

## BT-8 Datasheet



The BT-8 is a high performance compact cabinet which is ideally suited to both mobile use and fixed installation, offering extremely flexible mounting options including a top hat and both horizontal and vertical mounting yokes, rotatable horns, integrated handle and internal passive crossover designed to match the voicing of other products in the series, all achieving a flat, linear frequency response.

The discreet design with reticulated foam front and acrylic textured paint finish and multiple integrated fixing points achieves a high class look suitable for any application.

Designed with an 8" proprietary 200 W, 12 Ohm woofer and 1" compression driver, the internal passive crossover ensures a linear, usable frequency response of 73 Hz to 25 kHz (-10 dB) across 90°x 60° dispersion with rotatable horn. A maximum SPL of 125 dB (peak).

Sharing voicing characteristics with the rest of the B series allowing them to be used simultaneously, keeping a consistent tone.

Mounting options include integrated aluminium top-hat and horizontal cradle fixing points for use with the BC-8 Horizontal, BC-8 Vertical Yoke. Other fixings can be used with this cabinet such as the fixed large wall bracket (LWB) and pan and tilt wall bracket (LWB-PT). The rear cast aluminium connection plate has two 4 pin speakON® connectors fitted as standard, one input and one link. The speakON® connectors are wired on pins +1-1, with pass through of pins +2-2.

Custom RAL colours are available on request to make their appearance even more seamless with the surroundings. The discreet design with reticulated foam front and acrylic textured paint finish and multiple integrated fixing points achieves a high class look suitable for any application.

Weather resistant version is available with gland back plate, Polyurethane plus enamelled paint finish and metal grill front and 100v transformer with 3.75, 7.5, 15, 30 and 60 W tap settings.

#### **Key Features:**

- Suitable for install and portable
- 12 Ohm Impedance
- Rotatable 90° x 60° horn for enhanced flexibility
- 125 dB SPL in a compact cabinet
- Multiple mounting options available
- Available in weather resistant version
- Custom RAL Colours available on request

# Technical Specifications

## Design

8" Reflex Tuned, Mid High Point Source Cabinet

## Impedance

12 Ohm, Minimum 10 ohm @ 210 Hz

## Power Handling (AES)

200 Watts (continuous)

## Max. Power Handling (AES)

400 Watts (program)

800 Watts (peak 10 ms)

## Sensitivity 2.83V / 1m

95 dB

## Max. SPL

119 dB cont

125 dB peak

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

105 Hz - 23 kHz

## Usable Frequency Range (-10 dB)

73 Hz - 25 kHz

## Dispersion

90° x 60°, Rotational

## SYSTEM OPERATION

### Recommended Amplification

200 - 500 Watts

### System Controller

Omega DSP Solutions (optional)

### Speaker Cables

Min - 2 x 2.5 mm<sup>2</sup>

Preferred - 2 x 4 mm<sup>2</sup>

## PRODUCT FEATURES

### Components

1 x 8" Low Frequency Driver

1 x 1" Horn loaded Compression Driver

### Crossover

Passive - 1.7kHz

Active - \* LPF -  
HPF - 110Hz

## Connectors

2 x 4 pole Speakon Connectors

## Dimensions (H x W x D mm)

458 x 284 x 250

## Weight (kg)

13.4

## Shipping Weight (kg)

14.4 (1 cabinet per carton)

## Colour

Black

## Options

Available in white or RAL colours on request

Weather resistant version on request

## Rigging

4 x M6 mounting points for installation brackets, omni-mounting point for stand or truss adaptor, (optional 2 x 3 point adaptor for Horizontal Mounting)

## HARDWARE

### Fitted as Standard

Small Cast aluminium top hat, Blanking plate

### Optional

Horizontal cradle base, BC-8 cradle vertical, BC-8 cradle horizontal, LWB-PT large wall bracket pan and tilt with 35mm spigot, LWB large wall bracket, SS-1 speaker stand, TP-1 adjustable threaded pole, TP-1P threaded Mounting Plate.

