

TR-112HN Datasheet



The TR-112HN is an ultra-compact, high power, Bi-amped mid-high cabinet. Designed primarily for front of house applications, the asymmetric horn gives a smooth and highly-accuracy output that is ideally suited to short and medium size dancefloors. TR-112HN can be used at a range of up to 15 metres without having to tilt the cabinet, making temporary installations easy. TR-112HN is the obvious choice for club systems & live performances.

Dispersion is controllable between 30° to 45° horizontally and +10° to -25° vertically. TR-112HN has a frequency response of 69 Hz to 23 kHz (- 10 dB). Output SPL is an impressive 133 dB (peak). HF impedance is 16 Ohm, LF is 8 Ohm. Overall weight of this impressive cabinet is only 33 kg!

The overall look has a bold exposed red horn design and acrylic textured paint finish achieves a high class look suitable for club applications. Two pocket handles and integrated rubber feet on the underside of the enclosure make it possible to ground stack the TR-112HN on TR-218, TR-118 and Eris subwoofers.

Mounting options include aluminium Aeroquip flying strips (for use with CFEK flying eyes) located on the top and rear of the enclosure giving flexibility over ground stack or flying positions.

The rear cast aluminium connection plate has recessed connectors to aid cable management. Two 4 pin speakON® connectors are fitted as standard, one input and one link. The TR 112-HN is wired bi-amp with pins +1-1 for 12" woofer, and the 1.4" high frequency compression driver on pins +2-2.

Key Features:

- Rebated Baltic Birch Plywood construction
- Long throw central horn with tight dispersion
- Adjustable flying points to aid aiming
- Asymmetrical horn and coaxial driver for accurate coverage
- Tough Polyurea coating
- Reticulated weatherproof foam covered powder-coated Zintec steel grills
- Dual layer thermal relief driver technology
- Aerospace grade 7075-T6511 aluminium flying strips

Technical Specifications

Design

1 x 12" coaxial Mid-High Cabinet, bi-amped, assymetrical horn

Impedance

HF - 16 Ohm, Minimum 12.5 @ 430 Hz

MH - 8 Ohm, Minimum 8.7 @ 330 Hz

Power Handling (AES)

HF 80 Watts / MH 500 Watts (continuous)

Max. Power Handling (AES)

HF 160 Watts / MH 1000 Watts (program)

HF 320 Watts / MH 2000 Watts (peak 10 ms)

Sensitivity 2.83V / 1m

HF 109 dB / MH 101 dB

Max. SPL

HF 126 dB / MH 128 dB cont

HF 132 dB / MH 134 dB peak

Frequency Response (± 3 dB)

89 Hz - 21.5 kHz

Usable Frequency Range (-10 dB)

69 Hz - 23 kHz

Dispersion

Horizontal 30° to 45° x Vertical +10° to -25°

SYSTEM OPERATION

Recommended Amplification

80 / 500 - 160 / 1000 Watts

System Controller

Omega DSP Solutions

Speaker Cables

Min - 2 x 2.5 mm²

Preferred - 2 x 4 mm²

PRODUCT FEATURES

Components

1 x 12" Horn Loaded Low Frequency Driver

1 x 1.4" Horn loaded Compression Driver in coaxial arrangement

Crossover

Passive - N/A

Active - * LPF - / HF - / MH 1.3 k Hz

HPF - 1.5 kHz / HF 0.65 Hz /
MH 100 Hz

Connectors

2 x 4 pole speakON® connectors

Dimensions (H x W x D mm)

584.3 x 568 x 450

Weight (kg)

33

Shipping Weight (kg)

34(1 cabinet per carton)

Colour

Black

Options

Available in white or RAL colours on request

Rigging

5 x mounting points, to take flying eyes, Foot and cup stacking system

HARDWARE

Fitted as Standard

Recessed flying point strips, foot and cups.

