



IT88

INDOOR MONITOR

Admin Guide

About This Manual

Thank you for choosing the Akuvox IT88 series indoor monitor. This manual is intended for the administrators who need to properly configure the indoor monitor. This manual applies to the 88.30.1.108 version, and it provides all the configurations for the functions and features of the IT88 series door phone. Please visit the Akuvox forum or consult technical support for any new information or the latest firmware.

Introduction of Icons and Symbols



Warning:

- Always abide by this information in order to prevent the persons from injury.



Caution:

- Always abide by this information in order to prevent the damages to the device.



Note:

- Informative information and advice from the efficient use of the device.

Related Documentation

You are advised to refer to the related documents for more technical information via the link below:

<https://knowledge.akuvox.com>

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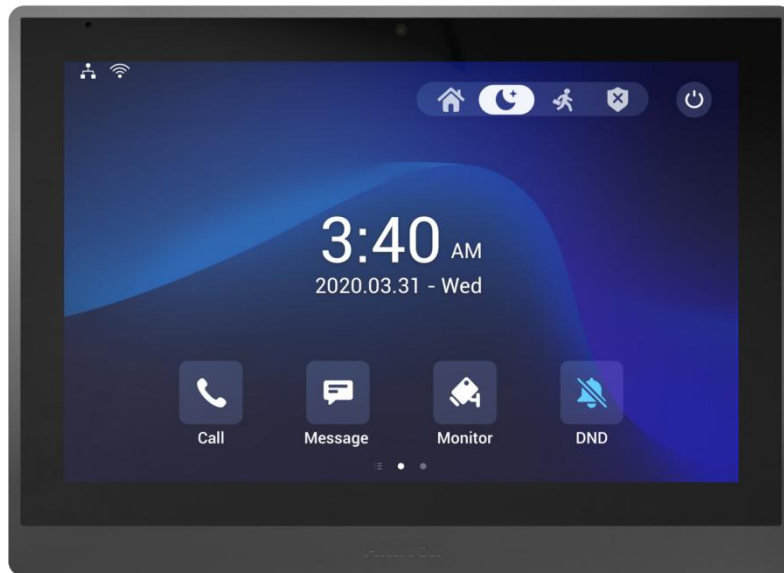
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1. Product Overview




IT88 series is an Android SIP-based with a smooth touch-screen indoor monitor. It can be connected with the Akuvox door phone for audio/video communication, unlocking, and monitoring. Residents can communicate with visitors via audio/video call, and it supports unlocking the door remotely. It is more convenient and safer for residents to check the visitor's identity through its video preview function. IT88A series are often applied to scenarios such as villas, apartments, and buildings.

2. Change Log

The change log will be updated here along with the changes in the new software version.

3. Model Difference

Model	IT88S	IT88A
Feature		
CPU	Quad Core Cortex-A55/1.9GHz	
OS	Android 9.0	
Color	Black	
Display	10 inch IPS LCD	
Resolution	1280 x 800	
MIC	Single microphone, -58dB	
Speaker	Dual speakers, 4Ω / 3W	
Wi-Fi	NA	IEEE 802.11 b/g/n
Bluetooth	NA	BLE 4.1
Ethernet	1xRJ45, 10/100Mbps adaptive	
Power Supply	12VDC/1A or IEEE 802.3af PoE	
Alarm Input	8 x Alarm Inputs	
Door Bell Input	1 x Bell In	
Relay Output	2 x Relay Out(NO/COM/NC)	
Installation	Wall-mounted/Table-mounted(Optional)	
Operation Temperature	-10°C ~ +45°C	
Operation Humidity	-20°C ~ +70°C	
Dimensions(W x H x D)	251x182.5x29.75(mm)	

4. Introduction to Configuration Menu

Status: This section gives you basic information such as product information, Network Information, and account information, etc.

Account: This section concerns the SIP account, SIP server, proxy server, transport protocol type, audio&video codec, DTMF, session timer, etc.

Network: This section mainly deals with DHCP&Static IP setting, RTP port setting, and device deployment, etc.

Phone: This section includes Time&language, call feature, dial management, data import&export, door log, and web relay.

Contacts: This section allows the user to configure the local contact list stored in the device.

Upgrade: This section covers Firmware upgrade, device reset&reboot, configuration file auto-provisioning, and PCAP.

Security: This section is for Password modification, account status & session time-out configuration, as well as service location switching.

Settings: This section is including the RTSPD & voice assistance setup.

Arming: This section covers the configuration including, arming zone setting, arming mode, disarm code, and alarm action.

- **Mode selection:**

Discovery mode: It is a plug and plays configuration mode. Akuvox devices will configure themselves automatically when users power on the devices and connect them to the network. It is a super time-saving mode and it will greatly bring users convenience by reducing manual operations. This mode requires no prior configurations previously by the administrator.

Cloud mode: Akuvox SmartPlus is an all-in-one management system. Akuvox SmartPlus is a mobile service that allows audio, video, and remote access control between smartphones and Akuvox intercoms. All configurations in the device will be issued automatically from the cloud. If

users decide to use Akuvox SmartPlus, please contact Akuvox technical support, and they will help you configure the related settings before using them.

SDMC mode: SDMC (**SIP Device Management Controller**) is a simple and comprehensive software for building management. It provides a topography for a community while offering you a graphical configuration interface for the door access, intercom, monitoring, alarm, etc. It is a convenient tool for property managers to manage, operate, and maintain the community.

- **Tool selection**

Akuvox has many configuration tools for you to set up devices more conveniently. Here we list some common tools, please contact your administrator to get the tool if you need them.

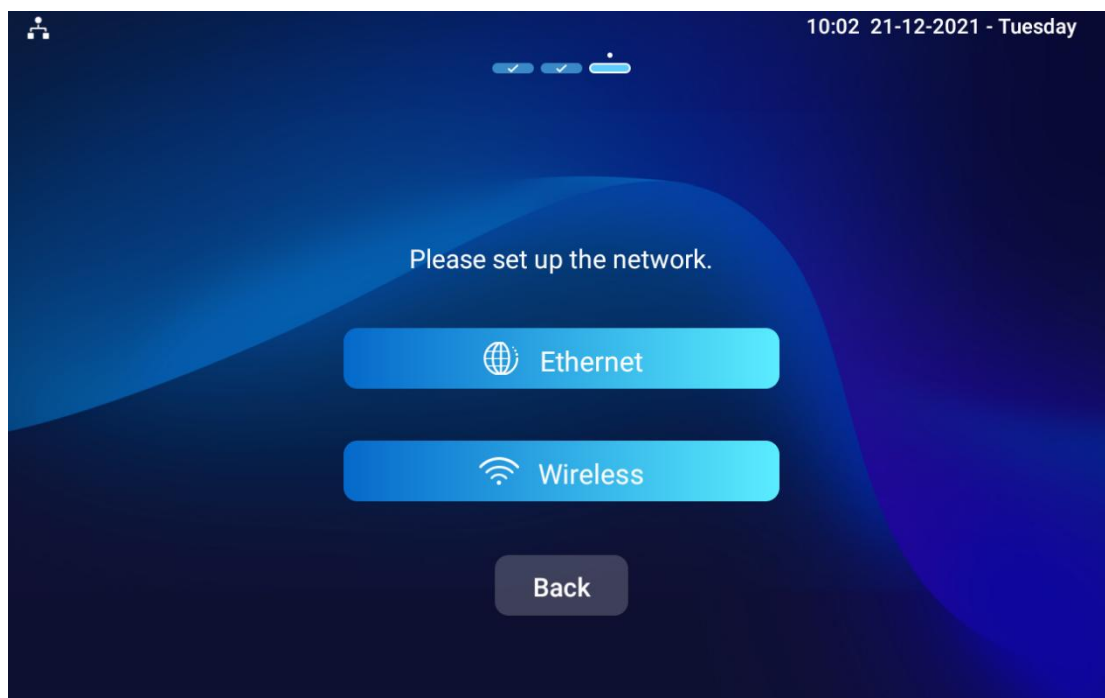
1. **SDMC:** SDMC is suitable for the management of Akuvox devices in large communities, including access control, resident information, remote device control, etc.
2. **Akuvox Upgrade tool:** upgrade Akuvox devices in batch on a LAN(**Local Area Network**)
3. **Akuvox PC Manager:** distribute all configuration items in batch on a LAN.
4. **IP scanner:** it is used to search Akuvox device IP addresses on a LAN.
5. **FacePro:** manage face data in batch for the door phone on a LAN.

5. Access the Device

Akuvox indoor monitor system settings can be either accessed on the device directly or on the device web interface.

5.1. Device Start-up Network Selection

Akuvox indoor monitor system settings can be either accessed on the device directly or on the device's web interface. After the device boots up initially, you are required to select the network connection for the device. You can either select ethernet or wireless network connection according to your need.




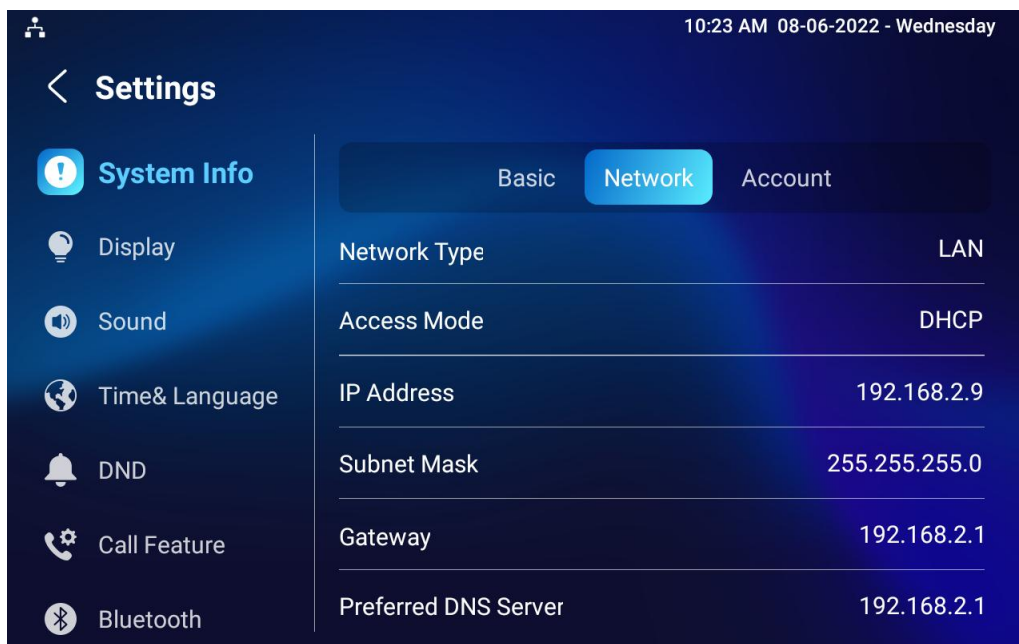
Note:

- Please refer to the chapter on **Network Setting&Other connection** for the configuration of the Ethernet and wireless network connection.

5.2. Accessing the Device Setting on the Device

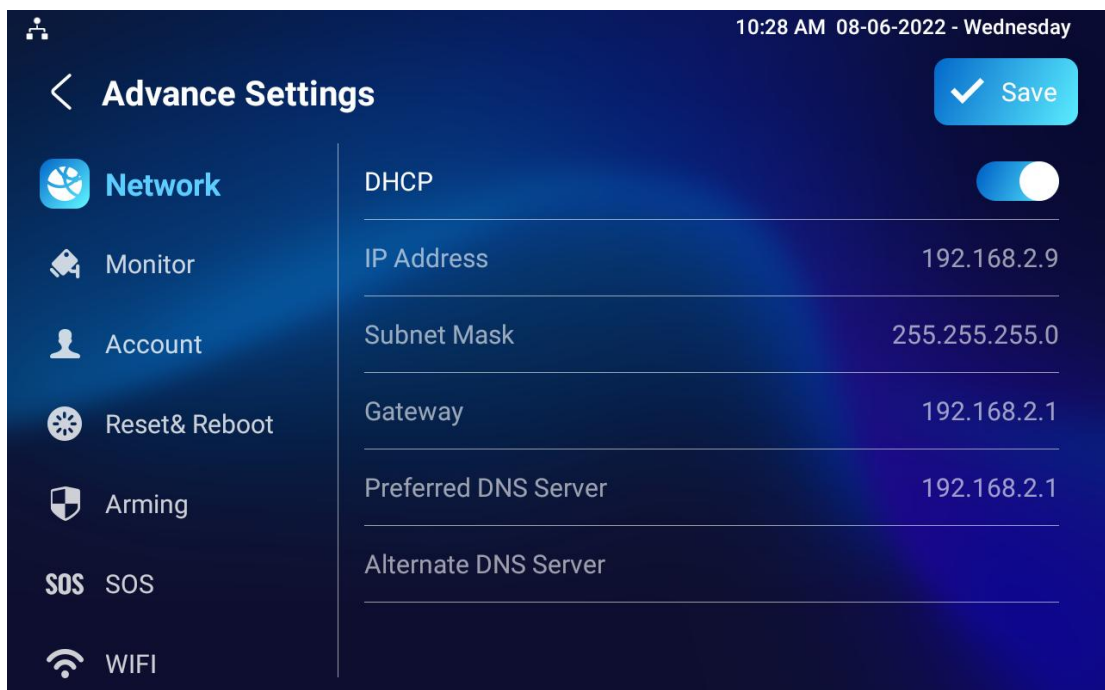
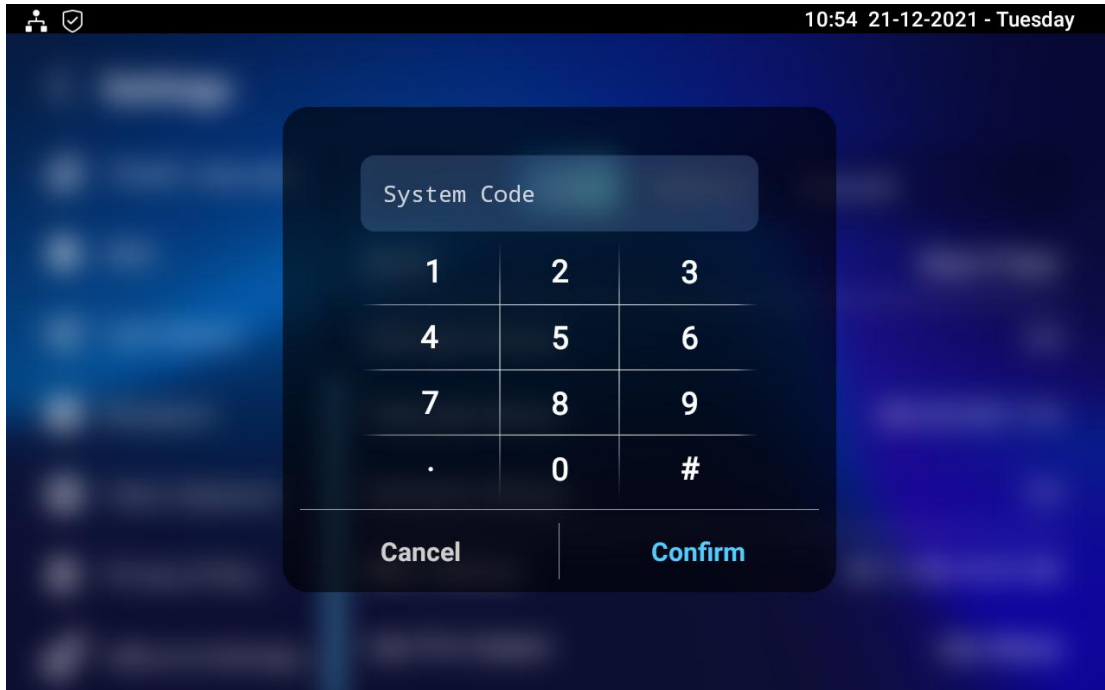
5.2.1. Accessing Device Basic Setting.

You can access the device's basic settings and advance settings where you can configure different types of functions as needed. To access the device basic setting by pressing **Setting** icon . To check the basic information like MAC, firmware, etc.



5.2.2. Accessing Device Advanced Setting

To access the advanced setting, press **Setting** then press **Advance Settings** icon. Press password 123456 to enter the advanced setting.



5.3. Access the Device Setting on the Web Interface

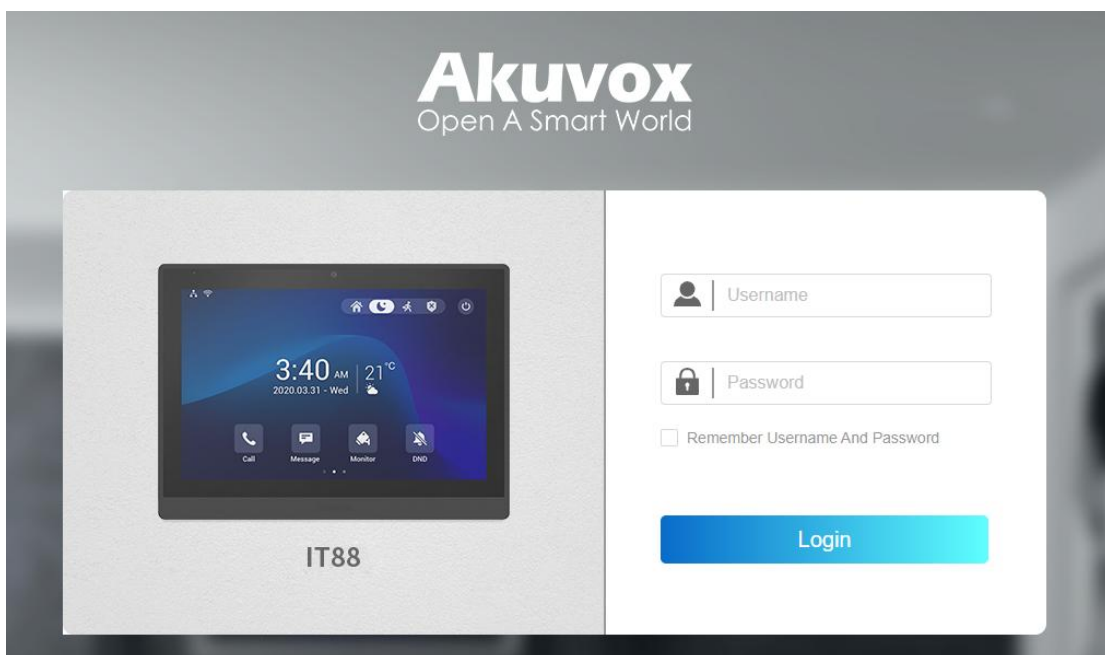
You can also enter the device IP address on the web browser in order to log in to the device web interface by user name and password **admin/admin** where you can configure and adjust parameters, etc.

For checking the IP address you can search in device **Setting > System Info > Network** screen. Or searching by IP scanner tool which in the same LAN with the devices.

IP Scanner

Online Device : 7

Index	IP Address	Mac Address	Model	Room Number	Firmware Version
1	192.168.35.102	0C11050A7F9B		1.1.1.1.1	111.30.1.216
2	192.168.35.103	0C11050BE577	R20	1.1.1.1.1	20.30.4.10
3	192.168.35.104	0C11050B00B4	R20	1.1.1.1.1	20.30.4.10
4	192.168.35.107	0C11050B083F	C317	1.1.1.1.1	117.30.2.831
5	192.168.35.101	0C11050785A9	R27	1.1.1.1.1	27.30.5.1
6	192.168.35.105	A8102020128A		1.1.1.1.1	915.30.1.15
7	192.168.35.109	0C11050A5951	R29	1.1.1.1.1	29.30.2.16



**Note:**

- You can also obtain the device IP address using the Akuvox IP scanner to log in to the device web interface. Please refer to the URL below for the IP scanner application:

<https://knowledge.akuvox.com/docs/akuvox-ip-scanner>

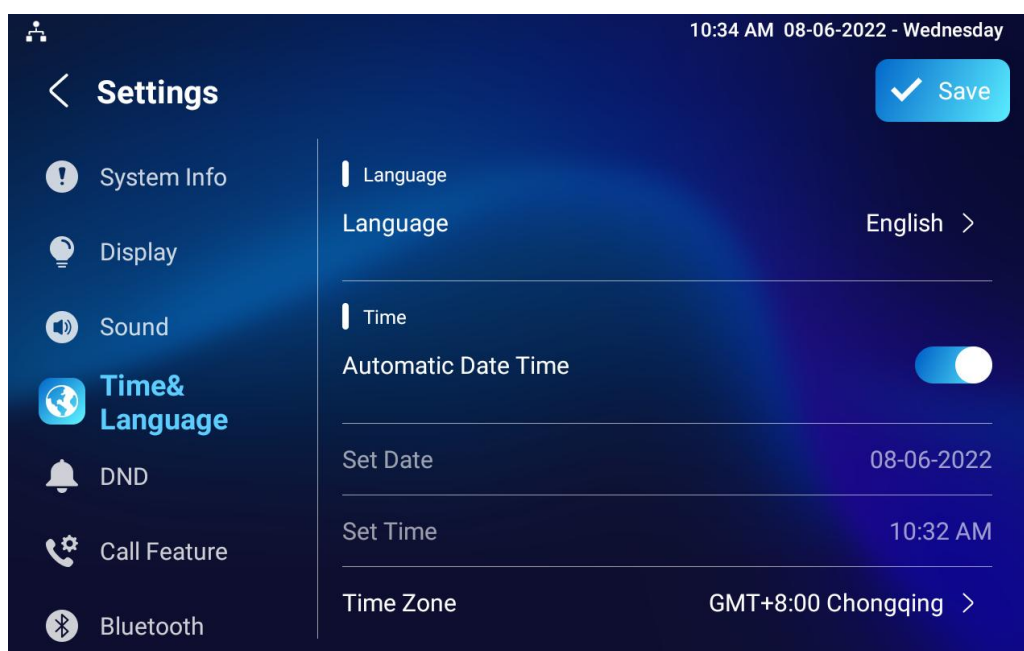
**Note:**

- Google Chrome browser is strongly recommended.
- The initial user name and password are "**admin**" and please be case-sensitive to the user names and passwords entered.

6. Language and Time Setting

6.1. Language Setting

When you first set up the device, you might need to set the language to your need or you can do it later if needed. Language setting can be configured on the device that allows you to select or change the language for screen display to your preference. To configure the language display on the device **Settings > Time&Language** screen.

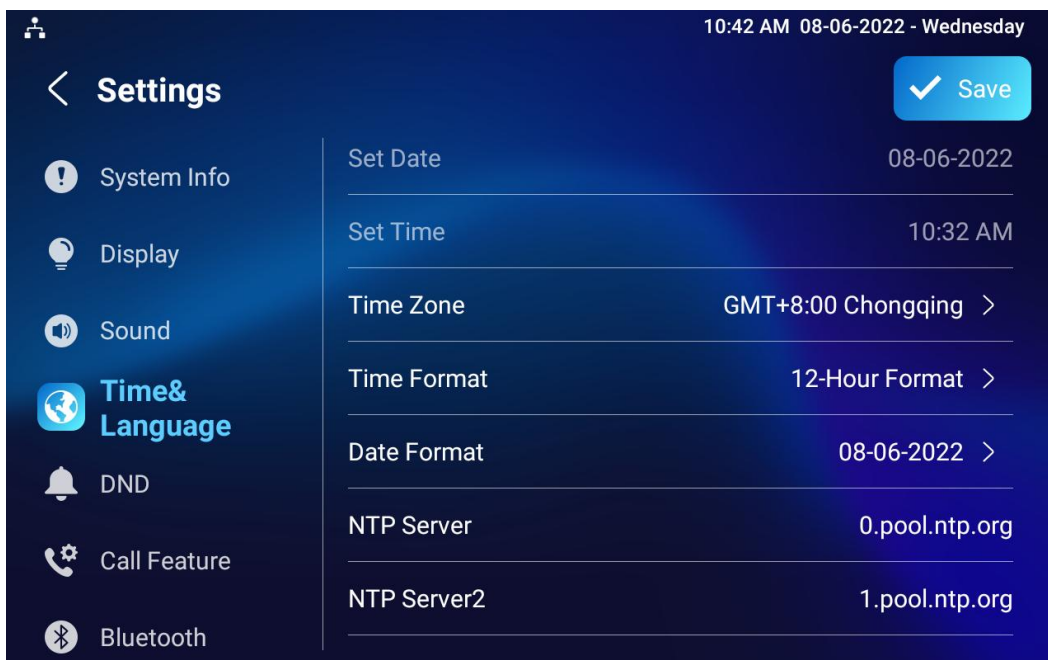
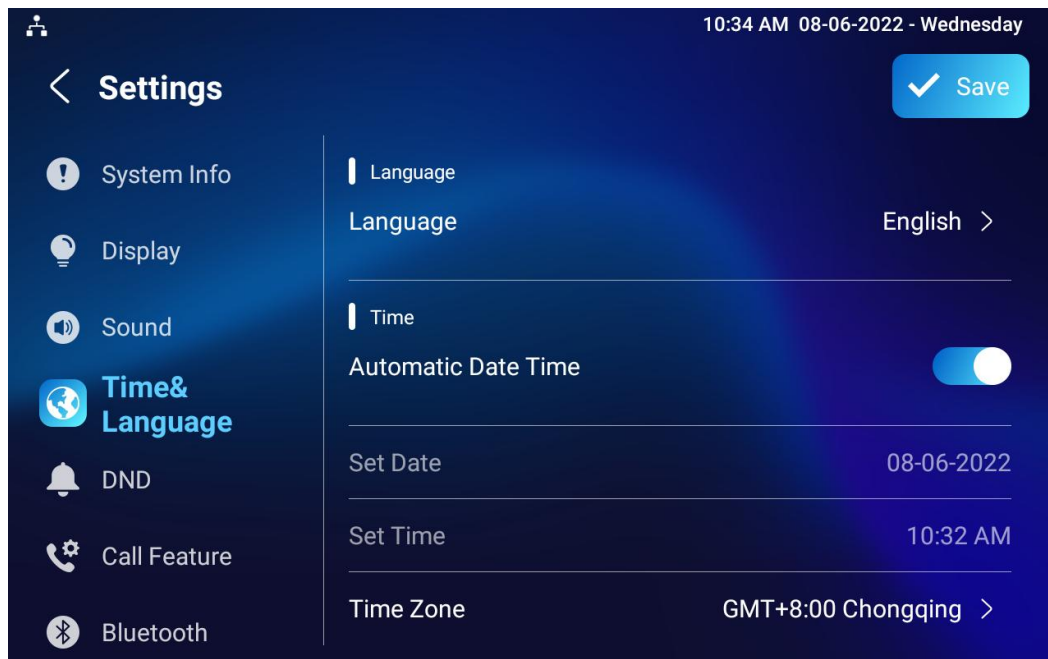


6.2. Time Setting

Time setting can be set up on the device and on the device web interface in terms of time zone, date and time format, etc.

