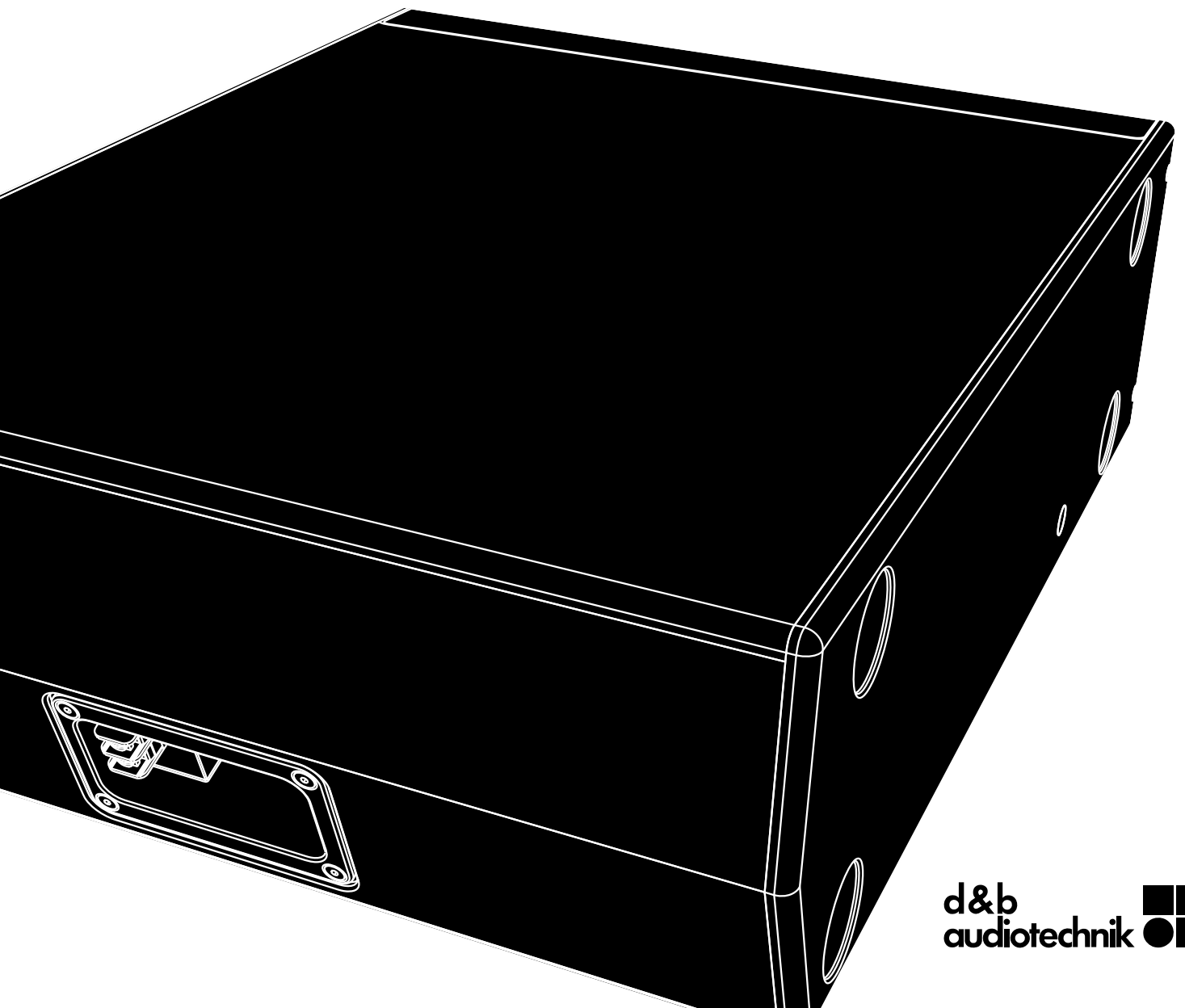


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Bi8-SUB **Manual 1.1 en**



General information

Bi8-SUB Manual

Version: 1.1 en, 03/2019, D2728.EN .01

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d&b audiotechnik GmbH
Eugen-Adolff-Straße 134, D-71522 Backnang, Germany
T +49-7191-9669-0, F +49-7191-95 00 00

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1.1 Information regarding the use of loudspeakers

Potential risk of personal injury

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.

