

BT-12 Datasheet



The BT-12 is a high performance compact cabinet which is ideally suited to both portable 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 12" proprietary 500 W, 8 Ohm woofer and 1.5" compression driver , the internal passive crossover ensures a linear, usable frequency response of 61 Hz to 22 kHz (-10 dB) across 60°x 40° dispersion with rotatable horn. A maximum SPL of 129 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-12 Horizontal, BC-12 Vertical Yoke and rear mounted pan and tilt bracket PTL. Other fixings can be used with this cabinet such as the fixed large wall bracket (LWB) and pan and tilt wall bracket (LWB-PT). This product is also Powerdrive compatible with the type 100 plate products.

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.

Key Features:

- Suitable for install and portable
- 8 Ohm Impedance
- Rotatable 60° x 40° horn for enhanced flexibility
- 129 dB SPL in a compact cabinet
- Multiple mounting options available
- Powerdrive compatible
- Available in weather resistant version
- Custom RAL Colours available on request

Technical Specifications

Design

12" Reflex Tuned, Mid High Point Source Cabinet

Impedance

8 Ohm, Minimum 6.6 ohm @ 170 Hz

Power Handling (AES)

500 Watts (continuous)

Max. Power Handling (AES)

1000 Watts (program)

2000 Watts (peak 10 ms)

Sensitivity 2.83V / 1m

96 dB

Max. SPL

123 dB cont

129 dB peak

Frequency Response (±3 dB)

74 Hz - 20 kHz

Usable Frequency Range (-10 dB)

61 Hz - 20 kHz

Dispersion

60° x 40° , Rotational

SYSTEM OPERATION

Recommended Amplification

500 - 1000 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 12" Low Frequency Driver

1 x 1.5" Horn loaded Compression Driver

Crossover

Passive - 1.37kHz

Active - * LPF -
HPF - 90 Hz

Connectors

2 x 4 pole Speakon Connectors

Dimensions (H x W x D mm)

642.5 x 400 x 350

Weight (kg)

27.8

Shipping Weight (kg)

29.7 (1 cabinet per carton)

Colour

Black

Options

Available in white or RAL colours on request

Weather resistant version on request

Rigging

4 x mounting for Powerdrive Bracket. 6 x 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

Standard Cast aluminium top hat, Blanking plate

Optional

Horizontal cradle base, BC-12 cradle vertical, BC-12 cradle horizontal, LWB-PT large wall bracket pan and tilt with 35mm spigot, PTL large wall bracket pan and tilt, LWB large wall bracket, SS-1 speaker stand, TP-1 adjustable threaded pole.

