



# Professional Sound



“Large sports venues, spacious religious facilities, boutique restaurants...  
TOA's expertise and engineering competency offers  
you the optimal solution for your project.”



"Sound, not equipment": TOA has held to this concept in its more than 80 years of crafting sound environments for spaces of all kinds. TOA is an experienced player in the professional sound sector, Voice Evac in particular—a sector where nothing less than the best in sound quality will do.

How sound is rendered is everything. A sound system brings to sporting events that feeling of being immersed in the moment and action, infuses concerts with that uplifting sense of togetherness and, in a place of worship, creates an embracing atmosphere where every word is brought home to those gathered there, enhancing the devotional experience. A sound system can also set the relaxed, carefree tone a commercial setting requires, encouraging conversation with and between guests and customers.

Whether for smaller venues like cafes and restaurants, for halls, places of worship, or stadiums for the tens of thousands, leave it to TOA to craft just the right soundspace.



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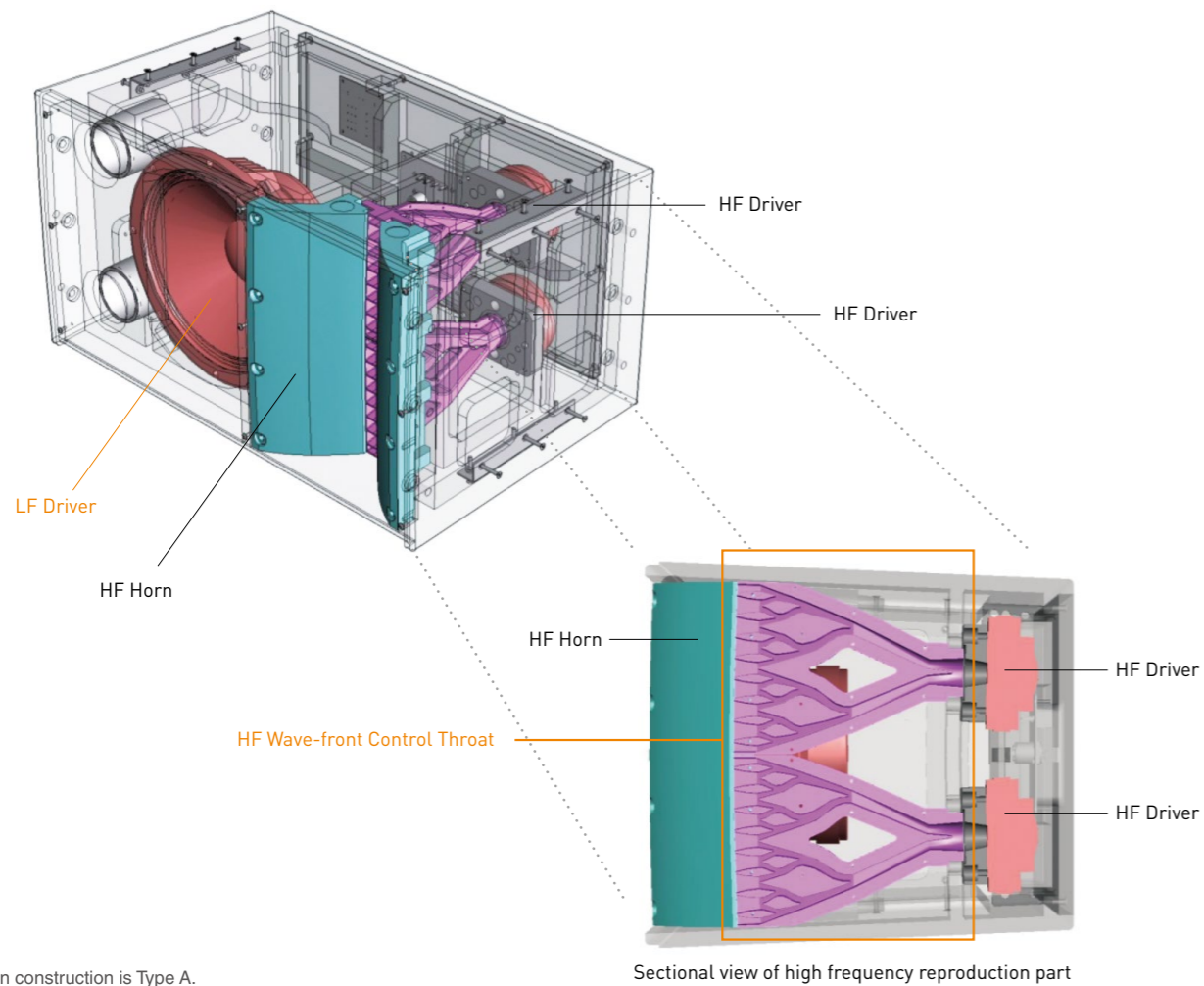
# Speakers

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

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

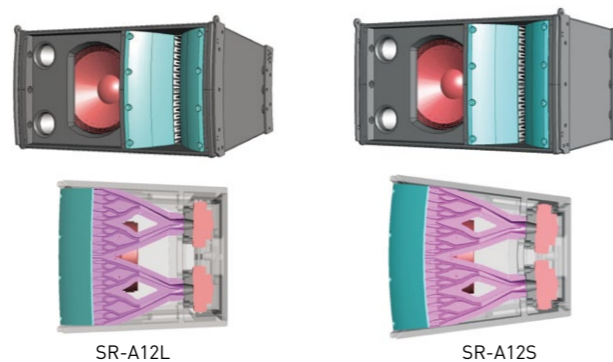
**SYNC-Drive™**  
SYnchronous Nexus Control

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

Both Type A and Type C include one speaker configuration with a 5-degree taper specifically designed to transmit sound over distance as well as a 15-degree taper configuration which provides greater short range coverage. Both configurations may be combined as required to achieve uniform sound coverage in various environments.



## Common Features :

- Powerful 2-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

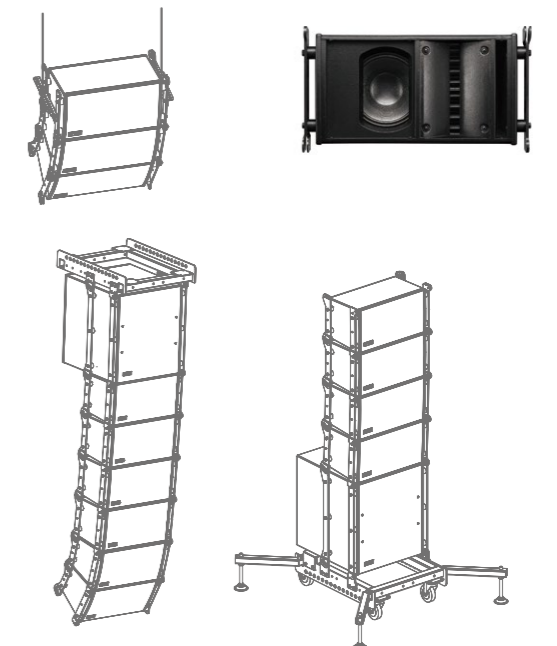
## Type A Features

- High power handling – High: 450W, Low: 180W
- Subwoofer with 40 cm (18") cone speaker



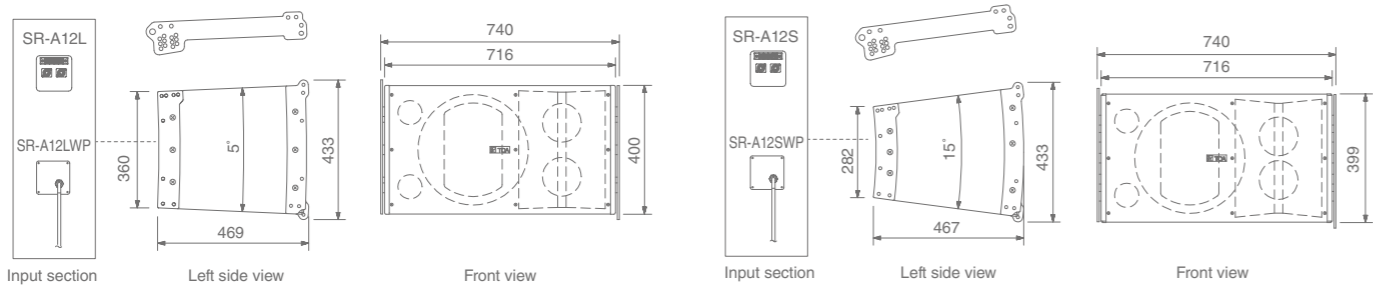
## Type C Features



- Single or bi-amp mode
- Compact and high power handling – 360W (single-amp mode) / High: 360W, Low: 180W (bi-amp mode)
- Subwoofer with 38 cm (15") cone speaker

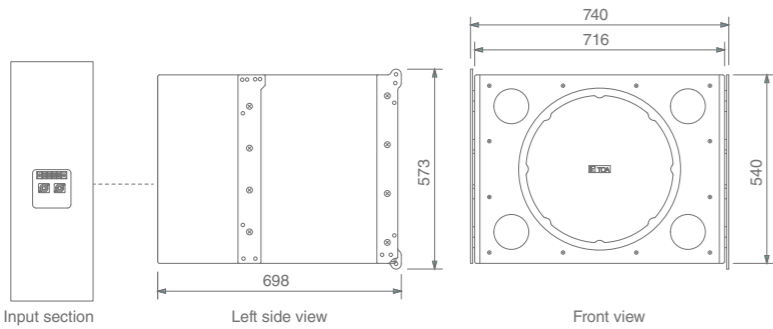


Speakers

Line Array / Modular Type / **Type A**

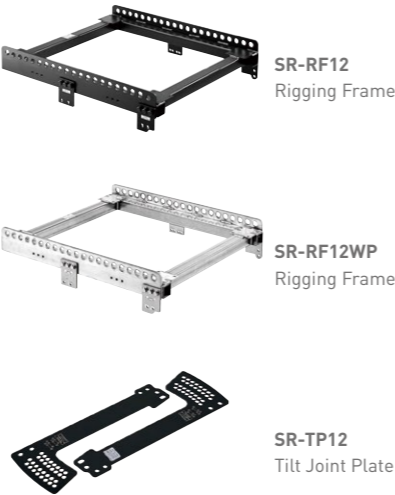


		
Specifications	SR-A12L	SR-A12SWP
Power Handling Capacity	Continuous program: Low frequency: 450W, High frequency: 180W	
Sensitivity (1W, 1m)	Low frequency: 98dB High frequency: 110dB	
Max SPL (Rated input, 1m)	125dB (Low)/ 133dB (High)	
Frequency Response	50 Hz – 20kHz	
Directivity Angle	Horizontal: 90°, Vertical: 5°	
Speaker Component	Low: 12" cone-type High: Wave front control horn with compression driver x 2	
Color	Black	
Dimensions (W x H x D)	740 x 433 x 469mm	

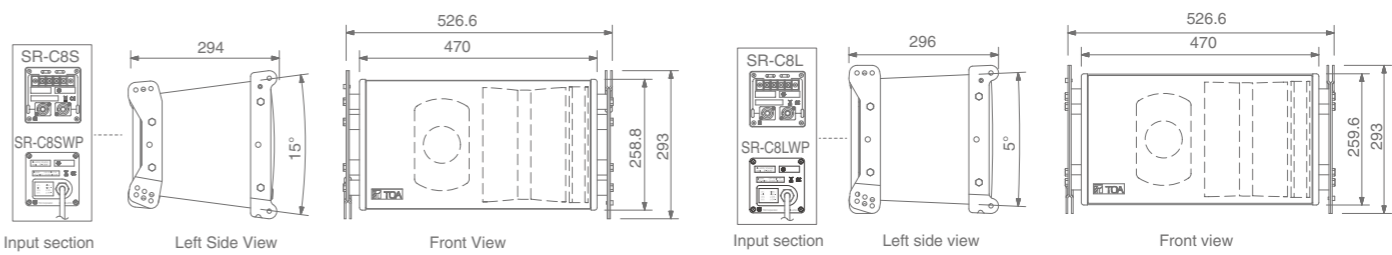


	
Specifications	SR-A18B
Power Handling Capacity	Continuous program: 720W
Sensitivity (1W, 1m)	95dB
Max SPL (Rated input, 1m)	124dB
Frequency Response	40 – 400Hz
Speaker Component	46cm cone-type
Speaker Component	46cm cone-type
Color	Black
Dimensions (W x H x D)	740 x 573 x 698mm

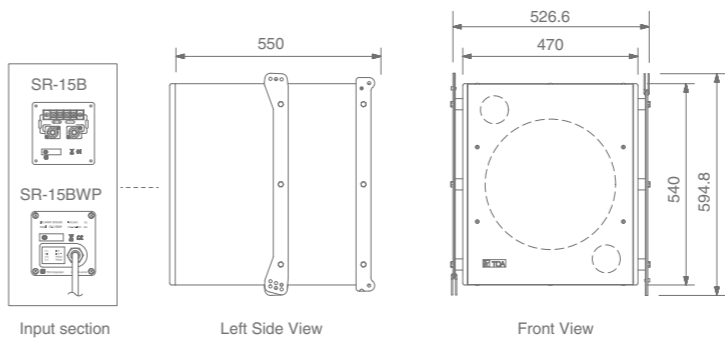
Accessories







Line Array / Modular Type / **Type C**

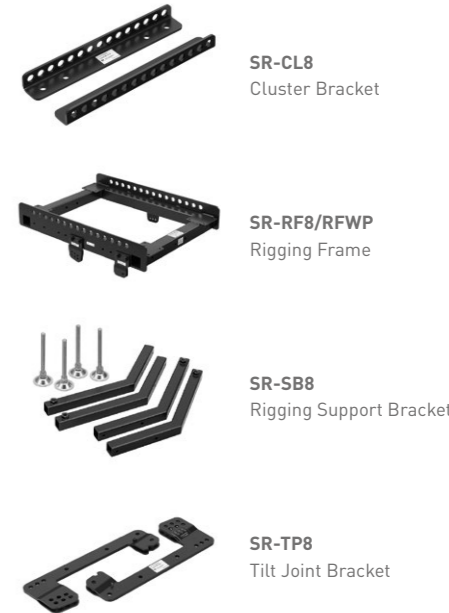


		
Specifications	SR-C8S	SR-C8LWP
Power Handling Capacity	Continuous program: 360W (single-amp mode) / low frequency: 360W, high frequency: 180W (bi-amp mode)	
Rated Impedance	16Ω (single-amp mode), low frequency: 16Ω, high frequency: 16Ω (bi-amp mode)	
Sensitivity (1W, 1m)	98dB (single-amp mode); low: 95dB; high: 110dB (bi-amp mode)	
Max SPL (Rated input, 1m)	124dB (Low)/ 132dB (High)	
Frequency Response	65Hz – 20kHz (when equalized at recommended parameters)	
Directivity Angle	Horizontal: 110°, vertical: 15°	
Speaker Component	Low frequency: 20cm cone-type / High frequency: Wave-front control horn + compression drivers x 2	
Color	Black	
Dimensions (W x H x D)	526.6 x 293 x 294mm	



			
Specifications	SR-C15B		SR-C15BWP
Power Handling Capacity	Continuous program: 450W		
Rated Impedance	8Ω		
Sensitivity (1 W, 1 m)	93 dB		
Max SPL (Rated input, 1m)	120dB		
Frequency Response	40 – 400Hz (when equalized at recommended parameters)		
Speaker Component	38 cm cone-type		
Color	Black		
Dimensions (W x H x D)	526.6 × 594.8 × 550mm		

Accessories



# Speakers

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

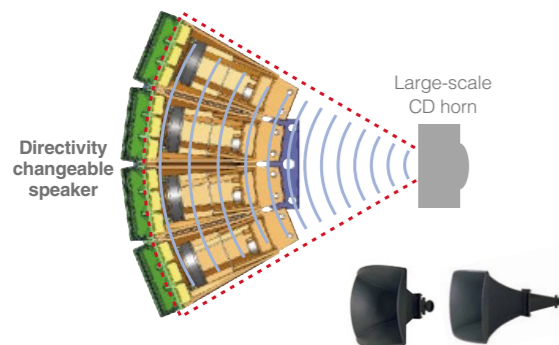
## Powerful & Compact variable dispersion line array with flexible installation options.

Thanks to its award-winning enclosure design, employing four modules per unit, the HX Series allows precise adjustment of sound dispersion angles.

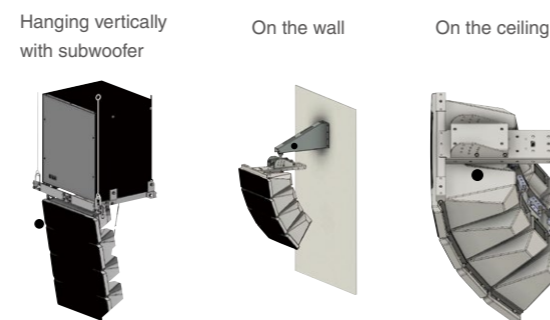
The series offers pristine clarity in a wide range of applications from sports venues, auditoriums, concert halls and challenging houses of worship. With the HX Series you're getting affordable quality and stellar performance.

### Accurate directivity control

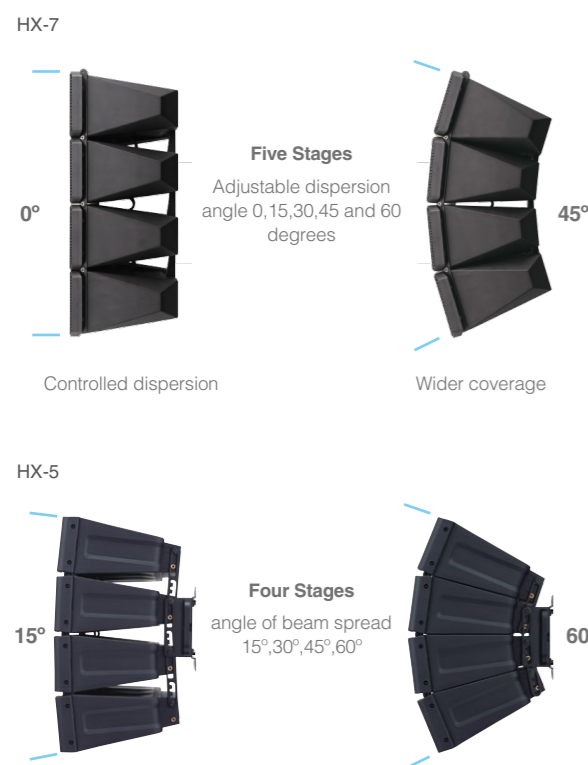
HX Series configuration allows the variable directivity control and low-frequency dispersion control comparable to using a large constant-directivity horn speaker.



### Versatile mounting options



### 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 ohms
- One module is composed of 2 x 5.5" LF speakers and waveguide loaded 1" HF 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° (60° requires optional HY-60D)
- 0° 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

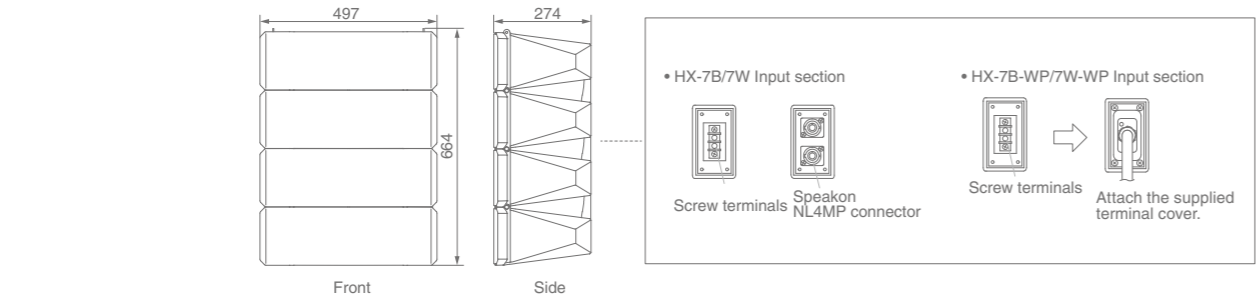
- More compact and affordable choice
- Power handling: 600W Continuous Program @8 ohms
- One module is composed of 1 x 4.72" cone-type LF driver and 3 x 1" balanced dome tweeters
- Adjustable dispersion angle 15, 30, 45 and 60°
- Maximum four speaker units can be stacked
- Splash-proof version (IPX4) available



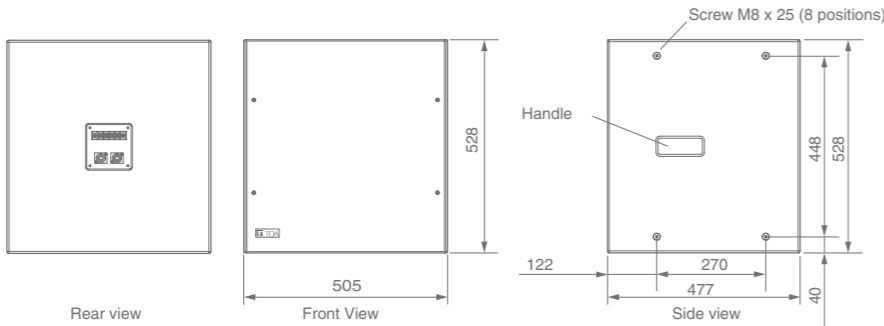
Speakers

# Speakers

Line Array / Variable Dispersion Array Speaker / HX-7

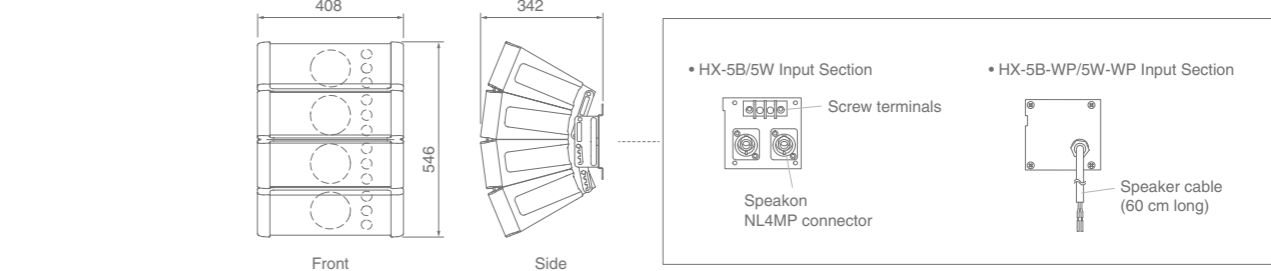


Specifications	HX-7B	HX-7W	HX-7B-WP	HX-7W-WP
Enclosure	Bass-reflex type		Sealed type	
Power Handling Capacity	Continuous pink noise: 250 W (IEC60268-5: 350W) / Continuous program: 750 W			
Rated Impedance	8 Ω			
Sensitivity (1 W, 1 m)	100 dB			
Frequency Response	75 Hz – 20 kHz		105 Hz – 20 kHz	
Crossover Frequency	1.7 kHz			
Directivity Angle	Horizontal: 100°, Vertical: Depending on directivity angle mode			
Speaker Component	Low frequency: 13 cm cone-type x 8 High frequency: Wave front control horn with compression driver x 4			
Input Terminal	Speakon NL4MP x 2 and M4 screw terminal, distance between barriers: 9 mm (0.35")		M4 screw terminal, distance between barriers: 9 mm (0.35")	
Water Protection	-		IPX4 (Install with every speaker module tilted downward from the horizontal.)	
Finish	Enclosure: Polypropylene, black or white (HX-7B/W) Punched net: Surface-treated steel plate, black or white (HX-7B/W), paint / Hanging bracket: Steel plate, t3.0, black or white (HX-7B/W), paint		Enclosure: Polypropylene, black or white (HX-7B/W-WP), Punched net: Surface-treated steel plate, black & white (HX-7B/W-WP), rust proof coating	
Dimensions (W x H x D)	497 x 664 x 274 mm			
Weight	30 kg			

