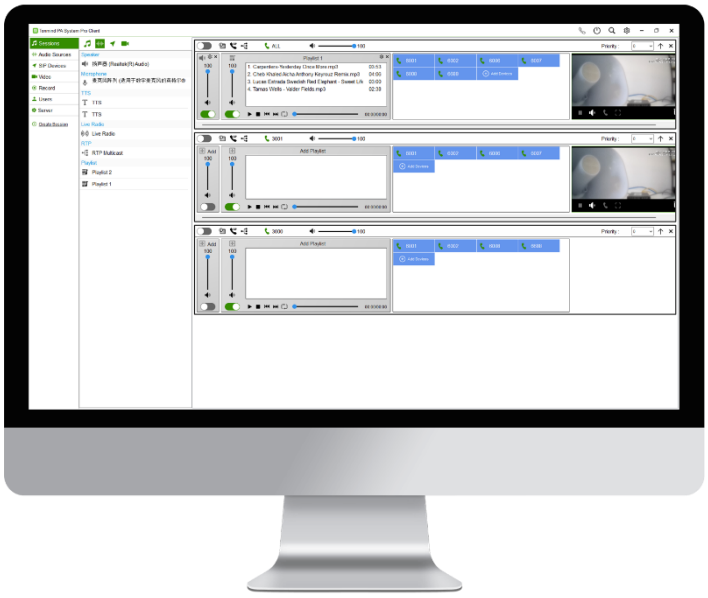
Tonmind PA System Pro

User Manual V2.20.4



Xiamen Tonmind Technologies Co., Ltd.

Contents

1. Introduction 3

2. PA System Pro Server Setting 4

2.1 General and System 4
2.2 About and How to Get a License Key 5
2.3 App Connect and Record 5

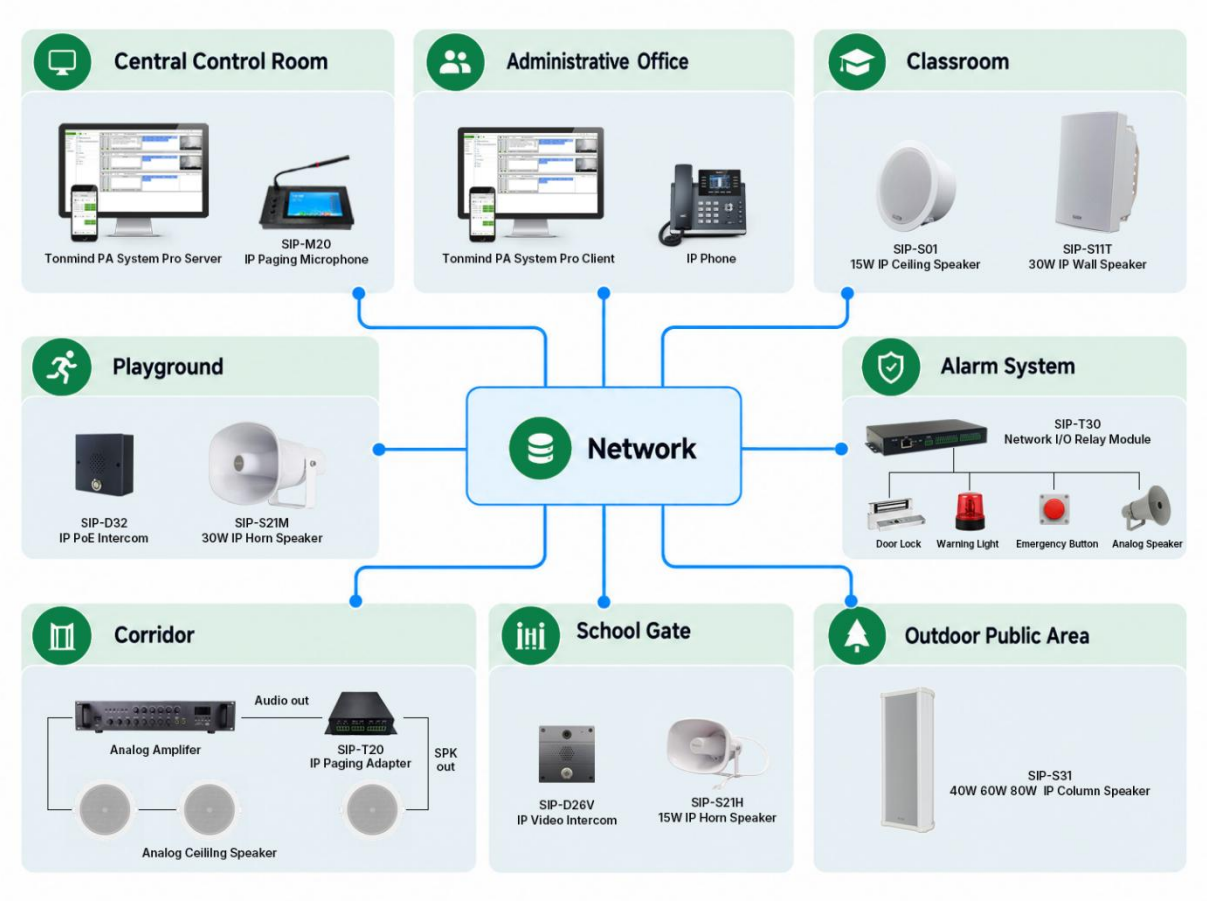
3. PA System Pro Client Setting 6

3.1 Login Admin Account 6
3.2 Sessions 7
3.2.1 Create Session 7
3.2.2 Schedule 8
3.2.3 SIP Trunk 9
3.2.4 Output 10
3.2.5 Meeting 11
3.3 Audio Sources 12
3.3.1 Speaker and Microphone 12
3.3.2 Playlist 12
3.3.3 Live Radio 13
3.3.4 TTS (Text-to-Speech) 13
3.3.5 RTP Multicast 13
3.3.6 Audio Source Arrangement 14
3.4 SIP Devices 15
3.4.1 Create SIP Devices and Add Them to Sessions 15
3.4.2 How to Register SIP Devices to PA System Pro 18
3.5 Video 20
3.6 Record 21
3.6.1 Add Recording Devices 21
3.6.2 Recording Mode Settings 22
3.6.3 Recording Playback 24
3.7 Users 24
3.8 Server 25

1. Introduction

Tonmind PA System Pro is an IP audio management platform with a built-in SIP Server. Based on a Server & Client architecture, it enables centralized management and multi-user operation across IP public address and intercom networks.

The software can create up to 1,000 sessions/zones and flexibly assign SIP devices such as IP Speakers, IP Intercoms, IP Paging Microphones, IP Paging Adapters and IP Phones. It also supports ONVIF video integration, multiple audio sources, recording, mobile control and SIP Trunk integration, providing a unified solution for schools, commercial buildings, transportation, hotels, healthcare and security applications.



2. PA System Pro Server Setting

Click the PA System Pro Server icon to open the server settings. You can view and configure **General**, **System**, **About**, **App Connect**, and **Record** settings.

2.1 General and System

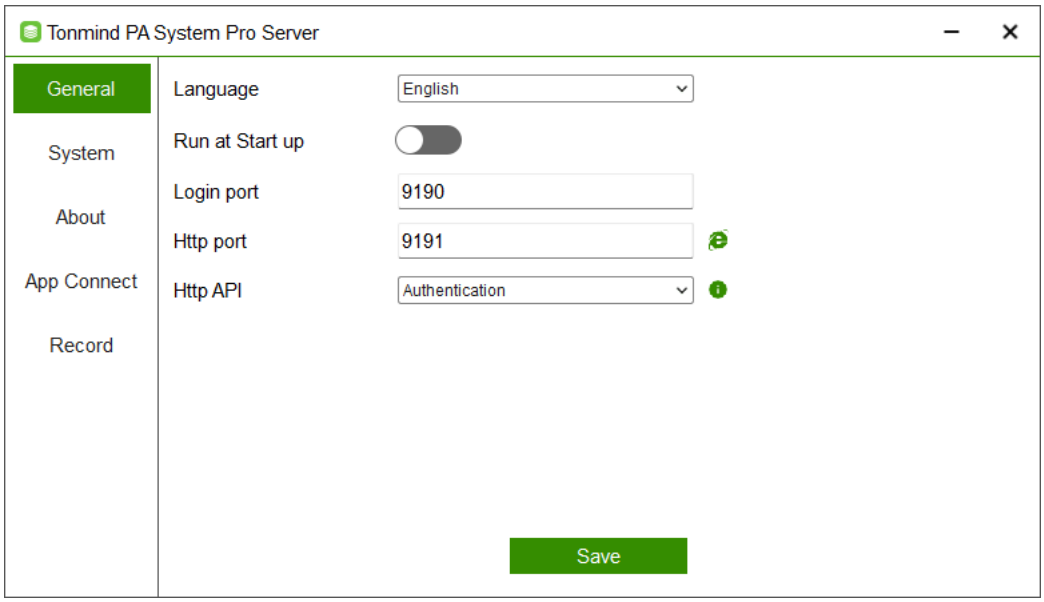
● General

Language: Select English, Simplified Chinese, or Russian.

Run at Startup: Enable this option to automatically launch the software when Windows starts.

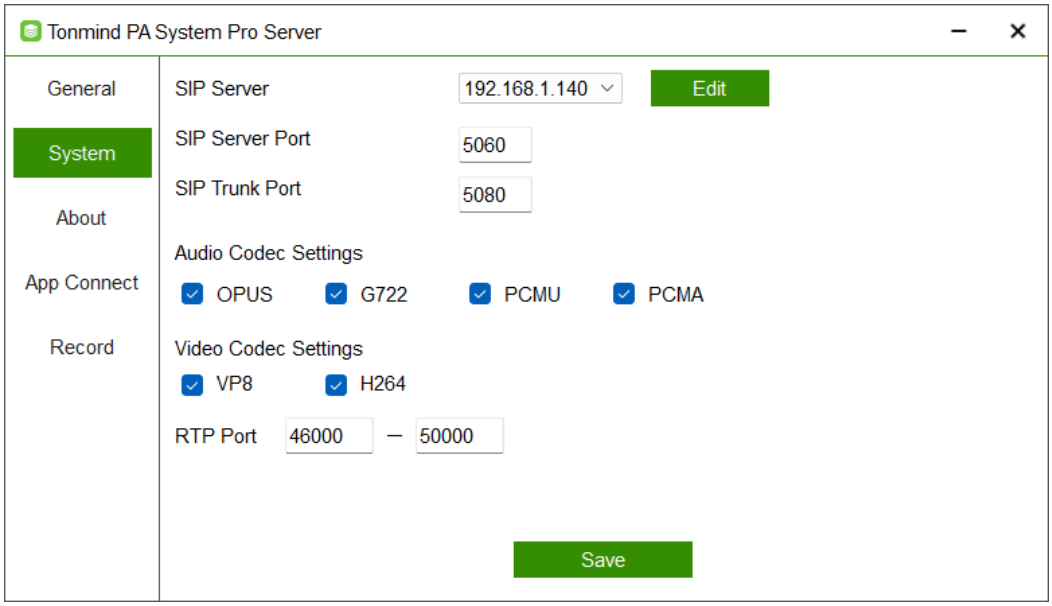
Login Port / HTTP Port: View the login and HTTP port information.

HTTP API: Select one of three modes: Authentication, No Authentication, or Disable. Click the information icon on the right to view example HTTP URLs.



● System

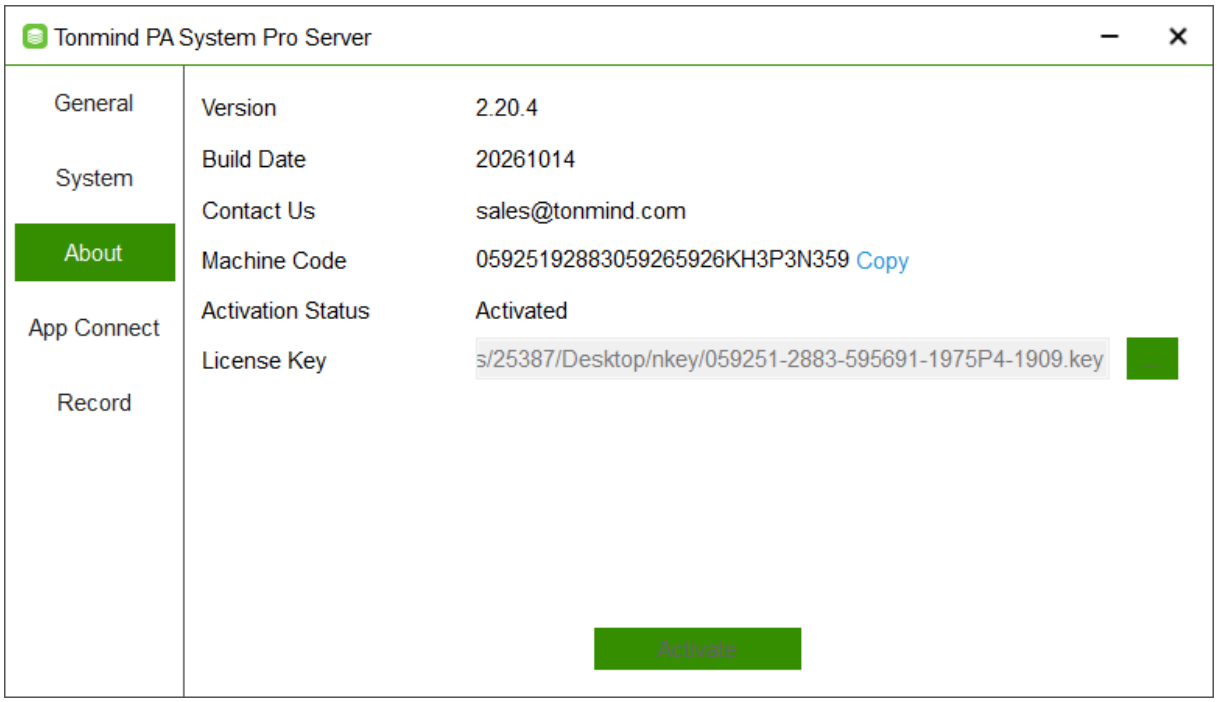
View the system parameters, including SIP Server, SIP Server Port, SIP Trunk Port, Audio Codec Settings, Video Codec Settings, and RTP Port.



