# **SOLVISION - SVCMA8**

# Ceiling Microphone Array Operation Instructions



# **Contents**

1.	Log in	3
2.	Web Settings	4
3.	Setup and Detailed Explanation	5
	(1) Array Sensitivity Model	5
	(2) Beamforming Setup	6
	(3) Output Configuration	8
	(4) Advanced Configuration	10
	(5) AES67 Cascade Configuration	11
	(6) Network Configuration	12
	(7) Upgrade	13
	(8) About	13
4	Interface Introduction	14

# 1. Log in

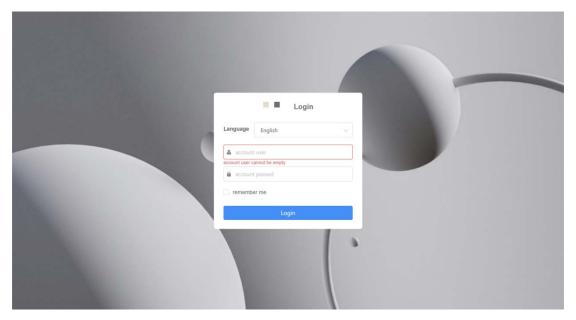


Open a browser and enter the IP address in the address bar to access.



The default IP address is:

192.168.1.80



Username: admin Password: admin123

#### Notice

- Before visiting, please ensure that the IP address of your computer is in the same subnet and that the network is functioning properly.
- If you do not have an address in the 192.168.1.X subnet, please set or add at least one such address in the network adapter first.

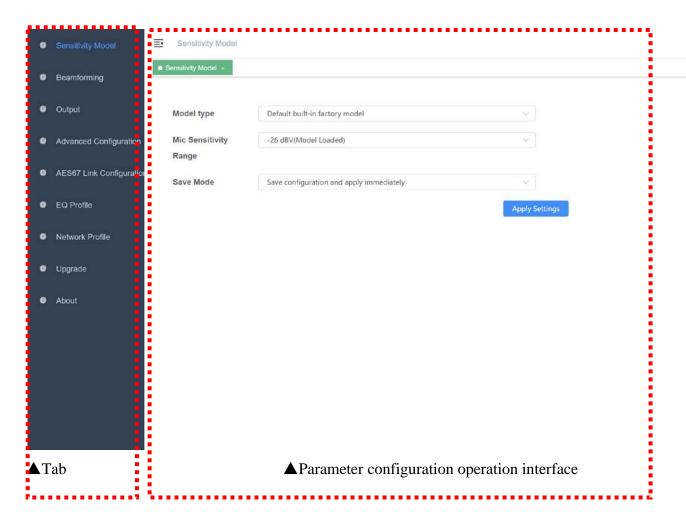
Taking the setup of Windows 10 as an example.

- Network and Internet Settings -> Change Adapter Options -> Right-click on the computer's network card (network adapter) -> Properties -> Select "Internet Protocol Version 4 (TCP/IPv4)" -> Properties -> Advanced -> Click Add in the IP address field -> Enter the IP address such as "192.168.1.123" and subnet mask "255.255.255.0" -> Add -> OK, close all open windows to complete the setup.
- Alternatively, in the "Internet Protocol Version 4 (TCP/IPv4)" properties, select "Use the following IP address" and add an address in the 192.168.1.X subnet, such as "192.168.1.123" with the default subnet mask of 225.225.225.0. Click OK, then close all open windows to complete the setup.

Note: You can select the interface language on the login screen.