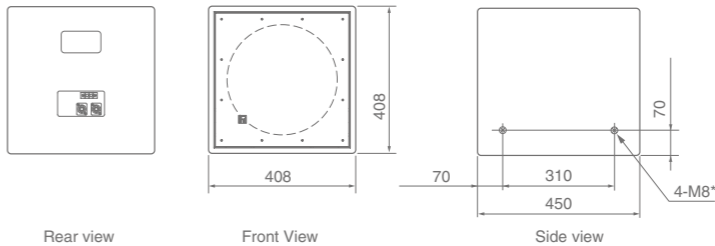


Specifications	FB-150B	FB-150W
Power Handling Capacity	Continuous pink noise: 200W / Continuous program: 600W	
Impedance	8 Ω	
Sensitivity (1W, 1m)	93 dB	
Frequency Response	40Hz – 400Hz (-10dB)	
Speaker Component	38cm cone-type	
Input Terminal	Speakon NL4MP x 2 and M5 screw terminal, distance between barriers: 12.2mm	
Finish	Enclosure: MDF, black or white (FB-150B/W), urethane paint Punched net: Surface-treated steel plate, black & white (FB-150B/W), paint	
Dimensions (W x H x D)	505 x 528 x 477 mm	
Weight	30kg	

Line Array / Variable Dispersion Array Speaker / HX-5



Specifications	HX-5B	HX-5W	HX-5B-WP	HX-5W-WP
Enclosure	Bass-reflex type		Sealed type	
Power Handling Capacity	Continuous pink noise: 200W / Continuous program: 600W			
Rated Impedance	8Ω			
Sensitivity (1W, 1m)	96 dB (60° mode), 97 dB (45° mode), 98 dB (30° mode), 99 dB (15° mode)			
Frequency Response	70Hz – 20kHz (-10 dB) (60° mode)		95Hz – 20kHz (-10 dB) (60° mode)	
	75Hz – 20kHz (-10 dB) (45° mode)		100Hz – 20kHz (-10 dB) (45° mode)	
	80Hz – 20kHz (-10 dB) (30° mode)		105Hz – 20kHz (-10 dB) (30° mode)	
	85Hz – 20kHz (-10 dB) (15° mode)		110Hz – 20kHz (-10 dB) (15° mode)	
Crossover Frequency	4kHz			
Directivity Angle	Horizontal: 100° (over 2kHz), Vertical: 60° (over 800Hz), 45° (over 1.2kHz), 30° (over 1.6kHz), 15° (over 3.2kHz) variable			
Speaker Component	Low frequency: 12cm cone-type x 4, High frequency: Balanced dome-type x 12			
Input Terminal	Speakon NL4MP x 2 and M4 screw terminal		-	
Speaker Cord	-		2-core cabtyre cord with diameter of 6mm	
Water Protection	-		IP X4 (Install with every speaker module downward)	
Finish	Enclosure: Polypropylene, black or white / Punched net: Surface-treated steel plate, black or white			
Dimensions (W x H x D)	408 x 546 x 342mm			
Weight	16kg			



Specifications	FB-120B	FB-120W
Rated Input	Continuous pink noise: 200W / Continuous program: 600W	
Impedance	8 Ω	
Sensitivity (1W, 1m)	90 dB at installation in free sound field, 96 dB at installation in 1/2 free sound field	
Frequency Response	40Hz – 1.2kHz (-10 dB)	
Speaker Component	30cm cone-type speaker	
Input Terminal	Speakon NL4MP x 2 and M4 screw terminals	
Finish	Enclosure plywood, metal front grille black	Enclosure plywood, metal front grille white
Dimensions (W x H x D)	408 x 408 x 450mm	
Weight	15kg	

# Speakers

## Line Array / Variable Dispersion Array Speaker / HX-7

### Mounting Options

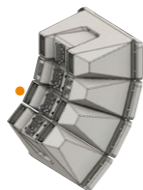
Two speakers connected  
HY-CN7W / HY-CN7W-WP /  
HY-CN7B / HY-CN7B-WP



On the wall  
HY-WM7W / HY-WM7B



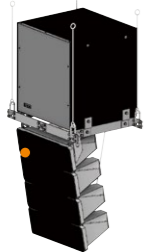
Dispersion angle 60 degrees  
HY-60DW / HY-60DW-WP /  
HY-60DB / HY-60DB-WP



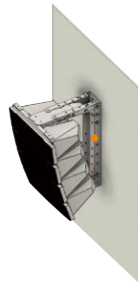
On building structures  
HY-TM7W-WP / HY-TM7B-WP



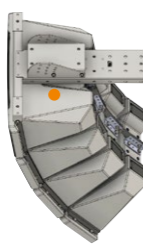
Hanging vertically with subwoofer  
HY-PF7W / HY-PF7B



On undereave walls  
HY-MS7W-WP / HY-MS7B-WP



On the ceiling  
HY-VM7W / HY-VM7B



On the stand  
HY-ST7



### Accessories

		Article number
	Speaker Connection Bracket, white	HY-CN7W* HY-CN7W-WP
	Speaker Connection Bracket, black	HY-CN7B* HY-CN7B-WP
	Angle Adjustment Bar, white Allows the dispersion angle 60 degrees.	HY-60DW* HY-60DW-WP
	Angle Adjustment Bar, black Allows the dispersion angle 60 degrees.	HY-60DB* HY-60DB-WP
	Rigging Frame, white	HY-PF7W*
	Rigging Frame, black	HY-PF7B*
	Rigging Bracket, white	HY-VM7W*
	Rigging Bracket, black	HY-VM7B*

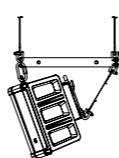
		Article number
	Wall Mounting Bracket, white	HY-WM7W*
	Wall Mounting Bracket, black	HY-WM7B*
	Rigging Bracket, white, outdoor use	HY-TM7W-WP
	Rigging Bracket, black, outdoor use	HY-TM7B-WP
	Wall Mounting Bracket, white, outdoor use	HY-MS7W-WP
	Wall Mounting Bracket, black, outdoor use	HY-MS7B-WP
	Matching Transformer Adapter	HY-MT7
	Speaker Stand Adapter	HY-ST7*

\*Indoor use only

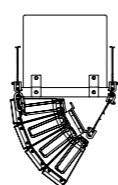
## Line Array / Variable Dispersion Array Speaker / HX-5

### Mounting Options

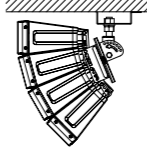
Hanging horizontally  
HY-PF1B / HY-PF1W / HY-PF1WP



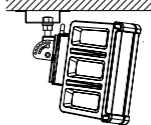
Hanging vertically with subwoofer



On the ceiling vertically  
HY-CW1B / HY-CW1W / HY-CW1WP



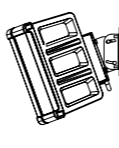
On the ceiling horizontally



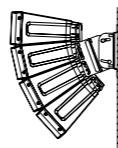
Two speakers connected  
HY-CN1B / HY-CN1W / HY-CN1BWP /  
HY-CN1WWP



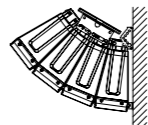
On the wall horizontally  
HY-WM1B / HY-WM1W / HY-WM1WP



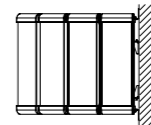
On the wall vertically



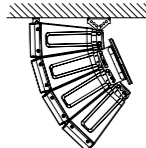
On the wall vertically



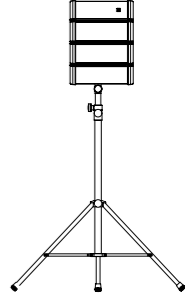
On the wall horizontally



On the ceiling vertically



On the stand  
HY-ST1



### Accessories

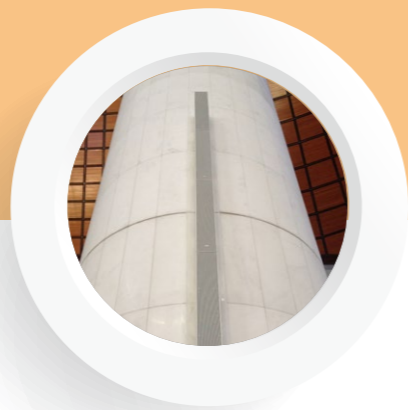
		Article number
	Rigging Frame, black	HY-PF1B*
	Rigging Frame, white	HY-PF1W*
	Rigging Frame, outdoor use	HY-PF1WP
	Ceiling Mounting Bracket, black	HY-CW1B*
	Ceiling Mounting Bracket, white	HY-CW1W*
	Ceiling Mounting Bracket, outdoor use	HY-CW1WP
	Wall Mounting Bracket, black	HY-WM1B*
	Wall Mounting Bracket, white	HY-WM1W*
	Wall Mounting Bracket, outdoor use	HY-WM1WP

\*Indoor use only

		Article number
	Wall Mounting Bracket, black	HY-WM2B*
	Wall Mounting Bracket, white	HY-WM2W*
	Wall Mounting Bracket, outdoor use	HY-WM2WP
	Extension Bracket, black	HY-CN1B*
	Extension Bracket, white	HY-CN1W*
	Extension Bracket, outdoor use, black	HY-CN1BWP
	Extension Bracket, outdoor use, white	HY-CN1WWP
	Speaker Stand Adapter	HY-ST1*
	Matching Transformer	MT-200

# Speakers

Line Array / Active Line Array / SR-D8

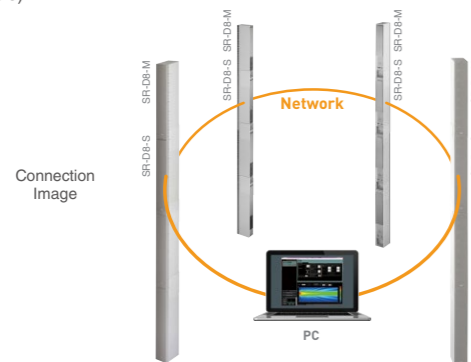


## DSP beam steering with instant simulation and high speed communication

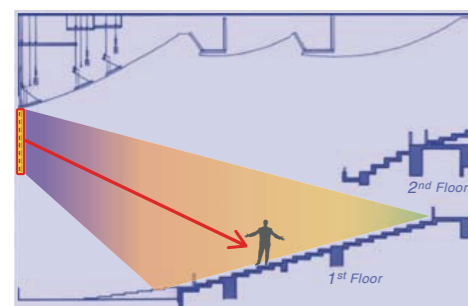
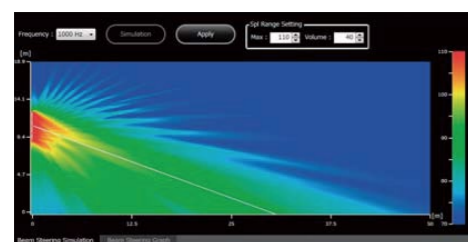
As well as processing both analog and digital audio input, this innovative speaker harnesses 8 built-in digital amplifiers to project sound waves to targeted areas with greater precision than is possible with conventional speakers. By digitally shaping the width and angle of acoustic beams, it can steer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

### Features

- A total of 16 speakers (in up to 4 stacks) can be controlled as a single unit via GUI-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 for CobraNet connection, the speaker supports 6 x 2 matrix mixing.
- Coverage: Horizontal – 90°; Vertical Beam Width – 45°; Vertical Beam Angle –  $\pm 45^\circ$  (Adjustable via dedicated GUI software)

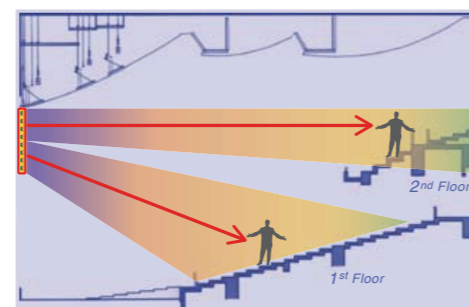
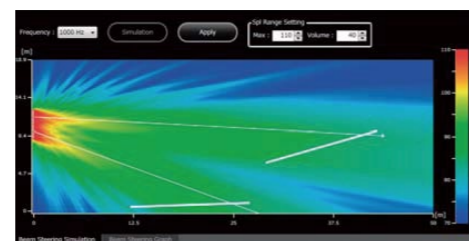


■ Beam width: 30°/Beam angle: -20°



■ Beam split in two directions

Beam splitting point: At the center point of all the transducers in a single stack.



## 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.

### Main screen of the GUI control software



### Operation View

Selecting a stack or a speaker in the System Tree view or selecting CobraNet Routing or Grouping Setting in the System Configuration view allows users to access a view depicting the status of the system and settings.

### System Tree View

Speakers and stacks are shown in this window in a tree configuration.

### System Configuration View

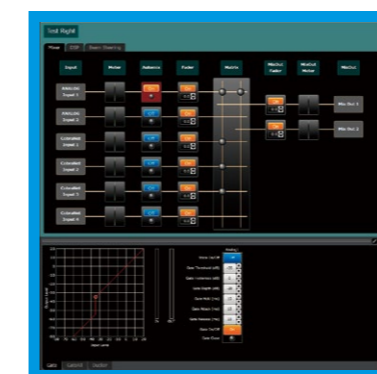
This window displays CobraNet routing and Grouping Settings.

### Preset View

Users can display presets of settings by their allocated number or name; load presets onto speakers; or store settings on speakers using their preset numbers.

### Contents View

Through this window, users can precisely adjust settings for each function selected in the Operation window.



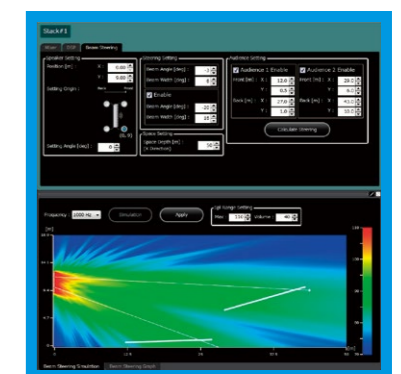
### Mixer View

As well as displaying the input level for each input channel, this window allows users to set functions such as auto-mix (for gating or ducking), fader, and 6 x 2 matrix. The fader can also be set independently for each output channel, with a view provided of the mixing output level.



### DSP View

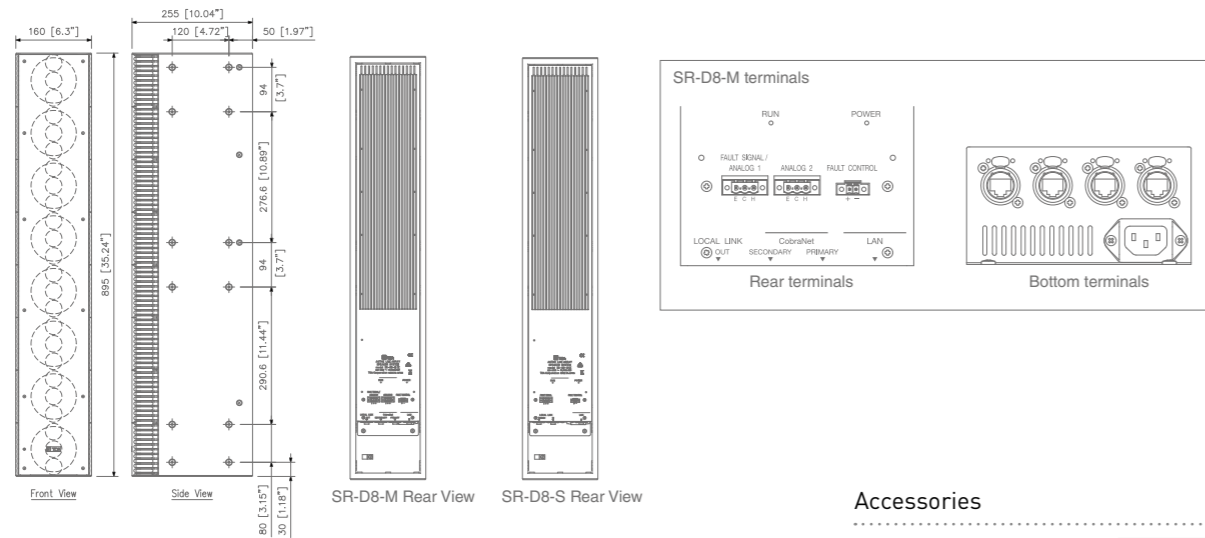
Users can adjust a number of signal processing functions independently for each speaker, including settings for muting, gain adjustment, high- and low-pass filters, and compressors.



### Beam Steering View

By setting parameters such as speaker location, audience position, and beam angle and width, users can control the vertical steering angle of sound beams projected 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**

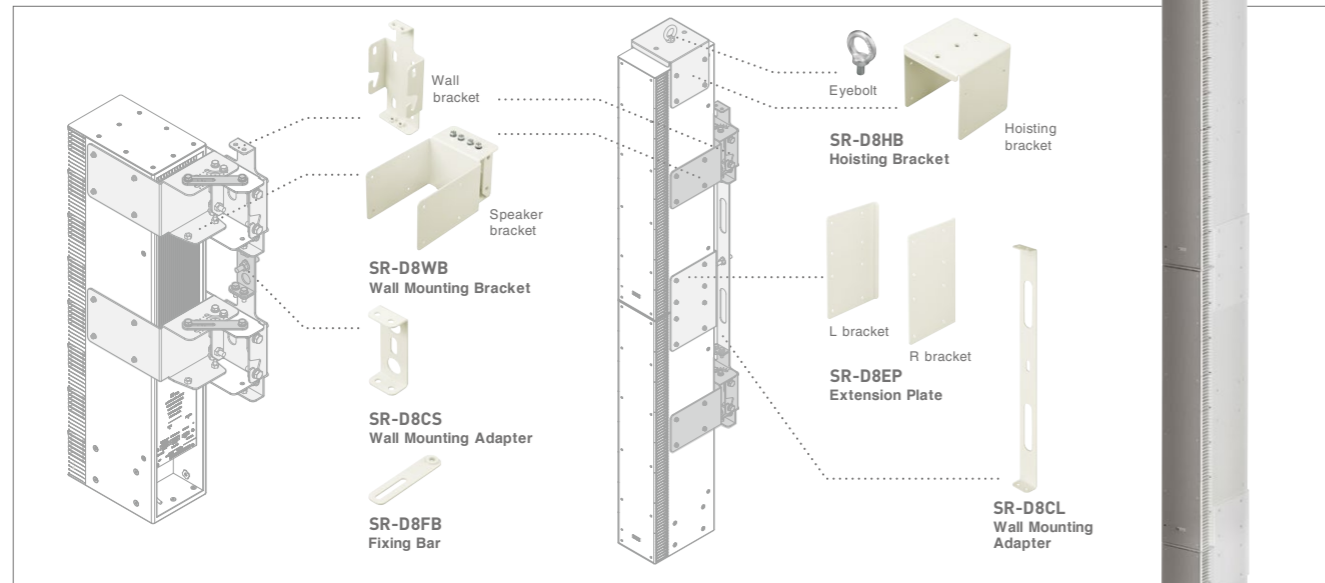
## Accessories

	Article number
Wall Mounting Bracket	SR-D8WB
Wall Mounting Bracket	SR-D8CS
Fixing Bar	SR-D8FB
Hoisting Bracket	SR-D8HB
Extension Plate	SR-D8EP
Wall Mounting Adapter	SR-D8CL



Specifications	SR-D8-M	SR-D8-S
Power Source	220 – 240V AC, 50 / 60Hz	
Power Consumption	315 W (Rated output), 72W (Based on EN Standards)	320W (Rated output), 72W (Based on EN Standards)
Frequency Response	130Hz – 20kHz	
S/N Ratio	100 dB or more (A-weighted), DSP+Amplifier	
Amplification System	Class D, 8 channels	
Output	30W, 1 channel (1% THD+N)	
Max SPL	Max. 93 dB SPL (A-weighted, pink noise, 30m)	
Line Input	2-channels, +4 dBu, 10 kΩ, electronically-balanced, removable terminal block (3P)	-
Finish	Enclosure: MDF, white, paint / Front grille: Punched steel plate, white, acrylic paint	
Dimensions (W x H x D)	160 x 895 x 255 mm	
Weight	21 kg	

## Optional Accessories

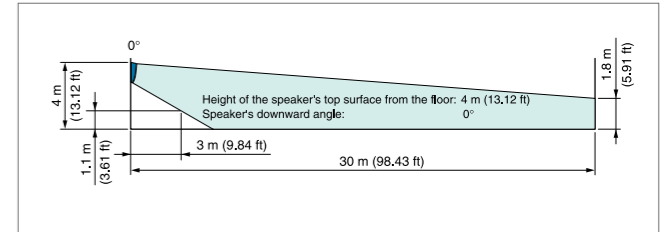
Line Array / dedicated for gymnasiums / **Type T**

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

## Features

- 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.
- Horizontal angle adjustable in conjunction with optional SR-PB5 Wall Pan Bracket.
- Optional MT-S0601 Matching Transformer for use in high-impedance applications.
- Safety wire supplied to prevent the speaker from falling during installation work and after installation.

## Coverage Area Example



Specifications	SR-T5
Enclosure	Bass-reflex type
Power Handling Capacity	Continuous pink noise: 250 W, Continuous program: 750 W
Rated Impedance	8Ω
Sensitivity	96 dB (1 W, 1 m equivalent, measured at 4 m (13.12 ft))
Frequency Response	70-20,000 Hz
Crossover Frequency	3kHz
Directivity Angle	Horizontal: 100°, Vertical: 35°
Speaker Component	Low frequency: 13 cm (5.12") cone-type x 8 High frequency: Balanced dome type x 24
Recommended Installation Height	4-5.5 m (13.12 - 18.04 ft) (Speaker top, when installed in sport facilities 30 m (98.43 ft) in length)
Adjustable Angle Range	Downward: 0°, 1°, 2°, 3° (when the supplied mounting bracket is used) Horizontal (left or right): 5°, 10° (when the optional SR-PB5 Wall Pan Bracket is used)
Input Terminal	M5 screw terminal, distance between barriers: 12.2 mm
Finish	Enclosure: Plywood, black, urethane paint Baffle: Polypropylene, black Punched net: Steel plate, black, acrylic paint Mounting bracket: Steel plate, black, acrylic paint
Dimensions	310 (W) x 1,239 (H) x 341 (D) mm
Weight	29 kg (including accessories)
Accessories	Mounting bracket Ax 1, Mounting bracket Bx 1, Bracket mounting bolt x 6, Side cover x 5, Side cover mount screw x 10, Eye bolt x 1, Safety wire x 1
Option	Wall Pan Bracket SR-PB5 Matching Transformer: MT-S0601

## Optional Accessories



Output Impedance: 8Ω  
Waight: 1.2kg

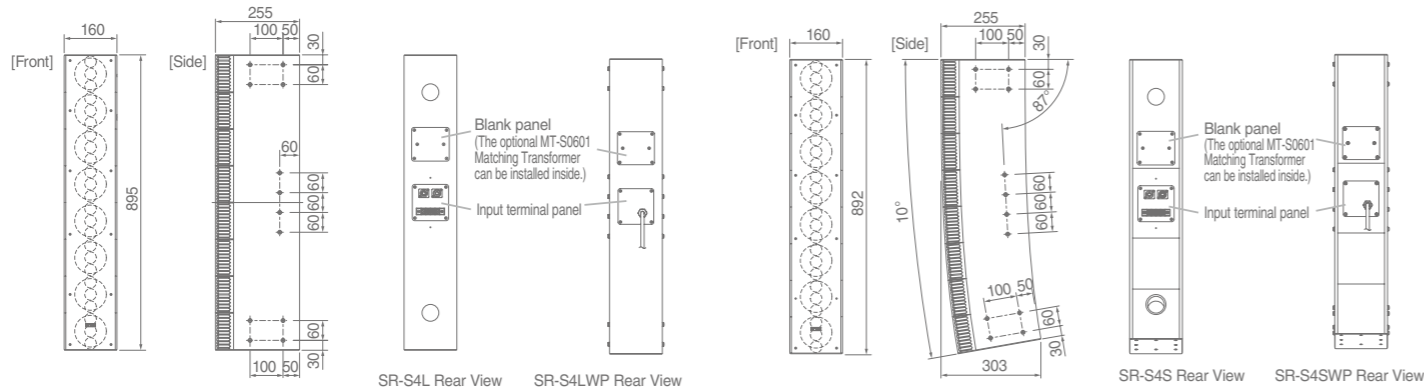
# Speakers

## 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 – 600W (single amp mode) / High:240W, Low: 240W (bi-amp mode)
- Composed of 8 x 10 cm (4") LF drivers and 24 x HF drivers
- Up to 2 speakers can be stacked
- Splash-proof version(IPX4) available
- High impedance – compatible by using the optional MT-S0601