2.2 About and How to Get a License Key

● About

View the software information, including Version, Build Date, Contact Us, Machine Code, Activation Status, and License Key.



● How to Activate the Software

All Tonmind PA software includes a **one-month free trial**. A license key is required to continue using the software after the trial period.

1) Click the blue **Copy** button next to Machine Code.
2) Send the copied Machine Code to the email address listed under **Contact Us**, or directly to your Tonmind sales representative.
3) After confirmation, Tonmind will provide the corresponding license key file.
4) Upload the license key file under **License Key** to activate the software for permanent use on the licensed PC.

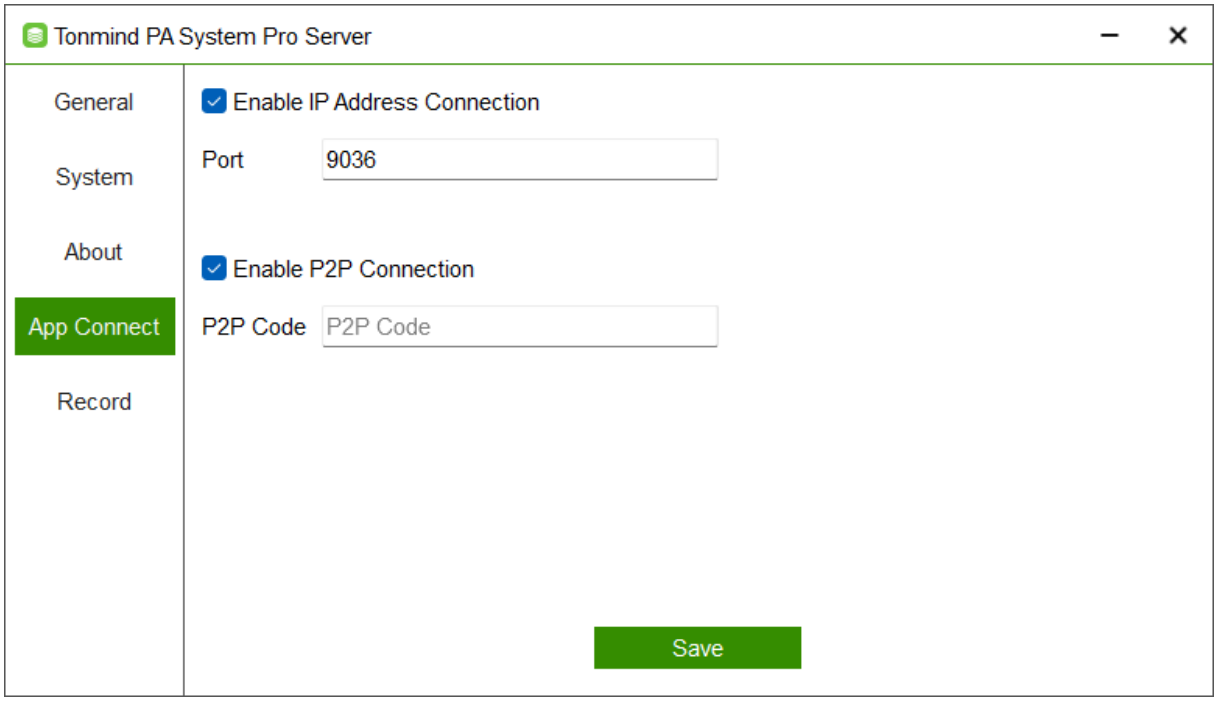
2.3 App Connect and Record

● App Connect

The Tonmind **PA Connect App** allows users to remotely control PA System Pro from a mobile phone. Two connection methods are available:

Enable IP Address Connection: Allow the app to connect to the software via IP address.

Enable P2P Connection: Allow the app to connect remotely through P2P.



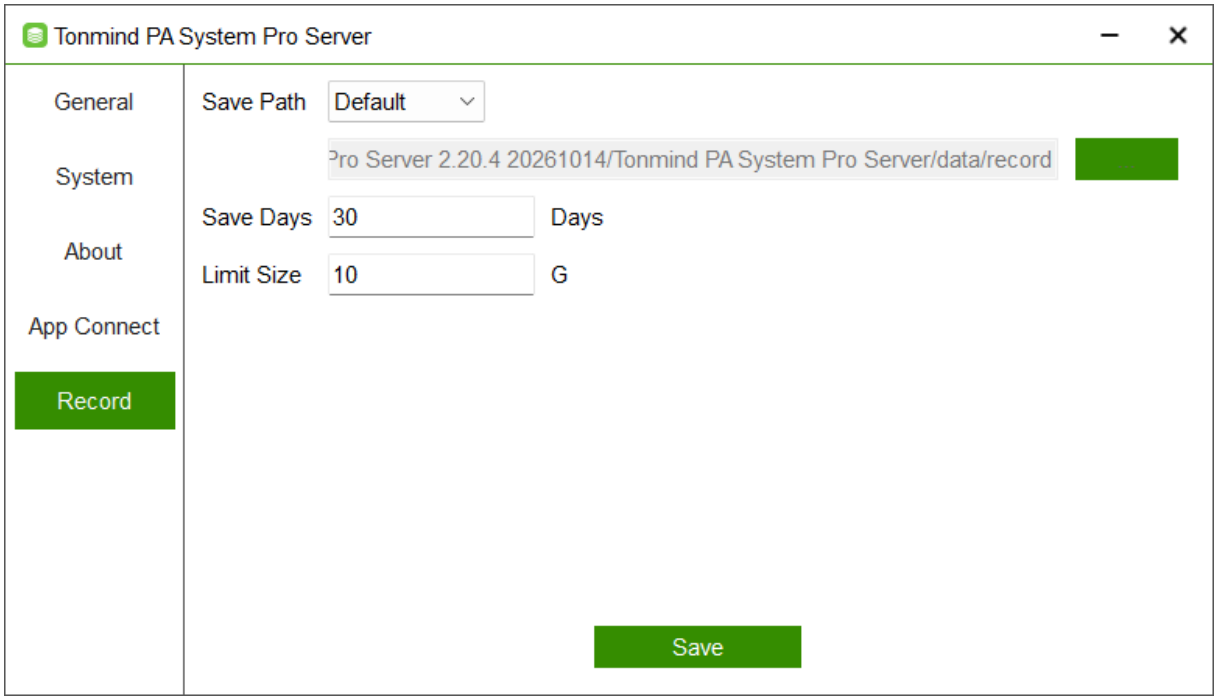
● **Record**

Configure the storage settings for recorded audio files.

Save Path: Select the default storage location or customize the save path.

Save Days: Set the number of days to retain recorded files.

Limit Size: Set the maximum storage capacity for recordings in GB.



3. PA System Pro Client Setting

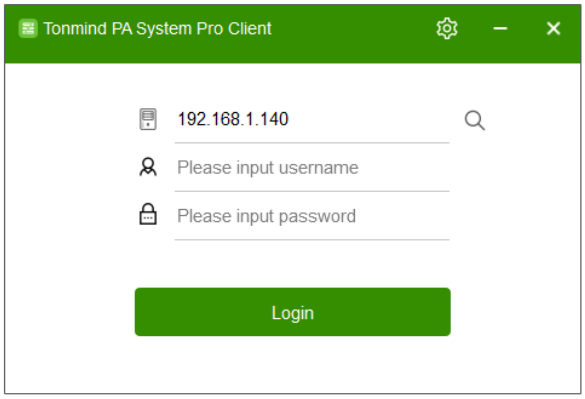
3.1 Login Admin Account

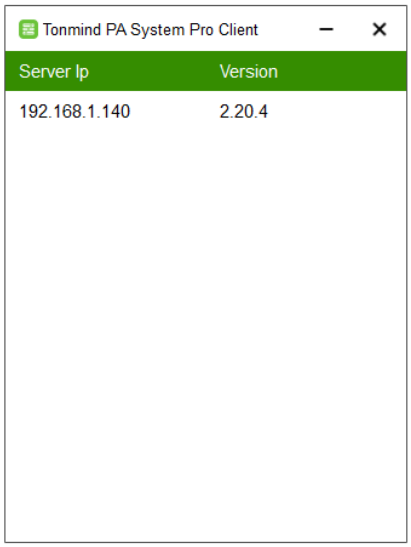
After launching PA System Pro Server, the PA System Pro Client login window will automatically appear.

1) Select the corresponding Server IP Address.

2) Enter the Username and Password.
3) Click Login to access PA System Pro Client.

Default Login Credentials:
Username: admin
Password: admin

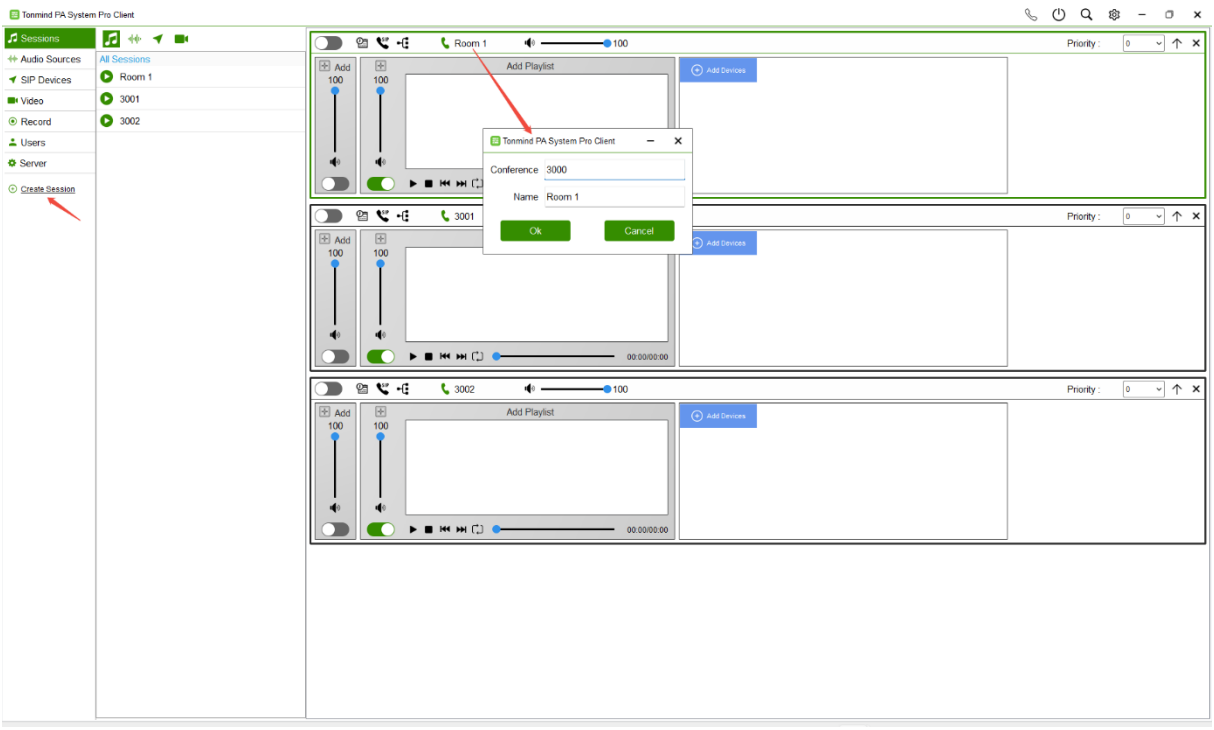




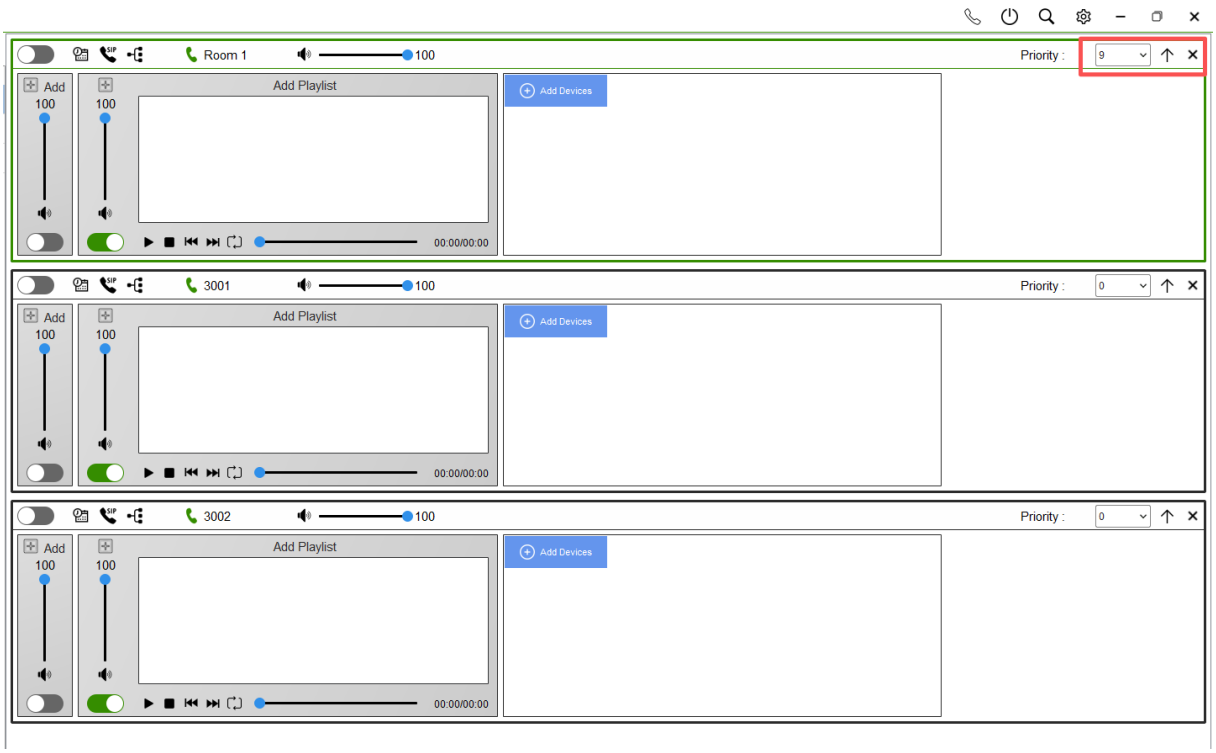
3.2 Sessions

3.2.1 Create Session

Click Create Session on the left to add a new session. The software supports up to 1,000 sessions.
Session Name & Number: Click the session name at the top to customize the name and number, e.g., Conference: 3000, Name: Room 1. The session number ranges from 3000 to 3999.



