

# TRS-112A Datasheet



TRS-112A is a 500W self-powered, multi-purpose, symmetrically angled cabinet designed for stage monitoring and general PA applications. Either flown or pole mounted this compact wedge is ideal for mirroring applications as both wedge angles are the same. The steep 45 degree angle of the wedge also makes these speakers perfect monitors for far-field applications like theatre and medium sized stage use. Using our own in-house designed and built drivers give depth and clarity which is unrivalled whilst Ohm's renowned build quality makes this cabinet an easy choice.

Using two high-power 500 w and 150 w Class D amplifiers with integrated DSP, these self-powered cabinets have dedicated amplification for each component, removing crossover distortion and increasing audio quality. Full FIR filtering achieves further detail and definition with a factory calibrated, pre-set coupled with RMS and Peak limiters ensure the drivers stay within safe parameters.

OHM's proprietary 12", 300w cast bass driver and 1" compression driver components come together through an internal passive crossover, creating a smooth linear sound. With a frequency response of 70 Hz to 23.1 kHz (-10 dB) across 90° x 40° dispersion while delivering

an impressive 133 dB (peak) SPL, this 22.5 kg unit gives the performance professionals demand.

The robust monitor is designed with a HEX design front grill, hardwearing Polyurea paint finish and integrated steel carry handle. Integrated rubber feet are located on 3 sides of the monitor for securing in multiple positions.

Mounting options include six integrated aluminium Aeroquip flying points (for use with CFEK flying eyes) located on the top and rear and bottom of the enclosure giving flexibility over horizontal or vertical flying positions. Other fixings can be used with this cabinet such as the fixed large wall bracket (LWB) and pan and tilt wall bracket (LWB-PT) utilising the integrated top-hat.

The rear connection plate has two input and two link XLR connectors and a powerCON® TRUE1 input and link fitted as standard.

#### **Key Features:**

- Tough Polyurea coating
- Reticulated weatherproof foam covered powder-coated Zintec steel grills
- Aerospace grade 7075-T6511 aluminium flying points
- TRS Interlocking stacking system
- Heavy duty recessed steel handles
- Integrated Class D Power module
- World-wide voltage compatibility
- Module power efficiency of 89%
- Full FIR-filtered DSP with linear phase outputs
- Fully integrated Look-Ahead and RMS limiters
- Rebated Baltic Birch Plywood construction
- Wide dynamic range 128dB(A) input converter

# Technical Specifications

## Design

12" Active Full Range with integrated FIR-DSP, Reflex Tuning

## Internal Power Amps

500 w +150 w

## Internal DSP

Full FIR-DSP with linear phase X-over and linear phase loudspeaker equalization

## Sensitivity Chassis 1w/1m

103 dB LF / 112 dB HF

## Max. SPL

127 dB cont. / 133 dB peak (frequency dependent)

## Frequency Response ( $\pm 3$ dB)

91 Hz – 21.2 kHz

## Usable Frequency Range (-10 dB)

70 Hz - 23.1 kHz

## Dispersion

90° x 40°

## SYSTEM OPERATION

### System Controller

Ohm DSP Solutions

### Input connection

Symmetrical XLR input, 2 x 10 K ohm Impedance with parallel link out

### Protection

Internal multiband Peak and RMS Limiter, thermal limiter and protection on Amplifier

## PRODUCT FEATURES

### Components

1 x 12" Low Frequency Driver

1 x 1" Horn loaded Compression Driver

### Crossover

1.55 kHz FIR Filter

### Connectors

1 x XLR female, 1 x XLR male and 1 x powerCON® True1 connector

## Dimensions (H x W x D mm)

579.5 x 398 x 270.75

## Weight (kg)

22.5

## Shipping Weight (kg)

24.4 (1 cabinet per carton)

## Colour

Black

## Options

Available in white or RAL colours on request

## Rigging

6 x mounting points, to take flying eyes, omni-mounting point for stand or truss adaptor,

## HARDWARE

### Fitted as Standard

TH-1 Cast aluminium top hat, CPFK Recessed flying points

### Optional

CFEK Set of three flying eyes, LWB-PT large wall bracket pan and tilt with 35mm spigot, LWB large wall bracket, SS-1 speaker stand, TP-1 adjustable threaded pole.

