360 ° DJ User Manual

Catalogue

1. Product Introduction

1.1 Introduction to 360°DJ

Playeah 360 DJ is an innovative solution that transforms traditional stereo DJ performances into immersive audio experiences — all without altering the DJ's original workflow. Powered by AI Music Decompose technology and the PlayeahSoun^{3}D Spatial Audio Engine, it creates an unprecedented level of interactive depth and heightened audiovisual immersion for both performers and audiences.

Deeply Moving Immersive Experience

Seamlessly converts stereo-format audio into a 360°DJ immersive sound experience, delivering more emotionally engaging stage effects and amplifying audience influence.

Real-Time Stem Separation

Utilizes AI Music Decompose algorithms to analyze and convert stereo audio into multi-track streams in real-time. Combined with a multi-algorithm spatial sound rendering engine, it achieves higher precision, clarity, and audio fidelity in 3D space reproduction.

seamless transition

Easily integrates with mainstream DJ equipment without complex configurations or cumbersome operations.

Creative Linkage & Interaction

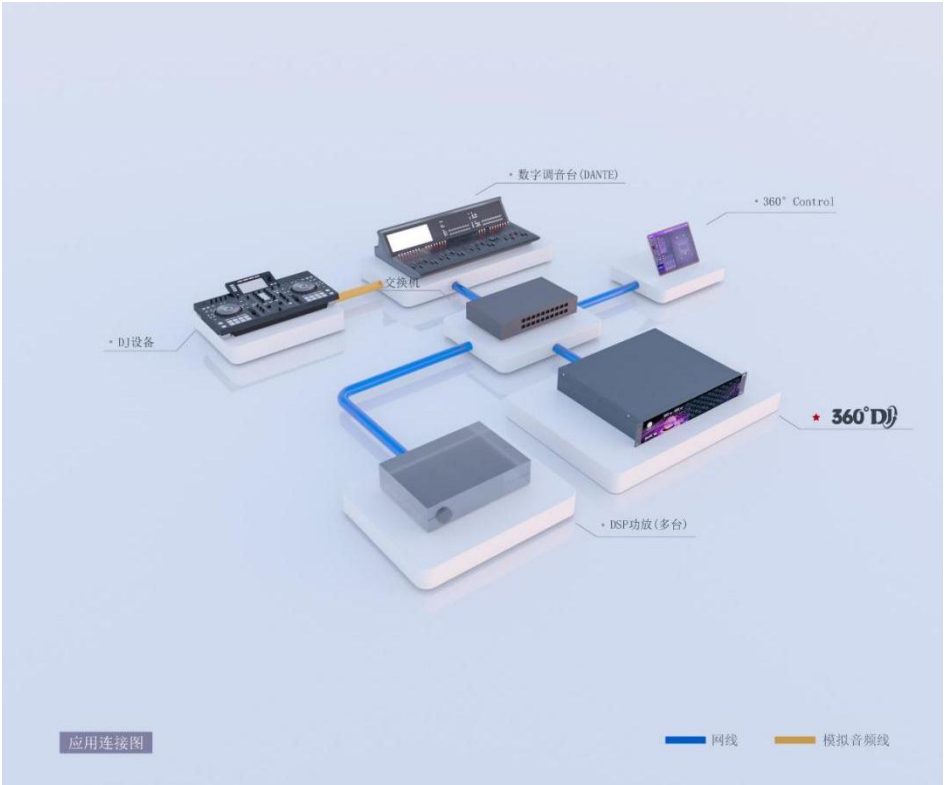
Through the “360°Control” Touch Interaction Platform, pre-designed audio movement paths allow for real-time dynamic positioning of audio elements, enhancing audience engagement and interactive creativity.

High Compatibility & Scalability

Compatible with audio systems from various brands. Supports a minimum of 6 independent audio output channels, expandable up to 64 channels depending on the venue and setup requirements.

1.2 Product Diagram

1.3 System wiring diagram

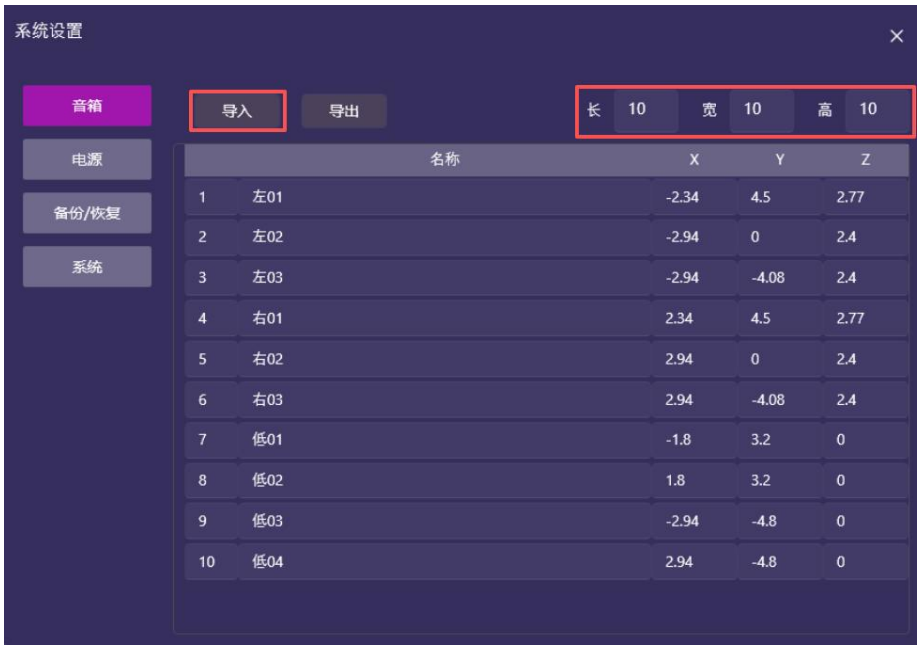


2. System Settings

Click the system icon  in the upper-right corner of the interface to enter the System Settings page.

