S^n space Ultra

PlayeahSoun°D 酷雅空间声 | 24bit 48Khz | 24bit 96Khz | IMFA | RT-MC | AI音乐解构 AI MUSIC DECOMPOSE | UISIF

S^{n}space Ultra

———Sound Creates Ambience, Ambience Evokes Emotions

S^{n}space Ultra is a fully integrated audio-visual-light interaction meta-control center designed for concerts, exhibition halls, cutting-edge art shows, high-end boutiques, immersive live performances, theaters, and more. Exceptional sound field processing enhances the atmosphere, and Sound Master employs Playeah's proprietary "PlayeahSoun3D" spatial audio composite rendering engine, supporting up to 128 independent speaker outputs to create a detailed, natural, and enveloping 3D spatial sound field. Together with set design, lighting effects, and video projections, it builds a fully integrated environment of sound, electricity, light, and shadow.

Ultimate Fusion of Sound, Light, and Shadow — Unity of Sound and Ambience.

The fusion of sound, light, and shadow is not merely about following beat changes. S^{n}space Ultra integrates Playeah's "IMFA" and "RT-MC" technologies to intelligently analyze and extract music metadata, dynamically synchronizing lighting effects, motion visuals, and other special effects to ensure that light, shadow, and mechanical movements align perfectly with musical rhythm and thematic emotion.

Diverse Interactions for Deeper Immersion.

Playeah's self-developed "UISIF" interaction interface enables S^{n}space Ultra to establish organic connections with the audience's visual, auditory, olfactory, tactile, somatic, and kinetic perceptions and actions. This allows for comprehensive mutual sensing and interaction between the thematic environment and people, making the theme more impactful and the experience more immersive.

S^{n}space Ultra provides exhibition and program designers with a comprehensive and uniquely powerful creative toolkit, enabling every meticulously crafted exhibition, display, and production to deliver a transcendent viewing experience and deeper emotional resonance to the audience!

FEATURES

- PlayeahSoun3D audio processing engine supports the construction and rendering of panoramic sound fields with up to 128 speaker channels, providing the foundational support for building the Playeah Soundscape TM.
- Supports AI Music Decompose intelligent music separation, which independently outputs isolated tracks of vocals, instruments, or other audio elements, providing more material and flexibility for live sound design.
- Supports two independent heterogeneous 64-channel speaker spatial sound fields.
- Supports spatial reverb processing, delivering an enhanced sense of presence.
- Up to 64 independent low-frequency channels.
- Supports 128 independent movable sound sources, all trackable via external beacons for movement and positioning.
- Automatic delay and loudness processing for each sound source, ensuring natural and realistic audio perception.
- 128-channel multi-track 6-band EQ processing for precise and delicate sound output.
- Compatible with channel-based immersive audio sources (including Dolby Atmos, DTS), enabling full spatial effect reproduction and overall sound field manipulation..
- Binaural Audio output for monitoring and production personnel to experience Playeah's spatial audio effects.
- New sound source trajectory design function with 3D interface for intuitive and flexible audio movement simulation. Designed trajectories can be stored and recalled
- Customizable audio input/output routing and channel control interfaces, offering greater freedom and flexibility.
- Built-in Dante network audio routing manager for direct control of audio network settings.
- Upgraded Playeah Soun3D engine with visual, drag-and-drop speaker layout design for intuitive sound field modeling..
- IMFA technology for real-time analysis of music segments, dynamics, tempo, and beat, providing emotional elements for scene integration..
- RTBC real-time rhythm control technology for precise synchronization of external devices with music rhythm.
- UISIF universal interaction system interface for seamless integration with third-party systems and diverse spatial interactive experiences.

Model: S^{n}space Ultra			
Processing Core:	Intel 64bit 24core CPU	**Storage Space:**	32GB RAM, 512GB SSD
Control Protocols:	OSC,MIDI,RS485,RS232,Qlab,UDP	**Control Channels:**	4 × RS485, 4 × RS232
AoLP Standard :	(AES67 National Standard., GY/T332 National Standard)	**Sound Field Algorithm:**	Playeah Soun3D
Real-time Dynamic Sound Sources:	128	**Automatic Beacon Tracking:**	128
Frequency Response:	20Hz-20kHz	**Output Control:**	Independent Bass Management
Clock Accuracy:	±0.1ppm	**Total Harmonic Distortion:**	0.003%@1kHZ
Sampling Frequency:	48/96kHz	**Signal-to-Noise Ratio:**	102dB
Dynamic Range:	96dB	**Processing Precision:**	64-bit Floating Point
Music Formats:	WAV,MP3	**Quantization Precision:**	24bit
Network Audio Input:	128 ch@Dante	**Network Audio Output:**	128 ch@Dante
Network Interfaces:	1 × RJ45, 1Gbps	**Dante Interfaces:**	2 × RJ45
Video Interfaces:	1 × HDMI	**USB Interfaces:**	7 × USB3.0
Dimensions:	430mm×385mm×90mm	**Power Supply:**	AC 220V, Redundant Dual Power
SMPTE Timecode Support (LTC、MTC)		**Weight:**	7.6Kg

