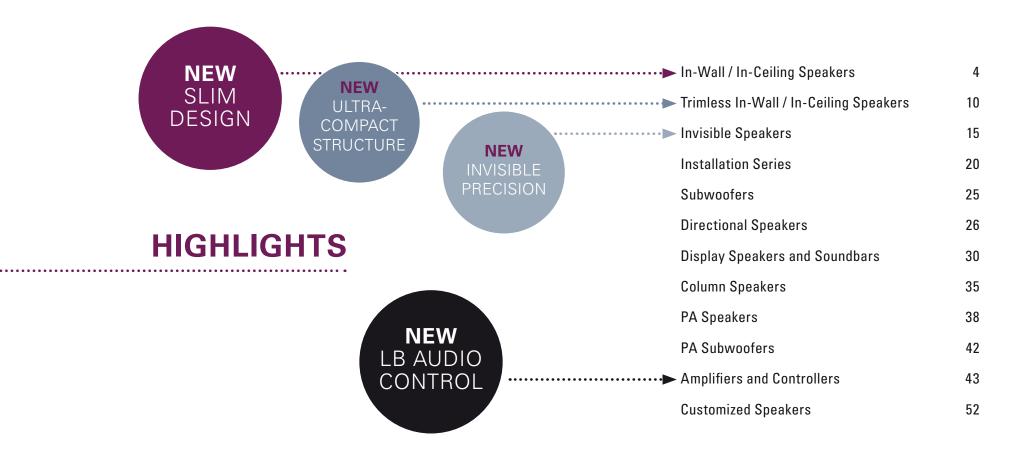




PRODUCTS 2022 | 23





10 IN-WALL / IN-CEILING SPEAKERS

NEXT GENERATION Our latest **DE series** sets new standards in highend, in-wall/in-ceiling sound systems and feature an elegant and slim installation frame. Compact dimensions and perfect acoustics are just some of the highlights of this new series. The installation height of the sophisticated steel installation frame of our round, square, and rectangular models is just 1.2 mm while the ultra-compact design means that only a minimum amount of installation space is required in ceilings and walls. Thanks to the modular concept comprising an installation frame, speaker unit, and magnetic front grille, the speakers can be installed flexibly and securely in any type of ceiling or wall.

Depending on requirements and room/situation, the various models in the DE series can be combined to create impressive and visually harmonious sound systems.

The models with optimized Polar® technology are designed for exceptionally consistent sound transmission from the in-ceiling sound system, even with just a few speakers. They offer a dispersion angle of 180°.

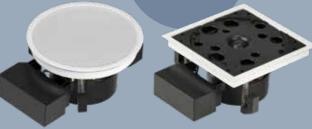
The models in the CD and FR series feature targeted dispersion and are especially suitable as front speakers in AV systems and conference spaces.

To ensure natural reproduction and perfect acoustic

dispersion, we have further optimized our new generation

- Elegant steel frames
- Installation height of just 1.2 mm
- Flexible assembly with clamps
- A variety of dispersion characteristics
- Optimized Polar® technology





NEW

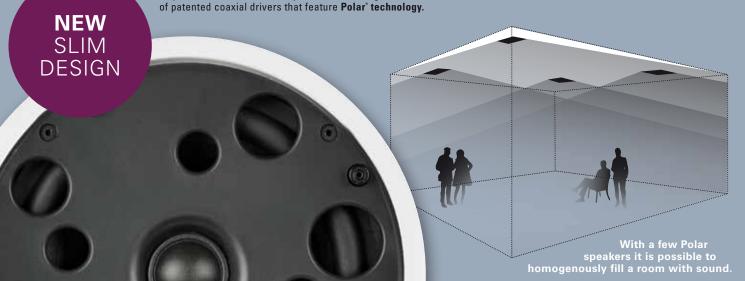


DE 300 FR In-Ceiling Front Speakers with Beam Direction -35° downwards



Clientis Bank Oberuzwil CH In-ceiling sound system with DE Series speakers



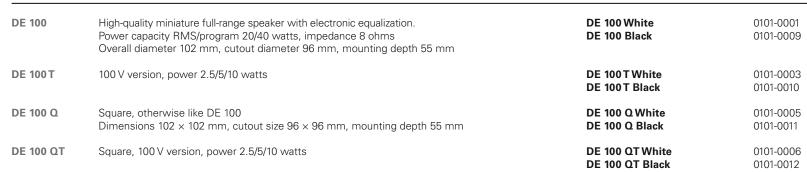


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Model

Item no.





Polar® Speakers Uncompromising two-way speakers with patented Polar® technology for extremely broad and even sound dispersion (180°). With Polar speakers it is possible to homogenously fill rooms with sound employing considerably fewer systems and greater speaker distances.







NEW Polar In-Ceiling Speakers with 180° Dispersion Angle

SLIM DESIGN

DE 140 Polar	2-way hifi in-ceiling speaker with Polar technology Power capacity RMS/program 30 / 60 watts, 8 ohms Overall diameter 144 mm, cutout diameter 128 mm, mounting depth 83 mm	DE 140 Polar White DE 140 Polar Black	0102-0013 0102-0009
DE 140T Polar	100 V version, power 7.5/15/30 watts	DE 140 T Polar White DE 140 T Polar Black	0102-0014 0102-0010
DE 140 Q Polar	Square, otherwise like DE 140 Polar Dimensions 144 \times 144 mm, cutout size 128 \times 128 mm, mounting depth 83 mm	DE 140 Q Polar White DE 140 Q Polar Black	0102-0015 0102-0011
DE 140 QT Pola	r Square, 100 V version, power 7.5/15/30 watts	DE 140 QT Polar White DE 140 QT Polar Black	0102-0016 0102-0012
DE 170 Polar	2-way hifi in-ceiling speaker with Polar technology Power capacity RMS/program 40 / 80 watts, 8 ohms Overall diameter 174 mm, cutout diameter 158 mm, mounting depth 88 mm	DE 170 Polar White DE 170 Polar Black	0103-0013 0103-0009
DE 170 Polar DE 170 T Polar	Power capacity RMS/program 40 / 80 watts, 8 ohms		
	Power capacity RMS/program 40 / 80 watts, 8 ohms Overall diameter 174 mm, cutout diameter 158 mm, mounting depth 88 mm 100 V version, power 7.5/15/30 watts	DE 170 Polar Black DE 170 T Polar White	0103-0009









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NEW Polar I	n-Ceiling Speakers with 180° Dispersion Angle DESIGN	Model	Item no.
DE 200 Polar	2-way hifi in-ceiling speaker with Polar technology Power capacity RMS/program 60/120 watts, 8 ohms, overall diameter 192 mm Cutout diameter 176 mm, mounting depth 100 mm	DE 200 Polar White DE 200 Polar Black	0104-0053 0104-0037
DE 200T Polar	100 V version, power 7.5/15/30 watts	DE 200T Polar White DE 200T Polar Black	0104-0054 0104-0038
DE 200 Q Polar	Square, otherwise like DE 200 Polar Dimensions 192 \times 192 mm, cutout size 176 \times 176 mm, mounting depth 100 mm	DE 200 Q Polar White DE 200 Q Polar Black	0104-0055 0104-0039
DE 200 QT Pola	r Square, 100 V version, power 7.5/15/30 watts	DE 200 QT Polar White DE 200 QT Polar Black	0104-0056 0104-0040
DE 200 HSP Polar	2-way in-ceiling speaker with Polar technology and high sound pressure Power capacity RMS/program 60 / 120 watts, 8 ohms Overall diameter 192 mm, cutout diameter 176 mm, mounting depth 102 mm	DE 200 HSP Polar White DE 200 HSP Polar Black	0104-0057 0104-0041
DE 200 HSPT Polar	100 V version, power 7.5/15/30 watts	DE 200 HSPT Polar White DE 200 HSPT Polar Black	0104-0058 0104-0042
DE 200 HSPQ Polar	Square, otherwise like DE 200 HSP Polar Dimensions 192 \times 192 mm, cutout size 176 \times 176 mm, mounting depth 102 mm	DE 200 HSPQ Polar White DE 200 HSPQ Polar Black	0104-0059 0104-0043
DE 200 HSPQT Polar	Square, 100 V version, power 7.5/15/30 watts	DE 200 HSPQT Polar White DE 200 HSPQT Polar Black	0104-0060 0104-0044
DE 300 R Polar	3-way in-ceiling speaker with Polar technology Power capacity RMS/program 120/240 watts, 4 ohms Dimensions 358 × 192 mm, cutout size 342 × 176 mm, mounting depth 100 mm	DE 300 R Polar White DE 300 R Polar Black	0105-0001 0105-0009



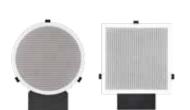
In-Ceiling Speakers with Reduced Mounting Depth

DE 200 LP	2-way system with reduced mounting depth Power capacity RMS/program 40 / 80 watts, 8 ohms Overall diameter 192 mm, cutout diameter 176 mm, mounting depth 48 mm	DE 200 LP White DE 200 LP Black	0104-0065 0104-0049
DE 200 LPT	100 V version, power 7.5/15/30 watts	DE 200 LPT White DE 200 LPT Black	0104-0066 0104-0050
DE 200 LPQ	Square, otherwise like DE 200 LP Dimensions 192 \times 192 mm, cutout size 176 \times 176 mm, mounting depth 48 mm	DE 200 LPQ White DE 200 LPQ Black	0104-0067 0104-0051
DE 200 LPQT	Square, 100 V version, power 7.5/15/30 watts	DE 200 LPQT White DE 200 LPQT Black	0104-0068 0104-0052





The models **DE 200 CD** and **DE 300 CDR** are high-performance two-way in-wall speakers with a defi ned dispersion angle of 80°. They are employed as front speakers (L, R, center) for home-audio systems and media rooms. A tweeter with waveguide ensures controlled sound radiation with CD characteristics (Constant Directivity).



NEW In-Wall	Speakers	with	Narrow	Dispersion	Angle	(80°)
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I Speakers with Narrow Dispersion Angle (80°) DESIGN	Model	Item no.
In-Wall Speaker 80° dispersion angle, power capacity RMS/program 60/120 watts, 8 ohms Overall diameter 192 mm, cutout diameter 176 mm, mounting depth 100 mm	DE 200 CD White DE 200 CD Black	0104-0061 0104-0045
Square, otherwise like DE 200 CD Dimensions 192 \times 192 mm, cutout size 176 \times 176 mm, mounting depth 100 mm	DE 200 CDQ White DE 200 CDQ Black	0104-0062 0104-0046



DE 300 CDR 3-way in-wall speaker with CD characteristics

DE 200 CD

DE 200 CDQ

80° dispersion angle, power capacity RMS/program 120/240 watts, 4 ohms Dimensions 358 × 192 mm, cutout size 342 × 176 mm, mounting depth 100 mm DE 300 CDR White 0105-0003 **DE 300 CDR Black** 0105-0010



The model **DE 300 FR** is a powerful front speaker for in-ceiling installation which radiates 35° downwards. It was specially developed for employment as front speaker (L, R, c enter) without impairing the field of view in home-cinema applications and media rooms.



In-Ceiling Front Speakers

DE 300 FR 3-way in-ceiling front speaker, beam directon-35° downwards Power capacity RMS/program 80/160 watts, 4 ohms Dimensions 358×192 mm, cutout size 342×176 mm, mounting depth 150 mm DE 300 FR White 0105-0005 DE 300 FR Black 0105-0011

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Model Item no.