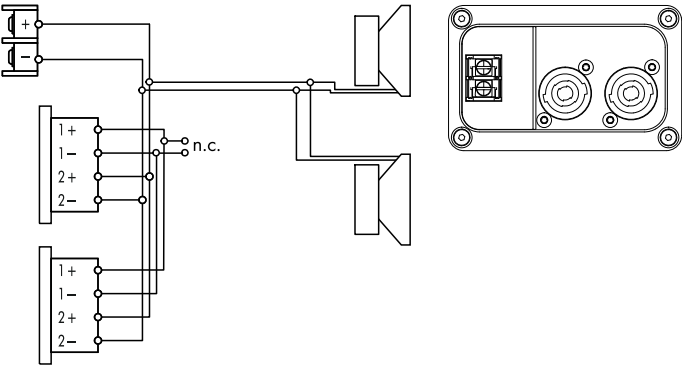
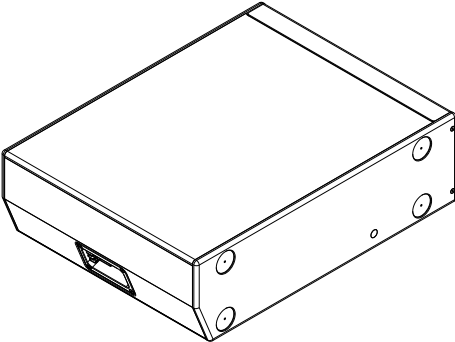
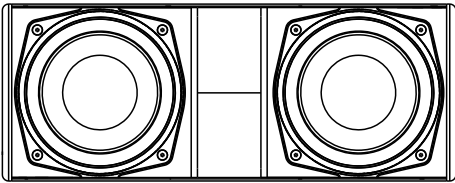
In order to prevent accidents when deploying loudspeakers on the ground or when flown, please take note of the following:

- 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.

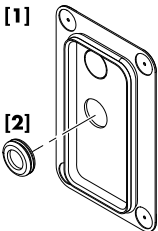
Potential risk of material damage

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.

2 Bi8-SUB loudspeaker



Connector wiring



Cover plate and rubber grommet

2.1 Product description

The Bi8-SUB is an actively driven, compact, high performance subwoofer.

The cabinet houses two 6.5" LF driver with ferrite magnets in a bass-reflex design. Its frequency response extends from 43 Hz to 170 Hz/125 Hz.

The enclosure is constructed from marine plywood with an impact resistant paint finish. The front of the cabinet is protected by a rigid metal grill backed by an acoustically transparent foam.

Two M8 threaded inserts are incorporated, one on each side panel to allow the attachment of a dedicated horizontal bracket. The threads are covered by dummy caps in cabinet color. The caps must be removed before mounting any accessories.

The bottom panel and one side panel are equipped with four circular recesses to accept the enclosed rubber feet. The rubber feet can be attached if desired and are intended to prevent cabinet movement and protect the respective panel against scratching.

2.2 Connections

The cabinet is fitted with a pair of NL4 M connectors and a two pole screw terminal block (ST). All four pins of both NL4 connectors are wired in parallel. The cabinet uses the pin assignments 2+/2-. Pins 1+/1- are designated to full range cabinets.

Pin equivalents of the applicable connector options are listed in the table below.

