



# R29 SERIES DOOR PHONE

## Administrator Guide

# **About This Manual**

Thank you for choosing Akuvox R29 series door phone. This manual is intended for the administrators who need to properly configure the door phone. This manual applies to 29.30.6.602 version, and it provides all the configurations for the functions and features of R29 series door phone. Please visit Akuvox forum or consult technical support for any new information or the latest firmwares.

# Introduction of Icons and Symbols



## Warning:

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



## Caution:

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



## Note:

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



## Tip:

- Useful information for the quick and efficient use of the device.

## **Related Documentation**

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

**<https://knowledge.akuvox.com>**

# Table of Contents

<b>1. Product Overview</b> .....	<b>1</b>
<b>2. Change Log</b> .....	<b>2</b>
<b>3. Model Differences</b> .....	<b>3</b>
<b>4. Introduction to Configuration Menu</b> .....	<b>6</b>
<b>5. Access the Device</b> .....	<b>9</b>
<b>6. Language and Time Setting</b> .....	<b>12</b>
6.1. Language Setting.....	12
6.1.1. Language Setting on the Device.....	12
6.1.2. Language Setting on the Device Web Interface.....	13
6.2. Time Setting.....	14
6.2.1. Time Setting on the Device.....	14
6.2.2. Time Setting on the Device Web Interface.....	15
<b>7. LED&amp;LCD Setting</b> .....	<b>16</b>
7.1. Infrared LED Setting on the Device.....	16
7.2. Infrared LED Setting on the Web Interface.....	18
7.3. LED Setting on Card Reader Area.....	18
7.4. LCD Screen Brightness Setting.....	19
7.5. LED White Light Setting.....	21
7.6. Screen Display configuration.....	21
7.6.1. Home Screen Display Setting.....	22
7.6.2. Await Screen Setting.....	23
7.6.2.1. Await Screen Setting on the Device.....	23

7.6.2.2. Await Screen Setting on the Web Interface.....	25
7.6.3. Upload Screen Saver.....	25
7.6.4. Upload Home Screen Background Pictures.....	26
7.6.5. Upload Background Picture in the Time-displaying Area.....	27
7.7. Configuration for Scenario-based Screen Display Mode.....	28
7.7.1. Building Mode Home Screen Configuration.....	30
7.7.2. Villa Mode Home Screen Configuration.....	32
7.8. Volume and Tone Configuration.....	34
7.8.1. Volume Configuration.....	34
7.8.2. Open Door Tone Configuration.....	36
7.8.3. Uploading Open Door Tone.....	37
<b>8. Network Setting.....</b>	<b>39</b>
8.1. Device Network Connection Setting.....	39
8.2. Device Local RTP configuration.....	41
8.3. Device Deployment in Network.....	42
8.4. NAT Setting.....	43
8.5. LTE Wireless Connection Setting (Optional).....	44
8.5.1. LTE Data Usage Control.....	45
8.5.1.1. LTE Data Usage Check.....	45
8.5.1.2. LTE Data Usage Configuration.....	45
<b>9. Intercom Call Configuration.....</b>	<b>48</b>
9.1. IP call & IP Call Configuration.....	48
9.2. SIP Call &SIP Call Configuration.....	49
9.2.1. SIP Account Registration.....	49
9.2.2. SIP Call DND&Return Code Configuration.....	51
9.2.3. SIP Server Configuration.....	53
9.2.4. Outbound Proxy Server configuration.....	54

9.2.5. Data Transmission Type Configuration.....	55
9.3. Dial Options Configuration.....	56
9.3.1. Quick Dial By number Replacement.....	56
9.3.2. Quick Dial Using Configured Dial Name.....	58
9.3.3. Speed Dial on the Home Screen.....	60
9.4. Call Auto-answer Configuration.....	62
9.5. Robin Call Configuration.....	63
9.6. Web Call Configuration.....	64
9.7. Call Settings.....	65
9.7.1. Maximum Call Duration Setting.....	65
9.7.2. Maximum Dial Duration Setting.....	66
9.7.3. Call Session Timer Setting.....	67
<b>10. Audio&amp; Video Codec Configuration for SIP Calls.....</b>	<b>68</b>
10.1. Audio Codec Configuration.....	68
10.2. Video Codec Configuration.....	69
<b>11. Phone book Configuration.....</b>	<b>70</b>
11.1. Phone book Configuration on the Device.....	70
11.2. Phone book Configuration on the Web Interface.....	72
11.2.1. Managing Contact Groups on the Web Interface.....	72
11.2.2. Contact Configuration on the Web Interface.....	73
11.2.2.1. Contact Management.....	74
11.2.2.2. Contacts Import and Export on the Web Interface.....	75
11.2.2.3. Contact List Display Setting.....	76
<b>12. Door Access Control Configuration.....</b>	<b>78</b>
12.1. Relay Switch Setting.....	78
12.1.1. Relay Switch Control on the Door phone.....	80
12.2. Web Relay Setting.....	80

12.3. Door Unlock Configuration.....	82
12.3.1. Configuring RF Card on the Door Phone.....	82
12.3.2. RF Card Configuration on the Web Interface.....	83
12.3.2.1. Editing RFID cards.....	85
12.3.2.2. RF Card Code Format Selection.....	85
12.3.3. NFC and Felica Card Setting.....	86
12.3.4. Door Unlock by PIN Code.....	87
12.3.4.1. Configuring Private PIN Code on the Device.....	87
12.3.4.2. Private PIN Code Configuration on the Web Interface.....	89
12.3.4.3. PIN Code Import & Export on the Web Interface.....	90
12.3.4.4. PIN Code Modification on the Web Interface.....	91
12.3.4.5. PIN Code Access Type Setting.....	92
12.3.5. Public PIN Code Configuration.....	93
12.3.5.1. Public PIN Code Configuration on the Device.....	93
12.3.5.2. Public PIN Code Configuration on the Web Interface.....	95
12.3.6. Unlock by Facial Recognition.....	95
12.3.6.1. Facial Recognition Configuration on the Device.....	96
12.3.6.2. Basic Facial Recognition Configuration on the Web Interface.....	96
12.3.6.3. Facial Recognition Improvement.....	98
12.3.6.4. Facial Recognition Data Management.....	99
12.3.6.5. Facial ID data Import&Export.....	99
12.3.6.6. Lift control via Facial Recognition.....	100
12.3.7. Unlock by QR Code.....	101
12.3.8. Unlock by Bluetooth.....	101
12.3.9. Unlock by HTTP Command on Web Browser.....	102
12.3.10. Unlock by Exit Button on the Door.....	104

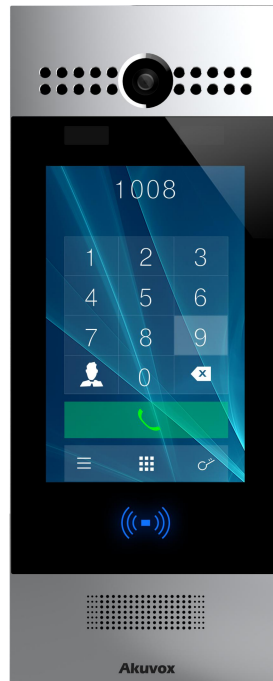


12.3.11. Unlock by Reception Icon.....	105
12.3.12. Unlock by DTMF code.....	106
12.3.13. DTMF White List.....	107
12.3.14. Unlock by Voice Assistant.....	108
12.3.15. Body Temperature Measurement for Door Access.....	111
12.3.15.1. Body Temperature Measurement Configuration....	111
12.3.15.2. Ambient Temperature Configuration.....	113
<b>13. Security.....</b>	<b>115</b>
13.1. Tamper Alarm Setting.....	115
13.1.1. Tamper Alarm Configuration on the Device.....	115
13.1.2. Tamper Alarm Configuration on the Web Interface.....	116
13.2. Motion Detection.....	117
13.2.1. Motion Detection Setting on the Device.....	117
13.2.2. Motion Detection Setting on the Web Interface.....	118
13.3. Security Notification Setting.....	119
13.3.1. Email Notification Setting.....	119
13.3.2. FTP Notification setting.....	121
13.3.3. TFTP Notification Setting.....	122
13.4. GDPR Setting.....	122
<b>14. Monitor and Image.....</b>	<b>124</b>
14.1. Mjpeg Image Capturing.....	124
14.2. Live Stream.....	125
14.3. RTSP Stream Monitoring.....	126
14.3.1. RTSP Basic Setting.....	126
14.3.2. RTSP Stream Setting.....	127
14.4. ONVIF.....	129
14.5. Door Phone Camera Exposure Adjustment.....	130

<b>15. Logs</b>	<b>132</b>
15.1. Call Logs	132
15.2. Door Logs	133
<b>16. Debug</b>	<b>135</b>
16.1. System Log for Debugging	135
16.2. PCAP for Debugging	136
<b>17. Password Modification</b>	<b>138</b>
17.1. Modifying Device Setting Password	138
17.2. Modifying Device Web Interface Password	139
<b>18. Firmware Upgrade</b>	<b>140</b>
<b>19. Backup</b>	<b>141</b>
<b>20. Auto-provisioning via Configuration File</b>	<b>142</b>
20.1. Provisioning Principle	142
20.2. Configuration Files for Auto-provisioning	143
20.3. AutoP Schedule	144
20.4. DHCP Provisioning Configuration	145
20.5. Static Provisioning Configuration	148
<b>21. Device Integration with Third Party Device</b>	<b>150</b>
21.1. Integration via HTTP API	151
21.2. RS485 Integration Mode Configuration	154
21.3. OSDP Setting	156
<b>22. System Reboot&amp;Reset</b>	<b>158</b>
22.1. Reboot	158
22.1.1. Reboot on the device	158
22.1.2. Reboot on the web interface	158
22.2. Reset	160
22.2.1. Reset on the Device	160

22.2.2. Reset on the Device Web Interface.....	160
<b>23. Abbreviations.....</b>	<b>161</b>
<b>24. FAQ.....</b>	<b>162</b>
<b>25. Contact us.....</b>	<b>166</b>

# 1. Product Overview



Akuvox R29 series is an Android-based IP video door phone with a touch screen. It incorporates audio and video communications, access control and video surveillance. Its finely-tuned Android OS, Cloud and AI based communication technology allows featured customization to better suit your operation habit. R29 series 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 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 voice control door access in an accompaniment with body temperature measurement. R29 series door phone is applicable to residential buildings, office buildings and their complex.