0104-0063

0104-0047

0105-0013

0105-0012

DE 200 ST	Stereo 2-way in-ceiling speaker with Polar technology
Polar	Power capacity RMS/program 2 × 40 / 80 watts
	Impedance 2×8 ohms, overall diameter 192 mm
	Cutout diameter 176 mm, mounting depth 100 mm

DE 200 STQ Polar White 0104-0064

DE 200 ST Polar White

DE 200 ST Polar Black

DE 300 SUB White

DE 200 STQ Square, otherwise like DE 200 ST Polar **Polar** Dimensions 192 × 192 mm, cutout size 176 × 176 mm

DE 200 STQ Polar Black 0104-0048

Mounting depth 100 mm



NEW In-Ceiling Subwoofers

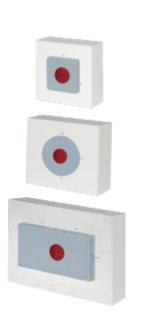
DE 300 SUB In-ceiling subwoofer with integrated crossover

Power capacity RMS/program 120 / 240 watts Impedance 4 ohms, dimensions 358 × 192 mm Cutout size 342 × 176 mm, mounting depth 100 mm

Only for use with our back boxes EG 300 or EGB 300







Accessorie	s	Model	ltem no.
DE-X-Tool	Magnetic holder for effortless removal of the DE and DE-X grille	DE-X-Tool	0360-0001
Back Boxes	s for DE and DE-X		
EG 100	Back box for DE 100, synthetic material, dimensions 200 \times 200 \times 100 mm	EG 100	2101-0001
EG 140	Back box for DE 140 and DE-X 140, synthetic material, dimensions $250 \times 250 \times 100$ mm	EG 140	2201-0001
EG 140 Q	Back box for DE 140 Q and DE-X 140 Q, synthetic material, dimensions $250 \times 250 \times 100$ mm	EG 140 Q	2202-0001

EG 100	Back box for DE 100, synthetic material, dimensions $200 \times 200 \times 100$ mm	EG 100	2101-0001
EG 140	Back box for DE 140 and DE-X 140, synthetic material, dimensions $250 \times 250 \times 100$ mm	EG 140	2201-0001
EG 140 Q	Back box for DE 140 Q and DE-X 140 Q, synthetic material, dimensions $250 \times 250 \times 100$ mm	EG 140 Q	2202-0001
EG 170	Back box for DE 170 and DE-X 170, synthetic material, dimensions $300 \times 250 \times 120$ mm	EG 170	2218-0001
EG 170 Q	Back box for DE 170 Q and DE-X 170 Q, synthetic material, dimensions $300 \times 250 \times 120$ mm	EG 170 Q	2219-0001
EG 200	Back box for DE 200 and DE-X 200, synthetic material, dimensions $350 \times 300 \times 120$ mm	EG 200	2203-0001
EG 200 Q	Back box for DE 200 Q and DE-X 200 Q, synthetic material, dimensions $350 \times 300 \times 120$ mm	EG 200 Q	2204-0001
EG 300	Back box for DE 300 R Polar, CDR, SUB and DE-X 300 R Polar, CDR, SUB Synthetic material, dimensions $500\times350\times140$ mm	EG 300	2205-0001
EG 300 FR	Back box for DE 300 FR and DE-X 300 FR Synthetic material, dimensions 500×350×180 mm	EG 300 FR	2206-0001

Back Boxes for DE and DE-X for Concrete Ceilings

EGB 140	Back box for concrete ceilings for DE 140 and DE-X 140 Synthetic material, dimensions 250×250×128 mm, incl. rigid foam spacer	EGB 140	2207-0001
EGB 140 Q	Back box for concrete ceilings for DE 140 Q and DE-X 140 Q Synthetic material, dimensions $250\times250\times128$ mm, incl. rigid foam spacer	EGB 140 Q	2208-0001
EGB 170	Back box for concrete ceilings for DE 170 and DE-X 170 Synthetic material, dimensions $300\times250\times148$ mm, incl. rigid foam spacer	EGB 170	2220-0001
EGB 170 Q	Back box for concrete ceilings for DE 170 Q and DE-X 170 Q Synthetic material, dimensions $300\times250\times148$ mm, incl. rigid foam spacer	EGB 170 Q	2221-0001
EGB 200	Back box for concrete ceilings for DE 200 and DE-X 200 Synthetic material, dimensions $350\times300\times148$ mm, incl. rigid foam spacer	EGB 200	2209-0001
EGB 200 Q	Back box for concrete ceilings for DE 200 Q and DE-X 200 Q Synthetic material, dimensions $350\times300\times148$ mm, incl. rigid foam spacer	EGB 200 Q	2210-0001
EGB 300	Back box for concrete ceilings for DE 300 R Polar, CDR, SUB and DE-X 300 R Polar, CDR, SUB Synthetic material, dimensions $500 \times 350 \times 168$ mm, incl. rigid foam spacer	EGB 300	2211-0001
EGB 300 FR	Back box for concrete ceilings for DE 300 FR and DE-X 300 FR Synthetic material, dimensions $500\times350\times208$ mm, incl. rigid foam spacer	EGB 300 FR	2212-0001

TRIMLESS IN-WALL/IN-CEILING SPEAKERS

Our trimless speakers of the **DE-X series** are high-end speakers for flush mounting in ceilings and walls.

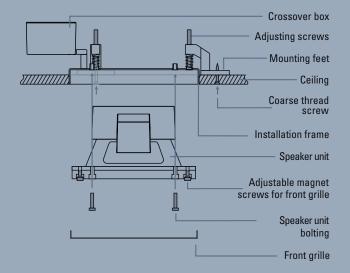
The minimalist appearance and compact dimensions of the round, square, and rectangular models of the DE-X series allow sound concepts of outstanding audio quality to be implemented with minimum intrusion in indoor spaces that feature a sophisticated interior design.

Depending on requirements and on room/situation, the various speaker models in the DE X series can be combined to create impressive and visually harmonious sound systems.

The models with optimized Polar® technology are designed for exceptionally consistent sound transmission from the in-ceiling sound system, even with just a few speakers. They offer a dispersion angle of 180°.

The models in the CD and FR series feature targeted dispersion and are especially suitable as front speakers in AV systems and conference spaces.

- Trimless with flush mounting
- Minimal dimensions
- Ultra-compact structure
- Maximum flexibility during installation
- A variety of dispersion characteristics
- Optimized Polar® technology



The speakers of the DE-X Series are flush mounted in walls and ceilings. After installation only the flush mounted front grilles are visible.



Penthouse Austria Invisible multi-room sound system with trimless speakers outdoors





Polar® Speakers Uncompromising two-way speakers with patented Polar® technology for extremely broad and even sound dispersion (180°). With Polar speakers it is possible to homogenously fill rooms with sound employing considerably fewer systems and greater speaker distances.





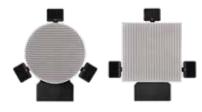






NEW Trimles	s Polar In-Ceiling Speakers with 180° Dispersion	Model	Item no.
DE-X 140 Polar	Trimless 2-way hifi in-ceiling speaker with Polar technology Power capacity RMS/program 30 / 60 watts, 8 ohms Overall diameter (grille) 122 mm, cutout diameter 128 mm, mounting depth 84 mm	DE-X 140 Polar White	0320-0001
DE-X 140 T Polar	100 V version, power 7.5/15/30 watts	DE-X 140 T Polar White	0320-0002
DE-X 140 Q Polar	Square, otherwise like DE-X 140 Polar Grille 122 \times 122 mm, cutout size 128 \times 128 mm, mounting depth 84 mm	DE-X 140 Q Polar White	0320-0003
DE-X 140 QT Polar	Square, 100 V version, power 7.5/15/30 watts	DE-X 140 QT Polar White	0320-0004
DE-X 170 Polar	2-way hifi in-ceiling speaker with Polar technology Power capacity RMS/program 40 / 80 watts, 8 ohms Overall diameter (grille) 152 mm, cutout diameter 158 mm, mounting depth 88 mm	DE-X 170 Polar White	0330-0001
DE-X 170 T Polar	100 V version, power 7.5/15/30 watts	DE-X 170 T Polar White	0330-0002
DE-X 170 Q Polar	Square, otherwise like DE-X 170 Polar Grille 152 \times 152 mm, cutout size 158 \times 158 mm, mounting depth 88 mm	DE-X 170 Q Polar White	0330-0003
DE-X 170 QT Polar	Square, 100 V version, power 7.5/15/30 watts	DE-X 170 QT Polar White	0330-0004
DE-X 200 Polar	Trimless 2-way hifi in-ceiling speaker with Polar technology Power capacity RMS/program 60/120 watts, 8 ohms Overall diameter (grille) 170 mm, cutout diameter 176 mm, mounting depth 100 mm	DE-X 200 Polar White	0340-0001
DE-X 200 T Polar	100 V version, power 7.5/15/30 watts	DE-X 200 T Polar White	0340-0002
DE-X 200 Q Polar	Square, otherwise like DE-X 200 Polar Grille 170 \times 170 mm, cutout size 176 \times 176 mm, mounting depth 100 mm	DE-X 200 Q Polar White	0340-0003
DE-X 200 QT Polar	Square, 100 V version, power 7.5/15/30 watts	DE-X 200 QT Polar White	0340-0004

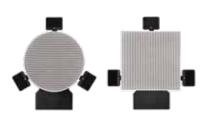












NEW Trimless Polar In-Ceiling Speakers with 180° Dispersion

Trimless 2-way high-end in-ceiling speaker with Polar technology and high sound pressure
Power capacity RMS/program 60/120 watts, 8 ohms
Overall diameter (grille) 170 mm, cutout diameter 176 mm, mounting depth 102 mm

DE-X 200 100 V version, power 7.5/15/30 watts **HSPT Polar**

DE-X 200

HSP Polar

DE-X 200 Square, otherwise like DE-X 200 HSP Polar

HSPQ Polar Grille 170 \times 170 mm, cutout size 176 \times 176 mm, mounting depth 102 mm

DE-X 200 Square, 100 V version, power 7.5/15/30 watts HSPQT Polar

DE-X 300 R
Polar

Trimless 3-way in-ceiling speaker with Polar technology
Power capacity RMS/program 120 / 240 watts, 4 ohms

Grille 336 \times 170 mm, cutout size 342 \times 176 mm, mounting depth 100 mm

NEW Trimless In-Ceiling Speakers with Reduced Mounting Depth (48 mm)

DE-X 200 LP	2-way system with reduced mounting depth, power capacity RMS/program 40 / 80 watts 8 ohms, overall diameter (grille) 170 mm, cutout diameter 176 mm, mounting depth 48 mm	DE-X 200 LP White	0340-0011
DE-X 200 LPT	100 V version, power 7.5/15/30 watts	DE-X 200 LPT White	0340-0012
DE-X 200 LPQ	Square, otherwise like DE-X 200 LP Grille 170 \times 170 mm, cutout size 176 \times 176 mm, mounting depth 48 mm	DE-X 200 LPQ White	0340-0013
DE-X 200 LPQT	Square, 100 V version, power 7.5/15/30 watts	DE-X 200 LPQT White	0340-0014

Model

DE-X 200 HSP Polar White

DE-X 200 HSPT Polar White

DE-X 200 HSPQ Polar White

DE-X 200 HSPQT Polar White

DE-X 300 R Polar White

Item no.

0340-0007

0340-0008

0340-0009

0340-0010

0350-0001

The models **DE-X 200 CD** and **DE-X 300 CDR** are trimless high-performance two-way inwall speakers with a defined dispersion angle of 80°. They are employed as front speakers (L, R, center) for home-audio systems and media rooms. A tweeter waveguide ensures controlled sound radiation with CD characteristics (Constant Directivity).

NEW Trimless In-Wall Speakers with Narrow Dispersion Angle (80°)

DE-X 200 CD	Trimless 2-way in-wall speaker with CD characteristics, 80° dispersion angle Power capacity RMS/program 60 / 120 watts, 8 ohms Overall diameter (grille) 170 mm, cutout diameter 176 mm, mounting depth 100 mm	DE-X 200 CD White	0340-0017
DE-X 200 CDC	Square, otherwise like DE-X 200 CD Grille 170 × 170 mm, cutout size 176 × 176 mm, mounting depth 100 mm	DE-X 200 CDQ White	0340-0018



NEW Trimless In-Wall Speakers with Narrow Dispersion Angle (80°)

Model

Item no.

DE-X 300 CDR Trimless 3-way in-wall speaker with CD characteristics, 80° dispersion angle Power capacity RMS/program 120/240 watts, 4 ohms

Grille 336 × 170 mm, Cutout size 342 × 176 mm, mounting depth 100 mm

DE-X 300 CDR White

0350-0004



The model DE-X 300 FR is a powerful front speaker for in-ceiling installation which radiates 35° downwards. It was specially developed for employment as front speaker (L, R, center) without impairing the field of view in home-cinema applications and media rooms.



NEW Trimless In-Ceiling Front Speaker with Beam Direction 35° Downwards

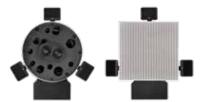
DE-X 300 FR Trimless 3-way in-ceiling front speaker, beam direction-35° downwards

Power capacity RMS/program 80 / 160 watts, 4 ohms

Grille 336×170 mm, cutout size 342×176 mm, mounting depth 150 mm

DE-X 300 FR White 0350-0002

NEW Trimless Polar In-Ceiling Stereo Speakers



DE-X 200 ST Trimless stereo-2-way in-ceiling speaker with Polar technology Polar Power capacity RMS/program 2 × 40 / 80 watts, 2 × 8 ohms

Overall diameter (grille) 170 mm, cutout diameter 176 mm, mounting depth 100 m

DE-X 200 STQ Square, otherwise like DE-X 200 ST Polar

Polar Grille 170 mm, cutout size 176 x 176 mm, mounting depth 100 mm DE-X 200 ST Polar White

0340-0015

DE-X 200 STQ Polar White

0340-0016

NEW Trimless In-Ceiling Subwoofer



DE-X 300 SUB Trimless in-ceiling subwoofer with integrated crossover

Power capacity RMS/program 120 / 240 watts, 4 ohms

Grille 336×170 mm, cutout size 342×176 mm, mounting depth 100 mm

Only for use with our back boxes EG 300 or EGB 300

DE-X 300 SUB White

0350-0003





Accessories

DE-X-Tool



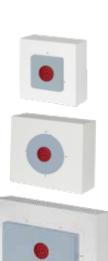
EG 140	Back box for DE 140 and DE-X 140, synthetic material, dimensions $250 \times 250 \times 100$ mm	EG 140	2201-0001
EG 140 Q	Back box for DE 140 Q and DE-X 140 Q, synthetic material, dimensions $250\times250\times100$ mm	EG 140 Q	2202-0001
EG 170	Back box for DE 170 and DE-X 170, synthetic material, dimensions $300 \times 250 \times 120$ mm	EG 170	2218-0001
EG 170 Q	Back box for DE 170 Q and DE-X 170 Q, synthetic material, dimensions $300 \times 250 \times 120$ mm	EG 170 Q	2219-0001
EG 200	Back box for DE 200 and DE-X 200, synthetic material, dimensions $350 \times 300 \times 120$ mm	EG 200	2203-0001
EG 200 Q	Back box for DE 200 Q and DE-X 200 Q, synthetic material, dimensions $350 \times 300 \times 120$ mm	EG 200 Q	2204-0001
EG 300	Back box for DE 300 R Polar, CDR, SUB and DE-X 300 R Polar, CDR, SUB Synthetic material, dimensions $500\times350\times140$ mm	EG 300	2205-0001
EG 300 FR	Back box for DE 300 FR and DE-X 300 FR Synthetic material, dimensions 500 × 350 × 180 mm	EG 300 FR	2206-0001

Model

DE-X-Tool

Item no.

