

AIMLINE

ALX series

Beam steering redefined

Active digitally steerable
column-Speaker
DANTE®-Input





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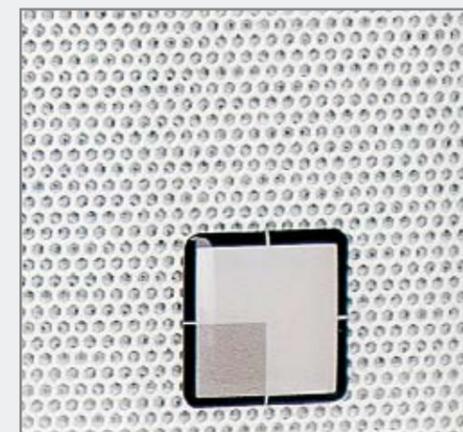
Active digitally steerable
column-Speaker
DANTE®-Input

Control over acoustics

A team of professional audio engineers and industry professionals in Europe founded the Germany based company Aimline. Bringing with them practical real world experience. The target was to engineer and built reliable column speaker for the install and rental market. These include active, passive, digital steerable and fixed beam, with analogue and digital inputs. Every time with the focus on musicality and clear speech reproduction for acoustically difficult environments and challenging spaces.

Another focus was set on a slim and unobtrusive design to satisfy the continuing demand for optimum visual integration.

Many important projects have been already realized with Aimline columns i.e.: German government facilities, churches, universities, theatres, conference centers, sport complexes and outdoor water theme parks.



ALX series: Main features:

- DANTE®-in- and out
- 4"-chassis with fiberglass-membrane
- Strong SPL
- Analogue and AES/EBU inputs
- 10 Band parametric EQ with IIR filter
- FIR filter import
- Networking over IP-protocol
- 24 internal presets
- GPIO
- Preset switch with UDP commands
- Heavy-duty aluminium-enclosure in a slim design

The internal digital signal processor also enables a compressor, a gate, a 10-band-parametric equalizer and a delay to be placed into the audio input path. With simple Windows-software every parameter can be set in real time. All speakers are recognized within a network by their IP-address.

ALX-cabinets can be fully monitored for surveillance issues.

Thanks to its very small and unobtrusive enclosure the AIMLINE-Speaker is a fit for most architecturally sensitive environment including museums, churches, conference-rooms and many more challenging spaces and environments.

With its two-channel DANTE®-input integration into existing IP-networks as well as a direct integration to other DANTE®-enabled products is simple.

The ALX-series will be built in a version for the installation market as well as in a version for rental market.

AIMLINE-speaker can be ordered in any RAL-Colour to match the environment. AIMLINE-speaker are completely built in Germany.



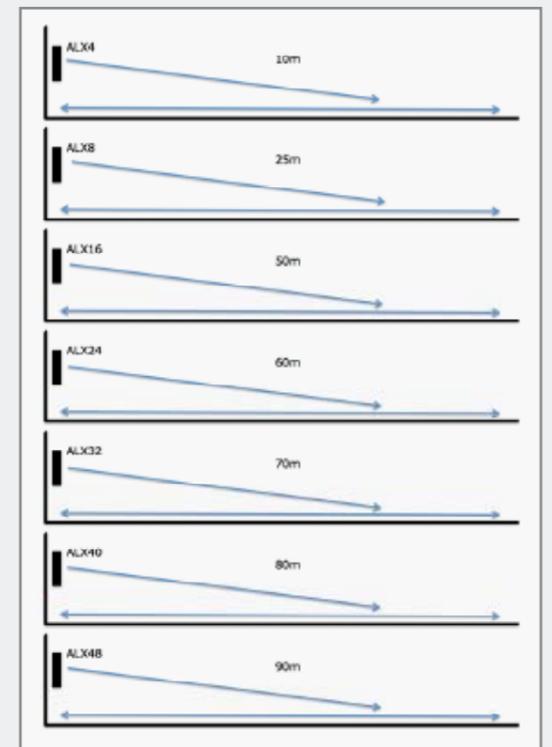
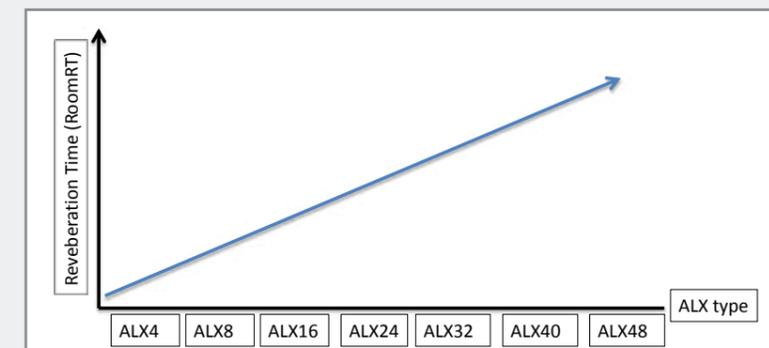
ALX series: Which model is the right one?

