
DALI 7a

Congratulations on your fine judgement. In its class the DALI 7a is one of the very finest loudspeakers on the market. To get the maximum performance from DALI 7a we recommend that you read this manual before installing your new speakers.

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POSITIONING

DISTANCE FROM WALLS

DALI 7a is a floor speaker system. The best placement of this type of speaker is at a distance of 20 cm (8 in) from the back wall, and at distance of no less than 50 cm (20 in) from the side walls.

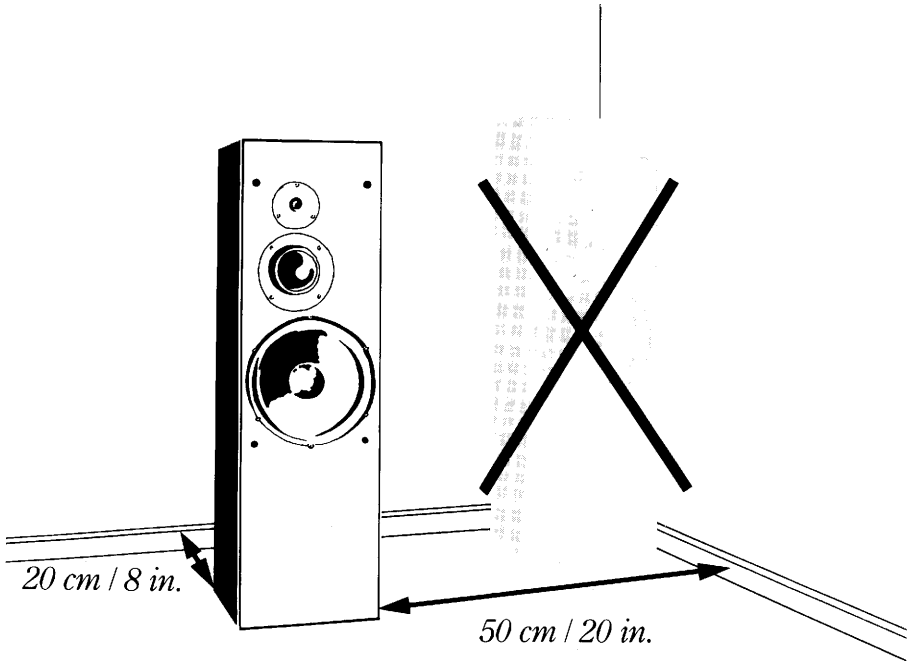
The distance from the back wall is important as this system is a bassreflex system, where the port is at the backside of the

speaker and the port must have »ventilating« room.

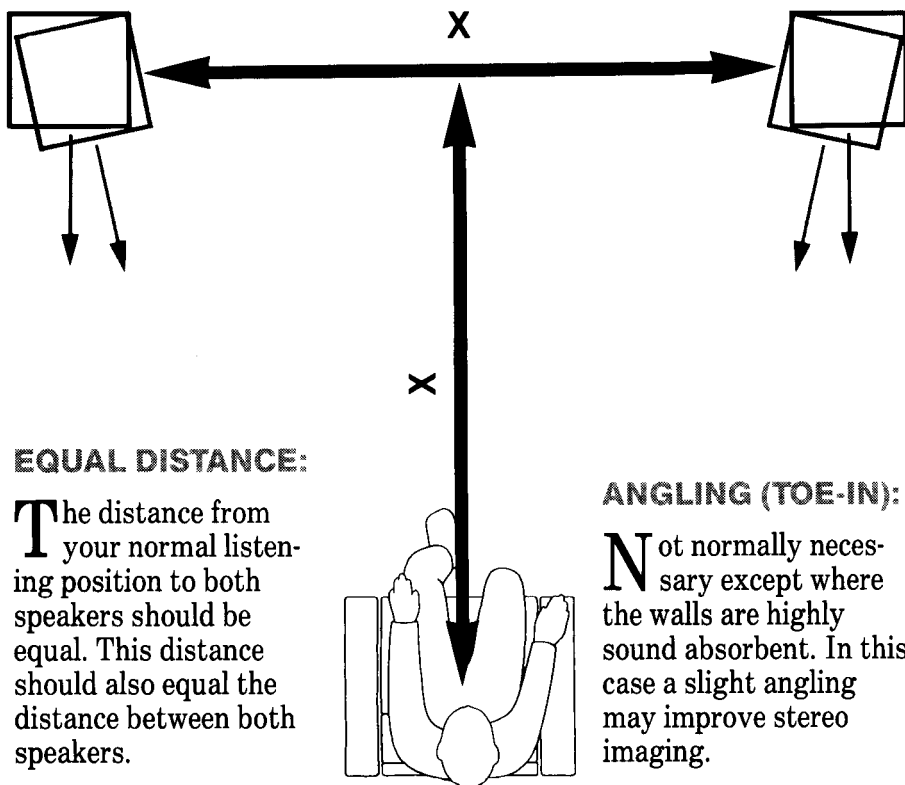
Please note that the two DALI 7a speakers are provided in mirror-imaged pairs. The right speaker has the midrange/tweeter on the left, and the left speaker has the midrange/tweeter on the right.

