

# INTERIOR DESIGN SPEAKER SYSTEM

## HB-1 Flush-Mount Subwoofer System



### DESCRIPTION

THE TOA HB-1 FLUSH-MOUNT SUBWOOFER is the ideal solution for adding low frequency enhancement to commercial, residential and retail sound systems. The HB-1's unique minimum-depth design allows discreet flush-mount installation in ceiling structures or in walls between standard studs.

The HB-1 features a tuned, ported enclosure and a heavy-duty 20 cm woofer for high power handling and extended low frequency response. An acoustic bandpass filter design eliminates the need for an external crossover. The solidly constructed steel enclosure also acts as a heat-sink to dissipate excessive heat from the speaker component. Other features include a paintable grille and removable terminal block. Options include a matching transformer (MT-S0601) for connecting the HB-1 to distributed speaker systems.

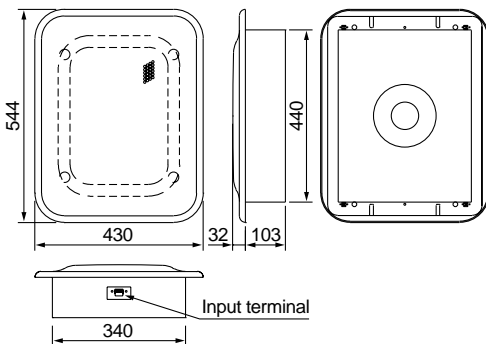
### FEATURES

- Low frequency enhancement for a wide variety of speaker system applications including hotels, houses of worship, museums, offices, residential spaces, restaurants, and retail stores.
- Frequency response: 45 - 200 Hz (-10 dB, 1/2 space)
- High sensitivity: 91 dB SPL (1 W / 1 m, 1/2 space)

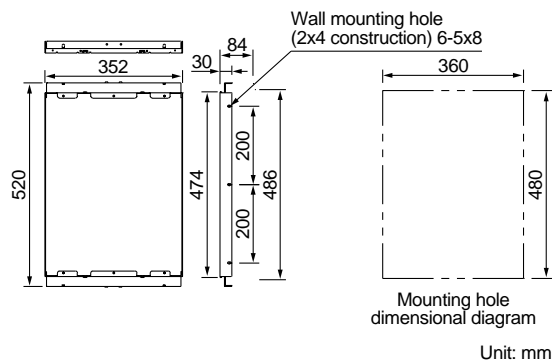
- Minimum-depth design allows recessed, flush-mount installation in spaces.
- Wall-mount between standard wall studs.
- Ceiling-mount using supplied rigging points.
- Tuned, ported enclosure for deep bass and low distortion.
- Acoustic bandpass filter design eliminates need for external crossover.
- High power handling: 240 W (Continuous Program).
- Heavy-duty loudspeaker component: 20 cm woofer with ferrite magnet.
- Solid, vibration-free steel enclosure: also acts as heat-sink to dissipate excessive heat away from the speaker component.
- Removable terminal block with loop-through terminations for convenient connection of parallel speakers.
- Paintable grille to custom-match to the environment.
- Mounting bracket included.
- Optional matching transformer (MT-S0601).

### APPEARANCE AND DIMENSIONAL DIAGRAM

HB-1

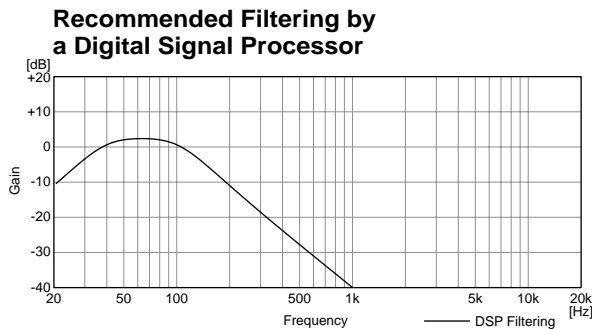
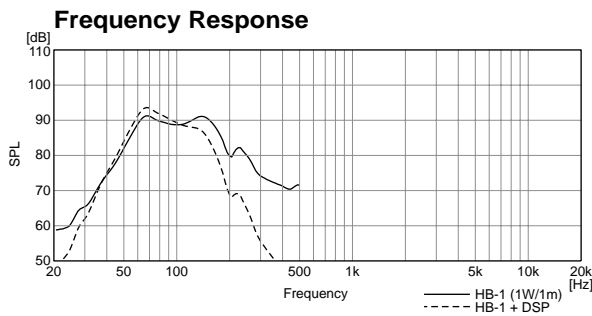


