

iBeam®



iBeam® Slave



iBeam® Master

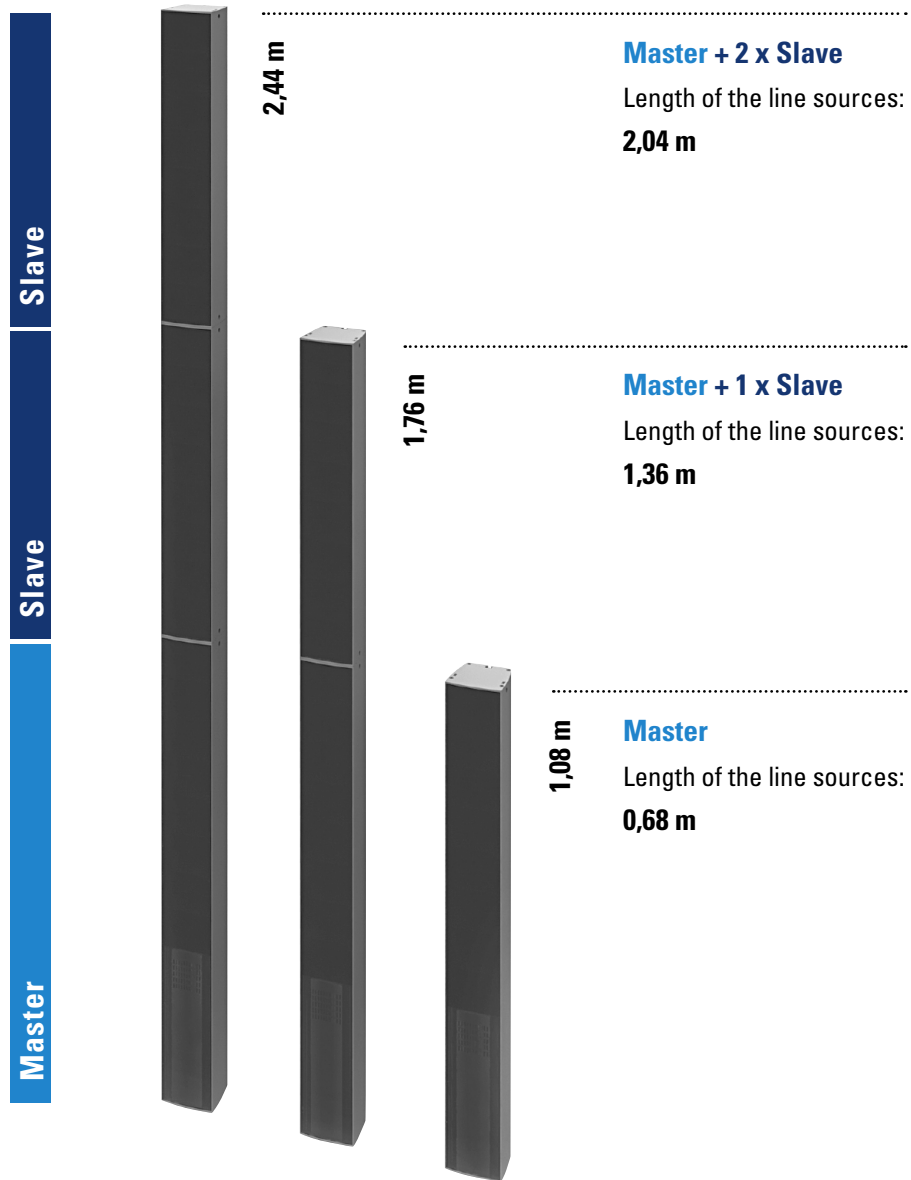


Modular Beam Steering System

Beam steering line source loudspeaker with up to 24 DSP and amplifier channels. The modular system is based on the iBeam Master, containing eight 3" broadband speakers, the DSP amplifier unit and a high-performance power supply. The system is expanded with up to two iBeam Slaves, which only contain the drivers and amplifiers. The relatively large cabinet volume ensures good speech reproduction without an additional subwoofer.

