

SH96HO

3 Way Full Range Loudspeaker



The SH96HO is a 3-way, bi-amp loudspeaker design housing (4) x 15" LF drivers, (6) x 4" MF drivers and (1) x 1.4" exit HF compression driver, all mounted within single 90° x 60° horn. Utilizing our patented Synergy Horn™ technology, we uniquely place drivers within the horn in unison with a Synergy crossover network to allow for proper phase alignment between frequency bands. This permits the physically separated bands to combine and emerge from the horn as a single source, greatly reducing off axis distortions in frequency response and allowing for greater clarity at long distances. Furthermore, out of band harmonic distortion is reduced by the use of acoustic low pass filters on the low and mid frequency drivers.

The 13-ply Baltic Birch used throughout the enclosure is encased in PolyUrea for protection from impact and atmospheric conditions. Install and touring versions of the SH96HO's are equipped with eighteen M10 rig points; however, touring models also include built on casters and six handles for easy transport. Our EW (Extreme Weather) variant offers the ultimate in protection from the elements due to the use of high-density polyurethane panels impregnated with fiberglass fibers in the place of standard plywood.

As an added layer of protection we include our Sentinel™ high frequency driver protection circuitry which is a multistage limiter that protects the high freq driver in the event of overloads (peaks or long term). It is inaudible during normal operation, so dynamic range is not compromised. Utilize our DNA amplifiers or processor for maximum performance and protection with industry leading DSP capabilities.

Performance Specifications

Operating Mode

Two channel amplified three-way loudspeaker

Operating Range

45Hz - 13.5KHz -3dB

38Hz - 15KHz - 10dB

Coverage Pattern

90 x 60

Transducers

Low 4x15", Mid 6x 4", High 1x1.4"

Power Handling

Low 2800 W Cont. | 11,200 W Peak

M/H 800 W Cont. | 3,200 W Peak

Sensitivity measured as 2.83V @1m distance

105dB

Maximum SPL (continuous | peak)

133 dB | 139 dB

M Noise

134 dB

Impedance

Low 2 or 8 Ohm | M/H 4 Ohm

Recommended Power Amplifier

Low 5,600 Watts | Mid/High 1600 Watts

Physical Specifications

Connections (SH96HO-I/SH96HO-T)

(2) Neutrik NL4 Speakon

Pin 1+/- | Low Frequency

Pin 2+/- | Mid High Frequency

Connections (SH96HO-EW)

2x 2 Conductor Lead-in Wire

Mounting / Suspension Points

(2) M12 yoke points,

(18) M10 rigging points

Dimensions / Weight

26.5 x 45 x 25 in. | 67.31 x 114.3 x 63.5 cm.

265 lbs

Finish

Black polyurea coated enclosure w/ matte black grille, or

White polyurea coated enclosure w/ matte white grille

Gray UV resistant painted enclosure w/ matte grey grille

Enclosure Material

18mm Baltic Birch, polyurea coated

18mm high-density polyurethane

Options

SH96HO-EW Extreme Weatherized Version

SH96HO-I Install Version

SH96HO-B Touring Version

Accessories

BRKT-96BB Bracket Bumper

Bracket for attaching a SH95/95HO under a SH96/96HO (BRKT-95 required)

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SH96HO

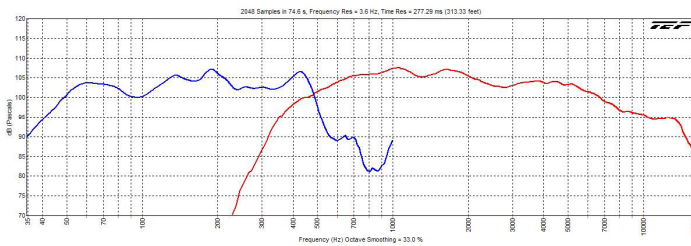
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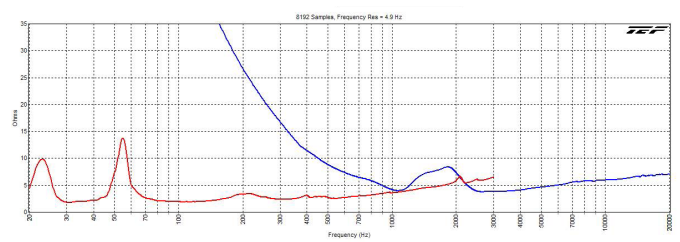
ARCHITECT/ENGINEERS SPECS

