# INTRODUCTION

The new MOTIF® LCR loudspeaker from DALI is a genuine high fidelity loudspeaker in an elegant design package.

From the start of the creation of the MOTIF® LCR, the project team was determined to prove that it was possible to show that beauty and performance could be materialized in one and same product.

Whereas engineering tasks and, of course, all acoustics has been done by DALI's R&D department, the Denmark-based international design company Designit® was hired to develop the aesthetics.

We claim the task has been fulfilled.
Have the first introduction in the following pages.

# APPLICATIONS

## THE SOPHISTICATED SOLUTION TO COMPLETE YOUR FLATSCREEN TV

MOTIF® LCR® is a perfect match to a high quality flat screen TV set, as LCR speaker set, as “building block” in a complete surround setup, or as a stylish stereo speaker for on-wall application.

The acoustic dispersion pattern of the speaker allows horizontal or vertical orientation, as it should be on a genuine LCR-speaker.

True LCR configuration
around an on-wall TV

Stereo speaker configuration
combined with on wall TV e.g. for a
2.1 surround setup solution

Due to the dispersion properties of the MOTIF®

CR,

the speakers can be mounted horizontally as long as extreme of-axis positions are avoided

## WIDE DISPERSION – A DALI SPECIALITY

Wall mount speakers are generally designed to either be as flat to the wall as possible, meaning parallel orientation to the wall surface, or alternatively to be angled, e.g. on a pivoting bracket which, on the other hand, introduces an un-wanted elevation of the speaker from the wall surface.
As well, the variable angle between wall and pivoting speaker will change acoustical environment around the speaker, resulting in a changing and unpredictable sound character.

The MOTIF® LCR speakers, features a wide dispersion pattern, a property shared with other DALI speakers and refined by the acoustic engineers at DALI as a unique specialty.
DALI speakers in generally should not be toed in, - not even the bigger floor standing speaker - and the MOTIF® LCR owner will benefit from this feature, allowing a higher degree of freedom in placement compared to most other products in the market.

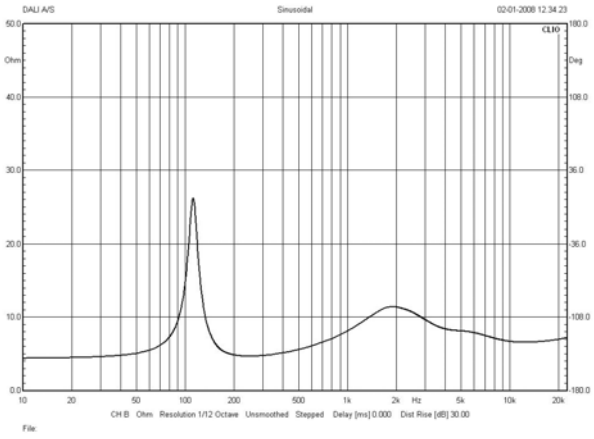
Of course to get most out of the MOTIF® LCR speakers you should still consider normal precautions, e.g. symmetry in the positioning of the speakers and avoid placement in remote corners of the room or in extreme angles relative to the listening position.

## AMPLIFICATION

The MOTIF® LCR speaker is a genuine hi-fi speaker and will come to its best when combined with high grade audio components in terms of stereo amplifiers or surround receivers.

Although built-in amplifier in TV sets generally lacks of current-power, improved amplifier quality can be found in some modern TV sets.

To give the best possible operation conditions for amplifiers, the impedance of MOTIF® LCR is kept high at nominal 6 ohms and relatively flat over the frequency range.
Combined with the high voltage sensitivity of the MOTIF® LCR (89 dB for 2,83 volts, measured 1 meter from the speaker), this impedance response allows high sound pressure levels with modest current consumption, and reduced amplifier distortion as the positive outcome.




For best performance and highest sound pressure levels, combine MOTIF® LCR's with 15 – 120 watts per channel quality amplifiers (resulting in a maximum SPL of 107 dB in 1 meter distance).

## CLICK N' CONNECT STEREO ANYWHERE

The design of MOTIF® LCR speakers will invite to position real high fidelity speakers in both domestic environment, in rooms where a traditional loudspeaker wouldn't be accepted, or even in public areas like restaurants or galleries where the visual appearance and convenience and flexibility in installation is important.