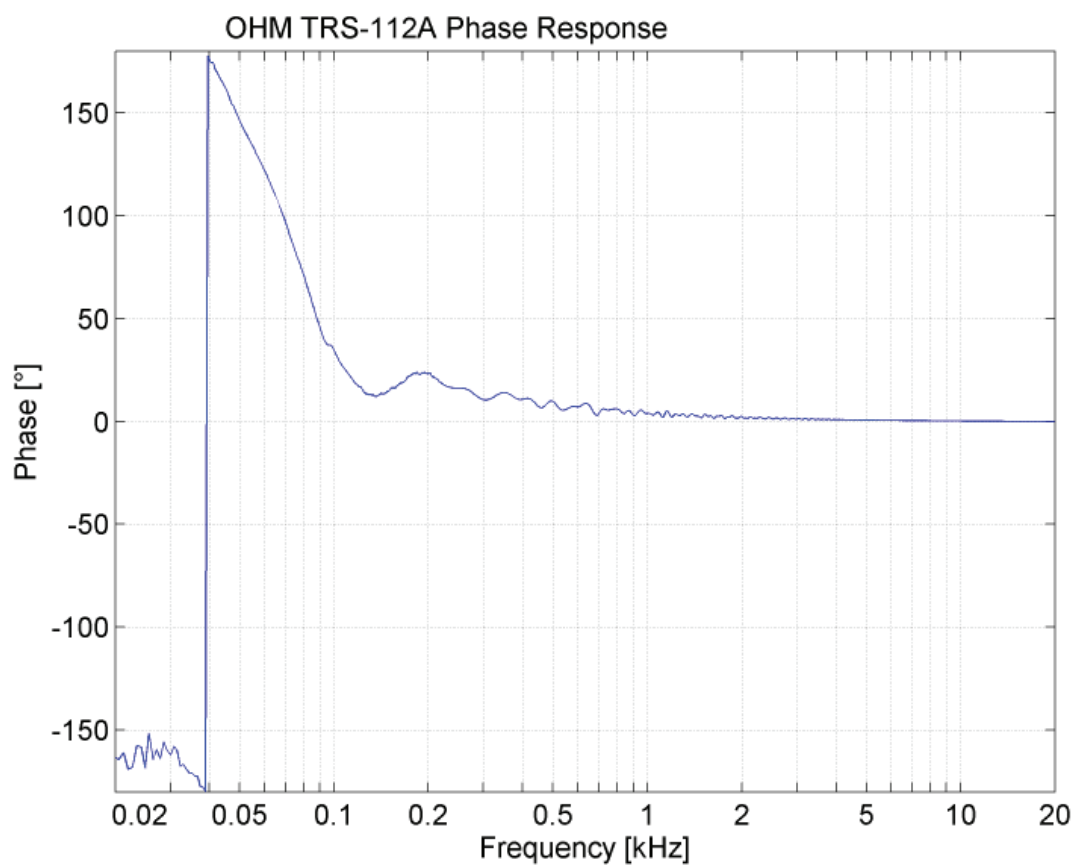
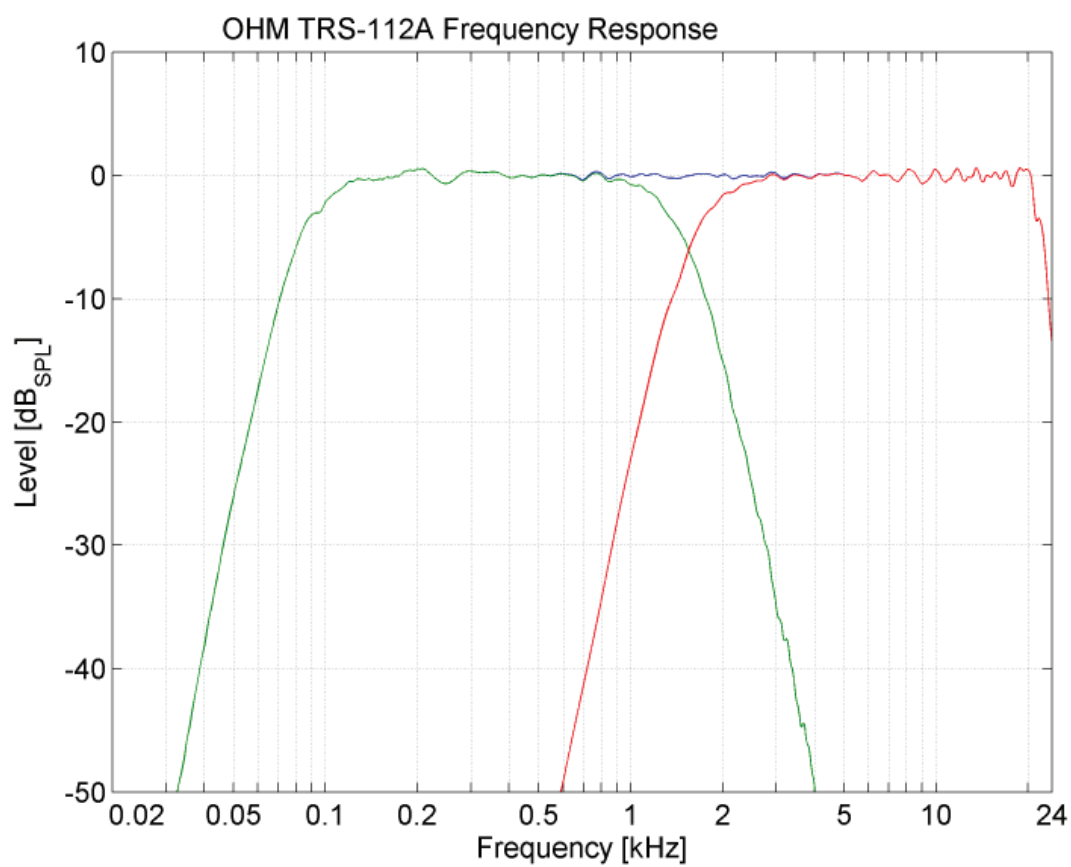
### Additional Descriptive Data