Applications: Acoustically difficult rooms such as lecture halls, concert halls, churches, exhibition halls and foyers, in which a very even and low-feedback reproduction and at the same time an unobtrusive appearance are required.

Modular System



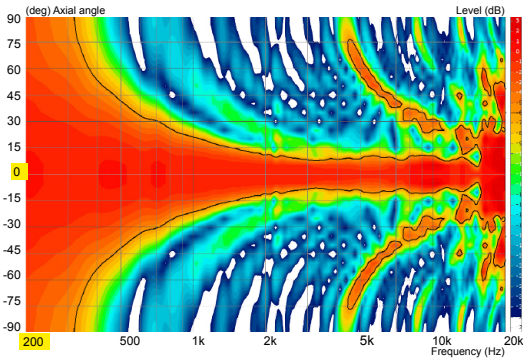
The electrical connection of the modules is made via multipin connectors, which are also aligned via locating pins.

The mechanical connection is made via integrated, retractable connecting links.

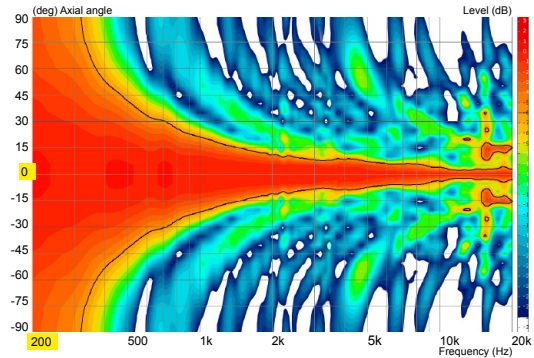


The iBeam uses 3" broadband chassis, which have very good acoustic properties. They work on specially developed waveguides which optimize the coupling of the individual sources. In this way, high frequencies of over 10 kHz are radiated without the annoying side lobes that are common with conventional column speakers. This special type of wave guidance also results in a well-controlled and homogeneous horizontal radiation. The vertical radiation behavior of the overall system is pre-cisely adapted to the listening area using intelligent software algorithms.

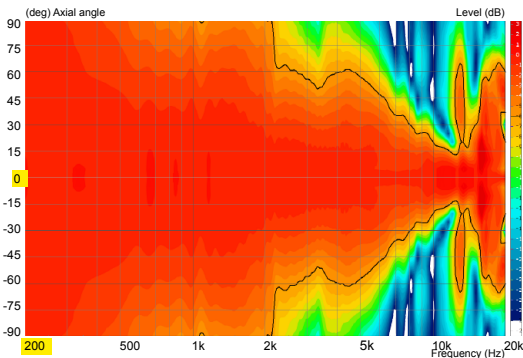
Conventional line source loudspeaker - directivity-vertical



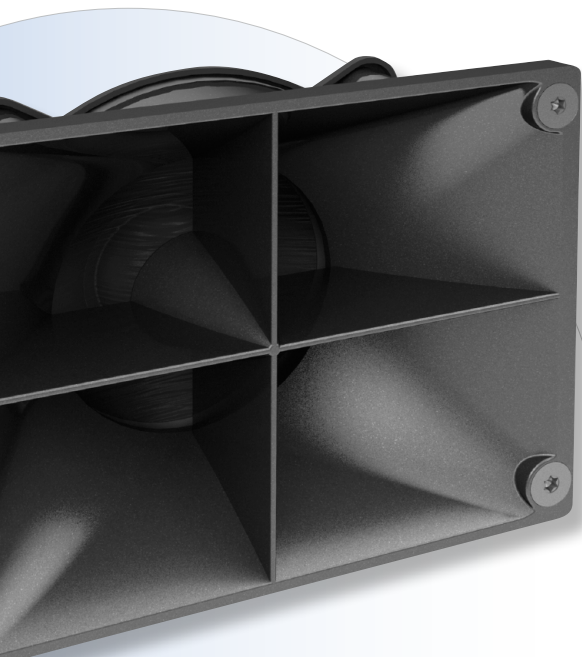
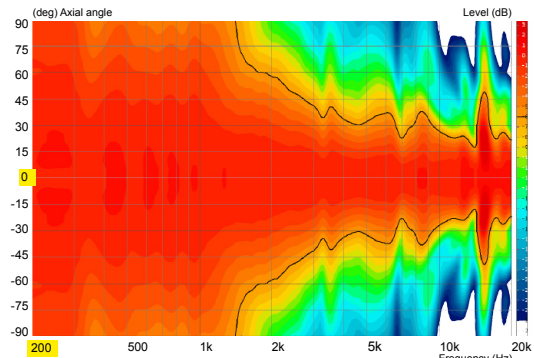
iBeam waveguide line source loudspeaker - directivity-vertical