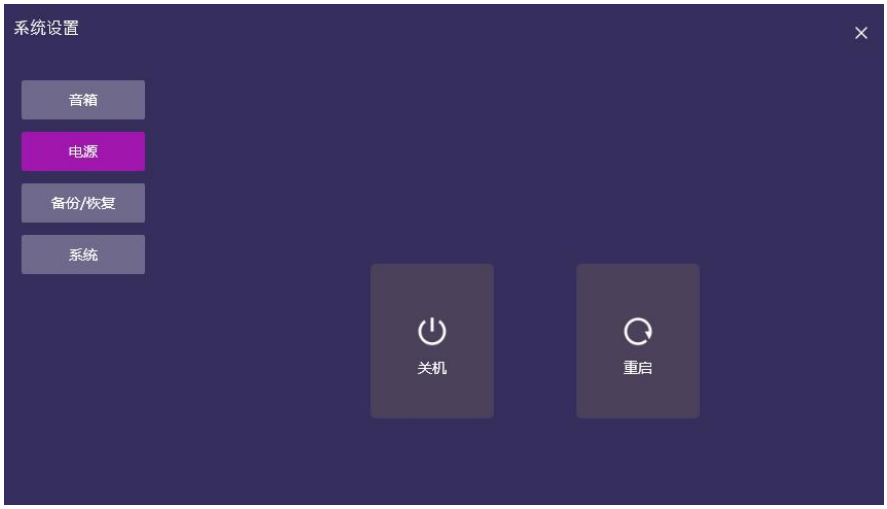
2.1 Speaker

Import the xlsx speaker table of the venue (the measurement of the speaker table is to take the center point of the speaker layout of the venue as the origin 0 of the XYZ coordinate axis, measure the XYZ coordinates of each speaker, and fill in the production form according to the specified xlsx form template) and fill in the length, width and height of the speaker space (length is the total span on the X-axis, Width is the total span on the Y-axis, and Height is the Z-axis value of the highest speaker)



2.2 Power Supply

Shutdown or restart (You can shut down or restart the system)