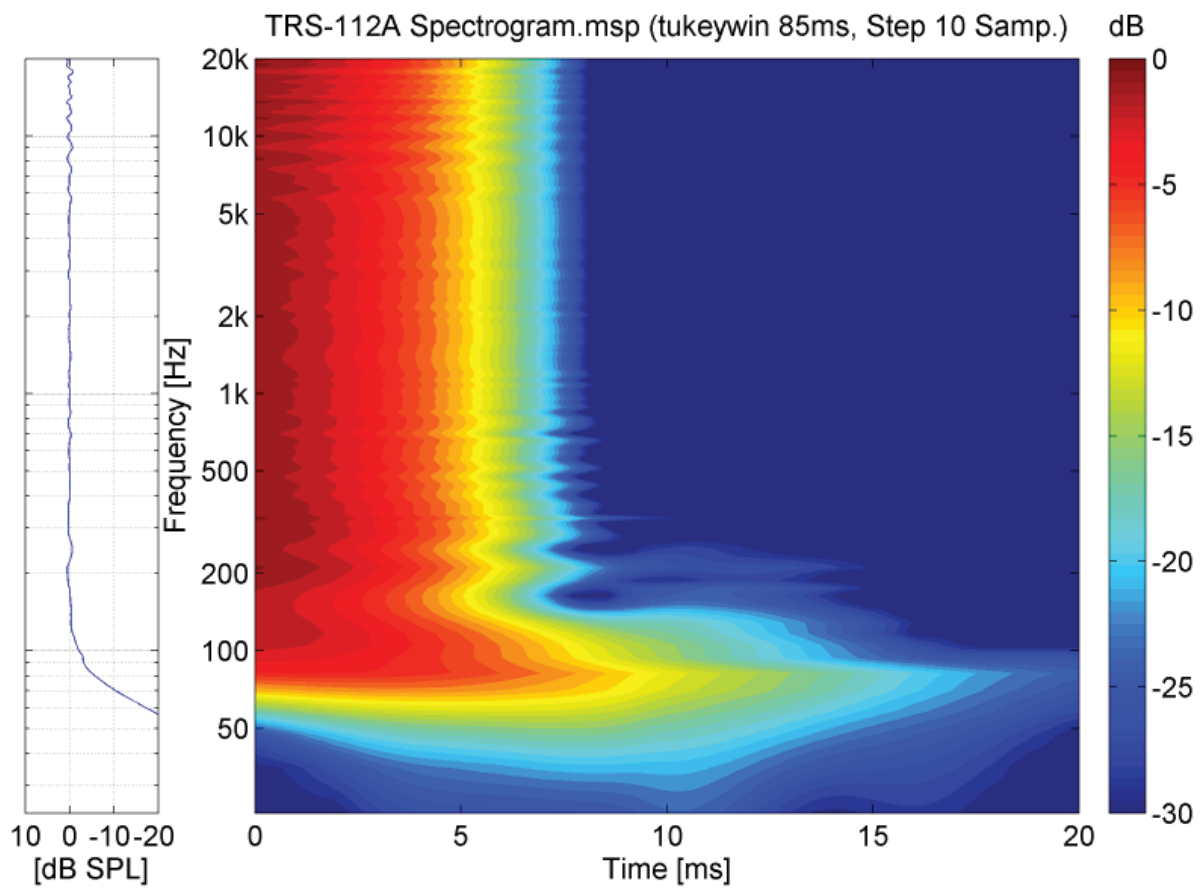
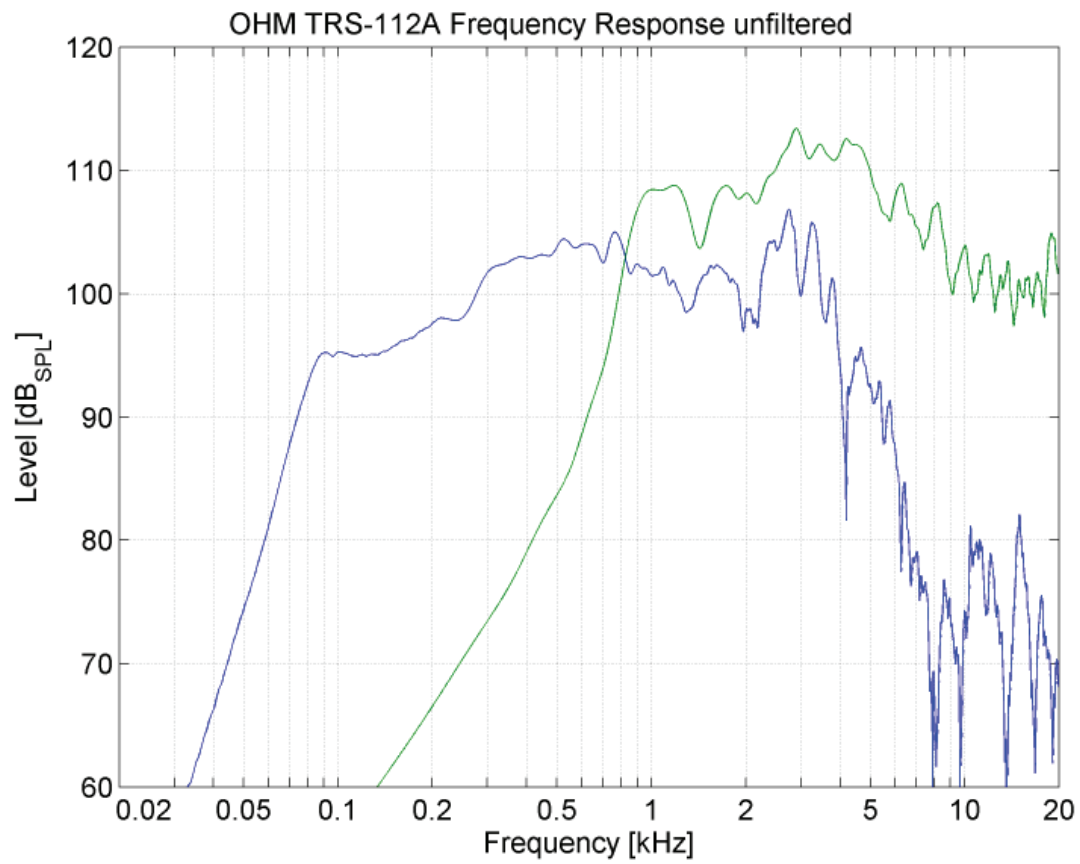
Birch plywood construction, with durable scratch resistant black textured polyurea paint finish, kick-proof steel grill and internal black foam with Ohm logo.