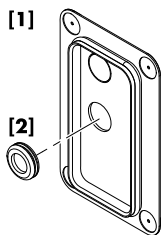
NL4 M	1+	1-	2+	2-
ST	n.a.	n.a.	+	-

d&b LoadMatch

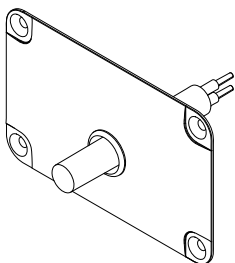
With the d&b four channel amplifier platform, the LoadMatch function enables the amplifier to electrically compensate for the properties of the loudspeaker cable used without the need for an additional sense wire. For applicable loudspeakers, LoadMatch is therefore independent of the connector type used.

Fixed cable connection

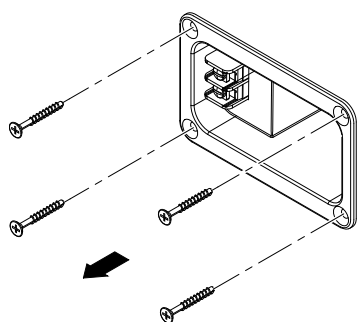
The Bi8-SUB loudspeaker is supplied with a cover plate [1] and a rubber grommet feed through [2]. For indoor operation, these items can be used to hide the connector panel, if required. For unprotected outdoor operation, the connector panel must be covered, i.e. both items must be used to achieve an IP degree of protection of IP34.



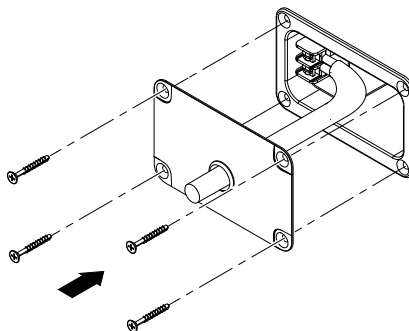
Step 1



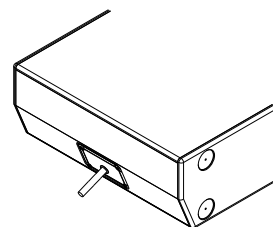
Step 2



Step 3

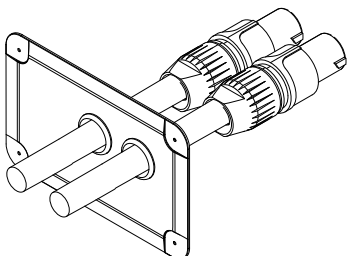


Step 4/5



Step 6

Installing the fixed cable connection



NL4 cable connection with cover plate [1]

To install the fixed cable connection, proceed as follows:

Tools required: Philips screw driver (#PH2).

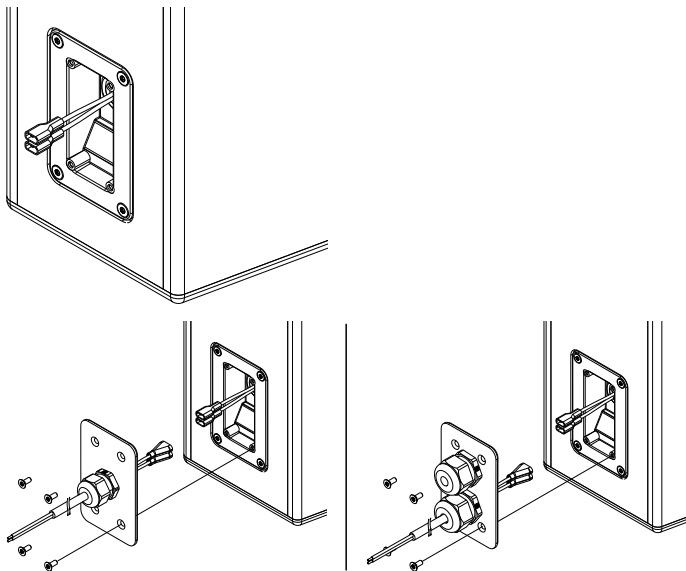
1. Remove the knockout opening in the cover plate [1] and attach the rubber grommet [2] correspondingly.
2. Insert the connection cable through the rubber grommet.
3. Undo the four screws of the connector panel.
4. Connect the cable wires to the screw terminal.
⇒ Observe the correct polarity!
5. Push the cover plate towards the connector panel until it fits into place.
6. Finally fix the cover plate together with the connector panel using all screws.