Optional

CFEK Set of three flying eyes,

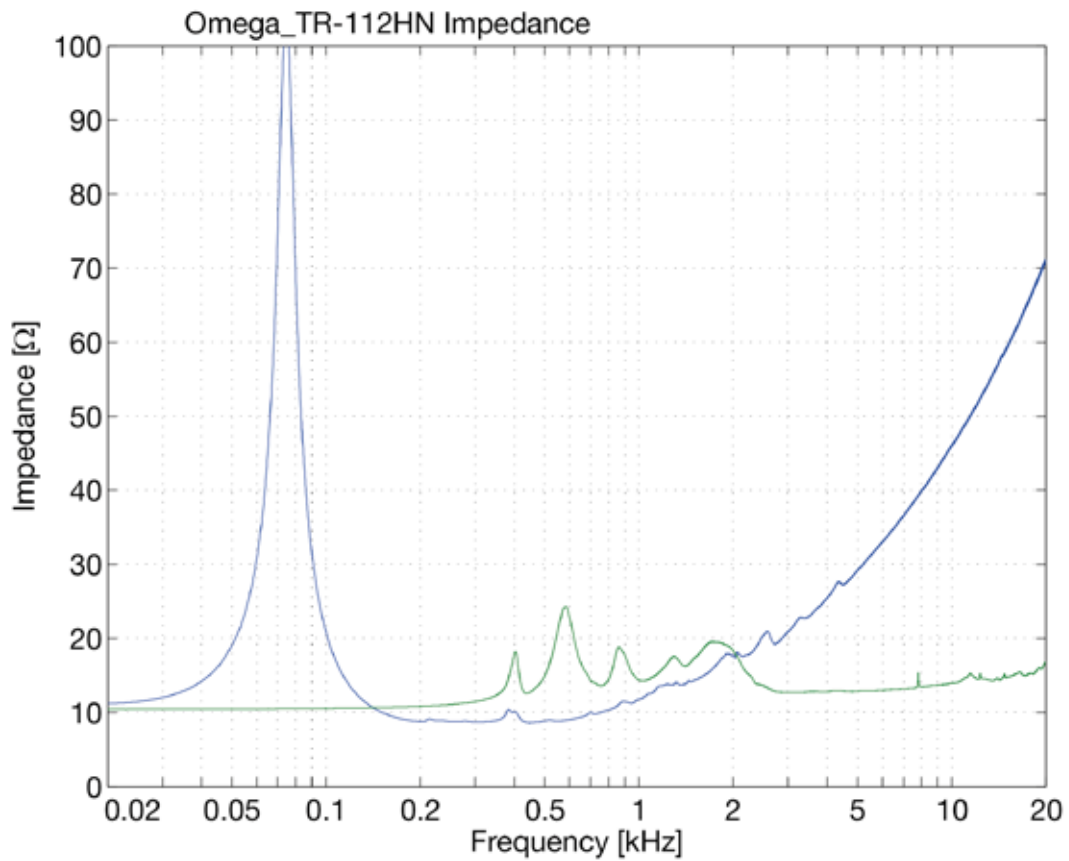
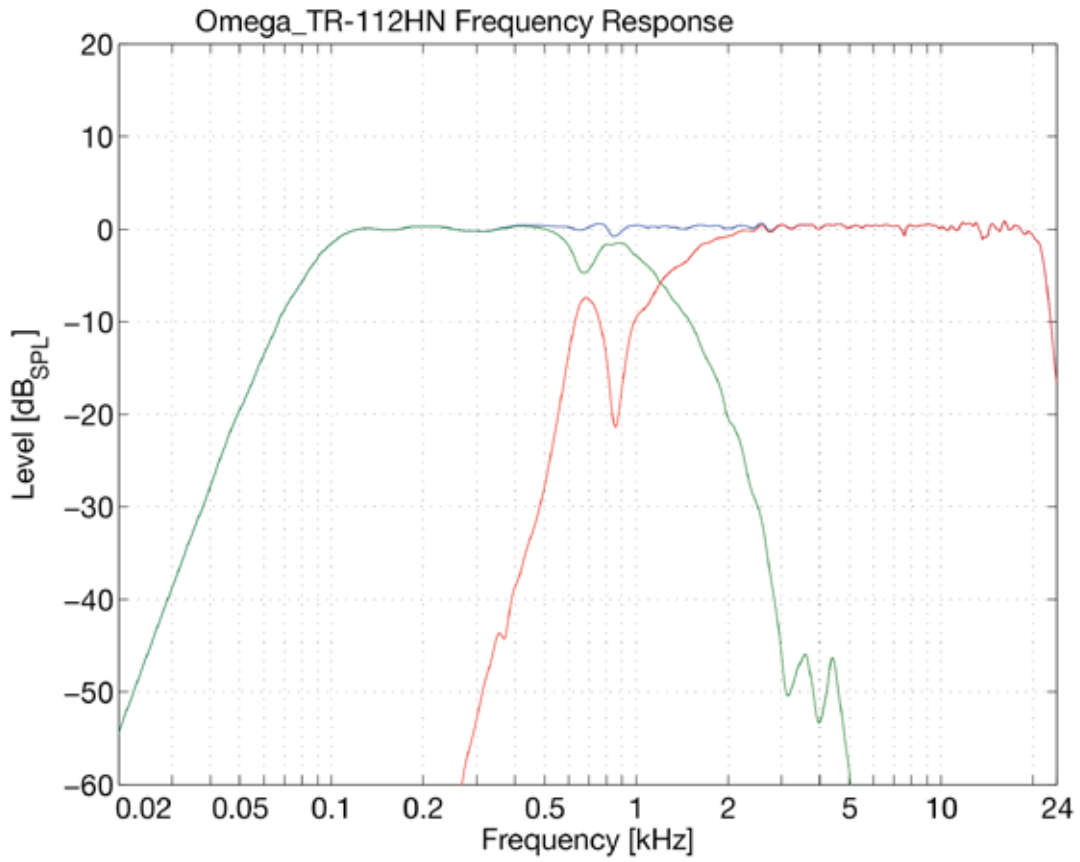
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