

# Tonmind IP Speaker User Manual



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## 1. Overview

SIP-Sxxx series is IP based paging speaker. They have different shape, materials and design which can be easy installed in indoor and outdoor environment. Tonmind IP speakers are well compatible with SIP & ONVIF protocol that can be used in VoIP and security field. Up to 10 RTP multicast address enable to arrange different paging solutions. Alarm in and HTTP URL are able to combine with alarm system. Pre-recorded message and schedule broadcasting to meet various paging demands. The 48K OPUS Audio Codec enables excellent sound quality to make announcement, play background music, security alarm in school, factory and hospital, etc.





# 2. Web Configuration

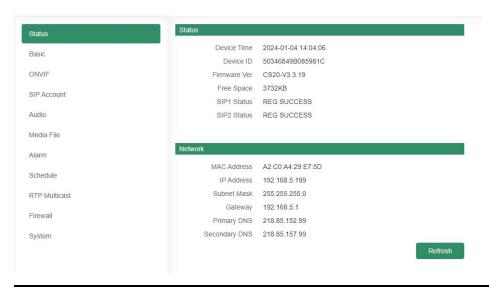
Web configuration includes complete function setting. When the device and your computer are connected to a same network, please open a browser and type in http://192.168.5.200, then log in with defaulted username and password as below.

Username: admin Password: tm1234



## 2.1 Status

We can check out firmware version, free space and two SIP accounts status of IP speaker, also can locate the current network information here, like MAC, IP address and gateway etc.

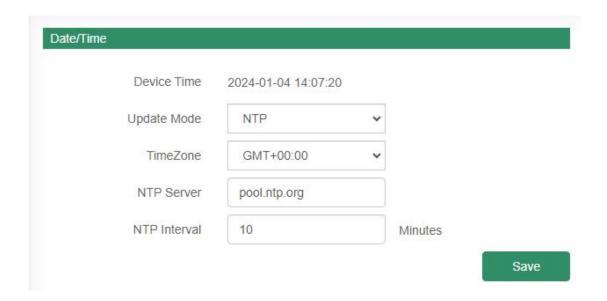


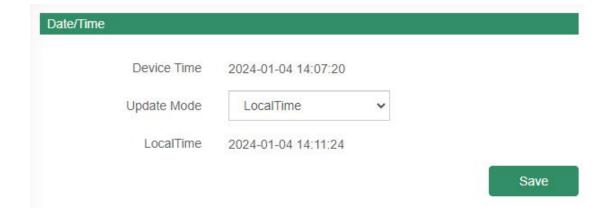


## 2.2 Basic

## 2.2.1 Date/ Time

There are two update modes for time: NTP/ local time, choose one and set the time zones, NTP sever and interval can choose default setting, then save the configuration.



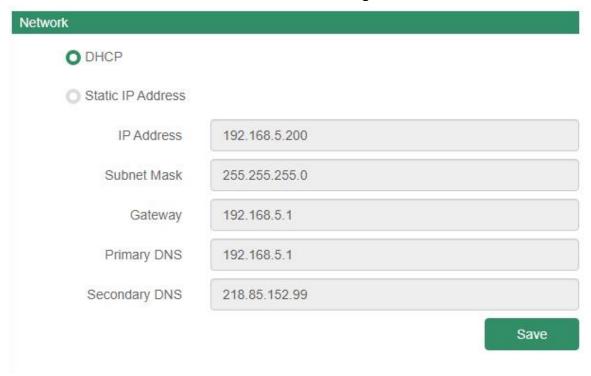




#### 2.2.2 Network

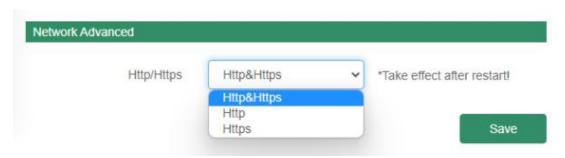
When you choose DHCP and save it, IP address will be created automatically by a DHCP server, then you need to login again with the new IP address on browser: 192.168.5.XXX.

Status IP address: it is a default IP and will not be changed as follows.



#### 2.2.3 Network advanced

Pick one of network as your requested.





## **2.3 ONVIF**

Select Enable ONVIF, then the device be searched by ONVIF VMS.