Conventional line source loudspeaker - directivity-horizontal

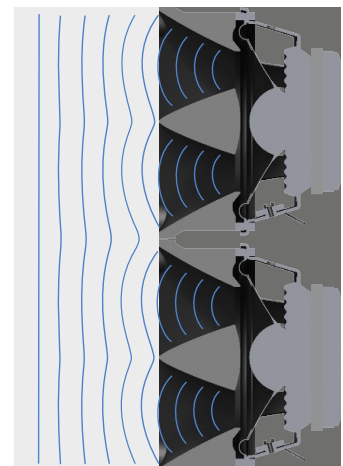


iBeam waveguide line source loudspeaker - directivity-horizontal



Waveguide for 3" Chassis

- + Best possible coupling to a line source
- + Controlled horizontal directivity
- + Enhanced efficiency



iBeam® software

Audience area - optimization

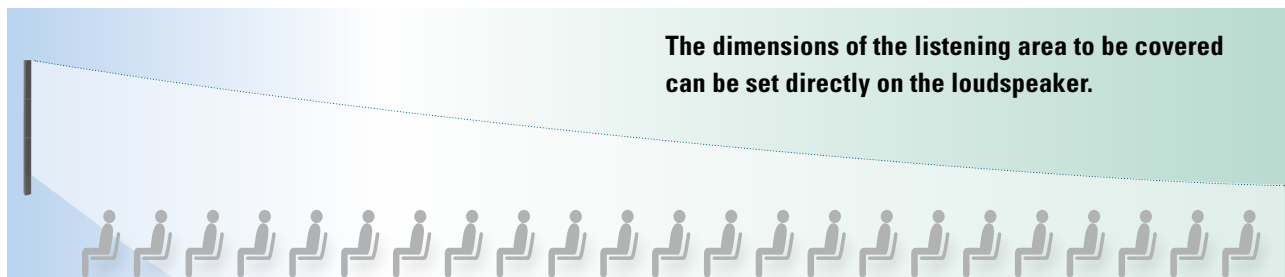
The basis for the iBeam controller software is the audience's listening area, not a specific beam angle.

Simple and quick access directly at the loudspeaker

iBeam® quick and easy access

The iBeam can be set directly at the loudspeaker via 8 x 8 fixed presets for quick and easy use, even without a laptop. The beginning and the end of the listening area to be covered are set using two encoders.

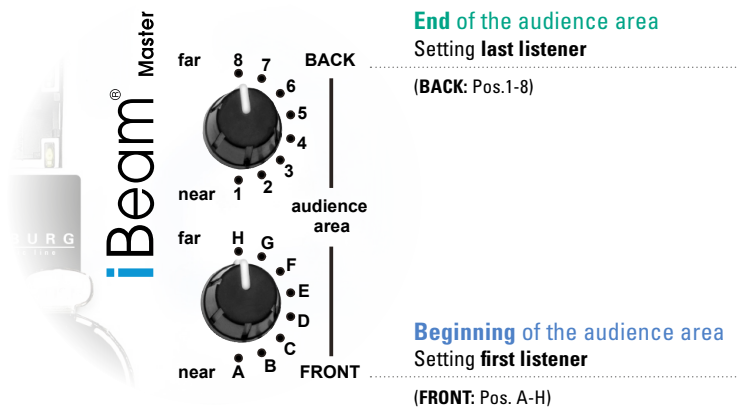
The result is even coverage from the first to the last row.