0360-0001



Back Boxes for DE and DE-X for Concrete Ceilings

Magnetic holder for effortless removal of the DE and DE-X grille

EGB 140	Back box for concrete ceilings for DE 140 and DE-X 140 Synthetic material, dimensions $250\times250\times128$ mm, incl. rigid foam spacer	EGB 140	2207-0001
EGB 140 Q	Back box for concrete ceilings for DE 140 Q and DE-X 140 Q Synthetic material, dimensions $250\times250\times128$ mm, incl. rigid foam spacer	EGB 140 Q	2208-0001
EGB 170	Back box for concrete ceilings for DE 170 and DE-X 170 Synthetic material, dimensions $300\times250\times148$ mm, incl. rigid foam spacer	EGB 170	2220-0001
EGB 170 Q	Back box for concrete ceilings for DE 170 Q and DE-X 170 Q Synthetic material, dimensions $300\times250\times148$ mm, incl. rigid foam spacer	EGB 170 Q	2221-0001
EGB 200	Back box for concrete ceilings for DE 200 and DE-X 200 Synthetic material, dimensions $350\times300\times148$ mm, incl. rigid foam spacer	EGB 200	2209-0001
EGB 200 Q	Back box for concrete ceilings for DE 200 Q and DE-X 200 Q Synthetic material, dimensions $350\times300\times148$ mm, incl. rigid foam spacer	EGB 200 Q	2210-0001
EGB 300	Back box for concrete ceilings for DE 300 R Polar, CDR, SUB and DE-X 300 R Polar, CDR, SUB Synthetic material, dimensions $500 \times 350 \times 168$ mm, incl. rigid foam spacer	EGB 300	2211-0001
EGB 300 FR	Back box for concrete ceilings for DE 300 FR and DE-X 300 FR Synthetic material, dimensions $500\times350\times208$ mm, incl. rigid foam spacer	EGB 300 FR	2212-0001

INVISIBLE SPEAKERS

PUSHING THE LIMITS Our new **DE Plan series** consolidates all of our experience 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 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.

DEplan®

- Invisible
- Compact dimensions
- Flexible installation in all ceilings and walls
- Excellent low-frequency characteristics



inveoo Showroom Vienna Invisible Dolby Atmos multi-room sound system

DE PLAN SERIES CONSTRUCTION AND MOUNTING IN DRYWALLS







adapted line array

LB AUDIO CONTROL

Browser-based Software for our new DSPs Interface: Ethernet Download www.lb-lautsprecher.de

NEW INVISIBLE LINE ARRAY WITH ADJUSTABLE DISPERSION DIRECTION

The **DE Plan 800 AlArray** 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 new **LB AUDIO CONTROL Software**.



DE Plan transducers have a dispersion angle of 180°. This broad omnidirectional behavior enables rooms to be evenly filled with sound using just a few systems. The speakers can be installed in ceilings as well as in walls.

de:shape®

DEplan®	Invisible In-	Wall / In-Ceiling Speakers	Model	Item no.
*	DE Plan 200 NEW	2-way planar transducer with wide dispersion angle (180°) Power capacity RMS/program 60 / 120 watts, Impedance 8 ohms Dimensions 300 × 240 mm, cutout size 302 × 242 mm, mounting depth 72 mm Incl. installation frame and kit	DE Plan 200	0401-0003
	DE Plan 200 T NEW	100 V version, power 7.5/15/30 watts	DE Plan 200 T	0401-0004
+	DE Plan 200 ST NEW	2-way stereo planar transducer with wide dispersion angle (180°) Power capacity RMS/program 2 \times 30 / 60 watts, impedance 2 \times 8 ohms Dimensions 300 \times 240 mm, cutout size 302 \times 242 mm, mounting depth 72 mm Incl. installation frame and kit	DE Plan 200 ST	0404-0002
	DE Plan 400 NEW	2-way planar transducer with wide dispersion angle (180°) Power capacity RMS/program 120 / 240 watts, impedance 8 ohms Dimensions 420×300 mm, cutout size 422×302 mm, mounting depth 72 mm Incl. installation frame and kit	DE Plan 400	0402-0003
	DE Plan 400T NEW	100 V version, power 15/30/60 watts	DE Plan 400 T	0402-0004

DE Plan installation - we will be happy to assist you! You can find the detailed installation instructions on www.lb-lautsprecher.de



THE T PER

Mark, cut out, bevel edges, smooth.



Insert frame and secure feet. Remove frame.



DE Plan 500 S



Incl. installation frame and kit

Insert loudspeaker system, secure...



2-way planar transducer with small construction and wide dispersion angle (180°)

Dimensions 540×140 mm, cutout size 542×142 mm, mounting depth 72 mm

Power capacity RMS/program 80 / 160 watts, impedance 8 ohms

... and test functioning.



Adjust fastening screws, spatula smooth and polish.



Stretch out glas fiber fabric, smooth down and leave to



DE Plan 500 S

Smooth finely with spatula two to three times and polish transitions.



Alternatively, the entire surfa- Finally paint over. ce including the speakers can be concealed using painter's



0405-0001



NEW Invisible In-Wall / In-Ceiling Speakers

Model

Item no.

DE Plan 600

2-way planar transducer with wide dispersion angle (180°) Power capacity RMS/program 180 / 360 watts, impedance 6 ohms

DE Plan 600

0403-0002

-

Dimensions 620×300 mm, cutout size 622×302 mm, mounting depth 72 mm Incl. assembly frame and kit



NEW Invisible 4-Channel Line-Array

DE Plan 800 AlArray 4-channel planar transducer with adjustable beam direction Power capacity RMS/program 4 \times 60/120 watts, impedance 4 \times 8 ohms Dimensions 300 \times 720 mm, cutout size 302 \times 722 mm, mounting depth 72 mm Incl. installation frame and kit

Only in combination with system power amplifiers of the PA DSC Series

DE Plan 800 AlArray

0409-0001



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



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

In the case of the **DE Plan 600 AlArray**, 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.



PA Series

DSP power amplifiers for driving the passive multi channel line arrays starting on page 43



Browser-based Software for our new DSPs Interface: Ethernet Download www.lb-lautsprecher.de





NEW Invisible In-Wall / In-Ceiling Subwoofer



Planar subwoofer with integrated crossover Power capacity RMS/program 240 / 480 watts, impedance 4 ohms Dimensions 720 \times 300 mm, cutout size 722 \times 302 mm, mounting depth 76 mm Incl. installation frame and kit

Only for use with our back boxes EG Plan 800 or EGB Plan 800

DE Plan 800 SUB

0408-0001





DE Plan Back Boxes		Model	Item no.	
	EG Plan 200	Back box for DE Plan 200, synthetic material, dimensions 400×350×100 mm	EG Plan 200	2301-0001
	EG Plan 400	Back box for DE Plan 400, synthetic material, dimensions $500 \times 480 \times 120 \text{ mm}$	EG Plan 400	2302-0001
	EG Plan 500 S	Back box for DE Plan 500 S, synthetic material, dimensions $620 \times 240 \times 100~\text{mm}$	EG Plan 500 S	2303-0001
	EG Plan 600	Back box for DE Plan 600, synthetic material, dimensions $700 \times 480 \times 120 \text{ mm}$	EG Plan 600	2304-0001
	EG Plan 800	Back box for DE Plan 800, synthetic material, dimensions $800 \times 480 \times 120 \text{ mm}$	EG Plan 800	2310-0001



DE Plan Back Boxes for Concrete Ceilings

EGB Plan 200	Back box for concrete ceilings for DE Plan 200 Synthetic material, dimensions $400 \times 350 \times 128$ mm, incl. rigid foam spacer	EGB Plan 200	2305-0001
EGB Plan 400	Back box for concrete ceilings for DE Plan 400 Synthetic material, dimensions $500 \times 480 \times 148$ mm, incl. rigid foam spacer	EGB Plan 400	2306-0001
EGB Plan 500 S	Back box for concrete ceilings for DE Plan 500 S Synthetic material, dimensions $620 \times 240 \times 128$ mm, Incl. rigid foam spacer	EGB Plan 500 S	2307-0001
EGB Plan 600	Back box for concrete ceilings for DE Plan 600, all versions Synthetic material, dimensions $700 \times 480 \times 148$ mm, incl. rigid foam spacer	EGB Plan 600	2308-0001
EGB Plan 800	Back box for concrete ceilings for DE Plan 800, all versions Synthetic material, dimensions $800 \times 480 \times 148$ mm, incl. rigid foam spacer	EGB Plan 800	2309-0001

DE Plan inside for Furniture Build-In

The special built-in versions of the **DE Plan inside® 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. As the radiating surface is driven without an intermediary membrane, DE Plan inside speakers achieve high efficiency and a wide linear frequency range. These speakers should be adapted to different built-in materials and room acoustics using our **DSP amplifiers**.

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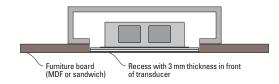
Invisible Spe	eakers for Furniture Build-In	Model	Item no.
DE Plan 200 inside NEW	2-way planar transducer with wide dispersion angle (180°) Power capacity RMS/program 60 / 120 watts, impedance 8 ohms Dimensions 300 × 240 mm, recess size 302 × 242 mm, mounting depth 72 mm Incl. installation accessories	DE Plan 200 inside	0411-0001
DE Plan 200 ST inside NEW	2-way stereo planar transducer with wide dispersion angle (180°) Power capacity RMS/program 2 \times 30 / 60 watts, impedance 2 \times 8 ohms Dimensions 300 \times 240 mm, recess size 302 \times 242 mm, mounting depth 72 mm Incl. installation accessories	DE Plan 200 ST inside	0414-0001
DE Plan 400 inside NEW	2-way planar transducer with wide dispersion angle (180°) Power capacity RMS/program 120 / 240 watts, impedance 8 ohms Dimensions 420 × 300 mm, recess size 422 × 302 mm, mounting depth 72 mm Incl. installation accessories	DE Plan 400 inside	0412-0001
DE Plan 500 S inside	2-way planar transducer with small construction and wide dispersion angle (180°) Power capacity RMS/program 80 / 160 watts, impedance 8 ohms Dimensions 540×140 mm, recess size 542×142 mm, mounting depth 72 mm Incl. installation accessories	DE Plan 500 S inside	0415-0001
DE Plan 600 inside NEW	2-way planar transducer with wide dispersion angle (180°) Power capacity RMS/program 160 / 320 watts, impedance 6 ohms Dimensions 620 × 300 mm, recess size 622 × 302 mm, mounting depth 72 mm Incl. installation accessories	DE Plan 600 inside	0413-0001



We recomend the use of our back boxes to avoid uncontrolled sound effects inside the furniture caused by the sound emission from the rear of the speaker.

DE Plan inside installation – we will be happy to assist you!

Invisible Checkers for Eurniture Build In



Madal



DE Plan inside behind veneered board

INSTALLATION SERIES

Our **installation series** includes universal speaker models that can be installed in a variety of ways, for example wall-mounted, pendant, satellite, and monitor speakers as well as subwoofers. All models offer unbeatable sound quality and power for the respective design. Thanks to clear lines and a superior surface finish, these speakers blend seamlessly into indoor spaces with a sophisticated interior design. They can be used in premium home audio systems as well as in installations for media spaces, presentation areas, and hospitality venues.

Thanks to their balanced sound, they can be perfectly combined with the corresponding models from our built-in speaker series.