6.2.1. Time Setting on the Device

To set up time setting on the device **Settings > Time&Language** screen.



Parameter Set-up:

- **Automatic Date:** 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 NTP server (Network Time Protocol). You can also set it up manually by checking off the square box and then entering the time and date you want and pressing the **Save** tab to save the setting.
- **Time Zone:** select the specific time zone depending on where the device is used. The default time zone is GMT+0.00.
- **Date Format:** select the date format as you like among the three format options. The three format options are **Y-M-D, Y/M/D, D-M-Y, D/M/Y, M-D-Y, M/D/Y.**
- **Time Format:** select 12-hour or 24-hour time format as you like.
- **NTP Server:** enter the NTP server you obtained in the NTP server field.

 **Note:**

- When the **Automatic Date&Time** toggle switch is toggled off then parameters related to the NTP server will become uneditable. And when the switch is toggled on, then time and date will be denied editing.

6.2.2. Time Setting on the Device Web Interface

Time setting on the web **Device >Time** interface also allows you to set up the NTP server address that you obtained to automatically synchronize your time and date. And when your time zone is selected, the device will automatically

notify the NTP server of its time zone so that the NTP server can synchronize the time zone setting in your device.

Time Setting ?

Automatic Date&Time	<input checked="" type="checkbox"/>	?
Time Format	12-Hour-Format	?
Date Format	DD-MM-YYYY	?
Date	29-12-2020	?
Time	10:26 am	?
Time Zone	GMT+0:00 Atlantic/Azores	?

NTP ?

Preferred Server	0.pool.ntp.org	?
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Parameter Set-up:

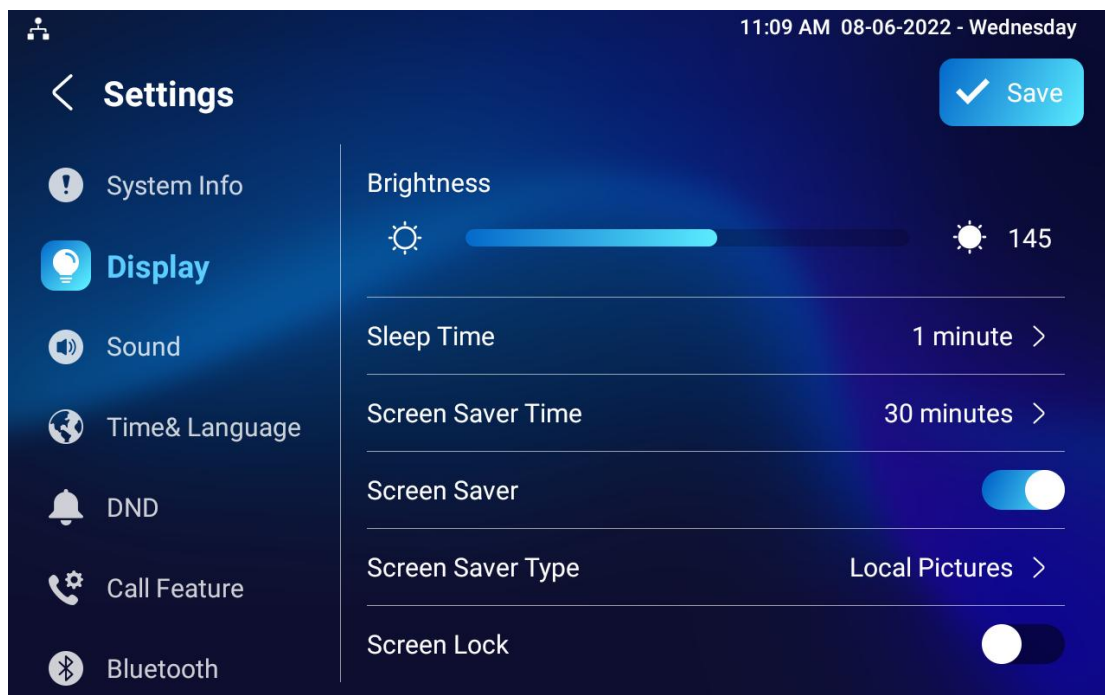
- **NTP Server:** enter the NTP server you obtained in the **NTP server** field.

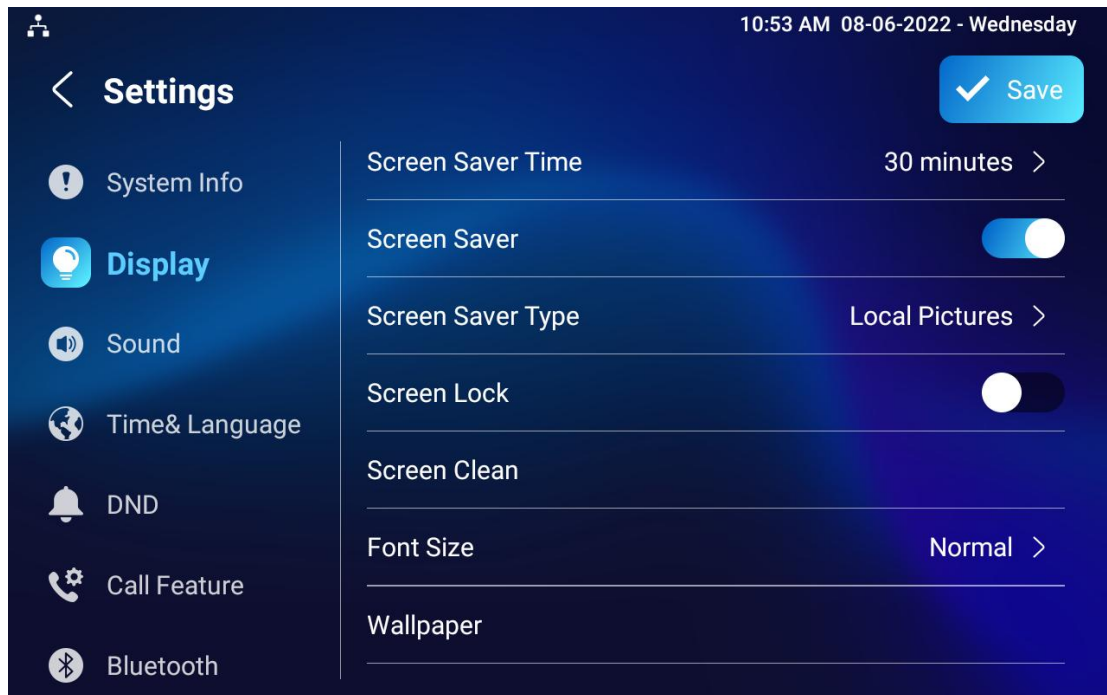
7. Screen Display Configuration

IT88 series indoor monitor allows you to enjoy a variety of screen displays to enrich your visual and operational experience through the customized setting to your preference.

7.1. Screen Display setting on the Device

You can configure a variety of features of the screen display in terms of brightness, screen saver and font size, etc. To do this configuration on device **Setting > Display** screen.





Parameter set-up:

- **Brightness:** press on the brightness setting and move the yellow dots to adjust the screen brightness. The default brightness is "145".
- **Sleep Time:** set the timing for the device screen to be turned off. You can select the timing among eight options: **15 seconds, 30 seconds, 1 minute, 2 minutes, 5 minutes, 10 minutes, 30 minutes, and 1 hour**. For example, if you set it as 1 minute then the screen will be turned off if there is no operation on the device for 1 minute. However, if you turn on the function, then the device screen will not be turned off until the screen saver display reaches its configured time duration.
- **Screen Saver Lock Time:** set the time duration for the screen saver among 4 options: **30 minutes, 1 hour, 2 hours, or Never**. for example, if you select **Never** then the screen saver will stay permanently on.
- **Screen Saver:** tick the square box to enable the screen saver function.
- **Screen Saver Type:** select screen saver type among seven options: **SDMC Pictures, Local Pictures, SDMC+Local Pictures, SDMC Videos, Local**

Videos, SDMC+Local Videos, Clock. Details for the screen saver types are shown below:

NO	Screen Saver Type	Type Description
1	SDMC Pictures	Display pictures from SDMC as the screen saver.
2	Local Pictures	Display picture uploaded to the indoor monitor as the screen saver.
3	SDMC+Local Pictures	Display pictures from SDMC and the indoor monitor in rotation as the screen saver.
4	SDMC Videos	Display videos from SDMC as the screen saver.
5	Local Videos	Display videos from the indoor monitor as the screen saver
6	SDMC+Local Videos	Display videos from SDMC and the door phone in rotation as the screen saver.
7	Clock	Display the clock as the screen saver.

- **Screen Lock:** tick the screen lock if you want to lock the screen after the screen is turned off (turn dark). You are required to enter the system code to unlock the screen or you can unlock the screen by facial recognition.
- **Screen Clean:** press on Screen clean feature first before you start wiping the screen clean. And this helps you avoid unwanted changes in the settings incurred while you are wiping the screen.
- **Font Size:** select the font size among four options "Small", "Normal", "Large", and "Huge" according to your need.
- **Breathing Light:** move the toggle switch to enable the breathing light.

- **Wallpaper:** click to select the local wallpaper.

7.2. Screen Display Setting on the Web Interface

IT88 series indoor monitor allows you to enjoy a variety of screen displays to enrich your visual and operational experience through the customized setting to your preference.

7.2.1. Upload Screen Saver

You can upload screen saver pictures separately or in batch to the device and to the device web **Device > Display Setting > Screen Saver Setting** interface for a public purpose or for a greater visual experience.

Screen Saver Setting ?

Screen Saver Pictures	<input type="button" value="Import"/> ?
Screen Saver Videos	<input type="button" value="Import"/> ?
Picture Files	<input type="text" value="2 (5).JPG"/> <input type="button" value="Delete"/> ?
Video Files	<input type="text"/> <input type="button" value="Delete"/> ?
Screen Saver Type	<input type="text" value="Local Pictures"/> ?

Note:

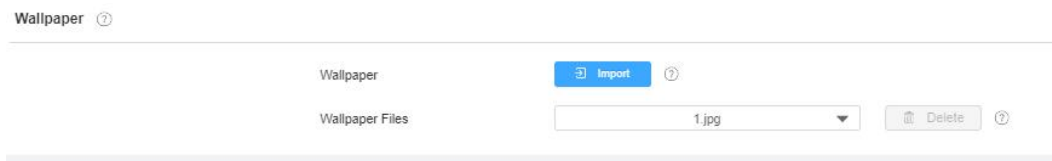
- The pictures uploaded should be in **JPG, JPEG, or PNG** format with 2M maximum.

Note:

- The previous pictures with a specific ID order will be overwritten when the repetitive designation of pictures to the same ID order occurred.

7.2.2. Upload Wall Paper

You customize your screen background picture on device web **Device > Display Setting > Wall Paper** interface in order to achieve the visual effect and experience you need for your personalized screen background display.

**Note:**

- The pictures uploaded should be in **JPG, JPEG, or PNG format** with 2M maximum.

7.2.3. Upload Device Booting Image

You can upload the booting image to be displayed during the device's booting process if needed on device web **Device > Display Setting > Boot Logo** interface.

Boot Logo

Import

Reset



Note:

- The pictures uploaded should be in **.png or .zip format**.

7.3. Icon Screen Display Configuration

IT88 series indoor monitor allows you to customize icon display on the home screen and one more screen for the convenience of your operation on device web **Device > Display Setting > Home Page Display** interface. This article helps you to set up the icon display properly on the screens according to your preference.


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

Parameter Set-up:

- **Type:** click to select among sixteen icon options: **"DND", "Message", "Contact", "Call", "Display", "System info", "Setting", "Sound", "Arming", "SOS", "Browser", "Motion Detection", "Custom APK", "Relays", "Unlock", "N/A"** is selected, the icon display in the corresponding area will disappear.
- **Value:** select the value if you select the icon type **"Custom APK"** and **"Browser"**. For example, when you select **"Custom APK"**, choose **Home Center** in the corresponding **Value** field before the APK icon can be

displayed on the home screen. If **“Browser”** is selected, you are required to enter the URL of the browser before the browser icon can be displayed. while the value is not applicable to other icon types.

- **Label:** click to rename the icon if you need, while DND icon cannot be renamed.
- **Icons:** click to select the picture to be uploaded as the icon to be displayed. The maximum icon size is 50*50. The picture format can be JPG, JPEG and PNG.

 **Note:**

- You can configure 4 icons in areas 1,2,3, and 4 on the home screen.

To configure the more icon display on **More Page Display** on the same interface.

More Page Display ⓘ Example

Area	Type	Value	Label	Icon(max size:50*50)
Area1	Contacts ▼	<input type="text"/>	<input type="text"/>	Not selected any files Select File Delete
Area2	Settings ▼	<input type="text"/>	<input type="text"/>	Not selected any files Select File Delete
Area3	Arming ▼	<input type="text"/>	<input type="text"/>	Not selected any files Select File Delete
Area4	N/A ▼	<input type="text"/>	<input type="text"/>	Not selected any files Select File Delete
Area5	N/A ▼	<input type="text"/>	<input type="text"/>	Not selected any files Select File Delete
Area6	N/A ▼	<input type="text"/>	<input type="text"/>	Not selected any files Select File Delete

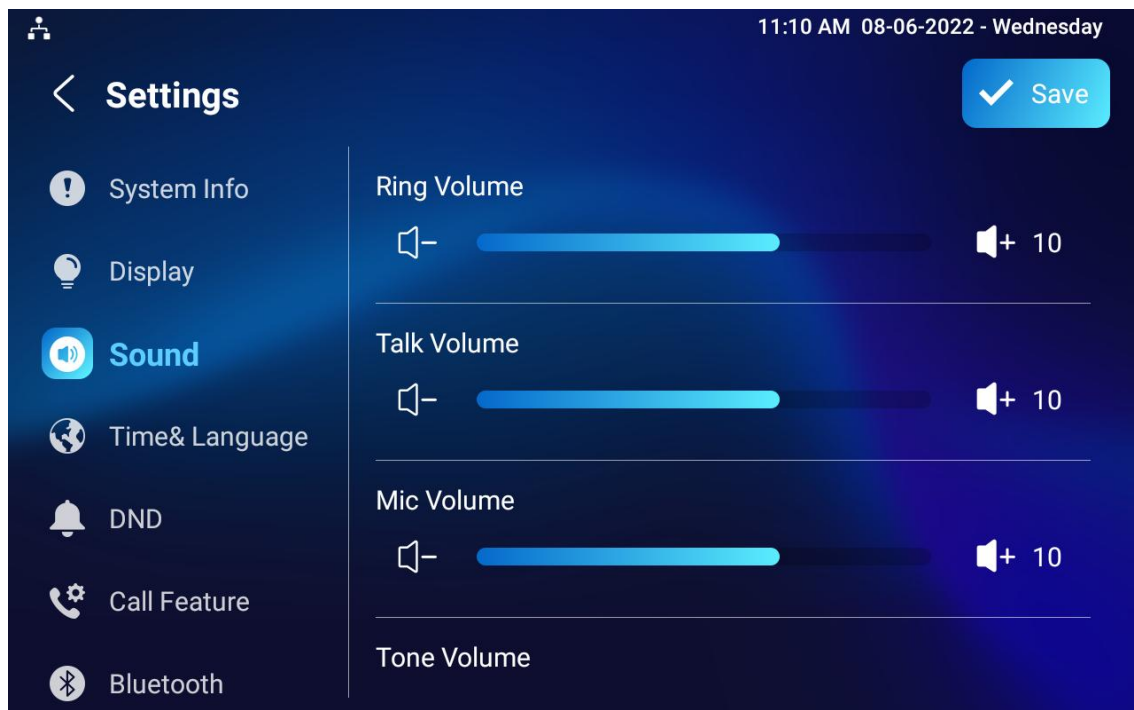
8. Sound and Volume Configuration

Akuvox IT88 series indoor monitors provide you with various types of ringtone and volume configurations ranging from Mic volume, Ring volume, Talk volume, Tone volume and Media volume. You can configure them on the device directly or on the web interface.

8.1. Volume Configuration

8.1.1. Configure Volume on the Device

To set up the volumes on the device **Setting > Sound** screen.



Parameter Set-up:

- **Ring Volume:** adjust the incoming call ringtone volume.
- **Talk Volume:** adjust the speaker volume during the call.
- **Mic Volume:** adjust the volume of your voice to be heard.
- **Tone Volume:** adjust the dial tone volume.
- **Media Volume:** adjust the volume for the video screen saver.
- **Touch Sound:** enable or disable the touch sound.
- **Phone Ringtone:** select ringtone for incoming calls.
- **Notification Sound:** select the ringtone for the incoming messages.

8.1.2. Configure Volume on the Web Interface

You can configure the volumes and tones and customize your doorbell sound and alarm ringtone to your preference on device web **Device > Audio** interface.

The screenshot shows the 'Volume Control' and 'Touch Sound' settings. The 'Volume Control' section has five rows, each with a label, a numeric input field set to '10', and a range indicator with a help icon. The 'Touch Sound' section has a label 'Touch Sound Enabled' and a dropdown menu set to 'Enabled' with a help icon.

Parameter	Value	Range
Mic Volume	10	(1-15)
Ring Volume	10	(0-15)
Talk Volume	10	(1-15)
Tone Volume	10	(1-15)
Media Volume	10	(0-15)

Touch Sound Enabled: Enabled

Doorbell Sound Upload ⓘ

Doorbell Sound Upload ⓘ

Doorbell Sound ⓘ

Alarm Ringtone Upload ⓘ

Alarm Ringtone Upload ⓘ

Alarm Ringtone ⓘ

Note:

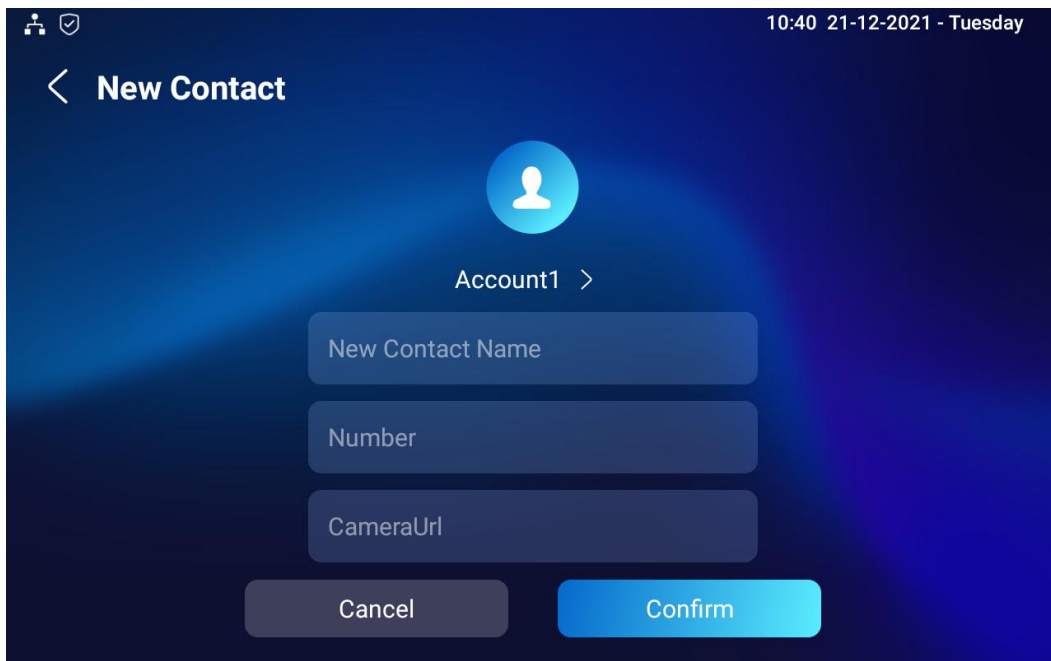
- Doorbell sound files and Alarm Ringtone files to be uploaded must be **.WAV** or **MP3** format. No limitation on the file size.

9. Phone Book Configuration

9.1. Phone Book Configuration on the Device

You can configure the contacts list in terms of adding and modifying contact groups or contacts on the device **Contacts > Local Contacts** directly.

9.1.1. Add contact



10:40 21-12-2021 - Tuesday

< New Contact

Account1 >

New Contact Name

Number

CameraUrl

Cancel Confirm

Parameter Set-up:

- **Account1**: select which account to use to dial out, Account 1 or Account 2.

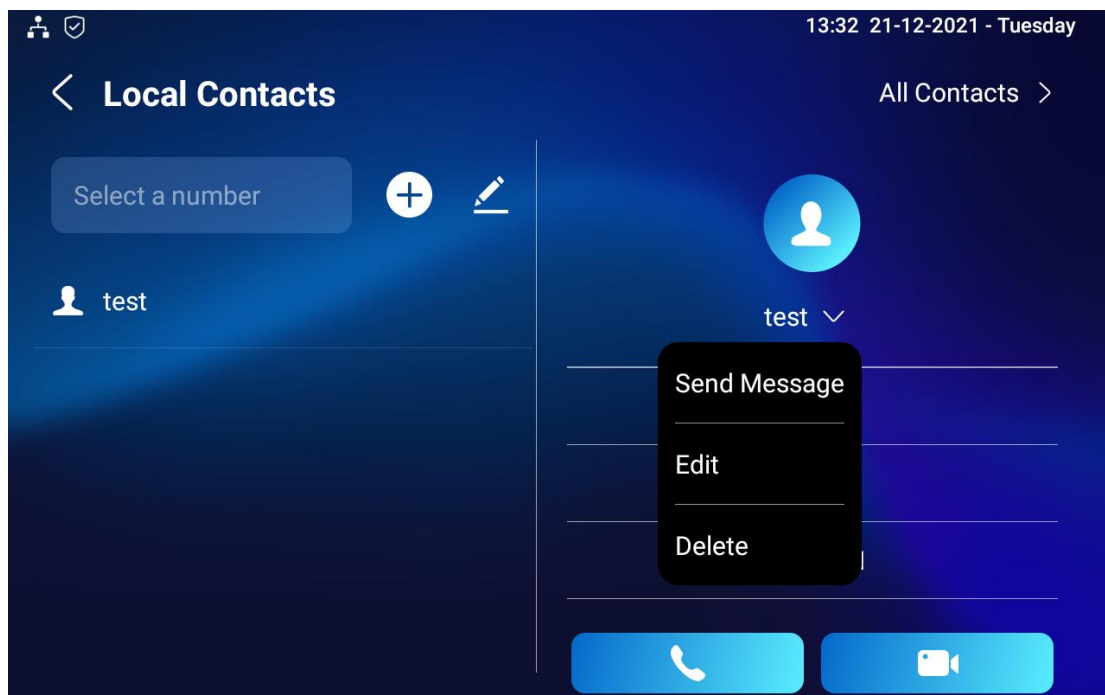
- **New Contact Name:** enter the name to save.
- **Number:** enter the IP or SIP number to save.
- **CameraUrl:** enter the RTSP URL for video preview.

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 their company.

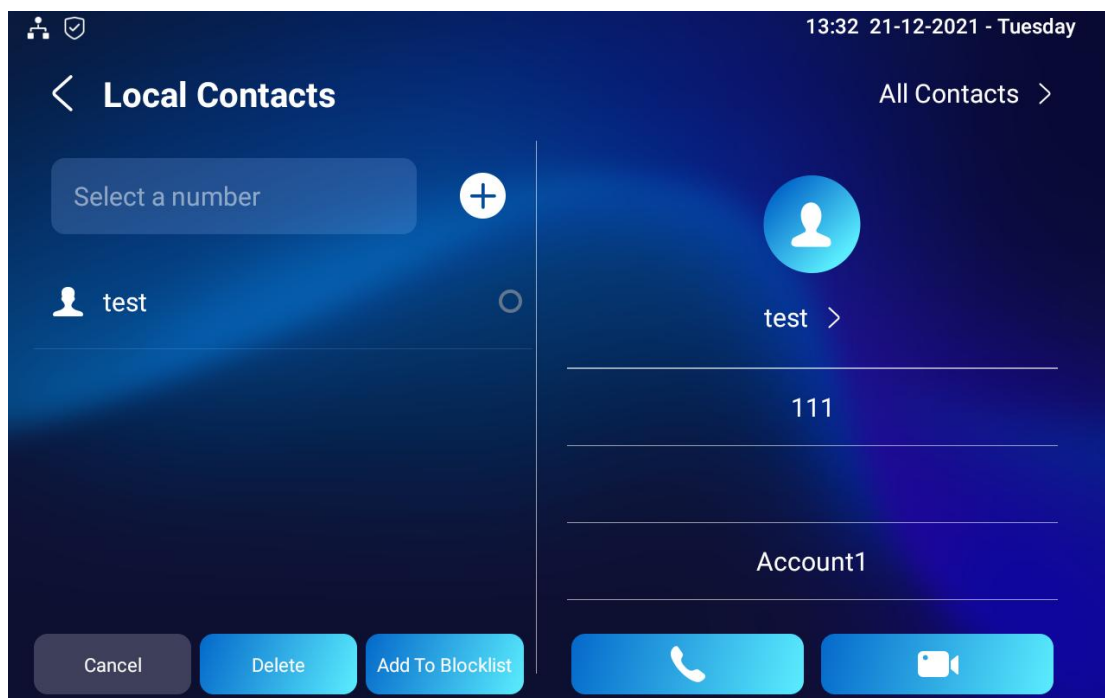
9.1.2.Edit Contact

You can check and edit the existed contacts in the phonebook list. Choose one and click **Edit** key to modify.



9.1.3. Block List setting on the device

Choose which contact on the contact list you want to be added to the blocklist.



Note:

- You can delete contacts regardless of whether it is on the **All Contacts** screen or the **Blocklist** screen.

9.2. Phone Book Configuration on the Web Interface

9.2.1. Contact Configuration

To conduct contact configuration on web **Contacts > Local Contacts > Local Contacts List** interface.