The right choice for the ALX model in your installation depends on:

- **The dimensions of the room**
- **The room reverberation time**
- **The required SPL**
- **The required speech intelligibility**
- **The required application (speech, background-music, music)**

- For applications up to 10 meter with speech or background music application choose **the AIMLINE ALX 4**
Lowest controllable frequency is 800Hz
- For applications up to 25 meter with speech or background music application choose **the AIMLINE ALX 8**
Lowest controllable frequency is 400Hz
- For applications up to 50 meter with speech or background music application choose **the AIMLINE ALX 16**
Lowest controllable frequency is 200Hz
- For applications up to 60 meter with speech or background music application choose **the AIMLINE ALX 24**
Lowest controllable frequency is 150Hz
- For applications up to 70 meter with speech or background music application choose **the AIMLINE ALX 32**
Lowest controllable frequency is 110Hz
- For applications up to 80 meter with speech or background music application choose **the AIMLINE ALX 40**
Lowest controllable frequency is 90Hz
- For applications up to 90 meter with speech or background music application choose **the AIMLINE ALX 48**
Lowest controllable frequency is 75Hz

For rooms with high reverberation time and mostly music application choose the next larger cascaded ALX type. For all applications with fullrange music the addition of Aimline subwoofers is recommended. Aimline active subwoofers are equipped with DANTE inputs and work together with ALX in the same IP-network and with the same software PANC.



ALX series: Why beam steering?

Beam-Steering offers the possibility to focus acoustical energy from a speaker to different directions. This is done by manipulating the cylindrical wave, having a dsp-control for phase, level, delay for each of the components within a speaker-cabinet.

The technology gives the benefit of being able to aim the acoustical energy up and down the room. This avoids energy waves hitting any walls, windows, glass and other hard surfaces resulting in unwanted reflections:
AIMLINE the sound to the audience!

Aimline beam steering products are developed for many applications:

- House of Worship
- Museums
- Theatres
- Airport
- Railway stations
- Conference facilities
- Lecture Halls
- Shopping Malls
- A/V rooms
- Security systems
- Fill or delay system in larger installations



And many more ...



ALX series: Specific features of Aimline ALX enclosure:

- Enclosure is made from one piece aluminium extruded profile. This gives a high stability and less resonance frequencies.
- The complete sealed enclosure is insensitive against humidity and dust.
- The full passive cooling system avoids any noise from fans and any need for maintenance
- Multiple mounting options for wall mount, horizontal or vertical alignment, flying or mobile applications are available
- Fiberglass coated membranes are insensitive against humidity and wear through aging
- A quick connection plate allows an easy combination of more enclosures to built up cascaded columns