## 2. Change Log

The summary of the change log is made based on 29.30.6.602 firmware. Please refer to the following updates on the new functions and changes on the existing functions.





### Update for new functions

- Null

### Update for functional changes

- [Language and Time Setting](#)
- [Unlock by Bluetooth](#)
- [Unlock by Facial Recognition](#)
- [Unlock by Exit Button on the Door](#)

### 3. Model Differences

	R29C	R29S	R29C-B	R29C-L
<b>Model &amp; Feature</b>				
<b>Display</b>	7"	7"	7"	7"
<b>Touch Screen</b>	√	√	√	√
<b>Button</b>	X	X	X	X
<b>Housing Material</b>	Aluminum	Aluminum	Aluminum	Aluminum
<b>Relay In</b>	3	3	3	3
<b>Relay Out</b>	3	3	3	3
<b>Alarm In</b>	X	X	X	X
<b>RS485</b>	√	√	√	√
<b>PoE</b>	√	√	√	X
<b>Resolution</b>	1280x800	1280x800	1280x800	1280x800
<b>Brightness</b>	450nits	450nits	450nits	450nits
<b>RAM</b>	2G	2G	2G	2G
<b>ROM</b>	16G	16G	16G	16G
<b>Card Reader</b>	13.56MHZ & 125KHZ	13.56MHZ & 125KHZ	13.56MHZ & 125KHZ	13.56MHZ & 125KHZ

				125KHZ
<b>Wi-Fi</b>	X	X	X	X
<b>Bluetooth</b>	√	X	√	√
<b>IP Rating</b>	IP65	IP65	IP65	IP65
<b>Temperature detection</b>	X	X	√	X
<b>Face recognition</b>	√	X	√	√
<b>LTE</b>	X	X	X	√
<b>USB</b>	X	X	X	X
<b>External SD card</b>	X	X	X	X
<b>Wall Mounting</b>	√	√	√	√
<b>Flush Mounting</b>	√	√	√	√
<b>Desk Mounting</b>	X	X	X	X
<b>Wall Mounting Dimension</b>	√	√	√	√
<b>Wall Mounting Dimension</b>	√	√	√	√
<b>POE Standby Power</b>	7.8W	7.8W	7.8W	X
<b>POE Full Load Consumption</b>	13W	12W	13W	X

<b>Power Adapter Standby Power</b>	6.6W	6.6W	6.6W	6.6W
<b>Power Adapter Full Load Consumption</b>	13W	12W	13W	16.6W
<b>Color Option</b>	Silver	Silver	Black	Silver



## 4. Introduction to Configuration Menu

- **Status:** this section gives you basic information such as product information, Network Information, and account information etc.
- **Intercom:** this section covers Intercom call, LED& LCD setting, Relay, input control, Live stream, RTSP, ONVIF, motion detection, card setting, face recognition setting, tab&button display, camera, private PIN code, RS485 connection etc.
- **Account:** this section concerns SIP account, SIP server, proxy server, transport protocol type, audio&video codec, DTMF, session timer etc.,
- **Network:** this section mainly deals with DHCP&Static IP setting, RTP port setting, and device deployment etc.,
- **Phone:** this section includes Time&language, call feature, dial management, data import&export, door log, web relay.
- **Phone book:** this section involves Call log, phone book management.
- **Upgrade:** this section covers Firmware upgrade, device reset&reboot, configuration file auto-provisioning, PCAP.
- **Security:** this section is for Password modification

- **Mode selection:**

1. **Discovery mode:** It is a plug and play configuration mode. Akuvox devices will configure themselves automatically when users power on the devices and connect them to network. It is super time-saving mode and it will greatly bring users convenience by reducing manual operations. This mode requires no prior configurations previously by the administrator.
2. **Cloud mode:** Akuvox Cloud is an all-in-one management system. Akuvox Cloud is the mobile service that allows audio, video, remote access control between smart phones and Akuvox intercoms. All configurations in the device will be issued automatically from cloud. If users decide to use Akuvox cloud, please contact Akuvox technical support, and they will help you configure the related settings before using.
3. **SDMC mode:** SDMC (**SIP Device Management Controller**) is a simple and comprehensive software for building management. It provides a topography for a community while offering you a graphical configuration interface for the door access, intercom, monitoring, alarm etc. It is a convenient tool for property manager to manage, operate and maintain the community.

- **Tool selection**

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

1. **SDMC:** SDMC is suitable for the management of Akuvox devices large communities, including access control, resident information, remote

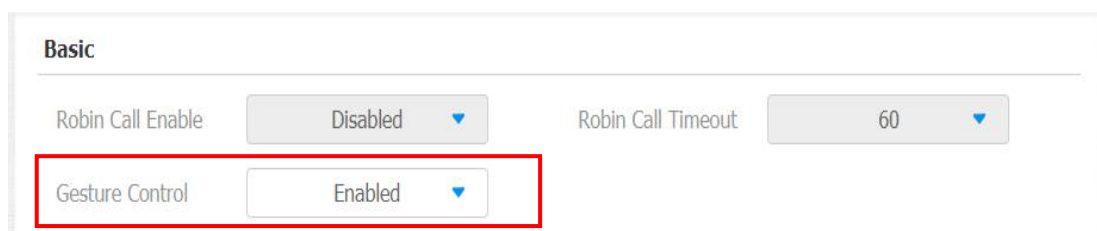
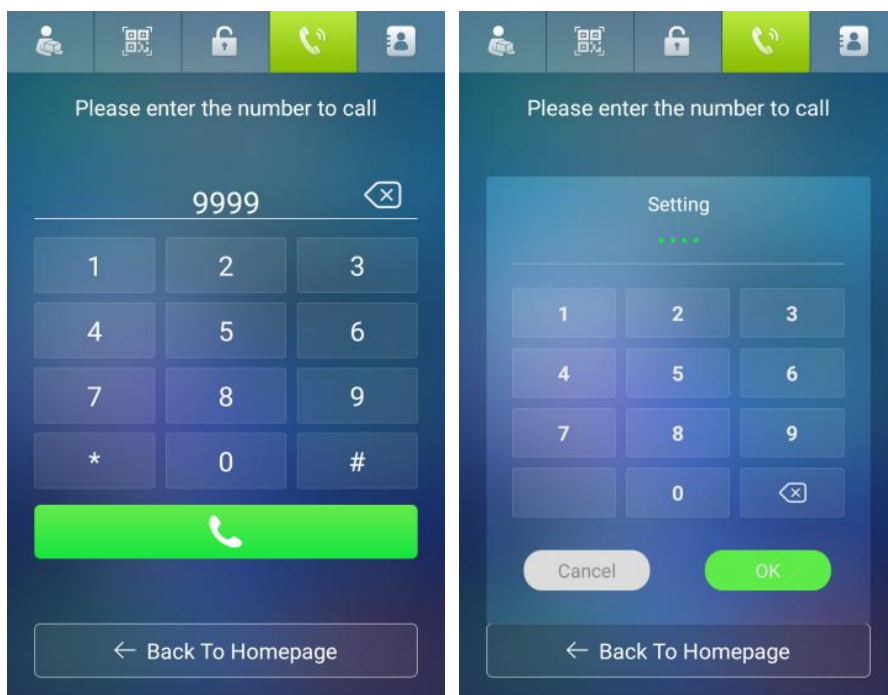
device control etc.

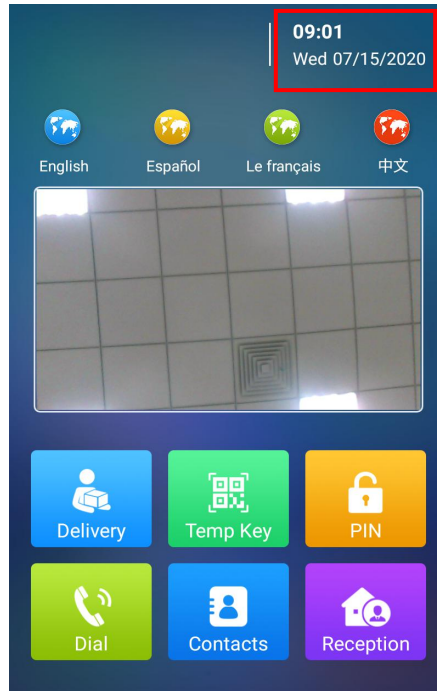
2. **Akuvox PC Manager:** Distribute all configuration items in batch on a LAN.
3. **IP scanner:** it is used to search Akuvox device IP addresses on a LAN.
4. **FacePro:** Manage face data in batch for the door phone on a LAN.

## 5. Access the Device

Before configuring Akuvox R29 series door phones, please make sure the device is installed correctly and connect a normal network. Using Akuvox IP scanner tool to search the device IP address in the same LAN. Then use the IP address to login in the web browser by user name and password **admin** and **admin**. Or setup some basic settings on device screen by pressing **9999** + **Dial** key + **3888**(password) on **Dial** screen.

You can also access the device **Setting** screen by clicking time bar 10 times without entering the project passwords "9999" using gesture control function which can be configured on the web **Intercom > Basic > Basic** interface.





**Tip:**

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

[http://wiki.akuvox.com/doku.php?id=tool:ip\\_scanner&s\[\]=ip&s\[\]=scanner](http://wiki.akuvox.com/doku.php?id=tool:ip_scanner&s[]=ip&s[]=scanner)

**Note:**

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

## 6. Language and Time Setting

### 6.1. Language Setting

When you first set up the device, you might need to set the language to your need or you can do it later if needed. And the language can either be set up directly on the device or on the device web interface according to your preference.

