

BRT-10WP Datasheet



The BT-10WP is a high performance weatherised compact cabinet which is ideally suited for use in fixed installation, using vertical mounting yoke, rotatable horns, 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 hex grill and acrylic textured paint finish and multiple integrated fixing points achieves a high class look suitable for any application.

Designed with an 10" proprietary 300 W, 8 Ohm woofer and 1" compression driver, the internal passive crossover ensures a linear, usable frequency response of 71 Hz to 22 kHz (-10 dB) across 90°x 60° dispersion with rotatable horn. A maximum SPL of 126.8 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 BC-10 Vertical Yoke.

The rear connector plate is fitted with an IP54 gland and is available with 100v transformer option with 3.75, 7.5, 15, 30 and 60 W tap settings.

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

Key Features:

- Rot and weatherproof
- RAL Colour options
- No maintenance costs
- Chew resistant and non-toxic to animals
- Acid and chemical resistant, resisting most industrial chemicals
- Suitable for install and portable
- 8 Ohm Impedance
- Rotatable 90° x 60° horn for enhanced flexibility
- 126.8 dB SPL in a compact cabinet

Same Look - Recycled

Significantly improving outdoor sound quality while helping the environment

As well as being one of the most innovative new enclosure materials for weatherproof loudspeakers, it's also one of the most environmentally-friendly and economical.

Each product in this range is manufactured from 100% waste plastic which typically ends up being land-filled, floating in our oceans or incinerated. Every design using this recycled polymer is engineered to perform as an alternative to polyurethane coated plywood or plastic rotational/injection moulded. Fully recyclable at end-of-life.

Technical Specifications

Design

10" Reflex Tuned, Mid High Point Source Cabinet

Impedance

8 Ohm, Minimum 6.6 @ 230 Hz

Power Handling (AES)

300 Watts (continuous)

Max. Power Handling (AES)

600 Watts (program)

1200 Watts (peak 10 ms)

Sensitivity 2.83V / 1m

96 dB

Max. SPL

120.8 dB cont

126.8 dB peak

Frequency Response (± 3 dB)

88 Hz - 21 kHz

Usable Frequency Range (-10 dB)

71 Hz - 22 kHz

Dispersion

90° x 60°, Rotational

SYSTEM OPERATION

Recommended Amplification

300 - 600 Watts

System Controller

Omega DSP Solutions (Optional)

Speaker Cables

Min - 2 x 2.5 mm²

Preferred - 2 x 4 mm²

PRODUCT FEATURES

Components

1 x 10" Low Frequency Driver

1 x 1" Horn loaded Compression Driver

Crossover

Passive - 1.59kHz

Active - * LPF -
HPF - 100Hz

Connectors

1 x IP54 Gland

Dimensions (H x W x D mm)

512.5 x 320 x 280

Weight (kg)

20.8

Shipping Weight (kg)

21.8 (1 cabinet per carton)