ALX series: Technical Datas

	ALX4 Dante	ALX8 Dante	ALX16 Dante	ALX24 Dante	ALX32 Dante	ALX40 Dante	ALX48 Dante
Type	Digital steerable column speaker with analogue and digital inputs						
Assembly	4 x 4" Neodym	8 x 4" Neodym	16 x 4" Neodym	24 x 4" Neodym	32 x 4" Neodym	40 x 4" Neodym	48 x 4" Neodym
Configuration	Fullrange						
Amplifier Channel	4 x 65 Watts Class D	8 x 65 Watts Class D	16 x 65 Watts Class D	24 x 65 Watts Class D	32 x 65 Watts Class D	40 x 65 Watts Class D	48 x 65 Watts Class D
DSPChannel	4 x DSP	8 x DSP	16 x DSP	24 x DSP	32 x DSP	40 x DSP	48 x DSP
Inputs	2 x analogue 2 x AES 2 x Dante						
Latency	1.8ms						
IIR Filter	10bd full parametric IIR for each input						
FIR Filter	FIR filter import for each input						
Dynamic EQ	for each input						
Presets	24 Presets, internal storage						
GPIOs	2						
Surveillance	Temperature, protect, clip, power supply, fault message contacts						
SPL	95dB@30m	98dB@30m	101dB@30m	104dB@30m	107dB@30m	110dB@30m	113dB@30m
Dispersion horizontal	120° (-6dB, 1kHz-8kHz)						
Dispersion vertical	5° to 40°, continuously digital steerable						
Typical throw	10m	25m	50m	60m	70m	80m	90m
Multibeam	-	yes	yes	yes	yes	yes	yes
Movable beam center	yes						
Frequency response	100Hz - 18kHz	70Hz - 18kHz	60Hz - 18kHz	50Hz - 18kHz			
Lowest controllable frequency	800Hz	400Hz	200Hz	150Hz	110Hz	90Hz	75Hz
Internal Delay	up to 500 ms for each input						
Software	PANC (Windows) (realtime)						
Network	IP based network, free configurable						
Control	UDP-commands						
Control LED	Front LED (disengageable)						
Enclosure	Aluminium, powder coated						
Cooling system	passive						
Temperature range	-5° - 40°						
Power supply	World wide: 94V - 264 V						
Color	Standard RAL 9016 white, any RAL color optional						
Weight	5.5kg	9,9kg	20kg	30kg	40kg	50kg	60kg
Dimensions	400(H) x 120(W) x 151(D) mm	805(H) x 120(W) x 151(D) mm	1610(H) x 120(W) x 151(D) mm	2415(H) x 120(W) x 151(D) mm	3320(H) x 120(W) x 151(D) mm	4025(H) x 120(W) x 151(D) mm	4830(H) x 120(W) x 151(D) mm

