

VORTIS 2 VR2-21214

The VR2-21214 is a professional-grade, full-range speaker system housed in a bass reflex enclosure with a passive crossover, two 12" bass/midrange woofers and one 1.4" 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 VR2-21214's hallmarks include remarkably neutral response, high maximum SPL, uniform dispersion, and constant directivity from 600 Hz upwards.

Its trapezoidal housing is made of birch plywood covered in a heavy-duty, two-component structured lacquer.

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

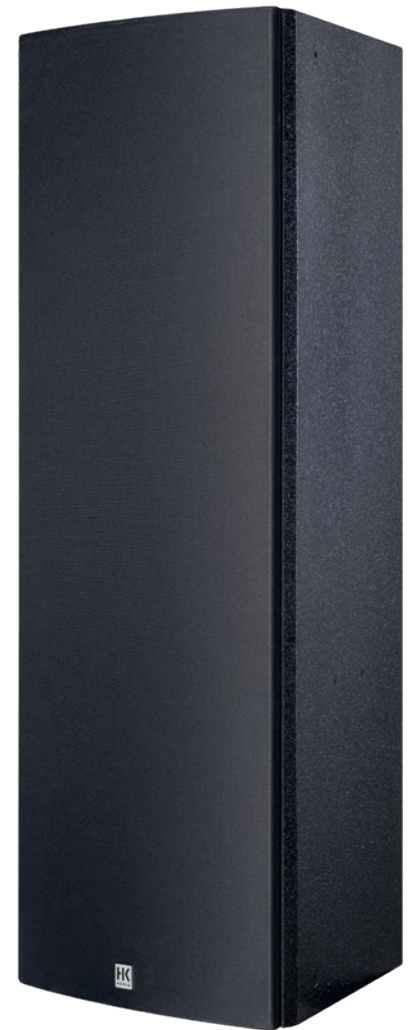
A front grille protects the speaker front in compliance with the German DIN 18032-3 standard for ball impacts.

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

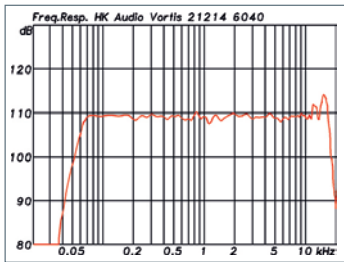
Cluster plates:
For configuring two- and three-cabinet arrays

TB-R:
Tilt bracket with variable angles

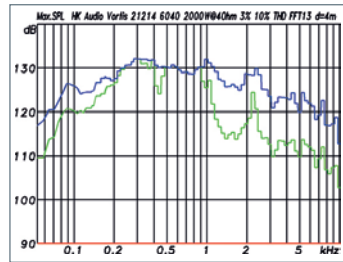
AP10-B:
Anchor point, e.g. for shackles to connect suspension cables/arrest wires

Technical Specifications:

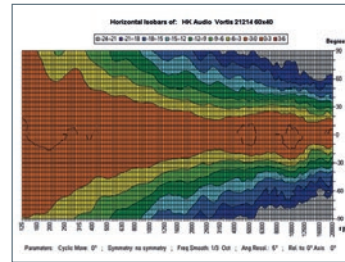
- 2.5-way system with a built-in passive crossover; crossover frequencies 800/1100 Hz.
- Frequency response: 60 Hz - 20 kHz (-10 dB)
- Sensitivity: 101 dB @ 1 W/1 m, full space
- Sensitivity: 88 dB @ 1 W/4 m, full space
- Max. SPL: 131 dB @ 1m, full space (10% THD/EN 60268-21)
- Max. SPL: 112 dB @ 4 m, full space (rated power/EN 54-24 signal)
- Power handling, nominal: 700 W
- Power handling, program: 1400 W
- Impedance: 3 ohms
- Coverage pattern: Varies according to the type of horn
- Connectors: Four binding posts with an optional protective cover



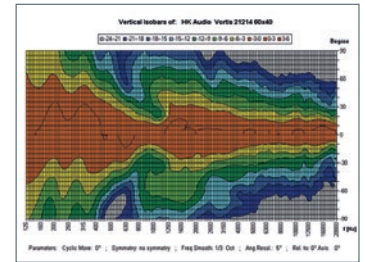
Frequency response



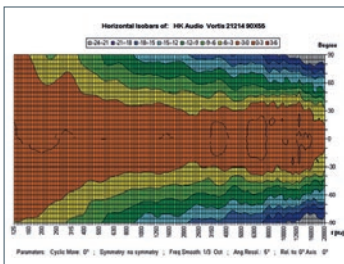
Max. SPL @ 3% and 10% THD (EN 60268-21)