Move to Top (↑): Click the up arrow on the right to move the session to the top of the list.
Priority: Select a priority level from 0 to 9. A higher number indicates a higher priority.
Delete (×): Click the × icon to delete the session.



3.2.2 Schedule

Click one of the three setting icons at the top of each session to open the session settings. Select Schedule to configure scheduled actions.

● **Repeat Type**

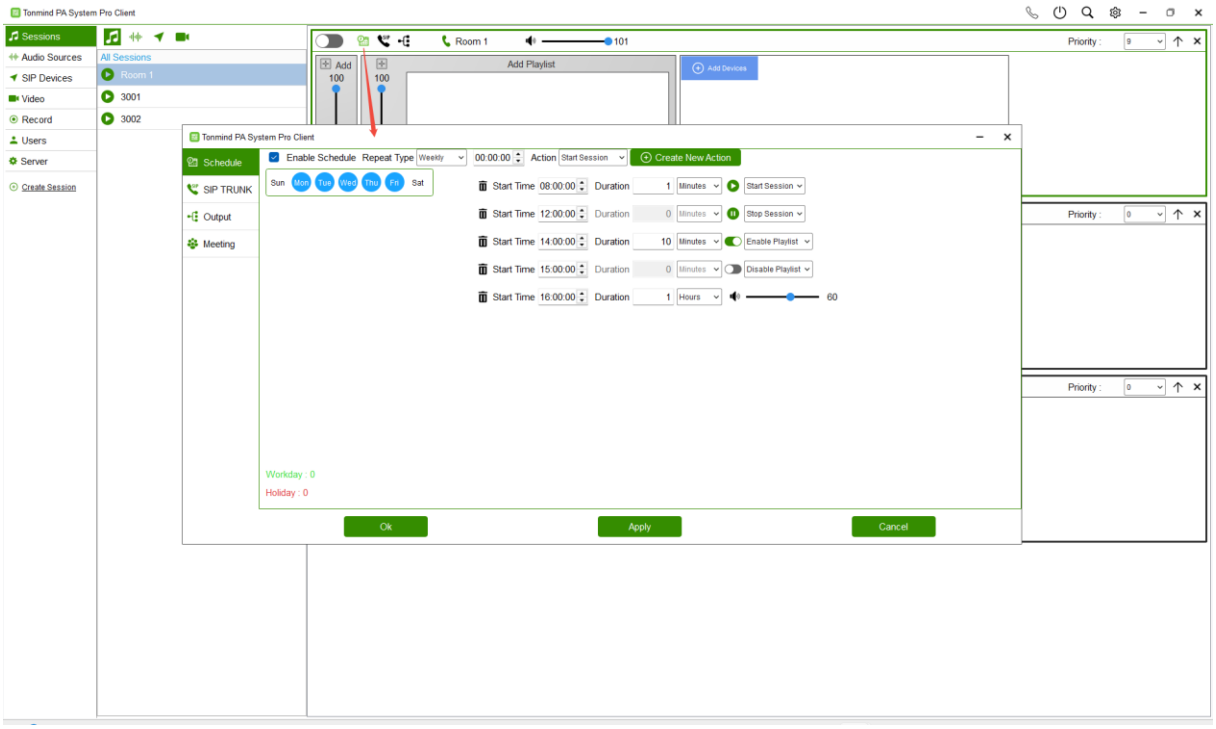
Enable Schedule and select one of four repeat types:
Once Only: Execute the schedule on a selected date.
Daily: Repeat the schedule every day.
Weekly: Select specific days of the week.
Monthly: Select specific days of the month.

● **Schedule Time and Actions**

Set the schedule time and select an action from the following options:
Start Session: Start the session automatically.
Stop Session: Stop the session automatically.
Enable Playlist: Enable playlist playback.
Disable Playlist: Disable playlist playback.
Set Volume: Adjust the session volume.
Click Create New Action to add a scheduled action.

● **Action Duration**

Configure the Start Time and Duration for each created action. Duration options include Seconds, Minutes, Hours, and No Limit.



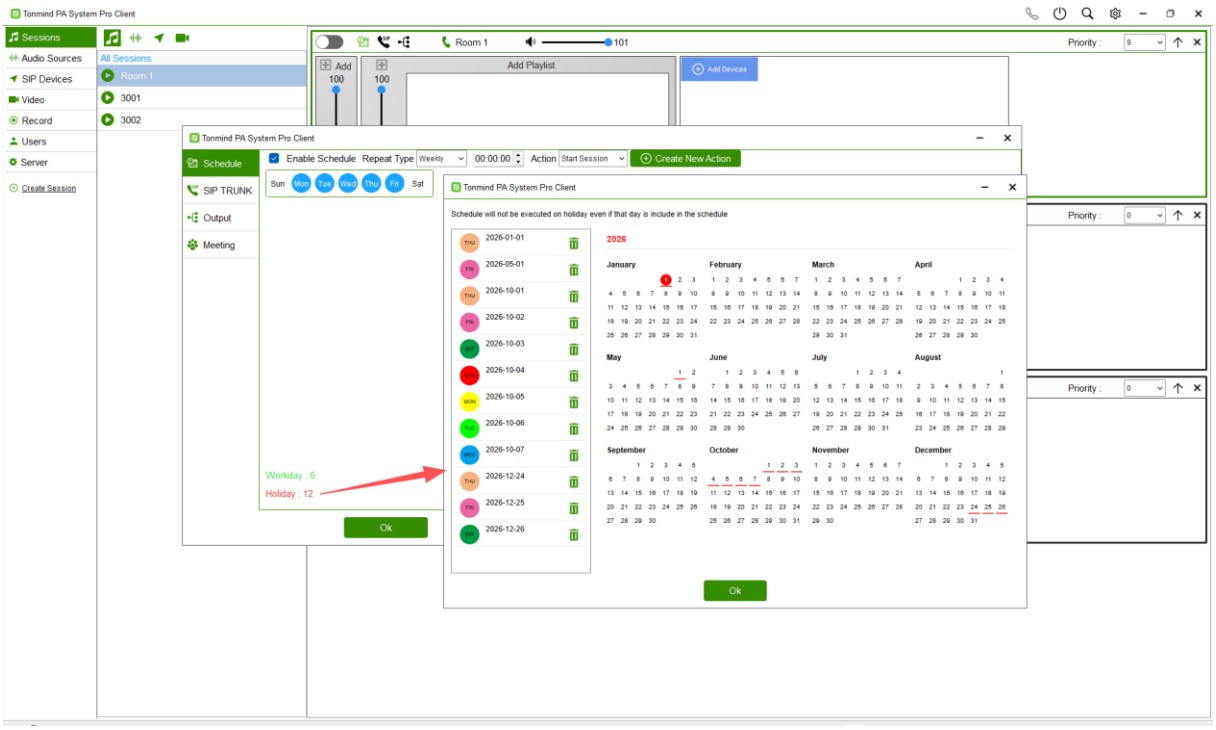
- **Workday and Holiday Settings**

Click Workday or Holiday at the bottom left to customize the calendar for the current year.

Workday: The schedule will run on designated workdays, even if they fall on normally excluded days. For example, if a Saturday is marked as a workday, a weekday schedule will also run on that Saturday.

Holiday: The schedule will not run on designated holidays, even if they fall on scheduled playback days. For example, if Monday is marked as a holiday, a Monday–Friday schedule will not run on that day.

Note: Workday and Holiday settings override the regular weekly schedule.



3.2.3 SIP Trunk

Click one of the three setting icons at the top of each session to open the session settings. Select SIP

TRUNK to configure the SIP trunk connection.

PA System Pro supports registering sessions to an external IP PBX via SIP Trunk, allowing SIP devices registered to the IP PBX to call and communicate with devices in the corresponding session.

● SIP Trunk Configuration

Enable SIP Trunk and enter the following IP PBX information:

Server: Enter the IP address or domain name of the IP PBX.

Port: Enter the SIP server port.

Account: Enter the SIP account number.

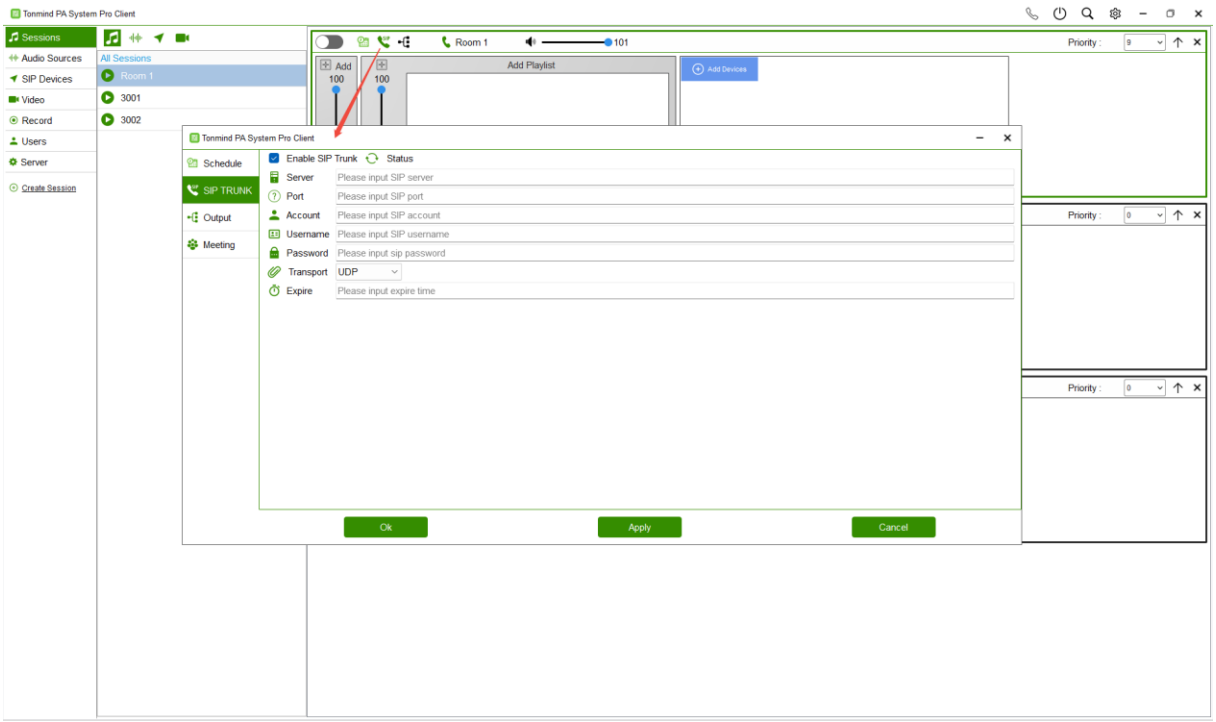
Username: Enter the SIP authentication username.

Password: Enter the SIP authentication password.

Transport: Select UDP or TCP.

Expire: Set the SIP registration expiration time.

Click Apply or OK to save the settings. Check Status to verify the SIP trunk registration status.



3.2.4 Output

Click the setting icon at the top of each session and select Output to configure RTP Multicast and HTTP Stream output.

● RTP Multicast

Enable RTP Multicast and enter the RTP multicast address.

Configure the same RTP multicast address on the receiving devices.

When the session starts playing audio, all devices configured with the corresponding RTP multicast address will also play the audio.

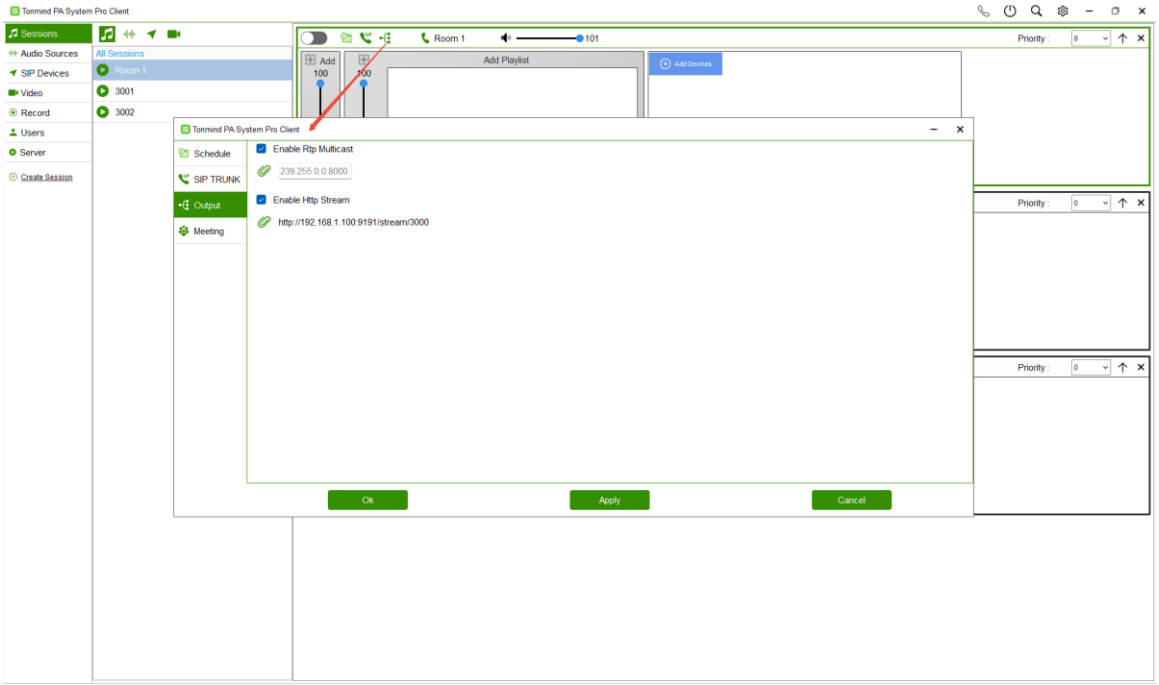
● HTTP Stream

Enable HTTP Stream to activate HTTP audio streaming.

