

BAYZ



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ABOUT US

The founder, Zoltán Bay has been obsessed with audio equipment and devices that offer High-End sound quality for more than 30 years. Zoltán is an engineer who strives for perfection, a technical creator who, as a music-lover, also plays the piano. During his career he has developed numerous technical innovations and

special technical solutions, several of which have been patented. His creations include amplifiers, loudspeakers, media players and cables. Apart from his technical successes, he devotes a great deal of attention to appearance and aesthetics, which has been recognized by him being awarded a design quality prize.

BAYZ Audio was established in order to build on experience gained to date and on state of the art innovation – Zoltán Bay's Bay Radial Speakers – to create High-End audio devices without compromise.

TECHNOLOGY

It has been quite some time since traditionally constructed loudspeakers reached the limit of what the human ear can sense, with respect to sound pressure, output and frequency response. In the interest of achieving the final objective, i.e. realistic stereo sound reproduction, High-End loudspeaker developers have increasingly turned their attention to loudspeakers emitting 360-degree sound. There have been many different technical solutions proposed for devices that precisely create radial or omni sound fields. However, the solutions created up to now are only able to realise radial sound projection at the cost of significant compromises.

The spatial projection abilities of radial sound radiation significantly exceed the spatial experience offered by traditional point speakers. It is also a known fact in the current world of High-End loudspeakers that in order to achieve appropriate stereo sound, the loudspeakers have to be very carefully located in the room, e.g. they need to be 0.5 – 1.0 m from the wall behind them. In the case of dipole loudspeakers, the stereo experience very much depends on the precise positioning of the loudspeakers and the listener. Radial or omni loudspeakers can reduce these positioning disadvantages.



The Bay Radial Speaker tweeter is among the best I have ever heard and it may very well be the best in the world today. ..."

Dan Foley

/ Board Member of The Association of Loudspeaker Manufacturing
and Acoustics (ALMA) International
/ Published Author of the Audio Engineering Society
and American Society of Mechanical Engineers
/ Technical Sales and Applications Engineering for Audio Precision
/ Former Field Applications Engineer for Brüel & Kjær
and VP for Listen. Inc.

"When I heard Zoltán Bay's new loudspeaker it was the first time in my life that my own recording took me back in time to the concert venue itself. I had to wait 60 years for this experience, I have never heard anything like it from a loudspeaker, ever!"

Prof. Ernő Sebestyén

/ Former first violin and concertmaster of Leonard Bernstein,
Lorin Maazel and György Solti
/ Former Artistic Leader of the Berlin Philharmonic Chamber Orchestra
/ Former first violin and concertmaster of the Deutsche Oper Berlin Orchestra
/ Former first violin and concertmaster of the
Bavarian Radio Symphony Orchestra
/ Former Head of Department of the University of
Music and Performing Arts Munich

BAY RADIAL SPEAKER

The decades of research and development work carried out by the founder, Zoltán Bay in the subject of radial sound projection finally brought a result in 2011: he created his own, unique radial sound projection concept, the Bay Radial Speaker (BRS). The BRS is actually a cylindrical membrane surface capable of changing its diameter, made from a special material, which creates sound by pulsating in the direction of radiation. This is a revolutionary new radial loudspeaker, which is protected by patent in numerous countries around the world. Its uniqueness does not only come from its radial sound projection ability, but also from its outstanding sound guality.

The BRS's exceptional acoustic and electronic parameters make a level of sound quality available that has never been experienced before and raises High-End quality sound reproduction to a new level. As a result of its outstanding impulse response, the concept of holographic acoustics gains new meaning. It is capable of reproducing the spatial location and dimensions of musical instruments so that they are almost palpable.

As the total surface area of the membrane used is many times that of dome tweeters (as much as 30–50 times), the sound energy projected into the environment is much less concentrated in a single direction. Due to this the sound field created provides a significantly more pleasant sound experience for the human ear.

On the basis of our experience, the audio quality of the BRS is much less influenced by the acoustic features of the environment, in other words it is able to give the listener its special qualities even in relatively poor conditions.

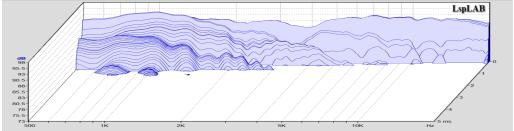
As a result of its construction it handles extreme impulse loading much better than dome tweeters usually used.



R A D S Α K P

Frequency Response with MLS **Frequency Curve** Description: Measurement Acquire date: Jul 9 2018 17:25.16 pm LspLAB **Polar Plot Polar Plot** Description: Polar Plot Acquire date: Jul 9 2018 17:37.25 pm LspLAB +60 1.0 kHz 15 kHz +75° +90° +105° -105° +120 -120° -135° +135 +150 -150° -165° +165 Frequency Response with MLS Impulse Description: PIR Acquire date: Jul 9 2018 17:25.16 pm LspLAB **CSD Graph** Frequency Response with MLS Description: Waterfall Acquire date: Jul 9 2018 17:25.16 pm

LspLAB



ALL MEASURMENTS WITH 4 OHM / 1 W / 1 M (2,83 V)

SMOOTHING 1/12 OCTAVE

MEASUREMENT EQUIPMENT: B&K 4220 Pistonphone • B&K 4165 Condenser Microphone • B&K 2639 Microphon Preamplifier • B&K 2610 Measuring Amplifier • B&K 2716 Power Amplifier • Audio Precision SYS-322 Audio Test System • Audio Precision DCX-127 • GenRad 1689M RLC Digibridge • Digigram WXPocket V2 soundcard • LoudspeakerLab software