

About This Manual

Akuvox
Open A Smart World

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AKUVOX X937A INDOOR MONITOR

Administrator Guide

Thank you for choosing the Akuvox X937A indoor monitor. This manual is intended for administrators who need to configure the indoor monitor properly. This manual applies to the 937.30.13.129 version, and it provides all the configurations for the functions and features of the X937A series indoor monitor. Please visit the Akuvox forum or consult technical support for any new information or the latest firmware.

Product Overview



The Akuvox X937A indoor monitor, featuring a 15.6-inch oversized screen, gives users a wonderful operational and visual experience. Its integration with CCTV and security systems enables users to access NVR videos and check alarm information. It is embedded with the Google service and AI model, freeing users from tapping on the screen. It is ideal for high-end residential markets.

Changelog

What's new in version 937.30.13.129:

- Optimized monitor display.
- Support zooming in and out of the monitoring video.

Model Specification

Model	X937A
OS	Android 14
Resolution	1920x1080
Power Supply	IEEE802.3at PoE+ or 12VDC/2.5A Power Adapter
RJ45	x2
RS485	x1
Doorbell Input	x1
Relays Out	x2
Alarm Input	x8
Wi-Fi	✓, IEEE 802.11 a / b/g/n/ac/ax
Bluetooth	✓, BLE 5.0 or higher
HDMI Input	x1
Microphones	x4
Speakers	x4

Introduction to the Configuration Menu

- **Status:** This section gives you basic information such as product information, network information, account information, etc.
- **Account:** This section concerns the SIP account, SIP server, proxy server, transport protocol type, audio & video codec, DTMF, NAT, user agent, etc.
- **Network:** This section mainly deals with DHCP & static IP settings, RTP port settings, device deployment, etc.
- **Device:** This section includes time, language, call feature, NTP, display setting, audio, multicast, relay, third-party app, intercom, relay monitor, lift control, etc.
- **Contacts:** This section allows the user to configure the local contact list stored on the device and check call logs.
- **Upgrade:** This section covers firmware upgrade, device reset & reboot, screenshots, configuration file auto-provisioning, and PCAP.
- **Security:** This section is for password modification, account status & session time-out configuration, client certificate, as well as service location.
- **Settings:** This section includes the RTSP setting and voice assistant.
- **Arming:** This section covers the configuration including arming zone setting, arming mode, disarm code, and alarm action.

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Homepage



Status



Account



Network



Device



Contacts



Upgrade



Security



Settings



Arming



Access the Device

Device Start-up Network Selection

After the device boots up initially, you are required to select the network connection for the device. You can select either an Ethernet or a wireless network connection.



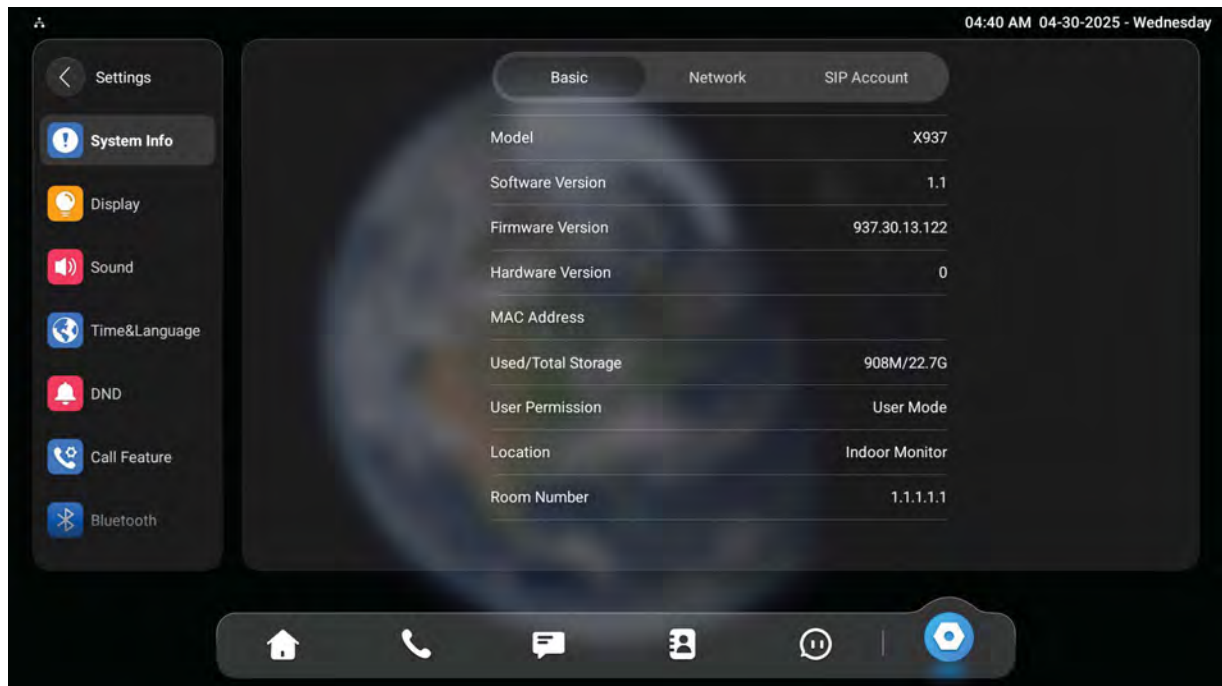
Note

Please refer to [Network Setting & Other Connection](#) for the configuration of the Ethernet and wireless network connection.

Access the Device's Settings

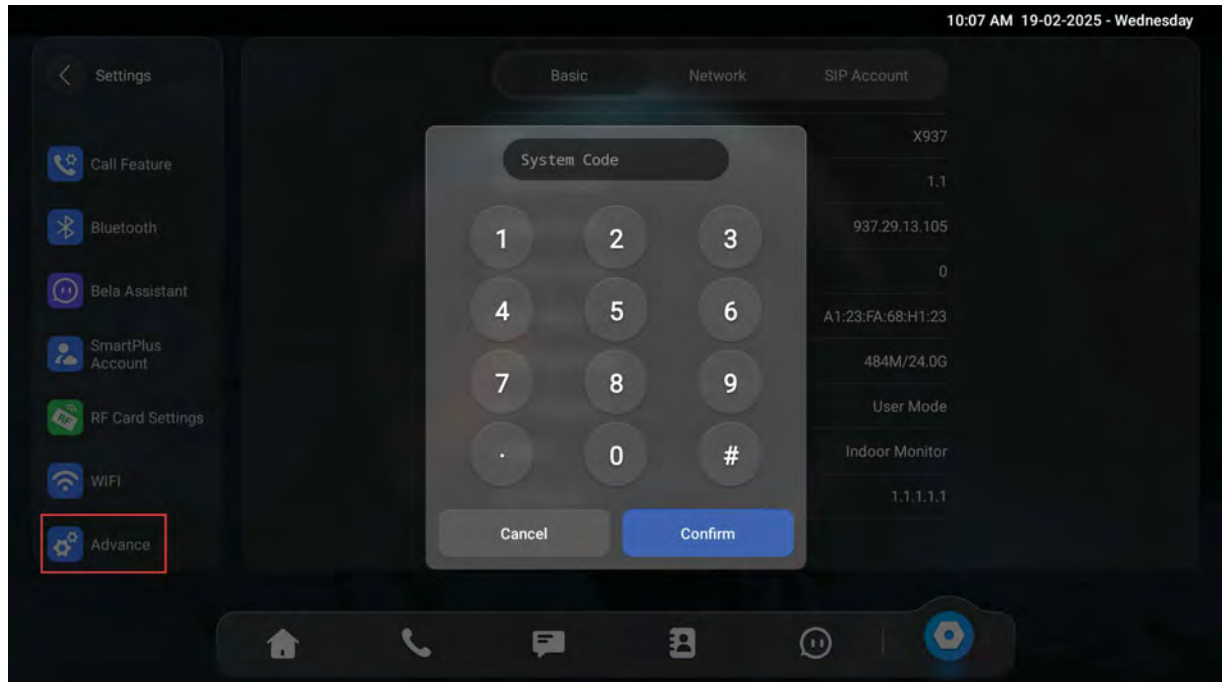
Access Device Basic Settings

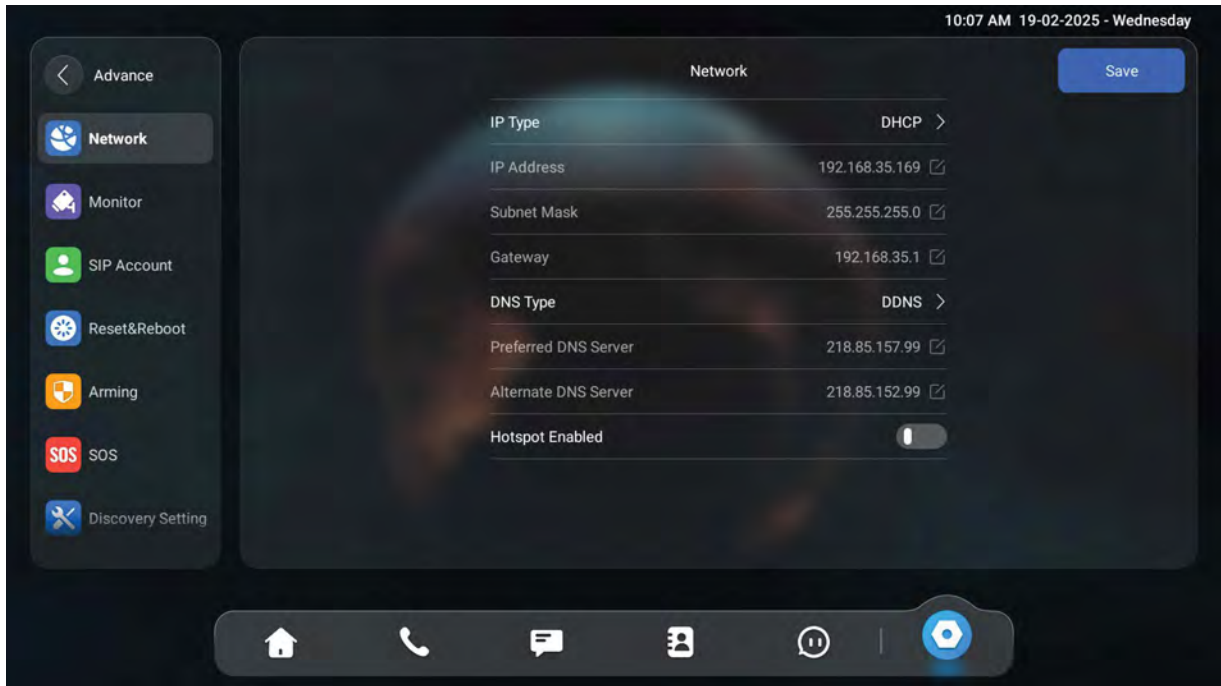
You can access the device's basic settings and advanced settings, where you can configure different types of functions as needed. To access the device's basic settings, tap **Settings** on the right menu. You can check the basic information like MAC, firmware, etc.



Access Device Advance Settings

To access the advanced settings, tap **Settings > Advance**. Press the default password 123456 to enter the advanced settings.



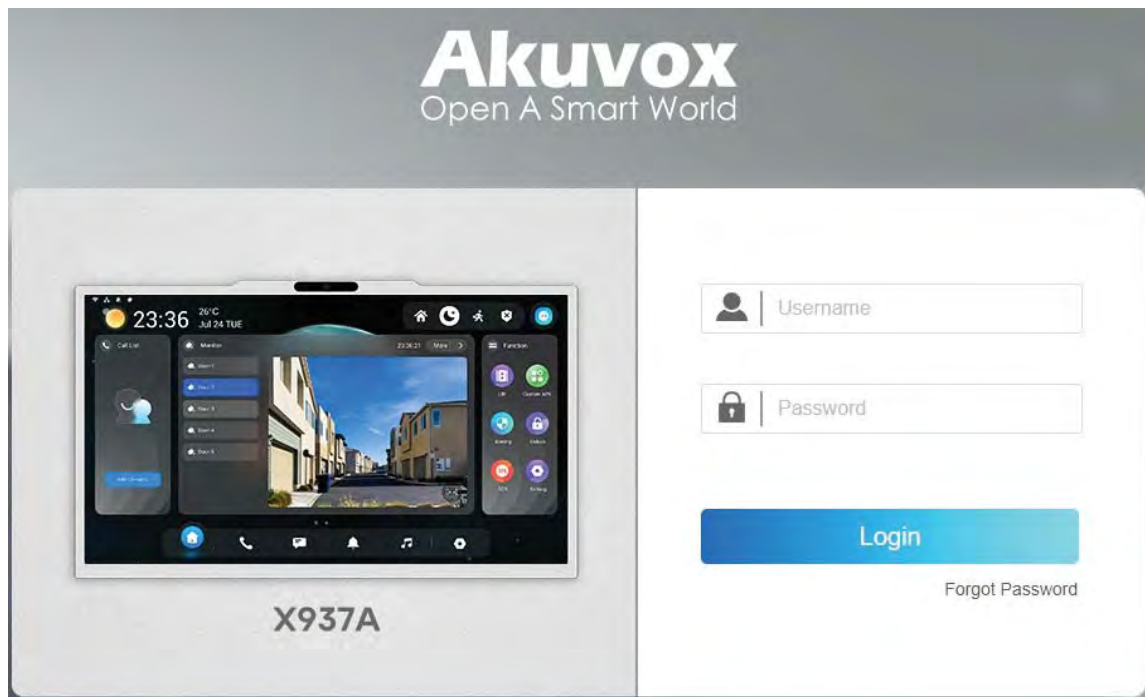


Access the Device's Web Settings

You can also enter the device's IP address in a web browser to access its web interface, where you can configure and adjust parameters, etc.

To check the IP address, go to the device **Settings > System Info > Network** screen. Or, search the device by IP scanner, which can search all the devices on the same LAN.

[illegible]



Note

- Download IP scanner:
[Link](#)
- See detailed guide:
[Link](#)
- Google Chrome browser is strongly recommended.
- The initial username and password are **admin** and please be case-sensitive to the user names and passwords entered.
- Your computer should be on the same network as the device.

Language and Time

Language

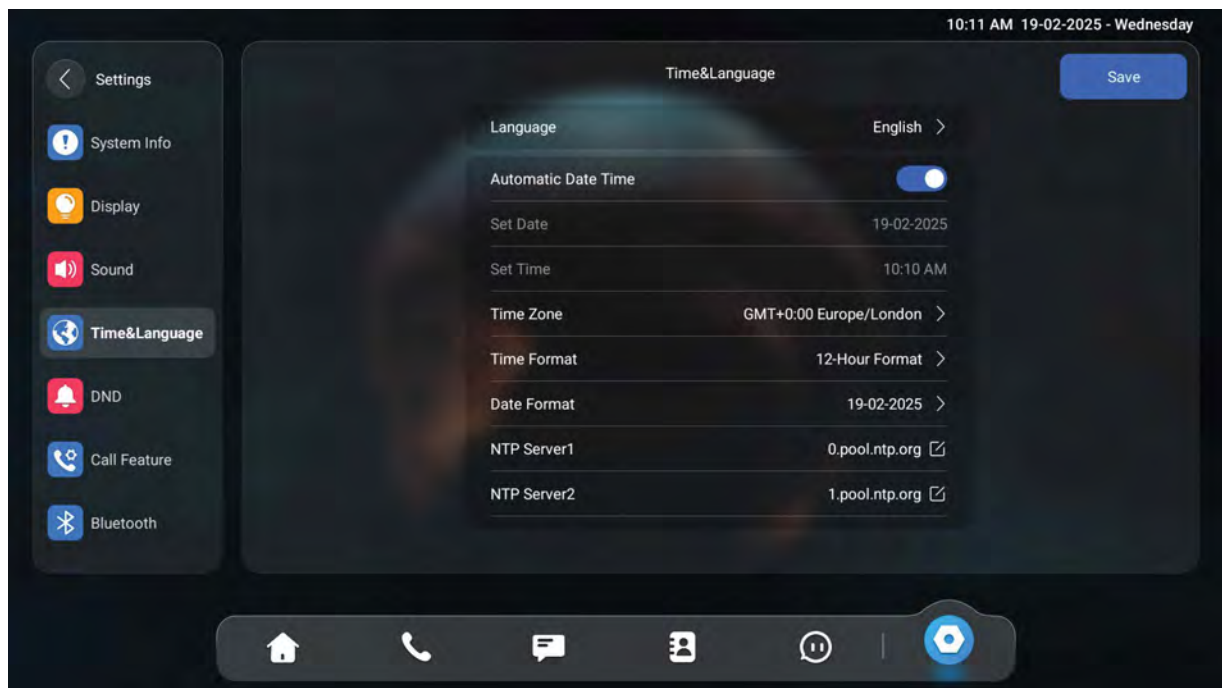
Set up the language during the initial device setup or later through the device or web interface.

On the Device

To select the desired language, go to **Settings > Time & Language** screen.

The device supports the following languages:

- Bosnian, Czech, Danish, German, English, Spanish, French, Italian, Lithuanian, Mongolian, Norsk, Polish, Portuguese, Russian, Slovene, Swedish, Turkish, Vietnamese, Korean, Simplified Chinese, Traditional Chinese, Japanese, Ukrainian, Dutch, and Arabic.



On the Web Interface

You can switch the device's web language in the upper right corner.

The device web interface supports the following languages:

- English, Simplified Chinese, Traditional Chinese, Russian, Czech, Portuguese, Spanish, Dutch, French, German, Polish, Turkish, Japanese, Mongolian, Vietnamese, and Italian.



Change the LCD language on the **Device > Time/Lang** interface.



The device supports the following languages:

- Bosnian, Czech, Danish, German, English, Spanish, French, Italian, Lithuanian, Mongolian, Norsk, Polish, Portuguese, Russian, Slovene, Swedish, Turkish, Vietnamese, Korean, Simplified Chinese, Traditional Chinese, Japanese, Ukrainian, Dutch, and Arabic.

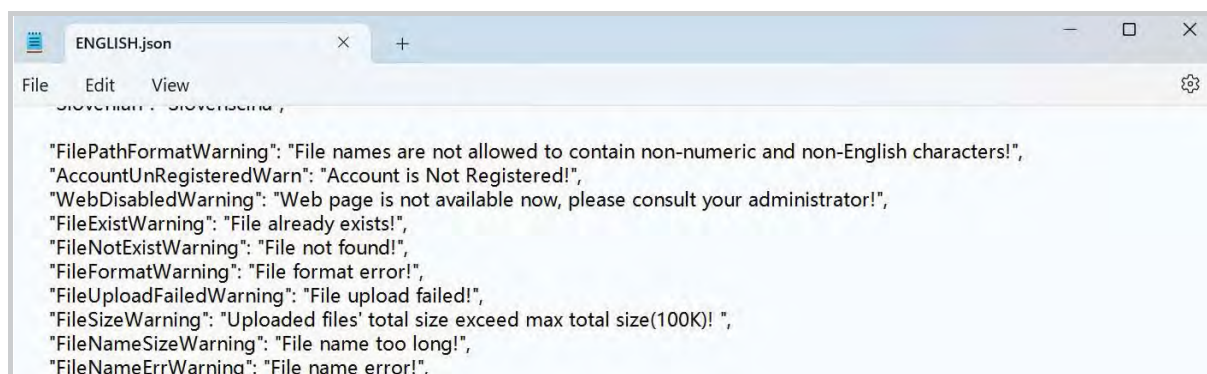
Custom Language

You can customize the configuration names and prompt texts on the device and its web portal such as the file name error warning.

Export the .json file for editing. You may edit it with the notepad on your computer.

Import the .json file and its size should be smaller than 1 MB.

File Example:



To set it up, navigate to **Device > Time/Lang > Custom Language** interface.

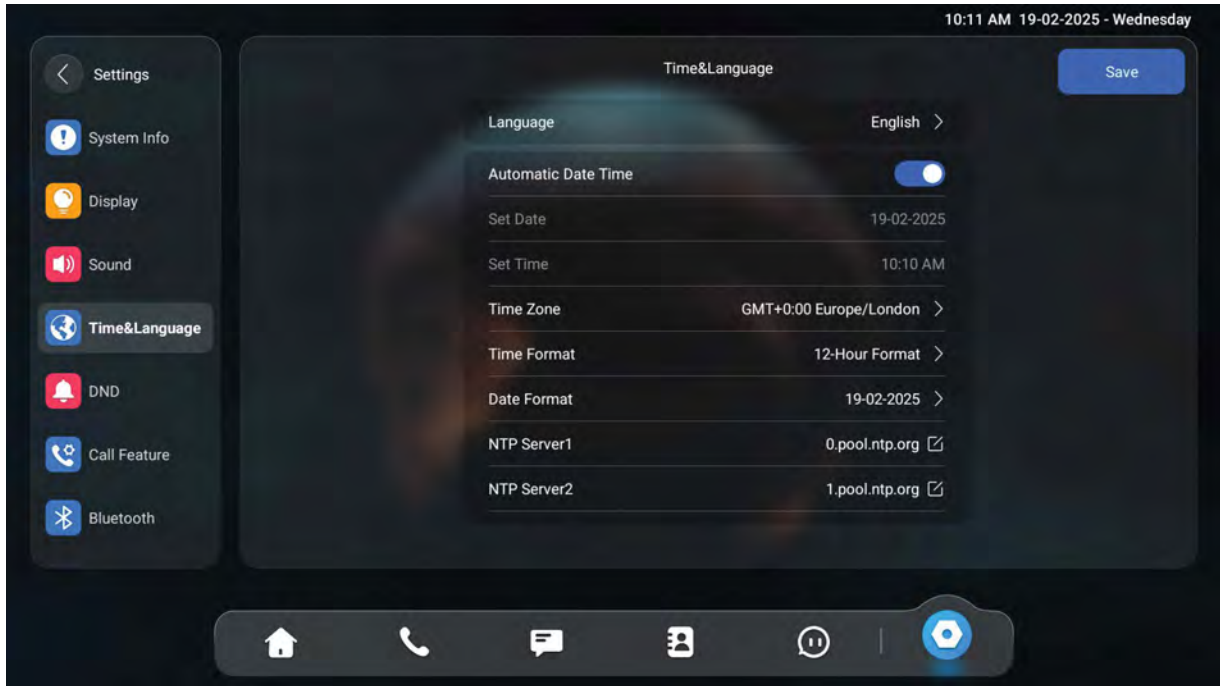


Time

Time settings, including time zone, date and time format, and more, can be configured either on the device or the web interface.

On the Device

Set up time on the device **Settings > Time & Language** screen.



- **Automatic Date Time:** The automatic date is switched on by default, which allows the date & time to be automatically set up and synchronized with the default time zone and the Network Time Protocol(NTP) server. You can also set it up manually by switching off the automatic date and entering the time and date.
- **Time Zone:** Select the specific time zone depending on where the device is used. The default time zone is GMT+0:00.
- **Time Format:** Select a 12-hour or 24-hour time format.
- **Date Format:** Select the date format from the provided options.
- **NTP Server 1/2:** Enter the NTP server address. NTP server 2 is the backup.

On the Web Interface

The time settings on the web interface allow you to configure the NTP server address for automatic time and date synchronization. Once a time zone is selected, the device will notify the NTP server of the chosen time zone, enabling it to synchronize the time zone settings on your device.

Navigate to **Device > Time/Lang** interface.

Time Setting

Automatic Date&Time

☒

Time Format

12-Hour Format

Date Format

DD-MM-YYYY

Date

07-03-2024

Time

0:33 am

Time Zone

GMT+0:00 Europe/London

NTP

Preferred Server

0.pool.ntp.org

Secondary Server

1.pool.ntp.org

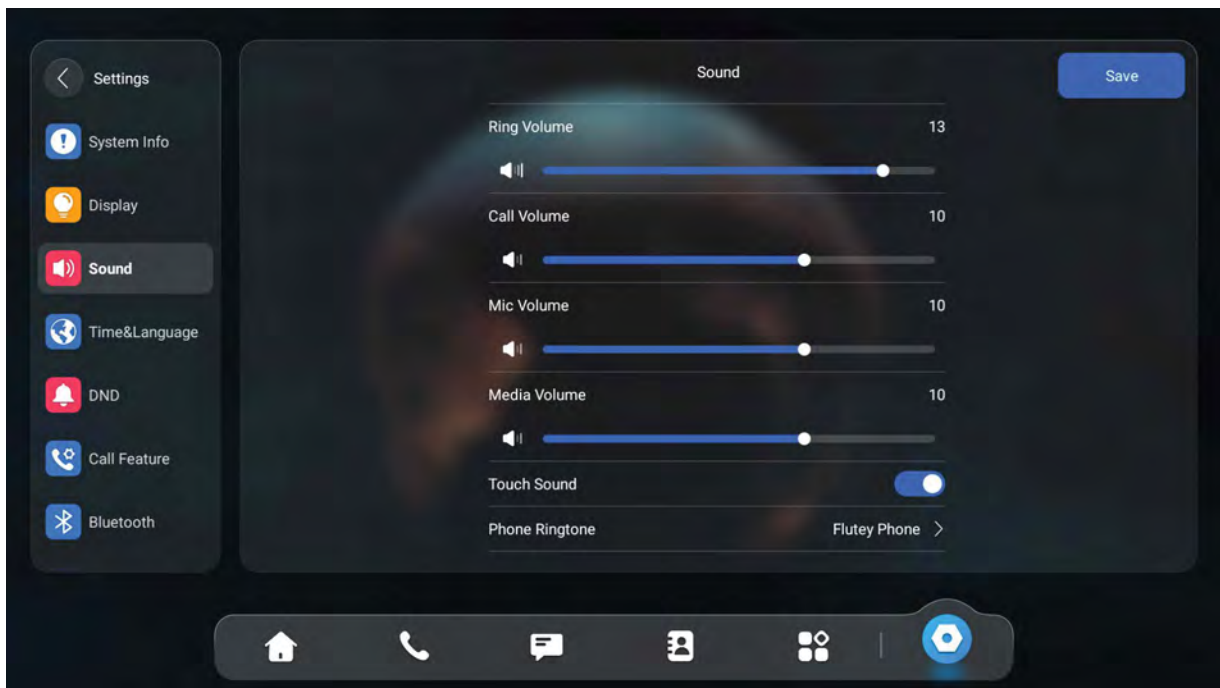
- **Automatic Date Time:** The automatic date is switched on by default, which allows the date & time to be automatically set up and synchronized with the default time zone and the Network Time Protocol(NTP) server. You can also set it up manually by switching off the automatic date and entering the time and date.
- **Time Format:** Select a 12-hour or 24-hour time format.
- **Date Format:** Select the date format from the provided options.
- **Time Zone:** Select the specific time zone depending on where the device is used. The default time zone is GMT+0:00.
- **Preferred Server:** Enter the NTP server address.
- **Secondary Server:** Enter the backup server address. When the main NTP server fails, it will change to the backup server automatically.

Sound and Volume

Akuvox indoor monitor provides you with various types of ringtones and volume configurations. You can configure them on the device directly or on the web interface.

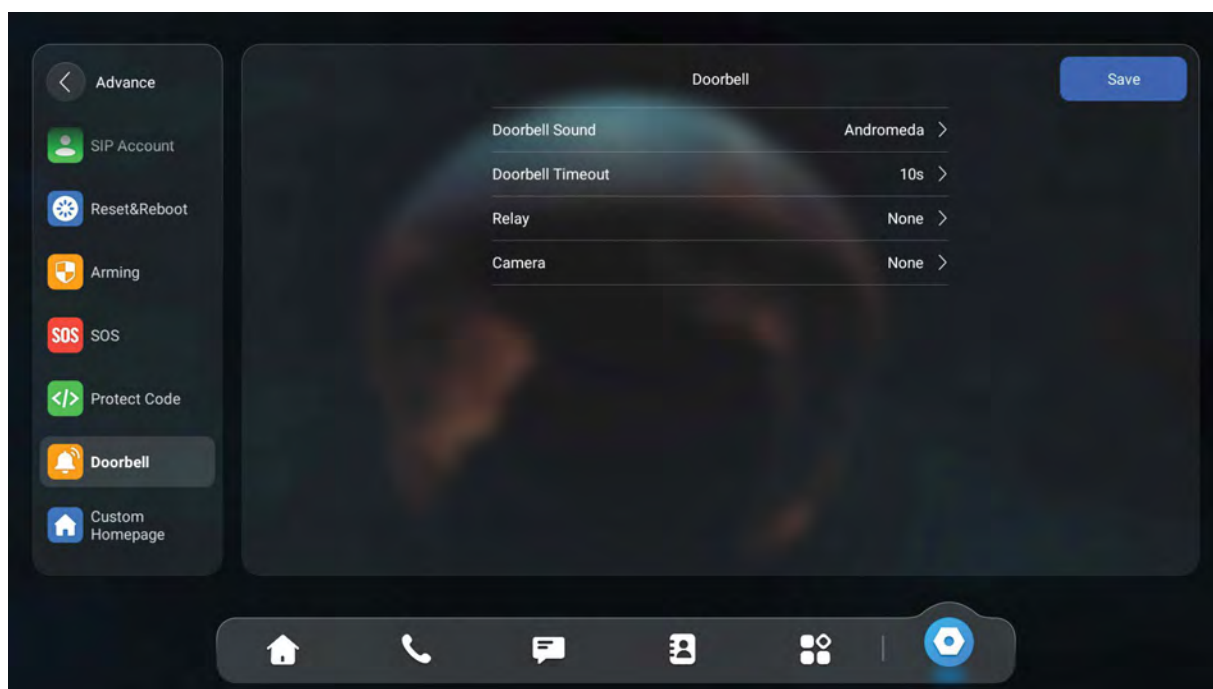
On the Device

Set up the volumes on the device **Settings > Sound** screen.



- **Ring Volume:** The incoming call ringtone volume. The default is 13.
- **Call Volume:** The speaker volume during the call. The default is 10.
- **Mic Volume:** The mic volume. The default is 10.
- **Media Volume:** The volume for the video screen saver. The default is 10.
- **Touch Sound:** The icon tapping sound.
- **Phone Ringtone:** The ringtone for incoming calls.
- **Notification Sound:** The ringtone for the incoming messages.

You can configure the doorbell sound and select the local relay to be triggered along with the doorbell on the **Settings > Advance > Doorbell** screen.



- **Doorbell Sound:** Select the doorbell sound.
- **Doorbell Timeout:** Set the doorbell duration(from 10 seconds to 5 minutes).
- **Relay:** Select the local relay to be triggered along with the doorbell.
- **Camera:** Select the camera to be triggered along with the doorbell.