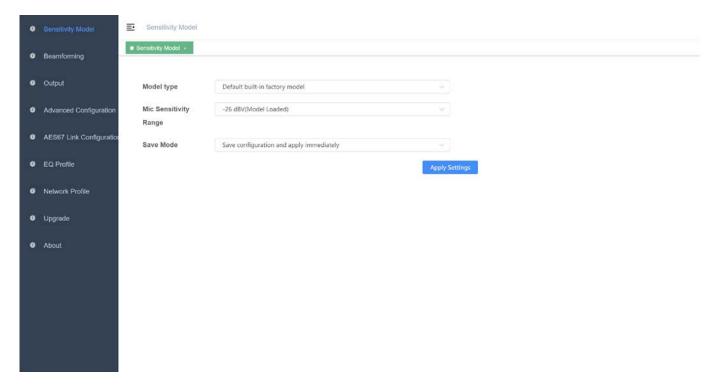
# 2. Web Settings

The left side is the tab area, and right side is the operation interface.



# 3. Setup and Detailed Explanation

### (1) Array Sensitivity Model



# Array Sensitivity Model

#### **Model Type**

**Default Tone:** This model adapts to most scenarios, offering a clear and natural listening experience with high audio fidelity and a comfortable auditory sensation.

**Transparent Tone:** This model is more suitable for classrooms, training rooms, etc. It is not suitable for environments with a lot of reverberation as it may make the audio sound mixed.

**Sharp Tone:** This model is suitable for environments with a lot of reverberation and long reverberation tails, focusing more on high frequencies in speech, better adapting to spaces with strong reverberation.

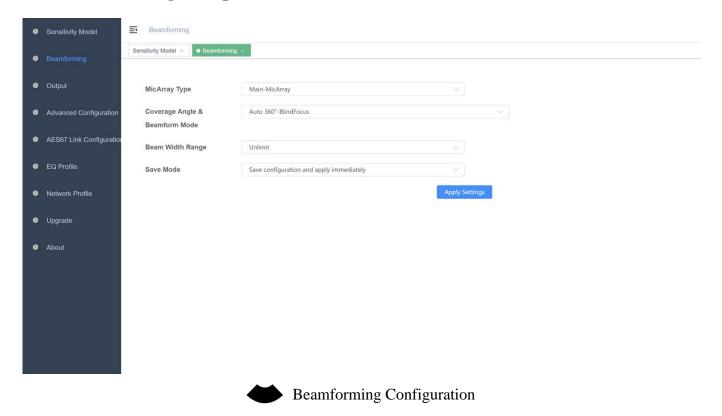
#### **MIC Optimal Spatial Model Range**

Microphone sensitivity setting, default at -26dBv, the smaller the value, the lower the sensitivity. Choose according to the on-site environment.

**Save Method:** Effective for this session only/Save Configuration/Save Configuration & Apply Immediately

**Settings:** Confirm the current settings and apply them according to the save method.

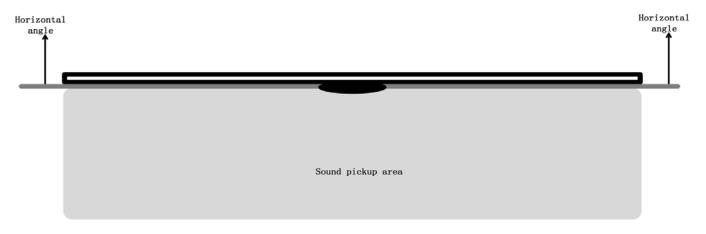
## (2) Beamforming Setup



## Pickup Angle & Beamform Mode

### **Omnidirectional Beam Tracking Array**

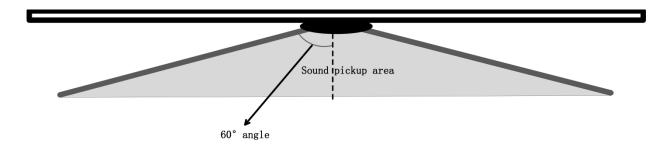
Application: Default option, emphasizes horizontal directional pickup.



