

# Tonmind IP Microphone M20

## User Manual



**Xiamen Tonmind Technologies Co., Ltd.**

# Contents

<b>1. Overview</b> .....	<b>3</b>
<b>2. Interface Specification</b> .....	<b>4</b>
<b>3. Application and Setting</b> .....	<b>6</b>
<b>3.1 P2P Call</b> .....	6
<b>3.2 RTP Multicast</b> .....	7
<b>3.3 SIP Setting</b> .....	8
<b>3.3.1 Register SIP Account</b> .....	8
<b>3.3.2 How to Make SIP Call</b> .....	9
<b>3.4 How to Set Fast Dial Key</b> .....	10
<b>3.5 Broadcast Setting</b> .....	11
<b>3.5.1 Sessions</b> .....	12
<b>3.5.2 Schedule</b> .....	15
<b>3.5.3 Devices</b> .....	17
<b>3.6 History and Contacts</b> .....	18
<b>3.6.1 How to Find Calling History</b> .....	18
<b>3.6.2 How to Add Contacts' Information</b> .....	19
<b>3.7 System Setting</b> .....	20
<b>3.7.1 Audio Settings</b> .....	20
<b>3.7.2 How to Upload Files</b> .....	21
<b>3.7.3 Other Settings</b> .....	22

# 1. Overview

SIP-M20 IP microphone is IP based paging station, which has a built-in Android system, up to 8G flash storage. 8 SIP lines enable to make free phone calls at internal communication. WIFI available for more network mode capability. Built-in 5W speaker and microphone for hands free communication, announcement receiving and monitoring. It supports RTP multicast paging, point to point and zone paging. Download and upload files via FTP server and USB disk. User friendly contact management. There are two audio in, one audio out to provide multi choices paging solutions. It supports real-time monitoring and speaking while playing music, which make it compatible with multiple demands for VoIP and security, public address system users.



## 2. Interface Specification



①	Built-in Microphone
②	Volume Switch for microphone, range 1-100
③	Volume Switch for background music, range 1-100
④	Volume Switch for speaker, range 1-100
⑤	Power button for screen display

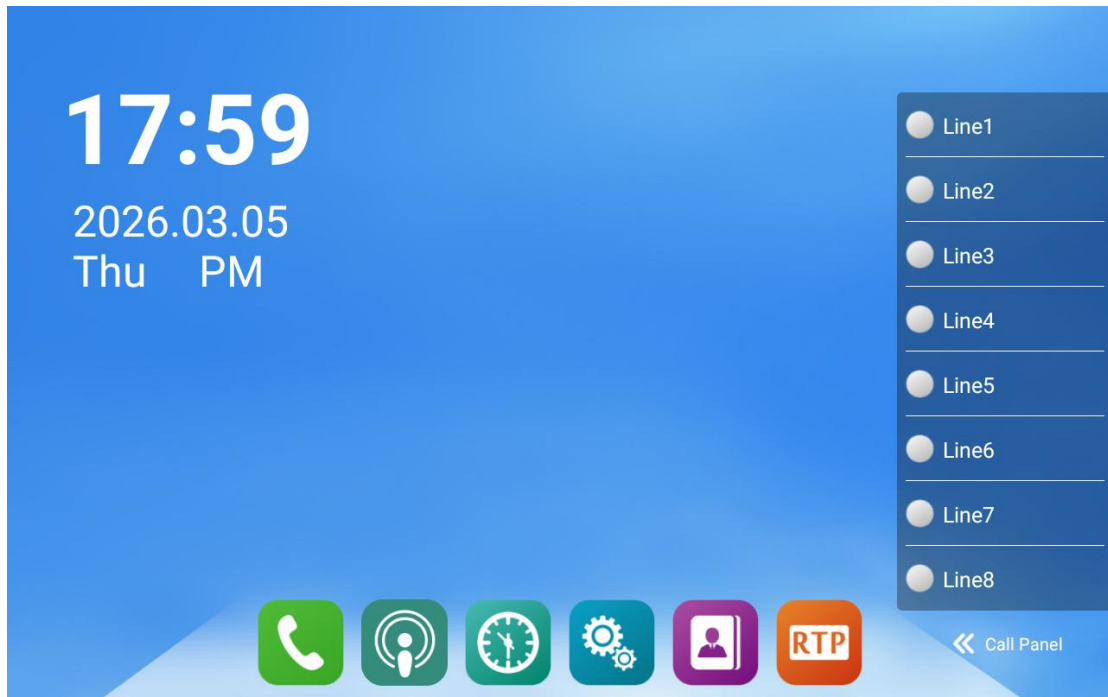


①	2 audio input and 1 audio output
②	WIFI antenna
③	Volume switch for audio output
④	2 GPIO in and 1 GPIO out
⑤	RJ45 network port
⑥	Reset system and firmware button
⑦	Interface for system upgrading
⑧	USB 2.0 interface
⑨	Power interface 12V/2A


## 3. Application and Setting

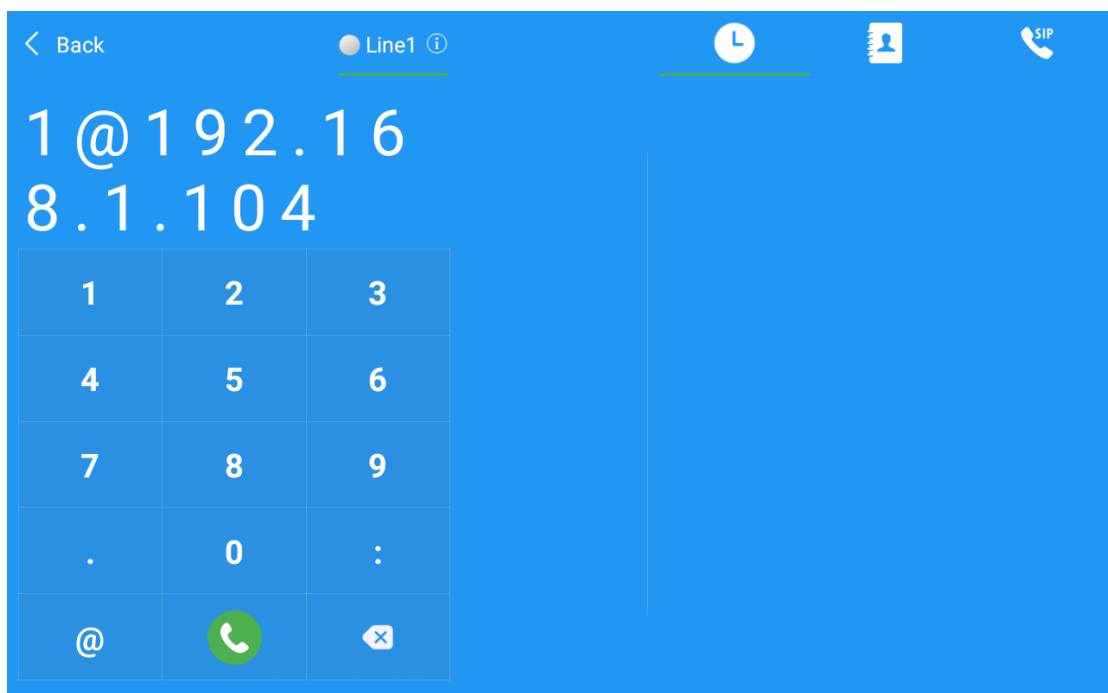
### 3.1 P2P Call

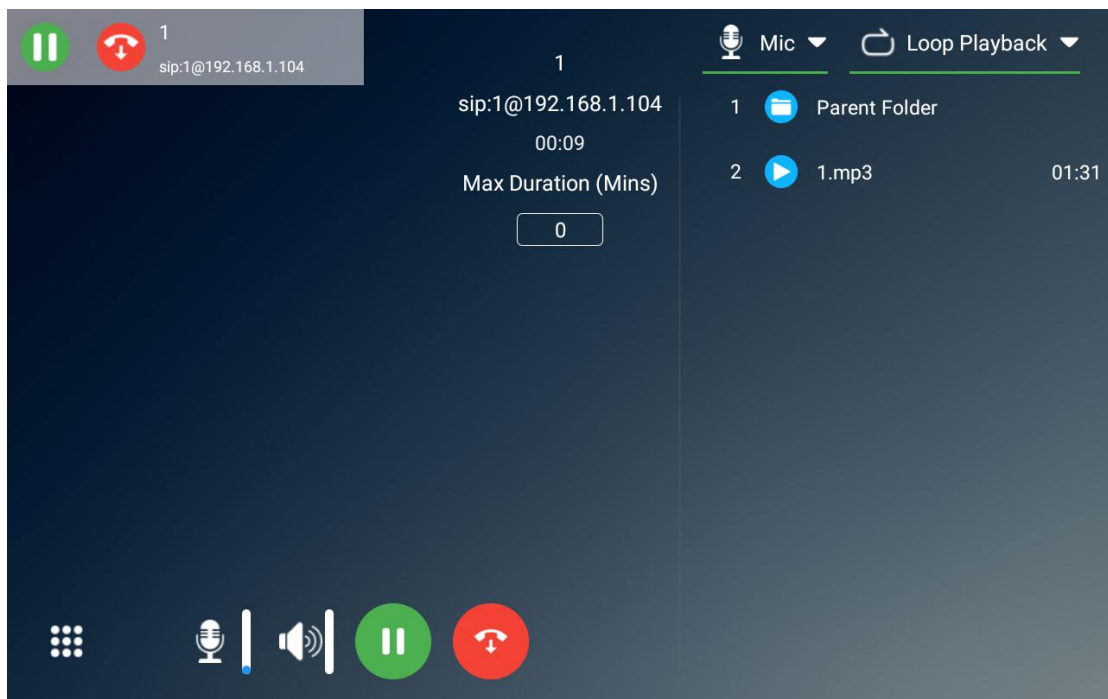
Power on and connect to the network, then open the PA Microphone to access the main interface.




When the M20 and IP audio devices (such as IP Speakers) are in the same network segment, the M20 supports P2P calls to the IP Speaker.

