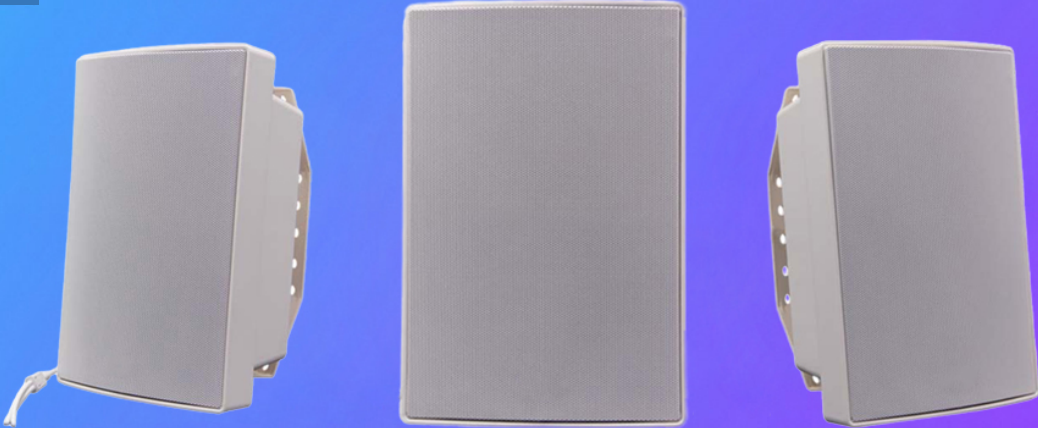


Universal User Manual


Aristel **AN-SP11**





SIP
Compatible with VoIP, SIP devices (IPPBX, IP Phone) via SIP protocol


ONVIF
Compatible with IP Camera VMS via ONVIF protocol


Aristel **AN-171mc**



 Alarm in / out

 Pre - Record

 HTTP Control

 Schedule

SIP
Compatible with VoIP, SIP devices (IPPBX, IP Phone) via SIP protocol

ONVIF
Compatible with IP Camera VMS via ONVIF protocol

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1. Overview

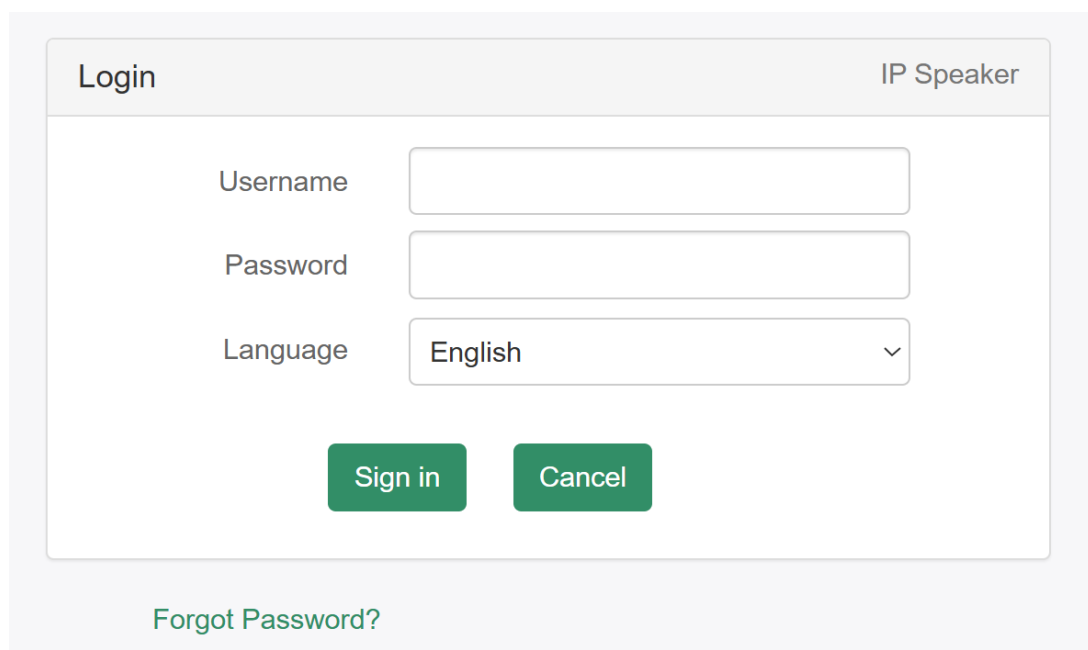
The IP speakers are compatible with SIP & ONVIF protocols that can be used in VoIP and security fields. Up to 10 RTP multicast addresses enable the arrangement of different paging solutions. Alarms in an HTTP URL can be combined with the alarm system, such as pre-recorded messages and scheduled broadcasting, to meet various paging demands. The 48K OPUS Audio Codec enables excellent sound quality to make announcements, play background music, and set security alarms in schools, factories, hospitals, etc.