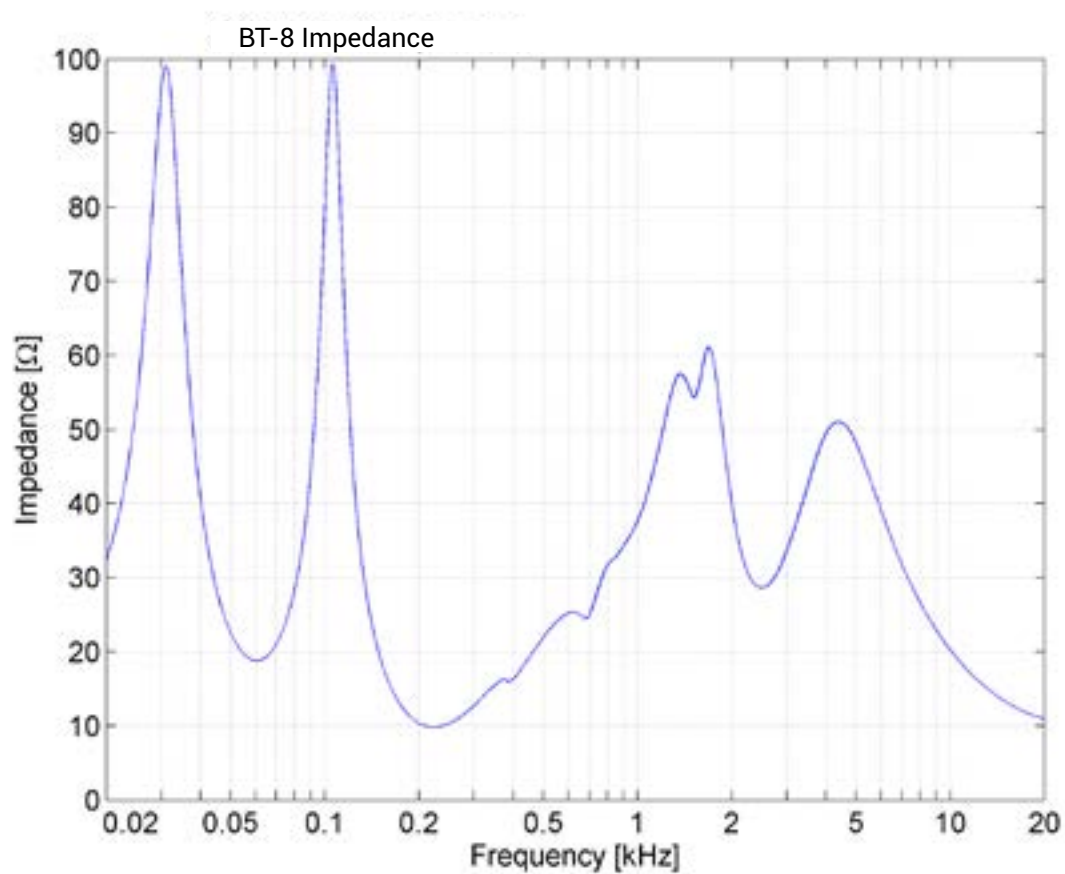
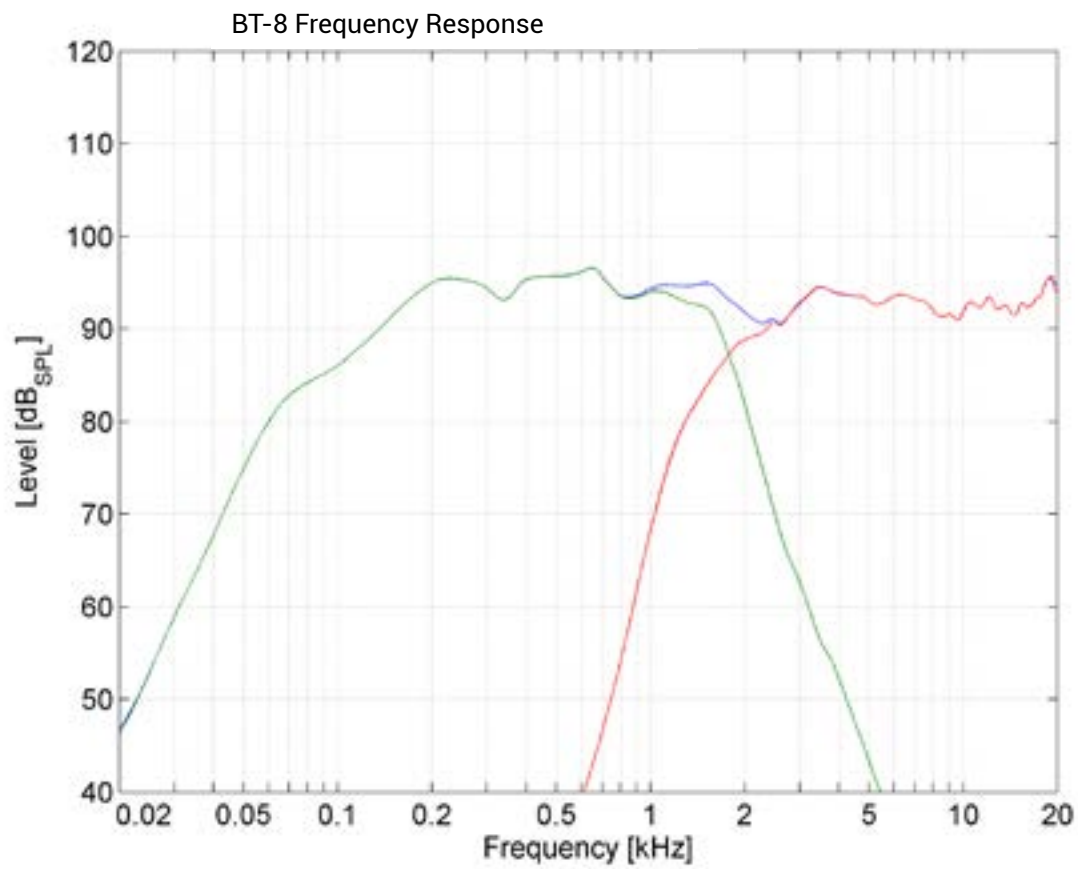
### Additional Descriptive Data