Dali 7a should be placed vertically.

Corner location should be avoided.



POSITIONING



EQUAL DISTANCE:

The distance from your normal listening position to both speakers should be equal. This distance should also equal the distance between both speakers.

ANGLING (TOE-IN):

Not normally necessary except where the walls are highly sound absorbent. In this case a slight angling may improve stereo imaging.

SIGNAL SOURCES

We recommend the use of the best speaker cables and, especially, a very good turntable or CD-player.

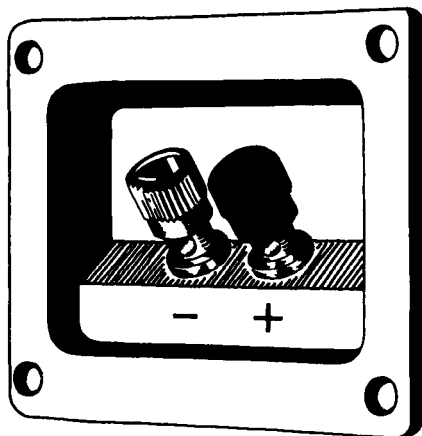
Limited sound reproduction is often caused by misadjustment and/or weak signal equipment.

CONNECTION

The gold-plated terminal on DALI 7a makes it possible to use banana plugs or heavy bared wires for amplifier connection.

IMPORTANT!

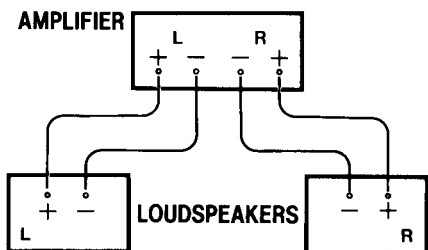
Turn off the amplifier when you are working at loudspeaker connection!



PHASING

To get true stereo-reproduction it is necessary that the loudspeakers are phased correctly. Always connect the amplifier + to the loudspeaker +, and the amplifier - to the loudspeaker -.

On most speaker cables one of the leads will have an indication making it easy to do this the right way.



DAILY USE

The main point here is: enjoy the music! The only regular maintenance required is occasional cleaning of the surfaces.

WOOD:

Dust with cloth.

TEXTILE FRONT:

Brush with a clothes-brush or vacuum clean with a brush attachment.

The DALI 7a replaces the popular DALI 7, a speaker which has been well-received by the hi-fi press in such far-flung corners of the globe as Sweden, Japan, Australia and the United States. The DALI 7's phenomenal run of success culminated in its selection as »Loudspeaker of the Year« in the January 1988 edition of the Danish journal, »Hi-Fi & Elektronik«. Improving on success is no easy matter, but months of intensive work in the DALI research and development division have made possible a major step forward in the form of the DALI 7a.

The underlying design philosophy, based on thorough studies of the interaction between loudspeaker and listening room, remains the same. This research revealed that the sound reflected from a room is often more critical than the direct sound in determining a speaker's overall performance characteristics. In order to use the reflected sound correctly, DALI engineers determined a critical ratio of direct-to-reflected sound derived through a speaker dispersion characteristic of greater than 70 degrees off-axis. This increased dispersion principle is used together with an asymmetrical slope linear directivity crossover design which keeps the first arrival and reflected sounds in proper perspective. As a result, the DALI 7a system is much less room dependent, is easier to place, and has a larger listening »window« than conventionally designed speakers.