Click , then click “Back” to return to the dial interface. Enter “1@IP Speaker IP address” (e.g., 1@192.168.1.104) and press Call. Once connected, you can speak through the microphone or play music.

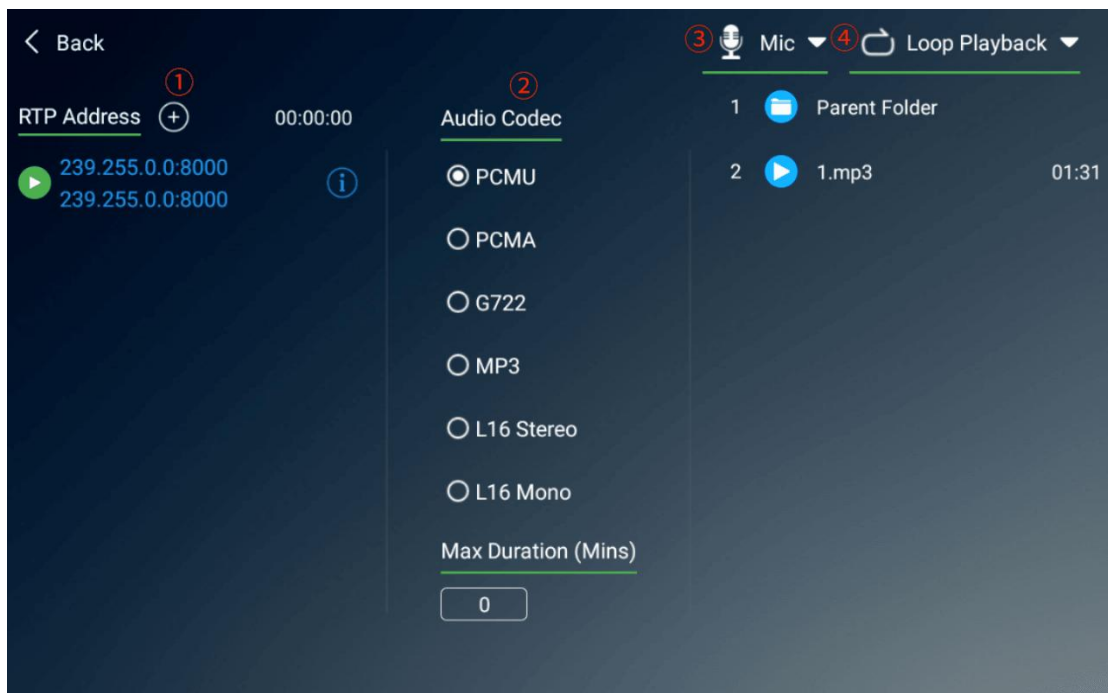




### 3.2 RTP Multicast

Click , to configure the RTP Multicast settings.

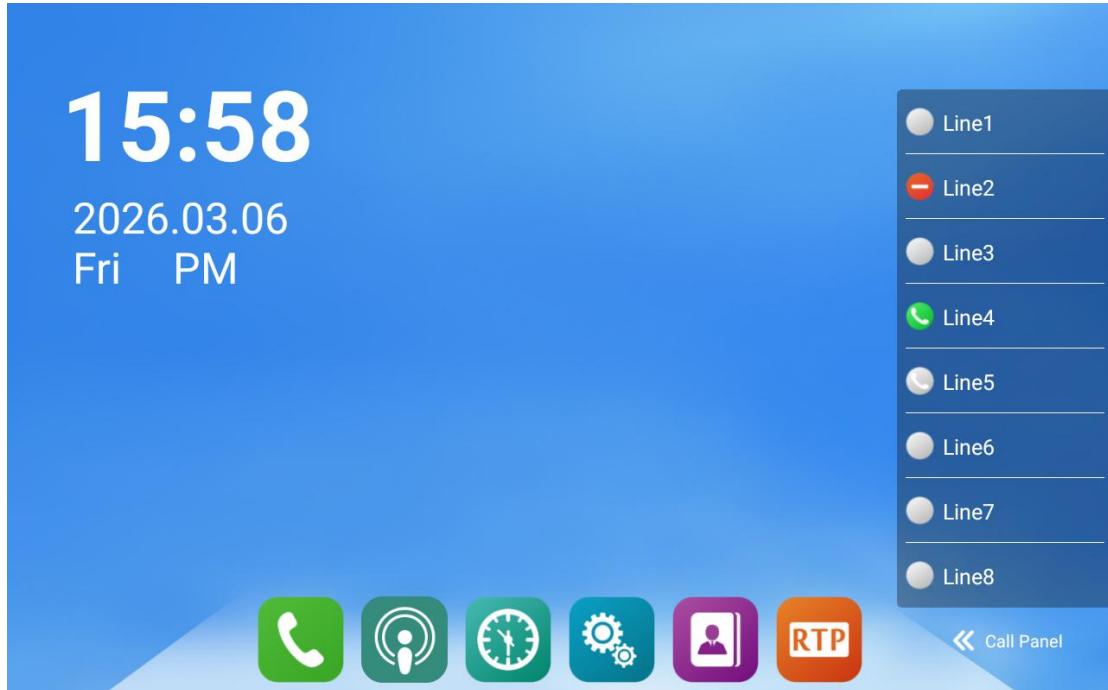
- ① Add an RTP address matching the target devices;
- ② Select the audio codec and duration;
- ③ Choose the paging source (Mic / Media / AUX1 / AUX2);
- ④ Select the paging mode and start broadcasting.



### 3.3 SIP Setting

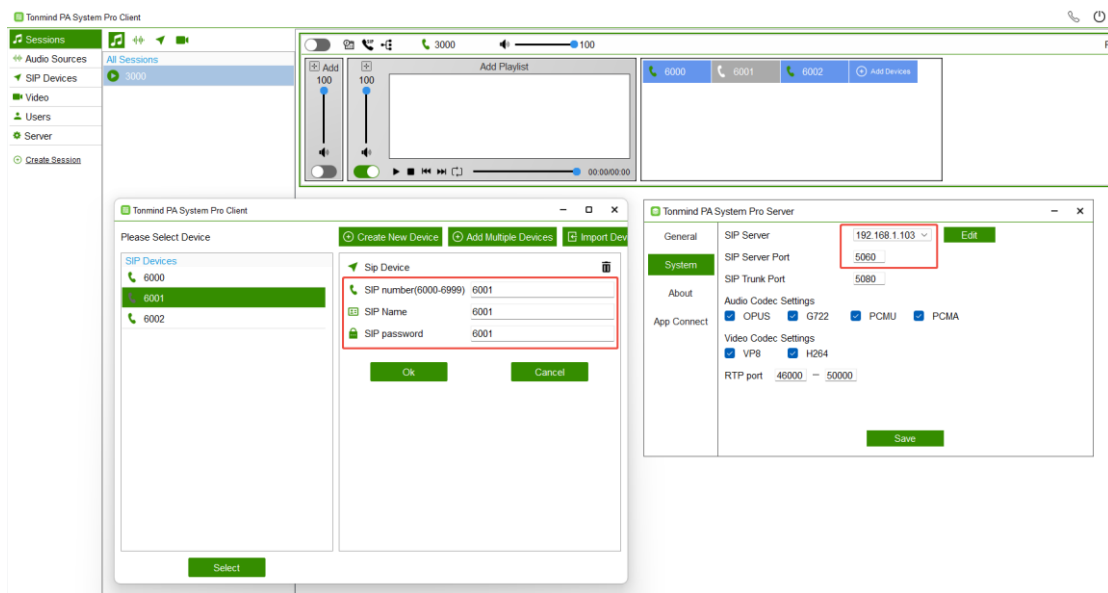
#### 3.3.1 Register SIP Account

M20 supports 8 SIP lines. Select an unregistered (grey) SIP line on the right side, such as Line 1.



Enter the SIP Server information and the SIP account registered on the server, then choose the status (Available / Do Not Disturb / Offline).

Using Tonmind PA System Pro as an example, fill in the information as shown below, then click Save in the top-right corner to apply the settings.



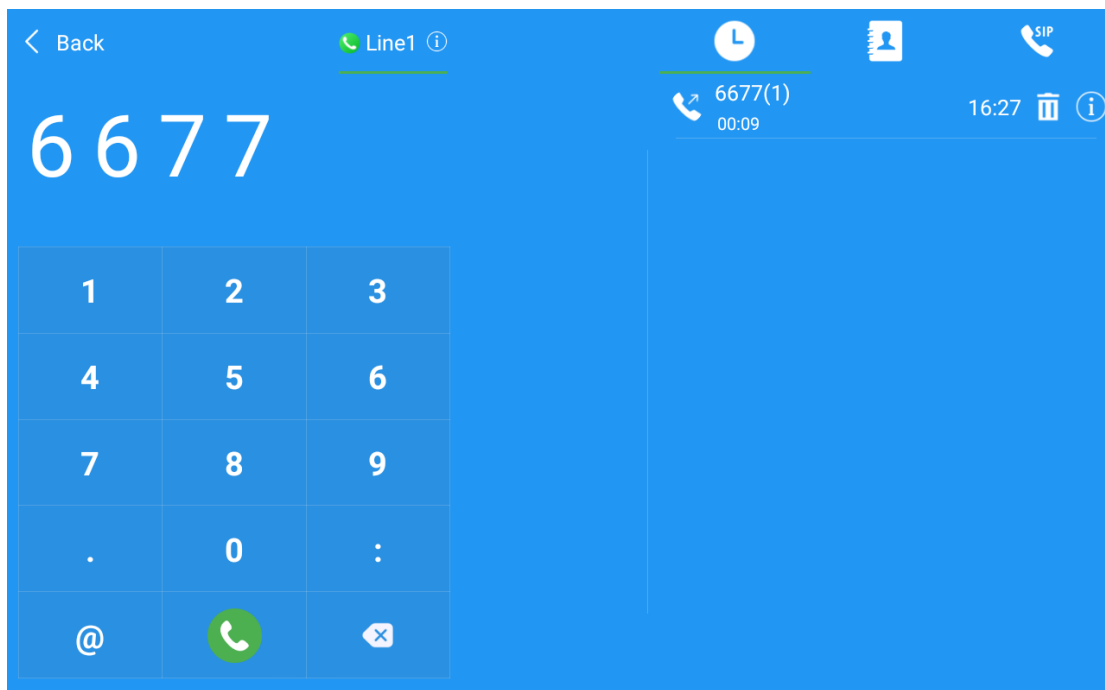


### 3.3.2 How to Make SIP Call

Select an available SIP Line.

