

Sontia Solutions for TV

When applied to TV, Sontia's revolutionary patented technologies create a stunning sound experience with deep, rich bass, 3-dimensional depth and clear, life-like quality that is vastly superior to conventional TV sound.

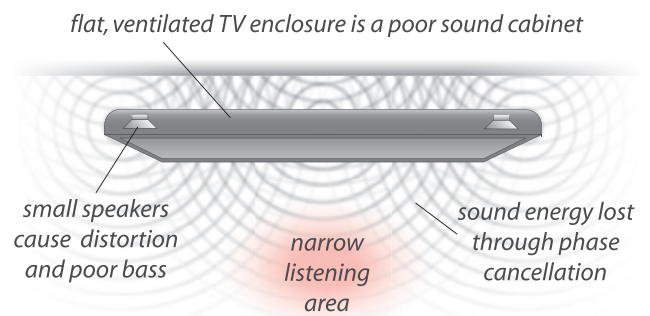
Sontia's Stable Phase Technologies (SPT) are a family of innovative high-fidelity sound solutions that dramatically deliver outstanding, superior performance from any speaker in almost any sound product. In TV applications, Sontia SPT delivers an unrivaled transformation of the sound experience and provides an effective, low-cost solution to the problems associated with TV sound design.

Sontia SPT Capabilities in TVs:

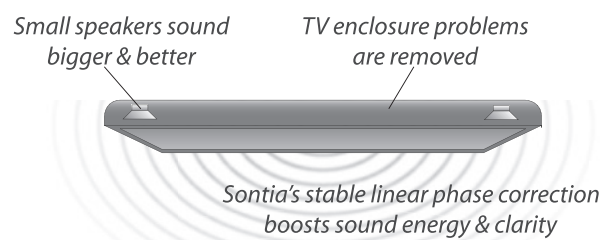
- vastly improved bass volume and richness
- wide, spatial listening area with natural depth
- life-like, natural, crisp and clear sound
- removes the negative effects of the TV enclosure
- overcomes limitations of small, inexpensive speakers
- improves clarity of spoken-word content
- boosts sound level through linear phase correction
- sound appears to come from the screen, not the frame
- provides distortion-free listening at high volumes.

"very impressed...a naturalness and fidelity to the original that I have not heard before"

Michael Price, Music Editor & Composer
(*'Lord of the Rings'*, *'Quantum of Solace'*)



Without Sontia



wide, clear sound with deep dynamic bass

With Sontia

Vastly Improved Deep, Rich Bass

Achieving good bass from flat-panel TVs is a big challenge. A thin enclosure is the aim, so they usually aren't deep enough for large bass speakers or bass ports. Common bass enhancement processing often creates an unpleasant, artificial sound without significant improvement in bass. Sontia's bass enhancement is different and achieves vastly better results. Firstly, Sontia's 'SPT' linear phase correction algorithms prevent sound energy from being lost when out-of-phase sound waves cancel each other out—this process naturally increases bass. Secondly, Sontia performs *dynamic* equalisation, which adapts to the actual sound passing through the system *in real-time*. Sontia also offers an additional, patented, organic convolution bass enhancement approach that reproduces 'lost' bass harmonics.

Spatial Sound At Any Position

'Virtual' Surround Sound effects are common in home entertainment but they usually sound artificial, create distortions and, at best, only create their 'effect' in a single listening position. Some approaches rely on unreliable reflections from surrounding walls. Sontia's Acoustic Imaging approach is not an effect - it delivers high fidelity performance and is effective across a wide listening area without using room reflections. Sound appears to come from within the screen and not from the frame or base.

Removes Enclosure Problems

Any speaker enclosure affects the sound that is produced. Unlike dedicated speaker cabinets, TV enclosures are not designed primarily for sound reproduction. They have very little internal space, and they tend to introduce unpleasant and unwanted modifications to the sound. TV sound often appears 'boxy', unnatural and with an uneven frequency response. Sontia SPT inherently removes the enclosure's many negative characteristics by creating a unique profile of the distortions that it produces, calculated from sound data gathered in an anechoic chamber. These distortions are effectively 'cancelled out' by the profiled Sontia algorithms and producing the original natural sound that was intended.

Life-Like Sound & Clear Dialogue

Listeners say that with Sontia on board, sound is far more life-like and natural - almost like original, 'live' sound. This is perfect for TV content such as music concerts, nature programming, movies and speech. Sontia SPT sounds natural because it has removed the unnatural distortions created by the speaker drivers and enclosure using a profile, created in the sound labs, which is unique to the inherent characteristics of the product.

Small Speakers, Yet Great Sound

Thin, flat-panel TVs have limited space for large speakers—and a target selling price with a very limited budget for the highest quality speaker drivers. Consequently, it's a challenge to get big, high-quality sound from most TVs. The Sontia SPT process measures the characteristics of the chosen speaker drivers (and enclosure). Using this measurement, it applies a natural and perfect correction that will yield the theoretical best that the chosen speaker can achieve. It is possible for speakers to be replaced with cheaper units yet achieve equivalent (or better) performance with Sontia on board.

Integrating Sontia SPT

Integration of Sontia SPT is easy. It requires no modification to speakers or the product enclosure—it just requires the incorporation of Sontia's real-time algorithms on inexpensive, commonly available DSP electronics. Sontia also offers reference design electronics for rapid product integration. Just contact us for more information and we'll be happy to help.

"[with Sontia 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*)