### **About This Manual**



WWW.AKUVOX.COM



# AKUVOX E18C DOOR PHONE

**Administrator Guide** 

Thank you for choosing Akuvox E18C door phone. This manual is intended for administrators who need to properly configure the door phone. This manual applies to the 18.30.10.8 version, and it provides all the configurations for the functions and features of E18C door phones. Please visit Akuvox forum or consult technical support for any new information or the latest firmware.

### **Product Overview**

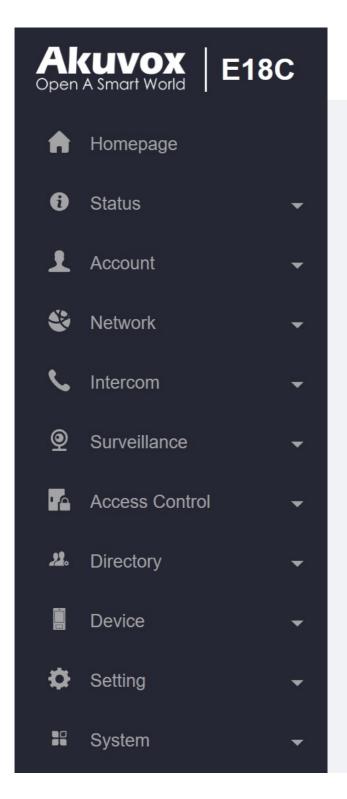
Akuvox E18C is Linux-based with a touch screen. It incorporates audio and video communications, access control, and video surveillance. Its finely-tuned SmartPlus and Al-based communication technology allow featured customization to better suit your operation habit. E18C multiple ports, such as RS485 and Wiegand ports, can be used to easily integrate external digital systems, such as elevator controller and fire alarm detector, helping to create a holistic control of the building entrance and its surroundings and giving you a great sense of security via a variety of access such as card access, NFC, Bluetooth, QR code and newly added door access in an accompaniment with body temperature measurement. E18C door phone applies to residential buildings, office buildings, and their complex.

# **Model Specification**

Model	E18C
Relay Out	2
Relay In	3
RS485	<b>✓</b>
Card Reader	13.56MHz, 125kHz & NFC
Wi-Fi	X
Bluetooth	<b>✓</b>
Temperature Detection	Optional
Face Recognition	<b>✓</b>
LTE	Optional
USB	X
External SD Card	<b>✓</b>

# **Introduction to Configuration Menu**

- Status: this section gives you basic information such as product information, Network Information, and account information, call log, access log, and temperature log.
- Account: this section concerns SIP account, SIP server, proxy server, transport protocol type, outbound proximity server.
- Network: this section mainly deals with DHCP&Static IP settings, and device deployment etc.
- Intercom: this section covers intercom call setting, call features, dial plan and so on.
- Surveillance: this section includes audio&video related settings such as Live stream, RTSP, ONVIF, MJPEG.
- Access Control: this section includes input type setting, relay setting, web relay setting, private PIN code, facial recognition, RF card, BLE setting, and body temperature and so on.
- Directory: this section allows you to add users and configure user-specific door access control. It also lets you set up contact groups and contacts are displayed on the door phone.
- Device: this section concerns LED light, Wiegand, lift control, LCD display and audio and so on.
- Setting: this second deals with time, language, security notification settings, door prompt text setting, action URL, schedule, and HTTP API and so on.
- System: this section covers Firmware upgrade, device reset&reboot, configuration file auto-provisioning, PCAP password modification, tamper alarm, and web interface automatic logout.



#### Status » Info

### **Product Information**

#### **Network Information**

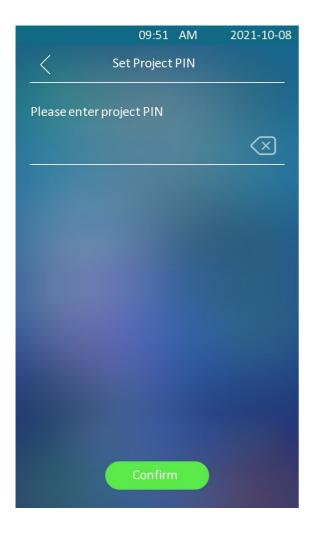
### **Access the Device**

Door phones' system settings can be either accessed on the device directly or on the device web interface.

### Access the Device Setting on the device

If you want to access the device setting to configure and adjust the parameters, you can do it directly on the device. You can press anywhere on the initial screen for approximately five seconds, enter the default PIN code **admin**, then press **Confirm** tab.





# 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 where you can configure and adjust parameters, etc.



#### Note:

- You can obtain the device IP address using the Akuvox IP scanner to log in to the device web interface.
- Download IP scanner: <a href="https://knowledge.akuvox.com/docs/akuvox-ip-scanner?highlight=IP">https://knowledge.akuvox.com/docs/akuvox-ip-scanner?highlight=IP</a>
- See detailed guide: <u>https://knowledge.akuvox.com/v1/docs/en/how-to-obtain-ip-address-via-ip-scanner?highlight=IP%20Scanner</u>
- Google Chrome browser is strongly recommended.
- The initial username and password are **admin** and please be case-sensitive to the user names and passwords entered.

# **Time and Language Setting**

### **Language Setting**

Set up the language during initial device setup or later through the device or web interface according to your preference.

### Language Setting on the Device

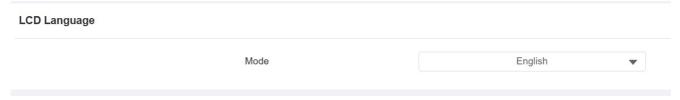
Device Language can be configured on the device and on the device web interface that allows you to select or change the language for screen display to your preference. Path: **Display&Sounds** > **Language**.



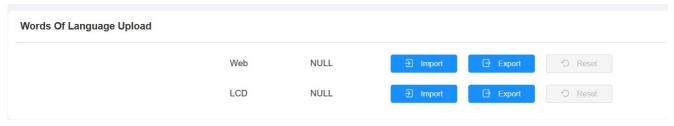
Language Setting on the Device Web Interface

You can select device language and device language icons, and customize interface text including configuration names and prompt text.

Navigate to Setting >Time/Lang > LCD Language.



To customize configuration names and prompt text, you need to export and edit the .json file before uploading the file to the device. Path: Setting > Time/Lang > Words Of Language Upload.

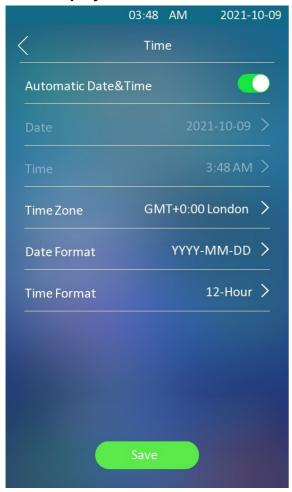


### **Time Setting**

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

### **Configure Time Setting on the Device**

Path: Display&Sounds > Time.



#### Parameter Set-up:

Automatic Date&Time: Automatic Date&Time is toggled 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 toggling off the
switch first, then entering the time and date you want before pressing the Save tab for the
validation.

#### Note

When the Automatic Date&Time toggle switch is toggled off then parameters
related to the NTP server will become not editable. And when the switch is toggled
on, the time and date will be denied editing.

### Time Setting on the Device Web Interface

Time settings on the web interface allows you to set up the NTP server address that you obtained to automatically synchronize your time and date. When a time zone is selected, the device will automatically notify the NTP server of the time zone so that the NTP server can synchronize the time zone setting in your device.

#### Navigate to Setting > Time/Lang interface.

Time			
	Automatic Date&Time Enabled		
	Time Zone	GMT+0:00 London	•
	Preferred Server	0.pool.ntp.org	

#### Parameter Set-up:

- Automatic Date&Time Enabled: tick the checkbox to allow the date& time in the device
  to be automatically set up and synchronized with the default time zone and the NTP server
  (Network Time Protocol). If you untick the checkbox, then you are allowed to set up the
  time manually on the web interface.
- Preferred Server: enter the NTP server you obtained in the NTP Server field.

#### Note

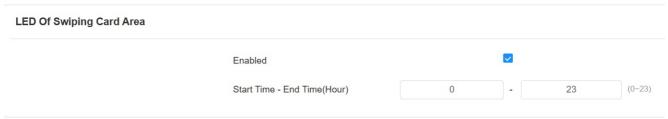
 When the check box is unticked, the parameters related to the NTP server will become uneditable.

# LED & LCD Setting

### **Configure Card Reader LED Setting**

You can enable or disable the LED lighting on the card reader area as needed on the web interface. Meanwhile, if you do not want to have the LED light on the card reader area stay on, you can also set the timing for the exact time span during which the LED light can be disabled in order to reduce electrical power consumption.

#### Path: Device > Light > LED of Swiping Card Area.



#### Parameter Set-up:

• Start Time - End Time (H): enter the time span for the LED lighting to be valid, e.g. if the time span is from 18-22 it means the LED light will stay on during the time span from 6:00 pm to 10:00 pm during one day (24 hours).

### **Configure LED White Light Setting**

White light LED is mainly used to reinforce the lighting for the QR code access and for the greater visibility of the visitors when seeing their images from indoors in a dark environment.

#### Path: Device > Light > White Light.



#### Parameter Set-up:

• Mode: select Auto or OFF. If you select Auto then the white light will turn on for 5 minutes for facial recognition and QR code scan. And if you select Off then the white light will be

turned off.

• Max White Light Value: set the white light value from 1-5, and the default white light value is 3. The greater value it is, the brighter the light will be.

#### **Note**

 IR LED light should be triggered first before the white light can be valid in the facial recognition, however, IR LED light does not need to be triggered for the white light function in the QR code scan.

### **LCD Screen Brightness Setting**

If you want to brighten up the screen in order to see the screen at greater ease in an environment with higher light intensity, you need to set up the related parameters.

### LCD Screen Brightness Setting on the Device

On the device, you can set and adjust the screen backlight brightness.

Path: Display&Sounds > Backlight.



### LCD Screen Brightness Setting on the Web Interface

On the web interface, you can set and adjust the backlight brightness for the screen and screen saver.

#### Path: Device > Light > Screen Backlight Brightness.



#### Parameter Set-up:

• Backlight Brightness (day): set the screen backlight brightness during the daytime with the value ranging from (0-255).

# **Screen Display Configuration**

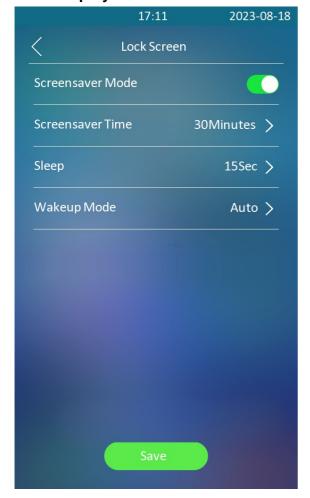
You can set up the device's screen display features such as screensaver to give users a better visual and operational experience.

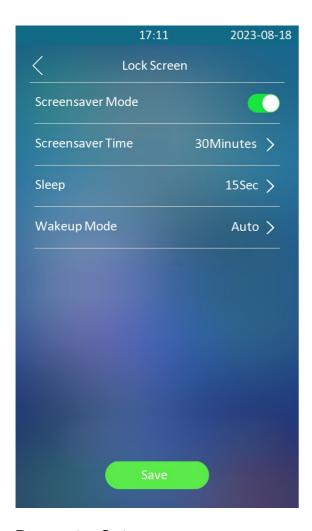
### **Configure Screensaver**

### **Configure Screensaver on the Device**

Sleep mode and screen saver are designed for screen protection. You can set these two modes to prevent the device screen from getting overheated and to reduce energy consumption. You can define when the device should go into sleep mode, screen saver mode, and turn off the screen.

Path: Display&Sounds > Screensaver > Lock Screen.





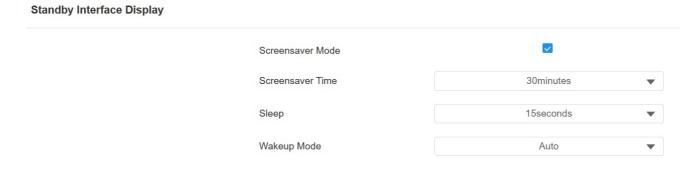
#### Parameter Set-up:

- Screensaver Mode: move the toggle switch to the right to enable the screen saver function.
- Screensaver Time: set the screensaver duration after the device goes into sleep mode. The default setting is 30 min.
- Sleep: select the time from 5 sec, 10 sec, and 15 sec. For example, if you set it as 10 sec, then the device will go into screen saver mode in 10 sec when there is no operation on the device or no one is detected approaching.
- Wakeup Mode: if you select Auto mode, then the screen will be awakened when someone approaches without it being touched upon, and if Manual mode is selected, then you have to touch and wake up the screen.

### Configure Screensaver on the Web Interface

You can set the screen saver duration as well as the timing for the screen to be turned off for both screen protection and power reduction.

To configure the screensaver on the web interface, you can go to **Device > LCD > Standby** Interface Display.



#### Parameter Set-up:

- Screensaver Time: set the screensaver duration after the device goes into sleep mode.
   Screensaver duration ranges from 5 seconds to 2 hours on the web interface. The default setting is 30 min.
- Sleep: select the time from 5 sec, 10 sec, and 15 sec. For example, if you set it as 10 sec, then the device will go into screen saver mode in 10 sec when there is no operation on the device or no one is detected approaching.
- Wakeup Mode: if you select Auto mode, then the screen will be awakened when someone approaches without it being touched upon, and if Manual mode is selected, then you have to touch and wake up the screen.

### Customize Screensaver on the Web Interface

You can upload and customize screensaver pictures separately or in batch to the device for public purposes or for a greater visual experience. You are allowed to upload a maximum of 5 pictures, and each picture will be displayed in rotation according to the ID order with the specific time duration (Time Interval) you set. You can go to Device > LCD > Upload Screensaver.

Upload Screensaver			
	Screensaver1	▼ Thopmt ⊕	
Screensaver ID	File Status	Interval(Sec)	Delete
1	File Exists	5	Delete
2	File Exists	5	Delete
3	File Exists	5	Delete
4	File Exists	5	□ Delete
5	File Exists	5	□ Delete

#### Parameter Set-up:

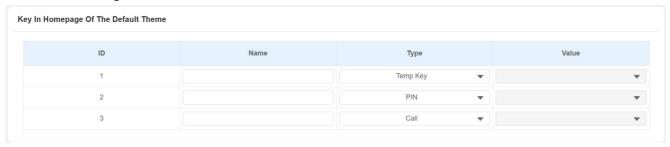
• Interval(Sec): set the display time of each picture you uploaded in Interval (Sec.). The display time range is from 1-120 seconds. The default setting is 5 seconds.