Colour

Black

Options

Available in white or RAL colours on request

Weather resistant version on request

Rigging

4 x mounting points for installation brackets

HARDWARE

Fitted as Standard

Small cast aluminium top hat, Blanking plate

Optional

BC-10 cradle vertical

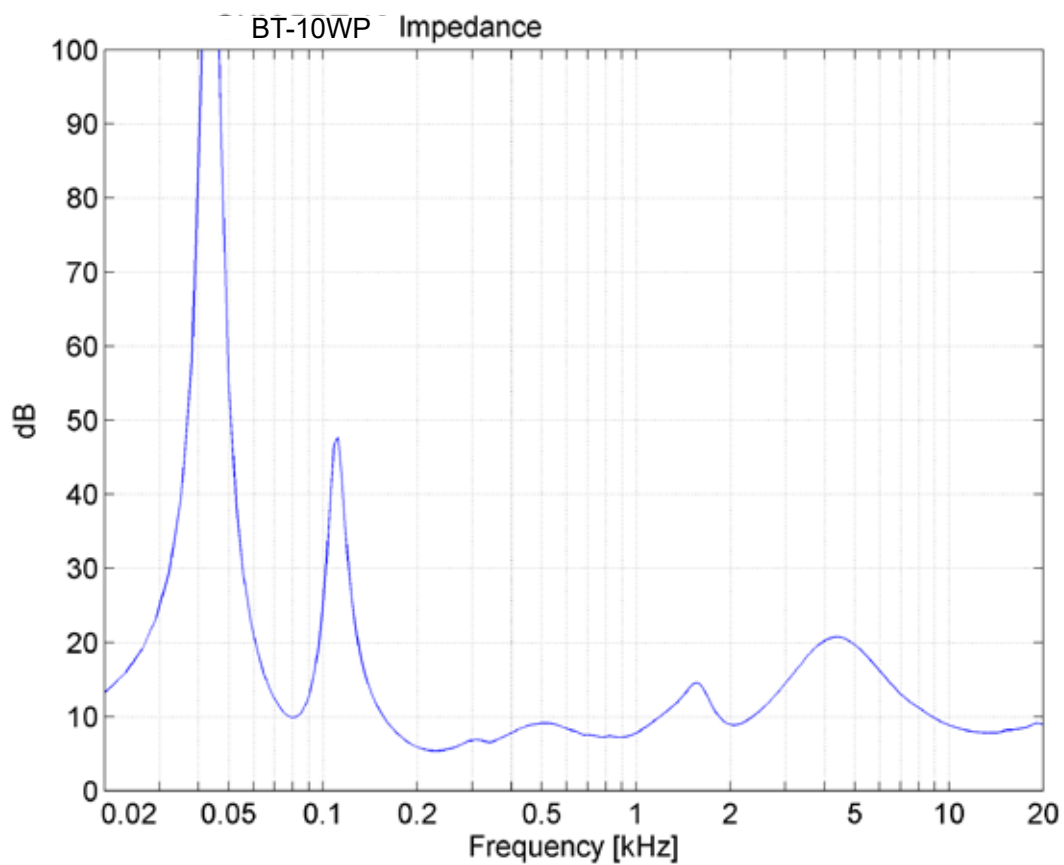
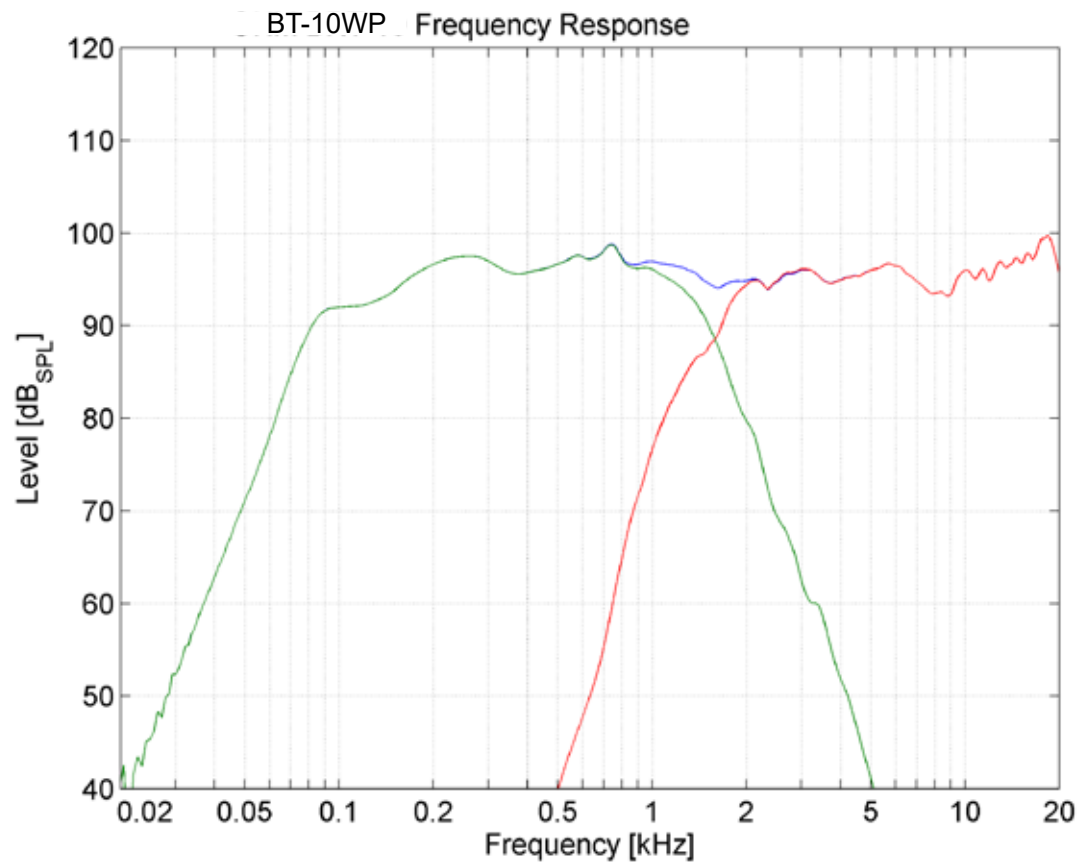
Additional Descriptive Data

