

ABOUT



Location Based 360 Immersive Audio Platform

Welcome to TruSound, a cutting-edge company at the forefront of 360-degree immersive sound technology. We are dedicated to revolutionizing audio experiences through innovative research, development, and manufacturing of state-of-the-art sound systems and equipment. Our team of passionate audio professionals combines years of expertise in music composition, production, and sound design with the latest technological advancements to create unparalleled auditory environments.

At TruSound, we're not just about technology - we're about transforming how people perceive and interact with sound. Our mission is to create hyper-realistic sound spaces that seamlessly blend artistic vision with technical excellence, providing creators with powerful new tools to express their ideas. Join us as we explore the future of audio and redefine the possibilities of immersive sound.

ABOUT

Stephen Thomas Cavit CEO



As Co-Founder and CEO of TruSound, Stephen brings a wealth of experience and accolades to the company. His impressive track record includes three Emmy Awards, a THEA Award, and an IAAPA Brass Ring Award, showcasing his expertise in audio production and innovation.

Stephen's talents have been further recognized through his participation as a two-time BMI Conducting Workshop fellow and a Sundance Composers Lab fellow, demonstrating his commitment to continuous learning and excellence in his craft.

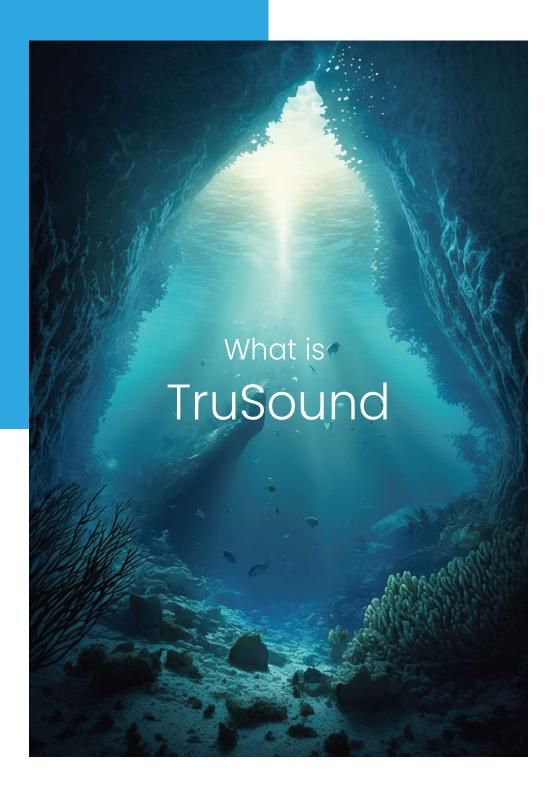
Stephen's years experiences in music industry let him to have the ability and sensitivity to combine artistic ideas and pioneer technology together, that's where TruSound started.



Roger Hayler CTO

Roger is CTO and lead developer, brings a solid academic background with a Bachelor's degree in Electroacoustics from Salford University, UK. This specialized education forms the cornerstone of his expertise in audio technology and acoustics.

Roger's professional journey includes roles as a noise and vibration control consultant at ATP, UK, and involvement in studio design at Feldon Audio, UK. A key highlight of Roger's career is his work on China Giant Screen audio system R&D, showcasing his ability to develop cutting-edge solutions for large-scale immersive audio environments. This experience directly translates to his role in driving TruSound's technological advancements.



Immersive & Interactive Audio

TruSound is a state-of-the-art audio rendering system that delivers a true 3D immersive and interactive audio experience. It utilizes a sophisticated real-time engine to render the audio scene based on the location of objects and loudspeakers. With TruSound, you can create a high-definition sound field that accurately replicates the spatial characteristics of the audio content, making it feel as if you're right in the real world.

Realistic Effects

This cutting-edge technology goes beyond traditional stereo systems by delivering more realistic movement and positioning effects.

Maximum Optimal Listening Area

TruSound focuses on optimizing the sound field for the maximum the best audience area, ensuring an exceptional experience for everyone, not just those sitting in the "sweet spot." It's like having a concert hall or a movie theater come to life in your own space.



Where is

TruSound



Theme Parks and Attractions

TruSound's technology is ideal for creating captivating audio experiences in dark rides, flying theaters, and special movie theaters. Our systems enhance the immersion factor, transporting visitors into fantastical worlds through sound.

Immersive Exhibitions

Museums and art installations benefit from TruSound's ability to create layered, interactive audio environments. This technology brings exhibits to life, offering visitors a more engaging and memorable experience.





Entertainment Venues

From music bars and EDM clubs to live shows, TruSound elevates the audio experience. Our technology creates dynamic, enveloping soundscapes that intensify the energy and emotion of performances.

Retail and Hospitality

hospitality venues, creating immersive environments that enhance brand experiences and customer engagement. Our technology can be tailored to create unique ambiances that complement various settings.





1. Object-based 3D Spatial Panning

TruSound utilizes advanced Spatial Panning in three dimensions, allowing for precise positioning of audio objects in space. This technology ensures smooth transitions and realistic movement of sound sources.

