

# **T-SUB**

## **Manual (1.0 EN)**

## Symbols on the equipment



**Please refer to the information in the operating manual.**



**WARNING!**  
**Dangerous voltage!**

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## General Information

T-SUB Manual

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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.

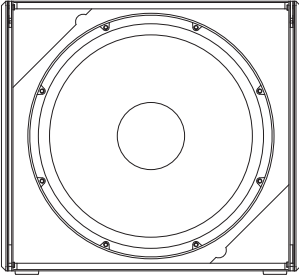
Regularly check the loudspeaker housings and accessories for visible signs of wear and tear, and replace them when necessary.

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.

## T-SUB



**Fig. 1: T-SUB loudspeaker**

The T-SUB is the subwoofer for the T-Series. It can be used to supplement T10 cabinets in various combinations, either flown or ground stacked. The T-SUB cabinet is an actively driven bass-reflex design housing a long excursion 15" driver, its frequency response extending from 47 Hz to 140 Hz.

The T-SUB cabinet is constructed from marine plywood and has 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 top panel incorporates a handle.

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

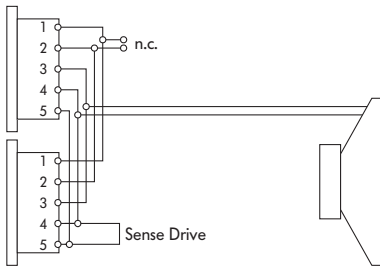
### T-Series rigging components and arrays

Cabinets are mechanically connected using the rigging strands on both sides of the cabinet front and a central strand at the rear of the cabinet. All necessary rigging components are mounted to the cabinet and are folded or slide out when needed.

A detailed description of the T-Series rigging components is given in the T-Series Rigging manual which is provided with the Z5370 T Flying frame.

A detailed description of planning and designing T-Series arrays is given in the technical information "TI 385 J-, Q- and T-Series system design, d&b ArrayCalc" which is also provided with the T Flying frame.

The d&b ArrayCalc array calculator can be downloaded from the d&b website at [www.dbaudio.com](http://www.dbaudio.com).



**Fig. 2: Connector wiring**

## Connections

The T-SUB cabinet is fitted with a pair of EP5 connectors. All five pins of both connectors are wired in parallel. The T-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 d&b full range systems. Using the male connector as the input, the female connector allows for direct connection to additional loudspeakers.

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

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

<b>EP5</b>	1	2	3	4	5
<b>NL4</b>	1+	1-	2+	2-	n.a.

## Operation with D6 or D12

Select the controller setup T-SUB.

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

Up to a total of two T-SUB loudspeakers can be driven by each channel of the D6 or D12 amplifiers.

## 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.

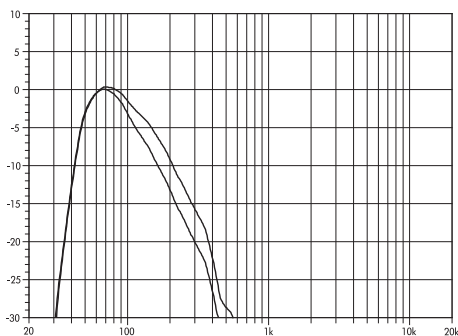
## Technical specifications

### T-SUB system data

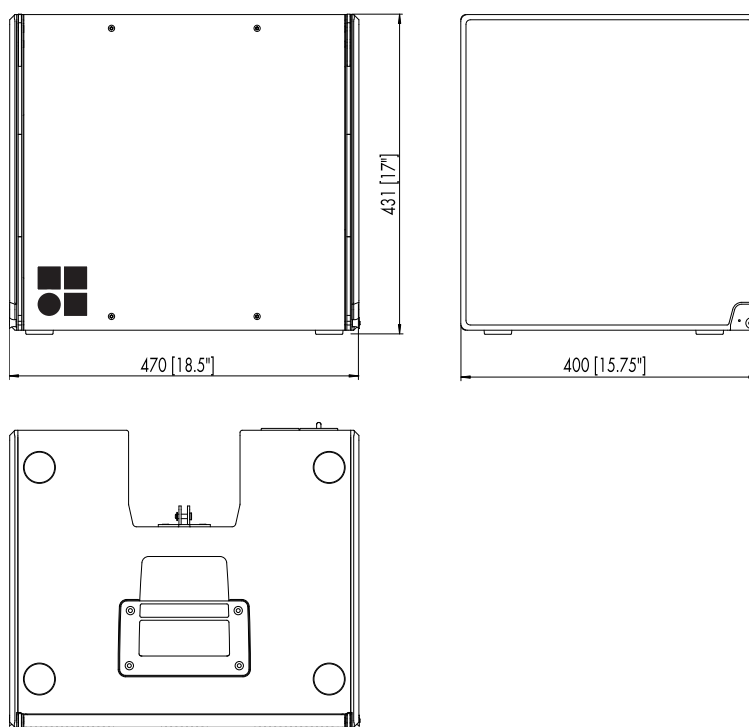
Frequency response (-5 dB standard).....47 Hz ... 140 Hz  
 Frequency response (-5 dB 100 Hz mode).....47 Hz ... 100 Hz  
 Max. sound pressure (single cabinet, 1 m, free field) with D12.....130 dB  
 Max. sound pressure (single cabinet, 1 m, free field) with D6.....127 dB  
 (SPLmax peak, pink noise test signal with crest factor of 4)

### T-SUB loudspeaker

Nominal impedance.....8 ohms  
 Power handling capacity (RMS / peak 10 ms).....300/1600 W  
 Components.....15" driver with neodymium magnet  
 Connections.....2 x EP5  
 .....Optional: 2 x NL4  
 Pin assignments.....EP5: 3/4  
 .....NL4: 2+/2-  
 Weight.....17 kg (37 lb)



**Fig. 3: T-SUB frequency response, standard and 100 Hz settings**



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

## Manufacturer's Declarations



### EU conformity of loudspeakers (CE symbol)

This declaration applies to

#### **T-SUB loudspeaker, Z0560**

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](http://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.