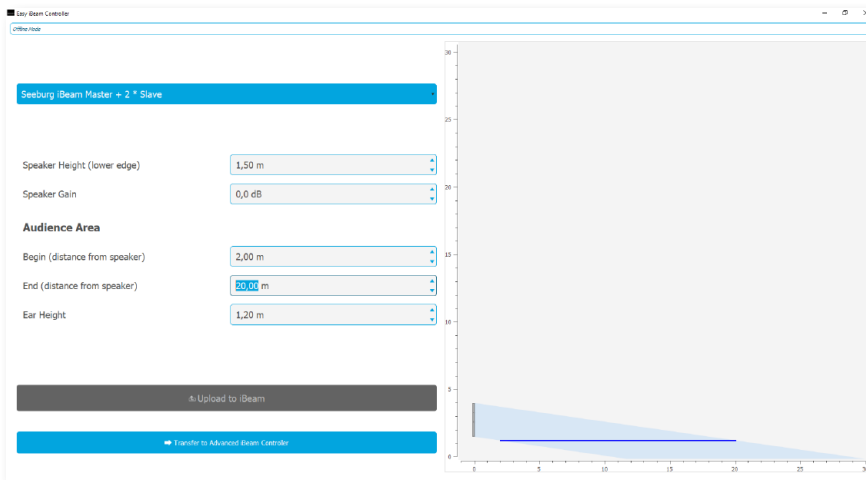
Beginning of the audience area (FRONT: Pos. A-H)



End of the audience area (BACK: Pos.1-8)



