

Owner's Manual

DLS Home Audio speakers



Audio for Life

**The information contained in this manual is subject to change without prior notice. The most current version of this manual is available on our official website at:
www.dls.se**

Introduction!

Please read this manual fully before unpacking and installing the product. It will help you to optimise your speakers performance.

Unpacking and maintenance

Your speaker should be treated with the same care you would treat a piece of furniture. Use a piece of soft cloth and a small quantity of warm soapy water to clean the loudspeakers. Avoid touching the cone of the bass unit or treble dome since this may leave a fingermark or damage the dome and spoil its performance. After unpacking, we suggest you retain all packing material for future transports.

Running-in period

The performance of the speaker will change subtly during the listening period. Please allow your new speakers to play about 50 hours of music at normal listening level before doing any critical listening.

Stability

All floorstanding models are delivered with spikes providing improved acoustical isolation and height adjustment. To obtain proper mechanical coupling to the floor, adjust until all spikes have equal contact.

Floor standing models are also equipped with an internal sub-cavity, intended to be filled with sand with a grain size of more than 1mm. For environmental reasons we do not recommend lead shot. Carefully

remove the sand plugg under the terminal on the rear of the speaker, and fill up. The increased mass will enhance contact with the floor, further reduce resonances and increase stability and focus of the soundstage.

CAUTION!

If you hear distortion when you increase the volume this is normally a sign of overloading the amplifier and you should immediately reduce the output level. Use of loudness, bass or treble boost increases the risk for harmful distortion in the amplifier. We recommend that you use these controls with care.

CE

Marking by the "CE" symbol indicates compliance of this device with the EMC (Electromagnetic Compatibility) and LVD (Low Voltage Directive) standards of the European Community



This product must be returned to the separate collection system for electronic products. Do not dispose this product together with general household waste.

Room positioning

2-channel stereo

The performance of a loudspeaker system in a room varies with placement. Ideal positioning of the speakers are 3-4 m apart and preferably at least 0.5-1m away from side and rear walls se fig. 1. Avoid distances from walls that correspond to $1/2$, $1/4$, $1/6$ etc., of the room dimensions. Seek instead odd fractions; $1/3$, $1/5$, $1/7$ etc. to minimize effects of room related resonances.

You will perceive the most accurate sound picture if you listen from a position halfway between the loudspeakers, and three to four metres away. Avoid corner placement as it leads to colouration and an overemphasise of the lower frequencies. Image stability and stereo perception is increased if the two speakers are turned slightly towards the listening position. Try this out and listen for best stereo image and centre focus. Objects in the direct sound path can disturb the coherence of the sound picture. Try out different positions before deciding on a final arrangement.

Surround system

Centre speaker positions:

For a front centre speaker position it directly above or below the screen, depending on screen height. Optimum is in the same height as the front speaker sound centre (0.8-1m for floor standing models).

Front right and left speaker:

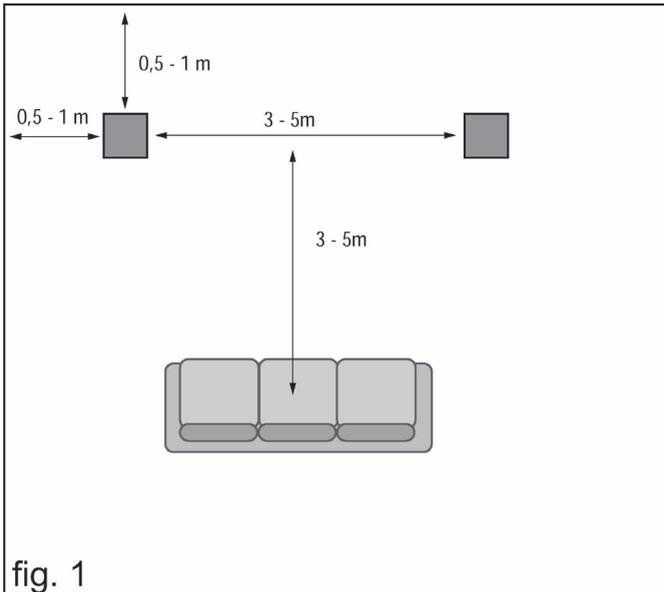
Place the speaker 0.5-1m from the TV. For large projection screens, space speaker 0.1-0.5m from screen. Try to follow the 2-channel position as close as possible in room for best sound image.

Surround speaker "rear speaker"

Depending on where you sit in the room there are two ways of presenting the sound image. Direct or diffuse surround effect.

Direct is when the speaker point at the listening positions from rear or side walls, in the same height as front and centre speaker.

For diffuse sound effect, mount the speaker higher and point them along rear or side wall.



Magnetic shielded speakers

Magnetic shielded speakers, such as Center channel speakers are magnetically shielded and can safely be placed directly on, under or alongside your video (TV) monitor. A small number of televisions are hyper sensitive to magnetic fields. If you notice any picture distortion, we recommend that you move the speaker a few centimetres forth or back, or distance the speaker a few centimetres. These small changes in the position often are enough to cure the problem.