Default user name: admin, password:tm1234.

Then open The VMS/NVR to search and connect with Tonmind IP speaker.

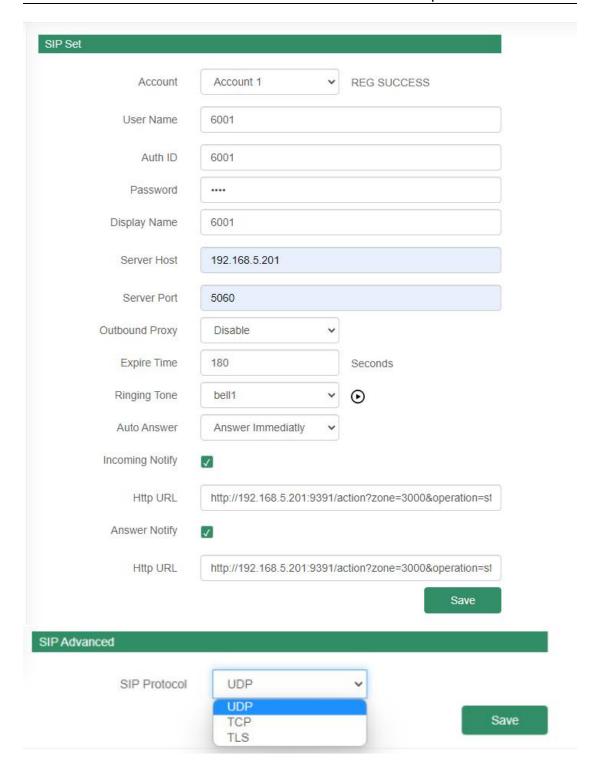


## 2.4 SIP Account

Each speaker has two SIP accounts, put SIP extension and SIP sever information into the blanks and save the configuration, then you can check if it registers successfully or not on status.

Parameter	Description
Outbound Proxy	Choose disable or enable the proxy as needed.
Expire Time	Set the expire time of registered account information.
Ringing Tone	5 system ringtones and 10 users upload media files.
Auto Answer	Answer immediately and answer delay when a calling incomes.
Incoming Notify	Put an URL from the third party, when a incoming call ringing, URL take effect.
Answer Notify	Put an URL the third party, when a incoming call answered, URL takes effect.
SIP Advanced	UDP/TCP/TLS, three SIP protocol optional.







#### 2.5 Audio

On the audio part, we can choose four audio codecs to be compatible with major audio sources. and adjust the volume and sound quality of speaker and MIC.

Jitter buffer: to make the audio more stable.

Amp auto off: It's set defaulted as ON, then there will be less noise when the speaker under broadcasting.

HPF: High Pass Filter

NR: Noice reduction.

AEC: Automatic echo cancellation.

AGC: Automatic Gain Control.

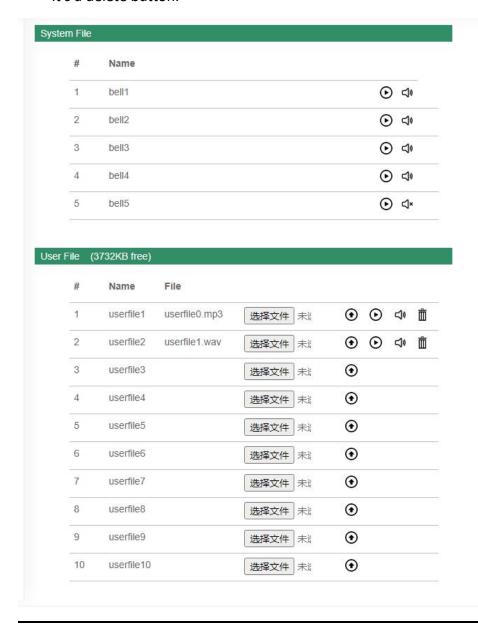




#### 2.6 Media File

There are five system ringtones, and you can upload 10 user files as customers' demands: music, announcement, bells, etc, support MP3 and WAV. Files. the limitation of user file is 3732KB.

- this button is for uploading files for PC.
- this button is to preview the files you upload.
- click this button, the speaker will play the files.
- it's a delete button.