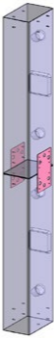


						
Specifications	SR-S4L	SR-S4LWP		SR-S4S	SR-S4SWP	
Power Handling Capacity	Continuous program: 600 W					
Rated Impedance	8 Ω					
Sensitivity (1W, 1m)	94 dB			93 dB		
Max SPL (Rated input, 1m)	122dB			121dB		
Frequency Response	70 Hz – 20kHz					
Directivity Angle	H: 90 deg., V: 0 deg.			H: 90 deg. , V: 10 deg.		
Speaker Component	Low: 4" cone-type x 8, High: 1" balanced dome-type x 24			Low: 4" cone-type x 8, High: 1" balanced dome-type x 24		
Color	white			white		
Dimensions (W x H x D)	160 × 895 × 255 mm			160 × 892 × 303 mm		

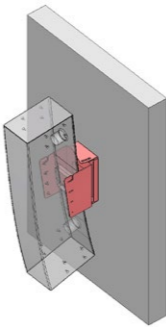
## Slim Line Arrays / Type S

### Mounting Options

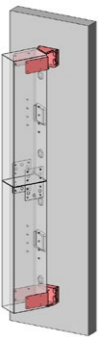
Two speakers connected  
SR-EP4/EP4WP



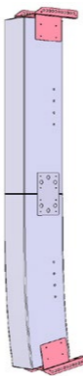
On the wall  
SR-TB4/TB4WP  
• Vertically adjustable to max 5°, horizontally to max 20°



On the wall  
SR-WB4/WB4WP  
• Horizontally adjustable to max. 30°



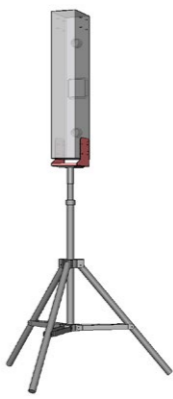
Hanging  
SR-SA4



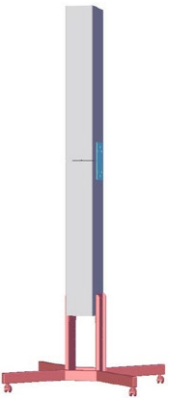
For protection  
SR-PP4



On the stand  
SR-SA4







On the stand  
SR-FS4



### Accessories

		Article number
	Flying Bracket	SR-FB4*
	Extension Plate	SR-EP4*
	Extension Plate, outdoor use	SR-EP4WP
	Wall Mounting Bracket	SR-WB4*
	Wall Mounting Bracket, outdoor use	SR-WB4WP

\*Indoor use only

		Article number
	Wall Tilt Bracket	SR-TB4*
	Wall Tilt Bracket, outdoor use	SR-TB4WP
	Stand Adapter	SR-SA4*
	Protection Pad	SR-PP4

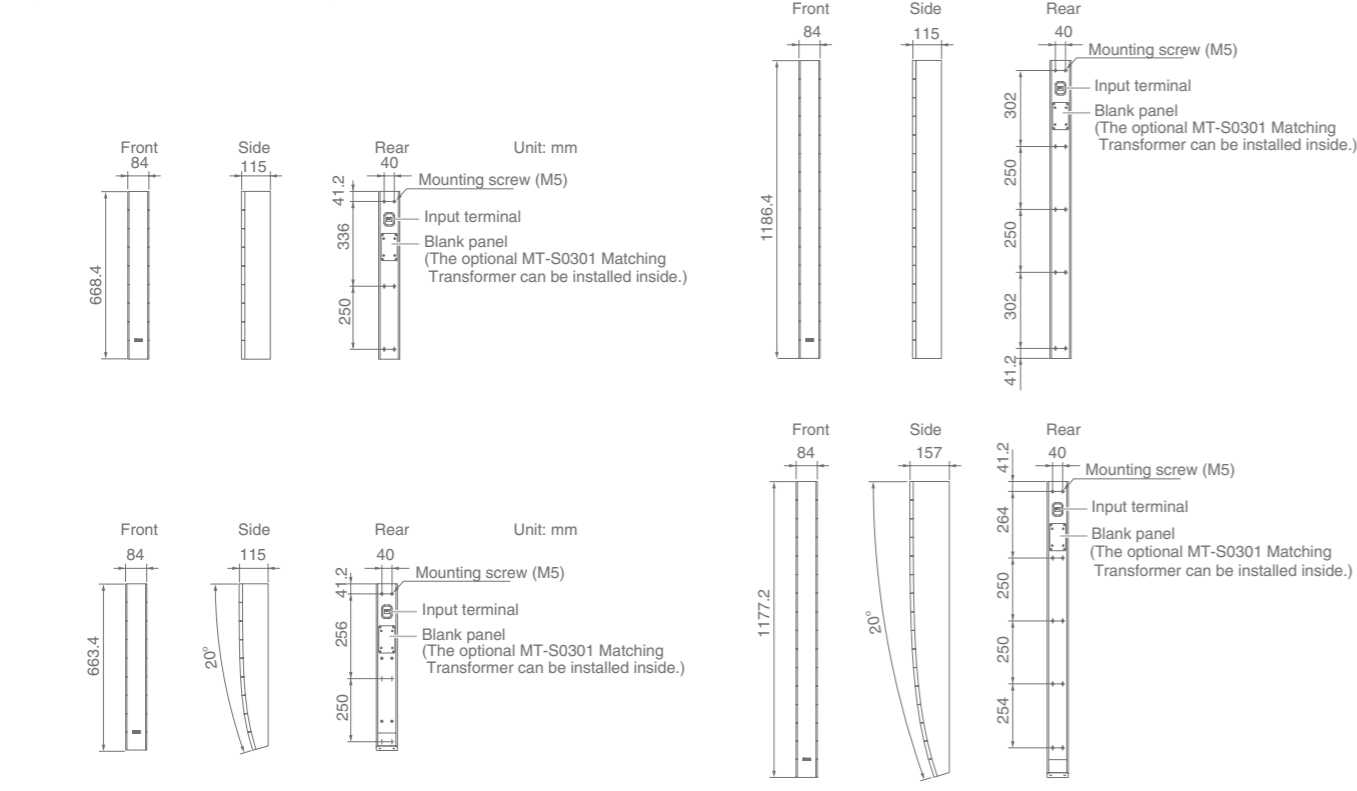
# Speakers


Slim Line Arrays / **Type H**





Ultra slim enclosure for clearly intelligible speech

### Features

- Sync-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-H3L/H3S)
- Power handling – 180W (SR-H2L/H2S) /360W (SR-H3L/H3S)
- Short length models contain 9 x 7 cm (2.8") full-range speakers, while the taller long models come with 16 speakers
- Attractive 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-S0601





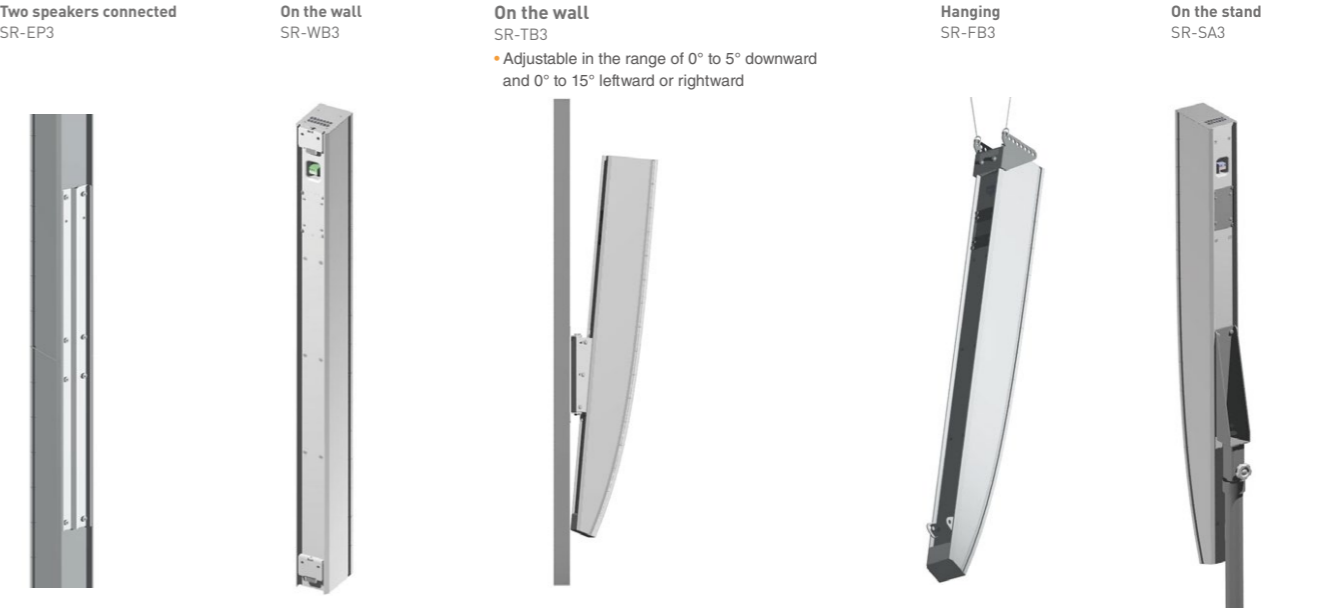





Specifications	SR-H2L	SR-H2S	SR-H3L	SR-H3S
Power Handling Capacity	Continuous program: 180 W		Continuous program: 360 W	
Rated Impedance			8 Ω	
Sensitivity (1W, 1 m)	92 dB	90 dB	95 dB	92 dB
Frequency Response	80 Hz – 18 kHz	90 Hz – 17 kHz	110 Hz – 18 kHz	90 Hz – 17 kHz
Speaker Component	7 cm cone-type x 9		7 cm cone-type x 16	
Directivity Angle	Horizontal: 90°/ Vertical: 0°	Horizontal: 90°/ Vertical: 20°	Horizontal: 90°/ Vertical: 0°	Horizontal: 90°/ Vertical: 20°
Finish	Enclosure: MDF, white, paint / Front grille: Punched steel plate, white, acrylic paint			
Dimensions (W x H x D)	84 x 668.4 x 115 mm	84 x 663.4 x 115 mm	84 x 1,186.4 x 115 mm	84 x 1,177.2 x 157 mm
Weight	4.4 kg	4.2 kg	7.6 kg	7.9 kg



Slim Line Arrays / **Type H**

### Mounting Options



### Accessories

		Article number			Article number
	Wall Tilt Bracket	SR-TB3		Stand Adapter	SR-SA3
	Wall Mounting Bracket	SR-WB3		Matching Transformer	MT-S0301
	Flying Bracket	SR-FB3		Speaker Stand	ST-34B
	Extension Plate	SR-EP3			

Speakers

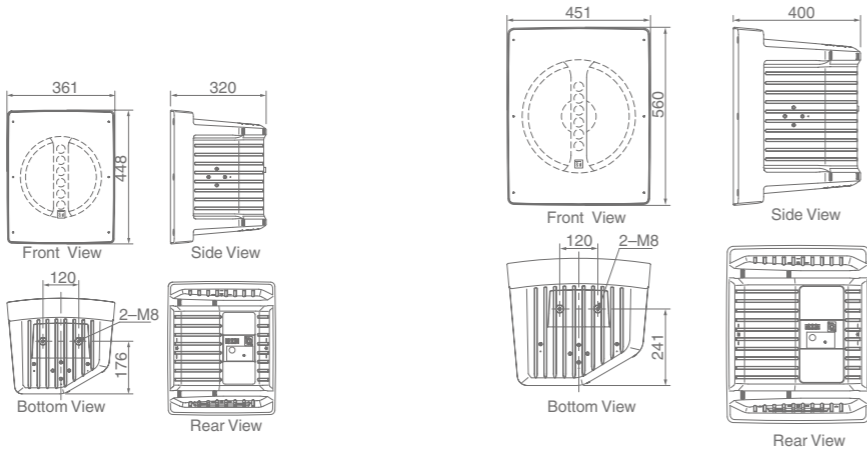
Coaxial Arrays / HS Series

Affordable coaxial array speaker for both permanent installation and portable application



Features

- Coaxial tweeter array with large-diameter woofer in a compact, lightweight enclosure
- A wide variety of optional brackets for permanent installation
- Easy to carry and easy to install, with handle for easy transportability
- Twin input terminal connections (Speakon® and screw terminal)
- Can be used as a floor monitor
- Well-controlled sound coverage : 90 ° horizontal x 40°vertical



				
Specifications	HS-120B / HS-120W	HS-1200BT / HS-1200WT	HS-150B / HS-150W	HS-1500BT / HS-1500WT
Power Handling Capacity	Continuous pink noise: 100W, Continuous program: 300W			
Rated Impedance	8 Ω	8 Ω, 100V: 170 Ω (60), 330 Ω (30), 670 Ω (15W)	8 Ω	8 Ω, 100V: 170 Ω (60), 330 Ω (30), 670 Ω (15W)
Sensitivity (1W, 1m)	97 dB			98 dB
Frequency Response	80 Hz – 20kHz	70 Hz – 20kHz		60 Hz – 20 kHz
Speaker Component	30 cm cone-type, Balanced dome-type x 6		38 cm cone-type, balanced dome-type x 6	
Connection	Neutrik NL4MP Speakon and M4 screw terminal, distance between barriers: 9mm			
Finish	Polypropylene, black (HS-120B) or white (HS-120W)			
Dimensions (W x H x D)	361 x 448 x 320 mm		451 x 560 x 400 mm	
Weight	8.5kg	10kg	12kg	14kg

Mounting Options



Accessories

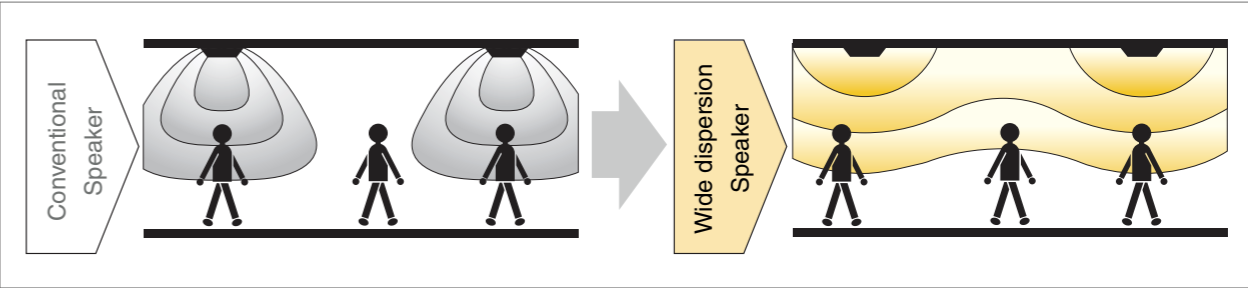
		Article number	HS-120B/HS-1200BT	HS-120W/HS-1200WT	HS-150B/HS-1500BT	HS-150W/HS-1500WT
	Wall/Ceiling Mounting Bracket, black • Horizontal orientation	HY-1200HB	•	—	—	—
	Wall/Ceiling Mounting Bracket, white • Horizontal orientation	HY-1200HW	—	•	—	—
	Wall/Ceiling Mounting Bracket, black • Vertical orientation	HY-1200VB	•	—	—	—
	Wall/Ceiling Mounting Bracket, white • Vertical orientation	HY-1200VW	—	•	—	—
	Wall/Ceiling Mounting Bracket, black • Horizontal orientation	HY-1500HB	—	—	•	—
	Wall/Ceiling Mounting Bracket, white • Horizontal orientation	HY-1500HW	—	—	—	•
	Wall/Ceiling Mounting Bracket, black • Vertical orientation	HY-1500VB	—	—	•	—
	Wall/Ceiling Mounting Bracket, white • Vertical orientation	HY-1500VW	—	—	—	•
	Wall Mounting Bracket, black • in combination with HY-1200 / HY-1500 series brackets	HY-W0801	•	—	•	—
	Wall Mounting Bracket, white • in combination with HY-1200 / HY-1500 series brackets	HY-W0801W	—	•	—	•
	Speaker Stand • in combination with HY-1200 / HY-1500 series brackets	ST-34B	•	•	•	•

# Speakers

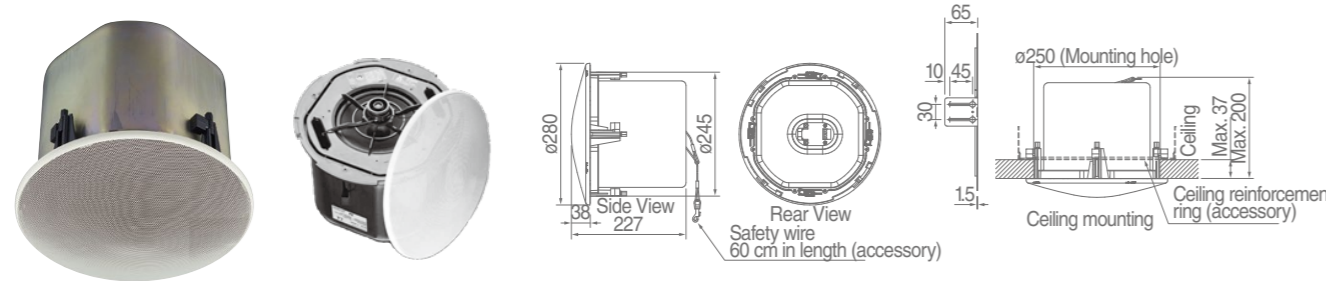
## Wide Dispersion Speaker / F Series Ceiling Type

Expanded listening coverage area through extra-wide dispersion characteristics

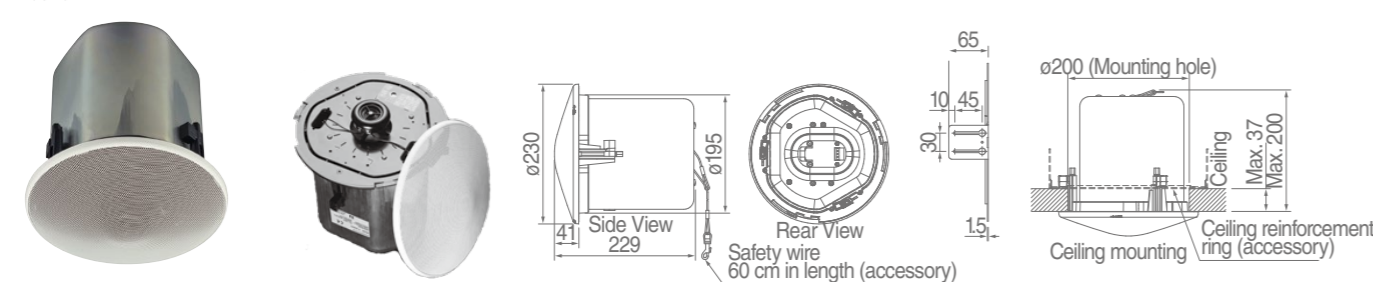
Most noticeable has always been the high-frequency roll-off that resulted from limited speaker dispersion characteristics. The F-Series provides well-balanced audio reproduction without treble attenuation over an expanded listening area thanks to the extra-wide dispersion characteristics that are part 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. Conventional speakers exhibit high frequency roll-off characteristics as the distance between speaker and listener increases. An ideal ceiling mounted speaker's response characteristics should include wide dispersion and non-frequency dependent directionality and this ceiling speaker series proves that.



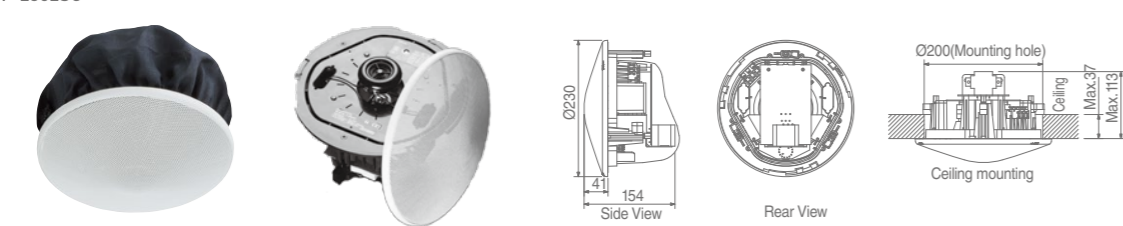
6.5" coaxial 60w  
F-2852C



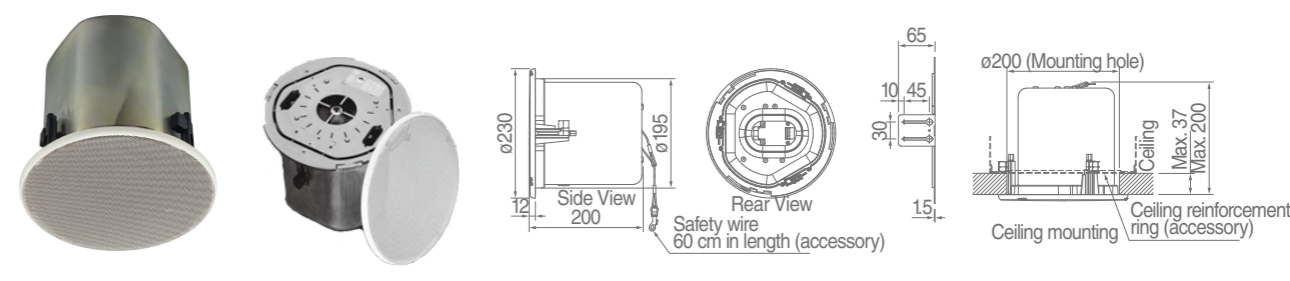
5" coaxial 30w  
F-2352C



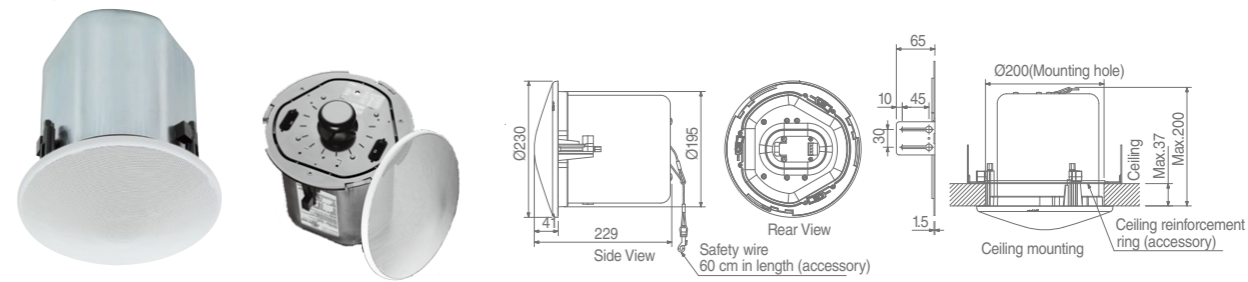
5" coaxial 6w  
F-2352SC



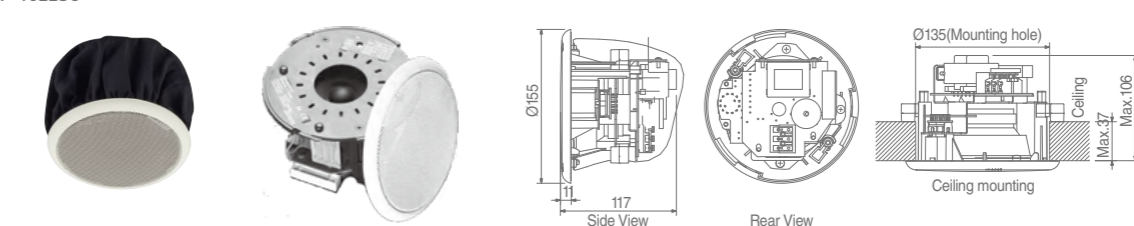
5" full-range 30w  
F-2322C



5" full-range 30w  
F-122C



4" full-range 6w  
F-1522SC



# Speakers

## Wide Dispersion Speaker / F Series Ceiling Type



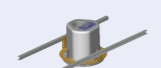




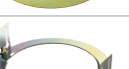
### Co-axial type

Specifications	F-2852C	F-2352C	F-2352SC
Rated Input	60W	30W	6W
Tap Settings	100 V: 60W, 30W, 15W, 3W 70V: 60W, 30W, 15W, 7.5W, 1.5W 25V: 7.5W, 3.7W, 1.9W, 0.9W, 0.2W 8Ω	100V: 30 W, 10W, 3W, 1W 70V: 30 W, 15 W, 5 W, 1.5W, 0.5W 25V: 3.7W, 1.9W, 0.6W, 0.2W, 0.06W 8Ω	100 V: 6 W, 3 W, 1W, 0.5W 70V: 6W, 3W, 1.5W, 0.5W, 0.25W 25V: 0.75W, 0.4W, 0.2W, 0.06W, 0.03W 8Ω
Sensitivity (1W, 1m)	91dB	90dB	89dB
Max SPL (Rated input, 1m)	109dB	105dB	97dB
Frequency Response	60Hz – 20kHz	70Hz – 20kHz	80Hz – 20kHz
Mounting Hole Diameter	ø250 mm	ø200mm	ø200mm
Speaker Component	Low: 6" cone-type, High: Dome-type	Low: 5" cone-type, High: Balanced dome-type	Low: 5" cone-type, High: Balanced dome-type
Color	Baffle: black/Rim: white/Punched net: white		
Dimensions	ø280 x 227(D) mm	ø230 x 229(D) mm	ø230 x 154(D) mm

