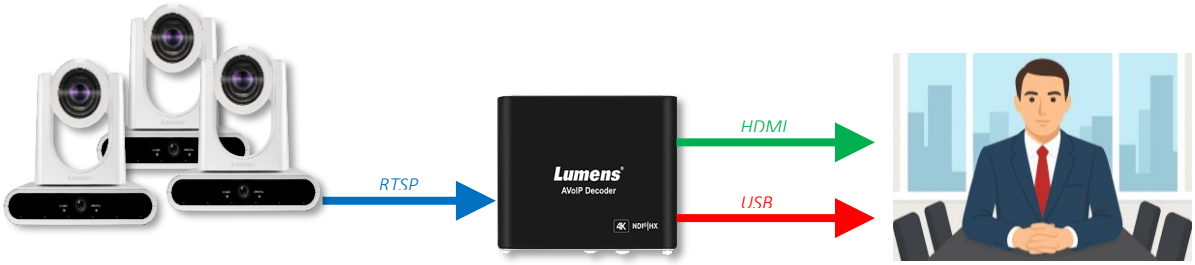
VoiceConnect Setting Guide

Revised：2026/11/02

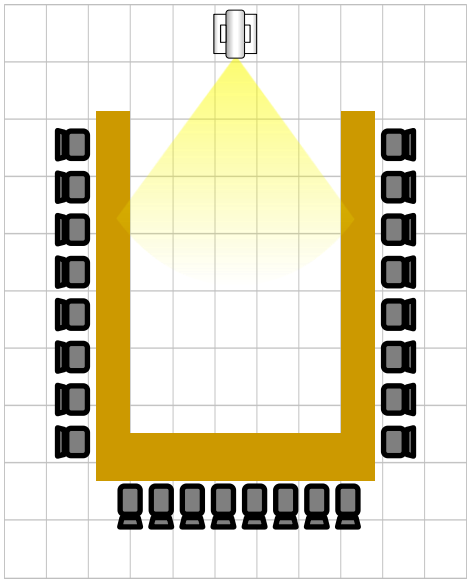
1. Introduction

The VoiceConnect feature enables OIP-N60D/N40E to receive audio data from multiple VC-TR60A cameras. It determines the speaker closest to each camera and automatically switches to the respective video feed. This extends the voice tracking range beyond the typical 8-meter limit, making it ideal for a large meeting room.



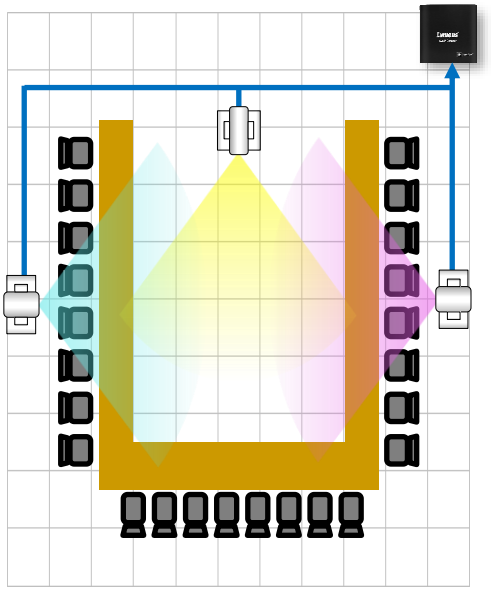
VC-TR60A + OIP-N60D / OIP-N40E = VoiceConnect

Without



Single Voice Tracking Camera

VoiceConnect



Multiple voice tracking cameras cover different zones to provide full tracking coverage across

2. What You Need

- **OIP-N60D or OIP-N40E ×1**

- OIP-N60D：**OIB1.36** or above
- OIP-N60D Dante AV-H：**OIC1.36** or above
- OIP-N40E：**OIA1.38**

■ **VC-TR60A ×2–3 units** (The following example will use 3 VC-TR60A units)

- VC-TR60A：VRK208 or above
- VC-TR60A, Dante AV-H：VRK300 or above
- VC-TR60A, V1: VRK300 or above

■ **VoiceConnect License Key**

VoiceConnect is a premium feature and requires a license for activation.
To request a license, please complete the form below.