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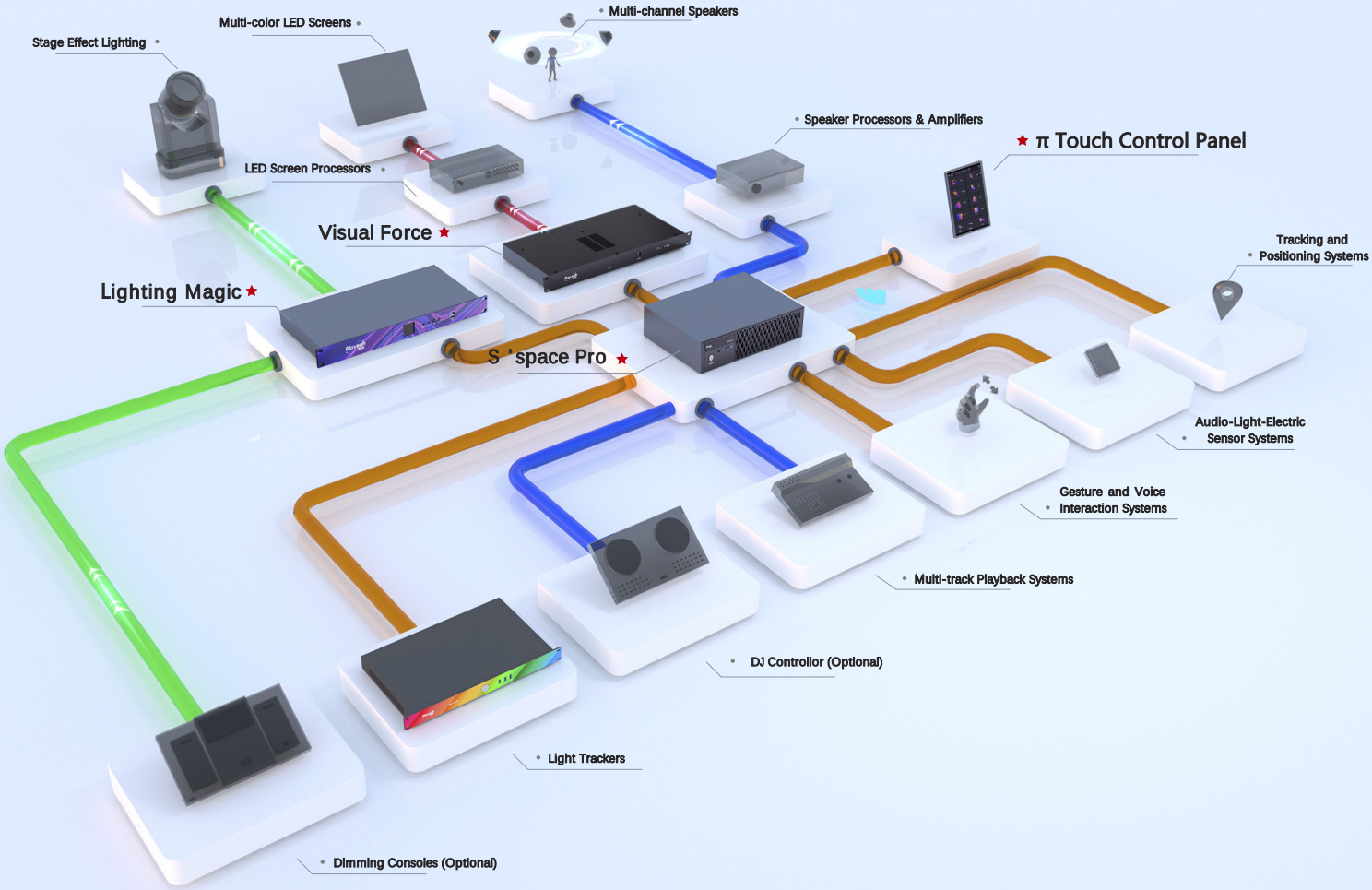