(Pickup Area: 180° - area indicated by the angle)

#### **Omnidirectional Beam Tracking Array – 60° Elevation**

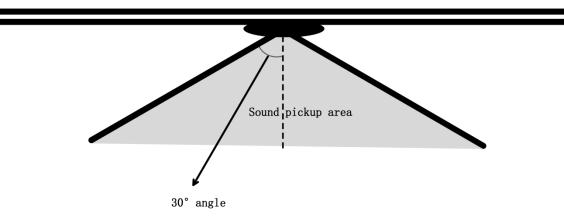
Application: The gray area represents the pickup zone, with a total angle of 120°, comprised of 60° on each side of the microphone's vertical center point. The system prioritizes sound tracking within a 60m² area while actively blocking noise interference from outside the pickup angle.



(Pickup Area: 60° - area indicated by the angle)

#### **Omnidirectional Beam Tracking Array - 30° Elevation**

Application: The gray area represents the pickup zone, with a total angle of 60°, comprised of 30° on each side of the microphone's vertical center point. The system prioritizes sound tracking within a 12m² area while actively blocking noise interference from outside the pickup angle.



(Pickup Area:  $30^{\circ}$  - area indicated by the angle)

#### **Omnidirectional Beam Tracking Array Aggregation**

Application: Focuses on low-frequency clarity with less high-frequency feedback.

#### **Omnidirectional Beam Tracking Array Aggregation Beta**

Application: Focuses on low-frequency clarity with less high-frequency feedback.

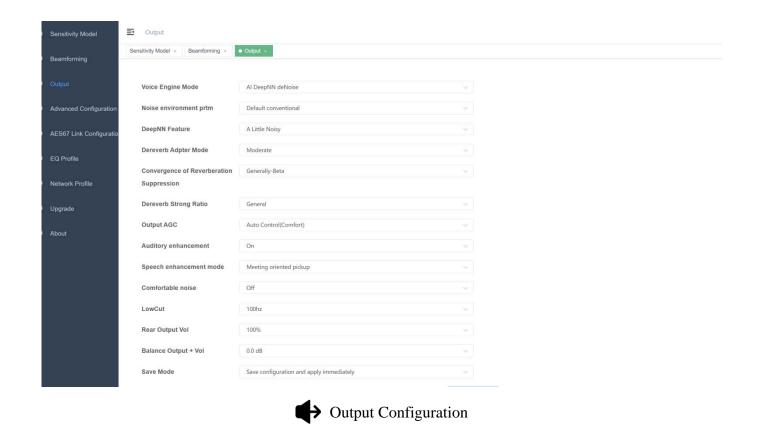
The Beta beam theoretically achieves a 60° downward sound pickup curtain, which can partially shield against reflected sound in the space.

**Save Mode:** Only Effective Now / Save Configuration / Save Configuration & Apply Immediately

**Settings:** Confirm current settings according to the save mode.

Notes: The pickup area angle coefficient is a reference theoretical value, not an absolute angle.

### (3) Output Configuration



### **Environmental Noise & Voice Enhancement Mode**

AI Neural Network Model for Noise Reduction (AI Smart Noise Reduction Algorithm)

#### **Noise Environment Preprocessing**

Select noise reduction level based on overall environmental noise (None/Quiet/Default Normal/Poor/Severe/Extremely Severe)

Process steady-state noise levels in the environment and adjust settings accordingly. (Generally, the Default Normal can cover most scenarios; choose a higher level if the onsite noise is severe.)

#### **Noise Reduction Feature Context Processing**

Select AI noise reduction level based on environmental noise (None/Level 1/Level 2/Level 3/Level 4/Level 5)

Choose the AI noise reduction level based on the onsite noise environment (default is Level 2 noise reduction; increase level if there is significant noise onsite).

#### **Reverberation Suppression Switch & Adaptive**

Configure onsite reverberation: (Off/Low/Moderate/High (Low Frequency Focused)/High (Mid Frequency Focused)/High & Small Dynamic Range)

Choose a suitable or high reverberation suppression level based on the onsite environment.

#### **Reverberation Suppression Convergence**

**Fast:** fastest converging reverberation suppression, suitable for relatively quiet sites with significant reverberation reflection.

Balanced: basic configuration, suitable for most scenarios.

