

B1-SUB

Manual (2.0E)

References in the manual

WARNING!

This refers to a potentially dangerous situation which may lead to personal injury.

CAUTION!

This refers to a potentially dangerous situation which may lead to damage to the equipment.

IMPORTANT!

This refers to a situation which may cause the equipment to malfunction.

Symbols on the equipment



Please refer to the information in the operating manual.



WARNING!
Dangerous voltage!

General Information

B1-SUB Manual

Version 2.0E, 10/2003, D2090.E.02

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The information contained in this manual has been carefully checked for accuracy, at the time of going to press, however no guarantee is given with respect to the correctness.

d&b audiotechnik AG accepts no responsibility for any errors or inaccuracies that may appear in this manual or the products and software described in it.

Technical specifications, dimensions, weights and properties do not represent guaranteed qualities.

As manufacturers we reserve the right to make alterations and modifications within the framework of legal provisions, as well as changes aimed at improving quality.

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Safety precautions

Before you use our products, read the manual carefully and observe all the safety precautions. They will protect you and help to avoid equipment failures.

Keep this manual in a safe place so that it is available for future reference.

If you supply d&b products, please draw the attention of your customers to these safety guidelines. Enclose the relevant manuals with the systems. If you require additional manuals for this purpose, you can order them from d&b.

Information regarding use of loudspeakers

WARNING!

Never stand in the immediate vicinity of loudspeakers driven at a high level. Professional loudspeaker systems are capable of causing a sound pressure level detrimental to human health. Seemingly non-critical sound levels (from approx. 95 dB SPL) can cause hearing damage if people are exposed to it over a long period.

In order to prevent accidents when deploying loudspeakers on the ground or when flown, please take note of the following:

When setting up the loudspeakers or loudspeaker stands, make sure they are standing on a firm surface. If you place several systems on top of one another, use straps to secure them against movement.

Only use accessories which have been tested and approved by d&b for assembly and mobile deployment. Pay attention to the correct application and maximum load capacity of the accessories as detailed in our specific "Mounting instructions" or in our "Flying system and Rigging manuals".

Ensure that all additional hardware, fixings and fasteners used for installation or mobile deployment are of an appropriate size and load safety factor. Pay attention to the manufacturers instructions and to the relevant safety guidelines.

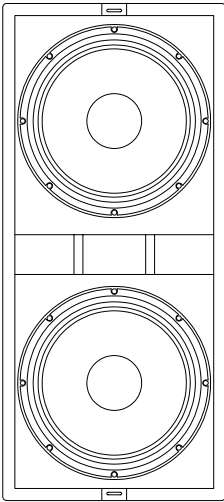
Regularly check the loudspeaker housings and accessories for visible signs of wear and tear, and replace them when necessary.

Regularly check all load bearing bolts in the mounting devices.

CAUTION!

Loudspeakers produce a static magnetic field even if they are not connected or are not in use. Therefore make sure when erecting and transporting loudspeakers that they are nowhere near equipment and objects which may be impaired or damaged by an external magnetic field. Generally speaking, a distance of 0.5 m (1.5 ft) from magnetic data carriers (floppy disks, audio and video tapes, bank cards, etc.) is sufficient; a distance of more than 1 m (3 ft) may be necessary with computer and video monitors.

B1-SUB



The B1-SUB is an actively driven subwoofer which uses a pair of 15" LF drivers mounted in a bass-reflex cabinet.

The B1-SUB cabinet is constructed from marine plywood and has an impact resistant paint finish. The front of the loudspeaker cabinet is fitted with a rigid metal grill covered with a replaceable acoustically transparent foam, and fitted with catches to the top and bottom for securing an optional transport lid E7909.

The cabinet incorporates four recessed handles, MAN CF4 stud plate rigging points and on the rear panel are ratchet strap guide plates (kelping bars) and four heavy duty wheels.

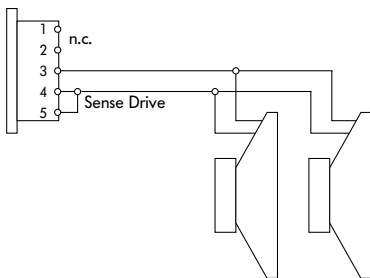
CAUTION!

Only operate B1-SUB cabinets with a d&b D12 amplifier in "Dual channel" and B1-SUB mode or an A1 mainframe fitted with a B1-SUB controller module, otherwise there is a risk of damaging the loudspeaker components.

Connections

The B1-SUB cabinet is fitted with a single EP5 connector and uses the pin assignments 3/4 and 5 (Pin 5: SenseDrive - D12 in conjunction with 5-wire cables).

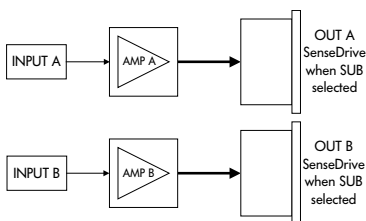
The B1-SUB can be supplied with a single CACOM connector as an option to drive the B1-SUB cabinet with the d&b A1 mainframe. SenseDrive is also available when the B1-SUB is driven by the A1 mainframe.