#### Note

• The pictures uploaded should be in JPG format with 2M pixel maximum.

### **Home Screen Configuration**

You can change the home screen display through the configuration of tab name and tab arrangement on the device web interface if needed. Path: Device > LCD > Key In Homepage Of The Building Theme.



#### Parameter Set-up:

- Type: select the tab type corresponding to the index number which indicates the tab
  position. For example, if you want to make Speed Dial tab to be displayed in position
  one, you can change the type in index number 1 to Speed Dial. And you can change
  another tab position accordingly.
- Name: enter a new name to replace the original type of name, but it does not change the attribute of the type.
- Value: enter the IP or SIP number to be attached to the reception icon for the speed dial.
   The number entered will be dialed out as you press the reception icon on the home screen.
   This field is only valid for speed dial.

# **Volume & Tone Configuration**

Volume and tone configuration include microphone volume, the AD volume, keypad volume, speaker volume, tamper alarm volume, and open-door tone configuration. Moreover, you can upload the tone you like to enrich your personalized user experience.

# **Volume Configuration**

You can configure the Mic volume according to your need for open-door notification. Moreover, you can also set up the tamper alarm volume when unwanted removal of the access control terminal occurs.

### **Configure Volume on the Device**

You can adjust the microphone volume, speaker volume, keypad volume, and AD volume on the device.

Path: Display&Sounds > Sounds.



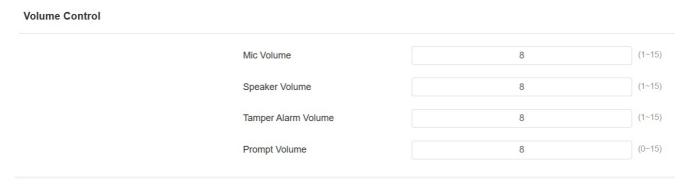
#### Parameter Set-up:

• **Prompt Volume**: adjust the prompt volume, which includes various types of prompt sounds for door open success and failure, ringback, temperature measurement sound, etc.

### Configure Volume on the Web Interface

On the web interface, you can set the tamper alarm volume, mic volume, etc.

Path: Device > Audio > Volume Control.



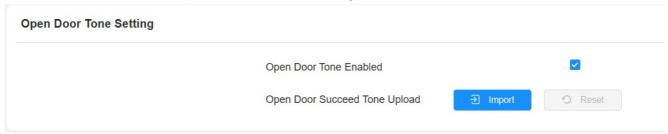
Parameter Set-up:

• Prompt Volume: adjust the prompt volume, which includes various types of prompt sounds for door open success and failure, ringback, temperature measurement sound, etc.

### **Upload Open Door Tone**

You can upload the tone for open door failure and success on the device web interface.

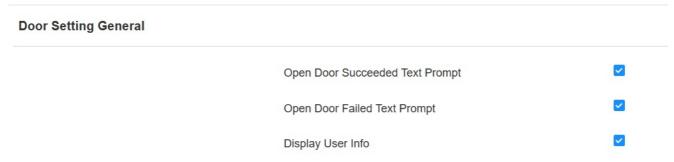
#### Path: Device >Audio > Open Door Tone Setting.



### **Configure Door Open Prompt Text**

You can enable the open door text prompt for both door-opening success and failure. And you can also make the door phone display the user information when users use credentials such as RF cards for access.

#### Path: Access Control > Relay > Door Setting General.

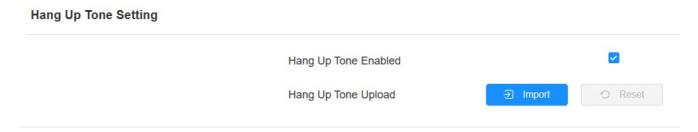


#### Parameter Set-up:

- Open Door Succeeded Text Prompt: tick the check box if you want to see the text prompt after the door open success and vice versa.
- Open Door Failed Text Prompt: tick the check box if you want to see the prompt words after the door open failure and vice versa.

### **Configure Hang-up Tone**

You can customize your call hang-up tone if needed. Path: Device > Audio > Hang Up Tone Setting.



#### Parameter Set-up:

• Hang Up Tone Upload: upload the hang-up tone file in .wav format. And the file size shall be less than 200KB. You can click on Reset if you want to delete the uploaded file and then change it back to the default hang-up tone.

## **Network Setting**

### **Device Network Connection Setting**

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

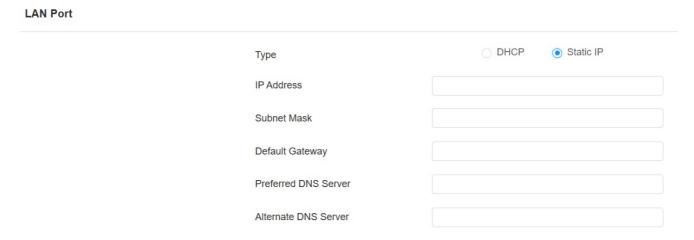


#### Parameter Set-up:

- 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: When static IP mode is selected, then the IP address, subnet mask, default
  gateway, and DNS servers 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 according to the IP address.
- Preferred&Alternate DNS Server: set up a preferred or an 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.

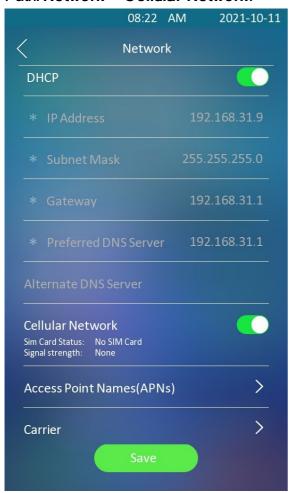
You can also configure the network work setting on the web interface. Path: **Network > Basic > LAN Port**.



### LTE Wireless Connection Setting

The LTE module enables cellular network connectivity for the device in areas where wired networks are unavailable, particularly beneficial for installations in older buildings.

#### Path: Network > Cellular Network.





#### Parameter Set-up:

- Cellular Network: move the toggle switch on and off to enable or disable the LTE function. The signal strength has four levels: Weak, Fair, Good, and Excellent.
- Access Point Name (APNs): check the Cellular Network provider for the Access Point.
   You can also add and delete APNs manually if needed.
- Carrier: enable or disable the network provided by the network service provider.

You can also enable or disable the 4G cellular network. Path: **Network > Advanced > Cellular Network**.

Cellular Network	
Enabled	

### **Device Local RTP Configuration**

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

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

Path: Network > Advanced > Local RTP interface.

11800	(1024~65535)
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 end point for the exclusive data transmission range.

### **Device Deployment in Network**

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

Path: Network > Advanced > Connect Setting.

Connect Setting		
	Server Mode	Cloud
	Discovery Mode	
	Device Address	1 1 1 1
	Device Extension	1
	Device Location	E18

#### Parameter Set-up:

Server 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 or SDMC in discovery mode.

- **Discovery Mode**: click **Enabled** to turn on the discovery mode of the device so that it can be discovered by other devices in the network, and click **Disabled** 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 information from the left to the right: **Community, Unit, Stair, Floor**, and **Room** in sequence.
- Device extension: enter the device extension number for the device you installed.
- Location: enter the location in which the device is installed and used.

### **NAT Setting**

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

#### Path: Account > Advanced > NAT.

NAT		
UDP Keep Alive Messages		
UDP Alive Messages Interval	30	(5~60Sec)
RPort Enabled		

#### Parameter Set-up:

- UDP Keep Alive Messages: if enabled, the device will send out the message to the SIP server so that SIP server will recognize that the device is in online status.
- UDP Alive Messages Interval: set the message sending time interval from 5-60 seconds, the default is 30 seconds.
- RPort: enable the RPort when the SIP server is in WAN (Wide Area Network).

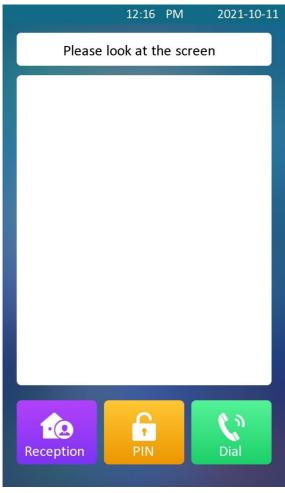
# **Intercom Call Configuration**

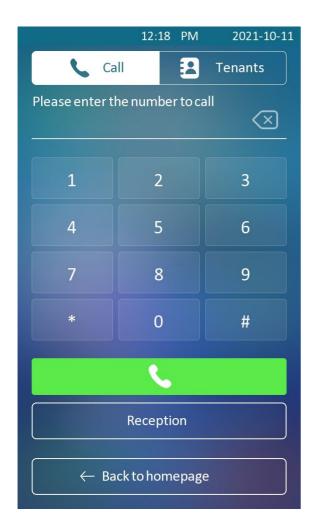
# **IP Call & IP Call Configuration**

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

### Make IP/SIP calls

You can press the dial tab and make IP or SIP calls.

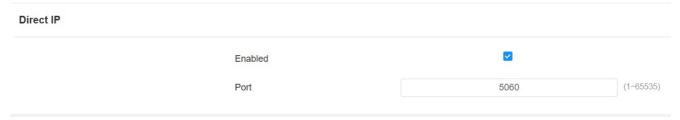




### **IP Call Configuration**

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

#### Path: Intercom > Basic > Direct IP.



#### Parameter Set-up:

- Enabled: tick the checkbox to Enable or Disable the direct IP call. For example, if you do not allow direct IP calls to be made on the device, you can disable the function.
- **Direct IP Port**: the direct IP Port is **5060** by default with the port range from **1-65535**. If you enter any values within the range other than 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.

### SIP Call &SIP Call Configuration

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

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

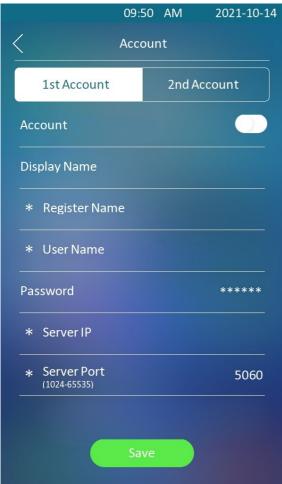
### **SIP Account Registration**

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

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

### Configure SIP Account on the Device

To configure SIP account on the device. Path: **Account**. **Register Name**, **User Name**, and **Password** are provided by the SIP account administrator.

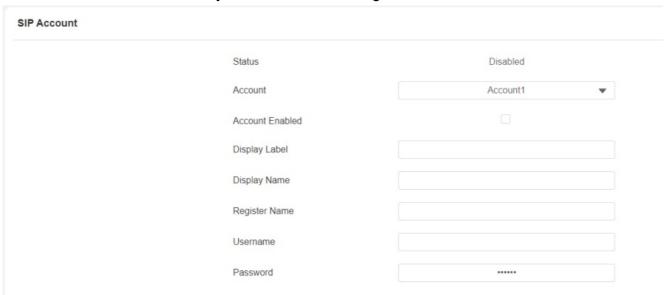


#### Parameter Set-up:

- Display Name: configure the name, for example, the device's name to be shown on the device being called to.
- Server IP: enter the SIP server address for the SIP account selected.
- Server port: enter the SIP server port for communication. The SIP port is 5060 by default.

### Configure SIP Account on the Web Interface

To configure the configuration on the web interface, you go to Account > Basic > SIP Account interface. Register Name, User Name, and Password are provided by the SIP account administrator. You can fill in 63 bytes of characters in length maximum.



#### Parameter Set-up:

- Status: check to see if the SIP account is registered or not.
- Account: select the exact account (Account 1&2) to be configured.
- Account Enabled: tick the checkbox to enable or disable a registered SIP account.
- **Display Name**: configure the name, for example, the device's name to be shown on the device being called to. You can fill in 63 bytes of characters in length maximum.
- Display Label: configure the device label to be shown on the device screen. You can fill in
   63 bytes of characters in length maximum.

### **SIP Server Configuration**

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

#### Path: Account > Basic > Preferred SIP Server.

Preferred SIP Server			
	Server Address		
	Sip Server Port	5070	(1024~65535)
	Registration Period	1800	(30~65535 Sec
Iternate SIP Server			
	Server Address		
	Sip Server Port	5060	(1024~65535)

#### Parameter Set-up:

- Server Address (Preferred SIP server): enter the primary server IP address number or its URL.
- Server Address (Alternate SIP server): enter the backup SIP server IP address or its URL.
- SIP Server Port: set up a SIP server port for data transmission.
- Registration Period: set up SIP account registration time span. 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.

### **Configure SIP Ports for SIP Calls**

You are required to set up a SIP port range for making SIP calls. Navigate to **Account** > **Advanced** > **Call**.

Call		
Max Local SIP Port	30286	(1024~65535)
Min Local SIP Port	30276	(1024~65535)

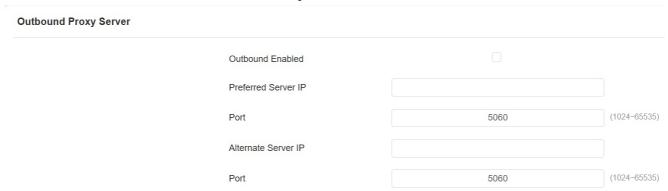
#### Parameter Set-up:

- Max Local SIP Port: enter the maximum SIP port ranging from 1024 to 65535. The default port setting is 5062.
- Min Local SIP Port: enter the minimum SIP port ranging from 1024 to 65535. The default port setting is 5062.

# **Configure Outbound Proxy Server**

An outbound proxy server is used to receive all initiating request messages and route them to the designated SIP server in order to establish a call session via port-based data transmission.

## Path: Account > Basic > Outbound Proxy Server.



## Parameter Set-up:

- Preferred Server IP: enter the SIP address of the outbound proxy server.
- Port: enter the Port number for establishing call session via the outbound proxy server
- Alternate Server IP: set up backup server IP for the backup outbound proxy server.
- Port: enter the Port number to establish a call session via the backup outbound proxy server.