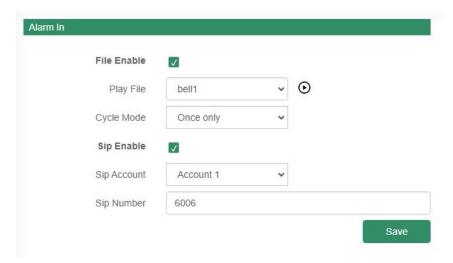


#### 2.7 Alarm

#### 2.7.1 Alarm In

File Enable: choose one play file and the cycle mode, save configuration. Trigger the alarm which connect to the alarm in port on the IP speaker, then the speaker will play the file.

SIP Enable: choose one of the sip account, and put the SIP extension you wanna call, eg. 6006. Trigger the alarm which connect to the alarm in port on the IP speaker, then 6006 will received the alarm call.

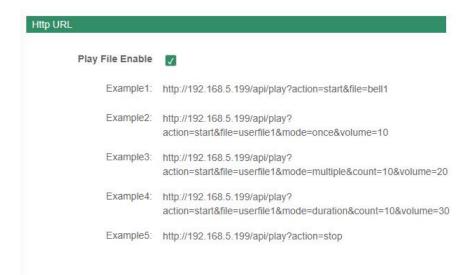


#### **2.7.2 Http URL**

User can control the alarm by HTTP URL. (also we can rewrite a new url as the examples)

- (1) Enable the selection;
- (2) Open any browser you have in computer;
- (3) Put the URL as the following examples, enter, then this url takes effort.

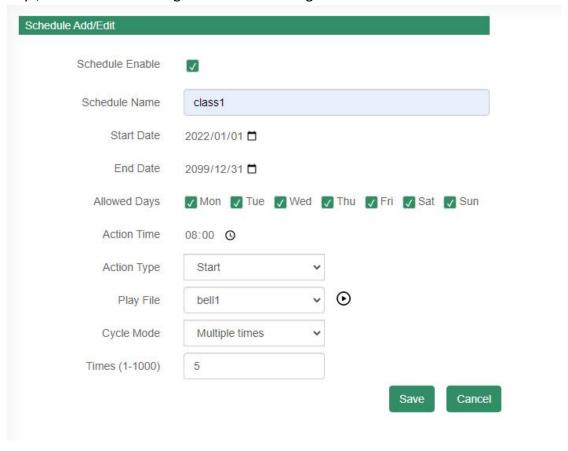




## 2.8 Schedule

This function is widely use in school, factory and office projects. Making a regular bell, announcement and alarm.

Enable the schedule, wou can name the schedule, choose start and end time, cycle days, etc. At last don't forget to save the configuration to make it work.





## 2.9 RTP Multicast

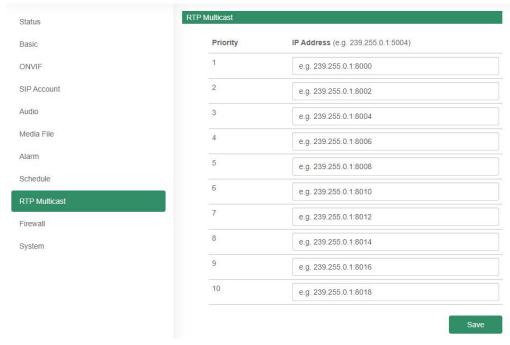
There are 10 RTP addresses can be received for each device, please note that: port numbers do not use continuous numbers when setting the same RTP addresses. Use discontinuous numbers. eg:

239.255.1.2:8000, 239.255.0.1:8001, 239.255.0.1:8002 (×) 239.255.0.1:8000, 239.255.0.1:8002, 239.255.0.1:8004 (V)

• Multicast address range: 224.0.0.0-239.255.255.

