SECRETS OF THE MBL RADIALSTRAHLER

We experience “the sound” as a blend of direct and reflected sounds. MBL speakers uniquely create a similar sound field that we perceive as balanced in frequency and natural in time. Just as if listening to instruments in an orchestra, club, or concert, MBL speakers mimic the inherent natural blend of direct and reflected sound. With a true 360° radiation pattern, the MBL Radialstrahler provides a realistic aural and emotional experience, just as if the sound were live.

What exactly is the technology, what ingenious principles are really behind all this sonic magic?

We would like to let you in on some secrets and take you on a journey to explore the world of the Radialstrahler, the world of natural omni-directional sound.

1. The principle of the MBL Radialstrahler independently arranges lamellae segments of a specific shape and material around a vertical axis for each frequency range (Tweeter, Midrange, Woofer). These segments are fixed at the top. All motion is generated by the upward thrust of the magnet/moving coil.

2. The moving coil and the magnet form a single unit. The moving coil moves freely in the air gap of the magnet.

3. The musical signal, still electrical at this stage, is sent from an amplifier to the speaker. Electricity passes through the moving coil, and the resulting magnetic field allows the coil to move up and down in the air gap of the magnet.

4. The vertical movements of the coil force the lamellae segments to bend, creating sound waves. Just like a balloon that is held at the top and forced vertically from the bottom, then released again, the Radialstrahler drivers pulsate and launch waveforms. We hear them as music.

5. The sound is not radiated on one plane, as is the case in conventional speakers, but over a sphere encompassing 360°, filling the room with a natural balance of direct and reflected sounds.

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