VoiceConnect Activation License Request Form

■ **Network Connection**

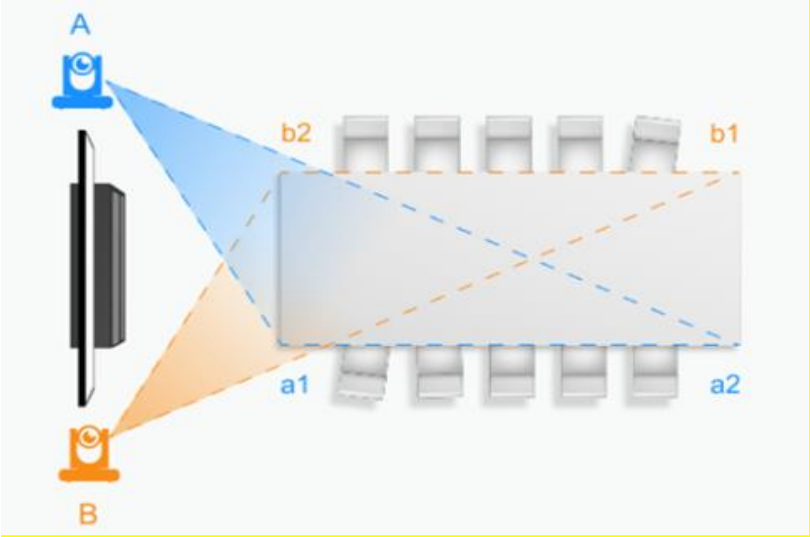
- All devices must be connected to the same LAN

3. Recommend installation

- Recommended installation height for VC-TR60A: 2–2.4 m
- Maximum Voice Tracking distance: 8 m
- Distance from VC-TR60A to the first row of seats: At least 2 m
- Each VC-TR60A should be able to pick up audio from all participants within the tracking area.
- Users can use the OIP-N60D to check the audio reception status.
- The FOV of the VC-TR60A panoramic lens must cover camera own tracking area.

4. Supported scenarios

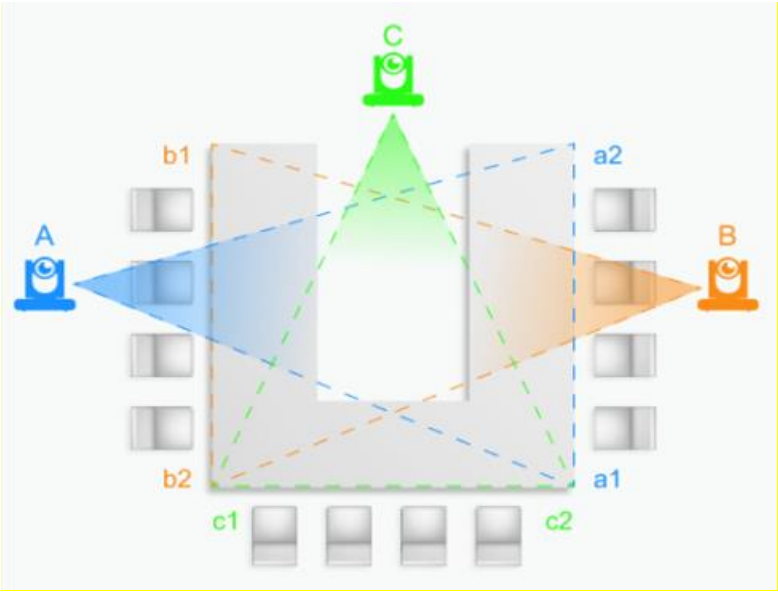
■ Rectangular Table Meeting Room (2 cams)



STAGGERED LAYOUT (CROSS)