Connector wiring

Operation with D12

Selecting "Dual channel" and B1 mode enables a single B1-SUB cabinet to be driven by each channel.

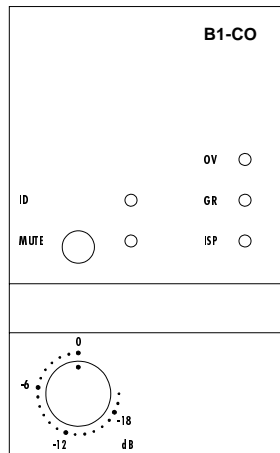


D12 Input/Output routing Dual channel mode

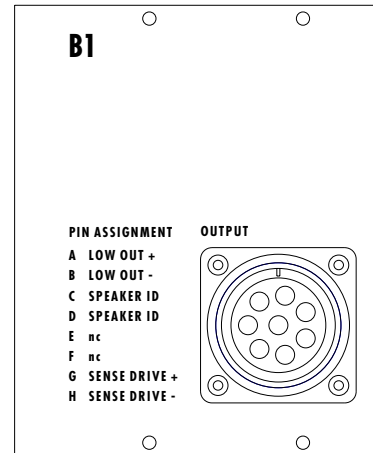
Operation with A1

One B1-SUB cabinet can be driven by a single A1 mainframe fitted with a B1-SUB controller module.

Since the B1 controller module is not fitted with any special controls or configuration switches, its standard controls are covered in the general controller module description in Section 3.2 of the A1 user manual.



Controls on B1-SUB controller module



B1-SUB controller rear panel

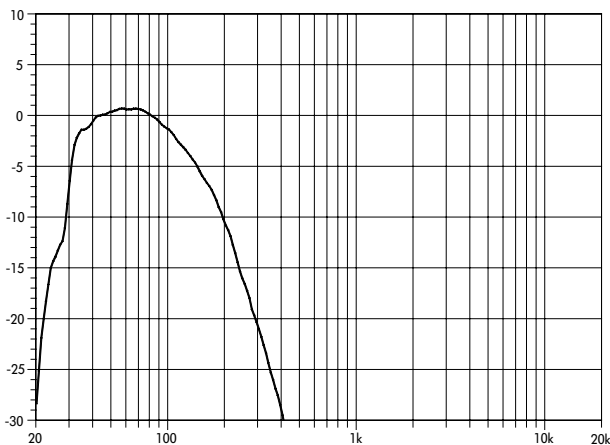
Technical specifications

B1-SUB system data

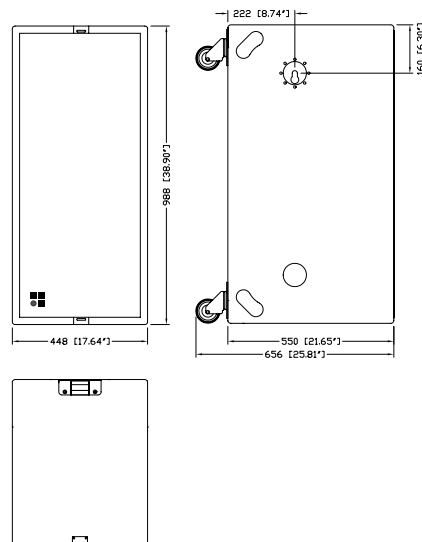
Frequency response (-5 dB).....32 Hz - 110 Hz
 Maximum sound pressure (1 m, full space)D12 or A1..... 131 dB
 (SPLmax peak, test signal pink noise with crest factor 4)
 Input level for 100 dB SPL / 1 m -12 dBu
 Polarity to controller INPUT (XLR pin 2: + / 3 -)..... LF: +

B1-SUB subwoofer

Nominal impedance 4 ohms
 Power handling capacity (RMS / peak 10 ms).....600 / 2400 W
 Connections 1 x EP5
 Pin assignments 3/4 and 5 (Pin 5: SenseDrive - D12)
 optional..... 1 x CACOM
 Pin assignments printed on the controller module rear panel
 Weight63 kg (139 lb)



B1-SUB frequency response



B1-SUB cabinet dimensions in mm [inch]

EU declaration of conformity (CE symbol)



EU conformity of loudspeakers

This declaration applies to loudspeakers manufactured by d&b audiotechnik AG and includes the types listed in the table below:

– **B1-SUB Z0041**

All production versions of these types are included, provided they correspond to the original technical version and have not been subject to any later design or electromechanical modifications.

We herewith declare that said products are in conformity with the provisions of the following EC directives including all applicable amendments:

– **89/336 Electromagnetic Compatibility**

The following standards have been applied:

- **DIN EN 55013:08-1991**
- **DIN EN 55020:05-1995**
- **DIN EN 50082-1:03-1993**