The system will generate an HTTP URL for the session.

When the session plays audio, the same audio stream will be available through the HTTP URL for compatible devices or applications.

Click Apply or OK to save the settings.



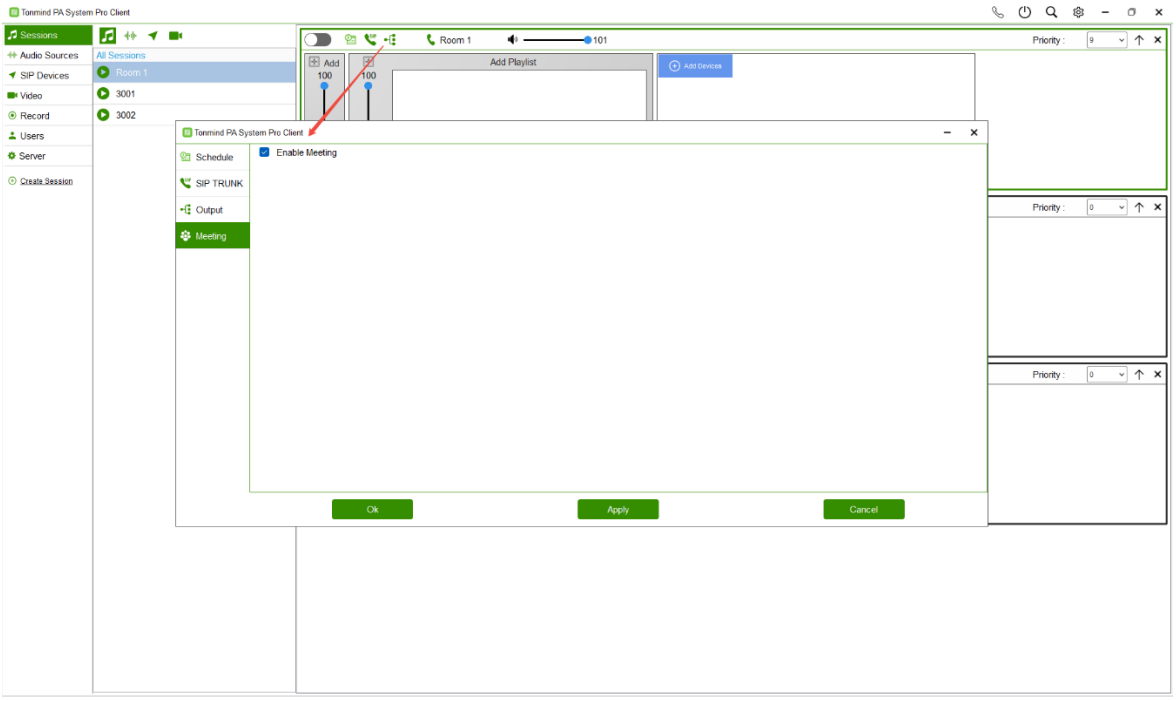
3.2.5 Meeting

Click the setting icon at the top of each session and select Meeting to configure the meeting mode.

Enable Meeting: Check this option to enable meeting mode for the session.

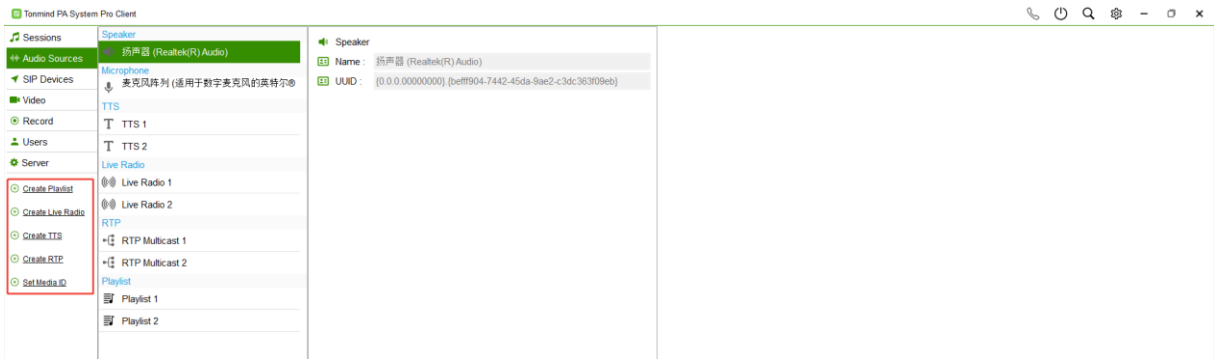
Two-Way Communication: When the session is started, all devices in the session enter meeting mode. Audio captured by devices with built-in microphones is transmitted through PA System Pro to other devices in the same session, allowing participants to communicate with each other.

Click Apply or OK to save the settings.



3.3 Audio Sources

Click Audio Sources on the left menu to manage audio inputs. PA System Pro supports multiple audio sources, including Speaker, Microphone, Playlist, Live Radio, TTS, and RTP Multicast.
Click Create Playlist, Create Live Radio, Create TTS, or Create RTP on the left to add a new audio source.



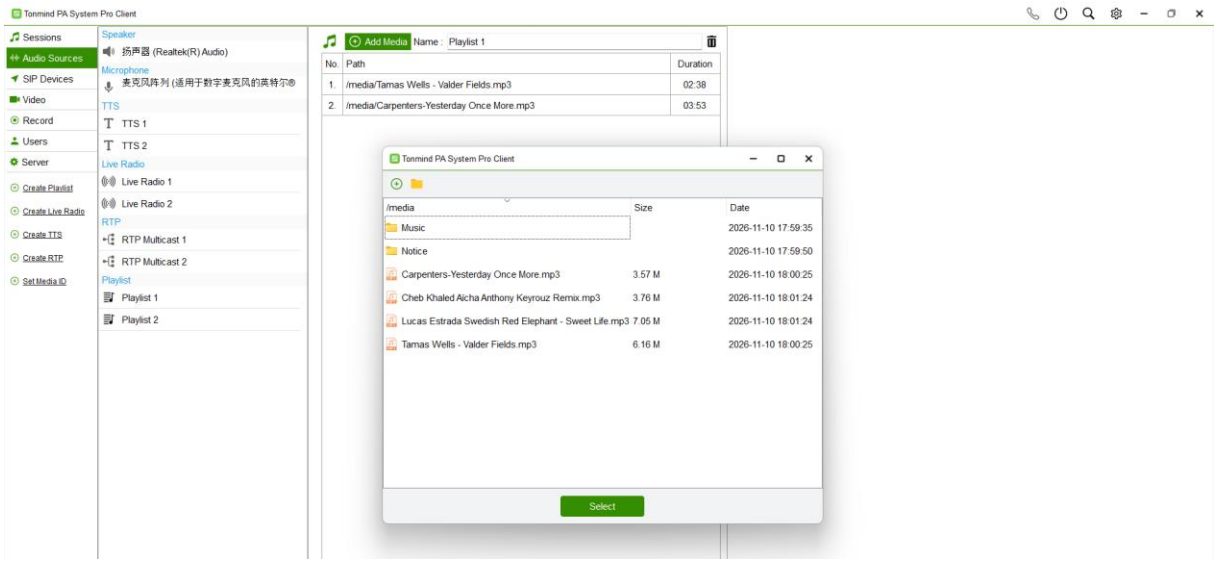
3.3.1 Speaker and Microphone

The default audio sources are automatically detected from the computer.
Speaker: Uses the computer's audio output as an audio source.
Microphone: Uses the computer's connected microphone for live paging.

3.3.2 Playlist

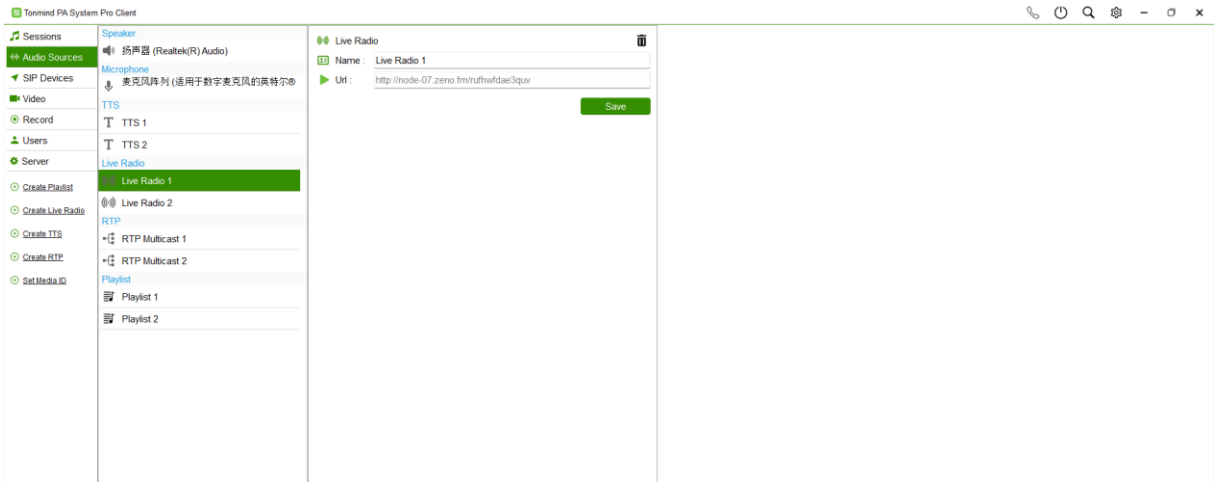
Click Create Playlist to add a new playlist.

1) Enter a name for the playlist.
2) Click Add Media, then click the + icon in the pop-up window to upload local audio files to PA System Pro.
3) Create folders to organize audio files into different categories if needed.
4) Select the desired audio files and click Select to add them to the playlist.



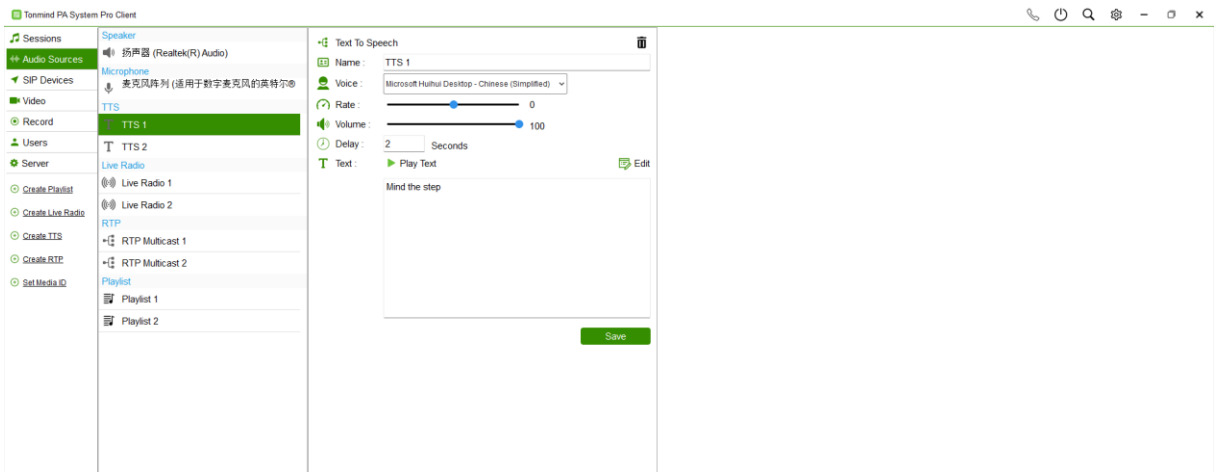
3.3.3 Live Radio

Click Create Live Radio to add an online radio source.
Name: Enter a name for the Live Radio source.
URL: Enter the live radio streaming URL.
Click Save to save the settings.



3.3.4 TTS (Text-to-Speech)

Click Create TTS to create a text-to-speech audio source.
Name: Enter a name for the TTS source.
Voice: Select an available voice, such as Microsoft Huihui Desktop (Chinese Simplified), Microsoft Zira Desktop (English - United States), or Microsoft David Desktop (English - United States).
Rate: Adjust the speech speed.
Volume: Adjust the playback volume.
Delay: Set the delay time in seconds.
Text: Enter the text to be converted into speech.
Click Play Text to preview the speech, then click Save to save the settings.



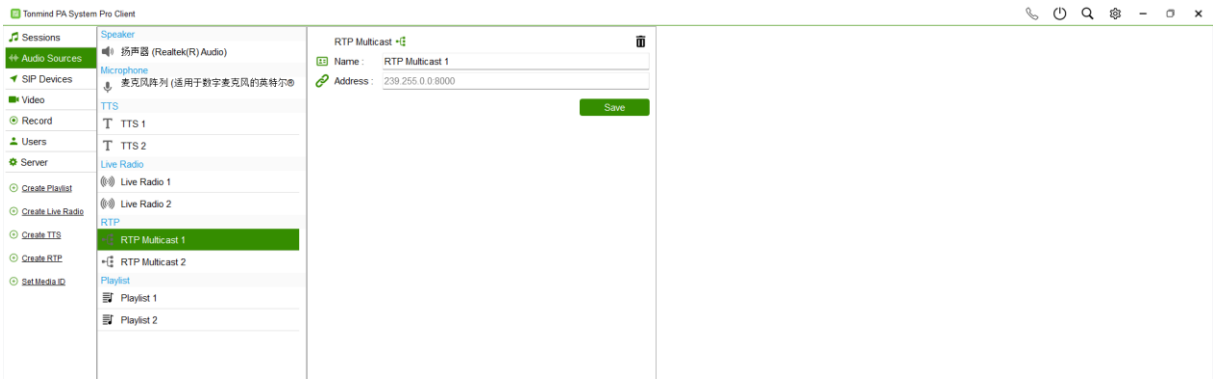
3.3.5 RTP Multicast

Click Create RTP to add an RTP multicast audio source.
Name: Enter a name for the RTP multicast source.