- The Strategy: “Diagonal Shooting”
- To capture the best facial angle of a speaker, cameras are mounted on the display wall but aimed at the opposite side of the room.
  Camera A and Camera B are crossing each other to film the seats on both sides
- This avoids “side-profile only” shots and ensures clear communication

■ U-Shaped Meeting Room (3 cams)



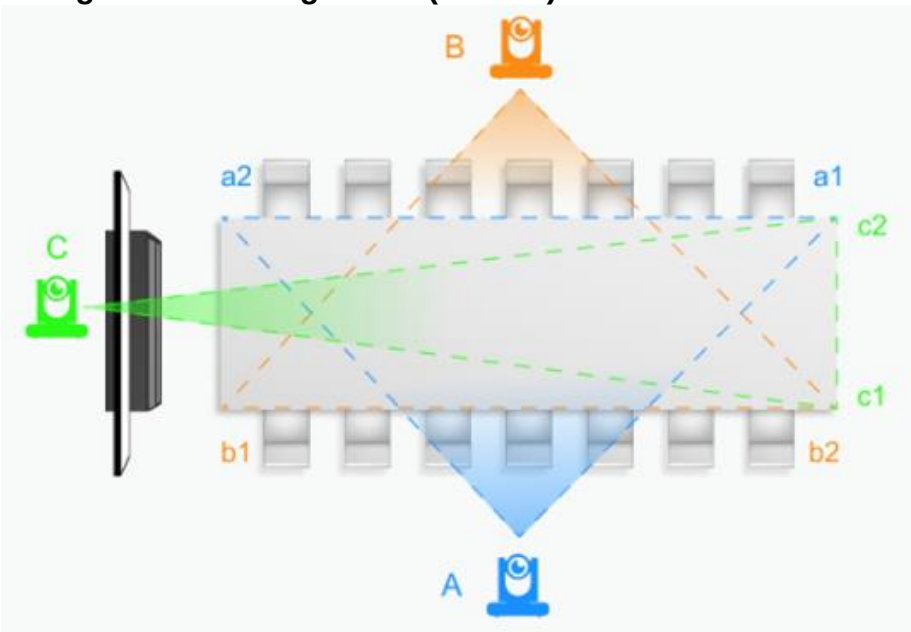
THREE-DIRECTIONAL LAYOUT

- The Challenge: U-shaped tables have participants facing three different directions.
- The Solution: Three cameras work in tandem.

"Cameras A and B shoot the opposite seats; Camera C shoots the monitor-facing seats

- VoiceConnect intelligently switches to the camera facing the active speaker.

- **Long-Table Meeting Room (3 cams)**



OPPOSITE INSTALLATION

- The Challenge: Long, narrow tables make it hard to see everyone from the front of the room.
- The Solution: A centralized "Judge" camera + Symmetric Side Cameras.

Cam C (Side Wall): Acts as the audio judge to detect which side is speaking. It will not provide the image.

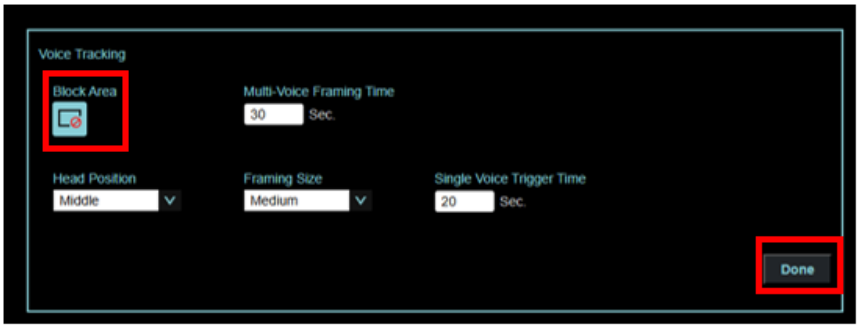
Cam A & B (Top/Bottom): Mounted symmetrically to capture the two sides of the table.

5. Setup for VC-TR60A

Step 1: Access the camera web page → [Tracking] → Disable Multi-Voice Framing.