On the Web Interface

You can configure volumes on the **Device > Audio** interface.

Volume Control ?			
Ring Volume	13	(0~15) ?	
Call Volume	10	(1~15) ?	
Mic Volume	10	(1~15) ?	
Media Volume	10	(0~15) ?	

Touch Sound ?	
Touch Sound Enabled	Enabled ?

- **Ring Volume:** The incoming call ringtone volume. The default is 13.
- **Call Volume:** The speaker volume during the call. The default is 10.
- **Mic Volume:** The mic volume. The default is 10.
- **Media Volume:** The volume for the video screen saver. The default is 10.
- **Touch Sound Enabled:** The icon tapping sound.

Upload Tones

You can customize ringtones on the **Device > Audio** interface. Click **Import** to upload the ringtone and **Delete** to delete the existing one.

Doorbell Sound Upload

Doorbell Sound Upload

Import

Doorbell Sound

▼

Delete

Alarm Ringtone Upload

Alarm Ringtone Upload

Import

Alarm Ringtone

default.wav

▼

Delete

Ring Tone Upload

Ring Tone Upload

Import

Ring Tone

▼

Delete

Note

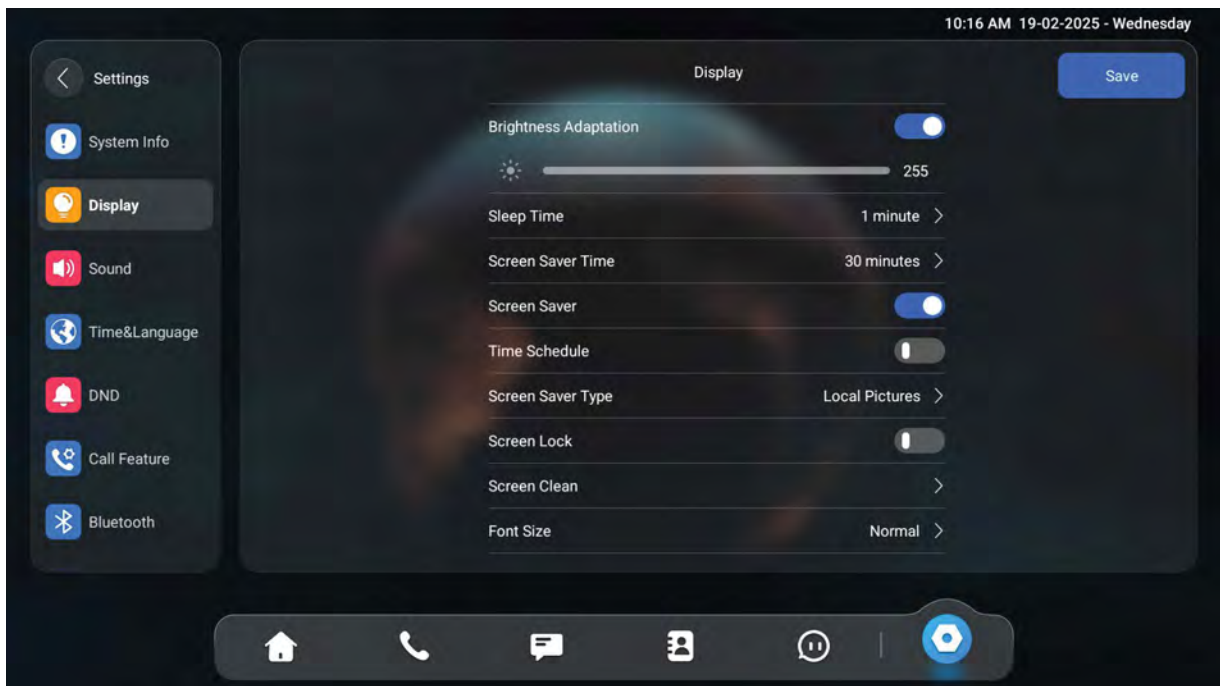
The files to be uploaded should be in WAV or MP3 format. No limitation on the file size.

Screen Display

On the Device

You can configure a variety of features of the screen display in terms of brightness, screen saver and font size, etc.

Navigate to the device **Settings > Display** screen.



- **Brightness Adaptation:** Enable the device to adjust automatically to natural light.
- **Brightness:** Move the blue bar to adjust the screen brightness.

Note

You cannot adjust the screen brightness manually when the **Brightness Adaptation** is enabled.

- **Sleep Time:** Set the sleep timing based on the screen saver (15 seconds to 30 minutes).
 - If the screen saver is enabled, the sleep time here is the screen saver start time. For example, if you set it as 1 minute, the screen saver will start automatically when the device has no operation for 1 minute.

- If the screen saver is disabled, the sleep time here is the screen turn-off time. For example, if you set it as 1 minute, the screen will be turned off automatically when the device has no operation for 1 minute.
- **Screen Saver Time:** The time for displaying the screensaver.
- **Screen Saver:** Determine whether to display the screensaver when the device goes into sleep mode.
- **Time Schedule:** Decide the specific time range to display the screen saver.
- **Screen Saver Type:**
 - **Local Pictures:** Display pictures uploaded to the indoor monitor as the screen saver.
 - **Local Videos:** Display videos from the indoor monitor as the screen saver
 - **Clock:** Display the clock as the screen saver.
- **Screen Lock:** Lock the screen after the screen is turned off(turn dark). You are required to enter the code to unlock the screen. The default code is 123456.
- **Screen Clean:** Allow users to wipe the screen clean without triggering unwanted changes in the settings.
- **Font Size:** Select the font size among four options: Small, Normal, Large, and Huge.
- **Wallpaper:** It is for local wallpaper selection.
- **Wake Up Mode:**
 - **Manual:** Touch the screen to wake up the device.
 - **Auto:** Approach the device to wake it up. It is the default option.
- **Wake Up Distance:** Select the distance to wake up the device. The short distance is 50 cm and the long distance is 80 cm.

On the Web Interface

You can configure the screen display on the **Device > Display Setting > Screen Saver Setting** interface.

Screen Saver Setting ?

Screen Saver Pictures	Import ?	
Screen Saver Videos	Import ?	
Picture Files	Daydream1.jpg ▼	Delete ?
Video Files	▼	Delete ?
Screen Saver Type	Local Pictures ▼	?
Schedule	☐	?
Adapting Screen Savers for Third-Party Apps	☐	?

- **Screen Saver Type:**

- **Local Pictures:** Display pictures uploaded to the indoor monitor as the screen saver.
- **Local Videos:** Display videos from the indoor monitor as the screen saver
- **Clock:** Display the clock as the screen saver.
- **Schedule:** Decide the specific time range to display the screen saver.
- **Adapting Screen Savers for Third-Party Apps:** This feature keeps third-party apps running in the background. When enabled, the screen will turn off without a screensaver. The screen-saver parameters will be hidden on the web interface and the device.

You can set up the brightness adaptation and wake-up mode on the **Settings > Basic** interface.

Wake Up Device ?

Wake Up Mode Auto ?

Wake Up Distance Short Distance ?

Brightness Adaptation ?

Brightness Adaptation ☒ ?

- **Wake Up Mode:**
 - **Manual:** Touch the screen to wake up the device.
 - **Auto:** Approach the device to wake it up. It is the default option.
- **Wake Up Distance:** Select the distance to wake up the device. The short distance is 50 cm and the long distance is 80 cm.
- **Brightness Adaptation:** Enable the device to adjust automatically to natural light.

Upload Screen Saver

You can upload screen-saver pictures or videos to the device for a public purpose or greater visual experience.

Navigate to the web **Device > Display Setting > Screen Saver Setting** interface.

You can click **Delete** to delete the existing files.

Screen Saver Setting ?

Screen Saver Pictures	Import ?
Screen Saver Videos	Import ?
Picture Files	Daydream1.jpg Delete ?
Video Files	Delete ?
Screen Saver Type	Local Pictures ?
Schedule	☐ ?
Adapting Screen Savers for Third-Party Apps	☐ ?

Note

- The pictures uploaded should be in JPG, JPEG, or PNG format with a 2M maximum. The recommended resolution is 1920×1080.
- Previous pictures with the same ID will be overwritten when they are reassigned.
- The videos uploaded should be in MP4, WMV, or AVI format with a 500M maximum. The recommended resolution is 1080×720.

Upload Wallpaper

You can customize your screen background picture on the device web to achieve the visual effect and experience for users.

Navigate to **Device > Display Setting > Wallpaper** interface.

Wallpaper ?

Wallpaper	Import ?
Wallpaper Files	1.jpg Delete ?

Note

- The pictures uploaded should be in JPG, JPEG, PNG format with a 2M maximum.
- The recommended resolution is 1920×1080.

Upload Device Booting Image

You can upload the booting image to be displayed during the device's booting process.

Go to **Device > Display Setting> Boot Logo** interface.

Boot Logo ?

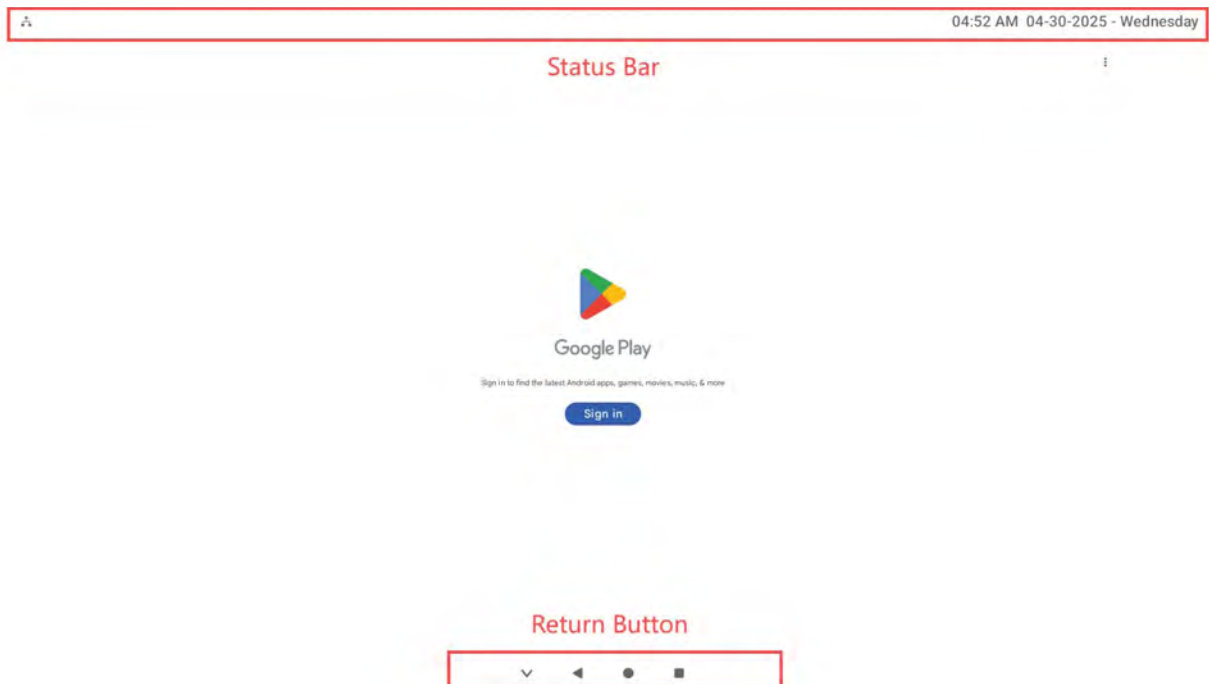
Web Logo	 Import	 Reset	?
Web Homepage Logo	 Import	 Reset	?

- **Web Logo:** The logo will appear in the upper left corner of the web interface. Supported format: JPG and PNG; Max size: 252*76 PNG.
- **Web Homepage Logo:** The logo will appear on the device's web login interface. Supported format: JPG and PNG; Max size: 182*55 PNG.

Status Bar Display Configuration

You can configure whether to display the status bar and return button when running a third-party app.

To set it up, go to the **Device > Display Setting > Display Settings** interface.



- **Status Bar Visible:** Determine whether to display the status bar when running a third-party app.
- **Return Button Hide Time:** Determine that the return button will be concealed for a certain seconds. If you select **Never**, the button will keep displaying. Users can swipe up on the screen to make the button appear.

Home Screen Tab Display

Akuvox indoor monitor allows you to customize icon display on the **Home** screen and **More** screen for the convenience of users' operation.

To set it up, navigate to **Device > Display Setting** interface.

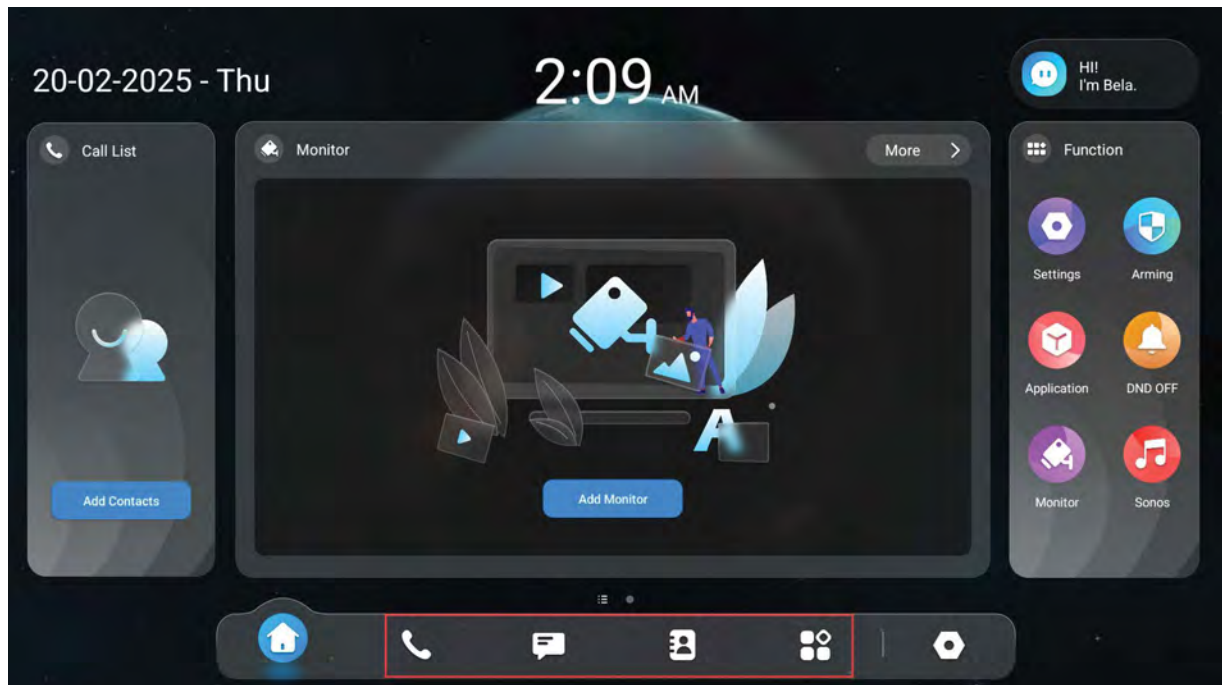
Home Page Display

Example

Area	Type	Value	Label	Type(max size:100*100)
Area1	Call		Call	Not selected any files Select File Delete
Area2	Message			Not selected any files Select File Delete
Area3	Contacts			Not selected any files Select File Delete
Area4	Application		Application	Not selected any files Select File Delete

- **Type:** Select the functional icon to be displayed on the home screen.
- **Label:** Name the tab. The DND tab cannot be renamed.
- **Icon:** Click to upload the icon picture. The maximum icon size is 100*100. The picture format can be JPG, JPEG, or PNG.

You can click **Example** to see the icon layout.

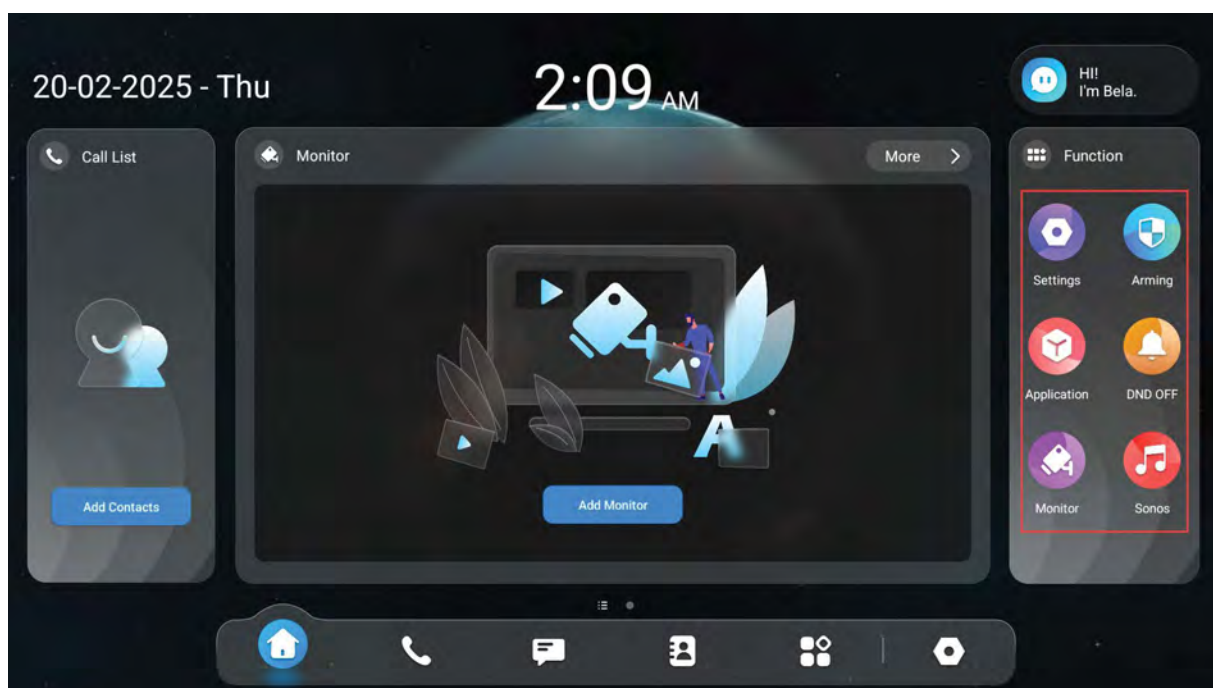


Configure the icons displayed on **More Page Display** on the same interface.

More Page Display ⓘ

Example

Area	Type	Value	Label	Type(max size:100*100)
Area1	Settings ▼			Not selected any files Select File Delete
Area2	Arming ▼			Not selected any files Select File Delete
Area3	Application ▼			Not selected any files Select File Delete
Area4	DND ▼			
Area5	Monitor ▼		Monitor	Not selected any files Select File Delete
Area6	Sonos ▼			Not selected any files Select File Delete
Area7	N/A ▼			Not selected any files Select File Delete
Area8	N/A ▼			Not selected any files Select File Delete



Function Tabs Configuration

You can set up the display of functional tabs on the talking, monitor, and call preview screens.

To set up tabs on the **Talking** screen, go to **Device > Display Setting > Softkey in Talking Page** interface.

Softkey in Talking Page ⓘ

Key	Display
Mute	Enabled ▼
Switch	Enabled ▼
Capture	Enabled ▼
Keyboard	Enabled ▼
Hang Up	Enabled ▼

- **Mute:** Tap to mute the talking.

- **Switch:** Tap to switch between Video and Audio talking mode.
- **Capture:** Tap to take a screenshot of the talking screen.
- **Keyboard:** Tap to display the keyboard.
- **Hang up:** Tap to end the call.

To set up tabs on the **Call Preview** screen, go to **Device > Display Setting > Softkey in Call-Preview Page** interface.

SoftKey In Call-Preview Page

Key	Display
Capture	Enabled
Answer	Enabled
Hang Up	Enabled

- **Capture:** Tap to take a screenshot of the preview screen.
- **Answer:** Tap to answer the incoming call.
- **Hang up:** Tap to end the call.

To set up tabs on the **Monitor** screen, go to **Device > Display Setting > Softkey in Monitor Page** interface.

SoftKey In Monitor Page

Key	Display
Capture	Enabled
Cancel	Enabled

- **Capture:** Tap to take a screenshot of the monitor screen.
- **Cancel:** Tap to exit the monitor screen.

Unlock Tabs Configuration

You can customize the unlock tab and select the relay type on the talking, monitor, and call preview screen for the door opening.

To set up the unlock tab on the talking screen, go to **Device > Relay > SoftKey In Talking Page** interface.

Softkey In Talking Page

Key	Status	Display Name	Type
Key1	Enabled	Unlock1	Auto
Key2	Disabled	Unlock2	Auto
Key3	Disabled	Unlock3	Auto

- **Status:** With it enabled, the unlock tab will be displayed on the talking screen.
- **Display Name:** Name the unlock tab.

- **Type:** Select the relay trigger type according to the actual setup.

Scroll down to set up the unlock tab on the **Monitor** screen on the **SoftKey In Monitor Page** section.

SoftKey In Monitor Page ⓘ

Key	Status	Display Name	Type
Key1	Enabled ▼	Unlock	Auto ▼
Key2	Disabled ▼	Unlock	Auto ▼
Key3	Disabled ▼	Unlock	Auto ▼

- **Status:** With it enabled, the unlock tab will be displayed on the monitor screen.
- **Display Name:** Name the unlock tab.
- **Type:** Select the relay trigger type according to the actual setup.

Scroll down to set up the unlock tab on the **Call Preview** screen on the **SoftKey In Call-Preview Page** section.

SoftKey In Call-Preview Page ⓘ

Key	Status	Display Name	Type
Key1	Enabled ▼	Unlock	Auto ▼
Key2	Disabled ▼	Unlock	Auto ▼
Key3	Disabled ▼	Unlock	Auto ▼

- **Status:** With it enabled, it will be displayed on the call preview screen.
- **Display Name:** Name the unlock tab.
- **Type:** Select the relay trigger type according to the actual setup.

Note

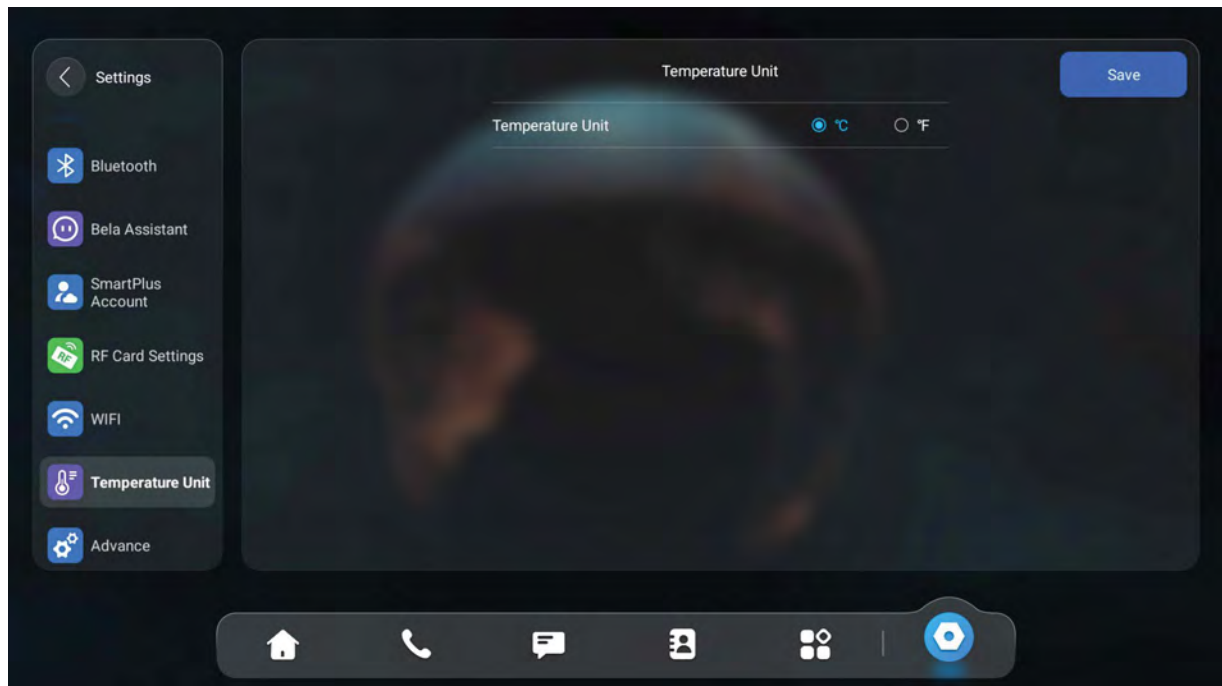
Please refer to the [Access Control](#) chapter for different unlock types setup.

Temperature Display Setting

When the device is connected to the SmartPlus Cloud, temperature information will be displayed on the device's Home screen.

You can switch the temperature unit between Fahrenheit and Celsius on the device.

To set it up, go to the **Settings > Temperature Unit** screen.



Note

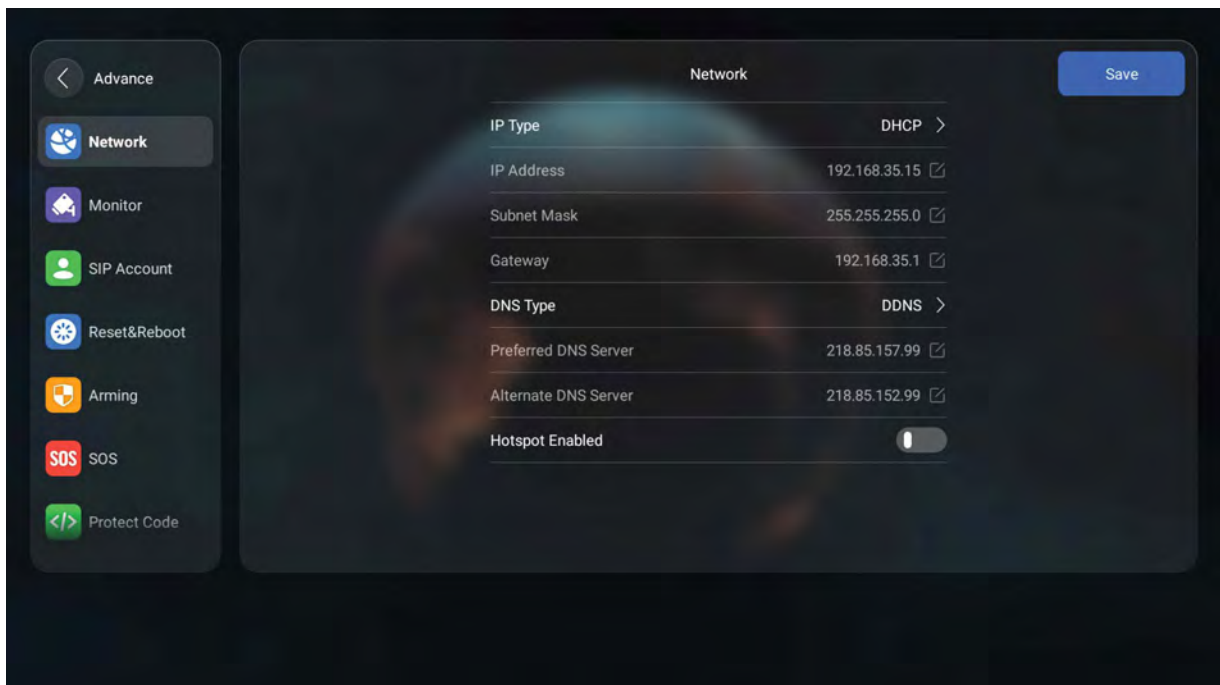
Please refer to [Configure Weather Display on Indoor Monitors](#) for configuration details.

Network Setting & Other Connections

To ensure normal functioning, make sure that the device has its IP address set correctly or obtained automatically from the DHCP server.

On the Device

Check and configure the network connection on the device **Settings > Advance > Network** screen.



- **IP Type:** DHCP mode is the default network connection. The device will be assigned by the DHCP server with an IP address, subnet mask, default gateway, and DNS server address automatically. In static IP mode, the IP address, subnet mask, default gateway, and DNS server address have to be manually configured according to the actual network environment.
- **IP Address:** The IP address when the static IP mode is selected. To access the device's web settings, your computer should be on the same local network as the device.
- **Subnet Mask:** A subnet mask tells your device which IP addresses are part of your local network and which ones are not. For example, if the subnet mask is 255.255.255.0, it means that devices with similar starting IPs (like 192.168.1.x) are in the same network.
- **Gateway:** The gateway is like a bridge between your device and other networks, such as the internet. Usually, it's the IP address of your router.

- **DNS Type:** Domain Name System(DNS) is the overall system or network that handles the translation of domain names (like www.example.com) into IP addresses (like 192.0.2.1), which computers use to identify each other on a network.
 - **DDNS:** Dynamic DNS. It is obtained automatically through the DHCP server.
 - **Static DNS:** When selected, you need to enter the DNS manually.
- **Preferred & Alternate DNS Server:** The preferred DNS server is the primary DNS address, while the alternate DNS server is the secondary one. The device will connect to the alternate server when the primary server is unavailable.
- **Hotspot Enabled:** With it enabled, the device can provide a network for other devices.

Note

- You can press System Info, and then press Network on the Settings screen to check device network status.
- The default code to enter advanced settings is 123456.

On the Web Interface

Check the network on the web **Status > Network Information** interface.

Network Information ?

Network Type	LAN
LAN Port Type	DHCP Auto
LAN Link Status	Connected
LAN IP Address	192.168.35.15
LAN Subnet Mask	255.255.255.0
LAN Gateway	192.168.35.1
Preferred DNS Server	218.85.157.99
Alternate DNS Server	218.85.152.99
Primary NTP	0.pool.ntp.org
Secondary NTP	1.pool.ntp.org

Configure the network connection on the web **Network > Basic > LAN Port** interface.

LAN Port ?

IP Type	☐ DHCP ☒ Static IP	?
LAN IP Address	192.168.35.15	?
LAN Subnet Mask	255.255.255.0	?
Default Gateway	192.168.35.1	?
DNS Type	☒ DDNS ☐ Static DNS	?
Preferred DNS Server	218.85.157.99	?
Alternate DNS Server	218.85.152.99	?