# **Configure Data Transmission Type**

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

## Path: Account > Basic > Transport Type.

Transport Type			
	Туре	TCP	•

## Parameter Set-up:

 UDP: select UDP for unreliable but very efficient transport layer protocol. UDP is the default transport protocol.

- TCP: select TCP for a reliable but less-efficient transport layer protocol.
- TLS: select TLS for a secured and reliable transport layer protocol.
- DNS-SRV: select DNS-SRV to obtain a 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.

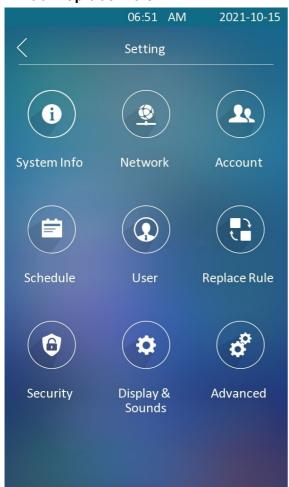
# **Dial Options Configuration**

# **Quick Dial by Number Replacement**

The dial number replacement feature simplifies long and complex dial numbers of the device, providing shorter and more user-friendly alternatives for making calls. It allows the substitution of multiple dial numbers, such as IP addresses or SIP numbers, with a single, simplified number.

## Quick Dial By Number Replacement on the Device

You can replace the long SIP/IP number with the short number on the device. Path: Replace Rule > Add Replace Rule.





## Parameter Set-up:

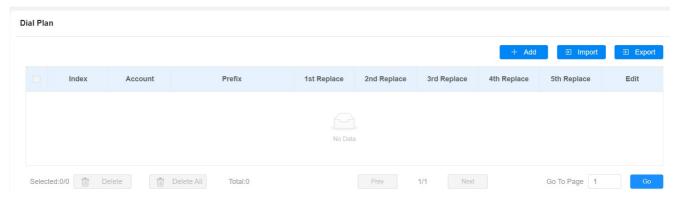
- Account: select the account to which you want to apply dial number replacement. The
  account is Auto by default (to dial out from the account in which the dial number has been
  registered). You can select either account 1 or account 2 from which the number can be
  dialed out. If you have registered the dialed number in both Account 1 and Account 2, then
  the number will be called out from Account 1 by default.
- Prefix: enter the short number to replace the dialed number you wish to replace.
- Replace 1/2/3/4/5: enter the dialed number(s) you wish to replace. It supports up to 5
  number maximum for the replacement on the device configuration. For example, if you
  replace five original dial numbers with a common short number such as 101 then the five
  intercom devices with the dialed number will be called at the same time when you dial 101.

# Quick Dial by Number Replacement on the Web

You can not only add a quick dial number separately but also import the quick dial number to the device in batch. Besides, you can edit and delete the numbers if needed.



## Path: Intercom > Dial Plan.



# **Sequence Call**

Sequence Call is a feature that allows you to dial a group of numbers in a predefined order until one of them answers. This feature is supported by Akuvox SmartPlus, which provides a set of sequence call numbers for the application.

To do the configuration on the web **Intercom** > **Basic** > **Sequence Call** interface.



## Parameter Set-up:

• When Refused: if you select Do Not Call Next, then the sequence call will be terminated if the call is rejected by the called party. If you select Call Next then the sequence call will be continued to the next called party if it is rejected by the first called party.

# **Call Auto-answer Configuration**

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

Configure auto-answer function
 Path: Intercom > Call Feature > Auto Answer

Auto Answer			
	Auto Answer Delay	0	(0~5Sec
	Mode	Video	•
Enable Auto-ans	wer mode		
	wer mode  Advanced > Call.		
Path: Account >		30286	(1024~65535)
	Advanced > Call.	30286 30276	(1024~65)

## Parameter Set-up:

Auto Answer Delay: set up the delay time (from 0-5 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.

Prevent SIP Hacking

 Auto Answer Mode: set up the Video or Audio mode you preferred for the automatic call answering.

# **Call Settings**

# **Maximum Call Duration Setting**

The door phone allows you to set up the call time duration in receiving the call from the calling device as the caller side might forget to hang up the intercom device. When the call time duration is reached, the door phone will terminate the call automatically.

# Path: Intercom > Call Feature > Max Call Time

Max Call Time		
Max Call Time	5	(2~30Min)

Max Call Time: enter the call time duration according to your need (ranging from 2-30 min.). The default call time duration is 5 min.

## Note

The max call time of the device is also related to the max call time of the SIP server. If
using a SIP account to make a call, please pay attention to the max call time of the
SIP server. If the max call time of the SIP server is shorter than the max call time of
the device, the shorter one is available.

# **Maximum Dial Duration Setting**

Maximum Dial Duration is the time limit for incoming- and/or outgoing calls on the door phone. If configured, the door phone will automatically terminate the call if no one answers the call within the preset time, whether it is incoming or outgoing.

## Path: Intercom > Call Feature > Max Dial Time.

Max Dial Time		
Dial In Time	60	(5~120Sec)
Dial Out Time	60	(5~120Sec)

- Dial In Time: enter the dial-in time duration for your door phone (ranging from 30-120 sec.). For example, if you set the dial-in time duration is 60 seconds in your door phone, then the door phone will hang up the incoming call automatically if the call is not answered by the door phone in 60 seconds. 60 seconds is the dial in time duration by default.
- Dial Out Time: enter the dial-in time duration for your door phone (ranging from 5-120 sec.). For example, if you set the dial-out time duration is 60 seconds in your door phone, then the door phone will hang out the call it dialed out automatically if the call is not answered by the device being called to.

## **Note**

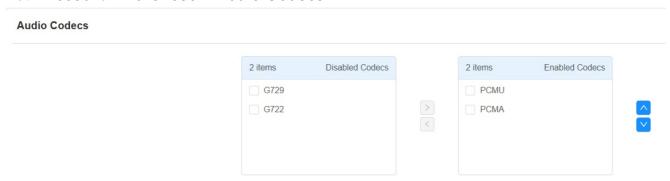
Max dial time of the device is also related to the max dial time of the SIP server. If
using an SIP account to make a call, please pay attention to the max dial time of the
SIP server. If the max dial time of the SIP server is shorter than the max dial time of
the device, the shorter one is available.

# **Audio& Video Codec Configuration for SIP Calls**

# **Configure Audio Codec**

The door phone supports four types of Codec (PCMU, PCMA, G729, and 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.

## Path: Account > Advanced > Audio Codecs.



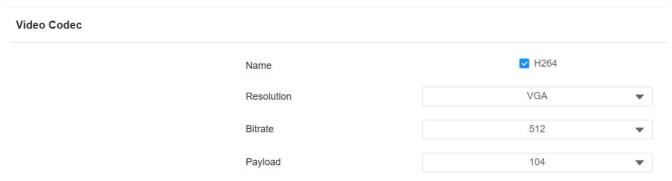
Please refers to the bandwidth consumption and sample rate for the four types of codecs below:

Codec Type	Bandwidth Consumption	Sample Rate
PCMA	64 kbit/s	8kHZ
РСМИ	64 kbit/s	8kHZ
G729	8 kbit/s	8kHZ
G722	64 kbit/s	16kHZ

# **Configure Video Codec**

The door phone supports the H264 codec that provides better video quality at a much lower bit rate with different video quality and payload.

## Path: Account > Advanced > Video Codecs.



- 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 five options: QCIF,
   CIF, VGA, 4CIF, and 720P according to your actual network environment. The default code resolution is VGA.
- **Bitrate**: select the video stream bit rate (ranging from **128-2048**). The greater the bitrate, the data transmitted every second is the greater in amount therefore the video will be clearer. While the default code bitrate is 512.

 Payload: select the payload type (ranging from 90-119) to configure the audio codec payload. The payload between the door phone and the corresponding intercom device should be identical. The default payload is 104.

# **Configure DTMF Data Transmission**

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

## Path: Account > Advanced > DTMF.

DTMF		
Mode	RFC2833 ▼	
How To Notify DTMF	Disabled ▼	
Payload	101	(96~127)

## Parameter Set-up:

- Mode: select DTMF mode among six options: Inband, RFC2833, Info, Info+Inband, Info+RFC2833, and Info+Inband+RFC2833 based on the specific DTMF transmission type of the third party device to be matched with as the party for receiving signal data.
- How to Notify DTMF: select among four types: Disable, DTMF, DTMF-Relay, and
   Telephone-Event according to the specific type adopted by the third party device.

You are required to set it up only when the third party device to be matched with adopts Info mode.

 Payload: set the payload according to the specific data transmission payload agreed on between the sender and receiver during the data transmission.

# **Phone Book Configuration**

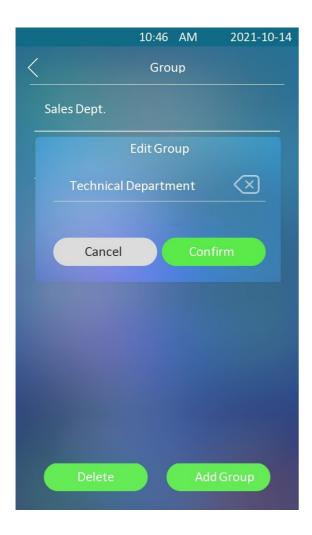
# **Phone Book Configuration on the Device**

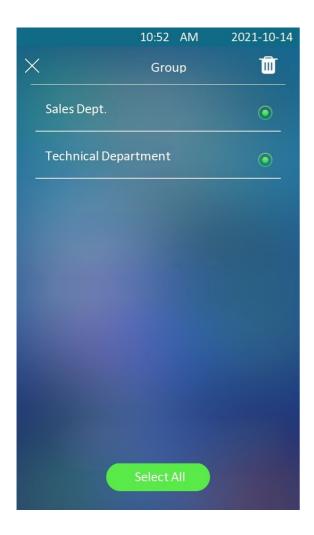
You can create contact groups for users.

To configure the phone book on the device **User > Group**.









# Phone Book Configuration on the Web Interface

# Manage Contact Groups on the Web Interface

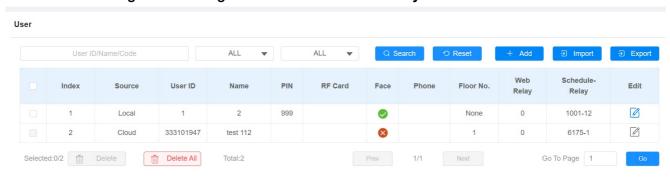
You can create and edit a contact group for the contacts. The contact group will be used when you are adding a user.

## Path: Directory > User > Group.



# **Contact List Configuration on the Web Interface**

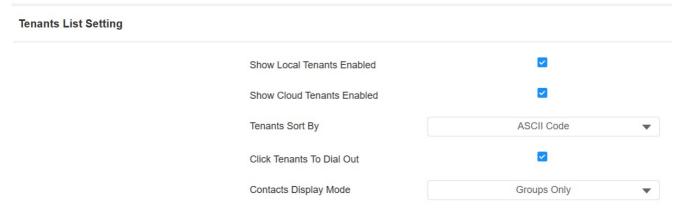
Contact can also be configured on the web interface where you can also upload the contact pictures if needed. To configure the configuration on the web **Directory** > **User** interface.



# **Contact List Display Setting**

If you want to customize your contact list display to your desired visual preference. You can go to the web interface to do the configuration.

## Path: Directory > Directory Setting > Tenants List Setting.



- Show Local Tenants Enabled: tick or untick the check box to control the display of the group label. If you untick the check box, then only the group tab will be displayed while the contact tab will be concealed and vice versa.
- Show Cloud Tenants Enabled: tick the check box to show the cloud tenants in the tenants list. And when you untick the check box, the cloud tenants will be concealed.
- Tenants Sort By: select ASCII Code, Room No. or Import. When you select ASCII
  Code, the tenants will be listed by their names in the sequence of the ASCII code. When
  you select Room No., the tenants will be sorted according to their room numbers. When
  you select Import, the contacts will be sorted in the order in the import file.
- Click Tenants to Dial Out: tick the check box to enable the dial-out by pressing the contact tab. When this function is enabled, you can press anywhere on the contact tab to

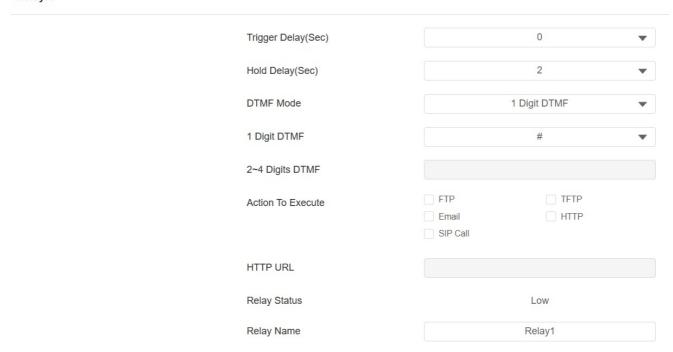
- dial out. This function will be disabled when you untick the check box, and when it is disabled, you need to press the Call icon to dial out.
- Contacts Display Mode: Select from Groups Only, All Contacts, and Group On Entry Page And Their Contacts On Subpage. If you select Groups Only, you can tap the group to call all contacts. The group name is displayed when calling.

# **Relay Setting**

# **Relay Switch Setting**

You can unlock the door via DTMF code during the call. To do so, you are required to set up DTMF code along with relays. Path: Access Control > Relay > RelayA

RelayA



- Trigger Delay (Sec): set the relay trigger delay timing (ranging from 1-10 Sec.) For example, if you set the delay time as 5 sec. then the relay will not be triggered until 5 seconds after you press unlock tab.
- Hold Delay (Sec): set the relay hold delay timing (ranging from 1-10 Sec.) For example,
  if you set the hold delay time as 5 Sec. then the relay will be delayed for 5 after the door is
  unlocked.
- DTMF Mode: select the number of DTMF digit for the door access control (ranging from 1-4 digit) For example, you can select 1-digit DTMF code or 2-digit DTMF code, etc., according to your need.
- 1 Digit DTMF: set the 1 digit DTMF code within range from (0-9 and \*,#).
- 2~4 Digits DTMF: set the DTMF code according to the DMTP Option setting. For
  example, you are required to set the 3-digit DTMF code if DTMP Mode is set as 3-digit.
- Relay Status: relay status is low by default which means Normally Closed (NC) If the relay

status is high, then it is in Normally Open status (NO).

Relay Name: name the relay switch according to your need. For example, you can name
the relay switch according to where the relay switch is located for convenience.

