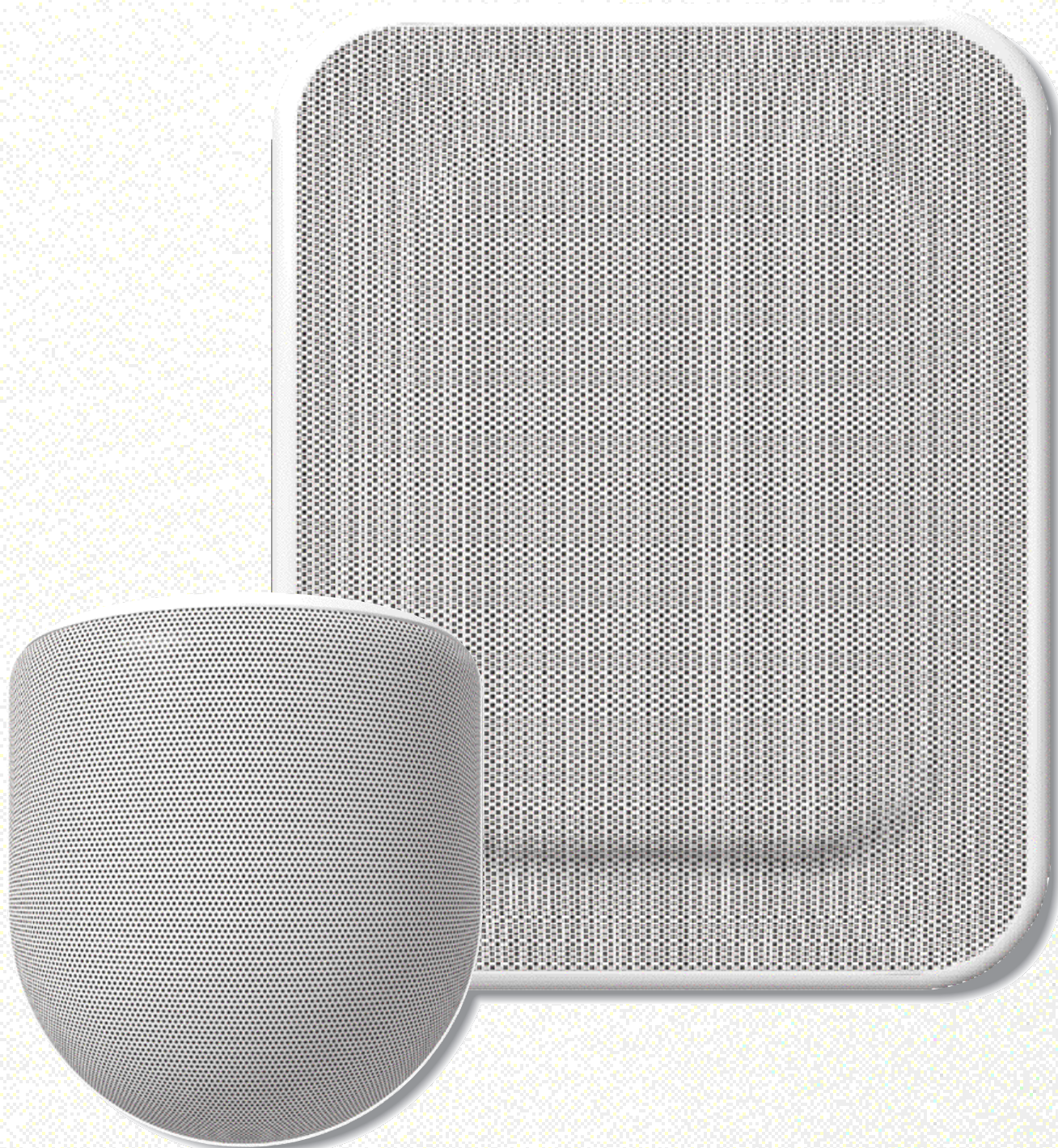




# H Series

## Interior Design Speakers

**When appearances have to count  
as much as performance.**





**F**or audio installations where good sound is required as well as the near invisibility of speaker units and related hardware, TOA H Series speakers prove ideal. The H Series have been designed to offer high-quality audio for locations that place priority on interior appearance and feature designs that can effectively blend into the background. This can be further enhanced as the grilles may be painted to blend in more unobtrusively with the color scheme of the environment. Performance without aesthetic compromises present new possibilities that conventional speakers cannot provide. The attractively styled H Series enclosures can be semi-flush mounted to minimize out-of-phase sound reflections that often pose problems in similar installations. The H Series offers several models to suit desired sound dispersion characteristics or for use in exterior locations. And to augment the frequency response of the H-Series for a fuller-bodied sound that is preferred today, a dedicated subwoofer can easily be flush-mounted into ceilings or between standard wall studs, also blending perfectly into any interior decoration scheme. The H Series offers an ideal solution to the problem of providing high-quality audio in appearance-critical environments.

