

# VORTIS 2 VR2-10810

The VR2-10810 is a professional-grade, full-range speaker system housed in a bass reflex enclosure with a passive crossover, 8" bass/midrange woofer and a 1" high-frequency driver coupled to a CD horn.

It is designed for use in integrated public address systems tasked to render music and speech in high audio quality and provide (voice) alarms in compliance with current international standards.

This speaker is EN 54-24-certified (type B, outdoor use).

VORTIS 2 series speakers ship with one of three different high-frequency horns with the following coverage patterns: 60° x 40°, 90° x 55° and 60°-90° x 55° (asymmetrical horn), indicated in horizontal by vertical degrees. All horns may be rotated 90°.

The VR2-10810's hallmarks include remarkably neutral response, high maximum SPL, uniform dispersion, and constant directivity from 1000 Hz upwards.

Its trapezoidal housing is made of birch plywood covered in a heavy-duty,

two-component textured coating.

The bass/midrange woofer's moisture-proofing on both sides and the cabinet interior's two-component structured lacquer ensure long life even in rugged outdoor conditions.

A front grille protects the speaker front in compliance with the German DIN 18032-3 standard for ball impacts.

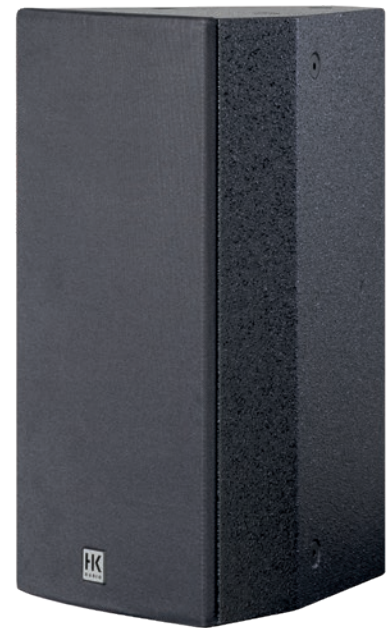
The acoustically-engineered fabric that serves as the grille cloth is available in a dirt/water repellent or non-flammable variant.

The enclosure and grille cloth come in more than 30 colors.

Three each M10 threaded inserts on the top, bottom and rear panels and two M10 threaded inserts on the side panels serve to connect mounting hardware and fall protection devices such as arrest wires.

For the best audio results, this speaker is to be used with the presets for the Gräf & Meyer eXentro system, Lab.gruppen IPD/D series power amps or, in multiplatform systems, for the given manufacturers' equipment.

(The latter filter sets are available in downloadable spreadsheets.)



## Technical Data

### Applications:

Voice Alarm Systems:  
EN 54-24:2008 certification (type B)

Sports facilities:  
Compliant ball impact resistance according to DIN 18032-3

Outdoor or indoor use:  
Dirt/water repellent or non-flammable speaker cloth variant available

### Mounting accessories:

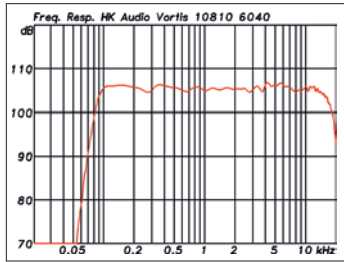
U-bracket:  
For use with a rotatable, tilting wall mount

Cluster plates:  
For configuring two- and three-cabinet arrays

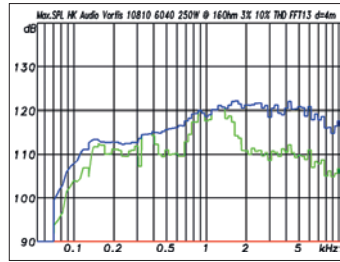
AP10-B:  
Anchor point, e.g. for shackles to connect suspension cables/arrest wires

### Technical Specifications:

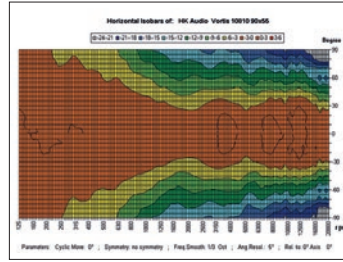
- Two-way system with a built-in passive crossover; crossover frequency 1100 Hz
- Frequency response: 84 Hz - 20 kHz (-10 dB)
- Sensitivity: 95 dB @ 1 W/1 m, full space
- Sensitivity: 83 dB @ 1 W/4 m, full space
- Max. SPL: 118 dB @ 1 m, full space (10% THD/EN 60268-21)
- Max. SPL: 101 dB @ 4 m, full space (rated power/EN 54-24 signal)
- Power handling, nominal: 100 W
- Power handling, program: 200 W
- Impedance: 12 ohms
- Coverage pattern: Varies according to the type of horn
- Connectors: Four binding posts with an optional protective cover



