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## TOA SPEAKER COMPONENT

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# LOW-FREQUENCY ENCLOSURE

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## SB-46S

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### DESCRIPTION

The TOA SB-46S is a vented, bass-reflex, low-frequency enclosure for permanent speaker-system installations. It serves as a low-frequency enclosure for the HLS46S-8 woofer unit. It may be used in multi-amp systems employing the TOA SAORI for optimal time alignment, phase programs, equalization and channel divider functions. It also displays high-quality characteristics when used as a sub-woofer system for ultra-low-frequency output in a large multi-way speaker system. The optional HY-700 suspension kit may be mounted in the SB-46S before the woofer is installed. A large screw terminal input panel ensures safe and solid connections. The enclosure comes with a protective punched-metal grille and a leatherette finish.

### FEATURES

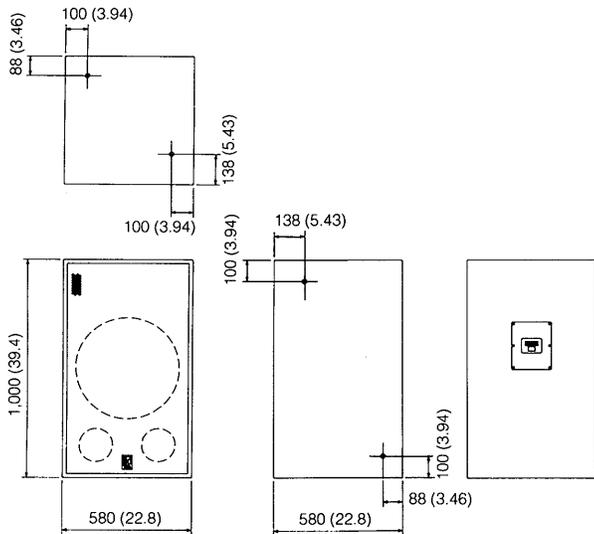
1. Low-frequency, vented (bass-reflex) enclosure for fixed installations.
2. HLS46S-8 woofer may be installed to produce a woofer system that is highly efficient in reproducing the low-frequency range. Box tuning frequency (fb) is 40Hz.
3. Creates a sub-woofer system for ultra-low frequency output in a large multi-way speaker system when used in conjunction with the HLS46S-8.
4. SB-46S may be suspended by using the optional HY-700 suspension kit.
5. Large, screw terminal, barrier-strip input panel.
6. Protective punched-metal grille.
7. Leatherette finish.

## SPECIFICATIONS

Enclosure	Vented (bass-reflex) type
Box Tuning Frequency	40Hz
Applicable Speaker Unit	HLS46S-8
Input Terminal	2P screw-terminal, barrier-strip (M5)
Material	Particle board
Finish	Leatherette dark gray
Dimensions	580(W) x 1,000(H) x 580(D) mm 22.8(W) x 39.4(H) x 22.8(D) inches
Weight	44kg (97 lbs.)
Accessories	Rubber feet: 4

\*Specifications are subject to change without notice

## APPEARANCE AND DIMENSIONAL DIAGRAM



Unit: mm (inch)

## OPTIONAL ACCESSORY

### HY-700 Suspension Kit



## ARCHITECTS AND ENGINEERS SPECIFICATIONS

The low-frequency enclosure shall be a TOA SB-46S or approved equivalent. The enclosure shall be a vented, bass-reflex low-frequency unit intended for permanent speaker system installations. Box tuning frequency (fb) shall be 40Hz. When installation with a suspended SB-46S is required, the optional HY-700 suspension kit shall be mounted to the SB-46S before the woofer is installed. A large barrier-strip input panel shall ensure safe and solid connections. Dimensions shall be 1,000(H) x 580(W) x 580(D)mm (39.4(H) x 22.8(W) x 22.8(D) in.). Weight shall be 44kg (97 lb.), for the enclosure. The enclosure shall be of particle board and shall come with a protective punched-metal grille and a leatherette finish.

## INSTALLATION EXAMPLES

The SB-46S is an enclosure for reproducing low frequencies. A high-efficiency low-frequency speaker system can be created by adding an HLS46S-8 woofer. It also displays high-quality characteristics when used as a sub-woofer system for ultra-low frequency output in a large multi-way speaker system. When driving the speaker system with multi-amplifier operation, the time alignment, phase program, equalization and channel divider functions can be set to their optimum performance conditions by using the TOA SAORI integrated sound processor.