Mounting Bracket

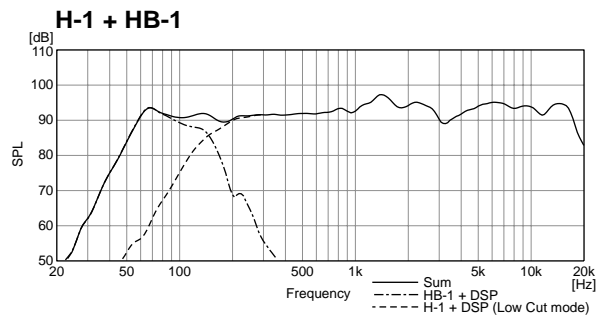


# HB-1

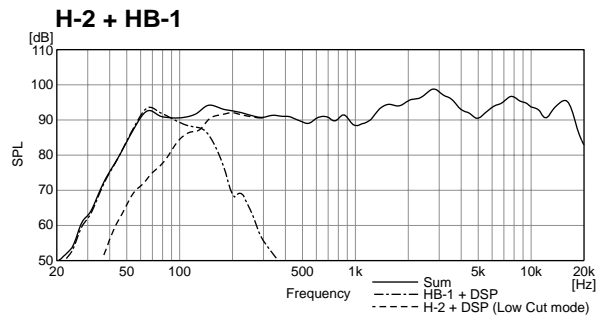
## CHARACTERISTIC DIAGRAMS



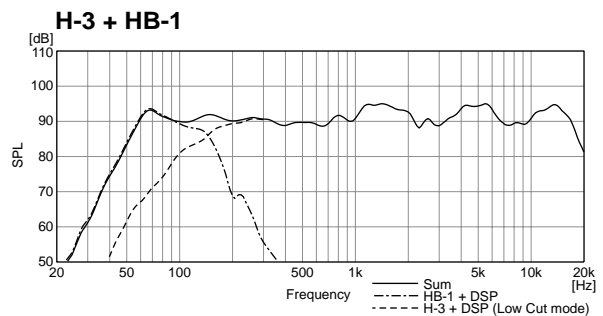
Note: High-pass filter (-12 dB/oct):  
Cut-off frequency=40 Hz, Q=1.0  
Low-pass filter (-12 dB/oct):  
Cut-off frequency=100 Hz, Q=1.0



\*\* H-1 level increased 9dB for SPL adjustment.  
\*\* HB-1 polarity reversed.



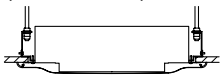
\*\* H-1 level increased 6dB for SPL adjustment.  
\*\* HB-1 polarity reversed.



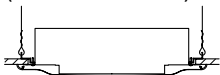
\*\* H-1 level increased 3dB for SPL adjustment.  
\*\* HB-1 polarity reversed.

### CEILING MOUNTING EXAMPLE

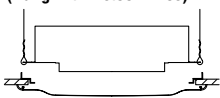
**Ceiling mount**  
(Fixed with 2 bolts)



**Ceiling mount**  
(Fixed with 4 steel wires)

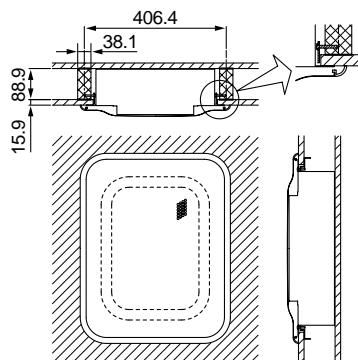


**Ceiling mount**  
(Hung with 4 steel wires)



\* Replace the Securing Clips onto the Mounting Bracket.  
\*\* In this case, the board thickness should be less than 18mm.

### WALL MOUNTING EXAMPLE



Unit: mm

### SPECIFICATIONS

	HB-1
<b>Enclosure</b>	Acoustic Bandpass
<b>Power Handling Capacity</b>	240W (continuous program), 80W (continuous pink noise, 40 – 200Hz)
<b>Impedance</b>	8Ω
<b>Sensitivity</b>	91dB (1W/1m, 1/2 space)
<b>Frequency Response</b>	45 – 200Hz (-10dB, 1/2 space)
<b>Speaker Component</b>	20cm cone woofer
<b>Input Connector</b>	Removable terminal block with screw terminals (AWG #14 – #24), 2 pairs of (+)/(-) for input and loop-through terminations
<b>Material/Finish</b>	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
<b>Dimensions</b>	430 (W) x 544 (H) x 135 (D) mm
<b>Weight</b>	11kg (including mounting bracket)
<b>Option</b>	Matching transformer: MT-S0601 (rated 60W)

TOA Corporation

URL : <http://www.toa.co.jp/>

Specifications are subject to change without notice.  
Printed in Japan (012) 833-64-556-00 U