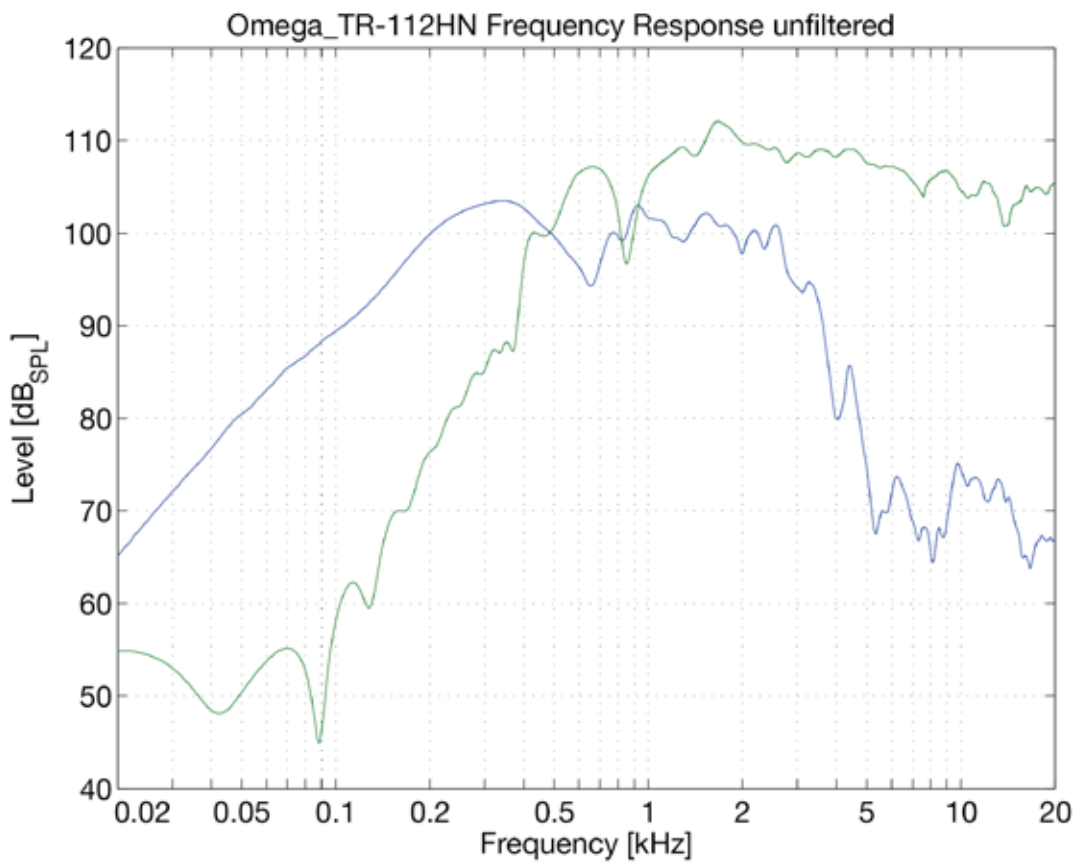
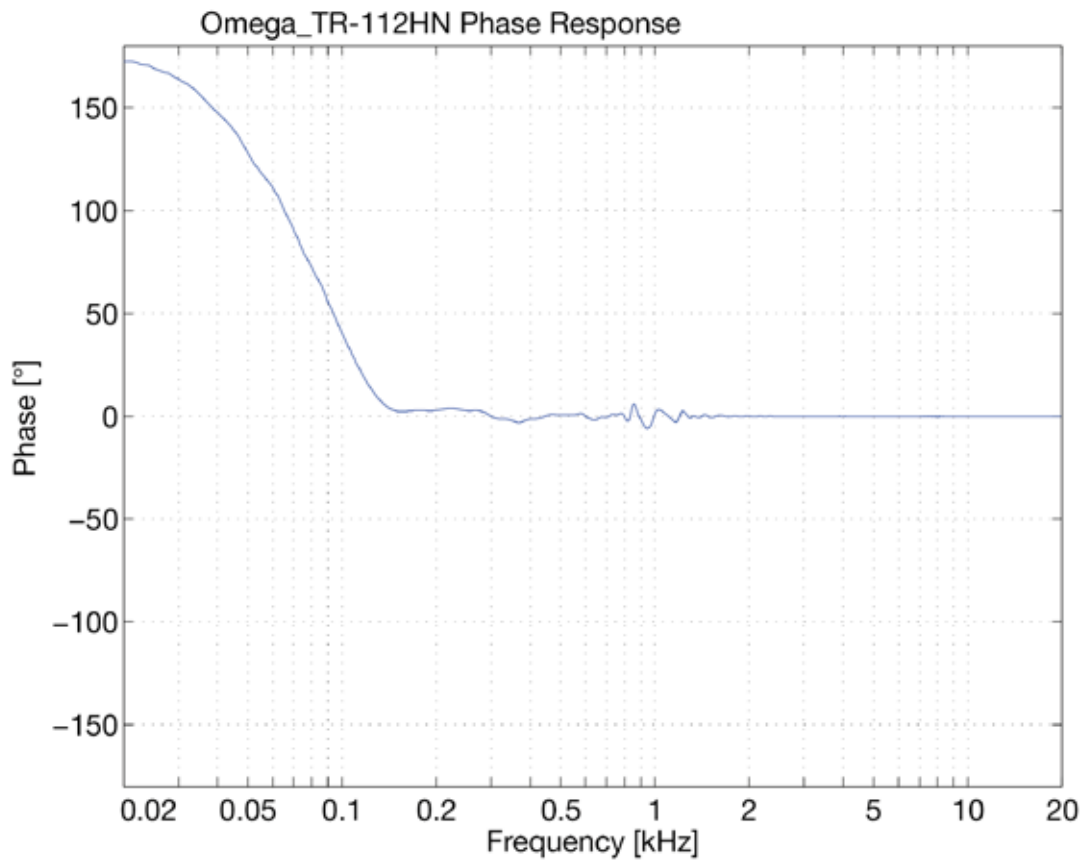
Birch plywood construction, with durable scratch resistant black polyurea textured paint finish.