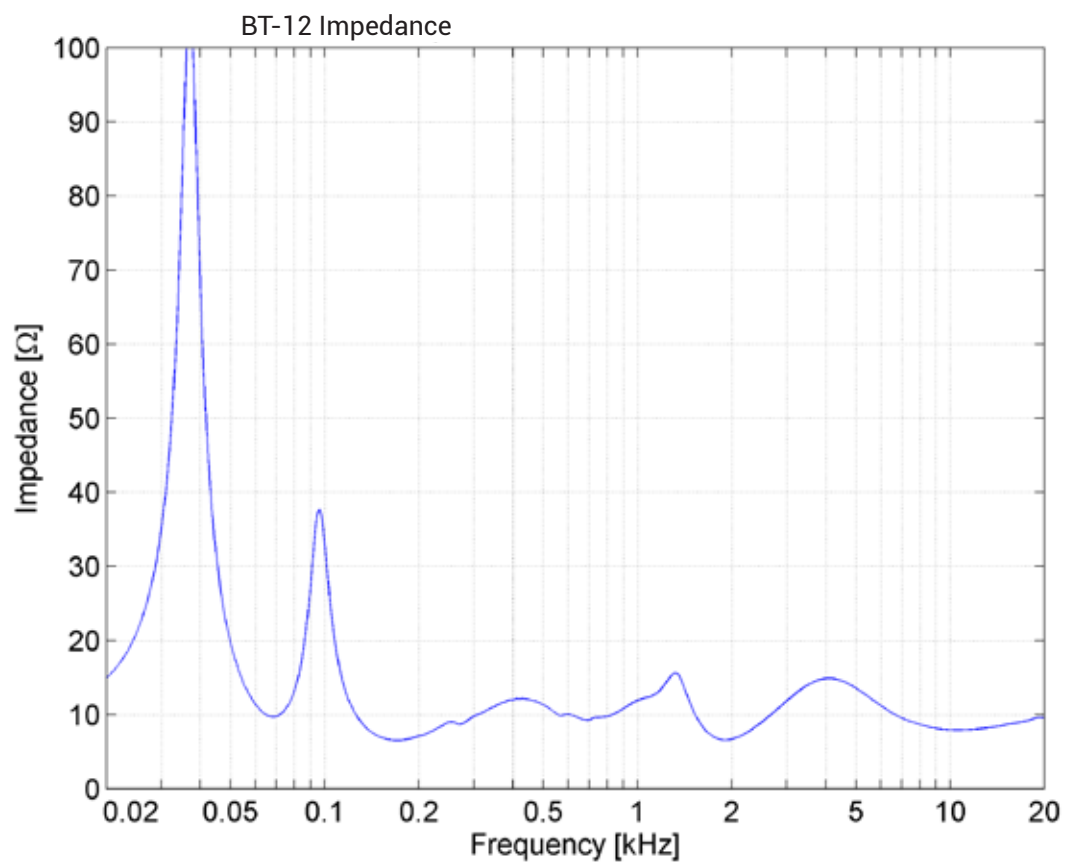
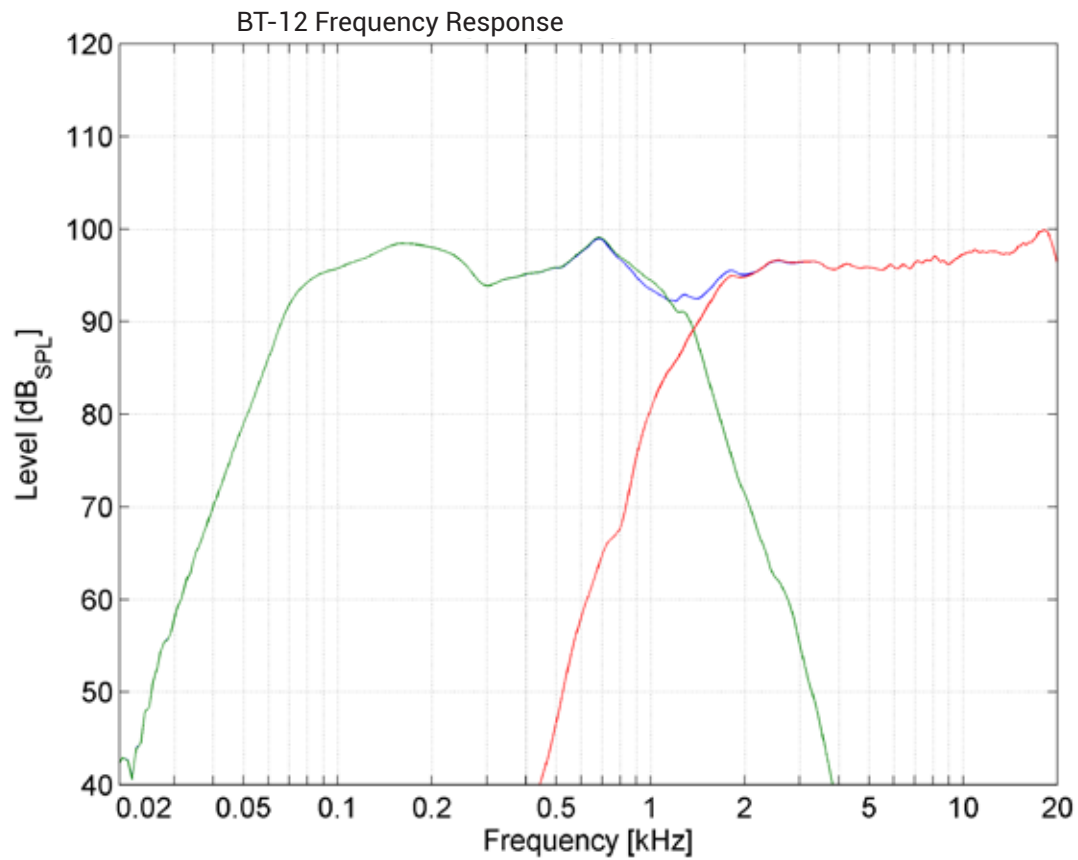
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