- **IP Type:**
 - **DHCP** mode will enable the indoor monitor to be assigned by the DHCP server with an IP address, subnet mask, default gateway, and DNS address automatically.
 - **Static IP** allows you to enter the IP address, subnet mask, default gateway, and DNS address manually according to the actual network environment.
- **LAN IP Address:** The IP address when the static IP mode is selected. To access the device's web settings, your computer should be on the same local network as the device.
- **LAN Subnet Mask:** A subnet mask tells your device which IP addresses are part of your local network and which ones are not. For example, if the subnet mask is 255.255.255.0, it means that devices with similar starting IPs (like 192.168.1.x) are in the same network.
- **Default Gateway:** The gateway is like a bridge between your device and other networks, such as the internet. Usually, it's the IP address of your router.
- **DNS Type:** Domain Name System(DNS) is the overall system or network that handles the translation of domain names (like www.example.com) into IP addresses (like 192.0.2.1), which computers use to identify each other on a network.
 - **DDNS:** Dynamic DNS. It is obtained automatically through the DHCP server.
 - **Static DNS:** When selected, you need to enter the DNS manually.
- **Preferred/Alternate DNS Server:** The preferred DNS server is the primary DNS address, while the alternate DNS server is the secondary one. The device will connect to the alternate server when the primary server is unavailable.

To enable the WLAN hotspot, go to the **Network > Advanced > WLAN Hotspot** interface.

WLAN Hotspot

Hotspot Enabled  

Device Deployment in Network

To facilitate device control and management, configure Akuvox intercom devices with details such as location, operation mode, address, and extension numbers.

Deploy the device in the network on the web **Network > Advanced > Connect Setting** interface.

Connect Setting

Connect Mode	None	
Discovery Mode	☒	
Preferred Network	Ethernet	
Device Node	1 1 1 1 1	
Device Extension	1	(1~9) 
Device Location	Indoor Monitor	

- **Connect Mode:** It is automatically set up according to the actual device connection with a specific server in the network, such as **SDMC**, **Cloud**, or **None**. **None** is the default factory setting, indicating the device is not in any server type.
 - **None:** None is the default factory setting indicating the device is not in any server type. Devices connect directly to each other or within a local area network (LAN) without relying on external servers.
 - **Cloud:** The device is connected to the SmartPlus Cloud, a cloud-based system simplifying property access management. The Cloud mode allows devices to interact intelligently with one another and the mobile SmartPlus App, backing up data daily and on different hosts. It suits projects requiring smart, flexible, and secure deployment and management.
 - **SDMC:** The device is connected to the SDMC, a management platform designed for on-premise projects. The SDMC mode manages and backs up data remotely on a local network. It also boasts many features suitable for projects requiring high privacy, lower cost, and centralized management.
- **Discovery Mode:** Enabled by default. Available for the **None** server mode. The device can be discovered by other devices in the network. When disabled, the device will be concealed and not be discovered by other devices.
- **Preferred Network:** Specify the preferred network connection, WLAN or Ethernet. It is Ethernet by default. When Ethernet is unavailable, the device will automatically switch to a WLAN connection and vice versa.

- **Device Node:** Available for the **None** server mode. Uneditable in Cloud and SDMC mode. It can be used to call the device. Specify the device address by entering device location information from left to right: Community, Building, Unit, Floor, and Room in sequence.
- **Device Extension:** Available for the **None** server mode. Uneditable in Cloud and SDMC mode. The device extension number ranges from 0 to 10.
- **Device Location:** The location in which the device is installed and used. Available for the **None** server mode. Uneditable in Cloud and SDMC mode.

Device NAT Setting

Network Address Translation(NAT) lets devices on a private network use a single public IP address to access the internet or other public networks. NAT saves the limited public IP addresses and hides the internal IP addresses and ports from the outside world.

To register SIP accounts on third-party servers in a Wide Area Network(WAN), you need to enable the RPort feature on the intercom devices to establish a stable connection.

To set up NAT, go to **Account > Basic > NAT** interface.

- **Stun Server Address:** Set the SIP server address in the Wide Area Network(WAN).
- **Port:** Set the SIP server port.

Then go to **Account > Advanced > NAT** interface.

- **RPort:** Enable the RPort when the SIP server is in WAN for the SIP account registration.

Device Web HTTP Setting

This function manages device website access. The device supports two remote access methods: HTTP and HTTPS (encryption).

Set it up on the **Network > Advanced > Web Server** interface.

Web Server ⓘ

HTTPS Port

443

(443, 1024~65535) ⓘ

- **HTTPS Port:** Set the HTTPS port within the valid range.

SNMP Setting

Simple Network Management Protocol(**SNMP**) is a protocol for managing IP network devices. It allows network administrators to monitor devices and receive alerts for attention-worthy conditions. SNMP provides variables describing system configuration, organized in hierarchies and described by Management Information Bases (MIBs).

To set it up, go to the **Network > Advanced > SNMP** interface.

SNMP ⓘ

Enabled



Port

(1024~65535) ⓘ

Trusted IP

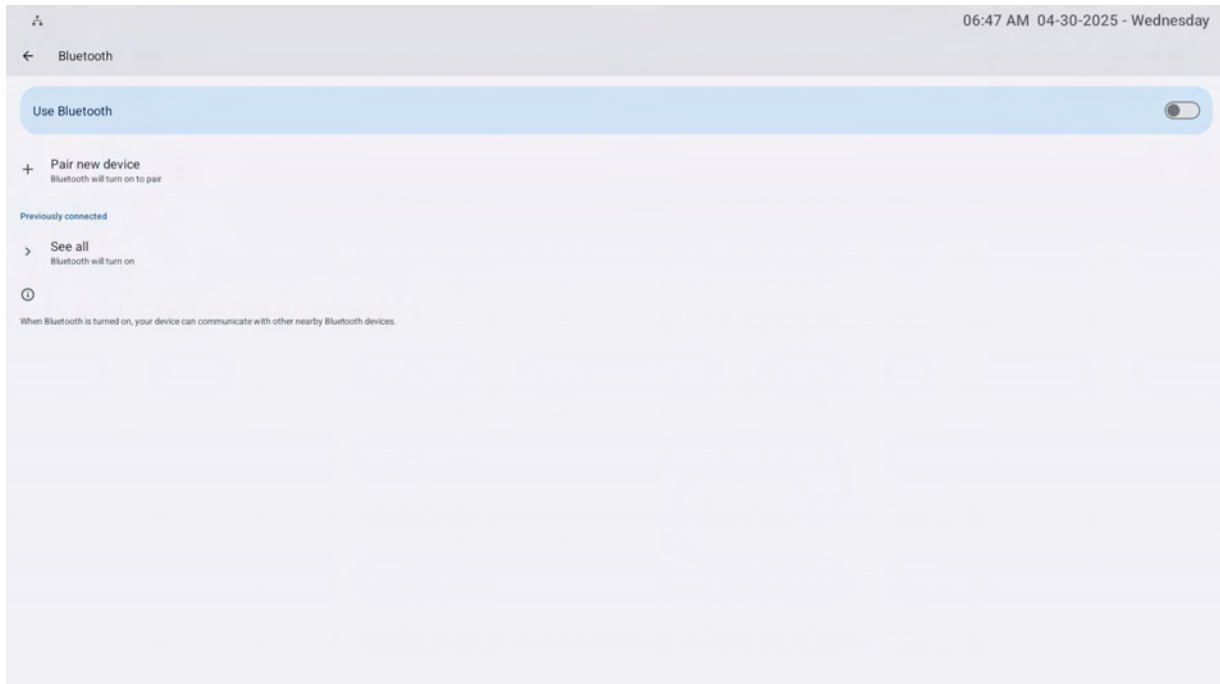


- **Port:** Set a specific port for the data transmission from 1024-65535.
- **Trusted IP:** Enter the third-party IP address.

Device Bluetooth Setting

You can pair the indoor monitor with other Bluetooth-featured devices.

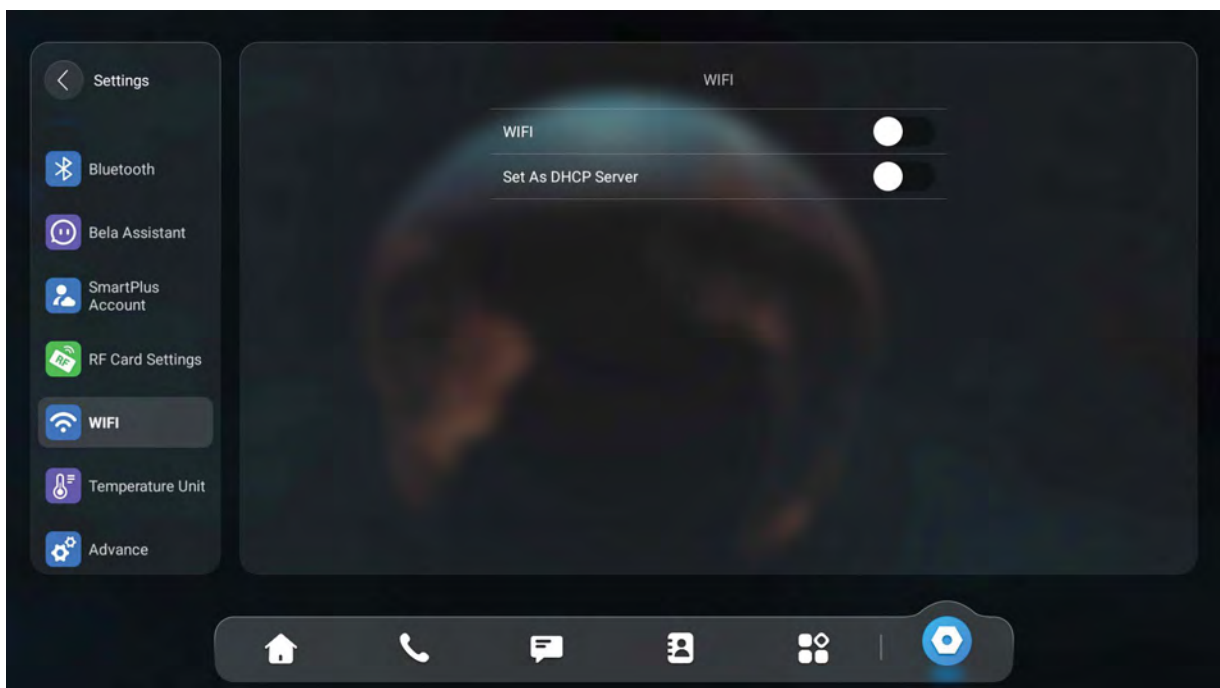
To set it up, go to **Settings > Bluetooth** screen.



- **Use Bluetooth:** When enabled, other Bluetooth devices will display.
- **Pair new device:** Tap to pair with available Bluetooth devices.
- **Previously connected:** Tap **See all** to view the previously connected devices.

Device Wi-Fi Setting

Set the Wi-Fi on the device **Settings > Wi-Fi** screen. Tap the desired Wi-Fi and enter the password for connection.



- **Set As DHCP Server:** Use the Wi-Fi as the DHCP server.

Contacts Management

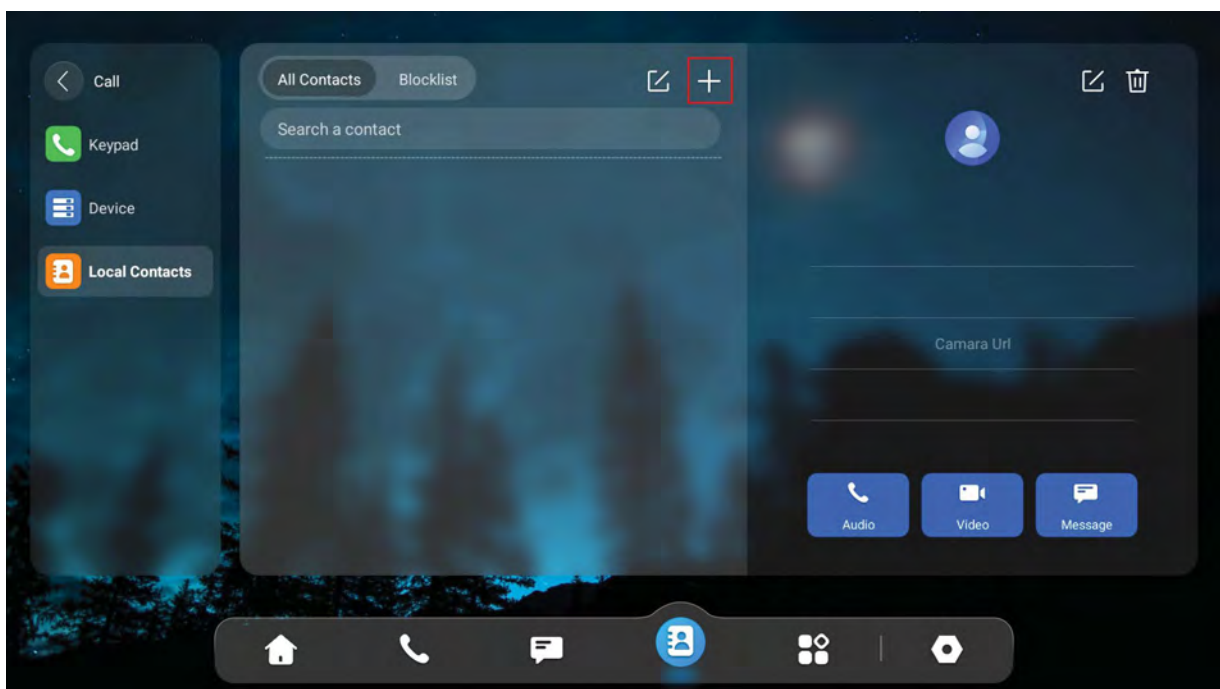
The local contact information is used to initiate SIP or IP calls to other intercom devices. You can group the contact information to facilitate group calls. Moreover, you can add the camera URL of the target device, allowing users to view its live stream during a call or a call preview.

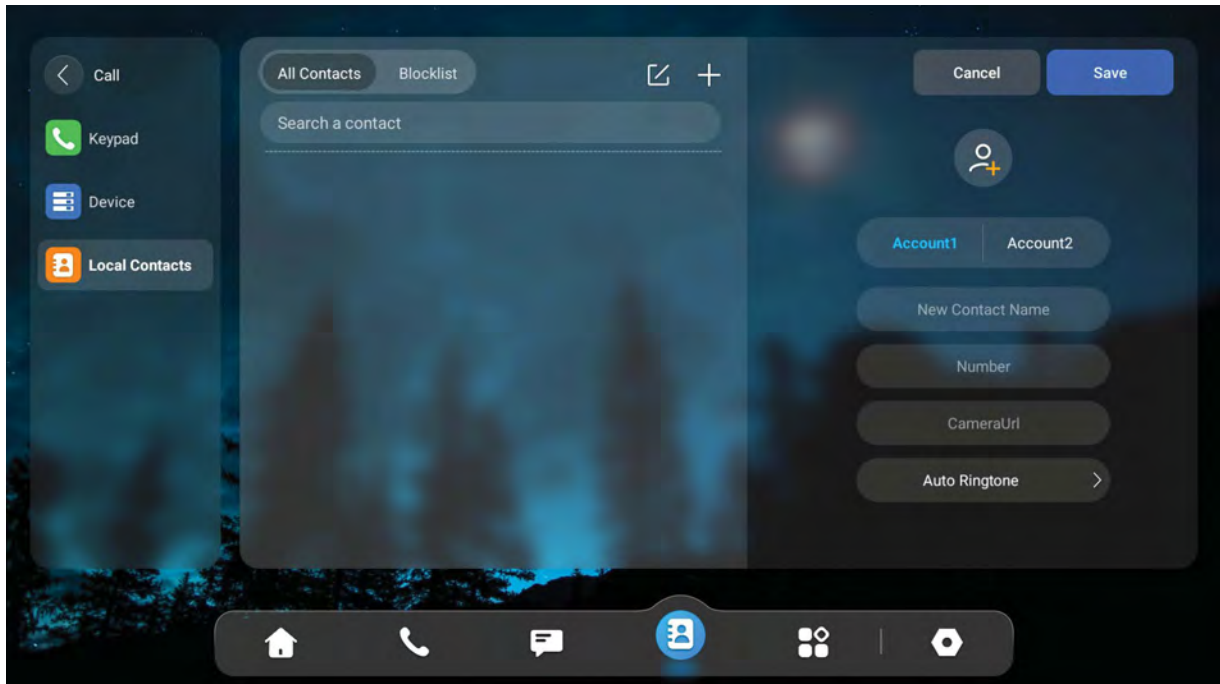
On the Device

You can add, edit, and delete contacts on the device's **Contacts > Local Contacts** screen directly.

Add Local Contact

Tap the **Add** icon to add a contact. You can add 3,000 local contacts or more.





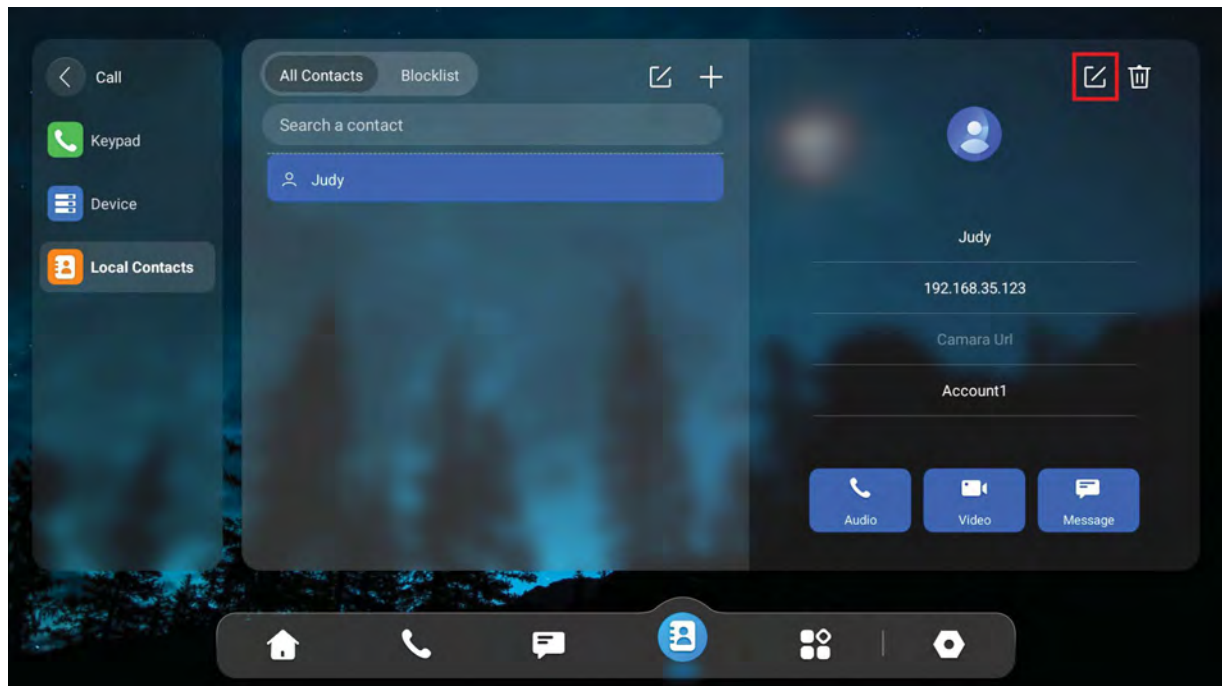
- **Account:** The account to make the call, Account 1 or Account 2.
- **New Contact Name:** Name the contact to distinguish it from others.
- **Number:** The IP or SIP number.
- **CameraUrl:** The RTSP URL for video preview.
- **Auto Ringtone:** The ringtone for incoming calls.

Note

Akuvox devices' RTSP URL format is *rtsp://device IP/live/ch00_0*. If you use a third-party device, please confirm the URL format with the service provider.

Edit Contact

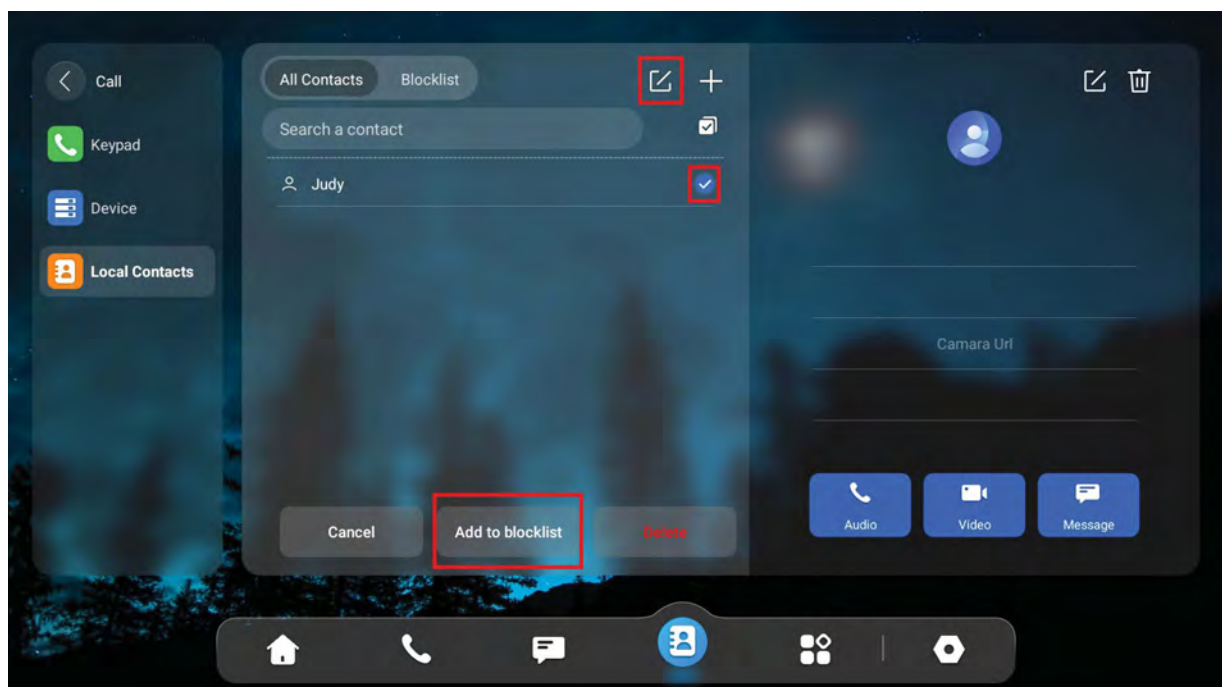
You can check and edit the existing contacts in the contacts list. Tap the contact and tap the **Edit** icon.



Blocklist Contacts

You can choose from the contact list the contact you want to add to the block list.

Incoming calls from the contacts in the blocklist will be rejected. Press the **Edit** icon, select the contact, and press **Add To blocklist**.



Note

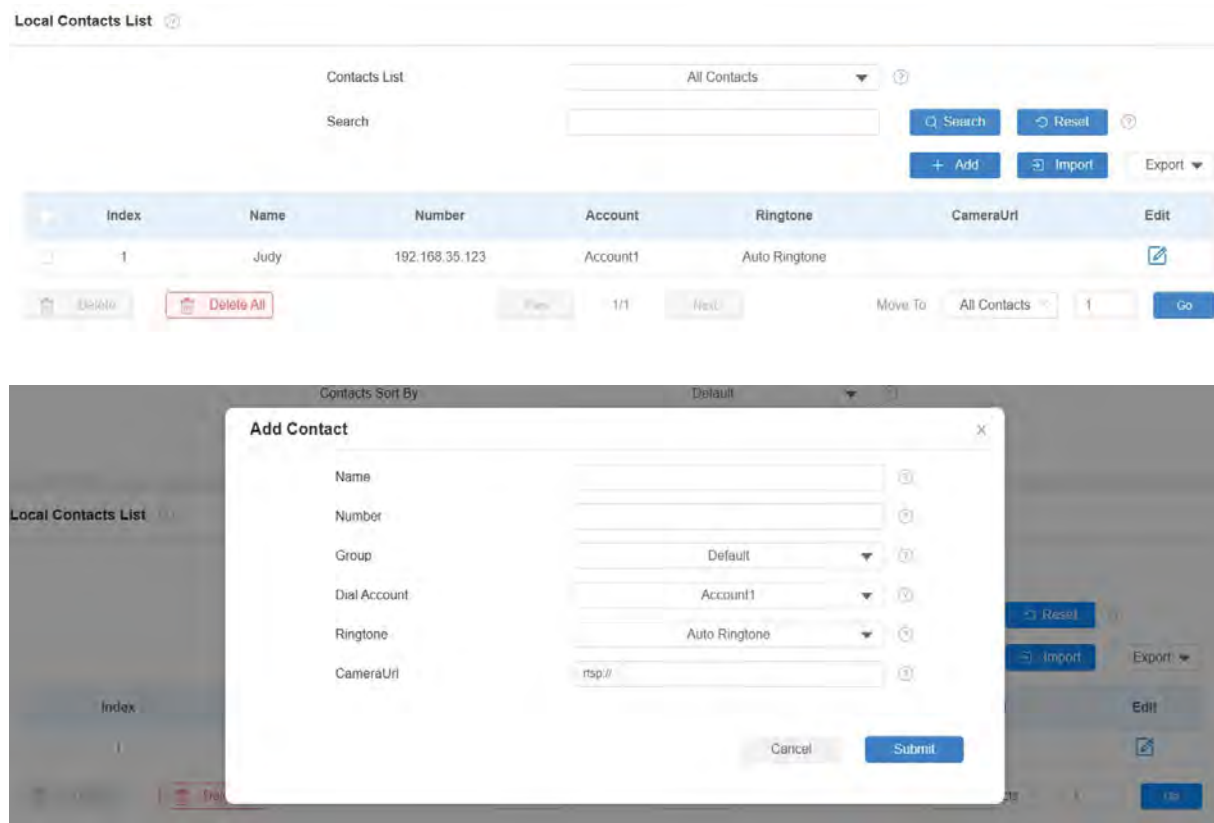
You can delete contacts regardless of whether it is in blocklist.

On the Web Interface

Add Local Contacts

You can add, edit, and search local contacts on the device's web interface.

To add contacts, go to **Contacts > Local Contacts > Local Contacts List** interface, then click **+Add**. You can add 3,000 local contacts or more.



- **Contacts List: All Contacts** displays all the contacts in the contact list. **Blocklist** displays the contacts in the blocklist.
- **Search:** Search for a contact by its name or number.
- **Name:** The contact's name to distinguish it from others.
- **Number:** The SIP or IP number of the contact.
- **Group:** Calls from contacts in the **Blocklist** will be rejected.
- **Dial Account:** The account to make the call, Account 1 or Account 2.
- **Ringtone:** The ringtone for the incoming call from the contact.
- **CameraUrl:** The RTSP URL for video preview. Akuvox devices' RTSP URL format is *rtsp://device IP/live/ch00_0*. If you use a third-party device, please confirm the URL format with the service provider.

Note

If you want to remove the contact from the blocklist on the web interface, you can change the group to Default when editing the contact.

Import and Export Contacts

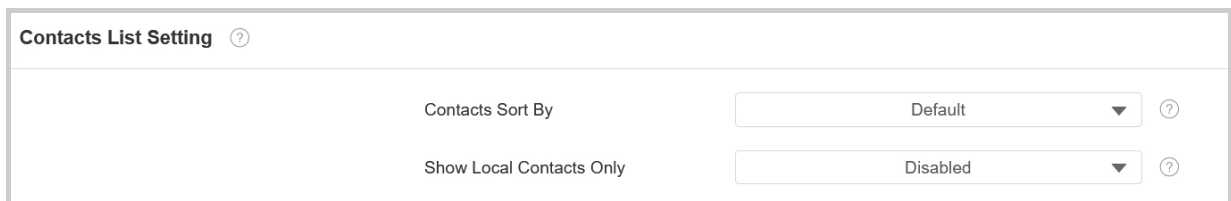
You can import and export contacts in batches. The file should be in .xml or .csv format.

To import or export contacts, go to **Contacts > Local Contacts > Local Contacts List** interface.



Contact List Display

Set it up on the web **Contacts > Local Contacts > Contacts List Setting** interface.



- **Contacts Sort By:**
 - **Default:** The local contacts will be displayed before those from SmartPlus, SDMC, etc.
 - **ASCII Code:** The contacts will be displayed in order based on the first letter of the contact names.
 - **Created Time:** The contacts will be displayed by their created time.
- **Show Local Contacts Only:** If enabled, only the local contacts will be displayed. If disabled, all the contacts from SmartPlus Cloud, SDMC, and so on will be displayed.