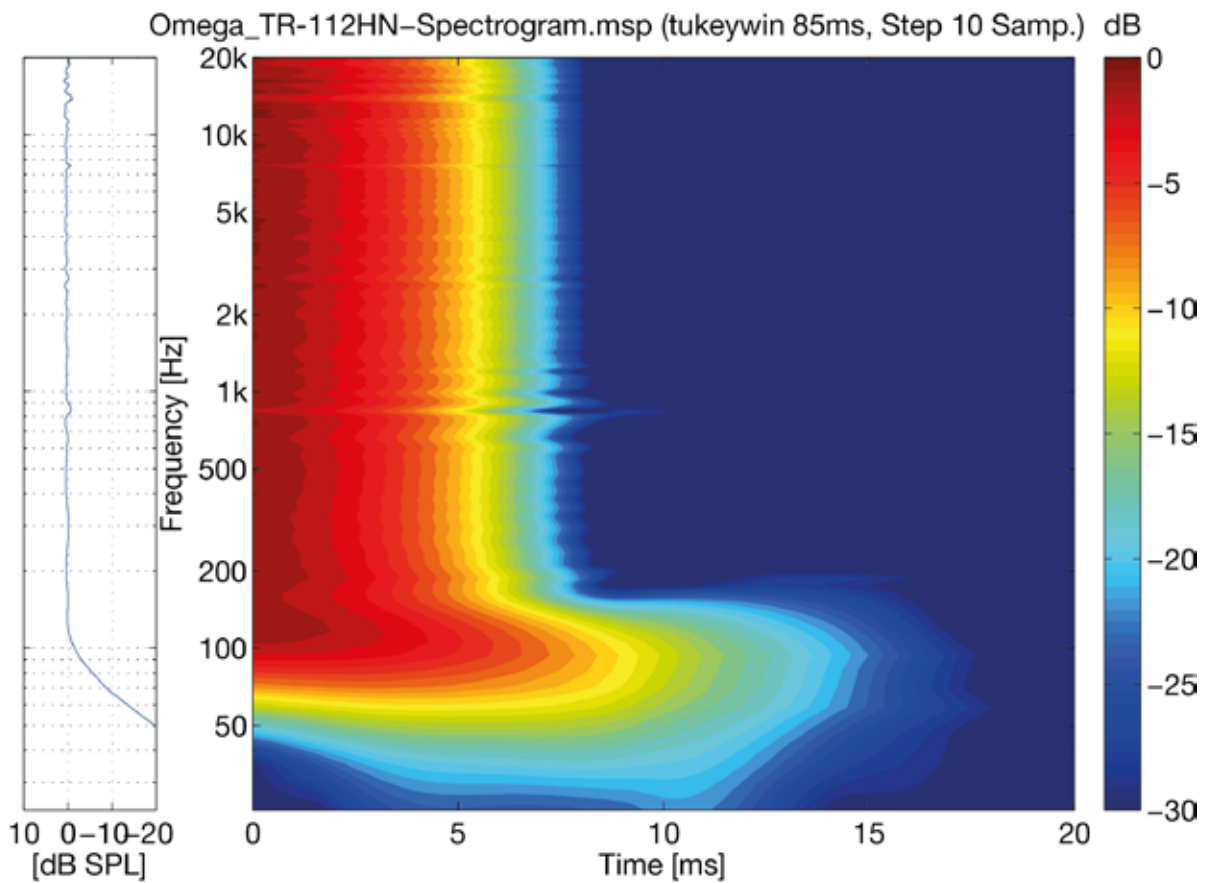
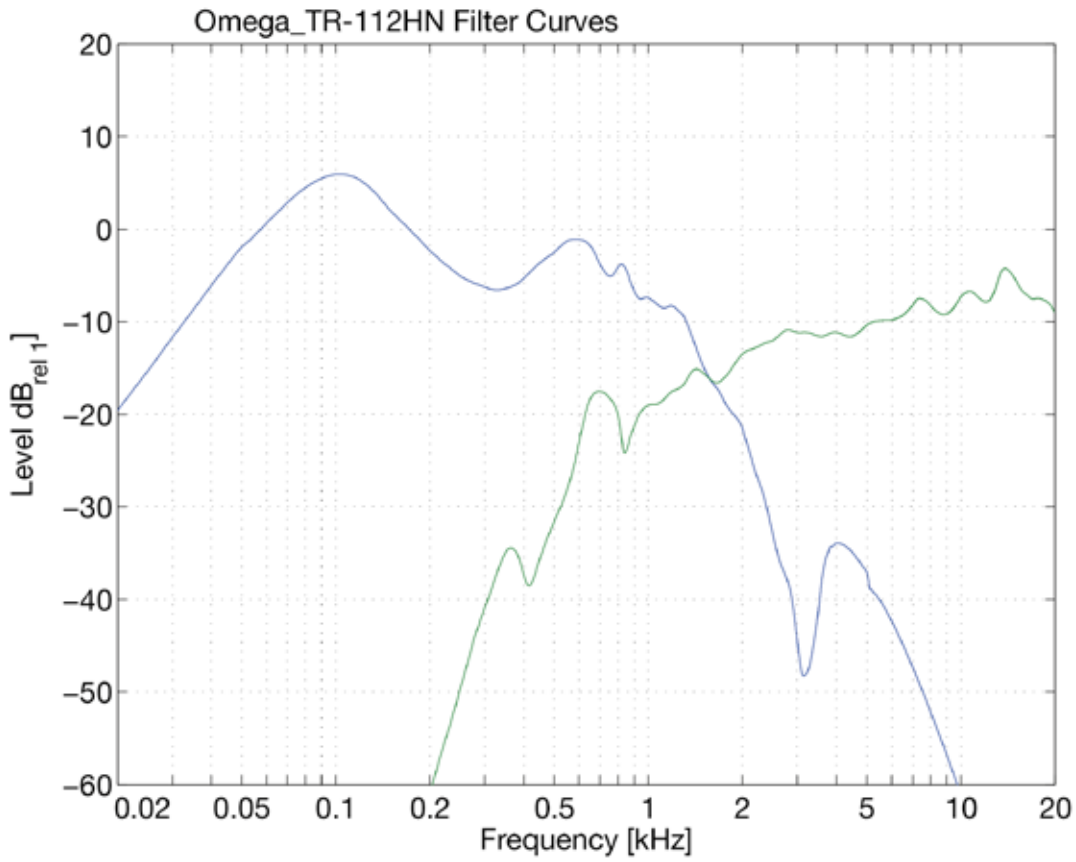
Recommended filter settings are available on the website omegaproaudio.co.uk/downloads