- Clear shapes
- High-quality surfaces
- Very linear reproduction
- Wide frequency range



Best Western Hotel Zuffenhausen
PA system with suspended FZ 180 Polar speakers

Buga Erfurt Multi channel sound systen with S 403 speakers





DA 250 Q Polar 2-way on-wall speaker with aluminium housing and passive radiators



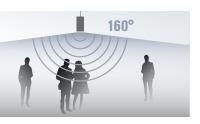
SUB 40 and SUB 40 A
High-performance subwoofers
with double vented bandpass
cabinets



S 2High-end satellite speaker with precise electronic linearization



FZ 140 Polar Cylindric speaker with aluminium housing for suspension from the ceiling



Our two-way on-wall and cylinder speakers with Polar® technology feature an exceptionally wide and constant dispersion angle. The cabinet designs with passive membranes ensure excellent low-frequency reproduction. These speaker models can be used to evenly cover spaces with excellent sound quality even without subwoofers.

On-wall full-range speaker for ceiling and wall mounting with electronic equalization

Power capacity RMS/program 20 / 40 watts, 8 ohms

Diameter 180 mm, depth 70 mm

100 V version, power 2.5/5/10 watts

Model

DA 180 White

DA 180 Black

DA 180 T White

DA 180 T Black

Item no.

0501-0001

0501-0002

0501-0003

0501-0004



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On-Wall Polar Speakers

On-Wall Speakers

DA 180

DA 180 T

DA 250 Polar	2-way on-wall speaker with Polar technology and passive radiators 180° dispersion angle, power capacity RMS/program 30 / 60 watts, 8 ohms Diameter 260 mm, depth 80 mm	DA 250 Polar White DA 250 Polar Black	0511-0001 0511-0002
DA 250T	100 V version, power 7.5/15/30 watts	DA 250 T Polar White	0511-0003
Polar		DA 250 T Polar Black	0511-0004
DA 250 Q	2-way on-wall speaker with Polar technology and passive radiators 180° dispersion angle, power capacity RMS/program 30 / 60 watts, 8 ohms Dimensions 260 \times 260 mm, depth 80 mm	DA 250 Q Polar White	0511-0005
Polar		DA 250 Q Polar Black	0511-0006
DA 250 QT	100 V version, power 7.5/15/30 watts	DA 250 QT Polar White	0511-0007
Polar		DA 250 QT Polar Black	0511-0008

Cylindric Speakers

FZ 110	Cylindric full-range speaker with electronic equalization Power capacity RMS/program 20 / 40 watts, 8 ohms Diameter 110 mm, lenght 190 mm	FZ 110 White FZ 110 Black	0601-0001 0601-0002
FZ 110 T	100 V version, power 2.5/5/10 watts	FZ 110 T White FZ 110 T Black	0601-0003 0601-0004
WH 110	Rotatable/pivotable L-bracket with assembly plate Suitable for RL 110 / FZ 110, incl. safety rope	WH 110 White WH 110 Black	7109-0001 7109-0002
SR 300	Stainless steel rope for pendant mounting, length 3 m, thickness 1 mm, one side with loop	SR 300	7109-0003

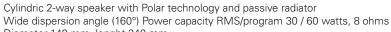
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Diameter 140 mm, lenght 240 mm

FZ 140 T Polar 100 V version, power 7.5/15/30 watts

FZ 140 Polar

FZ 180 Polar

SR 300-16

NEW

WH 140 Rotatable/pivotable L-bracket with assembly plate Suitable for RL 140 / FZ 140, incl. safety rope

SR 300 Stainless steel rope for pendant mounting, length 3 m, thickness 1 mm, one side with loop

Cylindric 2-way speaker with Polar technology and passive radiator Wide dispersion angle (160°), power capacity RMS/program 60 / 120 watts, 8 ohms

Stainless steel rope for pendant mounting, lenght 3 m, thickness 1.6 mm, one side with loop

Diameter 180 mm, lenght 280 mm

FZ 180 T Polar 100 V version, power 7.5/15/30 watts

FZ 180 T Polar White 0603-0003 FZ 180 T Polar Black 0603-0004

Item no.

0602-0001

0602-0002

0602-0003

0602-0004

7109-0004

7109-0005

7109-0003

0603-0001

0603-0002

7109-0008

Model

FZ 140 Polar White

FZ 140 Polar Black

FZ 140 T Polar White

FZ 140 T Polar Black

WH 140 White

WH 140 Black

FZ 180 Polar White

FZ 180 Polar Black

SR 300-16

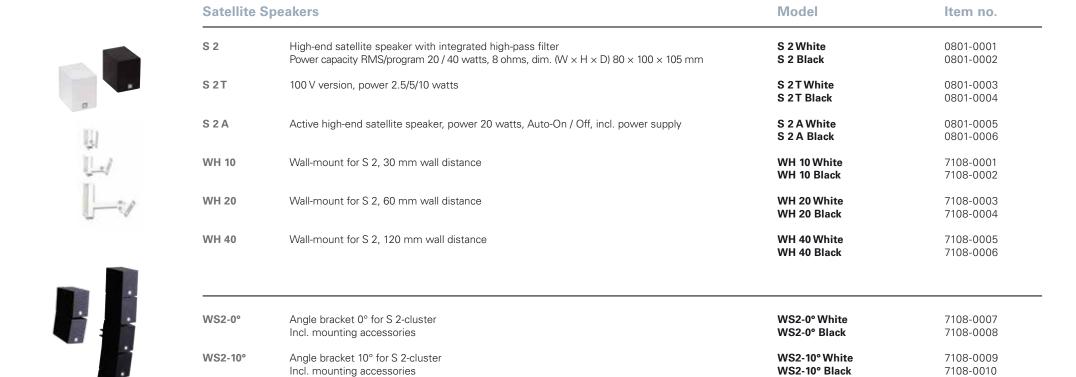
SR 300

Cylindric Speakers with Narrow Dispersion Angle (80°)





FZ 180 CD	Cylindric 2-way speaker with CD characteristics and passive radiator 80° dispersion angle, power capacity RMS/program 60 / 120 watts, 8 ohms Diameter 180 mm, lenght 280 mm	FZ 180 CD White FZ 180 CD Black	0603-0005 0603-0006
FZ 180 CDT	100 V version, power 7.5/15/30 watts	FZ 180 CDT White FZ 180 CDT Black	0603-0007 0603-0008
WH 180	Rotatable/pivotable L-bracket with assembly plate Suitable for RL 180 / FZ 180, incl. safety rope	WH 180 White WH 180 Black	7109-0006 7109-0007



Flat, on-wall speakers with high efficiency designed for use as front speakers in media spaces and surround systems. For full-range reproduction, we recommend combining with our subwoofers.



Satellite Speakers for Media Rooms

Angle bracket 20° for S 2-cluster

Incl. mounting accessories

WS2-20°

S 403	3-way on-wall speaker (for vertical or horizontal mounting) Dispersion angle (H \times V) 100° \times 100°, power capacity RMS/program 80 / 160 watts Impedance 8 ohms, dimensions (W \times H \times D) 80 \times 700 \times 48 mm Precision steele grille, wall-mount not included	S 403 White S 403 Black	0802-0001 0802-0002
S 403 T	100 V version, power 7.5/15/30 watts	S 403 T White S 403 T Black	0802-0003 0802-0004
SH 50	Pivotable wall-mount, for S 403, 30 mm wall distance	SH 50 White SH 50 Black	7110-0003 7110-0004

WS2-20° White

WS2-20° Black

7108-0011

7108-0012

	Monitor S	Speakers	Model	Item no.
	F 4	Very linear 2-way speaker with CD characteristics, dispersion angle (H \times V) 90° \times 90° Power capacity RMS/program 50 / 100 watts, impedance 8 ohms Dimensions (W \times H \times D) 140 \times 250 \times 180 mm, semi-matte varnish, steel grille	F 4 White F 4 Black	0702-0001 0702-0002
П	UB 4	U-bracket for F 4, powder-coated, incl. mounting accessories	UB 4 White UB 4 Black	7114-0001 7114-0002
\Box	UB 4 Q	U-bracket for F 4, horizontal installation, powder-coated, incl. mounting accessories	UB 4 Q White UB 4 Q Black	7114-0003 7114-0004
2	F 6	Very linear 2-way speaker with CD characteristics, dispersion angle (H \times V) 90° \times 90° Power capacity RMS/program 90 / 180 watts, impedance 8 ohms Dimensions (W \times H \times D) 215 \times 350 \times 260 mm, semi-matte varnish, steel grille	F 6 White F 6 Black	0704-0001 0704-0002
	F 6 A	2-way active speaker, power 120 watts + 80 watts XLR and PowerCon connectors	F 6 A Black F 6 A White	0704-0003 0704-0004
	UB 6	U-bracket for F 6, powder-coated, incl. mounting accessories	UB 6 White UB 6 Black	7114-0005 7114-0006
	UB 6 Q	U-bracket for F 6, horizontal installation, powder-coated, incl. mounting accessories	UB 6 Q White UB 6 Q Black	7114-0007 7114-0008
mil)	WH 350	Rotatable / pivotable wall-mount suitable for F4/F6	WH 350 White WH 350 Black	7114-0028 7114-0029

Subwoofers

Our **high-power subwoofers** use dual-vented bandpass cabinets that ensure maximum sound pressure levels with compact dimensions. Due to the minimized surface area of the sound outlets, the subwoofers can be discreetly integrated in indoor spaces or furniture. The **active models** feature class D amplifier modules equipped with limiters, VCAs, and an automatic switch-on function.



Subwoofers		Model	Item no.
SUB 20	Compact double-vented bandpass subwoofer, 6.5" long excursion driver Impedance 8 ohms, power capacity RMS/program 100 / 200 watts Dimensions (W \times H \times D) 190 \times 320 \times 400 mm, semi-matte varnish	SUB 20 White SUB 20 Black	1310-0001 1310-0002
SUB 20 A	Compact active subwoofer, 6.5" long excursion driver Cinch / XLR sym. / speaker level inputs, power 200 watts, Auto-On/Off Dimensions (W \times H \times D) 190 \times 320 \times 400 mm, semi-matte varnish	SUB 20 A White SUB 20 A Black	1310-0003 1310-0004
SUB 40	Compact double-vented bandpass subwoofer, $2\times6.5''$ long excursion driver Impedance 8 ohms, power capacity RMS/program 200 / 400 watts Dimensions (W \times H \times D) 250 \times 400 \times 500 mm, semi-matte varnish	SUB 40 White SUB 40 Black	1320-0001 1320-0002
SUB 40 A	Compact active subwoofer, 2 \times 6.5" long excursion driver Cinch / XLR sym. / speaker level inputs, power 400 watts, Auto-On/Off Dimensions (W \times H \times D) 250 \times 400 \times 500 mm, semi-matte varnish	SUB 40 A White SUB 40 A Black	1320-0003 1320-0004
SUB 80	Compact double-vented bandpass subwoofer, $4\times6.5''$ long excursion driver Impedance 4 ohms, power capacity RMS/program 400 / 800 watts Dimensions (W × H × D) $320\times520\times650$ mm, semi-matte varnish	SUB 80 White SUB 80 Black	1330-0001 1330-0002
SUB 80 A	Compact active subwoofer, 4×6.5 " long excursion driver Cinch / XLR sym. / speaker level inputs, power 800 watts, Auto-On/Off Dimensions (W \times H \times D) 320 \times 520 \times 650 mm, semi-matte varnish	SUB 80 A White SUB 80 A Black	1330-0003 1330-0004



Customized Subwoofers

We offer numerous customized subwoofers with individual cabinet dimensions. This allows an almost invisible integration of the subwoofers into ceilings, walls, wall paneling or built-in furniture. We will be happy to assist you!

DIRECTIONAL SPEAKERS

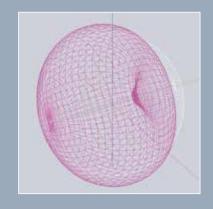
The **RL series** includes directional speakers with a cardioid or supercardioid pattern for targeted sound transmission and high speech intelligibility. They can be used in exhibition centers with limited listening zones as well as for voice amplification in conference spaces, auditoriums, and large public spaces such as foyers, halls, and train and bus stations.

Sounds.

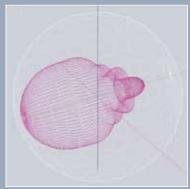
→rlseries

The RL 110 Series was specially designed for targeted sound transmission at exhibitions and museums

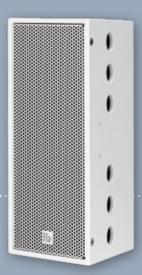
ZKM Karlruhe active directional speakers with integrated motion sensors (RL 110 AX)



The pendant speakers **RL 180 NT** and **RL 180 NT EVAC** with cardioid pattern are dedicated to over large public spaces The backward sound emission to the ceiling is minimized.



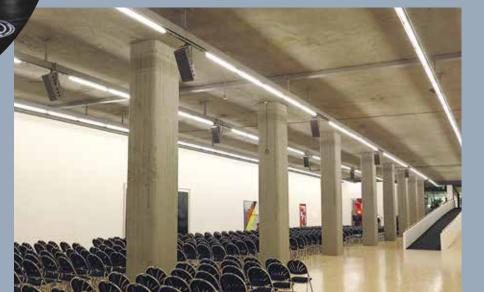
The models RL 110, RL 204 SN and RL 206 SN with supercardioid pattern and narrow beam width are used to cover defined listening areas.