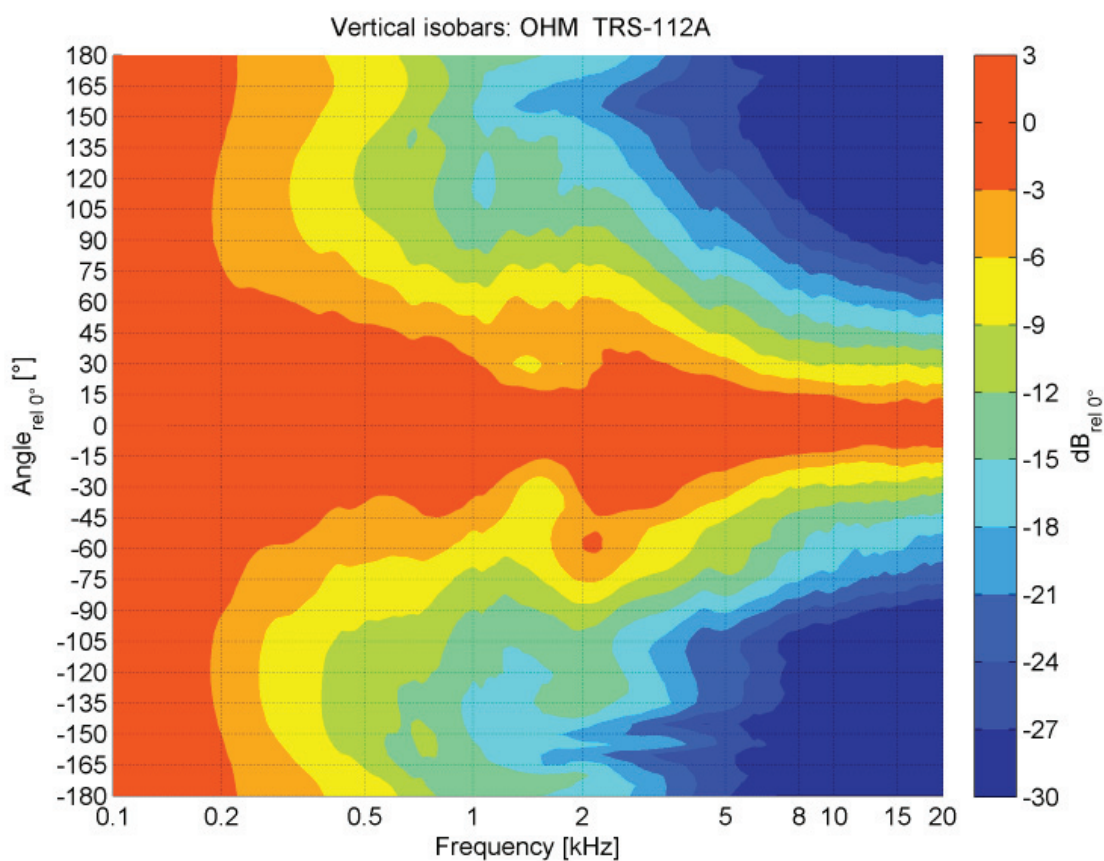
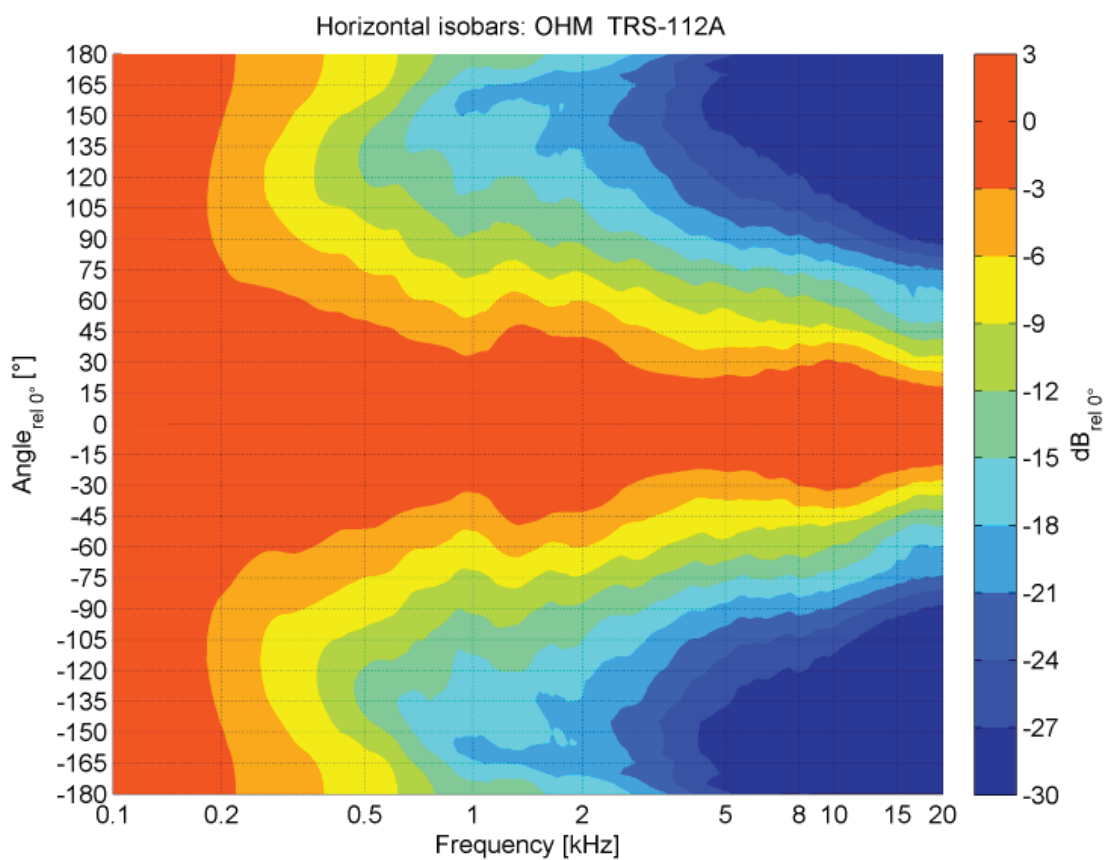
**Recommended filter settings are available on the website [ohm.co.uk/downloads](http://ohm.co.uk/downloads)**