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

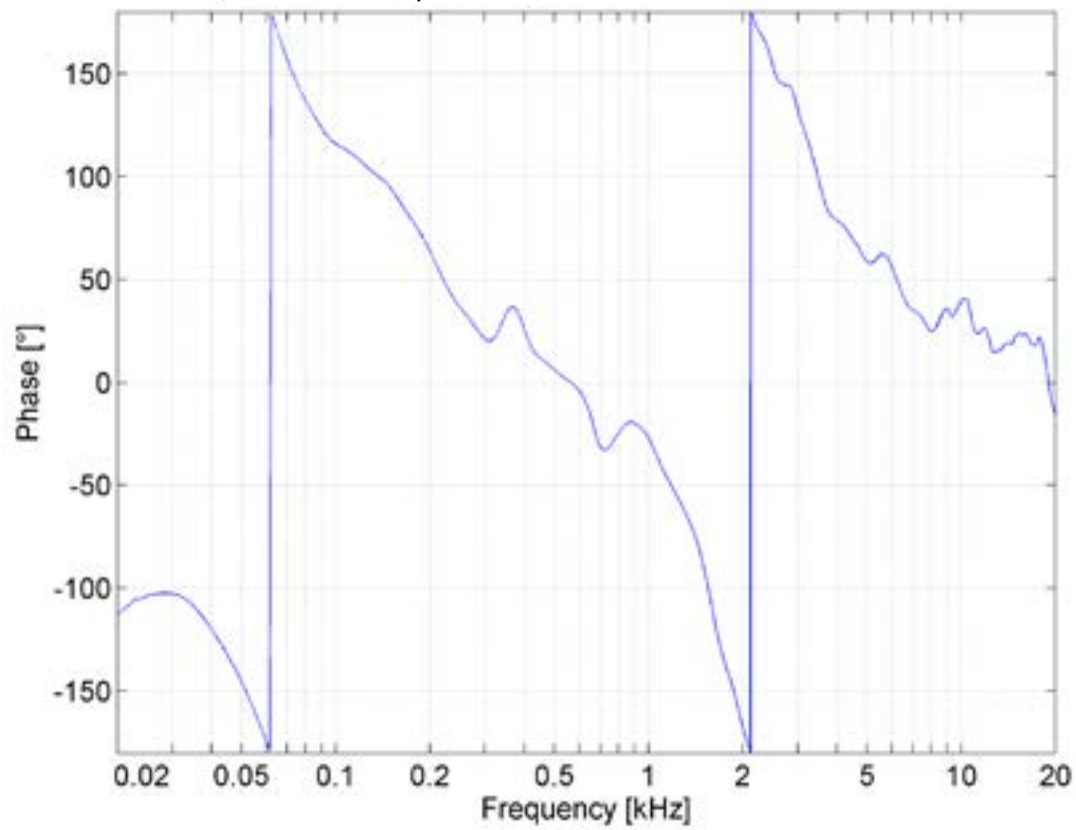
**Recommended filter settings are available on the website [omegaproaudio.co.uk/download](http://omegaproaudio.co.uk/download)**

\* All presets from the Omega Library.

