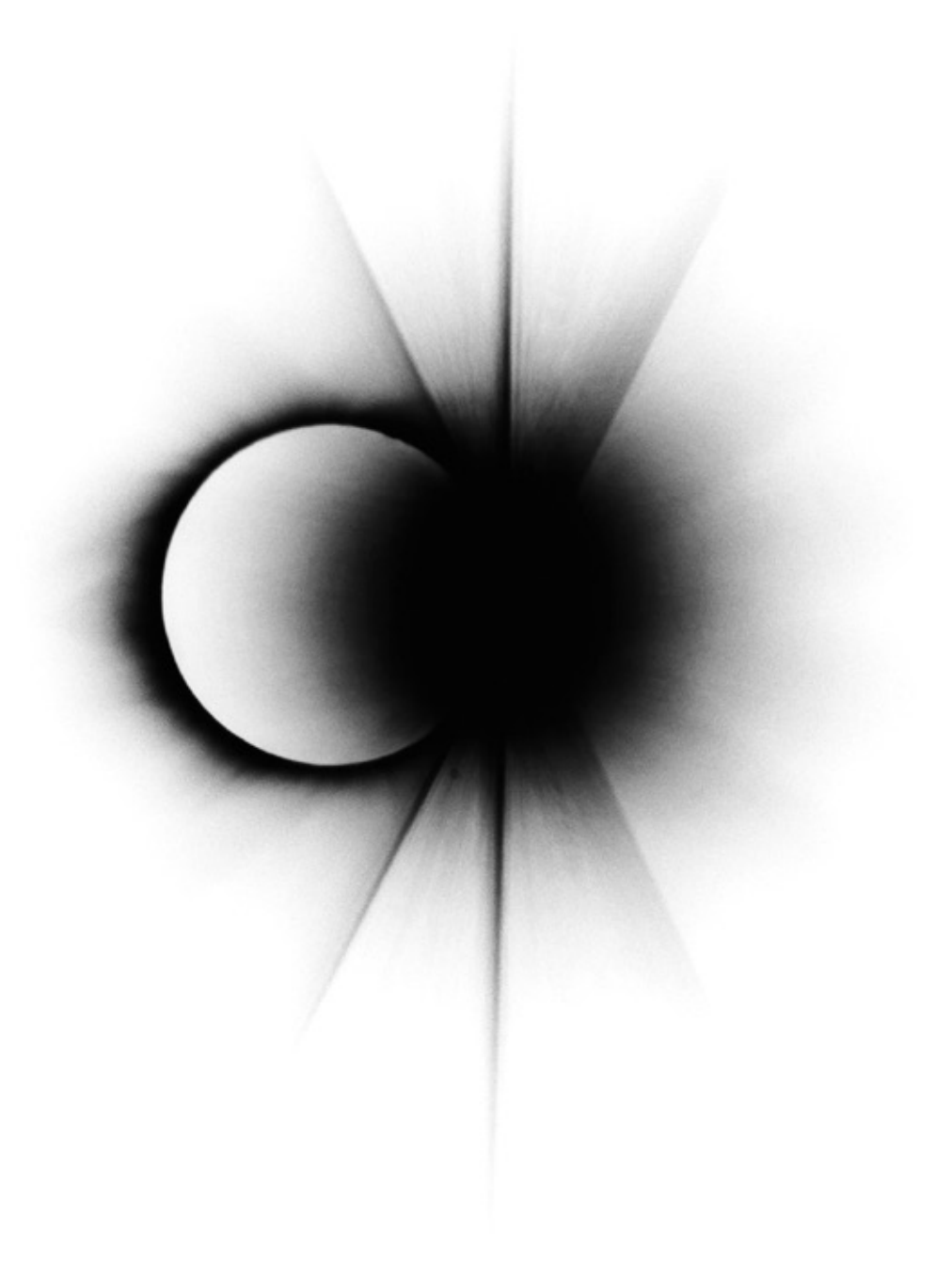




DE Plan Series
Invisible Speakers

Invisible Precision

pure listening 





DE Plan Series NEXT GENERATION

Pushing the Limits Our **DE Plan Series** consolidates all of our experiences since 1999 in developing invisible speakers, redefining what is technically possible with speakers of this kind. The combination of flat-membrane woofer drivers, high-frequency exciters, and the latest generation of **de:shape®** membranes means maximum linearity and sound pressure in the low frequency range. As the entire membrane surface is used for homogenous sound dispersion, the dimensions of our DE Plan series are remarkably compact. The mathematically

calculated contour of the de:shape® membranes and the patented absorption elements prevents interference caused by membrane resonance for unprecedented precision in sound reproduction.

Thanks to the optimized coupling between the drivers and dispersion membrane, the new models respond a lot less sensitively to deviations in covering material (plastering, lining, and paint). After installation, the speakers are completely concealed in ceilings and walls.

PURE LINES.
EXCELLENT
ACOUSTICS.



Private mansion, Mallorca
Invisible multi-room sound system with DE Plan speakers

The patented flat transducers deflect the dispersion membrane which has a homogenous deflection via a compression driver and highly efficient exciters in the high-frequency range to deliver outstanding sound properties and exceptional low-frequency characteristics.

DE Plan membranes have an optimized contour with a calculated distribution of distance between the edge and the high frequency driver.