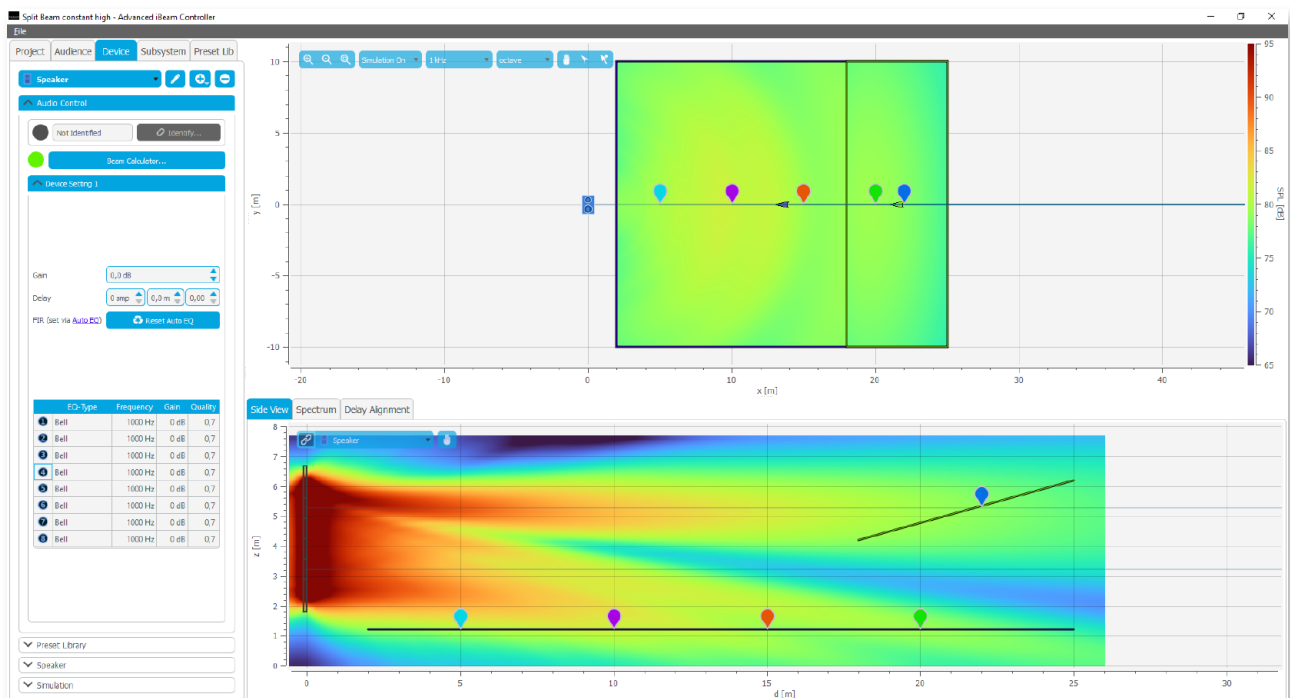
Basic mode Easy iBeam® Controller

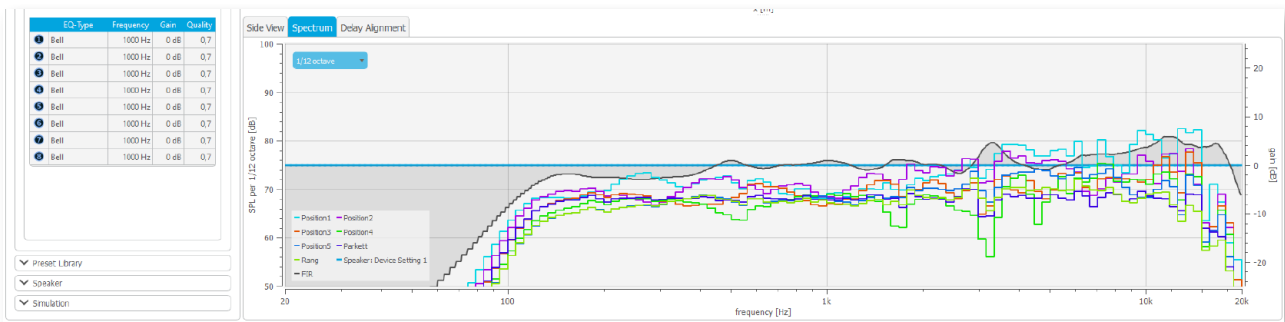


In the Easy iBeam Controller, the user only enters the installation height of the iBeam and the beginning and the end of the listening area to be covered. The intelligent algorithm then optimizes the vertical sound radiation so that the level and frequency response are as uniform as possible within the listening area. Side lobes are suppressed to a very low level. The integrated Auto EQ linearizes the frequency response in the listening area without any further action on the part of the user.

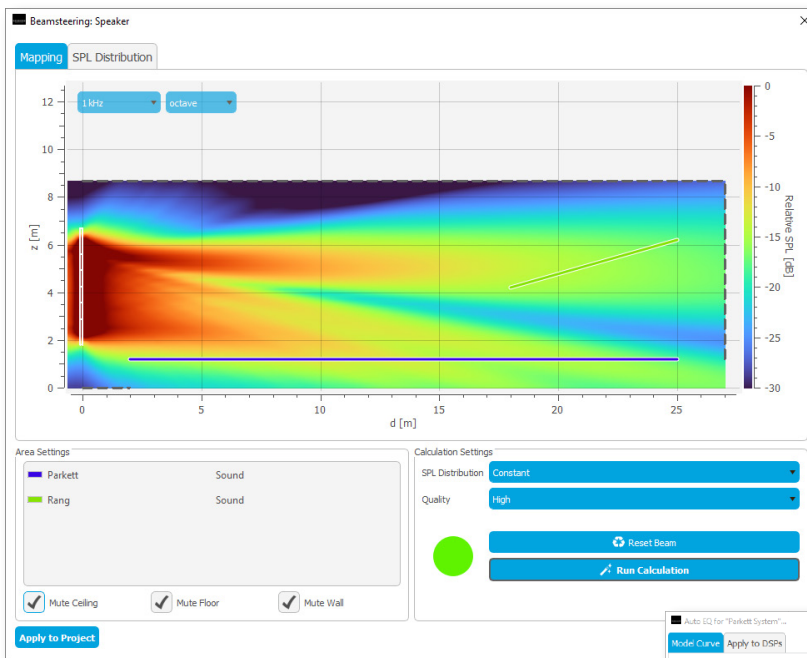
Professional mode Advanced iBeam® Controller