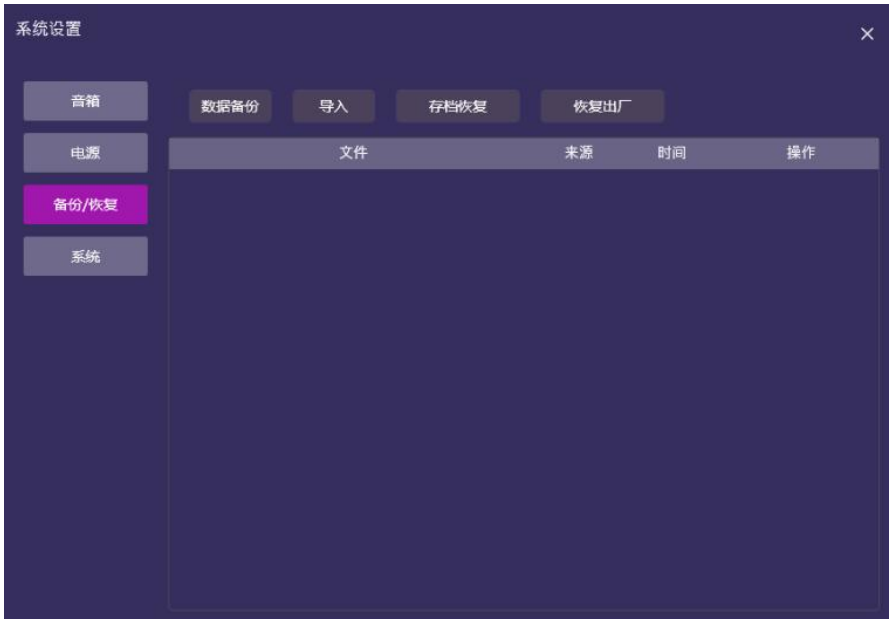
2.3 Backup/Recovery

[Data Backup] Backup the entire system's data

[Import] Import data backed up by the system

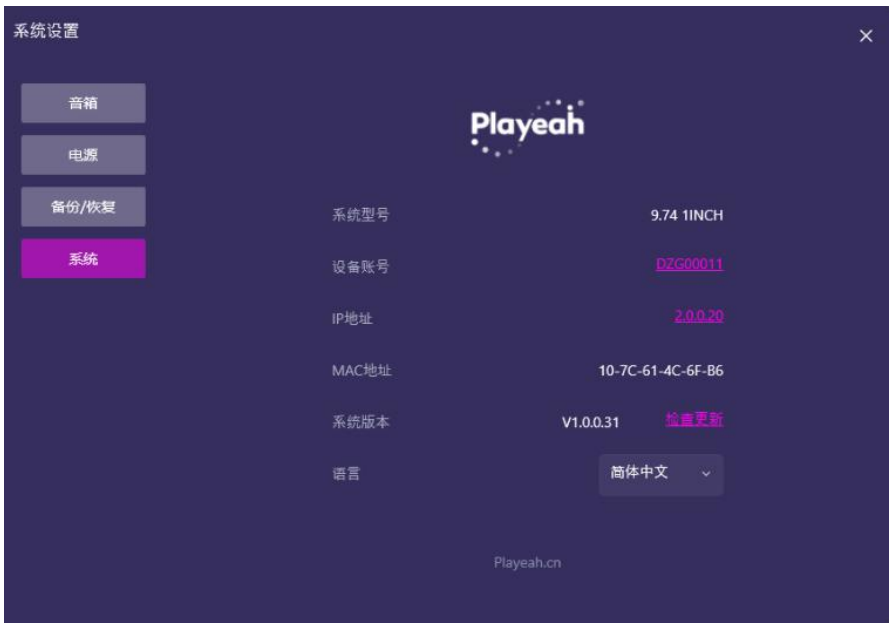
[Archive Recovery] Select the date of normal use to restore the audio archive

[Factory Reset] Clear all settings on the system and restore to factory status



2.4 System

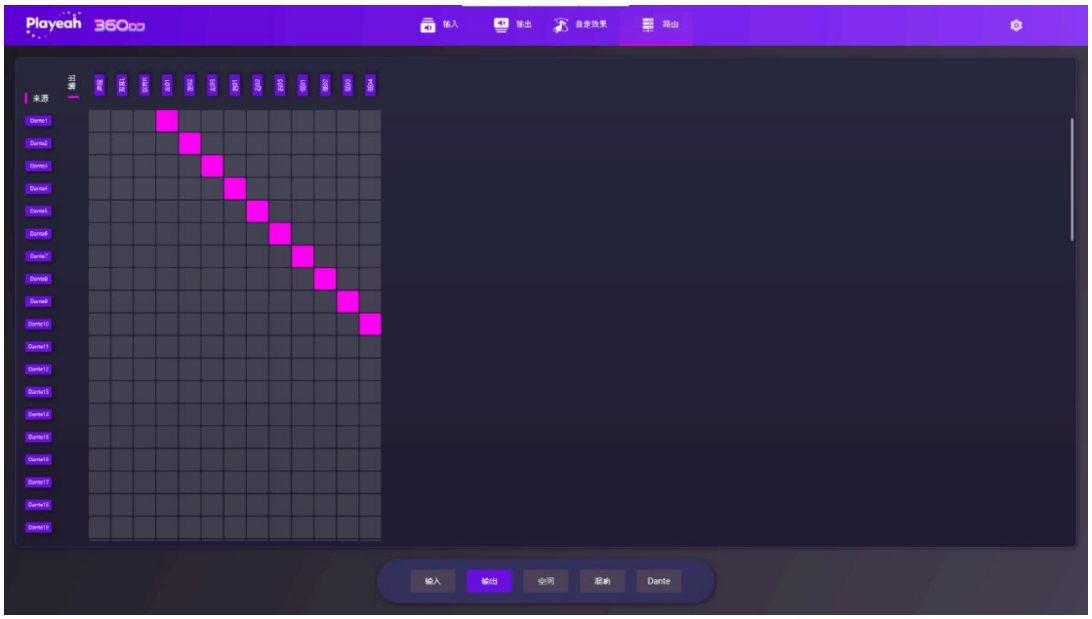
You can view system information, set system DHCP or static IP, update system versions and switch languages.



3. Routing settings

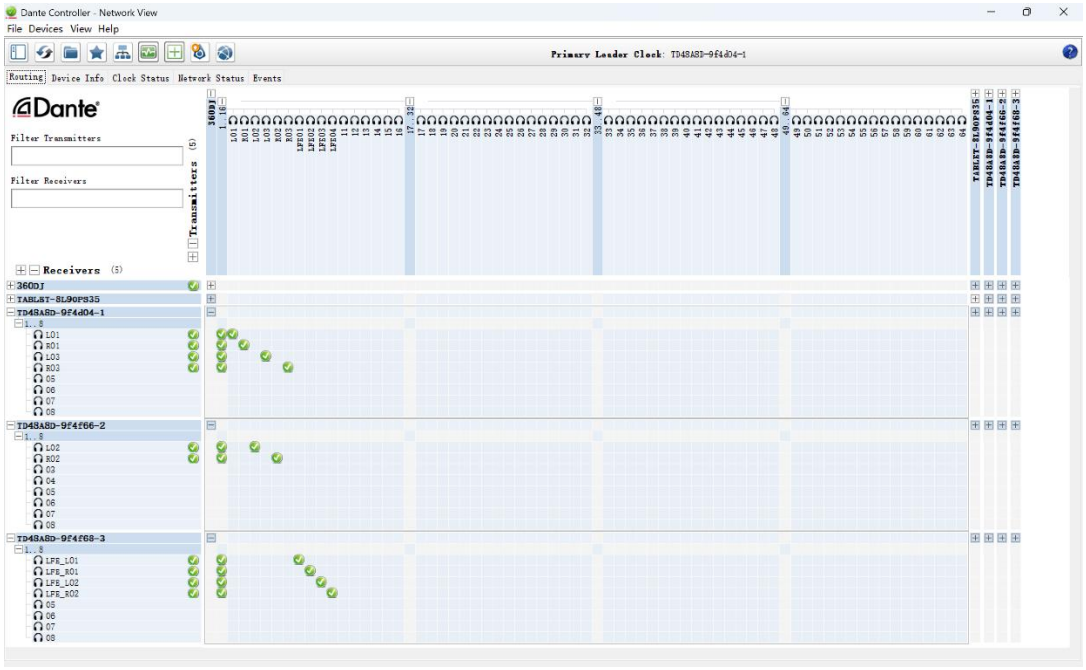
3.1 Output Channel Mapping – Dante Sources