Step 2: Go to Advanced Settings, define Block Areas where tracking is not needed.





Step 3: Enable Voice Tracking.

* Repeat the above steps for each camera.

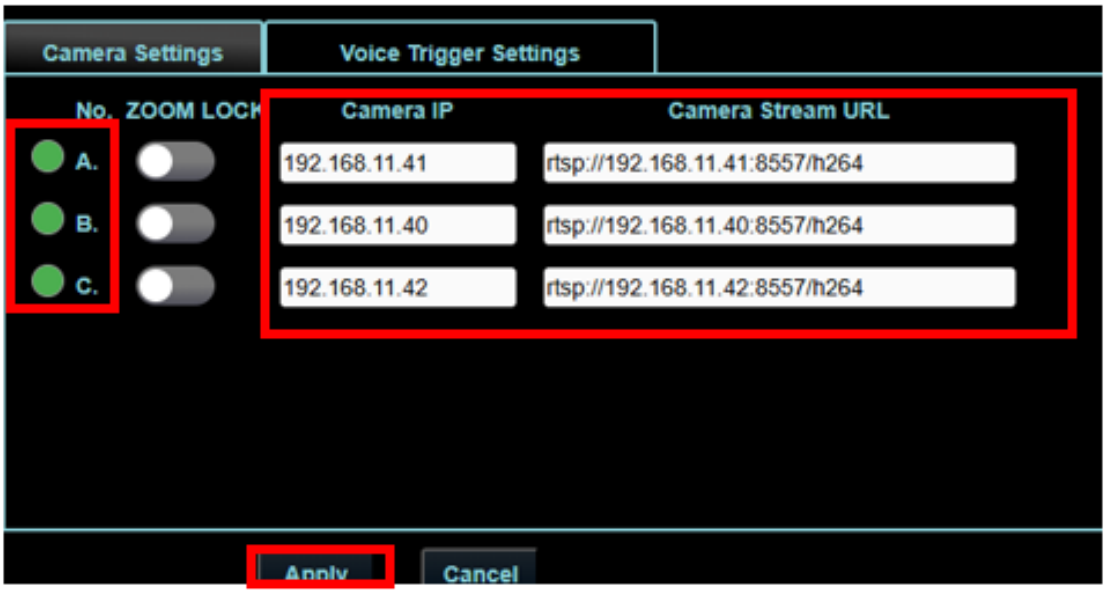
6. Setup for OIP-N60D/N40E

- **Step 1: Enable VoiceConnect**
- → Go to [System] → [Settings] → [VoiceConnect] →Enable [VoiceConnect Mode], and Apply.



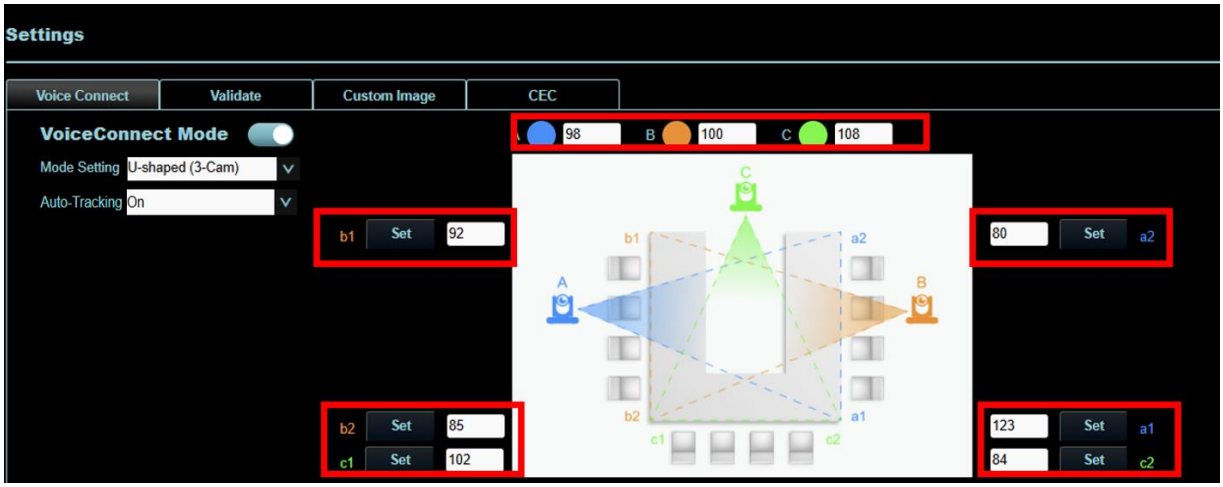
- **Step 2: Input camera IP & Stream URL**