In the Advanced iBeam Controller, more complex audience areas such as grandstands and galleries can be entered and larger applications with several sources can be predicted. Each array can consist of up to two master and four slave modules. The algorithm calculates the necessary FIR filters for the up to 48 power amplifier channels. The vertical radiation behavior depends on the assigned listening areas and can have a width of up to 60° as well as split beams. This enables sound reinforcement tasks to be solved that were not possible with conventional line sources.

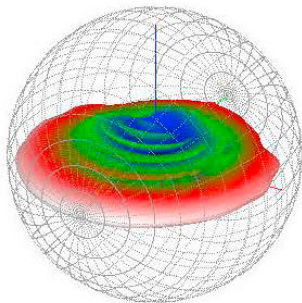




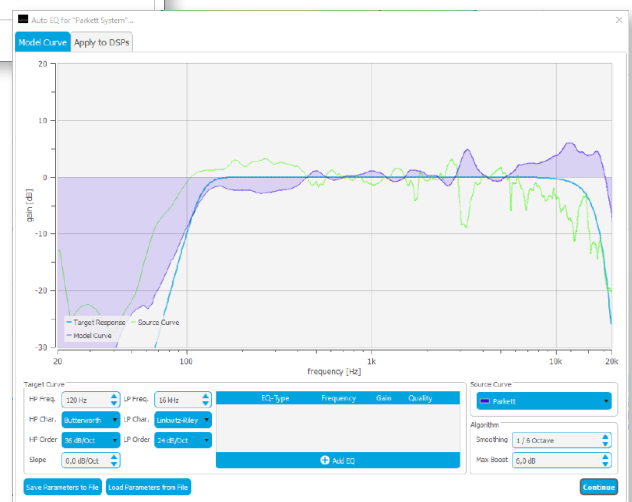
- Frequency response optimization for selectable listening areas



- Further specification of the sound beams
- Selectable level drop over the distance
- Precise suppression of critical areas
- Memory for up to 50 „projects”