### Full-range type

Specifications	F-2322C	F-122C	F-1522SC
Rated Input	30W	30W	6W
Tap Settings	100V: 30 W, 10W, 3W, 1W 70V: 30 W, 15 W, 5 W, 1.5W, 0.5W 25V: 3.7W, 1.9W, 0.6W, 0.2W, 0.06W 8Ω	100V: 30 W, 10W, 3W, 1W 70V: 30 W, 15 W, 5 W, 1.5W, 0.5W 25V: 3.7W, 1.9W, 0.6W, 0.2W, 0.06W 8Ω	100 V: 6 W, 3 W 70V: 6W, 3W, 1.5W 25V: 0.75W, 0.4W, 0.2W 8Ω
Sensitivity (1W, 1m)	90dB	90dB	88dB
Max SPL (Rated input, 1m)	105dB	105dB	96dB
Frequency Response	70Hz – 20kHz	70Hz – 20kHz	65Hz – 18kHz
Mounting Hole Diameter	ø200mm	ø200mm	ø135mm
Speaker Component	5" cone-type	5" cone-type	4" cone-type
Color	Baffle: black/Rim: white/Punched net: white		
Dimensions	ø230 x 200 (D) mm	ø230 x 229(D) mm	ø155 x 117(D) mm

### Accessories

			Article number	F-2852C	F-2352C	F-2352SC	F-2322C	F-122C	F-1522SC
		Anchor Hanging Bracket	HY-AH1	•	•	• w/HY-RR2	•	•	—
		Tile Bar Bridge	HY-TB1	•	•	• w/HY-RR2	•	•	—
		Back Can	HY-BC1	—	•	•	•	•	—
		Trim Ring	HY-TR1	—	•	• w/HY-RR2	•	•	—
		Reinforcement Ring	HY-RR1	—	—	—	—	—	•
		Reinforcement Ring	HY-RR2	—	—	•	—	—	—

# Speakers

## Wide Dispersion Speaker / F Series Box

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

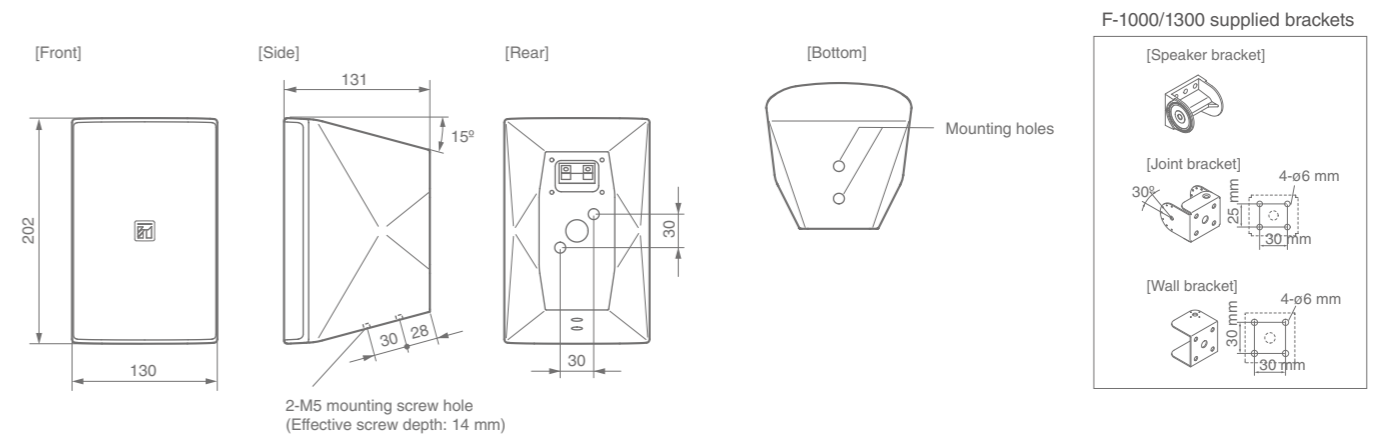


### Features

- 2-way speaker with high quality woofer and balanced dome tweeter
- Octagonal horn for clear, wide-area sound coverage
- Wide dispersion angle - F-1000: 90° x 90°, F-1300/2000: 110° x 100°
- Easily mountable 80°x 80°dispersion angle horn adapter for increased dispersion control(F-2000 only)
- Built-in speaker protection for low impedance models
- Easy impedance selection by rotary switch
- Great variety of brackets available
- Speaker bracket, joint bracket, wall bracket, bracket fixing screw included
- Stylish and highly rigid speaker casing design



with horn adapter

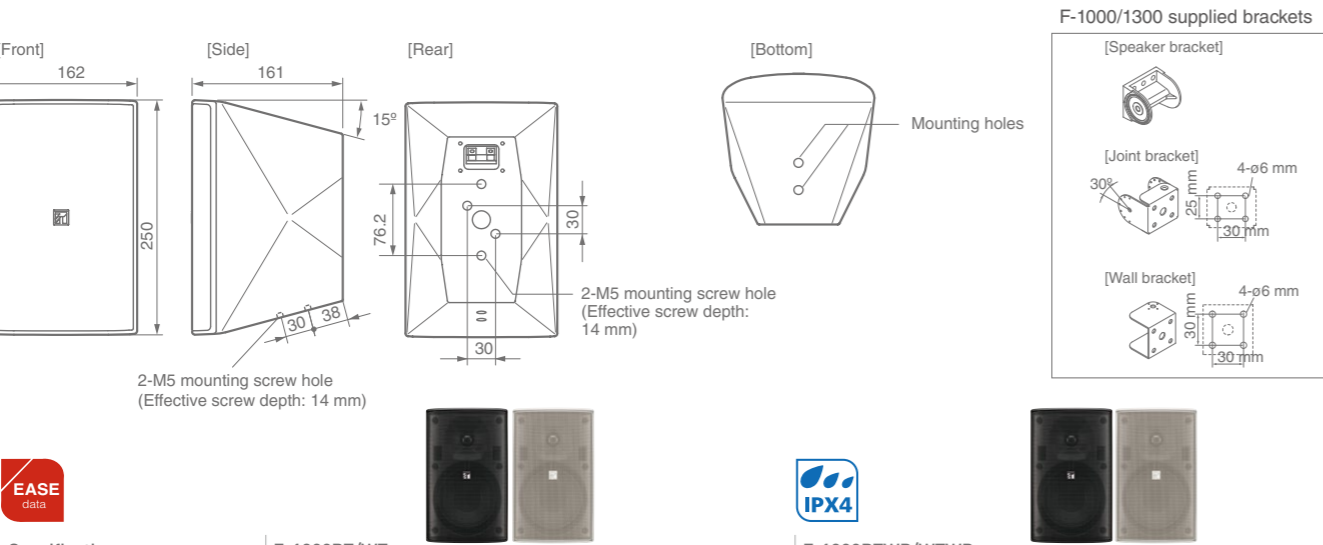


Specifications	F-1000BT/WT	F-1000BTWP/WTWP
Rated Input	15W	15W
Tap Settings	100 V: 15W, 5W, 3W, 1W 70V: 15W, 7.5W, 2.5W, 1.5W, 0.5W 8Ω	100 V: 15W, 5W, 3W, 1W 70V: 15W, 7.5W, 2.5W, 1.5W, 0.5W
Sensitivity (1W, 1m)	87dB	
Max SPL (Rated input, 1m)	99dB	
Frequency Response	85Hz – 20kHz	
Directivity Angle	H: 90 deg, V: 90 deg.	
Speaker Component	Low: 4" cone-type, High: Balanced dome tweeter	
Color	black or white	
Dimensions	130 (W) x 202 (H) x 131(D) mm	

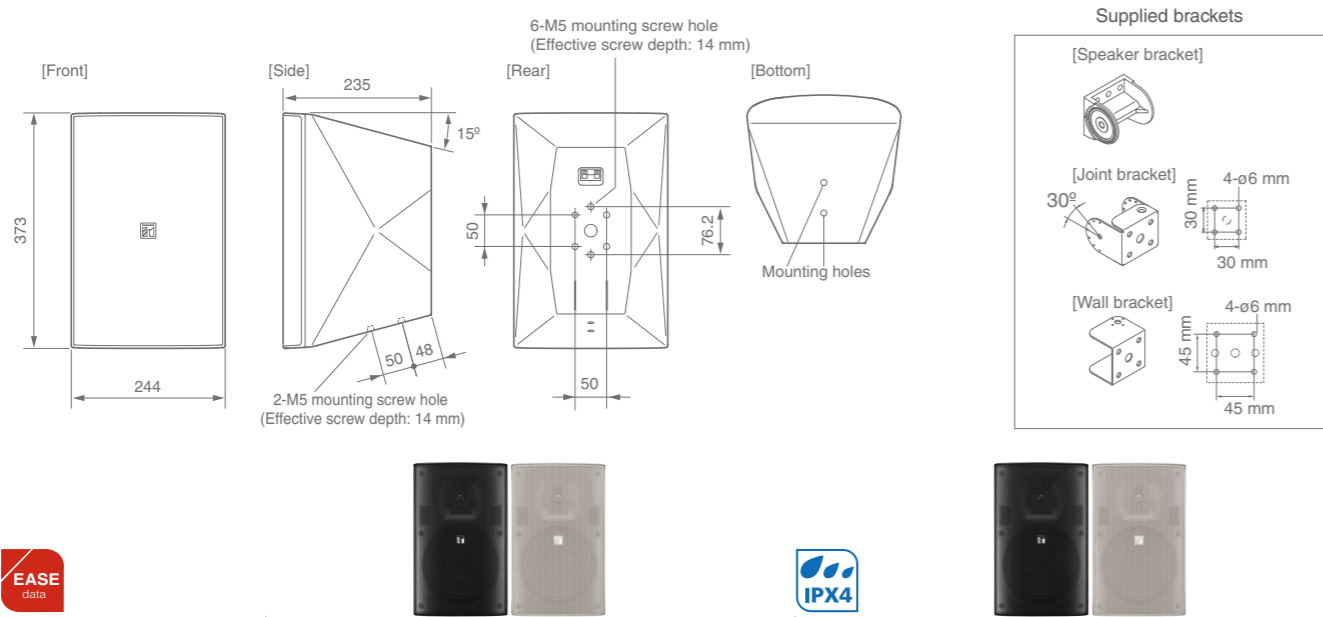


# Speakers

## Wide Dispersion Speaker / F Series Box



Specifications	F-1300BT/WT	F-1300BTWP/WTWP
Rated Input	30W	30W
Tap Settings	100 V: 30W, 10W, 3W, 1W 70V: 30W, 15W, 5W, 1.5W, 0.5W 8Ω	100 V: 30W, 10W, 3W, 1W 70V: 30W, 15W, 5W, 1.5W, 0.5W
Sensitivity (1W, 1m)	90dB	
Max SPL (Rated input, 1m)	105dB	
Frequency Response	80Hz – 20kHz	
Directivity Angle	H: 110 deg, V: 100 deg.	
Speaker Component	Low: 5" cone-type, High: 1" dome tweeter	
Color	black or white	
Dimensions	162 (W) x 250 (H) x 161(D) mm	

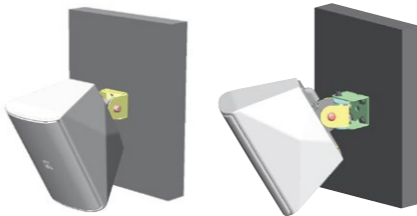


Specifications	F-2000BT/WT	F-2000BTWP/WTWP
Rated Input	60W	60W
Tap Settings	100 V: 60W, 30W, 15W, 3W 70V: 60W, 30W, 15W, 7.5W, 1.5W 8Ω	100 V: 60W, 30W, 15W, 3W 70V: 60W, 30W, 15W, 7.5W, 1.5W
Sensitivity (1W, 1m)	92dB/93dB (with horn adapter)	
Max SPL (Rated input, 1m)	110dB	
Frequency Response	65Hz – 20kHz	
Directivity Angle	H: 110 deg, V: 100 deg. /H: 80 deg., V: 80 deg. (with horn adapter)	
Speaker Component	Low: 8" cone-type, High: 1" dome tweeter	
Color	black or white	
Dimensions	244 (W) x 373 (H) x 235(D) mm	

### Mounting Options

#### With supplied brackets

##### Wall Mount

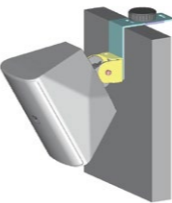


##### Ceiling Mount

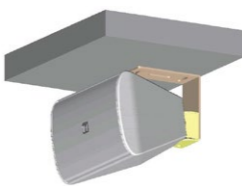


#### With optional brackets

##### Board wall mount (indoor use) HY-BH10B



##### Ceiling Mount (indoor use) HY-CM10B / HY-CM10W HY-CM20B / HY-CM20W



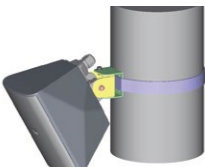
##### Cluster mount (indoor use) HY-CL10B / HY-CL20B






##### On the stand (indoor use) ST-16A



##### Pole Mount (outdoor) YS-60B



		Article number	F-1000	F-1300	F-2000
	Cluster Bracket	HY-CL10B	•	•	—
	Wall / Ceiling Bracket, black	HY-CM10B	•	•	—
	Wall / Ceiling Bracket, white	HY-CM10W	•	•	—
	Cluster Bracket	HY-CL20B	—	—	•
	Board Hanger Bracket	HY-BH10B	•	•	—

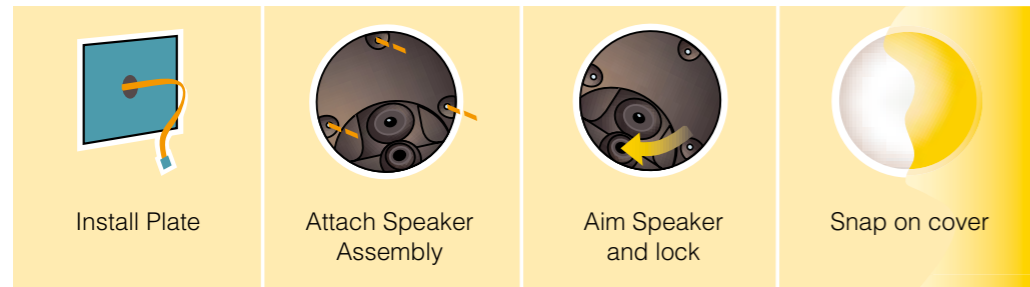
		Article number	F-1000	F-1300	F-2000
	Wall / Ceiling Bracket, black	HY-CM20B	—	—	•
	Wall / Ceiling Bracket, white	HY-CM20W	—	—	•
	Pole Mount (outdoor)	YS-60B	•	•	•
	Speaker Stand	ST-16A	•	•	•

# 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 H-1 and 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° 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.

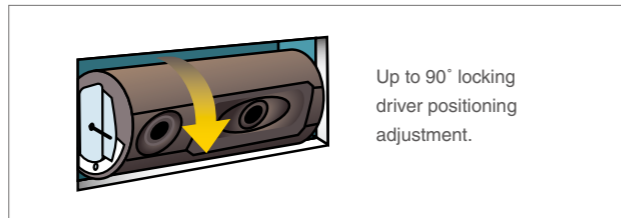
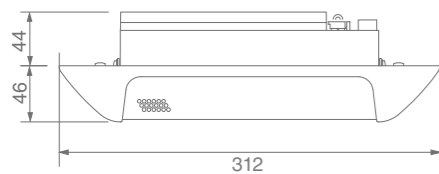


### Common features :

- Sleek and attractive, no brackets required
- Paintable grilles blend into architecture

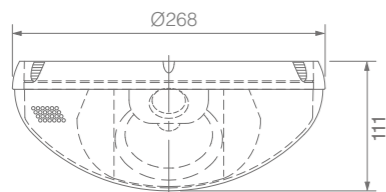
### H-1 Features

- Flush-mount speaker
- Wall or ceiling mount
- Rotate within housings for flexible aiming
- 1" balanced dome tweeter and 3" x 2" cone woofer
- Either low impedance (4Ω/16Ω) or high impedance (70V/100V) operation



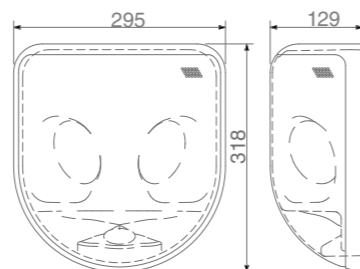
### H-2/H-2WP Features

- Surface-mount speaker on the wall or ceiling
- Rotate within housings for flexible aiming
- Weather-proof version available (H-2WP)
- 1" balanced dome tweeter and 4" cone woofer
- Either low impedance (4Ω/16Ω) or high impedance (70V/100V) operation



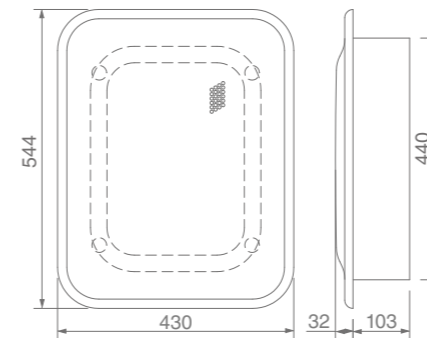
### H-3/H-3WP Features

- Surface-mount speaker on the wall
- Weather-proof version available (H-3WP)
- 1" soft dome tweeter with neodymium magnet and 2 x 4" cone woofers
- Either low impedance (8 Ω / 16 Ω) or high impedance (70 V / 100 V) operation



### HB-1 Features

- Flush-mount speaker
- For undisturbed interior aesthetics
- Acoustic super-woofer with acoustical bandpass filtering construction
- High-power 8" cone woofer with ferrite magnet and aluminum bobbin
- Low impedance (8Ω) operation



Specifications	H-1		H-2		H-2WP	
	12W		12W		12W	
Rated Input	12W		12W		12W	
Tap Settings	100V: 12W, 6W, 3W 70V: 12W, 6W, 3W, 1.5W 4Ω, 16Ω		100V: 12W, 6W, 3W 70V: 12W, 6W, 3W, 1.5W 4Ω, 16Ω		100V: 12W, 6W, 3W 70V: 12W, 6W, 3W, 1.5W 4Ω, 16Ω	
Sensitivity (1W, 1m)	85dB		88dB		88dB	
Max SPL (Rated input, 1m)	96dB		99dB		99dB	
Frequency Response	120Hz – 20kHz		100Hz – 20kHz		100Hz – 20kHz	
Speaker Component	Low: 3" x 2" cone-type, High: Balanced dome-type		Low: 4" cone-type, High: Balanced dome-type		Low: 4" cone-type, High: Balanced dome-type	
Color			white			
Dimensions	312 (W) x 126 (H) x 90(D) mm				ø268 x 111 (H) mm	

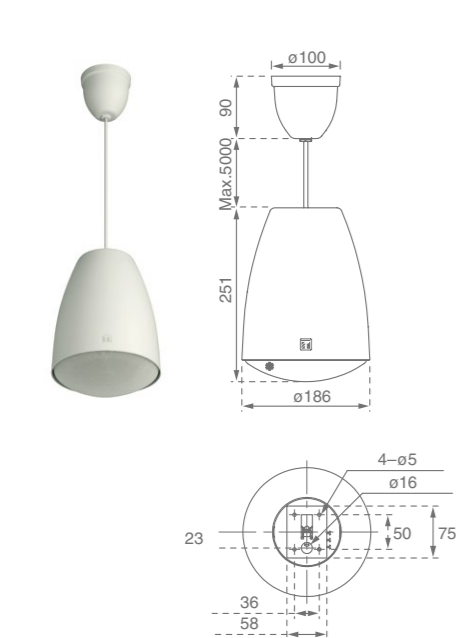
Specifications	H-3		H-3WP		HB-1	
	30W		30W		240W (continuous program)	
Rated Input	30W		30W		240W (continuous program)	
Tap Settings	100V: 30W, 15W, 7.5W 70V: 30W, 15W, 7.5W, 3.75W 8Ω, 16Ω		100V: 30W, 15W, 7.5W 70V: 30W, 15W, 7.5W, 3.75W 8Ω, 16Ω		8Ω	
Sensitivity (1W, 1m)	89dB		89dB		91dB	
Max SPL (Rated input, 1m)	104dB		104dB		115dB	
Frequency Response	100Hz – 20kHz		100Hz – 20kHz		45 – 200Hz	
Speaker Component	Low: 4" cone-type x 2, High: 1" dome-type (neodymium magnet)		Low: 4" cone-type x 2, High: 1" dome-type (neodymium magnet)		8" cone speaker	
Color	Enclosure: black/Frame: off-white/Punched net: off-white		Enclosure: black/Frame: off-white/Punched net: off-white		Punched net: off-white	
Dimensions	295 (W) x 318 (H) x 129 (D) mm				430 (W) x 544 (H) x 135 (D) mm	

# Speakers

Design Speakers / **PE, PJ Series**

Inspired by the finest lighting fixtures for a perfect harmony with architecture and decor.

The PE and PJ Series are bass-reflex HIPS resin enclosure 5" (12cm) 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.