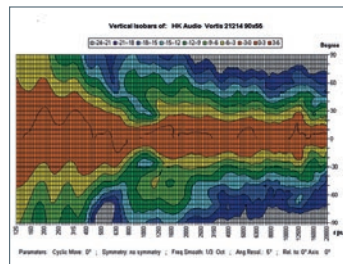
Horn variation 60°x40° horizontal



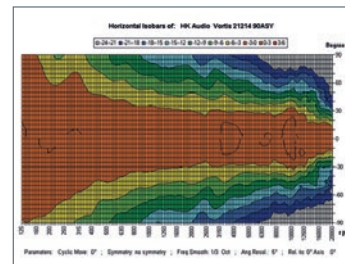
Horn variation 60°x40° vertical



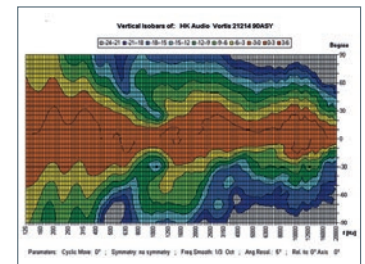
Horn variation 90° x 55° horizontal



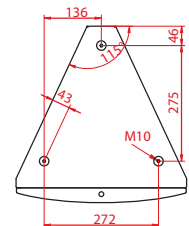
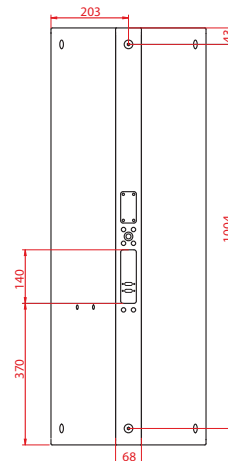
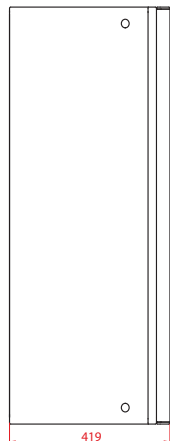
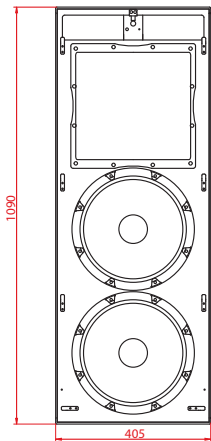
Horn variation 90° x 55° vertical



Horn variation 60°-90° x 55° horizontal



Horn variation 60°-90° x 55° vertical



Power handling capacity (nominal)	700 watts
Power handling capacity (program)	1400 watts
Power handling capacity (peak)	2800 watts
Frequency range (-10 dB)	60 Hz - 20 kHz
Crossover	2.5-way, passive
Crossover frequency	800/1100 Hz, 2nd order
Sensitivity 1 W @ 1 m, fullspace (100 Hz - 20 kHz)	101 dB
Sensitivity 1 W @ 4 m, fullspace (100 Hz - 20 kHz)	88 dB
Max. SPL @ 1 m, fullspace (10 % THD/ EN 60268-21)	131 dB
Max. SPL (rated power/4 m/EN 54-24 signal)	112 dB
Nominal impedance	3 ohms
Low/mid transducer	2 x 12" with 3" voice coil and neodymium magnet
High frequency driver	1 x 1.4" with 3" voice coil and ferrite magnet

Dispersion characteristic	Depends on horn variation
Horn variations (rotatable)	60° x 40°, 90° x 55° and 60° - 90° x 55° (asymmetrical)
Connections	4x screw terminals with optional touch protection plate
Cabinet	Birch plywood
Filters	Gräf & Meyer eXentro, Lab.gruppen IPD/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	36.9 kg / 81 lb 5.6 oz
Dimensions (H x D x W) in cm	109 x 40.5 x 41.9
Dimensions (H x D x W) in inch	42.91 x 15.95 x 16.5
Accessories	U-bracket, tilt unit, wall plate, cluster plates, TB-R T-bracket and AP-10 B mounting point