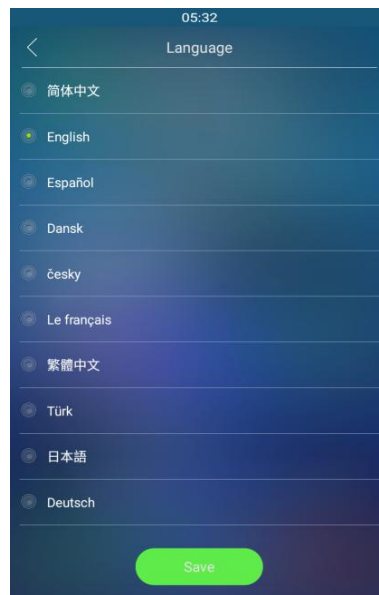


**Note:**

- On R29Z/R29ZL the language is Chinese by default, so there is no such option when first time boot up.

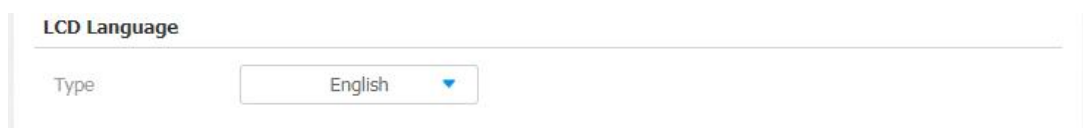
#### 6.1.1. Language Setting on the Device

To configure the language display on the device **Language** setting screen.



### 6.1.2. Language Setting on the Device Web Interface.

To configure the language display on the device web interface **Phone > Time/Lang > LCD Language**.



**Note:**

- R29Z/R29ZL only supports English and Chinese for LCD and web display.

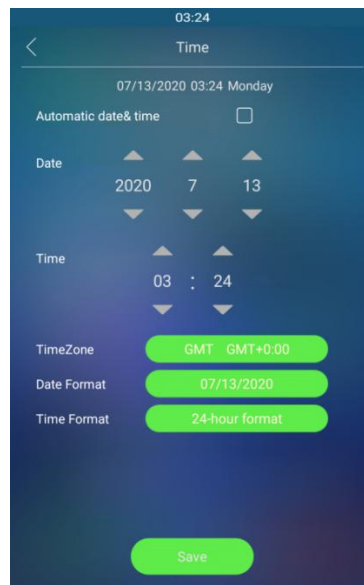


## 6.2. Time Setting

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

### 6.2.1. Time Setting on the Device

To set up time setting on the device **Time** interface.



#### Parameter Set-up:

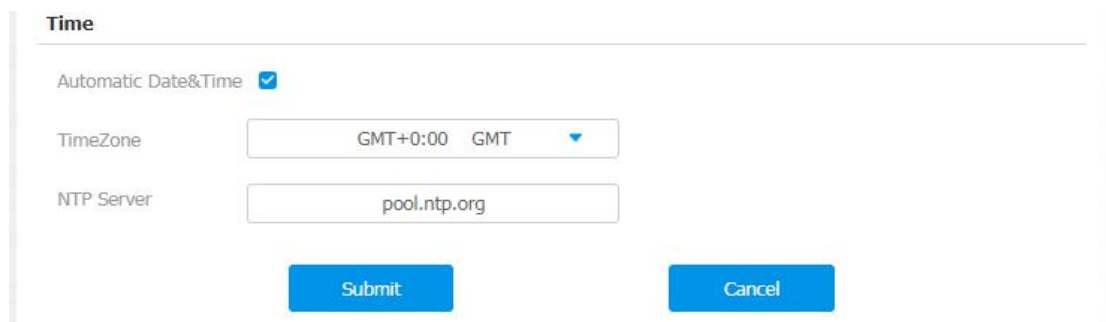
- **Automatic Date:** Automatic Date is switched on by default, which allows the date & time to be automatically set up and synchronized with the default time zone and the NTP server (**Network Time Protocol**). You can also set it up manually by checking off the square box and then enter the time and date you want before pressing the **Save** tab for the validation.
- **Time Zone:** select the specific time zone depending on where the device is used and then press **Confirm** tab for the confirmation. The default time

zone is **GMT GMT+0.00**.

- **Date Format:** select the date format as you like among three format options: "M-D-Y"; "D-M-Y"; "Y-M-D" and then press the **Confirm** tab for the confirmation.
- **Time Format:** you can either select 12 hour or 24 hour time format as you like, and then press the **Confirm** tab for the confirmation.

## 6.2.2. Time Setting on the Device Web Interface

Time setting on the web interface also allows you to set up the NTP server address that you obtained to automatically synchronize your time and date. And when your time zone is selected, the device will automatically notify the NTP server of its time zone so that the NTP server can synchronize the time zone setting in your device. To configure the time setting on the web **Phone >Time/Lang >Time** interface.



Time

Automatic Date&Time

TimeZone

NTP Server

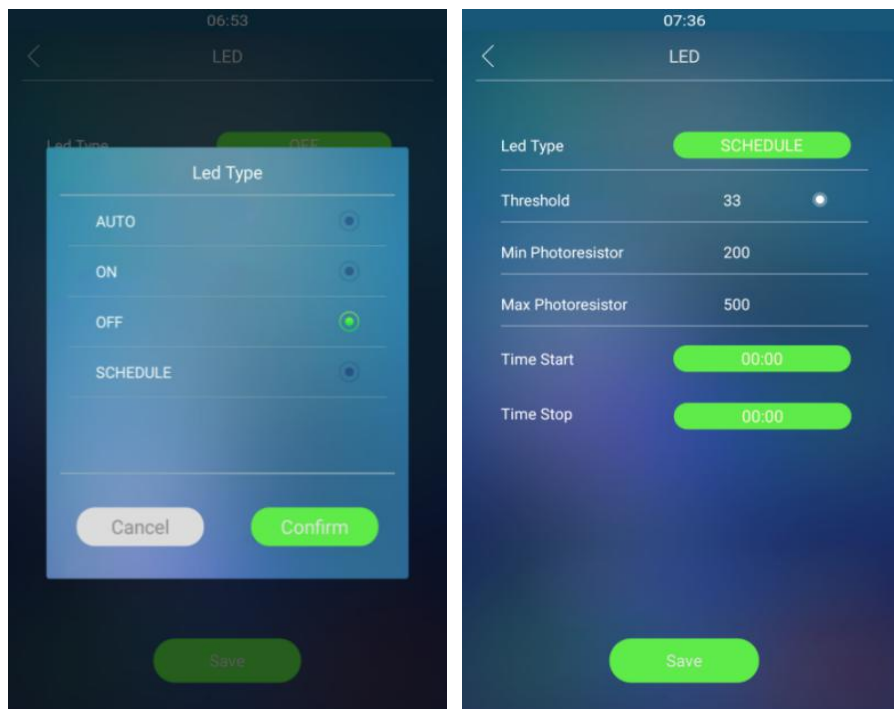
### Parameter Set-up:

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

## 7. LED&LCD Setting


### 7.1. Infrared LED Setting on the Device

Infrared LED is applied for the purpose of the face liveness detection. To configure the infrared LED setting on the device **LED** interface.



#### Parameter Set-up:

- **Auto:** select "Auto" if you want the Infrared LED light to be turned on automatically according to the setting.
- **ON:** select "ON" to enable the Infrared LED light to stay on permanently.

- **OFF:** select "OFF" to turn off the Infrared LED light.
- **SCHEDULE:** select "Schedule" to turn on the infrared LED according to the time schedule.
- **LED Type:** you can see the LED type "Auto" "ON" "OFF" "Schedule" you selected.
- **Threshold:** refers to the current light intensity indicated by the photo-resistor value. The higher photo-resistor values correspond conversely to the lower light intensity and vice versa. The default photo-resistor value (**Threshold**) is "33", however you can tap the  icon several times in order to obtain the actual photo-resistor value in a specific environment (the value fluctuation is about 5), and the value is what you based on to configure the minimum and maximum photo-resistor values.
- **Min/Max Photoresistor :** set the minimum and maximum photoresistor value based on the current actual photo-resistor value detected to control the **ON-OFF** of the LED light. You can set the maximum photoresistor value for the IR LED to be turned on and the minimum value for it to be turned off. While the default Minimum and maximum photoresistor value is "200" and "500" respectively.

**Note:**

- Threshold value will not be shown on the screen unless you change the LED type to either " **Auto**" or " **Schedule**".

## 7.2. Infrared LED Setting on the Web Interface


You can also select the LED type on the device web **Intercom > Advanced > LED** interface if needed.



The screenshot shows a web interface section titled "LED". Below the title, there is a label "LED Type" followed by a dropdown menu. The dropdown menu is currently set to "Always ON" and has a small downward arrow on the right side.

## 7.3. LED Setting on Card Reader Area

You can enable or disable the LED lighting on the card reader area as needed on the web **Intercom > LED Setting > LED Control** interface. Meanwhile, If you do not want to have the LED light on the card reader area to 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 the electrical power consumption.



The screenshot shows a web interface section titled "LED Control". Below the title, there are two settings: "Card LED Enable" and "Start Time (H)". The "Card LED Enable" setting is a dropdown menu currently set to "Disabled". The "Start Time (H)" setting consists of two input boxes: the first contains "18" and the second contains "23", with a hyphen between them. To the right of the second input box is the text "(0~23)". Below these settings are two blue buttons: "Submit" and "Cancel".

### Parameter Set-up:

- **Card LED Enable:** click to enable or disable the card reader LED lighting in the **Card LED Enable** field.
- **Start 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 LED light will stay on during the time span from **6:00 pm** to **10:00 pm** during one day (24 hours).

## 7.4. 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 in web **Intercom > Advanced > LCD** interface.

LCD			
High Contrast	Disabled ▼	Backlight Mode	Auto ▼
Backlight (day)	10	(0~255)	
Backlight (day) Stan...	15	(0~255)	
Backlight (night)	15	(0~255)	
Backlight (night) Sta...	3	(0~255)	
Screen Touch Mode	Normal ▼	Deep Sleep Enable	Disabled ▼
Deep Sleep Interval	30Minutes ▼		
Backlight Value	248	(0~255)	

### Parameter Set-up:

- **High Contrast:** click to enable or disable the high contrast function.
- **Back Light(day):** adjust the back light of the screen during the day time with the value ranging from (0-255). The larger value, the brighter screen.
- **Back Light (day) Standby Mode:** adjust the back light for the screen in the

standby mode with the value ranging from (0-255).