## Features

- Ideally suited for BGM and announcements
- Excellent sound quality
- Sturdy cable extendable up to 5 meters
- Repaintable
- Input impedance easily changeable
- PE-304: Either low impedance (8Ω) or high impedance (70V/100V) operation

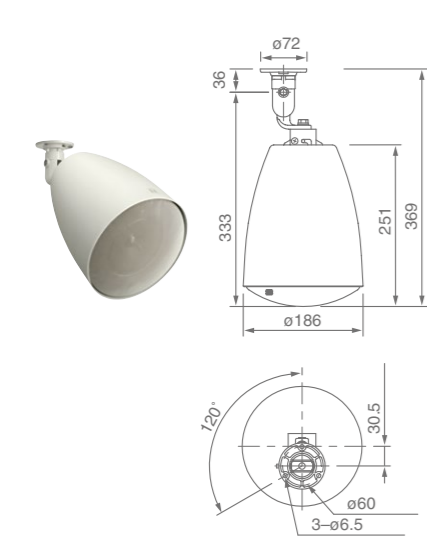


Specifications	PE-64	PE-304
Rated Input	6W	30W
Tap Settings	100 V: 6 W, 3 W, 1W 70V: 3W, 1.5 W, 0.5W	100V: 30 W, 20W, 15W, 10W, 5W 70V: 30 W, 20W, 15 W, 10W, 5 W 8Ω
Sensitivity (1W, 1m)	90dB <sup>*1</sup>	91dB <sup>*1</sup>
Max SPL (Rated input, 1m)	98dB	106dB
Frequency Response	100Hz – 18kHz	70Hz – 20kHz
Speaker Component	5" cone-type	5" cone-type + balanced dome tweeter
Color	Off-white (RAL 9010 or equivalent)	
Dimensions	ø186 x 251(H)mm (unit only)	ø186 x 251(H) mm (unit only)

<sup>\*1</sup>... 500Hz - 5kHz, pink noise

## Features

- Flexible speaker direction adjustment with accessory brackets
- Repaintable
- Ceiling or wall mount
- Input impedance easily changeable
- PJ-304: Either low impedance (8Ω) or high impedance (70V/100V) operation



Specifications	PJ-64	PJ-304
Rated Input	6W	30W
Tap Settings	100 V: 6 W, 3 W, 1W 70V: 3W, 1.5 W, 0.5W 8Ω	100V: 30 W, 20W, 15W, 10W, 5W 70V: 30 W, 20W, 15 W, 10W, 5 W 8Ω
Sensitivity (1W, 1m)	90dB <sup>*1</sup>	91dB <sup>*1</sup>
Max SPL (Rated input, 1m)	98dB	106dB
Frequency Response	100Hz – 18kHz	70Hz – 20kHz
Speaker Component	5" cone-type	5" cone-type + balanced dome tweeter
Color	Off-white (RAL 9010 or equivalent)	
Dimensions	ø186 x 369 (H)mm	ø186 x 369 (H)mm

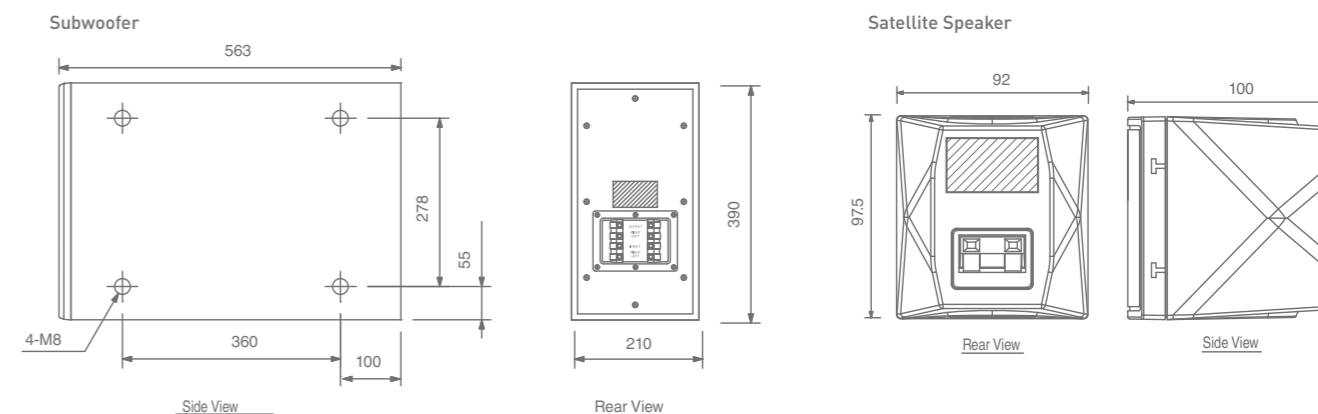
<sup>\*1</sup>... 500Hz - 5kHz, pink noise

Satellite Speaker System / **BS-301**

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.
- Compact and highly efficient in performance.
- The mounting brackets fitted onto the satellite speakers can be for 1 speaker or 2 speakers installation.
- Horizontal and vertical angles can be easily adjusted during installations onto ceilings or walls.



## Specifications

	BS-301B	BS-301W
Power Handling Capacity	Continuous Program: 160W x 2ch	
Rated Impedance	4Ω x 2ch	
Sensitivity (1W, 1m)	81dB x 2ch	
Max SPL (Rated input, 1m)	104dB x 2ch	
Frequency Response	40Hz - 20kHz x 2ch	
Speaker Component	Subwoofer: 6.5" cone-type x 2, Satellite Speaker: 3" cone-type	
Color	Black	White
Dimensions	Subwoofer: 210(W) x 390(H) x 563(D) mm Satellite Speaker: 92(W) x 97.5(H) x 100(D) mm	

## Accessories

### For Satellite speaker

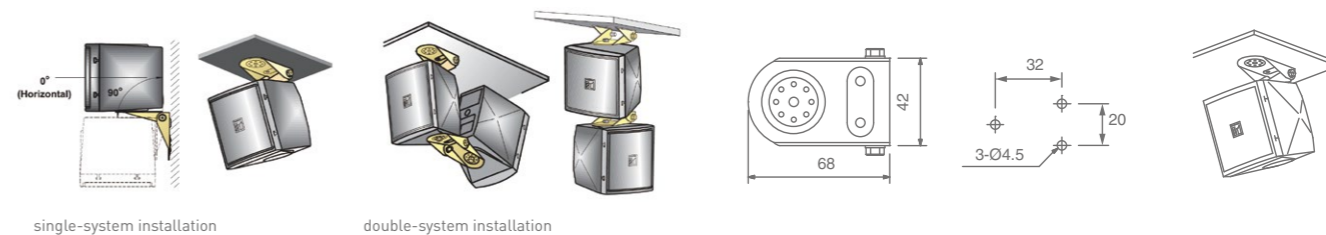


Indoor use only  
Available in Black or White color

### For Subwoofer



## Mounting Options



# Power Amplifiers

## Digital Amplifier / DA Series

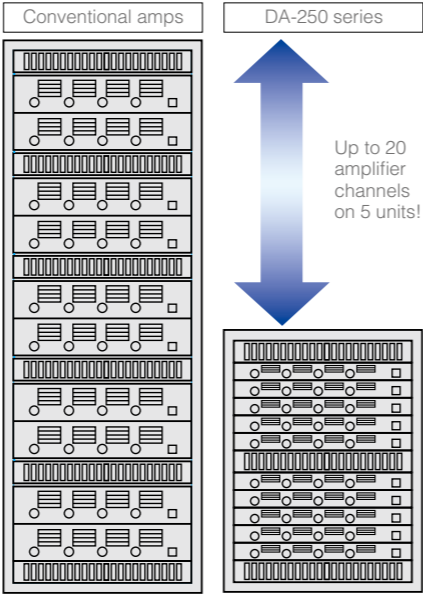
The power supply unit is the heart of the amplifier. To ensure consistently high performance and reliable operation, TOA engineers have given the DA Series a system that provides power independently to each of the four channels.

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

Never compromise ? that's the TOA philosophy.

### Features

- High reliability**  
The DA amplifier has a comprehensive protection circuitry for protection against excessive current flow due to overload, short circuit, unusual DC voltage output, and power amplifier heat sink temperature rise ( over 100°C), temperature rise inside the unit (over 80°C).
- Amplifier with lightweight design**  
Installation has become much easier thanks to the lightweight design.
- High efficiency**  
Extremely high amplification efficiency of 80-90%, resulting in reduction in power consumption by more than 60% compared with Class-AB amplifiers.
- Highly durable**  
Stands up to extended hours of operation. The DA amplifier has undergone a large number 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 they require only a small installation space. Because the amplifiers do not generate much heat, 5 units can be stacked together in a rack.
- Independent power supply**  
Each of the channels has its own power supply. If the power supply of Channel 1 should fail, this won't affect the operation of Channel 2. It is also possible to use the either channel as a spare amplifier.



Comparison DA-250 vs. conventional multichannel amp

### Dual-Channel Power Amplifier

DA-250D (CE301/CU version)  
DA-250DH (CE301/CU version)



### 4-Channel Power Amplifier

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



## Digital Amplifier / DA Series

### 4-Channel Power Amplifier

DA-550F (CE301/CU version)  
DA-500F-HL (CU version)  
DA-500FH (CE301 version)



### Matching Transformer

MT-251H



CE301 version	DA-250D	DA-250DH	DA-250F	DA-250FH	DA-550F	DA-500FH
Power Source	220 – 240V AC, 50/60Hz					
Number of Channels	2			4		
Power Consumption* Rated power consumption 1kHz 8 ohms 4 ohms 100 Volts	400W, 2.8A 620W, 4.2A —	— 580W, 3.9A	800W, 5.8A 1200W, 8.7A —	— 1150W, 8.3A	1550W, 11.3A 2750W, 19.9A —	— 2300W, 16.8A
S/N Ratio (A weighted)	100dB					
Crosstalk at 10kHz (A weighted)	70dB					
Inputs Input impedance Input sensitivity Input clipping	10kΩ (unbalanced), 20kΩ (balanced) +4dB (1.23V) 14V (25.1dBu)				10kΩ (unbalanced), 20kΩ (balanced) +4dB (1.23V) 12V (23.8dBu)	
Rated Output	2 channels: 250 W x 2 (4 Ω), 170 W x 2 (8 Ω) 1 channel (BRIDGE): 500 W (8 Ω)	2 channels: 250 W x 2 (100 V line, 40 Ω)	4 channels: 250 W x 4 (4 Ω), 170 W x 4 (8 Ω) 2 channels (BRIDGE): 500 W x 2 (8 Ω)	4 channels: 250 W x 4 (100 V line, 40 Ω)	4 channels: 550 W x 4 (4 Ω), 350 W x 4 (8 Ω) 2 channels (BRIDGE): 1,100 W x 2 (8 Ω)	4 channels: 500 W x 4 (100 V line, 20 Ω)
Protection Circuit Amplifier section Power supply section	DC output, overheat protection, load shorting, overload current, maximum output Overheat protection, AC rush current					
Dimensions	482 (W) × 44 (H) × 401.8 (D)mm				482 (W) × 88.4 (H) × 404.2 (D)mm	
Weight	5.3kg			6.8kg		9kg

CU version	DA-250D	DA-250DH	DA-250F	DA-250FH	DA-550F	DA-500F-HL
Power Source	120V AC, 50/60Hz					
Number of Channels	2			4		
Power Consumption* Rated power consumption 1kHz 8 ohms 4 ohms 100 Volts	420W, 5.9A 650W, 8.7A —	— 580W, 7.8A	850W, 11.7A 1300W, 16.9A —	— 1200W, 15.9A	1650W, 22.4A 2800W, 35.5A —	2600W, 33.2A 580W, 9.1A 2350W, 30.4A
S/N Ratio (A weighted)	100dB					
Inputs Input impedance Input sensitivity Input clipping	10kΩ (unbalanced), 20kΩ (balanced) +4dB (1.23V) 14V (25.1dBu)				10kΩ (unbalanced), 20kΩ (balanced) +4dB (1.23V) 12V (23.8dBu)	
Rated Output	2 channels: 250 W x 2 (4 Ω), 170 W x 2 (8 Ω) 1 channel (BRIDGE): 500 W (8 Ω)	2 channels: 250 W x 2 (70 V line, 19.6 Ω) 1 channel (BRIDGE): 500 W (140 V line, 39.2 Ω)	4 channels: 250 W x 4 (4 Ω), 170 W x 4 (8 Ω) 2 channels (BRIDGE): 500 W x 2 (8 Ω)	4 channels: 250 W x 4 (70 V line, 19.6 Ω) 2 channels (BRIDGE): 500 W x 2 (140 V line, 39.2 Ω)	4 channels: 550 W x 4 (4 Ω), 350 W x 4 (8 Ω) 2 channels (BRIDGE): 1,100 W x 2 (8 Ω)	4 channels: 500 W x 4 (70 V line, 9.8 Ω), 550 W x 4 (8 Ω), 100 W x 4 (4 Ω) 2 channels (BRIDGE): 1,000 W x 2 (140 V line, 19.6 Ω), 1,100 W x 2 (16 Ω)
Protection Circuit Amplifier section Power supply section	M4 screw terminal, distance between barriers: 8.8 mm (0.35") DC output, overheat protection, load shorting, overload current, maximum output Overheat protection, AC rush current					
Dimensions	482 (W) × 44 (H) × 401.8 (D)mm				482 (W) × 88.4 (H) × 404.2 (D)mm	
Weight	6.6kg			5kg		8.8kg

0 dB = 0.775Vrms  
\*Typical data

# Mixer Power Amplifiers

## Mixer Amplifier / A-5000

### Stylish, reliable with unmatched performance

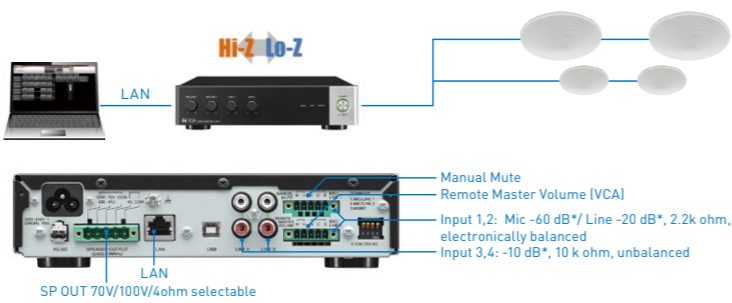
The TOA A-5000 series offers the ability to control your music just the way you want it with built-in digital signal processors (DSP) that boast high efficiency and durability.

A-5006 60W  
A-5012 120W



#### Features

- 1U-half size compact and simple hardware for easy setting
- Hi-/Low-Z speaker connection
- 60W and 120W models
- 2 x mic/line inputs with mute
- Intuitive GUI software for sound optimization
  - High pass filter and 4-point Parametric Equalizer for each input
  - Feedback Suppressor for input 1 and 2
  - Compressor for each input 1 and 2
  - Manual and Auto Mute
  - 10-point filter for each output (High-pass/Low-pass/PEQ)
  - 5-point speaker Parametric Equalizer with built-in preset EQ library of TOA's speakers



Specifications	A-5006	A-5012
Power Source	100 - 240 V AC, 50/60 Hz	
Rated Output	60W	120W
Power/ Current Consumption	106W (rated output), 20W (based on cULus standards) Max. 2 A	207W (rated output), 39W (based on cULus standards) Max. 3 A
Frequency Response	50 Hz - 20 kHz (1/8 output)	
Distortion	1 % or less (1 kHz, rated output)	
Input	INPUT 1, 2: MIC -60 dB*, LINE -20 dB*, MIC/LINE selectable 2.2k ohms, electronically-balanced, removable terminal block (5 pins) INPUT 3, 4: LINE -20 dB*, 10k ohms, unbalanced, RCA pin jack	
Output	SPEAKER: 4 ohms, 70 V (83 ohms), 100 V (170 ohms) removable terminal block (5 pins)	Speaker: 4 ohms, 70 V (42 ohms), 100 V (83 ohms) removable terminal block (5 pins)
S/N Ratio	MIC 1, 2: 50 dB or more, LINE 1 - 4: 70 dB or more (A-weighted)	
Function	Equalizer: 5 points settable on each input (High-pass filter x 1, Parametric equalizer x 4), FBS: settable on input 1 and 2, Compressor: settable on input 1 and 2, Mute: MANUAL/AUTO/OFF settable on each input, Equalizer: 10 points settable on output (Through, Low-pass filter, Parametric equalizer, High-pass filter), Speaker parametric equalizer: 5 points settable on each output	
Finish	Panel: PS resin, black, Case: Surface-treated steel plate, black, paint	
Dimensions	210 (W) X 52.5 (H) X 375 (D) mm	
Weight	3.6 kg	3.9 kg

## Mixer Amplifier / MX-6224D

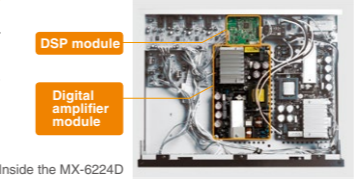
### Mosque sound made simple - pray with faith.



#### Features

##### • Superior Sound QUALITY

Built-in digital amplifier module + DSP module, designed with state-of-the-art TOA technology.



##### • EASY Operation

Simple design, compact size. Plus remote controller for easy operation.

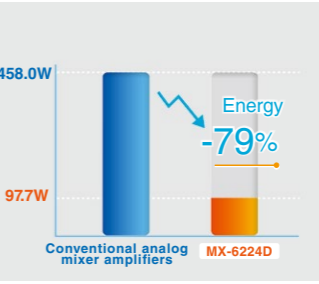


##### • SAFE, Reliable System

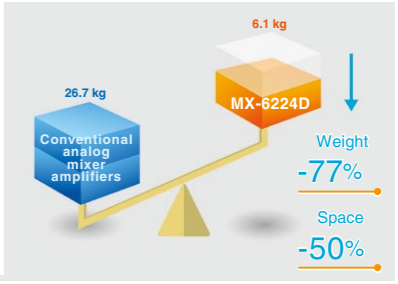


##### • ECO-FRIENDLY Performance

Energy-Efficient  
Uses considerably less power.

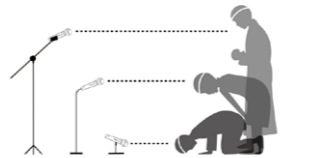


Light and Compact  
Easy to carry and install.



Note: Compared to TOA A-1724 and P-2240 models.

- 3-band EQ effective for all microphone inputs
- Digital effects for microphone inputs
- Optimal microphone sensitivity










Specifications	MX-6224D
Power Source	220 V - 240 V AC, 50/60 Hz
Power Output	240 W x 2 channels (100 V, 42 Ω, rated output)
Power Consumption	150 W (according to IEC60065), 650 W (at rated output, both channels)
Application System	Class D, Output transformerless galvanic isolated output
Frequency Response	50 Hz - 20 kHz, ±3 dB (at 1/3 rated output, rated load, from power amplifier input)
Distortion	Less than 1 % THD (at 1 kHz, 1/3 rated output power)
Output Regulation	Less than 2 dB no load to full load (at 1 kHz, 1/3 rated output power)
Input	MIC 1: -50 dB* (24 V phantom powered)/ -60 dB* (phantom power OFF) 600 Ω, electronically-balanced, ø6.3 mm phone jack MIC 2 - 4: -66 dB*, 200 Ω, electronically-balanced, XLR-3-31 type and ø6.3 mm phone jack (either one usable) MIC 5 - 6: -60 dB*, 600 Ω, electronically-balanced, XLR-3-31 type and ø6.3 mm phone jack (either one usable) AUX 1: -10 dB*, 10 kΩ mixed monaural, unbalanced, RCA pin jacks (1 pair) AUX 2: -20 dB*, 10 kΩ mixed monaural, unbalanced, ø3.5 mm mini jack (3P: stereo)  Power amplifier input: 0 dB*, 10 kΩ, unbalanced, RCA pin jacks (1 each for ROOM and OUTSIDE outputs)
Output	Speaker output: 2 zones Recording output Effect bus output Preamp output
S/N Ratio	60 dB or more (All volume controls: min.)
Dimensions	420 (w) x 99 (h) x 364.8 (d) mm
Installation Method	Desktop mount, Rack mount with mounting bracket MB-25B (option)
Weight	6.5 kg

\*0dB = 1V

# Mixers / DSP

TOA's Mixers and Digital Signal Processors at a glance

					input			bus			output				
D-2000		Max 32in/out + 2in(console) 24 bus	Console	Cobra (Dante) 16x16	TCP/IP	LPF PEQ HPF	Comp Leveler	Gate NOM Ducker	Delay	FBS		Xover	SP Filter	Comp	Delay
						Max 6				12		Max 24			
D-901		Max 12x8 1bus(mic)	Console		232C	PEQ HPF	Comp Leveler	Gate NOM Ducker	Effect	FBS		Xover	SP Filter	Comp	Delay
						3				12		Max 6			
DP-K1		Max 8x8 8 bus			TCP/IP	Filter	Comp Gate				ARC	Xover	SP Filter	Comp Gate	Delay
						Max 12					Max 12	Max 18			
M-864D		14x4	Console		TCP/IP	HPF Tone				FBS	PEQ	ARC			
						4				7	5	12			
M-633D		9x3				HPF				FBS		ARC			
										7		12			
DP-SP3		2x6			TCP/IP						LPF PEQ HPF	Xover	SP Filter	Comp	Delay
										10		12			
M-9000M2		Max 8x8			232C	LPF PEQ HPF	Comp Leveler	Gate NOM Ducker					LPF PEQ HPF	Comp Leveler	Delay
						12						12			

Communication Interface

Number of points

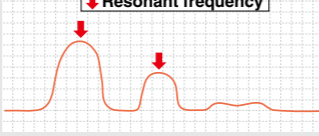
Communication Interface Number of points

## 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.

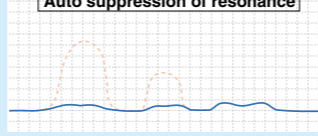
Automatically identifies room mode frequencies and applies an inverse response curve to compensate for the measured room response.

When resonance occurs




↓ Resonant frequency

With the touch of a button

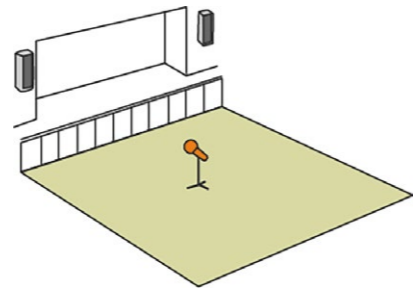


Auto suppression of resonance

ARC on




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

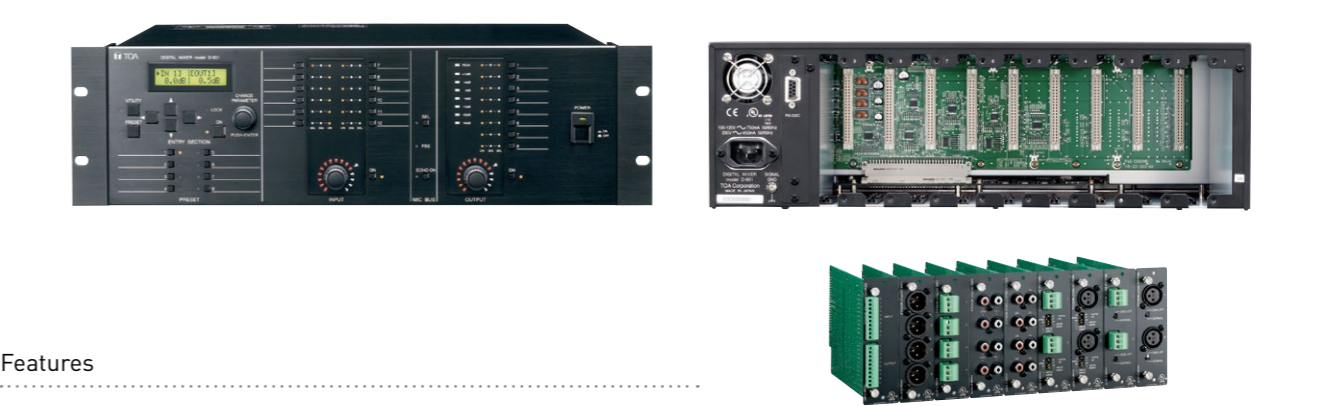


Models with ARC: DP-K1, M-864D and M-633D

## Digital Mixer / D-901

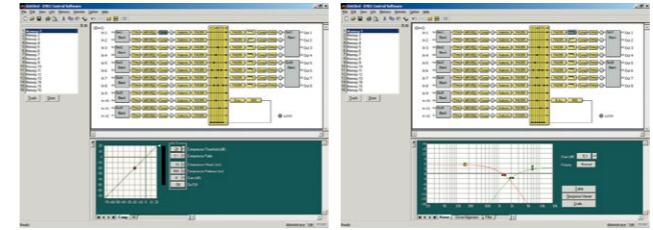
						input			bus			output			
D-901		Max 12x8 1bus(mic)	Console		232C	PEQ HPF	Comp Leveler	Gate NOM Ducker	Effect	FBS		Xover	SP Filter	Comp	Delay
						3				12		Max 6			

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

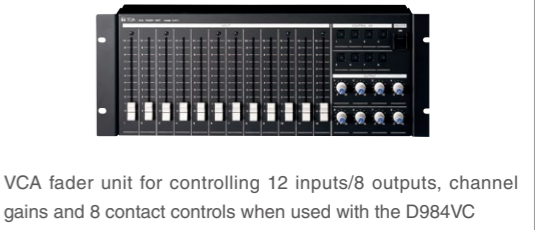


### Features

- 12-input, 8-bus, 8-output channel configuration (12 x 8 matrix) with easy operation
- Can be expanded as application requires
- Convenient front panel controls and display make it easy to perform all functions and confirm parameter settings without requiring a PC
- Ability to store up to 16 sound parameter setting configurations in memory for instant recall when required



### VCA Fader Unit

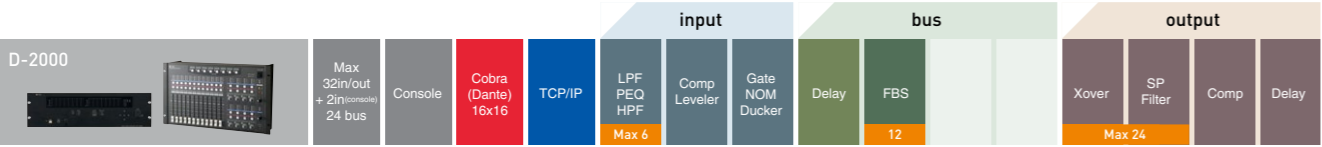


VCA fader unit for controlling 12 inputs/8 outputs, channel gains and 8 contact controls when used with the D984VC