Address: Enter the RTP multicast address, such as 239.255.0.0:8000.

PA System Pro can receive audio streams from the specified RTP multicast address and use them as audio sources for session playback.

Click Save to save the settings.



3.3.6 Audio Source Arrangement

Return to the Sessions page and click the Audio Sources icon in the second column. All added audio sources will be displayed. Drag the required audio sources into the target session as needed.

Click the session switch at the top left of the session to turn the session on or off. Each audio source in the session also has its own switch at the bottom, which is used to enable or disable that source independently.

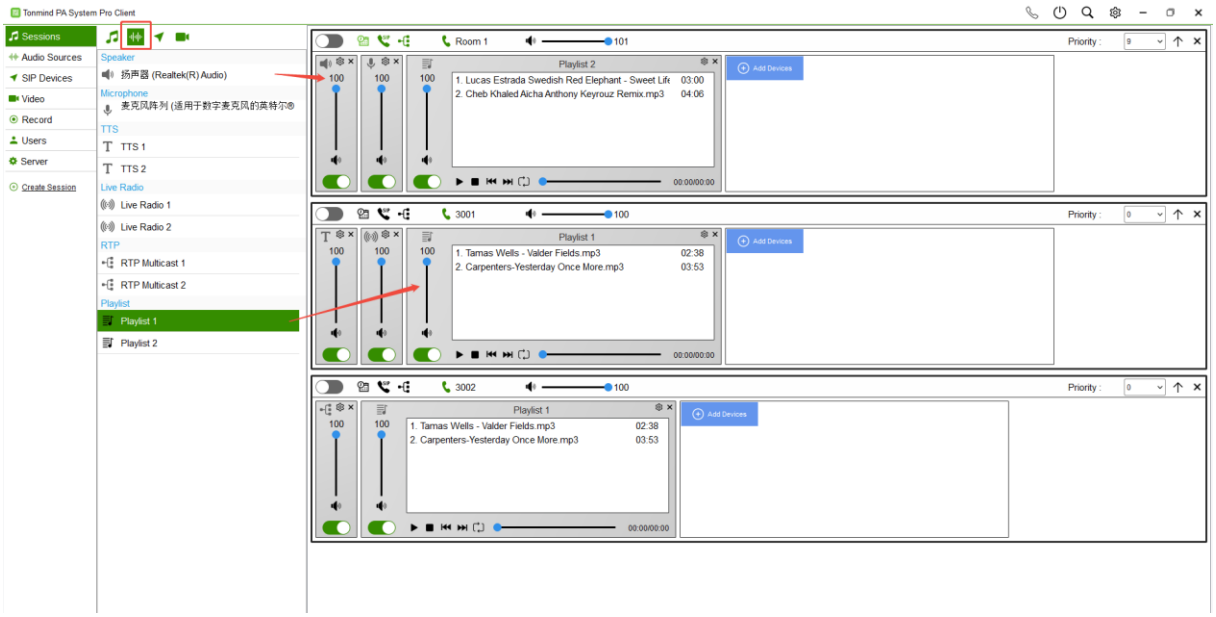
When the session is turned on and all audio sources in the session are enabled, the session will play a mixed audio output from all active sources if they have the same priority.

Click the setting icon at the top right of each audio source to set its priority from 0 to 9. A higher number indicates a higher priority.

If multiple audio sources are enabled after the session is turned on:

1) If the sources have the same priority, their audio will be mixed and played together.
2) If one source has a higher priority, the system will give playback priority to that source. After the higher-priority source finishes, playback will continue with the next available audio source.

This function allows flexible audio source management within each session.



3.4 SIP Devices

PA System Pro has a built-in SIP Server that supports registering and managing up to 1,000 SIP devices. The SIP number range is 6000–6999.

SIP devices can be created from the SIP Devices page or directly within a session.

3.4.1 Create SIP Devices and Add Them to Sessions

A. Create SIP Devices from the SIP Devices Page

Click SIP Devices on the left menu. There are three methods to create SIP devices:

1) Create New Device

Click Create New Device to add a single SIP device.

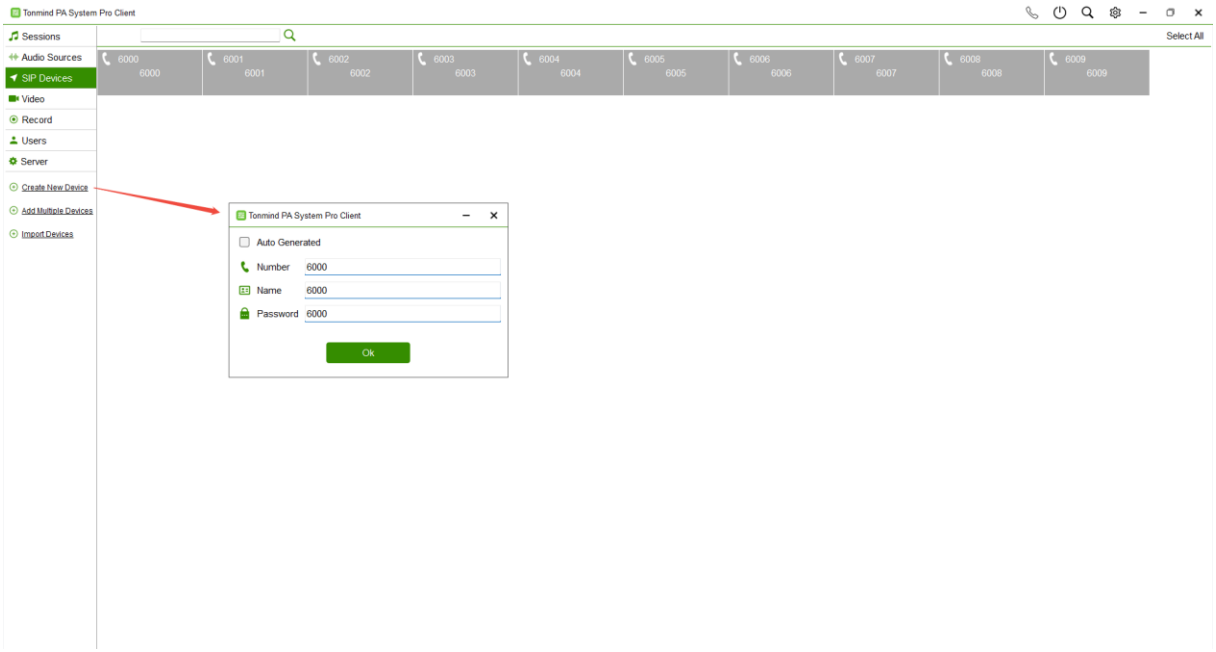
Number: Enter a SIP number (6000–6999).

Name: Enter the device name.

Password: Set the SIP registration password.

Auto Generated: Check this option to automatically generate the device information.

Click OK to create the SIP device.



2) Add Multiple Devices

Click Add Multiple Devices to create multiple SIP devices at once.

Start Number: Enter the starting SIP number, e.g., 6001.

Devices Count: Enter the number of devices, e.g., 9.

Name Prefix: Set an optional prefix for device names.

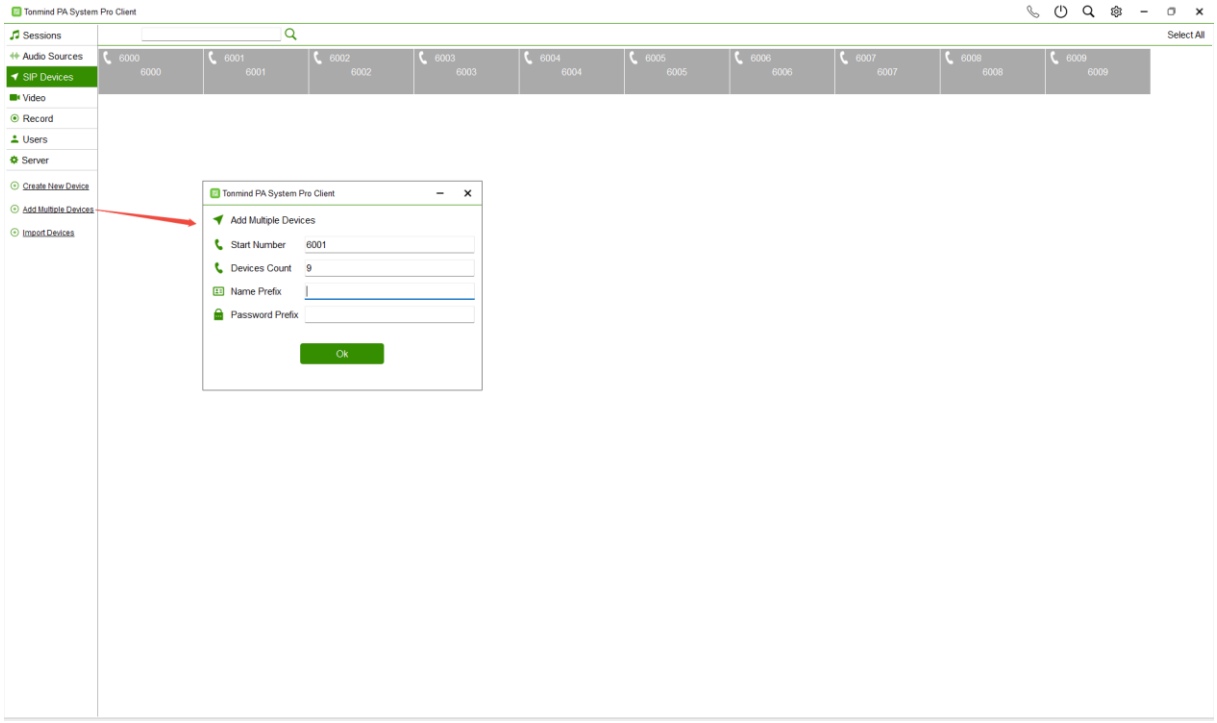
Password Prefix: Set an optional prefix for device passwords.

For example, entering Start Number 6001 and Devices Count 9 will create SIP devices numbered 6001–6009.

If the Name Prefix and Password Prefix are left blank, the device names and passwords will be the same as their SIP numbers.

If Name Prefix is set to F, the device names will be F6001–F6009. The Password Prefix works in the same way.

Click OK to create the devices.



3) Import Devices

Click Import Devices to add multiple SIP devices using a TXT file.

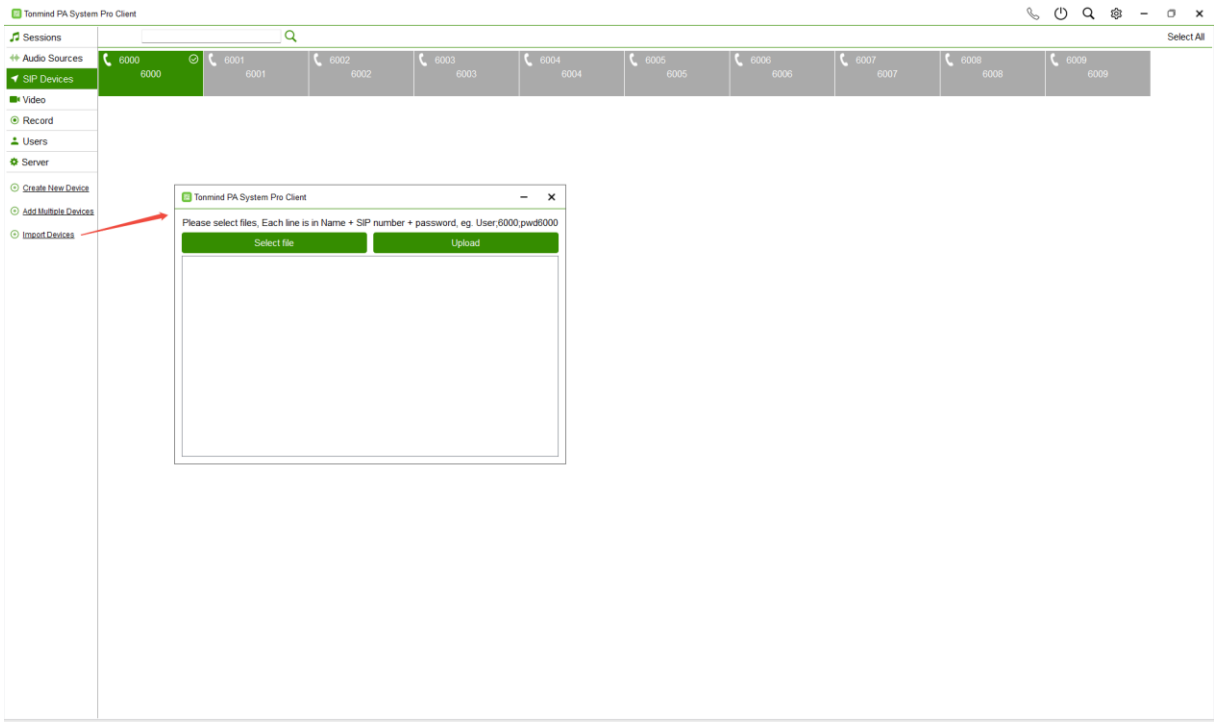
Create a TXT file containing the device information, with one device per line.

Use the format: Name;SIP Number;Password

Example: User;6000;pwd6000

Click Select File to choose the TXT file.

Click Upload to import the SIP devices.



B. Create SIP Devices Within a Session

Go to the Sessions page and click Add Devices in the target session.

