

## Aktiv DSP-Line BSF



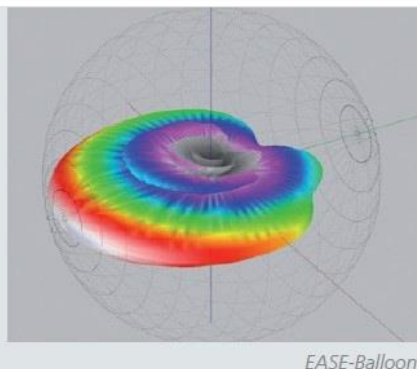
### Aktiv-DSP-Systems BSF

The BSF speaker series offers highest audio quality for speech and music applications.

By using the latest digital technology and sophisticated calculation algorithms for our software, the sound propagation of the loudspeakers is controlled for each room according to the customer's requirements. By electrically adjusting the sound inclination, the sound opening angle, the acoustic center, the number of beams and other parameters, only the desired audience areas are exposed to sound. Disturbing sound reflections are optimally prevented. The vertical installation of the loudspeaker in an elevated position not only offers visual advantages but also better feedback protection for the microphones and avoids sound blocking by projecting persons. Each listener is within the field of vision of the loudspeaker and thus receives optimal direct sound. The BSF series thus achieves exceptional STI values in speech intelligibility. The main focus during the development of the systems was on achieving very good speech intelligibility in combination with balanced music reproduction for use in acoustically demanding church rooms. In addition to church rooms with long reverberation times, other areas of application are in fixed installations, such as in town halls, hotels, theatres, conference and training rooms. The musical capabilities range from the recording of music, the natural reproduction of instruments, choirs and vocal soloists to a live band. All speakers of the BSF series have been developed in Germany using modern measuring and simulation methods.

### Simulation with EASE

For new building projects, careful acoustic planning using the latest computer-aided simulation and measurement methods is essential. This makes it possible to predict room acoustic parameters and auralization already in the planning phase of a building.



EASE-Balloon

## Advantages:

- High speech intelligibility at all seats, even in acoustically unfavorable environments.
- Detailed music reproduction with high output power
- High direct sound component over the entire frequency range
- Large sound range
- Few sound sources in the room

## Properties:

### System:

1. Seis Akustik group design (BS/BSF Serie)  
Uniform sound image and speech intelligibility in active and passive systems
2. cascading of single modules to one DSP line
3. flexible master-slave concept
4. no limitation of the number of speakers in the system
5. firmware update
6. remote monitoring / remote control (worldwide)
7. shapely, elegant design

### Hardware:

8. latest digital technology
9. automatic switch on/off
10. full remote control via LAN/WLAN
11. system monitoring / Watchdog
12. preset storage in the loudspeaker and in the system
13. grouping of individual loudspeakers
14. delay setting up to 2 sec.
15. without fan
16. limiter
17. FIR filter without phase change

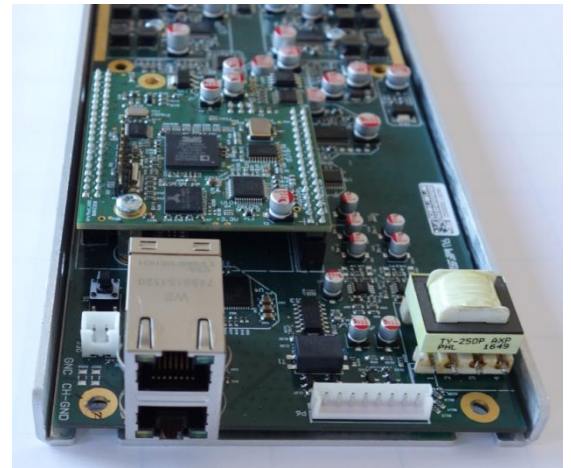
### Interfaces:

18. digital AES/EBU
19. Dante interface (optional module)
20. analog balanced NF
21. analog 100V
22. remote network
23. wireless (option)

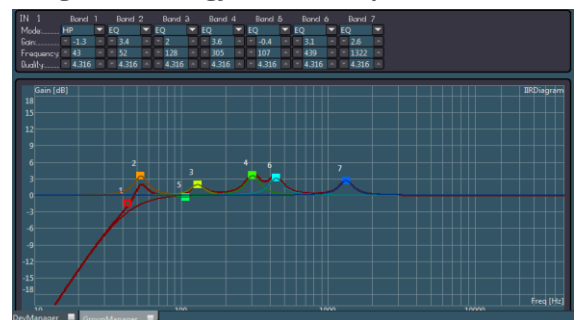
### Software:

24. easy programming, automatic system recognition
25. input selection/adjustment, parametric equalizer
26. FIR filter without phase change, delay
27. multiple beam splitting, beam steering/-inclination
28. beamforming
29. various acoustic centers
30. presets for different sound reinforcement
31. Seis Akustik Group Design

