

SURROUND



AUDIO

MANUAL DALI S1.5



Magic Moments



Denmark

www.dali.dk



*D*anish *A*udiophile *L*oudspeaker *I*ndustries

DALI is renowned among music lovers throughout the world for its unique speakers and cables, all conceived and built to uncompromising standards of design and sound. Our ultra-modern factory in Denmark is fully equipped with facilities for development and production of quality speakers.

Dali's principal competence is development and optimisation of known and new technology in the field of audio and acoustics. The result is continuous development and optimisation of new and existing models.

We always keep our goal firmly in view for each and every DALI speaker: To recreate sound experiences in your home that will carry you away, making you forget time and place...

It is important to us that your new DALI speakers are set up and connected optimally. This manual contains our recommendations for setup, connection and maintenance.

Enjoy!



Manual

Congratulations on the purchase of your new DALI S1.5 subwoofer. In this manual, you can read about set-up, adjustment and maintenance of the DALI S1.5 subwoofer.

Running-in

Like any other mechanical system, a speaker needs to be "run in", so you can look forward to a gradual improvement in sound quality over the initial period. Unlike other mechanical systems, a DALI speaker does not wear out - in fact, regular use will extend its lifetime.

Placement

In addition to correct connection and adjustment, it is also important to experiment with various subwoofer positions in the listening room, just as with any other loudspeaker.

Unfortunately, there is no shortcut to finding the optimal placement. You will discover the best position in your room only by a process of trial and error. However, we can offer the following suggestions and guidelines to assist in your experiments.

The S1.5 subwoofer must be placed on an even floor, either directly on rubber feet (included) or on optional spikes. If using spikes, please make sure that they do not penetrate loudspeaker cables, power cords, interconnects, etc. Make sure that the subwoofer rests evenly on all feet or spikes and cannot rock back and forth. Uneven footing can result in rattling, buzzing and other noise when playing loud. On an uneven floor, the subwoofer should be supported, so that it cannot rock back and forth.

Placement approximately midway between the left and right front speakers is usually preferable. Placement along a side wall may also yield good results in certain situations. Please note that it is not necessary to aim the subwoofer at the listening position.

The S1.5 subwoofer should normally be placed against a wall. If needed, bass levels can be reduced by moving the subwoofer away from the wall or increased by placing it in a corner. Note that moving the subwoofer reduces/increases the level mainly in the midbass region, acting as a kind of tone control, while the rear panel volume control operates in a linear manner, reducing or increasing all bass frequencies equally.

In a stereo system with two subwoofers, each subwoofer should be placed near its corresponding front loudspeaker, for example in the corner behind the main loudspeaker.

Connection

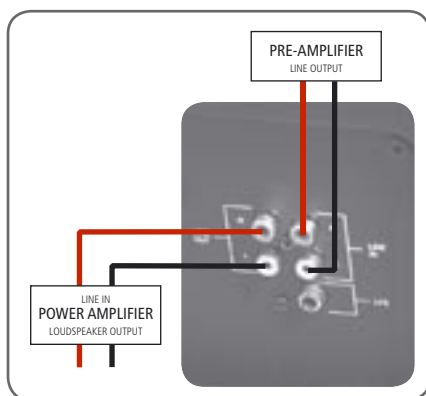
The addition of the S1.5 with active crossover and amplifier to your stereo or surround system offers several connection options. If in doubt regarding the best method, please consult your DALI dealer. No matter which method you select, we recommend the use of high-quality cables such as DALI Wave 5000.

Connection to a stereo full-range signal

If the subwoofer is to be used with a preamplifier without a high-quality crossover, we recommend connecting the subwoofer LINE IN - LEFT/RIGHT inputs to the full-range signal from normal preamplifier outputs. This allows the subwoofer's built-in crossover to filter the signal, so that the subwoofer only reproduces the deep bass.

When the subwoofer LINE IN - LEFT/RIGHT inputs are connected to a full-range stereo signal, a high-pass filtered signal (i.e. with the low frequencies intended for reproduction by the subwoofer removed) will be available at the subwoofer's LINE OUT - LEFT/RIGHT outputs.

Connect the high-pass filtered signal to the power amplifier that drives the main speakers, so that they are relieved of the strain of handling demanding low frequencies. This ensures cleaner, undistorted sound from the main speakers.

