

E15X-SUB

Manual (1.2 EN)

Symbols on the equipment



Please refer to the information in the operating manual.



WARNING!
Dangerous voltage!

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General Information

E15X-SUB Manual

Version 1.2 EN, 10/2008, D2032.EN .01

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

When reselling this product, hand over this manual to the new customer.

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

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Safety precautions



WARNING!

Information regarding use of loudspeakers

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.

E15X-SUB

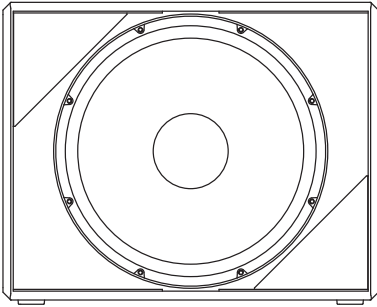


Fig. 1: E15X-SUB loudspeaker

The E15X-SUB is a compact high performance subwoofer for use with d&b E-Series loudspeakers. It employs a long excursion 15" neodymium driver in a bass-reflex enclosure.

Due to the built-in passive crossover network the E15X-SUB can be operated in parallel to E12 or E12-D loudspeakers on one amplifier channel, greatly extending the low frequency headroom and bandwidth of the systems.

As an alternative it can be operated actively driven by its own amplifier channel without the need for any changes to the cabinet. In active mode the E15X-SUB can be used to supplement any of the E-Series cabinets, its frequency response extending from 37 Hz to 100/140 Hz.

The E15X-SUB cabinet is constructed from marine plywood with an impact and weather resistant black paint finish. The front of the loudspeaker cabinet is protected by a rigid metal grill in front of an acoustically transparent foam. The cabinet incorporates a pair of handles and an M20 threaded flange in the top panel that accepts the d&b Z5013 Loudspeaker stand for the deployment of full range cabinets.

Four rubber feet prevent cabinet movement and protect the bottom panel against scratching. Correspondingly shaped recesses in the top panel of each cabinet prevent cabinet movement when stacking E15X-SUBs.

NOTICE: Only operate E15X-SUB loudspeakers with a correctly configured d&b amplifier, otherwise there is a risk of damaging the loudspeaker components.

E15X-SUB cabinet options

The special color (SC) version of the cabinet is available in all colors of the RAL color table. The connector type is NL4.

The weather resistant (WR) version is available in black only. It is equipped with a fixed input cable (5 m / 16.4 ft, type H-07-RN-F 2 x 2.5 mm²/AWG 13).

Connections

The E15X cabinet is fitted with a pair of EP5 connectors. All five pins of both connectors are wired in parallel. The E15X-SUB uses the pin assignments 3/4 and 5. Pin 5 is used for SenseDrive (only available when using a D12 amplifier and 5-wire cabling). Pins 1/2 are designated to E-Series full range systems. Using the male connector as the input, the female connector allows for direct connection to additional loudspeakers.

The E15X-SUB can be supplied with NL4 connectors as an option. The D12 SenseDrive function is not available when using NL4 connectors.

Pin equivalents of EP5 and NL4 connectors and the fixed cable option are listed in the table below.

EP5	1	2	3	4	5
NL4	1+	1-	2+	2-	n.a.
Fixed cable (PG)			Brown (+)	Blue (-)	

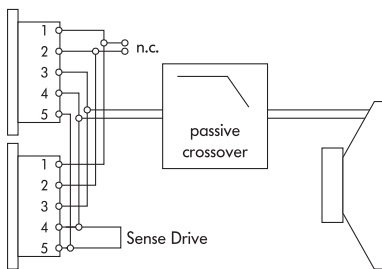


Fig. 2: Connector wiring

Operation with D6 or D12

Passive operation connected in parallel to E12 or E12-D

Select the E12-X or the E12-DX setup when E12 or E12-D cabinets are used in combination with E15X-SUB loudspeakers on the same channel. Compared to the standard E12, E12-D setups the X versions provide a dedicated correction for the combined frequency response of these systems. D12 amplifiers have to be set to "Dual Channel" to access these.

IMPORTANT!

Selecting the E12-X (E12-DX) setup enables a combination of one E12 (E12-D) and one E15X-SUB to be driven by the respective D12 or D6 channel.

In applications with low continuous levels and low ambient temperatures up to three cabinets can be connected to a D12 channel.

Active operation

Select the E15-SUB setup to drive E15X-SUB in active mode. E-Series full range cabinets should now be operated in CUT mode to increase the system headroom. Within the D12 amplifier the E15-SUB setup is available in "Dual Channel" and "Mix TOP/SUB" mode.

IMPORTANT!

