



Gottenburg Odin Horn Loudspeaker

OVERVIEW:

Gottenburg Odin is a large loudspeaker incorporating many acoustic innovations while using an absolute no-compromise approach to the components, construction, and design.

NAME DEFINITION:

Gottenburg — old English spelling of the Swedish port city of Gothenburg

Odin — Norse for God of magic and poetry, leader or chief, sometimes God

The Odin represents the largest version of the Gottenburg model. A smaller version may be considered in the future.

COMPONENTS:

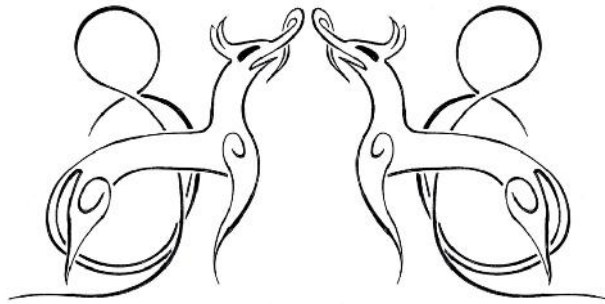
Gottenburg Odin will have unmatched performance. Components include a 31.5" (800 mm) Fostex wide-band woofer, the finest and most costly driver of its kind currently produced; and a 28.4" (712 mm) solid bronze horn mounted on an acoustic suspension which is loaded with a house modified top-of-the-line Lowther full-range driver in a non-compression loading configuration.

The horn-loaded full-range driver is mounted with an air gap/by-pass to the center portion of the large wide-band woofer, allowing the woofer to utilize the horn for upper bass and low midrange through the center of the horn, at the same time creating nearly perfect point source of sound.

Finally, a very special horn super tweeter with AlNiCo motor is semi-concealed within the solid bronze Norse sea dragon motif in the top resonator.

DESIGN OBJECTIVE:

The Gottenburg Odin is designed as an architectural artform with timeless, classic lines while achieving the correct balance in scale and proportion. Henceforth, the beautiful structure matches all the necessary sonic parameters.



Gottenburg Odin

Creating a new reference in ultra high fidelity: **its sonic abilities are virtually limitless**



Gottenburg Odin stands 70 inches (178 cm) tall

THE GOTTENBURG HORN



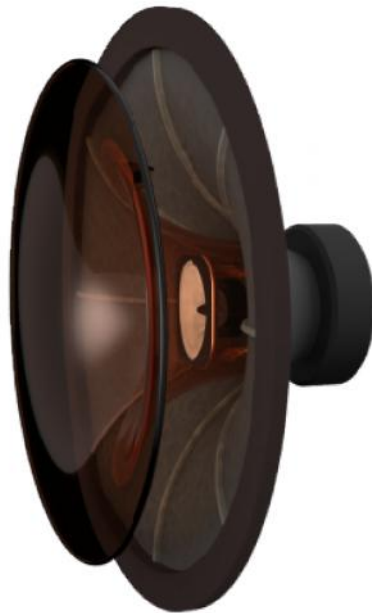
Solid bronze horn mounted in a unique suspension

THE HORN (continued)

FUNCTION:

The Gottenburg horn was designed with many hours of research and implements our already proven horn-loading principles: these principles are the base of Gottenburg's "infinite" horn configuration. The "infinite horn" utilizes both the inside and the outside of the horn and was perfected in CAD design, where every angle, proportion, and micrometer could be analyzed and accounted for. The completed CAD renders are sent off for high-tech 3D printing where an exact model is made and is used to make the final mold for the bronze masterpiece.

Designed by computer, each pair is finished by hand, one pair at a time.



Full-range driver mounted within the bronze horn with a gap to the center of the woofer



The horn mounted in suspension

UNIQUE CO-AXIAL HORN LOADING:

Loaded into the center of the horn is a highly sensitive full-range driver which is mounted in the horn with an air gap around it, allowing lower mid-band and mid-band sound from the supersized driver to pass through the horn at the same time as the full-range driver. The smaller driver is protected from any port turbulence by use of a tonewood “deflector” mounted within the horn. These two primary drivers use the horn’s center and it’s the central part of the horn that most of the music’s bandwidth will come from. The outer portion of the supersized woofer will utilize the exterior surface of the horn as a sort of inverted horn and will further its ability to produce truly tectonic bass. Additionally, directing the woofer’s lower bandwidth out of axis virtually eliminates any off-axis distortion to the ear. The horn’s unique suspension softens the “skin” of the horn’s surface for a more natural sound.



