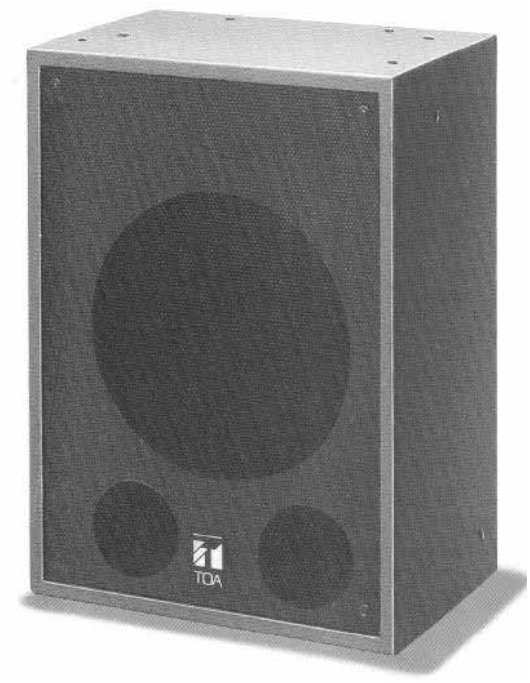
TOA SPEAKER COMPONENT

LOW-FREQUENCY ENCLOSURE

SB-30S



DESCRIPTION

The TOA SB-30S is a vented, bass-reflex, low-frequency enclosure for permanent speaker-system installations. It serves as a low-frequency enclosure for the HLS30S2-8 woofer. It may be used in multi-amp systems employing the TOA SAORI for optimal time alignment, phase programs, equalization and channel divider functions. The optional HNW-800 dividing network should be used when operating the speaker system passively. The optional HY-38S suspension kit may be mounted in the SB-30S before the woofer is installed, and the LE-M94 may be attached with the HY-M94 horn mounting bracket. 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. HLS30S2-8 woofer may be installed to produce a woofer system that is highly efficient in reproducing the low-frequency response. Box tuning frequency (fb) is 75Hz.
3. Creates a wide-response, highly efficient speaker system when used in conjunction with the LE Series horn, an HFD Series compression driver and the HLS30S2-8 woofer.
4. SB-30S may be suspended by using the optional HY-38S suspension kit.
5. Speaker system configuration allows for easy mounting of LE-M94 to the enclosure with the optional HY-M94 horn mounting bracket.
6. Large, screw terminal, barrier-strip input panel.
7. Optional HNW-800 cross-over network with HF equalization can be mounted in the supplied input panel opening.
8. Protective punched-metal grille.
9. Leatherette finish.

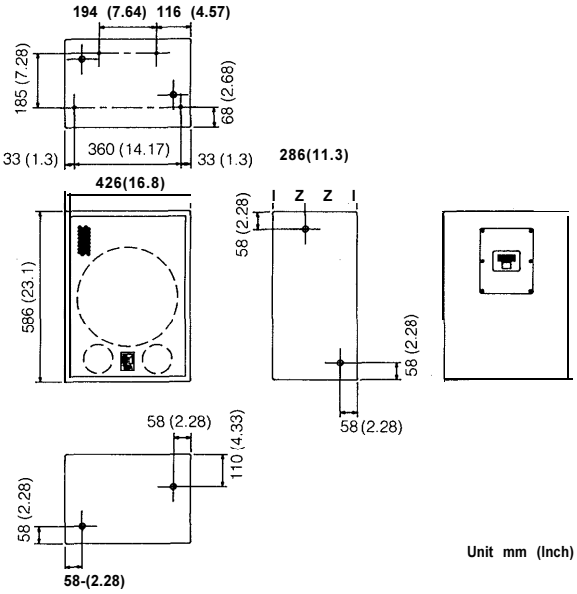
TOA

SPECIFICATIONS

Enclosure	Vented (bass-reflex) type
Box Tuning Frequency	75Hz
Applicable Speaker Unit	HLS30S2-8
Input Terminal	2P screw-terminal barrier-strip (M5)
Material	Particle board
Finish	Leatherette dark gray
Dimensions	426(W) x 586(H) x 286(D)mm 16.8(W) x 23.1(H) x 11.3(D) inches
Weight	15kg (33 lbs.)
Accessories	Rubber feet: 4

*Specifications are subject to change without notice.