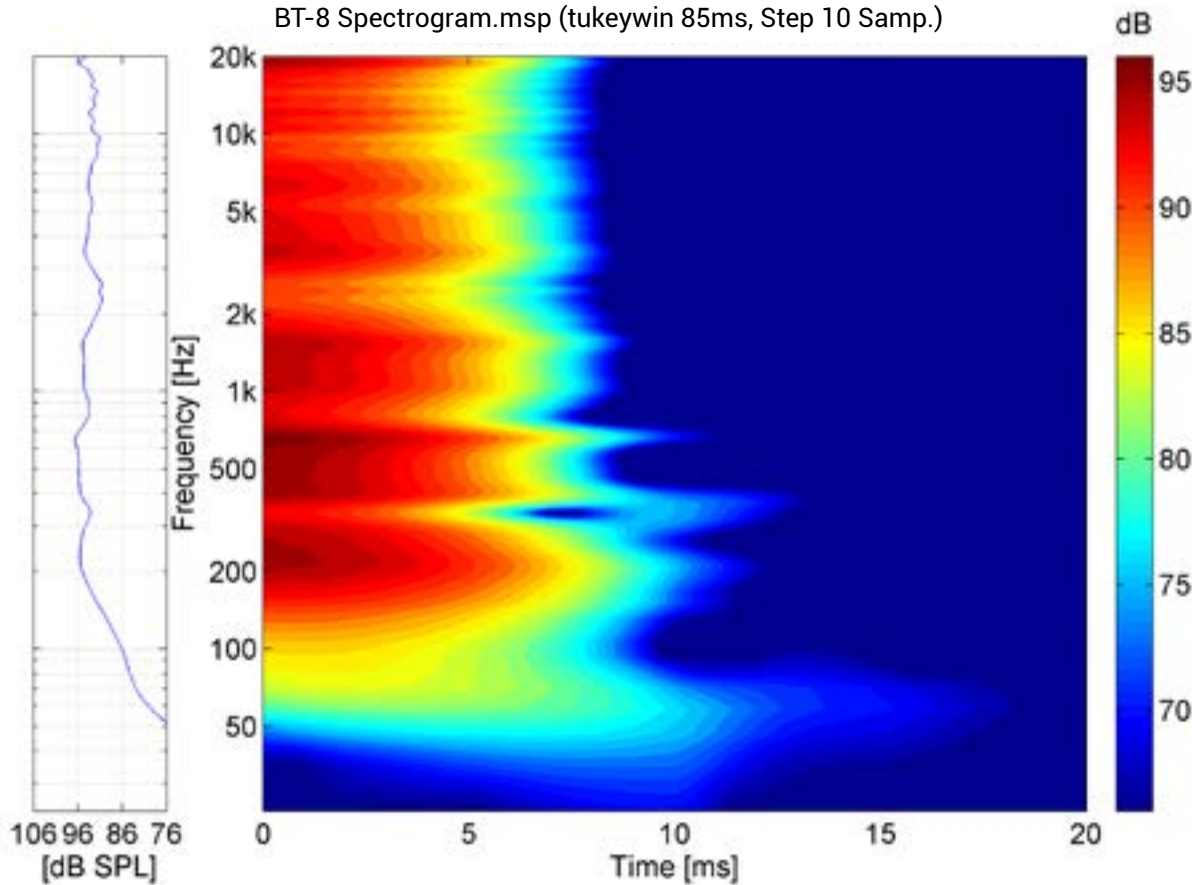
## BT-8 Measurements



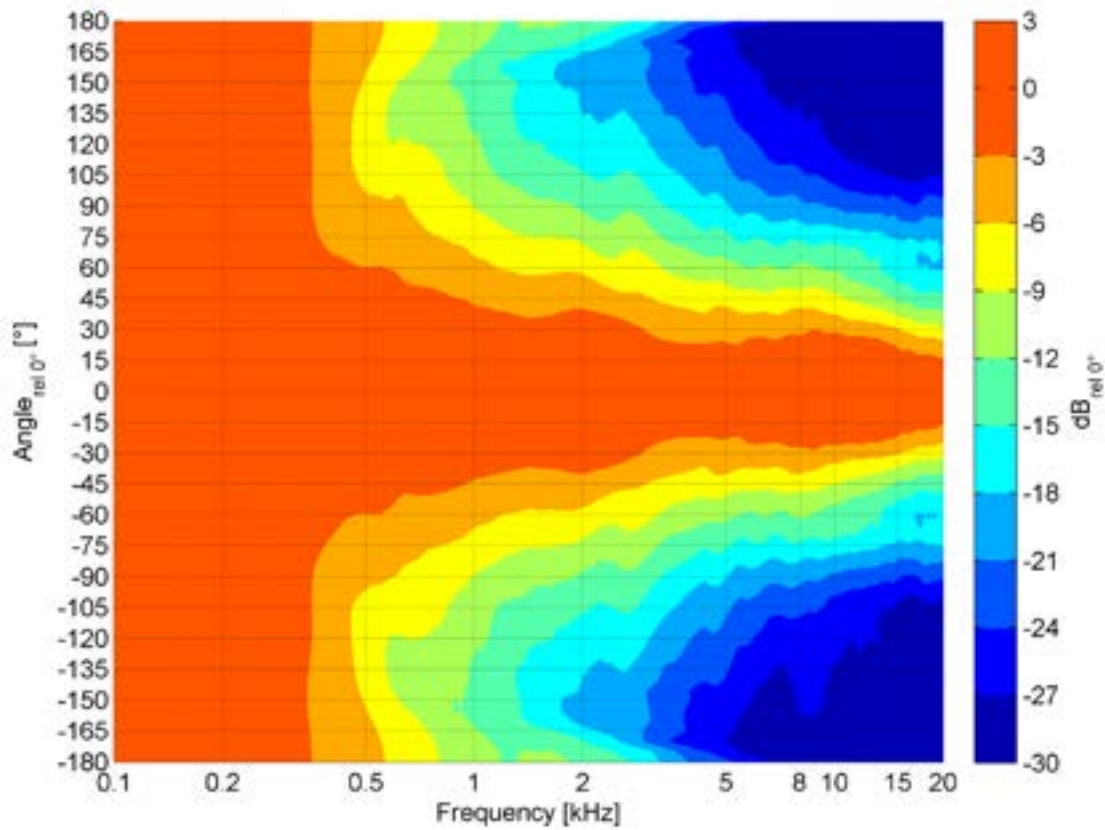