31.5" (800 MM) WIDE-BAND WOOFER

Larger drivers produce more realistic mid-range. It was true during the golden age of tube hi-fi and it's true today.

The wide-band principle is as follows: The larger the driver, the lower the required X-max (cone excursion) needed to produce the same bass as a smaller unit, which must work much harder to produce the same bass as the larger unit. Lower X-max is required for accurate low distortion mid-range reproduction — more X-max means more distortion. In short, the only way to have both is to have a driver large enough to produce the desired bass without too much excursion, along with a diaphragm sensitive enough to produce the mid-bandwidth.

The massive 31.5" (800 mm) wide-band woofer is made by hand in Tokyo, Japan, one pair at a time, and is one of the rarest and most expensive drivers of its kind. This extreme driver is then modified in-house to further exploit its mid-range potential, using less than 2.5 mm of X-max to produce truly tectonic bass. At the same time, its physical parameters make it the most perfect driver for upper bass and lower spectrum mid-range.

MYSTERY HORN SUPER TWEETER

A horn super tweeter is mounted within the double sea dragon motif in the top resonator.



Bronze horn in satin gold patina

THE CABINET

The Gottenburg Odin's cabinet takes design elements from great French, Swedish, and Georgian architecture, clocks, and other mechanical art.

The cabinet's body is finished in rare woods such as Persian cedar with solid African ebony or wenge wood inlays. The superstructure of the cabinet is made from void-free birch hardwood ply panels; the cabinet's interior is lined with Medex panels — an upgraded much stronger type of fiber board.

The Gottenburg cabinet is extremely strong, exquisitely crafted, and built to last a lifetime.



Void-free birch ply + Medex panel construction

DUAL EXTERNAL RESONATORS

Like other dc10audio horn loudspeakers, a resonating system is employed.

The Gottenburg has both top and bottom external resonators milled from music-grade tonewood such as ebony or African sapele. The lower panel has an internal resonator made from a rare tonewood from the coast of Oregon called Port Orford white cedar. The two holes in the lower resonator offer a window's view of the internal resonator, which works like a passive transducer, while the by-pass holes work as sort of dual port. This resonating system increases efficiency, reduces unwanted cabinet resonances, and produces a sound that is more dimensional and natural.

Both upper and lower resonators are mounted in solid bronze bezels with a patina to match the horn and other bronze components.

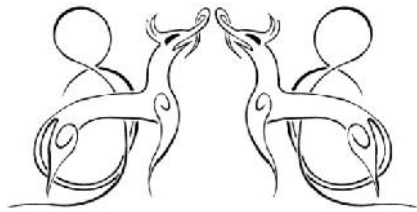


Bronze horns in
polished deep
copper finish

dc10audio's Gottenburg Odin

Designed to play the largest scale music without any sonic compromise





SPECIFICATIONS:

- dc10audio's unique infinite horn configuration
- Drivers: 31.5" (80 cm) wide-band woofer + 7" (17.8 cm) full-range driver set in co-axial horn arrangement; top mounted mystery horn super tweeter with AlNiCo motor
- Bronze alloy horns and other bronze components by **Santa Fe's Laird Hovland** (choice of gold satin patina, bronze satin patina, or hand-polished deep copper)
- Exclusive dual front mounted tonewood external & internal resonators
- Finest internal components by Duelund of Denmark
- Many wood/inlay options ([See wood choices page](#))
- Bandwidth: 15 Hz-50,000 Hz
- Sensitivity: estimated 102 dB
- Overall size: 70" (178 cm) high x 35" (89 cm) wide x 21.5" (55 cm) deep
- Weight: 510 lbs (231 kg) each

Price Upon Request