Modular line arrays with adjustable vertical directional characteristics. The speakers are controlled via our multi-channel DSP power amplifiers and programmed using the LB AUDIO CONTROL Software.

Special built-in versions of DE Plan models for installation in furniture and wall panels. The speakers are back-mounted on panels and directly resonate through these surfaces.

DEplan®

de:shape®

al array®
adjustable line array

DEplan®
inside

DE Plan 200



DE Plan 400



DE Plan 500 S



DE Plan 600



DE Plan 800 SUB



DE Plan 800 AIArray

The **DE Plan 800 AIArray** is an invisible 4-channel line array with an adjustable dispersion direction. It can be installed in walls or ceilings and enables sound dispersion to be adjusted to the listening zone. The system is controlled using our PA-series multichannel DSP power amplifiers and the dispersion direction is programmed using our **LB AUDIO CONTROL Software**.



DE Plan 800 AIArray, in-ceiling installation with adjustable directivity



DE Plan 800 AIArray, in-wall installation with adjustable directivity

-
- INVISIBLE
 - COMPACT DIMENSIONS
 - FLEXIBLE INSTALLATION IN ALL CEILINGS AND WALLS
 - EXCELLENT LOW-FREQUENCY CHARACTERISTICS



DE Plan Series CONSTRUCTION AND MOUNTING IN DRYWALLS



Screw fastening

Membrane limit

de:shape®

Compression driver

Exciter

Dispersion membrane

Woofer Absorber

Wall paint

Fine filling

Lining fleece

Absorber

Fugue filling

Drywall

Back box (optional)



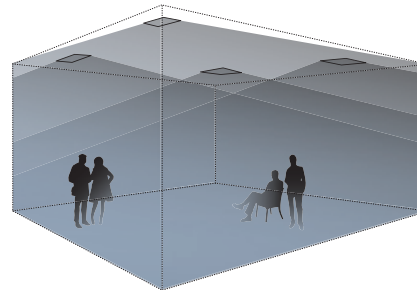
inveoo Showroom Vienna
Invisible Dolby Atmos multi-room
sound system