BT-8 Phase response



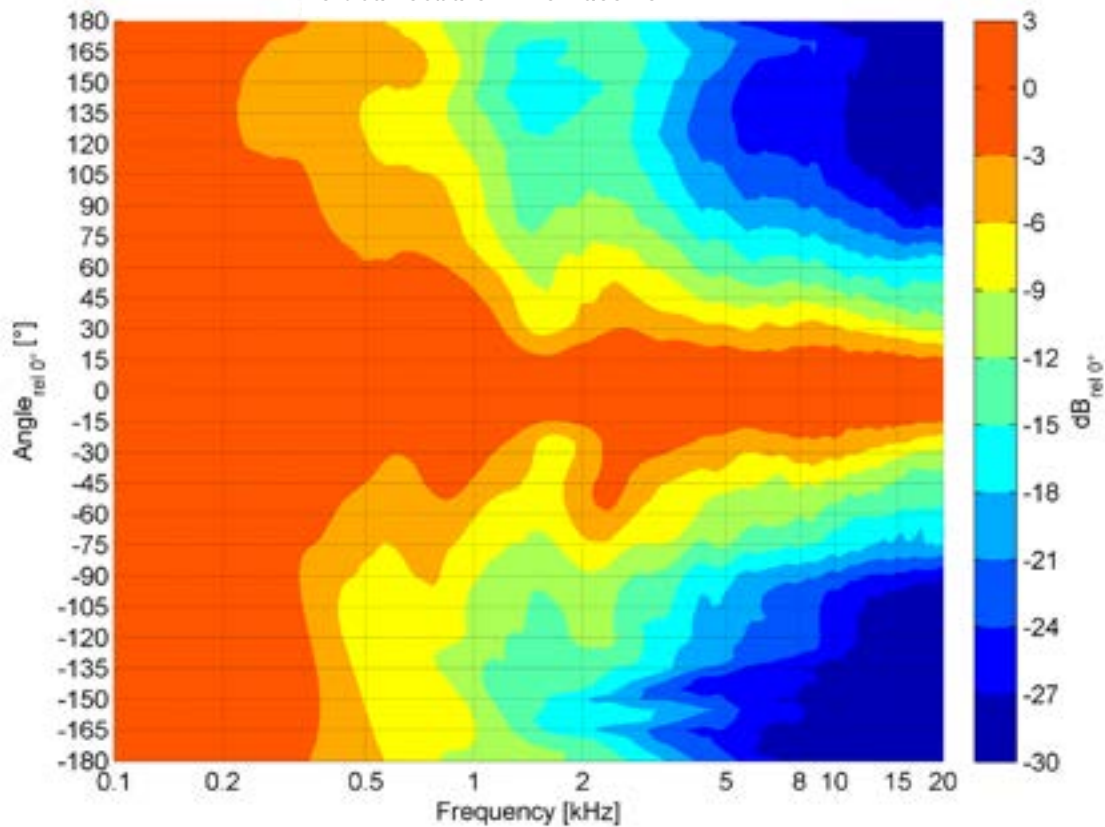
BT-8 Spectrogram.msp (tukeywin 85ms, Step 10 Samp.)



