## FS 249: When striving for perfection, you must break new ground



Experience music, be right in the middle of it, soak up the atmosphere, "see", feel and sense each instrument, each voice – this is how speakers should reproduce music.

In order to reproduce music authentically, vividly and naturally, the ELAC R&D engineers have paid special attention to three-dimensional sound radiation patterns. Their aim: to acoustically "energize" the room in a consistent and harmonised way.

To this end, ELAC has developed new transducer systems for the bass and midrange, and has calibrated the crossover frequency to optimise sound radiation characteristics across the entire frequency range. The result is a uniquely precise and musical three dimensional soundscape.

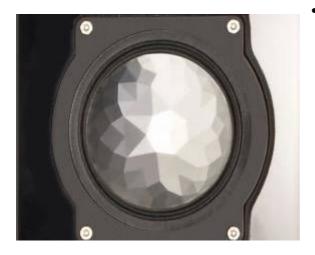
## Technical features and characteristics:

The design of the new patentpending woofer is based on the renowned ELAC aluminium sandwich technology which, by combining the different resonant characteristics of cellulose and aluminium, leads to a marked reduction in harmonic vibrations.

• The crystal-like surface of the new aluminium membrane catches both the eye & the ear. Harmonic vibrations are significantly reduced by the angled crystaline surface structure. In addition, by using a press formed structure, the membrane is more rigid and has lower distortion which not only prevents partial vibrations in the crossover zone but also reduces harmonic distortion.



Due to the high rigidity of the aluminium membrane, it is now possible to attach the solenoid not only to the cone neck but also directly to the aluminium membrane. This significantly extends the cone's bandwidth right across the frequency range giving a noticeably more even & continuous frequency response.



The FS 249 also stands out with a newly developed mid-range speaker that is equipped with a dual-wave (full-roll) absorbent fabric suuround. The specially designed surround absorbs & dampens lateral cone oscillations ensuring exceptionally pure output in the very sensitive mid-range area. This endows vocals in particular with a smoothness & articulation which is truly riveting.

• In the treble, ELAC uses its class leading JET tweeter, recognised worldwide as one of the very finest available. Its internal design has been reworked, which has resulted in an even more linear frequency response and

improved harmonic distortion.

 A key new feature is an acoustic tuning element made from porous foam called the "JET DC" (JET Dispersion Control) This allows the treble to be adapted to particular room settings – especially for hall-like spaces with a lot of glass, wood floors, etc. The JET DC incorporates both a directional characteristic as well as a frequency response correction, so that instruments and voices can be pinpointed precisely - even in difficult room settings with many reverberant surfaces.



- Each FS 249 is equipped with 2 bass reflex tubes. One radiates sound toward the back, one downward onto
  the base plate. This arrangement allows for deeper bass tuning and can also be used as an acoustic low-pass
  filter. The rear projection bass reflex tube comes closed off with a bass control plug. By removing it, the bass
  reproduction can be intensified.
- The FS 249's beautifully built cabinet features massive internal bracing to minimise resonances.
- High-quality ELAC bi-wiring terminals are used with separate connections for bass and middle/treble drivers. The angled adapter terminations are easily accessible and are especially suitable for larger cables (16 mm²) and highquality spade terminals (e.g. WBT products).
- The FS 249 is equipped with an elegant base plate and easily adjustable ELAC spikes/rubber feet. For acoustic reasons, since one of the bass reflex openings radiates sound downwards, the base plate must be securely fitted before use.



Finishes: Mocha, Cherry Veneer, Black High Gloss

## Specifications ELAC FS 249

Dimensions
Height (with/without base plate/spikes)
Width (with/without base plate)
Depth (with/without frame/base plate)
Weight
Type
Woofer
Midrange
Tweeter
Rec. Amplifier Power at nominal impedance

1060/1118/1147 200/260 308/323/368 mm 31 kg 3-way, bass reflex 2 x 180 mm AS-XR cone 140 mm AS-XR cone JET III (?) 30 – 400 W / Channel

Nominal Power handling Peak Power Handling Frequency Range Sensitivity Nominal impedance Minimum impedance

Crossover Frequency

500/3200 Hz 200 W 250 W 28 - 50000 Hz

89 dB/2.8V/m 4 ohms 3.0 ohms at 120 Hz