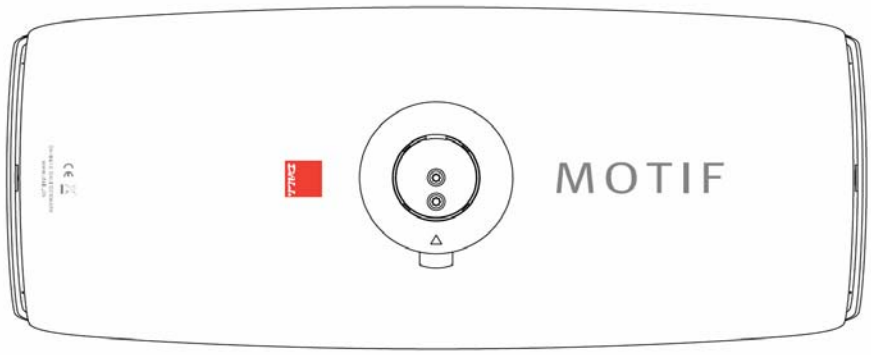
In homes the MOTIF® LCR speaker is a perfect match for e.g. some of the better distributed sound systems in the market.

The MOTIF® LCR speakers come with a wall bracket for easy and secure fixation on the wall, and at the same time a hassle-free audio-grade connection of the speaker.
Speaker wires are fastened to the gold plated connectors on the back side of the wall bracket, which are designed to allow the choice of a hidden wire (in-wall) or an on-wall speaker cable.

Gold plated 4mm banana plug style Connector pins will ensure high quality electrical connection between the loudspeaker and the wall bracket.

The speaker may be rotated to desired vertical or horizontal orientation without affecting polarity.

As the correct connection is clearly recognised by an audible "click" when the speaker is pushed onto the wall bracket.
For extra caution, the release button can be locked with an integrated lock-screw.





MOTIF® LCR rear side view with location of connecting pins and release button.

### SUBWOOFER RECOMMENDATION

We have chosen to emphasize a natural, undistorted and well articulated reproduction of all tones but the very lowest, rather than a boomy sound, which might be impressive in first minutes, but tiring in the long run. In fact, it is our belief that in most situations, you will be able to enjoy even bass guitar solo's better when the reproduction accuracy is prioritised than when extreme low tone extension is forced from a very compact speaker.
However, there are situations when a subwoofer is recommended.

In a 5.1 surround system (or 2.1, 7.1 or similar setup's) a subwoofer comes in by definition, but also as addition to a stereo application in larger rooms, a subwoofer will further enhance the music reproduction experience with the MOTIF® LCR's.

We recommend using the DALI BASIS 100 subwoofer for stereo or smaller installations and the DALI MENTOR SUB or DALI IKON® SUB for AV-systems and for the ultimate stereo solution.

## THE TECHNICAL SIDE OF THE SPEAKER

### STYLE AND PERFORMANCE

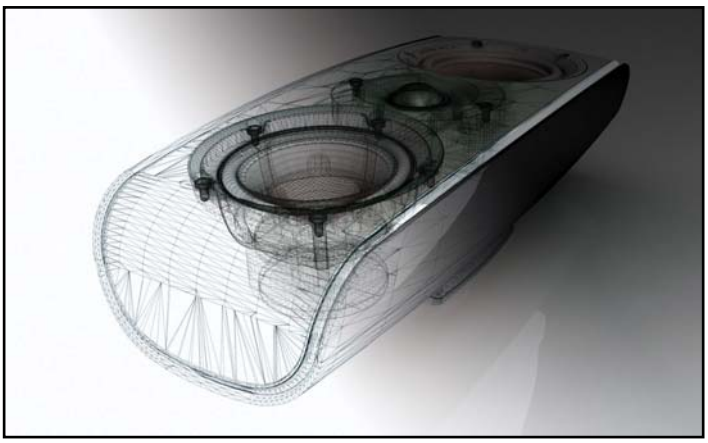
The MOTIF® LCR speaker comes in black and white high gloss finish with a distinct chrome trim to meet the trends in modern interior design and surfaces.
Similarly the blend of soft shapes and distinct lines will be an appealing match to a wide selection of leading flat screen TV set designs.

Rubber paint surface - a finish maybe best known from the Audi TT dashboard - has been chosen as finish on both the speaker baffle/front side and on the woofer and tweeter frames to ensure a clean and distinct visual appearance, even if you decide to use the speakers without the grille.