DISPERSION CHARACTERISTICS

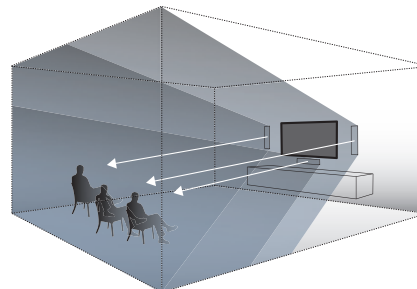
DEplan®

DE Plan 200, DE Plan 400 and DE Plan 600 models

These are two-way systems with a high-frequency exciter and a cone speaker for the low-frequency range. DE Plan 400 and DE Plan 600 offer particularly controlled and deep low-frequency characteristics. With a 180° dispersion angle, DE Plan systems create a very wide, uniform beam, enabling sound to be distributed evenly throughout a room with just a few speakers. The systems can be installed in ceilings and walls. **DE Plan 500 S** has a particularly narrow design, making it ideal for installation in confined spaces such as next to or below screens.



DE Plan 200, DE Plan 400, DE Plan 600

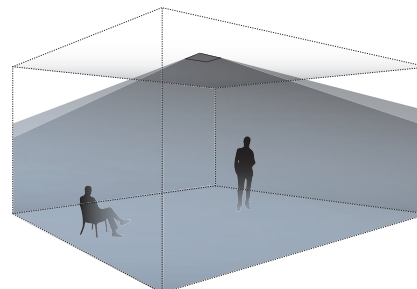


DE Plan 400, DE Plan 500 S, DE Plan 600



DE Plan 200 ST

This is a stereo 2-way system for reproducing sound in smaller rooms where only one speaker is required (bathrooms, changing rooms, etc.). The DE 200 ST has a wide, even beam direction (180° dispersion angle), enabling it to produce a sound that fills the entire room.



DE Plan 200 ST





DE Plan Series DE PLAN ALARRAY

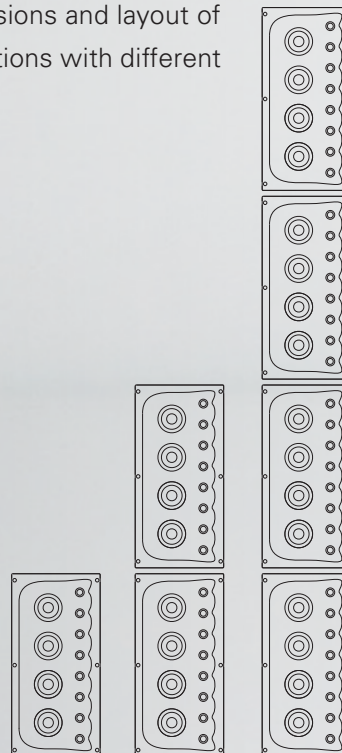
With **DE Plan 800 AIArray** modules from LB, you become the acoustic conductor. By aligning these speakers precisely with the position of your audience, you can create the perfect sound field exactly where you want it. DE Plan 800 AIArray modules are front speakers (L, R, center) designed to be integrated into ceilings and walls.

You can use the digital signal processors of our multi-channel DSP power amplifiers and our browser-based **LB AUDIO CONTROL Software** to match the sound to the specific room acoustics. For large rooms with longer reverberation times, you can combine multiple modules to create longer line arrays with the range and directivity you need. We are happy to advise you on the dimensions and layout of systems and can also deliver preset files for standard configurations with different dispersion angles.

DE Plan 800 AIArray Configurationen

1 or 2 DE Plan 600 AIArray units can be operated on either side using a PA 8100 DSC controller power amplifier.

A four-part line array measuring 2.5 m in total requires a PA 8100 DSC on each side.



In the case of the **DE Plan 800 AIArray**, the dispersion direction is set by programming the corresponding DSP power amplifiers using our newly developed, browser-based **LB AUDIO CONTROL Software**.

The required angle is set by selecting the appropriate preset from the preset library in 1° up to 3° increments.

In addition to selection of the dispersion direction, the software also provides the usual setting options such as parametric EQs, delays, compressors, and limiters.