Specifications	D-901
Power Source	(US/314L)100-120V 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	20Hz - 20kHz, ±1 dB (±4 dBu 1 Input)
Input	Max. 12 channels, modular construction (modules optional)
Output	Max. 8 channels, modular construction (modules optional)
Signal Processing	Feedback suppression function, audio mixing function(ducker, NOM attenuation), 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, delay, matrix(12 x 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 module slot: 2, Remote control module slot: 1
Finish	Panel: aluminum, hair-line finish, black / Others: pre-coated steel plate, black, 30 % gloss
Dimensions (W x H x D)	482.6 x 132.6 x 320mm (excluding projection), 3 units
Weight	6.9kg

# Mixers / DSP

## Digital Mixing System / D-2000 Series



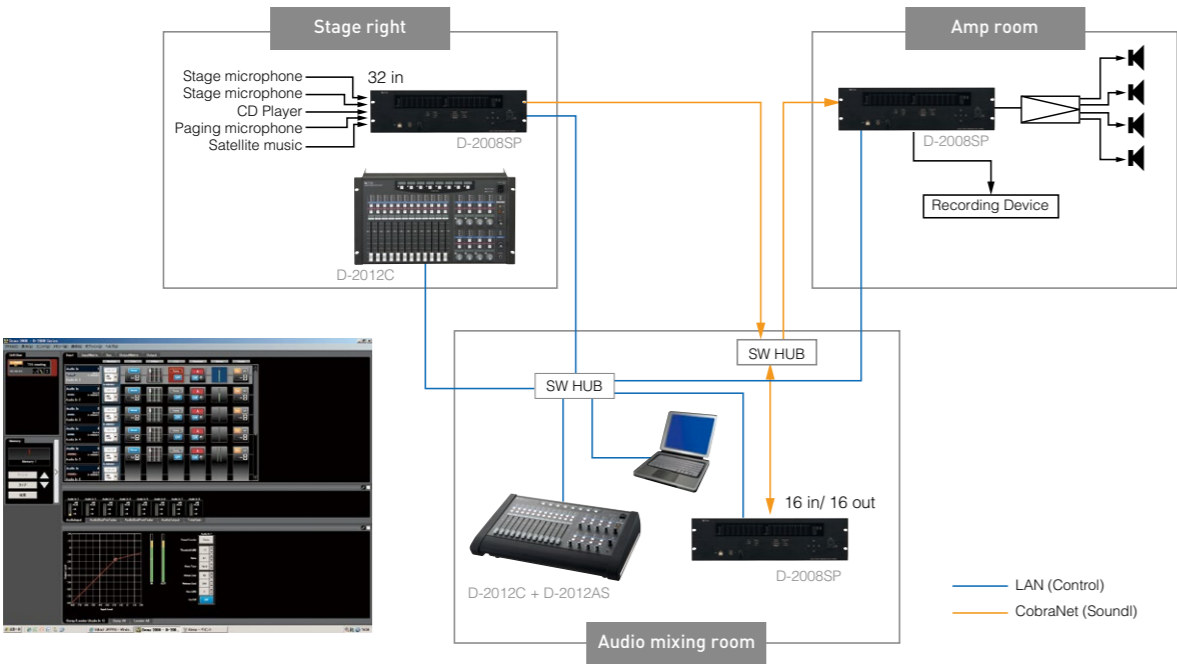
Expandable all-in-one designs offering easy operation, advanced functions and system control capabilities

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



### 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
  - Intuitive GUI
  - Mixing console offers easy user operation
  - User-friendly VCA control
- \*See page 41 for applicable modules.



## Digital Mixing System / D-2000 Series

Specifications	D-2008SP
Power Source	(CU)120V AC, 60Hz, (CE)220-240V AC, 50/60Hz, (KR)220V AC, 60Hz
Power Consumption	(CE/KR)76W, (CU)78W
Frequency Response	20 Hz – 20 kHz, ±1 dB (+4 dB Input)
Sampling Frequency	48 kHz
Inputs / Outputs	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(Ducker, NOM attenuation), 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 Functions	Key lock function
LAN	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 (between D-2008SP and switching sub)
Control	RS-232C, D-sub connector (9 pins) used for external control, Module: Remote control module slot: 2
Dimensions (W x H x D)	482 x 132.6 x 343.4 mm
Weight	6.3 kg



With D-2012AS for desktop application

Specifications	D-2012C
Power Source	(CE)220-240V AC, 50/60Hz, (KR)220V AC, 60Hz
Power Consumption	18 W
Volume Adjustment	100mm motorized fader x 12, Rotary encoder x 8
Line Input	1 channel (stereo), +10 to -20 dBu, 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 (between D-2012C and switching sub)
Control	RS-232C: D-sub connector (9 pins) for maintenance use
Dimensions (W x H x D)	482 x 266 x 138 mm
Weight	6.6 kg

### Dante™-enabled model : Q-2008SPD

#### Features

- 16-ch Dante input/output as well as 32-ch analog audio input/output
- Remote operation with exceptional transmission quality with near zero latency between another Q-2008SPD and any other Dante compatible devices
- Dante audio routing configurable on Dante Controller
- A single D-2012C Mixer Console connectable per Q-2008SPD

# Mixers / DSP

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

### Mic/Line Input Modules (Monaural)



- 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 Modules (Stereo)



- 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-972AE**
- 4-channel line output
  - XLR connectors
  - Applicable format: AES/EBU

### 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

### Remote Control Modules



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



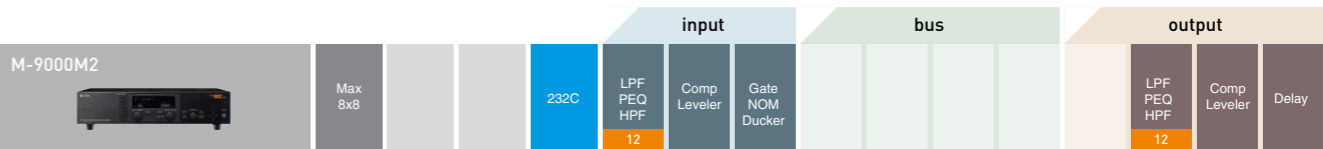
- D-983**
- 24 inputs/16 outputs
  - RJ45 connectors

### CobraNet Interface Module



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

## Digital Matrix Mixer / M-9000M2



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



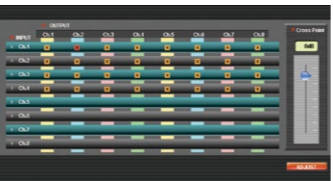
### Features

- 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 x Scene memories
- 32 x Paging memories
- Four control inputs/Four control outputs
- Up to 16 remote controllers can be connected



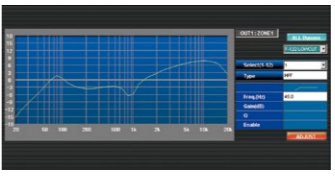
#### Cross Point Settings

Up to 32 preprogrammed broadcast patterns can be stored in the scene memory.



#### EQ Settings

Select from 3 types: LPF, HPF and PEQ. Up to 12 filters can be applied to each input-output channel. TOA's Speaker preset EQ is visible in graphic display.



#### Paging Settings

Set 3-level prioritized paging for each activation trigger (up to 32)



Mixers / DSP

Digital Matrix Mixer / Modules for M-9000M2

Dual Mic/Line Input Module with DSP



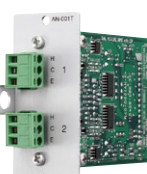
- D-001T
- Two Balanced Mic / Line Inputs
  - Digital Signal Processing
  - 10-Band Parametric EQ
  - Bass / Treble • Loudness
  - High and Low Pass Filters • Compressor
  - Adjustable Sensitivity (nine levels, -60 to -10 dBV)
  - Phantom Power (24 VDC)
  - Removable Terminal Block
  - Maximum four per chassis
  - Required for VOX function and input metering

Line Input Module with DSP



- D-001R
- Two RCA phone inputs per channel provides stereo summing
  - Digital Signal Processing
  - 10-Band Parametric EQ
  - Bass / Treble
  - Loudness
  - High and Low Pass Filters
  - Compressor

Ambient Noise Controller Module



- AN-001T
- Automatically adjusts output gain to compensate for changes in ambient noise level
  - Each input can be assigned to control a specific output
  - Two inputs with +24VDC phantom power for condenser mics
  - 14 preset gain ratios
  - Accessory sensing microphone available, model AN-9001
  - Maximum two per chassis

Telephone Zone Paging Module



- ZP-001T
- Telephone Paging to up to eight zones
  - Uses DTMF dialing to access outputs
  - Dial up to eight output zones in one operation
  - Analog extension or page port compatible
  - Page port operation requires contact closure activation
  - RJ-11 Telephone Jack and Removable Terminal Blocks
  - Maximum one per chassis

Dual Line Output Expansion module with DSP



- T-001T
- Two Balanced Line Outputs
  - Digital Signal Processing
  - 10-Band Parametric EQ
  - Bass / Treble • Loudness
  - High and Low Pass Filters
  - Compressor
  - TOA speaker EQ presets
  - Removable Terminal Block
  - Maximum three per chassis

Input/Output Control Module



- C-001T
- Eight assignable control inputs for activating Event, Volume Up/Down, Mute, Power On/Off, Emergency Mute or Sync On/Off
  - Eight assignable control outputs for activating external relays
  - Removable Terminal Block
  - Maximum one per chassis

RS-485 Control Modules



- RC-001T
- Allows use of up to 16 RS-485 remote control panels
  - Bi-directional RS-485 communication provides control and status feedback display for each remote function
  - Dual ports allows independent home runs for up to 8 modules each
  - 24V DC power adapter (optional AD-246) required for each 1 port used
  - May be used in any control option slot on 9000M2 mainframe in addition to a C-001T when spare slots are available

Digital Matrix Mixer / M-9000M2

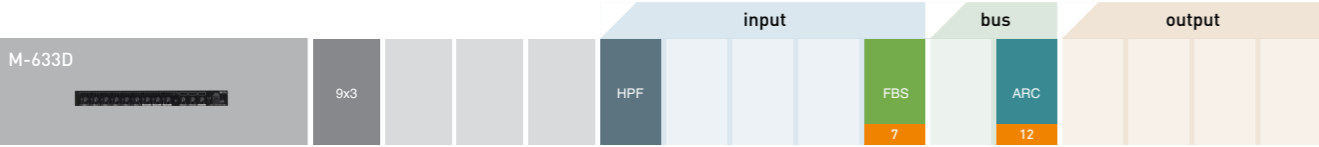
Specifications	M-9000M2
Power Source	(CU) 120V AC, 60Hz, (CE/CE-GB) 220-240V AC, 50/60Hz
Power Consumption	40W
Frequency Response	20 Hz – 20 kHz
Audio Input	Max. 8 channels, modular (modules optional)
Audio Output	Preamplifier outputs 1 and 2: 0 dBV, 600Ω, balanced, removable terminal blocks (3-pins), max. 8 outputs
Control Inputs and Outputs	RS-232C, D-sub connector (9-pins), 4 control inputs and outputs each, remote volume control, removable terminal block
Crosstalk	> 64 dB (20 kHz)
Signal Processing	Tone control (bass, treble: ±12 dB), 10-bands parametric equalizer (31 steps, Q: 0.3 ...5), 10 speaker equalizer, high pass (-12 dB / Oct), low pass (-12 dB / Oct), Compressor (depth 1 to 5), Delay (0 ... 40 ms in 1 ms steps),
Scene/Event Memory	32
Auxiliary Function	Key lock function
Finish	Front: Aluminum, black / Case: steel plate, black
Dimensions (W x H x D)	420 x 107.6 x 353 mm
Weight	6 kg (without modules)

Optional Accessories

		Article number			Article number
	Remote Panel <ul style="list-style-type: none"><li>• Six assignable buttons to activate preset selection or volume up/down</li><li>• Operates on Remote Volume Control terminal on the 9000M2 back panel</li></ul>	ZM-9001		Remote Control Panel <ul style="list-style-type: none"><li>• Eight assignable buttons each with LED status indicator can control Xpoint settings (on/off, select), paging activation, scene and relay activation</li><li>• Assignable ID rotary adjustment on box</li></ul>	ZM-9013
	Remote Panel <ul style="list-style-type: none"><li>• Four assignable buttons to activate preset selection or volume up/down</li><li>• Variable knob to control volume</li><li>• Operates on Remote Volume Control terminal on the 9000M2 back panel</li></ul>	ZM-9002		Remote Control Panel <ul style="list-style-type: none"><li>• Four assignable buttons each with LED status indicator can control Xpoint settings (on/off, select), paging activation, scene and relay activation</li><li>• Assignable ID rotary adjustment on box</li></ul>	ZM-9014
	Remote Panel <ul style="list-style-type: none"><li>• Works with contact inputs on 9000M2 mainframe and on C-001T</li><li>• Six buttons - 4 locking with label strips and two momentary buttons - may be assigned to control program change, volume up/down, channel on/mute, emergency mute, power and paging prohibit function.</li></ul>	ZM-9003		Ambient Noise Sensing Microphone <ul style="list-style-type: none"><li>• Ceiling or wall-mount condenser microphone</li><li>• Fits one gang electrical box</li><li>• Use with AN-001T module</li></ul>	AN-9001
	Remote Control Panel <ul style="list-style-type: none"><li>• Four assignable buttons each with LED status indicator can control Xpoint settings (on/off, select), paging activation, scene and relay activation</li><li>• Assignable ID rotary adjustment on box</li></ul>	ZM-9011		Speaker Selector <ul style="list-style-type: none"><li>• Switch up to four speaker lines on one amplifier output</li><li>• Two amplifier inputs for Paging/ BGM applications</li><li>• Triggered by ZP-001T module control outputs</li><li>• Wall-mount bracket included</li><li>• Requires optional 24VDC power supply, model AD-246</li></ul>	SS-9001
	Remote Control Panel <ul style="list-style-type: none"><li>• Rotary Encoder can be assigned to control any input or output volume</li><li>• Multiple input or outputs may be "ganged" for Master volume terminals</li><li>• Multi-segment LED indicator provides visual volume level status</li></ul>	ZM-9012			

# 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.



#### Features

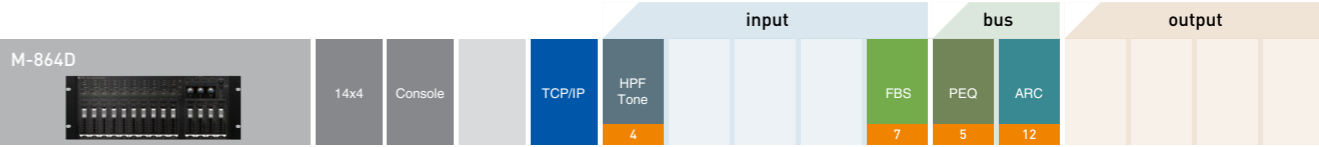
- The M-633D features 6 monaural input s, 3 stereo input s, 2 monaural output s, 1 stereo output, and 1 stereo recording output.
- Ideal for medium-size places of worship and sports arenas
- Provides automatic audio adjustment with push-button ease. You don't have to be a sound technician to operate 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 1U size.

#### Functions

<b>Automatic Resonance Control (ARC)</b> An advanced measurement and processing algorithm improves speech intelligibility and sound quality in facilities with acoustically challenging environments. This function also automatically identifies room mode frequencies and applies an inverse response curve to compensate for the measured room response.	<b>Feedback Suppressor (FBS)</b> The M-633D automatically suppresses sudden feedback that can occur when the person holding the microphone moves around.	<b>Automatic Clipguard (ACG)</b> When the input sensitivity is set to either the MIC or PHANTOM position,the sensitivity is automatically switched to the line level in the presence of excessive input levels, thus preventing sound distortion.
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Specifications	M-633D
Power Source	(CU)120V AC, 60Hz, (CE/CE-GB)220-240V AC, 50/60Hz, (KR)220V AC, 60Hz
Power Consumption	(CU)13W, (CE/CE-GB/KR)14W
Frequency Response	20Hz – 20kHz
Input	6 monaural input channels, selectable independently from 3 types of inputs for each channel: LINE, MIC or PHANTOM, LINE: -10dBu, 2.4kΩ, MIC: -46dBV, 2.4kΩ, PHANTOM: -46dBV, 2.4kΩ, supplies +24V DC / 10mA, electronically balanced, removable terminal block (3 pins), phone jack, 3 stereo inputs (L, R): -10dBV / 10kΩ, RCA jack, stereo mini jack
Output	2 monaural outputs: 0dBV, electronically balanced, removable terminal block (3 pins) 1 stereo output (L, R): 0dBV, electronically balanced, removable terminal block (3 pins) 1 stereo recording output (L,R): -10dBV, RCA jack
Bus Line	Monaural channel x 2, stereo channel x 1
Distortion	0.03% or less
Sampling Frequency	48kHz / 24 bits
Signal Processing	Automatic resonance control (ARC), feedback suppressor (FBS), automatic clipguard (ACG), automatic mute
S/N Ratio	90dB or more (IHF-A weighted)
Finish	Front: Aluminum, black / Case: Precoated steel sheet, black
Dimensions (W x H x D)	420 x 44 x 341.3mm
Weight	4kg

## Digital Mixer / M-864D



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



#### Features

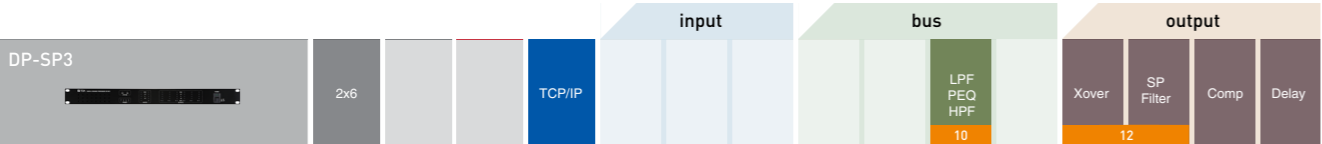
- 15 input (8 x monaural and 7 x stereo ) and 5 output channels per unit
- Equipped with digital signal processing functions such as Automatic Resonance Control(ARC), Feedback Suppressor(FBS), Automatic stereo input mute function (AUTO MUTE or Ducker) and Equalizer
- Advanced acoustic compensation can be automatically performed without using an acoustic measuring instrument
- Furnished with various function setting buttons and 14 analog volume faders
- Can be operated without need for use of a PC, by connecting the PC, optional Remote control panel or via iPad app



Specifications	M-864D
Power Source	(CU)100-120V AC, 60Hz, (CE/CE-GB)220-240V AC, 50/60Hz
Power Consumption	30W
Frequency Response	20 Hz – 20 kHz, ±1 dB
Sampling Frequency	48 kHz / 24 bits
Distortion	0.03% or less, 1 kHz, +4 dBu input/output, 20Hz – 20kHz BPF
Crosstalk	-80 dB or less, 1 kHz
Input	8 monaural input channels, removable terminal block (3P) <ul style="list-style-type: none"><li>• Phantom power (+24 V DC, 10 mA, ON/OFF switchable for each channel)</li><li>• Gain setting (settable for each channel)</li></ul> 7 stereo input (L, R) channels (1-A, 1-B, 1-C, 2-A, 2-B, 2-C, front mounted input) RCA jack (stereo mini jack provided on the front panel) <ul style="list-style-type: none"><li>• -10 dBu (max. +10 dBu), 10 kΩ</li><li>• Trim gain for each individual channel: -∞ to 0 dB (except front mounted input)</li></ul>
Output	4 output channels, +4 dBu (max. +24 dBu), applicable load 600 Ω or more, electronically-balanced, removable terminal block (3P) 1 recording output (L, R) channel: -10 dBu (max. +10 dBu), applicable load 1 kΩ or more, RCA jack, gain is adjustable
Contact Input	8 channels, open voltage: 24 V DC, short-circuit current: 5 mA, removable terminal block (10P)
Contact Output	8 channels, no-voltage make contact, contact capacity: 24 V DC/100 mA, removable terminal block (10P)
Signal Processing	Automatic Resonance Control (ARC) Function, Feedback Suppressor Function, Filter: 8 channels (each monaural input channel), high-pass filter: 20 Hz – 20 kHz, Tone Controller: BASS, MID, TREBLE, Parametric Equalizer: 20 Hz – 20 kHz, ±15 dB, 4 channels (each output channel), Matrix: 12 x 4, Crosspoint Gain: -∞ to 0 dB in 1 dB steps, Auto Mute Function
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 M-864D and switching hub)
Finish	Panel: Aluminum, hairline, black / Case: Surface treated steel plate
Dimensions (W x H x D)	482.6 x 177.1 x 157.2mm
Weight	5.1kg

# Mixers / DSP

## Speaker Processor / DP-SP3



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

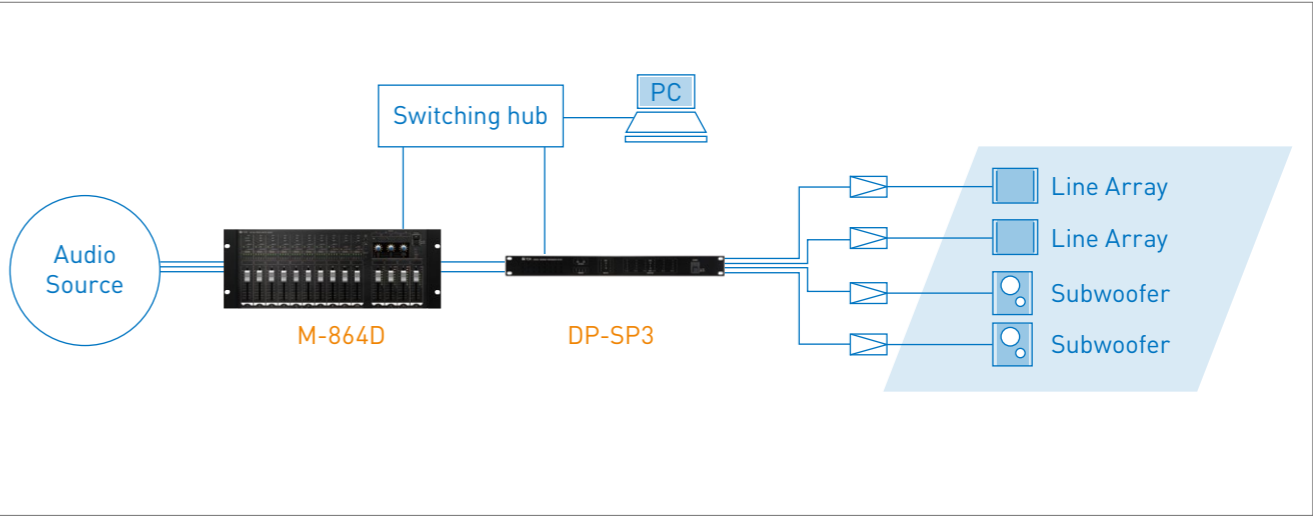


### Features

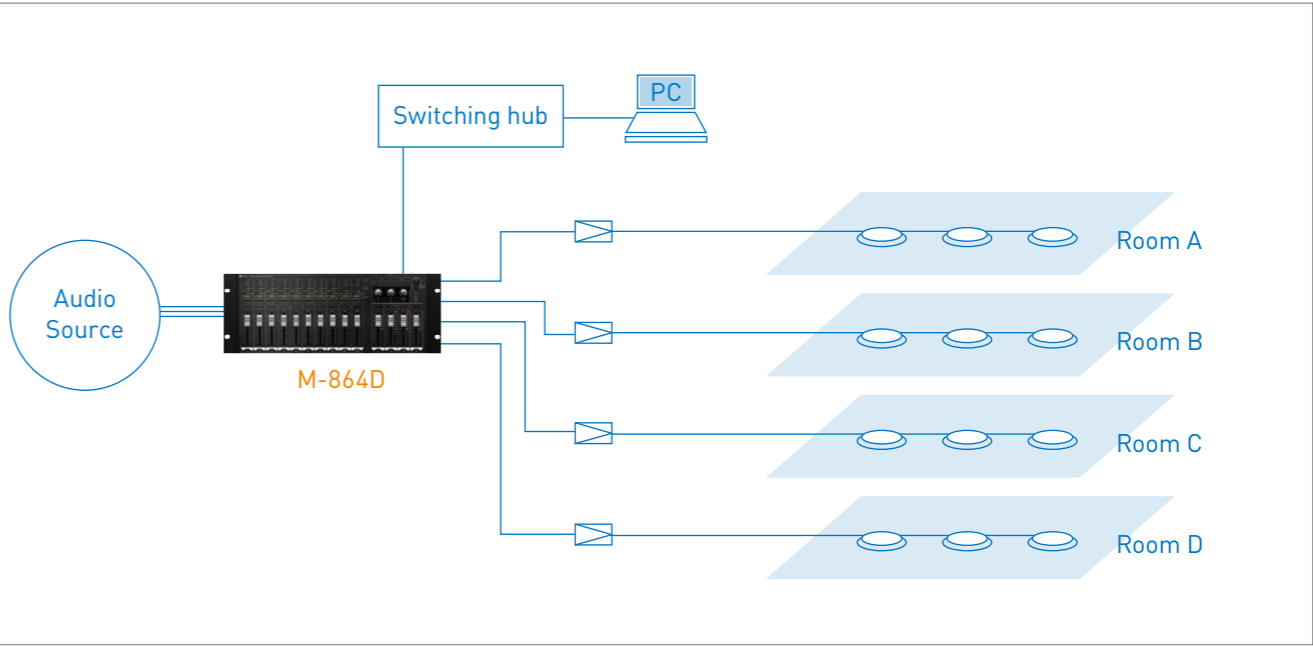
- Digital Speaker Processor for clear, high-quality and realistic sound, with a full sense of presence
- Essential audio processing tools: Compressor, Parametric Equalizer, Output Delay and Mute
- 10 filters on each input and 12 filters on each output
- Any combinations of parametric equalizer and high/low 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 M-864D digital mixer's preset switching possible.