## Note

- Only the external devices connected to the relay switch need to be powered by powered adapters as the relay switch does not supply power.
- If DTMF mode is set as 1 Digit DTMF, you cannot edit DTMF code in 2~4 Digits
  DTMF field. And if you set DTMF mode from 2-4 in 2~4 Digits DTMF field, you
  cannot edit DTMF code in 1 Digit DTMF field.

# **DTMF Code Configuration**

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

## Path: Account > Advanced > DTMF.

DTMF		
Mode	RFC2833 ▼	
How To Notify DTMF	Disabled ▼	
Payload	101	(96~127)

- Mode: select DTMF type among six options: Inband, RFC2833, Info, Info+Inband, Info+RFC2833, and Info+Inband+RFC2833 according to your need.
- DTMF Code Transport format: select among four options: Disable, DTMF, DTMF-Relay, Telephone-Event according to your need.
- Payload: select payload 96-127 for data transmission identification. The default payload is 101.

## Note

- Please refer to the Configure DTMF Data Transmission in chapter <u>Intercom</u>
   <u>Call Configuration</u> for the specific DTMF code setting.
- Intercom devices involved must be consistent in the DTMF type otherwise DTMF code cannot be applied.

# **Security Relay Setting**

The Security Relay, known as Akuvox SR01, is a product designed to bolster access security by preventing unauthorized forced entry attempts. Installed inside the door, it directly governs the door opening mechanism, ensuring that the door remains secure even in the event of damage to the device.



To set up the security relay, navigate to Access Control > Relay > Security Relay.

# Connect Type RS485 Trigger Delay(Sec) 0 1 Digit DTMF 2 2~4 Digits DTMF 013 Relay Name Security Relay A Enabled □

- Connect Type: select the connection type between the security relay and the door phone. You can select connection via the door phone Relay A Power Output or RS485.
- Trigger Delay (Sec): set the relay trigger delay timing (ranging from 1-10 Sec.) For
  example, if you set the delay time as 5 sec. then the relay will not be triggered until 5
  seconds after you press Unlock tab. The default is 0 meaning triggering relay right after you
  press the unlock tab.
- 1 Digit DTMF: set the 1 digit DTMF code within range from (0-9 and \*,#).
- 2~4 Digits DTMF: set the DTMF code according to the DMTP Option setting. For example, you are required to set the 3-digit DTMF code if DTMP Mode is set as 3- digits.
- Relay Name: give a name to the relay if needed. And relay name can be edited on the SmartPlus cloud and SDMC.

# **Web Relay Setting**

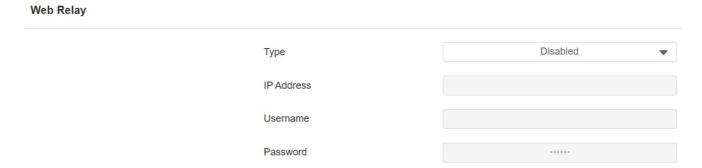
A web relay has a built-in web server and can be controlled via the Internet or a local network. The device can use a web relay to either control a local relay, or a remote relay somewhere else on the network.



# Configure Web Relay on the Web Interface

Web relay needs to be set up on the web interface where you are required to fill in such information as relay IP address, password, web relay action, etc. Before you can achieve door access via web relay.

Path: Access Control > Web Relay. IP Address, User Name, and Password are provided by the web relay manufacturer.

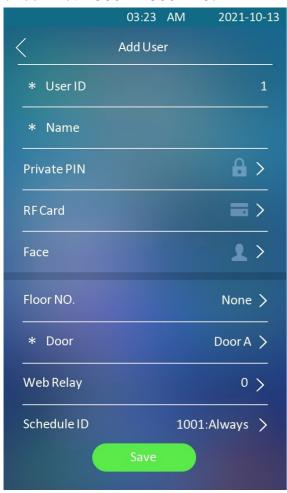


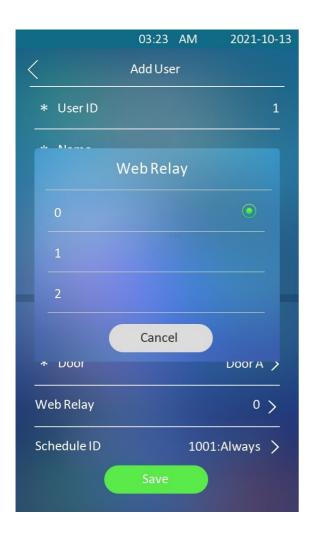
## Parameter Set-up:

- Type: select among three options Disabled, Web Relay, and Both. Select Web Relay
  to enable the web relay. Select Disable to disable the web relay. Select Both to enable
  both local relay and web relay.
- Password: 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.
- Web Relay Key: enter the configured DTMF code, when the door is unlocked via DTMF code, the action command will be sent to the web relay automatically.
- Web Relay Extension: enter the relay extension information, which can be a SIP Account user name 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.

# Configure Web Relay on the Device

After the web relay actions are entered on the web interface, you can now select the specific number of the web relay actions to be carried for the specific resident you added for the door unlock. Path: User > User List.



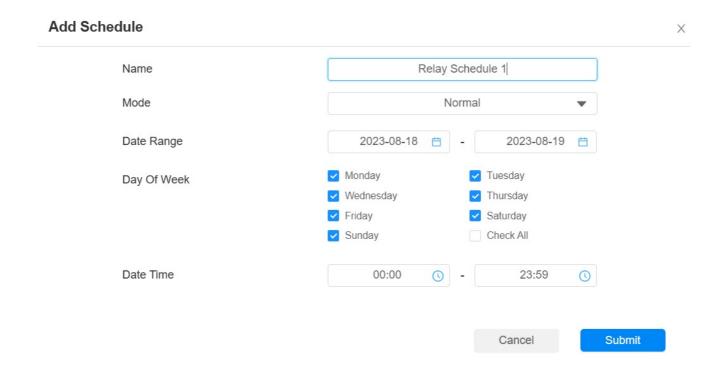


# **Relay Schedule**

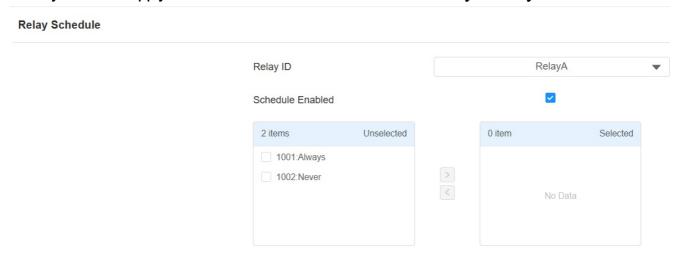
The relay schedule allows you to set a specific relay to always open at a certain time. This is helpful for situations like keeping the gate open after school or keeping the door open during work hours.

You are required to set the relay schedule first before applying the relay schedule to the specific relay for the door access control. Path: Setting > Schedule.





After the relay schedule is created, you can select the relay schedule and select the specific relay to which you want to apply the schedule. Path: Access control > Relay > Relay Schedule.



## Note

• You can refer to **Create Door Access Schedule** for the relay schedule setting.

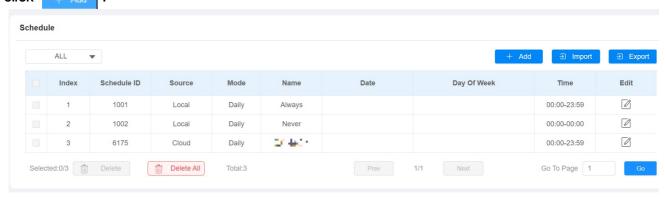
# **Door Access Schedule Management**

# **Configure Door Access Schedule**

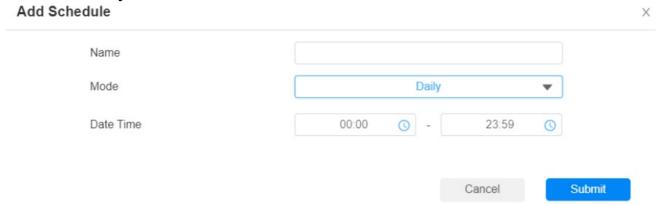
A door access schedule lets you decide who can open the door and when. It applies to both individuals and groups, ensuring that users within the schedule can only open the door using the authorized method during designated time periods.

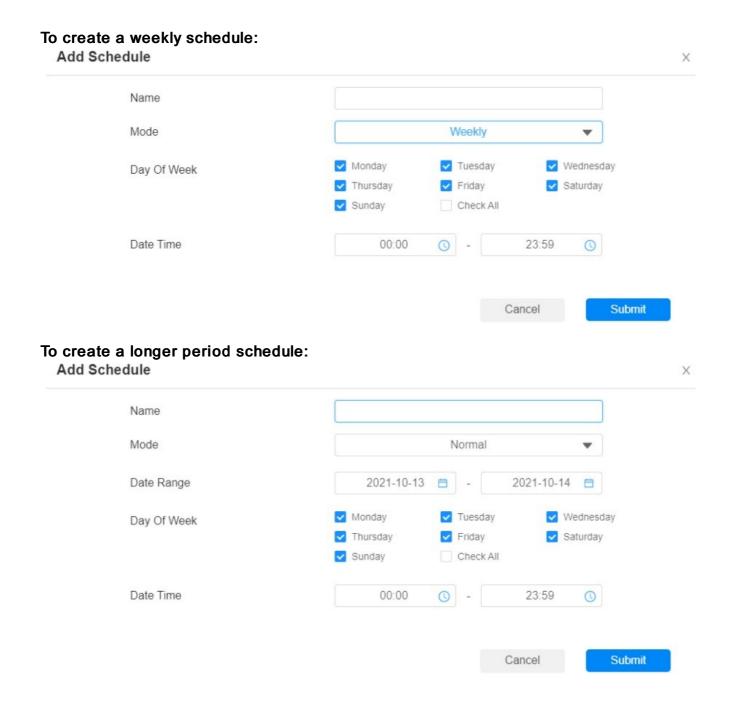
## Create Door Access Schedule on the Web Interface

You can create the door access schedule on a daily or monthly basis, and you can also create a schedule that allows you to plan for a longer period of time in addition to running the door access schedule on a daily or monthly basis. To configure the schedule, go to **Setting > Schedule**, then click Add .



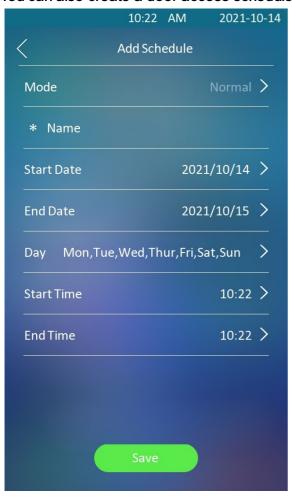
## To create a daily schedule:





**Create Door Access Schedule on the Device** 

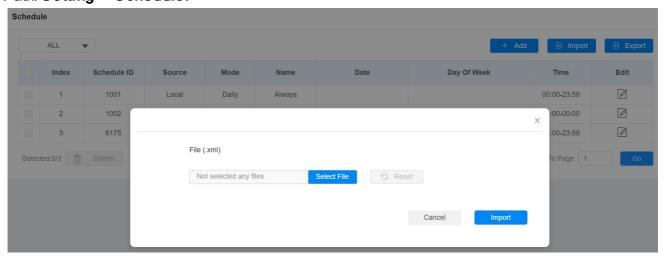
You can also create a door access schedule on the device. Path: Schedule > Add Schedule.



# Import and Export Door Access Schedule

You can create door access schedules one by one or in bulk. You can export the current schedule file, edit it or add more schedules following the format, and import the new file to the desired devices. This helps you manage your door access schedules easily.

Path: Setting > Schedule.



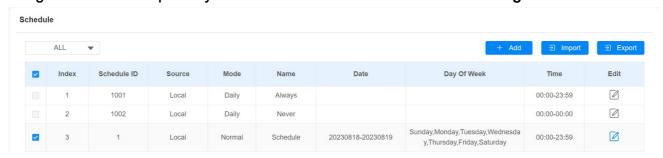
## **Note**

• It only supports .xml format files for importing and exporting the schedule.

# **Edit the Door Access Schedule**

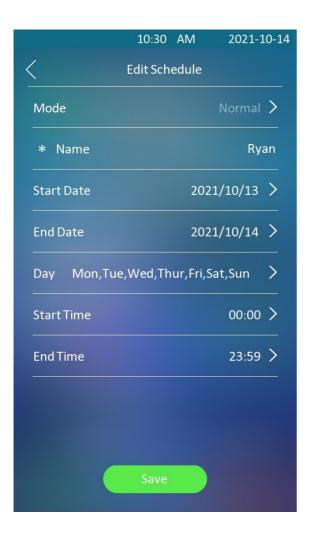
## Edit the Door Access Schedule on the Web Interface

If you want to edit or delete the door access schedule you created, you can edit or delete the configured schedule separately or in batch on the web interface. Path: **Setting > Schedule**.



You can also edit or delete the door access schedule on the device. Path: Schedule > Schedule.





# **Door Unlock Configuration**

# **Configure PIN Code for Door Unlock**

There are two types of PIN codes for door access: public and private. A private PIN is unique to each user, while the public one is shared by residents in the same building or complex. You can create and modify both the public and private PIN codes.

# Configure Public PIN code

You can configure and modify public PIN codes on the device and on the device's web interface.

Configure public PIN code on the web interface
 Path: Access Control > PIN Setting > Public PIN



## Parameter Set-up:

- PIN Code: set the PIN code with a digit limit ranging from 4-8.
- Configure the public PIN code on the device

Path: Security > Public PIN.



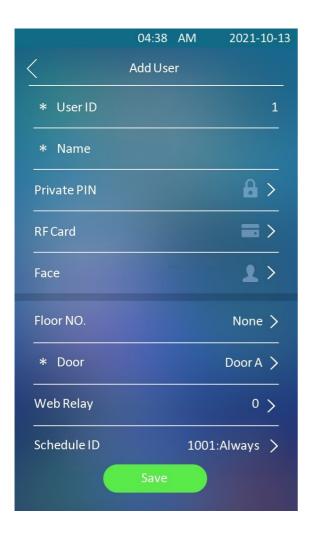
## Note

- The public PIN code will not be valid until the function is turned on.
- APT+PIN can only be applicable when the device is added to the Akuvox SmartPlus.

# Configure Private PIN Code on the Device

You can set up a private PIN code on the device for the specific user.