Dante channels can be mapped as needed, allowing each independent speaker output channel to be mapped one-to-one to a Dante channel.



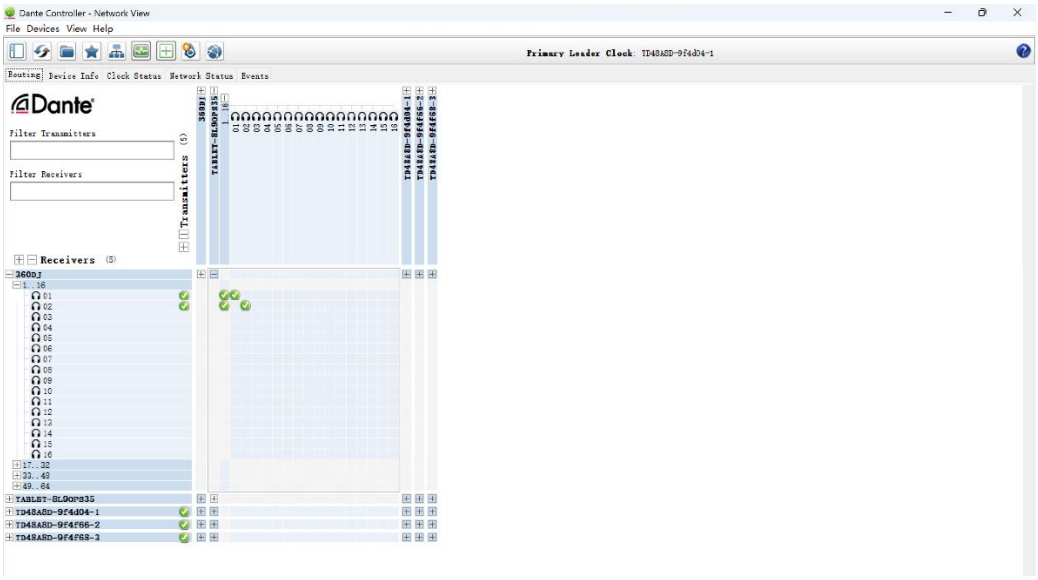
3.2 Configuring Dante Output Routing

Configure Dante output routing according to the mapping between each system output channel and its Dante transmit channel. Assign clear channel names to the loudspeaker output channels on the 360°DJ Dante transmit side, then connect them to the corresponding Dante receive channels on the power amplifiers for each loudspeaker.



3.3 Connecting Dante Input Routing

External stereo input sources need to be converted to Dante signals (analog-to-Dante conversion). Connect from the transmitter side to the Dante receiver side of the 360°DJ. (Channels 1-2 of the 360°DJ receiver correspond to Input Stereo 1 in the 360°DJ software, channels 3-4 correspond to Stereo 2, ..., channels 15-16 correspond to Stereo 8). If only one stereo source is used, connect it to channels 1-2 as Stereo 1.