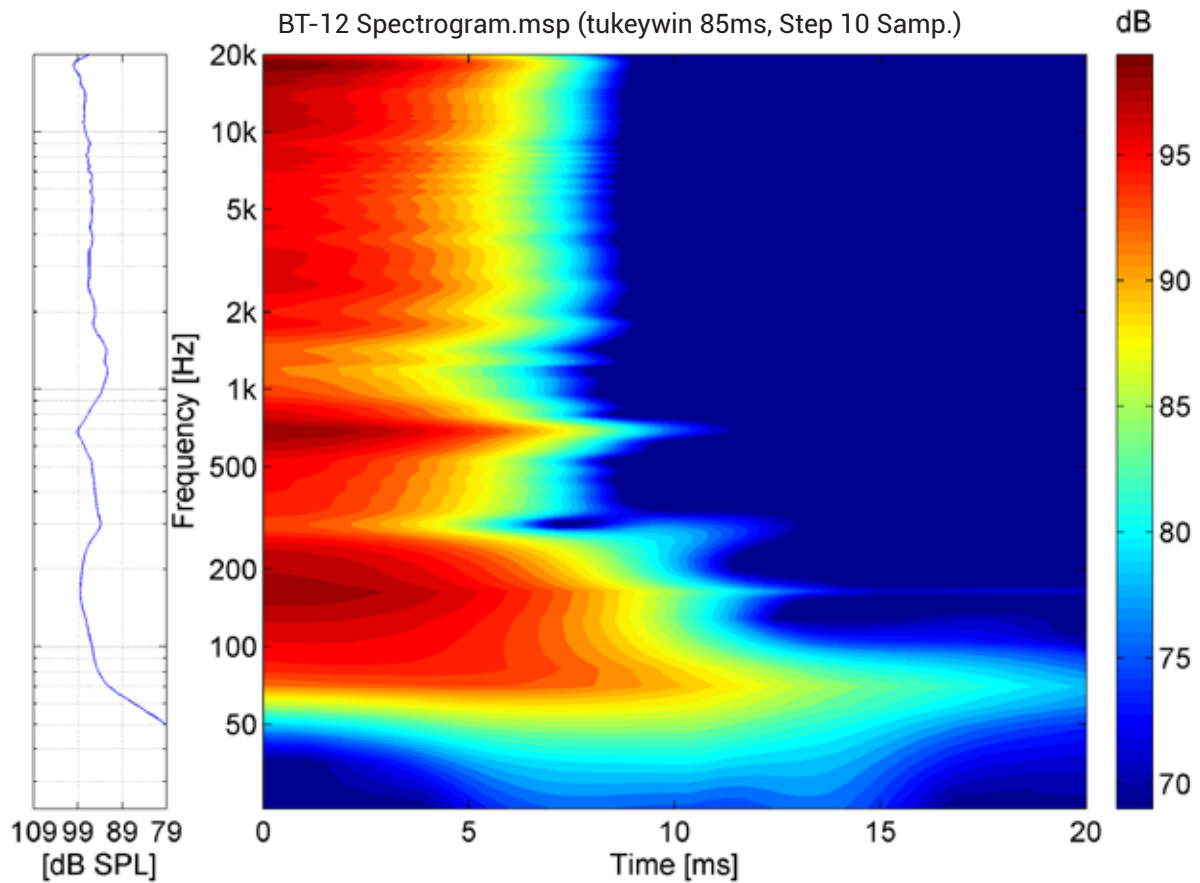
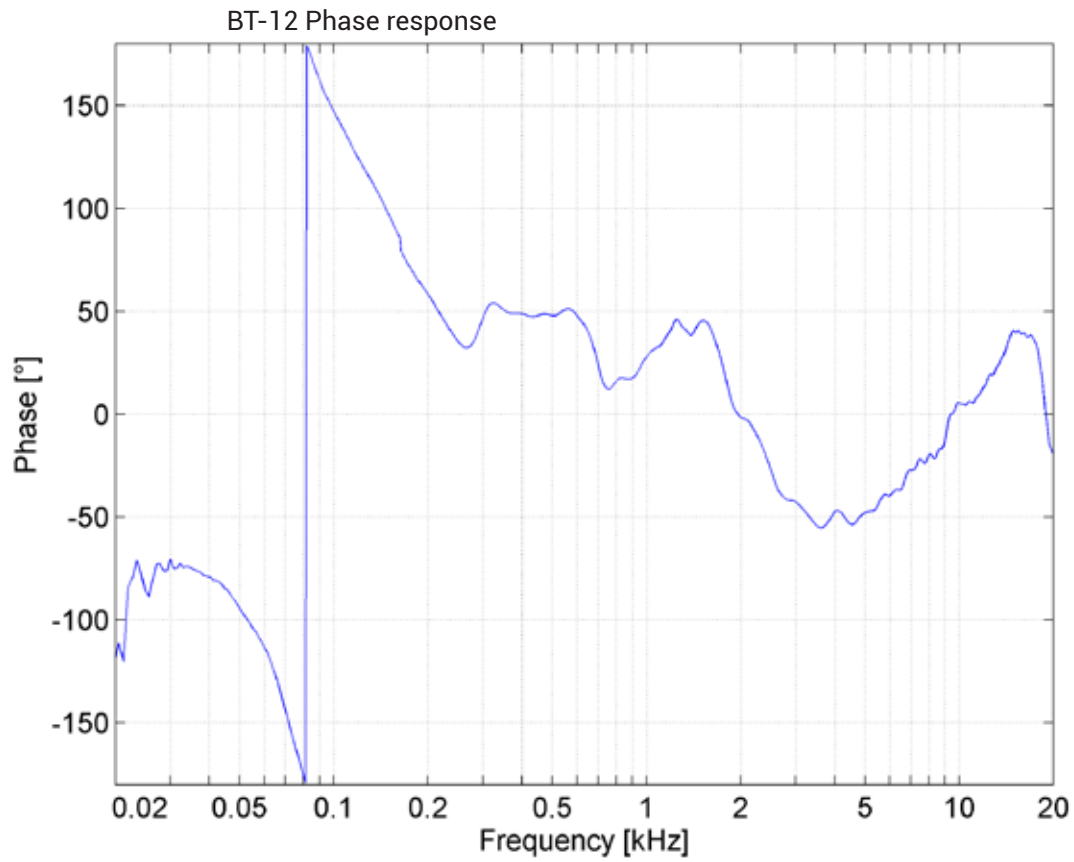
Birch plywood construction, with durable scratch resistant black textured paint finish, kick-proof steel grill and black foam with Omega logo.