- **Back Light Night Standby Mode:** adjust the back light for the screen in standby mode in the night with the value ranging from (0-255).
- **Backlight Mode:** click to select "**Manual**" or "**Auto**" mode for the backlight. Backlight will be adjusted automatically when "**Auto**" is selected and vice versa.
- **Backlight value:** set the backlight value when the back light mode is set **Manual**.
- **Screen Touch Mode:** There are two modes - **Normal** and **Cloves**. If you choose Gloves, you can touch screen by wearing cloves especially for those people in some cold area. Normal mode is default.
- **Deep Sleep Enable:** whether the door phone enter deep sleep mode when idle.(deep sleep means the device screen will be dark)
- **Deep Sleep Interval:** the time from screensaver to enter deep sleep. The interval can be setup as **5Minutes, 10Minutes, 15Minutes, 20Minutes, 30Minutes**.



**Note:**

- **Backlight Value** parameter remains concealed on the web interface until the **Backlight Mode** is changed to "**Manual**".

## 7.5. LED White Light Setting

LED White light is used to reinforce the lighting for facial recognition as well as for the QR code access as needed in the dark environment. You can set the white light function properly on the device web **Intercom > Advanced > White Light** interface.

White Light

White Light Mode  Max White Light Value  (0~255)

### Parameter Set-up:

- **White Light 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 on condition that LCD **Backlight Value** or **Backlight (night)** is lower than **Max White Light Value**.
- **Max White Light value:** set the white light value from **0-255**, and the default white light value is “**50**”.

## 7.6. Screen Display configuration


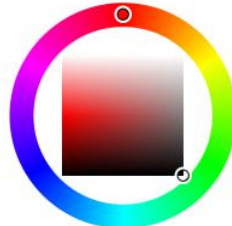
R29 series door phone allow you to enjoy a variety of screen displays to enrich your visual and operational experience through the customized setting to your preference.



## 7.6.1. Home Screen Display Setting

You can configure the home screen background display and the foreground colors for **Villa** mode, **Building** mode and **Office** mode home screen display according to your preference in web **Intercom > Advanced > UI** interface.

**UI**

Foreground Color <input style="width: 100%;" type="text" value="Custom"/>	Background Color <input style="width: 100%;" type="text" value="Custom"/>
Foreground Custom ... <input style="width: 100%; background-color: #123456;" type="text" value="#123456"/>	Background Custom... <input style="width: 100%; background-color: #789ABC;" type="text" value="#789ABC"/>
Foreground Color Pi... <input style="width: 100%;" type="text" value="#-1-1-1"/>	Background Color Pi... <input style="width: 100%;" type="text" value="#-1-1-1"/>
	

### Parameter Set-up:

- **Foreground Color:** select among four foreground color options: **"Default"**, **"Black"**, **"White"**, **"Custom"**. The default foreground color is **"White"**.
  
- **Background Color:** select among four foreground color options: **"Default"**, **"Black"**, **"White"**, **Custom"**. The default foreground color is **"Blue"**. If you select **"Custom"**, you can customize your foreground and background color by adjusting the color and hue controller underneath and press the **Submit** tab for the validation.

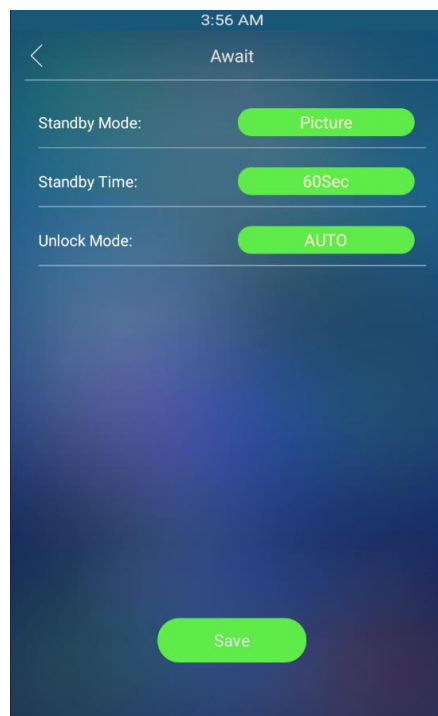
**Note:**

- If you want to select "**Custom**" you need to click the **Submit** tab before you can see a color and hue controller with which you can adjust the color to your preference, and you are required to click **Submit** tab again for the validation.

## 7.6.2. Await Screen Setting

### 7.6.2.1. Await Screen Setting on the Device

Await screen is mainly a function for the screen protection. You can make the device to go into idle status for a predefined time span when there is no operation on the device or no one is detected approaching in device **Await** screen.



### Parameter Set-up:

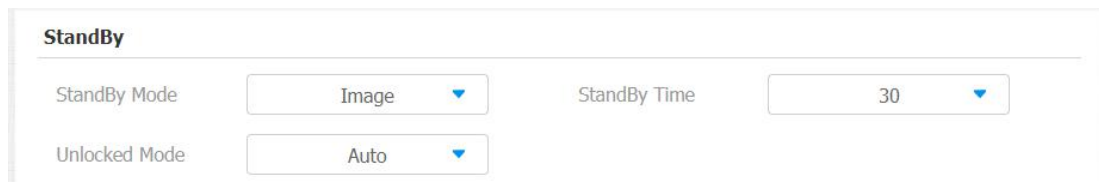
- **Standby Mode:** select among four options “NO”, “Blank”, “Screen” and “Picture”. “NO” is selected when you want the screen to stay on without going into idle status; if “Blank Screen” is selected, the screen will turn dark in idle status. If “Picture” is selected, then the picture you uploaded will be shown as the screen saver in the idle screen. The picture can be uploaded in batch.
- **Standby Time:** select the time duration from 30 seconds to 180 seconds before the device goes into idle status if the screen is not awakened. For example, if you set the “Standby Time” as 30 seconds, then the screen will go idle (Await screen) when the screen is not awakened for 30 seconds.
- **Unlock Mode:** select the screen awake mode. If you select “Auto” mode then the screen will be awakened when someone approaches without its being touched upon, and if “Manual” mode is selected, then you have to

touch the screen to awaken it.

### 7.6.2.2. Await Screen Setting on the Web Interface

You can also conduct the await screen configuration on the web

**Intercom > Advanced > StandBy** interface.



The screenshot shows the 'StandBy' configuration panel. It contains three dropdown menus: 'StandBy Mode' is set to 'Image', 'StandBy Time' is set to '30', and 'Unlocked Mode' is set to 'Auto'.



#### Note:

- The Unlock Mode can not be changed from **"Auto"** to **"Manual"** when the **Standby Mode** is set as **"Blank Screen"**.

### 7.6.3. Upload Screen Saver

You can upload screen saver pictures separately or in batch to the device and to the device web **Phone > Import/Export > Upload Screensaver Picture** interface for publicity purpose 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 specific time duration (**Play Time**) you set.

**Upload ScreenSaver Picture**

ID	File Status	Play Time	Submit	Delete
1	File Exists	<input type="text" value="5"/>	<input type="button" value="Submit"/>	<input type="button" value="Delete"/>
2	File Exists	<input type="text" value="5"/>	<input type="button" value="Submit"/>	<input type="button" value="Delete"/>
3	File Exists	<input type="text" value="5"/>	<input type="button" value="Submit"/>	<input type="button" value="Delete"/>
4	File Exists	<input type="text" value="5"/>	<input type="button" value="Submit"/>	<input type="button" value="Delete"/>
5	File Exists	<input type="text" value="5"/>	<input type="button" value="Submit"/>	<input type="button" value="Delete"/>

Please Choose ScreenSaver ID for upload

Screensaver1

(Support Size:2M; format:jpg)

**Parameter Set-up:**

- **Play Time:** the time for playing the screensaver picture. The time range from 0 to 120 seconds. The picture will not be shown if the time is 0.

**Note:**

- The pictures uploaded should be in **JPG format** with 2M pixels maximum.

**7.6.4.Upload Home Screen Background Pictures**

R29 series door phones allow you to customize the home screen background picture display in the Building mode, Villa mode and Office mode on the device web **Phone > Import/Export > Import Contact Background(.png)**

interface.

**Import Contact Background (.png)**

Background Picture:  [Select File](#) [Import](#) [Reset](#)



**Note:**

- The pictures uploaded should be in **png format**.
- This function can be applied to both home screen background and contact screen background.
- The recommend picture resolution is 800\*1280.

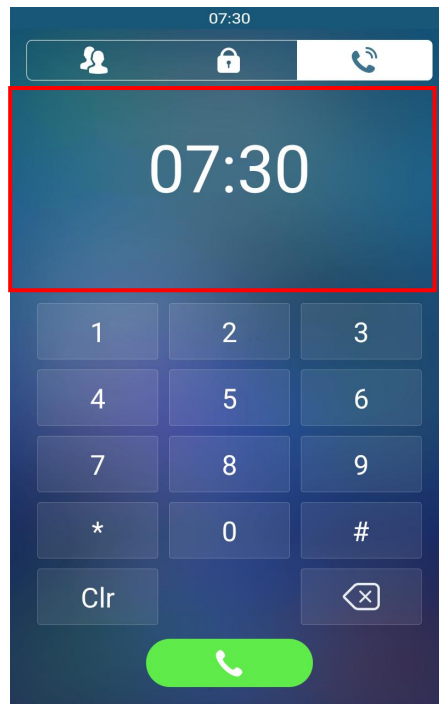
## 7.6.5. Upload Background Picture in the Time-displaying Area

You can upload pictures on web **Phone > Import/Export > Time View Background (.png)** interface as the background for the time-displaying area on the dial screen in Villa mode and Office mode.