→ Enter VC-TR60As IP and RTSP stream, and then Apply. Follow the system architecture diagram (Using U-shaped mode as example), Camera A is the camera on the right side of Camera C, Camera B is the camera on the left side of Camera C, and Camera C is the center camera.
Make sure the light are **green**. If no, please confirm the RTSP URL and camera is work or not.



- **Step 3: Perform relative position calibration for each camera**

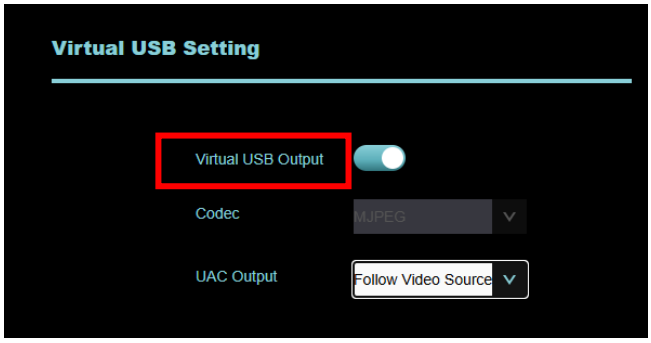
- At each calibration point (a1, a2, b1, b2, c1, and c2), generate a continuous sound for **5–10 seconds**. Each point should be at least **50 cm outside the tracking area**, as illustrated.
- Wait for the audio level to stabilize and verify that the detected angle changes. Then click **[Set]**.
- **Note: If the angle remains at 230, it means the camera has not detected the sound. Do not save the point.**
- After calibration, verify that **x1 > x2 (x = a, b, or c)**. If not, check the corresponding camera orientation and calibration positions, then recalibrate.
- Once verified, set **[Auto Tracking] = On** and click **[Apply]**



■ **Step 4: Video Output Setting**

OIP-N60D can output HDMI and Virtual USB. **OIP-N40E can only output Virtual USB**. To start Virtual USB Output, please follow below steps.

→ Go to [System] -> [Output] -> Enable [Virtual USB Out]



■ **Step 5: Configure Voice Trigger Settings**

→ Go to [Voice Trigger Settings] -> Set below setting -> [Apply]

- **Trigger Delay Time**: Timing to calculate to change the camera.
- **No Voice Trigger Action**: If you want to set up No Voice Trigger Action, please set [No Voice Trigger Action] to [Specify]. You can setup the timing and the video URL when there is no one speaking (e.g.: Panoramic video of VC-TR60A or other camera RTSP stream.)

- **Screen Stream URL:** You can specify a video URL when there is no one speaking.

Step 6: Audio Reference Settings

→ Go to [Voice Trigger Settings] -> Set below setting -> [Apply]

- **Audio Reference:** If you need to avoid speaker interrupt, select UAC, Audio in, or Dante as Audio Reference source.
- **Detection Sensitivity:** Sensitivity levels: High, Medium, and Low (from most to least sensitive).
- **Screen Stream URL:** You can specify a video URL when remote speaker is speaking.