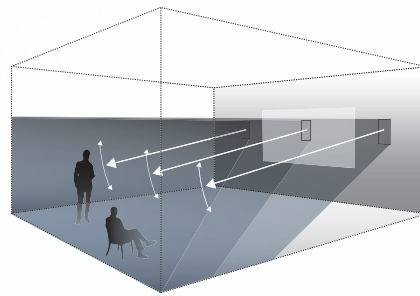
Project-specific presets available on request.



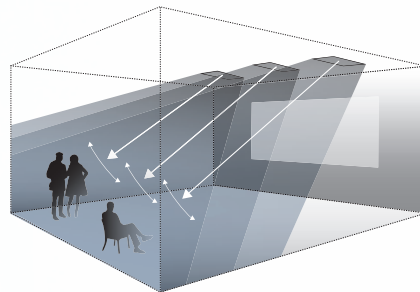
SETTING AND DISPERSION CHARACTERISTICS

This is a four-channel line array module designed to be operated with our multi-channel DSP power amplifiers. Each of the channels is set up as a two-way system with one 4" woofer and two high-frequency exciters.

In multi-unit arrays, two channels can be parallel-connected in each array. The horizontal dispersion angle is 180° and vertical dispersion is set using our **LB AUDIO CONTROL Software**.



DE Plan 800 AIArray in-wall installation,
radiation characteristic adjustable via controller



DE Plan 800 AIArray in-ceiling installation,
radiation characteristic adjustable via controller



LB AUDIO CONTROL

Interface: Ethernet
Operating Systems:
Windows / Mac OS

Download: www.lb-lautsprecher.de/en/download-software



PA Series DSP power amplifiers for driving the
passive multi channel line arrays



DE Plan Series SUBWOOFER

Pump up the Bass The DE Plan 600 SUB from lb is a powerful, completely invisible subwoofer. It is equipped with eight long excursion woofers, which deflect the membrane homogenously and deliver deep low-frequency characteristics.

The low-resonance back box (EG Plan 600 or EGB Plan 600) is very shallow, enabling it to be installed in non-concrete walls, solid walls and even concrete ceilings.





DE Plan Serie DE PLAN INSIDE

DE Plan Inside – make your furniture sing DE Plan Inside from LB turns your furniture into sound boards. These special built-in versions of the DE Plan speaker series can be installed in furniture and wall panels. The speakers are back-mounted onto the front of furniture or panels made of wood, MDF or similar materials and directly resonate through these surfaces. This surface is activated without an intermediate membrane, which makes DE Plan Inside models extremely efficient and gives them an extensive, linear frequency range.

These speakers can be adapted to different materials and conditions inside rooms using our system controllers or digital power amplifiers with signal processors. Find out more about the different ways these speakers can be installed.



DE Plan 400 inside in veneered cupboard

DE plan[®] inside





DE Plan Series ACCESSORIES

Back box for drywalls and -ceilings (incl insulating wool)



EG Plan 200

400 × 350 × 100 mm



EG Plan 400

500 × 480 × 120 mm



EG Plan 500 S

620 × 240 × 100 mm



EG Plan 600

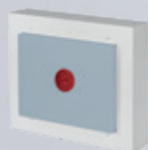
700 × 480 × 120 mm



EG Plan 800

800 × 480 × 120 mm

Back box for concrete (incl insulating wool)



EGB Plan 200

400 × 350 × 100 mm



EGB Plan 400

500 × 480 × 120 mm



EGB Plan 500 S

620 × 240 × 100 mm



EGB Plan 600

700 × 480 × 120 mm



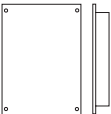
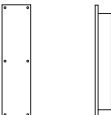
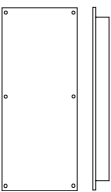
EGB Plan 800