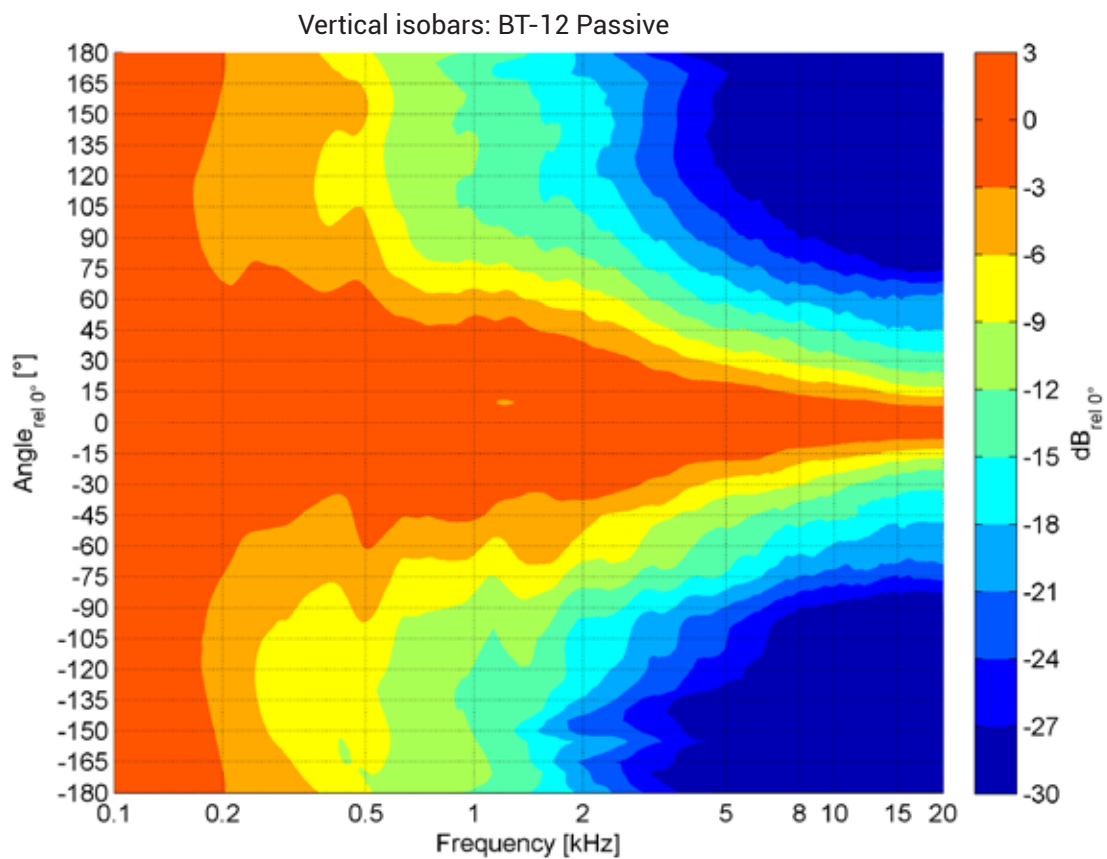
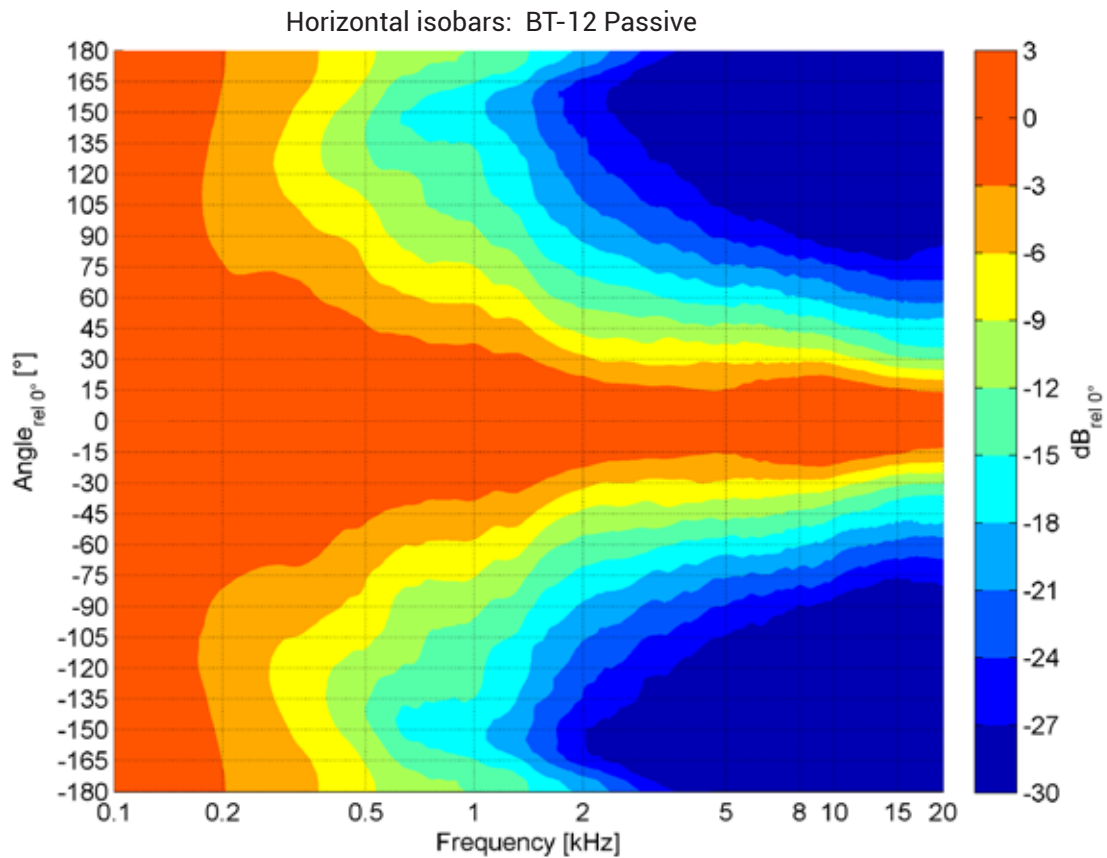
Recommended filter settings are available on the website omegaproaudio/download