**Time View Background (.png)**

Picture  [Select File](#) [Import](#) [Reset](#)

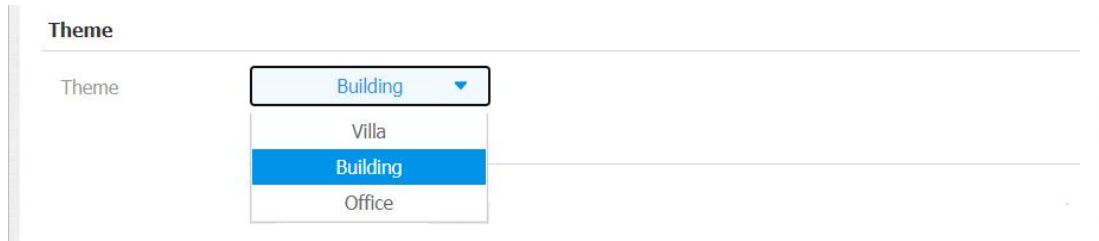
( Max picture size: 1MB, Recommend resolution: 800\*314. )

**Note:**

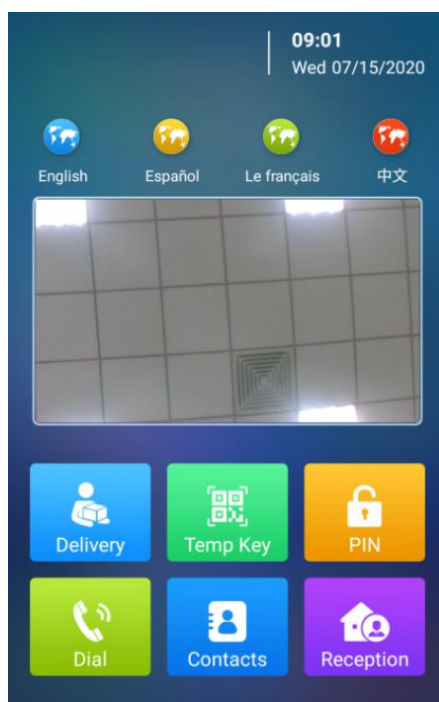
- This function can only be applied in the Villa mode and Office mode.
- Pictures uploaded should be in png format with 1 MB in maximum.

## 7.7. Configuration for Scenario-based Screen Display Mode

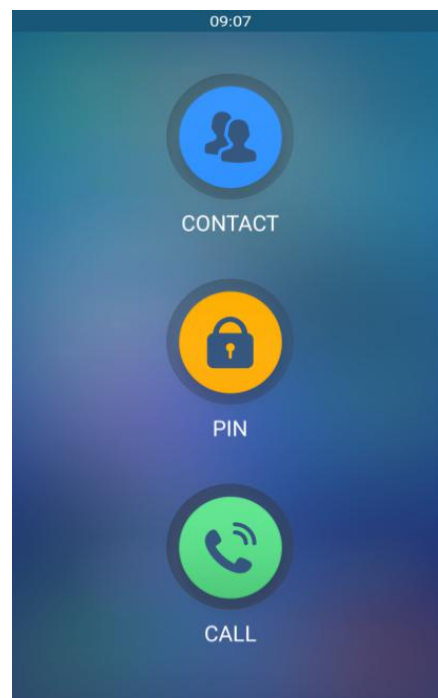
R29 series door phones offer you three types of screen display modes for the application scenarios: **Building** mode, **Office** mode and **Villa** mode. You can make the configuration on the device web **Intercom > Key/Display > Theme** interface to select the specific mode based on actual application scenarios.



Please refer to the default home screen display of the application based modes below:



**Building Mode Screen Display**



**Villa Mode Screen Display**

Office mode screen display is not shown here as it shares the same home screen display with that of Villa mode, however, the two modes vary in terms of their dial screen displays that will be explained in the following sections.



### 7.7.1. Building Mode Home Screen Configuration

You can change the home screen display through the configuration of tab arrangement, and the language icon display as needed on the device web **Intercom > Key/Display > Key In Homepage Of The Building Theme** interface.

ID	Name	Type	Value
1	<input type="text"/>	Delivery <input type="button" value="v"/>	<input type="text"/>
2	<input type="text"/>	Delivery	<input type="text"/>
3	<input type="text"/>	Temp Key	<input type="text"/>
4	<input type="text"/>	PIN	<input type="text"/>
5	<input type="text"/>	Dial	<input type="text"/>
6	<input type="text"/>	Contact	<input type="text"/>
		Speed Dial	<input type="text"/>
		Null	<input type="text"/>

**Parameter Set-up:**

- **Type:** select the tab type corresponding to the ID order which indicates the tab position. For example, if you want to make **Temp Key** tab to be displayed in the position one of tab row one, you can click to select the type of the ID order 1. And you can change other tab position accordingly.
- **Name:** enter a new name to replace the original type name, but it does not change the attribute of the type.
- **Value:** it is available for those feature which need to be setup numbers, like Speed Dial feature.

To configure the tab icons on web **Intercom > Key/Display > Select Icons** interface.



Select Icons

Select Icon  

Type

#### Parameter Set-up:

- **Type:** select the **Type** field for the tab type you need.
- **Select Icon:** Select by clicking the tab icon you need.



#### Note:

- Currently, tab icon selection can only be applicable to the **Speed Dial Type**.

To configure the language icon display on web **Intercom > Key/Display > Language Setting Of The Building Theme** interface.



Language Setting Of The Building Theme

Language

#### Parameter Set-up:

- **Language:** select **"Visible"** and **"Invisible"** respectively if you want the

four language icons to be displayed or concealed on the home screen.

## 7.7.2. Villa Mode Home Screen Configuration

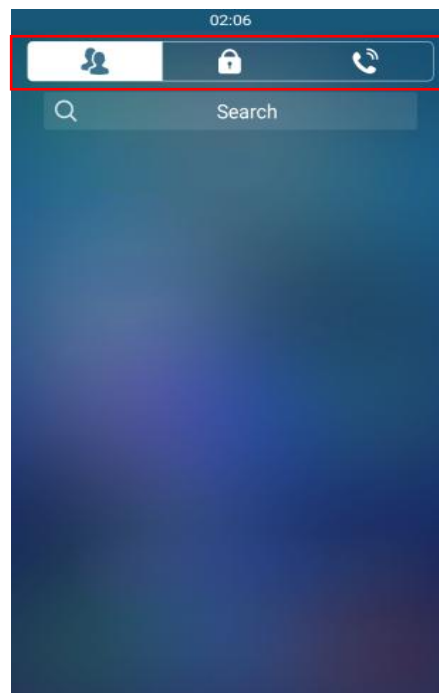
You can configure the screen display for the layout of Contact icon, PIN icon and Call (**Dial**) icon on the home screen in villa mode. In addition, you can set those icons as your home screen while configuring their respective smaller icons on the top of the screen in the villa mode according to your need on web **Intercom > Key/Display >View Control Of The Villa Theme** interface.

The screenshot shows a configuration window titled "View Control Of The Villa Theme". It contains four dropdown menus arranged in a 2x2 grid. The first row has "Display Type" set to "Homepage" and "DialView" set to "VISIBLE". The second row has "ContactView" set to "VISIBLE" and "Password" set to "VISIBLE". Below the dropdowns are two blue buttons: "Submit" on the left and "Cancel" on the right.

### Parameter Set-up:

- **Display Type:** click to select home screen display type among the four options "**Homepage**" "**Dial**" "**Contact**" "**Password**". "**Homepage**" is for the default home screen display of three vertical round icons, while "**Dial**" (Call icon), "**Contact**" icon and "**Password**" (PIN icon) as a whole can be set up as a home screen. For example, if you switch from building mode to Villa mode, while your previous villa mode home screen display type is "**Homepage**" then the three round icons for **Contact**, **PIN and Call** will be all displayed. However, if your previous display type is any one of the "**Dial**" "**Contact**" "**Password**" type then any one of the icons for Dial, Contact and Password will be displayed in highlight together on the top of the home screen with the other two as the home screen display instead of the three round icons for the "**homepage**".

- **ContactView:** click the field to choose if you want to display or conceal the **Contact** icon on the home screen. For example, if you click **ContactView** field "**Invisible**" then the **Contact** Icon will not be displayed on the home screen of all display types.
- **Password:** click the field to choose if you want to display or conceal the **PIN** icon on the screen according to your need. For example, if you click **Password** field "**Invisible**" then the **PIN** Icon will not be displayed on the home screen of all display types.
- **DialView:** click the field to choose if you want to display or conceal the **Call** icon on the home screen. If you click **DiaView** field "**Invisible**" then the **Call** Icon will not be displayed on the home screen of all display types.



**Note:**

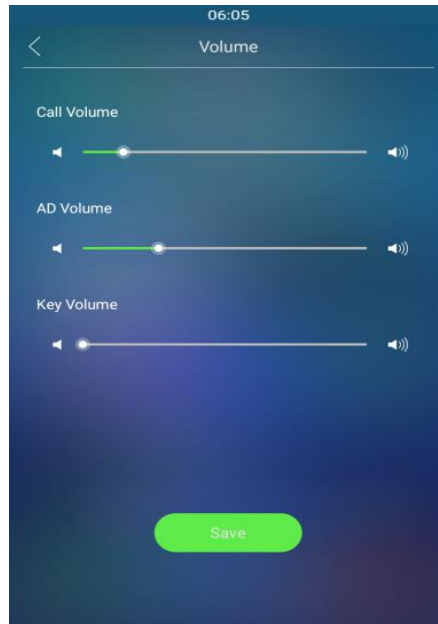
- "Homepage" type screen display will be denied if all of the icons are set "Invisible".

## 7.8. Volume and Tone Configuration

Volume and tone configuration in R29 refers to the Call volume, the AD volume, key volume and Mic volume and open door tone configuration. Moreover, you can upload the tone you like to enrich your personalized user experience.

### 7.8.1. Volume Configuration

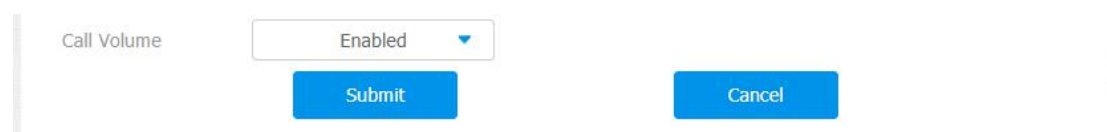
To set up the volumes on the device **Volume** screen.



### Parameter Set-up:

- **Call Volume:** adjust the speaker volume.
- **AD Volume:** adjust the announcement volume. Announcement can be, for example the open door success announcement, ringback sound and other prompt sounds.
- **Key Volume:** adjust the volume for the button touch sound.

