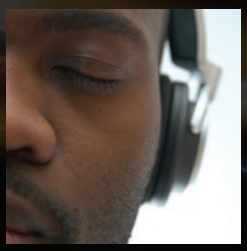
Sontia®



Hear Sontia—and Hear The Big Picture

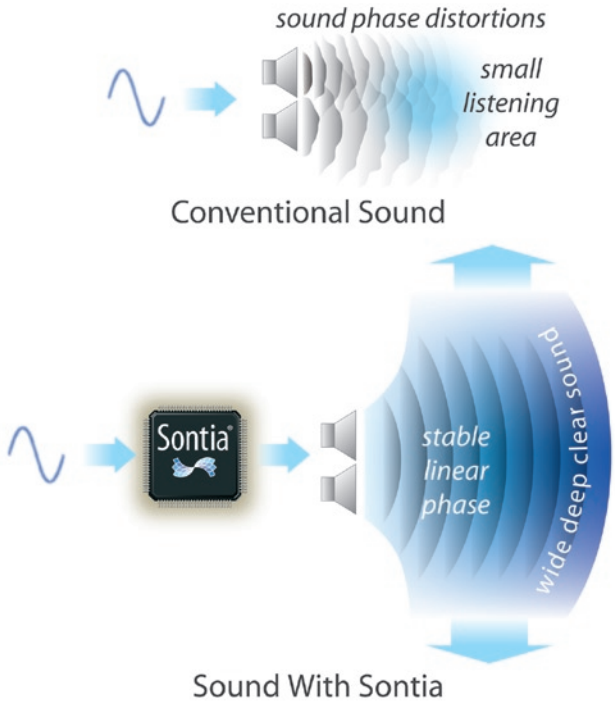
Sontia's family of patented Stable Phase audio Technologies ('SPT') take a ground-breaking approach to correcting and improving sound—achieving stunning results across a wide range of audio products.

Sontia's SPT is a family of audiophile-grade sound correction and improvement technologies that dramatically improve the performance from any speaker in almost any sound product. Traditional, low-quality, sound enhancement approaches often employ effects and gimmicks—usually with unpleasant audible results. Sontia's studio-quality SPT approach is fundamentally different. It creates a unique, multi-dimensional profile of the sound produced by a product, measuring a vast range of natural acoustic and psycho-acoustic characteristics. It then uses this profile to 'pre-correct' the signal that is fed into the product's speaker(s)—producing a near-optimal, impressive sound. SPT removes most sonic artefacts resulting in natural, clear, 3-dimensional sound with deep, rich bass. What's more, in the listening environment, there is nothing to set up and no calibration required.

Sontia SPT Key Benefits

- better, crystal clear, natural, life-like sound
- three-dimensional audio experience
- stunning deep, rich, smooth and natural bass
- wide optimal listening area
- makes smaller speakers sound much larger
- removes cabinet resonance and artefacts
- provides distortion-free listening at high volumes
- resolution suitable for audiophile quality products.

"[with Sontia SPT turned on] the sound changed entirely, making it more than simply '2.0' sound...it performed beautifully...bass portrayed huge resonance; sound seemed like a live performance" (review in *EE Times*)



The Sontia SPT Family

SPT Speaker Optimisation

Conventional speaker 'correction' simply alters the frequency response. Sontia's SPT speaker optimisation employs patented algorithms to correct the phase, time and frequency response of the whole speaker product, including the enclosure, mounting position and destructive interference of sound waves between speaker drivers. Listeners agree that improvements are dramatic.

SPT Acoustic Imaging

Conventional speakers suffer from a small optimal listening area (or 'sweet spot'), possess poor sonic depth and produce sound that isn't life-like. Sontia's SPT Acoustic Imaging is a patented approach that employs novel otoacoustic and 'whole-body' acoustic modelling techniques to produce sound that is natural and spacious with a wide listening area.

SPT Linear-Phase Digital Cross-over

Conventional cross-overs suffer from a number of problems, including cancellation/phasing effects, poor frequency separation, poor phase/time matching, ringing, signal transient smearing, lobbing and beaming effects. Sontia's SPT Cross-over addresses these problems, achieving 4–8 times better frequency separation and virtually eliminating destructive interference between drivers. Results are free of nearly all distortions commonly associated with conventional cross-over designs.

SPT Cabinet Resonance Control

SPT Cabinet Resonance Control removes enclosure resonance and rattle that typically affects audio products at higher listening volumes.

SPT Dynamic Bass Enhancement

Sontia SPT bass enhancement is multi-faceted. Firstly, linear phase correction increases available bass energy by removing the cancellation effects of out-of-phase sound waves. Sontia also uses an advanced, patented, organic convolution method that reproduces 'lost' bass harmonics, adapting to the actual sound passing through the system in real-time. Additionally, Sontia's SPT LFX technique optimises bass for different volume settings, extending bass response at normal listening volumes. These approaches achieve astounding, deep, rich bass.

SPT Central Channel Generator

Sontia's SPT Central Speaker solution delivers improved sound through the central speaker in sound/speaker bars and other 3+ channel systems. Unlike traditional subtraction techniques, Sontia SPT Central Speaker is able to accurately isolate sounds that are common to left and right channels using sophisticated algorithms that are a part of Sontia's core SPT approach.

SPT Active Damper

It is well known that standard loudspeaker cones continue to move after the original sound signal has stopped, producing undesirable effects and distortions. Sontia's SPT Active Damper algorithm is a patented solution that removes this effect allowing the speaker to faithfully track the audio signal.

U-Q Voicing

U-Q Voicing is a very high quality, manufacturer-configurable, multi-band digital EQ that allows Sontia SPT to be tuned to a preferred product 'voicing'.

Integrating Sontia SPT

Sontia's expanding range of reference designs, hardware modules, development tools and support make it easy to incorporate the ground-breaking SPT solutions into any audio product. For more information about integrating Sontia SPT, contact us and we'll be happy to help.

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