Contacts List Setting ⓘ

Contacts Sort By: ⓘ

Show Local Contacts Only: ⓘ

Local Contacts List ⓘ

Contacts List: ⓘ

Search: 🔍 Search ↺ Reset ⓘ

+ Add 📄 Import Export ▾

☐	Index	Name	Number	Account	Edit
<input type="checkbox"/>	1	test	111	Account1	

🗑 Delete 🗑 Delete All
Prev 1/1 Next
Move To All Contacts ▾ 1 Go

Add Contact ✕

Name: ⓘ

Number: ⓘ

Group: ⓘ

Dial Account: ⓘ

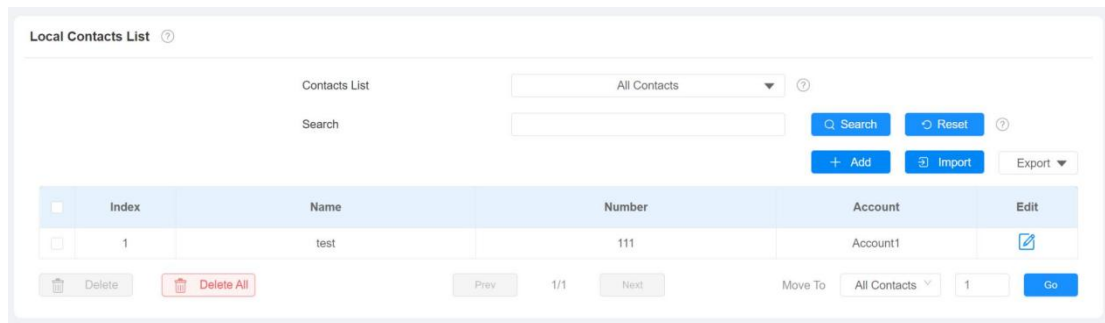
Cancel
Submit

Parameter set-up:

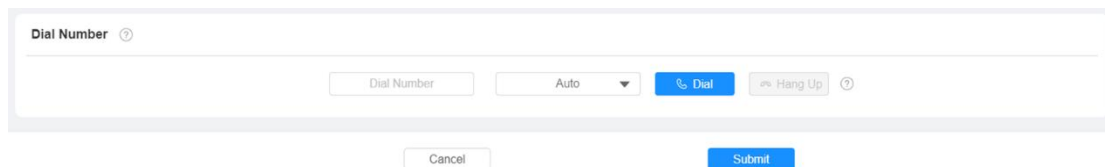
- **Name:** enter the contact name to be saved.
- **Number:** enter the contact number (SIP or IP number) to be saved.
- **Group:** select Default or Blocklist group.
- **Dial Account:** select Account1 or Account2.

9.2.2. Contact Management

You can search, display, edit, and delete the contacts in your contacts list on web **Contacts > Local Contacts > Local Contacts List** interface.



You can dial out using the contact phone number on **Contacts > Local Contacts > Dial Number** interface.



9.2.3. Block List Setting on the Web Interface

You can set the blocklist directly in the contact list on the web **Contacts > Local Contacts > Contacts List Setting** interface or set it when editing a contact.

Index	Name	Number	Group	Account	Edit	
<input checked="" type="checkbox"/>	1	Atest	192.168.12.12	Default	Account1	
<input type="checkbox"/>	2	Btest	192.168.12.13	Default	Account1	
<input type="checkbox"/>	3	Ctest	192.168.12.14	Default	Account1	

1/1

- All Contacts
- BlockList

Add Contact X

Name ?

Number ?

Group ?

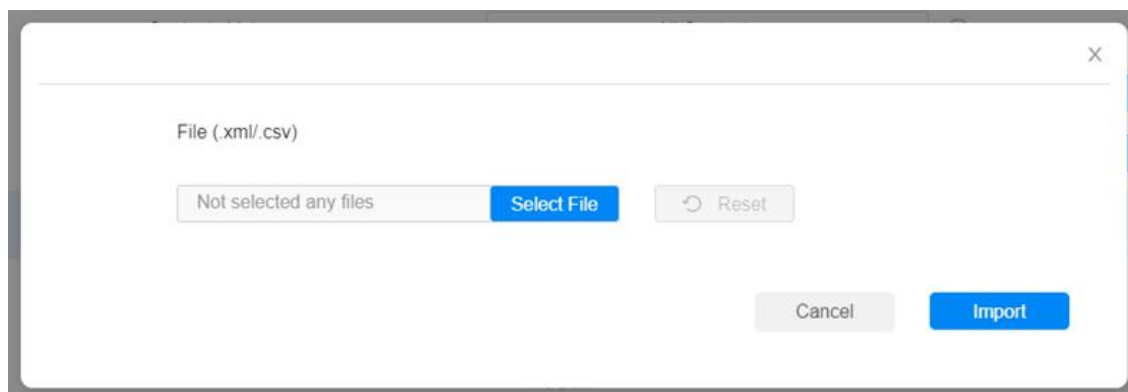
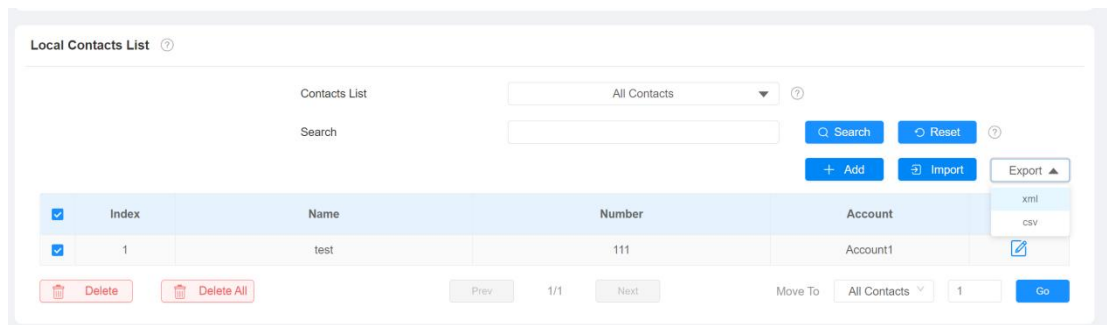
Dial Account ?

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.

9.2.4. Contacts Import and Export on the Web Interface

When the contact becomes so many that you can not afford to manage each contact one by one manually, you can import and export the contacts in batch on the device web **Contacts > Local Contacts > Local Contacts List** interface.



Note:

- The contact file can only be imported or exported in .xml or .csv format.

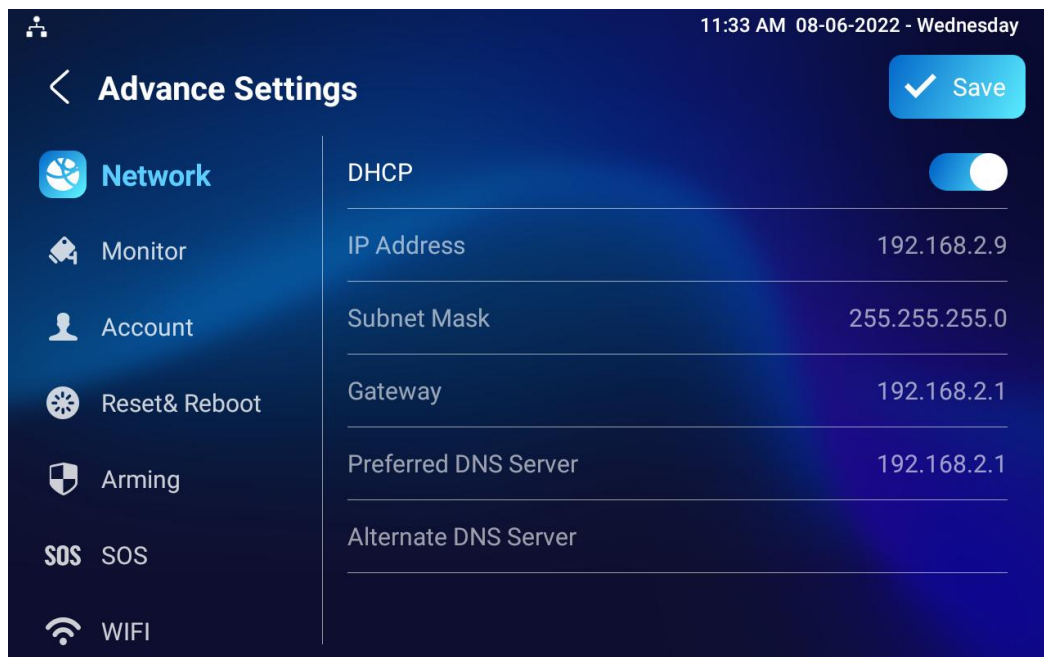
10. Network Setting & Other Connection

10.1. Device Network Configuration

You can check for the door phone's network connection info and configure the default DHCP mode (**Dynamic Host Configuration Protocol**) and static IP connection for the device either on the device or on the device web interface.

10.1.1. Configuring Device Network Connection on the Device

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




Parameter Set-up:

- **DHCP:** select the **DHCP** mode by moving the toggle switch to the right. DHCP mode is the default network connection. If the DHCP mode is turned on, then the door phone will be assigned by the DHCP server with IP address, subnet mask, default gateway, and DNS server address automatically.
- **Static IP:** select the static IP mode by checking off the DHCP check box. When static IP mode is selected, then the IP address, subnet mask, default gateway, and DNS server address have to be manually configured according to your actual network environment.
- **IP Address:** set up the IP Address if the static IP mode is selected.
- **Subnet Mask:** set up the subnet Mask according to your actual network environment.
- **Default Gateway:** set up the correct gateway default gateway according to the IP address of the default gateway.
- **Preferred&Alternate DNS Server:** set up a preferred or alternate DNS Server (**Domain Name Server**) according to your actual network environment. Preferred DNS server is the primary DNS server address while the alternate DNS server is the secondary server address and the door phone will connect to the alternate server when the primary DNS server is unavailable.



Note:

- You can press **System Info**  icon and then press **Network** tab on the **Settings** screen to check the device network status.
- The default system code is "123456".

10.1.2. Configuring Device Network Connection on the Web Interface

To check the network on the web **Status > Network information** interface.

Network Information ?	
Network Type	LAN
LAN Port Type	DHCP Auto
Link Status	Connected
IP Address	192.168.2.9
Subnet Mask	255.255.255.0
GateWay	192.168.2.1
Preferred DNS	192.168.2.1
Alternate DNS	
Primary NTP	0.pool.ntp.org
Secondary NTP	1.pool.ntp.org

To check and configure network connection on the device web **Network > Basic > LAN Port** interface.

Network » Basic

LAN Port ⓘ

Type	<input type="radio"/> DHCP <input checked="" type="radio"/> Static IP ⓘ
IP Address	<input type="text" value="192.168.35.120"/> ⓘ
Subnet Mask	<input type="text" value="255.255.255.0"/> ⓘ
Default Gateway	<input type="text" value="192.168.35.1"/> ⓘ
Preferred DNS Server	<input type="text" value="218.85.157.99"/> ⓘ
Alternate DNS Server	<input type="text" value="218.85.152.99"/> ⓘ

Parameter Set-up:

- **DHCP:** select the **DHCP** mode by checking the DHCP box. DHCP mode is the default network connection. If the DHCP mode is selected, then the indoor monitor will be assigned by the DHCP server with IP address, subnet mask, default gateway, and DNS server address automatically.
- **Static IP:** select the Static IP mode by checking off the DHCP square box. When static IP mode is selected, then the IP address, subnet mask, default gateway, and DNS server address have to be manually configured according to your actual network environment.
- **IP Address:** set up the IP address if the static IP mode is selected.
- **Subnet Mask:** set up the subnet mask according to your actual network environment.
- **Default Gateway:** set up the correct gateway default gateway according to the IP address of the default gateway.
- **Preferred/Alternate DNS Server:** set up DNS (**Domain Name Server**) according to your actual network environment. **Preferred DNS Server** is the primary DNS server address while the **Alternate DNS Server** is the secondary server address and the door phone connects to the alternate DNS server when the preferred DNS server is unavailable.

10.2. Device Deployment in Network

Akuvox IT88 series indoor monitors should be deployed before they can be properly configured in the network environment in terms of their location, operation mode, address and extension numbers as opposed to other devices for device control and the convenience of the management. To deploy the device in the network on web **Network > Advanced > Connect Setting** interface.

The screenshot shows the 'Connect Setting' interface with the following configuration:

- Connect Mode: SDMC
- Discovery Mode:
- Device Node: 1 1 1 1 1
- Device Extension: 1
- Device Location: Indoor Monitor

Parameter Set-up:

- **Connect Mode:** It is automatically set up according to the actual device connection with a specific server in the network such as **SDMC** or **Cloud and None**. **None** is the default factory setting indicating the device is not in any server type, therefore you are allowed to choose Cloud, SDMC in discovery mode.
- **Discovery Mode:** check to turn on the discovery mode of the device so that it can be discovered by other devices in the network, and uncheck if you want to conceal the device so as not to be discovered by other devices.
- **Device Node:** specify the device address by entering device location info from the left to the right: **Community, Unit, Stair, Floor, Room** in sequence.
- **Device extension:** enter the device extension number for the device you installed.

- **Device Location:** enter the location in which the device is installed and used.

10.3. Device NAT Setting

NAT (**Network Address Translation**) allows hosts in an organization's private intranet to transparently connect to hosts in the public domain. There is no need for internal hosts to have registered Internet addresses. It is a way to translate the internal private network IP address into a legal network IP address technology. To set up NAT, you can do it on web **Account > Advanced > NAT** interface.



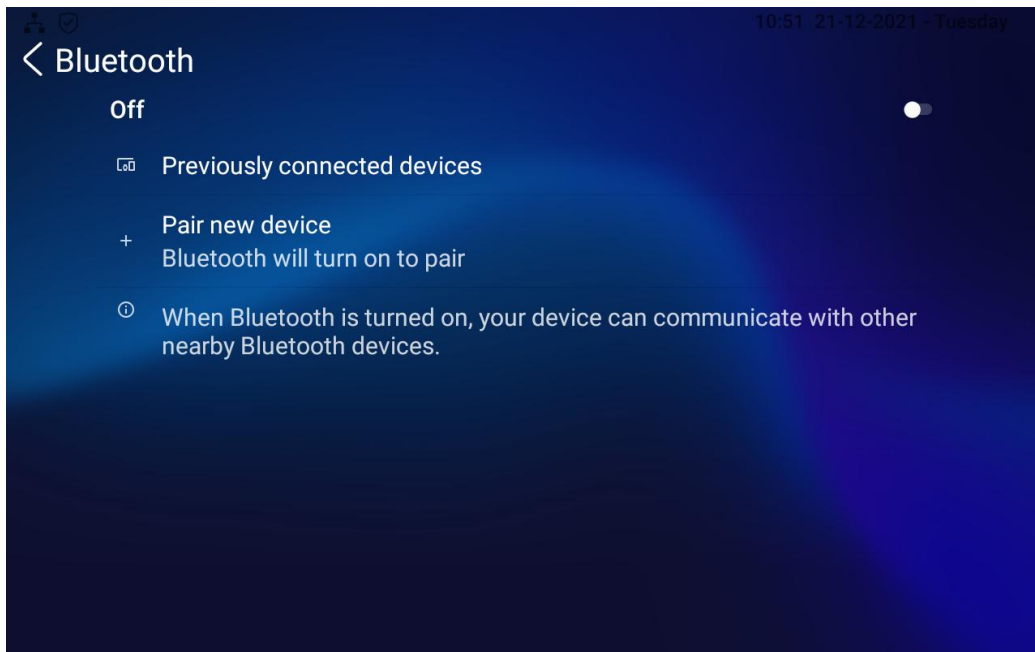
Parameter Set-up:

- **RPort:** check the RPort when the SIP server is in WAN (**Wide Area Network**).

10.4. Device Bluetooth Setting

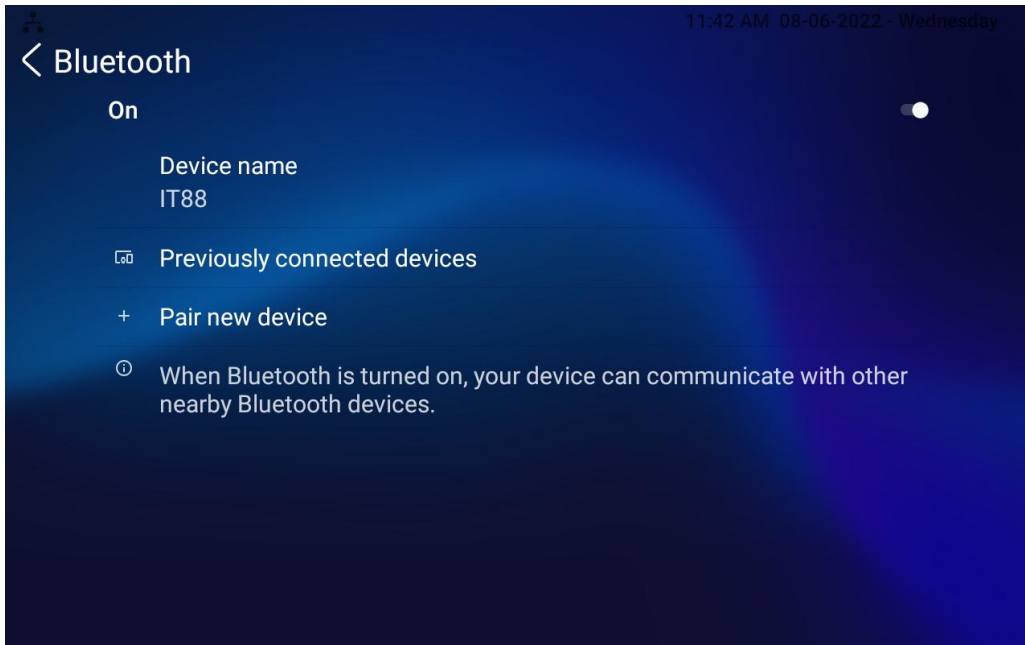
10.4.1. Device Bluetooth Pairing

After IT88 series indoor monitors turn on the Bluetooth on the device **Settings > Bluetooth** screen, it can be paired with other devices via Bluetooth.



10.4.2. Device Bluetooth Data Transmission

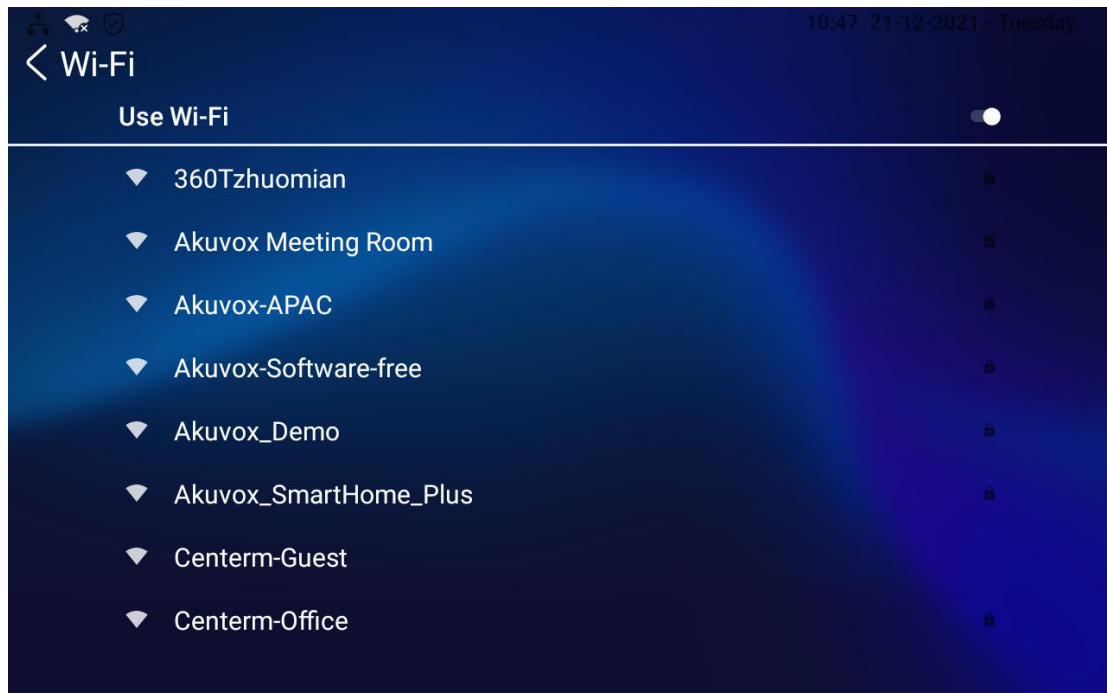
To transfer data via Bluetooth by pressing **Pair new device**.

**Note:**

- After successful Bluetooth pairing, data transmission can be carried out.

10.5. Device Wi-Fi Setting

In addition to wired connection, the device also supports Wi-Fi connection. To set the Wi-Fi on device **Settings > Advance Settings > WIFI** screen.



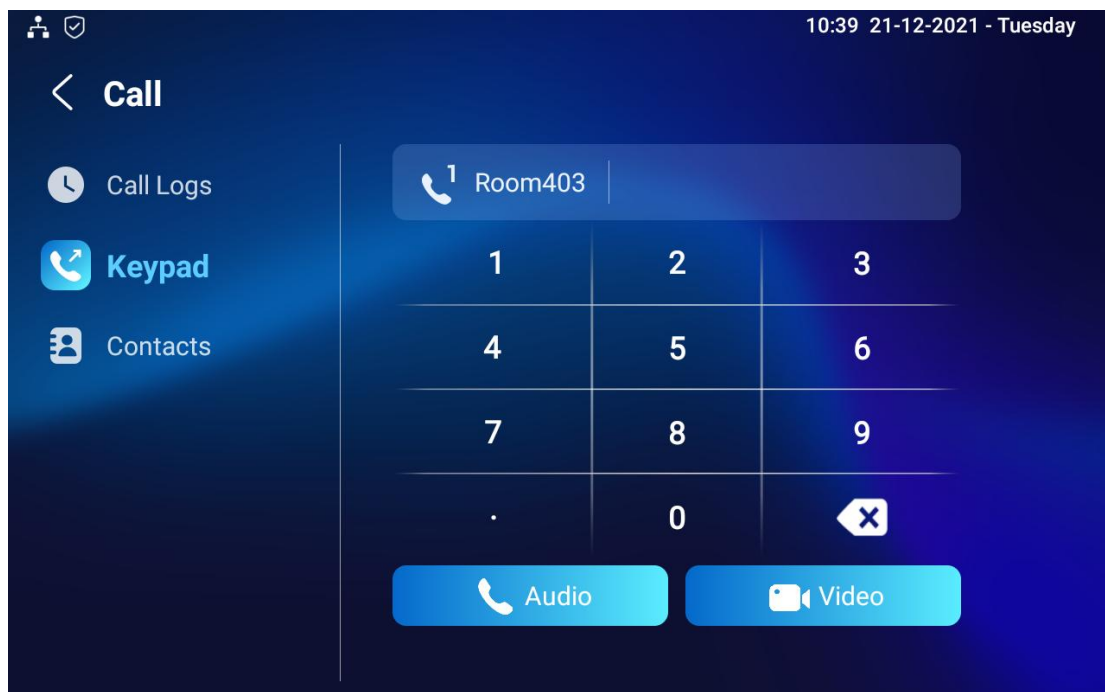
11. Intercom Call Configuration

11.1. IP call & IP Call Configuration

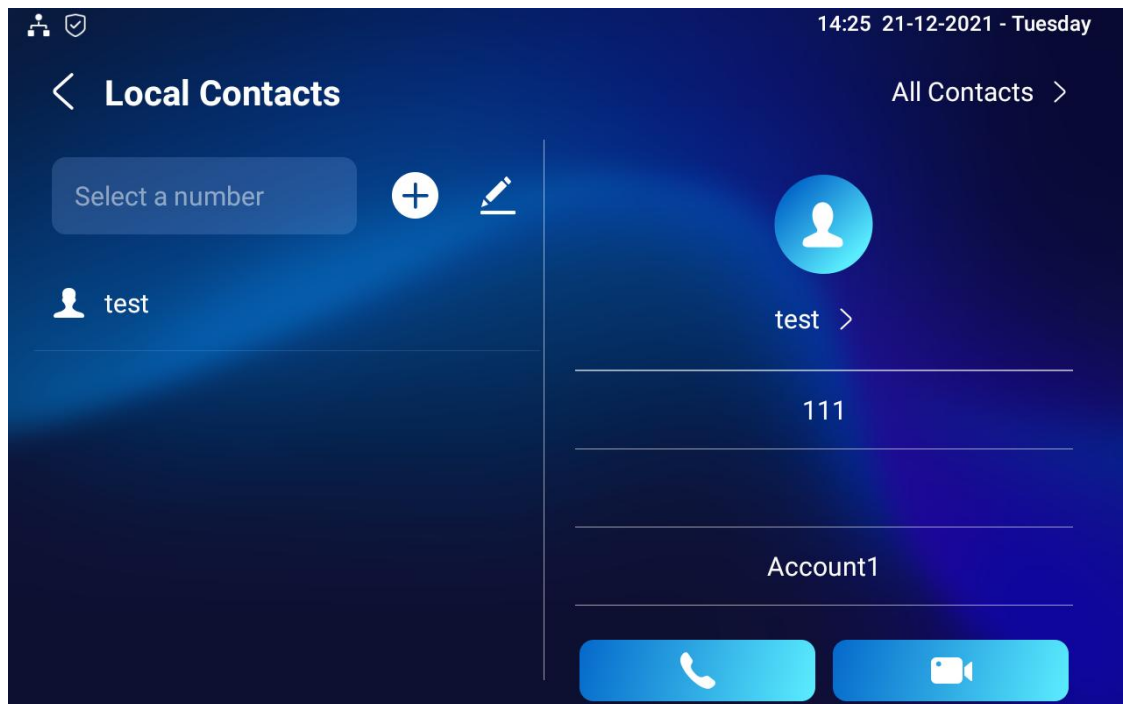
IP calls and SIP calls can be made directly on the intercom device by entering the IP number on the device. And you can also disable the direct IP call if you allow no IP call to be made on the device.

11.1.1. Make IP Calls

To make a direct IP call on the device **Call** screen. Enter the IP address you wish to call on the soft keyboard, press **Audio** or **Video** tab to call out.

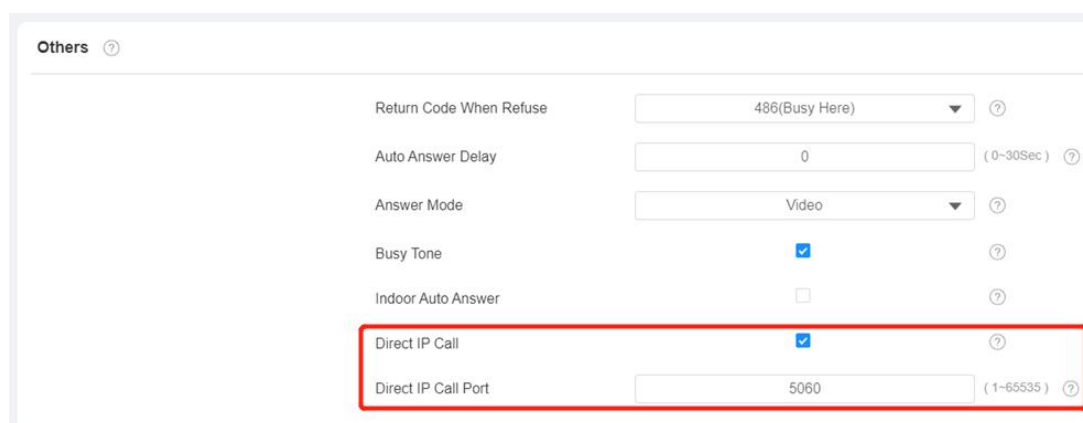


In addition, you can also make IP calls on the **Local Contacts** on your device.