• Ports range: 1024-65536

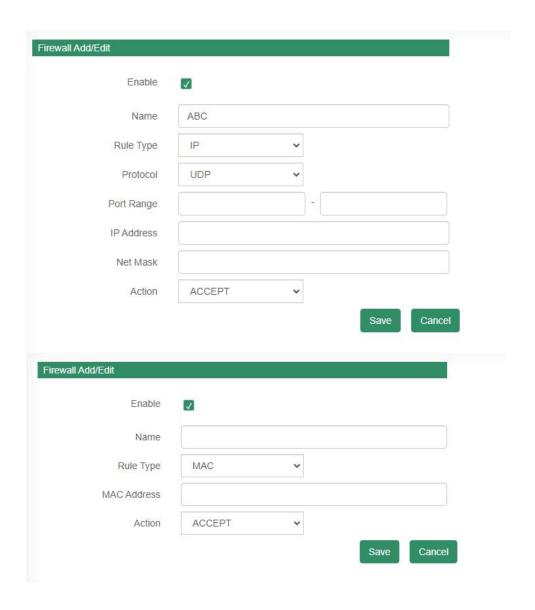
• Use IP Tool, Audio manager and PA System software to play RTP multicast.





## 2.10 Firewall

#### 2.10.1 Firewalls Rules

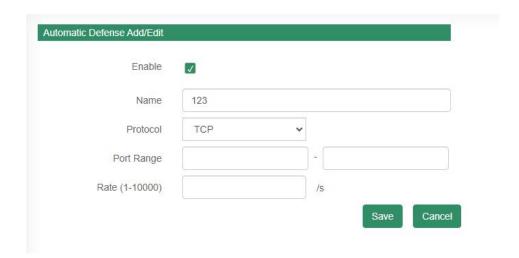


Parameter	Description
Name	A name for this rule
	Eg. rule1
Rule Type	IP/MAC optional.
MAC Address	The format of MAC Address is XX:XX:XX:XX:XX,
	X means 0~9 or A~F in hex, the A~F are not case sensitive.



Protocol	All/TCP/UDP three options.
Port Range	Initial port should be on the left and end port should be on the right. The port must be equal to or greater than start port.
	Eg. 2000 - 3000
IP Address	The IP address and netmask are used in combination
Net Mask	Eg. 192.168.5.20 & 255.255.255.255 for ip 192.168.5.20
	Eg. 192.168.5.0 & 255.255.255.0 for ip from 192.168.5.0 to
	192.168.5.255
Action	Accept: Accept the access from remote hosts
	Drop: Drop the access from remote hosts

#### 2.10.2 Automatic Defense Rules



Parameter	Description
Rule Type	IP/MAC optional.
Protocol	TCP/UDP two options.
Port Range	Initial port should be on the left and end port should be on the right. The port must be equal to or greater than start port.
Rate(1-10000)	The maximum packets can be handled per unit time. Eg.(IP:192.168.6.88/32 Protocol:UDP Rate:10/sec)means maximum 10 UDP packets from 192.168.6.88 can be handled per minute,and drop the redundant packets.



## **2.11 System**

#### **2.11.1 Upgrade**

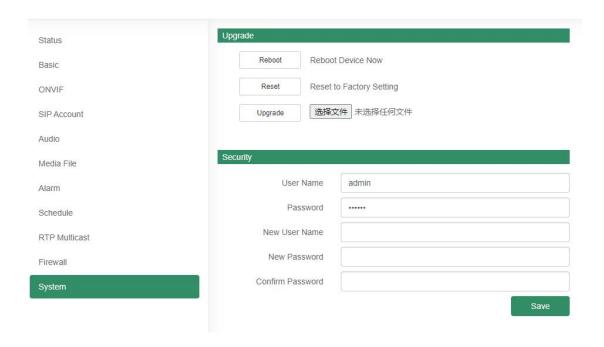
When reboot and reset the system, system will turn to original setting, and you need to re-login the web page.

How to upgrade IP Speaker firmware version in web interface?

- (1) Select the latest version firmware CS20-xxx-bin.
- (2) Click upgrade to refresh, it would require about 10-20s.
- (3) Re-login the web interface, latest version has upgraded.

#### **2.11.2 Security**

Set a new user name and password as you need, save the configuration and restart login.





# 3. IPTool Configuration

Apart from Web configuration, IPTool is the other option that configure quickly basic information such as SIP account setting, volume setting, RTP Multicast setting, upgrade. Please follow below steps.

- (1) Download IPTool in <a href="https://www.tonmind.com/category/downloads/5">https://www.tonmind.com/category/downloads/5</a>
- (2) Enter IPTool, scan local network, the device will appear and then start setting.