Dial an extension number registered on the same SIP Server as the M20 (e.g., 6677) to make a call.

The call records will be displayed on the right side.

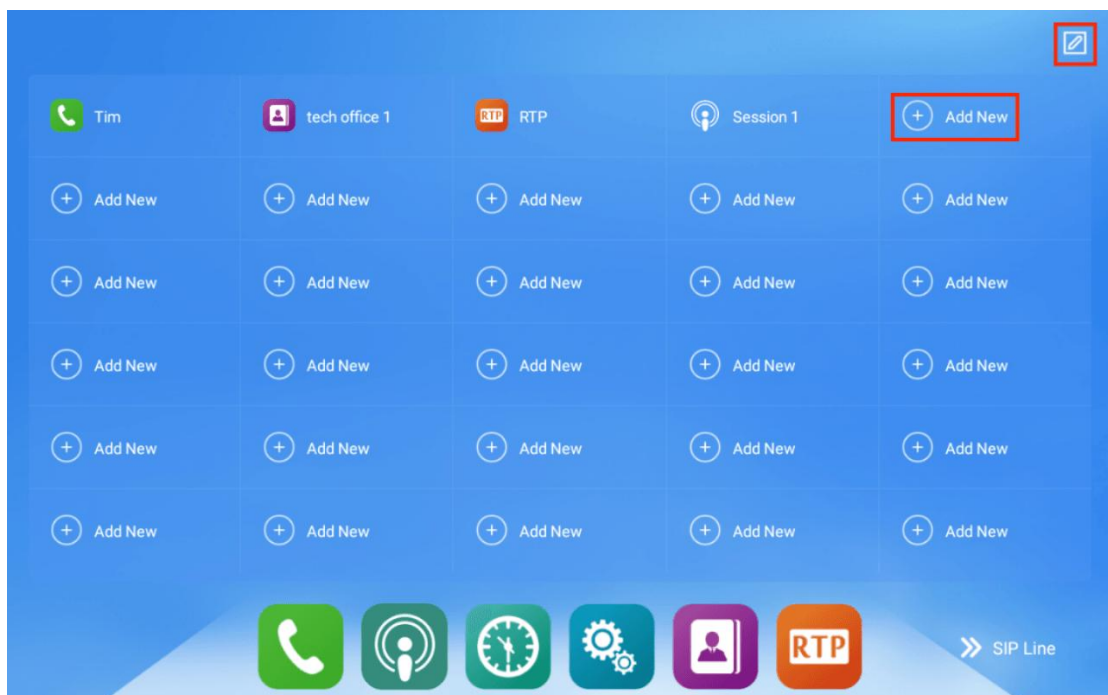


### 3.4 How to Set Fast Dial Key

Click Call Panel to enter the Set Fast Dial Key page.



Click the top-right icon or an unused Fast Dial Key to create or edit a new key.



Four types are available: Number, Contacts, RTP, and Session.

After setting, you can press the Fast Dial Key ID (e.g., 1) to make a quick call.

< Back Delete Save

ID: 1

Type:  Number  Contacts  RTP  Session

Name:


Number:

Channels:  +

### 3.5 Broadcast Setting

In addition to manually entering the RTP address and playing audio on the RTP page, the Broadcast page allows you to automatically search for IP audio devices, set their RTP addresses, and configure device schedules more quickly.



Click  to enter the Broadcast page. The Broadcast section includes three pages: Sessions, Schedule, and Devices.

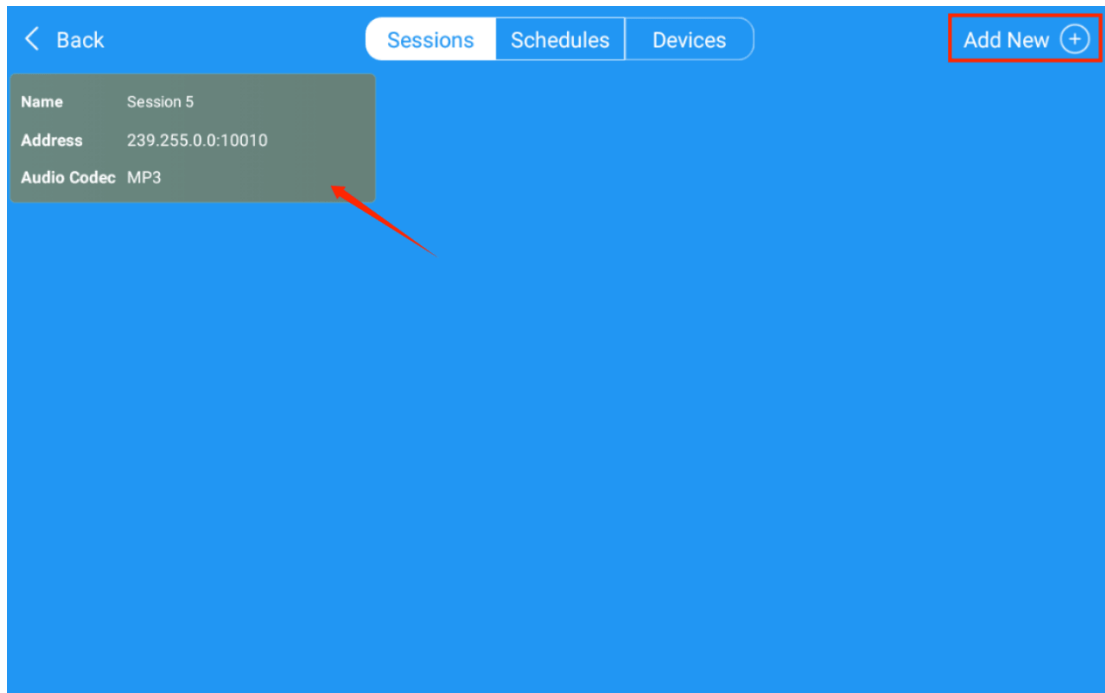
< Back Add New +

Sessions
Schedules
Devices

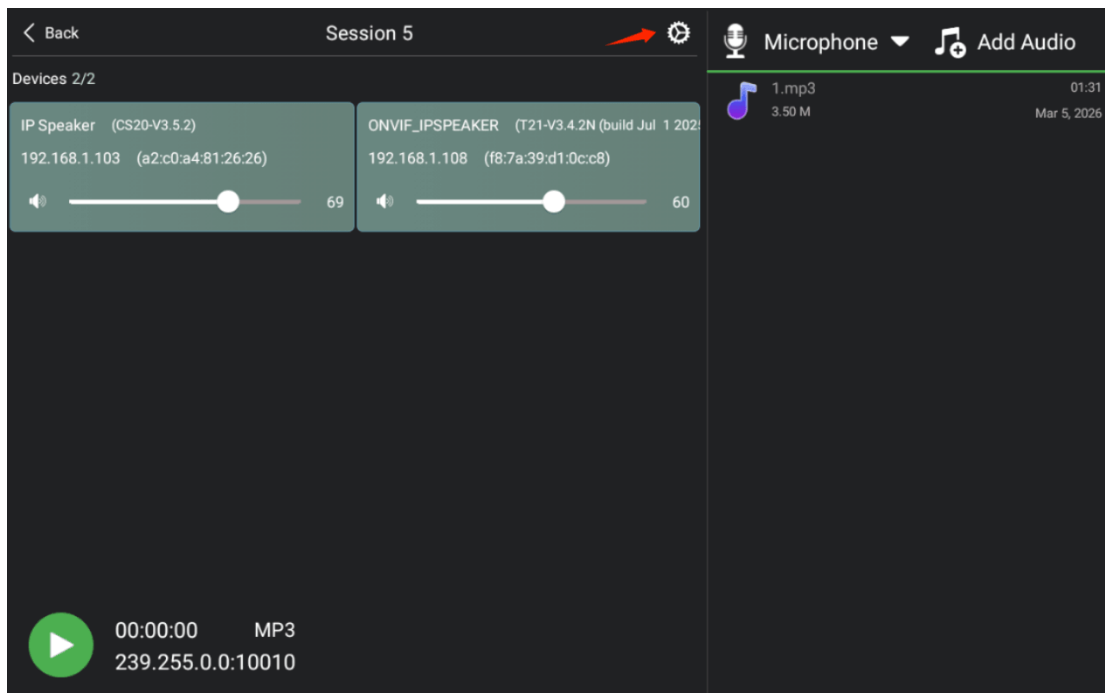
Name	Session 5
Address	239.255.0.0:10010
Audio Codec	MP3