RL 204 SN

2-way directional speaker with supercardoid pattern for targeted sound transmission in rooms with long reverberation time

Kunstbau Munich mobile multi channel PA system with RL 206 SN directional speakers



In the **RL 110 series,** the lateral arrangement of the sound outlets in the cabinet causes a supercardioid pattern to be generated. This design principle provides a high level of sound focus with minimum lateral and rear dispersion across the entire frequency range.



Directional	Speakers with Narrow Dispersion Angle (80°)	Model	Item no.
RL 110	Full-range directional speaker with narrow dispersion angle (80°) Power capacity RMS/program 20 / 40 watts, 8 ohms Diameter 110 mm, lenght 190 mm	RL 110 White RL 110 Black	0901-0001 0901-0002
RL 110 T	100 V version, power 2.5/5/10 watts	RL 110 T White RL 110 T Black	0901-0003 0901-0004
RL 110 A	Active full-range directional speaker with narrow dispersion angle (80°) Power 20 watts, incl. power supply, diameter 110 mm, lenght 190 mm	RL 110 A White RL 110 A Black	0901-0005 0901-0006
RL 110 A-MP3	Active full-range directional speaker with integrated MP3 player and narrow dispersion angle (80°), power 20 watts, incl. power supply Diameter 110 mm, lenght 190 mm	RL 110 A-MP3 White RL 110 A-MP3 Black	0901-0007 0901-0008
RL 110 AX	Active full-range directional speaker with integrated motion sensor and narrow dispersion angle (80°), power 20 watts, incl. power supply Diameter 110 mm, lenght 190 mm	RL 110 AX White RL 110 AX Black	0901-0009 0901-0010
RL 110 AX- MP3	Active full-range directional speaker with integrated motion sensor, MP3 player and narrow dispersion angle (80°) Power 20 watts, incl. power supply, diameter 110 mm, lenght 190 mm	RL 110 AX-MP3 White RL 110 AX-MP3 Black	0901-0011 0901-0012

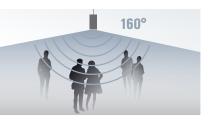






The patented active directional loudspeaker **RL 110 PerZonic®** automatically adapts the output volume to the ambient noise of the listening zone. The control settings can be adjusted to the respective sound environment.

RL 110 PerZonic	PerZonic active directional speaker with volume control and narrow dispersion angle (80°) Power 20 watts, incl. power supply, diameter 110 mm, lenght 190 mm	RL 110 PerZonic White RL 110 PerZonic Black	0901-0013 0901-0014
WH 110	Rotatable/pivotable L-bracket with assembly plate Suitable for RL 110 / FZ 110, incl. safety rope	WH 110 White WH 110 Black	7109-0001 7109-0002
SR 300	Stainless steel rope for pendant mounting, lenght 3 m, thickness 1 mm, one side with loop	SR 300	7109-0003

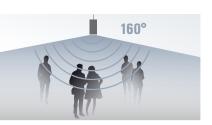


Thanks to its cardioid pattern, the **RL 180 N Polar**® is especially suitable for consistent sound transmission from the in-ceiling sound system in indoor spaces with long reverberation times.





Directional Polar Speakers with Cardioid Pattern (160°)		Model	Item no.
RL 180 N Polar	2-way speaker with Polar technology and cardioid pattern, high efficiency and wide dispersion angle (160°), power capacity RMS/program 60 / 120 watts 8 ohms, diameter 180 mm, lenght 280 mm	RL 180 N Polar White RL 180 N Polar Black	0903-0001 0903-0002
RL 180 NT Pola	r 100 V version, power 7.5/15/30 watts	RL 180 NT Polar White RL 180 NT Polar Black	0903-0003 0903-0004
WH 180	Rotatable /pivotable Lbracket with assembly plate Suitable for RL 180 / FZ 180, incl. safety rope	WH 180 White WH 180 Black	7109-0006 7109-0007
SR 300-16	Stainless steel rope for pendant mounting Lenght 3 m, thickness 1.6 mm, one side with loop	SR 300-16	7109-0008



The **RL 180 NT EVAC** is a 2-way speaker that is certified in accordance with **EN54-24** and designed to be suspended from ceilings in indoor spaces with long reverberation times. The proven Polar technology achieves a constantly wide dispersion angle at medium and high frequencies. The cardioid pattern at low frequencies minimizes sound dispersion towards the back, effectively suppressing interference caused by sound reflections from the ceiling. As such, just a few RL 180 NT EVAC speakers can be used to achieve exceptionally consistent sound transmission with high speech intelligibility, even in acoustically challenging spaces.



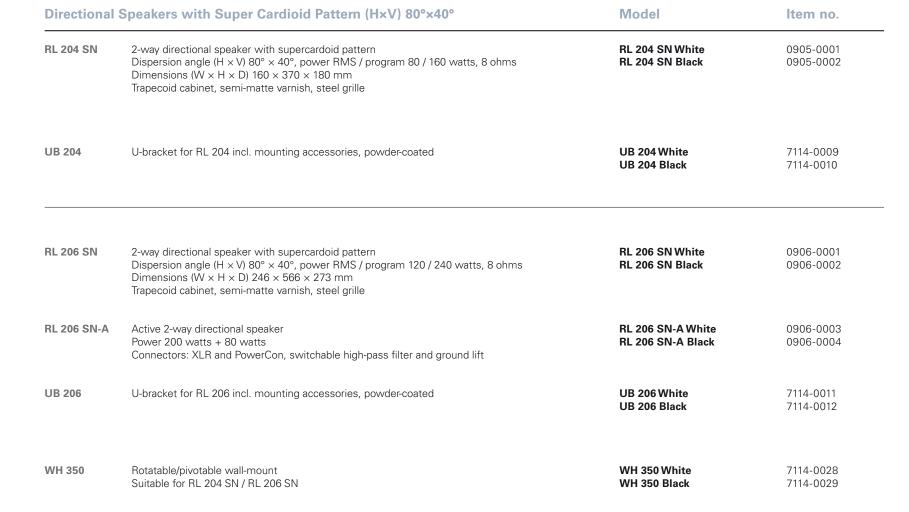
Directional Polar Speakers with Cardioid Pattern (160°) for Voice Alarm Systems

RL 180 NT EVAC	2-way speaker with Polar technology and cardioid pattern, high efficiency and wide dispersion angle (160°) power capacity RMS/program 60 / 120 watts, 8 ohms Diameter 180 mm, lenght 280 mm	RL 180 NT EVAC White RL 180 NT EVAC Black	0904-0001 0904-0002
WH 180	Rotatable/pivotable L-bracket with assembly plate Suitable for RL 180 / FZ 180, incl. safety rope	WH 180 White WH 180 Black	7109-0006 7109-0007
SR 300-16	Stainless steel rope for pendant mounting Lenght 3 m. thickness 16 mm. one side with loop	SR 300-16	7109-0008



The **RL 204 SN** and **RL 206 SN** models are PA speakers with a supercardioid pattern. The cabinet design with lateral sound outlets that emit inversely phased sound creates a high level of directivity across the entire frequency range. These speakers can also be used in spaces with long reverberation times to create sound systems with high speech intelligibility and clear reproduction of music. For full-range applications, we recommend combining with our subwoofers.





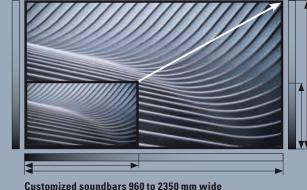


DISPLAY SPEAKERS AND SOUNDBARS

Our **display speakers** and **soundbars** are designed for video conferences and high-quality sound reproduction in media spaces. The active stereo systems are equipped with a digital signal processor (DSP) and multiband limiters. They offer a broad frequency range and facilitate high speech intelligibility.

The DL-A 2.2 and SB-A 2.2 models are active 2-way systems with integrated subwoofers and higher output power. They are especially suited to larger indoor spaces and superior music reproduction.

Our new models **DLA 2.4 DSC** and **DLX-A 2.8 DSC** with beam steering have been developed specifically with large displays and LED walls in mind.



Customized display speakers 700 to 4000 mm high





GE Additive Garching, Sound system for media rooms and beam steering line arrays for LED wall



The vertical beam direction of the DSP-controlled line arrays is set using presets in our new LB AUDIO CONTROL Software.

NEW ACTIVE DISPLAY SPEAKERS WITH BEAM STEERING

The new active display speakers DL-A 2.4 DSC AlArray and DLX-A 2.8 DSC AlArray are designed for combinations with large displays, split walls, and LED walls. Both models feature an adjustable vertical beam direction and can be optimally directed towards listeners.





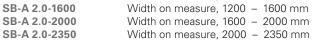






Active Soundbars

SB-A 2.0





Active stereo soundbar with integrated DSP

 2×50 watts, Auto-On, external power supply, dim. (W \times H \times D) $960 \times 80 \times 48$ m



Active stereo soundbar with integrated subwoofers and DSP $2 \times 50 + 2 \times 100$ watts, Auto-On, external power supply

Dimensions (W \times H \times D) 1200 \times 80 \times 103 mm

Customized Versions

SB-A 2.2-1600	Width on measure, 1200 - 1600 mm
SB-A 2.2-2000	Width on measure, 1600 - 2000 mm
SB-A 2.2-2350	Width on measure, 2000 - 2350 mm

Fee SB Customized version fee SB (one-time charge per display type and order) SB-A 2.2-1600 Black 1223-0002 SB-A 2.2-2000 Black 1223-0003 SB-A 2.2-2350 Black 1223-0004

Fee SB 1213-0006

CISPIQU Series







Soundbars for Video conferences with integrated Camera

Active soundbars with integrated camera and microphone array for huddle rooms and medium-sized conference spaces.

SB-A 2.0 CAM+ Active stereo soundbar with integrated camera and microphone (Huddly IQ)

2 × 50 watts, Auto-On, external power supply Dimensions (W \times H \times D) 960 \times 80 \times 48 mm

Customized Versions

Width on measure, 960 - 1200 mm SB-A 2.0-1200 CAM+ SB-A 2.0-1600 CAM+ Width on measure, 1200 - 1600 mm SB-A 2.0-2000 CAM+ Width on measure, 1600 - 2000 mm

Customized version fee SB (one-time charge per display type and order) Fee SB

SB-A 2.0 Black CAM+

SB-A 2.0-1200 Black CAM+

SB-A 2.0-1600 Black CAM+

Model

Fee SB

SB-A 2.0 Black

SB-A 2.0-1200 Black

SB-A 2.0-1600 Black

SB-A 2.0-2000 Black

SB-A 2.0-2350 Black

SB-A 2.2 Black

1215-0006

1215-0007

1215-0005

Item no.

1213-0001

1213-0002

1213-0003

1213-0004

1213-0005

1213-0006

1223-0001

SB-A 2.0-2000 Black CAM+ 1215-0008 Fee SB

1213-0006

	Mounts for Sou	undbars	Model	Item no.
	SB-VESA	VESA mount for display soundbars SB-A 2.0 and SB-A 2.2	SB-VESA Black	7111-0012
E 3	WH 80	Adjustable wall-mount from 35 up to 110 mm wall distance (1 pair per soundbar)	WH 80 Black Pair	7111-0013
	Active Display	Speakers		
	DL-A 2.0	Active stereo speaker pair with integrated DSP 2×50 watts, Auto-On, external power supply Dimensions (W \times H \times D) $80 \times 700 \times 48$ mm	DL-A 2.0 Black Pair	1113-0001
	Customized Version	ons		
	DL-A 2.0-900 DL-A 2.0-1200 DL-A 2.0-1600	Height on measure, 600 – 900 mm Height on measure, 900 – 1200 mm Height on measure, 1200 – 1600 mm	DL-A 2.0-900 Black DL-A 2.0-1200 Black DL-A 2.0-1600 Black	1113-0002 1113-0003 1113-0004
	Fee DL	Customized version fee DL (one-time charge per display type and order)	Fee DL	1113-0005
000	DL-A 2.2	Active stereo speaker pair with integrated subwoofers and DSP, pair, $2 \times 50 + 2 \times 100$ watts, Auto-On, external power supply Dimensions (W × H × D) $80 \times 700 \times 103$ mm	DL-A 2.2 Black Pair	1123-0001
	Customized Version	ons		
9	DL-A 2.2-900 DL-A 2.2-1200 DL-A 2.2-1600	Height on measure, 700 – 900 mm Height on measure, 900 – 1200 mm Height on measure, 1200 – 1600 mm	DL-A 2.2-900 Black DL-A 2.2-1200 Black DL-A 2.2-1600 Black	1123-0002 1123-0003 1123-0004
0	Fee DL	Customized version fee DL (one-time charge per display type and order)	Fee DL	1113-0005
	VESA-Mounts	for Display Speakers		
	DL-VESA 1150 DL-VESA 1400 DL-VESA 1650 DL-VESA 1900 DL-VESA 2150 DL-VESA 2400	VESA-mount for display width 900 – 1150 mm VESA-mount for display width 1150 – 1400 mm VESA-mount for display width 1400 – 1650 mm VESA-mount for display width 1650 – 1900 mm VESA-mount for display width 1900 – 2150 mm VESA-mount for display width 2150 – 2400 mm	DL-VESA 1150 Black DL-VESA 1400 Black DL-VESA 1650 Black DL-VESA 1900 Black DL-VESA 2150 Black DL-VESA 2400 Black	7111-0006 7111-0007 7111-0008 7111-0009 7111-0010 7111-0011
Ί	Wall-mounts fo	or Display Speakers		
П	SH 50	Pivotable wall-mount, 30 mm wall distance (2 pieces per speaker pair)	SH 50 Black	7110-0004
	WH 80	Adjustable wall-mount from 35 up to 110 mm wall distance (2 pairs per speaker pair)	WH 80 Black Pair	7111-0013

Active Display Speakers with Beam Steering for large screens

The new **active display speakers** DL-A 2.4 DSC AlArray and DLX-A 2.8 DSC AlArray are designed for combinations with large displays, split walls, and LED walls. Both models feature an adjustable vertical dispersion direction and can be optimally directed towards listeners regardless of installation height. The dispersion direction is set by selecting the corresponding preset in our newly developed **LB AUDIO CONTROL Software** in 1° up to 3° increments. The 3-way systems offer two power levels (2 x 500 watts and 2 x 1000 watts) and include integrated subwoofers. They are ideal for high-quality reproduction of speech and music, even in larger indoor spaces. We also manufacture custom versions of both models tailored to the relevant display height.