* All presets from the OMEGA library.

BT-12 Measurements



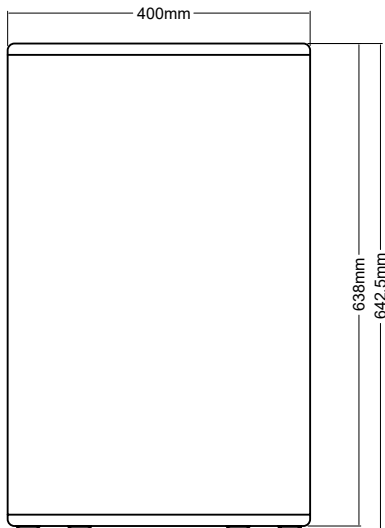




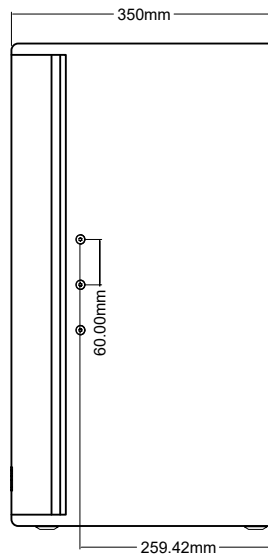
All Measurements are executed by the IFAA Institute for Acoustics in Aachen, Germany
 measurement conditions 4Pi environment for full range cabinets, 2Pi environment for subwoofers.

BT-12 Dimensions

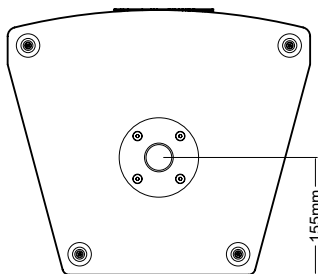
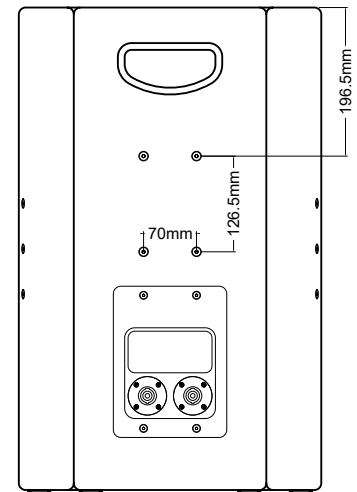
Front