2. Web Configuration

The web configuration of the IP speakers includes a complete function setting . When the device and your computer are connected to the same network, please open a browser and type in `http://192.168.5.200`, then log in with the default username and password as below.

Username: **admin**

Password: **tm1234**



The screenshot shows a web browser window with the title "IP Speaker". The page has a "Login" header on the left. The main content area contains three input fields: "Username" (empty), "Password" (empty), and "Language" (set to "English" with a dropdown arrow). Below these fields are two green buttons: "Sign in" and "Cancel". At the bottom of the page, there is a link that says "Forgot Password?".

2.1 Status

You can check the IP speaker's firmware version, free space, and two SIP account statuses. You can also locate the current network information here, like MAC, IP address, gateway, etc.

The screenshot displays the 'IP SPEAKER' web interface. On the left is a navigation menu with the following items: Status (highlighted), Basic, ONVIF, SIP Account, Audio, Media File, Alarm, Schedule, RTP Multicast, Firewall, Auto Provision, and System. The main content area is divided into two sections: 'Status' and 'Network'. The 'Status' section contains the following information:

Device Time	2024-07-29 03:42:29
Device ID	50442141A08B6E1C
Firmware Ver	CS20-V3.3.36N
Free Space	3836KB
SIP1 Status	NONE
SIP2 Status	NONE

The 'Network' section contains the following information:

MAC Address	F8:7A:39:D0:04:DE
IP Address	192.168.2.108
Subnet Mask	255.255.255.0
Gateway	192.168.2.1
Primary DNS	192.168.5.1
Secondary DNS	192.168.2.1

A 'Refresh' button is located at the bottom right of the Network section.

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 server, and interval. You can also choose the default setting and save the configuration.

Date/Time

Device Time	2024-07-29 03:47:50	
Update Mode	<input type="text" value="NTP"/>	▼
TimeZone	<input type="text" value="GMT+08:00"/>	▼
NTP Server	<input type="text" value="pool.ntp.org"/>	
NTP Interval	<input type="text" value="10"/>	Minutes

Date/Time

Device Time	2024-07-29 03:47:50	
Update Mode	<input type="text" value="LocalTime"/>	▼
LocalTime	2024-07-29 12:01:14	

2.2.2 Network

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

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

Network

DHCP

Static IP Address

IP Address

Subnet Mask

Gateway

Primary DNS

Secondary DNS

2.3 ONVIF

Select Enable ONVIF; then the device will be searched by ONVIF VMS.

Default user name: **admin** password: **tm1234**

IP SPEAKER

- Status
- Basic
- ONVIF**
- SIP Account
- Audio
- Media File
- Alarm
- Schedule
- RTP Multicast
- Firewall
- System

ONVIF

ONVIF Enable

User Name

Password

2.4 SIP Account

Each speaker has two SIP accounts. Fill in the blanks with SIP extension messages and save the configuration. Then, you can check whether it registers successfully or not on status.