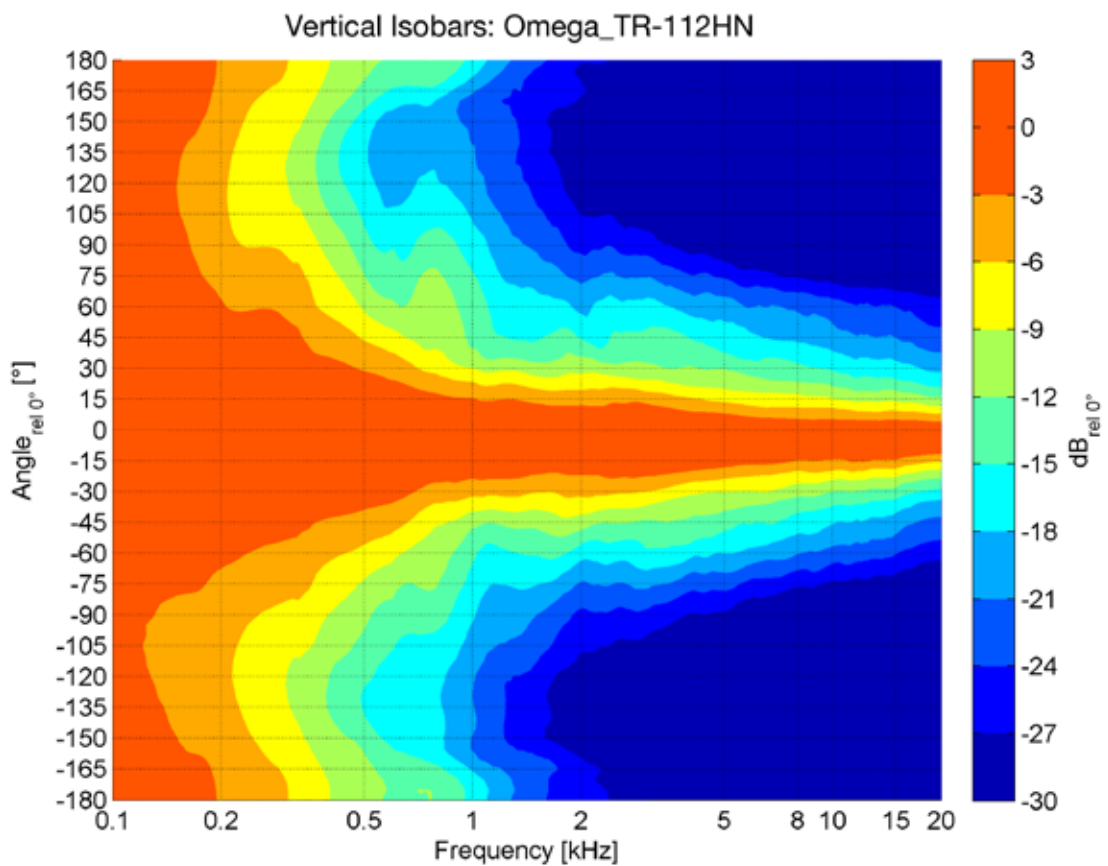
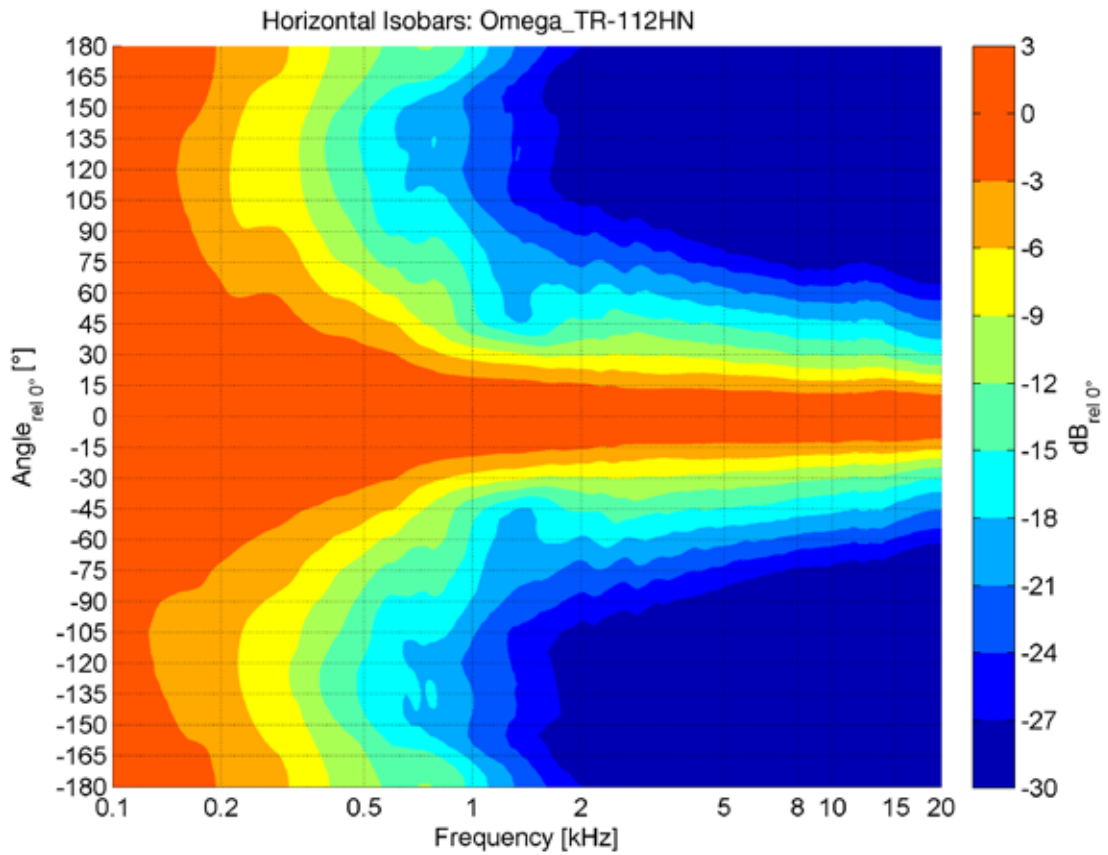
* All presets from the Omega library.