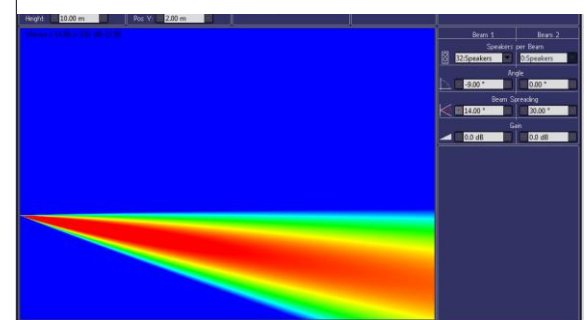
Software compatible with Seis Akustik mixers/devices



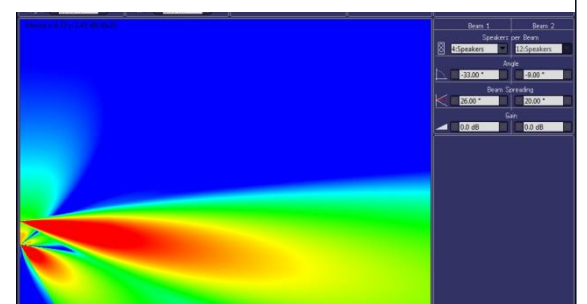
Digital technology without compromises



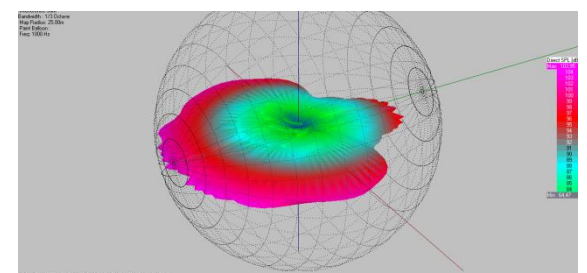
Signal adjustment parametric EQ



Example 1 Beams / Sound fields



Example 2 Beams / Sound fields



Example sound field 1000Hz (25m Radius)

## BSF 816

**Equipment:** Full range, 2 ways,  
8x neodymium speaker systems 4",  
16x tweeter systems  
**Class-D power amplifiers:**  
8x 50W (Woofer) and 8x 10W (Tweeter) RMS  
**Frequency range:** 80 Hz - 20 kHz  
**Hor. Opening angle:** 130°  
**Vert. opening angle:** 12° to 100°  
**Vert. sound inclination:** +50° to -50°  
**Typical range:** 14m  
**Dimensions (W × H × D):** 135 x 890 x 153 mm  
**Weight:** 10,3 kg  
**Housing:** Aluminium, RAL

## BSF 1632

**Equipment:** Full range, 2 ways,  
16x neodymium speaker systems 4",  
32x tweeter systems,  
**Class-D power amplifiers:**  
16x 50W (Woofer) and 16x 10W (Tweeter)  
**Frequency range:** 80 Hz - 20 kHz  
**Hor. Opening angle:** 130°  
**Vert. opening angle:** 7° to 100°  
**Vert. sound inclination:** +50° to -50°  
**Typical range:** 25m  
**Dimensions (W × H × D):** 135 x 1780 x 153 mm  
**Weight:** 20,6 kg  
**Housing:** Aluminium, RAL

## BSF 2448

**Equipment:** Full range, 2 ways,  
24x neodymium speaker systems 4",  
48x tweeter systems  
**Class-D power amplifiers:**  
24x 50W (Woofer) and 24x 10W (Tweeter)  
**Frequency range:** 80 Hz - 20 kHz  
**Hor. Opening angle:** 130°  
**Vert. opening angle:** 5° to 100°  
**Vert. sound inclination:** +50° to -50°  
**Typical range:** 36m  
**Dimensions (W × H × D):** 135 x 2640 x 153 mm  
**Weight:** 30,9 kg  
**Housing:** Aluminium, RAL

## BSF 3264

**Equipment:** Full range, 2 ways,  
32x neodymium speaker systems 4",  
64x tweeter systems  
**Class-D power amplifiers:**  
32x 50W (Woofer) and 32x 10W (Tweeter) RMS  
**Frequency range:** 80 Hz - 20 kHz  
**Hor. Opening angle:** 130°  
**Vert. opening angle:** 4° to 100°  
**Vert. sound inclination:** +50° to -50°  
**Typical range:** 47m  
**Dimensions (W × H × D):** 135 x 3530 x 153 mm  
**Weight:** 41,2 kg  
**Housing:** Aluminium, RAL

## BSF xxxx

**Bestückung:**  
We produce loudspeakers in special  
lengths depending on the project

## BSF Dante

**Erweiterungsmodul:**  
Digital Dante Module  
Brooklyn for connection  
of the BSF series about  
Network



Technical changes and errors excepted