Path: User > User List

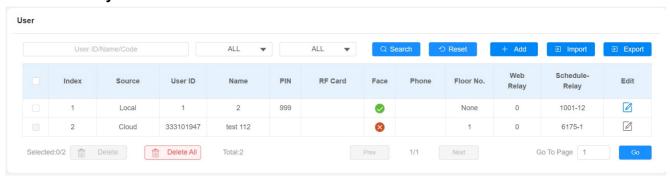


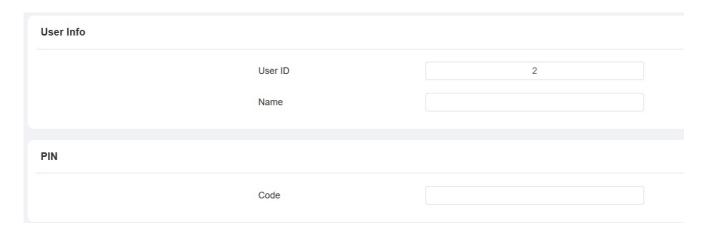


# Configure Private PIN Code on the Web Interface

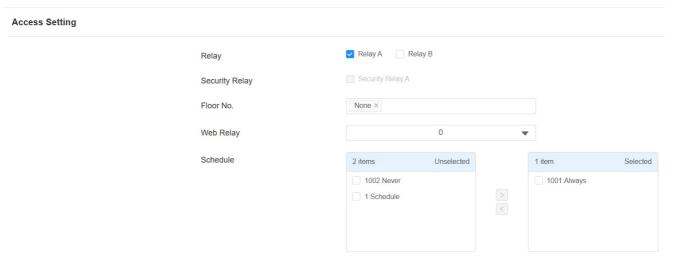
On the web interface, you can create the PIN code and customize additional settings, such as defining the door access schedule to determine when the code is valid and specifying which relay to open.

## Path: Directory > User.





After user information and PIN code are entered, you can start configuring the private PIN code for door access.



## Parameter Set-up:

- Web Relay: select the specific number of web relay action commands you have set up on the web interface.
- Schedule: select from the created door access schedule on the right box and move the
  one to be applied to the user(s)-specific PIN code door access to the box on the right side.

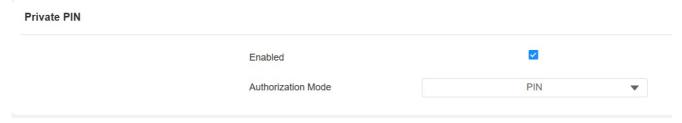
## Note

• This step is applicable to door access by RF card and facial recognition credentials as they are identical in configuration.

# **Configure Private PIN Access Mode**

The device provides two authentication methods for private PIN code access: PIN and APT# + PIN. The latter requires users to input their apartment number followed by their private PIN to unlock the door.

## Path: Access Control > PIN Setting > Private PIN



## Parameter Set-up:

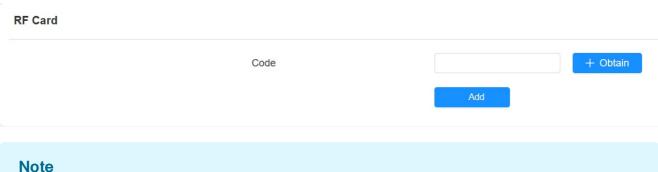
 Authorization Mode: select access mode between PIN and APT#+PIN. If you select PIN, then you are only required to enter the PIN code directly for the door access, while if you select APT#+PIN, then you are required to enter the Apartment Number first before entering your PIN code for the door access.

# **Configure RF Card for Door Unlock**

You can add RF card for the specific user for the door unlock on the web interface and on the device.

# Configure RF Card on the Web Interface

You can tap the RF card on the reader and click obtain to add RF card for the user. Path: Directory > User > RF Card.

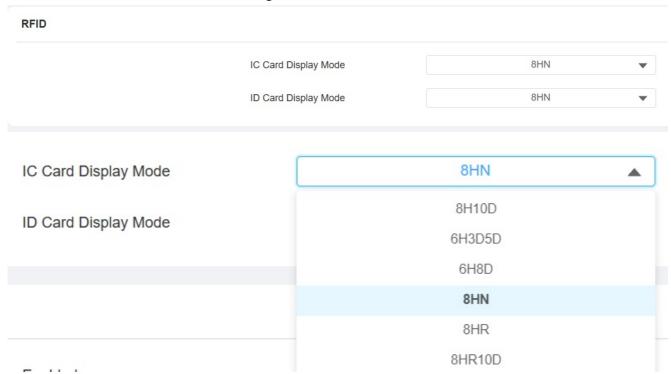


- Please refer to PIN code access schedule selection for the RF card user(s)- specific door access.
- RF card with 13.56 MHz and 125 KHz can be applicable to the door phone for the door access.

# **Configure RF Card Code Format**

To integrate the RF card door access with the third-party intercom system, you need to match the RF card code format with the one used by the third-party system.

## Path: Access Control > Card setting >RFID.



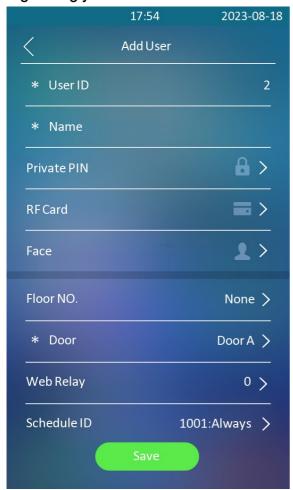
## Parameter Set-up:

 IC/ID Card Display Mode: select the card format for the ID/IC Card for the door access among six format options: 8H10D; 6H3D5D; 6H8D; 8HN; 8HR; 8HR10D. The card code format is 8HN by default in the door phone.

# **Configure Facial Recognition for Door Unlock**

# **Configure Facial Recognition on the Device**

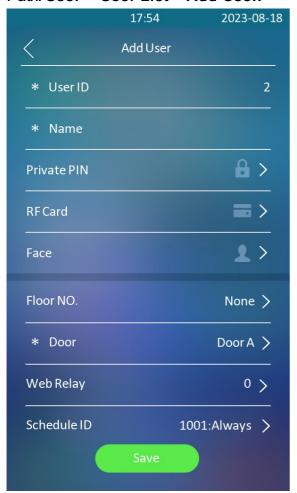
You can configure door access by facial recognition on the device by entering the user's name and registering your facial ID on the device for door access. Path: User > User List > Add User.



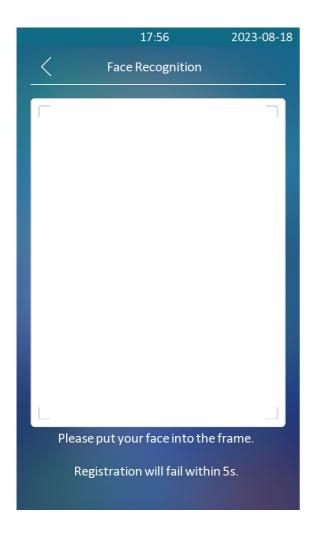
# **Upload Face Data on the Device**

You can upload the face data to the device on the web interface.

### Path: User > User List > Add User.



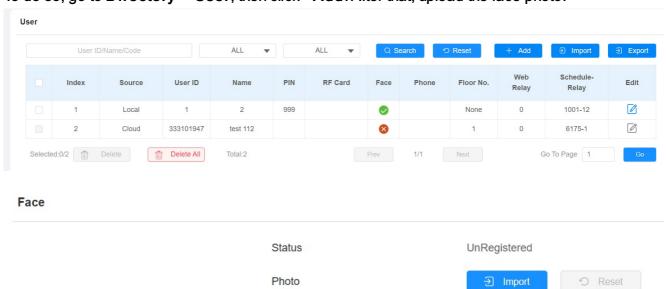




# Upload Face Data on the Web Interface

You can upload the face data to the device on the web interface.

To do so, go to **Directory > User**, then click **+Add**. After that, upload the face photo.



### Parameter Set-up:

- Status: it will show Registered when the picture uploaded conforms to the format and standard otherwise it would show Unregistered as the default. However, the status will be changed back to Unregistered if the picture uploaded is cleared when you press the Reset tab.
- **Photo(jpg/png)**: select the picture with jpg or png format to be uploaded to the device and press if you want to clear the picture uploaded.

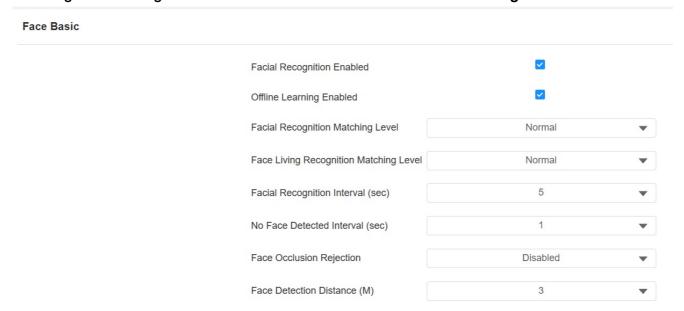
#### Note

• Pictures to be uploaded should be in jpg or png format.

## **Configure Facial Recognition**

The door phone allows you to adjust facial recognition accuracy, recognition intervals, and more to enhance user experience.

To configure the configuration on the web **Access Control > Face Setting** interface.



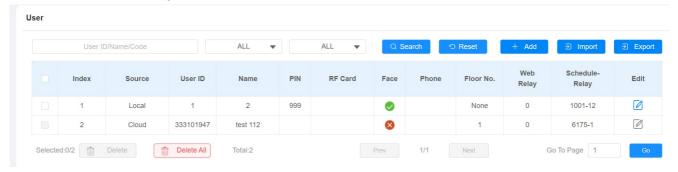
#### Parameter Set-up:

Offline Learning Enabled: select Enable if you want to improve the device recognizing
capability, focusing on the major facial characteristics while sidelining the minor changes
that occurred to your face. Facial recognition accuracy improves as the number of facial
recognition increases.

- Facial Recognition Matching Level: click to select the facial recognition accuracy level
  among four options: Low, Normal, High, and Highest. For example, if you select
  Highest, then there will be the least possibility that someone else will be mistaken for you
  or in another way around in facial recognition.
- Face Living Recognition Matching Level: select an Anti-spoofing level among four options: Low, Normal, High, and Highest. For example, if you select Highest, then there will be the least possibility that the device will be fooled by digital images or pictures of any kind.
- Facial Recognition Interval(Sec): select the time interval between every two facial recognitions from 1-8 seconds. For example, if you select 5 then you have to wait for 5 seconds. Before you are allowed to perform the facial recognition again.
- No Face Detected Interval(Sec): set a valid time interval for the passed body temperature authentication. If the time interval is too long, it might be taken advantage by others to gain door entry through face recognition only. For example, if you passed the body temperature detection but failed in the face recognition, then you walked away, and someone behind you might try using only the face recognition for the door entry before reaching the valid time interval. So you can shorten the time interval to anywhere from 1-8 seconds so that no one can gain door entry with face recognition only. And this would also help speed up the quick door entry as the door phone will quickly return to the home screen for temperature detection when anyone failed in face recognition.
- Face Detection Distance(M): you set the valid distance for face detection (1-meter, 2-meter, and 3 meters). For example, if you want to reduce the number of unnecessary face recognition of the people who happens to walk past the device. The default distance is 3 meters.

## **Configure Door Access Using Configured Files**

E18 allows you to speedily configure user(s)-specific door access in batch by importing the configured all-in-one door access control files incorporating user information, door access type, door access schedule, etc., thus all the door access setting can be done at one stop, saving your time and effort from configuring the door access for users separately when users are large in number. Path: Directory > User > User.

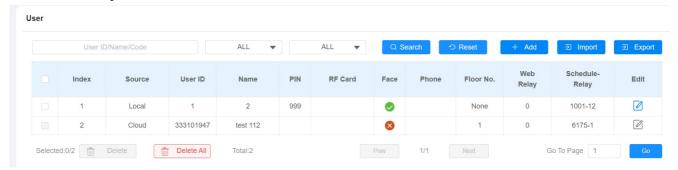


#### **Note**

• Configured files for facial recognition and the other types of configured door access files are separated with different file forms.

## Edit the User(s)-specific Door Access Data

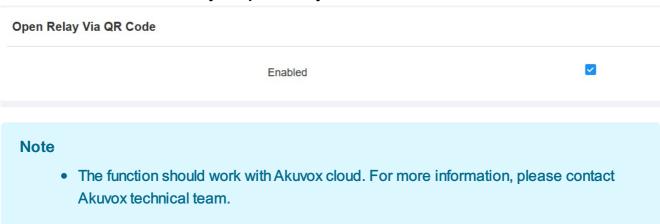
You can search user(s)-specific door access and edit the door access data on the web interface. Path: Directory > User > User.



# Unlock by QR Code

You can use a QR code to unlock the door with the door phone. This method requires the Akuvox SmartPlus cloud service. You have to activate this feature before using it.

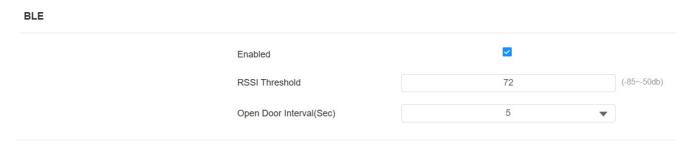
### Path: Access Control > Relay > Open Relay via QR Code.



## **Unlock by Bluetooth**

The Bluetooth-enabled SmartPlus app enables users to enter the door hands-free. They can either open the door with the app in their pockets or wave their phones towards the door phone as they get closer to the door.

#### Path: Access Control > BLE > BLE.



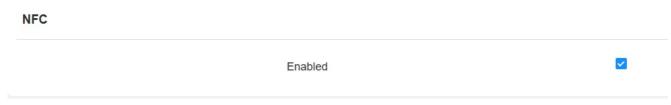
#### Parameter Set-up:

- RSSI Threshold: select the signal receiving strength from -85~-50db in absolute terms. The higher value is, the greater strength it has. The default value is 72db in absolute terms.
- Open Door Interval(Sec): select the time interval between every two Bluetooth door accesses.

# **Unlock by NFC**

NFC (Near Field Communication) is a popular way for door access. It uses radio waves for data transmission interaction. The device can be unlocked by NFC. You can keep the mobile phone closer to the device for door access.