TR-112HN Measurements





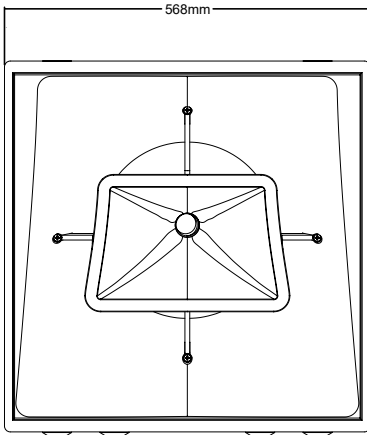




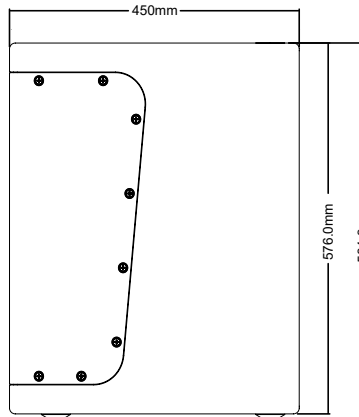
All Measurements are executed by the IFAA Institute for Acoustics in Aachen, Germany
measurement conditions 4PI environment for full range cabinets, 2PI environment for subwoofers.

TR-112HN Dimensions

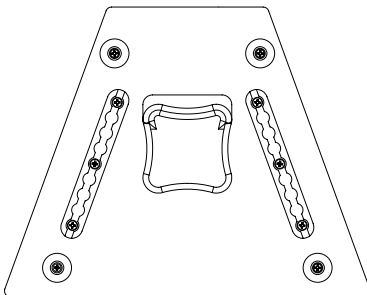
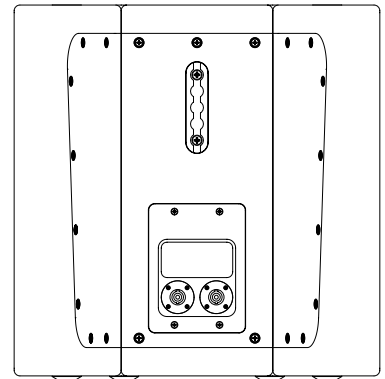
Front