The loudspeaker shall utilize 4 – 15" woofers, 6 – 4" mid frequency drivers and 1 x 1.4" high frequency driver in a single enclosure. The coverage pattern shall be 90° horizontal x 60° vertical. The loudspeaker shall have an operating range of +/- 3 dB 45 Hz – 13.5 kHz. Sensitivity of 105 dB SPL @ 1m. Output of 133 dB SPL/139 dB SPL Peak. Power handling shall be 2800 Watts continuous, 800 Watts program. The impedance shall be selectable 2 or 8 ohms. The loudspeaker shall be constructed of 13 ply Baltic birch, water resistant Polyurea coated, properly braced for the intended use and a rugged steel grill. The connectors shall be Neutrik NL4. The Loudspeaker shall be the Danley Sound Labs SH96HO.

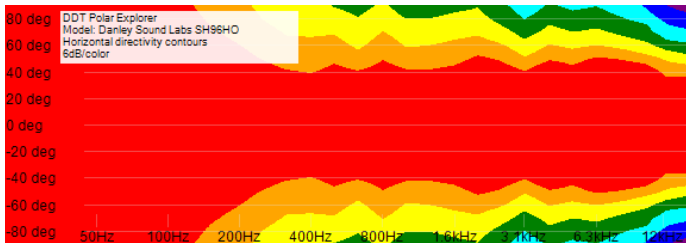