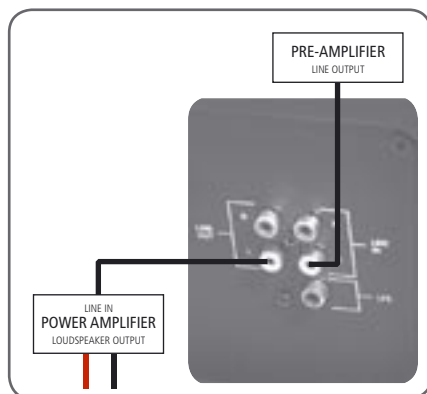


Connection to a stereo full-range signal

Connection to a mono full-range signal

If the subwoofer is only to be used with a single channel, for instance with two subwoofers in a stereo system, and you wish to use the subwoofer's built-in crossover for frequency division as mentioned on previous page in the section on stereo connection, the subwoofer's LINE-IN LEFT input can be used.

As described in the section regarding stereo connection, the subwoofer's built-in crossover will split the audio signal, so that only the deep bass is directed to the subwoofer. As with stereo connection, a high-pass filtered signal will be available at the LINE OUT - LEFT output. Please note that there will be no signal at the LINE OUT - RIGHT output.

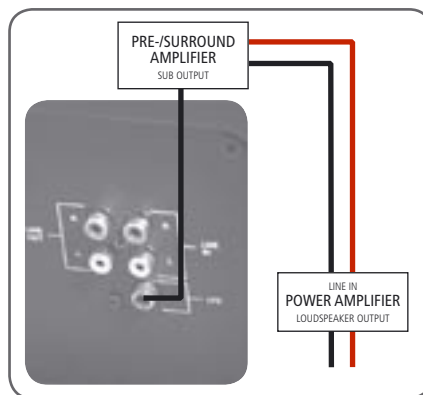


Connection to a mono full-range signal

Connection to a low-pass filtered mono signal

When using the subwoofer with a surround amplifier or other equipment with a low-pass filtered subwoofer output, this output should be connected to the subwoofer's LFE input. With LFE connection, the signal goes directly to the S1.5 amplifier, bypassing the subwoofer's crossover. No signal is available at the LINE OUT outputs.

Any crossover adjustments should be made according to the instructions in the owner's manual of the surround processor. When using the LFE input, level and phase controls are active and should be adjusted as described in the section on adjustment.



Connection to a low-pass filtered mono signal

Adjusting the S1.5 Subwoofer

After you have connected the subwoofer using one of the methods described and have placed it in the optimum position, it is time for the exciting task of fine-tuning the subwoofer response. Please note that placement has major impact on the subwoofer's overall contribution to system performance. For instance, placement in a corner provides significantly louder bass than placement along a wall away from corners.

We recommend the following procedure for fine-tuning bass response. Use a familiar piece of music with strong rhythmic bass content such as kettle drum, electric bass, etc.



Start with VOLUME and CROSSOVER in the center position (12 o'clock). Set PHASE at 180°. Set the POWER switch to ON.

Setting volume

Adjust the volume of the S1.5 so that the bass matches the level of the main speakers. You should be able to appreciate the subwoofer's contribution to the sound, without it ever being over-powering. Bass must be tight and accurate, so that the subwoofer reproduces the bass present in the music/film - no more and no less. If installing the S1.5 in a surround system, it is practical to select a fixed level on the subwoofer and adjust subwoofer output using the surround amplifier's set-up function. If bass levels are set too high, distortion will reduce the quality of your listening experience. Please note once again that the position of the subwoofer will have major influence on its sonic contribution.

Setting crossover frequency (when connecting via Line In - Left/Right)

With volume correctly adjusted, it is time for the equally important integration of the transition between the main speakers and S1.5. Simply turn CROSSOVER up and down until you experience smooth, even bass with no gaps. It may be necessary to re-adjust volume in connection with selection of crossover frequency. If you are using the LFE input, this adjustment is not active and crossover frequency should be adjusted in the set-up menu of your surround processor.

Setting phase

Experiment with both settings – possibly with new adjustments of volume and crossover frequency. It is a good idea to listen to the system for a few days and then adjust again, if needed. The optimal setting for surround may not be the same as for stereo. Make a note of which setting you prefer for film and for music.

Setting Auto-function

In the AUTO position, the S1.5 will automatically go into Standby after approximately 20 minutes without a signal. When the S1.5 detects a signal again, it will automatically turn on. With the AUTO switch in the ON position, the S1.5 will remain fully powered up as long as the main POWER switch is in the ON position.