### Installing the Low-Frequency Loudspeaker

1. Detach the protective punched-metal grille.
2. Connect the cables to the speaker.
3. Mount the speaker unit in the enclosure and tighten the screws at the 8 locations. Use the screws provided with the speaker.
4. Mount the protective punched-metal grille to the enclosure and tighten the screws at the 14 locations.

### Suspending the Enclosure

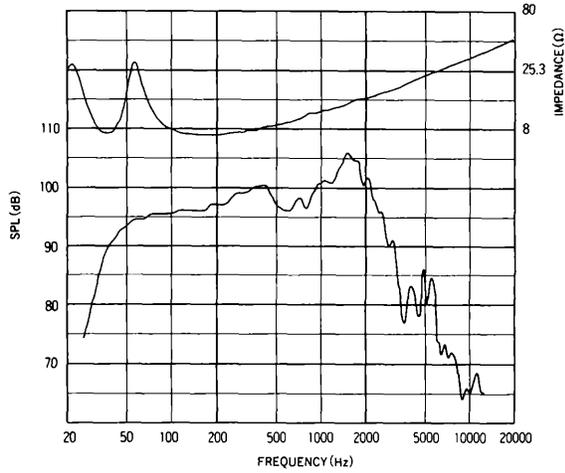
Before installing the speaker, mount the HY-700 suspension kit in the enclosure. For details, refer to the HY-700's instruction manual. When suspending this speaker system, be sure to investigate the structure of the installation location, and confirm that it is adequate for the weight of the components in the system.

### Free-Standing Enclosure

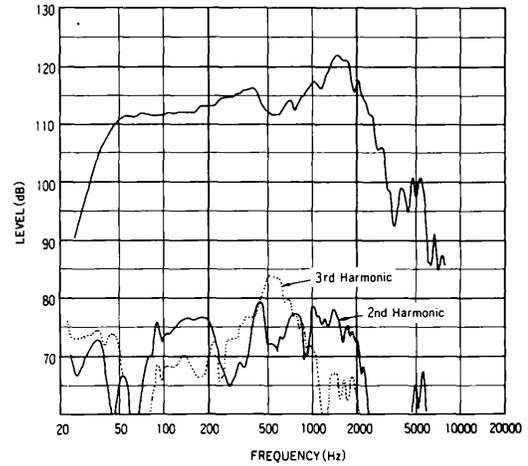
If necessary, attach the provided rubber feet to the four locations at the bottom of the enclosure for free-standing installation.

# CHARACTERISTIC DIAGRAMS (Assembled with the HLS46S-8 Low-frequency Loudspeaker)

## Harmonic Distortion

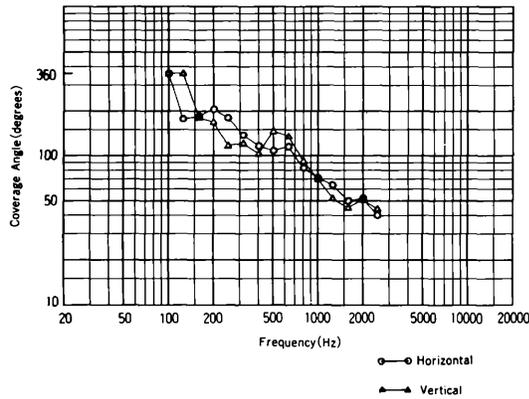


\*Measured in an anechoic environment referenced to 1 watt at 1 meter.

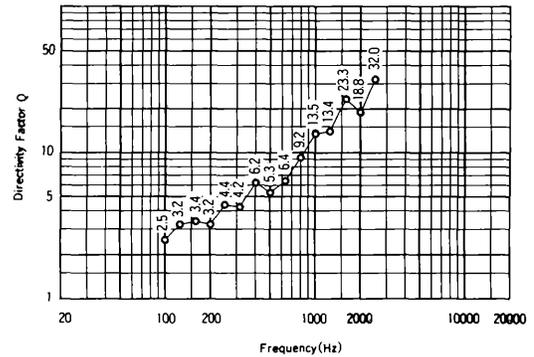


\*Measured at 60 watts (-10dB power), 1 meter reference distance.

## Coverage Angle vs Frequency (-6dB)



## Directivity Factor (Q) vs Frequency



## Polar Response (1/3 Octave Pink Noise)

— Horizontal    - - - - Vertical