H-3/H-3WP



HB-1



## Invisible High Performance

The H Series may blend into the environment, but there's no mistaking their TOA sound pedigree. Whichever model selected, the two-way H Series speakers can be relied on to deliver accurate, uncolored sound reproduction that enhances any program material.

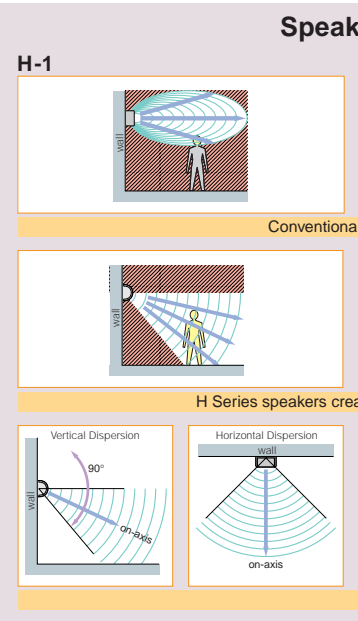
- Every H Series model utilizes a passive crossover with optimized filter slopes built-in.
- Natural boost at frequencies between 200Hz to 300Hz due to the reinforcement of those frequencies with half- and quarter-space loading of enclosures after installation.
- Enclosures have been designed to minimize reflections and since brackets are not required for installation, common problems such as out-of-phase wall or ceiling reflections can be minimized.
- Easily paintable exterior grille and frame to match decor.
- For easy use in distributed speaker systems, each speaker has a built-in 70V/100V matching transformer.
- A removable terminal block accepts up to 14AWG speaker wire and loop-through terminations are provided when wiring a distributed speaker system.

### Features specific to H-1/H-2/H-2WP models

- Ferrofluid-cooled tweeters and neodymium magnet-equipped woofers.
- Flexibility for aiming sound with driver components that revolve within the enclosure.
- The H-1 allows up to 90° of movement while the H-2/H-2WP components can revolve 360°. The external appearance remains unchanged.

### Features specific to H-3/H-3WP models

- Dome tweeter and woofers both equipped with neodymium magnets.
- Expanded 140° horizontal dispersion characteristics.





## Subwoofers that stay out of sight

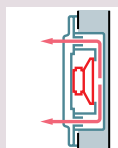
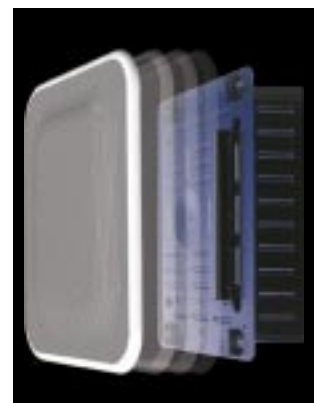
Responding to today's trends for a fuller, better-balanced bandwidth reproduction, TOA developed an effective subwoofer to complement H Series speakers. Amazingly compact yet capable of producing clean, tight low frequency sounds, the HB-1 subwoofer can also be fitted into walls and ceilings to maintain an environment's decor without calling attention to itself.

H-2/H-2WP

H-1

## Versatile installation options

H Series speakers can easily be semi flush-mounted in ceilings and walls for minimal visibility. Even the HB-1 subwoofer can be almost hidden by flush-mounting it in the ceiling or between standard 16"-on-center wall studs. Conventional electrical gang boxes simplify installation of H Series speakers for any desired location. And no matter the location -- lobbies, restaurants, places of worship, foyers, and so on -- in any type of building or even homes, the H Series offers the significant advantages of outstanding sound and build quality with virtual invisibility.

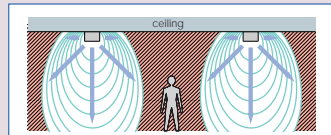


The HB-1's thin metal cabinet provides enough displacement for satisfactory low frequency response and helps dissipate heat for extended service life.