In addition, Call Volume can be configured on web **Phone > Call Feature > Others** interface to allow you to adjust the volume when you are answering the call.





**Tip:**

- When the Call volume on the above web interface is enabled, you are allowed to adjust the call volume during the call session.

## 7.8.2. Open Door Tone Configuration

You can not only enable or disable the Open Door Tone but also controls the prompt words that accompany the tone on web **Intercom > Basic > Door Setting General** interface.

Door Setting General

RTP TimeOut  Open Door Tone

### Parameter Set-up:

- **Open Door Tone:** click the **"Enable"** and **"Disable"** depending on if you want to hear the tone or not.

To control the Open Door Prompt words on web **Intercom > Advanced > Open Door Warning** interface.

Open Door Warning

Open Door Succ  Open Door Failed

**Parameter Set-up:**

- **Open Door Success:** click the field on or off depending on if you want to see the prompt words after the door open success.
- **Open Door Failed:** click the field on or off depending on if you want to see the prompt words after the door open failure.

**Note:**

- **Open Door Success "ON-OFF"** setting is currently applicable to all types of door access except for the access via Facial recognition while the **Open Door Failed "ON-OFF"** is only applicable to door access via **RF** cards.

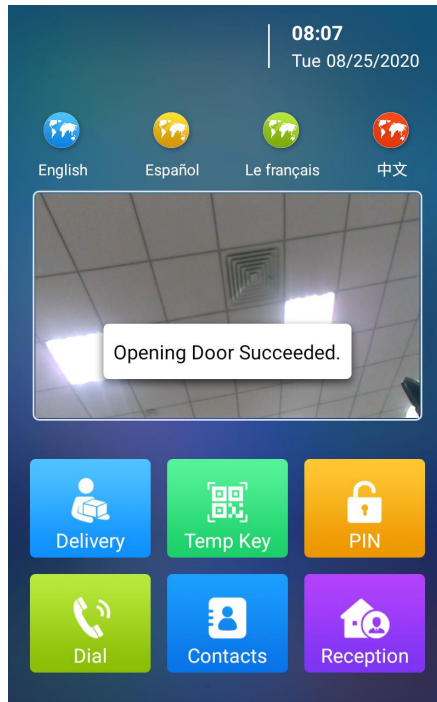
### 7.8.3. Uploading Open Door Tone

You can upload the Open Door Tone on the device web **Phone > Import/Export > Open Door Tone (.wav)** interface. No limitation of the tone file size.

Open Door Tone (.wav)

Tone

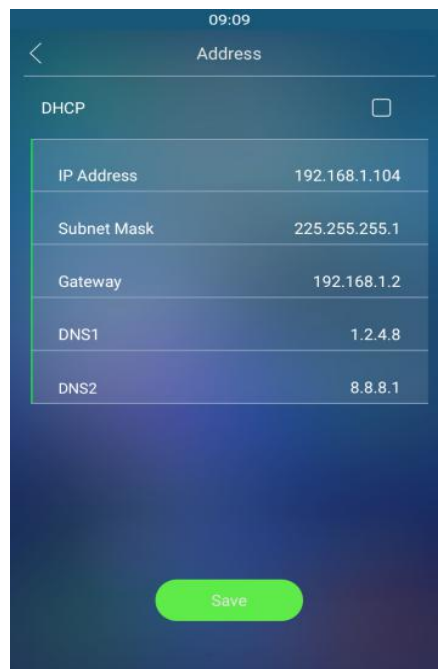




## 8. Network Setting

### 8.1. Device Network Connection Setting

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



#### Parameter Set-up:

- **DHCP:** select the **DHCP** mode by checking off the DHCP box. DHCP mode is the default network connection. If the DHCP mode is selected, then the door phone will be assigned by the DHCP server with IP address, subnet mask, default gateway, and DNS server address automatically.

- **Static IP:** select the static IP mode by checking off the DHCP square box. 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 default gateway according to the IP address of the default gateway.
- **DNS1/DNS2:** set up DNS1/ DNS2 (**Domain Name Server**) according to your actual network environment. DNS1 is the primary DNS server address while the DNS2 is the secondary server address and the door phone connects to DNS2 server when the primary DNS server is unavailable.

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

Network Information			
LAN Port Type	DHCP Auto	LAN Link Status	Connected
LAN IP Address	192.168.1.64	LAN Subnet Mask	255.255.255.0
LAN Gateway	192.168.1.1	LAN DNS1	218.85.157.99
LAN DNS2	218.85.152.99		

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

**LAN Port**

DHCP
  Static IP

IP Address: 
 Subnet Mask:

Default Gateway: 
 LAN DNS1:

LAN DNS2:

## 8.2. Device Local RTP configuration

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

**Local RTP**

Starting RTP Port:  (1024~65535)

Max RTP Port:  (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.

## 8.3. Device Deployment in Network

Door phones should be deployed before they can be properly configured in the network environment in terms of their location, operation mode, address and extension numbers as opposed to other devices for the device control and the convenience of the management. So you can do it on web **Network > Advanced > Connect Setting** interface.

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

Server Type	SDMC					Discovery Mode	Enabled		
Device Address	1	1	1	1	1				
Device Extension	1					Device Location	Stair Phone		

Buttons: Submit, Cancel

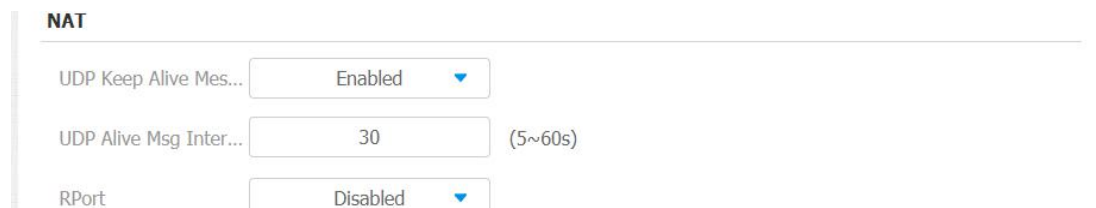
### Parameter Set-up:

- **Server Type:** 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, SMDC in discovery mode.
- **Discovery Mode:** click **"Enable"** to turn on the discovery mode of the device so that it can be discovered by other devices in the network, and click **"Disable"** if you want to conceal the device so as not to be discovered by other devices. After turning off the discovery mode, you need to restart the device to take effect.
- **Device Address:** specify the device address by entering device location information from the left to the right: **Community, Unit, Stair, Floor, Room** in sequence.

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

## 8.4. NAT Setting

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



NAT	
UDP Keep Alive Mes...	Enabled
UDP Alive Msg Inter...	30 (5~60s)
RPort	Disabled

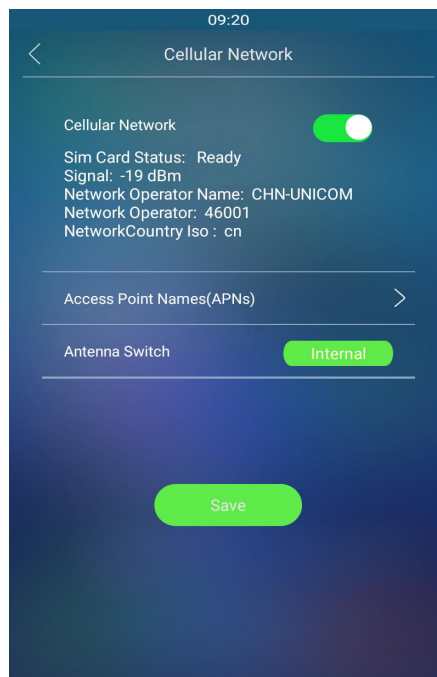
### Parameter Set-up:

- **UDP Keep Alive Messages:** If enabled, the device will send out the message to the SIP server so that SIP server will recognize that if the device is in online status.
- **UDP Alive Msg 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).

## 8.5. LTE Wireless Connection Setting (Optional)

In addition to wired connection, the device is installed with a LTE module which allows both users and installers to conduct a convenient, quick and wireless connection in the installation environment with no access to wired network such as old building etc. Only R29C-L has LTE module and the LTE setting only show after inserting SIM card. To configure the LTE setting on the device **Cellular Network** screen.



### Parameter Set-up:

- **Cellular Network:** move the toggle switch on and off to enable or disable the LTE function.

- **Access Point Name (APNs):** check the Cellular Network provider for the Access Point.
- **Antenna Switch:** select internal and external antenna for signal transmission. The internal antenna is a built-in antenna in the device while the external antenna is optional and is used to reinforce the signal in the compromised network environment.

## 8.5.1. LTE Data Usage Control

### 8.5.1.1. LTE Data Usage Check

LTE data usage in 29-L door phone can be checked on the device web **Network > Data Usage > Data Information** interface.

Data Information	
Data Used	0GB0MB 
Data Remaining	--

### 8.5.1.2. LTE Data Usage Configuration

You can also manage the data usage on the web **Network > Data Usage > Data Plan Setting** interface in order to be informed on the data consumption according to your configuration.



**Data Plan Setting**

---

Unlimited Data

Data Limit

Data Reminders  %  
Action to execute when data usage reaches 80% (32G) of Monthly limit.

Start Date  (1~31)

Action To Execute  Email  HTTP URL

Http URL

**Parameter set-up:**

- **Unlimited Data:** click **"enable"** if you have unlimited data package and vice versa. The setting is **"disabled"** by default.
- **Data Limit:** set the data limit according to your actual amount of data package. The data limit is **"40"** GB or MB.
- **Data Reminders:** set the data percentage point to trigger the notification. For example , if the data percent point reaches the default value **"80"** actions will be executed for the purpose of notification when it reaches 80 the data percentage point.
- **Start Date:** set the start date of a month to start data usage monitoring from **1** to **31**. The start date is **"1"** by default. For example, if you set the start date as **"1"** then the end day will be the last day of the month, however if the start date is **"2"** then the end date will be **23:59** of the first day of the next month. Moreover, if a month is less than 31 days, then the end date will be the last day of the month before renewing data usage monitoring on the first day of the next month.
- **Action To Execute:** click **"Email"** or **"HTTP URL"** for the Email notification

or notification via HTTP URL when the data usage reaches the limit.

- **Http URL:** enter your **HTTP URL** for the notification purpose.