Specifications	DP-SP3
Power Source	(CU)100-120V AC, 60Hz, (CE/CE-GB)220-240V AC, 50/60Hz
Power Consumption	25 W
Frequency Response	20 Hz – 20 kHz, ±1 dB
Sampling Frequency	96 kHz/24 bits
Dynamic Range	Over 110 dB
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 dBu (Max. +24 dBu), 10 k $\Omega$ , 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 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: 20 – 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 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 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	- $\infty$ 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 x 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, hairline, black / Case: Surface-treated steel plate
Dimensions (W x H x D)	482 x 44 x 289 mm
Weight	3.1 kg

### System Example A

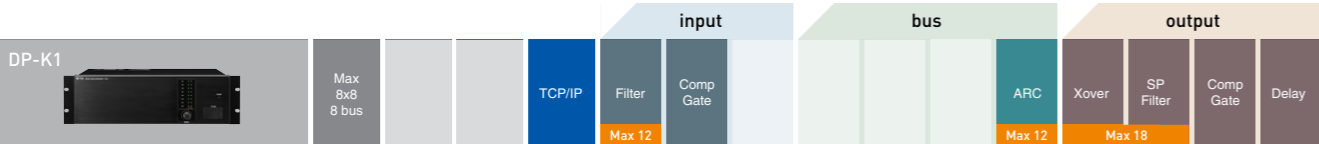


### System Example B



# Mixers / DSP

## Digital Audio Processor / DP-K1

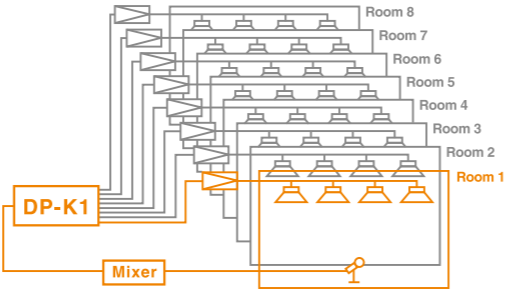


## Advanced Automatic Resonance Control (ARC) for Finer Acoustic Compensations



### Features

- One DP-K1 unit is 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/low-pass, all-pass and notch filters, horn EQ, high/low shelving and output delay
- Eight bus matrix allows flexible input-to-output signal routing for zoning or room-combining
- PC software for offsite programming and settings



Dedicated software

Specifications	DP-K1
Power Source	(CU) 100-120V AC, 50/60Hz, (CE/CE301/CE-GB) 230V AC, 50/60Hz
Power Consumption	40W
Frequency Response	20Hz – 20kHz, ±1 dB (+4dBu input)
Inputs / Outputs	Up to 8 channels, modular construction
Equalizer / Filter	Parametric equalizer: 20Hz – 20kHz, ±12 dB, Q: 0,267 - 69,249 Filter: (total amount of filters depends on the number of input and output channels) High pass filter: 20Hz – 20kHz, 6dB/Oct., 12dB/Oct Low pass filter: 20Hz – 20kHz, 6dB/Oct., 12dB/Oct Notch filter: 20Hz – 20kHz, Q: 8,651 - 69,249 All pass filter: 20Hz – 20kHz, Q: 0,267 - 69,249 High shelving filter: 6 – 20kHz, ±12 dB Low shelving filter: 20 – 500 Hz , ±12 dB Horn-Equalizer: 20 kHz, 0 to +18 dB (0.5 dB steps) Crossover filter: 20Hz – 20kHz, 6dB/Oct, 12dB/Oct, 18dB/Oct, 24dB/Oct (LR, BW, BE)
Compressor	threshold: -16 to +24 dB (1 dB steps); Ratio: 1:1, 2:1, 3:1, 4:1, 8:1, 12:1, 20:1, ∞:1 Attack time: 0.2 - 100 ms , Release time: 10ms - 5s
Delay	Delay time: 0 - 682.0 ms (0.021 ms steps)
Matrix / Gain control	Matrix 8 x 8, Level control: -∞ to 0dB (1 dB steps)
Preset Memory	8
Auxiliary Function	Key lock function
Network	10 BASE-T/100 BASE-TX, Auto-negotiation, RJ45 connector
Finish	Front: Aluminum, hair-line, black / Others: pre-coated steel plate, black, 30 % gloss
Dimensions (W x H x D)	482.6 x 132.6 x 320mm
Weight	7.4kg

## Ambient Noise Controller / DP-L2

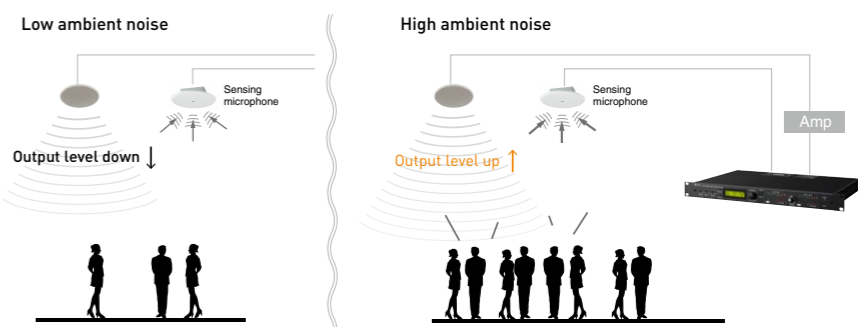
## Automatic and Accurate Input and Output Sound Level Adjustment

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 that 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.



### Ambient Noise Control (ANC)

ANC function automatically adjusts the volume level of announcements in response to fluctuation of ambient noise. In addition, for complete accuracy, a DP-L2 feature exclusive to TOA automatically separates the unit's own output from the calculation of the ambient sound level, meaning that the output is not detected as noise.



### 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 music sound quality.



Specifications	DP-L2
Power Source	(CU)110 – 120 V AC, 50/60 Hz, (CE301/CE-GB/315H) 220 – 240 V AC, 50/60 Hz
Power Consumption	20W
Sampling Frequency	48kHz
Frequency Response	20Hz – 20kHz, ± 1 dB
Dynamic Range	Over 108 dB (IHF-A weighted)
Distortion	< 0.006%, 1 kHz, + 4 dB input/output (20Hz – 20kHz BPF)
Input	Sensor Input, Input 1 & 2 (removable terminal block)
Output	Monitor Output, Output 1 & 2 (removable terminal block 3 pins)
A/D, D/A Converter	24 bit
Signal Processing	Automatic level control, ambient noise control, maximum output signal level control, input level indicator, output level indicator
Other Features	Phantom power switch (sensor input), key lock function, ground lift switch (INPUT 1, INPUT 2), input/output bypass function in power off
Finish	Pre-coated steel plate, black, 30 % gloss
Dimensions (W x H x D)	482 x 44 x 303mm
Weight	3.7 kg

# Wireless Microphone Systems

Digital Wireless / TOA D5000 Series



TOA 5000 Series is the ultimate choice for the presenter, offering incredible intelligibility so your audience won't miss a single word. You can be assured that with TOA's continuous commitment to research and development, we will always provide wireless solutions that allow your voice to be heard clearly by all.



## Voice clarity and comfort for any speaking scenario

### Features

- Up to 32 simultaneous channels \*Region dependent
- 15 compatible channels per 6 MHz, 20 compatible channels per 8 MHz TV channel
- Approx. 100 m operating range (line of sight)
- Signal stability is assured using the digital diversity method.
- Control of peripherals is possible using contact output.

### D5000 Advantages

#### DSP for HIGH QUALITY SOUND and RELIABLE operation

##### Microphone EQ



optimizes audio characteristics for each model of handheld wireless microphone or any microphone connected to the belt-pack transmitter.



##### Feedback Suppressor



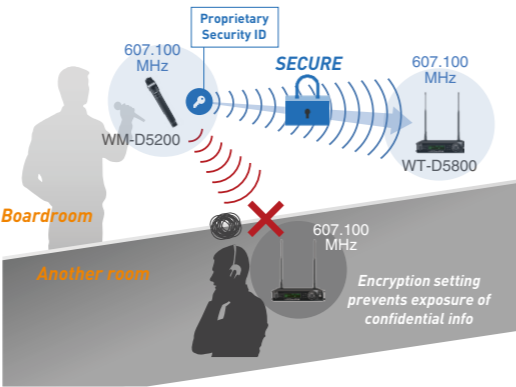
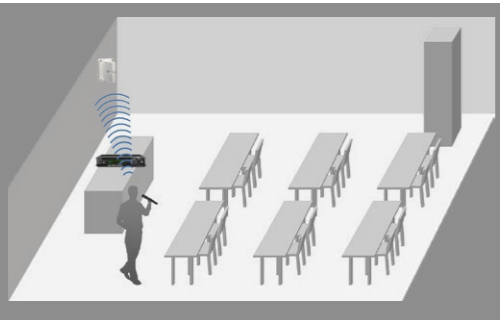
automatically works to suppress acoustic feedback when the feedback occurs.

#### SYSTEM DESIGN capability for SECURE and INTERFERENCE-FREE operation

- CODE setting helps multichannel operation
- Encryption setting prevents exposure of confidential info



- Antenna reception level check (Walk Test) using Maintenance Software



- Visualize the level and frequency of undesired signals using Maintenance Software



Digital Wireless / TOA D5000 Series



### Features

- Frequency channel scan
- Feedback suppression
- Built-in optimized preset equalization in microphones
- Detachable antenna
- Audio mixing with cascading voice input connectivity
- Antenna mixing with cascading antenna connectivity
- Intuitive LCD display

### Digital Wireless Receiver WT-D5800

Specifications	WT-D5800
Power Source	AC mains (supplied AC adapter must be used)
Current Consumption	350 mA (13.5 V)
Receiving Frequency	606 - 636 MHz, 794 - 806 MHz or 794 - 832 MHz
Channel Selectable	160 selectable frequencies
Receiving System	Double super-heterodyne
Diversity system	Space diversity (digital diversity)
Mixing Output	MIC/LINE (selectable): -60 dB* (MIC)/-20 dB* (LINE), 600 $\Omega$ phone jack (unbalanced), 600 $\Omega$ XLR-3-32 type connector (balanced)
Mixing Input	-20 dB*, 10 k $\Omega$ , unbalanced, phone jack
Antenna Input	75 $\Omega$ , BNC (phantom powering for antenna), 9 V DC, 30 mA (max)
Antenna Output	75 $\Omega$ , BNC (Gain 0 dB)
Contact Output	1 channel, no-voltage make contact output, withstand voltage: 30 V DC, control current 0.5 A max terminal block (2 pins)
Receiving Sensitivity	24 dB $\mu$ V or less (Bit error rate: 1E-5 or less)
Antenna Input Attenuator	0 dB/-10 dB switchable
Indicator	Audio (5 steps), RF (5 steps), ANT A/B, Audio (peak), Battery alarm
Frequency Response	50 Hz - 12 kHz
Total Harmonic Distortion	0.5 % or less
Function	Frequencies scanning, Feedback suppressor, Equalizer (optimizing each compatible microphone)
ID Selectable	10 patterns
Finish	Resin, black
Dimensions	210 (W) $\times$ 44 (H) $\times$ 211.9 (D) mm
Weight	730 g
Option	Rack mounting bracket kit: MB- WT3 (for rack mounting one WT-D5800 unit) MB- WT4 (for rack mounting two WT-D5800 units)

### Digital Wireless Microphone WM-D5200



### Features

- Lightweight body
- Dedicated rechargeable (NiH2 = nickel-hydrogen) battery or an AA alkaline battery can be used
- 1 AA battery provides up to 8 hours of continuous use
- Selectable microphone sensitivity
- Selectable transmission output (1 mW/10 mW)
- 3-step battery life indicator
- Built-in antenna

Specifications	WM-D5200	WM-D5300
Microphone Element	Electret condenser unit: Unidirectional	-
RF Carrier Power	Less than 50 mW	
Audio Frequency Response	100 Hz - 12 kHz	
Maximum Input Level	132 dB SPL (Sensitivity: L)/ 122 dB SPL (Sensitivity: H)	-18 dB* (Sensitivity: L)/ -28 dB* (Sensitivity: H)
Battery Life	Approx. 8 hours	
Antenna	Built-in type	Lambda/4 whip antenna
Finish	Body: ABS resin, black, coating Head: steel, black, paint	Body: ABS resin, black, paint
Dimensions	$\varnothing$ 47 $\times$ 239.5 mm	C04/C07 ver.: 62(W) $\times$ 171(H) $\times$ 19(D) mm G01 ver.: 62(W) $\times$ 185(H) $\times$ 19(D) mm
Weight	220 g (with battery)	90 g (with battery)

\*0dB = 1V

# 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 transmitter 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.

### Receiver WT-5800



#### Features

- Up to 64 selectable frequencies (Up to 16 Simultaneous channels)
- Frequency scan function
- Adjustable 7-step squelch function
- Supplied audio mixing input and audio mixing output
- Antenna distribution output
- Two-line LCD display
- Indication of transmitter's battery life
- Half-rack size body

### Receiver WT-5805



#### Features

- Up to 64 selectable frequencies (Up to 16 Simultaneous channels)
- Frequency scan function
- Adjustable 7-step squelch function
- Supplied audio mixing input and audio mixing output
- Two-line LCD display
- Indication of transmitter's battery life
- Half-rack size body

### Receiver WT-5810



#### Features

- Up to 16 selectable frequencies (Up to 16 Simultaneous channels)
- Frequency scan function
- Adjustable 7-step squelch function
- Supplied audio mixing input and audio mixing output
- Indication of transmitter's battery life
- Compact portable design

Specifications	WT-5800	WT-5805	WT-5810
Power Source	AC mains (supplied AC-DC adapter must be used)		
Channel Selectable	64 channel capability (Max. 16 Simultaneous channels)		16 CH
Diversity System	Space diversity (true diversity)	Space diversity	
Mixing Output	MIC: -60dB*1, 600Ω, balanced, XLR-3-31 type connector LINE: -20dB*1, 600Ω, unbalanced, phone jack		
Mixing Input	-20dB*1, 10 kΩ, unbalanced, phone jack		
Antenna Input	75Ω, BNC (phantom powering for antenna) 9V DC, 30mA (max.)	—	
Antenna Output	75Ω, BNC (Gain 0dB)	—	
Receiving Sensitivity	90dB or more, S/N ratio (20dBμV input, 40kHz deviation)		
Squelch Sensitivity	18 – 40dBμV variable		
Squelch System	Using together of noise SQ, carrier SQ and tone SQ		
Indicator	Audio (6 step), RF (6 step), ANT A/B, Audio (peak), battery alarm		ANT A/B, Audio (peak), battery alarm
S/N Ratio	110dB or more (A-weight, unbalanced output)		104dB or more (A-weight, unbalanced output)
Harmonic Distortion	1% or less (typical)		
Frequency Response	100 – 15kHz, ±3 dB		
Dimensions	210(W) × 44(H) × 205.1(D) mm		206(W) × 40.6(H) × 152.7(D) mm
Weight	700 g		590 g

### Receiver WT-4820



### Tuner Unit WTU-4800



#### Features

- Up to 16 selectable frequencies (Up to 16 Simultaneous channels)
- Modular dual channel receiver accepts up to two WTU-4800 Tuner Units
- Supplied audio mixing input and audio mixing output
- Antenna distribution output
- Half-rack size body

Specifications	WT-4820
Power Source	AC Mains (supplied AC adapter must be used)
Channel Selectable	16 CH
Mixing Input	-20 dB*1, 10 kΩ, unbalanced, phone jack
Antenna Input	75 Ω, BNC (phantom powering for antenna) 9 V DC, 30 mA (max.)
Antenna Output	75 Ω, BNC (Gain 0dB)
Indicator	ANT A/B, Audio (peak), Power
S/N Ratio	102 dB or more (A-weight, unbalanced output)
Harmonic Distortion	1% or less
Frequency Response	50 Hz - 18 kHz, ±3 dB
Dimensions	210(W) × 44(H) × 181(D) mm
Weight	770 g (without receiver unit)

\*1 0dB=1V

## 16 Channel Wireless Solution / TOA 5000 Series

### Handheld Microphone WM-5270



#### Features

- Dynamic microphone unit: Unidirectional
- 64 selectable channels
- Rolling stopper prevents the microphone from rolling
- Single AA battery operation for more compact and light weight body
- Built-in antenna

### Handheld Microphone WM-5265



#### Features

- Dynamic microphone unit: Unidirectional
- 64 selectable channels
- ON/OFF switch prevents the microphone from rolling
- WB-2000 rechargeable battery or single AA battery operation for compact and lightweight body
- Built-in antenna

### Handheld Microphone WM-5225



#### Features

- Electret condenser microphone unit: Unidirectional
- 64 selectable channels
- ON/OFF switch prevents the microphone from rolling.
- WB-2000 rechargeable battery or single AA battery operation for compact and lightweight body
- Built-in antenna

### Beltpack Transmitter WM-5325



#### Features

- 64 selectable channels
- Maximum input level: -14 dB to -29 dB
- Built-in circuitry minimizes ambient noise effects
- WB-2000 rechargeable battery or single AA battery operation for compact and lightweight body
- Connector for ø3.5 mini-plugs
- Built-in antenna

Specifications	WM-5270	WM-5265	WM-5225	WM-5325
RF Carrier Power	Less than 50mW (Factory preset 10mW ERP)			
Oscillator	PLL synthesizer			
Maximum Input Level	142 dB SPL	132 dB SPL	126 dB SPL	-14dB to -29dB*1 (Audio level control: Min. to Max.)
Audio Input Connector	—	—	—	ø3.5mm (ø0.14") mini plug
Audio Frequency Response	80Hz – 15kHz	100Hz – 15kHz		
Dynamic Range (AF Circuit)	95dB or more (with WT-5800)			—
Battery	AA alkaline dry cell battery	WB-2000 (Ni-MH battery) or LR6(AA)		
Battery Life	Approx. 10h (when the alkaline battery is used)	Approx. 13h (when the WB-2000 rechargeable battery is used) Approx. 10h (when the alkaline battery is used))		
Indicator	Power/Battery lamps			
Dimensions	ø48 × 244 mm	ø50 × 229 mm	ø43.6 × 231.5 mm	62 (W) × 102.5 (H) × 23 (D) mm
Weight	340g (with battery)	205g (with battery)	180g (with battery)	90g (with battery)

### Wireless Lavalier Microphone WM-4300

#### Features

- Unidirectional electret condenser microphone element
- 64 selectable channels
- Input sensitivity control included
- Built-in circuitry minimizes ambient noise effects
- Highly reliable TA-4 (XLR-type) mini-cannon microphone plug
- Belt clip rotatable 360 degrees



Specifications	WM-4300
RF Carrier Power	Less than 50mW (Factory preset 10mW ERP)
Oscillator	PLL synthesizer
Maximum Input Level	120 dB SPL
Battery	6LR61 (9 V × 1)
Battery Life	10 hours (alkaline)
Indicator	Power/Battery indicator (common use)
Dimensions	62 (W) × 142 (H) × 32 (D) mm
Weight	135g (with battery)

### TOA 5000 Series Set

#### WM-5225+WT-5810 Set WS-5225

#### WM-5265+WT-5810 Set WS-5265

#### WM-5325+YP-M5300+WT-5810 Set WS-5325U

#### WM-5325+YP-M5310+WT-5810 Set WS-5325M

#### WM-5325+WH-4000H+WT-5810 Set WS-5325H



# Wireless Microphone Systems

## Optional Accessories

### TOA D5000 Series/5000 Series common options

#### Lavalier Microphone YP-M5300



- Unidirectional electret condenser microphone element
- Connector for ø3.5 mini-plug

#### Lavalier Microphone YP-M5310



- Omnidirectional electret condenser microphone element
- Connector for ø3.5 mini-plug

#### Headworn Microphone WH-4000H



- Unidirectional electret condenser microphone

#### Headworn Microphone WH-4000A



- Unidirectional electret condenser microphone
- Ideal for sports applications

#### Antenna Distributor WD-5800



#### Rechargeable Battery WB-2000-2



#### Wall Mount Antenna YW-4500



#### Rack Mount Bracket MB-15B



#### Rack Mount Bracket MB-WT3



#### Rack Mount Bracket MB-WT4



### TOA D5000 Series option

#### Battery Charger BC-2000



#### AC Adapter AD-5000-2



### TOA 5000 Series options

#### Battery Charger BC-5000-2



#### Battery Charger BC-5000-6



#### Battery Charger BC-5000-12



#### AC Adapter AD-5000-2



#### AC Adapter AD-5000-6



#### Waist Pouch WH-4000P



#### Windscreen WH-4000S



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



### TRANTEC Wireless Microphone Systems S5 and S4 Series

The Trantec S5 and S4 Series is synonymous with quality among vocalists, musicians and theatrical performers. Additionally, presenters and the like also enjoy the wide variety of accessories that Trantec has to offer, allowing them to meet their professional needs.