No less than 20 neodymium magnets are used to keep the front grille firmly in position on the speaker without compromising the stylish and clean front side of the MOTIF® LCR. There are no visible attachment mechanisms for the grille.

## DIECAST ALUMINUM ADVANTAGES

The use of a diecast aluminium as cabinet construction material introduces important mechanical advantages, and has been chosen in order to meet some of the challenges it is make great sound in a compact stylish package.



First of all, the high strength of aluminium, compared to less rigid materials as fibreboard or plastic, enables the engineers to use the thinner walls, thus utilising the speaker size for internal volume.
The use of a die cast process has been used to further strengthen the cabinet with internal bracings and to integrate sturdy and non-resonant bases and supports for the baffle, bracket connection etc.
Further, and quite important, the diecast process has been used to create an inner cavity without parallel sides thus avoiding standing wave modes, - simply to ensure a better acoustic environment for the drivers.
Finally, the higher mass of the aluminum (the speaker is 3,6 kg/7.8 lbs) acts as a heavy counterweight to avoid vibrations from the cone-movements to shake the complete speaker. In fact the weight of the speaker is more than 200 times the total moving mass of the three drivers.

## OVERSIZED SOFTDOME TWEETER

Most dome tweeters are 25 – 26mm diameter.
MOTIF® LCR share tweeter technology with other DALI speakers, and are based on a 28mm voice coil. That means 25% longer voice coil circumference and better power handling, both short- and long term compared to more common 1 inch tweeters. Moreover, power compression is reduced because of the oversized voice coil.

Power handling is further improved by the use of aluminium heat sink on the back of the magnet system.

The oversized diameter of the dome tweeter has further advantages: The surface area of the tweeter is larger than normal – resulting in higher sound pressure levels for a given electrical input. The resonance frequency is also reduced by use of the oversize dome, which will make a better integration with the sound from the mid/woofers and improve dynamics of the deepest tones the dome tweeter reproduces.

Even tough the dome tweeter is larger than normal; the weight of the dome is lower than normal, due to the use of a thin, light weight material. The low moving mass will make it possible for the dome to react faster on the electrical signals that is fed to the voice coil. The outcome is sound with a more natural character, as well as improved resolution and attention to fine details and micro dynamics.

## WOOFER/MIDRANGE TECHNOLOGY

Wood fiber cones have become a speciality in DALI driver designs.
The invention has been used since the introduction into the top line Euphonia series.

Wood fibres add stiffness to paper cones without any ringing tendencies, and have proven to work as a key technology in reproducing the finest details and dynamics in the music without any loss. Paper cones are typically very light weight in comparison with other cone materals.

Of course driver design is more than knowing about the right cone material (which of course has to be used with the right cone geometry, adhesives, coatings etc.).
At DALI we believe in designs based on low mechanical losses. This means that we were among the first to insist in controlling the frequency response by carefully balanced designs, even with very low-loss rubber surrounds that will reveal problems in poor design (it is the easiest way in the world to control frequency response by adding a lot of, mechanical damping in e.g. surround and cones).
We do not want to use nonlinear mechanic effects to control, reduce or limit the movement of the parts that should reproduce the music. We want the amplifier current to be the factor to control the movement.

## TECHNICAL SPECIFICATIONS:

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|---|---|
| Frequency range [+/- 3dB, Hz] | 78 – 25.000 |
| Crossover frequency [Hz] | 3.000 |
| Sensitivity [2.83V/1m, dB] | 89.0 |
| Nominal impedance [ohm] | 6.0 |
| Maximum SPL [dB] | 107 |
| Recommended Amp. Power [W] | 15 – 120 |
| Terminals | Gold plated, integrated in the Click'n'Connect wall bracket |
| Dome Tweeter [mm] | 28 |
| Low Frequency Drivers [inches] | 2 x 4.5 |
| Dimensions [HxWxD, cm] | 38.5 x 15.7 x 10.0 |
| Dimensions [HxWxD, inch] | 15.2 x 6.2 x 3.9 |
| Weight [kg/lb] | 3.6 / 7.8 |
| Accessories | 1.5 mm Allen key<br>Click'n'Connect wall bracket,<br>positioning templates. |
| Finishes | High gloss lacquer, white or black with chrome trim. |

*Specifications are subject to change without notice.*