

VORTIS 2 VR2-10810 100 V

The VR2-10810 100 V is a professional-grade, full-range speaker system housed in a bass reflex enclosure with a fully encapsulated 100/70 V transformer, a passive crossover, an 8" bass/midrange woofer and a 1" highfrequency driver coupled to a CD horn.

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

Three power taps serve to adjust levels.

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 hallmarks of this speaker 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, twocomponent structured lacquer.

The bass/midrange woofer's moistureproofing on both sides and the cabinet interior's twocomponent coating ensure long life even in rugged outdoor conditions.

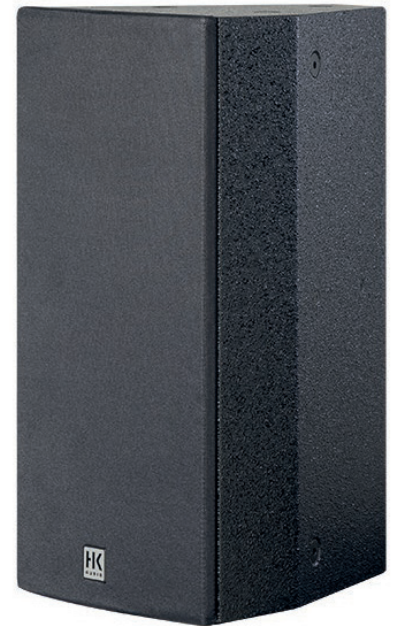
For use in unprotected outdoor areas, a PU (polyurethane) coating is required.

A front grille protects the speaker front in compliance with the German DIN 18032-3 standard for ball impacts. The acousticallyengineered 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 40 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, presets are provided for Lab.gruppen IPD/X and Lake, Powersoft Armonia, QSC Q-SYS and, for implementation on 3rd party platforms, filter sheets in a tabular format.



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:

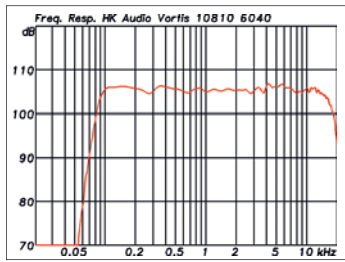
U-bracket:
For use with a rotatable, tilting wall mount

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

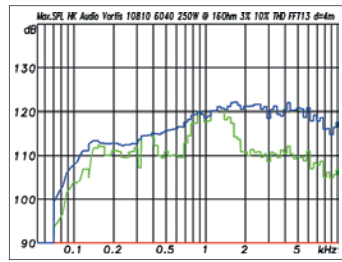
AP10-B:
Anchor point, e.g. for shackles to connect suspension cables/arrest wires

Technical Specifications:

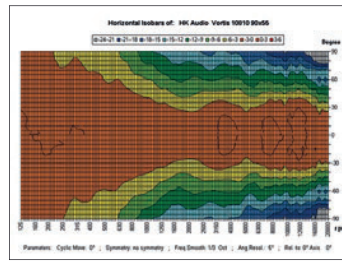
- Two-way system with a built-in passive crossover; crossover frequency 1100 Hz
- Frequency response: 84 Hz - 20 kHz (-10 dB)
- Sensitivity: 112 dB @ 50 W/1 m, full space
- Sensitivity: 100 dB @ 50 W/4 m, full space
- Max. SPL: 112 dB @ 1 m, full space (10% THD/ EN 60268-21))
- Max. SPL: 101 dB @ 4 m, full space (50 W-tap/ EN 54-24 signal)
- Power handling, nominal: 50 W/25 W/12.5 W
- Impedance: 100 ohms @ 50 W; 200 ohms @ 25 W; 400 ohms @ 12.5 W
- Coverage pattern: Varies according to the type of horn
- Connectors: 2x screw terminals with optional touch protection plater and three selectable power taps



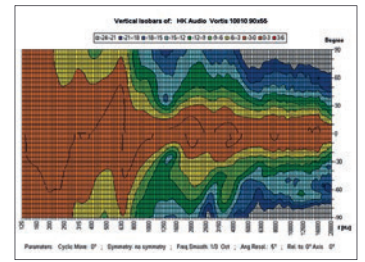
Frequency response



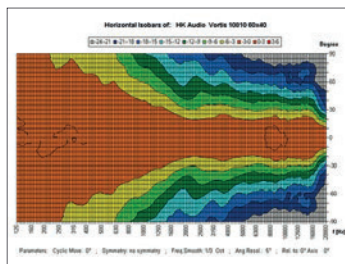
Max. SPL @ 3% and 10% THD (EN 60268-21)