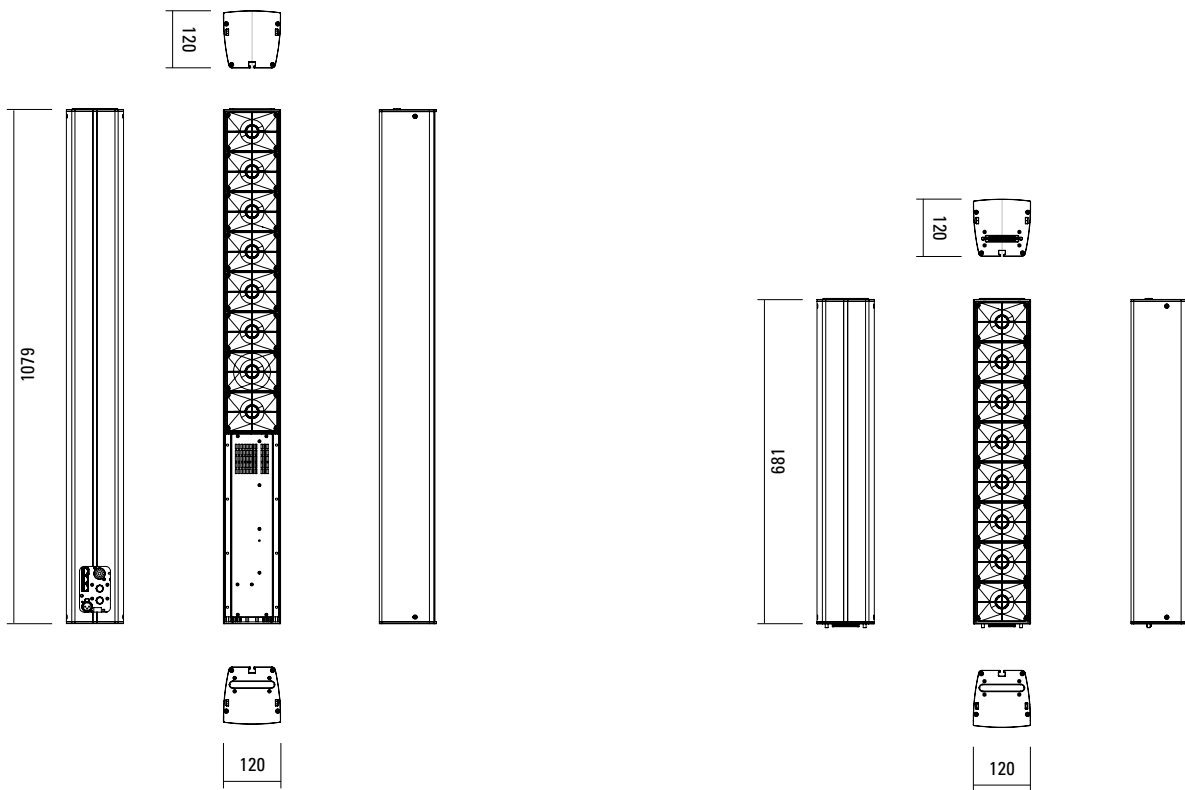


- For integration into EASE™, an XGLC file can be generated for each project (for use with the iBeam GLL).



- In addition to the Auto EQ, up to ten additional EQs and filters can be activated.

DIMENSIONS



iBeam Master

iBeam Slave



Cabinet

- Cabinet made of powder-coated 3mm aluminum profiles
- Steel grille with anti-corrosion powder coating
- Available colors: black (RAL 9005) and white (RAL 9010).
Also available in RAL or NCS special colors upon request.



PRODUCT SPECIFICATIONS



iBeam[®] Master

iBeam[®] Slave

Speaker Components	Master: 8 x 3" Nd Master + Slave: 16 x 3" Nd Master + 2 x Slave: 24 x 3" Nd	8 x 3" Nd
Description	24-way active beam steering DSP column system with FIR Array Beam Steering (FABS) and Mapping Optimization Mode (MOM)	
Amp Power AES	Master: 8 x 44 W RMS = 352 W Master + Slave: 16 x 44 W RMS = 704 W Master + 2 x Slave: 24 x 20 W RMS = 480 W	
Power Supply	90-240 VAC	---
Rated Current	tba.	---
Max. SPL Pink noise ¹⁾	Master: 119 dB Master + Slave: 125 dB Master + 2 x Slave: 125 dB	
Max. Input Signal	28 dBu	---
AD / DA	24 bit / 48 kHz	---
Usable Range -10 dB	110 Hz - 20 kHz	
Coverage horizontal / vertical	horizontal: 100° (1-3 kHz) und 80° (> 3 kHz) vertical: depends on preset	
Connectors	XLR in, Phoenix, Powercon in, 3 x Ethernet RJ45	24 pol. D-Sub
Rigging / Fittings	Captive rigging system	
Rigging Components	Stainless steel, 1.4301 (t.b.u.)	
Max. Array Size	2 x Master + 4 x Slave	
Cabinet	Aluminum extrusion profile	
Front	Steel grille with anti-corrosion powder coating	
Finish	Powder coating	
Weight	11,8 kg	6,6 kg
Size height x width x depth	107,9 x 12,0 x 12,0 cm	68,1 x 12,0 x 12,0 cm
Order No.	00800	00810



Signal inputs:

The analog input, the AES/EBU digital input and the Ethernet-based Dante[®] are available as standard from the factory.