800 × 480 × 148 mm



**DE Plan Installation Videos
with/without back box
on Youtube**

DE Plan Series MODELS

| | Models | Principle | Frequency range* | Power capacity | Sensitivity | Dispersion | Dimensions | Cutout size Installation depth | Weight | Back box |
|---|--|------------------------------------|---------------------|--|------------------------------|--|--|--|--------|---------------------------------|
|  | DE Plan 200 DE Plan 200 inside | 2-way flat transducer | 70... 20.000 Hz | RMS/Prog. 60/120 Watts 8 Ohms | 83 dB (1W/1m) max. 101 dB | 180° | 300 × 240 mm incl. mounting feet 300 × 326 mm | 304 × 244 mm (Wall thickness 10 – 35 mm incl. back box) Installation depth 72 mm | 3 kg | EG Plan 200 EGB Plan 200 |
| | DE Plan 200 T 100 V version | | | 7,5/15/30 Watts | max. 97 dB | | | | 3,4 kg | |
| | DE Plan 200 ST DE Plan 200 ST inside | Stereo 2-way flat transducer | 90... 20.000 Hz | RMS/Prog. 2 × 30/2 × 60 Watts 2 × 8 Ohms | 83 dB (1W/1m) max. 101 dB | 180° | 300 × 240 mm incl. mounting feet 300 × 326 mm | 304 × 244 mm (Wall thickness 10 – 35 mm incl. back box) Installation depth 72 mm | 3,1 kg | EG Plan 200 EGB Plan 200 |
|  | DE Plan 400 DE Plan 400 inside | 2-way flat transducer | 46... 20.000 Hz | RMS/Prog. 120/240 Watts 8 Ohms | 84 dB (1W/1m) max. 106 dB | 180° | 420 × 300 mm incl. mounting feet 420 × 38 8 mm | 424 × 304 mm (Wall thickness 10 – 35 mm incl. back box) Installation depth 72 mm | 4,3 kg | EG Plan 400 EGB Plan 400 |
| | DE Plan 400 T 100 V version | | | 7,5/15/30 Watts | max. 102 dB | | | | 4,7 kg | |
|  | DE Plan 500 S DE Plan 500 S inside | 2-way flat transducer | 110... 20.000 Hz | RMS/Prog. 80/160 Watts 8 Ohms | 82 dB (1W/1m) max. 104 dB | 180° | 540 × 140 mm incl. mounting feet 560 × 210 mm | 544 × 144 mm (Wall thickness 10 – 35 mm incl. back box) Installation depth 72 mm | 3,8 kg | EG Plan 500 S EGB Plan 500 S |
|  | DE Plan 600 DE Plan 600 inside | 2-way flat transducer | 38... 20.000 Hz | RMS/Prog. 180/360 Watts 6 Ohms | 85 dB (1W/1m) max. 110 dB | 180° | 620 × 300 mm incl. mounting feet 626 × 388 mm | 624 × 304 mm (Wall thickness 10 – 35 mm incl. back box) Installation depth 72 mm | 5 kg | EG Plan 600 EGB Plan 600 |
| | DE Plan 800 AIArray | 4-channel 2-way flat transducer | 40... 20.000 Hz | RMS/Prog. 4 × 60/120 Watts 4 × 8 Ohms | 88 dB (1W/1m) max. 112 dB | horiz. 180° vert. with LB AUDIO CONTROL Software adjustable | 720 × 300 mm incl. mounting feet 728 × 388 mm | 724 × 304 mm (Wall thickness 10 – 35 mm incl. back box) Installation depth 72 mm | 8,5 kg | EG Plan 800 EGB Plan 800 |
|  | DE Plan 800 SUB Only in conjunction with EG(B) Plan 800 | Flat transducer | 35... 180 Hz | RMS/Prog. 240/480 Watts 4 Ohms | 87 dB (1W/1m) max. 112 dB | 180° | 720 × 300 mm incl. mounting feet 728 × 388 mm | 724 × 304 mm (Wall thickness 10 – 35 mm incl. back box) Installation depth 76 mm | 8,5 kg | EG Plan 800 EGB Plan 800 |

* installed with two layers of paint

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pure listening 