Horizontal isobars: BT-8 Passive



Vertical isobars: BT-8 Passive



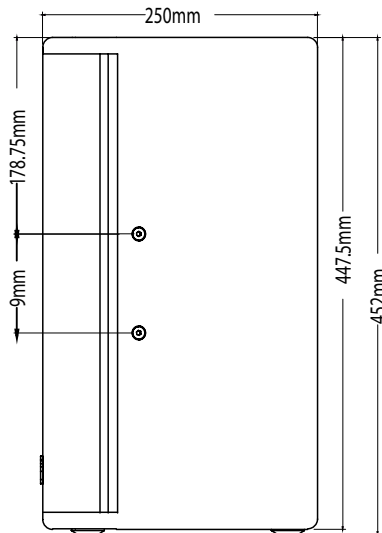
All Measurements are executed by the IFAA Institute for Acoustics in Aachen, Germany  
measurement conditions 4Pi environment for full range cabinets, 2Pi environment for subwoofers.

## BT-8 Dimensions

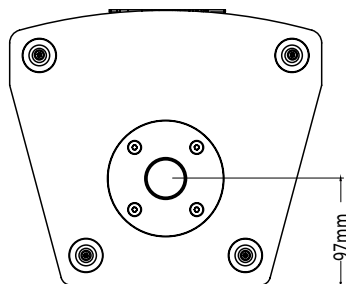
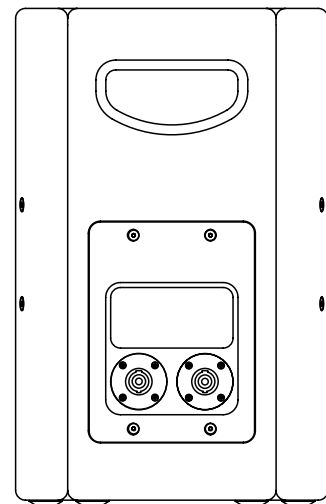
Front