11.1.2. IP Call Configuration

To configure the IP call feature and port on the device web **Device > Call Feature > Others** interface.



Parameter Set-up:

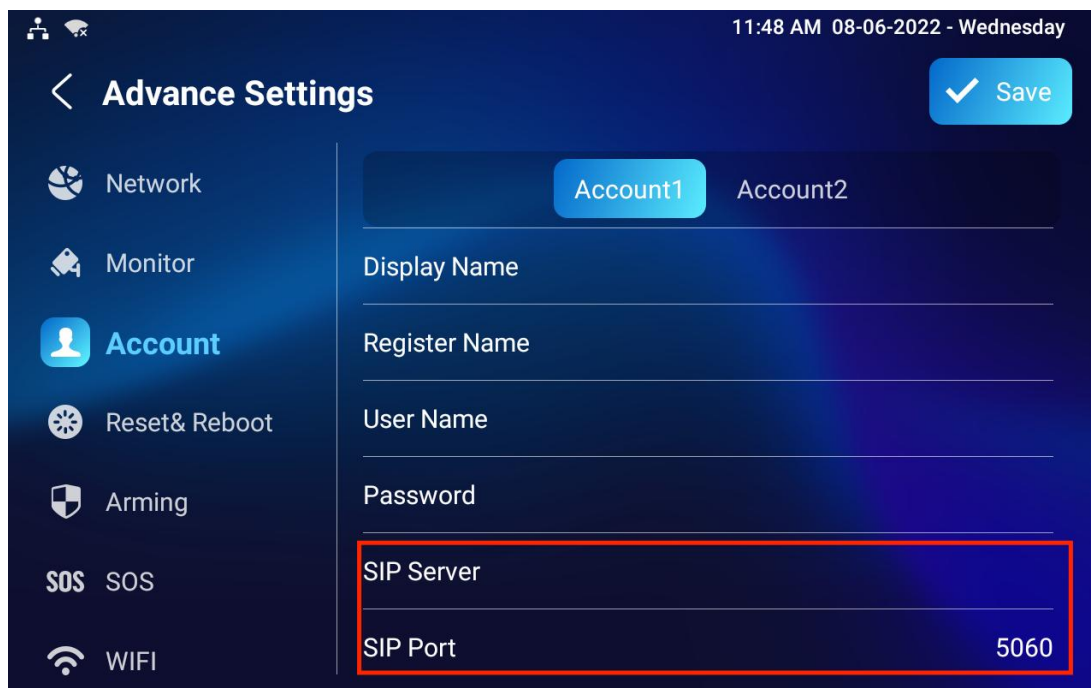
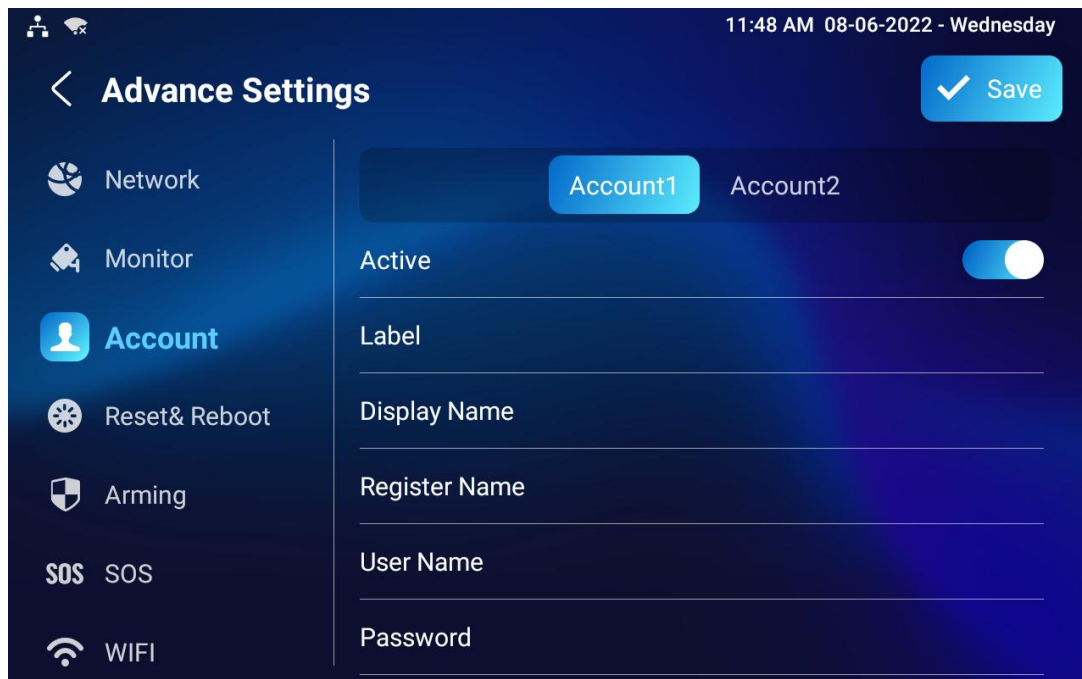
- **Direct IP Call:** tick the check box to enable the direct IP call. For example, if you do not allow direct IP call to be made on the device, you can untick the check box to terminate the function.
- **Direct IP Call Port:** the direct IP Call Port is "5060" by default with the port range from 1-65535. If you enter any values within the range other than the 5060, you are required to check if the value entered is consistent with the corresponding value on the device you wish to establish a data transmission with.

11.2.SIP Call &SIP Call Configuration

You can make SIP (**Session Initiation Protocol**) call in the same way as you do for making the IP calls on the device. However, SIP call parameters related to its account, server, and transport type need to be configured first before you can make calls on the device.

11.3.SIP Account Registration

Akuvox IT88 series indoor monitors support two SIP accounts that can all be registered according to your applications. For example, you can switch between the two SIP accounts. The SIP account can be configured on the device and on the device interface. To configure the SIP account on the device **Settings > Advance Settings > Account** screen.



Parameter Set-up:

- **Account1/Account2:** select Account1 or Account2. Account1 is the default SIP account.

- **SIP Port:** enter the SIP server port for communication. The SIP port is "5060" by default.

The parameter settings for SIP account registration can be configured on the Account setting screen and they can also be configured on the device web **Account > Basic > SIP Account** interface.

Parameter setup:

- **Status:** check to see if the SIP account is registered or not.
- **Account:** select Account1 or Account2.
- **Account Enabled:** check to active the registered SIP account.
- **Display Label:** configure the device label to be shown on the device screen.
- **Display Name:** configure the name, for example, the device's name to be shown on the device being called to.
- **Register Name:** enter the SIP account register Name obtained from the

SIP account administrator.

- **Username:** enter the user name obtained from the SIP account administrator.
- **Password:** enter the password obtained from the SIP server.

11.4.SIP Server Configuration

SIP server can be set up for device in order to achieve call sessions through the SIP server between intercom devices. To perform the SIP account setting on the Web **Account > Basic > SIP Server** interface.

SIP Server ?	
Server Address	<input type="text"/> ?
Sip Server Port	<input type="text" value="5060"/> (1024-65535) ?
Registration Period	<input type="text" value="1800"/> (30-65535 Sec) ?

Parameter Set-up:

- **Server Address:** enter the Server's IP address number or its URL.
- **Sip Server Port:** set up SIP server port for data transmission.
- **Registration Period:** set up SIP account registration time pan. SIP re-registration will start automatically if the account registration fails during the registration time span. The default registration period is "1800", ranging from **30-65535s**.

11.5. Outbound Proxy Server configuration

An outbound proxy server is used to receive all initiating request messages and route them to the designated SIP server in order to establish call sessions via port-based data transmission. To configure the outbound Proxy server on **Account > Basic > Outbound Proxy Server** interface.

Parameter Set-up:

- **Outbound Enable:** check or uncheck to turn on or turn off the outbound proxy server.
- **Preferred Outbound Proxy Server:** enter the SIP address of the outbound proxy server.
- **Preferred Outbound Proxy Port:** enter the Port number for establishing call sessions via the outbound proxy server.
- **Alternate Outbound Proxy Server:** set up Backup Server IP for the backup outbound proxy server.
- **Alternate Outbound Proxy Port:** enter the Port number for establishing call sessions via the backup outbound proxy server.

11.6.SIP Call DND & Return Code Configuration

DND (**Do not disturb**) setting allows you not to be disturbed by any unwanted incoming SIP calls. You can set up DND related parameters properly on the device web **Device > Call Feature > DND** interface to block SIP calls you do not intend to answer. In the meantime, you can also define the code to be sent to the SIP server when you want to reject the call.

The screenshot shows the 'DND' configuration page. It includes the following settings:

- Whole Day:** A checkbox that is currently unchecked.
- Schedule:** A checkbox that is currently unchecked.
- DND Start Time:** A time selection field set to '12:00 am'.
- DND End Time:** A time selection field set to '12:00 am' with a 'Next Day' option.
- Return Code When DND:** A dropdown menu currently showing '486(Busy Here)'.

Parameter Set-up:

- **DND:** check **Whole Day** or **Schedule** to enable the DND function. DND function is disabled by default.
- **Return Code When DND:** select what code should be sent to the calling device via the SIP server. **404** for “Not Found”; **480** for “Temporary Unavailable”; **486** for “Busy Here”.

11.7.Device Local RTP configuration

For the device network data transmission purpose, the device needs to be set up with a range of RTP ports (**Real-time Transport Protocol**) for establishing an exclusive range of data transmission in the network. To set up device local RTP on web **Network > Advanced > Local RTP** interface.

Local RTP

Starting RTP Port	<input type="text" value="11800"/>	(1024-65535)
Max RTP Port	<input type="text" value="12000"/>	(1024-65535)

Parameter set-up:

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

11.8.Data Transmission Type Configuration

SIP message can be transmitted in three data transmission protocols: **UDP (User Datagram Protocol)**, **TCP (Transmission Control Protocol)**, **TLS (Transport Layer Security)** and **DNS-SRV**. In the meantime, you can also identify the server from which the data come from. To do this configuration on web **Account > Basic > Transport Type** interface.

Parameter Set-up:

- **UDP:** select “UDP” for unreliable but very efficient transport layer protocol. UDP is the default transport protocol.

- **TCP:** select "TCP" for Reliable but less-efficient transport layer protocol.
- **TLS:** select "TLS" for Secured and Reliable transport layer protocol.
- **DNS-SRV:** select "DNS-SRV" to obtain DNS record for specifying the location of services. And **SRV** not only records the server address but also the server port. Moreover, SRV can also be used to configure the priority and the weight of the server address.

11.9.Call Setting

IT88 will auto answer all incoming calls if call auto-answer is enabled and receive a live stream if live stream is enabled.

11.9.1. Call Auto-answer Configuration

IT88 will auto answer all incoming calls if call auto-answer is enabled and receive a live stream if live stream is enabled. To do the configuration on web **Account > Advanced > Call > Auto Answer** and **Device > Call Feature > Others** interface.

Call ⓘ

Max Local SIP Port	<input type="text" value="5062"/>	(1024-65535) ⓘ
Min Local SIP Port	<input type="text" value="5062"/>	(1024-65535) ⓘ
PTime(ms)	<input type="text" value="20"/>	ⓘ
Auto Answer	<input checked="" type="checkbox"/>	ⓘ
Prevent SIP Hacking	<input type="checkbox"/>	ⓘ

Others ⓘ

Return Code When Refuse ⓘ

Auto Answer Delay (0-30Sec) ⓘ

Answer Mode ⓘ

Busy Tone ⓘ

Indoor Auto Answer ⓘ

Direct IP Call ⓘ

Direct IP Call Port (1-65535) ⓘ

Parameter Set-up:

- **Auto Answer:** turn on the Auto Answer function by ticking the square box.
- **Auto Answer Delay:** set up the delay time (from 0-30 sec.) before the call can be answered automatically. For example, if you set the delay time as 1 second, then the call will be answered in 1 second automatically.
- **Answer Mode:** set up the video or audio mode you preferred for answering the call automatically.
- **Indoor Auto Answer:** turn on the Auto Answer function for calls from other indoor monitors by ticking the check box .

11.9.2. Auto-answer Allow List setting

Auto-answered can only be applicable to the SIP or IP numbers that are already added to the auto-answer white-list of your indoor monitor. Therefore, you are required to configure or edit the numbers in the white-list on the web **Device > Call Feature > Auto Answer AllowList** interface.

Auto Answer AllowList ?

<input type="checkbox"/>	Index	Device Location	SIP/IP	Edit
<input type="checkbox"/>	1	Gate	101	✎
<input type="checkbox"/>	2	Lobby	102	✎
<input type="checkbox"/>	3	Front Door	192.168.3.15	✎

Delete Delete All Prev 1/1 Next 1 Go

Add Auto Answer AllowList ×

Device Location ?

SIP/IP ?

Cancel Submit

SIP/IP numbers can be imported to or exported out of the indoor monitor in batch on web **Device > Call Feature > Auto Answer AllowList > Import/Export** interface.

Select Answer Allowlist File(xml or csv)

Not selected any files Select File Reset

Cancel Import

Note:

- SIP/IP number files to be imported or exported must be in either .xml or .csv format.
- SIP/IP numbers must be set up in the phone book of the indoor monitor before they can be valid for the auto-answer function

11.9.3. Live Stream Setting

Receive Live Stream on the indoor monitor allows you to see the video image (one-way video stream) from the calling device such as a door phone whether or not you answered the call in audio or video mode, while the video image from your indoor monitor will not be sent to the calling devices in order to protect your privacy. To do the configuration on web **Device > Call Feature > Audio Call Settings** interface.



After the feature is enabled, once a caller requires a video call:

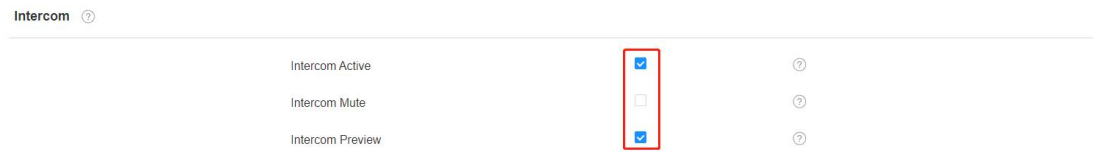
- If we received the coming call as a video call at the IT88 side, will build a two-way video conversation, be able to see each other.
- If we received the coming call as an audio call at the IT88 side, will build a one-way video conversation, only be able to see the live streaming from the caller.

 **Note:**

- Only device with camera module will have this feature.

11.10. Intercom Call Configuration (intercom preview, mute)

If you want 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.

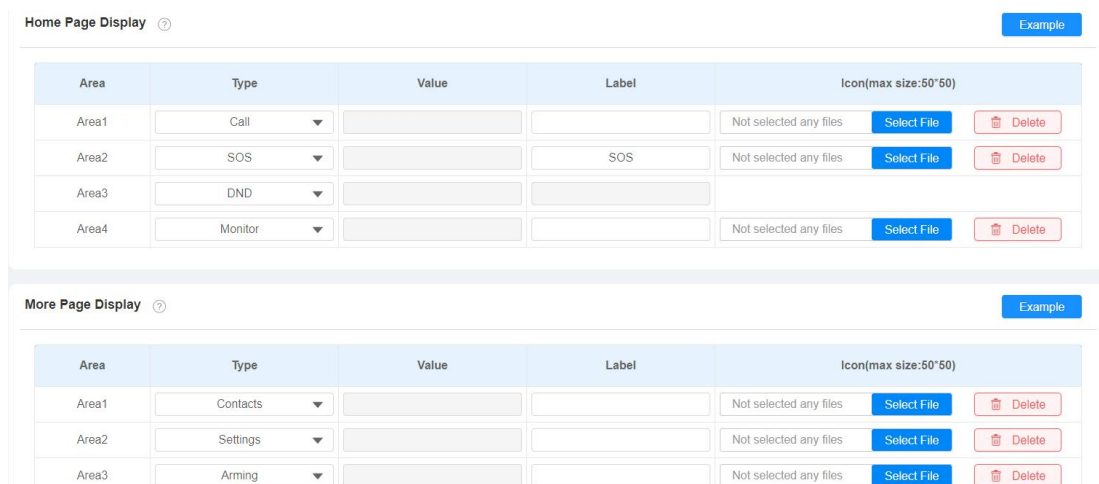


Parameter Set-up:

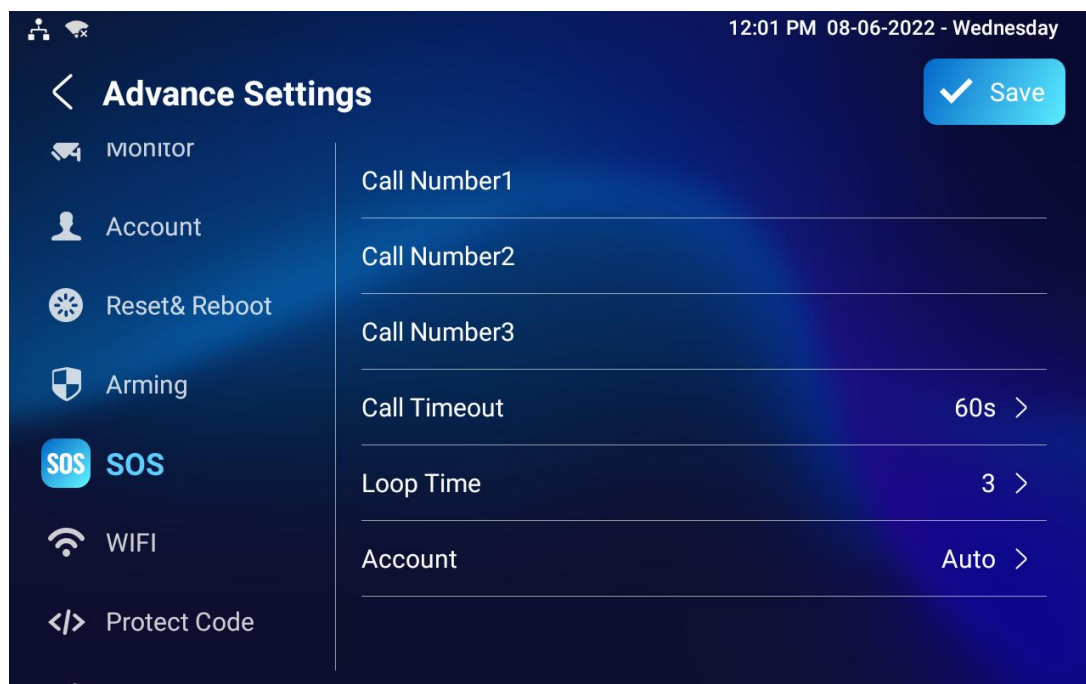
- **Intercom Active:** tick the check box to enable or disable the intercom function.
- **Intercom Mute:** tick the check box to enable mute the voice from the callee side and vice versa.
- **Intercom Preview:** tick the check box to enable the incoming call preview function. If enable intercom preview, the group call is not available.

11.11. Emergency Call Setting

Emergency call is used to call out three emergency contacts when you are in urgent status. Especially for the elders and children. To display Emergency call softkey on web **Device > Display Setting > Home Page Display/More Page Display** interface.



After setup on web, you also need to do the configuration on device **Settings > Advance Settings > SOS** screen.



Parameter Set-up:

- **Call Number:** to setup 3 SOS numbers. Once users press the SOS key on the home page (SOS display key shall be set on the web manually), indoor monitors will call out the number in order.
- **Call Timeout:** set up the timeout for each number. Once users call out, if the other side will not answer within the timeout, indoor monitors will continue to call the next number.
- **Loop Times:** to set up the call loop times.

11.12. Multicast Configuration

IT88 allows you to conduct one-to-many broadcasting via a multicast function on web **Device > Multicast > Multicast List** interface.

Multicast List ⓘ

Multicast Group	Multicast Address	Enabled
Multicast Group 1	<input type="text" value="224.1.6.11:51231"/>	<input checked="" type="checkbox"/>
Multicast Group 2	<input type="text"/>	<input type="checkbox"/>
Multicast Group 3	<input type="text"/>	<input type="checkbox"/>

Listen List ⓘ

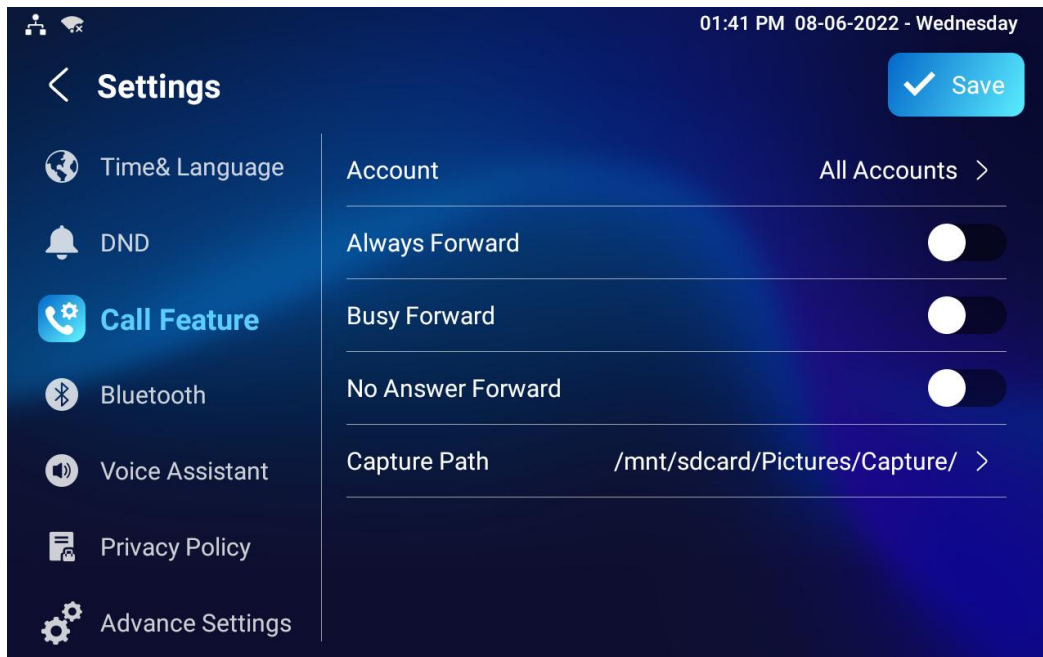
Listen Group	Listen Address	Label
Listen Group 1	<input type="text" value="224.1.6.11:51230"/>	<input type="text" value="Test_1"/>
Listen Group 2	<input type="text"/>	<input type="text"/>
Listen Group 3	<input type="text"/>	<input type="text"/>

11.13. Call Forwarding Setting

Call Forward is a feature used to redirect an incoming call to a specific third party. Users can redirect the incoming call based on different scenarios. Typically, call forward has three modes: **Always Forward/ No Answer Forward /Busy Forward**.

11.13.1. Call Forwarding Configuration on the Device

To do the configuration on the device **Settings > Call Feature** interface.



Parameter Set-up:

- **Account:** to choose which account shall implement the call forwarding feature.
- **Always Forward:** to enable the Always Forward function; all incoming calls will be automatically forwarded to a specific number.
- **Busy Forward:** to enable the Busy Forward function; incoming calls will be forwarded to a specific number if the phone is busy.
- **No Answer Forward:** to enable the No Answer Forward function; incoming calls will be forwarded to a specific number if the phone is not picked up within no answer ring time.
- **Target Number:** to enter the specific forward number if IT88 enables Always Forward / Busy Forward / No Answer Forward.

11.13.2. Call Forwarding Configuration on the Web Interface

To set up forward function on web **Device > Call Feature > Call Forward** interface.

Call Forward ⓘ

Always Transfer	<input type="text" value="Disabled"/>	ⓘ
Designated Call Forward Number	<input type="text"/>	ⓘ
Busy Transfer	<input type="text" value="Disabled"/>	ⓘ
Designated Call Forward Number	<input type="text"/>	ⓘ
No Answer Transfer	<input type="text" value="Disabled"/>	ⓘ
Designated Call Forward Number	<input type="text"/>	ⓘ
No Answer Call Transfer Duration (Sec)	<input type="text" value="30"/>	ⓘ

Parameter Set-up:

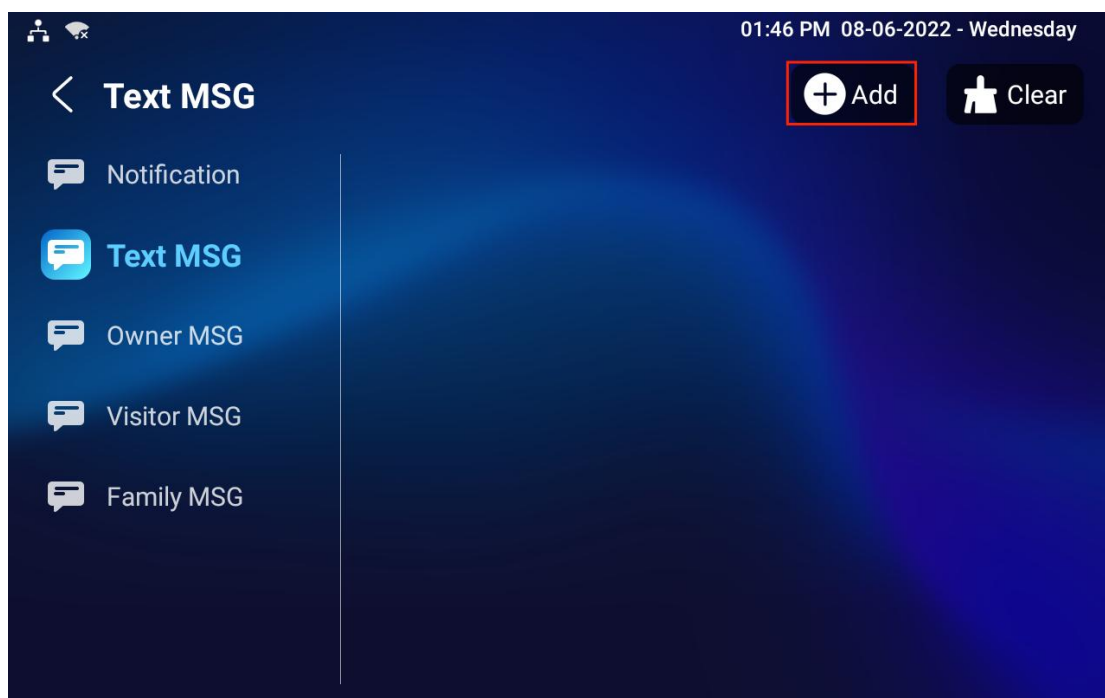
- **Always Transfer:** to enable the Always Forward function; all incoming calls will be automatically forwarded to a specific number.
- **Busy Transfer:** to enable the Busy Forward function; incoming calls will be forwarded to a specific number if the phone is busy.
- **No Answer Transfer:** to enable the No Answer Forward function; incoming calls will be forwarded to a specific number if the phone is not picked up within no answer ring time.
- **Designated Call Forward Number:** to enter the specific forwarding number if IT88 enables Always Forward / Call Forward Busy / No Answer Forward.
- **No Answer Call Transfer Duration (Sec):** to set the no answer time interval from 0-120 seconds before the call is transferred to a designated number.