Selecting the E15-SUB setup enables up to two E15X-SUB loudspeakers to be driven by the respective channel.

In applications with low continuous levels and low ambient temperatures up to three cabinets can be connected to a D12 channel.

To apply SenseDrive for the subwoofer, EP5 connectors and 5-wire cables have to be used. When operated in "Mix TOP/SUB" mode, the subwoofer has to be fed from the output B connector of the D12 amplifier.

Controller settings

100 Hz circuit

If the 100 Hz circuit is selected the upper operating frequency of the system is reduced from 140 Hz to 100 Hz. It can be used when actively driven E15X-SUB subwoofers are used to supplement E-Series 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 E15X-SUB and E-Series cabinets operated in CUT mode, for example in a drum fill setup.

Operation with E-PAC

Selecting E15-SUB mode enables the E-PAC to drive one E15X-SUB loudspeaker.

The 100 Hz setting is available. The characteristics of the 100 Hz setting are explained in the previous section "Operation with D6 or D12 - Controller settings".

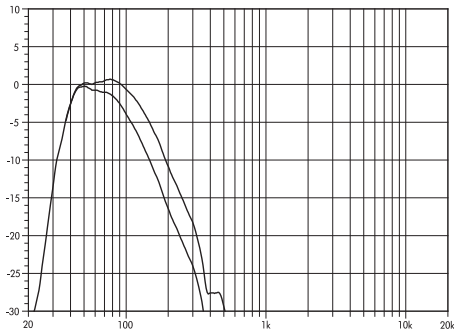


Fig. 3: E15X frequency response, standard and 100 Hz settings

Technical specifications

E15X-SUB system data

Frequency response (-5 dB standard).....37 Hz ... 140 Hz
 Frequency response (-5 dB 100 Hz mode).....37 Hz ... 100 Hz
 Max. sound pressure (single cabinet, 1 m, free field) with D12 130 dB
 Max. sound pressure (single cabinet, 1 m, free field) with D6 127 dB
 (SPLmax peak, pink noise test signal with crest factor of 4)

E15X-SUB subwoofer

Nominal impedance.....8 ohms
 Power handling capacity (RMS / peak 10 ms).....300/1600 W
 Components.....15" driver
Passive crossover network
 Connections.....2 x EP5
Optional and SC option: 2 x NL4
WR option: Fixed cable 5 m (16.4 ft) (H-07-RN-F 2 x 2.5 mm²/AWG 13)
 Pin assignments.....EP5: 3/4, SenseDrive pin 5
NL4: 2+/2-
Fixed cable: Brown + / Blue -
 Weight.....24 kg (53 lb)

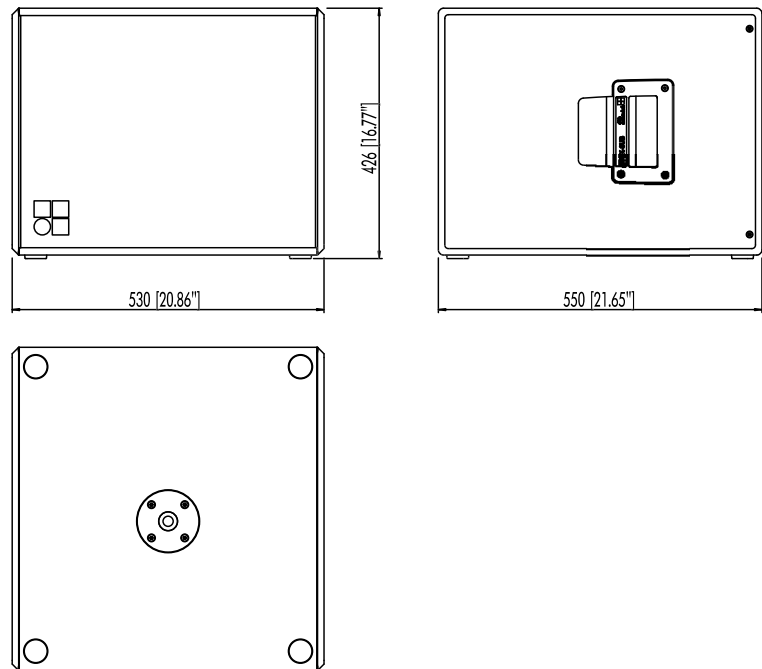


Fig. 4: E15X-SUB cabinet dimensions in mm [inch]

Manufacturer's declarations



EU conformity of loudspeakers (CE symbol)

This declaration applies to:

d&b E15X-SUB loudspeaker, Z0615

manufactured by d&b audiotechnik GmbH.

All production versions of this type 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.

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.