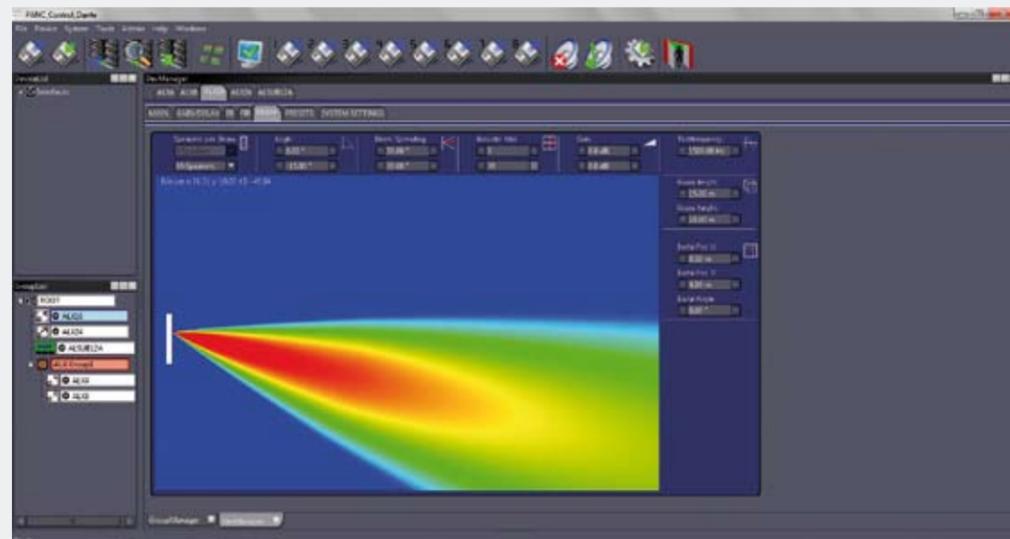


ALX series: PANC powerful software for all active Aimline devices

All active Aimline products are managed by the powerful and easy to use Windows-software PANC. PANC works in an IP-based network and allows a realtime access to all functions of any Aimline devices within this network.

PANC gives control for:

- Input select (Dante / AES / analog)
- Delay for each input (up to 500ms)
- IIR filter
- FIR filter
- Dynamic eq
- X-over
- Limiter
- Beam steering
- Presets
- System settings
- Control and surveillance
- Group settings
- Metering



ALX series: Control with UDP commands

Full access to the most important functions is given by sending UDP commands into the network. UDP commands can be send by most media control systems, specifying the IP address and the port no.

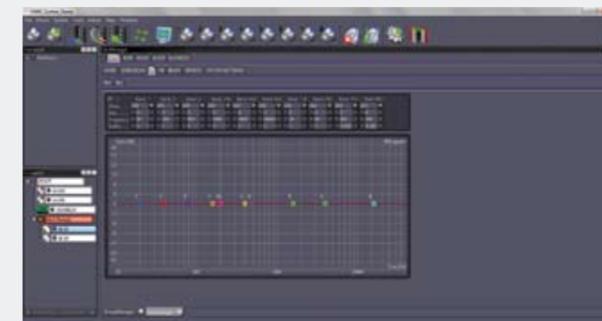
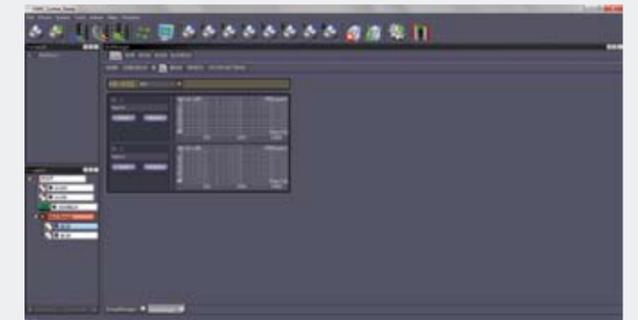
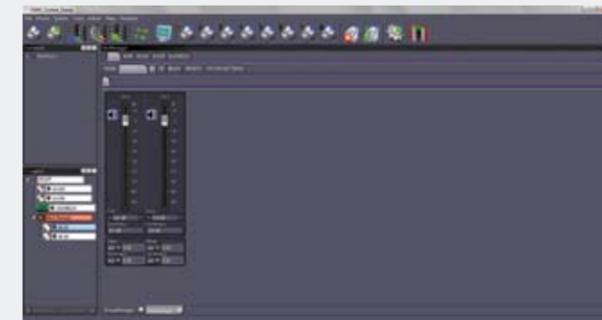
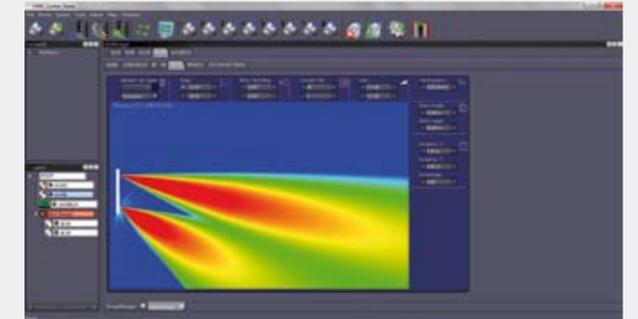
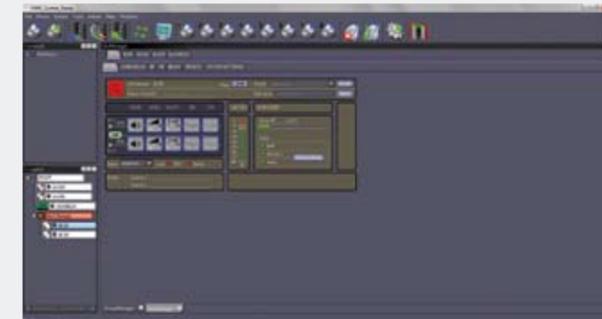
Controllable functions e.g.:

Send commands:

- Preset switch
- Input switch
- Volume control for each input
- Mute

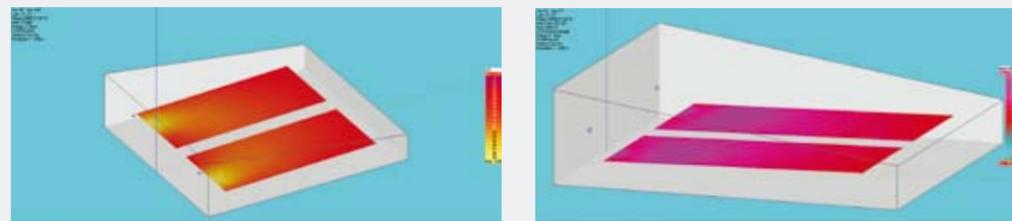
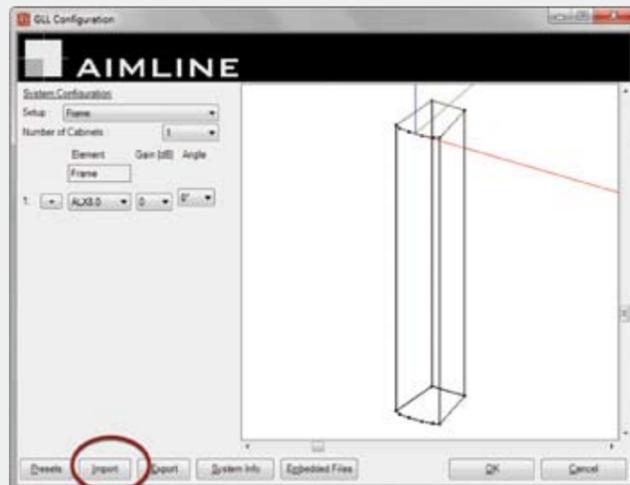
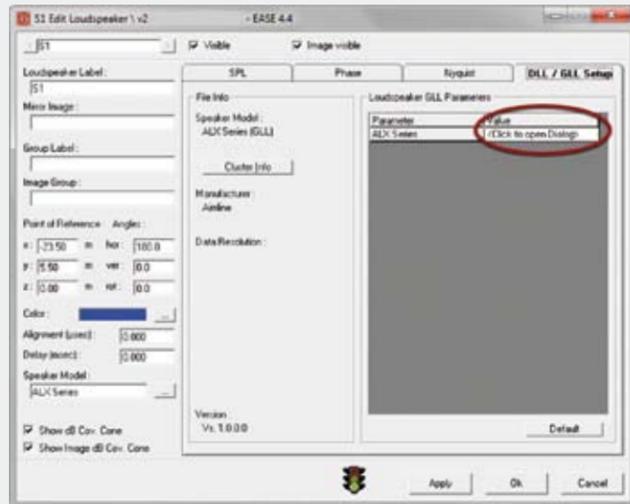
Get device info:

- Temperature,
- Status,
- Metering
- Preset Number
- Volume



ALX series: Simulation using EASE

For ALX series GLL files for EASE are available. The software PANC allows a function to export all setting incl. beam settings, IIR filter, gain, delay into a GLL to use with EASE.