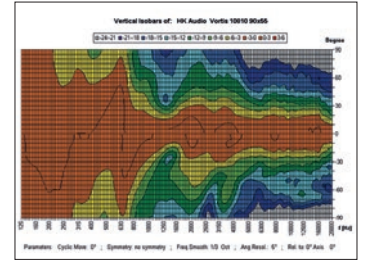
Frequency response



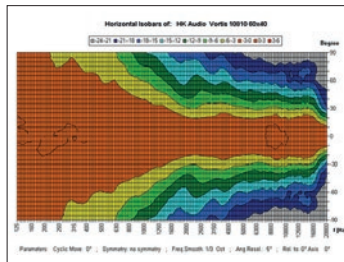
Max. SPL @ 3% and 10% THD (EN 60268-21)



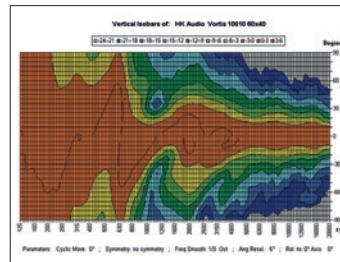
Horn variation 90° x 55° horizontal



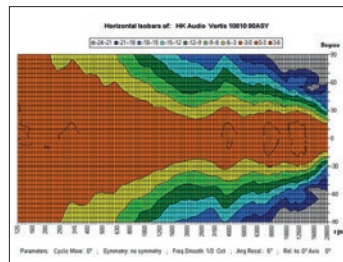
Horn variation 90° x 55° vertical



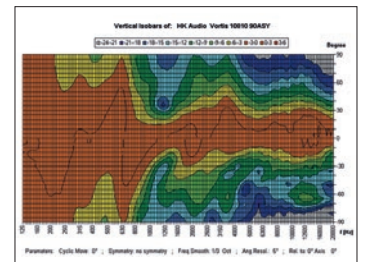
Horn variation 60°x40° horizontal



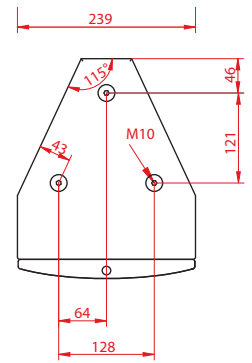
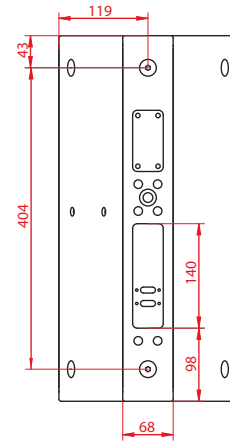
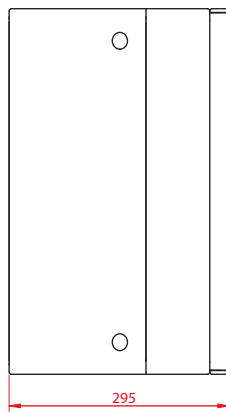
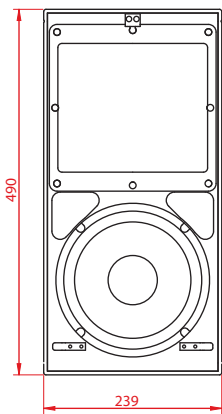
Horn variation 60°x40° vertical



Horn variation 60°-90° x 55° horizontal



Horn variation 60°-90° x 55° vertical



Power handling capacity (nominal)	100 watts
Power handling capacity (program)	200 watts
Power handling capacity (peak)	400 watts
Frequency range (-10 dB)	84 Hz - 20 kHz
Crossover	2-way passive
Crossover frequency	1100 Hz, 2nd order
Sensitivity 1 W @ 1 m, fullspace (100 Hz - 20 kHz)	95 dB
Sensitivity 1 W @ 4 m, fullspace (100 Hz - 20 kHz)	83 dB
Max. SPL @ 1 m, fullspace (10% THD/ EN 60268-21)	118 dB
Max. SPL (rated power/4 m/EN 54-24 signal)	101 dB
Nominal impedance	12 ohms
Low/mid transducer	1 x 8" with 1.75" voice coil and ferrite magnet
High frequency driver	1 x 1" with 1.4" voice coil with neodymium magnet and ferrofluid

Horn variations (rotatable)	60° x 40°, 90° x 55° and 60° - 90° x 55° (asymmetrical)
Dispersion characteristic	Depends on horn variation
Connections	4x screw terminals with optional touch protection plate
Cabinet	Birch plywood
Filters	Gräf & Meyer eXentro, Lab.gruppen IP-D/D-series or filter spread sheets
Finish	2-component structured lacquer in over 30 colors, cabinet is painted from the in- and outside
Metal grille with acoustic textile	In over 30 colors, dirt repellent and flame-retarding
Rigging points	13 x M10
Weight	11.7 kg / 25 lb 13 oz
Dimensions (H x D x W) in cm	49 x 23.9 x 29.5
Dimensions (H x D x W) in inches	19.29 x 9.41 x 11.61
Accessories	U-bracket, tilt unit, wall plate, cluster plates and AP-10 B mounting point