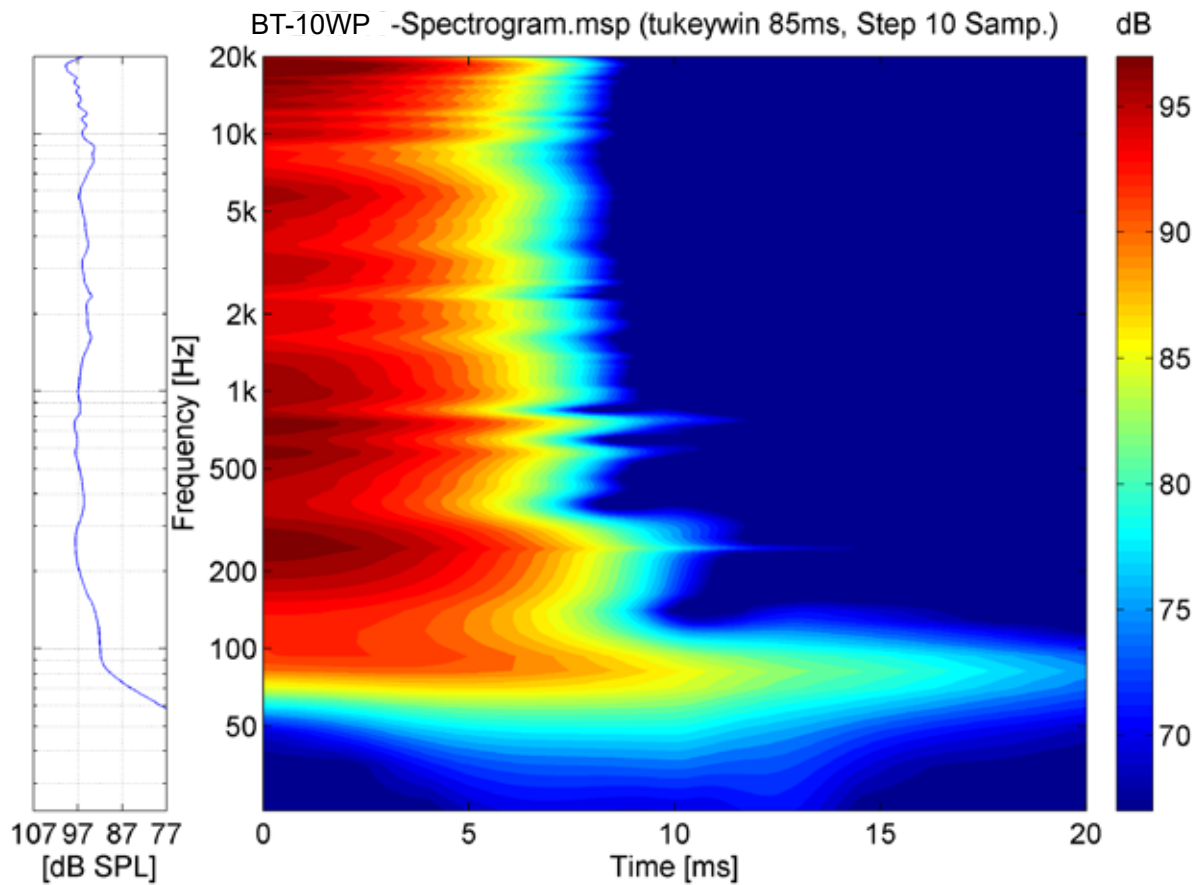
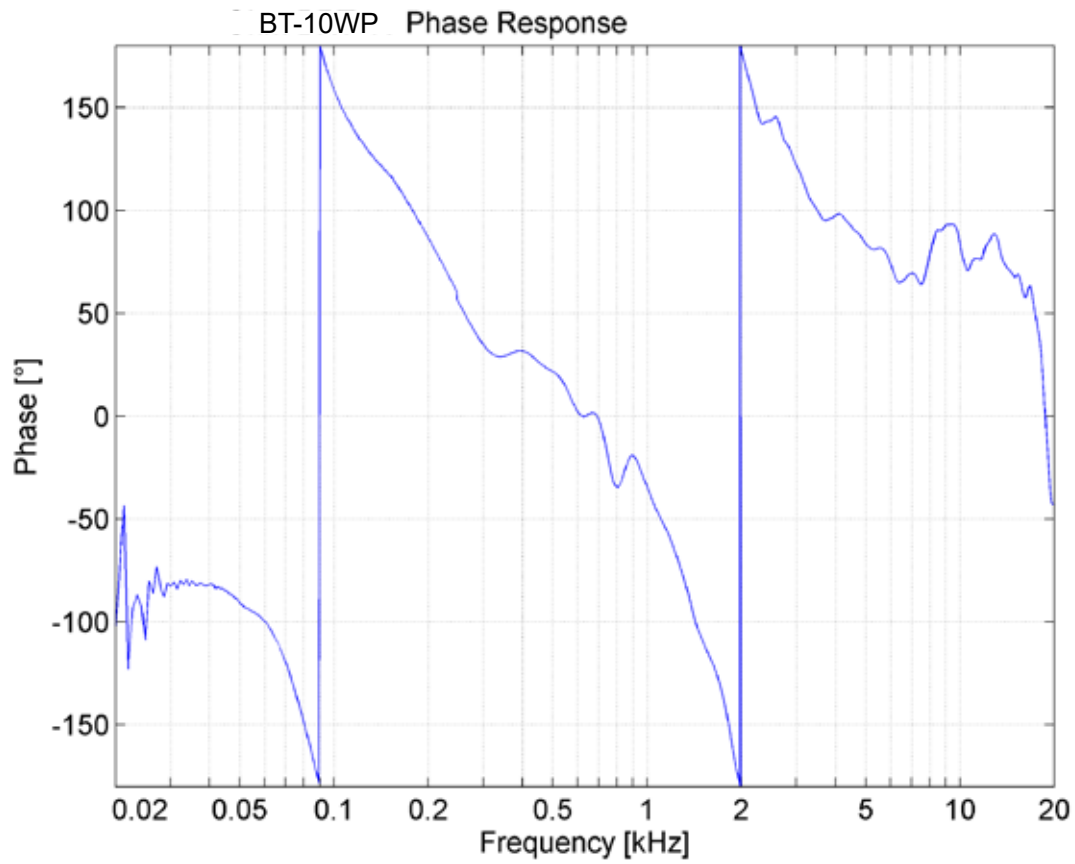
Polymer construction, with durable scratch resistant black textured paint finish, kick-proof steel grill with Omega logo.