Active Display Speakers with Beam Steering

DL-A 2.4 DSC AlArray NEW	Active 3-way stereo speaker pair with abjustable beam direction Power 2 x 500 watts, DSP, Ethernet, Auto On, Inputs symmetrical + cinch External power supply, dimensions (W x H x D) $80 \times 1080 \times 103$ m	DL-A 2.4 DSC AlArray Black Paar	1133-0001
Customized Versions			
DL-A 2.4 DSC-1600 DL-A 2.4 DSC-2000 DL-A 2.4 DSC-2350	Height on measure, 1080 – 1600 mm Height on measure, 1600 – 2000 mm Height on measure, 2000 – 2350 mm	DL-A 2.4 DSC-1600 Black DL-A 2.4 DSC-2000 Black DL-A 2.4 DSC-2350 Black	1133-0002 1133-0003 1133-0004
Fee DL	Customized version fee DL (one-time charge per display type and order)	Fee DL	1113-0005



DL-A 2.4 DSC AlArray

Model

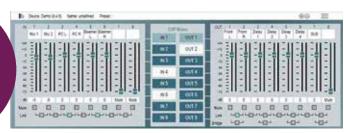
Active display speaker pair with abjustable beam direction for conference rooms and medium size spaces.

Item no.

DL-A 2.4 DSC AlArray and DLX-A 2.8 DSC AlArray

The vertical beam direction of the DSP controlled line arrays is set by selecting the corresponding preset in our newly developed **LB AUDIO CONTROL Software** in 1° up to 3° increments within a range of $+/-30^\circ$.





Active Display Speakers with Beam Steering for large screens





Active Display Speakers with Beam Steering		Model	Item no.
DLX-A 2.8 DSC AlArray	Active 2-way stereo speaker pair with integrated subwoofers and abjustable beam direction, power 2 \times 1000 watts, external power supply Dimensions (W \times H \times D) 150 \times 2400 \times 170 mm	DLX-A 2.8 DSC AlArray Black Pair	1135-0001
DLX-A 2.8 DSC 4000	Height on measure, 2400 – 4000 mm	DLX-A 2.8 DSC 4000 Black Pair	1135-0002
Fee DL	Customized version fee DL (one-time charge per display type and order)	Fee DL	1113-0005



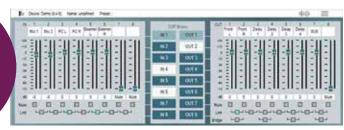
DLX-A 2.8 DSC AIArray

Active display speaker pair with integrated subwoofers and abjustable beam direction for large spaces.

DL-A 2.4 DSC AlArray and DLX-A 2.8 DSC AlArray

The vertical beam direction of the DSP controlled line arrays is set by selecting the corresponding preset in our newly developed **LB AUDIO CONTROL Software** in 1° up to 3° increments within a range of +/- 30°.





L COLUMN SPEAKERS

The line arrays of the **ZL series** are powerful speaker systems for targeted sound dispersion with a high level of directivity. As well as models with a variety of fixed dispersion characteristics, we also provide multichannel line arrays with adjustable dispersion characteristics. All models feature an elegant cabinet that is just 8 cm wide and are fitted with high-efficiency audiophile full-range speakers, ensuring high speech intelligibility as well as outstanding music reproduction. Due to the large number of sound sources, the ZL series has an extremely low feedback tendency when using a microphone.

- Low feedback tendency
- Audiophile full-range speaker
- Very good low frequency sound
- Speech and music
- Elegant slim design
- A variety of fixed and adjustable dispersion characteristics



LB AUDIO **CONTROL**

Browser-based Software for our new DSPs Interface: Ethernet Download



feature vertical directivity that can be set using our new LB AUDIO **CONTROL Software.** This allows targeted sound transmission in

ZL Serie

Line arrays 480 to 2500 mm high and with a wide frequency range for reproduction of speech and music. The various models come with fixed or electronically adjustable directivity (beam steering) and can be operated individually or in multi-unit line arrays.

Schattdecor Rohrdorf PA system with beam steering line arrays

> Lenbachhaus Munich Multi channel sound system with line arrays and wireless speakers

Column Speakers

The passive line arrays in the **ZL series** offer different vertical dispersion characteristics and a wide linear frequency range. They suited for high quality reproduction of speech and music with low feedback response.











Column Speakers		Model	Item no.
ZL 50	Line array, with electronic equalization, dispersion angle (H \times V) 120° \times 20° Power capacity RMS/program 90 / 180 watts, 8 ohms Dimensions (W \times H \times D) 80 \times 480 \times 110 mm, brackets not included	ZL 50 White ZL 50 Black	1002-0001 1002-0002
ZL 50 T	100 V version, 7.5/15/30 watts	ZL 50 T White ZL 50 T Black	1002-0003 1002-0004
ZL 100	Line array, with electronic equalization, dispersion angle(H \times V) 120° \times 10° Power capacity RMS/program 180 / 360 watts, 8 ohms Dimensions (W \times H \times D) 80 \times 960 \times 110 mm, brackets not included	ZL 100 White ZL 100 Black	1003-0001 1003-0002
ZL 100 T	100 V version, 15/30/60 watts	ZL 100 T White ZL 100 T Black	1003-0003 1003-0004
ZL 104	4-way line array with asymmetric dispersion Characteristics (-7° vertical), dispersion angle (H × V) 120° × 20° Power capacity RMS/program 180 / 360 watts 8 ohms, dimensions (W × H × D) 80 × 960 × 110 mm Brackets not included	ZL 104 White ZL 104 Black	1004-0001 1004-0002
ZL 104 T	100 V version, 15/30/60 watts	ZL 104 T White ZL 104 T Black	1004-0003 1004-0004
ZL 108	3-way line array, dispersion angle (H \times V) 120° \times 40° Power capacity RMS/program 140 /280 watts, 8 ohms Dimensions (W \times H \times D) 80 \times 960 \times 110 mm Brackets not included	ZL 108 White ZL 108 Black	1005-0001 1005-0002
ZL 108 T	100 V version, 15/30/60 watts	ZL 108 T White ZL 108 T Black	1005-0003 1005-0004
Mounting	Accessories for ZL Series		
SH 20	Pivotable wall-mount for ZL 50 30 mm wall distance	SH 20 White SH 20 Black	7110-0001 7110-0002
SH 50	Pivotable wall-mount for ZL 100 up to ZL 250 30 mm wall distance	SH 50 White SH 50 Black	7110-0003 7110-0004
W-ZL	L-bracket (pair) for ZL series	W-ZL White W-ZL Black	7110-0005 7110-0006



Passive multichannel **line arrays** for operation with the multichannel DSP power amplifiers of the PA series. The vertical directivity can be adjusted using our newly developed, browser-based **LB AUDIO CONTROL Software**. The line arrays can be combined to create longer arrays.

Passive Mul	ti-Channel Column Speakers	Model	Item no.	
ZL 125 AlArray	Passive 4-channel high-power line array with AlArray technology for 4-channel active operation, adjustable vertical directivity Power capacity RMS/program 4 × 60 / 120 watts, 8 ohms Dimensions (W × H × D) 80 × 1250 × 110 mm, brackets not included	ZL 125 AlArray White ZL 125 AlArray Black	1006-0001 1006-0002	
ZL 200 AlArray	Passive 6-channel high-power line array with AlArray technology for 6-channel active operation, adjustable vertical directivity Power capacity RMS/program 6 \times 60 / 120 watts, 8 ohms Dimensions (W \times H \times D) 80 \times 1920 \times 110 mm, brackets not included	ZL 200 AlArray White ZL 200 AlArray Black	1007-0001 1007-0002	
ZL 250 AlArray	Passive 8-channel high-power line array with AlArray technology for 8-channel active operation, adjustable vertical directivity Power capacity RMS/program 8 × 60 / 120 watts, 8 ohms Dimensions (W × H × D) 80 × 2500 × 110 mm, brackets not included	ZL 250 AlArray White ZL 250 AlArray Black	1008-0001 1008-0002	

Active, DSP-controlled line arrays with adjustable vertical directivity and a long throw ensure consistent sound transmission across large spaces. They offer an exceptionally wide frequency range and are ideally suited for both speech and music reproduction.

Active Column Speakers with Integrated DSP

ZL 200 A-DSC	Active 6-channel line array with DSP, the vertical directivity is adjustable via our LB AUDIO CONTROL Software, 24 \times 2.5" long excursion full-range drivers Power 6 \times 100 watts, input: XLR sym., interface: Ethernet Dimensions (W \times H \times D) 80 \times 1920 \times 110 mm, brackets not included	ZL 200 A-DSC AlArray White	1009-0001
AlArray		ZL 200 A-DSC AlArray Black	1009-0002
ZL 250 A-DSC AlArray	Active 8-channel line array DSP, the vertical directivity is adjustable via our LB AUDIO CONTROL Software, 32×2.5 " long excursion full-range drivers Power 8 × 100 watts, input: XLR sym., interface: Ethernet Dimensions (W × H × D) $80 \times 2500 \times 110$ mm, brackets not included	ZL 250 A-DSC AlArray White ZL 250 A-DSC AlArray Black	1010-0001 1010-0002



The vertical dispersion characteristics of the line arrays can be set using our new LB AUDIO CONTROL Software.



LB AUDIO CONTROL

Browser-based Software for our new DSPs Interface: Ethernet Download www.lb-lautsprecher.de



PA Series

DSP power amplifiers for driving the passive multi channel line arrays starting on page 43

B PA SPEAKERS

Universal **PA speakers** for the professional user. All models offer precise acoustic dispersion with a constant beam width and are optimized for a high sound pressure level with a balanced sound. The speaker systems offer precise tonal balance so that they can be perfectly combined in complex PA systems for constant sound transmission in larger listening areas.

The line array module F 208 with its patented AlArray° technology is equipped with a high-frequency array with a switchable dispersion angle of 120° x 10° or 120° x 30°. This allows the throw to be adjusted to the respective acoustic situation. Speakers can be operated individually or as a line array with two to four elements.