## 9. Intercom Call Configuration

Intercom call in the device can be configured to allow you to perform a variety of customized intercom calls such as IP call and SIP call for different application scenarios.

### 9.1. IP call & IP Call Configuration

IP call can be made directly on the intercom device by entering the IP number on the device. And you can also disable the direct IP call if you allow no IP call to be made on the device web **home > Call Feature > Others** interface.

The screenshot shows the 'Others' configuration page with the following settings:

- Return Code When ...: 486(Busy Here)
- Auto Answer Delay: 0 (0~5s)
- Auto Answer Mode: Video
- Direct IP Port: 5060 (1~65535)
- Direct IP: Disabled
- Call Volume: Disabled

Buttons: Submit, Cancel

#### Parameter Set-up:

- **Direct IP Call:** click "Enable" or "Disable" to turn the direct IP call on or off. For example, if you do not allow direct IP call to be made on the device, you can click "disable" to terminate the function.
- **Direct IP Port:** the direct IP Port is "5060" by default with the port range from 1-65535. And you enter any values within the range other than the 5060, you are required to check if the value entered is consistent with the

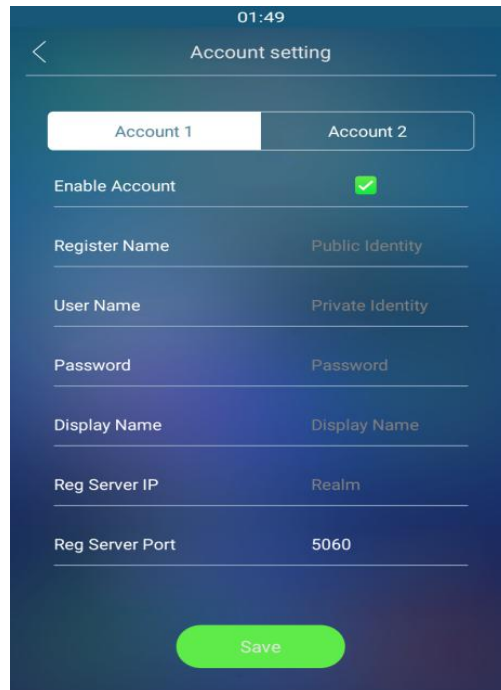
corresponding value on the device you wish to establish a data transmission with.

## 9.2. SIP Call & SIP Call Configuration

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

### 9.2.1. SIP Account Registration

R29 series door phones support two SIP accounts that can all be registered according to your applications. You can, for example, switch between them if any one of the accounts failed and became invalid. The SIP account can be configured on the device screen and on the device web interface. To configure the SIP account on the device **Account** screen.



**Parameter set-up:**

- **Account 1/Account 2:** select Account 1 or account 2. Account 1 is the default SIP account.
- **Reg Server port:** enter the SIP server port for communication. The SIP port is "5060" by default.

Other parameter settings for SIP account registration can not be configured on the Account setting screen as they can only be configured on the device web **Account > Basic > SIP Account** interface.

SIP Account			
Status	Disabled	Account	Account 1
Account Active	Disabled	Display Label	
Display Name		Register Name	
User Name		Password	.....

**Parameter setup:**

- **Status:** check to see if the SIP account is registered or not.
- **Account Active:** click "**enable**" or "**Disable**" to activate or deactivate the registered SIP account.
- **Display Name:** configure the name, for example the device's name to be shown on the device being called to.
- **User Name:** enter the user name obtained from SIP account administrator.
- **Account:** select the exact account (Account 1&2) to be configured.
- **Display Label:** configure the device label to be shown on the device screen.
- **Register Name:** enter the SIP account register Name obtained from the SIP account administrator.
- **Password:** enter the password obtained from the SIP account administrator.

### 9.2.2.SIP Call DND&Return Code Configuration

DND (**Do not disturb**) setting allows you not to be disturbed by any unwanted incoming SIP calls. You can set up DND related parameters properly on the device web **Phone > Call Feature > DND** interface to block SIP calls you do

not intend to answer. In the mean time, you can also define the code to be sent to the SIP server when you want to reject the call.

### Phone-Call Feature

---

**DND**

Account	<input type="text" value="All Account"/>	DND	<input type="text" value="Disabled"/>
Return Code When ...	<input type="text" value="486(Busy Here)"/>	DND On Code	<input type="text"/>
DND Off Code	<input type="text"/>		

---

**Others**

Return Code When ...	<input type="text" value="486(Busy Here)"/>
----------------------	---

#### Parameter Set-up:

- **Account:** select “Account1”, “Account2” or “All account” for the DND application.
  
- **DND:** enable or disable the DND function. DND function is disabled by default.
  
- **Return Code When DND:** select what code should be sent to the calling device via SIP server. **404** for “Not found”; **480** for “Temporary unavailable”; **486** for “busy here”.
  
- **DND On Code:** turn on the DND on server using the Code obtained. The DND on Code is **78** by default.
  
- **DND Off Code:** turn off the DND on server using the code obtained. The DND off Code is **79** by default.
  
- **Return Code When Refuse:** select code to be sent the caller side via SIP

server when you rejected the incoming call.

### 9.2.3.SIP Server Configuration

Two SIP servers can be set up for device in order to achieve call session through SIP server between intercom devices. SIP server 2 serves as a backup to the SIP server 1. To do it on device web **Account - Basic - SIP server1 /SIP server 2** interface.

SIP Server 1			
Server IP	<input type="text"/>	Port	<input type="text" value="5060"/>
Registration Period	<input type="text" value="1800"/>	(30~65535s)	

SIP Server 2			
Server IP	<input type="text"/>	Port	<input type="text" value="5060"/>
Registration Period	<input type="text" value="1800"/>	(30~65535s)	

#### Parameter Set-up:

- **Server IP:** enter the Server's IP address number or its URL.
- **Port:** set up 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.



## 9.2.4. Outbound Proxy Server configuration

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

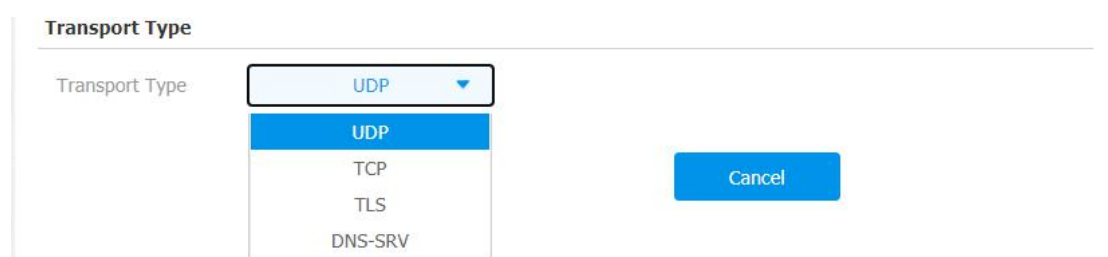
Outbound Proxy Server			
Enable Outbound	Disabled ▾		
Server IP	<input type="text"/>	Port	<input type="text" value="5060"/>
Backup Server IP	<input type="text"/>	Port	<input type="text" value="5060"/>

### Parameter Set-up:

- **Enable Outbound:** click “Enable” and “Disable” to turn on or turn off the outbound proxy server.
- **Server IP:** enter the SIP address of the outbound proxy server.
- **Port:** enter the Port number for establish call session via the outbound proxy server
- **Backup Server IP:** set up Backup Server IP for the back up outbound proxy server.
- **Port:** enter the Port number for establish call session via the backup outbound proxy server.

## 9.2.5. Data Transmission Type Configuration

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



Transport Type

Transport Type

UDP

UDP

TCP

TLS

DNS-SRV

Cancel

### Parameter Set-up:

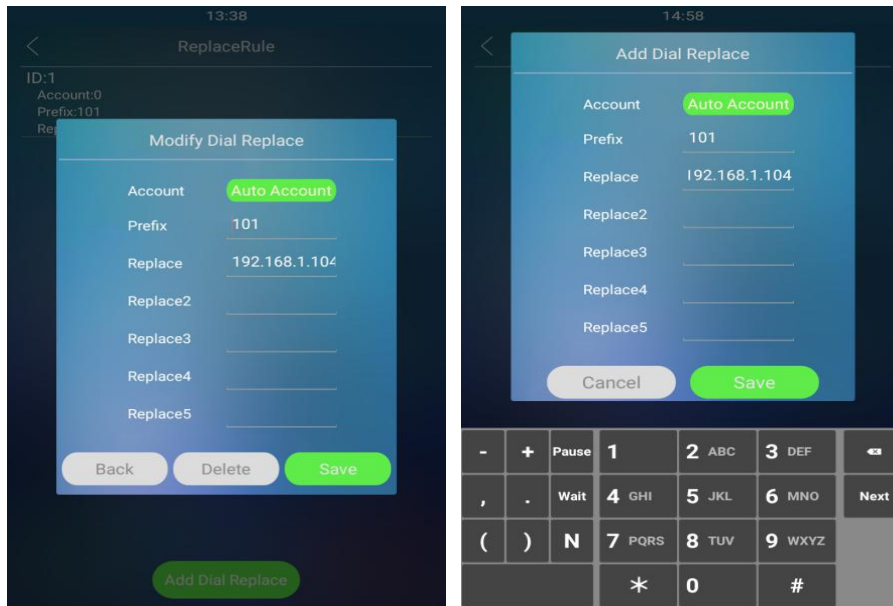
- **UDP:** select “UDP” for unreliable but very efficient transport layer protocol. UDP is the default transport protocol.
- **TCP:** select “TCP” for Reliable but less-efficient transport layer protocol.
- **TLS:** select “TLS” for Secured and Reliable transport layer protocol.
- **DNS-SRV:** select “DNS-SRV” to obtain DNS record for specifying the location of servers. 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.

## 9.3. Dial Options Configuration

R29 series offers a variety of Dial options that allows you to have fast dial experience while relieving you off memory burden due to long and complex dial numbers.

### 9.3.1. Quick Dial By number Replacement

If you want to replace the long and complex dial number with a shorter number that can be memorized at greater ease and convenience for making calls, you can configure the dial number replacement on the device and on the device web interface. You can replace a multiple device dial numbers such as IP address with only one short number. To configure the number replacement on the device **ReplaceRule** screen.