### 3.5.1 Sessions

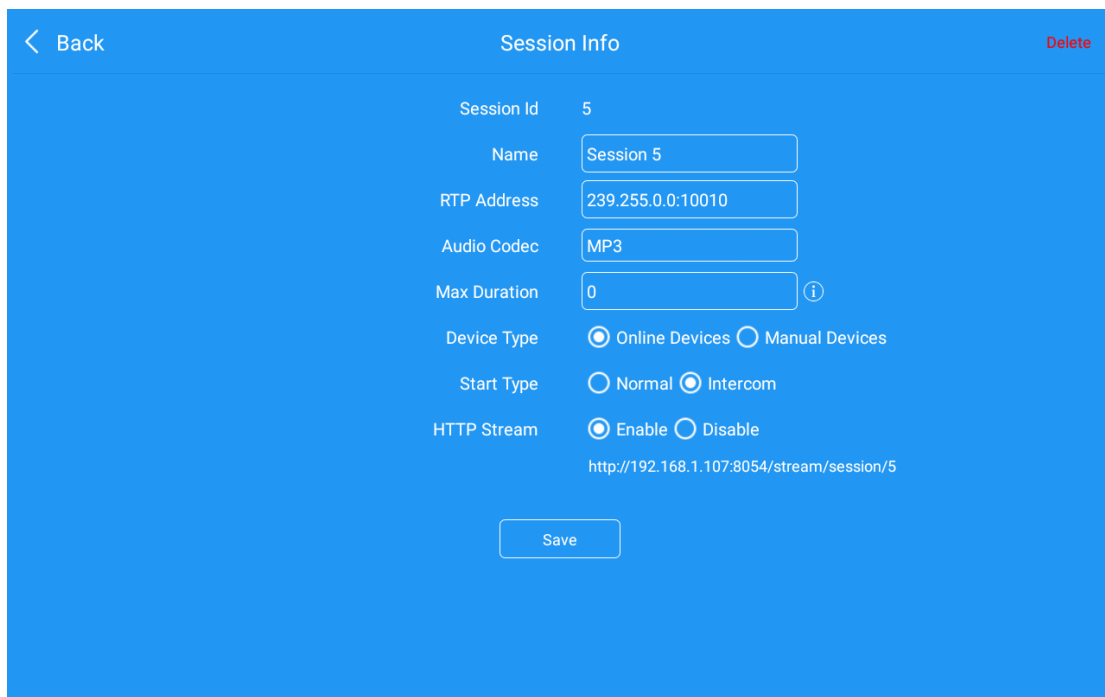
On the Sessions page, click Add New in the top right to create a new session, or select an existing session to edit. The RTP address for each new session is automatically generated.



On the Sessions page, open an existing session to view the devices automatically discovered by the M20 on the same network. Click the session name or the gear icon on the right to open the session settings.



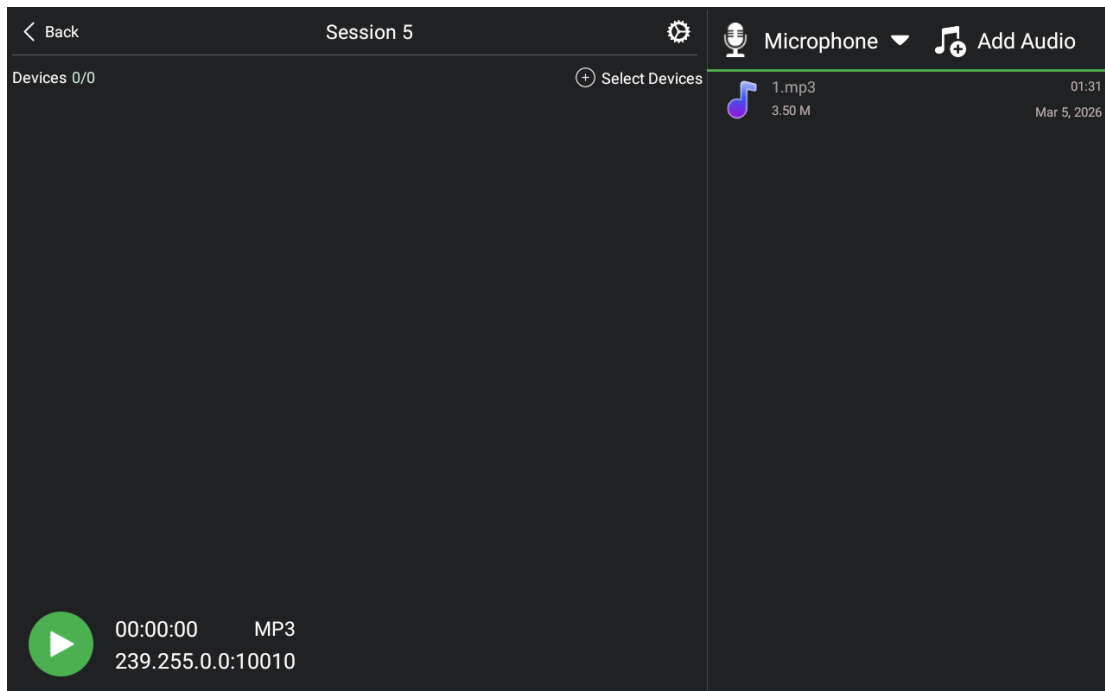
Here you can configure the Name, RTP address, Audio Codec, Max Duration, enable or disable HTTP Stream, and select Device Type and Star Type.

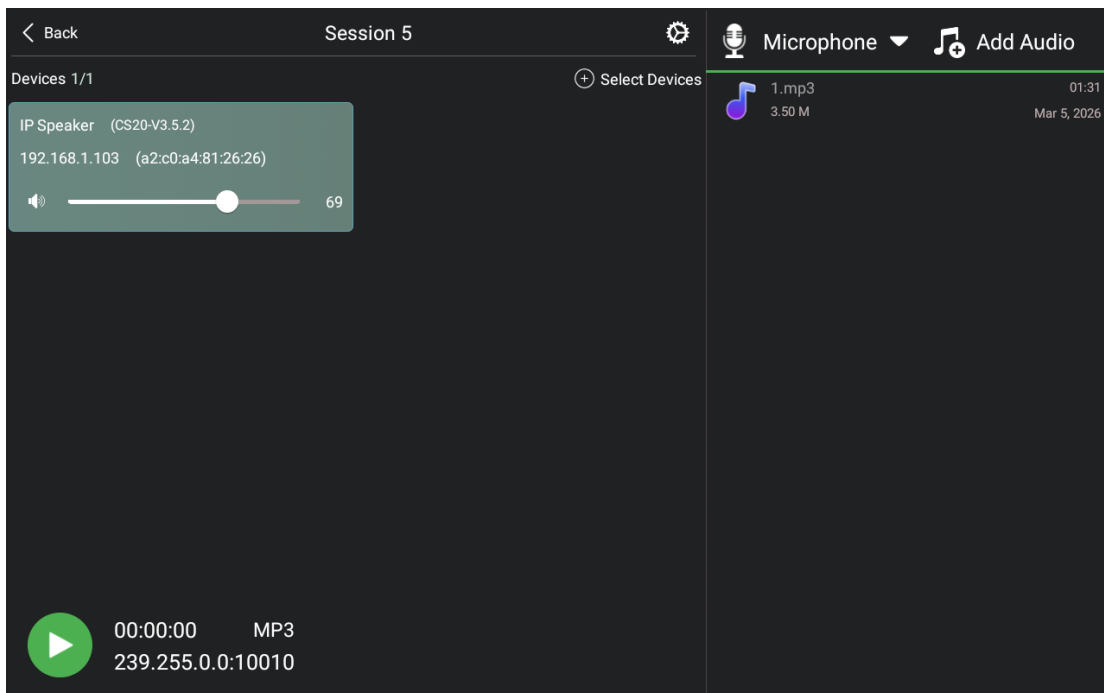
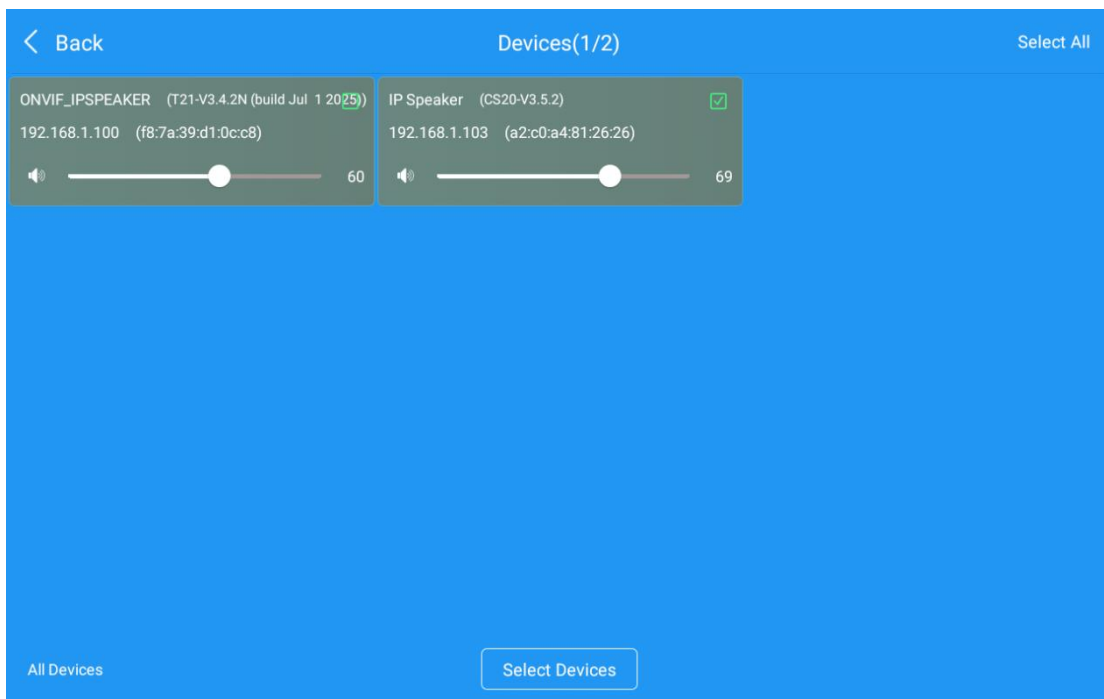


**Device Type:**

**Online Devices:** Select and click Save to return to the session page, where all devices automatically discovered by the M20 will be displayed.

**Manual Devices:** Select then after saving, click Select Devices on the session page to choose which devices this session will manage.