Application Connection Diagram

Control Signal

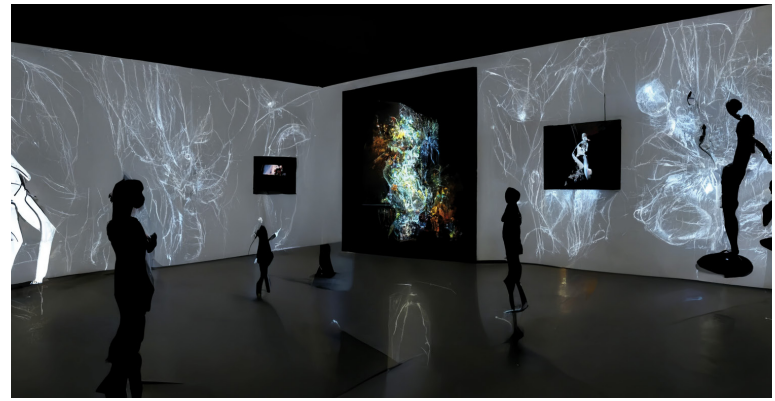
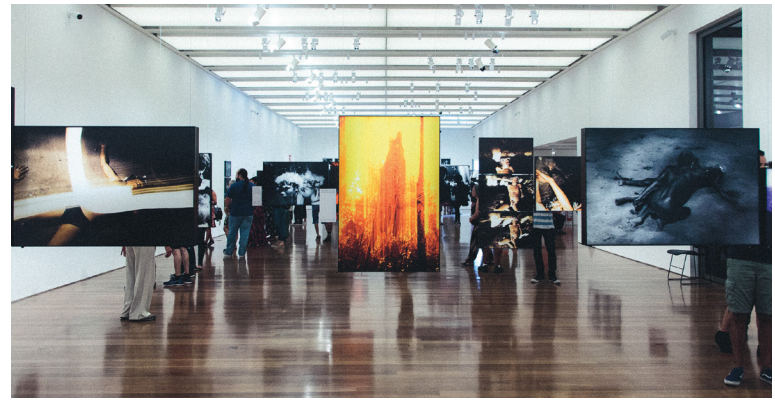
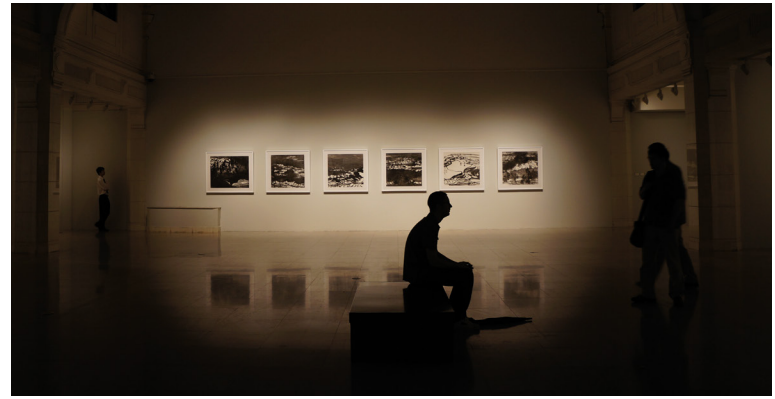
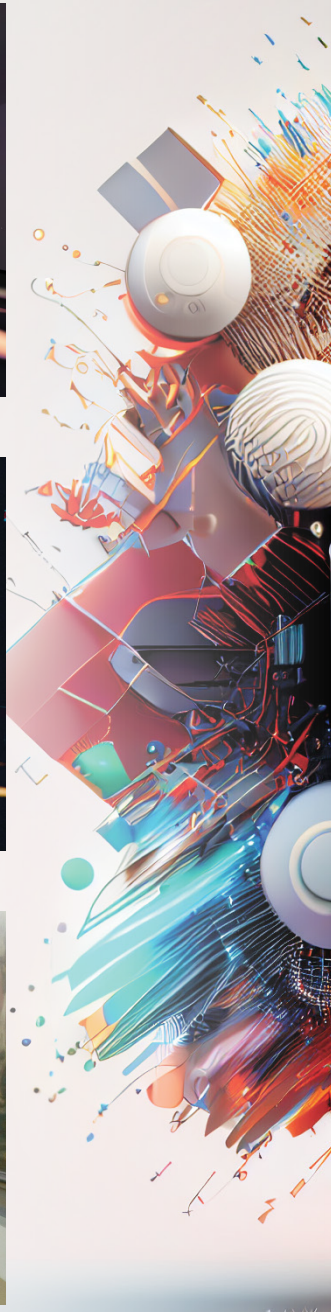
Video Signal

512 signal

Audio signal

Wireless Signal

APPLICATION SCENARIOS

Playeah Space

Enables deeply immersive experiences, offering new concepts and design perspectives for thematic exhibitions, cutting-edge art shows, high-end boutiques, immersive live performances, interactive dramas, and more.