F 208 AlArray

The line array module with patended AlArray technology features a dispersion pattern that can be switched from 120° x 10° to 120° x 30°



Freilichtbühne St. Martin in Passeier South Tyrol PA system with line arrays

Harry Klein Munich F 8 A active DJ monitor speakers



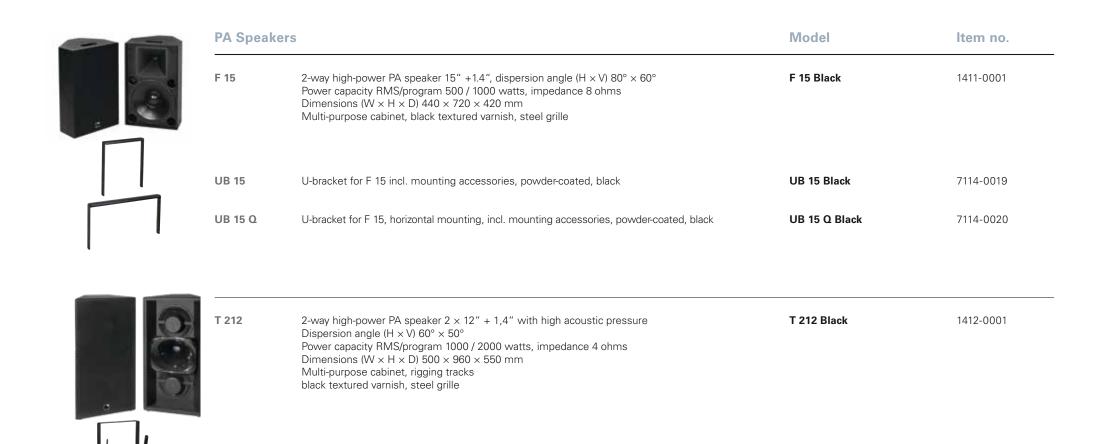
Crowns Club Munich, 48 channel PA system



B 212 B Subwoofer

Double-vented bandpass subwoofer for maximum output with small dimensions

	PA Speake	ers	Model	Item no.
	F 8	Compact 2-way PA speaker 8" + 1", dispersion angle (H \times V) 80° \times 80° Power capacity RMS/program 250 / 500 watts, impedance 8 ohms Dimensions (W \times H \times D) 250 \times 400 \times 270 mm Multi-purpose cabinet, black textured varnish, steel grille	F 8 Black	1408-0001
	F 8 A	2-way active speaker, power 400 watts + 80 watts XLR and PowerCon connectors, switchable high-pass filter and ground lift	F 8 A Black	1408-0002
	UB 8	U-bracket for F 8 incl. mounting accessories, powder-coated, black	UB 8 Black	7114-0013
	UB 8 Q	U-bracket for F 8, horizontal mounting, incl. mounting accessories, powder-coated, black	UB 8 Q Black	7114-0014
1 -4	WH 350	Rotatable/pivotable wall-mount, suitable for F 8	WH 350 Black	7114-0029
	F 10	Compact 2-way PA speaker 10" + 1", dispersion angle (H \times V) 80° \times 60° Power capacity RMS/program 300/600 watts, impedance 8 ohms Dimensions (W \times H \times D) 320 \times 520 \times 340 mm Multi-purpose cabinet, black textured varnish, steel grille	F 10 Black	1409-0001
	F 10 A	2-way active speaker, power 400 watts + 80 watts XLR and PowerCon connectors, switchable high-pass filter and ground lift	F 10 A Black	1409-0002
	UB 10	U-bracket for F 10 incl. mounting accessories, powder-coated, black	UB 10 Black	7114-0015
	UB 10 Q	U-bracket for F 10, horizontal mounting, incl. mounting accessories, powder-coated, black	UB 10 Q Black	7114-0016
	WH 400	Rotatable/pivotable wall-mount, suitable for F 10	WH 400 Black	7114-0031
	F 12	2-way high-power PA speaker 12"+ 1.4", dispersion angle (H \times V) 80° \times 60° Power capacity RMS/program 500 / 1000 watts, impedance 8 ohms Dimensions (W \times H \times D) 380 \times 640 \times 360 mm Multi-purpose cabinet, black textured varnish, steel grille	F 12 Black	1410-0001
	UB 12	U-bracket for F 12 incl. mounting accessories, powder-coated, black	UB 12 Black	7114-0017
	UB 12 Q	U-bracket for F 12, horizontal mounting, incl. mounting accessories, powder-coated, black	UB 12 Q Black	7114-0018
39				



UB 212 Black

7114-0021

U-bracket for T 212 incl. mounting accessories, powder-coated, black

UB 212



The **line array module F 208** with its patented **AlArray® technology** is equipped with a high-frequency array with a switchable dispersion angle of 120° x 10° or 120° x 30°. This allows the throw to be adjusted to the respective sound environment. Speakers can be operated individually or as a line array with two to four elements.



	Line Array P	A Speaker with Switchable Dispersion Angle	Model	Item no.
	F 208 AlArray	2-way PA Speaker 2 \times 8" + 6 \times 1" with AlArray technology and rotatable horn Switchable dispersion angle(H \times V) 120° \times 10° / 120° \times 30° Power capacity RMS/program 400 / 800 watts, impedance 8 ohms Dimensions (W \times H \times D) 270 \times 520 \times 380 mm Multi-purpose cabinet, black textured varnish, steel grille	F 208 AlArray Black	1413-0001
П	UB 208	U-bracket for F 208 incl. mounting accessories, powder-coated, black	UB 208 Black	7114-0022
	UB 208 Q	U-bracket for F 208, horizontal mounting, incl. mounting accessories powder-coated, black	UB 208 Q Black	7114-0023
	MS 208	Mounting set to connect two F 208 modules in line arrays Powder-coated, black	MS 208 Black	7114-0024
	8	Further mounting accessories on request		



Rigging frame

 FR 208
 Rigging frame for line arrays consisting of 2 – 4 x F 208 AlArray
 FR 208
 7114-0025

We will be happy to assist you!

PA-Subwoofer

The PA series are **heavy-duty subwoofers** that can be combined with our PA speakers and line arrays. They are designed for high sound pressure levels and continuous operation at maximum power. The new models B 12 B and B 212 B have been developed for an optimal ratio of sound pressure to size.

	PA-Subw	oofer	Model Item no.	
	B 12 B	Compact bandpass subwoofer 12" long excursion driver, impedance 8 ohms Power capacity RMS/program 500/1000 watts Dimensions (W × H × D) 430 × 300 × 400 mm Textured varnish, black, rubber feet, recessed handles	B 12 B Black	1422-0001
.00	B 212 B	Compact bandpass subwoofer 2 × 12" long excursion driver, impedance 4 ohms Power capacity RMS/program 1000/2000 watts Dimensions (W × H × D) 380 × 640 × 580 mm Textured varnish, black, rubber feet, recessed handles	B 212 B Black	1423-0001
	B 18 B	Bandpass subwoofer 18" long excursion driver, impedance 8 ohms Power capacity RMS/program 700 / 1400 watts Dimensions (W × H × D) 540 × 900 × 620 mm Textured varnish, black, rubber feet, recessed handles	B 18 B Black	1425-0001
	B 218	High-performance subwoofer 2 × 18" long excursion driver, impedance 4 ohms Power capacity RMS/program 1400/2800 watts Dimensions (W × H × D) 600 × 1200 × 720 mm Textured varnish, black, rubber feet, recessed handles	B 218 Black	1426-0001

Front grille



AMPLIFIER AND CONTROLLER AND ACCESSORIES

To control our speakers, we offer a comprehensive series of amplifiers and controllers that harmonize perfectly with our speakers and enable optimally tailored PA systems with maximum operational reliability. We develop and produce **compact amplifiers** as well as **multichannel 19" power amplifiers** with two to eight channels and output power of 50 to 800 watts per channel. All amplifier models are available with or without DSP.

The 19" power amplifiers can be fitted with one or two input modules for analog input signals and/or **Dante audio networks**. Our newly developed, browser-based **LB AUDIO CONTROL Software** is used to program and control amplifiers and controllers via Ethernet.

Our range is supplemented by a variety of accessories that can be used to meet specific requirements and implement particular operating concepts.

eposeries











Deutsche Schule Meran PA system



8-CHANNEL DANTE INTERFACE FOR PA SERIES

The Dante interface features two RJ 45 ports for audio over Ethernet (primary/secondary). If the primary network connection fails, the module automatically switches to the secondary connection.

Intelligent amplification. High Tech made in Munich



Compact Amplifiers

Our **compact power amplifiers** with automatic on/off functionality and a standby contact are designed for decentralized installation (even in inaccessible locations) and for assembly in 19" racks. The PA 250 SD and PA 2100 SD models are additionally fitted with symmetrical inputs, bridge switches, switchable high-pass filters, and VCA inputs. They can be regulated using the WP-V and RP-V volume regulation panels or by means of the DV module and up/down contacts.

≡pa series	Compact Amplifiers		Model	Item no.
112 T	PA 230	Compact 2-channel amplifier with Auto-On/Off $2\times30\text{W}$ / 4 ohms, $2\times20\text{W}$ /8 ohms Dimensions (W × H × D) 110 × 43 × 220 mm, ½ 19", 1 U	PA 230	3001-0001
- Indiana	PA 250 SD	Remote-controllable digital 2-channel amplifier with Auto-On/Off $2\times50\text{W/4}$ ohms, $2\times40\text{W/8}$ ohms, $1\times100\text{W/8}$ ohms, $1\times140\text{W/4}$ ohms Dimensions (W \times H \times D) 110 \times 43 \times 220 mm, ½ 19", 1 U	PA 250 SD	3002-0001
The same of the sa	PA 2100 SD	Remote-controllable digital 2-channel amplifier with Auto-On/Off $2\times100\mathrm{W}/4$ ohms, $2\times60\mathrm{W}/8$ ohms, $1\times200\mathrm{W}/8$ ohms, $1\times200\mathrm{W}/4$ ohms Dimensions (W × H × D) $110\times43\times220$ mm, $1/4$ 19", 1 U	PA 2100 SD	3002-0002

Compact Amplifiers with DSP

Compact power amplifiers with integrated DSP. The power amplifiers are programed via Ethernet using our new LB AUDIO CONTROL Software. They are equipped with VCA inputs, enabling external volume control using our WP-V and RP-V volume control panels or using a DV module as well as automatic on/off functionality and a standby contact.

Compact Amplifiers with DSP

) = . D.	PA 250 S-DSC	Remote-controllable digital 2-channel amplifier with integrated DSP $2\times50\text{W}/4$ ohms, $2\times40\text{W}/8$ ohms, $1\times100\text{W}/8$ ohms, $1\times140\text{W}/4$ ohms Dimensions (W × H × D) $110\times43\times240$ mm, $1/419$ ", 1 U	PA 250 S-DSC	3003-0001
	PA 2100 S-DSC	Remote-controllable digital 2-channel amplifier with integrated DSP $2\times100\text{W}/4$ Ohm, $2\times60\text{W}/8$ ohms, $1\times200\text{W}/8$ ohms, $1\times200\text{W}/4$ ohms Dimensions (W \times H \times D) $110\times43\times240$ mm, $1/4$ 19", 1 U	PA 2100 S-DSC	3003-0002

19" Multi-Channel Amplifiers

Remote control **19" multichannel power amplifiers** with two to eight channels and output power of 100 to 800 watts per channel. These highly efficient power amplifiers deliver an outstanding sound with low heat build-up. The switchable automatic on/off functionality for each channel switches to an energy-saving Sleep mode when not receiving an input signal. The amplifiers can be equipped with a second input module such as the **Dante interface** to process mixed signal types. They are equipped with VCA inputs for external volume control as well as contacts for remote activation and fault signalling.

≡pa series	19" Multi-C	hannel Amplifiers	Model	Item no.
	PA 2100	2× Line In Sym., 2×100 W/2-8 ohms, 1 U 2× Line In Cinch 2× In Dante-Module	PA 2100 PA 2100 CINCH PA 2100 DANTE	3106-0001 3106-0002 3106-0003
	PA 4100	$4 \times$ Line In Sym., 4×100 W/2-8 ohms, 1 U $4 \times$ Line In Cinch $4 \times$ In Dante-Module	PA 4100 PA 4100 CINCH PA 4100 DANTE	3106-0004 3106-0005 3106-0006
	PA 6100	6× Line In Sym., 6×100 W/2–8 ohms, 1 U 6× Line In Cinch 6× In Dante-Module	PA 6100 PA 6100 CINCH PA 6100 DANTE	3106-0007 3106-0008 3106-0009
	PA 8100	8× Line In Sym., 8×100 W/2-8 ohms, 1 U 8× Line In Cinch 8× In Dante-Module	PA 8100 PA 8100 CINCH PA 8100 DANTE	3106-0010 3106-0011 3106-0012
	PA 2200	2× Line In Sym., 2×200 W/2–8 ohms, 1 U 2× Line In Cinch 2× In Dante-Module	PA 2200 PA 2200 CINCH PA 2200 DANTE	3106-0013 3106-0014 3106-0015
	PA 4200	$4 \times$ Line In Sym., 4×200 W/2-8 ohms, 1 U $4 \times$ Line In Cinch $4 \times$ In Dante-Module	PA 4200 PA 4200 CINCH PA 4200 DANTE	3106-0016 3106-0017 3106-0018
	PA 6200	6× Line In Sym., 6×200 W/2-8 ohms, 1 U 6× Line In Cinch 6× In Dante-Module	PA 6200 PA 6200 CINCH PA 6200 DANTE	3106-0019 3106-0020 3106-0021
	PA 8200	8× Line In Sym., 8×200 W/2-8 ohms, 1 U 8× Line In Cinch 8× In Dante-Module	PA 8200 PA 8200 CINCH PA 8200 DANTE	3106-0022 3106-0023 3106-0024