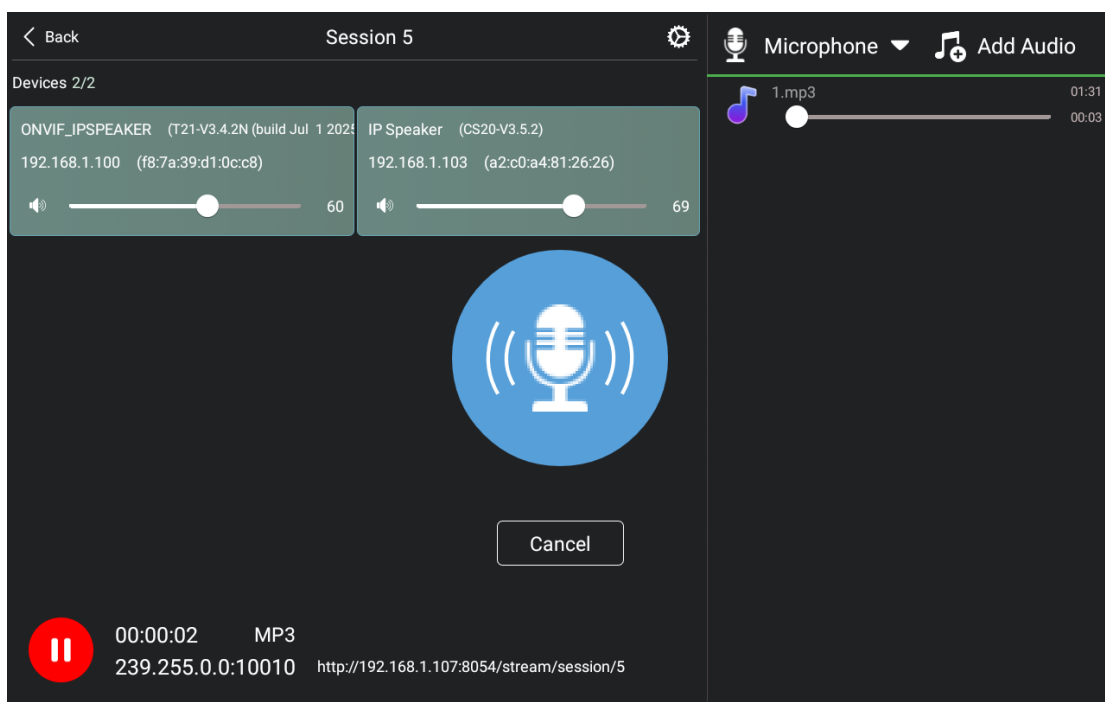


**Start Type:**

Normal: To start playback directly by clicking the Play button at the bottom left of the session page.

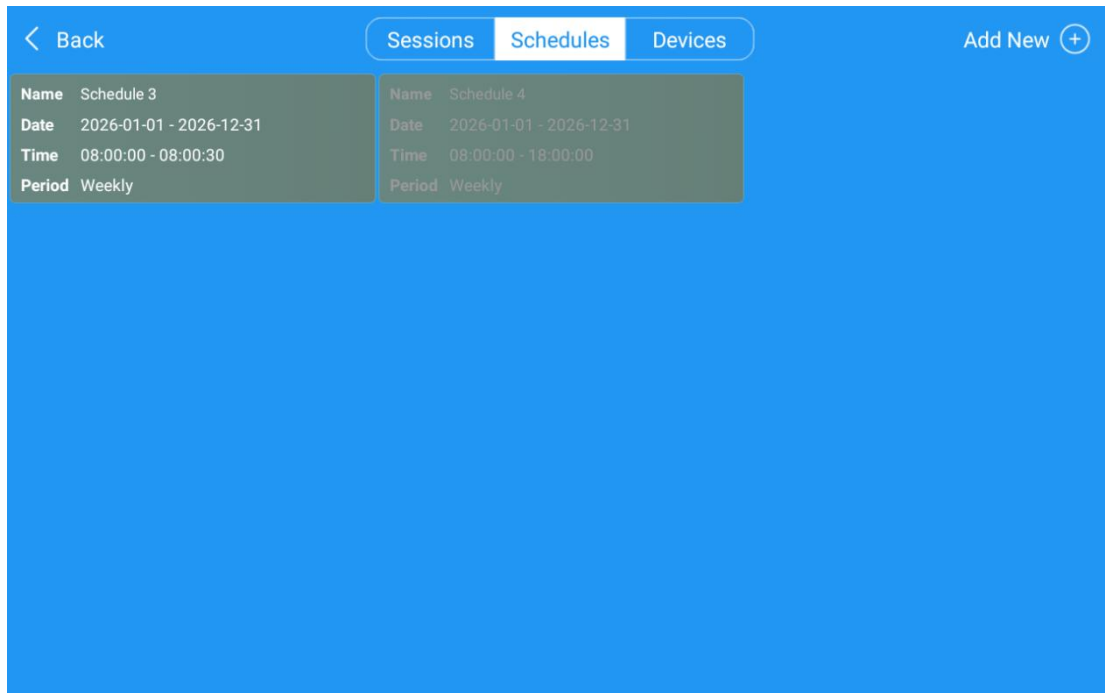
Intercom: To enable intercom mode. After clicking the Play button, an Intercom icon will appear.

Press and hold the icon to talk, and release it to stop.



### 3.5.2 Schedule

On the Schedule page, click Add New in the top right to create a new schedule, or select an existing schedule to enter and edit the settings.

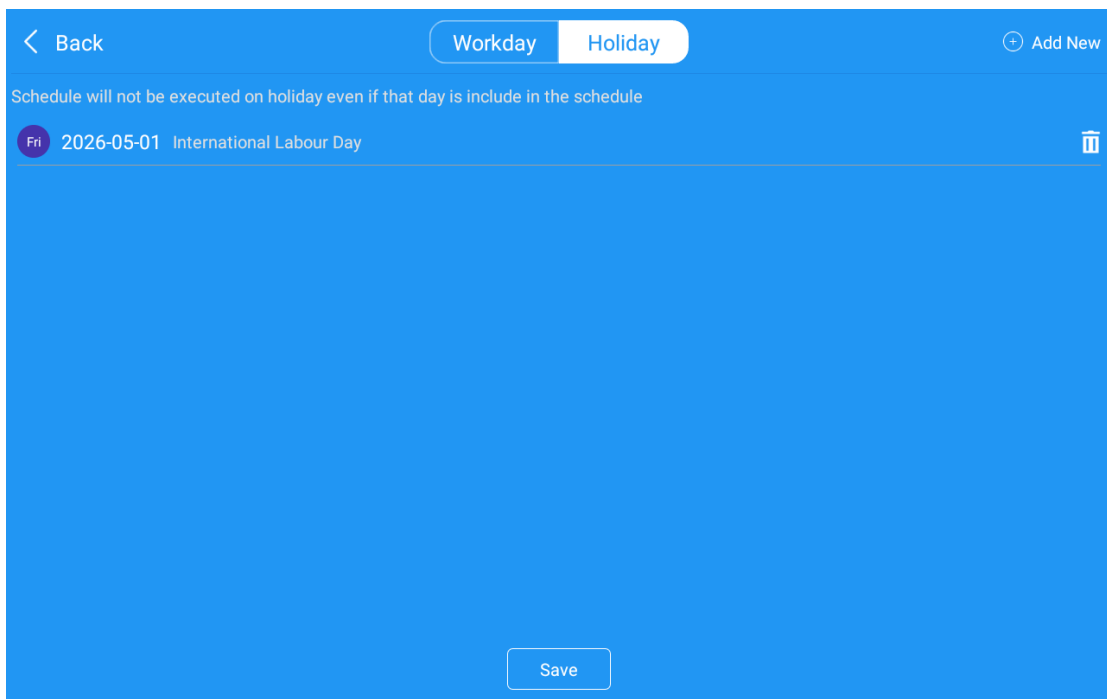


The left side displays the details of each schedule. Click a schedule to edit its settings. You can configure the Name, Start Date, Start Time, Period (Daily, Weekly, Monthly), Audio Codec, Priority, and Volume.

Device Type works the same as in Sessions: choose Manual to select which devices will play this schedule.

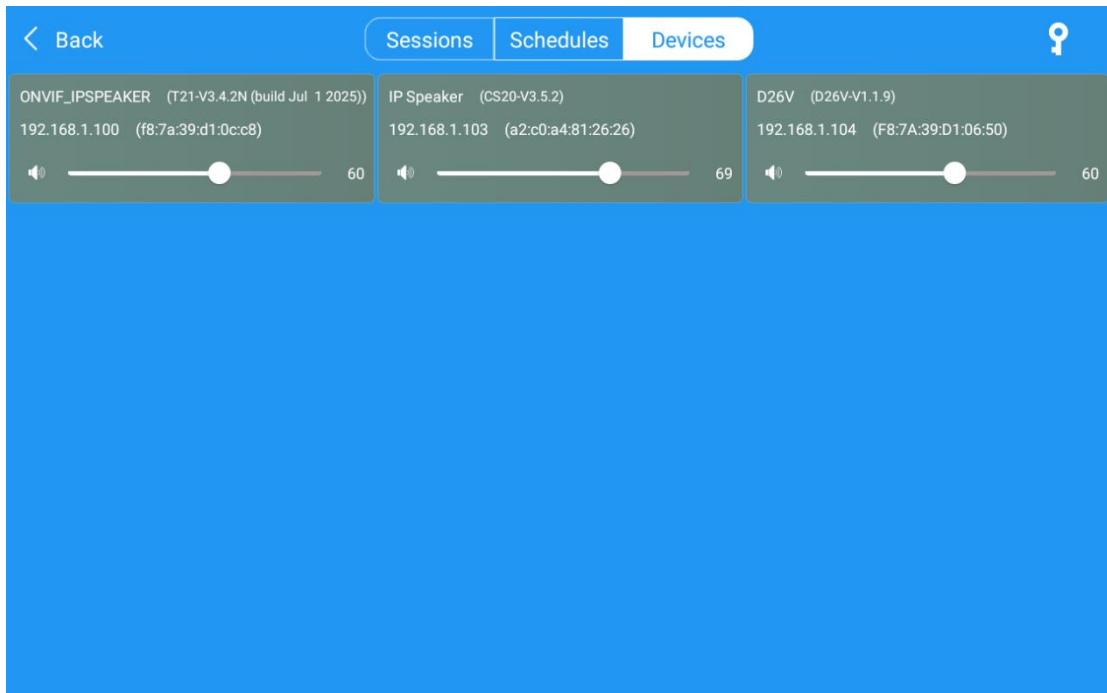
You can also enable or disable HTTP Stream for the schedule.