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

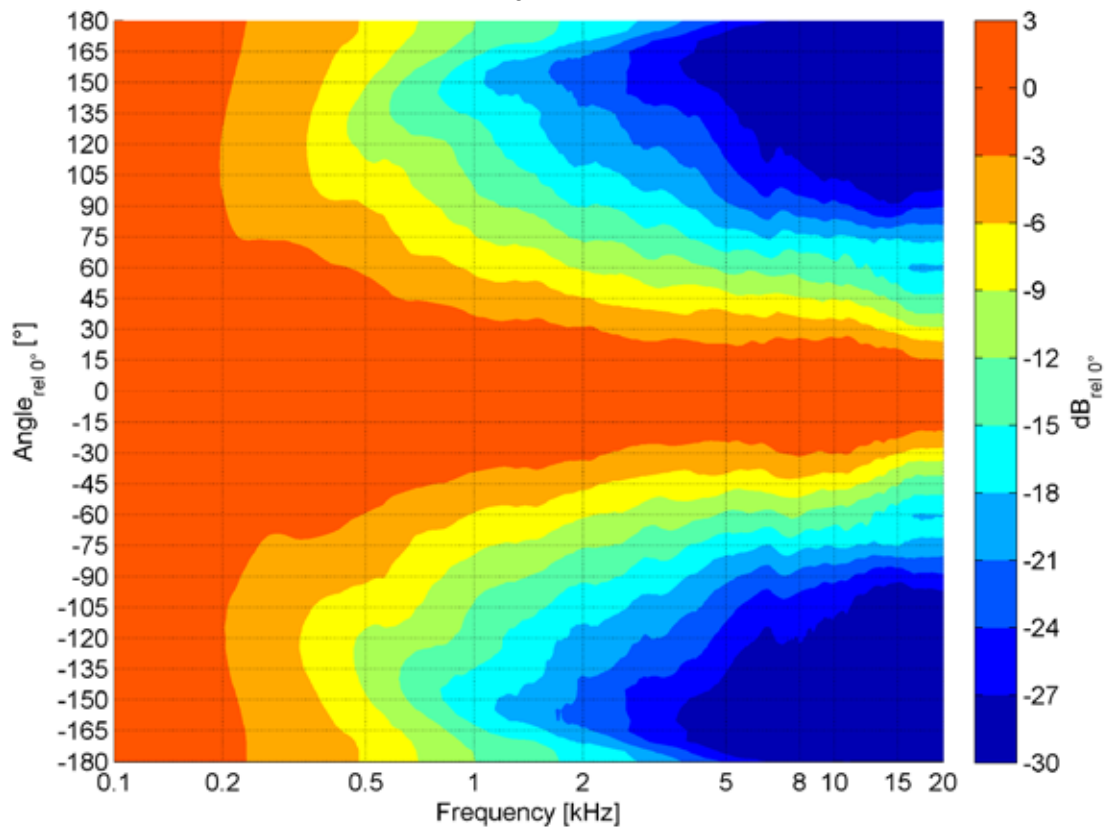
* All presets from the OMEGA library.