### Path: Access Control > Card Setting> NFC

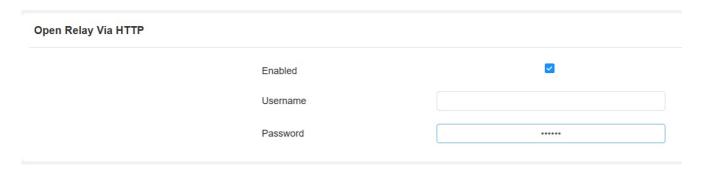


# **Unlock by HTTP Command on Web Browser**

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

#### Path: Access Control > Relay

Open Relay via HTTP



#### Parameter Set-up:

- User Name: enter the user name of the device web interface, for example, admin.
- Password: enter the password for the HTTP command. For example, 12345.

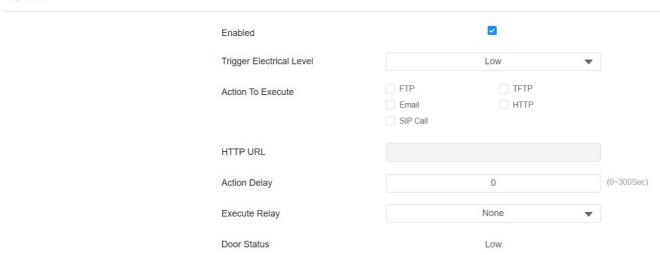
Please refer to the following example: http://192.168.35.127/fcgi/do?action=OpenDoor&UserName=admin&Password=12345&DoorNum=1

# Unlock by Exit Button by the Door

When users need to open the door from inside by pressing the Exit button, you need to set up the Input terminal that matches the Exit button to activate the relay for the door access.

#### Path: Access Control > Input > Input A

Input A



#### Parameter Set-up:

- Trigger Electrical Level: select the trigger electrical level options between High and Low according to the actual operation of the exit button.
- Action to Execute: select the method to carry out the action among five options: FTP, Email, TFTP, HTTP, and SIP Call.
- Http URL: enter the URL if you select the HTTP to carry out the action.
- Action Delay: set up the delay time when the action is carried out. For example, if you set
  the action delay time at 5 seconds., then the corresponding actions will be carried out 5
  minutes after your press the button.

## **Unlock by Reception Tab**

The Reception button is a tab on the home screen that allows residents and visitors to contact the receptionist or the security guard of the building. They can tap this button to ask for help or access to the door.

### Path: Intercom > Basic > Key Setting

Key Setting		
	Reception Enabled	
	Name	Reception
	Number	

#### Parameter Set-up:

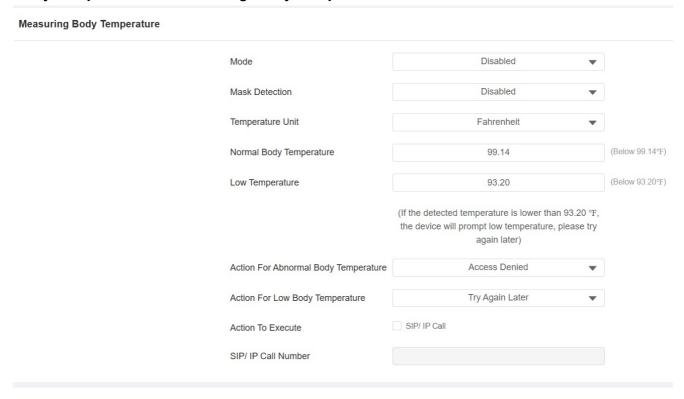
 Number: enter the SIP/IP number to be called after pressing the Reception icon for door access.

# **Body Temperature Measurement for Door Access**

The body temperature measurement function allows the door phone measures body temperature and checks masks for safety. When enabled, the door phones only opens the door for residents or visitors who pass the test.

## **Body Temperature Measurement Configuration**

You can configure the body temperature measurement function in terms of defining the normal temperature as well as making schedule for the validity of the function etc. Path: Access Control > Body Temperature > Measuring Body Temperature.



#### Parameter Set-up:

- Mode: select either Disabled Mode, Wrist Mode, or Forehead Mode for temperature
  measurement according to your need. The device can be installed with a digital forehead
  temperature detector therefore you can are required to set the mode properly according to
  your application.
- Mask Detection: select Disable if you want to turn off the mask detection. Select Set
   mask-wearing as mandatory and the device will check if the visitor is wearing a mask or

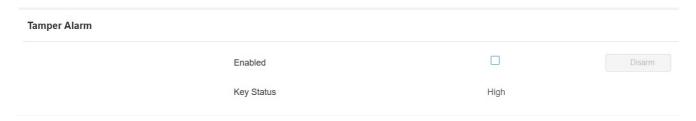
- not while reminding the visitor with the announcement "Please wear a mask". Select **Display mask-wearing** prompt and the device will display the mask-wearing prompt only without making the mask-wearing mandatory.
- Normal Body Temperature: set the body temperature to the predefined body
  temperature as the measuring basis in either Fahrenheit or Celsius. For example, if you
  set the temperature at 37.3 degrees celsius as the normal temperature, then any body
  temperature measured higher than 37.3 degrees celsius will be deemed as an abnormal
  temperature, while a temperature is lower than 34 degrees celsius will be deemed as low
  body temperature.
- Action For Abnormal Body Temperature: if you select Access Denied then anyone
  who is detected with abnormal body temperature will be denied door access. If you select
  Just For Reminder then anyone with abnormal body temperature will still be granted door
  access.
- Action for Low Body Temperature: if Try Again Later is selected, you will be denied
  the door access with the prompt "Try again later for the low body temperature". If you select
  Just For Reminder, then anyone with low body temperature will still be granted door
  access.
- Action to Execute: check the box to enable or disable the SIP/IP Call. If you want to be
  notified via SIP/IP call when abnormal temperature and low temperature are detected.
- SIP/IP Call Number: enter the SIP or IP call for the notification. The field will appear for you to fill in SIP/IP numbers when you check the Action to Execute box.

# **Security**

## **Tamper Alarm Setting**

The tamper alarm function prevents anyone from removing the devices without permission. It does this by setting off the tamper alarm and making calls to a designated location when the device detects a change in its gravity value from the original one.

### Path: System > Security > Tamper Alarm



#### Parameter Set-up:

- Enabled: tick the check box to enable the tamper alarm function. When the tamper alarm goes off, you can press the **Disarm** tab beside the check box to clear the alarm.
- **Key Status**: tamper alarm will not be triggered unless the key status is shifted from **Low** to **High** status.

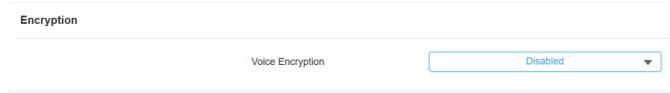
#### Note

- **Disarm** tab will turn gray when the tamper alarm is cleared.
- The round rubber button at the back of the device must be in press-down status otherwise the alarm will not be fired.

## **Voice Encryption**

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

### Path: Account > Advanced > Encryption interface.



#### Parameter Set-up:

Voice Encryption(SRTP): choose Disabled, Optional or Compulsory for SRTP. If it
is Optional or Compulsory, the voice during the call is encrypted, and you can grab the
RTP packet to view.

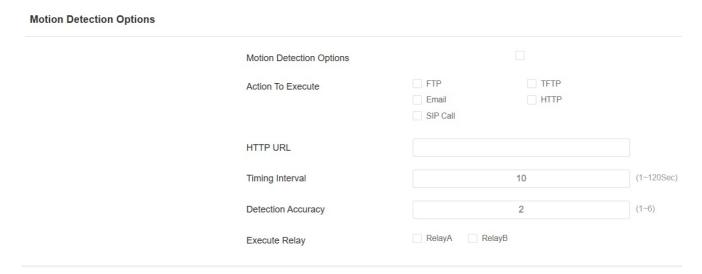
### **Motion Detection**

Motion Detection is a feature that allows unattended video surveillance and automatic alarms. It detects any changes in the image captured by the camera, such as someone walking by or the lens being moved, and activates the system to perform the appropriate action.

## **Configure Motion Detection on the Web Interface**

You can adjust various motion detection settings on the device web interface, such as the time interval, the sensitivity level, the notification method when motion is detected, and more.

#### Path: Surveillance > Motion > Motion Detection Options interface.



#### Parameter Set-up:

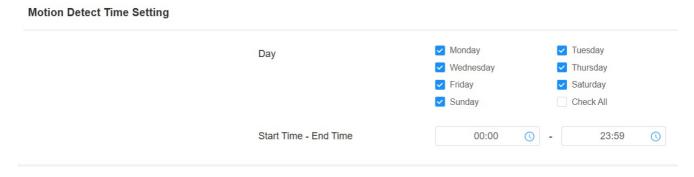
• Action to Execute: select the action to be executed (FTP, TFTP, Email, HTTP, and SIP



Call) after motion detection is triggered.

- HTTP URL: enter the HTTP URL command which will be sent to the designated server for a certain action.
- Time Interval: set the time interval in the same way as you do on the device.
- **Detection Accuracy**: set the detection accuracy for the detection sensitivity. The higher value is, the greater sensitivity. The default detection accuracy value is 2.
- Execute Relay: select relay A or relay B to be triggered when the motion detection is triggered.

You can also set the motion detection time schedule.



# **Configure Motion Detection on the Device**

You can turn on the motion detection and set up the motion detection interval on the device. Path:

### Advanced > Surveillance > Motion.





# **Security Notification Setting**

Security notification can be initiated as an action when the motion detection is triggered. And the security notification can be made via Email, FTP server, TFTP server, and SIP call.

# **Email Notification Setting**

Set up email notification to receive screenshots of unusual motion from the door phone.

### Path: Setting > Action.

Email Notification			
Set	nder's Email Address		
Ser	nder's Email Name		
Red	ceiver's Email Address		
Red	ceiver's Email Name		
SM	TP Server Address		
Por	rt		
SM	TTP User Name		
SM	TP Password		•••••
Em	nail Subject		
Em	nail Content		
Em	nail Test	윦	Test Email

#### Parameter Set-up:

- Sender's Email Name: enter the name of the email sender.
- Sender's Email Address: enter the sender's email address from which the email notification will be sent out.
- Receiver's Email Address: enter the receiver's email address.
- Receiver's Email Name: enter the name of the email receiver.
- SMTP Server Address: enter the SMTP server address of the sender.
- Port: enter the port number from which the email is sent out.
- SMTP User Name: enter the SMTP user name, which is usually the same with the sender's email address.
- SMTP Password: configure the password of SMTP service, which is the same with the sender's email address.

# **FTP Notification setting**

To get notifications through FTP server, you need to set up the FTP settings. The door phone will upload a screenshot to the specified FTP folder if it senses any unusual motion.

Path: Setting > Action >	FTP Notification.	
FTP Notification		
	FTP Server	
	FTP User Name	
	FTP Password	•••••
	FTP Path	
Parameter Set-up:		
TFTP Notification	J	eed to enter the TFTP server address.
Path: Setting > Action >	TFTP Notification.	
TFTP Notification		
	TFTP Server	
Parameter Set-up:		
TFTP Server: el	nter the address (URL) of the	TFTP server for the TFTP notification.
SIP Call Notificat	tion	
-	ecurity notification via SIP ca Path: Setting > Action > \$	all, you can configure the FTP notification on SIP Call Notification.
SIP Call Notification		
	SIP Call Number	

# **Web Interface Automatic Log-out**

SIP Caller Name

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

To set it up, go to System> Security > Session Time Out.

Session Time Out

Session Time Out Value 300 (60~14400Sec)

#### Parameter Set-up:

• Session Time Out Value: set the automatic web interface logout timing ranging from 60 seconds to 14400 seconds. The default value is 300.

## **Action URL**

You can use the device to send specific HTTP URL commands to the HTTP server for certain actions. These actions will be triggered when the relay status, input status, PIN code, or RF card access changes.

#### **Akuvox Action URL:**

No	Event	Parameter format	Example
1	Make Call	\$remote	Http://server ip/ Callnumber=\$remote
2	Hang Up	\$remote	Http://server ip/ Callnumber=\$remote
3	Relay Triggered	\$relay1status	Http://server ip/ relaytrigger=\$relay1status
4	Relay Closed	\$relay1status	Http://server ip/ relayclose=\$relay1status
5	Input Triggered	\$input1status	Http://server ip/ inputtrigger=\$input1status
6	Input Closed	\$input1status	Http://server ip/ inputclose=\$input1status
7	Valid Code Entered	\$code	Http://server ip/ validcode=\$code
8	Invalid Code Entered	\$code	Http://server ip/ invalidcode=\$code
9	Valid Card Entered	\$card_sn	Http://server ip/ validcard=\$card_sn
10	Invalid Card Entered	\$card_sn	Http://server ip/ invalidcard=\$card_sn
11	Tamper Alarm Triggered	\$alarm status	Http://server ip/tampertrigger=\$alarm status

For example: http://192.168.16.118/help.xml?

mac=\$mac:ip=\$ip:model=\$model:firmware=\$firmware:card\_sn=\$card\_sn

## You can navigate to **Setting > Actions URL**.

#### Action URL

Enabled	
Make Call	
Hang Up	
RelayA Triggered	
RelayB Triggered	
RelayA Closed	
RelayB Closed	
InputA Triggered	
InputB Triggered	
InputC Triggered	
InputA Closed	
InputB Closed	
InputC Closed	
Valid Code Entered	
Invalid Code Entered	
Valid Card Entered	
Invalid Card Entered	
Tamper Alarm Triggered	
Valid Face Recognition	
Invalid Face Recognition	

#### Note

• Action URL and format are provided by a third-party manufacturer, Akuvox door phone only sends the URL to third-party devices.

# **High Security Mode**

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

To configure this feature on the web: System > Security > High Security Mode

High Security Mode		
	Enabled	

#### **Important Notes**

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

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

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

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

- I http://devicelP/fcgi/do?
   action=OpenDoor&UserName=username&Password=password&DoorNum=1
- 4. It is not allowed to import/export configuration files in tgz. format between a device with the high security mode and another one without it. For assistance with file transfer, please contact Akuvox technical support.

# Monitor and Image

MJPEG and RTSP are the primary monitoring stream types discussed in this chapter.

MJPEG, or Motion JPEG, is a video compression format that uses JPEG images for each video frame. Akuvox devices display live streams on the web interface and capture monitoring screenshots in MJPEG format. Settings related to MJPEG determine video quality and the on/off status of the live stream function.