NL4 connection with cover plate

Note: Neutrik NL4FC type connectors must be used for this option.

The cover plate is equipped with two knockout openings to allow daisy chaining of the loudspeaker.

To use the NL4 connection, proceed in the same manner as described in the previous section.



Faston type connector, male single PG (standard), dual PG (optional)

WR option (Weather Resistance)

A number of d&b loudspeakers are available in special options suitable for different types of installed applications and environmental conditions. The following options are available for the Bi8-SUB loudspeaker:

- Weather resistant (WR): This option is suitable for outdoor use. The cabinets have an impact and weather protected black PCP (Polyurea Cabinet Protection) finish.
- Sea water resistant (SWR): This option is suitable for outdoor use, especially in wet and acid or salty environments.

WR cabinets are equipped with a recessed connector panel including a Faston type connector (2 x 6.3 mm, female). A cover plate which accepts single or dual PG cable glands (Type PG13.5 for cable diameters from 6 - 12 mm) is enclosed, as shown in the graphic opposite.

To install the fixed connection cable, please proceed as follows:

Tools required: Screw driver (#T20).

Note: Observe the correct polarity of the cable
Brown (+) / Blue (-).

1. Insert the connection cable through the PG screwing and connect the male connector to the female connector.
2. Push the cover plate towards the connector panel until it fits into place.
3. Fix the cover plate to the connector panel using the four countersunk screws.

2.3 Operation

NOTICE!

Only operate d&b loudspeakers with a correctly configured d&b amplifier, otherwise there is a risk of damaging the loudspeaker components.

Applicable d&b amplifiers:

10D/30D/D20/D80/D6.

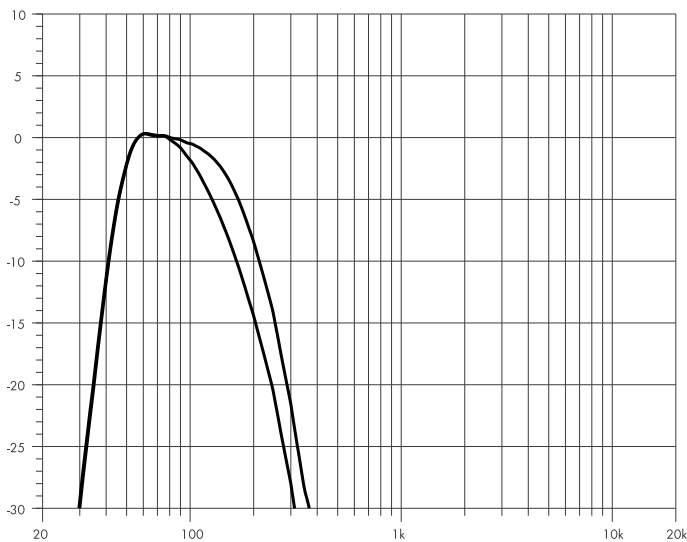
Amplifier output mode(s): Dual Channel or Mix TOP/SUB		
Application	Setup	Cabinets per channel
Bi8-SUB	B8-SUB	2

2.3.1 Controller settings

For acoustic adjustment the 100 Hz mode can be selected.

100 Hz mode

It can be used when actively driven Bi8-SUB cabinets are used to supplement TOP cabinets operated in full range mode, for example in a distributed sound system. The 100 Hz mode can also be used to compensate for the effect of close coupling between the Bi8-SUB and TOP cabinets operated in CUT mode.