BT-10WP Measurements

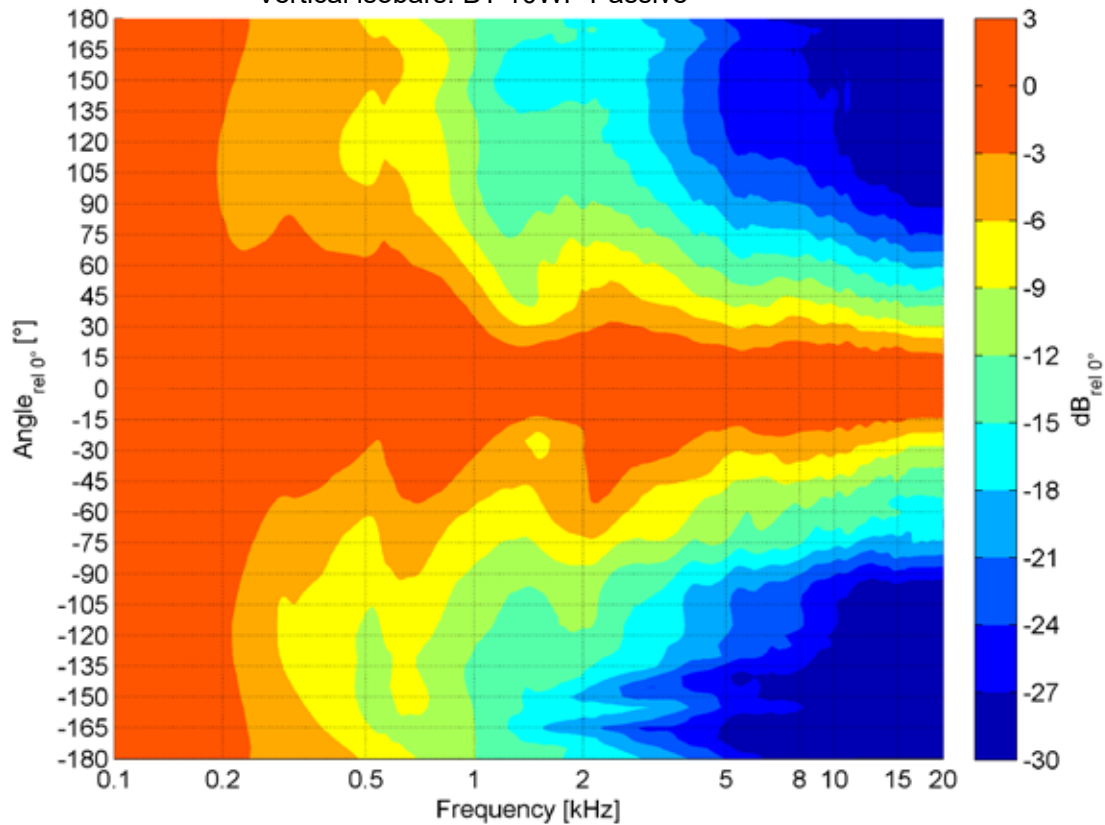




Horizontal isobars: BT-10WP Passive



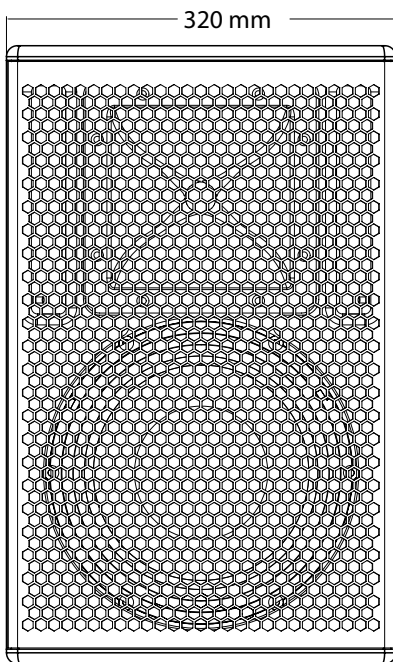
Vertical isobars: BT-10WP Passive



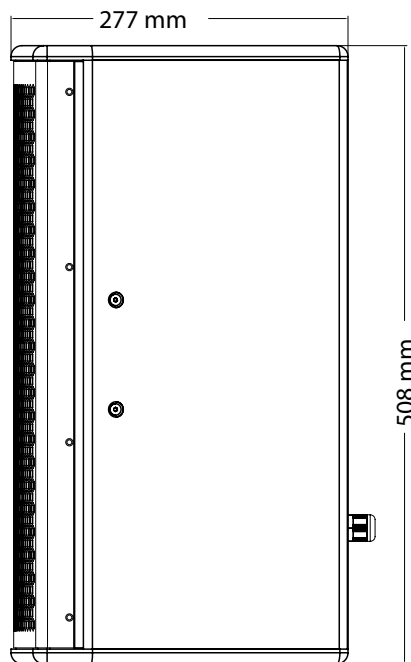