RTSP stands for Real Time Streaming Protocol. It can be used to stream video and audio from the third-party cameras to the device. You can add a camera's stream by adding its URL. The URL format of Akuvox devices is <a href="rtsp://Device's IP/live/ch000">rtsp://Device's IP/live/ch000</a>

ONVIF is an Open Network Video Interface Forum. It enables the device to scan and discover cameras or intercom devices with activated ONVIF functions. Live streams obtained through ONVIF are essentially in RTSP format.

## **MJPEG Image Capturing**

You can take a monitoring image in Mjpeg format with the device. To do this, you need to turn on the Mjpeg function and choose the image quality.

### Path: Surveillance > MJPEG > Mjpeg Server

MJPEG Server		
Enabled		
Image Quality	VGA ▼	

#### Parameter Set-up:

Image Quality: select the quality for the image capturing among seven options: QCIF,
 QVGA, CIF, VGA, 4CIF, 720P, 1080P

After the Mjpeg service is enabled, you can capture the image from the door phone using the following three types of URL format:

http:// device ip:8080/picture.cgi

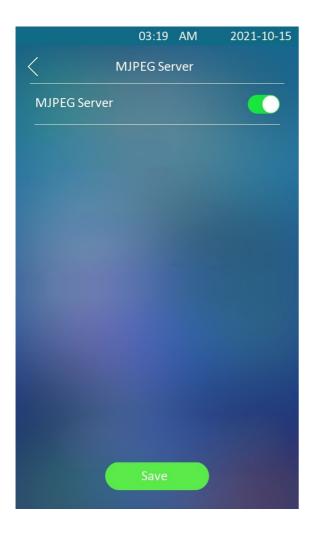
- http://device ip:8080/picture.jpg
- http://device ip:8080/jpeg.cgi

For example, if you want to capture the jpg format image of the door phone with the IP address:192.168.1.104, you can do as follows:

- 1. Enter http://192.168.1.104:8080/picture.jpg on the web browser
- 2. Press Enter key on your keyboard to capture the image.

You can also enable the MJPEG server on the device directly. Path: **Advanced > Surveillance > MJPEG server**.

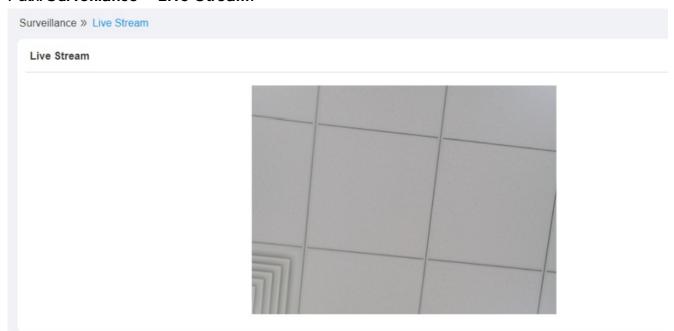




# **Live Stream**

There are two ways to check the real-time video from the device. One is to go to the device web interface and view the video there. The other is to enter the correct URL on the web browser and access the video directly.

#### Path: Surveillance > Live Stream.





{height="" width=""900}

#### Note

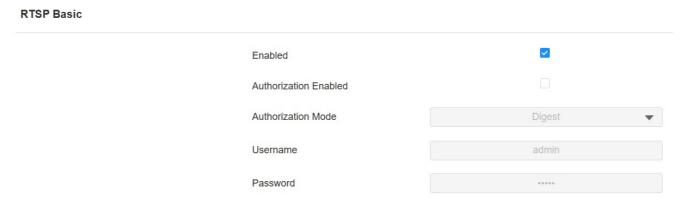
• You can also enter the correct URL (http://IP\_address:8080/video.cgi) on the web browser if you want to obtain the real-time video directly without going to the web interface.

# **RTSP Stream Monitoring**

You can use RTSP to watch a live video stream from other intercom devices on the device.

## **RTSP Basic Setting**

You are required to set up the RTSP function in terms of RTSP Authorization, authentication and password, etc. before you are able to use the function. Path: Surveillance > RTSP > RTSP Basic



#### Parameter Set-up:

- Authorization Enabled: tick the check box to enable the RTSP authorization. If you
  enable the RTSP Authorization, you are required to enter RTSP Authentication Type, RTSP
  Username, RTSP Password on the intercom device such as an indoor monitor for
  authorization.
- RTSP Authentication Type: select RTSP authentication type between Basic and Digest. Basic is the default authentication type.

You can also enable the RTSP function on the device directly. Path: **Advanced > Surveillance >** RTSP Server



# **RTSP Stream Setting**

The RTSP stream can use either H.264 or Mjpeg as the video codec. If you choose H.264, you can also adjust the video resolution, bitrate, and other settings.

#### Path: Surveillance > RTSP > H.264 Video Parameters

#### **H.264 Video Parameters**

Video Resolution	4CIF	•
Video Framerate	25 fps	•
Video Bitrate	2048 kbps	•
2nd Video Resolution	VGA	•
2nd Video Framerate	25 fps	•
2nd Video Bitrate	512 kbps	•
Video Crop	Default	•

#### Parameter Set-up:

- Video Resolution: select video resolutions among seven options: QCIF, QVGA, CIF, VGA, 4CIF, 720P, 1080P. The default video resolution is 4CIF. And the video from the door phone might not be able to be shown on the indoor monitor if the resolution is set higher than 4CIF.
- Video Framerate: 25fps is the video frame rate by default.
- Video Bitrate: select video bit-rate among six options: 128 kbps, 256kbps, 512 kbps, 1024 kbps, 2048 kbps, 4096 kbps according to your network environment. The default video bit rate is 2048 kbps.
- 2nd Video Resolution: select the video resolution for the second video stream channel. While the default video solution is VGA.
- 2nd Video Framerate: select the video framerate for the second video stream channel.

  25fps is the video frame rate by default for the second video stream channel.
- 2nd Video Bitrate: select video bit-rate among the six options for the second video stream channel. While the second video stream channel is 512 kbps by default.
- Video Crop: select Default if you want to obtain cropped video image and select
   Original if you want to obtain an original video image.

#### **Note**

• E18 series supports two video stream channels for H.264 codec video stream.

### **ONVIF**

You can access the real-time video from the device's camera using the Akuvox indoor monitor or other third-party devices like Network Video Recorder(NVR). Enabling and setting up the ONVIF function on the device will allow its video to be visible on other devices.

### Path: Surveillance > ONVIF > Basic Setting

Basic Setting	
Discoverable	<b>☑</b>
Username	admin
Password	•••••

### Parameter Set-up:

- Discoverable: tick the check box to turn on the ONVIF mode. If you select a video from
  the door phone camera can be searched by other devices. ONVIF mode is Discoverable
  by default.
- User Name: enter the user name. The user name is admin by default.
- Password: enter the password. The password is admin by default.

After the setting is complete, you can enter the ONVIF URL on the third-party device to view the video stream.

For example: http://IP address:80/onvif/device\_service

#### Note

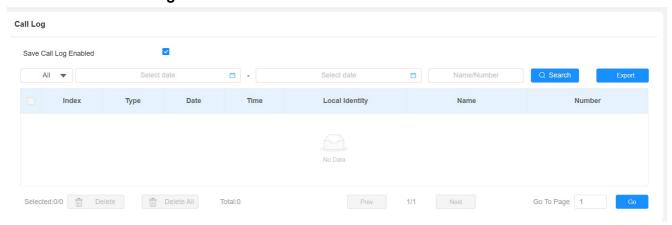
Fill in the specific IP address of the door phone in the URL.

# Logs

# **Call Logs**

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 interface and export the call log from the device if needed.

### Path: Status > Call Log



### Parameter Set-up:

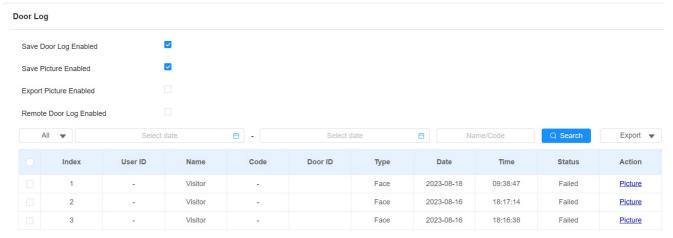
• Call History: select call history among four options: All, Dialed, Received, Missed for the specific type of call log to be displayed.

# **Door Logs**

If you want to search and check on the various types of door access history, you can search and check the door logs on the device's web.



### Path: Status > Access Log.

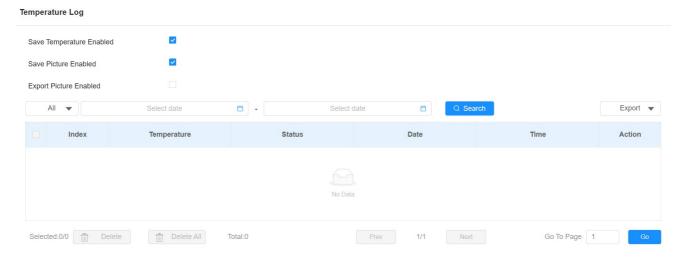


#### Parameter Set-up:

- Save Picture Enabled: enable it if you want to save the door open snapshot captured.
- Export Picture Enabled: enable it if you want to export the door log with a snapshot picture captured.
- Status: select between Success and Failed options to search for successful door accesses or failed door accesses.
- Time: select the specific time span of the door logs you want to search, check or export.
- Name/Code: select the Name and Code options to search the door log by the name or by the PIN code.
- Action: click to display the picture captured.

## **Temperature Log**

If you want to search and check on the temperature log, you can search and check the logs on the device web interface. Path: Status > Temperature Log



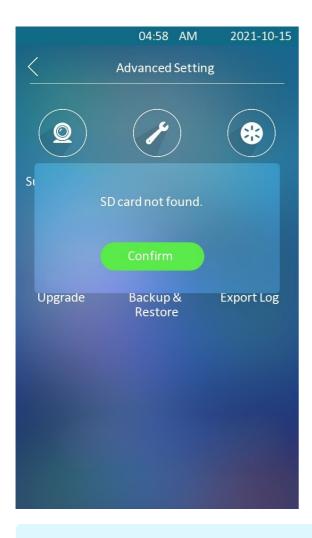
#### Parameter Set-up:

- Save Picture Enabled: enable it if you want to save the temperature-measuring snapshot.
- Export Picture Enabled: enable it if you want to export the temperature log with a snapshot picture captured.
- Time: select the specific time span of the temperature log you want to search, check, or export.
- Action: click to display the picture captured.

# **Export Logs**

You can export door logs, call logs and temperature logs if needed. Path: **Advanced > Export Log**.





### Note

• You need to insert a SD card to export logs on the device screen.

# **Debug**

# **System Log for Debugging**

System logs can be used for debugging purposes.

### Path: System > Maintenance > System Log

System Log	
Log Level	3 ▼
Export Log	<b>글</b> Export
Remote System Log Enabled	
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 purposes. The default log level is 3, the higher the level is 5, the more complete the log is 7.
- Export Log: click the Export tab to export temporary debug log file to a local PC.
- Remote System Server: enter the remote server address to receive the device log. And the remote server address will be provided by Akuvox technical support.

## **PCAP** for Debugging

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

#### Path: System > Maintenance > PCAP.

PCAP	
Specific Port	(1~65535)
PCAP	Start ⊚ Stop Export
PCAP Auto Refresh Enabled	

### 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 the 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 their 1M maximum in capacity. If you set it as Disable
  the PCAP will stop data packet capturing when the data packet captured reached the
  maximum capturing capacity of 1MB.

## **User Agent**

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

Path: Account > Advanced > User Agent

User Agent	
User Agent	

### Parameter Set-up:

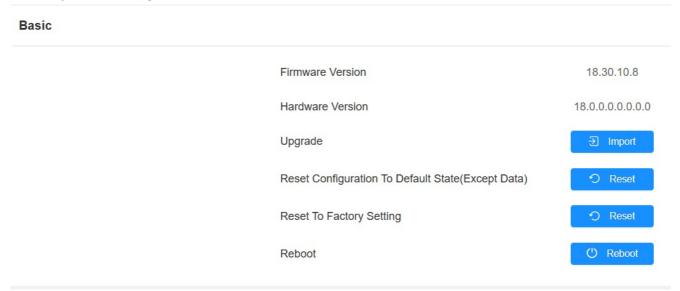
• User Agent: support to enter another specific value, it is Akuvox by default.

# Firmware Upgrade

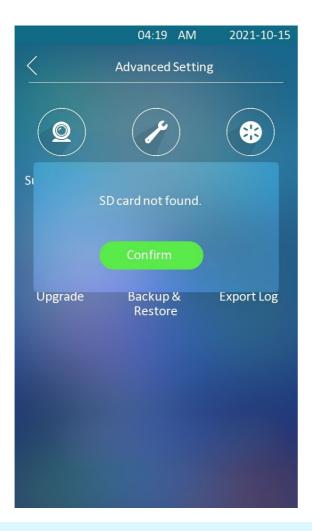
Akuvox devices can be upgraded on the device web interface.

• Upgrade the device on the web interface

Path: System > Upgrade.



Upgrade the device on the device
 Path: Advanced > Upgrade.



### Note

• When you insert the SD card, you are required to add a .rom file at the root directory and change the file name to update.rom.

# **Backup**

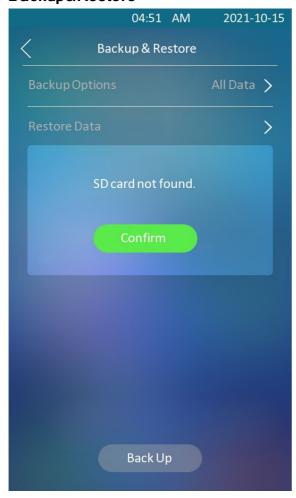
You can import or export encrypted configuration files to your Local PC.

Back up data on the web interface
 Path: System > Maintenance > Others



Back up data on the device

You need to insert the SD card to the device for the backup. Path: Advanced > Backup&Restore



### Parameter Set-up:

• Backup Options: select Only User Data or All Data which is the default setting. Select All Data when you want to back up user, group schedule data, and configuration data

exclusive of all types of logs. Select **Only User Data** if you only want to back up user and schedule data.

### Note

• SDHC and SDXC SD cards with FAT32 format are supported.