Bi8-SUB frequency response, standard and 100 Hz modes

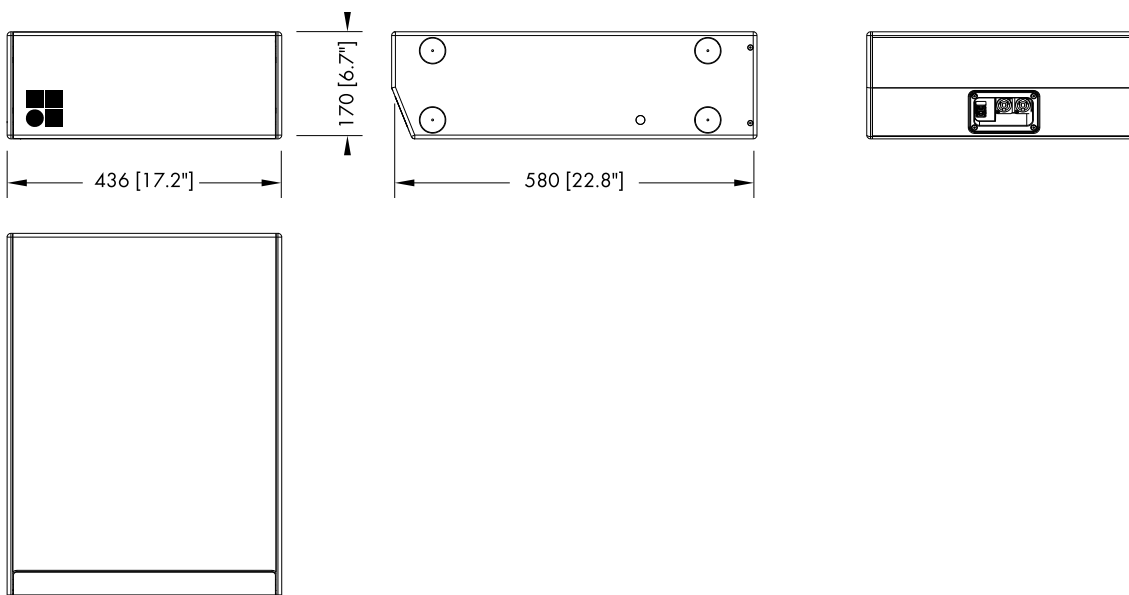
2.4 Technical specifications

System data

Frequency response (-5 dB standard)	43 Hz - 170 Hz
Frequency response (-5 dB 100 Hz mode)	43 Hz - 125 Hz
Max. sound pressure (1 m, free field)	
with 10D/D6	120 dB
with 30D/D20	122 dB
with D80	122 dB
	(SPLmax peak, pink noise test signal with crest factor 4)

Loudspeaker data

Nominal impedance	8 ohms
Power handling capacity (RMS/peak 10 ms)	200/800 W
Components	2 x 6.5" driver with ferrite magnet
Connections	2 x NL4 M
	1 x screw terminal (ST - up to 4 mm ² /AWG 11)
	WR option: Faston type connector 2 x 6.3 mm, female
Pin assignment	NL4 M: 2+/2-
	WR option: brown +/blue -
Weight	17 kg (37.5 lb)



Bi8-SUB cabinet dimensions in mm [inch]



3.1 EU conformity of loudspeakers (CE symbol)

This declaration applies to:

d&b Bi8-SUB loudspeaker, Z0631

manufactured by d&b audiotechnik GmbH.

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 respective EC directives including all applicable amendments.

A detailed declaration is available on request and can be ordered from d&b or downloaded from the d&b website at www.dbaudio.com.

3.1.1 WEEE Declaration (Disposal)

Electrical and electronic equipment must be disposed of separately from normal waste at the end of its operational lifetime.

Please dispose of this product according to the respective national regulations or contractual agreements. If there are any further questions concerning the disposal of this product, please contact d&b audiotechnik.