The integration in media controls is possible using the common JSON transfer protocol.

¹⁾ Peak level at 1 m under free field conditions using 12 dB crest factor pink noise with preset and Auto EQ for a listener area from 5 to 15 m, cabinet mounting height 2,5 m, listener area 1,6 m height, MOM quality

Cradle



for iBeam,
incl. (1 x M6 x 10 screw, 1 x rubber
washer), max. load 50 kg
Order No. **01399**
Order No. **01399/w** (RAL 9010)

Angle Bracket



for iBeam, universal,
incl. (2 x sliding blocks (64082),
2 x M8 x 16 socket head screws)
Order No. **08136**
Order No. **08136/w** (RAL 9010)

Wall Mount, long



for iBeam,
incl. (2 x sliding blocks (64082),
3 x M8 x 16 socket head screws,
1 x M8 self-locking nut)
Order No. **08134**
Order No. **08134/w** (RAL 9010)

Wall Mount, short



for iBeam,
incl. (2 x sliding blocks (64082),
3 x M8 x 16 socket head screws,
1 x M8 self-locking nut)
Order No. **08133**
Order No. **08133/w** (RAL 9010)

Pole Mounting Kit



for iBeam,
incl. (pole mount adapter (08126),
2 x sliding blocks (64082),
2 x M8 x 16 socket head screws,
1 x knurled head nut (73755)
Order No. **08137/set**

Sliding Block M8



M8
Order No. **64082**

Pole Mount Adapter



35 mm \varnothing \rightarrow M10 x 16 mm,
M8 x 20 star knob screw
Order No. **08126**

Pole Mount Adapter



35 mm \varnothing \rightarrow M10 x 16 mm
Order No. **08126/II**
Order No. **08126/II/w** (RAL 9010)

Knurled Head Nut



reduction screw for fastening
M10 Pole Mount Adapter (08126)
Order No. **73755**

Quick Trigger Clamp



max. load 100 kg
Order No. **01223/100 kg**

Ring Screw



M10– DIN 580
Order No. **73700** (zincd)
Order No. **73700/sw** (black zincd)



The continuous groove on the back
enables versatile installation options
in conjunction with the sliding block.

ACCESSORIES

Stacking Adapter



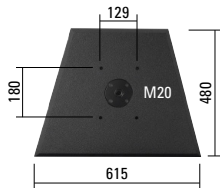
for mounting i Beam -> M20,
incl. (1 x M20 screw)
Order No. **01398**
Order No. **01398/w** (RAL 9010)

Base Plate, Round



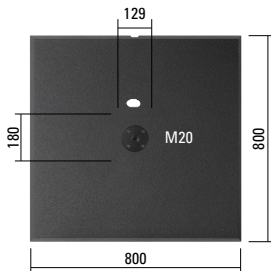
M20, ø 450 mm, height: 21 mm
black zinc die-cast, felt strips on the
bottom, weight: 6,7 kg
Order No. **01278/round**

Base Plate, Small



with M20 flange,
61,5 x 48,0 cm
Order No. **01278**
Order No. **01278/w** (RAL 9010)

Base Plate, XL



for stacked mounting,
with M20 flange, cable channel,
80,0 x 80,0 cm
Order No. **01279**
Order No. **01279/w** (RAL 9010)

Monopod Slave



for iBeam,
size and design like iBeam Slave,
height 68,1 cm
Order No. **64104**
Order No. **64104/w** (RAL 9010)

Speaker Pole



M20, with wind up
Order No. **03023**



M20, adjustable, K&M
Order No. **03022**

Speaker Stand



incl. wind up,
height 138,5 to 218 cm,
max. load 50 kg
Order No. **03011**

Bag



for 2 x iBeam Master or Slave
and accessories
Order No. **01235**

