

Technics SB-E200

3-Way Horn Type
Linear Phase Speaker System



A Touch of Luxury in Sound and Appearance: The Linear Phase System in Its Rosewood Enclosure

The waveform fidelity that has won such high acclaim for Technics Linear Phase speaker systems now becomes available for the first time in a three-way system using horn drivers for the midrange and tweeter, and proving that the high efficiency and sharp clarity of horns can very well be matched with low distortion and wide frequency range. "Linear Phase" means that wavefronts that arrived

together at the microphone in the recording studio will arrive together at your ears—phase (or time) relationships do not change with frequency. This explains the superior ability of these Technics speakers to reproduce complex pulse signals and their uncanny way of giving a sharp, pin-point stereo image. Let's examine the system constituents in some detail:



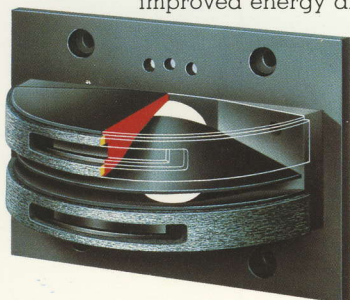
30cm Woofer with Diecast Frame and High Efficiency

For a finely balanced match with the high efficiency mid and high range horns, a woofer of equally high efficiency was chosen (94dB SPL at 1 m, 1 W). Aided by its non-resonating diecast frame, its light and solid cone, its high compliance damper and non-directional urethane edge, it delivers crisp, well controlled bass energy aplenty. The ferri-casting core helps reduce magnetic distortion, while the highly heat resistant voice coil bobbin insures high power handling capacity: 150 watts, music.



Radial Horn Midrange Driver of Wide Dispersion Angle

Covering a horizontal angle of 150 degrees, the radial midrange horn completely avoids the danger of "beaming", giving a spacious, unrestricted stereo listening area. The horn is solid aluminum diecast deadened against horn resonances with sheets of natural latex and bolted to the woofer enclosure. The driver itself uses an aluminum alloy diaphragm only 30 microns in thickness of excellent transient response, a copper clad aluminum wire voice coil wound on an aluminum bobbin of very good heat dissipation. This construction and the high magnetic flux density of 13,200 Gauss account for the high efficiency and low distortion of this driver. It is coupled to the horn via a newly developed, shell-shaped equalizer for improved energy dispersion.



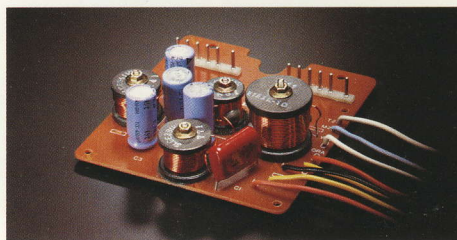
Cross sections of radial horn midrange and tweeter



Equally Wide Dispersion from Horn Tweeter

The horizontal horn opening angle of the tweeter encompasses the same 150 degrees as in the midrange. Again the radial horn is aluminum diecast covered with anti-resonant natural latex and equipped with a diecast equalizer for wide, balanced energy distribution. Driver data attest to the high performance of this unit: 14mm ϕ voice coil, very thin (50 microns) metallized polyester film diaphragm, alnico magnet with 12,500 Gauss flux density, copper-clad aluminum wire voice coil for high efficiency.

Special Crossover Network, Staggered Driver Arrangement Give Linear Phase Response



All conditions for linear phase response have been fulfilled: drivers of wide, flat frequency response used only in their areas of optimum linearity; special network design (a unique combination of 12dB/oct and derived m-type filters) avoiding phase shifts; and in-line arrangement of the drivers' acoustic centers, to ensure equal thru-air sound travel times. This linear phase feature is instrumental in achieving highest waveform fidelity and sharp, clear-cut imaging of sound sources in the acoustic field.

Terminals for Tri-Amping Provided

For tri-amping installations, direct access to the individual drivers has been provided.



Bass Reflex Enclosure Improves Bass Response

In order to match the high efficiency of the mid and high range horns, the woofer has been given a bass reflex environment, increasing its effective sound pressure while avoiding any trace of "boominess."

Genuine Rosewood Finish, Optional Speaker Stands

In their rich, luxurious rosewood finish, these speakers will add visual appeal to any living room. Special stands are available optionally.



The SB-E200 comes supplied with four insulated feet. Suitable for placement on shelves, etc.

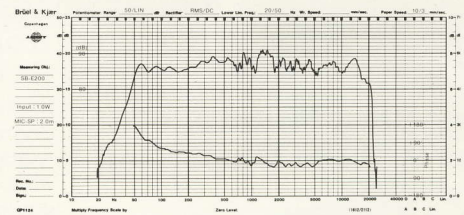


Optional speaker stand SH-S200 is available for floor placement. This stand may be adjusted to two different heights.

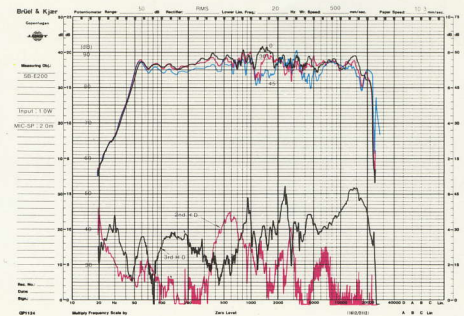
Technical Specifications

Configuration	3-way 3-speaker system
Speaker units	Woofer: 30 cm (12") cone type Midrange: Horn type Tweeter: Horn type
Impedance	8 ohms
Input power	150W, music 100W, DIN
Output level	94dB/W (1.0m)
Crossover frequencies	1,500Hz, 6,500Hz
Frequency range	37Hz~22,000Hz
Dimensions (W x H x D)	63.3 x 61.8 x 44.1 cm (24-7/8" x 24-3/8" x 17-3/8")
Weight	27.5kg (60.6 lb.)

Sound Pressure and Phase Characteristics



Directional Dispersion and Harmonic Distortion



Technics
Matsushita Electric