The POWER switch is the main On/Off control for the subwoofer. Always turn off the system, if it is not to be used for an extended period of time. Always turn the subwoofer completely off, whenever you connect or disconnect cables.

Overload

In the event of a major overload of the S1.5, the onboard protection circuit will shut down the subwoofer. If this occurs, turn the system level all the way down. To re-set the subwoofer, turn its main power switch off and then back on.

Beware: The built-in protection circuit CANNOT provide unconditional protection against damage as a result of overload.

DALI - More than meets the eye

Maintenance

Clean the cabinets with a soft, dry cloth. If the cabinets are dirty, wipe with a soft cloth first dipped in a mild all-purpose cleaner and then wrung out. Be very careful when wiping the speaker cones, as they are very fragile. The grille fronts can be vacuumed and wiped with a well-wrung, lint-free cloth and mild all-purpose cleaner.

DALI - Quality in all aspects

We wish to congratulate you once again on your investment and to inform you that your authorised DALI dealer will be happy to provide you with advice on connection, set-up and adjustment of your audio system. Finally, we would like to invite you to visit us at www.dali.dk for more information on the technology behind our loudspeakers, for the full DALI story and to sign up for our free newsletter.



Safety



CAUTION:
TO REDUCE THE RISK OF ELRCTRIC SHOCK, DO NOT REMOVE THE BACK PANEL. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.



The lightning flash within an equilateral triangle is intended to alert you to the presence of uninsulated „dangerous voltage“ within the product’s enclosure that may be of sufficient magnitude to constitute an electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions - The safety and operating instructions should be retained for future reference.
3. Heed Warnings - All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions - All operating and use instructions should be followed.
5. Water and Moisture - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool and the like. Do not place anything containing liquids on the appliance.
6. Carts and Stands - The appliance should be used only with a cart or stand if recommended by the manufacturer.
7. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. Ventilation - The appliance should be situated so that its location or position does not interfere with proper ventilation. For or placed in a built-in installation, such as a bookcase or cabinet, that mayimpede the flow of air through the ventilation openings. Do not close or block any ventilation holes. Maintain free space between ventilation holes and wall.
9. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances that produce heat. Do not place candles or other open flame on the appliance.
10. Clearance - The appliance should be situated as shown in the operating instructions, or as marked on the appliance.
11. Power Cord Protection - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed on or against them, paying particular attention to cords at plugs, convenience receptacles and the point where they exit from appliance.
12. Cleaning - Do not use any liquid cleaners. Use only a dry cloth to wipe off dust and grease.
13. Non-use Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
14. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
15. Damage Requiring Service - The appliance should be serviced by qualified personnel when:
 - a. The power-supply cord or the plug has been damaged; or
 - b. Objects have fallen, or liquid has been spilled into the appliance; or
 - c. The appliance has been exposed to rain; or
 - d. The appliance does not appear to operate normally, or exhibits a marked change in performance; or
 - e. The appliance has been dropped, or the enclosure damaged.
16. Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

Specifications

There are countless methods of measuring speakers. However, none of them actually represent how a speaker really sounds. Only by listening is it possible to determine whether one speaker sounds better than another. So we only give you the specifications that are of real value to you. The DALI S1.5 subwoofer has been designed to reproduce music as honestly as possible - and we know we have succeeded. Enjoy your new speakers!

	DALI S1.5 Active Subwoofer
Controls	Volume, Crossover Frequency, Phase
Frequency Range +/- 3dB [Hz]	23 - 140
Crossover Frequencies [Hz]	45 - 120
Phase	0° or 180°
Nominal Impedance	20 kOhm
Minimum Impedance	20 kOhm
Maximum SPL [dB]	119
Amplifier [Watts]	300 (RMS) 600 (Peak)
Inputs (Line Level)	RCA, Stereo (low-pass filtered) RCA, Mono (LFE)
Outputs (Line Level)	RCA, Stereo (high pass filtered)
Low Frequency Driver	15" long throw
Auto Power On/Standby	Standby after 20 minutes without signal
Power Consumption (Max/Standby On/Standby Off) [Watts]	450 / 8 / 1.5
Mains Voltage [Volt] *	100, 120, 230 or 240
Available Finishes	Golden cherry, light beech, black
Dimensions (H x W x D) [mm]	560 x 447 x 490
Dimensions (H x W x D) [inch]	22.05 x 17.60 x 19.29
Weight [kg/lbs]	39.9 / 88.0

All specifications are subject to change without notice.

*Dependent on country – please check that mains voltage corresponds to the mains voltage of your country