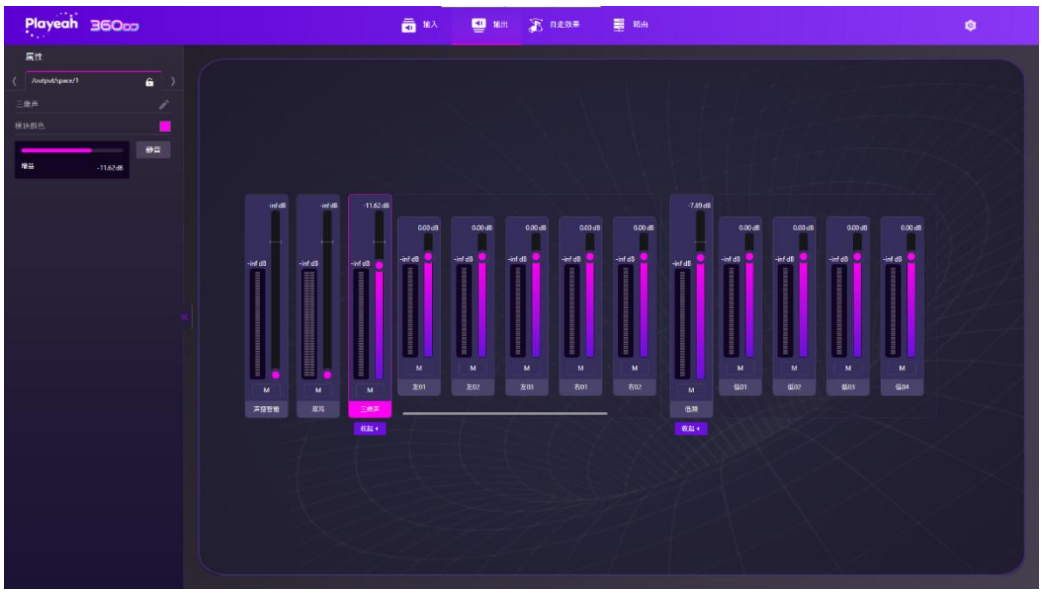


4. Output settings

[3D Sound] Three-dimensional sound is the output volume master control of the full-range speaker channel, and the volume of each full-range speaker can be adjusted by unfolding.

[Low frequency] Low frequency is the main output volume control of the ultra-low speaker channel, and the channel can only be expanded with more than three ultra-low speakers.

[Properties] You can select the output channel, change the channel name, set the channel module color, adjust the channel gain and mute.

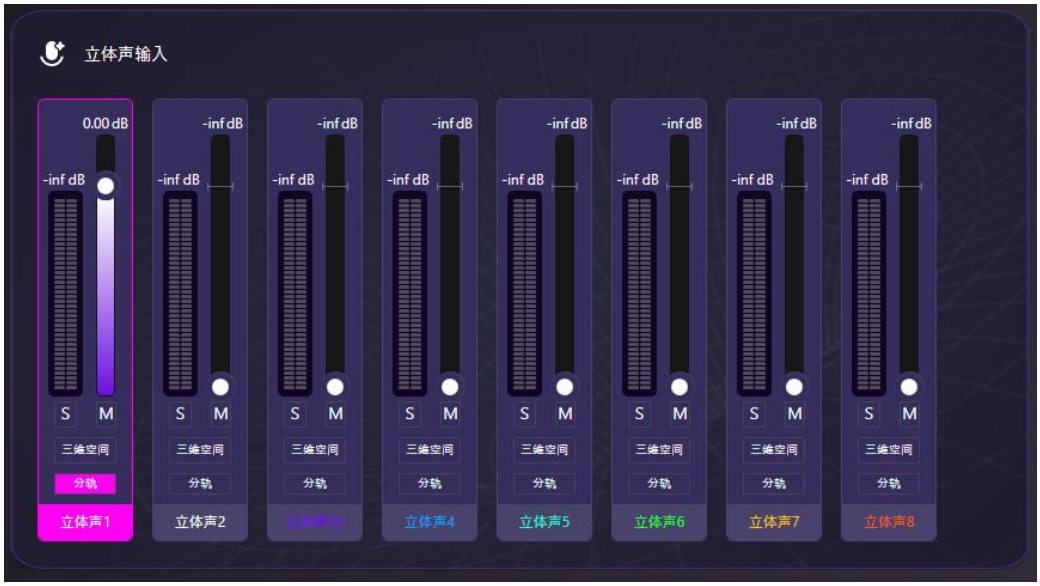


5. Enter settings

The input settings include stereo input, real-time stem separation, properties, and 3D space.