12. Intercom Message Setting

You can read, create, and delete messages on the **Message** screen.

12.1. Manage Messages

You can check, create and clear messages as needed on the IT88 indoor monitor **Message** screen. Click **Add** to create a new text message and Clean icon to delete the existed messages.



Parameter Set-up:

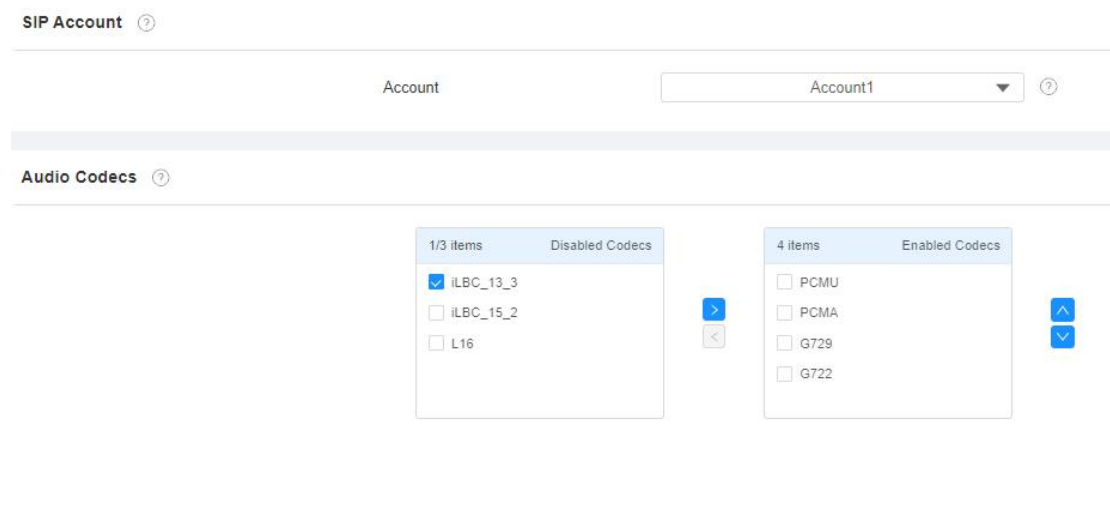
- **Notification:** the message from the property manager, this feature is only available when using SDMC or Akuvox SmartPlus.
- **Text MSG:** to send or receive or manage the text message here.
- **Owner MSG:** if you enable this feature, and nobody answers the incoming call within the pre-configure ring time, the visitor will hear the owner's audio message.

- **Visitor MSG:** if you enable the visitor message feature, and nobody answers the incoming call within the pre-configure ring time, it will save the visitor record.
- **Family MSG:** you can record the audio messages for your family members.

13. Audio & Video Codec Configuration for SIP Calls

13.1. Audio Codec Configuration

Akuvox indoor monitor supports seven types of Codec (iLBC_13_3, iLBC_15_2, L16, PCMU, PCMA, G729, G722 for encoding and decoding the audio data during the call session. Each type of codec varies in terms of sound quality. You can select the specific codec with different bandwidths and sample rates flexibly according to the actual network environment. To do the configuration on web **Account > Advanced > SIP Account** interface.



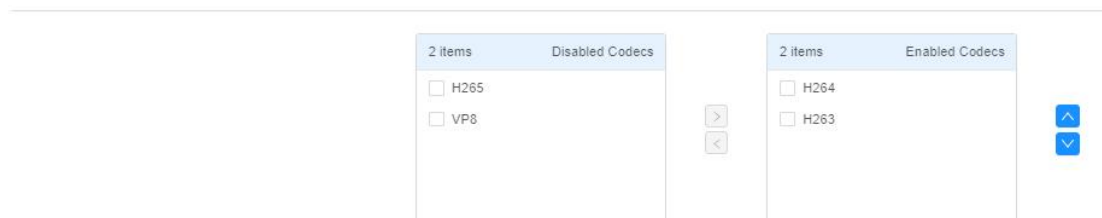
Please refer to the bandwidth consumption and sample rate for the four codec types below:

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
L16	128 kbit/s	variable

13.2. Video Codec Configuration

IT88 series supports VP8, H263, H264, H265 codec that provides a better video quality at a much lower bit rate with different video quality and payload. To do the configuration on web **Account > Advanced > Video Codecs** interface. Choose available video codecs and set up the codecs parameters.

Video Codecs ?



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	ⓘ

Parameter Set-up:

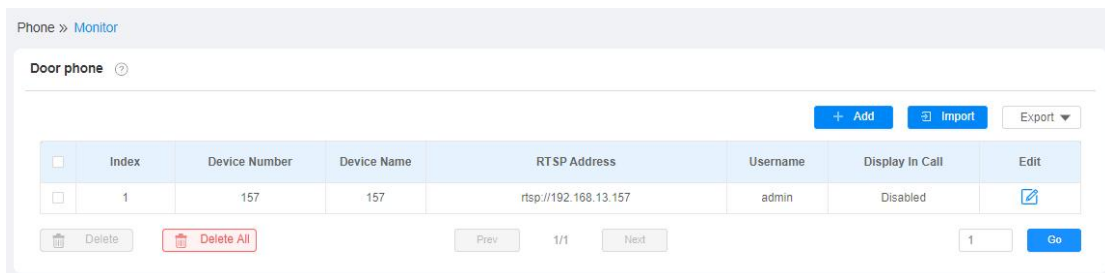
- **Name:** Check to select the H264 video codec format for the door phone video stream. H264 is the video codec by default.
- **Resolution:** select the code resolution for the video quality among four options: "QCIF", "CIF", "VGA", "4CIF" and "720P" according to your actual network environment. The default code resolution is 4CIF.
- **Bitrate:** select the video stream bit rate (Ranging from 320-2048). The greater the bitrate, the data transmitted every second is greater in amount therefore the video will be clearer. While the default code bitrate is 2048.
- **Payload:** select the payload type (ranging from 90-118) to configure the audio/video configuration file. The default payload is 104.

14. Security

14.1. Monitor and Image

14.1.1. Monitor Setting

You can configure the monitor setting on the web **Device > Monitor** interface. Enter the IP/SIP number of door phone in device number and fill in the device name. Then set up the RTSP address. The RTSP format of the Akuvox door phone is rtsp://deviceIP/live/ch00_0. Enable or disable display in the call. If enabled, when there is an incoming call from the monitor, the video will be displayed.

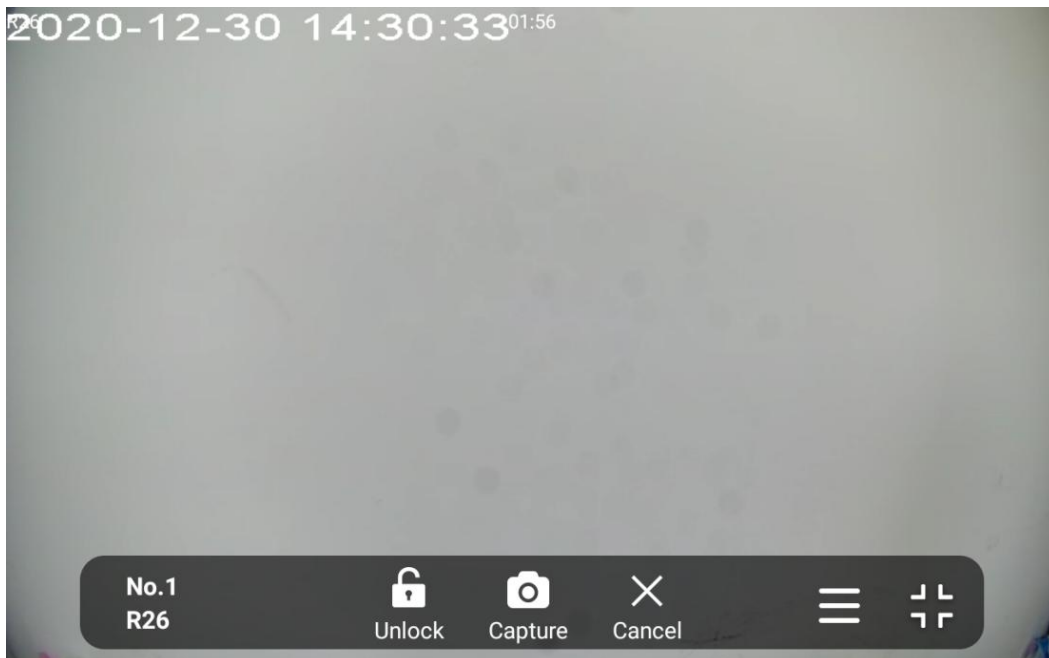


Add Monitor ✕

Device Number	<input type="text" value="157"/>	?
Device Name	<input type="text" value="R29"/>	?
RTSP Address	<input type="text" value="rtsp:// 192.168.13.157/live/ch00_0"/>	?
Username	<input type="text" value="admin"/>	?
Password	<input type="password" value="....."/>	?
Display In Call	<input type="text" value="Disabled"/>	?

14.1.2. Video Image Capturing

To capture a video image by pressing **Monitor > Capture** on the device screen.

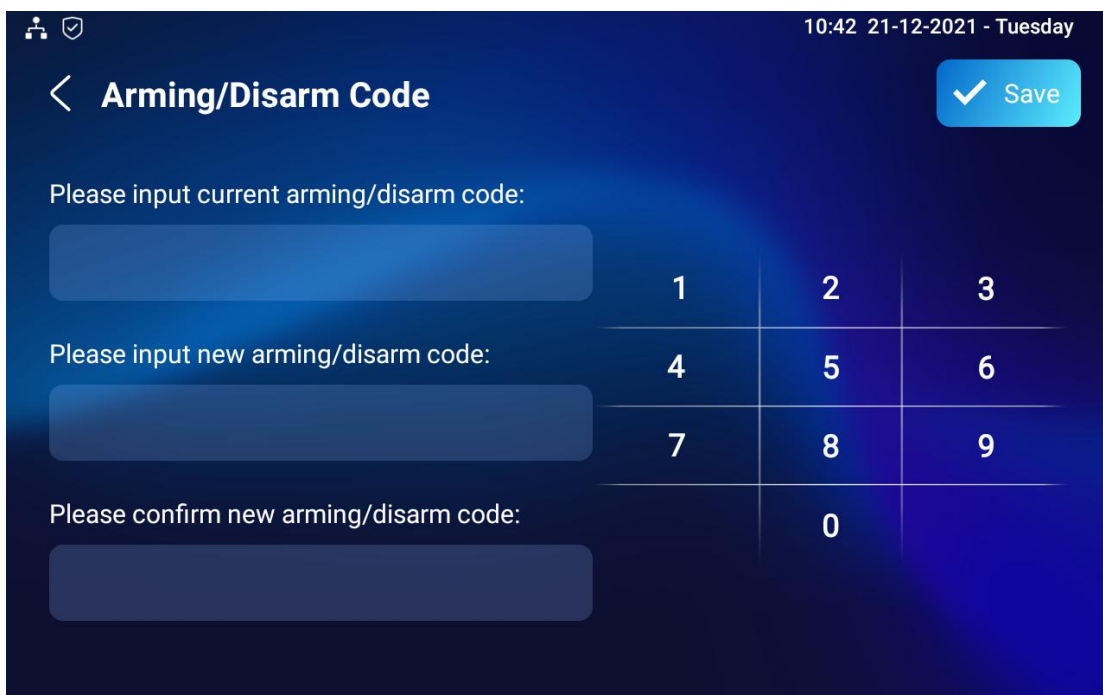


14.2. Alarm and Arming Configuration

Alarm feature is used to connect some alarm detection devices to protect your home safe. Akuvox indoor monitors support 8 alarm connectors which means you can connect 8 different alarm sensors in different rooms of your house. For example, by connecting a smoker sensor in your kitchen to detect a gas leak, the indoor monitor will ring up and send the alarm message to the target, like community property.

14.2.1. Configure Alarm and Arming on the Device

To configure the arming and disarm code on the device **Arming > Arming/Disarm Code** screen. Change the current password and save it.



10:42 21-12-2021 - Tuesday

< **Arming/Disarm Code** ✓ Save

Please input current arming/disarm code:

1	2	3
4	5	6
7	8	9
	0	

Please input new arming/disarm code:

Please confirm new arming/disarm code:

To check the zone status on **Arming > Zone Status** screen.

10:43 21-12-2021 - Tuesday

< **Sensor Status**

Connect Mode	Location	Sensor Type	Trigger	Status	Battery
Zone1	Master Bedroom	Smoke Sensor	NC	✓	--
Zone2	None	Infra-red Sensor	NC	✗	--
Zone3	None	Infra-red Sensor	NC	✗	--
Zone4	None	Infra-red Sensor	NC	✗	--
Zone5	None	Infra-red Sensor	NC	✗	--
Zone6	None	Infra-red Sensor	NC	✗	--
Zone7	None	Infra-red	NC	✗	--

14.2.2. Configure Alarm and Arming on the Web

Interface

To set up a location-based alarm sensor on the device web **Arming > Zone Setting > Zone Setting** interface.

Zone Setting ⓘ

Zone	Location	Zone Type	Trigger Mode	Status
Zone1	Bedroom	Infrared	NC	Enabled
Zone2	Bedroom	Drmmagnet	NC	Enabled
Zone3	Bedroom	Smoke	NC	Disabled

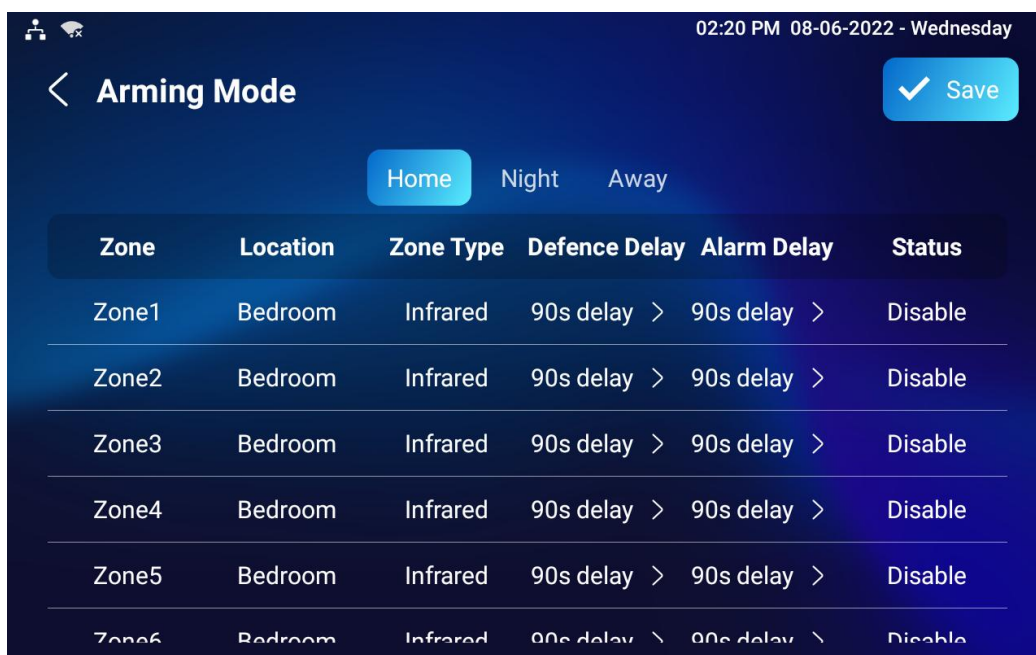
Parameter Set-up:

- **Location:** set up the location according to where the alarm sensor is installed. You can select among ten location types: "Bedroom", "Gate", "Door", "Guest room", "Hall", "Window", "Balcony", "Kitchen", "Study" and "Bathroom".

- **Zone Type:** set up the alarm sensor types. You can select among five sensor types: "Infrared", "Drmagnet", "Smoke", "Gas", "Urgency".
- **Trigger Mode:** set sensor trigger mode between "NC" and "NO" according to your need.
- **Status:** set the alarm sensor status among three options: "Enable", "Disable", and "24H". Select "Enable" if you want to enable the alarm, however, you are required to set the alarm again after an alarm is disarmed. Select "Disable" if you want to disable the alarm, and select "24H" if you want the alarm sensor to stay enabled for 24 hours without needing to set up the alarm manually again after the alarm is disarmed.

14.2.3. Configure Location-based Alarm

Configure the alarm sensor in the same way you do on the web interface.



Parameters set up:

- **Location:** to select which location the detection device is in, including Bedroom, Guest room, Hall, Window, Balcony, Kitchen, Study and Bathroom.
- **Zone type:** to select which type of detection device is, including Infrared, Drmagnet, Smoke, Gas, and Urgency.
- **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:** to enable or disable Arming mode on the corresponding Zone.

14.2.4. Configure Alarm Text

After the alarm sensor is set up, you are allowed to customize your alarm text shown on the screen when an alarm is triggered on the web **Arming> Zone Setting > Zone Setting** interface. Enter the alarm text for the alarm at each location according to your need.

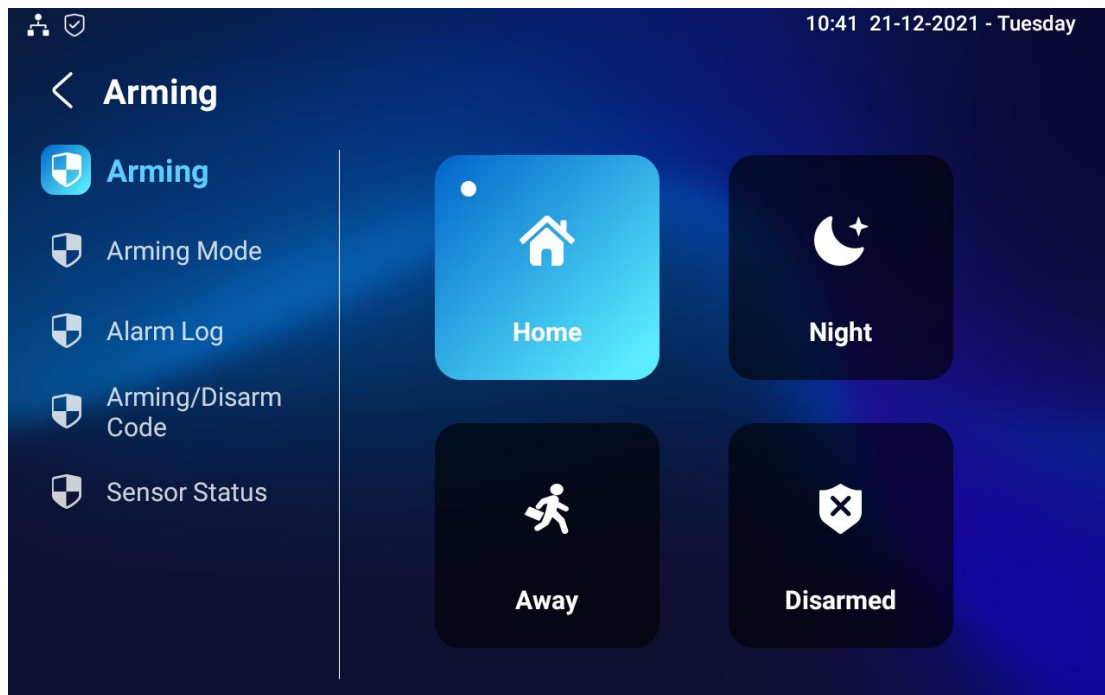
Customized Alarm ⓘ

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

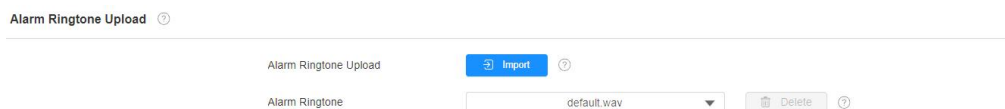
14.2.5. Configure Arming mode

To switch arming mode, disarm the alarm on **Arming** screen by pressing their respective icons. Press **Disarm** icon if you want to clear the Arming Mode.



14.2.6. Configure Alarm Ringtone

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



 **Note:**

- The file format of the customized ringtone should be .wav.

14.2.7. Alarm Action Configuration

The triggering of the alarm sensor can be accompanied by the actions you configured in the forms of HTTP command, SIP Message, Call, and Local Relay for different security purposes.

14.2.7.1. Select Alarm Action Types

To select and set up actions on web **Arming > Alarm Action** interface.

HTTP Command Setting

Zone	Http Command	Send Http
Zone1	<input type="text"/>	Disabled
Zone2	<input type="text"/>	Disabled
Zone3	<input type="text"/>	Disabled
Zone4	<input type="text"/>	Disabled
Zone5	<input type="text"/>	Disabled
Zone6	<input type="text"/>	Disabled
Zone7	<input type="text"/>	Disabled
Zone8	<input type="text"/>	Disabled

Receiver Of SIP Setting

SIP Account

Zone	SIP Message	Send Sip Message
Zone1	<input type="text"/>	Disabled
Zone2	<input type="text"/>	Disabled
Zone3	<input type="text"/>	Disabled
Zone4	<input type="text"/>	Disabled
Zone5	<input type="text"/>	Disabled
Zone6	<input type="text"/>	Disabled
Zone7	<input type="text"/>	Disabled
Zone8	<input type="text"/>	Disabled

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

Parameter Set-up:

- **HTTP Command:** enable the HTTP command if you want the action to be implemented on a designated third-party device
- **SIP Message:** enable SIP message if you want the SIP message to be sent to a designated SIP account as an action. This feature should be enabled by using Autop.
- **Call:** enable call if you want a call to go to a designated SIP or IP number.

14.2.7.2. Configure Alarm Action via HTTP Command

To set up the HTTP Command action, you can click **“Enable”** 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 manufacturer of the device on which the action is to be carried.

HTTP Command Setting ⓘ

Zone	Http Command	Send Http
Zone1	http:// <input type="text"/>	Disabled ▼
Zone2	http:// <input type="text"/>	Disabled ▼
Zone3	http:// <input type="text"/>	Disabled ▼
Zone4	http:// <input type="text"/>	Disabled ▼
Zone5	http:// <input type="text"/>	Disabled ▼
Zone6	http:// <input type="text"/>	Disabled ▼
Zone7	http:// <input type="text"/>	Disabled ▼
Zone8	http:// <input type="text"/>	Disabled ▼

14.2.7.3. Configure Alarm Action via SIP Message

To set up the SIP message action receiver on the same web interface. Enter the SIP account to which you want to send the configured SIP message as an action when the alarm is triggered.

Receiver Of SIP Setting ⓘ

SIP Account

Zone	SIP Message	Send Sip Message
Zone1	<input type="text"/>	Disabled ▼
Zone2	<input type="text"/>	Disabled ▼
Zone3	<input type="text"/>	Disabled ▼
Zone4	<input type="text"/>	Disabled ▼
Zone5	<input type="text"/>	Disabled ▼
Zone6	<input type="text"/>	Disabled ▼
Zone7	<input type="text"/>	Disabled ▼
Zone8	<input type="text"/>	Disabled ▼

14.2.7.4. Configure Alarm Action via SIP Call

To set up the call action, you can enter the SIP or IP number of the device to be called as an action, then enable **Alarm Siren** for arming zone as needed.

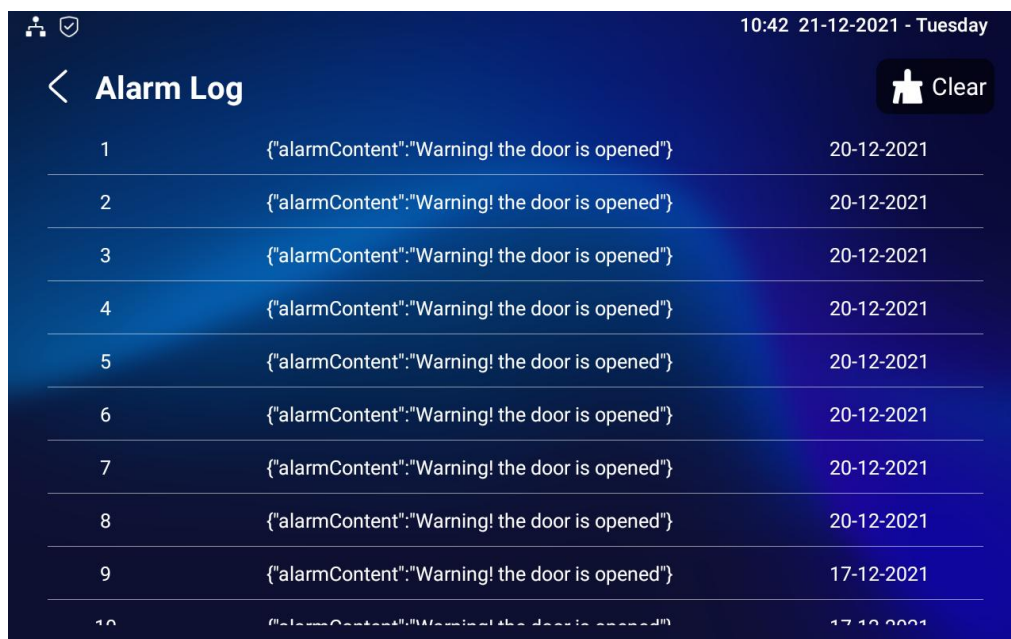
Call Setting ⓘ

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

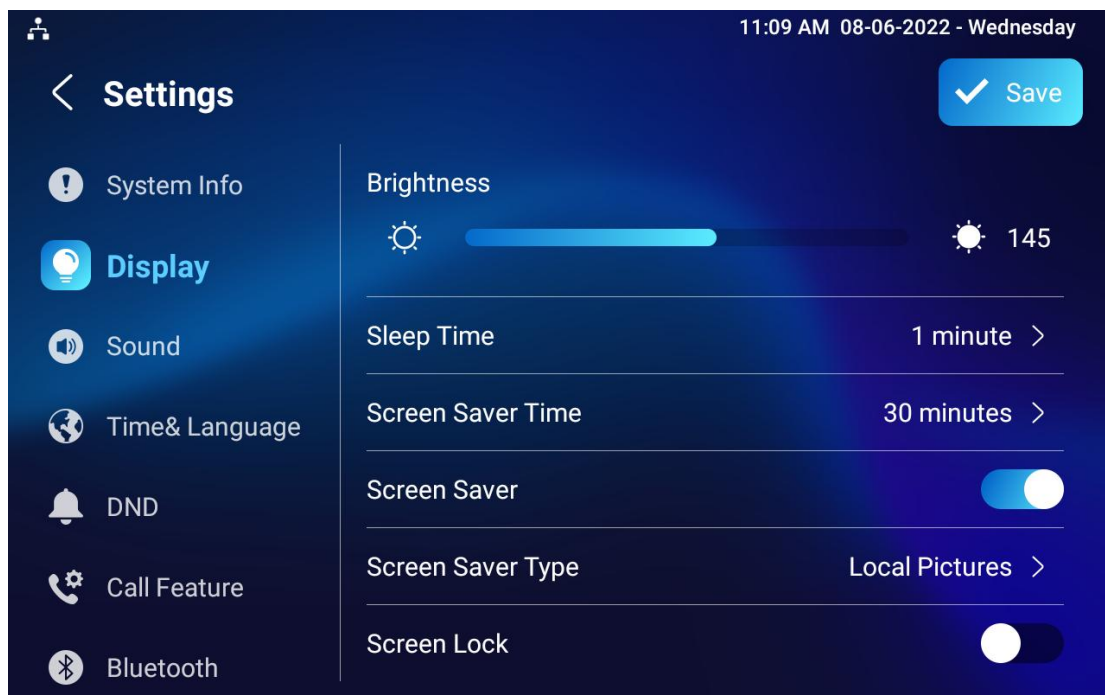
14.2.8. Check Alarm Log

To check alarm log on device **Settings > Arming Log** screen.



