

E18-SUB

Manual (3.1 EN)



Symbols on the equipment

Please refer to the information in the operating manual.

WARNING!
Dangerous voltage!

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General Information

E18-SUB Manual

Version 3.1 EN, 03/2008, D2076.E.03

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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.

E18-SUB

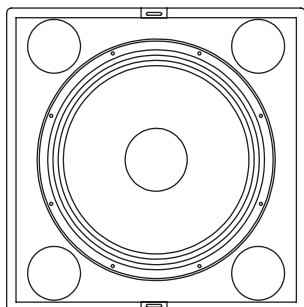


Fig. 1: E18-SUB loudspeaker

The E18-SUB is a compact, very low tuned bass-reflex design employing a single 18" driver.

The E18-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 at the top and bottom to secure an optional transport lid (E7908). The cabinet incorporates a pair of steel handles and on the rear panel four heavy duty wheels. An M20 threaded flange in the top panel accepts the Z5013 Loudspeaker stand for the deployment of full range cabinets.

NOTICE: Only operate E18-SUB subwoofers with a correctly configured d&b amplifier, otherwise there is a risk of damaging the loudspeaker components.

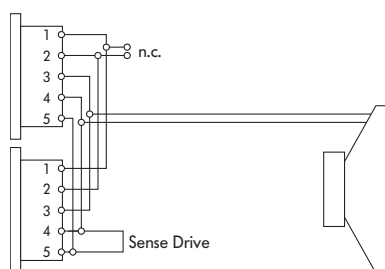


Fig. 2: Connector wiring

Connections

The E18-SUB cabinet is fitted with a pair of EP5 connectors. All pins of both connectors are wired in parallel.

The E18-SUB uses the pin assignments 3/4 and 5 (Pin 5: SenseDrive - D12 only and in conjunction with 5-wire cables).

Pins 1/2 are designated to d&b full range systems.

Using one connector as the input, the second connector allows for direct connection to additional cabinets.

The E18-SUB can be supplied with NL4 output connectors as an option using the pin assignment 2+/2-. Pins 1+/1- are designated to d&b full range systems. The D12 SenseDrive function is not available with NL4 connectors.

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

EP5	1	2	3	4	5 (SenseDrive SUB)
NL4	1+	1-	2+	2-	n.a.

Operation with D6 or D12

Select the controller setup E18-SUB.

Within the D12 amplifier this is available in "Dual Channel" and "Mix TOP/SUB" mode.

Up to a total of two E18-SUB loudspeakers can be driven by each D6 or D12 amplifier channel.

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

When the D12 is operated in "Mix TOP/SUB" mode, the E18-SUB cabinet and a respective full range cabinet can be linked together locally and fed by a single 4-wire cable from either amplifier output connector.

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

Operation with E-PAC

To drive E18-SUB cabinets, the E-PAC has to be configured to E18-SUB mode.

For an E-PAC version 2, the configuration is selected by setting the appropriate DIP switches on the rear panel. DIP switches 1 and 2 (CUT and HFA) are not functional with the configuration E18-SUB .

For an E-PAC version 3, the configuration is set via the encoder in conjunction with an LCD.

The E-PAC can drive a single E18-SUB cabinet.

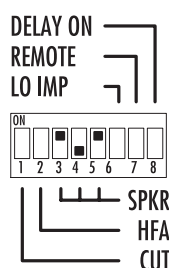


Fig. 3: E-PAC version 2 configuration for E18-SUB

Operation with P1200A

Up to two E18-SUB cabinets can be driven by each P1200A power amplifier channel fitted with an E18-SUB controller module. Fitting one E18-SUB and one TOP controller module allows a single mainframe to drive two E18-SUB and two mid/high cabinets. All cabinets can be linked together locally and fed by a single 4-wire cable from either mainframe output connector.

160 Hz switch

If the 160 Hz switch is selected, the upper operating frequency of the system is increased from 110 Hz to 160 Hz.

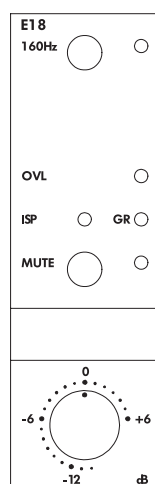


Fig. 4: Controls on E18-SUB controller module

Technical specifications

E18-SUB system data

Frequency response (-5 dB).....	38 Hz - 110 / 160 Hz
Max. sound pressure (1 m, free field) with D12.....	132 dB
Max. sound pressure (1 m, free field) with D6.....	128 dB
Max. sound pressure (1 m, free field) with P1200A.....	130 dB
(SPLmax peak, pink noise test signal with crest factor of 4)	
Input level (100 dB SPL / 1 m).....	-11 dBu

E18-SUB subwoofer

Nominal impedance.....	8 ohms
Power handling capacity (RMS / peak 10 ms).....	200 / 800 W
Components.....	18" driver
Connections.....	2 x EP5
Pin assignments.....	3/4 and 5 (Pin 5: SenseDrive - D12)
optional.....	2 x NL4
Pin assignments.....	2+ / 2-
Weight.....	42 kg (93 lb)

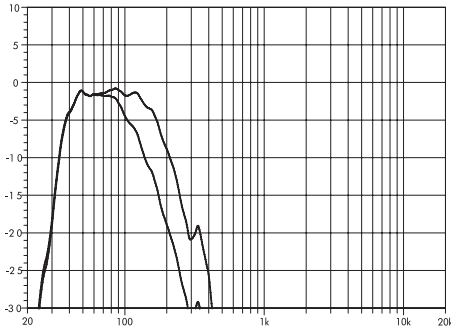


Fig. 5: E18-SUB frequency response, standard and 160 Hz settings

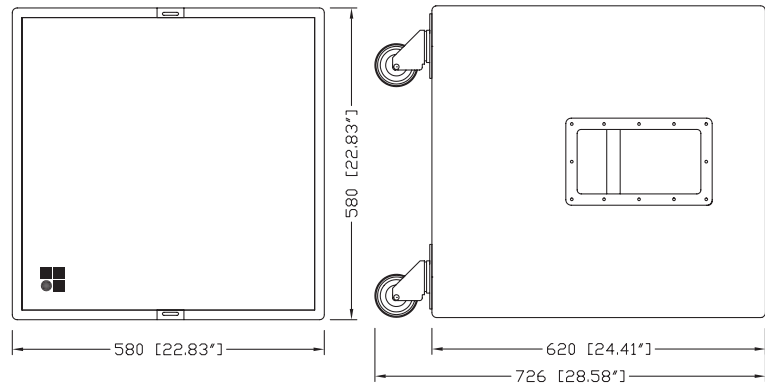


Fig. 6: Cabinet dimensions in mm [inch]

Manufacturer's declarations



EU conformity of loudspeakers (CE symbol)

This declaration applies to:

d&b E18-SUB, Z2253

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.