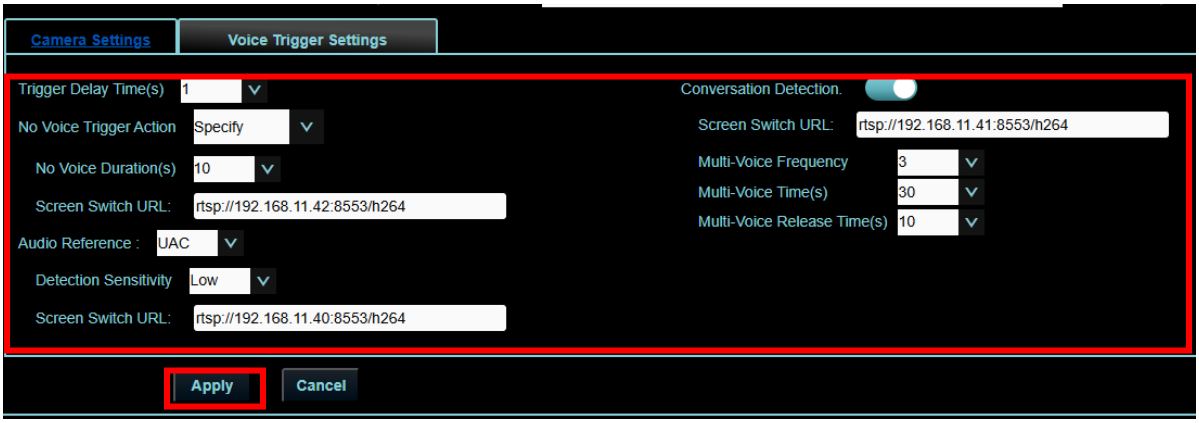


Step 7: Conversation Mode Settings

→ Go to [Voice Trigger Settings] -> Set below setting -> [Apply]

- **Conversation Detection**: Enable/Disable conversation mode
- **Screen Switch URL**: You can specify a video URL when the conversation mode is enabled. (e.g.: panoramic video of VC-TR60A or other camera RTSP stream.)
- **Multi-Voice Frequency & Multi-Voice time**: OIP will enable Conversation mode when it switches the camera X times during Y second (e.g.: OIP switches to different VC-TR60A 3 times during past 30 second, it will enable conversation mode.)

- **Multi-Voice Release Time**: OIP will disable Conversation mode when someone is speaking at least Z second or no one speak at least Z second. (Minimum is 10secs.)