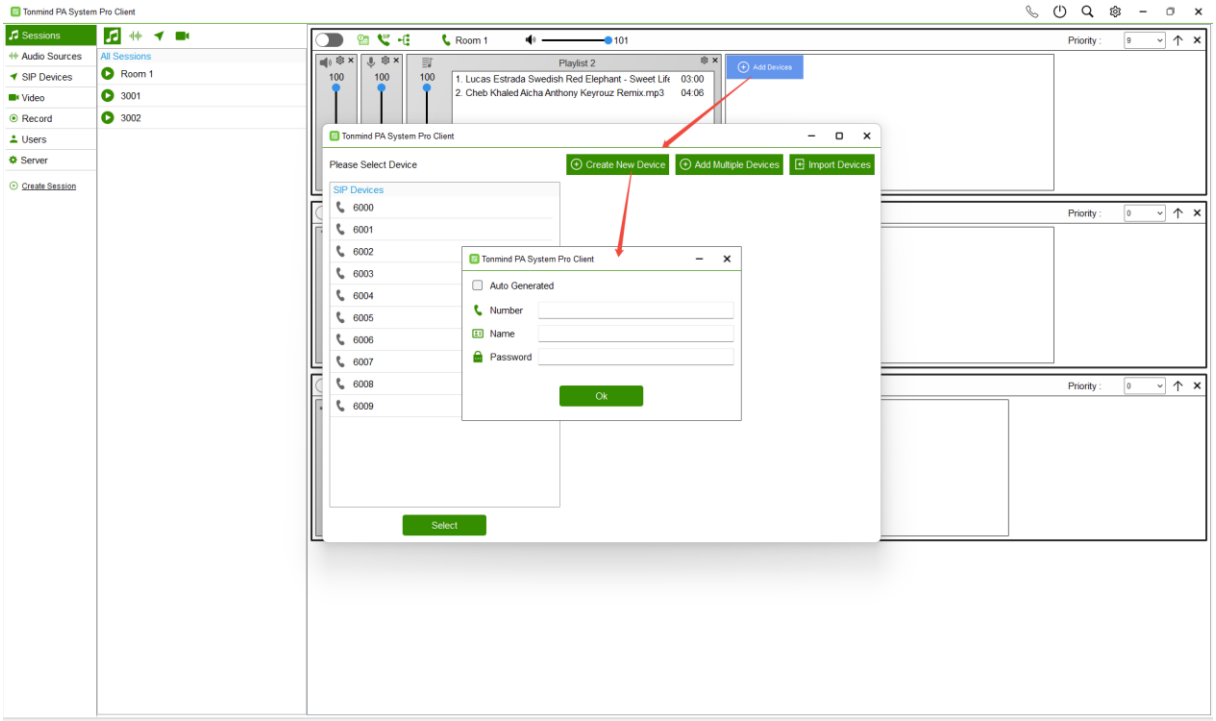
Three options are available:

Create New Device: Create a single SIP device.

Add Multiple Devices: Create multiple SIP devices.

Import Devices: Import SIP devices from a TXT file.

Follow the same steps described above to create the devices.



C. Add SIP Devices to a Session

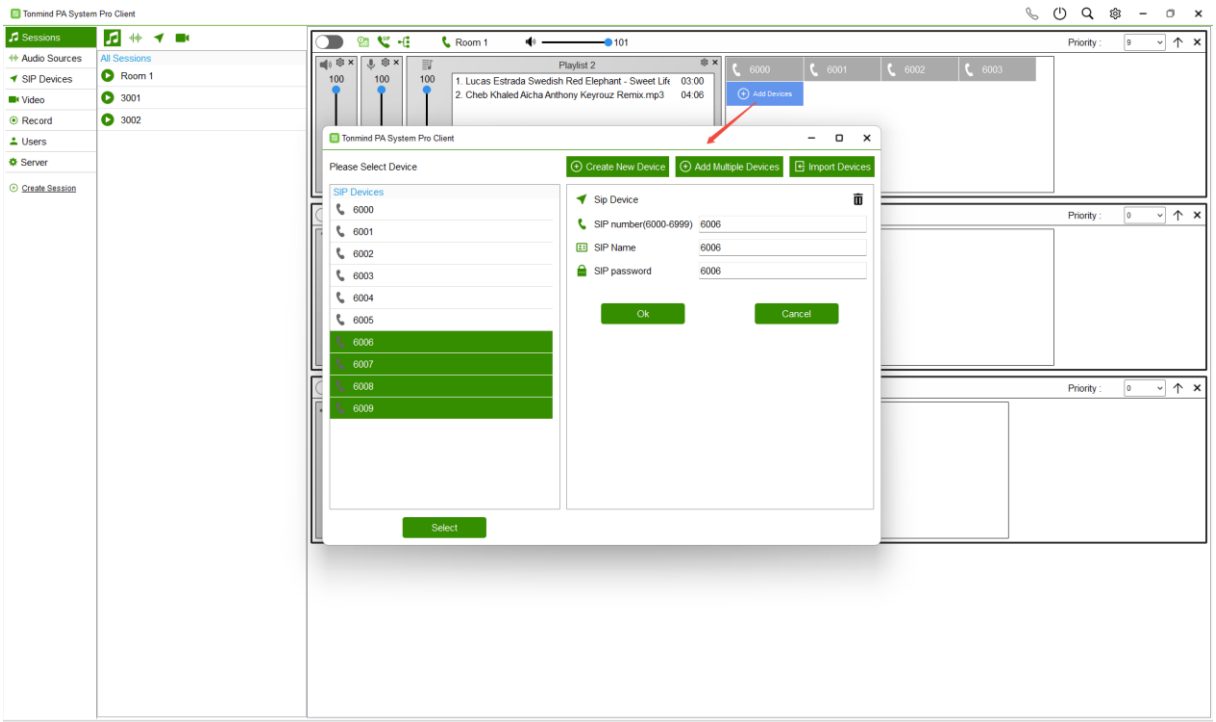
Go to the Sessions page.

Click Add Devices in the target session.

Select the required SIP devices from the existing device list on the left.

Click Select to add the selected devices to the session.

The selected SIP devices will appear in the session's device area.



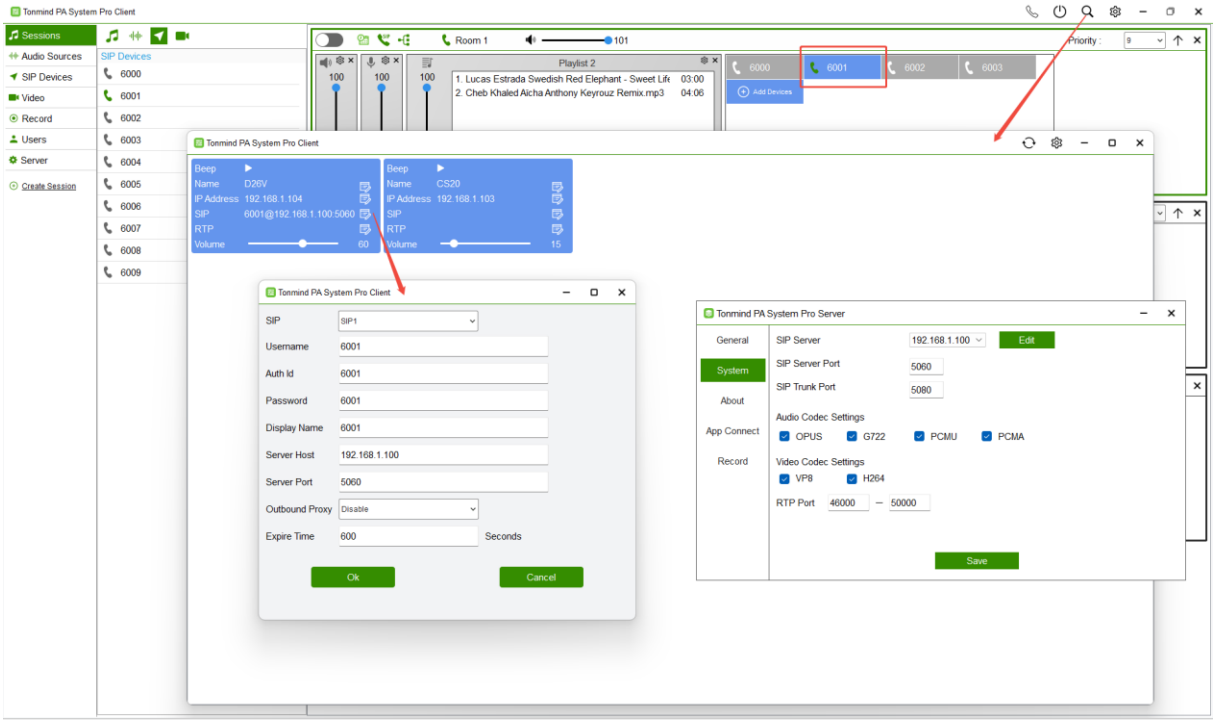
3.4.2 How to Register SIP Devices to PA System Pro

There are three methods to register Tonmind IP audio devices to PA System Pro: PA System Pro, IPTool, or the device's Web interface.

A. Register via PA System Pro

1) Go to the Sessions page and click the Search icon at the top right.
2) PA System Pro will automatically discover Tonmind IP audio devices on the local network.
3) Click the Edit icon next to SIP on the detected device to open SIP settings.
4) Enter the previously created SIP account information, including Username, Auth ID, Password, and Display Name.
5) Enter the Server Host (PA System Pro Server IP address) and Server Port (e.g., 5060).
6) Click OK to save the settings.

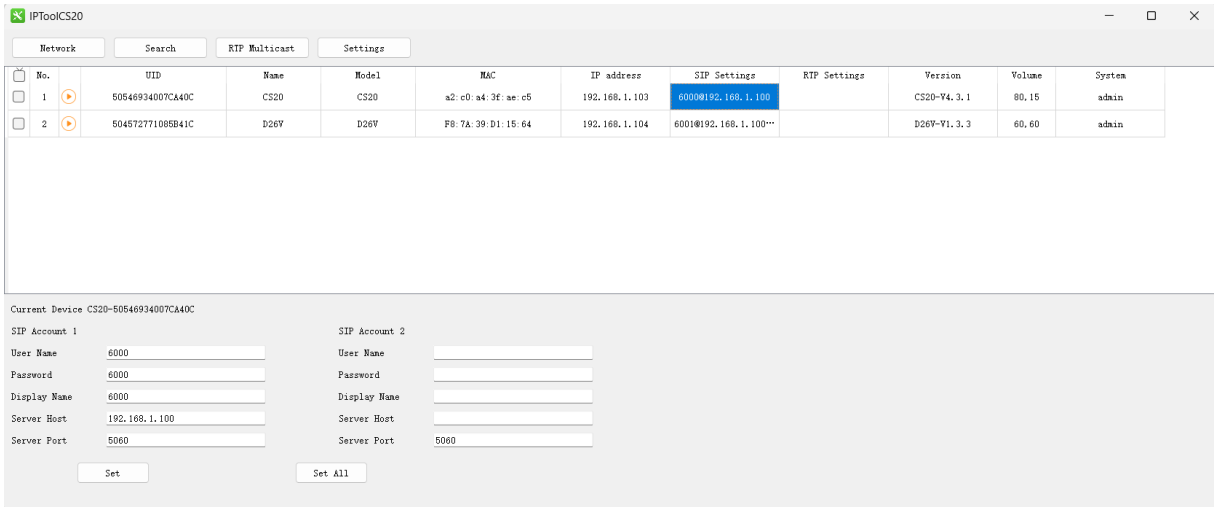
Once successfully registered, the SIP device indicator will change from gray to blue.



B. Register via IPTool

IPTool is a free Tonmind utility that can discover IP audio devices on the local network and configure basic settings, including SIP, RTP Multicast, and Volume.

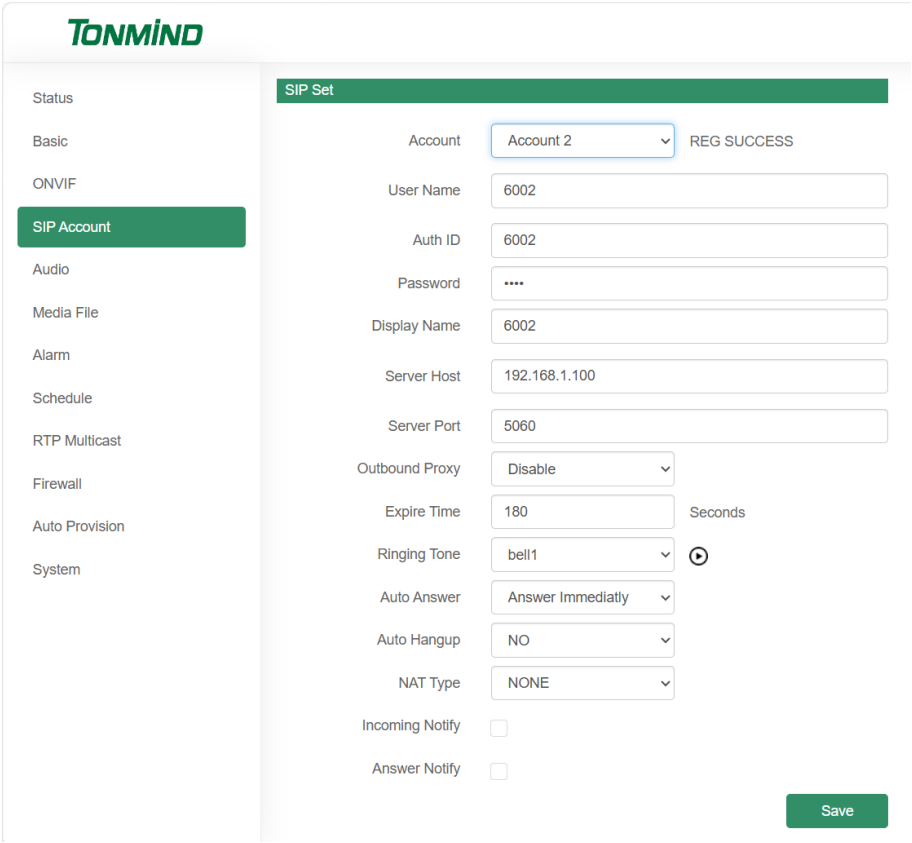
1) Open IPTool and click Search to discover devices.
2) Select the target device and open its SIP Settings.
3) Enter the SIP account information, including User Name, Password, Display Name, Server Host, and Server Port.
4) Click Set to apply the settings to the selected device, or Set All to apply the configured settings to multiple selected devices.