At the core of the DALI 7a is a proprietary 15 component, polypropylene capacitor crossover network interfaced via LC-OFC cable with three advanced driver designs, allowing the system to achieve »room friendly« response characteristics, and a natural, accurate, three dimensional acoustic image. The DALI 7a uses a 25 cm (10") long excursion, high linearity bass driver to handle all low frequency material. This speaker component is especially well-damped and controlled throughout its operating range and can achieve long throw with high stability. This results in high acoustic output, extended low end response, and very low distortion.

Response from 900 Hz to 3000 Hz is reproduced by a 7.5 cm (3") dome driver with a coated, well-damped diaphragm for smooth, articulate repro-

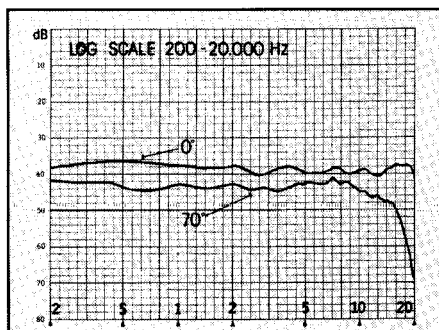
duction of all critical midrange material. Performance in the midfrequency range is also monitored through the innovative asymmetrical crossover to assure correct tonal balance of direct and reflected sound at the listener's ear.

The most significant improvement in the DALI 7a is the newly-developed $\frac{3}{4}$ " metal dome tweeter. The ultimate goal of a loudspeaker diaphragm is perfect pistonic motion, which makes metal a material well worth considering. Since low mass is also essential, a diaphragm must be extremely thin, which could cause metal fatigue and the disintegration of the diaphragm, if the metal is not sufficiently durable. The tweeter incorporated in the DALI 7a employs a duraluminium alloy for the ideal combination of strength and low mass. The result is a construction whose diaphragm has perfect pistonic motion over the entire audio band. The metal dome does have an internal break-up mode, of course, but, at well over 30 kHz, it becomes irrelevant. The metal dome is mounted directly on the voice coil, for the best transfer of energy and for improved heat dispersion, which contributes greatly to the driver's increased power handling capability. The magnetic gap is filled with ferrofluid, for improved damping as well as heat dispersion. The entire construction is mounted in a diecast baffle of glass-injected plastic, to create a strong, stable, vibration-resistant unit.

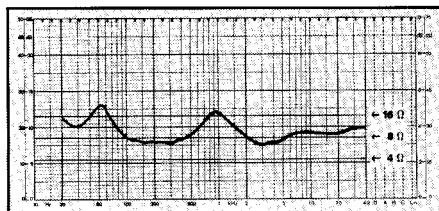
To complement the advanced performance qualities of the DALI 7a, DALI engineers have also taken special care to construct all cabinetry out of the highest density, rigidly braced particle board. This ensures a resonance-free enclosure even at the highest listening levels. And, of course, no DALI speaker would be complete without a finish of the highest quality Danish wood, handrubbed to a rich, natural luster.

The innovative design technology incorporated in the new DALI 7a continues the tradition of excellence from the people at Danish American Ltd. Inc. To hear the DALI 7a, no matter in what kind of listening environment, is to finally hear how good music can sound.

MEASUREMENTS



Frequency response on axis and 70° off axis.



Input impedance.

SPECIFICATIONS

Cabinet type	QB3 bassreflex
Drivers	
Woofer	10", super long stroke
Midrange	3", dome
Tweeter	3/4", metal dome
Crossover	Linear Directivity. 1st. quality components
Crossover frequency	800 Hz, 3 KHz
Impedance	8 ohms
System resonance	36 Hz
Frequency response ± 3 dB	35-25,000 Hz
Listening window ± 2 dB hor.	140°
ver.	+9°, -7°
Sensitivity (2.8 V)	90 dB/1m
Recommended amplifier	
power ratings	10 to 100 W/channel
Dimensions	
Height	94 cm (37")
Width	28 cm (11")
Depth	30 cm (12")
Net Weight	25 kg
<i>Specifications are subject to change without notice in the course of product improvement.</i>	