#### Receiver S5.5-RX



#### Features

- Up to 1400 selectable frequencies (24 Simultaneous channels)
- Interactive USB based computer control and monitoring for all aspects of performance
- Frequency scan function
- 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

Specifications	S5.5-RX
Diversity System	Space diversity (true diversity)
Audio Output	Line: -22 dB*/ Mic: 62 dB* Line/Mic selectable, 600 Ω, balanced, XLR-3-32 type connector. Headphone: max. 100 mW 16 Ω, unbalanced, phone jack -28 dB*, 600 Ω, unbalanced, phone jack
Receiving Sensitivity	0 dB V or less (12 dB SINAD)
Squelch Sensitivity	6 - 36 dB V variable
Squelch System	Using together of noise SQ, carrier SQ and tone SQ
Indicator	LCD, Power lamp, Mute lamp, ANT A/B lamp
S/N Ratio	110 dB or more (A-weight)
Harmonic Distortion	1% or less (typical)
Frequency Response	50 Hz - 20 kHz, ±3 dB
Dimensions	210 (W) x 46 (H) x 210 (D) mm (excluding antenna)
Weight	1.3kg

#### Handheld Microphone

S5.5-HDX (Dynamic)  
S5.5-HCX (Condenser)



#### Features

- Simple programming of transmitter with built-in Infra-red data link
- Frequency & Power lock facility
- Single AA operation of transmitters with battery life of over 10 hours
- Integral antenna
- Clear and intuitive LCD display
- Color coded ID band
- Professional metal enclosure

#### Beltpack Transmitter

S5.5-BTX



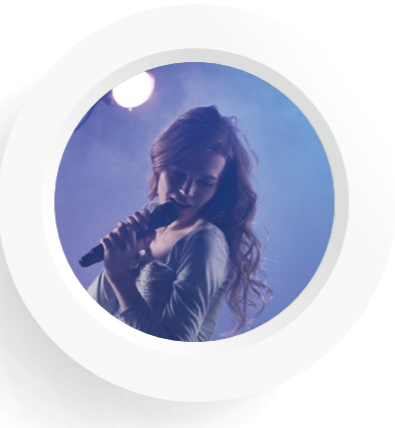
#### Features

- Credit card size beltpack
- Simple programming of transmitter with built-in Infra-red data link
- Frequency & Power lock facility
- Clear and intuitive LCD display
- Single AA operation of transmitters with battery life of over 10 hours
- Detachable antenna
- Professional metal enclosure

Specifications	S5.5-HDX	S5.5-HCX	S5.5-BTX
RF Carrier Power	Less than 50mW (Factory preset 10mW ERP)		
Modulation System	—		
Maximum Input Level	146 dB SPL (microphone sensitivity: Gain *0)	142 dB SPL (microphone sensitivity: Gain *0)	120 dB SPL (microphone sensitivity: Gain *0)
Audio Frequency Response	60 Hz - 20 kHz	90 Hz - 20 kHz	—
Dynamic Range	110 dB or more (with S5.5-RX)		
Audio Input Connector	—		
Battery	LR6 (AA)		
Battery Life	10 hours (Alkaline)		
Indicator	LCD, Power lamp, Mute lamp, ANT A/B lamp		
Dimensions	ø50 x 247.9 mm	ø50 x 232.9 mm	55 (W) x 80 (H) x 22 (D) mm
Weight	380g (with battery)	300g (with battery)	140g (with battery)

# Wireless Microphone Systems

12 Channel Wireless Solution / **TRANTEC S5.3 Series**



Receiver  
S5.3-RX



### Features

- Up to 640 selectable frequencies (12 Simultaneous channels)
- USB based computer monitoring
- Frequency scan function
- 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
- Indication of transmitter's battery life
- Professional metal enclosure

Specifications	S5.3-RX
Diversity System	Space diversity (true diversity)
Audio Output	Line: -22 dB*/ Mic: 62 dB* Line/Mic selectable, 600 Ω, balanced, XLR-3-32 type connector Headphone: max. 100 mW 16 Ω, unbalanced, phone jack -28 dB*, 600 Ω, unbalanced, phone jack
Receiving Sensitivity	0 dB V or less (12 dB SINAD)
Squelch Sensitivity	6 - 36 dB V variable
Squelch System	Using together of noise SQ, carrier SQ and tone SQ
Indicator	LCD, Power lamp, Mute lamp, ANT A/B lamp
S/N Ratio	110 dB or more (A-weight)
Harmonic Distortion	1% or less (typical)
Frequency Response	50 Hz - 20 kHz, ±3 dB
Dimensions	210 (W) x 46 (H) x 210 (D) mm (excluding antenna)
Weight	1.3kg (2.87lb)

### Handheld Microphone

- S5.3-HDX (Dynamic)  
S5.3-HCX (Condenser)



### Features

- Simple programming of transmitter with built-in Infra-red data link
- Frequency & Power lock facility
- Single AA operation of transmitters wit battery life of over 10 hours
- Integral antenna
- Clear and intuitive LCD display
- Color coded ID band
- Professional metal enclosure

Specifications	S5.3-HDX	S5.3-HCX	S5.3-BTX
RF Carrier Power	Less than 50mW (Factory preset 10mW ERP)		
Modulation System	—		PLL synthesizer
Maximum Input Level	146 dB SPL (microphone sensitivity: Gain *0")	142 dB SPL (microphone sensitivity: Gain *0")	120 dB SPL (microphone sensitivity: Gain *0")
Audio Frequency Response	60 Hz - 20 kHz	90 Hz - 20 kHz	—
Dynamic Range	110 dB or more (with S5.5-RX)		—
Audio Input Connector	—		TA-4 (Mini-XLR 4 pins)
Battery	LR6 (AA)		
Battery Life	10 hours (Alkaline)		
Indicator	LCD display, Power lamp		LCD display, Power lamp
Dimensions	ø50 x 247.9 mm	ø50 x 232.9 mm	55 (W) x 80 (H) x 22 (D) mm
Weight	380g (with battery)	300g (with battery)	140g (with battery)

### Beltpack Transmitter

S5.3-BTX



### Features

- Credit card size beltpack
- Simple programming of transmitter with built-in Infra-red data link
- Frequency & Power lock facility
- Clear and intuitive LCD display
- Single AA operation of transmitters with battery life of over 10 hours
- Detachable antenna
- Professional metal enclosure

Multi-channel plug and play system / **TRANTEC S4.10 Series**

Receiver  
S4.10-RXA



Receiver  
S4.10-RX1



Receiver  
S4.10-RX2



### Features

- Up to 16 selectable frequencies (Up to 16 Simultaneous channels)
- Frequency scan function
- Infrared auto channel setup
- Numerical LED display
- Adjustable output level
- Indication of transmitter's battery life
- Selectable from desk-top receiver (-RXA) and rack-mount receiver (-RX1/RX2)
- Dual Channel Receiver (-RX2) available

Specifications	S4.10-RXA	S4.10-RX1	S4.10-RX2
Diversity Reception	Antenna Diversity		
Frequency Range	506 - 937.5 MHz (*2), UHF		
Channel Selectable	Up to 16 channels (Region dependent)		
Sensitivity	10uV at 45 dBA S/N		
Squelch (SQ)	Tone SQ, Carrier SQ, Noise SQ		
Audio Frequency Response	50 Hz - 15k Hz		
Audio Output Level (Maximum)	Balanced (XLR socket) : -16 dBu Unbalanced (1/4" jack socket) : 10 dBu		
Power Supply	11-18 VDC 300 mA		
Dimensions	215 (W) x 39 (H) x 102 (D) mm (excluding antenna and BNC)	210(W) x 44(H) x 202(D) mm (excluding antenna)	
Weight	480g	680 g	720 g

### Handheld Microphone

S4.10-HDX (Dynamic)



### Features

- Handheld transmitter with dynamic cardioid microphone unit
- 1 AA battery provides up to 10 hours of continuous use
- Adjustable microphone sensitivity
- Numerical LED display
- Battery life indicator

### Beltpack Transmitter

S4.10-BTX



### Features

- Beltpack transmitter works with any Trantec microphone or alternatively a musical instrument cable
- 1 AA battery provides up to 10 hours of continuous use
- Integral switch for selection between instrument and microphone
- Numerical LED display
- Adjustable sensitivity
- 3.5mm Screw Jack
- Battery life indicator

Specifications	S4.10-HDX	S4.10-BTX
Frequency Range	506 - 937.5MHz, UHF	
Channel Selectable	Up to 16 channels	
Microphone Element	Dynamic with cardioid pattern	-
RF Carrier Power	10 mW	
Audio Frequency Response	80 Hz - 15k Hz	50 Hz - 15k Hz
Audio Input Level	140 dB SPL (maximum)	-6dBV (maximum), mic gain 0dB
Modulation System	PLL synthesizer	
Battery	1 AA size alkaline battery, 1.5 V	
Battery Life	Approx. 10 hours	
Indicator	Battery status LED, 7 segments LED	
Finish	Resin, coating	
Dimensions	Ø55 x 250 mm	62(W) x 100(H) x 25(D) mm (with clip)
Weight	245 g (with battery)	85 g (with battery)

# Wireless Microphone Systems

## Wireless Starter Pack / TRANTEC S4.04 Series



### Receiver S4.04-RX



#### Features

- Up to 4 simultaneous channels
- Frequency scan function
- Infrared auto channel setup
- Numerical LED display
- Adjustable output level
- Indication of transmitter's battery life
- Compact, portable design

Specifications	S4.04-RX
Diversity Reception	Antenna Diversity
Frequency Range	506 - 937.5 MHz (*1), UHF
Channel Selectable	4 channels
Sensitivity	10uV at 45 dBA S/N
Squelch (SQ)	Tone SQ, Carrier SQ, Noise SQ
Audio Frequency Response	50 Hz - 15k Hz
Audio Output Level (Maximum)	Balanced (XLR socket) : -20 dBu Unbalanced (1/4" jack socket) : 10 dBu
Power Supply	11-18 VDC 300 mA
Dimensions	215 (W) x 39 (H) x 102 (D) mm (excluding antenna and BNC)
Weight	480g

### Handheld Microphone S4.04-HDX (Dynamic)



#### Features

- Handheld transmitter with dynamic cardioid microphone unit
- 1 AA battery provides up to 10 hours of continuous use
- Numerical LED display
- Battery life indicator

### Beltpack Transmitter S4.04-BTX



#### Features

- Beltpack transmitter works with any Trantec microphone or alternatively a musical instrument cable
- 1 AA battery provides up to 10 hours of continuous use
- Integral switch for selection between instrument and microphone
- Numerical LED display
- Adjustable sensitivity
- 3.5mm Screw Jack
- Battery life indicator

Specifications	S4.04-HDX	S4.04-BTX
Frequency Range	506 - 937.5MHz, UHF	
Channel Selectable	4 channels	
Microphone Element	Dynamic with cardioid pattern	-
RF Carrier Power	10 mW	
Audio Frequency Response	80 Hz - 15k Hz	50 Hz - 15k Hz
Audio Input Level	140 dB SPL (maximum)	-6dBV (maximum), mic gain 0dB
Modulation System	PLL synthesizer	
Battery	1 AA size alkaline battery, 1.5 V	
Battery Life	Approx. 10 hours	
Indicator	Battery status LED, 7 segments LED	
Finish	Resin, coating	
Dimensions	Ø55 x 250 mm	62(W) x 100(H) x 25(D) mm (with clip)
Weight	245 g (with battery)	85 g (with battery)

## Trantec Optional Accessories

### TRANTEC Series Optional Microphones

#### Lavalier Microphone for S5 Series MIC-X2 for S4 Series MIC-LP2



#### Lavalier Microphone for S5 Series MIC-X55 for S4 Series MIC-SJ55



#### Glasses Frame Microphone for S5 Series MIC-X690H for S4 Series MIC-SJ690H



#### Lavalier Microphone for S5 Series MIC-X212-BE (Beige) MIC-X212-BK (Black) for S4 Series MIC-SJ212-BE (Beige) MIC-SJ212-BK (Black)



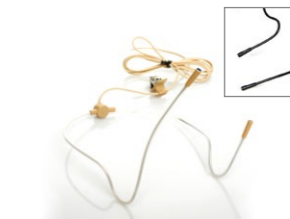
#### Headworn Microphone for S5 Series MIC-X33 for S4 Series MIC-SJ33



#### Headworn Microphone for S5 Series MIC-X66-BK (Black) MIC-X66-BL (Blue) MIC-X66-YE (Yellow) for S4 Series MIC-SJ66-BK (Black) MIC-SJ66-BL (Blue) MIC-SJ66-YE (Yellow)



#### Headworn Microphone for S5 Series MIC-X22-B-R (Black) MIC-X22-P-R (Pink) for S4 Series MIC-SJ22-B-R (Black) MIC-SJ22-P-R (Pink)



#### Headworn Microphone for S5 Series MIC-XEM77 for S4 Series MIC-SJEM77



### TRANTEC Series Accessories

#### Antenna Distributor S5-ADU



#### Antenna Booster YW-7000



#### Passive Antenna Splitter ACC-SPLIT-2W



#### Directional Antenna YW-7570



#### Omnidirectional Antenna YW-7520



#### Wall Mount Antenna YW-4500



#### Receiver Antenna for S4.16 Series ANT-S4.16 RX-D/RX-G



#### Receiver Antenna for S5 Series ANT-S5 RX-D/RX-G



#### Whip Antenna ANT-S4 BTX-D/BTX-G



#### Helical Antenna for S4 Series ANT-S4 HDX-D/HDX-G



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



#### Antenna Extension Cable for S4 Series LD-TNC ADU



#### Guitar Cable for S4 Series LD-SJ-JAC



#### TNC Rack Mount Panel PAN-1U19-TNC



#### Blank Panel MW-1U-BLANK



#### Rack Mount Kit for S5 Series ACC-S5RX-MB2



# Wired Microphones

## Dynamic Microphones

### Unidirectional Microphone DM-1100



#### Features

- Dynamic hand-held microphone for general use
- Rigid diecast aluminum microphone body
- Switching and handling noise suppression
- 7.5 m phone plug cable supplied with unit
- Microphone holder provided as standard accessory

### Unidirectional Microphone DM-1300



#### Features

- Dynamic hand-held microphone for vocal/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 accessory
- Balanced output for long distance connection

### Unidirectional Microphone DM-1200



#### Features

- 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 accessory
- Balanced output for long distance connection

### Unidirectional Microphone DM-1500



#### Features

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

Specifications	DM-1100	DM-1200	DM-1300	DM-1500
Type	Moving coil microphone (Dynamic microphone)			
Directivity	Unidirectional: Cardioid			
Rated Impedance	600 Ω, unbalanced	600 Ω, balanced		
Rated Sensitivity	-55 dB (1k Hz 0 dB = 1 V/Pa)		-54 dB (1k Hz 0 dB = 1 V/Pa)	-56 dB (1kHz 0 dB = 1 V/Pa)
Frequenc y Response	100 Hz – 12,000 Hz	50 Hz – 12 kHz	70 Hz – 15 kHz	
Weight	155 g (without connection cable)	265 g (without connection cable)	245 g (without connection cable)	280 g (without connection cable)
Dimensions (W x H x D)	ø 55 x 178 mm	ø 39.5 x 163 mm	ø 51 x 170 mm	ø 40.5 x 173 mm
Talk switch	Short-off type, slide on/off switch			
Finish	Body: Die cast aluminum, painted black Head: ABS resin, black/ zinc plated steel wire, painted black	Body: Die cast zinc, painted metallic gray Head: Die cast aluminum, zinc plated steel wire, painted metallic gray	Body: Die cast zinc, painted metallic gray Head: Aluminum, zinc plated steel wire, painted metallic gray	Body: Die cast zinc, painted metallic gold Head: Brass and zinc plated steel wire, painted metallic gold
Standard accessory	Microphone holder (W 5/16", W 5/8")	Microphone holder (W 5/16", W 5/8", W3/8")	Microphone holder (W 5/16")	

## Condenser Microphones

### 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
- Capsule rotates 360 degrees, for optimal pickup even when worn on a lapel

### Gooseneck Microphone EM-800



(With microphone stand: ST-800)

### For EM-800 ST-800



#### Features

- Electret condenser microphone for such speech applications as meetings, lectures, and religious services
- Excellent high-frequency response of 60 to 20k Hz delivers clear output
- High sensitivity (-35dB) provides a satisfying tonal response
- Gooseneck with two adjustment points allows more flexible microphone positioning angles
- Rejection of undesirable off-axis sound minimizes possible feedback

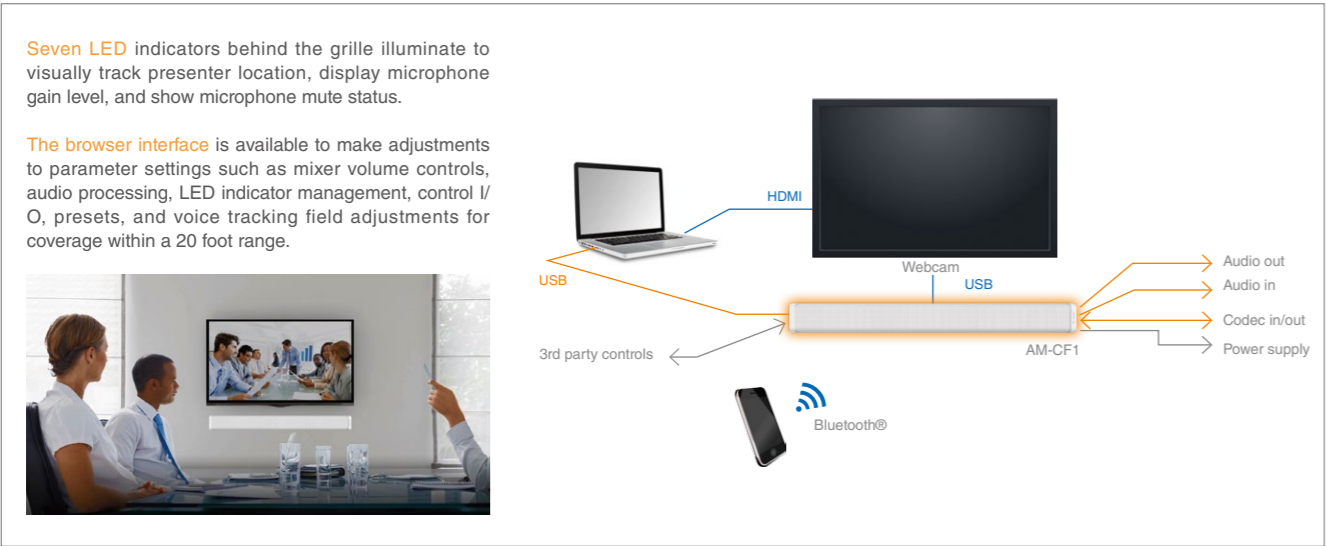
Specifications	EM-410	EM-800
Directivity	Hyper-cardioid	Cardioid
Rated Impedance	120 Ω, balanced	
Rated Sensitivity	-47 dB (1k Hz 0 dB = 1 V/Pa)	-35 dB (1kHz 0 dB = 1 V/Pa)
Phantom power	9-52V DC	
Frequency Response	100 Hz – 15kHz	60 Hz – 20kHz
Output Connector	Blanced-phone plug	XLR-3-12 equivalent
Finish	Body: Copper alloy, black, semi-gloss, paint	Body, Shaft: Copper alloy, black, semi-gloss, paint
Dimensions	ø8.9 × 28.6mm (cord excluded)	ø12 × 420mm
Weight	100g	135g
Accessory	Windscreen × 1, Clip Holder × 1	Windscreen × 1

# meetingIO 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.



Specifications	AM-CF1B	AM-CF1W
Power Source	12 V DC (supplied from the specified AC adapter) or 52 V DC (supplied from the specified PoE extender)	
Current Consumption	Under 3.5 A	
Inputs	USB Audio: 2 channels, USB 3.0/USB 2.0/USB 1.1 micro-B port Bluetooth: 2 channels, Codec: 1 channel, RCA pin jack, -10 dB*1, 10 kΩ, unbalanced type AUX: 2 channels, RCA pin jack, -10 dB*1, 10 kΩ, unbalanced type	
Outputs	USB Audio: 2 channels, USB 3.0/USB 2.0/USB 1.1 micro-B port Bluetooth: 2 channels Codec: 1 channel, RCA pin jack, -10 dB*1, 600 Ω, unbalanced type AUX: 2 channels, removable terminal block (6 pins), 4 dB*2, 600 Ω, balanced (electronically-balanced) type Internal speaker: 2-way x 2 (woofer x 2, tweeter x 1)	
Control Inputs	2 inputs, removable terminal block (6 pins), no-voltage make contact	
Control Outputs	2 outputs, removable terminal block (6 pins), no-voltage make contact, relay contact output	
Network I/F	10BASE-T/100BASE-TX, RJ-45	
Microphone	Unidirectional electret condenser type	
Frequency Characteristics	20 Hz – 20 kHz (AUX IN – AUX OUT)	
Operation Section	Power switch, Bluetooth pairing, Mute, Volume Up/Down	
Indicators	Power (blue/green/orange/red), USB connection (green), Bluetooth (blue), Multifunction (green/red)	
Dimensions	799 (w) x 83.2 (h) x 85.5 (d) mm	
Weight	4.6 kg	

\*1 0 dB = 1 V  
\*2 0 dB = 0.775 V

Real-time Steering Array Microphone System / **AM-1**

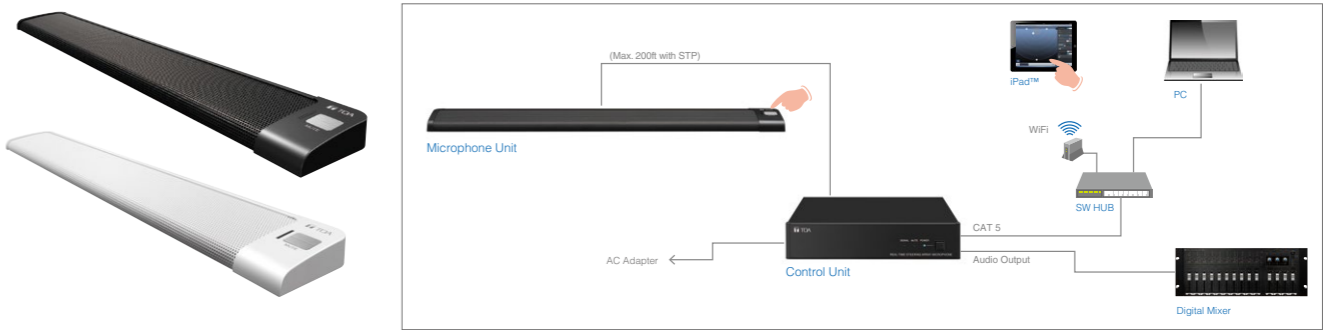
## Talk to your audience, not to the microphone.

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 naturally 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.

\*iPad is a registered trademark of Apple Inc.

### 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
- iPad app for intuitive set-and-forget configuration and ultimate real-time control in live production settings
- User-friendly mute controls with clear status indication



Array Microphone Unit	AM-1B/AM-1W
Power Source	24V DC (supplied from the Control Unit)
Microphone	Unidirectional electret condenser microphone
Directivity Angle	Horizontal 50° (800 Hz - 18 kHz, Array mode), 180° (Cardioid mode) Vertical: 90°
Frequency Response	150 Hz - 18k Hz
Maximum Input Sound Pressure	100 dB SPL
Operation	Mute switch
Indicator	Microphone status indicator (output: green, mute: red)
Microphone Cable	Shielded twisted pair cable 10m (32.81 ft) with connector equivalent to TA-3
Maximum Cable Length	70 m (229.66 ft) (use of the AES/EBU cable)
Finish	Black or white (RAL9016 equivalent)
Dimensions	483.9 (W) x 22.1(H) x 64.9 (D) mm excluding cable
Weight	1.2 kg
Control Unit	
Power Source	24V 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 connector Network protocol: TCP/IP, HTTP
Level Control	Output level selection (+4 dB*1, -10 dB*2, -50dB*1) LOW CUT ON/OFF
Dimensions	210 (W) x 45.7 (H) x 271.5 (D) mm
Weight	1.5 kg

\*1 0 dB = 1 V  
\*2 0 dB = 0.775 V

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D-2008SP	40	F-2000BT	27	HY-60DB	11	HY-WM1B	12	MT-S0301	20	SR-D8-S	15	T-001T	43		
D-2012C	40	F-2000BTWP	27	HY-60DB-WP	11	HY-WM1W	12	MT-S0601	16	SR-D8CL	15	WB-2000-2	55		
D-901	38	F-2000WT	27	HY-AH1	25	HY-WM1WP	12	MW-1U-BLANK	60	SR-D8CS	15	WD-5800	55		
D-921E	41	F-2000WTWP	27	HY-BC1	25	HY-WM2B	12	MX-6224D	36	SR-D8EP	15	WH-4000A	55		
D-921F	41	F-2322C	25	HY-BH10B	28	HY-WM2W	12	PAN-1U19-TNC	60	SR-D8FB	15	WH-4000H	55		
D-922E	41	F-2352C	25	HY-CL10B	28	HY-WM2WP	12	PE-304	31	SR-D8HB	15	WH-4000P	55		
D-922F	41	F-2352SC	25	HY-CL20B	28	HY-WM7B	11	PE-64	31	SR-D8WB	15	WH-4000S	55		
D-923AE	41	F-2852C	25	HY-CM10B	28	HY-WM7W	11	PJ-304	31	SR-EP3	20	WM-4300	54		
D-936R	41	FB-120B	10	HY-CM10W	28	LD-BNC-TNC	60	PJ-64	31	SR-EP4	18	WM-5225	54		
D-971E	41	FB-120W	10	HY-CM20B	28	LD-SJ-JAC	60	Q-2008SPD	40	SR-EP4WP	18	WM-5265	54		



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