ALX series: Mounting



ALX column speaker can be mounted quick and easy using the L-brackets. The desired mounting height is minimum 2 meters from the ground. A horizontal turn is possible.



Cabling is done invisible, all connectors are hidden in a closed input board, and cables run in cable ducts. Thanks to the network-switch provided in every ALX connections from one to the next speaker can be done.



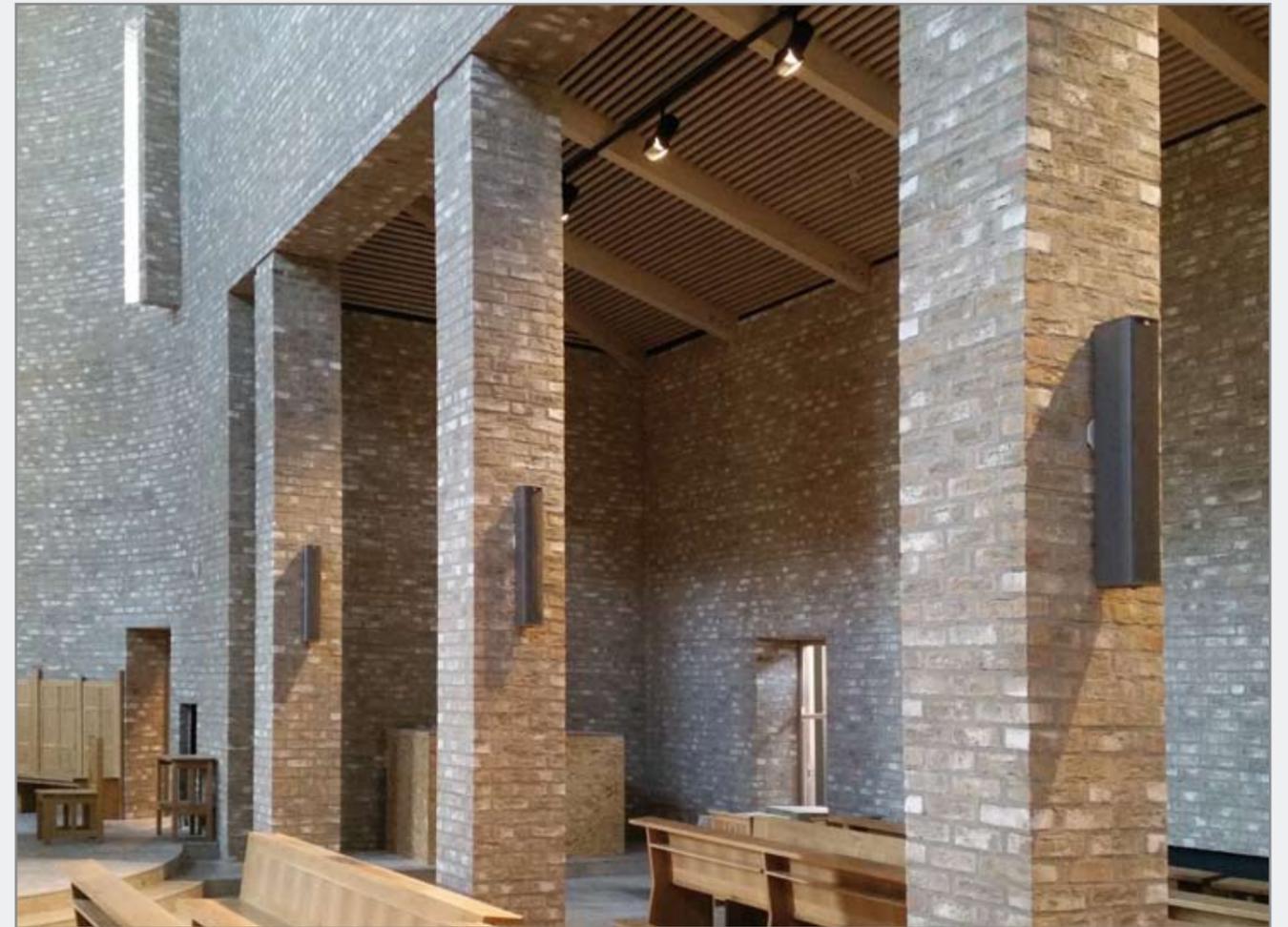