C. Register via Device Web Interface

1) Find the device's IP address using PA System Pro or IPTool.
2) Enter the device's IP address in a web browser to access its Web interface.
3) Go to SIP Account and select the account to configure.
4) Enter the corresponding SIP settings:
   User Name / Auth ID: SIP account number created in PA System Pro.
   Password: Corresponding SIP account password.
   Display Name: Device display name.
   Server Host: PA System Pro Server IP address.
   Server Port: SIP server port (e.g., 5060).
5) Click Save to apply the settings.

Once registration is successful, the device will display REG SUCCESS.

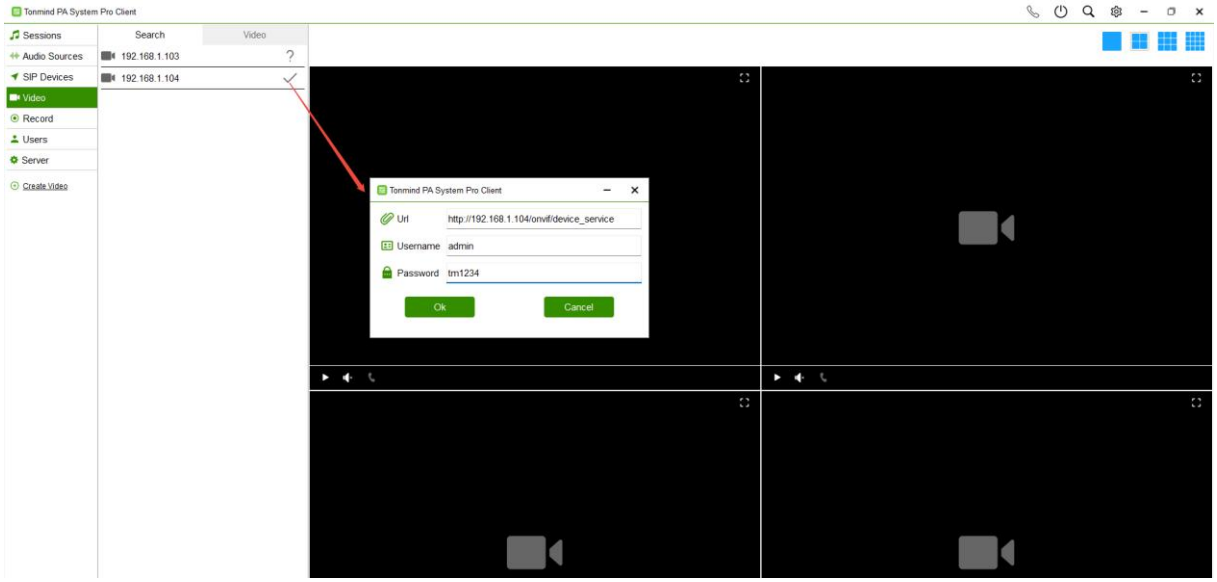


3.5 Video

PA System Pro supports video monitoring from compatible devices, such as the Tonmind IP Video Intercom D26V, and allows up to 1,000 video devices to be added.

A. Search and Connect Video Devices

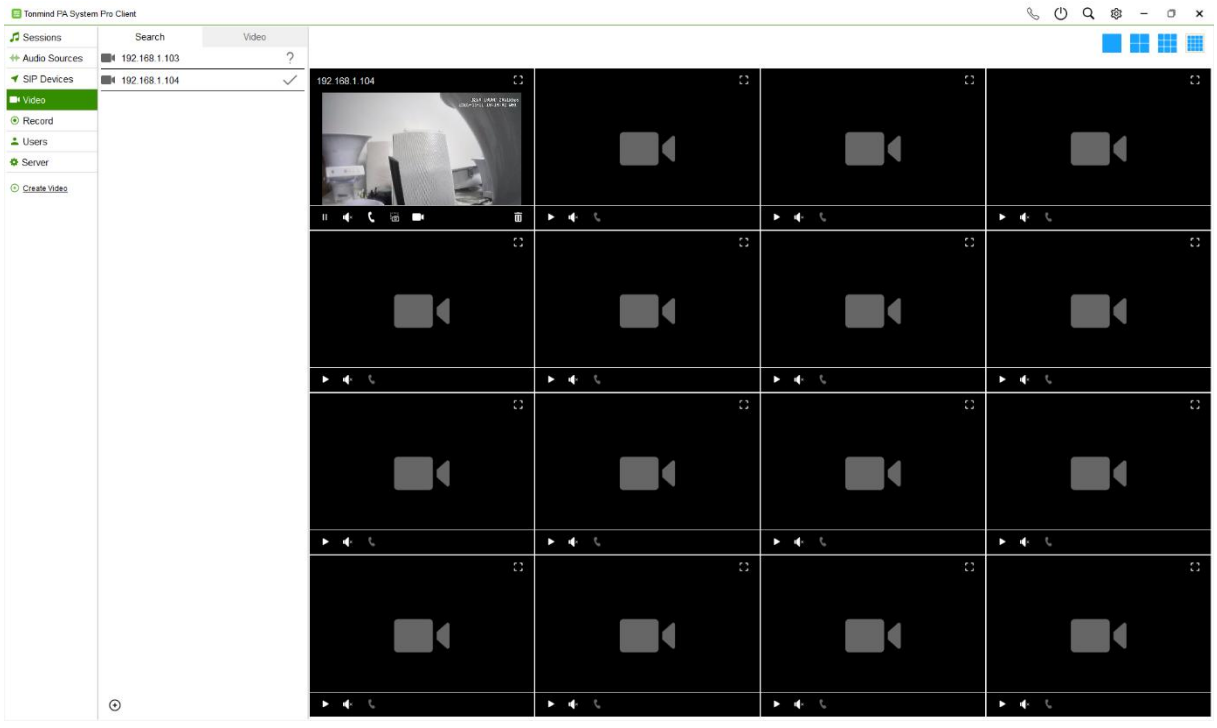
1) Click Video on the left menu.
2) Under Search, PA System Pro automatically discovers compatible video devices on the local network.
3) Click a detected device and enter its Username and Password.
4) Click OK to connect. A √ icon indicates a successful connection.



B. View Video Streams

Drag the connected video devices to the display area on the right to view live video.

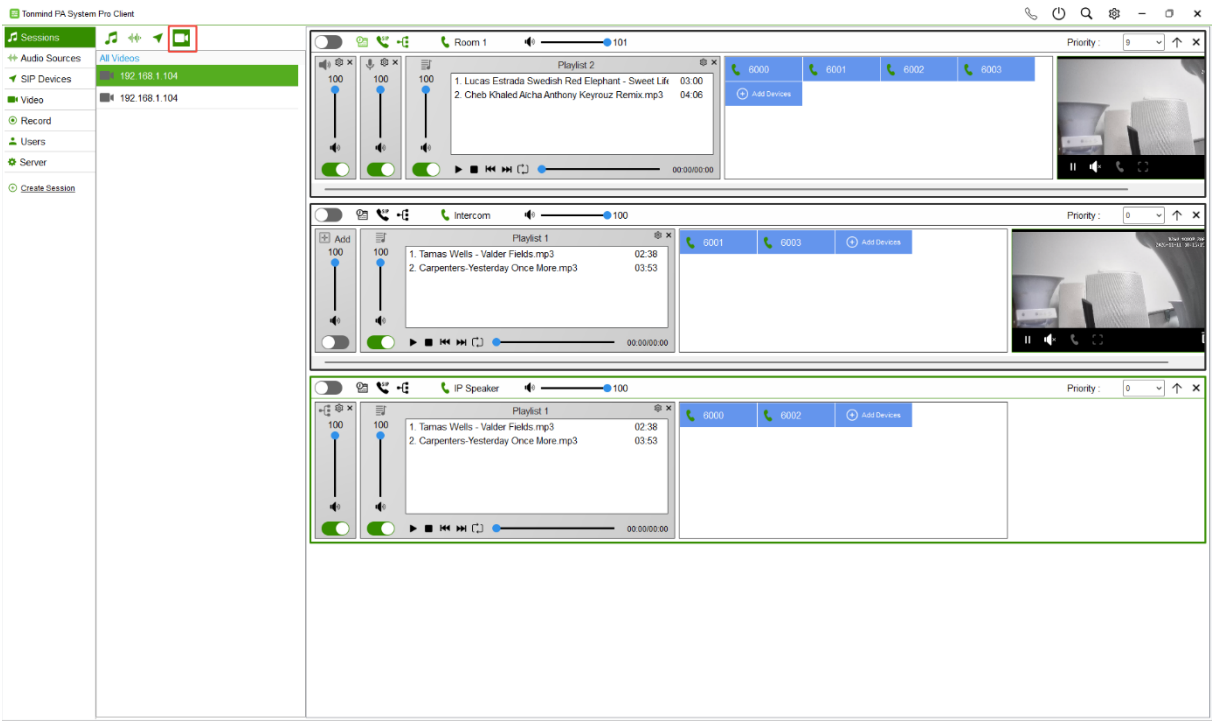
PA System Pro supports viewing up to 16 video streams simultaneously. Select different screen layouts as needed.



C. Add Video Devices to Sessions

1) Return to the Sessions page.
2) Click the Video icon in the second column to display the added video devices.
3) Drag the desired video device into the target session.

The video stream will appear in the corresponding session for monitoring.



3.6 Record

PA System Pro supports audio recording from IP devices with built-in microphones. Click Record on the left menu to configure recording modes and play back recorded audio files.

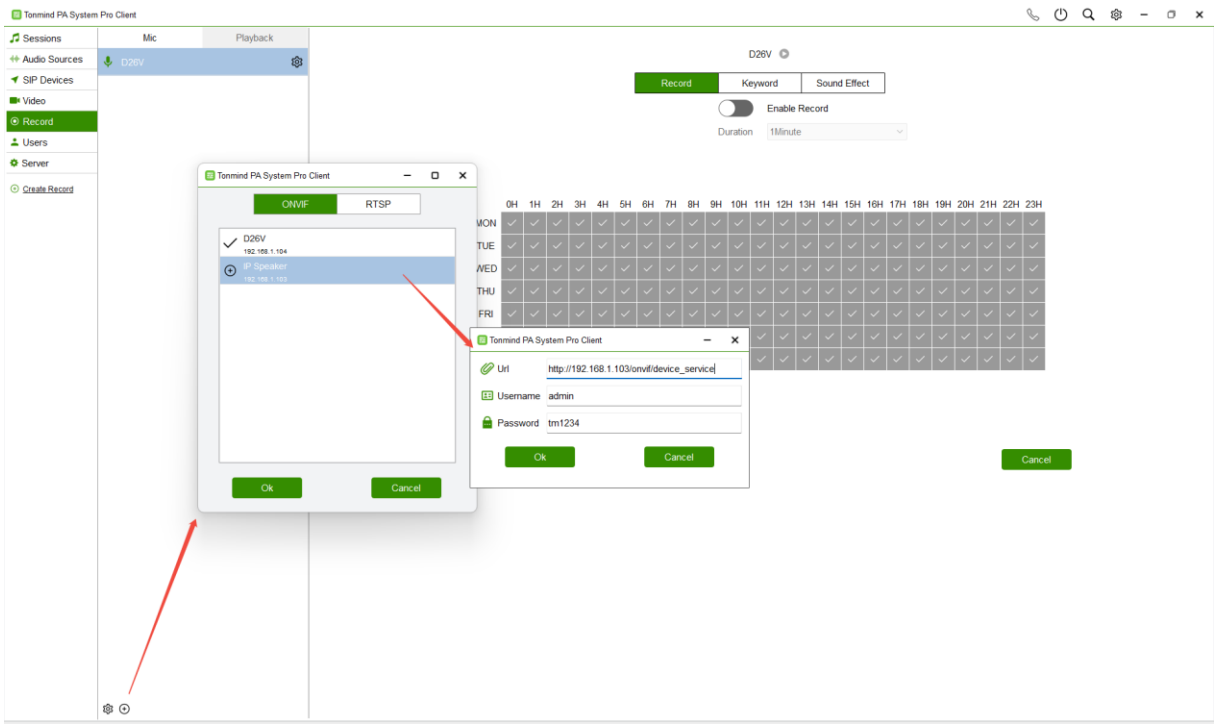
3.6.1 Add Recording Devices

1) Click Mic, then click the + icon at the bottom left to add a recording device.
2) Select a device discovered via ONVIF. For devices that do not support ONVIF, use RTSP to add them.
3) Enter the device's Username and Password to connect.
4) Once successfully added, the device will appear in the Mic list.

Device Status:

Green Microphone: Recording is inactive.

Red Microphone: Recording is in progress.



3.6.2 Recording Mode Settings

PA System Pro provides three recording modes: Record, Keyword, and Sound Effect.