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4. Pan-Split Function

By incorporating cutting-edge psychoacoustic principles, TruSound's DSP processing generates a truly immersive 360-degree sound field. This approach takes into account how the human brain perceives sound, resulting in a more natural and enveloping audio experience.

3. Psychoacoustic DSP Processing

The innovative Pan-Split function allows for even more precise object positioning, giving sound designers granular control over the placement of audio elements within the 3D space. This feature is particularly useful for creating highly detailed and accurate soundscapes.

2. Unique Decorrelation Algorithms

TruSound's proprietary decorrelation algorithm minimizes interference between loudspeakers, ensuring clarity and definition in complex sound environments. This feature is crucial for maintaining the integrity of the sound field across multiple speakers.



Key Features

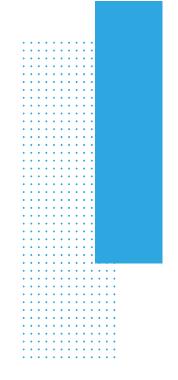


5. Self-Healing Function

TruSound incorporates a robust self-healing function that ensures continuous operation even in the event of hardware failures. This feature automatically redistributes audio signals to functioning speakers, maintaining the integrity of the sound field and minimizing disruptions to the listener experience.

7. Customizable Interface and Configuration

TruSound offers highly customizable plan views and loudspeaker configurations, allowing for tailored setups that match the specific requirements of each venue. This flexibility ensures optimal performance regardless of the physical space or acoustic challenges present.



6. Independent Filing Function

With TruSound's unique independent filing function, a single audio production can be easily adapted to different venues. This versatility allows creators to design once and deploy across multiple locations, saving time and resources while ensuring consistent quality across various installations.

8. Binaural Monitoring with HRTF Selection

The system includes a sophisticated binaural monitor generator with selectable Head-Related Transfer Functions (HRTF). This feature allows sound designers to accurately preview the 3D audio experience through headphones, facilitating precise adjustments and quality control during the production process.



TruSound Client

Remote Version*

TruSound Server

Essential version: 32 x 32 Standard version: 64 x 64 HD version: 64 x 128

TruSound Client

Rack Version*

System Connection



QLab/ProTools...etc. DAW

TruSound system *Server & Clients*



Dante

Amplifier & Loudspeaker

Essential version: 32ch Standard version: 64ch HD version: 128ch



Audio DSP Engine

- · 3D-VBA Panning Processing
- · Speaker System Bass Management Processing
- · Real-Time Renderer

Automation Engine

- · Snapshots and Cues
- · MTC, MSC, OSC, UDP Interfacing
- · Live XYZ Tracking Interfacing









Client Control Software



- Application used to configure the TruSound server and program performances
- · Customized Venue, Object and Speaker configuration
- · Snapshot and Cue to maximize automation function

Modular software design for extensible future audio processing and control features.

Server

Specifications

	TruSound Essential	TruSound Standard	TruSound HD
Input Channel	32	64	64
Output Channel	32	64	128
Sample Rate		48 kHz	
Bit Rate	24 bit		
Touch Screen	7.9 inch IPS Touch Screen, 400 x 1280 pixel		
Digital Signal Format	Dante / AES67		
3 rd Party Control	MTC / MSC / OSC / UDP via Ethernet port		
CPU	Intel® Core™ i7	Intel® Core™ i9	Intel® Core™ i9
RAM	16 GB	32 GB	32 GB
Internal Storage	500 GB SSD		
DSP Processing Latency	1.48 ms		
System Latency	14.8 ms	14.8 ms	1.48 ms
Connectors	1 USB-C port, 1 Ethernet port		
Electrical	100∼240V, 50∼60 Hz, 10A Current, Auto- Switching		
Rated Power	550W		
Rack Spaces	19" Rack Mount, 3U		19" Rack Mount, 4U
Net Dimensions	129 x 483 x 388 mm		176 x 483 x 388 mm
(HxWxD)	(5" × 19" × 15")		(7" x 19" x 15")
Packing Dimensions	210 x 555 x 545 mm		256 x 555 x 545 mm
(HxWxD)	(8.3" × 22" × 21.5")		(10" x 22" x 21.5")
Net Weight	11.2 kg (24.7 lb)		13.5 kg (29.8 lb)
Packing Weight	13.5 kg (29.8 lb)		16 kg (35.3 lb)

TruSound

Features

Immersive sound rendering algorithm

Object-based 3D-VBA Panning System

Immersive and interactive audio real-time renderer engine

Psychoacoustic Based DSP Processing to generate a 360 immersive sound field $\,$

Unique decorrelation algorithm between adjacent loudspeakers

Pan-Split Function

Based on object and loudspeaker location

Upmix and Downmix Function

Self-healing Function

Independent Filing Function

Binaural Monitor generator with choose-able HRTF

MTC / MSC / OSC / UDP Control protocol

Live XYZ Tracking Interfacing

Bass Management processing

Loudspeaker setting: level, mute, seclectable size for bass management

Object setting: level, solo, mute, mute group

Up to 1000 Snapshots

Non-limitation CUE list

3D Modelling

Customized plan view and loudspeaker configuration

Quad 3D views

Room Shape: Cuboid, Cylinder, Floor Plan

User definable loudspeaker: name, type, position, rotation

User definable object: name, color, position