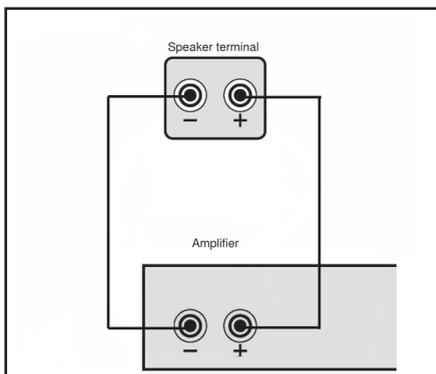
Connections

We recommend the use of heavy gauge loudspeaker cables of high quality. To reduce the effect the cable has on the speaker, the impedance of the cable at all frequencies should be lower than 0.2Ω . At high frequency the inductive component of the cables impedance can dominate over the DC resistance. Ask your dealer for the best cable for your needs.

Make sure to turn off all amplifiers before connecting your new speaker to your Hi-Fi system.

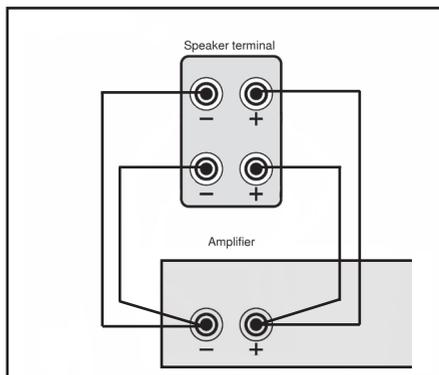
Single wire connection

Connect the cable to the terminal. Use the marking of the cable to ensure that the red or "+" mark of the amplifier is connected to the "+" side of the terminal, also marked with red. See the figure below.



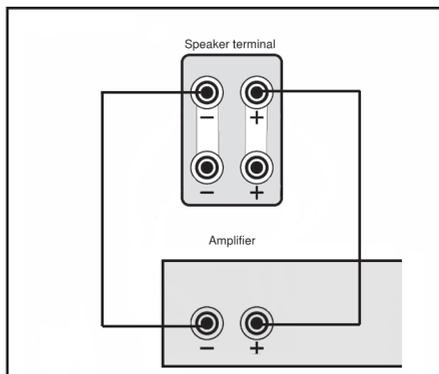
Bi-wiring connection

Some DLS speakers have 4-pole terminals allowing bi-wiring. This requires two cables for each speaker and gives an audible improvement. Remove the connectors between low and high sections of the terminal and connect according to the figure below.



Single wire connection to bi-wiring terminals

Some DLS speakers have 4-pole terminals allowing bi-wiring. When connecting with single wiring, do **NOT** remove the connectors between low and high sections of the terminal and connect to the upper terminals as in the figure below.



Power handling

DLS recommends using amplifiers within a specific power range. However, the most important thing is that the amplifier has sufficient power reserves for handling peaks and transients in the music signal.

The power rating figure of a loudspeaker is a very inprecise figure. Since the energy in the music signal varies, neither peak nor average value is relevant. A power rating of e.g. 100W RMS says only that you can play a continuous tone of 1kHz at this output. It does not mean that you can turn the volume all the way up on a 100W amplifier and expect clear sound and healthy speakers.

The greatest danger to a loudspeaker is distorted signal. Distorsion in the low frequency range produces overtones in the entire spectrum, with an energy that can easily damage the tweeter units. And since a more powerful amplifier can play louder without distorsion, we have the paradox that it is a greater risk to damage speakers by playing loud with a smaller amplifier.

Warranty

This DLS loudspeaker is warranted to the original purchaser, against factory defect in material or workmanship, for a period of one (1) year from the date of original purchase. This warranty is valid only in the country of purchase, to the original purchaser and is non-transferable.

DLS loudspeakers are music listening devices and should be used for listening purposes only. They must not be connected to any other equipment than amplifiers within the specified power range.

DLS cannot be held responsible for damage or injuries caused by improper use, or use in violation with the recommendations in this leaflet.

Service

Should your DLS loudspeaker system require service, or if you have difficulty in achieving the fine performance of which your DLS loudspeaker system is capable, consult the DLS dealer from whom the system was purchased. Your dealer has the knowledge required to provide expert advice and assistance. In case the DLS dealer is unable to assist you, you are welcome to contact the DLS Technical department.

Side panels

DLS D-series speakers are designed to be used with side panels that are available in different finishes. Mount the side panels so the magnets (black nobs) on the speakers side, match the magnets on the side panels.

Mounting

Centre and Satelites can be wall mounted. For mounting follow the instructions for the brackets. There are two screw positions on the satelites back side for one wall bracket. For the centre channel there are two screw positions on the back side of the speaker one for each bracket.

The Flatbox Mini & Flatbox Large have "key-holes" on the back side to allow mounting in many different ways. Use the template coming with the speaker to make the drilling easier. Mount the speaker box in a way that allows a free air flow from the port.

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