Sensitivity



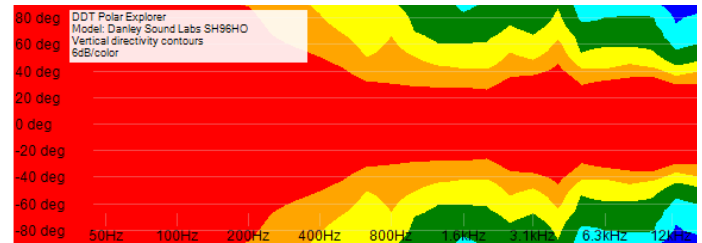
Impedance



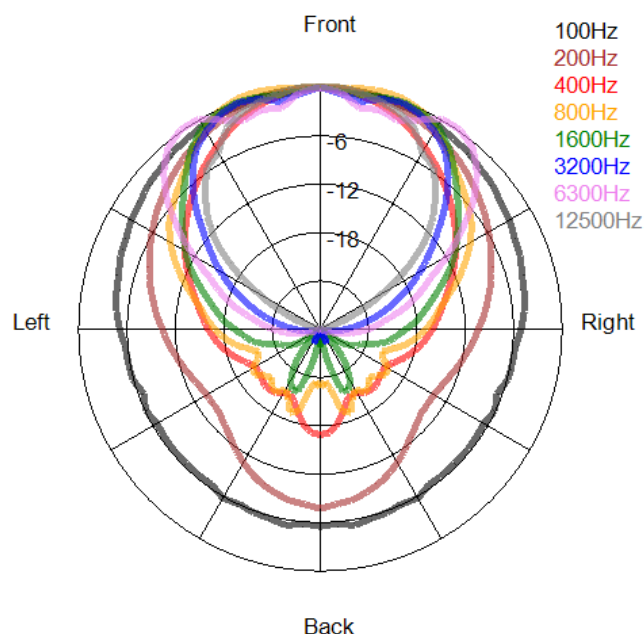
Horizontal Directivity Contours



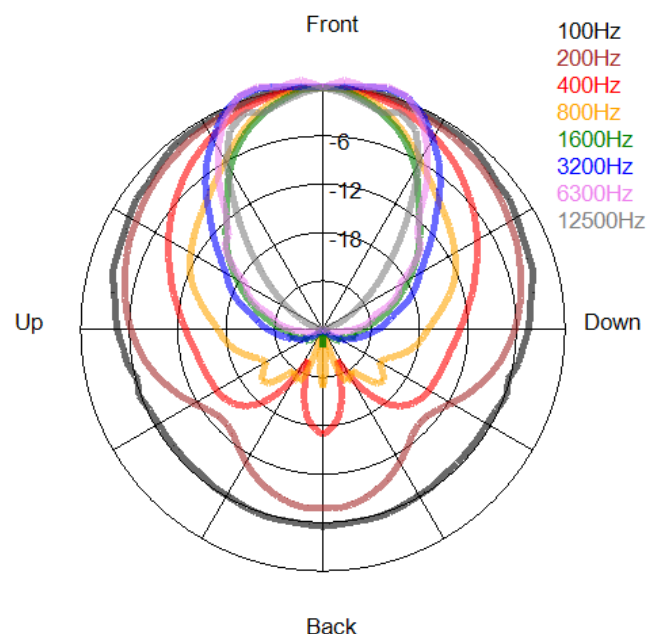
Vertical Directivity Contours



Horizontal Polar Response



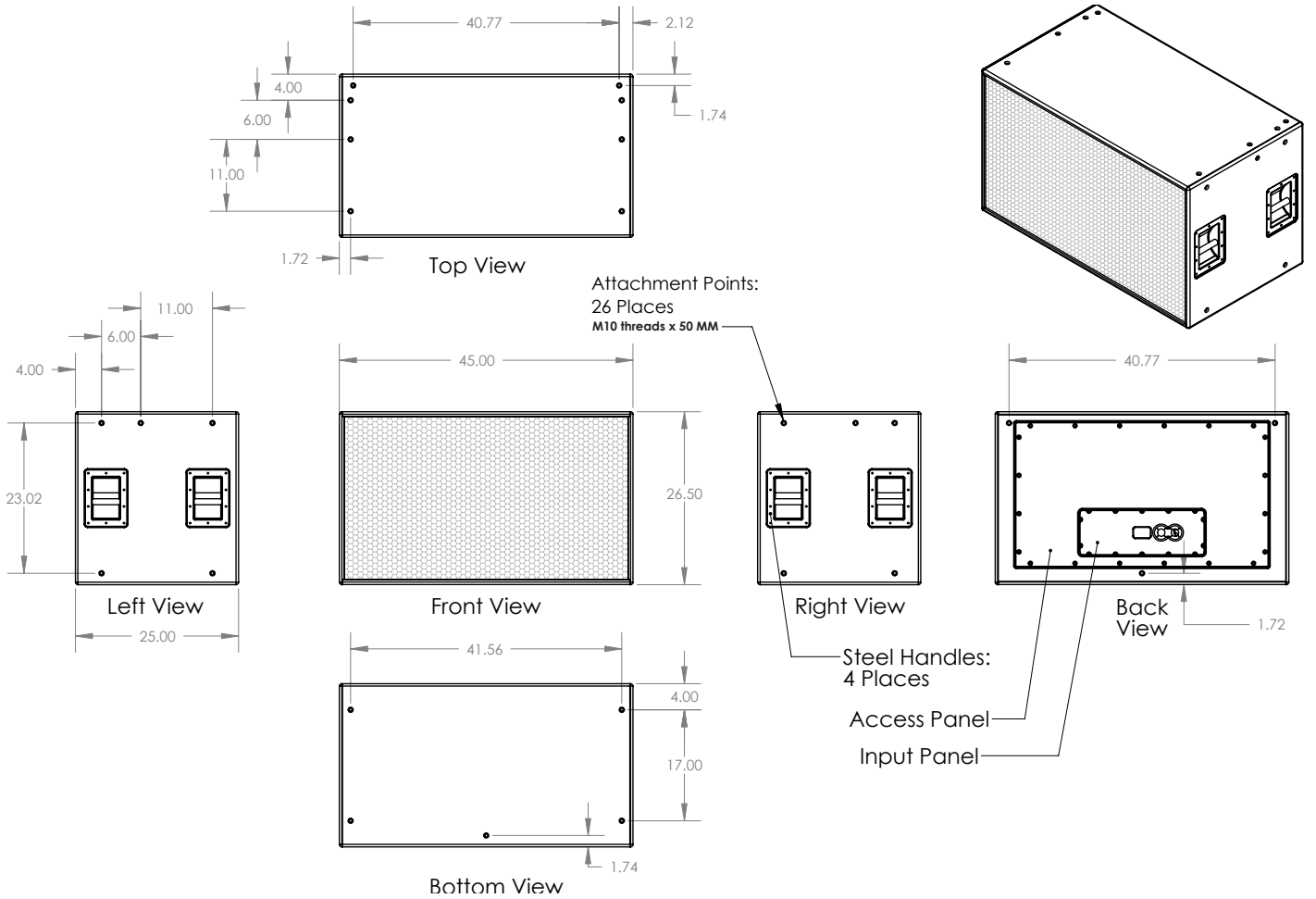
Vertical Polar Response



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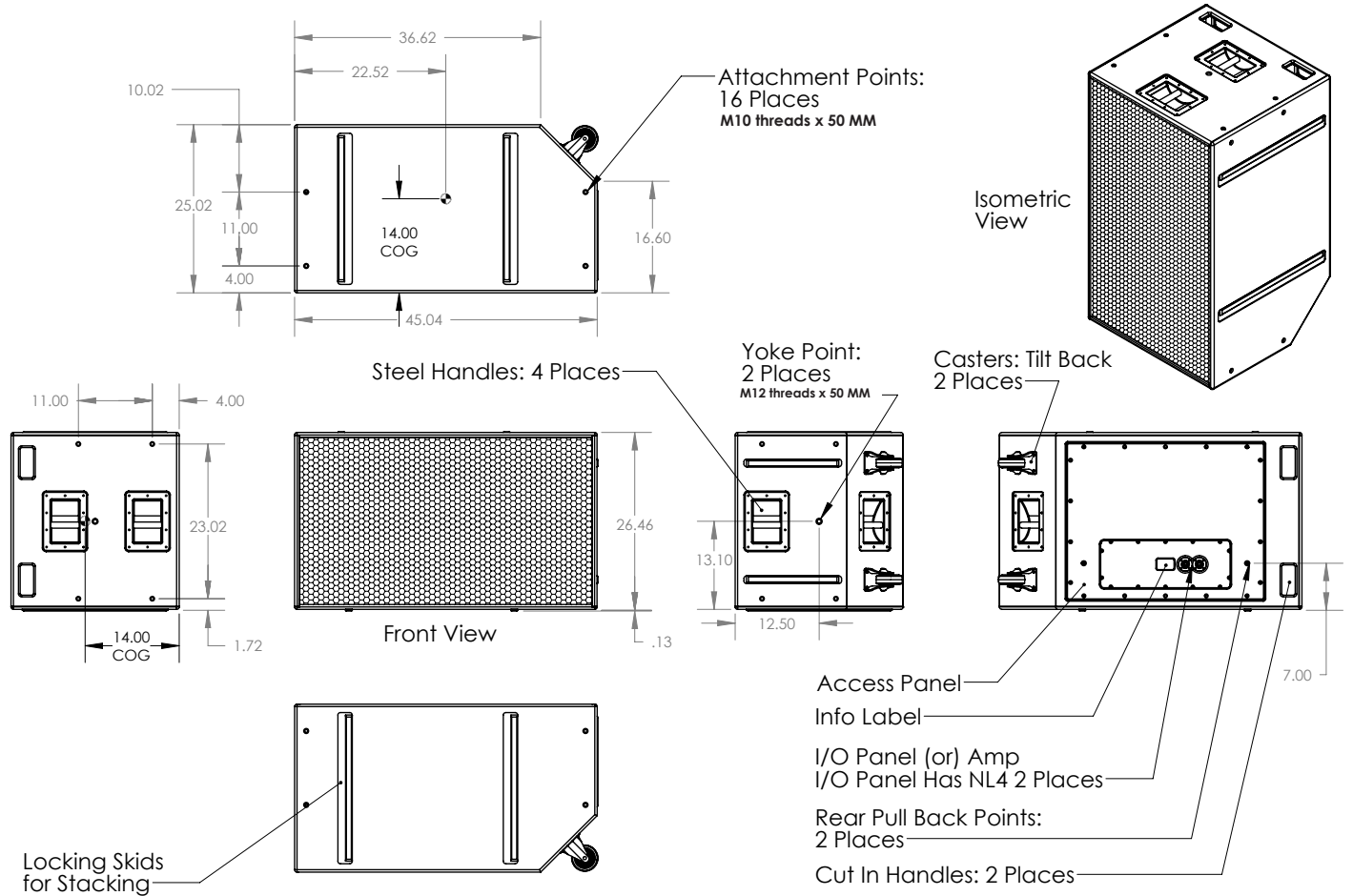