- High power-handling capacity of 240W.
- 8" high-power woofer featuring a 110mm magnet and aluminum bobbin.
- Bandpass-filtered acoustic super-woofer enhances bass output.
- Metal frame acts as a heat sink for speaker durability and more power.
- Optional matching transformer (MT-S0601).

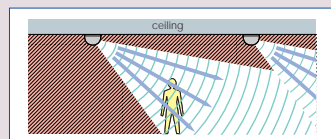
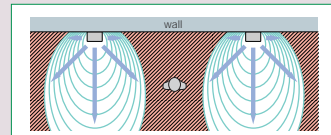
## Sound dispersion characteristics

H-2/H-2WP

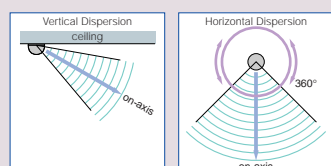


Speaker dispersion patterns leave dead areas between speakers.

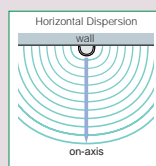
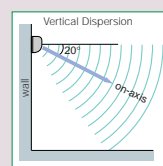
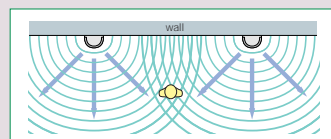
H-3/H-3WP



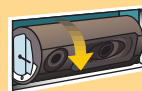
Attain optimum dispersion between speakers as well as in front of the speakers.



Area covered by speaker.



H-1



Up to 90° locking driver positioning adjustment.

H-2



Up to 360° locking driver positioning adjustment.



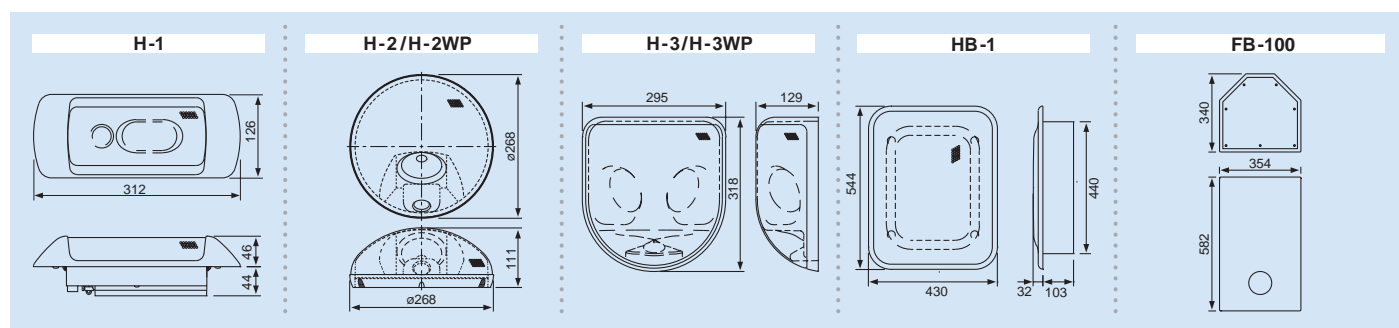
**FB-100**  
Super-Woofer Speaker System

Designed for applications where even more high-power low frequency reproduction than obtainable with the HB-1 is desired. This subwoofer may be cable-suspended or unobtrusively placed at floor level.