All Measurements are executed by the IFAA Institute for Acoustics in Aachen, Germany
measurement conditions 4Pi environment for full range cabinets, 2Pi environment for subwoofers.

BT-10WP Dimensions

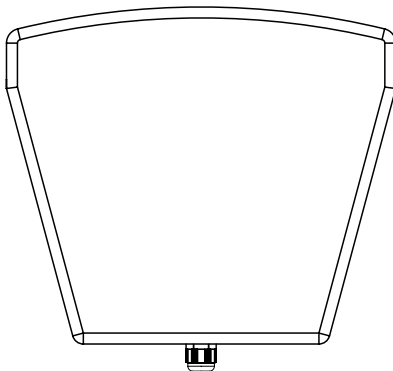
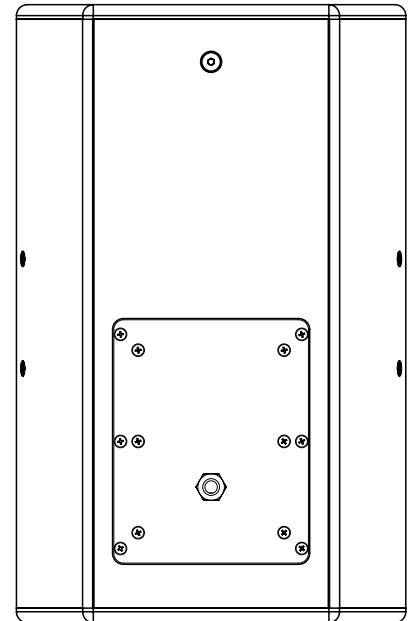
Front