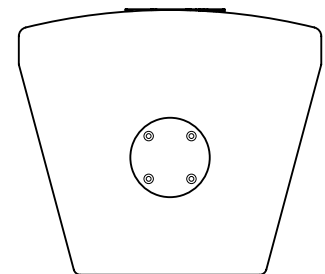
Side



Back



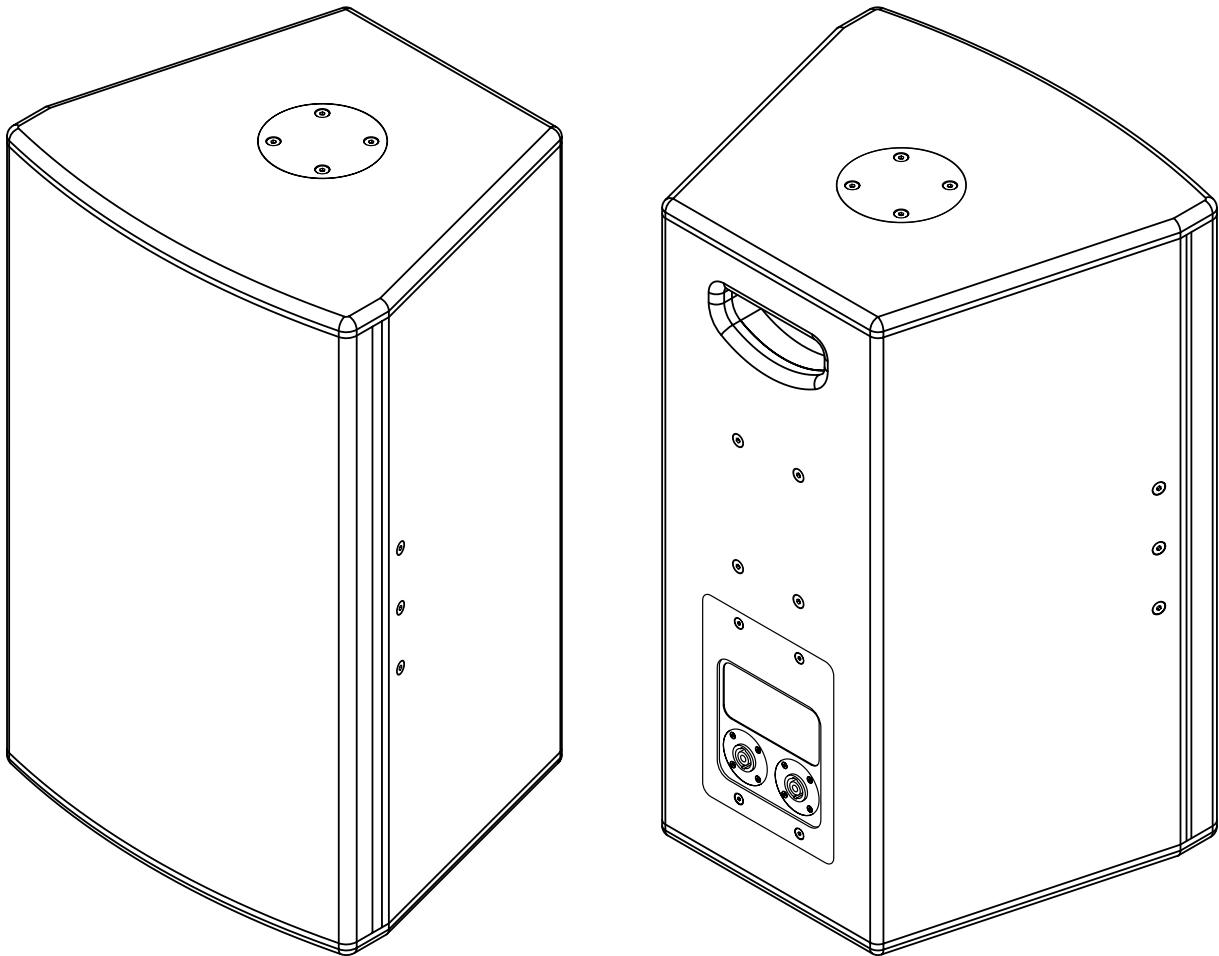
Bottom



Top

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

BT-12 3D View



Accessories and Spare Parts

- Cast aluminium top hat
- Horizontal cradle base
- Blanking plate
- BC-12 cradle vertical
- BC-12 cradle horizontal
- LWB-PT large wall bracket pan and tilt with 35mm spigot
- PTL large wall bracket pan and tilt
- LWB large wall bracket
- SS-1 speaker stand
- TP-1 adjustable threaded pole
- TP-1P threaded mounting plate
- 1 x 12" low frequency driver
- 1 x 1.5" horn loaded compression driver
- BT-12 steel grill assembly
- BT-12 backplate and crossover
- Steel Omega logo

Architects' & Engineers' specifications:

2-Way dynamic loudspeaker in a multi-purpose enclosure design, housing 1 x 12" proprietary low mid bass driver, internally and externally ventilated double sided high temperature voice coil, 1.5" compression exit driver on 60° x 40° CD horn. Homogeneous radiating behaviour and linear response from 350 Hz. Integrated passive crossover with HF protection and phase optimization. Constructed from different multi-laminated wood, eco friendly scratch resistant paint, 6 x flying points for cradle mount, 4 x Mounting for Powerdrive Bracket, omni-mounting point for stand or truss adaptor, 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: 61 Hz - 20 kHz (-10dB), 74 Hz - 20 kHz (± 3 dB), Continuous SPL: 123 dB/1m, Program SPL 126 dB/1m. Peak SPL 129 dB/1 m, Power Handling: 500 Watt cont. IEC268 AES, Maximum Power Handling: 1000 Watt prog. / 2000 Watt peak, Impedance Nominal: 8 ohm, Dispersion Nominal: 60° x 40° (hor. x vert.), Connectors: 2 x Speakon NL4MP (1+/1-, 2+/2- links), Dimensions (H x W x D): 642.5 mm x 400 mm x 350 mm Weight: 27.8 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

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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