\* All presets from the OHM library.

## TRS-112A Measurements



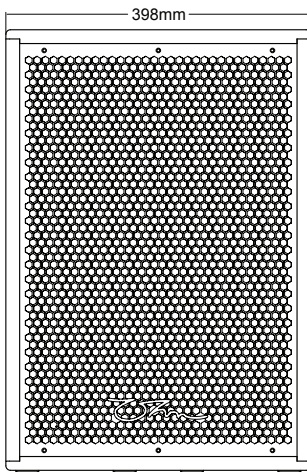




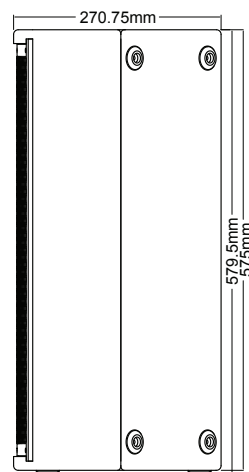
All Measurements are executed by the IFAA Institute for Acoustics in Aachen, Germany  
measurement conditions 4Pi environment for full range cabinets, 2Pi environment for subwoofers.

## TRS-112A Dimensions

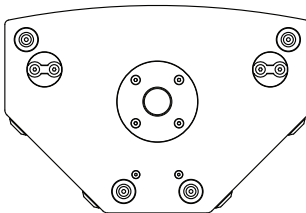
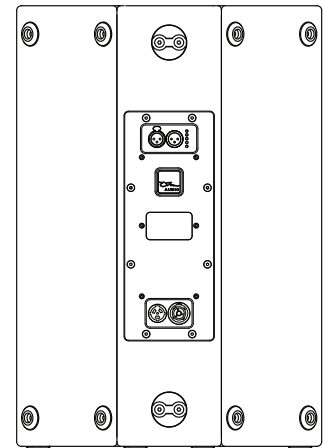
Front



