

SH50

3 Way Full Range Loudspeaker



The SH50 is a 3-way loudspeaker design that has the benefit of true modular array-ability. Housing (2) x 12" LF drivers, (4) x 5" MF drivers and (1) x 1" exit HF compression driver, all mounted within a single 50° x 50° horn and utilizing our patented Synergy Horn™ technology we uniquely place drivers within the horn, in unison with a Synergy crossover network, which allows 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 are both equipped with multiple M10 rig points. 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

Single channel amplified three-way loudspeaker

Operating Range

50Hz - 18KHz +/-3dB

37Hz - 24KHz - 10dB

Coverage Pattern

50 x 50

Transducers

Low 2x12", Mid 4x 5", High 1x1"

Power Handling

1000 W Cont. | 4000 W Peak

Sensitivity

measured as 2.83V @1m distance

100 dB

Maximum SPL

(continuous | peak)

127 dB | 133 dB

M Noise

Comming soon

Impedance

4 Ohm

Recommended Power Amplifier

2000 W

Physical Specifications

Connections (SH50-I/SH50-T)

(2) Neutrik NL4 Speakon wired in Parallel

Pin 1+/- | Full Range

Pin 2+/- | Pass Through

Connections (SH50-I-EW)

1x 2 Conductor Lead-in Wire

Mounting / Suspension Points

(2) M12 yoke points (SH50-I/SH50-I-EW)

(18) M10 rigging points

Dimensions / Weight

28 x 28 x 25.5 in. | 711 x 711 x 647 mm.

133 lbs | 60.3 Kg

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

Options

SH50-I-EW Extreme Weatherized Version

SH50-I Install Version

SH50-T Black Touring Version

Accessories

COVER-SH50 Protective Cover

BRKT-FSKIT Connects 2 Units w/ central pic point bar

BRKT-MBAKIT Connects 2 Units

Rev. 202209301629

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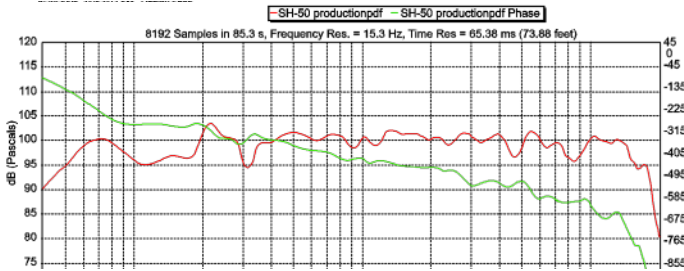


ARCHITECT/ENGINEERS SPECS

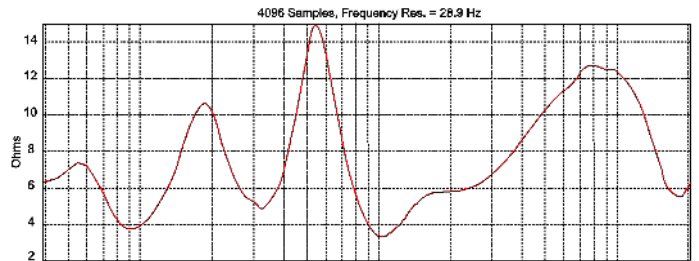
The loudspeaker shall utilize the synergy Horn/Tapped Horn patent-pending enclosure covering three pass bands. The coverage pattern shall be 50° horizontal x 50° vertical. The loudspeaker shall have an operating range of +/- 3 dB 50 Hz – 18 kHz. Sensitivity of 100 dB SPL @ 1m. Output of 127 dB SPL/133 dB SPL Peak. Power handling shall be 1000 Watts continuous, 2000 Watts peak. The impedance shall be nominal 4 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 SH50.

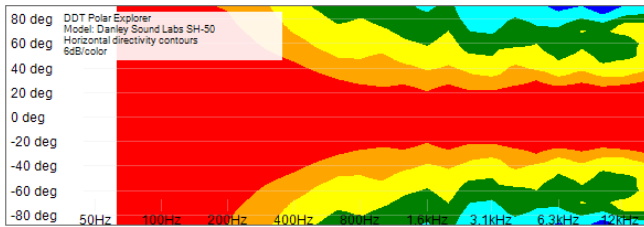
Sensitivity



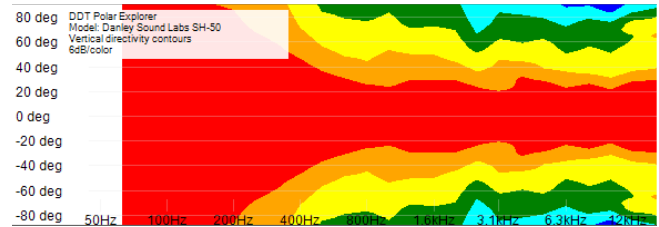
Impedance



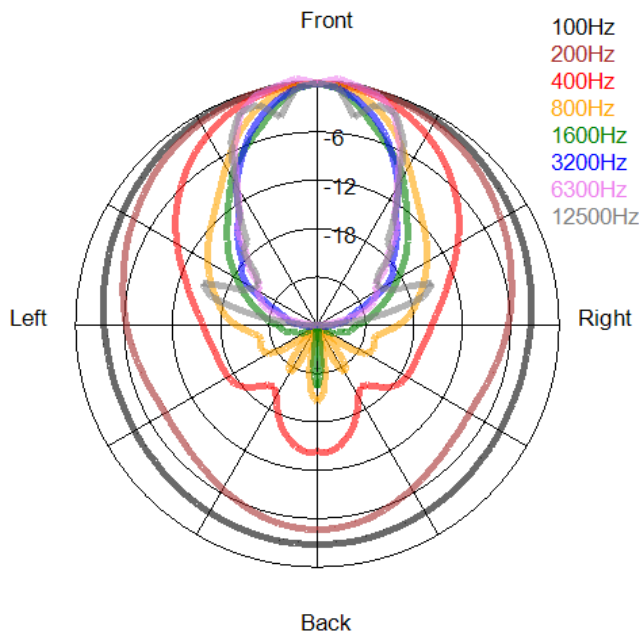
Horizontal Directivity Contour



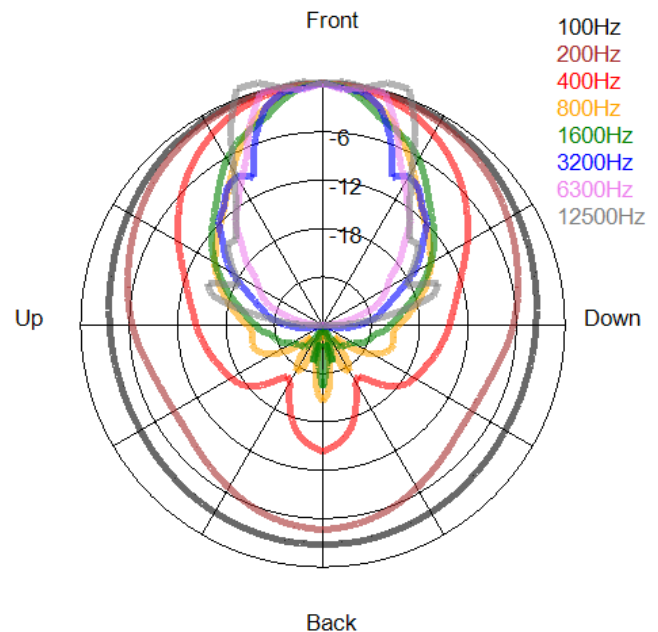
Vertical Directivity Contour



Horizontal Polar Response



Vertical Polar Response



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