AC adapter) |
| Current Consumption | 410 mA or less |
| Signal to Noise Ratio | 90 dB or more |
| Input | Combined type of TA-3 (dedicated to the array microphone) |
| Output | Combined type of XLR-3-32, Removable terminal block (3 pins) |
| Network | Network I/F: 10 BASE-T/100BASE-TX, RJ-45 conncector Network protocol: TCP/IP, HTTP |
| Level Control | Output level selection ( $+4 \mathrm{~dB}^{+1},-10 \mathrm{~dB}^{* 2},-50 \mathrm{~dB}^{* 1}$ ) LOW CUT ON/OFF |
| Dimensions | 210 (W) $\times 45.7$ (H) $\times 271.5$ (D) mm |
| Weight | 1.5 kg |
| $10 \mathrm{~dB}=1 \mathrm{~V}$ <br> 2008 c <br> 0.75 V |  |

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| MIC-SJ22-P-R | 60 | S5.3-BTX | 57 | SR-RF8WP | 06 | WT-5805 | 53 |
| MIC-SJ33 | 60 | S5.3-HCX | 57 | SR-S4L | 17 | WT-5810 | 53 |
| MIC-SJ55 | 60 | S5.3-HDX | 57 | SR-S4LWP | 17 | WT-D5800 | 52 |
| MIC-SJ66-BK | 60 | S5.3-RX | 57 | SR-S4S | 17 | WTU-4800 | 53 |
| MIC-SJ66-BL | 60 | S5.5-BTX | 56 | SR-S4SWP | 17 | YP-M5300 | 55 |
| MIC-SJ66-YE | 60 | S5.5-HCX | 56 | SR-SA3 | 20 | YP-M5310 | 55 |
| MIC-SJ690H | 60 | S5.5-HDX | 56 | SR-SA4 | 18 | YS-60B | 28 |
| MIC-SJEM77 | 60 | S5.5-RX | 56 | SR-SB8 | 06 | YW-4500 | 55,60 |
| MIC-X2 | 60 | SR-A12L | 05 | SR-T5 | 16 | YW-7000 | 60 |
| MIC-X212-BE | 60 | SR-A12LWP | 05 | SR-TB3 | 20 | YW-7520 | 60 |
| MIC-X212-BK | 60 | SR-A12S | 05 | SR-TB4 | 18 | YW-7570 | 60 |
| MIC-X22-B-R | 60 | SR-A12SWP | 05 | SR-TB4WP | 18 | ZM-9001 | 44 |
| MIC-X22-P-R | 60 | SR-A18B | 05 | SR-TP12 | 05 | ZM-9002 | 44 |
| MIC-X33 | 60 | SR-C15B | 06 | SR-TP8 | 06 | ZM-9003 | 44 |
| MIC-X55 | 60 | SR-C15BWP | 06 | SR-WB3 | 20 | ZM-9011 | 44 |
| MIC-X66-BK | 60 | SR-C8L | 06 | SR-WB4 | 18 | ZM-9012 | 44 |
| MIC-X66-BL | 60 | SR-C8LWP | 06 | SR-WB4WP | 18 | ZM-9013 | 44 |
| MIC-X66-YE | 60 | SR-C8S | 06 | SS-9001 | 44 | ZM-9014 | 44 |
| MIC-X690H | 60 | SR-C8SWP | 06 | ST-16A | 28 | ZP-001T | 43 |
| MIC-XEM77 | 60 | SR-CL8 | 06 | ST-34B | 20,22 |  |  |
| MT-200 | 12 | SR-D8-M | 15 | ST-800 | 62 |  |  |
| MT-S0301 | 20 | SR-D8-S | 15 | T-001T | 43 |  |  |
| MT-S0601 | 16 | SR-D8CL | 15 | WB-2000-2 | 55 |  |  |
| MW-1U-BLANK | 60 | SR-D8CS | 15 | WD-5800 | 55 |  |  |
| MX-6224D | 36 | SR-D8EP | 15 | WH-4000A | 55 |  |  |
| PAN-1U19-TNC | 60 | SR-D8FB | 15 | WH-4000H | 55 |  |  |
| PE-304 | 31 | SR-D8HB | 15 | WH-4000P | 55 |  |  |
| PE-64 | 31 | SR-D8WB | 15 | WH-4000S | 55 |  |  |
| PJ-304 | 31 | SR-EP3 | 20 | WM-4300 | 54 |  |  |
| PJ-64 | 31 | SR-EP4 | 18 | WM-5225 | 54 |  |  |
| Q-2008SPD | 40 | SR-EP4WP | 18 | WM-5265 | 54 |  |  |

## Smiles for the Public