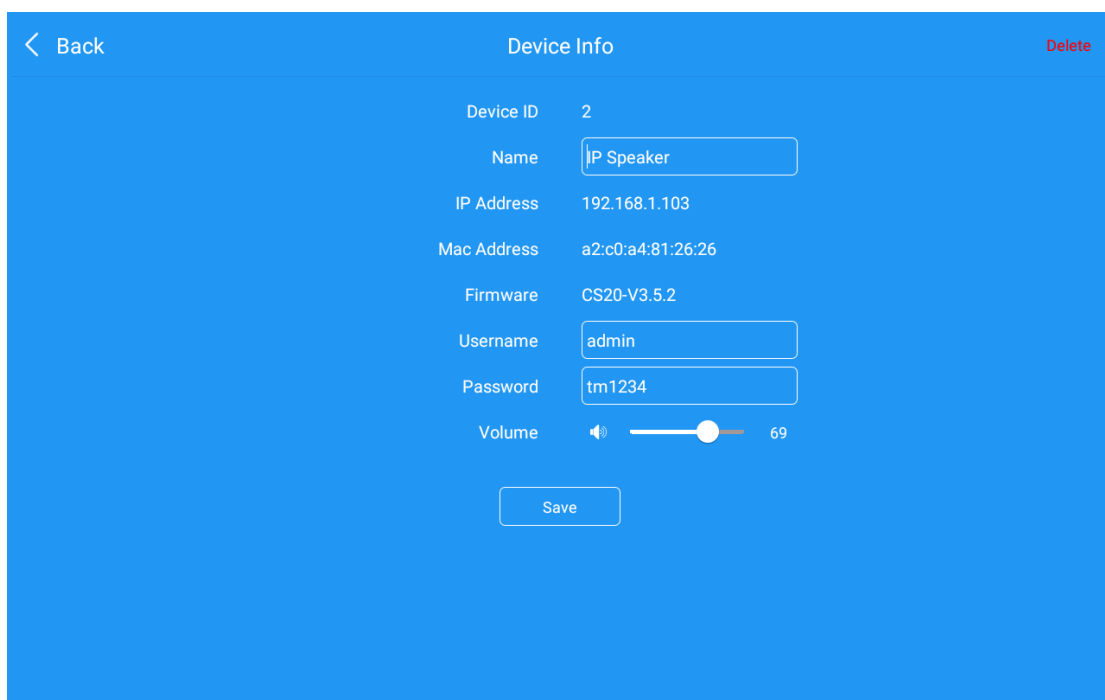


### 3.5.3 Devices

On the Devices page, all Tonmind IP Audio devices that are online and in the same network as the M20 will be displayed.




Click on a device to view its information, including Name, IP Address, MAC Address, Firmware information, Username, and Password. You can also adjust the device volume from this page.

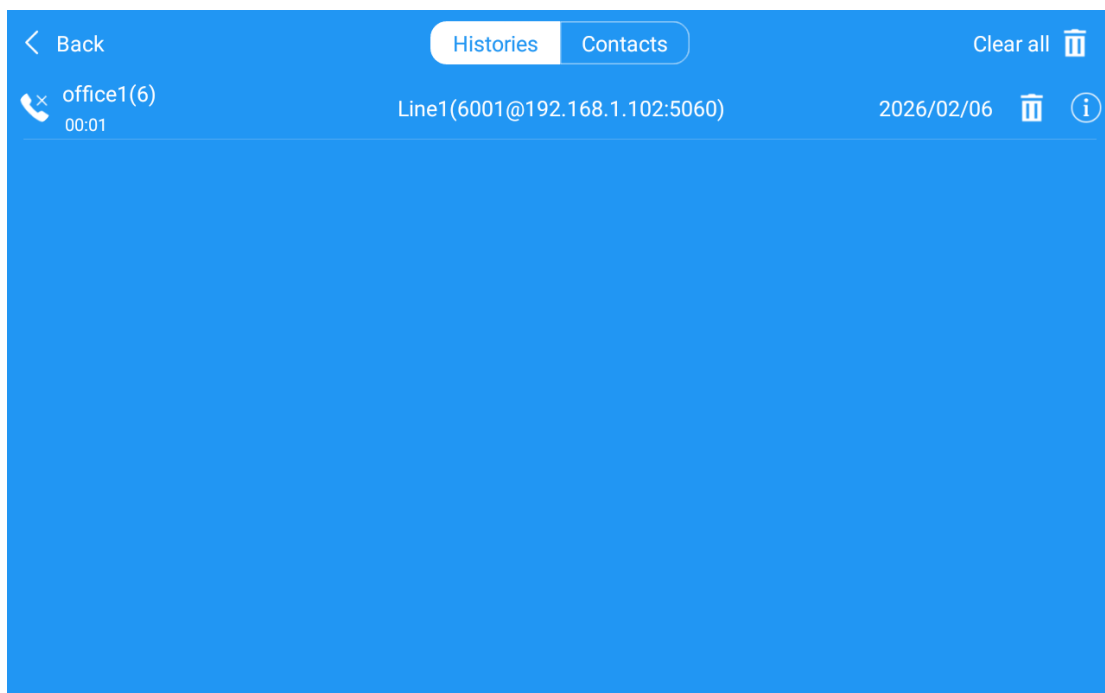


## 3.6 History and Contacts

### 3.6.1 How to Find Calling History




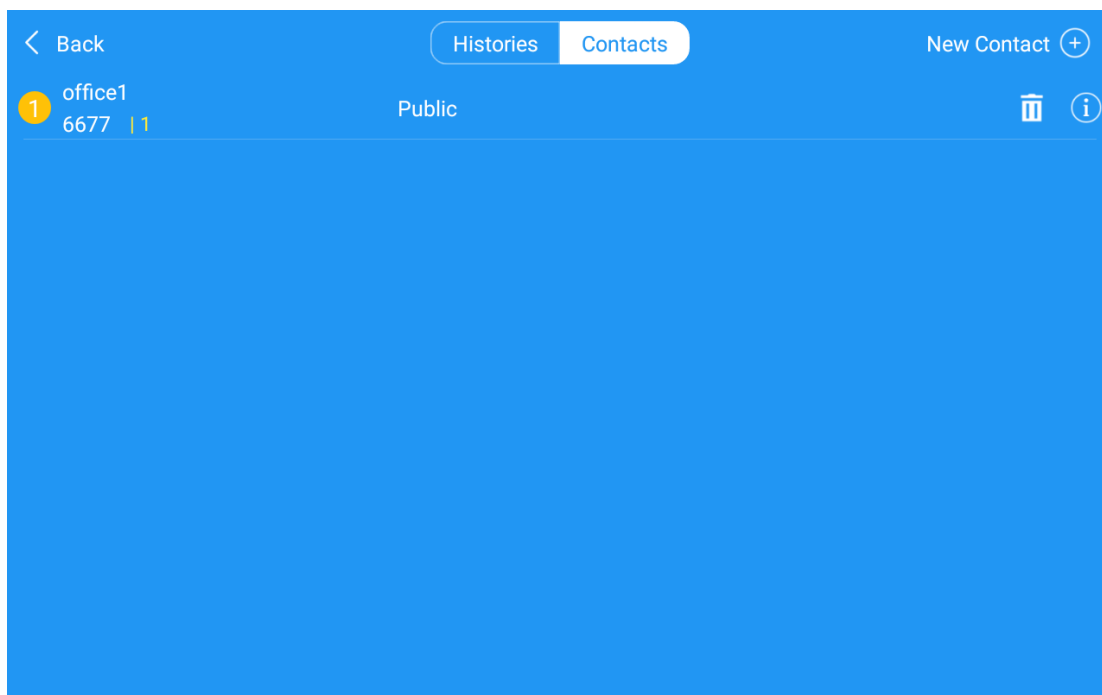
Click  to enter the Histories page. Here you can view the calling history and add contact information for quick access later.



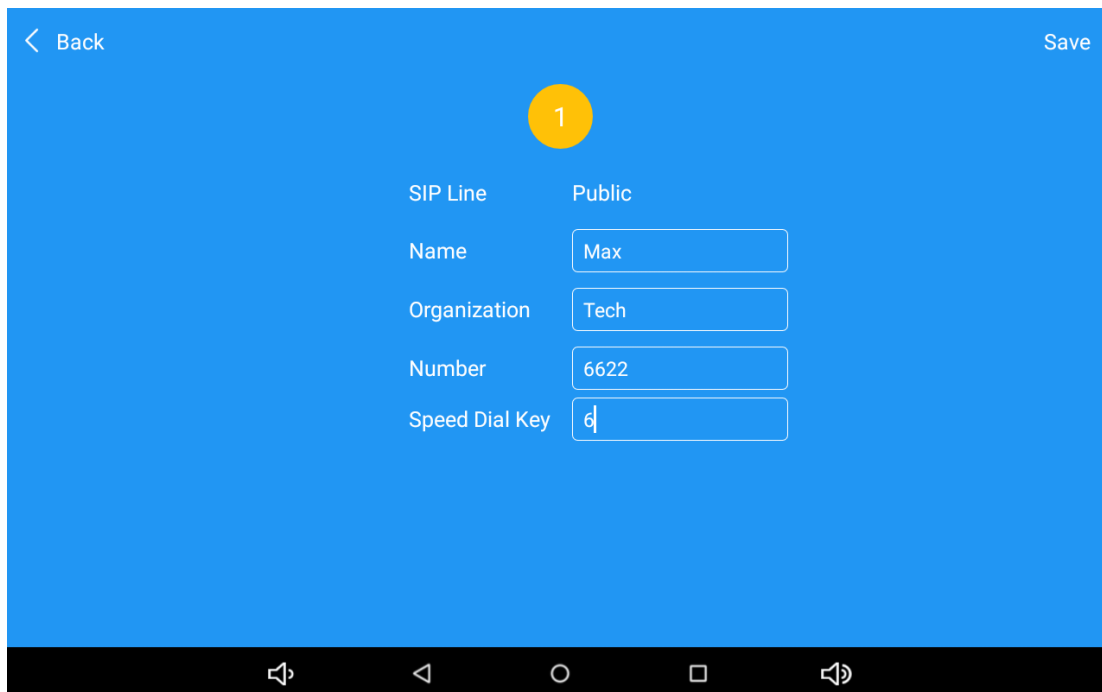
### 3.6.2 How to Add Contacts' Information