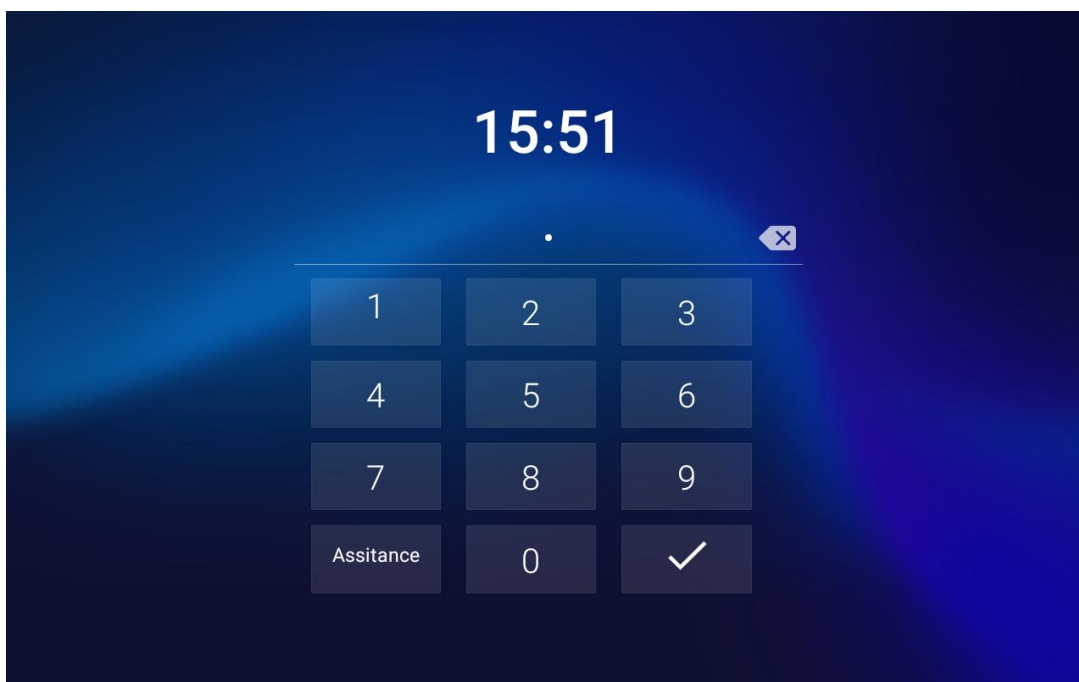
14.3. Screen Unlock Setting

You can enable screenlock function directly on the device **Settings > Display Setting** screen. The device screen will be locked over sleep time. You are required to wake up the device through face recognition (Face ID) or password.



14.3.1. Screen Unlock by PIN code

You can unlock the IT88 device screen by entering the pre-configured PIN code when the screen is locked.



Note:

- The default unlock PIN is 123456.

14.4.Voice Encryption

The encryption function provides you with greater security for the intercom call. And, IT88 series support three modes of voice encryption: SRTP(compulsory), SRTP(Optional), ZRTP(Optional) on web **Account > Advanced > Encryption** interface.



Parameter Set-up:

- **Voice Encryption:** select encryption mode from four options. If you select to disable it, 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)**, encrypts voice from the called party, if the called party also enables SRTP, the voice signals will also be encrypted. **ZRTP(Optional)** is the protocol that the two parties use to negotiate the SRTP session key.

14.5.Remote Control

Remote control function supports configuring a specific server to send HTTP commands or requests to the indoor monitor to do some specific action on the web **Device > Relay > Remote Control** interface.

Remote Control ?

Allowed Access IP List

 ?

15. Door Access Control Configuration

15.1. Relay Switch Setting

15.1.1. Local Relay Setting

Local relays in IT88 indoor monitor can be used to trigger the relay for the door access and trigger the chime bell as needed in different scenarios. You can do this configuration on web **Phone > Relay > Relay Setting > Local Relay** interface.

Relay Setting ⓘ

Local Relay1

Relay Delay (Sec)	<input type="text" value="3"/>	ⓘ
Relay Type	<input type="text" value="Open Door"/>	ⓘ
Remote Control	<input type="text" value="Disabled"/>	ⓘ
DTMF	<input type="text"/>	ⓘ

Parameter Set-up:

- **Relay Delay:** set the relay delay time after the relay is triggered.
- **Relay Type:** set relay action type. There are two types of the relay, chime bell and open door. **Chime Bell**, when there is a call, the chime bell will ring. **Open door**, when pressing the unlock icon, the local relay will be opened.
- **Remote Control:** enable it to trigger local relay by DTMF and vice versa.
- **DTMF:** set the DTMF to trigger the local relay when you enable Remote control.

15.1.2. Remote Relay Switch Setting

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

Remote Relay

DTMF1 Code	<input type="text" value="#"/>	?
DTMF2 Code	<input type="text" value="#"/>	?
DTMF3 Code	<input type="text" value="#"/>	?

Parameter Set-up:

- **DTMF Code:** to set the DTMF code for the remote relay, which is "#" by default.

15.2. Web Relay Setting

In addition to the relay that is connected to IT88, you can also control the door access using the network-based web relay. To do this configuration on 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	<input type="text"/>	<input type="text"/>	<input type="text"/>
Action ID 2	<input type="text"/>	<input type="text"/>	<input type="text"/>

Parameter Set-up:

- **IP address:** enter the web relay IP address.
- **User Name:** enter the User name provided by the web relay manufacturer.
- **Password:** enter the password provided by the web relay manufacturer. The passwords are authenticated via HTTP and you can define the passwords using "HTTP get" in Action.
- **Web Relay Action:** enter the specific web relay action command provided by the web manufacturer for different actions by the web relay.
- **IP/SIP:** Enter 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, while this setting is optional. And please refer to the example below:
<http://admin:admin@192.168.1.2/state.xml?relayState=2>.

15.3. Door Unlock Configuration

15.3.1. Door Unlock by DTMF Code

DTMF codes can be configured on the web **Account > Advanced > DTMF** interface where you can set up identical DTMF codes on the corresponding intercom devices, which allows residents to enter the DTMF code on the soft keypad or press the DTMF code attached unlock tab on the screen to unlock the door for visitors etc., during a call.

DTMF ⓘ

Type	<input type="text" value="RFC2833"/> ⓘ
DTMF Code Transport format	<input type="text" value="Disabled"/> ⓘ
Payload	<input type="text" value="101"/> (96-127) ⓘ

Parameter Set-up:

- **Type:** select DTMF type among four options: **"Inband"**, **"RFC2833"**, **"Info+Inband"** and **"Info+RFC2833"** according to your need.
- **How to Notify DTMF:** select among four options: **"Disable"** **"DTMF"** **"DTMF-Relay"** **"Telephone-Event"** according to your need.
- **DTMF Payload:** select the payload 96-127 for data transmission identification.



Note:

- Please refer to the chapter **Relay Switch Setting** for the specific DTMF code setting. Intercom devices involved must be consistent in the DTMF type, otherwise, DTMF code cannot be applied.

15.3.2. Door Unlock via HTTP Command

You can unlock the door remotely without approaching the device physically for the door access by typing the created HTTP command (URL) on the web browser to trigger the relay when you are not available by the door for the door access. To do this configuration on web **Device > Relay > Open Relay via HTTP** interface.

Open Relay Via HTTP ⓘ

Switch	<input type="checkbox"/>	ⓘ
Username	<input type="text"/>	ⓘ
Password	<input type="password"/>	ⓘ

Parameter Set-up:

- **Switch:** Enable it to allow the relay to be triggered remotely using HTTP command.
- **Username:** Enter the device username to be used as a part of HTTP command to trigger the local relay.
- **Password:** Enter the device password to be used as part of HTTP command to trigger the local relay.
- Please refer to the following example:
<http://192.168.35.127/fcgi/do?action=OpenDoor&UserName=admin&Password=12345&DoorNum=1>

 **Note:**

- DoorNum in the HTTP command above refers to the relay number #1 to be triggered.

16. Lift Control

You can summon lift at home via the lift control feature.

16.1. Configure Lift Control

To enable and set the display status Lift icon on device web **Device > Lift > Lift Control** interface.

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

Parameter set-up:

- **Status:** click to enable or disable the lift button.
- **Icon:** click to select icon for the button.
- **Label:** enter the title for the button.
- **HTTP Command:** select http:// or https:// for head of http command and enter http command.

16.2. Configure Lift Control Prompt

When the lift controller receives the HTTP command, it will feedback the current lift status with a prompt. To do this configuration on web **Device > Lift > Hints** interface. Edit the **HTTP Status Code**, and feedback code from the lift control board.

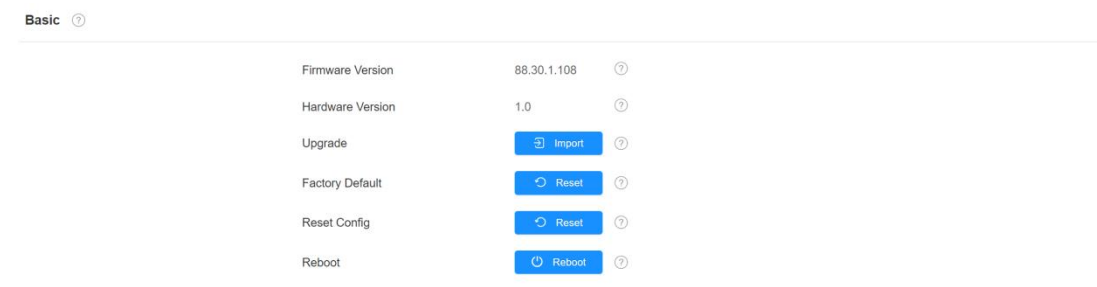
<input type="checkbox"/>	Index	HTTP Status Code	Lift	Hints	Edit
<input type="checkbox"/>	1	200	Lift1	Lift is coming to your floor	<input type="checkbox"/>
<input type="checkbox"/>	2	200	Lift2	Lift has been sent to Ground Floor	<input type="checkbox"/>

If there are huge amounts of Prompts that need to be added, you can click **Export** tab to export a template, after editing to import/export.



17. Firmware Upgrade

Firmwares of different versions for the indoor monitor can be upgraded on the device web **Upgrade > Basic** interface.

**Note:**

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

18. Backup

Configuration files can be imported to or exported out of the device to your local PC on the device web **Upgrade > Advanced > Others** interface if needed.

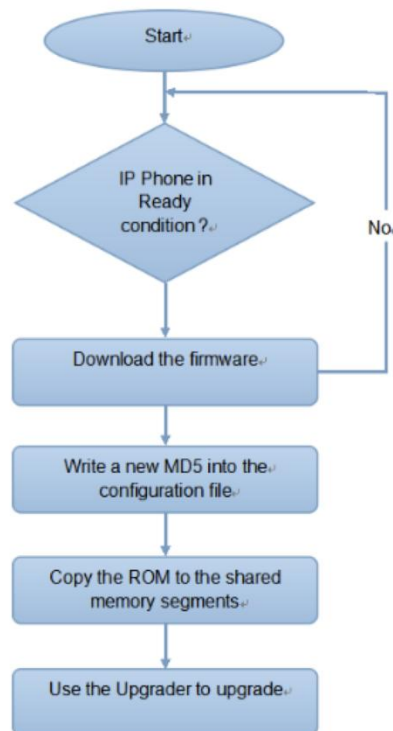


19. Auto-provisioning via Configuration File

19.1. Provisioning Principle

Auto-provisioning is a feature used to configure or upgrade the devices in batch via third-party servers. **DHCP, PNP, TFTP, FTP, and HTTPS** are the protocols used by the Akuvox intercom 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 door phone.

Please see the flow chart below:



19.2. Introduction to the Configuration Files for Auto-Provisioning

Configuration files have two formats for auto-provisioning. one is the general configuration files used for the general provisioning and another one is the MAC-based configuration provisioning.

The difference between the two types of configuration files is shown below:

- **General configuration provisioning:** a general file is stored in a server from which all the related devices will be able to download the same configuration file to update parameters on the devices. For example, cfg.
- **MAC-based configuration provisioning:** MAC-based configuration files are used for auto-provisioning on a specific device as distinguished by its unique MAC number. And the configuration files named with the device MAC number will be matched automatically with the device MAC number before being downloaded for the provisioning on the specific device.



Note:

- If a server has these two types of configuration files, then IP devices will first access the general configuration files before accessing the MAC-based configuration files.

19.3. Autop Schedule

Akuvox provides you with different Autop methods that enable the indoor monitor to perform provisioning for itself in a specific time according to your schedule. To set up the schedule on device web **Upgrade > Advanced > Automatic Autop** interface.

Please see the picture below:

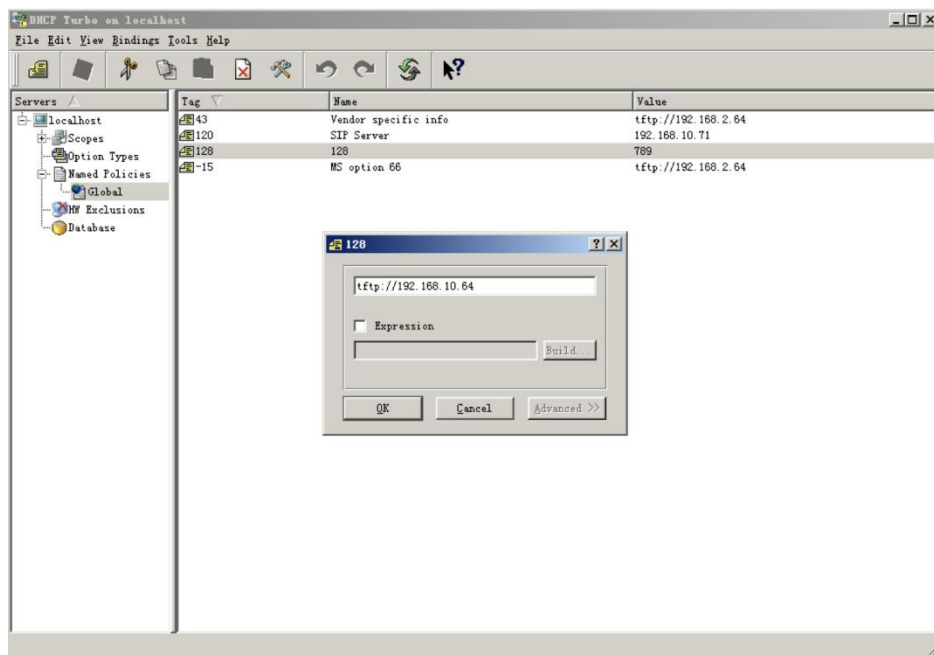
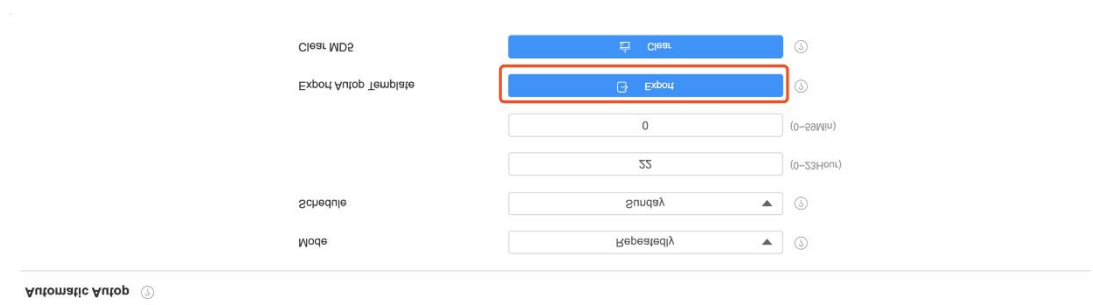
The screenshot shows the 'Automatic Autop' configuration page. It features a 'Mode' dropdown menu set to 'Repeatedly' and a 'Schedule' dropdown menu set to 'Sunday'. Below the 'Schedule' dropdown are two input fields: one for 'Hour' (set to 22) and one for 'Minute' (set to 0). At the bottom of the form are two blue buttons: 'Export' and 'Clear'.

Parameter Set-up:

- **Power On:** select "**Power on**", if you want the device to perform Autop every time it boots up.
- **Repeatedly:** select "**Repeatedly**", if you want the device to perform autop according to the schedule you set up.
- **Power On + Repeatedly:** select "**Power On + Repeatedly**" if you want to 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 you set up.
- **Hourly Repeat:** select "**Hourly Repeat**" if you want the device to perform Autop every hour.

19.4.DHCP Provisioning Configuration

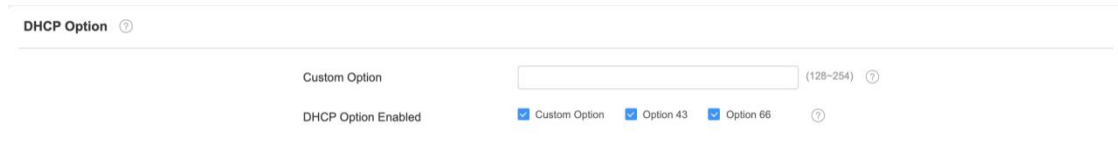
Auto-provisioning URL can also be obtained using DHCP option which allows the device to send a request to a DHCP server for a specific DHCP option code. If you want to use **Custom Option** as defined by users with option code range from 128-255), you are required to configure DHCP Custom Option on the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





Note:


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



Parameter Set-up:

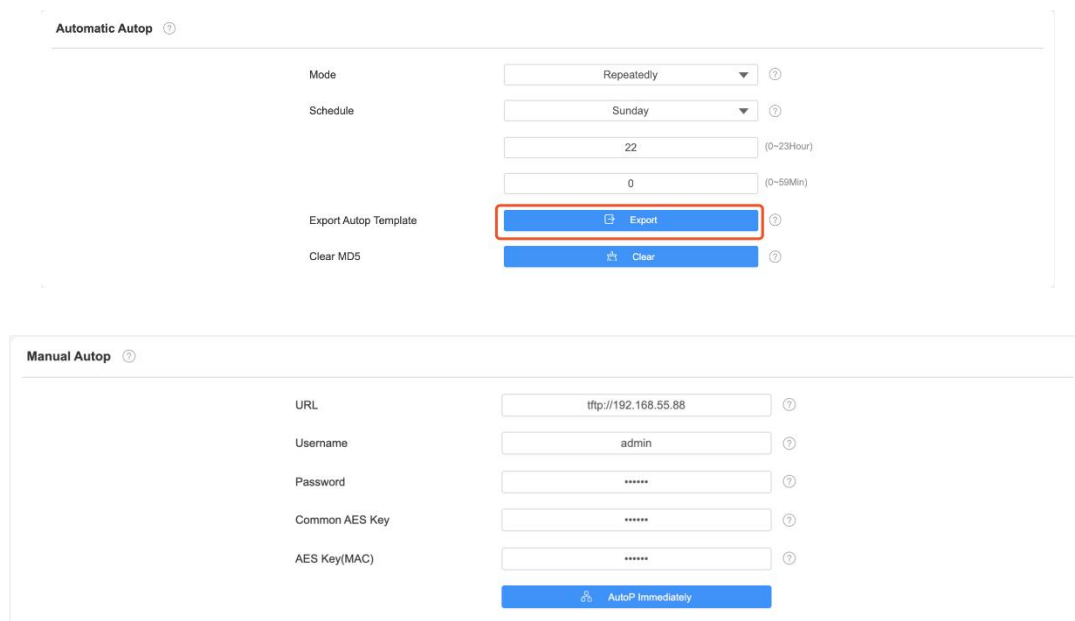
- **Custom Option:** enter the DHCP code that matched the corresponding URL so that the device will find the configuration file server for the configuration or upgrading.
- **DHCP Option 66:** If none of the above is set, the device will automatically use DHCP Option 66 for getting the upgrade server 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 updated server URL in it.
- **DHCP Option 43:** If the device does not get an 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 updated server URL in it.

Note:

 The general configuration file for the in-batch provisioning is with the format "**cfg**" taking R29 as an example, r000000000029.cfg (10 "zeros" in total while the MAC-based configuration file for the specific device provisioning is with the format "MAC_Address of the device.cfg", for example, "**OC110504AE5B.cfg**."

19.5.Static Provisioning Configuration

You can manually set up a specific server URL for downloading the firmware or configuration file on device web **Upgrade > Advanced > Automatic Autop** interface. If an autop schedule is set up, the indoor monitor will perform the auto-provisioning at a specific time according to autop 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.



The image shows two screenshots of the device's configuration interface. The top screenshot is titled "Automatic Autop" and contains the following fields and buttons:

- Mode: Repeatedly
- Schedule: Sunday
- Time: 22 (0-23Hour)
- Minutes: 0 (0-59Min)
- Export Autop Template: Export button (highlighted with a red box)
- Clear MDS: Clear button

The bottom screenshot is titled "Manual Autop" and contains the following fields and buttons:

- URL: ftp://192.168.55.88
- Username: admin
- Password: *****
- Common AES Key: *****
- AES Key(MAC): *****
- AutoP Immediately button

Parameter set-up:

- **URL:** set up TFTP, HTTP, HTTPS, FTP server addresses for the provisioning
- **User Name:** set up a user name if the server needs a user name to be accessed otherwise leave it blank.
- **Password:** set up a password if the server needs a password to be accessed otherwise leave it blank.
- **Common AES Key:** set up AES code for the intercom to decipher the general Auto Provisioning configuration files.
- **AES Key (MAC):** set up AES code for the intercom to decipher the MAC-based auto-provisioning configuration file.

 **Note:**

- AES is one type of encryption, it should be configured only when the config file is encrypted with AES, otherwise leave the field blank.

 **Note:**

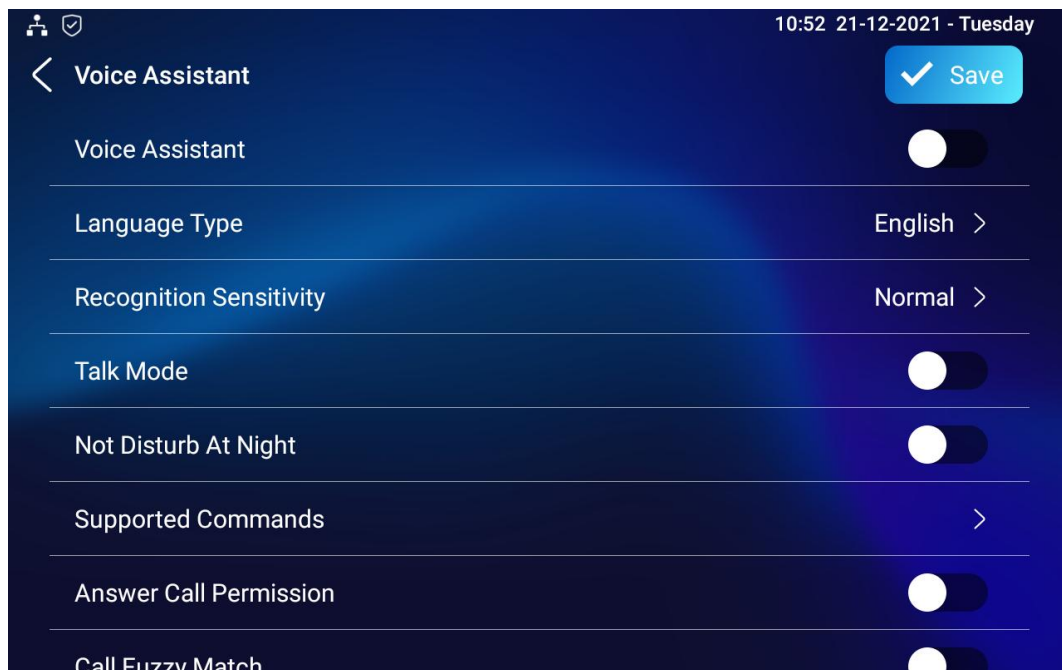
- **Server Address format:**
 - TFTP: tftp://192.168.0.19/
 - FTP: ftp://192.168.0.19/ (allows anonymous login)
 - ftp://username:password@192.168.0.19/ (requires a user name and password)
 - HTTP: http://192.168.0.19/ (use the default port 80)
 - http://192.168.0.19:8080/ (use other ports, such as 8080)
 - HTTPS: https://192.168.0.19/ (use the default port 443)

 **Note:**

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

20. Voice Assistant

You can configure a voice assistant named "**Albert**" to perform a variety of functions related to intercom calls, open-door, arming modes, etc. on the device. And you can also set up the specific relay to be triggered by the voice assistant for the door access control. To configure the voice assistant on device **Settings > Voice Assistance** screen.



Parameter Set-up:

- **Language Type:** select the language according to your need.
- **Recognition Sensitivity:** adjust the voice assistance recognition sensitivity among "**Low**", "**Normal**" and "**High**" according to your need.
- **Talk Mode:** move the toggle switch to the right if you want to enable the talk mode. When the talk mode is enabled, the voice assistant will stay on to receive your voice commands during a time span of 30 seconds without your needing to call "Albert" again to wake up the voice assistant., while if you disable it, the voice assistant will be wake up again for each voice command.
- **Not Disturb At Night:** move the toggle switch to the left to enable the function. This function is applied when you want the voice assistant to

stay silent while carrying out what it is made to do according to your voice commands.

- **Supported Command:** enable or disable the 22 voice commands according to your need.
- **Answer Call Permission:** enable it when you so that you can answer or reject the incoming call via voice assistant by replay "Yes" or "No"
- **Call Fuzzy Match:** Enable it to allow fuzzy matching of the contact name, for example, if you have Tom and Tomy in your phonebook, then Tomy will also appear when you call "Tom", and you are required to select the right contact manually.