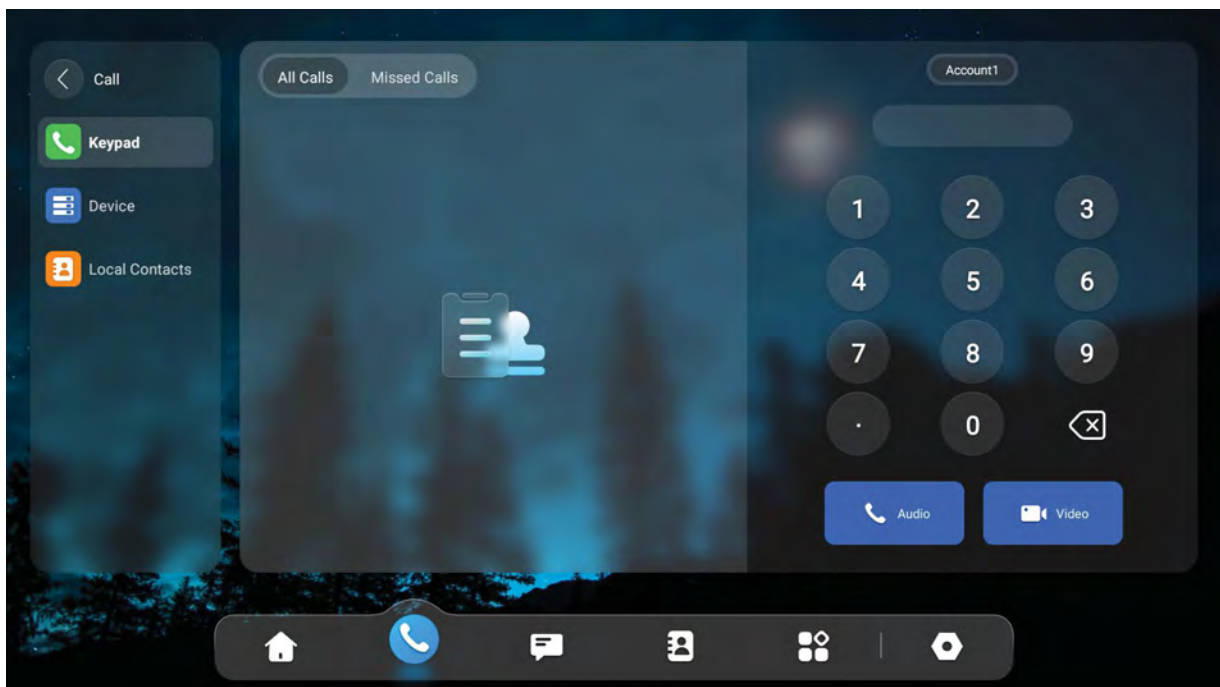
Intercom Call Configuration

IP Call Configuration

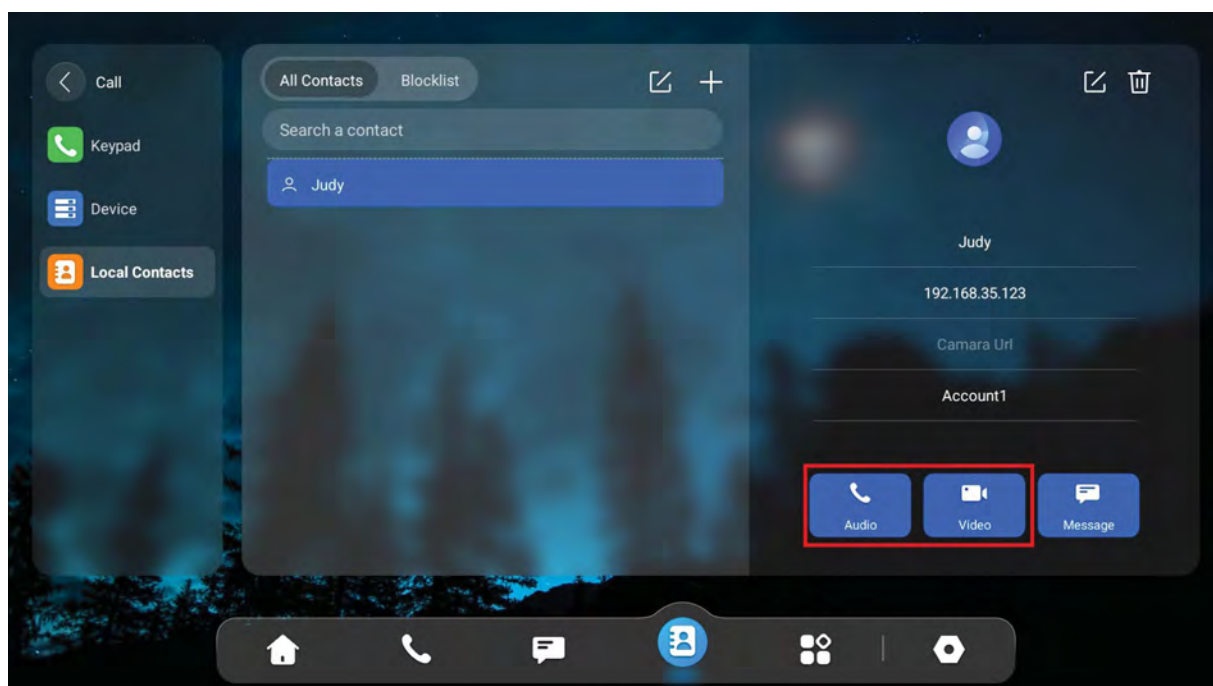
An IP call is a direct call between two intercom devices using their IP addresses, without a server or a PBX. IP calls work when the devices are on the same network.

Make IP Calls

Make a direct IP call on the device **Call > Keypad** screen. Enter the IP address, e.g., 192.168.35.123, on the soft keyboard and press the **Audio** or **Video** tab to call out.



In addition, you can also make IP calls on the **Contacts > Local Contacts** screen.



IP Call Setup

To configure the IP call feature and port, go to the web **Device > Call Feature > Others** interface.

Others ?

Return Code When Refuse	486(Busy Here)	?
Auto Answer Delay	0	(0-30s) ?
Answer Mode	Video	?
Answer Tone	Enabled	?
Busy Tone	☒	?
Indoor Auto Answer	☐	?
Auto Hang Up	☐	?
Direct IP Call	☒	?
Direct IP Call Port	5060	(1-65535) ?
Local Relay1 Trigger By Incoming	Enabled	?
Local Relay2 Trigger By Incoming	Enabled	?

- **Direct IP Call:** If you do not allow direct IP calls to be made on the device, you can untick the check box to terminate the function.
- **Direct IP Call Port:** Set the port for direct IP calls. The default is 5060, with a range from 1-65535. If you enter a value within this range other than 5060, ensure consistency with the corresponding device for data transmission.

SIP Call Configuration

Session Initiation Protocol(**SIP**) is a signaling transmission protocol used for initiating, maintaining, and terminating calls.

A SIP call uses SIP to send and receive data between SIP devices, and can use the internet or a local network to offer high-quality and secure communication. Initiating a SIP call requires a SIP account, a SIP address for each device, and configuring SIP settings on the devices.

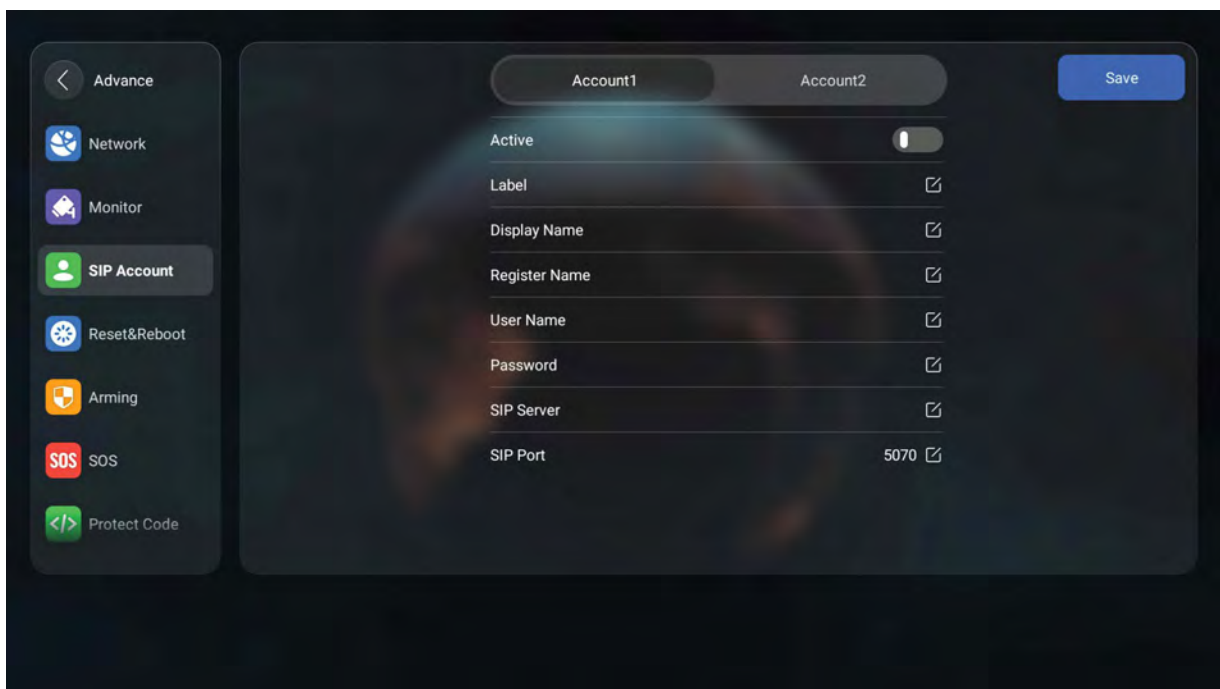
SIP Account Registration

Each device needs a SIP account to make and receive SIP calls.

Akuvox intercom devices support the configuration of two SIP accounts, which can be registered under two independent servers.

Click [here](#) to view the SIP account registration example.

On the device screen, navigate to **Settings > Advance > SIP Account** screen.



The SIP account registration can also be configured on the device web **Account > Basic > SIP Account** interface.

SIP Account ?

Status	Disabled	?
Account	Account1 ▼	?
Account Enabled	☐	?
Display Label		?
Display Name		?
Register Name		?
Username		?
Password	•••••	?

- **Account 1/Account 2:** The device supports 2 SIP accounts.
 - Account 1 is the default account for call processing. Also, it will be utilized when the Akuvox SmartPlus Cloud service is activated.
 - The system switches to Account 2 if Account 1 is not registered.
- **Active:** Check to activate the registered SIP account.
- **Display Label:** The label of the device.
- **Display Name:** The designation for Account 1 or 2 to be shown on the device itself on the calling screen.
- **Register Name:** Same as the username from the PBX server.
- **Username:** Same as the username from the PBX server for authentication.
- **Password:** Same as the password from the PBX server for authentication.

Tip

When the device is connected to the SmartPlus Cloud, the display label, register name, and username will show its SIP number.

SIP Server Configuration

SIP servers enable devices to establish and manage call sessions with other intercom devices using the SIP protocol. They can be third-party servers or built-in PBX in Akuvox indoor monitor.

To set it up, go to **Settings > Advance > SIP Account** screen or navigate to the web **Account > Basic > SIP Account** interface.



SIP Server ?

Server Address		?
Sip Server Port	5060	(1024-65535) ?
Registration Period	1800	(30-65535S) ?

- **Server Address:** Enter the server's IP address or its domain name.
- **SIP Server Port:** Specify the SIP server port for data transmission.
- **Registration Period:** Define the time limit for SIP account registration. Automatic re-registration will initiate if the account registration fails within this specified period.

Outbound Proxy Server

An outbound proxy server receives and forwards all requests the designated server. It is an optional configuration, but if set it up, all future SIP requests get sent there in the first instance.

To set it up, navigate to **Account > Basic** interface.

- **Preferred Outbound Proxy Server:** Enter the SIP proxy IP address.
- **Preferred Outbound Proxy Server Port:** Set the port for establishing a call session via the outbound proxy server.
- **Alternate Outbound Proxy Server:** Enter the SIP proxy IP address to be used when the main proxy malfunctions.
- **Alternate Outbound Proxy Server Port:** Set the proxy port for establishing a call session via the backup outbound proxy server.

SIP Call DND & Return Code Configuration

The Do Not Disturb(**DND**) feature prevents unwanted incoming SIP calls, ensuring uninterrupted focus. It also allows you to set a code to be sent to the SIP server when rejecting a call.

To set it up, go to **Device > Call Feature > DND** interface.

- **DND:** Check **Whole Day** or **Schedule** to enable the DND function. The DND function is disabled by default.
- **Schedule:** Determine the DND period by selecting DND Start Time and DND End Time.
- **Return Code When DND:** Specify the code sent to the caller via the SIP server when rejecting an incoming call in DND mode.

Device Local RTP

Real-time Transport Protocol(**RTP**) lets devices stream audio and video data over a network in real time.

To use RTP, devices need a range of ports. A port is like a channel for data on a network. By setting up RTP ports on your device and router, you can avoid network interference and improve audio and video quality.

To set it up, go to the web **Network > Advanced > Local RTP** interface.

- **Starting RTP Port:** The port value to establish the start point for the exclusive data transmission range.
- **Max RTP port:** The port value to establish the endpoint for the exclusive data transmission range.

Data Transmission Type

Akuvox intercom devices support four data transmission protocols: **User Datagram Protocol(UDP)**, **Transmission Control Protocol(TCP)**, **Transport Layer Security(TLS)**, and **DNS-SRV**.

To set it up, go to the web **Account > Basic > Transport Type** interface.

- **UDP:** An unreliable but very efficient transport layer protocol. It is the default transport protocol.
- **TCP:** A less efficient but reliable transport layer protocol.
- **TLS:** An encrypted and secure transport layer protocol. Select this option if you wish to encrypt the SIP messages for enhanced security or if the other party's server uses TLS. To use it, you need to [upload certificates for authentication](#).
- **DNS-SRV:** A DNS service record defines the location of servers. This record includes the hostname and port number of the server, as well as the priority and weight values that determine the order and frequency of using the server.

SIP Hacking Protection

Internet phone eavesdropping is a network attack that allows unauthorized parties to intercept and access the content of the communication sessions between intercom users. This can expose sensitive and confidential information to the attackers. SIP hacking protection is a technique that secures SIP calls from being compromised on the Internet.

To set it up, go to the web **Account > Advanced > Call** interface.

Call ⓘ

Max Local SIP Port

5062

(1024-65535) ⓘ

Min Local SIP Port

5062

(1024-65535) ⓘ

Auto Answer

☐

ⓘ

Prevent SIP Hacking

☐

ⓘ

- **Prevent SIP Hacking:** Activate this feature to only receive calls from contacts in the whitelist. This protects users' private and secret information from potential hackers during SIP calls.

Call Settings

Auto-answer Configuration

Auto-answer feature allows the device to automatically pick up incoming calls without any manual intervention. You can also customize this feature by setting the time duration for auto-answering and choosing the communication mode between audio and video.

To enable the auto-answer feature, go to the web **Account > Advanced > Call** interface.

Call

Max Local SIP Port	5062	(1024-65535)
Min Local SIP Port	5062	(1024-65535)
Auto Answer	☒	
Prevent SIP Hacking	Enabled	

To set it up, go to the web **Device > Call Feature > Others** interface.

Others

Return Code When Refuse	486(Busy Here)
Auto Answer Delay	0 (0-30s)
Answer Mode	Video
Answer Tone	Enabled
Busy Tone	☒
Indoor Auto Answer	☐
Auto Hang Up	☐
Direct IP Call	☒
Direct IP Call Port	5060 (1-65535)
Local Relay1 Trigger By Incoming	Enabled
Local Relay2 Trigger By Incoming	Enabled

- **Auto Answer Delay:** Set the time interval for the call to be automatically picked up after ringing. For example, if you set the delay time to 5 seconds, the device will answer the call automatically after 5 seconds.
- **Answer Mode:** Determine to auto-answer the call as a video or audio call.
- **Answer Tone:** Select the tone for answering calls automatically.

- **Indoor Auto Answer:** Allow calls from other indoor monitors to be answered by the device automatically.

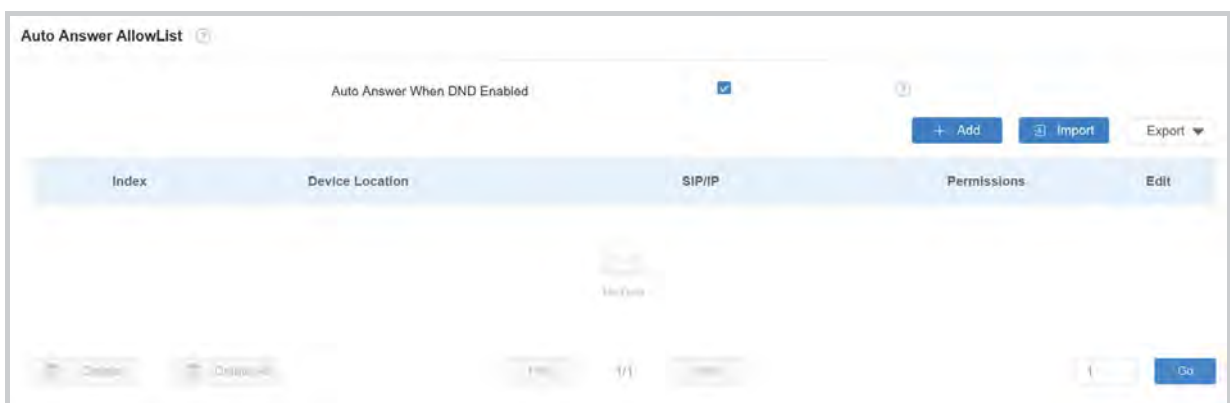
Other Options:

- **Return Code When Refuse:** Decide the code sent to the caller side via the SIP server when rejecting the incoming call.
- **Busy Tone:** Decide whether to sound a busy tone when a call is hung up by the callee.
- **Auto Hang Up:** Set whether to hang up the incoming calls automatically.
- **Local Relay 1/2 Trigger By Incoming:** Set whether to trigger the local relay by incoming calls.

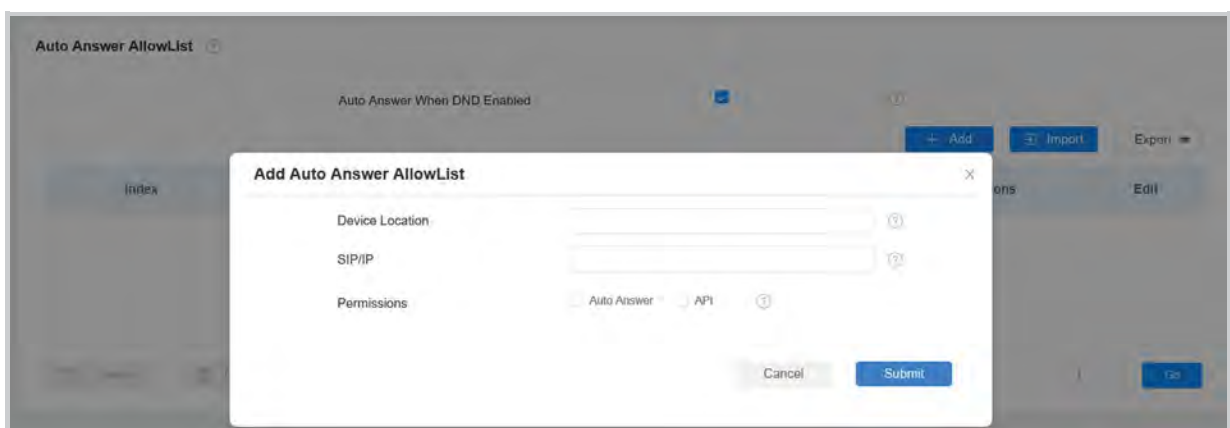
Auto-answer Allow List

Auto-answer can only be applicable to the SIP or IP numbers that are already added in the auto-answer allow list of your indoor monitor. Therefore, you are required to configure or edit the numbers in the allow list on the web interface.

To set it up, go to the **Security > Allowlist** interface. Click **+Add** to add the allowed device.



- **Auto Answer When DND Enabled:** Indicate that the auto-answer feature is effective when DND is turned on.

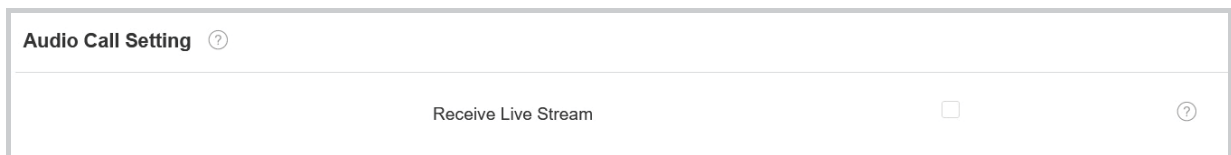


- **Device Location:** Specify the allowed device's name or location.
- **SIP/IP:** Enter the allowed device's SIP or IP number.
- **Permissions:**
 - **Auto Answer:** The call from the device will be answered automatically.
 - **API:** The device is allowed to access API.

Live Stream

The Receive Live Stream function enables the indoor monitor to view the one-way video stream from the calling party, regardless of whether the call is audio or video. Meanwhile, the video feed from the indoor monitor is not transmitted to the calling device, protecting the privacy.

To set it up, go to the web **Device > Call Feature > Audio Call Setting** interface.



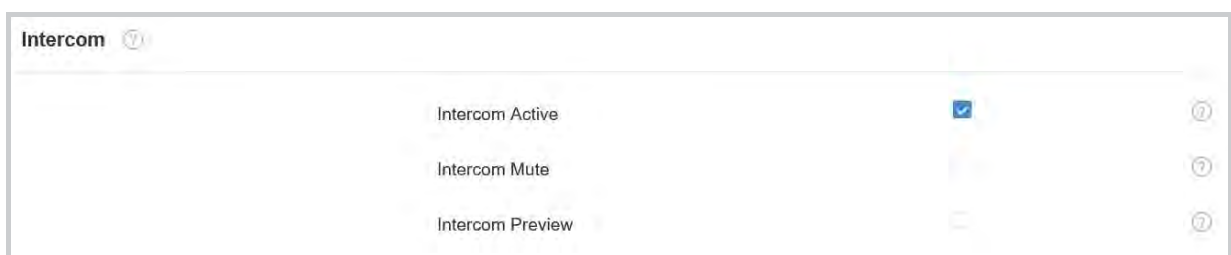
The screenshot shows the 'Audio Call Setting' interface. At the top, there is a title bar with 'Audio Call Setting' and a help icon. Below the title bar, there is a section titled 'Receive Live Stream' with a toggle switch that is currently turned off. To the right of the toggle switch is a help icon.

When it is enabled, calling parties cannot see users when they want to have a two-way video call with users. See the details below:

- If an incoming call is received on an audio basis on the indoor monitor, the user can still see the video image of the calling party, while the calling party cannot see the user's. Thus, it protects the user's privacy.
- If an incoming call is received on a video basis on the indoor monitor, the user and the calling party can see each other in the two-way video call.

Intercom Active, Mute, and Preview

To see the image at the door station before answering the incoming call, you can enable the intercom preview function on web **Device > Intercom > Intercom** interface.



The screenshot shows the 'Intercom' interface. At the top, there is a title bar with 'Intercom' and a help icon. Below the title bar, there is a table with three rows of settings. The first row is 'Intercom Active' with a checked checkbox and a help icon. The second row is 'Intercom Mute' with an unchecked checkbox and a help icon. The third row is 'Intercom Preview' with an unchecked checkbox and a help icon.

- **Intercom Active:** It is enabled by default.
- **Intercom Mute:** Mute the voice from the callee's side.
- **Intercom Preview:** Enable the incoming call preview. If it is enabled, the group call is not available.

Note

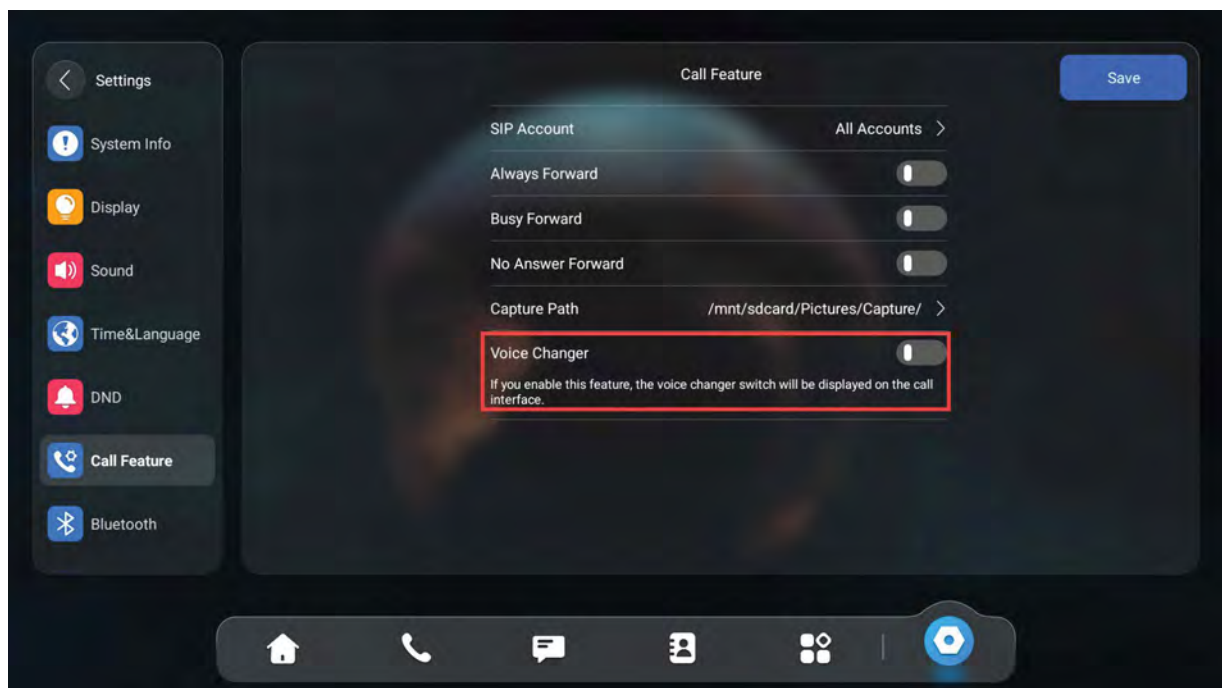
Enabling **Intercom Preview** option or not depends on whether the other party features RTSP.

- For devices without RTSP: Enable this option. The indoor monitor will automatically answer incoming calls and display the live stream on the preview screen.
- For devices with RTSP: Disable this option, as RTSP already provides real-time audio and video for intercom preview.

Voice Changer

Voice changer ensures users' privacy and home security. For example, users(especially women and children) can protect themselves by changing their voices when talking to a stranger.

Set it up on the device **Settings > Call Feature** screen.



Emergency Call

The Emergency Call function is designed for urgent situations, particularly beneficial for the elderly and children. Users can display the SOS button on the indoor monitor's screen. When the button is pressed, the device automatically calls the designated emergency contacts, ensuring quick help when needed.

To display the emergency call softkey, navigate to the web **Device > Display Setting > More Page Display** interface.

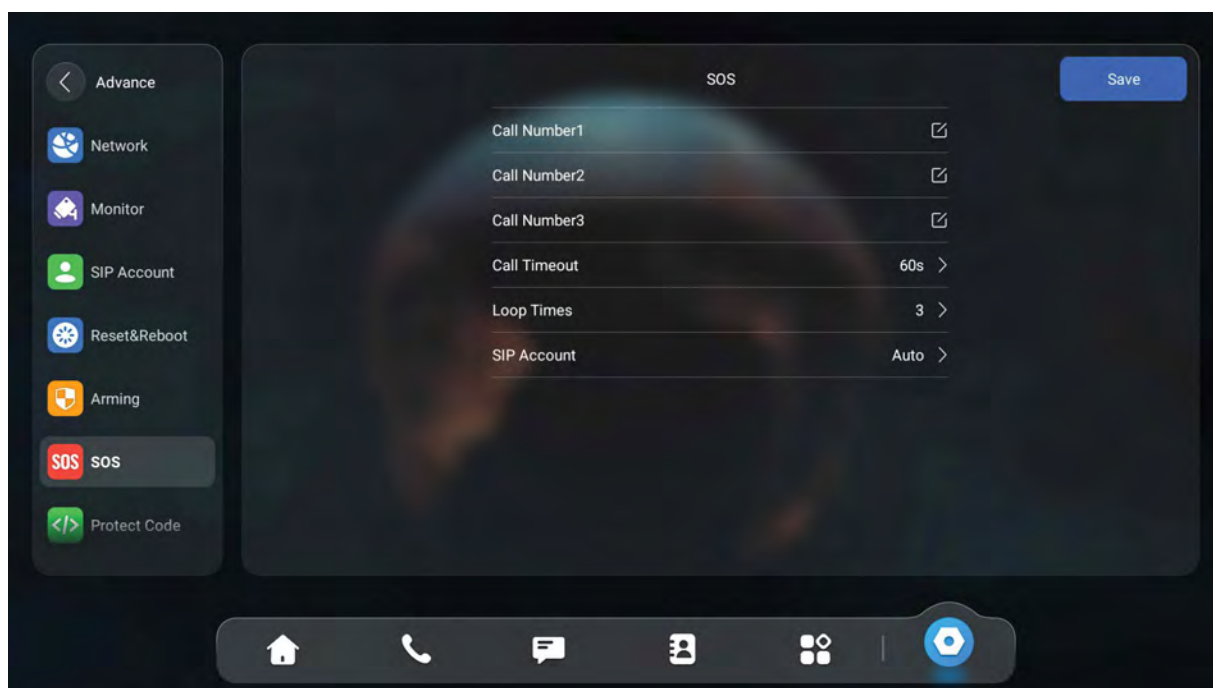
More Page Display ⓘ

Example

Area	Type	Value	Label	Type(max size:100*100)
Area1	SOS		SOS	Not selected any files Select File Delete
Area2	Arming			Not selected any files Select File Delete
Area3	Application			Not selected any files Select File Delete
Area4	DND			
Area5	Monitor		Monitor	Not selected any files Select File Delete
Area6	Sonos			Not selected any files Select File Delete
Area7	N/A			Not selected any files Select File Delete
Area8	N/A			Not selected any files Select File Delete

You also need to set up specific parameters on the device or the device web interface.

To set it up on the device, go to **Settings > Advance > SOS** screen.



To set it up on the web interface, go to **Device > Intercom > SOS** interface.

SOS ⓘ

Account	Auto	ⓘ
Call Number 1		ⓘ
Call Number 2		ⓘ
Call Number 3		ⓘ
Call Timeout	60	ⓘ
Loop Times	3	ⓘ

- **Call Number:** 3 SOS numbers can be set up. Once users press the SOS key on the home page, indoor monitors will call out the numbers in order.
- **Call Timeout:** The call duration for each number. When users call out and the other side does not answer within the timeout, indoor monitors will continue to call the next number.
- **Loop Times:** Set up the call loop times.
- **SIP Account:** The account to make SOS calls.

Multicast

The Multicast function allows one-to-many broadcasting for different purposes. For example, it enables the indoor monitor to announce messages from the kitchen to other rooms or to broadcast notifications from the management office to multiple locations. In these scenarios, indoor monitors can listen to or send audio broadcasts.

Click [here](#) to watch the demonstration video.

To set it up, go to the web **Device > Multicast** interface.

The screenshot shows two configuration sections: 'Multicast List' and 'Listen List'. Each section contains a table with three columns: 'Group', 'Address', and a status/label column.

Multicast Group	Multicast Address	Enabled
Multicast Group 1		
Multicast Group 2		
Multicast Group 3		

Listen Group	Listen Address	Label
Listen Group 1		
Listen Group 2		
Listen Group 3		

- **Multicast Address:** The multicast IP address is the same as the listen address.
- **Listen Address:** The listen address is the same as the multicast address.
- **Label:** The label name will be shown on the calling screen.