Expire Time	Set the expire time of registered account information
Ringling Tone	Five system ringtones and ten users upload media files
Auto Answer	Answer immediately and answer delay when a calling incomes
Incoming Notify	Put an input URL, when a incoming call ringing, URL take effect
Answer Notify	Put an input URL, when a incoming call answered, URL take effect

- Status
- Basic
- ONVIF
- SIP Account
- Audio
- Media File
- Alarm
- Schedule
- RTP Multicast
- Firewall
- Auto Provision
- System

SIP Set

Account	Account 1	▼	NONE
User Name	<input type="text"/>		
Auth ID	<input type="text"/>		
Password	<input type="text"/>		
Display Name	<input type="text"/>		
Server Host	<input type="text"/>		
Server Port	<input type="text"/>		
Outbound Proxy	Disable	▼	
Expire Time	180		Seconds
Ringling Tone	bell1	▼	▶
Auto Answer	Answer Immediatly	▼	
Incoming Notify	<input checked="" type="checkbox"/>		
Http URL	<input type="text"/>		
Answer Notify	<input checked="" type="checkbox"/>		
Http URL	<input type="text"/>		

2.5 Audio

Out volume: adjust mic and output volume at 0-100.

Jitter buffer: to make the audio more stable.

Amp auto-off: It's set defaulted to ON, so there is no noise when not broadcasting.

Code setting: Four audio codes to be compatible with major audio sources.

Status
Basic
ONVIF
SIP Account
Audio
Media File
Alarm
Schedule
RTP Multicast
Firewall
System

Audio

Out Volume (0-100)

Jitter Buffer (60 - 2000) ms

Amp Auto OFF

Codec Setting

- OPUS
- G.722
- G.711U
- G.711A

2.6 Media File

There are five system ringtones, and you can upload ten media files, such as music, announcements, bells, etc., as customers request.

2.7 Alarm

2.7.1 Alarm In

Enable the alarm, select a file and cycle mode, and save the setting. Connect the alarm device to the alarm input port in the IP speaker.

2.7.2 Http URL

User can control the alarm by HTTP URL:

- (1) Enable the selection;
- (2) Open any browser on your PC.
- (3) Put the URL as the following examples, enter it.

- Status
- Basic
- ONVIF
- SIP Account
- Audio
- Media File
- Alarm
- Schedule
- RTP Multicast
- Firewall
- System

Alarm In

Alarm Enable

Play File 🔊

Cycle Mode

- Once only
- Multiple times
- Duration

Save

Http URL

Play URL Enable

Example1: `http://192.168.5.229/api/play?action=start&file=bell1`

Example2: `http://192.168.5.229/api/play?action=start&file=userfile1&mode=once&volume=10`

Example3: `http://192.168.5.229/api/play?action=start&file=userfile1&mode=multiple&count=10&volume=20`

Example4: `http://192.168.5.229/api/play?action=start&file=userfile1&mode=duration&count=10&volume=30`

Example5: `http://192.168.5.229/api/play?action=stop`

2.8 Schedule

This function is widely used in schools, factories, and office projects. It makes a regular bell, announcement, and alarm. Enable the schedule; you can name it. Then, set it step by step.

- Status
- Basic
- ONVIF
- SIP Account
- Audio
- Media File
- Alarm
- Schedule
- RTP Multicast
- Firewall
- System

Schedule Add/Edit

Schedule Enable

Schedule Name

Start Date 📅

End Date 📅

Allowed Days Mon Tue Wed Thu Fri Sat Sun

Action Time 🕒

Action Type

Play File 🔊

Cycle Mode

Save Cancel

2.9 RTP Multicast

There are 10 RTP addresses that 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. e.g.:

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 (√)

- Multicast address range: 224.0.0.0-239.255.255.
- Ports range: 1024-65536
- Use IP Tool, Audio manager and PA System to make RTP multicast.