Please see the voice command details below:

NO	Voice Command	Description	Voice Prompt
1	Intruder mode off	Use it when you want to clear the arming mode when the arming alarm is triggered. (you are required to enter the disarm password in the pop-out window initiated by the voice assistant)	Please Input Password
2	Clear arming	ibid	ibid
3	night mode	Use it when you want to change the arming mode to night mode	<ul style="list-style-type: none"> • Started it, sweet dreams! • Made it, good night • Sure, sleep mode is on • OK, start sleep mode, have a good night <p>Alright, sleep mode is opened, have a nice dream</p>
4	sleep mode	Use it when you want to change the arming mode to sleep mode	<ul style="list-style-type: none"> • Sure, sleep mode is on • OK, start sleep mode, have a good night • Alright, sleep mode is

			<p>opened, have a nice dream</p> <ul style="list-style-type: none"> • Made it, good night • Started it, sweet dreams!
5	away mode	Use it when you want to change the arming mode to away mode	<ul style="list-style-type: none"> • Sure, away mode is on • OK, start away mode • Alright, away mode is opened • Made it • Made it, have a good day • Done, away mode is started
6	home mode	Use it when you want to change the arming mode to home mode	<ul style="list-style-type: none"> • Sure, home mode is on • OK, start home mode • Alright, home mode is opened • Made it • Done, home mode is started
7	open door	Use it when you want to open the door	<ul style="list-style-type: none"> • Sure, the door is open • The door is open for you • No problem, open the door • Opened, always here for you <p>Yep, door is opened now</p>
8	open the door	Use it when you want to open the door	<ul style="list-style-type: none"> • Sure, the door is open • The door is open for you • No problem, open the door • Opened, always here for you <p>Yep, door is opened now</p>

9	disable DND	Use it when you want to disable the DND mode	<ul style="list-style-type: none"> • Yes, closed it for you • Welcome back, DND is off • DND is closed, to mingle with the world • Sure, DND is off
10	enable DND	Use it when you want to enable the DND mode	<ul style="list-style-type: none"> • OK, DND is on • Done, enjoy yourself • DND is on, feel your inner peace • Turn on it now
11	emergency	Use it when you want to dial SOS number	<ul style="list-style-type: none"> • Got it, calling SOS as soon as possible • OKay, be relaxed, making a emergency call now • Calling ambulance now • Calling SOS now, please hold on • God bless you, calling emergency now • Hold on please, calling emergency right now • Take it easy, calling emergency right now
12	help me	ibid	ibid
13	call manager	use it when you want to call "manager" you name set up in the phonebook	<ul style="list-style-type: none"> • Please choose one for calling • Sorry I didn't get that
14	call staff	use it when you want to call "stuff" you named and set up in the phonebook	<ul style="list-style-type: none"> • Please choose one for calling • Sorry I didn't get that
15	call carer	use it when you want to call "carer" you named and set up in the phonebook	<ul style="list-style-type: none"> • Please choose one for calling • Sorry I didn't get that

16	open message	use it when you want to check text message.	<ul style="list-style-type: none"> • Got it, please check • OK, message is opened, you can write some contents to send • Message is ready for you • already opened it for you
17	open monitor	use it when you want to check monitor	Got it , please check
18	homepage	use it when you want to go to home screen	<ul style="list-style-type: none"> • Home page is already for you. <p>Already got it for you</p>
19	enable mute	use it when you want to mute your voice on the indoor monitor so that the caller or callee will be not be able to hear you.	<ul style="list-style-type: none"> • OK, mute is on • Done, enjoy yourself • Mute is on, feel your inner peace • Set it now
20	disable mute	use it when you want to unmute your voice on the indoor monitor so that the caller or callee will be able to hear you.	<ul style="list-style-type: none"> • Sure, mute is off • Mute is closed, to mingle with the world • Welcome back, mute is off • Yes, closed it for you
21	shut down/cancel	Use it when you want to turn off the voice assistant function.	<ul style="list-style-type: none"> • See you • See you later • Bye • Good bye • See you next time • Bye, best regards • See you, have a great time

To enable the voice assistant and set the voice assistant-controlled relay on the web **Setting > Voice Assistant > Voice Assistant Setting** interface, you can tick the check box to enable the voice assistant function. Then go to the

Voice Command Setting section to select a specific relay to be triggered via voice assistant.

Settings » [Voice Assistant](#)

Voice Assistant Setting ⓘ

Voice Assistant Enabled ⓘ

Voice Command Setting ⓘ

Unlock Type ⓘ Relays can be configured in the Phone-Relay menu ⓘ

21. Call Log

If you want to check on the calls inclusive of the dial-out calls, received calls, and missed calls in a certain period of time, you can check and search the call log on the device web **Contacts > Call Logs** interface and export the call log from the device if needed.

Call Logs ⓘ

Capture Delay (Sec) ⓘ

Upper Limit ⓘ

Call History ⓘ

<input type="checkbox"/>	Index	Type	Date	Time	Local Identity	Name	Number
<input type="checkbox"/>	1	Missed	29-12-2020	7:19:33 AM	192.168.0.32@192.168.0.32	manager	192.168.0.31@192.168.0.31
<input type="checkbox"/>	2	Received	29-12-2020	1:55:27 AM	192.168.0.32@192.168.0.32	192.168.13.142	192.168.13.142@192.168.13.142
<input type="checkbox"/>	3	Dialed	29-12-2020	1:42:22 AM	192.168.0.32@192.168.0.32	192.168.13.157	192.168.13.157@192.168.13.157

1/1

Parameter Set-up:

- **Capture Delay:** set the image capturing starting time when the device goes into a video preview.
- **Upper Limit:** set the maximum screenshot storage capacity, when the capacity is reached the previous screenshots would be overwritten.
- **Call History:** select call history among four options: "All", "Dialed" "Received" "Missed" for the specific type of call log to be displayed.

22. Debug

22.1. System Log for Debugging

Capturing a System log for debugging

System log-in the door phone can be used for debugging purpose. If you want to export the system out to a local PC or to a remote server for debugging, you can set up the function on the web **Upgrade > Diagnosis > System Log** interface.

Parameter	Value
LogLevel	7
Export Log	Export
Remote System Log Enabled	<input type="checkbox"/>
Remote System Server	

Parameter Set-up:

- **Log Level:** select log levels from 1 to 7 levels. You will be instructed by Akuvox technical staff about the specific log level to be entered for debugging purpose. 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.

- **Export Debug Log:** click the **Export** tab to export debug log file to a local PC.
- **Remote System Log:** select **"Enable"** or **"Disable"** if you want to enable or disable the remote system log.
- **Remote System Server:** enter the remote server address to receive the device And the remote server address will be provided by Akuvox technical support.

22.2. PCAP for Debugging

PCAP in Akuvox indoor monitor is used to capture the data package going in and out of the devices for debugging and troubleshooting purpose. You can set up the PCAP on the device web **Upgrade > Advanced > PCAP** interface properly before using it.

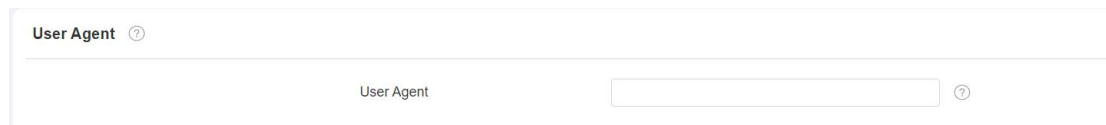
Parameter set-up:

- **Specific Port:** select the specific ports 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 **"Start"** tab and **"Stop"** tab to capture a certain range of data packets before clicking **Export** tab to export the data packets to your Local PC.
- **PCAP Auto Refresh:** select **"Enable"** or **"Disable"** to turn on or turn off the PCAP auto fresh function. If you set it as **"Enable"** then the PCAP will continue to capture data packets even after the data packets reached its 50M maximum in capacity. If you set it as **"Disable"** the PCAP will stop

data packet capturing when the data packet captured reaches the maximum capturing capacity of 1MB.

22.3. User Agent

User agent is used for identification purpose when you are doing analysis on the SIP data packet. To do this configuration on web **Account > Advanced** interface.

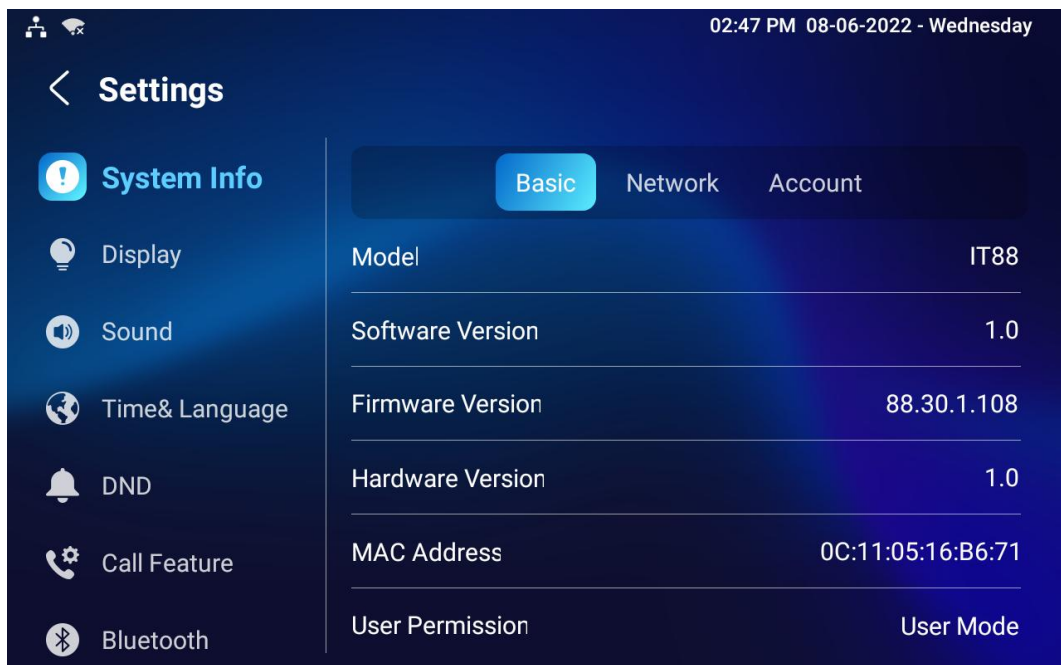


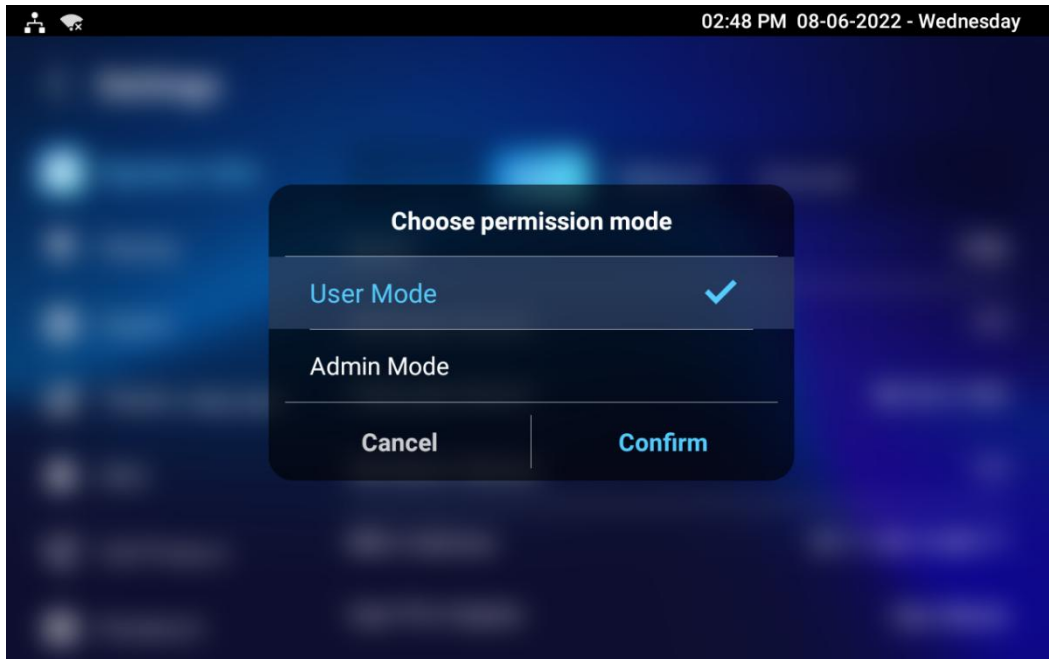
The screenshot shows a configuration field for 'User Agent'. The field is a single-line text input with a light gray border. The label 'User Agent' is positioned to the left of the input box, followed by a small circular help icon. The input box itself contains the text 'User Agent' and has a small circular help icon to its right.

23. Device Integration with Third Party

23.1. Enter Applications Screen

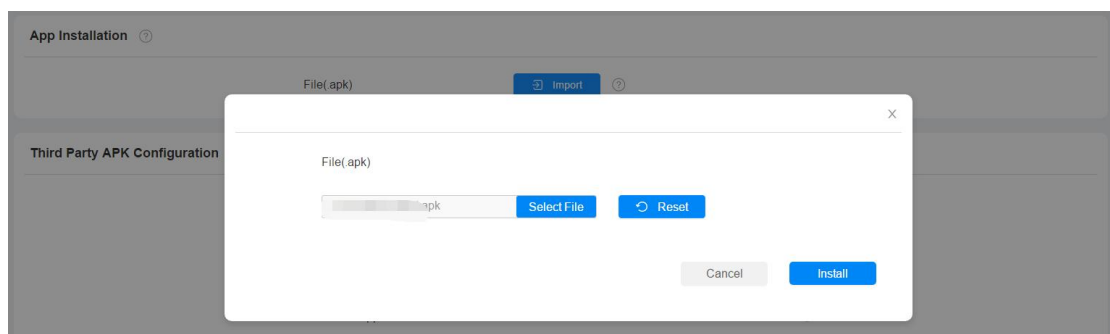
The content of this part mainly teaches you how to enter the APK interface through hidden operations. To do the configuration on device **Settings > System Info** interface, you can press on **User Mode** 10 times and press **“Admin Mode”** and press **“Confirm”** for the confirmation





23.2. Install Third-party App

You can install the third-party App to your device on the device web **Device >Third Party APK** interface. Choose a suitable .apk file from the PC to upload. If you want to clear the apk file uploaded, click **Reset**.



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

Third Party APK Configuration ⓘ

App Name	<input type="text"/>	ⓘ
Intervals Without Operating (Sec)	<input type="text" value="10"/>	ⓘ
Start Up Enabled	<input type="checkbox"/>	ⓘ
Turn Back App	<input type="checkbox"/>	ⓘ
Turn Back App After Awakening	<input type="checkbox"/>	ⓘ
APP Keep-Alive	<input type="checkbox"/>	ⓘ

General ⓘ

Turn Back App After Calling	<input checked="" type="checkbox"/>	ⓘ
Show App Icon	<input checked="" type="checkbox"/>	ⓘ

Parameter Set-up:

- **App Name:** select the App Name to be configured.
- **Interval Without Operating (Sec):** tick the check box to set the app returning time-interval when there is no operation on the device.
- **Start Up Enable:** tick the check box of Start UP Enable if you want the app to be run automatically when the device is turned on.
- **Turn Back App After Awakening:** tick the check box if you want the device to return to the app when the screen is awakened
- **APP Keep-Alive:** tick the check box if you want the app to stay running without being turned off.
- **Turn Back App After Calling:** tick the box if you want the app to return automatically after finishing a call (This feature applies to all the apps)
- **Show App Icon:** tick the box if you want the app icon to be displayed on the screen.

24. PBX Feature

IT88 Android indoor monitor has built the PBX server which makes the indoor station not only used as an intercom monitor but also a SIP PBX, users do not bother to prepare an extra SIP PBX again. The PBX supports call, forward, transfer, conference, ring group feature and so on. You can set it up on the device screen or web interface.

The screenshot shows the 'PBX' settings screen with a 'Number List (PBX Service Off)' table. The table has columns for Status, Username, Display Name, Call In/Call Out, Calling Party, and Called Party. All listed accounts are 'Unregistered'.

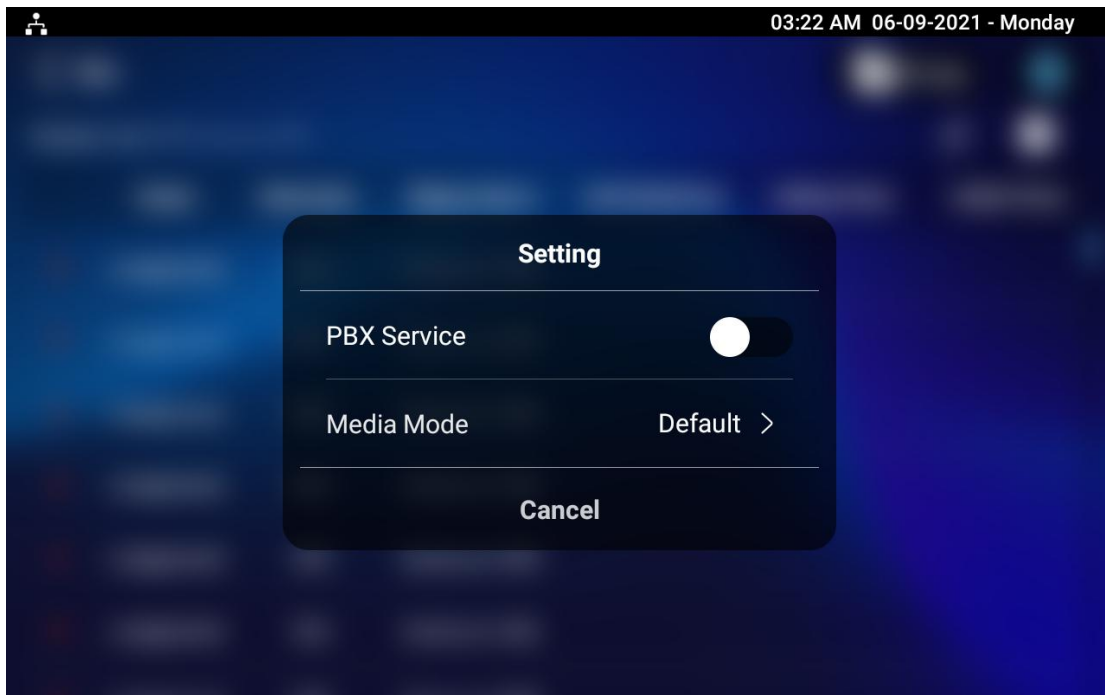
Status	Username	Display Name	Call In/Call Out	Calling Party	Called Party
Unregistered	1000	Extension 1000			
Unregistered	1001	Extension 1001			
Unregistered	1002	Extension 1002			
Unregistered	1003	Extension 1003			
Unregistered	1004	Extension 1004			
Unregistered	1005	Extension 1005			
Unregistered	1006	Extension 1006			

24.1. PBX Configuration on the Device

Enable the PBX feature on the device **Advance Settings > PBX** screen to check and manage SIP accounts.

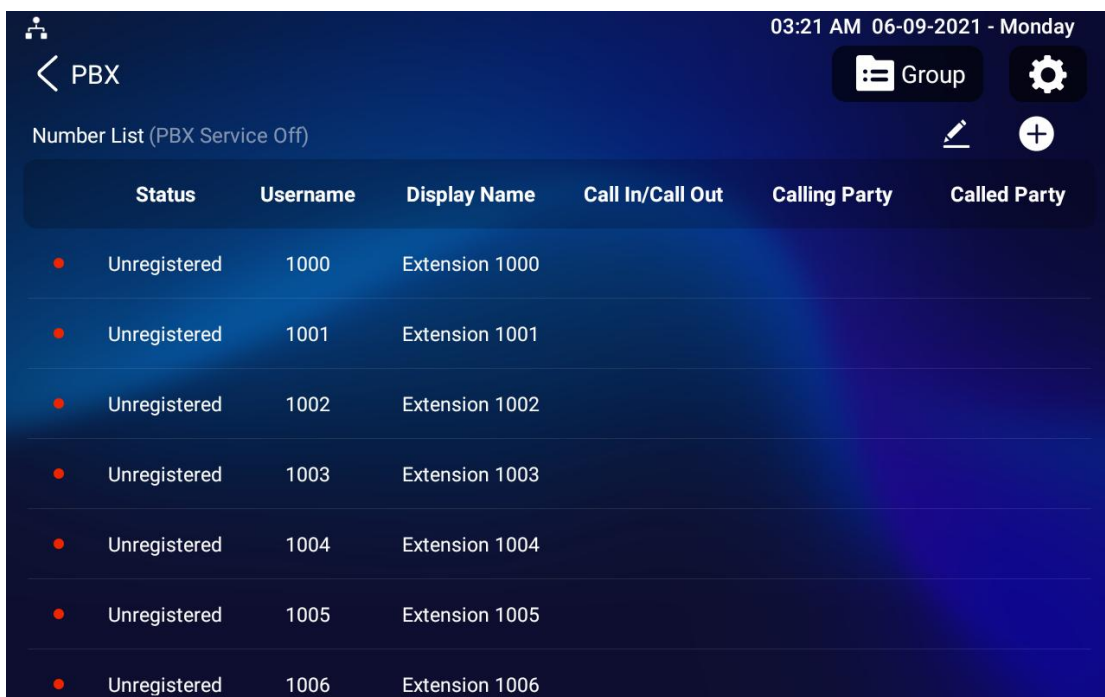
24.1.1. Enable PBX Service

In the PBX interface, clicking **Setting** on the right top corner enables the PBX.



24.1.2. Manage PBX Accounts

You can check the basic PBX information like PBX server and port and accounts status.



The screenshot shows a mobile application interface for editing a user profile. At the top left, there is a home icon and a back arrow labeled 'Edit'. At the top right, the time and date are displayed as '03:25 AM 06-09-2021 - Monday', and a blue 'Save' button with a checkmark is visible. The main content area contains four configuration items: 'Username' with the value '1000', 'Password' with the value 'abc1000', 'Display Name' with the value 'Extension 1000', and 'Enabled Status' which is a toggle switch currently turned on.

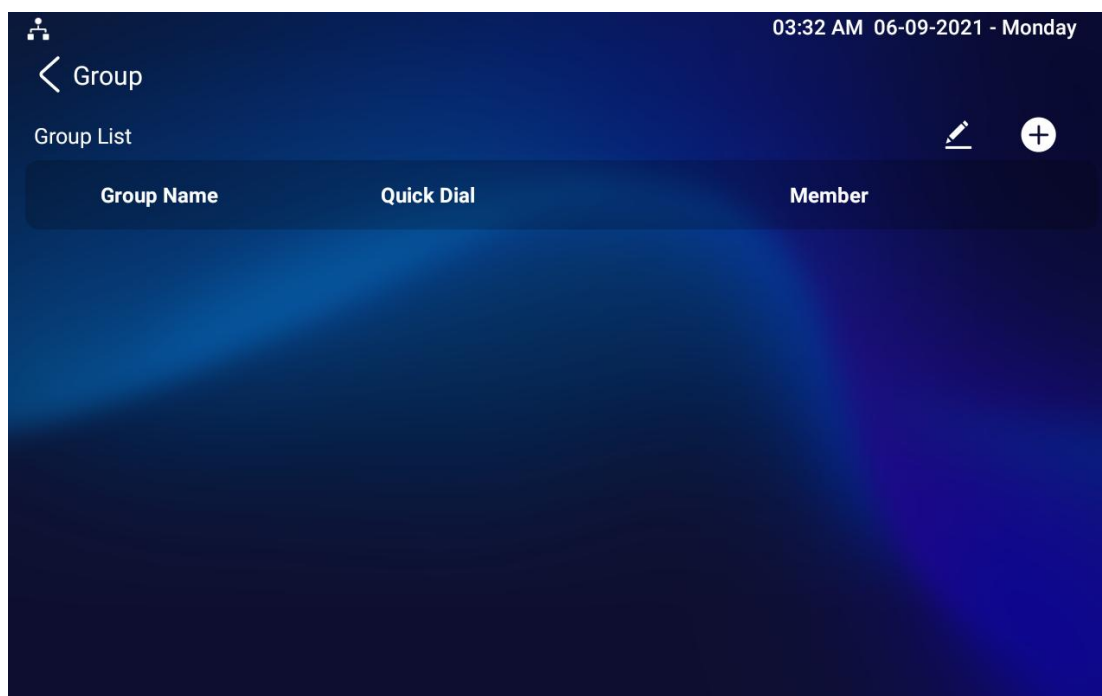
Parameter Set-up:

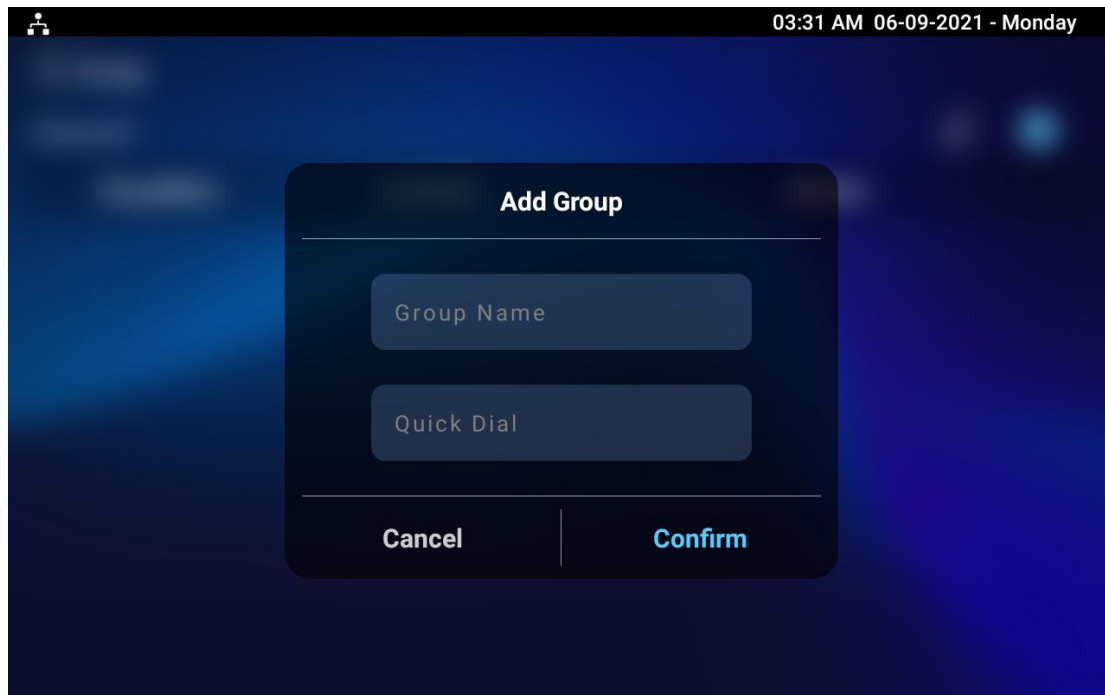
- **Status:** to show whether the account is registered or not.
- **Username:** to enter the extension number registered onto the SIP server.
- **Display Name:** to enter the display name of this account, which will show on other devices when making calls.
- **Password:** to enter the password of the corresponding users.
- **Enabled Status:** to activate the SIP account.
- **Call IN/Call Out:** the calling status of this account.
- **Calling Party:** the calling party number.