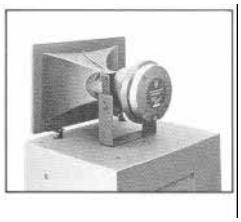
APPEARANCE AND DIMENSIONAL DIAGRAM



OPTIONAL ACCESSORIES

HY-38S
Suspension Kit

HY-M94
LE-M94 CD Horn Mounting Bracket



ARCHITECTS AND ENGINEERS SPECIFICATIONS

The low-frequency enclosure shall be a TOA SB-30S or approved equivalent. The enclosure shall be a vented, bass-reflex low-frequency unit intended for permanent speaker system installations. It shall serve as a low-frequency enclosure for the HLS30S2-8 woofer unit. Box tuning frequency (fb) shall be 75Hz. When installation with a suspended SB-30S is required, the optional HY-38S suspension kit shall be mounted to the SB30S before the woofer is installed. The LE-M94 may be attached with the HY-M94 horn mounting bracket. A large barrier-strip input panel shall ensure safe and solid connections. Dimensions shall be 586(H) x 426(W) x 286(D)mm (23.1(H) x 16.8(W) x 11.3(D) in.). Weight shall be 15kg (33 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-30S is an enclosure for reproducing low frequencies. A high-efficiency low-frequency speaker system can be created by adding an HLS30S2-8 woofer. A high-level, wide-range two-way speaker system can be configured by adding TOA's LE Series constant directivity horns and HFD Series compression drivers. 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. When driving the speaker system in passive operation, use the optional HNW-800 dividing network.

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 4 locations.

Suspending the Enclosure

Before installing the speaker, mount the HY-38S suspension kit in the enclosure. For details, refer to the HY-38S'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.

Mounting the Horn

When the speaker system is assembled, the LE-M94 constant directivity horn is attached to the SB-30S with the HY-M94 horn mounting bracket. For details, refer to the HY-M94's instruction manual.

Installing the Dividing Network

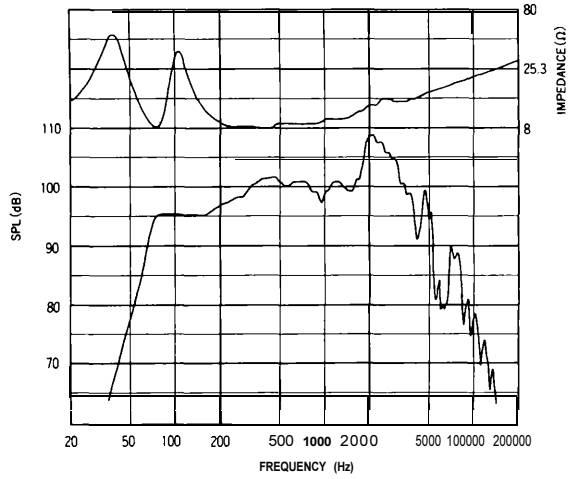
When using the HNW-800 dividing network, remove the input panel at the back of the enclosure and mount the HNW-800 dividing network in its opening. For details, refer to the HNW-800's instruction manual.

Free-Standing Enclosure

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

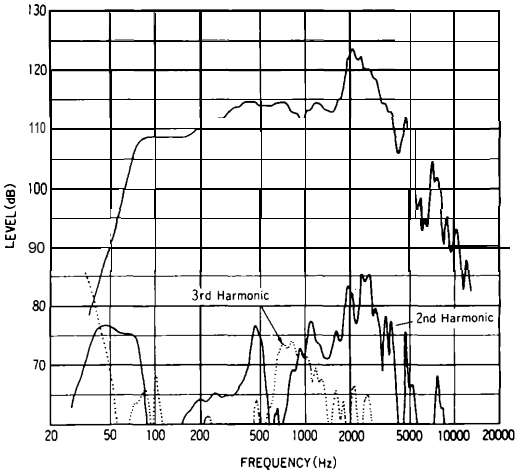
CHARACTERISTIC DIAGRAMS
(Assembled with the HLS30S2-8 Low-frequency Loudspeader)