**Balanced Alpha**: based on the default reverberation suppression algorithm, adjusts the division of

reverberation frequency domain, allowing increased sharpness of reverberation & sound)

Balanced Beta: reverberation reflection calculation uses an updated model.

#### **De-reverberation Intensity**

Configure onsite reverberation environment: (Slight/Low/Medium/High/Maximum), default set to Medium, increase level if reverberation is significant onsite. Reduce level if the acoustic environment is excellent.

#### **Output Gain Control**

Adjust microphone volume levels to (General/Moderate/Large) based on onsite recording conditions.

#### **Auditory Enhancement**

Enhances mid to high-frequency harmonics when activated on dynamic listening devices to improve audio quality.

#### **Voice Enhancement Mode**

For Environmental Monitoring: Used in monitoring scenarios to pick up detailed environmental sounds, making the sound more distinct.

For General Environments: Used in regular scenarios.

#### **Comfort Noise**

Adds comfort noise to the audio.

#### **Low Cut Configuration**

Adjust microphone to cut off the low-frequency portion of the audio (effective in conference mode).

#### **Post Output Volume**

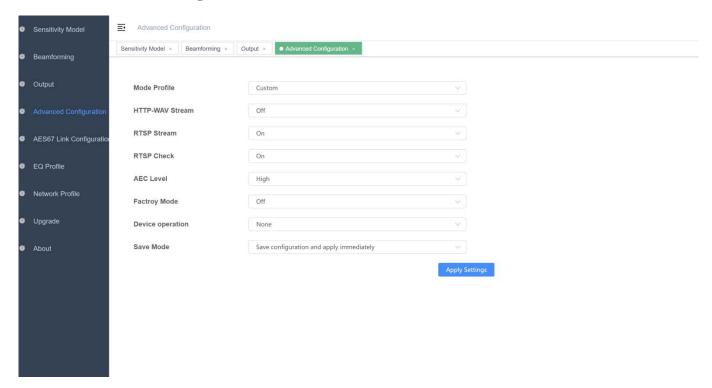
Adjust the overall microphone output volume (including USB and analog signals).

Note: increase output gain by 1dB, 2dB, or 3dB on top of the output gain control.

**Save Method:** Effective for this session only/Save Only/Save and Apply.

**Settings:** Confirm the current settings and apply them according to the save method.

## (4) Advanced Configuration



Advanced Configuration

#### **Application Mode Settings**

Custom configuration not yet available

#### **HTTP-WAV Stream**

Enable or disable audio streaming via HTTP protocol, with the HTTP audio stream output at a 32K sampling rate. Microphone audio stream URL: (http://IP/mix.wav).

#### **RTSP Stream**

Enable or disable device RTSP stream configuration, with RTSP audio stream output at a 16K sampling rate. Microphone stream URL: (rtsp://IP/audio).

#### **RTSP Authentication**

Enable or disable RTSP stream authentication with username and password Username: admin, Password: admin123

#### **Factory Mode**

Off

Test MIC Mode (test microphone sound)

Output 0dB 1Khz (microphone outputs 1Khz audio)

Clear AES67 Configuration (one-click to clear AES67 settings)

#### **Device Operations**

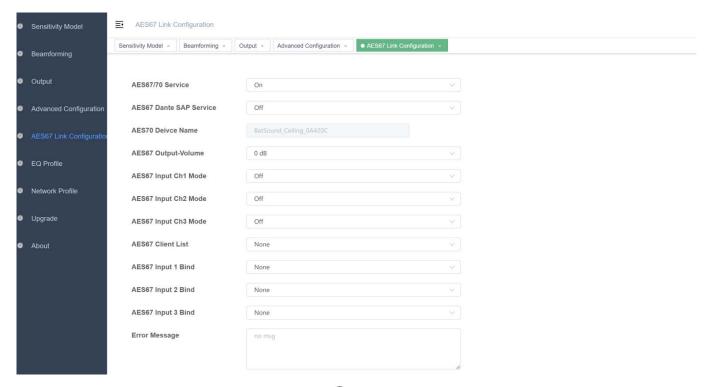
Control device (disable/restore factory settings & restart/restart)