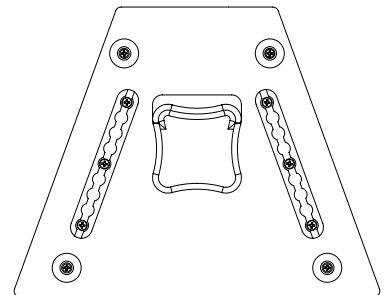
Side



Back



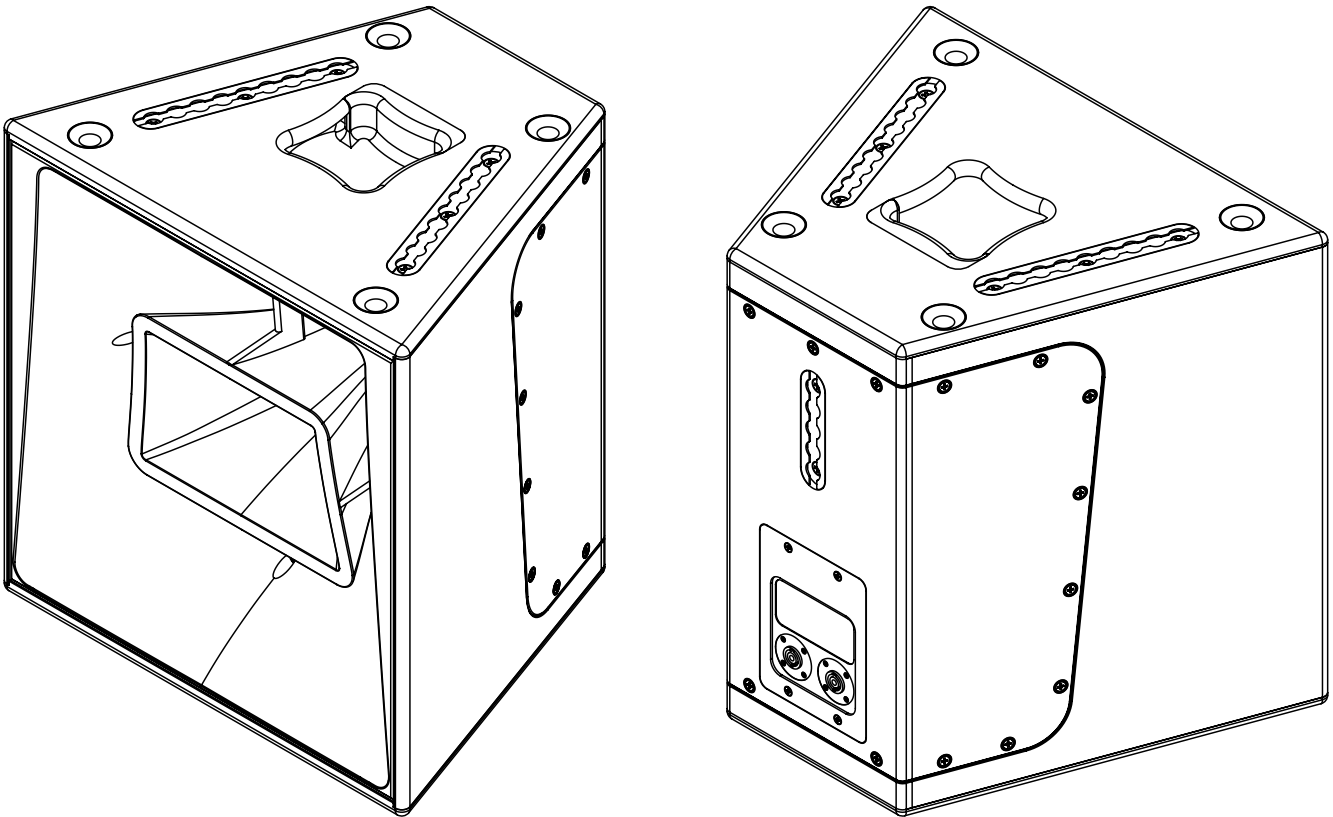
Bottom



Top

Further technical drawings for architectural requirements are available in DXF and DWG format for download on the website.

TR-112HN 3D View



Accessories and Spare Parts

- CFEK Set of three flying eyes
- Recessed flying points (strip)
- TR-112HN backplate and crossover
- 1x 12" Coaxial low frequency driver
- 1 x 1.4" Coaxial horn loaded compression driver

Architects' & Engineers' specifications:

2-Way dynamic loudspeaker in a multi purpose enclosure design, housing 1 x 12" proprietary low mid bass driver horn loaded, internally and externally ventilated double sided high temperature voice coil, 1 x 1.4" compression driver in coaxial arrangement Horizontal 30° to 45° x Vertical +10° to -25° horn loaded. Homogeneous radiating behaviour and linear response from 350 Hz. Constructed from different multi-laminated wood, eco-friendly scratch resistant paint, 5 x flying points, skid-proof rubber feet and plastic sups, ergonomic carry handle.

Technical Data:

Frequency Response: 89 Hz - 21.5 kHz (-10dB), 69 Hz - 23 kHz (± 3 dB), Continuous SPL: HF 107 dB / MH 101 dB/1m, Program SPL HF 126 dB / MH 128 dB /1m, Peak HF 132 dB / MH 134 dB /1 m. Power Handling: HF 80 Watts / MH 500 Watts cont. IEC268 AES, Maximum Power Handling: HF 160 Watts / MH 1000 Watts prog. / HF 320 Watts / MH 2000 Watts peak, Impedance Nominal: 4 ohm, Dispersion Nominal: 60° x 40° (hor. x vert.), Connectors: 2 x speakON® connectors NL4MP (1+/1-, 2+/2- links). Dimensions (H x W x D): 584.3 mm x 576 mm x 450 mm, Weight: 33 kg. Options: Durable scratch resistant black textured paint finish. RAL colours available to order.

Safety Instructions

Professional speaker systems are able to produce sound pressure levels that could harm your health.

Never stand directly in front of loudspeakers for long periods. Whilst not immediately apparent to the listener, sound pressure levels in excess of 90dB@1m can be hazardous to the hearing.

Please refer to the following advice when setting up or dismantling OMEGA speaker systems.