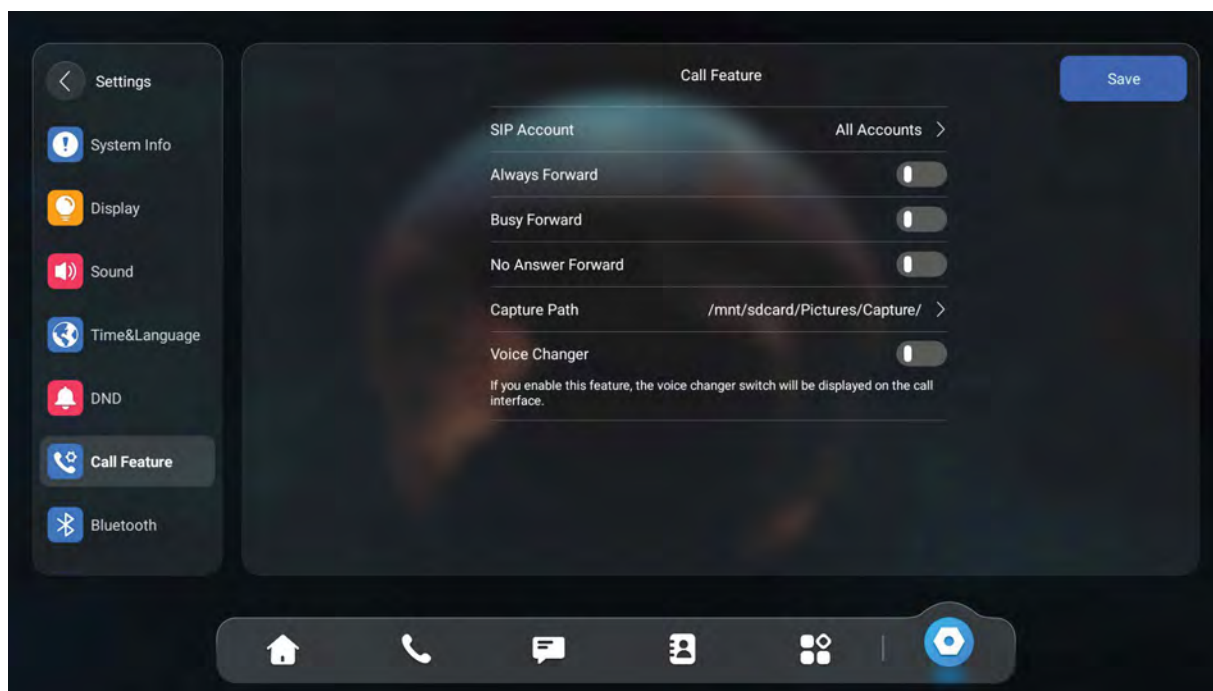
Note

The multicast address entered should be within the specific range and not all multicast IP addresses are valid. Please consult Akuvox tech team for more information.

Call Forwarding

Call Forward is a feature that allows for transferring incoming calls to another number. Users can set up call forwarding according to different situations, such as always forwarding calls, forwarding calls when the indoor monitor is busy, or when it doesn't pick up the call.

To set it up, go to the device **Settings > Call Feature** screen.



Or, set up the forward function on the web **Device > Call Feature > Call Forward** interface.

Call Forward ?

Account	All Accounts	?
Always Forward	Disabled	?
Busy Forward	Disabled	?
No Answer Forward	Disabled	?
No Answer Ring Time	30	?

- **SIP Account:** The account to implement the call forwarding feature.
- **Always Forward:** All incoming calls will be automatically forwarded to a specific number.
- **Busy Forward:** Incoming calls will be forwarded to a specific number if the device is busy.
- **No Answer Forward:** Incoming calls will be forwarded to a specific number if the call is not picked up within the no-answer ring time.
- **Target Number:** Specify the forward number when Always Forward, Busy Forward, or No Answer Forward is enabled.
- **No Answer Ring Time:** The time ranges from 0-120 seconds. This option is for No Answer Forward.

- **Capture Path:** The storage location for all the captured pictures.

Call Logs

To check calls—including dial-out, received, and missed calls—within a specific period, you can view the call log on the device's web interface. If needed, you can also export the call log from the device.

To set it up, go to the **Contacts > Call Logs** interface. The device supports 1,000 call logs or more.

Index	Type	Date	Time	Local Identity	Name	Number
1	Dialed	08-03-2024	2:21:31 AM	192.168.36.109@192.168.36.109	20	192.168.36.128@192.168.36.128
2	Dialed	08-03-2024	2:18:32 AM	192.168.36.109@192.168.36.109	20	192.168.36.128@192.168.36.128

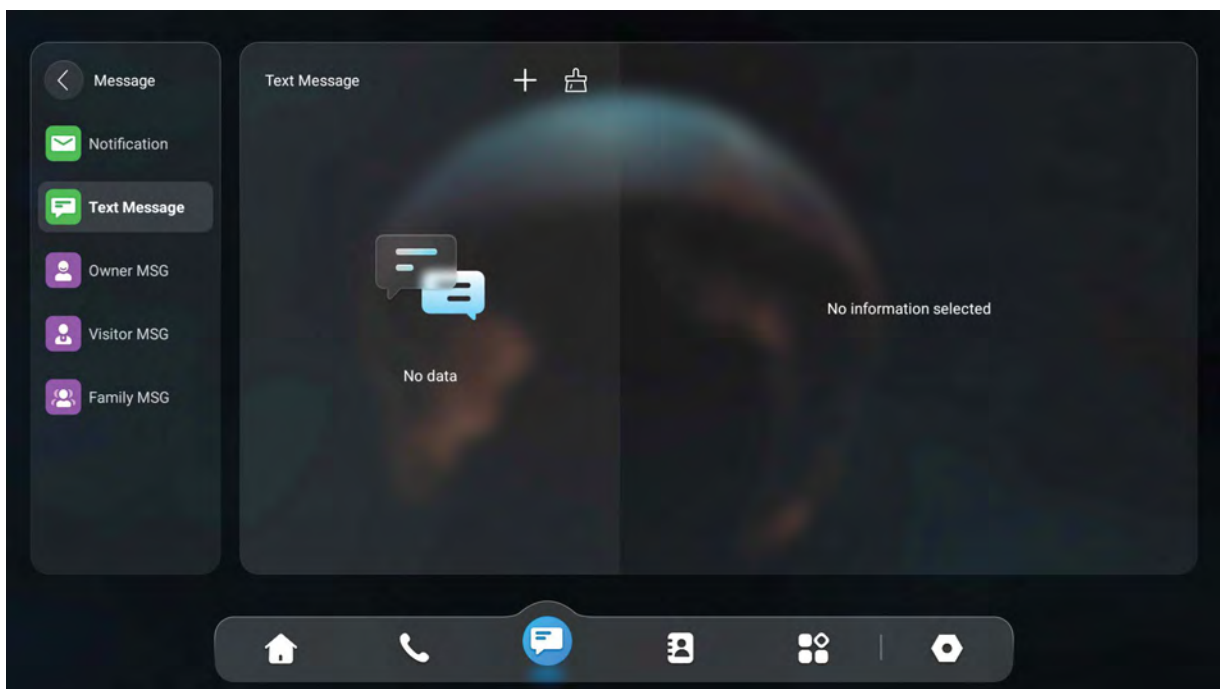
- **Capture Delay(Sec):** Set the image capturing starting time when the device goes into a video preview.
- **Upper Limit:** The maximum screenshot storage capacity. When the capacity reaches its limit, the previous screenshots will be overwritten.
- **Call History:** There are five types of call history, All, Dialed, Received, Missed, and Forwarded.
- **Local Identity:** Display the device's SIP account or IP number that receives incoming calls.

Intercom Messages

Manage Messages

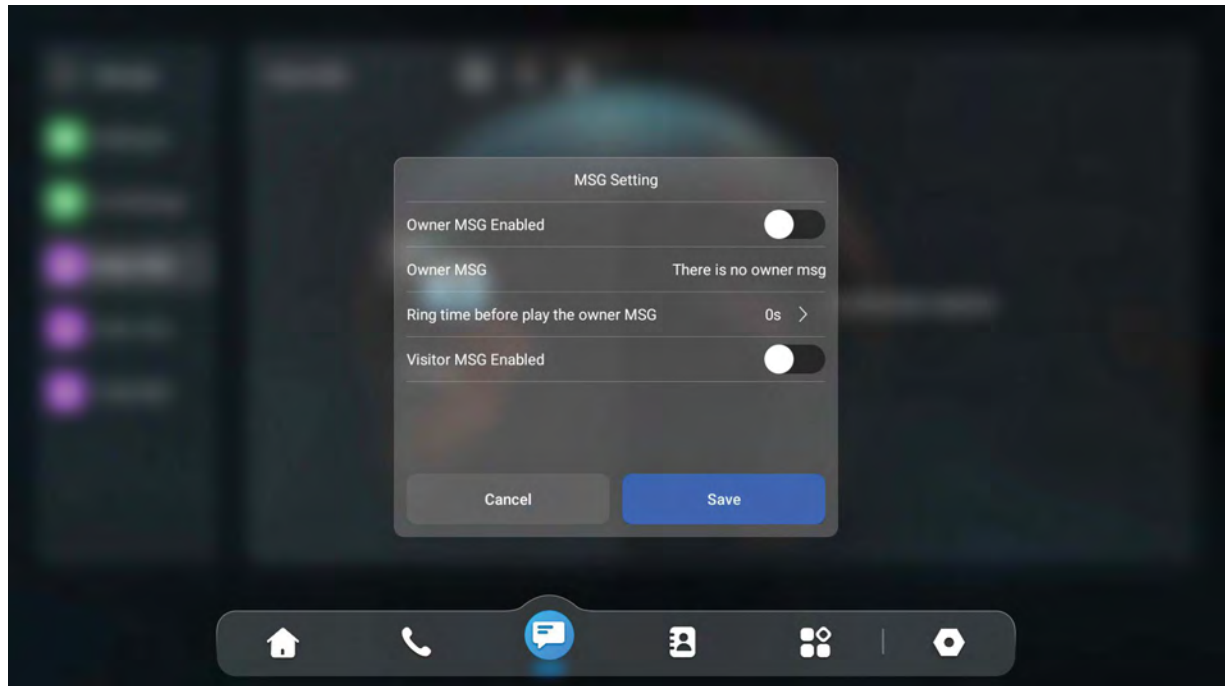
You can check, create and clear messages as needed on the device **Messages** screen.

Tap **+Add** to create a message and tap **Clear** to delete messages. The device supports 1,000 messages.



- **Notification:** The message from the property manager. This feature is only available when using SDMC or Akuvox SmartPlus.
- **Text Message:** To send, receive, or manage text messages here.
- **Owner MSG:** When nobody answers the incoming call within the pre-configured ring time, the visitor will hear the owner's audio message.
- **Visitor MSG:** When nobody answers the incoming call within the pre-set ring time, it will save the visitor record.
- **Family MSG:** Audio messages recorded for family members.

To configure ring time, press the **Settings** icon on the screen.



Audio and Video Codec for SIP Calls

Audio Codec

The indoor monitor supports eight types of codecs for encoding and decoding the audio data during the call session. Each type of codec varies in terms of sound quality. Higher bandwidth means the device can capture more detail, leading to clearer sound and higher sample rates capture more data, reducing distortion and preserving sound quality.

You can select the specific codec with different bandwidths and sample rates flexibly according to the actual network environment.

To set it up, go to the web **Account > Advanced** interface.



Please refer to the bandwidth consumption and sample rate for the codec types below:

Codec Type	Bandwidth Consumption	Sample Rate
PCMA	64 kbit/s	8kHz
PCMU	64 kbit/s	8kHz
G729	8 kbit/s	8kHz
G722	64 kbit/s	16kHz
iLBC_13_3	8,16 kbit/s	13.3kHz
iLBC_15_2	8,16 kbit/s	15.2kHz
OPUS	154.4 kbit/s	48kHz

Video Codec

The device supports VP8, H263, H264, and H265 codecs.

To set it up, go to the web **Account > Advanced > Video Codecs** interface. Choose an available video codec and set up the codec parameters.

Video Codecs ⓘ

2 items
Disabled Codecs

☐ H265
☐ VP8

2 items
Enabled Codecs

☐ H264
☐ H263

Video Codec ⓘ

Name	H263	ⓘ
Resolution	CIF	ⓘ
Bitrate	320	ⓘ
Payload	34	ⓘ
Name	H264	ⓘ
Resolution	CIF	ⓘ
Bitrate	320	ⓘ
Payload	104	ⓘ
Name	VP8	ⓘ
Resolution	CIF	ⓘ
Bitrate	320	ⓘ
Payload	96	ⓘ

- **Resolution:** Select the resolution from the provided options according to the network environment. The default is CIF(176×144 pixels).
- **Bitrate:** Select the video stream bitrate. It varies by the resolution.
- **Payload:** The payload ranges from 90-119 for the audio/video configuration file.

Access Control

Local Relay

A local relay is an external unit that is physically nearby and directly connected to the intercom device. It allows the intercom system to trigger actions, such as unlocking a door, based on user input or authorization.

To set it up, go to the web **Device > Relay > Relay Setting** interface.

Relay Setting ?

Local Relay	
Mode	Monostable ▼ ?
Hold Delay	3 ▼ ?
Relay Type	Open Door ▼ ?
Relay Name	Local Relay1 ?
Remote Control	Disabled ▼ ?
DTMF	?
Local Relay2	
Mode	Monostable ▼ ?
Hold Delay	3 ▼ ?
Relay Type	Open Door ▼ ?
Relay Name	Local Relay2 ?
Remote Control	Disabled ▼ ?
DTMF	?

- **Mode:** Specify the conditions for automatically resetting the relay status.
 - **Monostable:** After activation, the relay status resets automatically after the Hold Delay time.
 - **Bistable:** The relay status resets upon triggering it again. This keeps the relay activated until it receives a new command, including receiving an HTTP command, DTMF code, and any event selected in the **Relay Type** drop-down menu.
- **Hold Delay:** Available for **Monostable**. Determine how long the relay stays activated. For example, if set to 5 seconds, the relay remains to be opened for 5 seconds before closing.
- **Relay Type:**

- **Open Door:** The relay is triggered when users open the door such as by pressing the Unlock key and remotely opening via an HTTP command. In this case, the relay trigger time is not limited to the **Hold Delay**.

Tip

The relay can be connected to an alarm sensor and triggered alongside it. In this case, **Hold Delay** takes effect.

- If the alarm is cleared before the Hold Delay, the relay resets immediately.
 - If the alarm is cleared after the Hold Delay, the relay resets based on the Hold Delay time.
 - If Hold Delay is set to "Never", the relay resets instantly the alarm is cleared.
- **Chime Bell:** The relay is triggered when the indoor monitor receives calls and the doorbell rings.
 - When the call is picked up, rejected, or hung up, the relay resets.
 - The relay trigger time is not limited to Hold Delay when the doorbell rings. It follows the settings on the Doorbell screen.
 - **Other Switches(Reset By Event):** The relay resets after the triggered event is dealt with.
 - **Relay Name:** Assign a distinct name for identification purposes.
 - **Remote Control:** Enable it to trigger local relay by DTMF.
 - **DTMF:** The DTMF code to trigger the local relay.

Remote Relay

You can use the unlock tab during the call to open the door, and configure this feature on web **Device > Relay > Relay Setting > Remote Relay** interface. You are required to set up the same DTMF code in the door phone and indoor monitor.

Local Relay2	
Mode	Monostable ?
Hold Delay	3 ?
Relay Type	Open Door ?
Relay Name	Local Relay2 ?
Remote Control	Disabled ?
DTMF	?

Remote Relay	
DTMF Code1	0 ?
DTMF Code2	1 ?
DTMF Code3	2 ?

- **DTMF Code:** Define the DTMF code within the range(0-9 and *,#) for the remote relay.

Web Relay

A web relay has a built-in web server and can be controlled via the Internet or a local network. The device can use a web relay to either control a local relay, or a remote relay somewhere else on the network.



Click [here](#) to view how to set up web relay.

To set it up, go to the web **Device > Relay > Web Relay** interface.

Web Relay

IP Address

Username

Password

Web Relay Action Setting

Action ID	IP	SIP	Web Relay Action
Action ID 1			
Action ID 2			
Action ID 3			
Action ID 4			
Action ID 5			

- **IP Address:** The web relay IP address provided by the web relay manufacturer.
- **Username:** The user name provided by the web relay manufacturer.
- **Password:** The manufacturer-provided authentication key for the web relay. Authentication occurs via HTTP. Leaving the Password field blank indicates non-use of HTTP authentication. You can define the password using HTTP GET in the Web Relay Action field.
- **IP/SIP:** The relay extension information, which can be an IP address or SIP account of an intercom device such as an indoor monitor, so that the specific action command will be sent when unlock is performed on the intercom device. This setting is optional.
- **Web Relay Action:** Configure the actions to be performed by the web relay upon triggering. Enter the manufacturer-provided URLs for various actions.

Note

If the URL includes full HTTP content(e.g., <http://admin:admin@192.168.1.2/state.xml?relayState=2>), it doesn't rely on the IP address that you entered above. However, if the URL is simpler (e.g., "state.xml?relayState=2"), the relay uses the entered IP address.

Door-opening Configuration

Unlock by DTMF Code

Dual-tone multi-frequency signaling(**DTMF**) is a way of sending signals over phone lines by using different voice-frequency bands. Users can use the DTMF function to unlock the door for visitors during a call by either typing the DTMF code on the soft keypad, or tapping the unlock tab with the DTMF code on the screen.

To set it up, go to **Device > Relay > Relay Setting** interface.

Relay Setting ?

Local Relay

Mode	Monostable	?
Hold Delay	3	?
Relay Type	Open Door	?
Relay Name	Local Relay1	?
Remote Control	Disabled	?
DTMF		?

Local Relay2

Mode	Monostable	?
Hold Delay	3	?
Relay Type	Open Door	?
Relay Name	Local Relay2	?
Remote Control	Disabled	?
DTMF		?

Remote Relay

DTMF Code1	0	?
DTMF Code2	1	?
DTMF Code3	2	?

DTMF Transport Type

In order to achieve door access via DTMF code or some other applications, you are required to properly configure DTMF in order to establish a DTMF-based data transmission between the device and other intercom devices.

DTMF Type Differences:

Inband	DTMF signals are transmitted within the same audio channel as voice data. Simple implementation but signal distortion may occur with highly compressed codecs (e.g., G.729).
RFC2833	Transmits DTMF as special event packets over RTP (Real-Time Transport Protocol), known as out-of-band transmission. Reliable and unaffected by codecs.
Info	Sends DTMF signals via SIP (Session Initiation Protocol) signaling channel. Separate from voice transmission, ensuring audio quality.
Info+Inband	Combines Info and Inband methods.
Info+RFC2833	Combines both Info and RFC2833 methods.
Info+Inband+RFC2833	All three methods are used simultaneously.

To configure the DTMF code transport format, navigate to the web **Account > Advanced > DTMF** interface.

DTMF ?

Type	RFC2833 ?
DTMF Code Transport format	Disabled ?
Payload	101 (96~127) ?

- **Type:** Select from the provided options.
- **DTMF Code Transport Format:** There are four options, Disabled, DTMF, DTMF-Relay, and Telephone-Event. Configure it only when the third-party device that receives the DTMF code adopts the **Info** transport format. **Info** transfers the DTMF code via signaling while other transport format does it via RTP audio packet transmission. Select the DTMF transferring format according to the third-party device.
- **Payload:** It is for data transmission identification ranging from 96-127.

Note

To open the door with DTMF, the intercom devices that send and receive the unlock command must use the same mode and code. Otherwise, the DTMF unlock may fail. See [here](#) for the detailed DTMF configuration steps.

Unlock via HTTP Command

The device supports remote door unlocking via an HTTP command. Simply enable this feature and input the HTTP command(URL) for the device. This will trigger the relay and open the door, even if the users are away from the device.

To set it up, go to the web **Device > Relay > Open Relay via HTTP** interface.

Open Relay Via HTTP ⓘ

Switch

☒

?

Username

?

Password

?

Remote Open Relay Via HTTP AllowList

☒

?

1st IP

2st IP

3st IP

4st IP

5st IP

- **Username:** Set a username for authentication in HTTP command URLs.
- **Password:** Set a username for authentication in HTTP command URLs.
- **Remote Open Relay Via HTTP AllowList:** Enable it and type in the IP address of the server that you allow to send the HTTP command to the indoor monitor and trigger the local relay.

You can also set up HTTP commands to remotely control relays connected to door phones, go to the web **Device > Relay > Remote Relay By HTTP** interface.

Remote Relay By HTTP ⓘ

	Index	IP/SIP	URL	Username	Password	Door Num
	1					1 x 2 x 3 x 4 x
	2					1 x 2 x 3 x 4 x
	3					1 x 2 x 3 x 4 x
	4					1 x 2 x 3 x 4 x
	5					1 x 2 x 3 x 4 x
	6					1 x 2 x 3 x 4 x
	7					1 x 2 x 3 x 4 x
	8					1 x 2 x 3 x 4 x
	9					1 x 2 x 3 x 4 x
	10					1 x 2 x 3 x 4 x

Delete
Delete All

- **IP/SIP:** Specify the IP or SIP number of the door phone.
- **URL:** Enter the HTTP URL.
- **Username:** Enter the username the same as that is configured on the door phone's web interface.

- **Password:** Enter the password the same as that is configured on the door phone's web interface.

Tip

Here is an HTTP command URL example for relay triggering.

Door phone's IP **Preset credentials for authentication**
http://192.168.35.127/fcgi/do?action=OpenDoor&UserName=admin&Password=12345&DoorNum=1
ID of Relay to be triggered

Note

The HTTP format for relay triggering varies depending on whether the device's high secure mode is enabled. Please refer to this how-to guide [Opening the Door via HTTP Command](#) for more information.

Remote Control

The device can scan other intercom devices on the same LAN. You can redirect to their web interfaces for configuration.

Set it up on the **Device > Remote Control** interface.

Remote Control ⓘ

IP Address ⓘ

Port ⓘ (80,443,1024-65534) ⓘ

Remote Control

Device List ⓘ

Index	Device Name	Device Type	MAC Address	IP Address	Port	Remote Control
No Data						

1/1

1/1

1

Go

- **IP Address:** The IP address of the device to be accessed remotely.
- **Port:** The port of the device to be accessed remotely.
- **Remote Control:** Click to redirect to the device's web interface.

Security

Monitor and Image

Monitor Setting

You can add multiple video streams using RTSP. To set it up, go to the **Device > Monitor** interface.

Monitor Setting ?

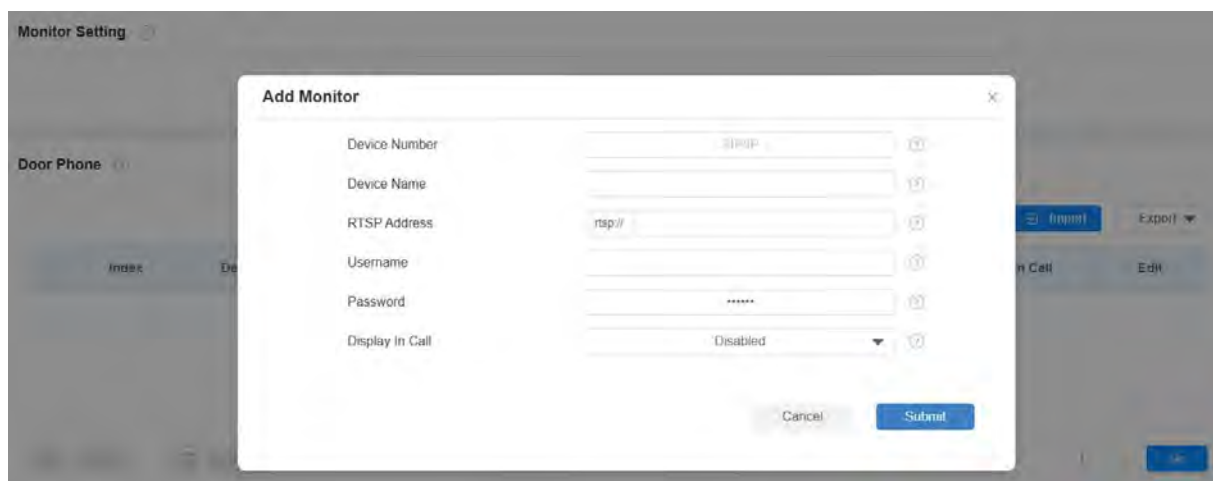
Monitor Display

Adaptive Multiple Windows ▼ ?

- **Monitor Display:**
 - **Adaptive Multiple Windows:** Display the monitor channels based on the number of added monitoring devices.
 - **Single Window:** Display only one video monitoring channel.
 - **Four/Nine/Sixteen/Twenty-five Windows:** Display 4/9/16/25 monitoring channels.

On the **Device > Monitor > Door phone** section, click **+Add** to add a monitor. The device supports displaying 25 monitoring channels at the same time.



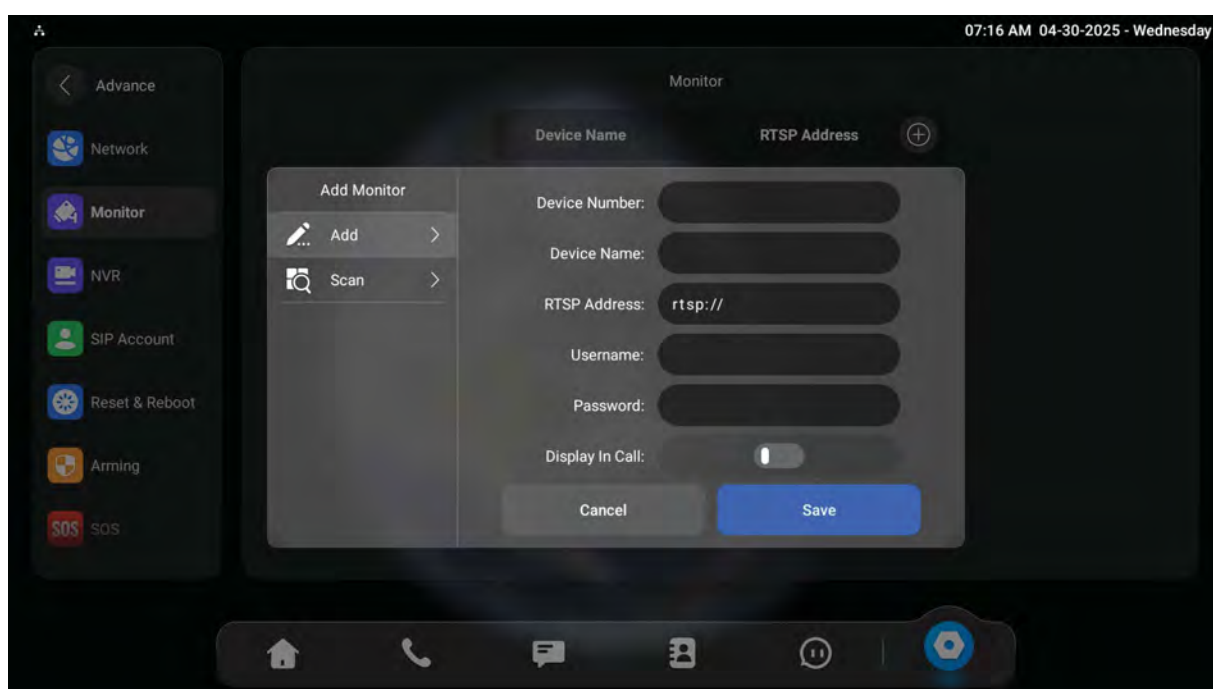


- **Device Number:** The device's SIP/IP number for identification.
- **Device Name:** The device name for identification.
- **RTSP Address:** The RTSP address of the monitoring device. RTSP format: *rtsp://Device IP address/live/ch00_0*.
- **Username:** The username of the monitoring device for authentication.
- **Password:** The password of the monitoring device for authentication.
- **Display In Call:** Enable it to display the monitoring video during a call.

Note

You can import and export the monitoring device settings via a template in .xml format.

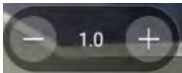
You can also set it up on the device **Settings > Advance > Monitor** screen. Tap the **Add** icon to add the monitor device.



- **Device Number:** The device's SIP/IP number for identification.
- **Device Name:** The device name for identification.
- **RTSP Address:** The RTSP address of the monitoring device. RTSP format: *rtsp://Device IP address/live/ch00_0.*
- **Username:** The username of the monitoring device for authentication.
- **Password:** The password of the monitoring device for authentication.
- **Display In Call:** Enable it to display the monitoring video during a call.
- **Scan:** Tap to scan monitors on the same LAN through ONVIF.

View Monitoring Streams

After adding the monitored device's RTSP URL, tap **Monitor** on the home screen and select the desired channel to view the stream.

You can zoom in and out of the video by tapping  in the upper right corner.



- **Unlock:** Tap to open the door.
- **Capture:** Tap to take a screenshot.
- **Cancel:** Tap to exit the monitoring.
- : Tap to display the monitor list.

RTSP Authentication

With RTSP authentication, users can monitor the indoor monitor via RTSP audio stream. This feature can be applied to, for example, listen to the baby in the baby's room for safety.

To set it up, go to **Settings > Basic** interface.

RTSP Setting ?

RTSP Audio Enable	Disabled ▼	?
Authorization Type	Digest	?
Username	admin	?
Password	*****	?

- **Authorization Type:** It is Digest by default.
- **Username:** Set the username for the authentication.
- **Password:** Set the password for the authentication.

Alarm and Arming Configuration

The Arming function is designed to enhance home security by offering three modes with custom zone settings for connected sensors. When armed, the device will sound a siren and notify specific people if a sensor detects something unusual.

Set up Location-based Alarm Sensors

To set up a location-based alarm sensor, go to the web **Arming > Zone Setting > Zone Setting** interface.

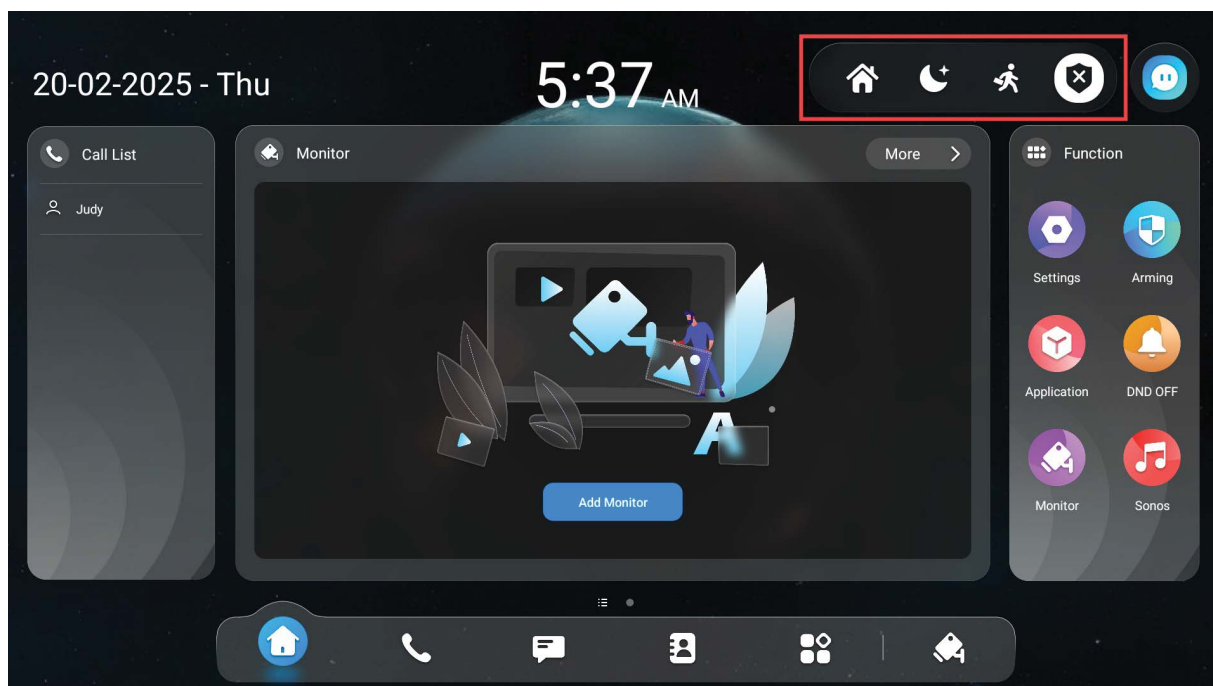
Zone Setting ?