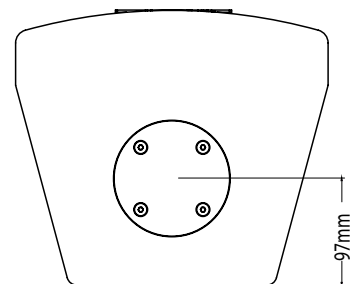
Side



Back



Bottom

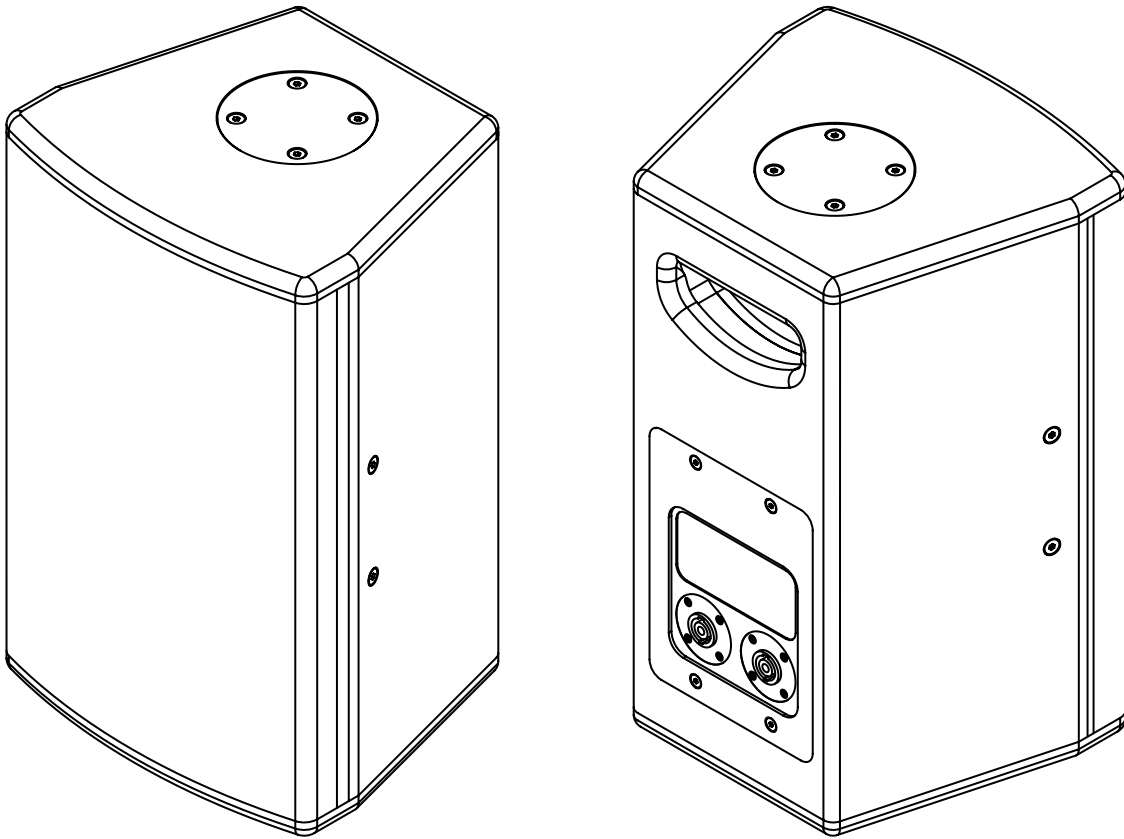


Top

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



## BT-8 3D View



## Accessories and Spare Parts

- Small cast aluminium top hat
- Horizontal cradle base
- Blanking plate
- BRC-8 cradle vertical
- BRC-8 cradle horizontal
- LWB-PT large wall bracket pan and tilt with 35mm spigot
- LWB large wall bracket
- SS-1 speaker stand
- TP-1 adjustable threaded pole
- TP-1P threaded Mounting Plate
- 1 x 8" low frequency driver
- 1 x 1" horn loaded compression driver
- BT-8 steel grill assembly
- BT-8 backplate and crossover
- Steel Omega Logo



## **Architects' & Engineers' specifications:**

2-Way dynamic loudspeaker in a multi-purpose enclosure design, housing 1 x 8" proprietary low mid bass driver, internally and externally ventilated double sided high temperature voice coil, 1" exit compression driver on rotatable 90° x 60° CD horn. Homogeneous radiating behaviour and linear response from 500 Hz. Integrated passive crossover with phase optimization. Constructed from different multi-laminated wood, eco-friendly scratch resistant paint, 4 x M6 flying points for cradle mount. omni-mounting point for stand or truss adaptor, 2 x optional horizontal cradle base plates to allow horizontal installation, skid-proof rubber feet, ergonomic carry handle, kick proof steel grill finished with external reticulated foam and Omega logo.

## **Technical Data:**

Frequency Response: 74 Hz - 25 kHz (-10dB), 106 Hz - 23 kHz ( $\pm 3$  dB), Continuous SPL: 119 dB/1m, Program SPL 122dB/1m. Peak SPL 125dB/1 m, Power Handling: 200 Watt cont. IEC268 AES, Maximum Power Handling: 400 Watt prog. / 800 Watt peak, Impedance Nominal: 12 ohm, Dispersion Nominal: 90° x 60° (hor. x vert.), Connectors: 2 x Speakon NL4MP (1+/1-, 2+/2- links). Dimensions (H x W x D): 458 mm x 284 mm x 250 mm, Weight: 13.4 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

## Safety Instructions Cont.

failure. Replace damaged or suspect items when necessary.

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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