5.1 Stereo Input

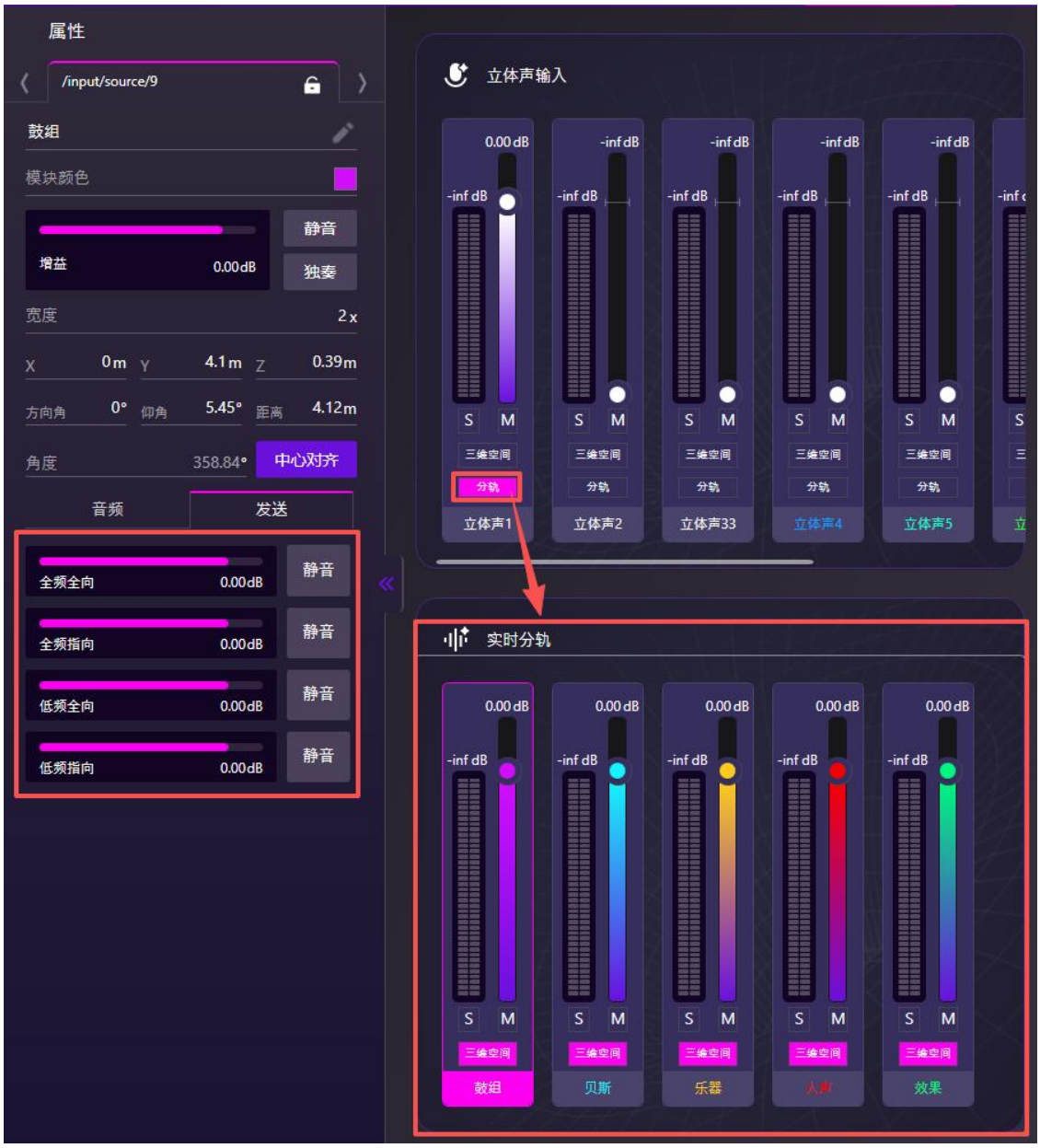
[Stereo input] Stereo input is an external stereo source sent in through Dante signal. A total of 8 stereo inputs are supported, each of which provides an overall level control, Solo, and Mute. The volume of each stereo input is also divided into full-range omnidirectional, full-range directional, low-frequency omnidirectional, and low-frequency directional. For each stereo input, these four channels must have their faders raised to produce sound, and their volume ratios should be adjusted live for optimal effect. The 3D Space button displays the sound source point within the 1:1 venue UI 3D space on the right. The Stems button enables real-time stem separation of the selected stereo input into the following tracks: Drums, Bass, Instrument, Vocals, and Effects.



5.2 Real-time Stem Separation

[Real-time Stem Separation] Real-time Stem Separation is enabled on one of the Stereo Inputs above. The system uses AI algorithms to split the selected stereo signal in real time into five stereo stems: Drums, Bass, Instruments, Vocals, and Effects.

Each stem provides an overall level control, Solo, and Mute. For every stem, the level is further divided into four components: Full-range Omnidirectional, Full-range Directional, Low-frequency Omnidirectional, and Low-frequency Directional. Each component has its own level fader and must be raised to an appropriate position for the signal to be audible, and their relative levels should be adjusted on site to achieve the best balance.



5.3 Properties

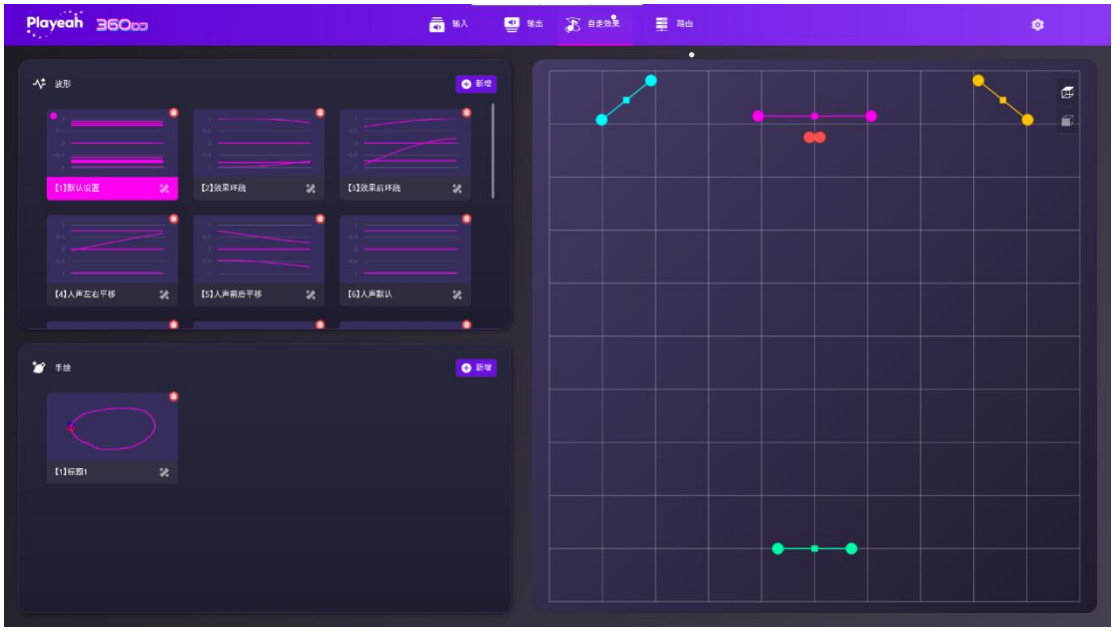
[Properties] Allows you to select input tracks, rename tracks, set track module colors, adjust track gain, mute, and solo. You can also configure the Width, Position, Angle, Center Alignment, Spatial Delay, Spatial Attenuation, as well as the send levels of Full-range Omnidirectional, Full-range Directional, Low-frequency Omnidirectional, and Low-frequency Directional for each audio source.