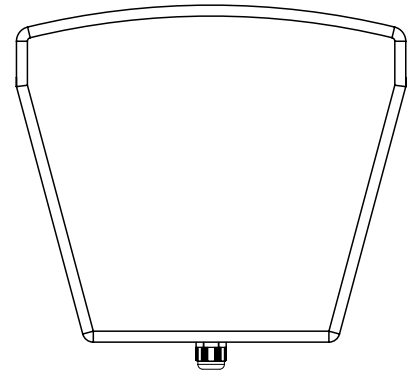
Side



Back



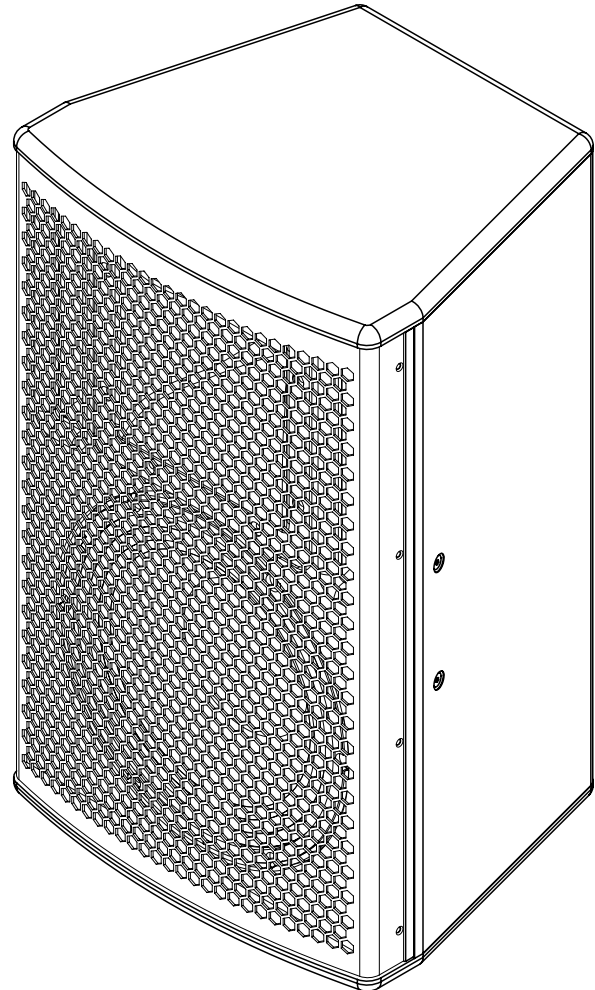
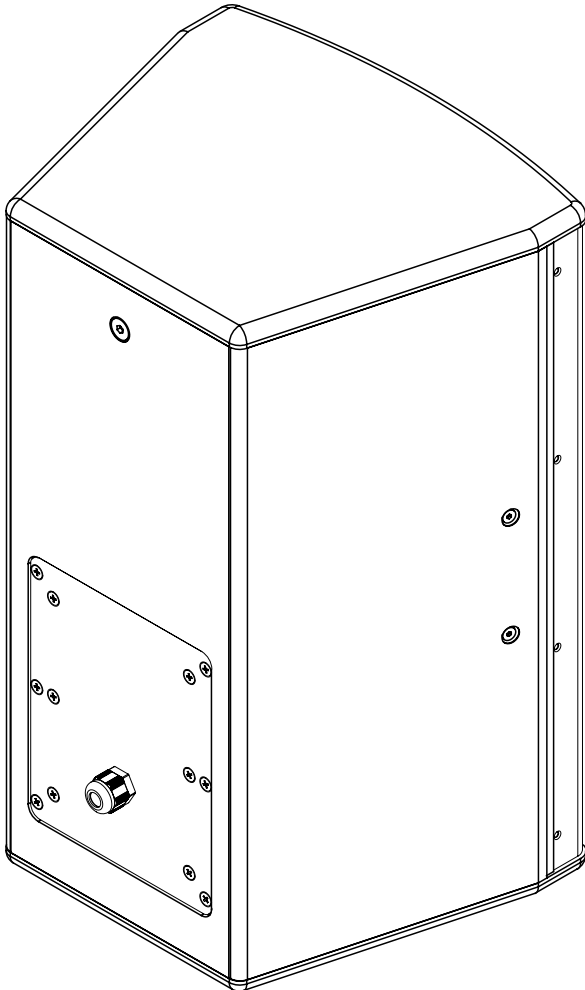
Bottom



Top

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

BT-10WP 3D View



Accessories and Spare Parts

- BC-10 cradle vertical
- 1 x 10" low frequency driver
- 1 x 1" horn loaded compression driver
- BT-10WP steel grill assembly
- BT-10WP backplate and crossover

Architects' & Engineers' specifications:

2-Way dynamic loudspeaker in a multi purpose enclosure design, housing 1 x 10" 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 recycled polymer, eco-friendly scratch resistant paint, 4 x flying points for cradle mount, skid-proof rubber feet, kick proof steel grill finished with Omega logo.

Technical Data:

Frequency Response: 71 Hz - 22 kHz (-10dB), 88 Hz - 21 kHz (± 3 dB), Continuous SPL: 120.8 dB/1m, Program SPL 123.8 dB/1m, Peak 126.8 dB/1 m. Power Handling: 300 Watt cont. IEC268 AES, Maximum Power Handling: 600 Watt prog. / 1200 Watt peak, Impedance Nominal: 8 ohm, Dispersion Nominal: 90° x 60° (hor. x vert.) rotational, Connectors: 1 x Gland. Dimensions (H x W x D): 512.5 mm x 320 mm x 280 mm, Weight: 20.8 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.
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

Safety Instructions Cont.

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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