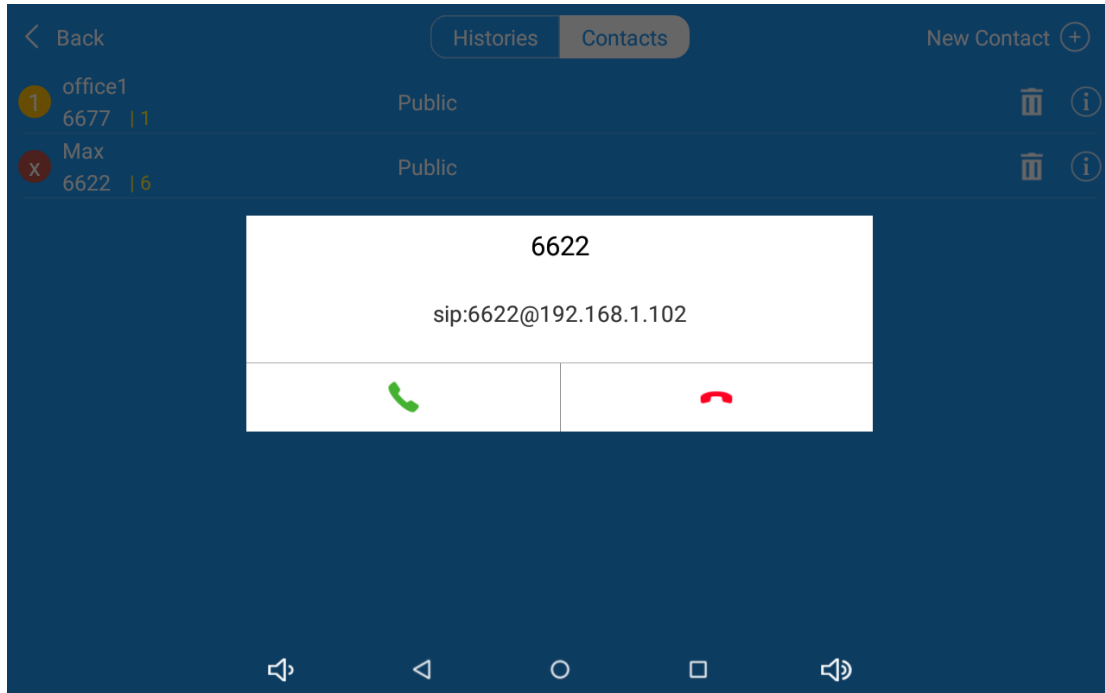
Click  to enter the Contacts page.



Click New Contact in the top right to create a new contact, then set the Name, Organization, Number, and Speed Dial Key.




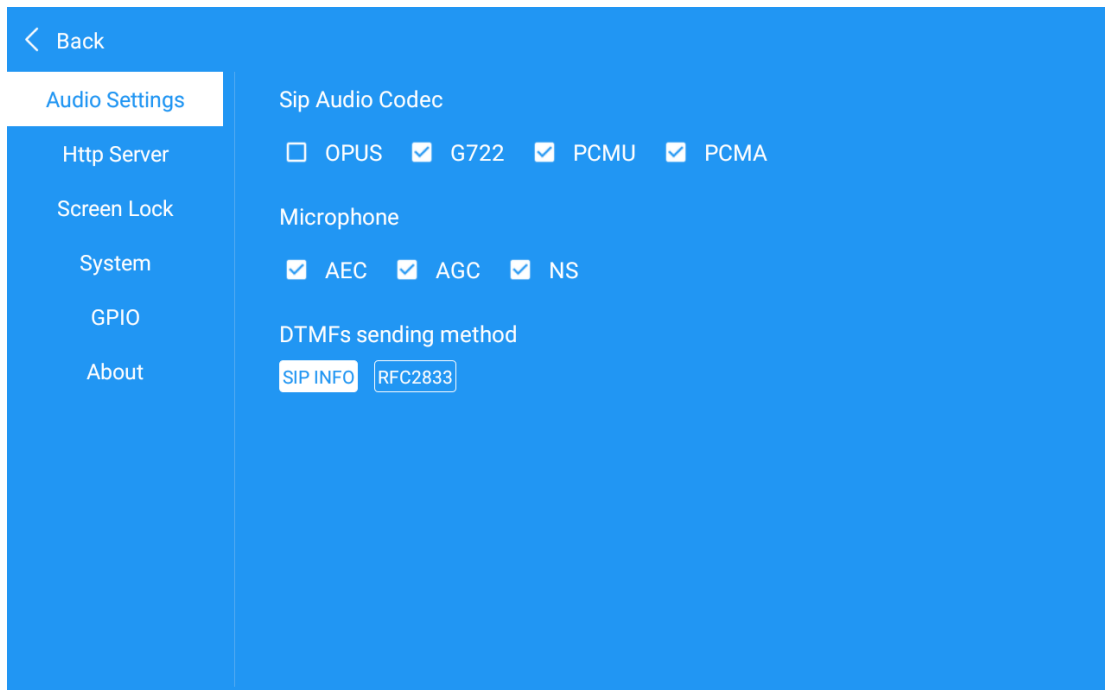
On the Contacts page, you can click a contact directly to make a call.



### 3.7 System Setting

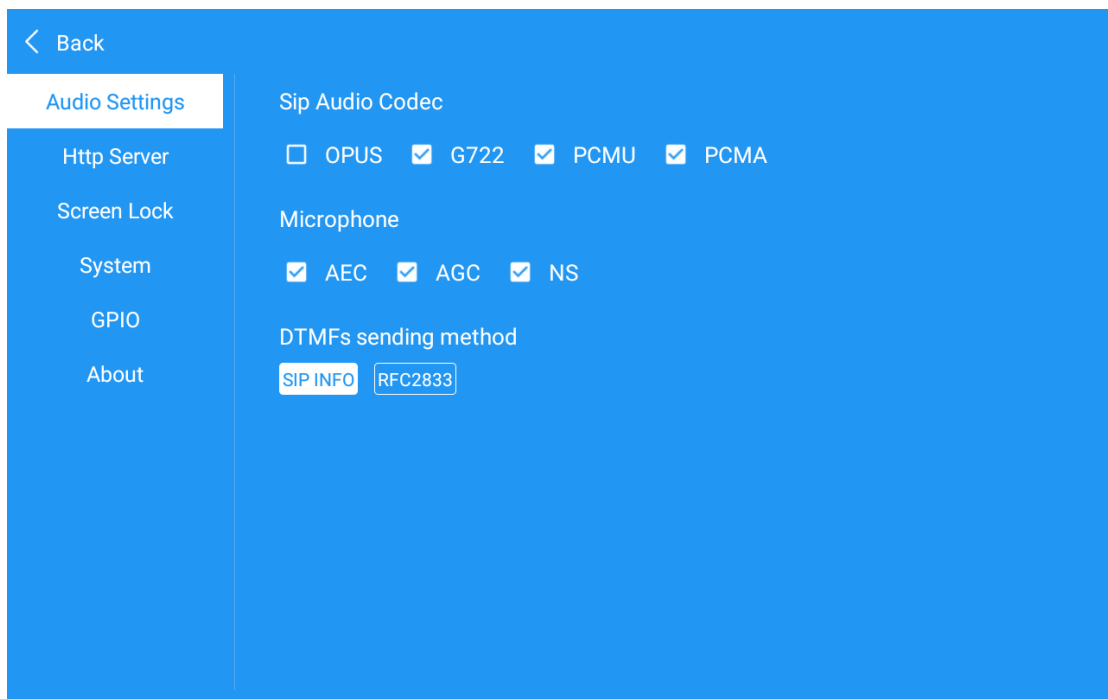


Click  to enter the System page, where you can access Audio Settings, HTTP Server, Screen Lock, System, GPIO, and About.



#### 3.7.1 Audio Settings

In Audio Settings, you can configure the SIP Audio Codec, Microphone, and DTMF Sending Method.



### 3.7.2 How to Upload Files

In HTTP Server, you can view the M20's HTTP server address, username, and password. If Anonymous is enabled, you can log in through the M20 HTTP address directly in a browser; if disabled, you need to enter the username and password to log in.

- ① Enter the M20 HTTP address in a computer browser.
- ② Upload files from your computer through the browser.