Control restart and restore to factory settings

**Save Method:** Effective for this session only/Save Only/Save and Apply

**Settings:** Confirm the current settings and apply them according to the save method.

### (5) AES67 Cascade Configuration





**AES67** Cascade Configuration

#### AES67/70 Services

AES67 is an open standard for networked digital audio. It is based on an IP network architecture, utilizing existing IT network protocols to achieve interoperability guidelines for low-latency, high-performance professional audio transmission.

#### **AES67 Dante SAP Service**

Enable or Disable AES67 Dante SAP Service (Enabling this will cause the microphone to send multicast streams).

#### **AES70 Device Name**

Automatically Identify the Name of this Device with AES67 Enabled.

#### **AES67 Volume**

**AES67 Input Volume** 

#### **AES67 Input Ch1**

Switch Mode (Cascade Mix Mode, Acoustic Echo Cancellation Mode).

#### **AES67 Input Ch2**

Switch Mode (Cascade Mix Mode, Acoustic Echo Cancellation Mode).

#### **AES67 Array Microphone List**

Detected Names of Other AES67-Enabled Devices on the Current Local Network.

#### **AES67 Input Channel 1 Binding**

Bind Secondary Microphone Input from Channel 1

#### **AES67 Input Channel 2 Binding**

Bind Secondary Microphone Input from Channel 2

#### **Configuration Result**

Display the Result of Cascade Configuration: Success or Failure.

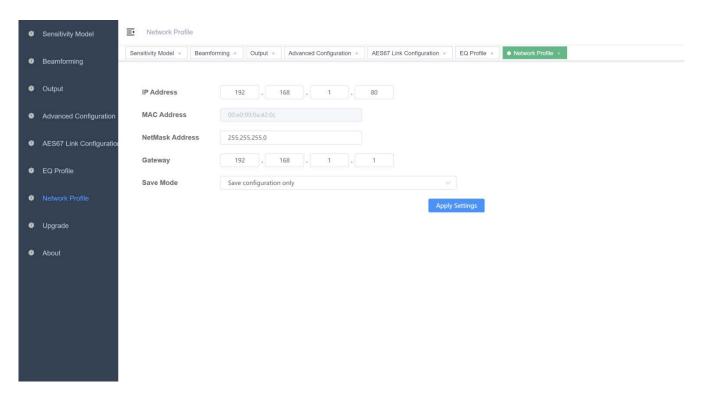
#### **Save Method**

Effective for this session only/Save Only/Save and Apply

#### **Settings**

Confirm the current settings and apply them according to the save method.

### (6) Network Configuration



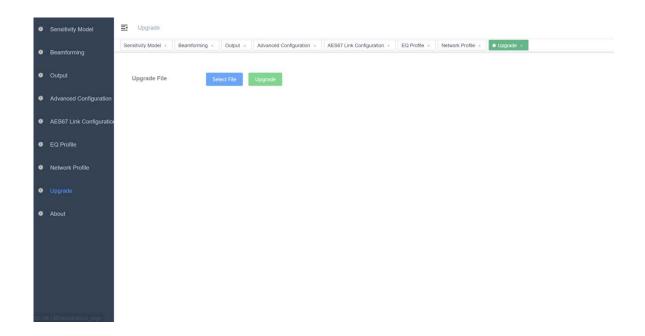
Network Configuration

Configure the product network IP.

Save Mode: Only Effective Now / Save Only / Save and Apply

**Settings:** Confirm current settings according to the save mode.

# (7) Upgrade





Select "Upgrade File" and choose to upload, then click "Upgrade Update" to complete the update. The system will automatically restart.

# (8) About



**?** About

Version and product model can be viewed here

# 4. Interface Introduction