=pa series	19" Multi-	Channel Amplifiers	Model	Item no.
	PA 2400	2× Line In Sym., 2×400 W/2–8 ohms, 1 U 2× Line In Cinch 2× In Dante-Module	PA 2400 PA 2400 CINCH PA 2400 DANTE	3106-0025 3106-0026 3106-0027
	PA 4400	$4\times$ Line In Sym., $4\times400\text{W}/2-8$ ohms, 1 U $4\times$ Line In Cinch $4\times$ In Dante-Module	PA 4400 PA 4400 CINCH PA 4400 DANTE	3106-0028 3106-0029 3106-0030
	PA 6400	6× Line In Sym., 6×400 W/2-8 ohms, 2 U 6× Line In Cinch 6× In Dante-Module	PA 6400 PA 6400 CINCH PA 6400 DANTE	3106-0031 3106-0032 3106-0033
	PA 8400	8× Line In Sym., 8×400 W/2-8 ohms, 2 U 8× Line In Cinch 8× In Dante-Module	PA 8400 PA 8400 CINCH PA 8400 DANTE	3106-0034 3106-0035 3106-0036
	PA 2800	$2\times$ Line In Sym., $2\times$ 800W / 2-4 ohms 2 x 400 W / 8 ohms, 1 U $2\times$ Line In Cinch $2\times$ In Dante-Module	PA 2800 PA 2800 CINCH PA 2800 DANTE	3106-0037 3106-0038 3106-0039
	PA 4800	$4\times$ Line In Sym., $4\times$ 800W / 2-4 ohms 4×400 W / 8 ohms, 2 U $4\times$ Line In Cinch $4\times$ In Dante-Module	PA 4800 PA 4800 CINCH PA 4800 DANTE	3106-0040 3106-0041 3106-0042
	PA 6800	$6\times$ Line In Sym., $6\times$ 800W / 2-4 ohms 6×400 W / 8 ohms, 2 U $6\times$ Line In Cinch $6\times$ In Dante-Module	PA 6800 PA 6800 CINCH PA 6800 DANTE	3106-0043 3106-0044 3106-0045
	PA 8800	$8\times$ Line In Sym., $8\times100\text{W/}2-8$ ohms, $8\times800\text{W}/2-4$ ohms $8\times400\text{W}/8$ ohms, 2 U $8\times$ Line In Cinch $8\times$ In Dante-Module	PA 8800 PA 8800 CINCH PA 8800 DANTE	3106-0046 3106-0047 3106-0048

19" Multi-Channel Amplifiers with DSP

Amplifier series with integrated **8x8 DSP**. All models have eight symmetrical inputs and a total of eight outputs. Depending on the model, two to eight outputs are configured as power amplifier channels with 100 watts of output power. The remaining outputs are available as symmetrical line outputs. The amplifiers can be programed via Ethernet using our newly developed, browser-based **LB AUDIO CONTROL Software**. They can be equipped with a second input module such as the Dante interface to process mixed signal types and are equipped with VCA inputs for external volume control as well as contacts for remote On/Off and Fault.

≡pa series	19" Multi-Ch	nannel Amplifiers with DSP	Model	Item no.
	PA 2100 DSC	$8\times$ Line In Sym., $2\times100\text{W}/2-8$ ohms, $6\times$ Line Out, 1 U $8\times$ Line In Cinch $8\times$ In Dante-Module	PA 2100 DSC PA 2100 DSC CINCH PA 2100 DSC DANTE	3106-0049 3106-0050 3106-0051
	PA 4100 DSC	$8 \times$ Line In Sym., $4 \times 100\text{W}/2 - 8$ ohms, $4 \times$ Line Out, 1 U $8 \times$ Line In Cinch $8 \times$ In Dante-Module	PA 4100 DSC PA 4100 DSC CINCH PA 4100 DSC DANTE	3106-0052 3106-0053 3106-0054
	PA 6100 DSC	$8 \times$ Line In Sym., 6×100 W/2-8 ohms, $2 \times$ Line Out, 1 U $8 \times$ Line In Cinch $8 \times$ In Dante-Module	PA 6100 DSC PA 6100 DSC CINCH PA 6100 DSC DANTE	3106-0055 3106-0056 3106-0057
	PA 8100 DSC	8× Line In Sym., 8×100 W/2-8 ohms, 1 U 8× Line In Cinch 8× In Dante-Module	PA 8100 DSC PA 8100 DSC CINCH PA 8100 DSC DANTE	3106-0058 3106-0059 3106-0060
	PA 2200 DSC	$8\times$ Line In Sym., $2\times200\text{W}/2-8$ ohms, $6\times$ Line Out, 1 U $8\times$ Line In Cinch $8\times$ In Dante-Module	PA 2200 DSC PA 2200 DSC CINCH PA 2200 DSC DANTE	3106-0061 3106-0062 3106-0063
	PA 4200 DSC	$8\times$ Line In Sym., $4\times200\text{W}/2-8$ ohms, $4\times$ Line Out, 1 U $8\times$ Line In Cinch $8\times$ In Dante-Module	PA 4200 DSC PA 4200 DSC CINCH PA 4200 DSC DANTE	3106-0064 3106-0065 3106-0066
	PA 6200 DSC	$8\times$ Line In Sym., $6\times200\text{W}/2-8$ ohms, $2\times$ Line Out, 1 U $8\times$ Line In Cinch $8\times$ In Dante-Module	PA 6200 DSC PA 6200 DSC CINCH PA 6200 DSC DANTE	3106-0067 3106-0068 3106-0069
	PA 8200 DSC	8× Line In Sym., 8×200 W/2-8 ohms, 1 U 8× Line In Cinch 8× In Dante-Module	PA 8200 DSC PA 8200 DSC CINCH PA 8200 DSC DANTE	3106-0070 3106-0071 3106-0072



SMART BACK SIDES

The power amplifiers feature two rear slots for two input modules, each with two to eight channels. They can be equipped with symmetrical line inputs, cinch inputs or a Dante interface (also in combination). This allows different signal types and signal combinations to be processed. DIP switches can be used to switch the automatic on/off functionality, input sensitivity, and parallel and bridge mode separately for all channels. VCA inputs per chan-

nel enable external volume control. The amplifiers can be switched on or off via a contact.



Input Modules

Input modules with two to eight channels for our 19" power amplifiers in the new PA series. The modules are available with symmetrical line inputs or asymmetrical cinch inputs. All modules are equipped with DIP switches for ground lift on each channel pair and can be configured for use with grounded or non-grounded signal sources.

≡pa series	Input Module	е	Model	Item no.
e con	2×IN-SYM	Input-Module 2 × Line In, symmetrical, pluggable screwtype terminals	2×IN-SYM	3108-0001
9 (2727)	4×IN-SYM	Input-Module 4 × Line In, symmetrical, pluggable screwtype terminals	4×IN-SYM	3108-0002
entaning.	6×IN-SYM	Input-Module 6 × Line In, symmetrical, pluggable screwtype terminals	6×IN-SYM	3108-0003
0111101111	8×IN-SYM I	Input-Module 8 × Line In, symmetrical, pluggable screwtype terminals	8×IN-SYM	3108-0004
	2×IN-CINCH	Input-Module 2 × Line In, asymmetrical, Cinch connectors	2×IN-CINCH	3108-0005
0 0	4×IN-CINCH I	Input-Module 4 × Line In, asymmetrical, Cinch connectors	4×IN-CINCH	3108-0006
000	6×IN-CINCH	Input-Module 6 × Line In, asymmetrical, Cinch connectors	6×IN-CINCH	3108-0007
0000	8×IN-CINCH I	Input-Module 8 × Line In, asymmetrical, Cinch connectors	8×IN-CINCH	3108-0008
	Dante Input N	/lodule		
		he multi-channel transmission of uncompressed digital audio signa nal distribution is configured using the Dante Controller routing s		ps or 1 Gbps Ethernet
-	DANTE 8×8	Dante interface for Audio over Ethernet, 2 × RJ 45 (Primary/Secondary)	DANTE 8×8	3108-0009

Accessories for Amplifiers

Transformers for 100 V systems and external volume control for our amplifiers in the PA series.



	Accessories	s for Amplifiers	Model	Item no.
.00	PA-T 2050	100 V transformer module, 2×50 watts, torodial core	PA-T 2050	3109-0001
	PA-T 100	100 V transformer module, 100 watts, torodial core	PA-T 100	3109-0002
	PA-T 200	100 V transformer module, 200 watts, torodial core	PA-T 200	3109-0003
	PA-T 400	100 V transformer module, 400 watts, torodial core	PA-T 400	3109-0004
Swan I	PA-T 800	100 V transformer module, 800 watts, torodial core	PA-T 800	3109-0007
	PA-T 1U	Rack cradle 1 U for 4 \times PA 250 SD, 4 \times PA 2100 SD or 4 \times PA-T 2050	PA-T 1U	3109-0005
	PA-T 2U	Rack cradle 2 U for 2 x PA-T 800	PA-T 2U	3109-0008
•••	WP-V	Wall panel, volume control for power amplifiers of PA Series Regulation and On/Mute via VCA for surface boxes	WP-V	3401-0003
• 2: •	RP-V	Rack panel, volume control for power amplifiers of PA Series Regulation and On/Mute via VCA for 19" rack mount RP-1U	RP-V	3401-0004
	WP-0 RP-0	Wall panel, blank panel Rack panel, blank panel	WP-0 RP-0	3401-0001 3402-0001
	RP-1U	Rack mount 1 U for 6 × RP panel	RP-1U	3402-0016
The second second	DV-Modul	Digitale volume control, regulation with dual push buttons (Up/Down contacts) via VCA inputs	DV-Modul	3109-0006

System controllers for processing signals in multichannel PA systems. Our newly developed, browser-based LB AUDIO CONTROL Software offers ten fully parametric filters, a delay of up to two seconds, plus limiters and compressors for every input and output. The mixer matrix can be used to route the inputs to the various outputs as required. The controllers can be programmed via Ethernet and controlled using media control systems. We can also configure project-specific presets on request.

19" System Controllers



DSC 808

8.0 1 1



Customized Speakers

30 years experience in loudspeaker design and the development of countless customized models for special projects permit us to supply even small series for particular applications both within short time and at reasonable cost.

- Special dispersion-characteristics and designs
- Individual versions of cabinets and dimensions

- Special colors and particular surfaces
- 100 V versions of all kinds of loudspeakers
- Active or wireless versions of many loudspeakers
- EN 54-24 certified speakers



Directional speaker for installation in room corners



Translucent speakers in chandeliers



Miniature dodecahedron speaker for room acoustic measurements



Invisible built-in speaker system for digital signage



C 805 Flat cinema speaker



In-ceiling speaker with Polar® technology and closed back



SUB 40 active subwoofer with Dante interface



Front speaker F 10 with integrated monitor speaker F 6



Micro line array (30 mm width)



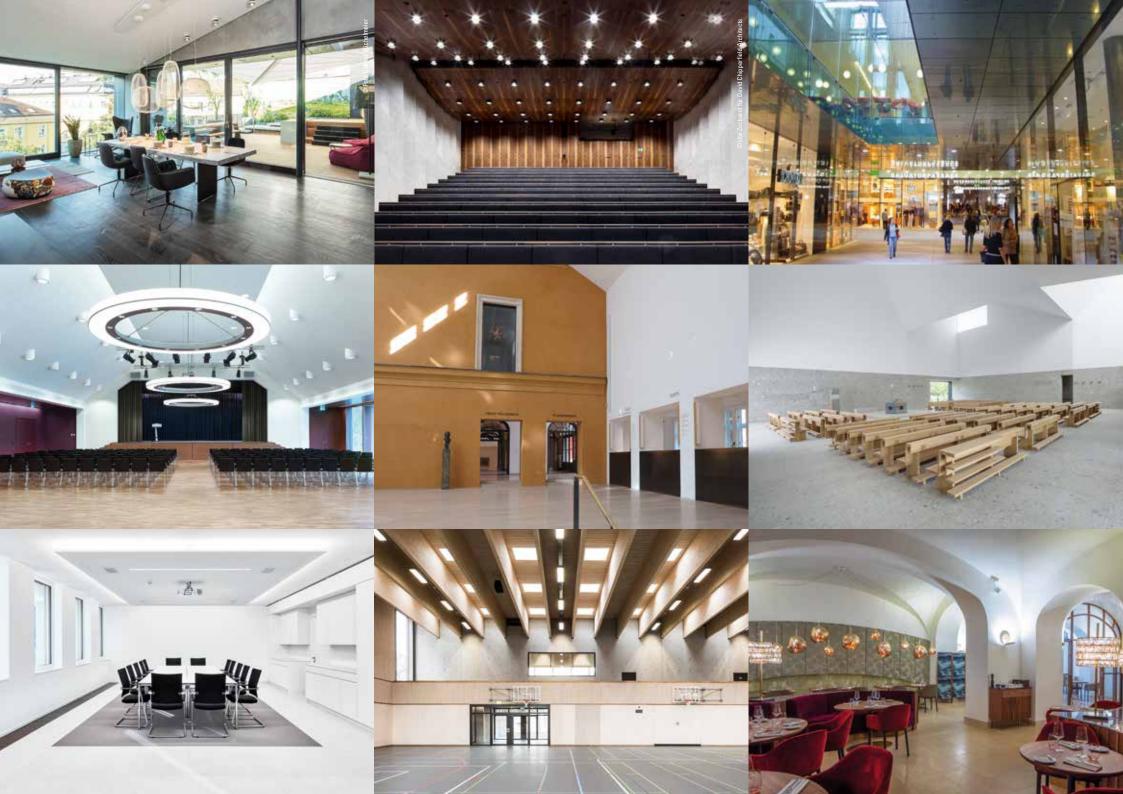
Flat on-wall subwoofer (backside)



Ring radiator for acoustic measurements



F 6 customized version



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