Zone	Location	Zone Type	Trigger Mode	Status
Zone1	Bedroom ▼	Infrared ▼	NC ▼	Disabled ▼
Zone2	Bedroom ▼	Infrared ▼	NC ▼	Disabled ▼
Zone3	Bedroom ▼	Infrared ▼	NC ▼	Disabled ▼
Zone4	Bedroom ▼	Infrared ▼	NC ▼	Disabled ▼
Zone5	Bedroom ▼	Infrared ▼	NC ▼	Disabled ▼
Zone6	Bedroom ▼	Infrared ▼	NC ▼	Disabled ▼
Zone7	Bedroom ▼	Infrared ▼	NC ▼	Disabled ▼
Zone8	Bedroom ▼	Infrared ▼	NC ▼	Disabled ▼

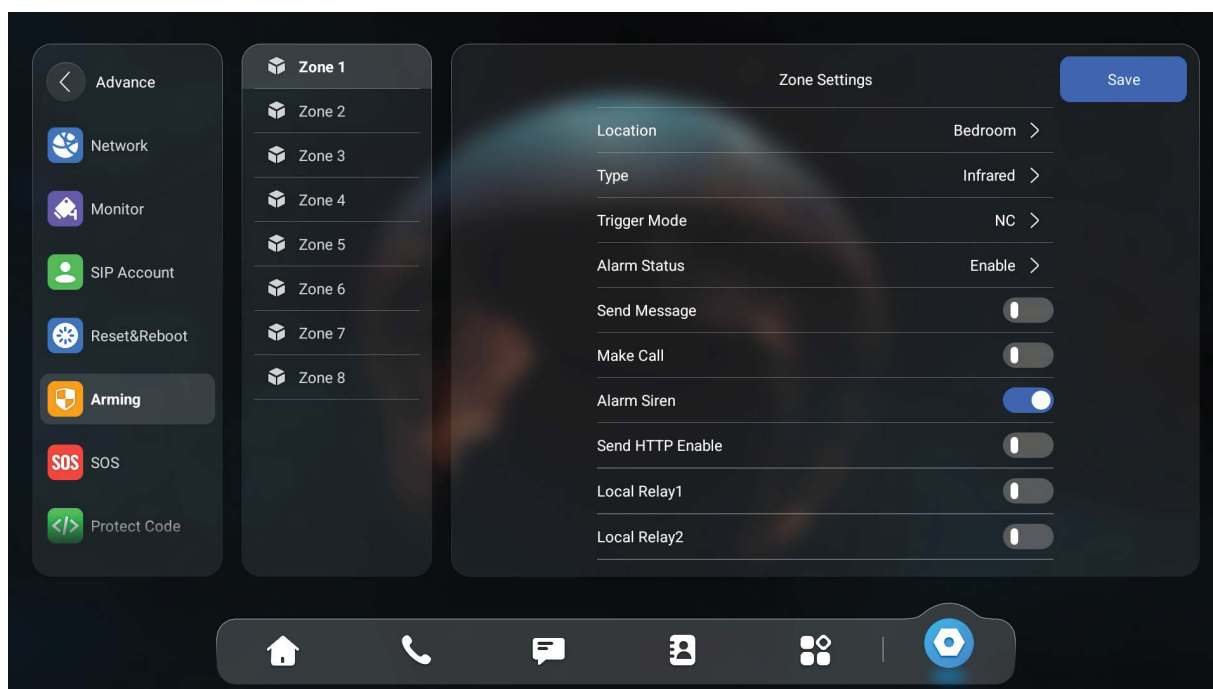
- **Location:** Indicate where the alarm sensor is installed. There are ten location types: Bedroom, Gate, Door, Guest room, Hall, Window, Balcony, Kitchen, Study, and Bathroom.
- **Zone Type:** The alarm sensor types.
- **Trigger Mode:** Set sensor trigger mode between NC and NO.
- **Status:** Set the alarm sensor status among three options: Enabled, Disabled, and 24H.
 - **Enabled:** The alarm needs to be set again after disarming.
 - **Disabled:** Disarm the alarm.

- **24H:** The alarm sensor will stay enabled for 24 hours without setting up the alarm manually again after the alarm is disarmed.

If any of the zones are enabled or set to **24H**, the alarm-related icons will be displayed on the home screen for quick access.



You can also set up alarm sensors on the **Settings > Advance > Arming** screen.



Select an Arming Mode

To select an arming mode, go to the **Arming > Arming Mode** interface.

Arming Mode ?

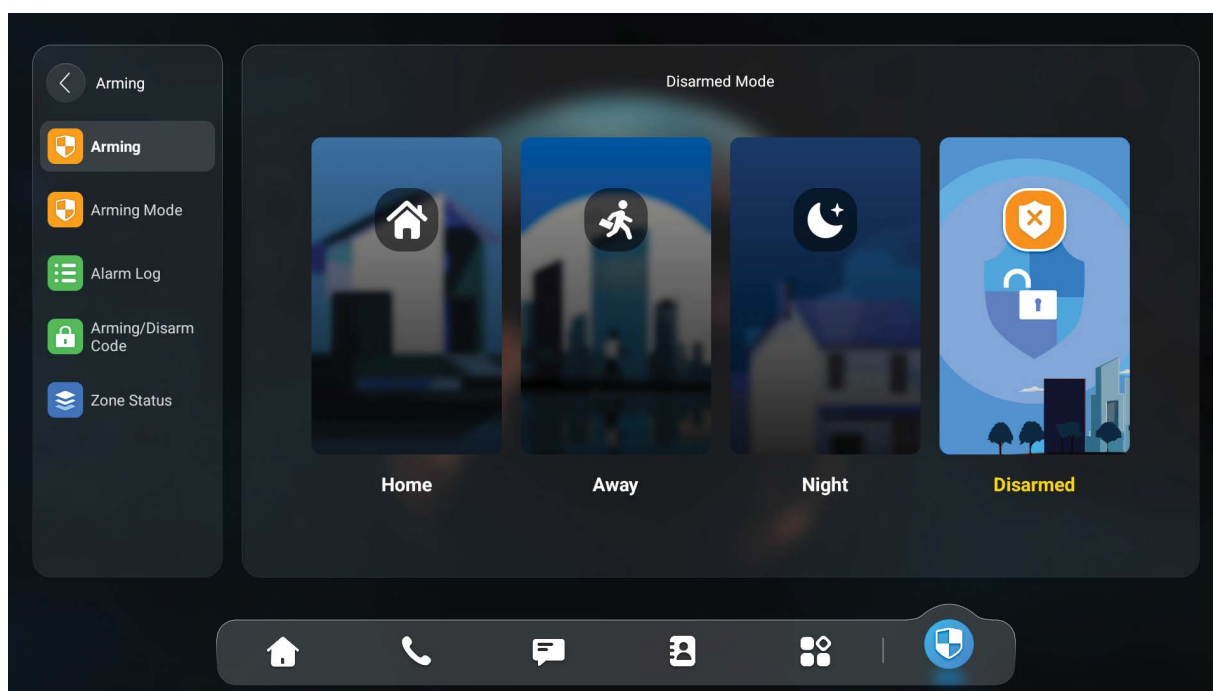
Mode Disarmed ▼

Trigger Local Relay 1 ☐ ?

Trigger Local Relay 2 ☐ ?

- **Trigger Local Relay 1/2:** Check it if you want the relay to be triggered with the arming mode switch.

Users can switch arming mode by tapping **Arming** on the home screen.



Set up Alarm Sensors in Different Arming Modes

To configure the alarm in different modes, go to the **Arming > Arming Mode** interface.

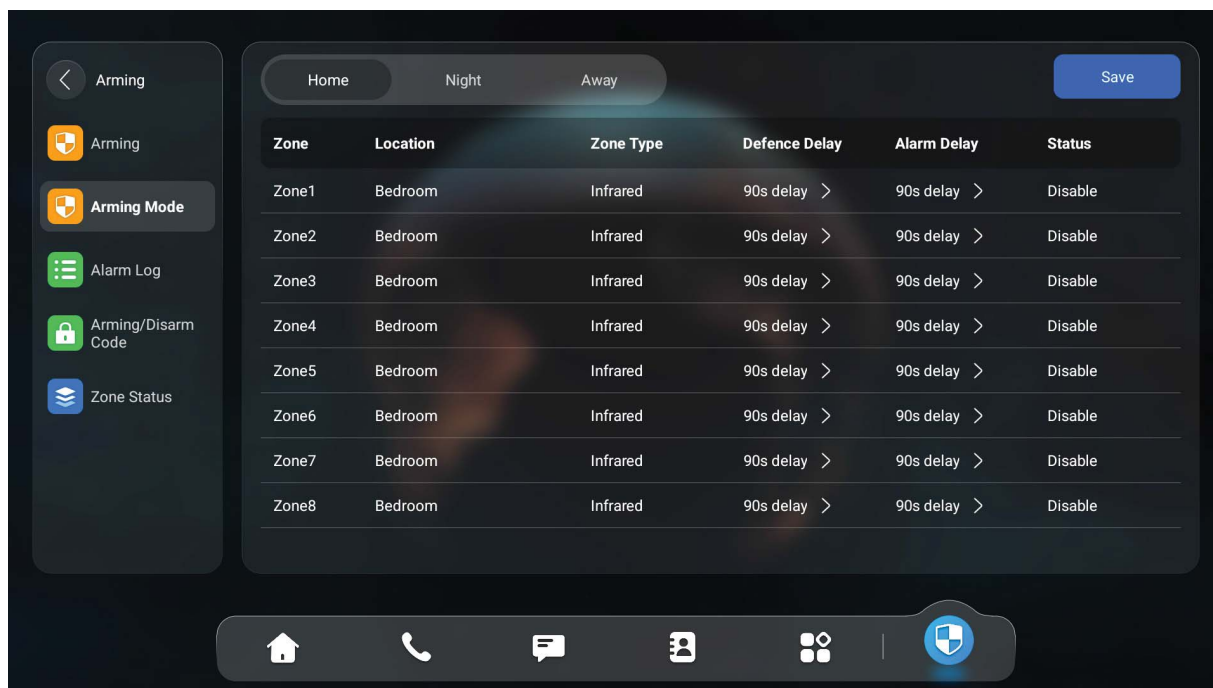
Home ?

Zone	Location	Zone Type	Defence Delay	Alarm Delay	Status
Zone1	Bedroom	Infrared	90s ▼	90s ▼	☐
Zone2	Bedroom	Infrared	90s ▼	90s ▼	☐
Zone3	Bedroom	Infrared	90s ▼	90s ▼	☐
Zone4	Bedroom	Infrared	90s ▼	90s ▼	☐
Zone5	Bedroom	Infrared	90s ▼	90s ▼	☐
Zone6	Bedroom	Infrared	90s ▼	90s ▼	☐
Zone7	Bedroom	Infrared	90s ▼	90s ▼	☐
Zone8	Bedroom	Infrared	90s ▼	90s ▼	☐

- **Location:** Display which location the detection device is in, including Bedroom, Guest room, Hall, Window, Balcony, Kitchen, Study, and Bathroom.

- **Zone Type:** Display the alarm sensor type.
- **Defence Delay:** It means when users change the arming mode from other modes, there will be 90 seconds delay time to get activated.
- **Alarm Delay:** It means when the sensor is triggered, there will be 90 seconds delay time to announce the notification.
- **Status:** Enable or disable Arming Mode on the corresponding zone.

You can also set it up on the **Arming > Arming Mode** screen.



Set up the Disarm Codes

To configure the arming and disarm codes, go to the **Arming > Disarm Code** interface.

Disarm Code ?

Current Password

 ?

New Password

 length must be 1-10 ?

Confirm Password

 ?

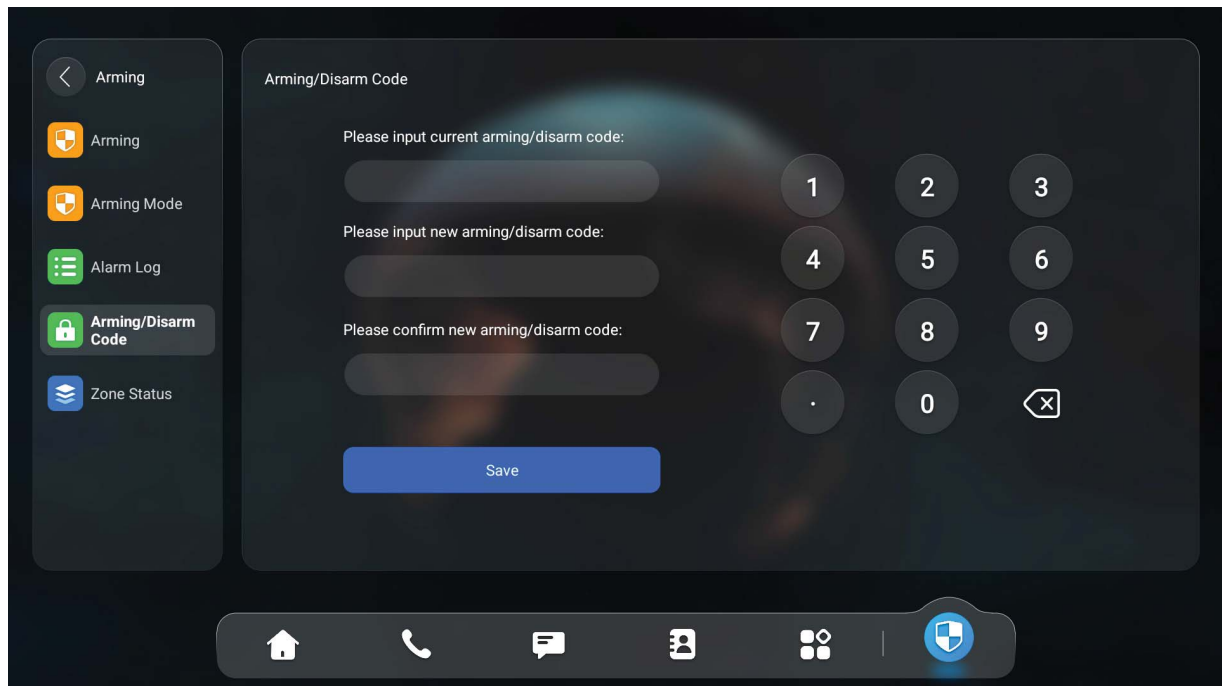
Disarm Interval (s)

Never ▼

 ?

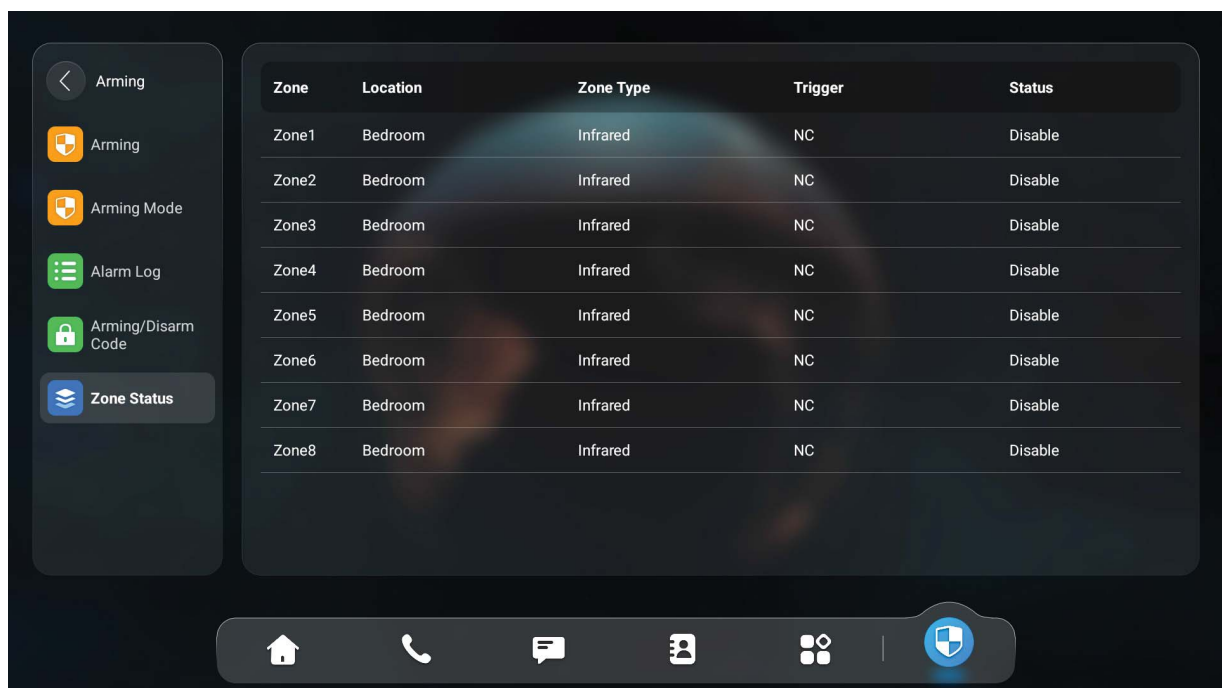
- **Disarm Interval(Sec):** Set the alarm sound duration after the alarm is triggered.

You can also set it up on the **Arming > Arming/Disarm Code** screen.



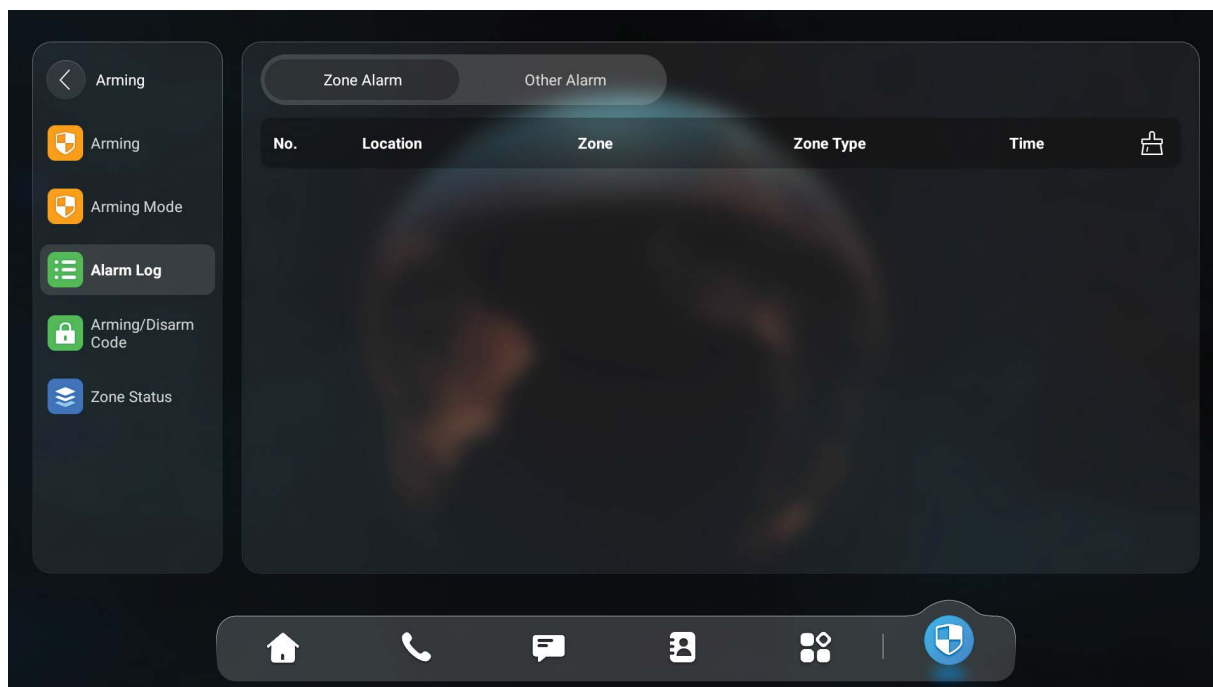
Check Zone Status

Check the zone status on the **Arming > Zone Status** screen.



Check Alarm Logs

To check the alarm log, go to the **Arming > Alarm Log** screen.



Configure Alarm Text

Once the alarm sensor is configured, you can access the device's web interface to personalize the alert content displayed on the screen when an alarm is triggered.

To set it up, navigate to the web **Arming > Zone Setting > Customized Alarm** interface.

Customized Alarm ?

Customized Alarm Enabled ☐ ?

Zone	Alarm Content
Zone1	Alarm was Triggered
Zone2	Alarm was Triggered
Zone3	Alarm was Triggered
Zone4	Alarm was Triggered
Zone5	Alarm was Triggered
Zone6	Alarm was Triggered
Zone7	Alarm was Triggered
Zone8	Alarm was Triggered

- **Alarm Content:** The alarm text will be displayed on the device screen when an arming is triggered.

Configure Alarm Ringtone

You can upload a customized alarm ringtone by choosing the local audio file on the web **Device > Audio > Alarm Ringtone Upload** interface.

Alarm Ringtone Upload ?

Alarm Ringtone Upload

Import ?

Alarm Ringtone

default.wav

Delete ?

Note

The file format of customized ringtone should be in WAV or MP3 format. No limitation to the file size.

Alarm Action Configuration

When the alarm sensor is triggered, it can start different actions, such as HTTP commands, SIP messages, and calls.

To select and set up actions, go to the web **Arming > Alarm Action** interface.

HTTP Command

To set up the HTTP command action, you can select **Enabled** in the **Send HTTP** field to enable the actions for the alarm sensor installed in different locations. Then enter the HTTP command provided by the device manufacturer on which the action is to be carried.

HTTP Command Setting ?

Zone	Zone Type	Http Command	Send HTTP Enabled
Zone1	Infrared	http://	Disabled v
Zone2	Infrared	http://	Disabled v
Zone3	Infrared	http://	Disabled v
Zone4	Infrared	http://	Disabled v
Zone5	Infrared	http://	Disabled v
Zone6	Infrared	http://	Disabled v
Zone7	Infrared	http://	Disabled v
Zone8	Infrared	http://	Disabled v

- **Zone Type:** Display the zone type set on the **Arming > Zone Setting** interface.
- **Send HTTP Enabled:** Enable it if you want the action to be implemented on a designated third-party device.
- **HTTP Command:** Enter the HTTP command provided by the third-party device manufacturer.
- **Send Delay:** This option is only available when the Zone Type is **Motion** and **Send HTTP** is enabled. When enabled, the HTTP command will be sent in a delay time that is the same as the **Alarm Delay** set on the **Arming > Arming Mode** interface.

SIP Message

The device can send messages to a designated device when the alarm is triggered. To set this up, enter a SIP number or IP address along with the message content.

Receiver Of SIP Setting ?

SIP Account

Zone	SIP Message	Send Sip Message
Zone1		Disabled ▼
Zone2		Disabled ▼
Zone3		Disabled ▼
Zone4		Disabled ▼
Zone5		Disabled ▼
Zone6		Disabled ▼
Zone7		Disabled ▼
Zone8		Disabled ▼

- **SIP Account:** The SIP number to receive the message.
- **SIP Message:** The message sent to the designated SIP number when the alarm is triggered.

SIP Call

To enable the device to make a call when the alarm is triggered, enter the SIP or IP number of the called party. Additionally, you can allow the indoor monitor to sound a siren simultaneously.

Call Setting ?

Call Number

Zone	Make Call Enable	Alarm Siren
Zone1	Disabled ▼	Enabled ▼
Zone2	Disabled ▼	Enabled ▼
Zone3	Disabled ▼	Enabled ▼
Zone4	Disabled ▼	Enabled ▼
Zone5	Disabled ▼	Enabled ▼
Zone6	Disabled ▼	Enabled ▼
Zone7	Disabled ▼	Enabled ▼
Zone8	Disabled ▼	Enabled ▼

- **Call Number:** The SIP number or IP number to receive the calls when the alarm is triggered.
- **Make Call Enable:** Enable it so that a call will be made to the designated SIP or IP number when the alarm is triggered.

- **Alarm Siren:** Enable it to trigger an alarm siren on the indoor monitor when the alarm is triggered.

Local Relay

You can select the local relay to be triggered by the alarm.

Local Relay ?

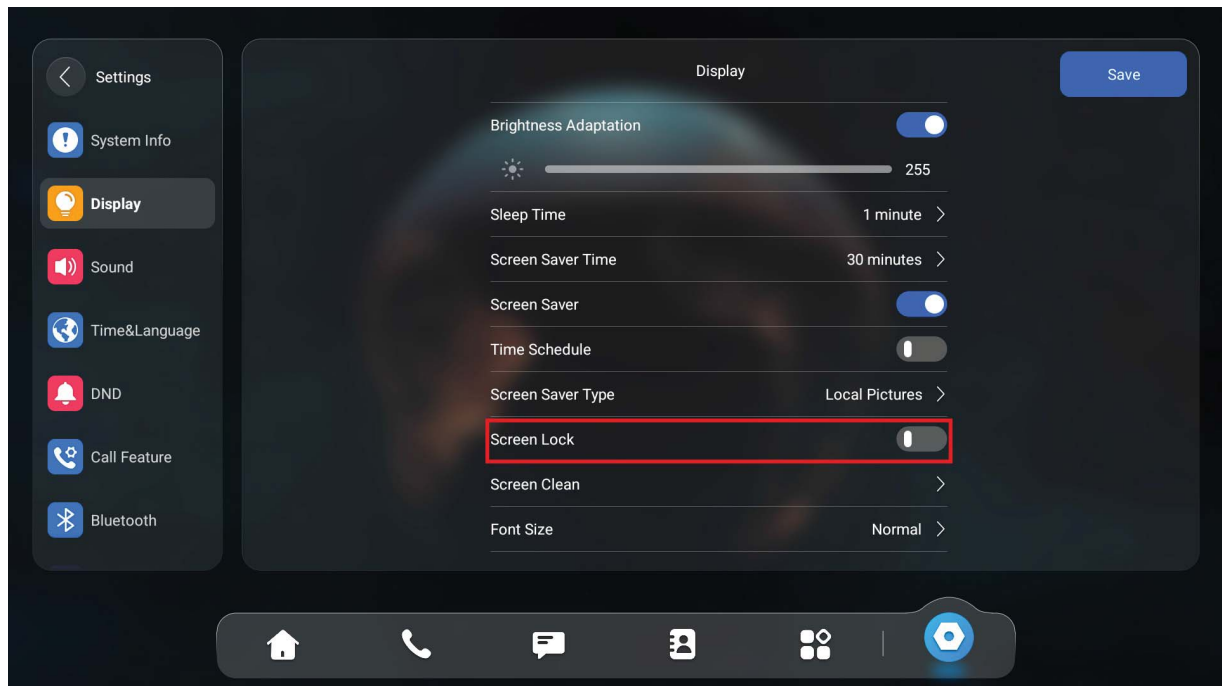
Zone	Zone Type	Local Relay 1	Local Relay 2
Zone1	Infrared	Disabled ▼	Disabled ▼
Zone2	Infrared	Disabled ▼	Disabled ▼
Zone3	Infrared	Disabled ▼	Disabled ▼
Zone4	Infrared	Disabled ▼	Disabled ▼
Zone5	Infrared	Disabled ▼	Disabled ▼
Zone6	Infrared	Disabled ▼	Disabled ▼
Zone7	Infrared	Disabled ▼	Disabled ▼
Zone8	Infrared	Disabled ▼	Disabled ▼

- **Zone Type:** Display the zone type set on the **Arming > Zone Setting** interface.
- **Local Relay 1/2:** Enable it if you want the local relay to be triggered with the sensor.
- **Open Delay:** This option is only available when the Zone Type is **Motion** and Local Relay 1 is enabled. When enabled, the relay will be triggered in a delay time that is the same as the **Alarm Delay** set on the **Arming > Arming Mode** interface.

Screen Unlock Setting

To prevent unauthorized access to the device when it is not being used, enable the Screen Lock function. This feature automatically locks the device after a period of inactivity, requiring a password to unlock.

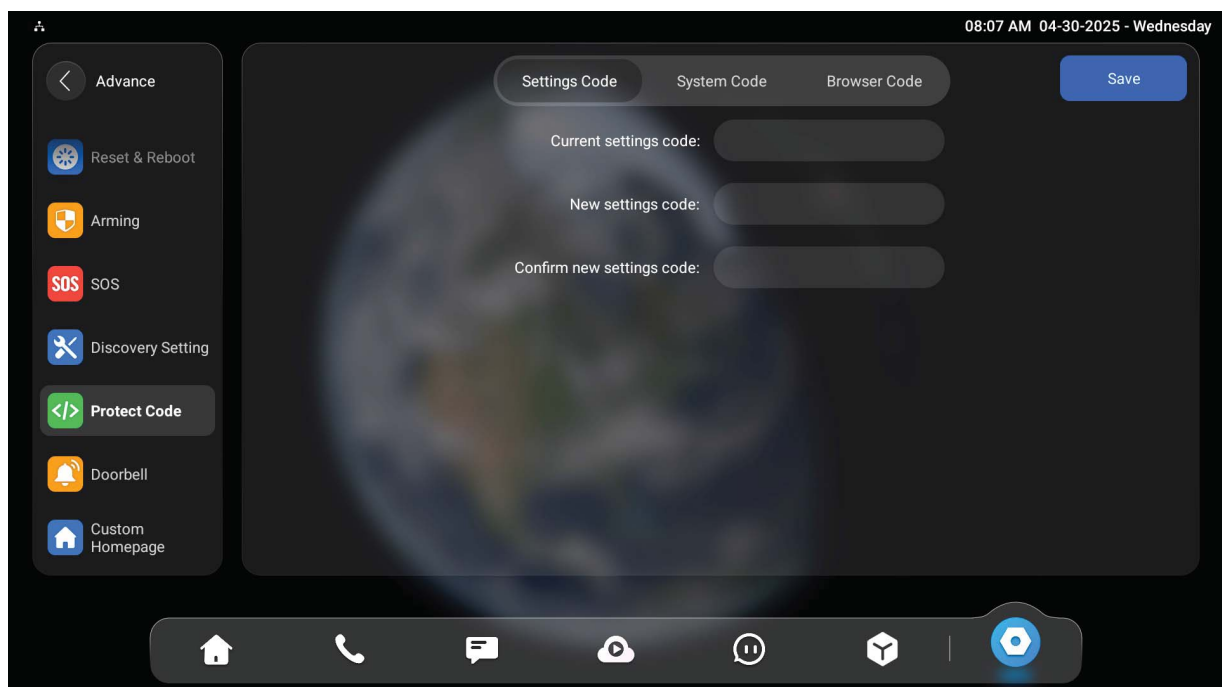
You can enable the screen lock function directly on the device **Settings > Display** screen.