Priority	IP Address (e.g. 239.255.0.1:5004)
1	<input type="text" value="e.g. 239.255.0.1:8000"/>
2	<input type="text" value="e.g. 239.255.0.1:8002"/>
3	<input type="text" value="e.g. 239.255.0.1:8004"/>
4	<input type="text" value="e.g. 239.255.0.1:8006"/>
5	<input type="text" value="e.g. 239.255.0.1:8008"/>
6	<input type="text" value="e.g. 239.255.0.1:8010"/>
7	<input type="text" value="e.g. 239.255.0.1:8012"/>
8	<input type="text" value="e.g. 239.255.0.1:8014"/>
9	<input type="text" value="e.g. 239.255.0.1:8016"/>
10	<input type="text" value="e.g. 239.255.0.1:8018"/>

2.10 Firewall

This function protects your network's safety. You can edit the firewall's automatic defence rules as needed.

Status	<div style="background-color: #2e8b57; color: white; padding: 2px;">Firewall Rules</div> <table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Type</th> <th>IP/MAC</th> <th>Action</th> </tr> </thead> <tbody> <tr><td>1</td><td></td><td></td><td></td><td> </td></tr> <tr><td>2</td><td></td><td></td><td></td><td> </td></tr> <tr><td>3</td><td></td><td></td><td></td><td> </td></tr> <tr><td>4</td><td></td><td></td><td></td><td> </td></tr> <tr><td>5</td><td></td><td></td><td></td><td> </td></tr> </tbody> </table> <div style="background-color: #2e8b57; color: white; padding: 2px;">Automatic Defense Rules</div> <table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Protocol</th> <th>Port Range</th> <th>Rate</th> </tr> </thead> <tbody> <tr><td>1</td><td></td><td></td><td>-</td><td> </td></tr> <tr><td>2</td><td></td><td></td><td>-</td><td> </td></tr> <tr><td>3</td><td></td><td></td><td>-</td><td> </td></tr> <tr><td>4</td><td></td><td></td><td>-</td><td> </td></tr> <tr><td>5</td><td></td><td></td><td>-</td><td> </td></tr> </tbody> </table>	#	Name	Type	IP/MAC	Action	1					2					3					4					5					#	Name	Protocol	Port Range	Rate	1			-		2			-		3			-		4			-		5			-	
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System																																																													

2.11 System

2.11.1 Upgrade

When you reboot and reset the system, it will return to its original settings, and you will need to re-login to the web page. How do you upgrade the IP Speaker firmware version in the web interface?

- (1) Select the latest version firmware CS20-xxx-bin.
- (2) Click upgrade to refresh; Taking around 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.

The screenshot shows the web interface for an IP Speaker. On the left is a navigation menu with the following items: Status, Basic, ONVIF, SIP Account, Audio, Media File, Alarm, Schedule, RTP Multicast, Firewall, and System (which is highlighted in green). The main content area is divided into two sections:

- Upgrade:** Contains three buttons: 'Reboot' (with the text 'Reboot Device Now' to its right), 'Reset' (with the text 'Reset to Factory Setting' to its right), and 'Upgrade' (with a greyed-out button to its right).
- Security:** Contains five input fields: 'User Name' (with 'admin' entered), 'Password' (with '*****' entered), 'New User Name', 'New Password', and 'Confirm Password'. A green 'Save' button is located at the bottom right of this section.

3. Audio Manager Configuration

Apart from Web configuration and IPTool, Audio Manager is another option that configure quickly basic information such as SIP account setting, volume setting, RTP Multicast setting. Please follow below steps.

- (1) Download and install Audio Manager at: <https://www.aristel.com.au/downloads>
- (2) Enter Audio Manager, select a network from the Options tab (eg. Realtek PCIe GBE Family Controller 192.168.5.1, Scan Devices, the device will appear and then start setting.

The screenshot shows the Audio Manager interface with a table. At the top, there are three tabs: 'Scan Devices' (selected), 'RTP Multicast', and 'Options'. The table has the following columns: No., Name, MAC, IP Address, Netmask, Gateway, SIP Account, RTP Multicast, Firmware Version, Volume, and System. The table is currently empty.

No.	Name	MAC	IP Address	Netmask	Gateway	SIP Account	RTP Multicast	Firmware Version	Volume	System