- **Caller Party:** the caller party number.

24.1.3. Manage PBX Groups

Click **Group** on the right top corner to add a new ring group or edit the existing group. One number can be added in different ring groups. Once receiving an incoming call, the numbers in one group will ring up at the same time.





Parameter Set-up:

- **Group Name:** the name of a ring group.
- **Quick Dial:** a number of this ring group.

24.2.PBX Configuration on The Web Interface

You can do the same configuration on web **PBX > Basic** and **PBX > Ring Group** interface.

PBX Basic ?

PBX Service Enabled ?

PBX Status ?

Media Model ?

PBX Port ?

[+ Add](#)

<input type="checkbox"/>	Index	Username	Password	Display Name	Status	Edit
<input type="checkbox"/>	1	1000	abc1000	Extension 1000	UnRegistered	✎
<input type="checkbox"/>	2	1001	abc1001	Extension 1001	UnRegistered	✎
<input type="checkbox"/>	3	1002	abc1002	Extension 1002	UnRegistered	✎
<input type="checkbox"/>	4	1003	abc1003	Extension 1003	UnRegistered	✎
<input type="checkbox"/>	5	1004	abc1004	Extension 1004	UnRegistered	✎
<input type="checkbox"/>	6	1005	abc1005	Extension 1005	UnRegistered	✎
<input type="checkbox"/>	7	1006	abc1006	Extension 1006	UnRegistered	✎
<input type="checkbox"/>	8	1007	abc1007	Extension 1007	UnRegistered	✎
<input type="checkbox"/>	9	1008	abc1008	Extension 1008	UnRegistered	✎
<input type="checkbox"/>	10	1009	abc1009	Extension 1009	UnRegistered	✎

[Delete](#)
[Delete All](#)
[Prev](#)
1/10
[Next](#)

[Go](#)

PBX >> Ring Group

Group Setting ?

[+ Add](#)

<input type="checkbox"/>	Index	Group Name	Quick Dial	Member	Edit
<p>No Data</p>					

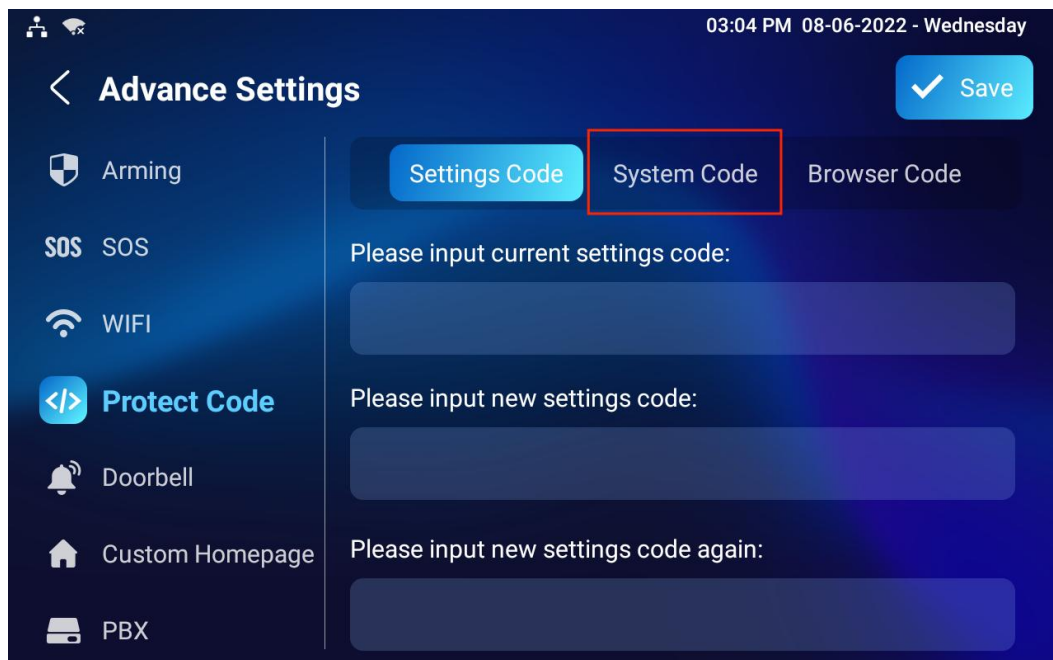
[Delete](#)
[Delete All](#)
[Prev](#)
1/1
[Next](#)

[Go](#)

25. Password Modification

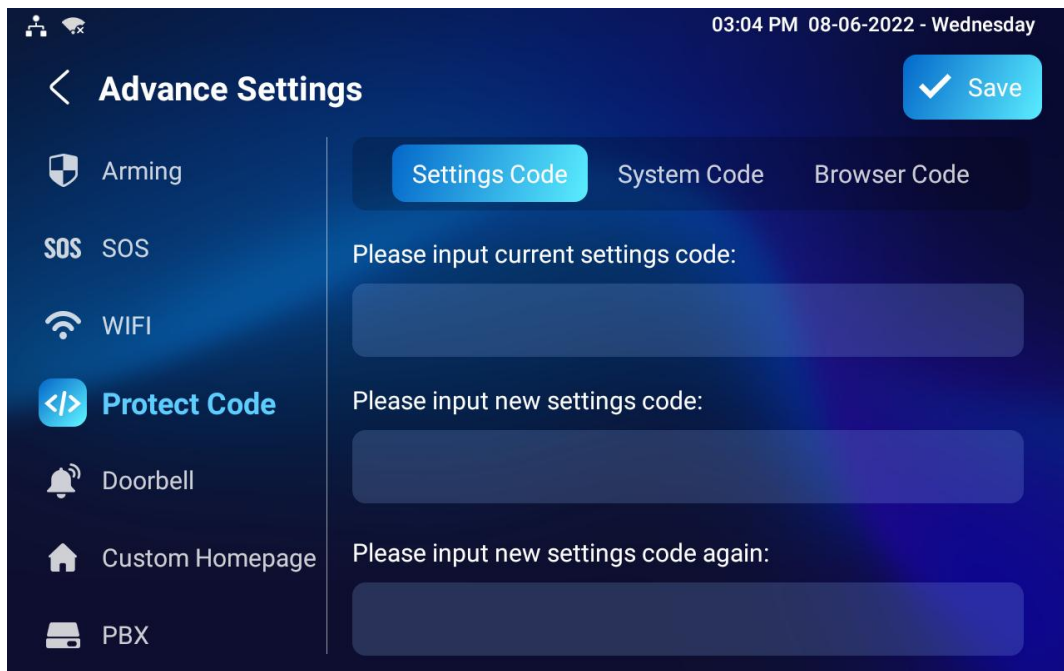
25.1. Modify Device Basic Setting Password

To do the configuration on device **Settings > Advanced Settings > Protected Code** screen to choose **System Code** change a new password. The default password is 123456.



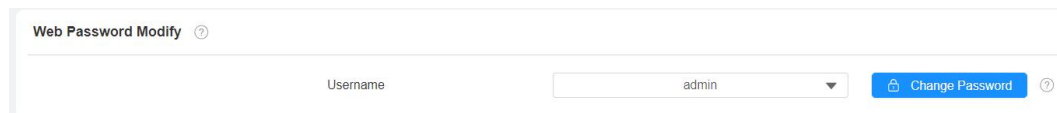
25.2. Modify Device Advanced Setting Password

This password is used to enter the advanced settings of the device, including password settings, account numbers, SOS numbers, network settings, etc. To modify the advanced setting password on device **Settings > Advanced Settings > Protect Code > Setting Code** screen. The default password is 123456.



25.3. Modify Device Web Interface Password

To modify the web interface password, you can do it on the device web **Security > Basic > Web Password Modify interface**. Select **"Admin"** for the administrator account and **"User"** for the User Account. Click the **Change Password** tab to change the password.

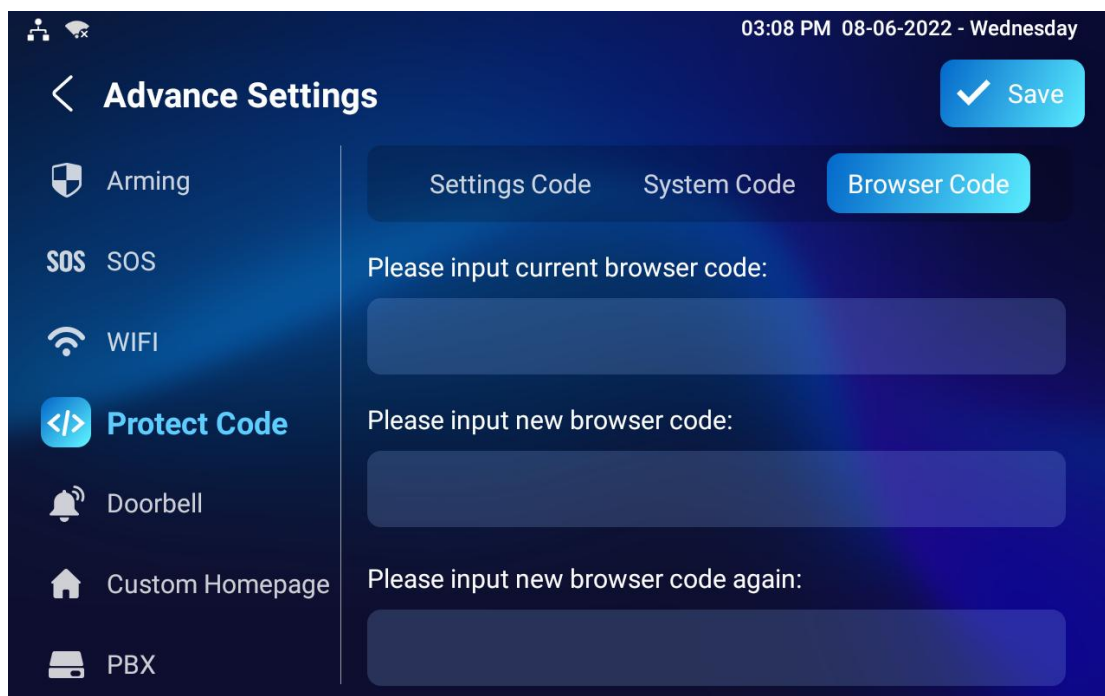


Note:

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

25.4. 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 device **Settings > Advanced Settings > Protected Code > Browser Code** screen. The default password is 123456.



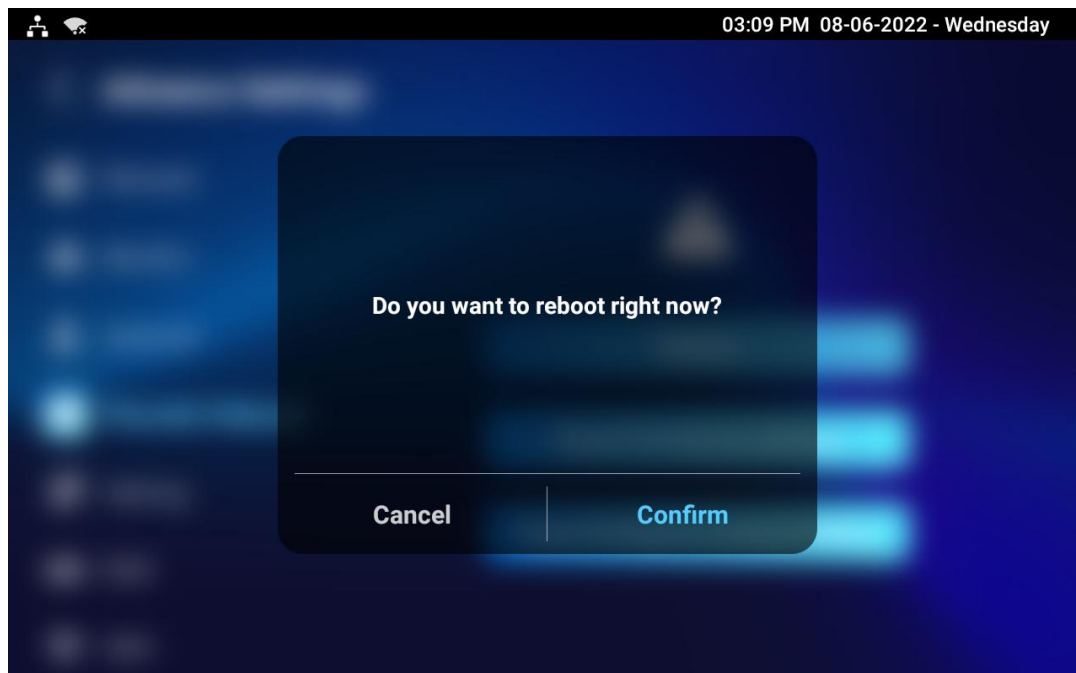
26. System Reboot&Reset

26.1.Reboot

26.1.1. Reboot on the Device

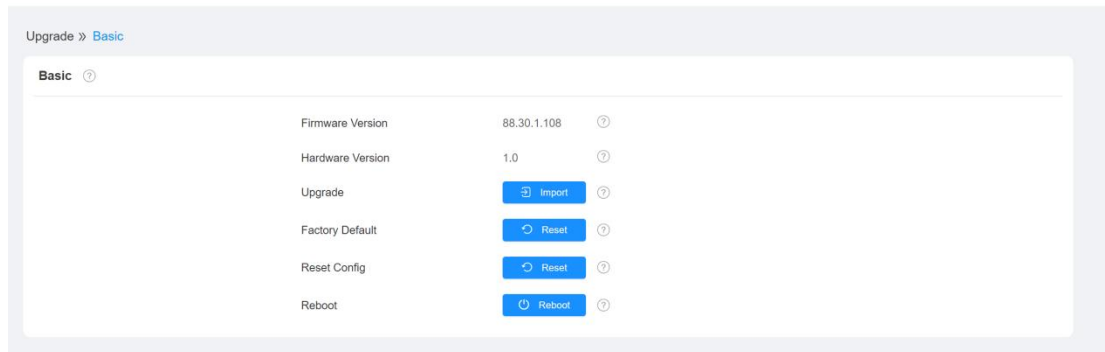
If you want to restart the system setting of the device, you can operate it directly on the device setting screen or on the device web interface.

To restart the system setting on device **Settings > Advance Settings > Reset&Reboot** screen.

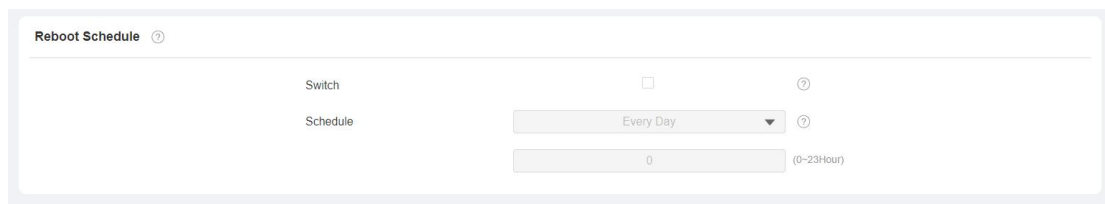


26.1.2. Reboot on the Web Interface

If you want to restart the device system, you can operate it on the device web **Upgrade > Basic** interface as well. Moreover, you can set up a schedule for the device to be restarted.



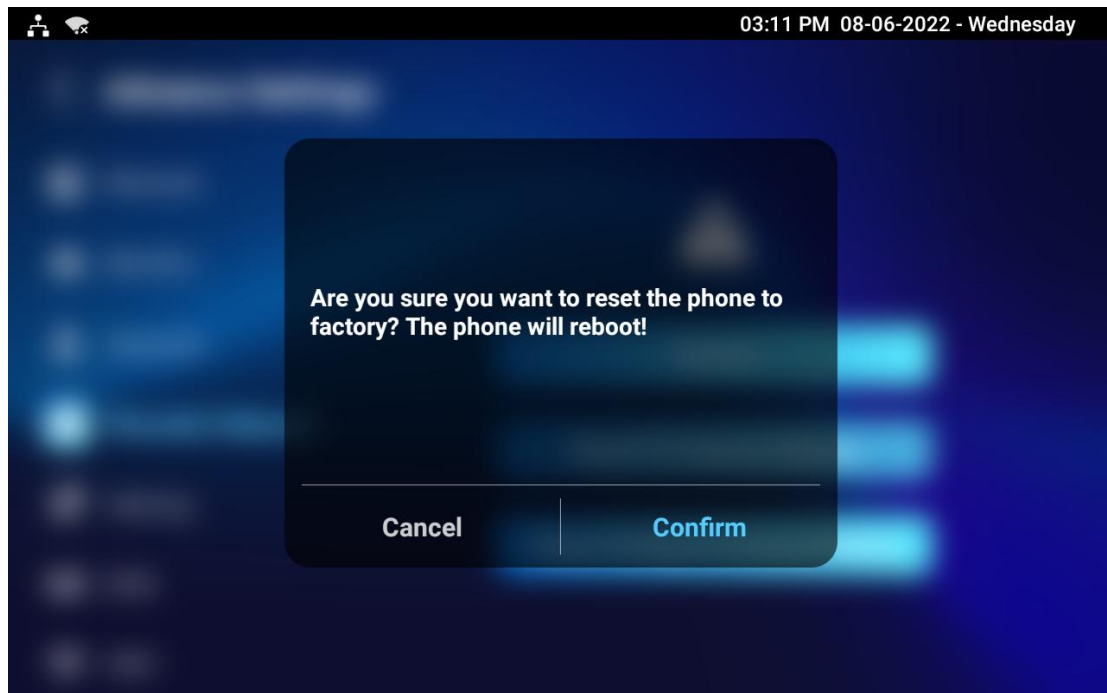
To set up the device restart schedule on web **Upgrade > Advanced > Reboot Schedule** interface.



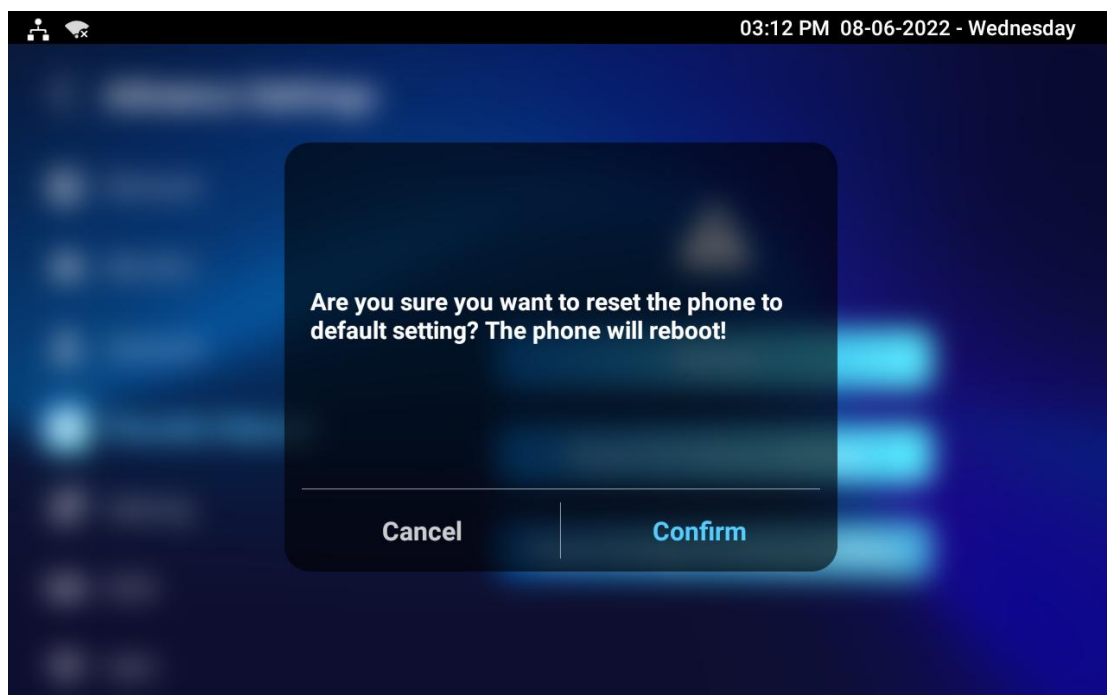
26.2. Reset

26.2.1. Reset on the Device

If you want to reset the whole device system to the factory setting, you can operate it directly on the device **Settings > Advance Settings > Reset&Reboot** screen.

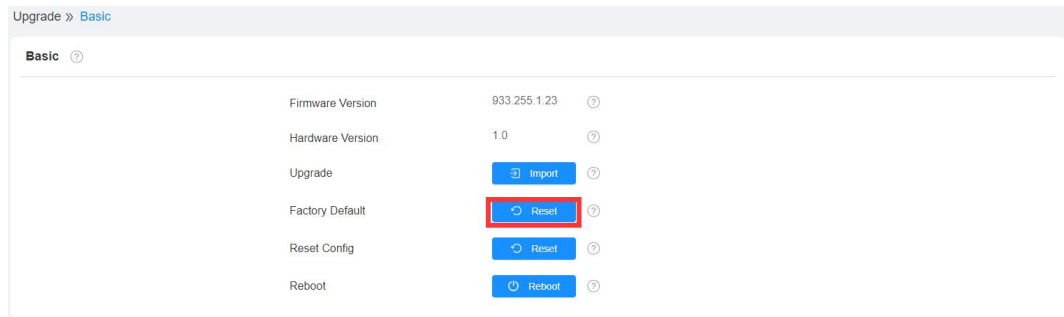


If you only want to reset the configuration file to the factory setting instead of the whole device system, you can press **Reset Config To Factory Setting** tab.

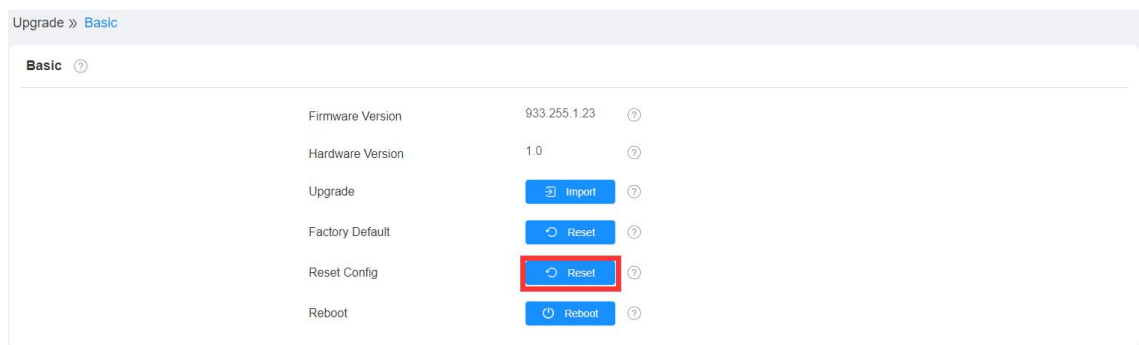


26.2.2. Reset on the Web Interface

Device system can also be reset on device web **Upgrade > Basic** interface without approaching the device.



If you only want to reset the configuration file to the factory setting, you can click **Reset Config** on the same page.



27. Abbreviations

ACS: Auto Configuration Server

Auto: Automatically

AEC: Configurable Acoustic and Line Echo Cancelers

ACD: Automatic Call Distribution

Autop: Automatical Provisioning

AES: Advanced Encryption Standard

BLF: Busy Lamp Field

COM: Common

CPE: Customer Premise Equipment

CWMP: CPE WAN Management Protocol

DTMF: Dual Tone Multi-Frequency

DHCP: Dynamic Host Configuration Protocol

DNS: Domain Name System

DND: Do Not Disturb

DNS-SRV: Service record in the Domain Name System

FTP: File Transfer Protocol

GND: Ground

HTTP: Hypertext Transfer Protocol

HTTPS: Hypertext Transfer Protocol Secure Socket Layer

IP: Internet Protocol

ID: Identification

IR: Infrared

LCD: Liquid Crystal Display

LED: Light Emitting Diode

MAX: Maximum

POE: Power Over Ethernet

PCMA: Pulse Code Modulation A-Law

PCMU: Pulse Code Modulation μ -Law

PCAP: Packet Capture

PNP: Plug and Play

RFID: Radio Frequency Identification

RTP: Real-time Transport Protocol

RTSP: Real Time Streaming Protocol

MPEG: Moving Picture Experts Group

MWI: Message Waiting Indicator

NO: Normal Opened

NC: Normal Connected

NTP: Network Time Protocol

NAT: Network Address Translation

NVR: Network Video Recorder

ONVIF: Open Network Video Interface Forum

SIP: Session Initiation Protocol

SNMP: Simple Network Management Protocol

STUN: Session Traversal Utilities for NAT

SMTP: Simple Mail Transfer Protocol

SDMC: SIP Devices Management Center

TR069: Technical Report069

TCP: Transmission Control Protocol

TLS: Transport Layer Security

TFTP: Trivial File Transfer Protocol

UDP: User Datagram Protocol

URL: Uniform Resource Locator

VLAN: Virtual Local Area Network

WG: Wiegand

28. FAQ

Q1: How to obtain the IP address of IT88?

A1: You can use the display screen to get the IP information, just check the IP address at Settings > Basic Info.

You can also use Akuvox IP Scanner to search Akuvox devices in the same LAN network.

Q2: Do Akuvox devices support Opus codec?

A2: For now, only Akuvox Android video IP phone R48G can support Opus audio codec. Door phone and indoor monitor are still not support.

Q3:What is the resolution of the 7-inch touch screen of IT88?

A3: The ratio is 16:10, and the resolution is 1280*800.

Q4:What operation system is IT88?

A4:IT88 is based on Android 9.0.

Q5:Can I install apps on Akuvox indoor monitor?

A5:Akuvox have indoor monitor based on the Linux system and Android system. For Linux system devices (IT80/IT81/C312/C313 series), not possible to install third-party app. For android system devices (C315/C317/IT83/IT83/X933/C319/IT88 series). You can install third-party apps as your wish.

Q6:Can I connect the electrical lock to the indoor monitor?

A6:Akuvox indoor monitors have relay component, so you can connect electrical lock to indoor monitors.

Q7:Can I communicate other indoor monitors with indoor monitor?

A7:Akuvox devices can communicate with each other, no matter whether it is indoor monitor, door phone or IP phone. Of course, indoor monitor can call other indoor monitors, also if you want, you can set other indoor monitors as auto answer mode.

29. Contact Us

For more information about the product, please visit us at www.akuvox.com or feel free to contact us by

Sales email: sales@akuvox.com

Technical support email: support@akuvox.com

Telephone: +86-592-2133061 ext.7694/8162

We highly appreciate your feedback about our products.