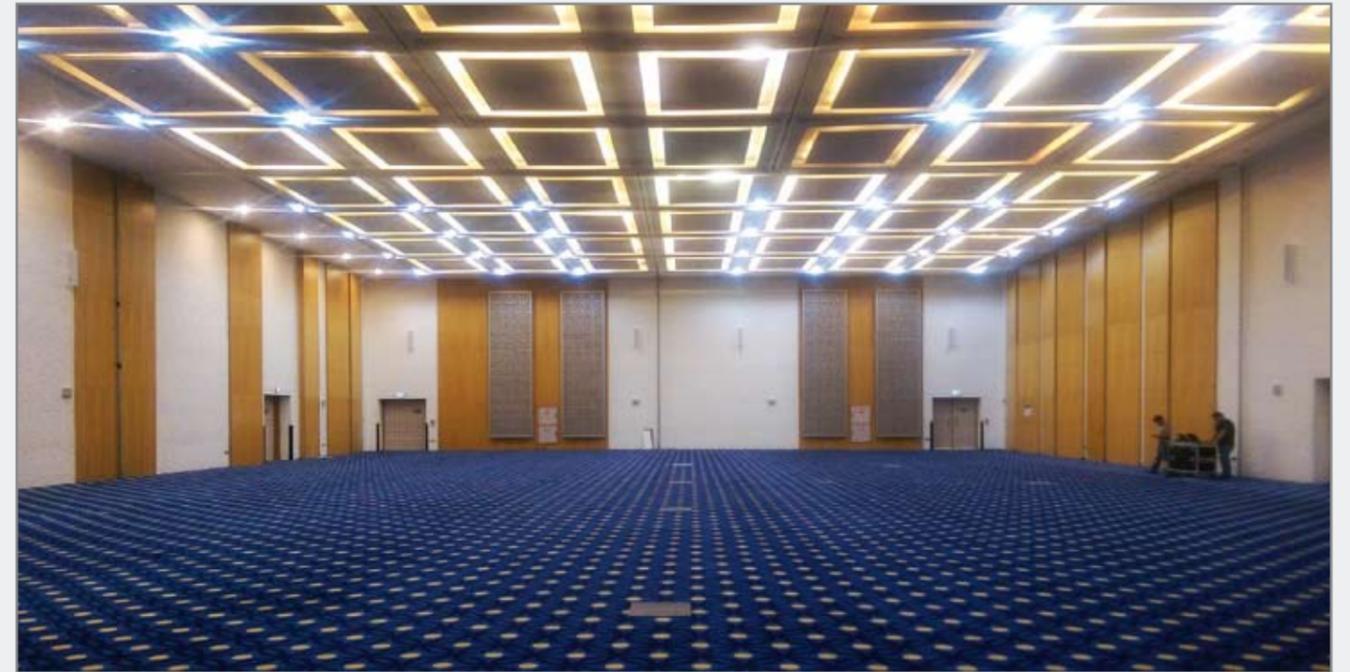
For a spaceless mounting close to the wall without the option of horizontal orientation a two-piece wallmount bracket is available.



ALX series: Options

ALX series can be ordered as an option:

- IP65 weather proof
- RAL colour
- Special colour painting
- Special photo finish printing
- Special mounting options
- Special enclosure length



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