# **Auto-provisioning**

Configurations and upgrading on the device can be done on the web interface via one-time autoprovisioning and scheduled auto-provisioning via configuration files, thus saving you from setting up configurations needed one by one manually on the access control terminal.

## **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 the other 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, such as 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. The configuration files named with the device MAC number will be matched automatically with the device MAC number before being downloaded for provisioning on the specific device.

### Note

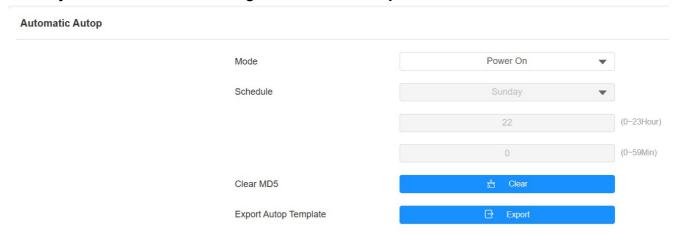
- The configuration file should be in CFG format.
- The general configuration file for the in-batch provisioning varies by model.
- The MAC-based configuration file for the specific device provisioning is named by its MAC address.
- If a server has these two types of configuration files, devices will first access the general configuration files before accessing the MAC-based configuration files.

You may click **here** to see the detailed format and steps.

## **AutoP Schedule**

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

Path: System > Auto Provisioning > Automatic Autop



### Parameter Set-up:

#### Mode:

- 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.

## **PNP Configuration**

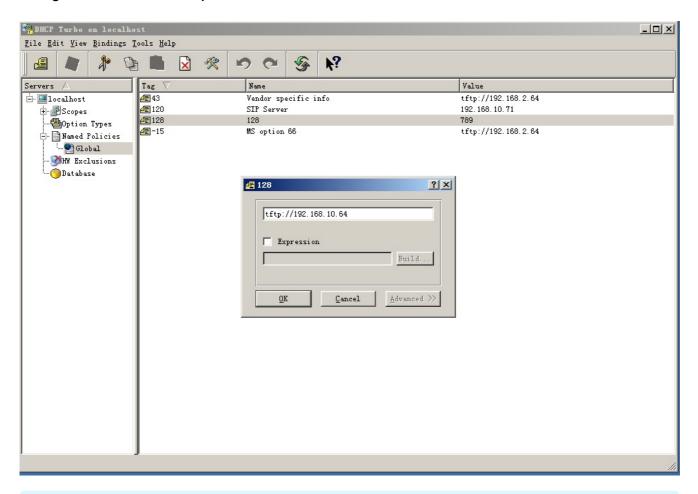
Plug and Play (PNP) is a combination of hardware and software support that enables a computer system to recognize and adapt to hardware configuration changes with little or no intervention by a user.

### Path:System > Auto Provisioning > PNP Option



## **DHCP Provisioning Configuration**

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



### **Note**

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

### Path: System > Auto Provisioning > DHCP Option.

DHCP Option		
Custom Option		(128~254)
	(DHCP option 66/43 is enabled by default.)	

### Parameter Set-up:

• Custom Option: enter the DHCP code that matched with corresponding URL so that 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
  the option 66 with the update 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 the option 43 with the update server URL in it.

### **Note**

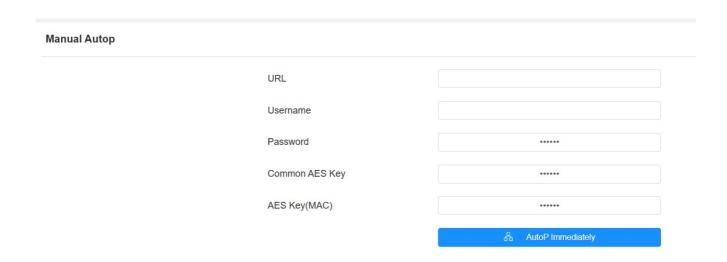
 The general configuration file for the in-batch provisioning is with the format "cfg". And taking E18 as an example, "r000000000018.cfg (10 zeros in total), while the MACbased configuration file for the specific device provisioning is with the format MAC\_Address of the device.cfg, for example, "0C110504AE5B.cfg".

## **Static Provisioning Configuration**

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

To download the Autop template on System > Auto Provisioning > Automatic Autop, and setup Autop server on System > Auto Provisioning > Manual Autop interface.

Automatic Autop		
Mode	Power On ▼	
Schedule	Sunday	
	22	(0~23Hour)
	0	(0~59Min)
Clear MD5	å Clear	
Export Autop Template	<b>∃</b> Export	



### Parameter Set-up:

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

### Tip

 AES, as one type of encryption, should be configured only when the config file is encrypted with AES.

### Note

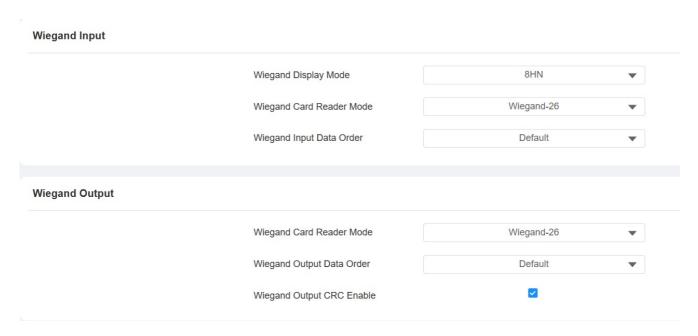
- Server Address Format:
  - TFTP: tftp://192.168.0.19/
  - FTP: ftp://192.168.0.19/ (allows anonymous login)
     ftp://username:password@192.168.0.19/(requires a user name and password)
  - HTTP: http://192.168.0.19/ (use the default port 80)
     http://192.168.0.19:8080/ (use other ports, such as 8080)
  - HTTPS: https://192.168.0.19/ (use the default port 443)
- Akuvox does not provide user specified server. Please prepare TFTP/FTP/HTTPS server by yourself.

# **Integration with Third Party Device**

## Integration via Wiegand

If you want to integrate the door phone with third-party devices via Wiegand, you can configure the Wiegand on the web interface.

### Path: Device > Wiegand



### Parameter Set-up:

- Wiegand Display Mode: select Wigand Card code format among 8H10D; 6H3D5D;
   6H8D; 8HN; 8HR; RAW; 8HR10D.
- Wiegand Card Reader Mode: set the Wiegand data transmission format among three
  options: Wiegand 26, Wiegand 34, and Wiegand 58. The transmission format should
  be identical between the door phone and the device to be integrated.
- Wiegand Input Data Order: set the Wiegand input data sequence between Normal and Reversed. If you select Reversed then the input card number will be reversed and vice versa.
- Wiegand Output Data Order: set the Wiegand output data sequence between Normal
  and Reversed. If you select Reversed then the input card number will be reversed and vice
  versa.
- Wiegand Output CRC: tick to enable the parity check function to ensure that signalbased data can be transmitted correctly according to the established data transmission

#### format.

When integrating with third-party devices, you need to set up the Wiegand PIN code output based on the Wiegand output format of the third-party device.



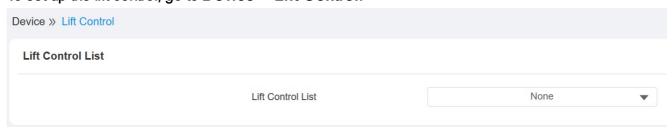
### Parameter Set-up:

- 8 bits per digit: select it if the third-party device adopts 8 bits per digit format. The PIN code is transferred separately by a digit (one digit consists of 8 bits).
- 4 bits per digit: select it if the third-party device adopts 4 bits per digit format. The PIN code is transferred separately by a digit (one digit consists of 4 bits).
- All at once: select it if the third-party device adopts All at once format. When it is selected, the PIN code will not be transferred until you enter the whole PIN code.

### Lift Control

The door phones can be connected to the Akuvox lift controller for the lift control. Users can summon the lift to go down to the ground floor when they are granted access through various types of access methods on the door phone.

To set up the lift control, go to **Device > Lift Control**.



### Parameter Set-up:

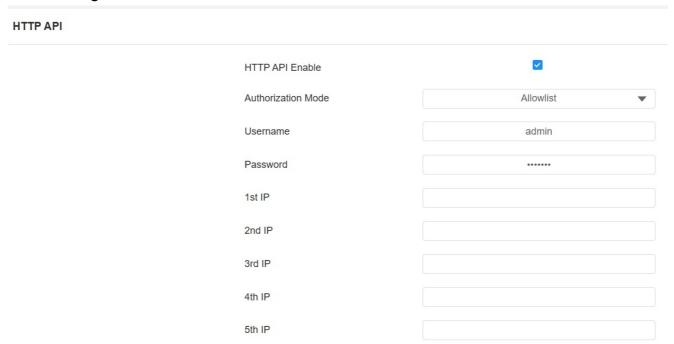
Lift Control List: select integration mode among None, OSDP, Akuvox EC32,
 KEYKING. The detail for the options will be provided in the following chart.

No.	Integration Mode	Description
1	None	If you select None, then the RS485 integration will be disabled.
2	OSDP	If you select OSDP Mode, then the integration communication between the door phone and the third-party device is via OSDP protocol. You are required to check for the device integration protocol and make sure that they use the same integration protocol.
3	Akuvox EC32	Select Akuvox EC32 if you want to connect the device with the Akuvox EC32 lift controller.
4	KEYKING	Select KEYKING if you want to integrate with the KEYKING lift controller.

## **Integration via HTTP API**

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

Path: Setting > HTTP API



### Parameter Set-up:

- HTTP API Enable: enable or disable the HTTP API function for third-party integration. For
  example, if the function is disabled any request to initiate the integration will be denied and
  be returned to HTTP 403 forbidden status.
- Authorization Mode: select among four options: None, Allowlist, Basic, Digest, and
   Token for authorization type, which will be explained in detail in the following chart.
- Username: enter the user name when Basic and Digest authorization mode is selected.

The default user name is admin.

- Password: enter the password when Basic and Digest authorization mode is selected. The default user name is admin.
- 1st IP- 5th IP: enter the IP address of the third-party devices when the WhiteList authorization is selected for the integration.

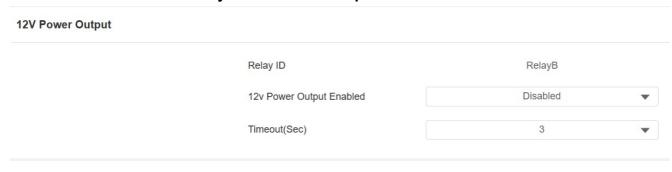
### Please refer to the following description for the Authentication mode:

NO.	Authorization Mode	Description
1	None	No authentication is required for HTTP API as it is only used for demo testing.
2	Allow List	If this mode is selected, you are only required to fill in the IP address of the third party device for the authentication. The whitelist is suitable for operation in the LAN.
3	Basic	If this mode is selected, you are required to fill in the User name and the password for the authentication. In Authorization field of HTTP request header, use Base64 encode method to encode of username and password.
4	Digest	Password encryption method, only supports MD5. MD5( Message-Digest Algorithm) In Authorization field of Http request header: WWW-Authenticate:Digest realm="HTTPAPI",qop="auth,auth-int",nonce="xx", opaque="xx".
5	Token	This mode is used by Akuvox developer only.

# **Power Output Control**

The device can serve as a power supply for the external relays.

### Path: Access Control > Relay >12V Power Output



### Parameter Set-up:

- Relay ID: select the relay to be powered by E18.
- 12V Power Output: select Disabled to disable the power output function; select Always
  to enable the access controller to provide continuous power to the third party device. Select
  Triggered By Open Relay if you want the E18 to provide power to the third party device
  via 12 output and GND interface during the timeout when the relays status is shifted from
  low to high.
- Time Out (Sec): select the power supply time duration after the relay is triggered. Three options: 3, 5, 10. It is 3 seconds by default. The power output is 12V, and the maximum output amperage is 0.8A.

## **Password Modification**

On the device web interface, you can set and change both the System PIN Code for accessing the device setting and login password for accessing the web interface. In addition, you can also select the user role when setting passwords.

## **Modify Device Web Interface Password**

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

# Path: System > Security > Web Password Modify Web Password Modify Username admin ☆ Change Password **Account Status** Enabled admin Change Password X The password must be at least eight characters long and contains at least one uppercase letter, one lowercase letter, and one digit. Username admin Old Password New Password Confirm Password Cancel Change

# **Modify System Password**

The system PIN code is used to access the device system. You can modify the system PIN code on the device and web interface.

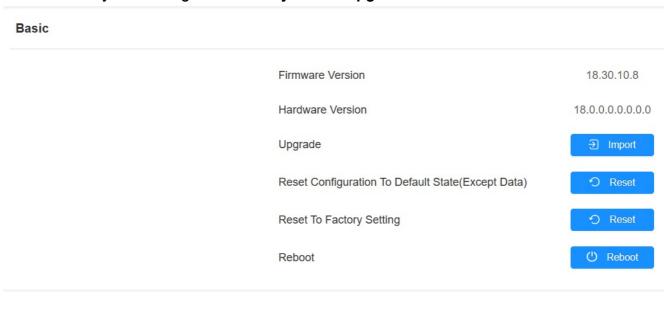
System PIN		
	PIN Code	••••

# System Reboot&Reset

### Reboot

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

To reboot the system setting on the web **System > Upgrade** interface.



To set up the device reboot schedule, go to System > Auto Provisioning > Reboot Schedule.

Reboot Schedule		
Mode		
Schedule	Every Day ▼	
	0	(0~23Hour)

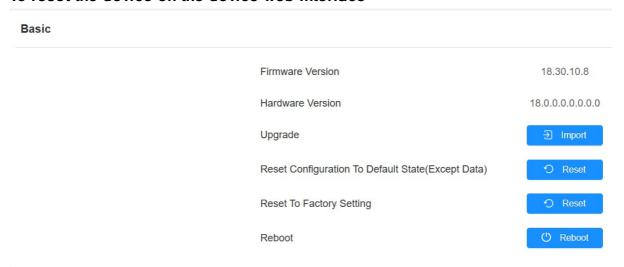
## Reset

You can select **Reset To Factory Setting** if you want to reset the device (deleting both configuration data and user data such as RF cards, face data, and so on). Or, select **Reset Configuration to Default State (Except Data) Reset**, if you want to reset the device (retaining the user data).

Path: System > Upgrade > Basic



• To reset the device on the device web interface



• To reset the device on the device