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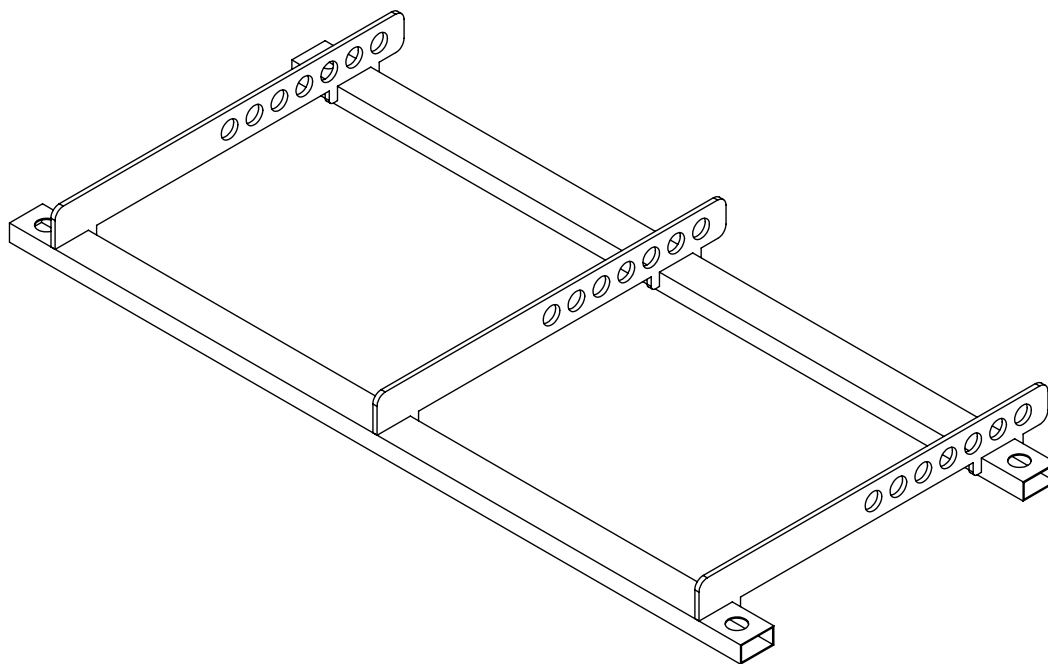
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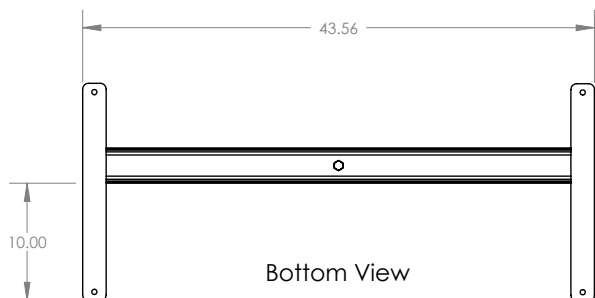
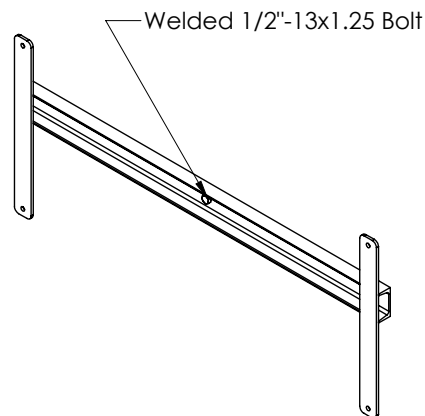
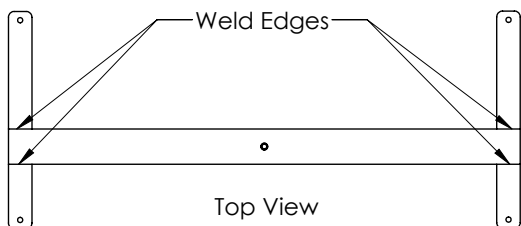
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