Screen Unlock by PIN Code

To unlock the screen, users need to enter the preset PIN code.

Navigate to **Settings > Advance Settings > Protect Code** screen and select **Settings Code** to change the password.



Note

The default password is 123456.

Voice Encryption

Secure Real-time Transport Protocol (SRTP) is a protocol derived from the Real-time Transport Protocol (RTP). It enhances the security of data transmission by providing encryption, message authentication, integrity assurance, and replay protection.

To set it up, go to the **Account > Advanced > Encryption** interface.

Encryption ?

Voice Encryption(SRTP)

Disabled

- **Voice Encryption:**
 - **Disabled:** The call will not be encrypted.
 - **SRTP(Compulsory):** All audio signals(technically speaking it is RTP streams) will be encrypted to improve security.
 - **SRTP(Optional):** Encrypt the voice from the caller. If the caller also enables SRTP, the voice signals will also be encrypted.
 - **ZRTP(Optional):** The protocol that the two parties use to negotiate the SRTP session key.

Remote Control

The remote control function allows a specific server to send HTTP commands or requests to the indoor monitor for actions like unlocking a local relay.

To set it up, navigate to the web **Device > Relay > Remote Control** interface.

Remote Control ?

Allowed Access IP List

- **Allowed Access IP List:** Set up the server IP address that can be allowed to send the HTTP commands to the indoor monitor.

Web Interface Automatic Log-out

You can set up the web interface's automatic log-out timing, requiring re-login by entering the user name and the passwords for security purposes or for the convenience of operation.

To set it up, go to the web **Security > Basic > Session Time Out** interface.

Session Time Out ?

Session Time Out Value

8000

(60~14400Sec) ?

Power Output Setting

The indoor monitor can serve as a power supply to the Akuvox door phone with a 12V power supply. You can enable the power output, then connect the door phone to the RJ45 port on the indoor monitor. Also, you can connect it to the 12V output port for the power supply.

To enable it, go to **Settings > Basic > Power Output Setting** interface.

Power OutPut Setting ?

Power OutPut Enable

Disabled ▼ ?

High Security Mode

High security mode is designed to enhance the security. It employs encryption across various facets, including the communication process, door opening commands, password storage methods, and more.

To set it up, go to the web **Security > Basic > High Security Mode** interface.

High Security Mode ?

Enabled

Disabled ▼ ?

Important Notes

1. The High Security mode is off by default when you upgrade the device from a version without the mode to one with it. But if you reset the device to its factory settings, the mode is on by default.
2. This mode makes the old version tools incompatible. You need to upgrade them to the following versions or higher to use them.
 - PC Manager: 1.2.0.0
 - IP Scanner: 2.2.0.0
 - Upgrade Tool: 4.1.0.0
 - SDMC: 6.0.0.34
3. The supported HTTP format for relay triggering varies depending on whether high secure mode is enabled or disabled.

If the mode is on, the device only accepts the new HTTP formats below for door opening.

- `http://username:password@deviceIP/fcgi/OpenDoor?action=OpenDoor&DoorNum=1`
- `http://deviceIP/fcgi/OpenDoor?action=OpenDoor&DoorNum=1`

If the mode is off, the device can use both the new formats above and the old format below:

- `http://deviceIP/fcgi/do?action=OpenDoor&UserName=username&Password=password&DoorNum=1`

4. It is not allowed to import/export configuration files in tgz. format between a device with the high security mode and another one without it. For assistance with file transfer, please contact Akuvox technical support.

Lift Control

Residents can summon and send the lift by simply tapping on the Akuvox indoor monitor.

To achieve this function, you need to set up the lift control feature on both the indoor monitor and the lift controller EC33.

Click [here](#) to view the configuration steps.

Configure Lift Control

Before setting the Lift icon, you need to display it on the More screen.

To display the icon, go to the **Device > Display Setting** interface.

More Page Display ⓘ Example

Area	Type	Value	Label	Type(max size:100*100)
Area1	Settings ▼			Not selected any files Select File Delete
Area2	Arming ▼			Not selected any files Select File Delete
Area3	Application ▼			Not selected any files Select File Delete
Area4	DND ▼			
Area5	Monitor ▼		Monitor	Not selected any files Select File Delete
Area6	Lift ▼		Lift	Not selected any files Select File Delete
Area7	N/A ▼			Not selected any files Select File Delete
Area8	N/A ▼			Not selected any files Select File Delete

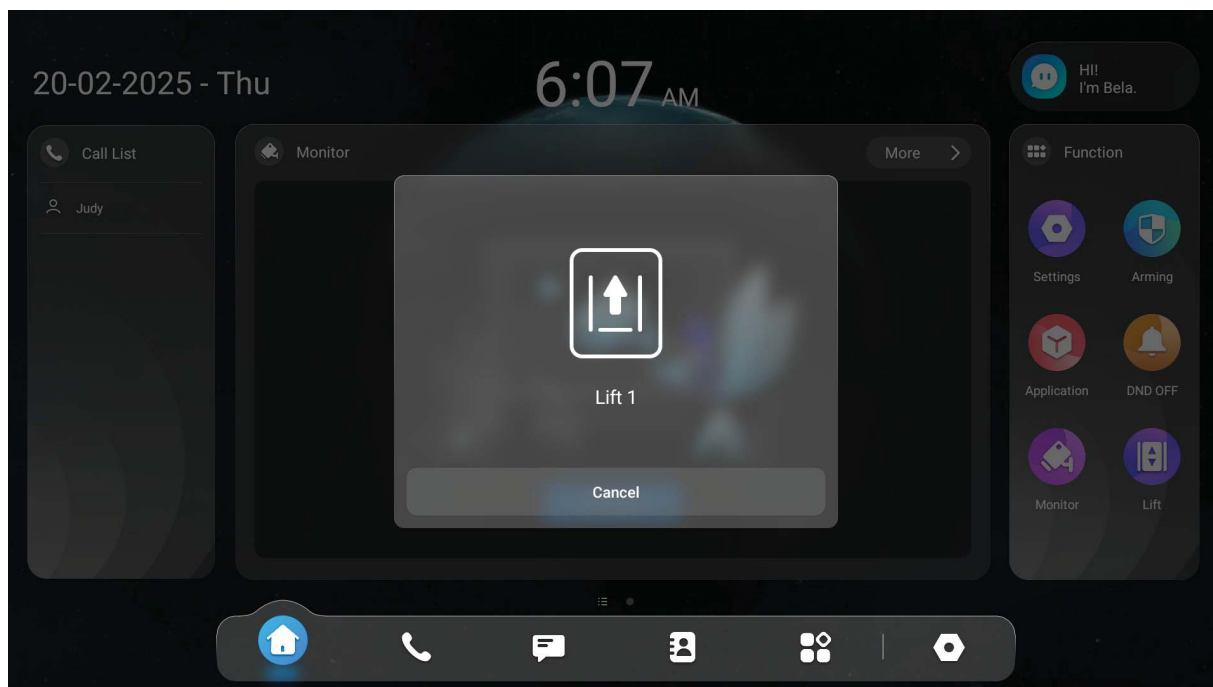
To set the Lift icon, go to the web **Device > Lift > Lift Control** interface.

Lift Control ⓘ

Name	Status	Type	Label	Http Command
Lift1	Disabled ▼	Up ▼		http:// ▼
Lift2	Disabled ▼	Up ▼		http:// ▼

- **Status:** Enable or disable the lift button.
- **Type:** Decide the button icon.
- **Label:** Name the button.
- **HTTP Command:** Select http:// or https:// for the head of the HTTP command and enter the HTTP command.

Users can tap the icon to summon or send a lift.



Configure Lift Control Prompt

When the lift controller receives the HTTP command, it will give feedback on the current lift status with a prompt.

To set it up, go to the web **Device > Lift > Hints** interface. Click the **Edit** icon  to modify the desired prompt.

Hints 

[+ Add](#)
[Import](#)
[Export ▼](#)

☐	Index	HTTP Status Code	Lift	Hints	Edit
☐	1	200	Lift1	Lift is coming to your floor	
☐	2	200	Lift2	Lift has been sent to Ground Floor	

[Delete](#)
[Delete All](#)
[Prev](#)
1/1
[Next](#)

[Go](#)

If there are huge amounts of prompts that need to be added, you can click the **Export** tab to export a template and import the file after editing. The import and export files should be in XML format.

Hints 

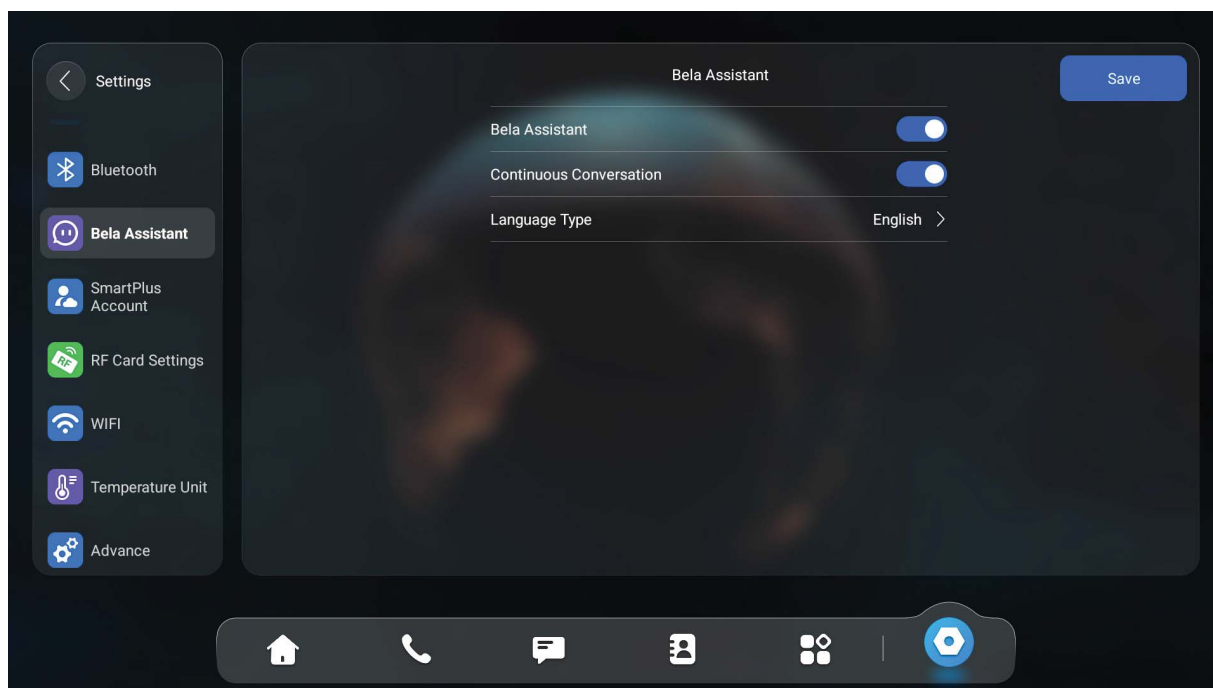
[+ Add](#)
[Import](#)
[Export ▼](#)

Voice Assistant

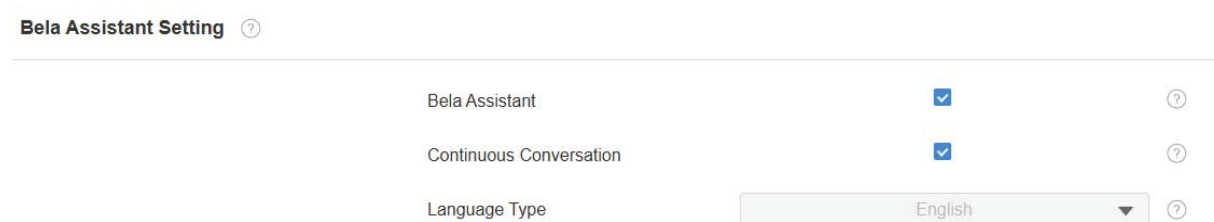
The Bela Assistant is a smart voice assistant responsive to commands. Users can ask Bela to make calls, answer calls, open doors, etc. This feature requires the device connection to the SmartPlus Cloud.

Click [here](#) to view the feature details.

Enable it on the device **Settings > Bela Assistant** screen.



Or, enable the voice assistant on the web **Settings > Bela Assistant** interface.

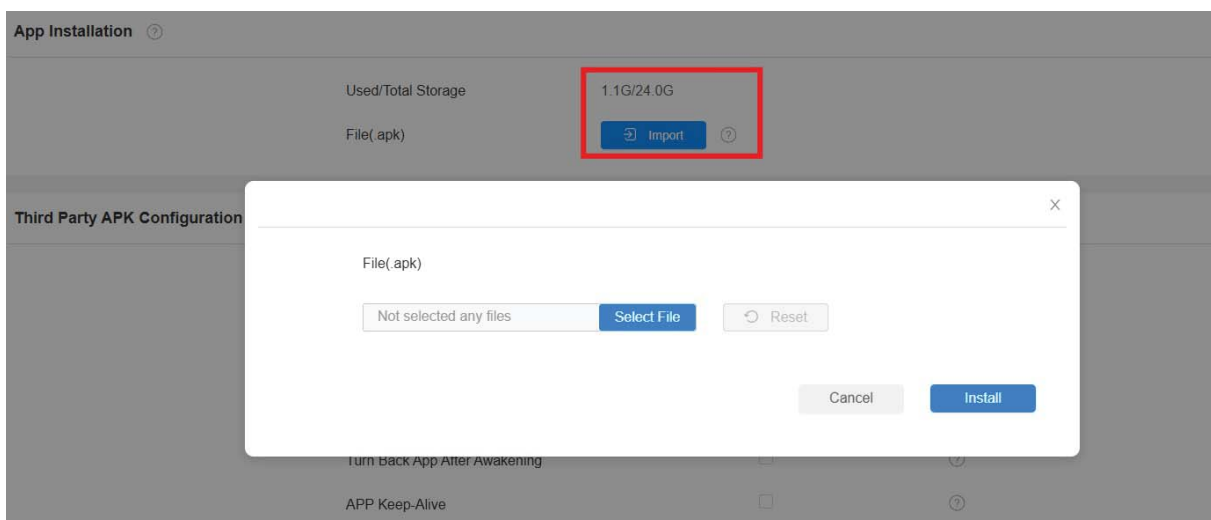


- **Continuous Conversation:** It is enabled by default. It means Bela will continue to listen for commands. After the last command ends, it will keep listening for 20 seconds. If no valid command is given within the 20 seconds, it will automatically exit the conversation.
- **Language Type:** Currently, it only supports English.

Integration with Third-party Devices

Install Third-party App

To check the used/total storage of the device and install the third-party app, go to the web **Device > Third Party APK** interface. Upload the APK file from the PC. If you want to clear the APK file uploaded, click **Reset**.



To configure the installed third-party app, you can click the **App Name** to select the specific app for configuration. Then tick the check boxes of each field for the specific configuration.

Third Party APK Configuration ?

App Name		?
Intervals Without Operating (s)	10	?
Start Up Enabled	☐	?
Turn Back App	☐	?
Turn Back App After Awakening	☐	?
APP Keep-Alive	☐	?

General ?

Turn Back App After Calling	☒	?
Show App Icon	☒	?
Notification Popup	☐	?

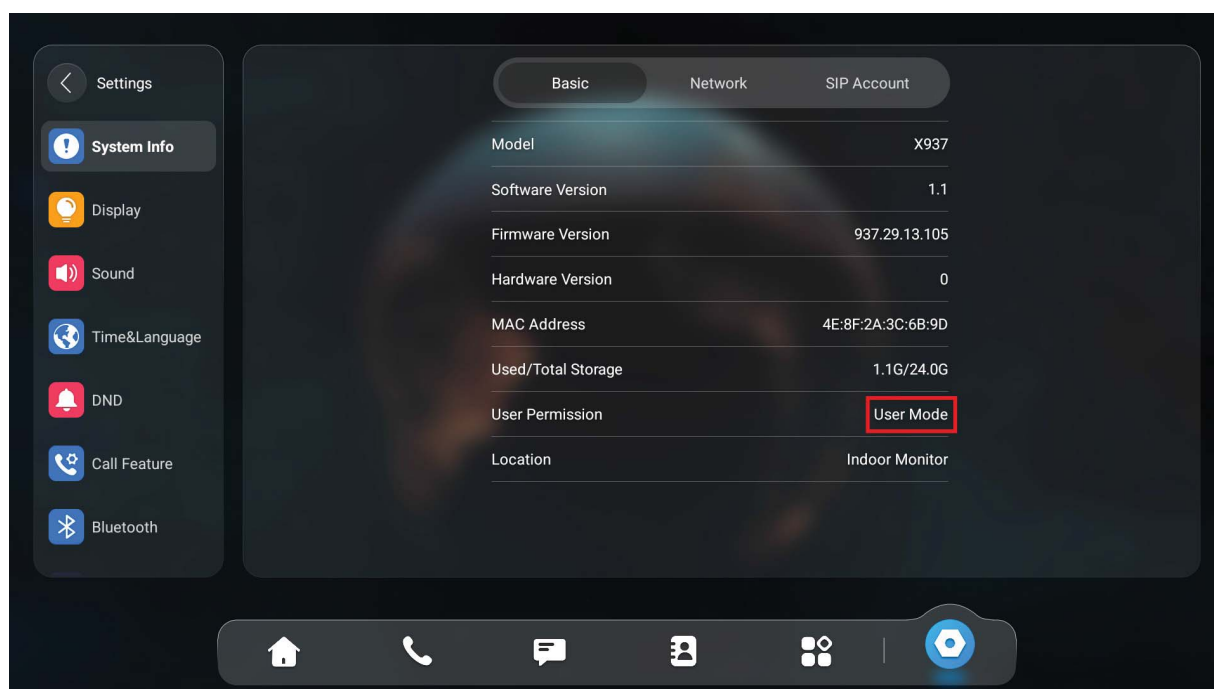
- **App Name:** Select the app to be configured.

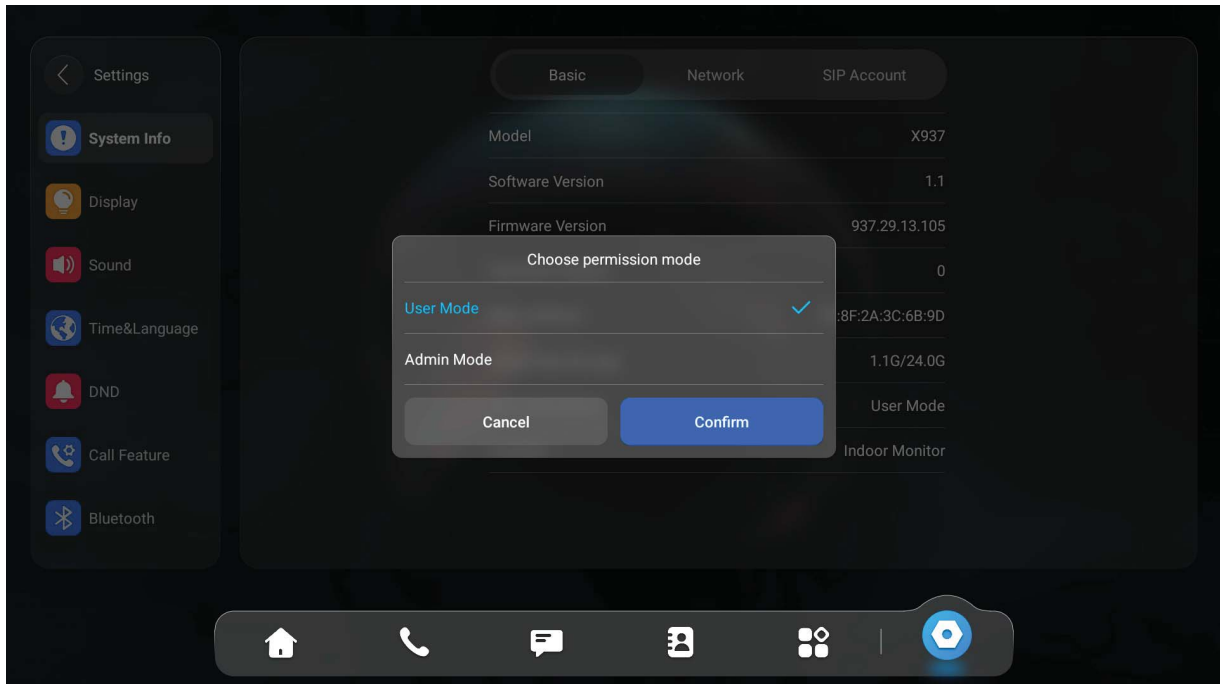
- **Intervals Without Operating(Sec):** Set the time to return to the app when there is no operation on the device.
- **Start Up Enabled:** Allow the app to run automatically when the device is turned on.
- **Turn Back App:** Allow automatic returning to the app.
- **Turn Back App After Awakening:** Allow the device to return to the app when the screen is awakened.
- **APP Keep-Alive:** Allow the app to stay running without being turned off.
- **Turn Back App After Calling:** Allow the device to return to the app automatically after finishing a call.
- **Show App Icon:** Allow the app icon to be displayed on the screen.
- **Notification Pop-up:** If enabled, the device will have a sound alert and pop-up notification when receiving notifications from third-party apps.

Enter Applications Screen

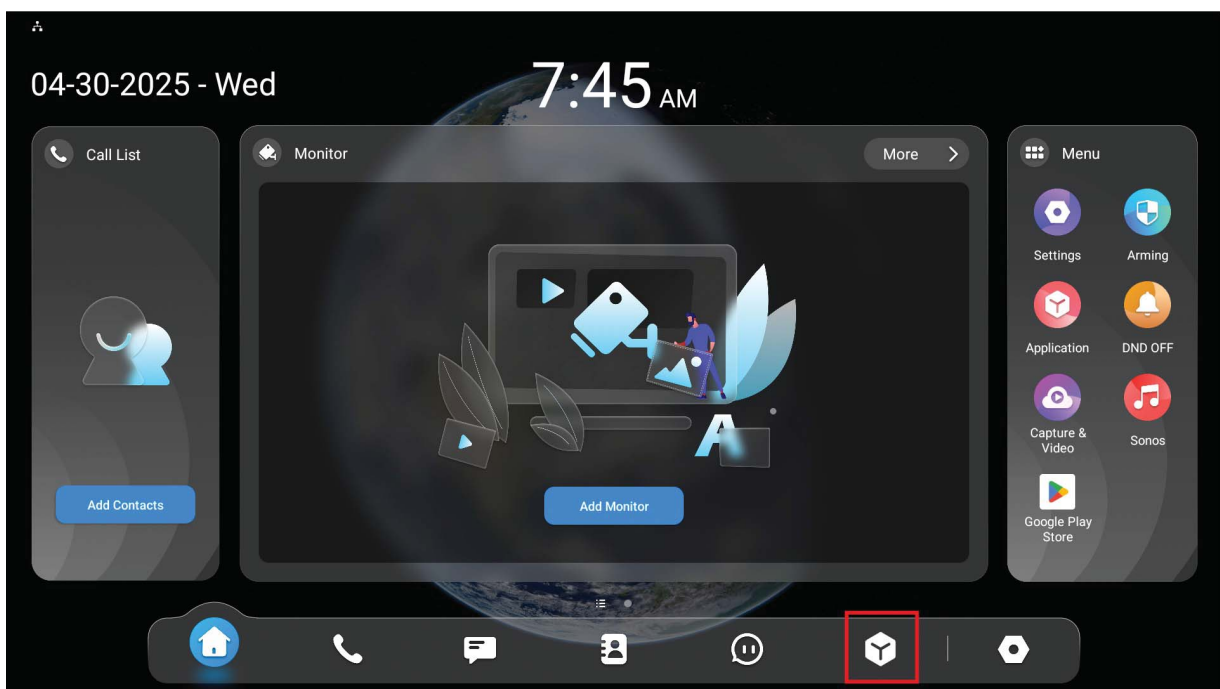
The indoor monitor supports **User** and **Admin** modes. In Admin mode, you can access both the third-party and default applications.

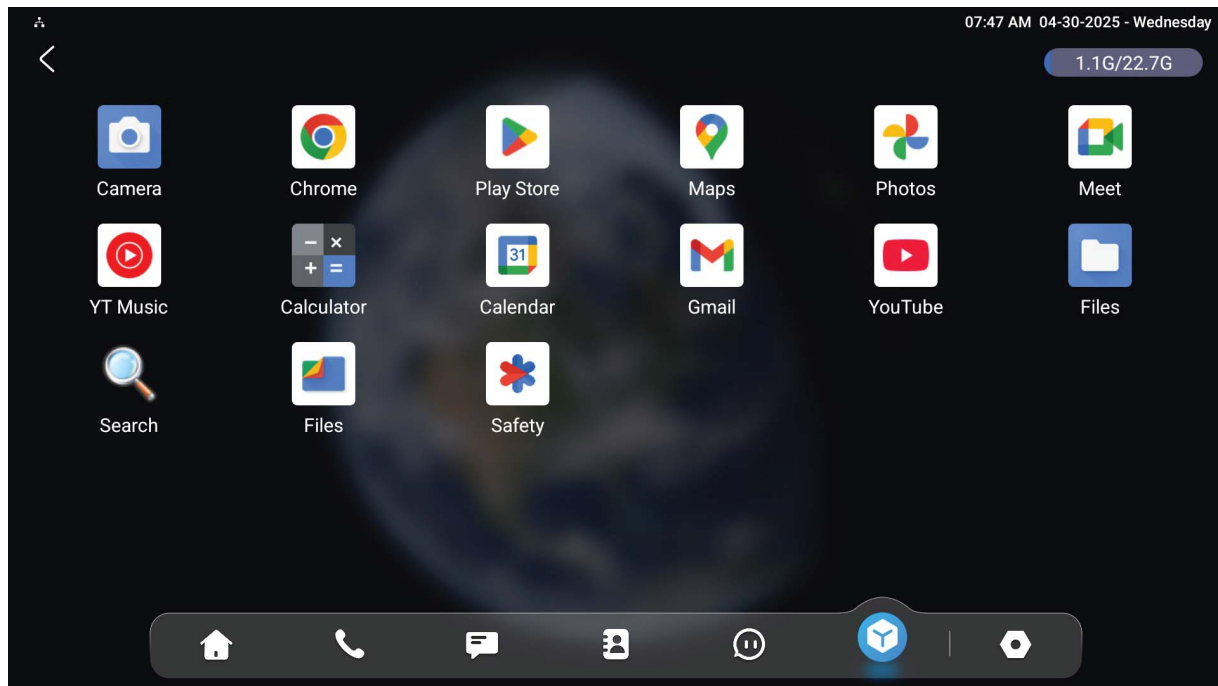
Go to the **Settings > System Info** interface. Tap on **User Mode** 10 times. Then select **Admin Mode** and tap Confirm.





The Application tab will display on the home screen. Tap it to access applications.





Integration via HTTP API

HTTP API is designed to achieve a network-based integration between the third-party device and the Akuvox device.

To set it up, go to the **Security > API** interface.

API Setting ?

API	Disabled ▼
Auth Mode	Digest ▼
Username	
Password	

- **API:** When the function is disabled, any request to initiate the integration will be denied and return HTTP 403 forbidden status.
- **Auth Mode:**
 - **Allowlist:** You are required to fill in the IP address of the third-party device for authentication. It is suitable for operation in LAN.
 - **Digest:** The password encryption method only supports MD5. MD5(Message-Digest Algorithm) In the Authorization field of the HTTP request header: WWW-Authenticate: Digest realm="HTTP API",qop="auth,auth-int",nonce="xx", opaque="xx".
- **Username:** Set the user name when **Digest** authorization mode is selected. The default user name is **admin**.
- **Password:** Set the password when **Digest** authorization mode is selected. The default password is **admin**.

Integration via External Relay

Users can control akubela or third-party smart home devices on the indoor monitor through an external relay controller.

To set it up, go to **Device > External Relay** interface.

External Relay ⓘ

Type: ⓘ

Mode: ⓘ

Key	Status	Relay Function	Hold Delay	Display Name
External Relay1	Disabled ▾	Light ▾	Never ▾	Light
External Relay2	Disabled ▾	Shutter Gate-Up ▾	Never ▾	Shutter Gate
External Relay3	Disabled ▾	Shutter Gate-Down ▾	Never ▾	Shutter Gate
External Relay4	Disabled ▾	Shutter Gate-Pausing ▾	Never ▾	Shutter Gate
External Relay5	Disabled ▾	Light ▾	Never ▾	Light
External Relay6	Disabled ▾	Light ▾	Never ▾	Light
External Relay7	Disabled ▾	Light ▾	Never ▾	Light
External Relay8	Disabled ▾	Light ▾	Never ▾	Light

- **Type:** Select the external relay type.
- **Mode:** Set the external relay mode based on its connection with the indoor monitor. If it is the Akubela RSAC-C1-R8, this option is RS485 by default.
- **Status:** Enable/disable the relay.
- **Relay Function:** Set the relay function based on the smart home devices connected.
- **Hold Delay:** Specify the relay reset time from 1 to 60 seconds. **Never** means it keeps activated once it is triggered. By default, it is 3 seconds for Door and Others relay functions, and Never for other functions.
- **Display Name:** Set the tab's name displayed on the indoor monitor's External Relay screen.

