



Technics SB-5000

"Linear Phase" 2-Way Speaker System



SB-5000 Linear Phase 2-Way Speaker System

An Important Step in the Continuing Quest for Ultimate Realism

The SB-5000 speaker system starts where most others finish: with a flat amplitude frequency response. But Technics research showed that the ultimate in realism calls for linear phase response, too. It wasn't easy. It took all of Technics accumulated audio expertise to achieve the technical breakthrough that made it possible. Not easy, but infinitely worthwhile, as you will agree if you hear the SB-5000 speakers.

Technically, it means that the output sound-pressure waveforms mirror the electrical input signals almost exactly. Audibly, it means that there is a dramatic improvement in the sense of realism, the sense of being

'really there,' whether at the recording studio or the live performance. You may not want to be bothered with the technical explanations of 'phase' and its measurement with the help of the special 'Bucket Brigade Device (BBD).' But you can't afford to ignore the difference that they make. The result is a limpid clarity of sound, a crisp transparency from deep bass to supersonic highs, that lets you enjoy, perhaps for the first time, the music as it really is. The punch, the brilliance, the sparkle of the original sound is there, yours to enjoy. Make sure you hear these speakers, for a new experience of realism.

Bass-Reflex 2-Way Speaker System with 25cm (10") Woofer and 6cm (2 $\frac{3}{8}$ ") Cone Tweeter in Linear Phase Configuration

Incredibly accurate output waveform fidelity, which means correspondingly realistic reproduction, is assured by the special crossover network, designed for linear overall phase characteristics (including individual speaker units), by the wide frequency range and high performance of the units themselves, and by the ideal physical configuration.

Extra Wide-Range Woofer

The special blend of aramid fiber in the woofer cone, combining lightness and strength, enables the frequency range to extend to 4 kHz, so that critical midrange frequencies are free of partial vibration, with extra low distortion. The voice-coil bobbin of hardened aluminum foil gives excellent heat dispersion for high power operation.

Wide-Range Edgeless Cone Tweeter

A specially developed synthetic resin prevents air-leakage and supports the cone with high compliance. This edgeless structure eliminates the edge resonance and reduces distortion. Response extends all the way up to 28 kHz, with an f_0 as low

as 350 Hz: this tweeter has the ultra-wide range essential for linear phase response. The crossover network assures the smoothness and perfect tweeter/woofer balance, with linear phase, that makes the SB-5000 sound more like a wide range single speaker than a two-way unit.

Optimum Speaker Location

The acoustic centers of woofer and tweeter are perfectly aligned, and physically as close as possible, to get maximum phase linearity, and even sound distribution. The location of the units is finely tuned to compensate the phase shift at the crossover network. Location of the woofer well away from the floor reduces boomy 'floor effects.'

High Power, High Efficiency Bass Reflex Design

The SB-5000 features a carefully-tuned bass reflex cabinet for rich, solid bass response. Happy with peak powers up to 75 watts, the SB-5000 isn't greedy: the high 93.5 dB/W.m efficiency gives ample volume at low power.

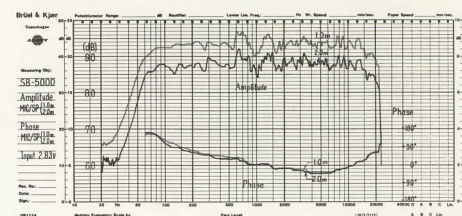
Technical Specifications

Configuration	2-way 2-speaker bass reflex
Impedance	8 Ω
Peak input power	75 W
Output level	93.5 dB/W (1m)
Speaker units	Woofer: 25 cm (10") cone type Tweeter: 6 cm (2 $\frac{3}{8}$ ") cone type
External dimensions (W x H x D)	350 x 717 x 323 mm (13 $\frac{3}{4}$ " x 28 $\frac{1}{4}$ " x 12 $\frac{11}{16}$ ") (including grille)
Net weight	16 kg (35.2 lbs.)

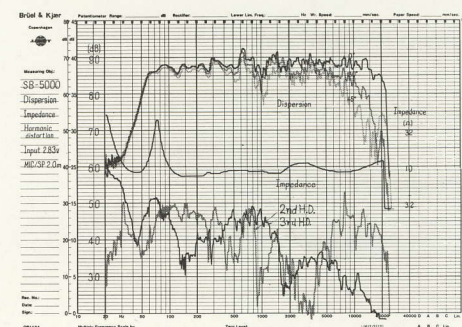
Note 1: The maximum instantaneous peak power quoted above is for a voice-coil temperature rise to not greater than 80°C (176°F), which corresponds to the conditions of measurement.

Note 2: System supplied with grille cloth as shown on front page.

Sound Pressure and Phase Characteristics



Directional Dispersion, Harmonic Dispersion and Impedance Characteristics



 **Technics**
Matsushita Electric

Specifications are subject to change without notice. Printed in Japan