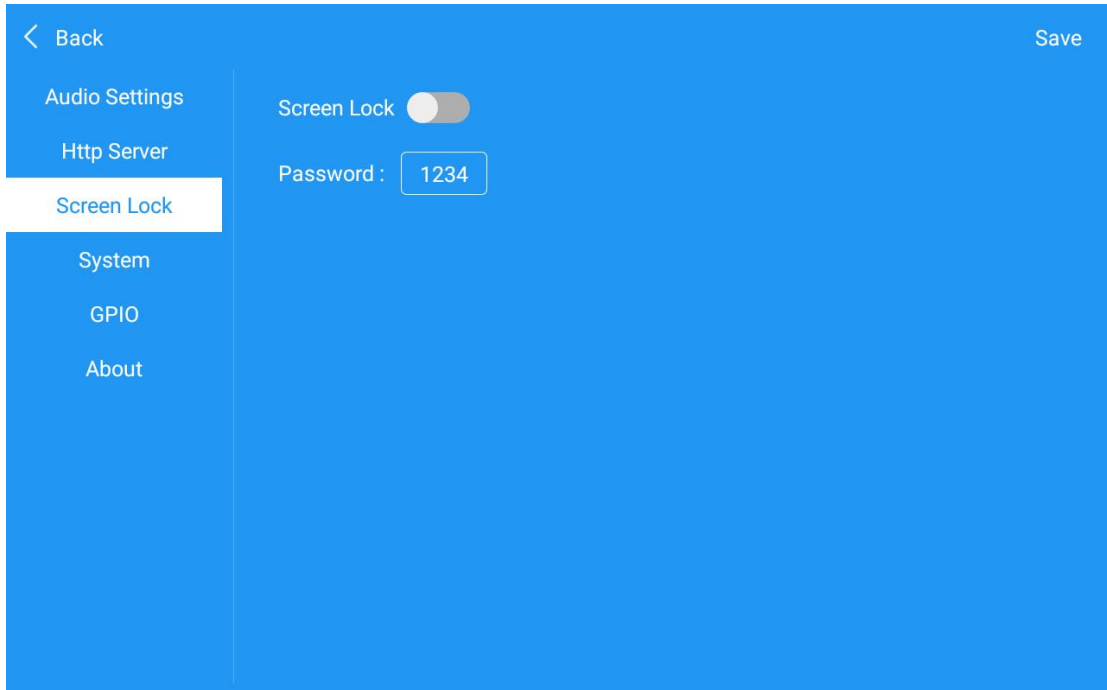
You can also use a USB drive to upload files, or upload files via an FTP tool, such as FileZilla.

## Index of /storage/emulated/0/IPMIC/

<a href="#">../</a>	<input type="button" value="Upload"/>	
<a href="#">Background</a>	2026-03-05 16:50:26	-
<a href="#">Backup</a>	2026-03-05 19:20:19	-
<a href="#">Image</a>	2026-03-05 16:50:26	-
<a href="#">Media</a>	2026-03-05 16:50:26	-
<a href="#">apk</a>	2026-03-05 16:50:26	-

### 3.7.3 Other Settings

Screen Lock: You can turn on the screen lock, enter the password you want, and save it.



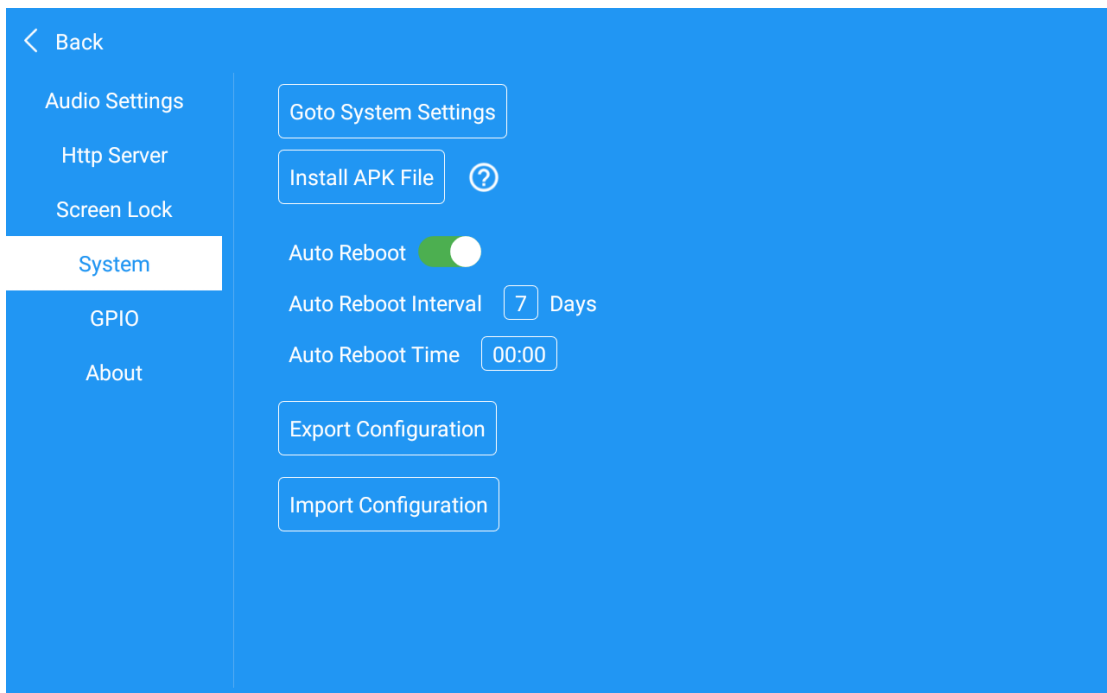
System:

Go to System Setting: Click to enter the M20 system settings page directly.

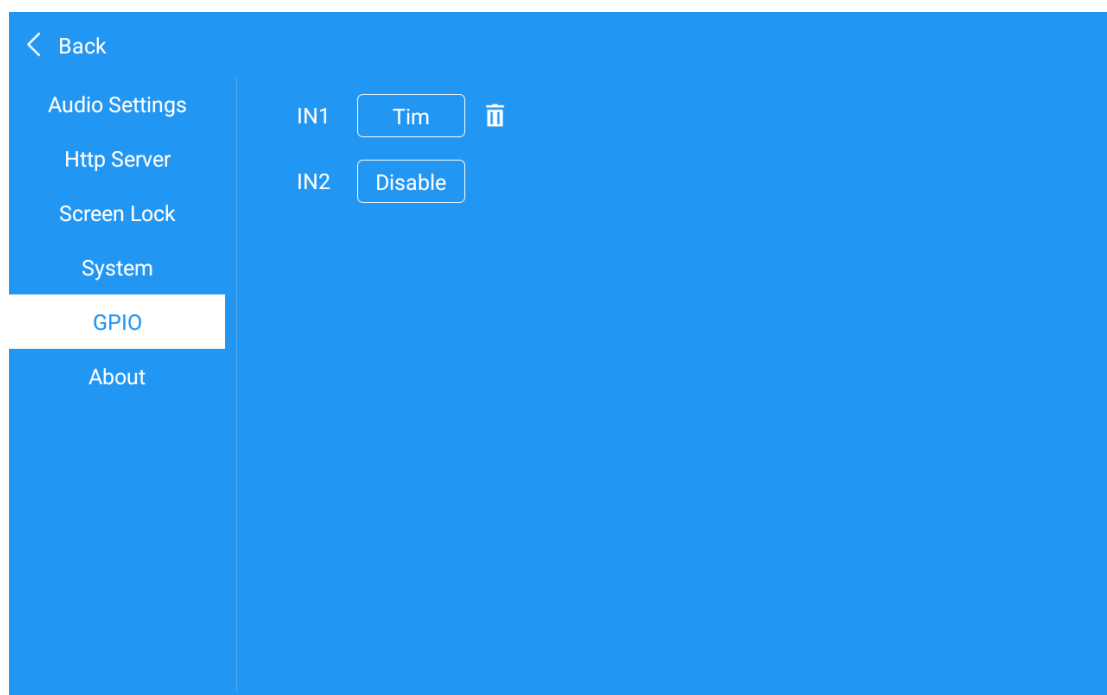
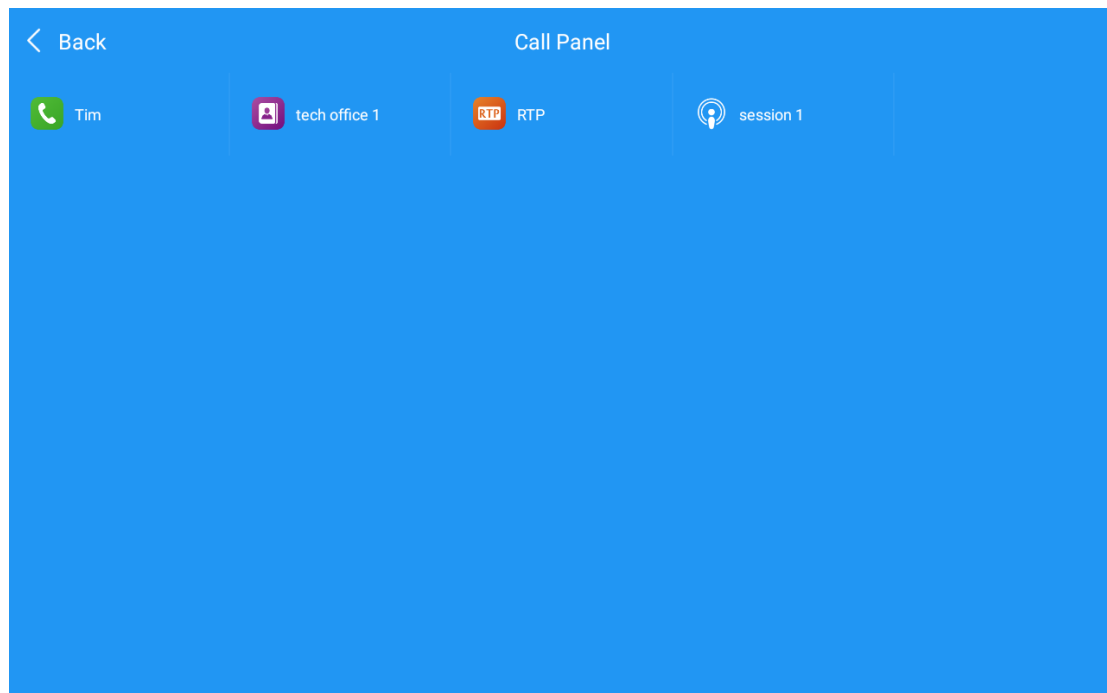
Install APK File: After uploading the APK file as described above, click here to update the PA Microphone app.

Auto Reboot: Set a scheduled time for the M20 to reboot automatically.

Configuration: Import or export device settings.



GPIO: The M20 has two GPIO inputs. Click to configure them and select which Fast Dial number (set in the Call Panel) will be automatically dialed when the GPIO is triggered.



About: View the Application Name (PA Microphone) and the current application version.