5.4 3D Space

[3D Space] The 3D Space UI recreates the venue's speaker space at a 1:1 scale, with each grid square representing 1 meter. In the top-right corner, you can toggle between Top View and Front View. You can also click and drag the center point of each sound source to move it within the space.

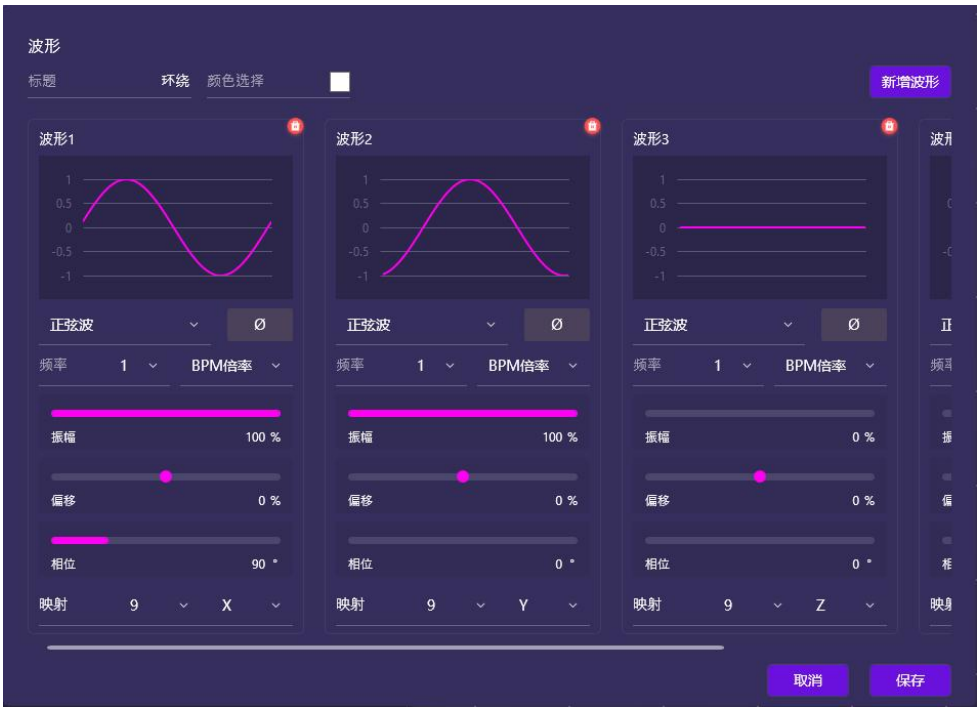
6. Auto Motion Effects

Auto Motion Effects are divided into two modes: Waveform Trajectories and Hand-drawn Trajectories.



6.1 Waveform Trajectory

Click 新增 Add Waveform Trajectory, then edit the title and select the font color, and click 新增波形 Add Waveform. After completing the waveform settings, click Save.



[Waveform Selection]: Sine Wave, Square Wave, Sawtooth Wave, Triangle Wave. Waveform polarity (normal / inverted).

A Sine Wave is a smooth and continuous wave,

A square wave features instantaneous jumps between high and low levels,

A sawtooth wave rises linearly and then drops instantaneously,

A triangle wave rises linearly and then falls linearly.

[BPM Multiplier]: When the frequency is 1, one cycle runs every 2 seconds. A value greater than 1 runs faster; less than 1 runs slower.

[Hz]: When the frequency is 1, one cycle runs every 1 second. A value greater than 1 runs faster; less than 1 runs slower.

[Amplitude]: Amplitude determines the range of the waveform motion. 100 is the maximum range, 0 is the minimum (no movement).

[Offset]:

X-axis offset: negative values shift left, positive values shift right.

Y-axis offset: negative values shift backward, positive values shift forward.

Z-axis offset: negative values shift downward, positive values shift upward.

Width offset: negative values decrease width, positive values increase width.

[Phase]: Different phase differences (0–360°) on different axes create different trajectories. Example: X-axis phase set to 90°, with other axes at 0°, produces a circular trajectory.

[Mapping Channel]: There are 13 audio source channels: 8 stereo inputs and 5 stems.

Channels 1–8 correspond to Stereo Inputs 1–8.