- Frequency Response and Impedance Curve



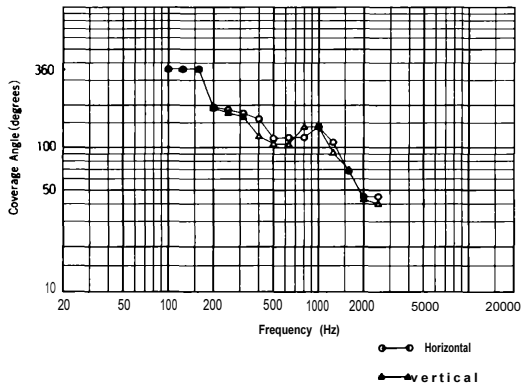
*Measured in an anechoic environment referenced to 1 watt at 1 meter

- Harmonic Distortion

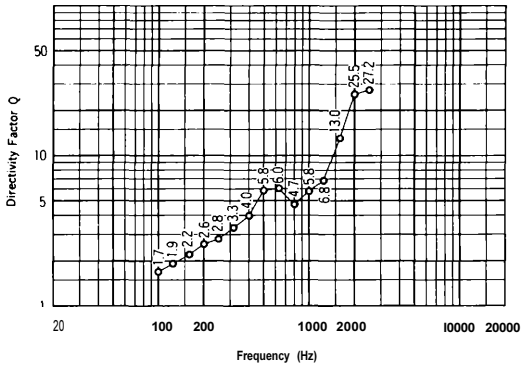


*Measured at 30 watts (-10dB power), 1 meter reference distance.

- Coverage Angle vs Frequency (-6dB)

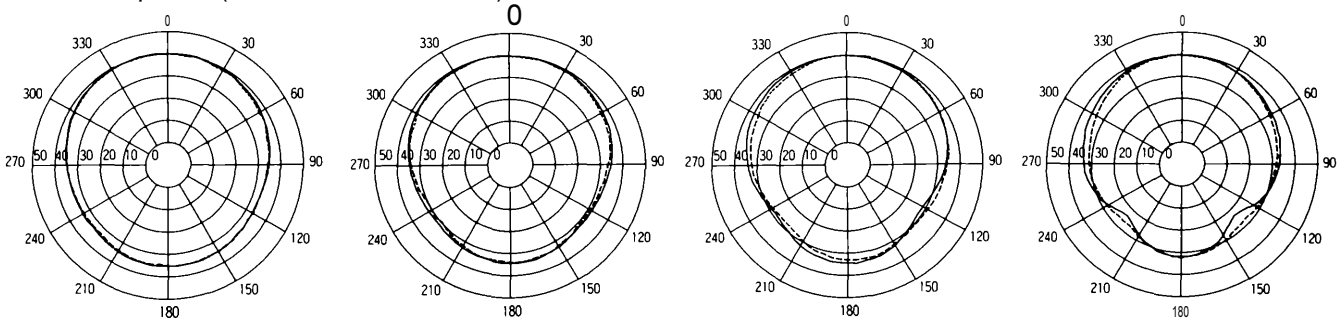


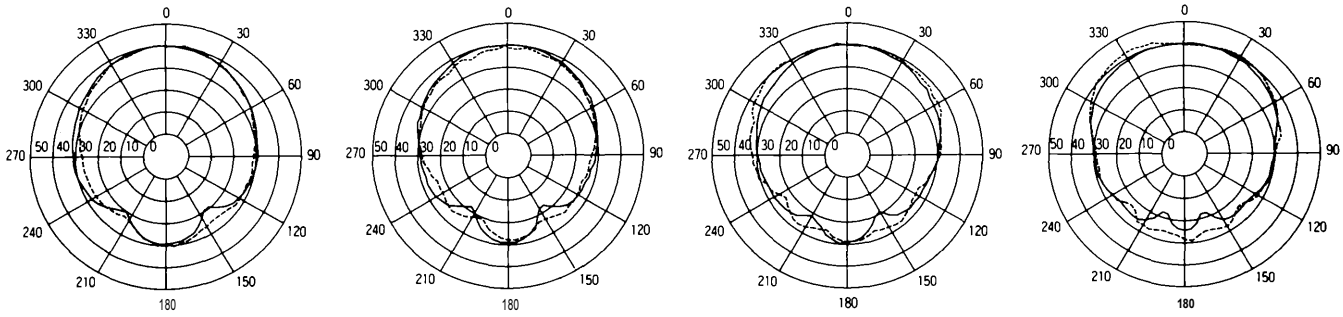
- Directivity Factor (Q) vs Frequency



- Polar Response (1/3 Octave Pink Noise)

—— Horizontal ------- Vertical





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