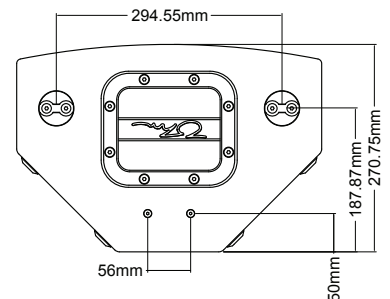
Side



Back



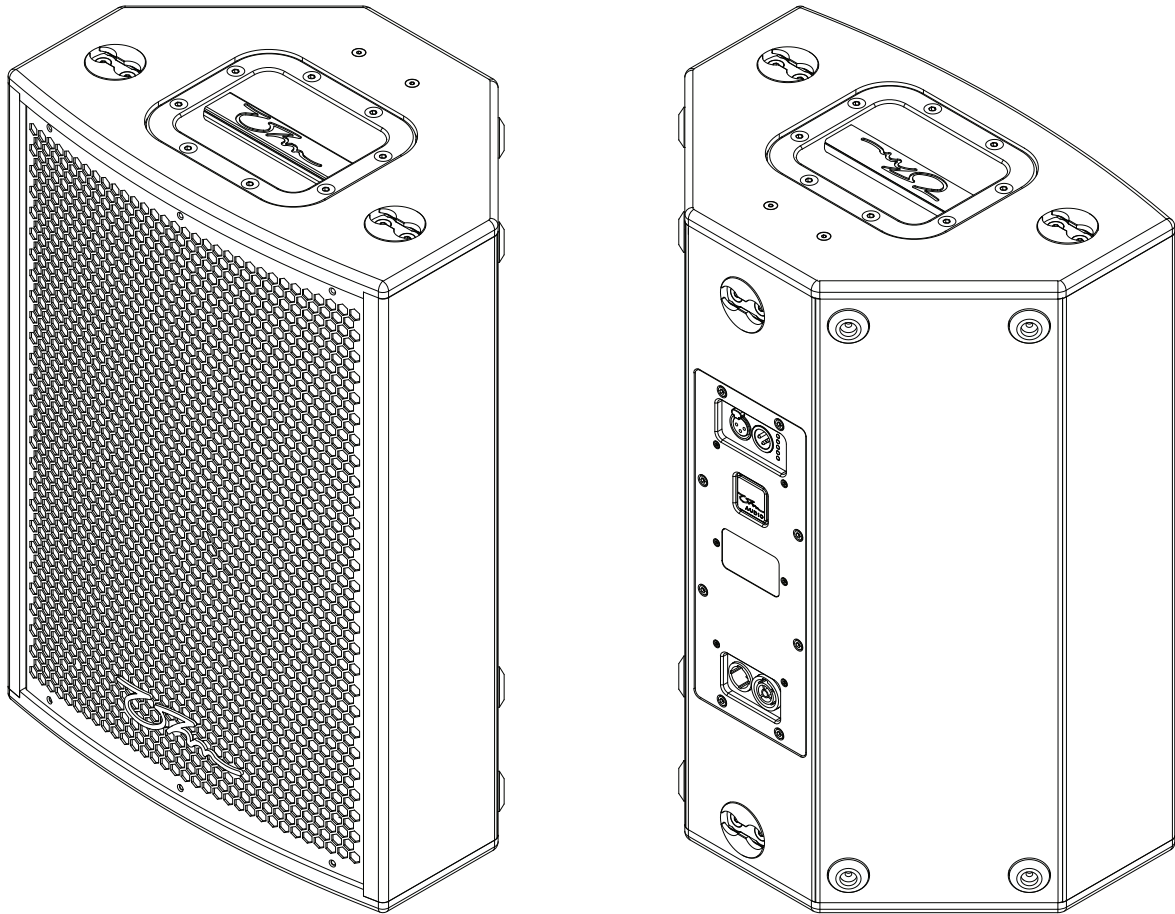
Bottom



Top

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

## TRS-112A 3D View



## Accessories and Spare Parts

- TH-1 Cast aluminium top hat
- LWB-PT large wall bracket pan and tilt with 35mm spigot,
- CFEK Set of three flying eyes
- CPMK Recessed flying points
- LWB Large wall bracket
- SS-1 Speaker stand
- TP-1 Adjustable threaded pole
- TRS-112 steel grill assembly
- TRS-112A Amplifier
- 1 x 12" low frequency driver
- 1 x 1" horn loaded compression driver
- Steel OHM Logo

## Architects' & Engineers' specifications:

2-Way dynamic loudspeaker in a multi purpose enclosure design, housing 1 x 12" proprietary OHM low mid bass driver, internally and externally ventilated double sided high temperature voice coil, 1" exit compression driver on 90° x 40° CD horn. Homogeneous radiating behaviour and linear response from 450 Hz. Integrated active amplifier. Constructed from different multi-laminated wood, eco-friendly scratch resistant paint, 6 x flying points, omni-mounting point for stand or truss adaptor, skid-proof rubber feet, ergonomic carry handle, kick proof steel grill finished with internal reticulated foam and Ohm logo.

## Technical Data:

Frequency Response: 70 Hz - 23.1 kHz (-10dB), 91 Hz - 21.2 kHz (±3 dB), Continuous SPL: 127 dB/1m, Peak SPL 133 dB/1 m, Maximum Output: 500 Watt LF + 150 Watt HF, Dispersion Nominal: 90° x 40° (hor. x vert.), Connectors: 1 x XLR female, 1 x XLR male and 1 x powerCON® True1 connector. Dimensions (H x W x D): 579.5 mm x 398 mm x 270.75 mm, Weight: 22.5 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 OHM 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 OHM mounting hardware, as this has been specified and approved by AURAL LTD, OHM (UK) LTD for use with OHM 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 OHM DSP Solutions. Only technicians authorised by AURAL LTD, OHM (UK) LTD are qualified to program digital controllers. Take note of recommended controllers as specified on the datasheets. Do not use OHM 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.

OHM 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 AURAL LTD, OHM (UK) 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 OHM authorised distributor/service centre. Unauthorised repair shall void the warranty. The OHM warranty does not cover cosmetics or finish and does not apply to any item which in OHM's opinion has failed due to user abuse, accident, modifications or any type of misuse.

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