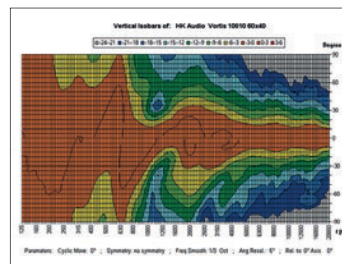
Horn variation 90° x 55° horizontal



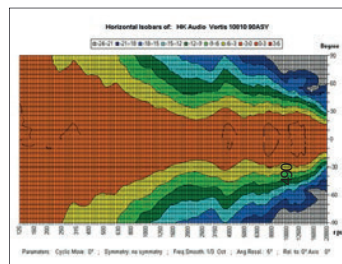
Horn variation 90° x 55° vertical



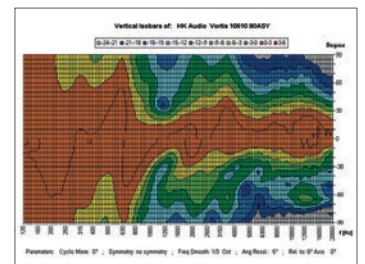
Horn variation 60° x 40° horizontal



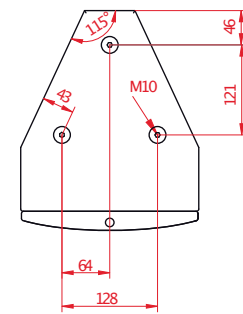
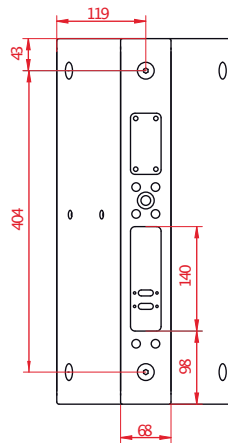
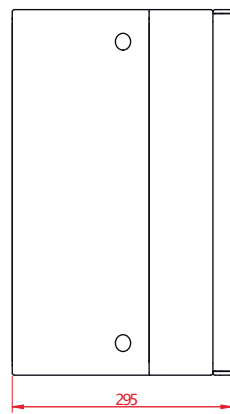
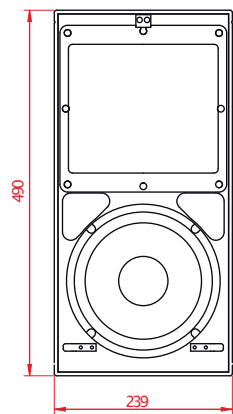
Horn variation 60° x 40° vertical



Horn variation 60°-90° x 55° horizontal



Horn variation 60°-90° x 55° vertical



Power handling capacity (tap 1 @ 70 V)	25 watts
Power handling capacity (tap 2 @ 70 V)	12,5 watts
Power handling capacity (tap 3 @ 70 V)	6 watts
Frequency range (-10 dB)	84 Hz - 20 kHz
Crossover	2-way passive
Crossover frequency	1100 Hz, 2nd order
Sensitivity 50 W @ 1 m, fullspace (100 Hz - 20 kHz)	112 dB
Sensitivity 50 W @ 4 m, fullspace (100 Hz - 20 kHz)	100 dB
Max. SPL @ 1 m, fullspace (10 % THD/ EN 60268-21)	112 dB
Max. SPL (rated power/4 m/EN 54-24 signal)	101 dB
Nominal impedance (depending on tap)	100 ohms, 200 ohms, or 400 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	2x screw terminals with optional touch protection plate
Cabinet	Birch plywood
Filters	Lab.gruppen IPD/X and Lake, Powersoft Armonia, QSC Q-SYS or filter sheets
Finish	2-component structured lacquer in over 40 colors, cabinet is painted from the in- and outside
Metal grille with acoustic textile	In over 40 colors, dirt repellent and flame-retarding
Rigging points	13 x M10
Weight	12.8 kg / 28 lb 4 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