A. Record

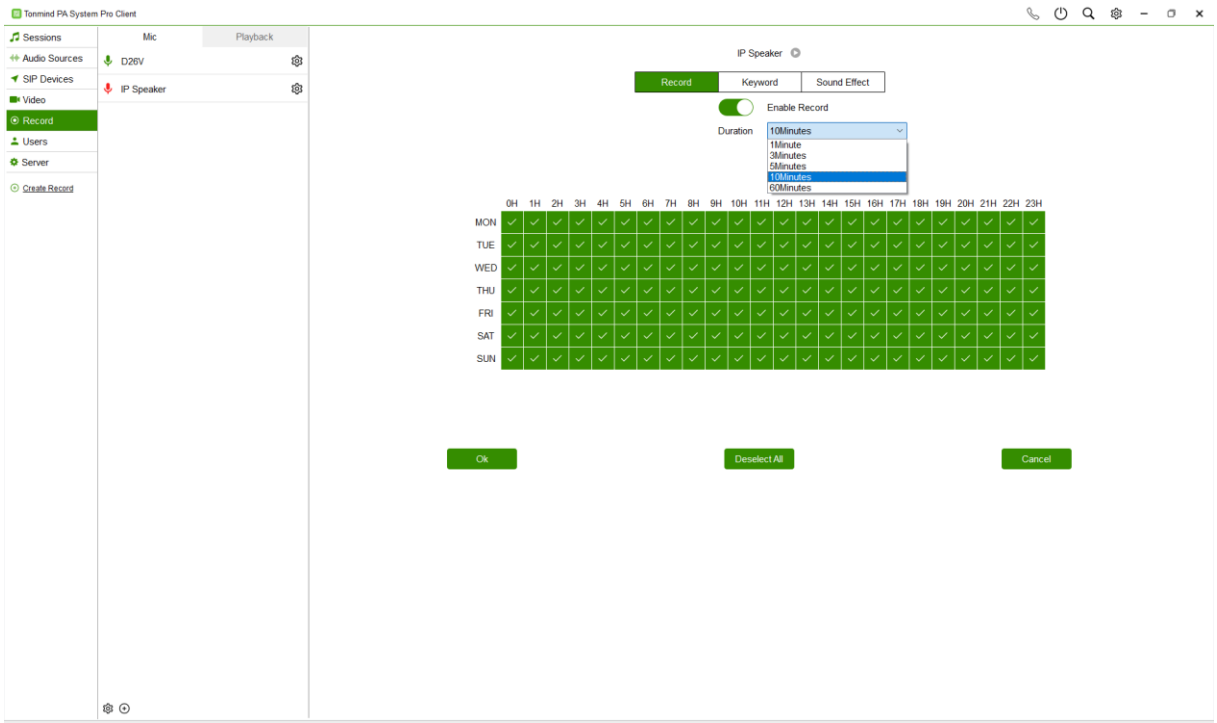
Enable Record to record audio from the selected device.

Enable Record: Turn on audio recording.

Duration: Select 1, 3, 5, 10, or 60 minutes. Recordings will be automatically split and saved into separate files according to the selected duration.

Schedule: Select the recording days and hours from Monday to Sunday.

Click OK to save the settings.

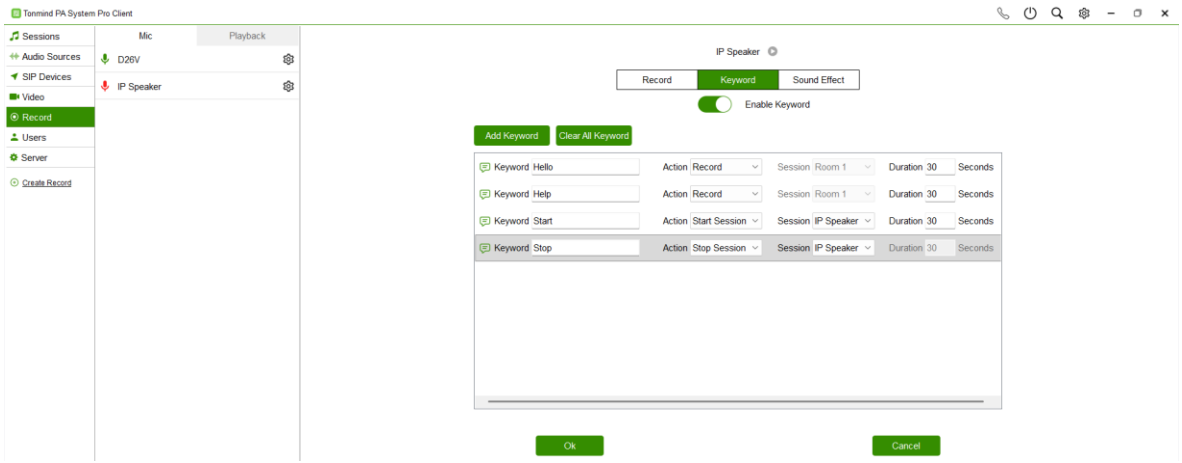


B. Keyword

The Keyword function automatically triggers actions when the device detects predefined spoken keywords.

1) Enable Keyword and click Add Keyword.
2) Enter the keyword to be detected, such as "Help" or "Stop".
3) Select an Action:
   Record: Start audio recording.
   Start Session: Activate the selected session.
   Stop Session: Stop the selected session.
4) Select the target Session when applicable.
5) Set the Duration in seconds.

Click OK to save the settings.

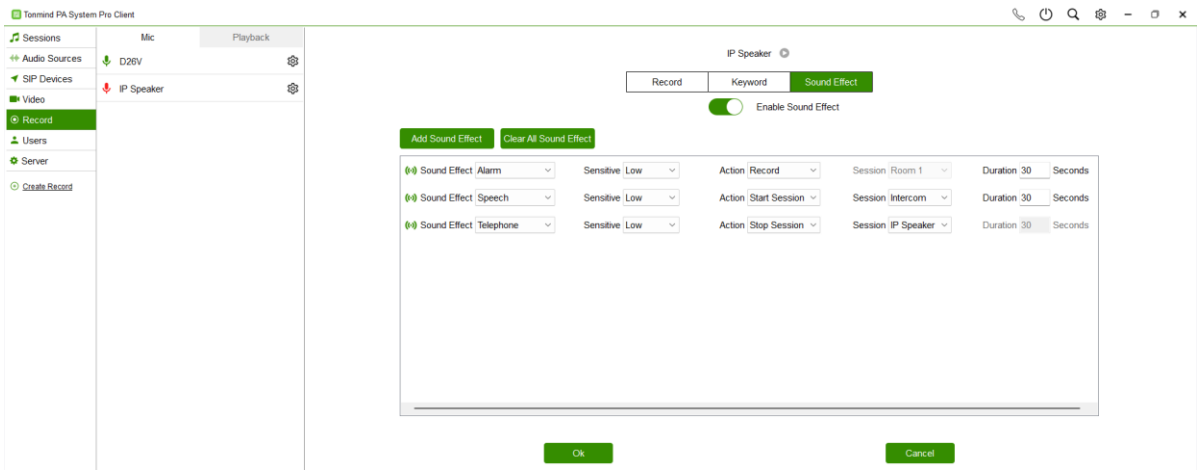


C. Sound Effect

The Sound Effect function supports recognition of 17 sound types, such as Glass Breaking, Alarm, Beep, Explosion, and Dog Barking. When a selected sound is detected, the system automatically triggers the configured action.

1) Enable Sound Effect and click Add Sound Effect.
2) Select the sound type to detect.
3) Set the Sensitive level: Low, Middle, High, or Very High.
4) Select an Action: Record, Start Session, or Stop Session.
5) Select the target Session when applicable.
6) Set the Duration in seconds.

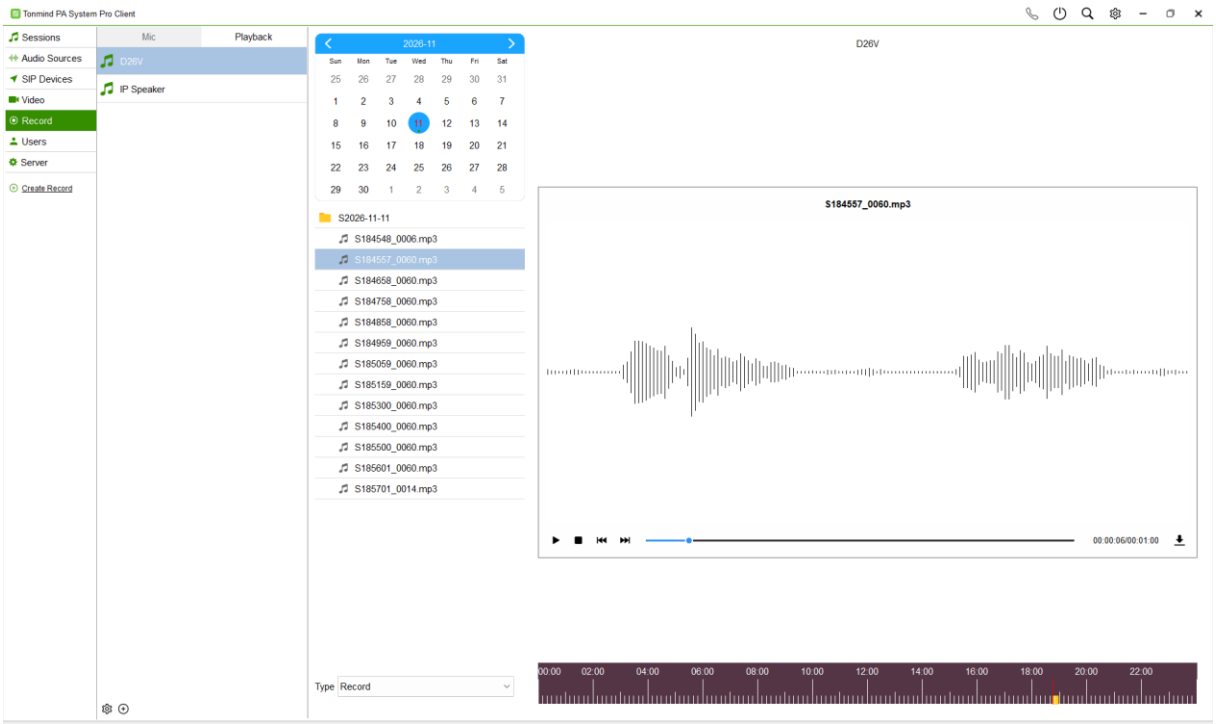
Click OK to save the settings.



3.6.3 Recording Playback

Click Playback to view and play recorded audio files.

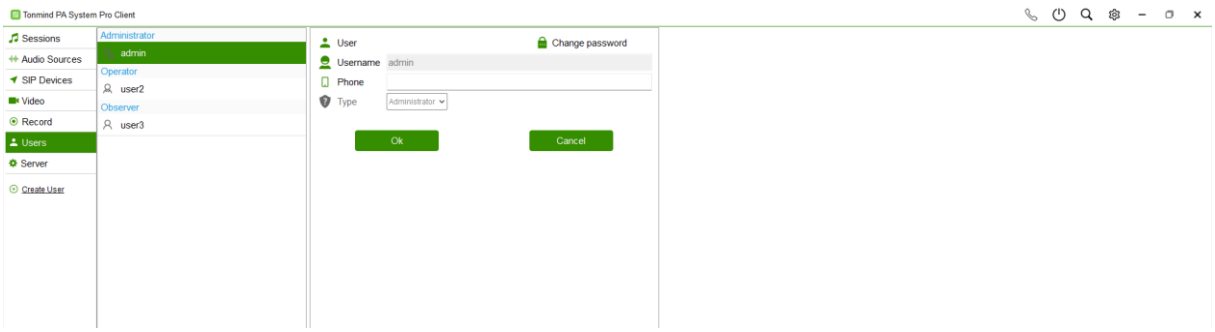
1) Select the recording device from the device list.
2) Select the recording Type: Record, Keyword, or Sound Effect.
3) Select the desired recording date from the calendar. Dates with available recordings are marked with a green dot.
4) Select a recording file from the list to play it.
5) Use the playback controls to Play, Pause, Stop, or Skip recordings.
6) Click the Download icon to save the selected recording file to another location.



3.7 Users

PA System Pro supports multiple Clients connected to one Server, allowing different users to access and manage the system with assigned permissions.

Click Users on the left menu to manage user accounts. The default Administrator account is displayed.



● Create Users

Click Create User on the left to add a new user account.

Enter the Username and optional Phone number, then select a user Type:

Administrator: Has full access to all system settings, sessions, and functions.

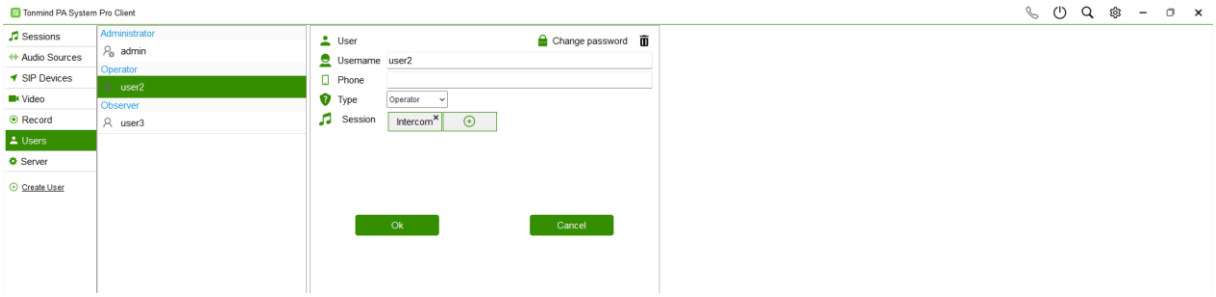
Operator: Can manage and control assigned sessions.

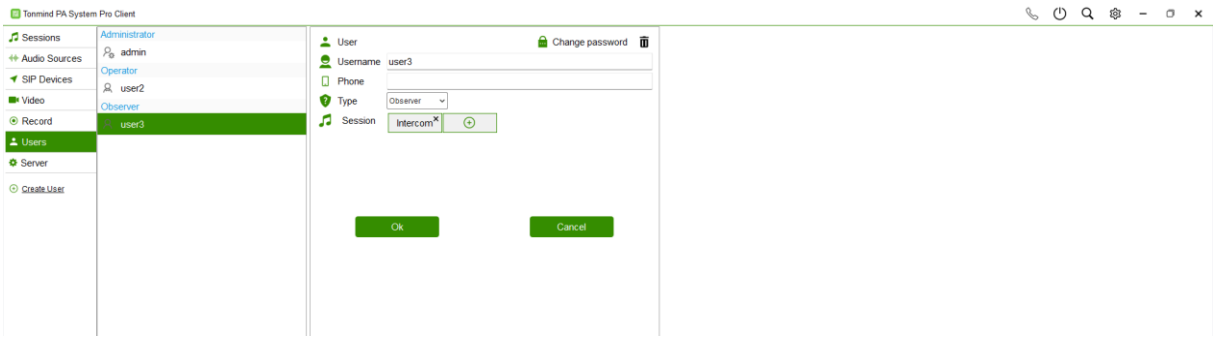
Observer: Can only view assigned sessions without control permissions.

For Operator and Observer accounts, click the + icon under Session to assign accessible sessions.

Click OK to save the user settings.

Select a user account and click Change Password to set or update the login password.





3.8 Server

Click Server on the left menu to view PA System Pro Server settings and system logs.