1. Be sure to leave adequate distance between speakers and the public. Refer to your local authority for Health and Safety guidance when using loudspeaker systems.
2. Be sure to have safe and stable ground for your speakers, particularly when using speaker stands.
3. When stacking speaker systems, ensure they are secured to prevent individual speakers from falling down or moving around.
4. Only use OMEGA mounting hardware, as this has been specified and approved by KHZ LTD, for use with OMEGA speakers.
5. When flying speakers, appropriate materials and techniques must be employed in order to safely suspend enclosures, taking care to allow for specified enclosure weight.
6. Please observe any special instructions that appear on specific loudspeaker data-sheets.
7. Check your speaker hardware and flying material regularly for any visual or mechanical failure. Replace damaged or suspect items when necessary.

Safety Instructions Cont.

8. Only use OMEGA DSP Solutions. Only technicians authorised by KHZ LTD are qualified to program digital controllers. Take note of recommended controllers as specified on the datasheets. Do not use OMEGA loudspeaker systems without the correct controller. If a system fails due to incorrect controller use, warranty is void.

9. Protect your speakers and electronics from freezing and do not expose them to humidity, water or rain without protection.

OMEGA loudspeakers and electronics are covered against defects in workmanship or materials for a period of two (2) years from original date of purchase. At the discretion of KHZ LTD, the defective item will be repaired/replaced with no charge for materials or labour. The item is to be adequately packed and dispatched, pre-paid, to an OMEGA authorised distributor/service centre. Unauthorised repair shall void the warranty. The OMEGA warranty does not cover cosmetics or finish and does not apply to any item which in OMEGA's opinion has failed due to user abuse, accident, modifications or any type of misuse.

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