Channel 9: Drums

Channel 10: Bass

Channel 11: Instrument

Channel 12: Vocals

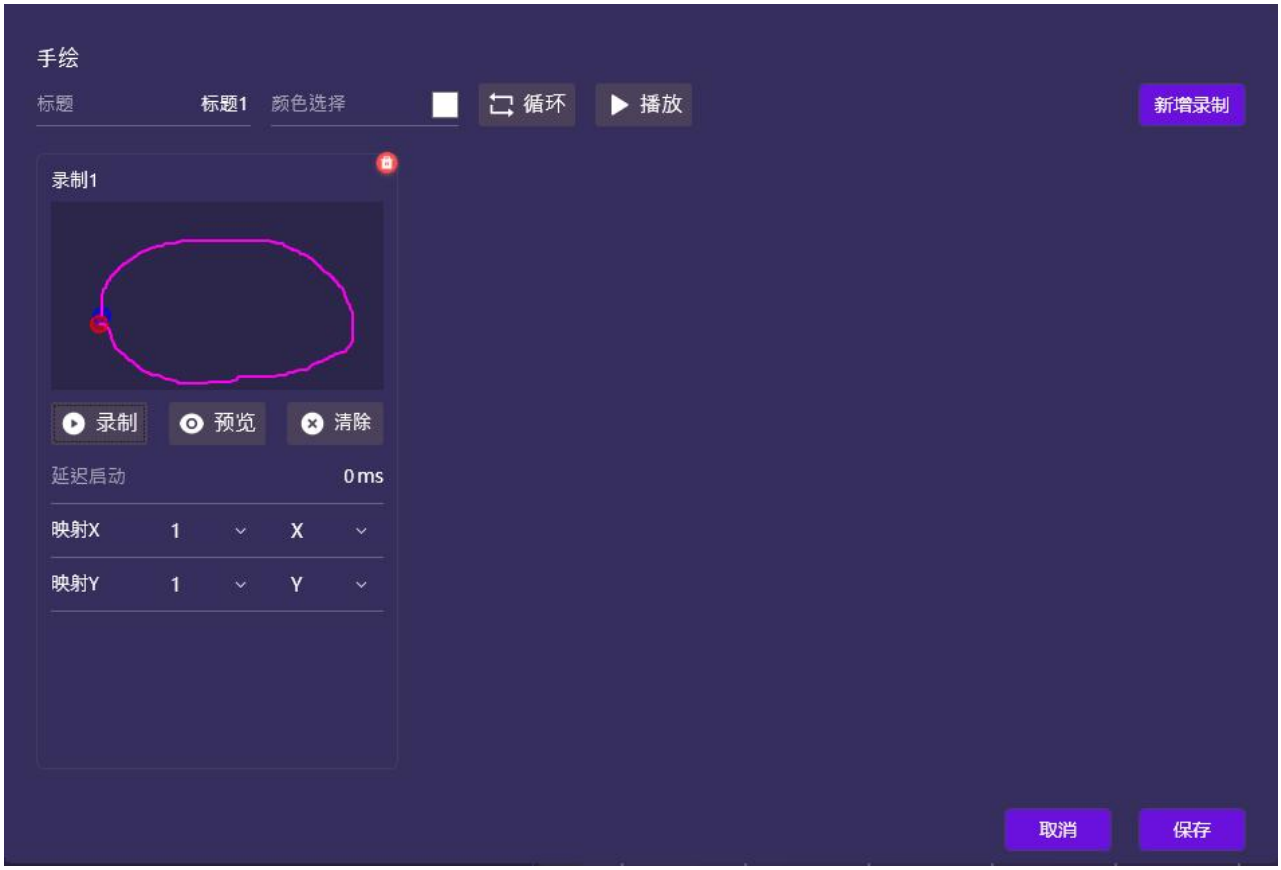
Channel 13: Effects.

[Mapping Properties]: X-axis, Y-axis, Z-axis, Angle, Width.

6.2 Hand drawn Trajectory

Click  **Add Hand-drawn Trajectory,** edit the title name and font color, then click  **Add Recording** select the mapping channel and XY axes, then click Record. Left-click and draw within the recording area. Once the drawing is complete, you can

preview or play it back. You may also enable loop and set a delay start. After finishing the hand-drawn trajectory, click Save.



7. Save data

[Save Data] After all system parameters have been configured, you must click Save Data in the upper-right corner. Once the Save Data button is clicked, the system settings will be retained even if the device is forcibly powered off. If you do not click the Save Data button, the device will not load the current data after a restart; instead, it will load the previously saved configuration.

8. Specifications and Parameters

Processor:	Intel 64bit 8core CPU	**Storage Capacity:**	8GB RAM，512GB SSD
Video Interface:	1×HDMI	**Network Interface:**	1 × RJ45
USB:	4×USB3.0	**Control Protocol**	OSC、UDP
Digital Audio input:	16CH	**Digital Audio Output:**	64CH
Spatialization Algorithm:	PlayeahSoun^{3}D Spatial Audio	**AI Algorithm:**	AI Music Decompose
Music Formats:	WAV，MP3	**Real-Time Dynamic Sound Sources:**	13
Sampling Rate:	48Hz/96Hz (optional)	**Quantitative Accuracy:**	102dB
Size:	430mm × 385mm × 90mm	**Power Supply**	AC 220V Redundant Backup Dual Power (Optional)
Weight:	7.6kg		