## SPECIFICATIONS

	H-1	H-2 / H-2WP	H-3 / H-3WP
Enclosure	Sealed	Sealed	Sealed
Power Handling	90W (continuous program/4Ω), 30W (continuous pink noise/4Ω, 50 – 20,000Hz)	120W (continuous program/4Ω), 40W (continuous pink noise/4Ω, 50 – 20,000Hz)	150W (continuous program/8Ω), 50W (continuous pink noise/8Ω, 50 – 20,000Hz)
Rated Input	12W (16Ω, 70V/100V line)	12W (16Ω, 70V/100V line)	30W (16Ω, 70V/100V line)
Impedance	Direct: 4Ω. Transformer: 16Ω 100V line: 830Ω (12W), 1.7kΩ (6W), 3.3kΩ (3W) 70V line: 420Ω (12W), 830Ω (6W), 1.7kΩ (3W), 3.3kΩ (1.5W)	Direct: 4Ω. Transformer: 16Ω 100V line: 830Ω (12W), 1.7kΩ (6W), 3.3kΩ (3W) 70V line: 420Ω (12W), 830Ω (6W), 1.7kΩ (3W), 3.3kΩ (1.5W)	Direct: 8Ω. Transformer: 16Ω 100V line: 330Ω (30W), 670Ω (15W), 1.3kΩ (7.5W) 70V line: 170Ω (30W), 330Ω (15W), 670Ω (7.5W), 1.3kΩ (3.75W)
Sensitivity	85dB (1W/1m, 1/2 space)	88dB (1W/1m, 1/2 space)	89dB (1W/1m, 1/2 space)
Frequency Response	120 – 20,000Hz (–10dB, 1/2 space)	100 – 20,000Hz (–10dB, 1/2 space)	100 – 20,000Hz (–10dB, 1/2 space)
Crossover Frequency	5,000Hz LPF: –12dB/octave HPF: –18dB/octave	5,000Hz LPF: –18dB/octave HPF: –18dB/octave	4,000Hz LPF: –12dB/octave HPF: –18dB/octave
Water Resistance	—	IP-X4 (H-2WP)	IP-X4 (H-3WP)
Speaker Components	8cm x 5cm cone woofer (neodymium magnet) 2.5cm balanced dome tweeter	10cm cone woofer (neodymium magnet) 2.5cm balanced dome tweeter	10cm cone woofer (neodymium magnet) x 2 2.5cm dome tweeter (neodymium magnet)
Input Connector	Removable terminal block with screw terminals (AWG #14 – #24), 2 pairs of (+)/(-) for input and loop-through terminations	Removable terminal block with screw terminals (AWG #14 – #24), 2 pairs of (+)/(-) for input and loop-through terminations	Removable terminal block with screw terminals (AWG #14 – #24), 2 pairs of (+)/(-) for input and loop-through terminations
Material/Finish	Enclosure: fire-resistant ABS resin (UL94:V – 0 grade), black Grille: steel plate, white, paint Trim piece: fire-resistant ABS resin (UL94: V – 0 grade), white, paint Adapter panel: stainless steel	Enclosure: fire-resistant ABS resin (UL94:V – 0 grade), black Grille: steel plate, white, paint Grille frame: fire-resistant ABS resin (UL94: V – 0 grade), white, paint Base plate: H-2; steel plate, plating H-2WP; stainless steel	Enclosure: fire-resistant ABS resin (UL94:V – 0 grade), black Grille: steel plate, white, paint Grille frame: fire-resistant ABS resin (UL94: V – 0 grade), white, paint Base plate: H-3; steel plate, plating H-3WP; stainless steel
Dimensions	312 (W) x 126 (H) x 90 (D) mm (mounting hole: 268 x 98mm)	ø268 x 111 (D) mm	295 (W) x 318 (H) x 129 (D) mm
Weight	1.5kg (including adapter panel)	2.1kg (including base plate)	3.3kg (including base plate)
Accessories	Trim piece x 1, Adapter frame (HY-H1) x 1	Front grille x 1, Base plate x 1	Front grille x 1 Base plate x 1

	HB-1	FB-100
Enclosure	Acoustic Bandpass	Acoustic Bandpass
Power Handling Capacity	240W (continuous program), 80W (continuous pink noise, 40-200Hz)	450W (Continuous program), 150W (Continuous pink noise, 40-200Hz)
Impedance	8Ω	8Ω
Sensitivity	91dB (1W/1m, 1/2 space)	94dB (1W/1m, 1/2 space) 88dB (1W/1m, free-standing in anechoic chamber)
Frequency Response	45 – 200Hz (–10dB, 1/2 space)	35 – 160Hz (–10dB, 1/2 space)
Speaker Component	20cm cone woofer	25cm cone woofer
Input Connector	Removable terminal block with screw terminals (AWG #14 – #24), 2 pairs of (+)/(-) for input and loop-through terminations	Removable terminal block with screw terminals (AWG #14 – #24), 2 pairs of (+)/(-) for input and loop-through terminations
Material/Finish	Enclosure: steel plate, black, paint Grille: steel plate, white, paint Grille frame: fire-resistant ABS resin (UL94: V – 0 grade), white, paint Mounting bracket: steel plate, black, paint	Medium Density Fiberboard (MDF), black, paint
Dimensions	430 (W) x 544 (H) x 135 (D) mm (mounting hole: 360 x 480mm)	354 (W) x 582 (H) x 340 (D) mm
Weight	11kg (including mounting bracket)	16kg
Option	Matching transformer: MT-S0601 (rated 60W)	Matching transformer: MT-S0601 (rated 60W)



TOA Corporation  
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Specifications are subject to change without notice.  
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