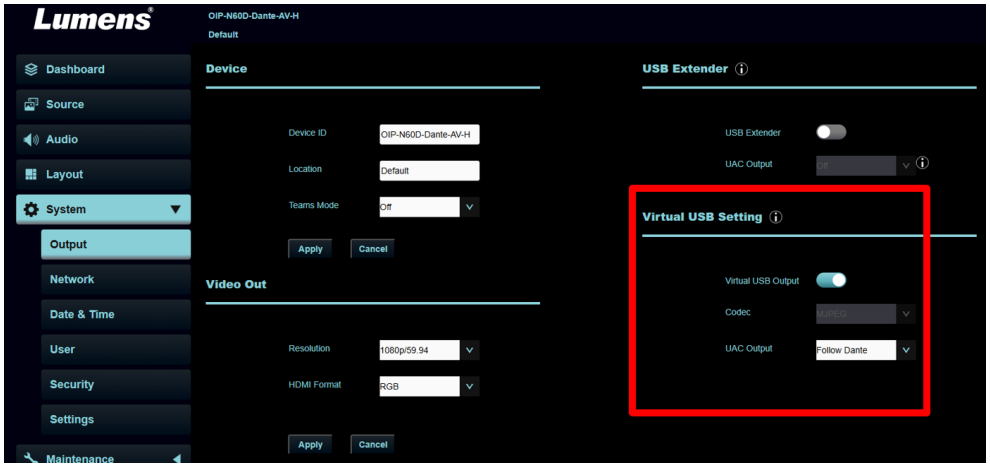


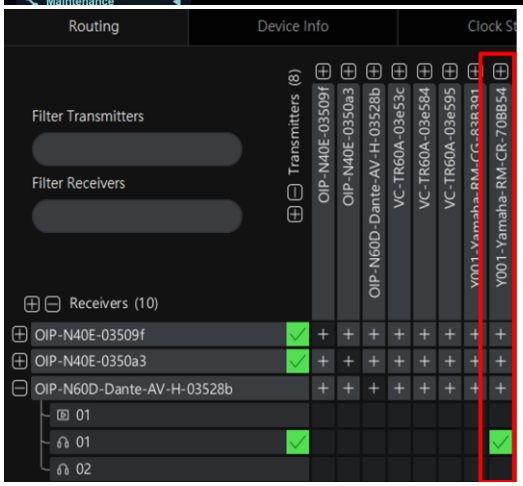
7. Setup for Audio Reference

■ **Dante**

Step 1: Go to OIP-N webpage -> [System] -> [Output], Enable Virtual USB Output, and UAC out select Follow Dante.

Step 2: Go to Dante Controller -> Subscribe Dante DSP to OIP-N Receiver channel.



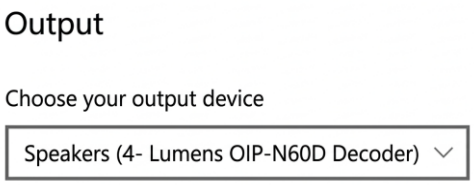


■ UAC

Step 1: Go to OIP-N webpage -> [System] -> [Output], Enable Virtual USB Output, and UAC out select Follow Video Stream, Follow Dante, or Follow Routing.

Step 2: OIP-N connected to PC via USB cable, and then Select OIP-N as PC sound output device.





■ Audio in

Step 1: Connect your 3.5mm Audio Cable from the DSP to OIP-N audio in port.

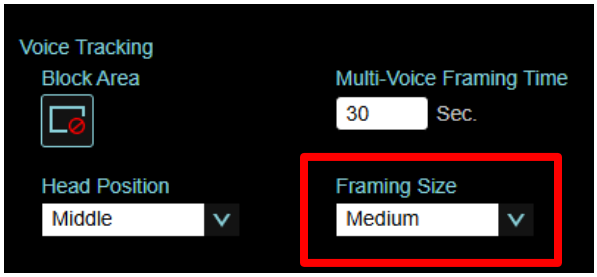
6. Limitations

- Supports RTSP stream only.
- Dante AV-H stream not supported (expected in future firmware update)
- OIP-N60D HDMI output: up to 4K60; OIP-N60D/N40E UVC output: up to 1080P30.
- Cannot use multiple OIP-Ns to do VoiceConnect in the same LAN at the same time.

7. FAQ

Q1：How to change framing size?

Answer： Please go to VC-TR60A webpage -> [Tracking] -> Advance setting -> select framing size you want -> Press [Done]. Option: Tight, Medium, Wide



Q2：The camera is not tracking or switching to the active speaker while they are speaking. How should we handle this?

Answer： Please check and verify the following settings:

- Ensure VoiceConnect Mode is enabled
- Confirm all connected camera status indicators are green.
- Verify Voice Tracking is enabled on all VC-TR60A cameras.
- Ensure the Last-in Switch function is disabled (Off).
- Recalibrate the positions following Part 4, Step 3, and make sure the detected angle value is not 230.
- Reboot the OIP-N device

Q3：How do I reduce the speaker switching delay if tracking is too slow?

Answer：Adjust the Trigger Delay Time on the OIP-N web interface. The default value is 1.0 s, which can be reduced to 0.5 s for faster camera switching

Q4：How do I prevent camera mis-tracking caused by far-end audio from room speakers?

Answer：Enable and configure the Audio Reference source on the OIP-N by following the instructions in Part.5 (Setup for Audio Reference).

Q5：What is the "Validate" tab used for?

Answer: The [Validate] tab displays the currently selected video source. The green camera indicator identifies the active source. After calibration, test each tracking zone and confirm that the source selection and actual video output correspond to the intended camera.