Note

- To display the External Relay button on the home screen, set it up on the **Device > Display Setting** interface.
- Click [here](#) to view the detailed configuration of the external relay feature.

Control Sonos Speaker

The device can scan and add a Sonos speaker on the same network. Users can play music on the device.

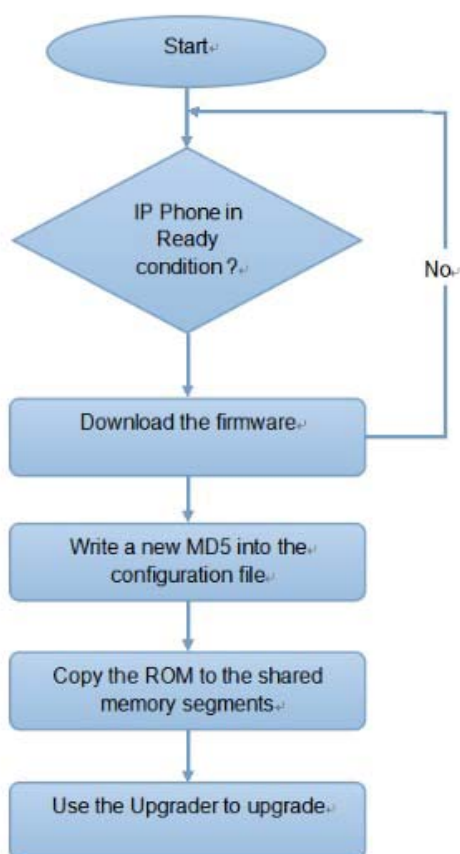
Click [here](#) to view the instructions for adding the Sonos speaker.

Auto-provisioning via Configuration Files

Provisioning Principle

Auto-provisioning is a feature used to configure or upgrade devices in batch via third-party servers. **DHCP, PNP, TFTP, FTP, and HTTPS** are the protocols used by the Akuvox devices to access the URL of the address of the third-party server which stores configuration files and firmware, which will then be used to update the firmware and the corresponding parameters on the device.

Please see the flow chart below:



Introduction to the Configuration Files

Configuration files for auto-provisioning come in two formats: general configuration files and MAC-based configuration files.

Differences:

- **General Configuration Provisioning:**

A general configuration file is stored on a server, allowing all related devices to download the same file to update parameters.

- **MAC-Based Configuration Provisioning:**

MAC-based configuration files are specific to individual devices, identified by their unique MAC addresses. Files named with the device's MAC address will be matched automatically before downloading for provisioning.

Note

- Configuration files must be in CFG format.
- The name of the general configuration file for batch provisioning varies by model.
- The MAC-based configuration file is named after its MAC address.
- Devices will first access general configuration files before the MAC-based ones if both types are available.

You may click [here](#) to see the detailed format and steps.

Autop Schedule

Akuvox provides you with different AutoP methods that enable the device to perform provisioning for itself according to the schedule.

To set up the schedule, go to the web **Upgrade > Advanced > Automatic Autop** interface.

Automatic Autop ?

Mode	Power On ▼ ?
Schedule	Sunday ▼ ?
	22 (0~23Hour)
	0 (0~59Min)
Export Autop Template	 Export ?
Clear MD5	 Clear ?

- **Mode:**

- **Power On:** The device will perform Autop every time it boots up.
- **Repeatedly:** The device will perform Autop according to the schedule you set up.
- **Power On + Repeatedly:** Combine **Power On** mode and **Repeatedly** mode that will enable the device to perform Autop every time it boots up or according to the schedule.

- **Hourly Repeat:** The device will perform Autop every hour.

Static Provisioning

You can manually set up a specific server URL for downloading the firmware or configuration file. If an auto-provision schedule is set up, the device will perform the auto-provisioning at a specific time according to the auto provision schedule you set up. In addition, TFTP, FTP, HTTP, and HTTPS are the protocols that can be used for upgrading the device firmware and configuration.

To download the template, go to the **Upgrade > Advanced > Automatic Autop** interface.

The screenshot shows the 'Automatic Autop' configuration page. It includes a title bar with a help icon. Below, there are two rows of settings: 'Mode' set to 'Power On' and 'Schedule' set to 'Sunday' at '22' hours and '0' minutes. At the bottom, there are two buttons: 'Export Autop Template' and 'Clear MD5'. The 'Export Autop Template' button is highlighted with a red rectangle.

To set up the server, go to the **Upgrade > Advanced > Manual Autop** interface.

The screenshot shows the 'Manual Autop' configuration page. It includes a title bar with a help icon. Below, there are five input fields: 'URL', 'Username', 'Password', 'Common AES Key', and 'AES Key(MAC)'. At the bottom, there is a blue button labeled 'AutoP Immediately'.

- **URL:** Specify the TFTP, HTTP, HTTPS, or FTP server address for the provisioning.
- **Username:** Enter the username if the server needs a username to be accessed.
- **Password:** Enter the password if the server needs a password to be accessed.
- **Common AES Key:** It is used for the intercom to decipher general Autop configuration files.

- **AES Key (MAC):** It is used for the intercom to decipher the MAC-based Autop configuration file.

Note

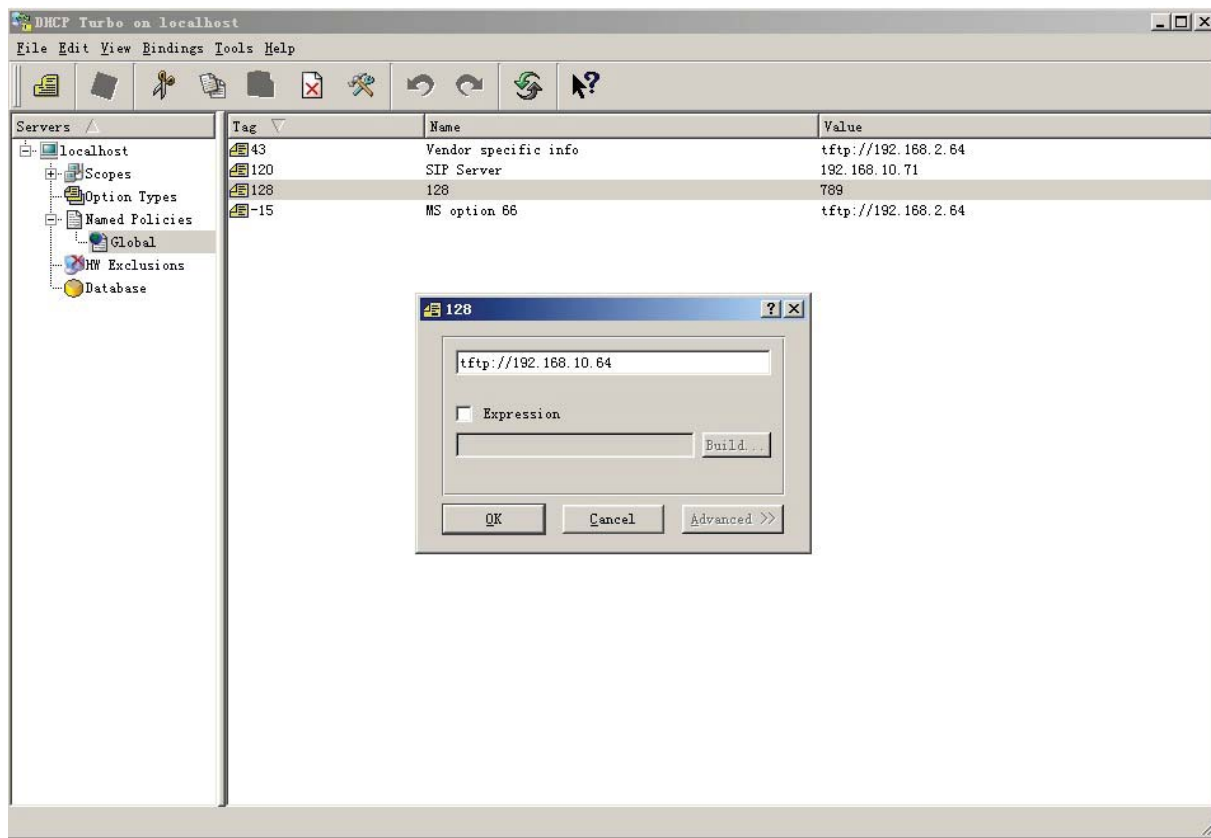
- AES as one type of encryption should be configured only when the config file is encrypted with AES.
- Server Address Format:
 - TFTP: tftp://192.168.0.19/
 - FTP: ftp://192.168.0.19/(allows anonymous login)
ftp://username:password@192.168.0.19/(requires a user name and password)
 - HTTP: http://192.168.0.19/(use the default port 80)
http://192.168.0.19:8080/(use other ports, such as 8080)
 - HTTPS: https://192.168.0.19/(use the default port 443)

Tip

Akuvox does not provide user specified server. Please prepare TFTP/FTP/HTTP/HTTPS server by yourself.

DHCP Provisioning

Auto-provisioning URL can also be obtained using the DHCP option which allows the device to send a request to a DHCP server for a specific DHCP option code. If you want to use **Custom Option** as defined by users with option codes ranging from 128-255, you are required to configure DHCP Custom Option on the web interface.



Note

The Custom Option type must be a string. The value is the URL of the TFTP server.

To set up DHCP Autop with **Power On** mode, go to the web **Upgrade > Advanced > Automatic Autop** interface.

Automatic Autop ?

Mode	Power On ▼ ?
Schedule	Sunday ▼ ?
	22 (0~23Hour)
	0 (0~59Min)
Export Autop Template	Export ?
Clear MD5	Clear ?

To set up the DHCP Option, scroll to the **DHCP Option** section.

DHCP Option ?

Custom Option	(128~254) ?
DHCP Option Enabled	☒ Custom Option ☒ Option 43 ☒ Option 66 ?

- **Custom Option:** Enter the DHCP code that matches with corresponding URL so that the device will find the configuration file server for the configuration or upgrading.
- **DHCP Option 43:** If the device does not get a URL from DHCP Option 66, it will automatically use DHCP Option 43. This is done within the software and the user does not need to specify this. To make it work, you need to configure the DHCP server for option 43 with the upgrade server URL in it.
- **DHCP Option 66:** If none of the above is set, the device will automatically use DHCP Option 66 to get the upgrade server URL. This is done within the software and the user does not need to specify this. To make it work, you need to configure the DHCP server for option 66 with the upgrade server URL in it.

PNP Configuration

Plug and Play (PNP) is a combination of hardware and software support that enables a computer system to recognize and adapt to hardware configuration changes with little or no intervention by a user.

Click [here](#) to watch the configuration video.

To enable the function, go to the **Upgrade > Advanced > PNP Option** interface.

PNP Option ?		
PNP Config Enabled	☒	?

Firmware Upgrade

Akuvox devices can be upgraded on the device web interface.

To upgrade the device, navigate to the **Upgrade > Basic** interface.

Basic 

Firmware Version	937.30.13.122	
Hardware Version	0	
Upgrade	 Import	
Factory Default	 Reset	
Except the start-up settings	☐	
Reset Config	 Reset	
Reboot	 Reboot	

Note

Firmware files should be **.zip** format for the upgrade.

Backup

You can import or export encrypted configuration files to your Local PC.

To export the file, navigate to the **Upgrade > Advanced > Others** interface. The export file is in the TGZ file.

The import file should be in TGZ, CONF, or CFG format.

Others ?

Config File

Import

Export

(Encrypted) ?

Debug

System Log for Debugging

System logs can be used for debugging purposes.

If you want to export the system log to a local PC or a remote server for debugging, you can set up the function on the web **Upgrade > Diagnosis > System Log** interface.

System Log ?

Log Level	3	?
Export Log	Export	?
Remote System Log Enabled	☐	?
Remote System Server		?

- **Log Level:** Log level ranges from 0 to 7 levels. You will be instructed by Akuvox technical staff about the specific log level to be entered for debugging purposes. The default log level is 3. The higher the level is, the more complete the log is.
- **Export Log:** Click the **Export** tab to export a temporary debug log file to a local PC.
- **Remote System Server:** Enter the remote server address to receive the system log and it will be provided by Akuvox technical support.

PCAP for Debugging

PCAP is used to capture the data package going in and out of the devices for debugging and troubleshooting purposes.

To set up PCAP, go to the web **Upgrade > Diagnosis > PCAP** interface.

PCAP ?

Network Interface	Ethernet	?
PCAP Specific Port	(1-65535)	?
PCAP	Start Stop Export	?
PCAP Auto Refresh	☐	?

- **Network Interface:** Specify the network interface based on the device's network connection.
 - **Ethernet:** The captured data is from the wired network packets.

- **WLAN:** The captured data is from the wireless network packets.
- **PCAP Specific Port:** Select the specific port from 1-65535 so that only the data packet from the specific port can be captured. You can leave the field blank by default.
- **PCAP:** Click the **Start** tab and **Stop** tab to capture a certain range of data packets before clicking the **Export** tab to export the data packets to your Local PC.
- **PCAP Auto Refresh:** When enabled, the PCAP will continue to capture data packets even after the data packets reach 50M in capacity. When disabled, the PCAP will stop data packet capturing when the data packets reach the maximum capturing capacity of 1 MB.

Remote Debug Server

When the device is having a problem, you can use the remote debug server to access the device log remotely for debugging purposes.

To set it up, go to the **Upgrade > Diagnosis > Remote Debug Server** interface.

Remote Debug Server ?	
Enabled	☐ ?
Connect Status	Disconnected ?
IP	47.106.233.244 ?

- **Connect Status:** Indicate the remote debug server's connection status.
- **IP:** Specify the server's IP address.

User Agent

User agent is used for identification purpose when you are analyzing the SIP data packet.

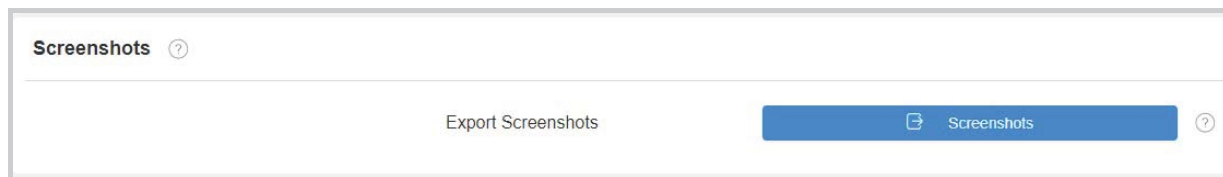
To set it up, go to the web **Account > Advanced > User Agent** interface.

User Agent ?
User Agent ?

Screenshots

You can take a screenshot of the specific device screen to help with the troubleshooting and so on.

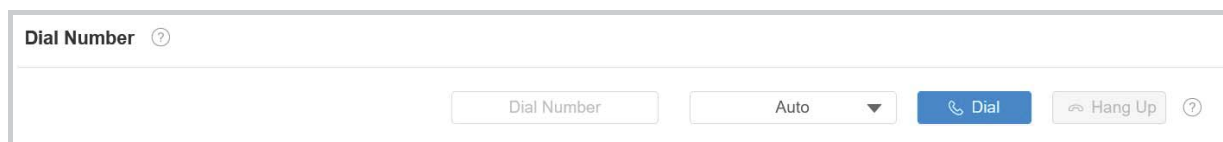
To take screenshots, go to **Upgrade > Diagnosis > Screenshots** interface. Click **Screenshots** to capture the current screen.



Web Call

The web call feature allows for making calls via the device's web interface, commonly used for remote call testing purposes.

To set it up, navigate to the **Contacts > Local Contacts > Dial Number** interface. Enter the target number and select the account to dial out.

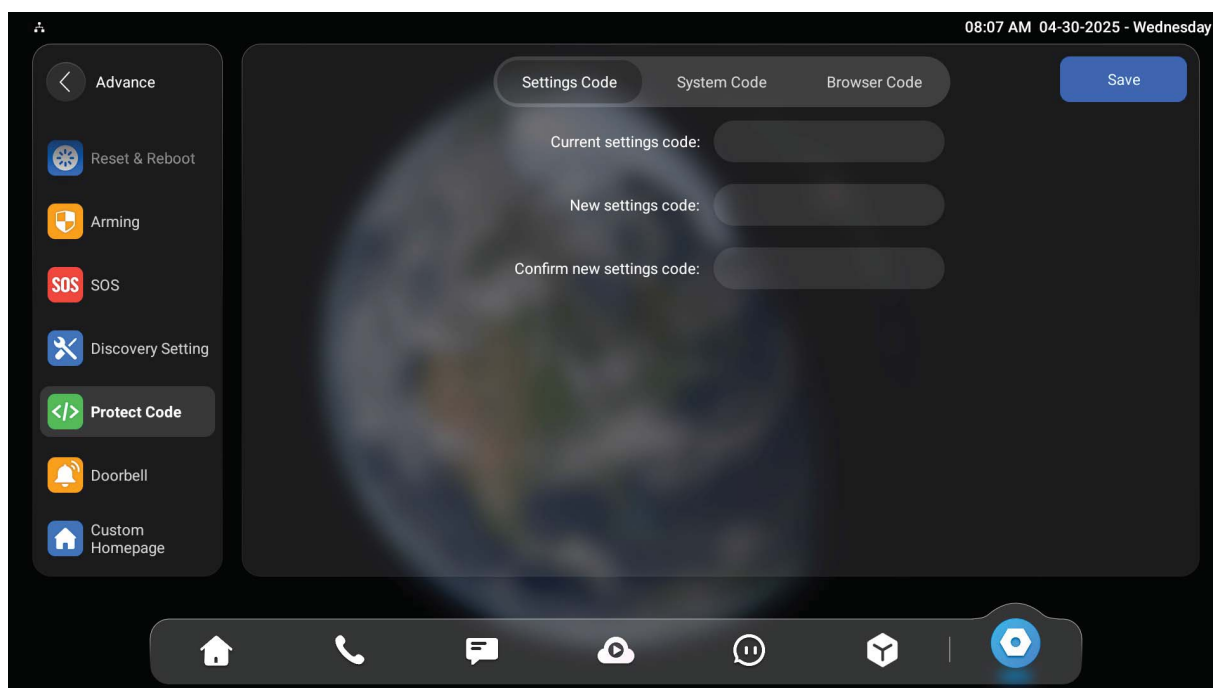


Password Modification

Modify Basic Setting Password

Settings Code is used to unlock the screen. The default is 123456.

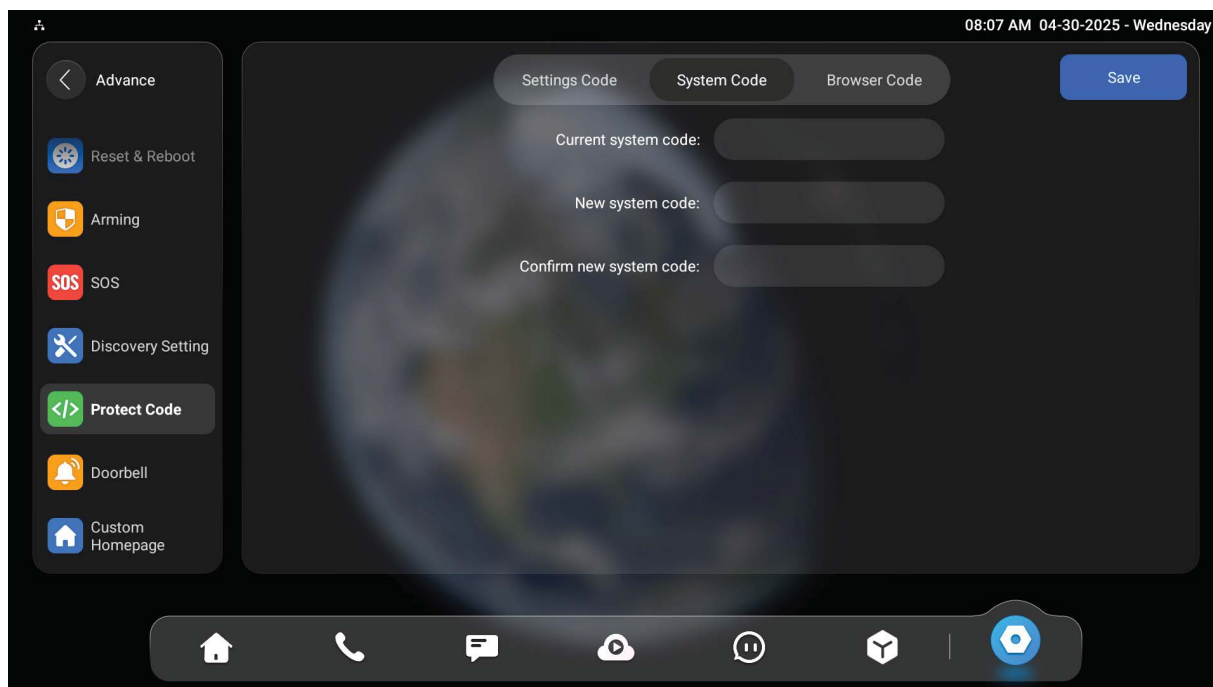
To modify it, go to the **Settings > Advance > Protect Code** screen and select **Settings Code**.



Modify Advance Setting Password

This password is used to enter the advance settings of the device, including password settings, account numbers, SOS numbers, network settings, etc. The default password is 123456.

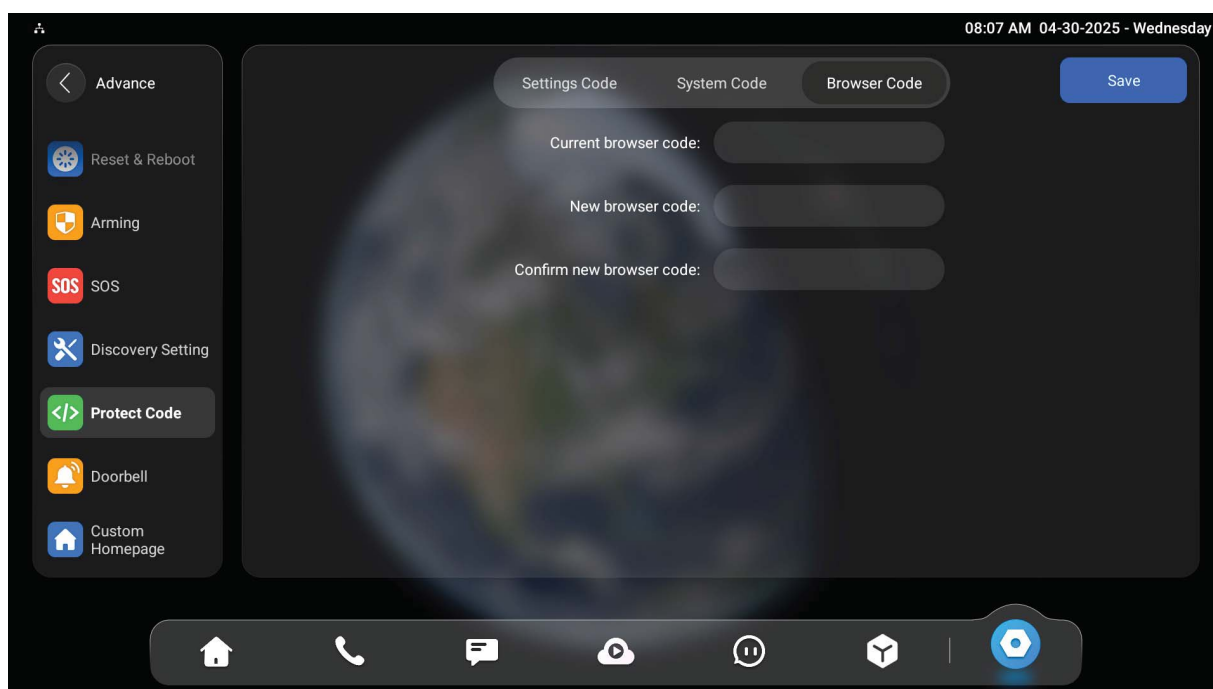
To modify it, navigate to the **Settings > Advance > Protected Code** screen and select **System Code**.



Modify Browser Password

This password is used to lock the browser on the device in case someone abuses the browser for any unwanted application. You can do this configuration on the device screen. The default password is 123456.

To modify it, go to the **Settings > Advance Settings > Protected Code** screen and select **Browser Code**.



Modify Device Web Interface Password

Select **Admin** for the administrator account and **User** for the user account. Click the **Change Password** tab to change the password.

To set it up, navigate to the **Security > Basic > Web Password Modify** interface.

Web Password Modify ?

Username ?

Web Password Modify ?

Account Status ?

Username	Status
admin	Enabled
user	Disabled

Session Time Out ?

High Security Mode ?

Enabled

Change Password X

The password must be at least eight characters long and contains at least one uppercase letter, one lowercase letter, and one digit.

Username

Old Password

New Password

Confirm Password

You can enable or disable the user account on the **Security > Basic** interface.

Account Status ?

Username	Status
admin	Enabled
user	Disabled

Note

There are two accounts, one is admin, its password is admin, the other is user, and its password is user.

Modify Security Questions

Security questions allow you to reset the web password if you forget it. After setting up the security questions, you can click "Forget Password" on the login interface, enter the answers, and a password reset window will pop up.

If you do not set up the security questions, clicking "Answer security questions" will prompt you to "Please contact your service provider".

Set it up on the **Security > Basic > Web Password Modify** interface.

Web Password Modify ?

Username

admin



Change Password ?



Modify Security Question

You are required to fill in the correct password before modifying the security questions.

Web Password Modify ?

Username

admin



Change Password ?

Account Status ?

Session Time Out ?

High Security Mode ?

Please set up your security questions.



Question 1

-- Select One --

Answer

Question 2

-- Select One --

Answer

Question 3

-- Select One --

Answer

Ignore

Submit

Reboot and Reset

Reboot

You can reboot the device on its **Settings > Advance > Reset&Reboot** screen. Or, go to the **Upgrade > Basic** interface.

Basic ?

Firmware Version	937.30.13.122	?
Hardware Version	0	?
Upgrade	 Import	?
Factory Default	 Reset	?
Except the start-up settings	☐	?
Reset Config	 Reset	?
Reboot	 Reboot	?

Besides, you can set up a reboot schedule to make the device restart at designated times.

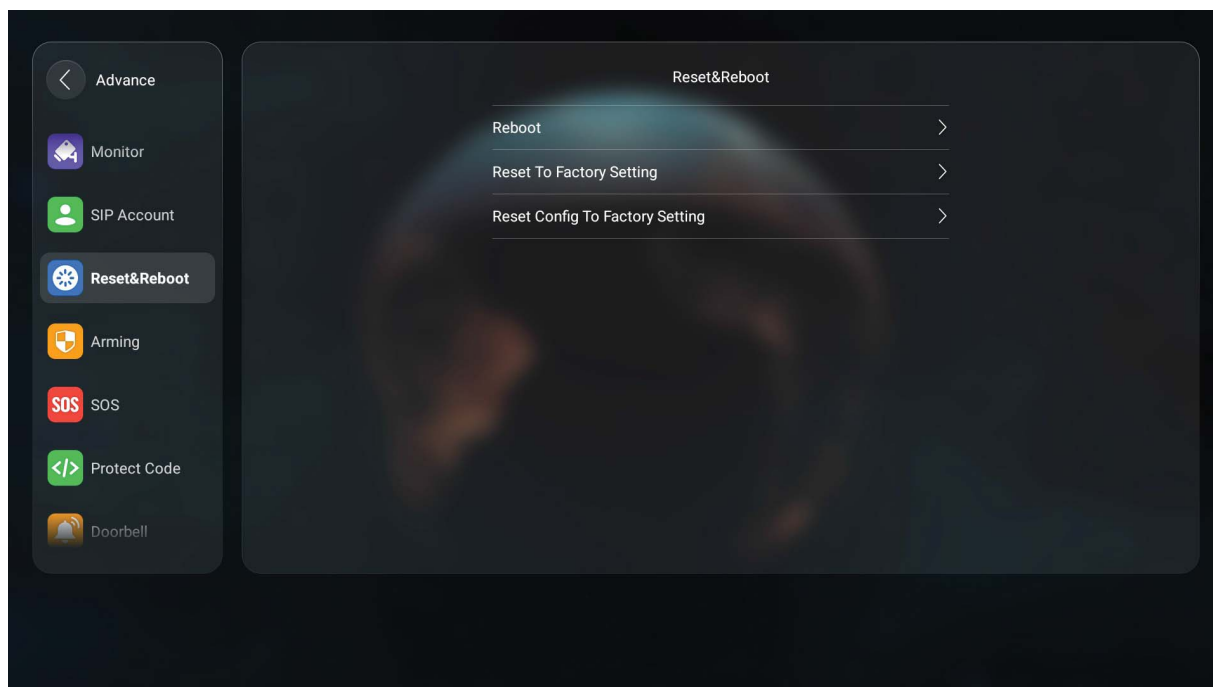
Set it up on the **Upgrade > Advanced > Reboot Schedule** interface.

Reboot Schedule ?

Switch	☐	?
Schedule	Every Day ▼ 0	? Hour(0~23)

Reset

You can reset the device on its **Settings > Advance > Reset&Reboot** screen. Or, go to the **Upgrade > Basic** interface.



- **Reset to Factory Setting:** Reset all data to the factory default.
- **Reset Config to Factory Setting:** Retain the user data, such as contacts.

Basic ?

Firmware Version	937.30.13.122	?
Hardware Version	0	?
Upgrade	↩ Import	?
Factory Default	↺ Reset	?
Except the start-up settings	☐	?
Reset Config	↺ Reset	?
Reboot	🔌 Reboot	?

- **Factory Default:** Reset all data to the factory default.
- **Except the start-up settings:** Check to retain the initial settings, such as network and time zone.
- **Reset Config:** Retain the user data, such as contacts.

Note

While the device is powering on, keep tapping the upper left corner on the device screen. It can also be reset.

The following frequency power is CE data

Frequency:

BLE/BT:2402-2480MHz(TX and RX)

2.4G WiFi:2412-2472MHz(TX and RX)

5.2G WiFi:5150-5250MHz(TX and RX)

5.3G WiFi:5250-5350MHz(TX and RX)

5.6G WiFi:5470-5725 MHz(TX and RX)

5.8G WiFi:5725-5850MHz(TX and RX)

Power:

BLE:1.59dBm

BT:1.84dBm

2.4G WiFi:18.81dBm

5.2G WiFi:13.33dBm

5.3G WiFi:12.74dBm

5.6G WiFi:14.58dBm

5.8G WiFi:10.42dBm



FCC Caution:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment .

This transmitter must not be co - located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with minimum distance 20cm between the radiator&you body.