**Parameter Set-up:**

- **Account:** select the account to which you want to apply dial number replacement. The account is "Auto" by default (to call 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 dial out. if you have registered the dial 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 dial number you wish to replace.
- **Replace 1/2/3/4/5:** enter the dial 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 dial number will be called to at the same time when you dial 101.

To configure the setting on the web **Phone > Dial Plan-Rules Management** interface.

**Rules Management**

**Select File** **Import** **Export**

Rules

<input type="checkbox"/>	Index	Account	Prefix	Replace 1	Replace 2	Replace 3	Replace 4	Replace 5
<input checked="" type="checkbox"/>	1	Auto	101	192.168.1.106	192.168.1.107	192.168.1.108	192.168.1.109	
<input type="checkbox"/>	2	Account1	102	192.168.1.101	192.168.1.102	192.168.1.103	192.168.1.104	192.168.1.105
<input type="checkbox"/>	3	Account2	103	192.168.1.110				

**Delete** **+ Add** **Edit** **Prev** 1/1 **Next**  **Page**

**Rules Modify >>**

Account  Prefix   
 Replace 1  Replace 2   
 Replace 3  Replace 4   
 Replace 5

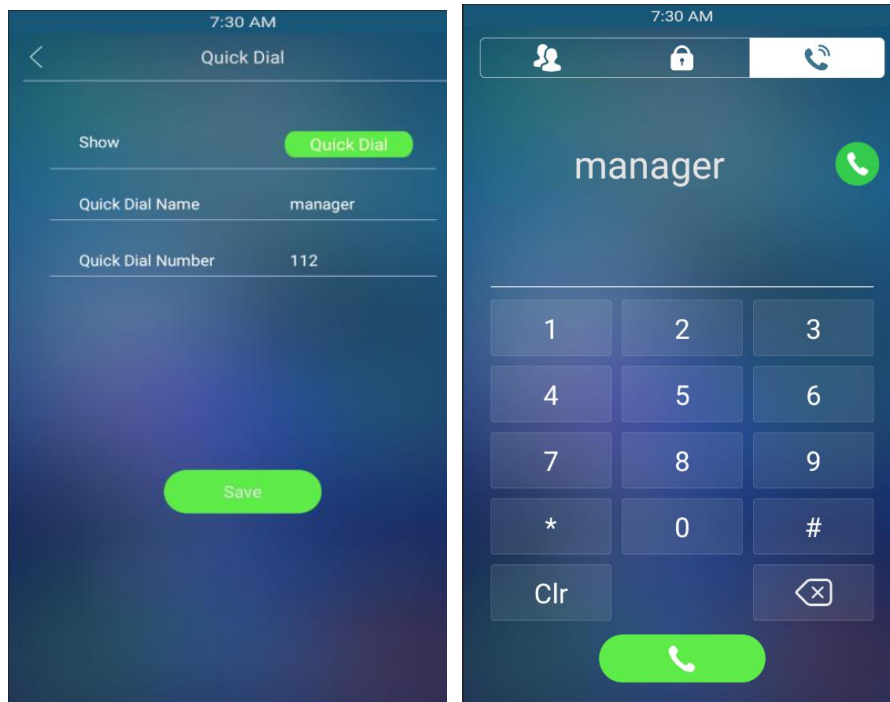
**Submit** **Cancel**

**Note:**

- The square box for each line of "Prefix" should be checked before you can see the **Edit** tab, which you click to carry out the modification.


### 9.3.2. Quick Dial Using Configured Dial Name

You can create one dial name on the **Quick Dial** screen in both villa mode and office mode on the device directly. You can press the dial icon by the dial name to make calls.



### Parameter Set-up:

- **Show:** select the **Quick Dial** in order to conceal the time display. If you select clock option, then the time will be displayed on the time screen.
- **Quick Dial Name:** create a quick dial name such as **"Manager"** according to your need.
- **Quick Dial number:** enter the quick dial number, which can be a SIP number or an IP address number.

 **Note:**

- This function cannot be applied in **Building Mode**.

### 9.3.3.Speed Dial on the Home Screen

Speed dial is a function that allows you to create tab or a combination of organized tabs to be displayed on the device’s dial screen. You can make call by pressing the specific tabs to make speedy calls without entering any dial numbers. To configure the speed dial on the web **Phone > Speed Dial > Dial Contacts Management** interface.

**Speed Dial Theme**

Speed Dial Theme

---

**Speed Dial Contacts Management**

Index	Name	Number	Submit	Clear
1	<input type="text" value="Ryan"/>	<input type="text" value="101"/>	<input type="button" value="Submit"/>	<input type="button" value="Clear"/>
2	<input type="text" value="Vincent"/>	<input type="text" value="102"/>	<input type="button" value="Submit"/>	<input type="button" value="Clear"/>
3	<input type="text" value="Jon"/>	<input type="text" value="103"/>	<input type="button" value="Submit"/>	<input type="button" value="Clear"/>
4	<input type="text" value="Cathy"/>	<input type="text" value="104"/>	<input type="button" value="Submit"/>	<input type="button" value="Clear"/>
5	<input type="text" value="Wayne"/>	<input type="text" value="105"/>	<input type="button" value="Submit"/>	<input type="button" value="Clear"/>
6	<input type="text" value="Lucy"/>	<input type="text" value="106"/>	<input type="button" value="Submit"/>	<input type="button" value="Clear"/>

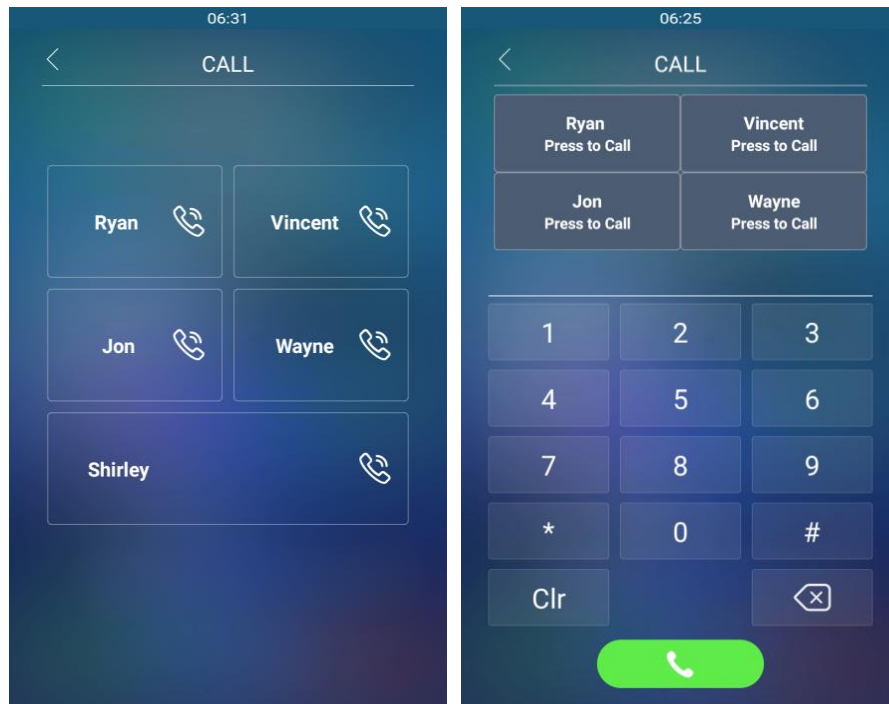
**Parameter Set-up:**

- **Speed Dial Theme:** select speed dial tab layout among 9 options to your preference. Each option offers you different layout of dial tabs along with

changes of the soft keypad arrangement on the dial screen. The 9 options explained as follows:

Options	Descriptions
<b>Standard</b>	select " <b>Standard</b> " if you want to display the time and key pad only with <b>no</b> dial tabs.
<b>Auto</b>	select " <b>Auto</b> " if you want to select the dial tab layout that does match with any one of the other 8 options. For example, if you want to create 3dial tabs, 5 dial tabs or 7 tabs etc., that does not match with other options.
<b>1 Key</b>	select " <b>1 Key</b> " if you display only one dial tab with no keypad.
<b>1 Key + Keypad</b>	select " <b>1 Key+Keypad</b> " if you want to display one dial tab with key pad.
<b>2 Keys+ Keypad</b>	select " <b>2 Key+Keypad</b> " if you want to display two dial tabs with keypad.
<b>8 Keys</b>	select " <b>8 Keys</b> "if you want to display 8 dial tabs with no keypad.
<b>16 Keys</b>	select" <b>16 keys</b> " if you want to display 16 dial tabs with no keypad.
<b>64 Keys</b>	select " <b>64 keys</b> " if you want to display 64 dial tabs with no keypad.



**Note:**

- This function cannot be applied in **Building Mode**.
- Keypad will not be displayed if the number of the dial tabs is over 4 tabs.

## 9.4. Call Auto-answer Configuration

You can define how quick the door phone should response in answering the incoming SIP/IP call automatically by setting up the time related parameters. In addition, you can also define the mode in which the calls are to be answered. (video mode or audio mode) To do the configuration in web **Account > Advanced > Call** interface.

**Call**

Max Local SIP Port  (1024~65535)

Min Local SIP Port  (1024~65535)

Caller ID Header

---

**Others**

Return Code When ...

Auto Answer Delay  (0~5s)

Auto Answer Mode  Direct IP

**Parameter Set-up:**

- **Auto Answer:** turn on the Auto Answer function by clicking **Enable**.
- **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.
- **Auto Answer Mode:** set up the video or audio mode you preferred for the automatic call answering.

## 9.5. Robin Call Configuration

Robin Call is a function supported by Akuvox cloud which releases a group of robin call numbers for the application. You can call the targeted group of robin calls (e.g. your extension numbers in your kitchen, bedroom, etc.) in sequential orders until the call is answered. Robin call sequence will complete as soon as the call is answered by any of the targeted extension device. To do the configuration in web **Intercom > Basic > Basic** interface.

**Intercom-Basic**

---

Basic

Robin Call Enable  Robin Call Timeout

### Parameter Set-up:

- **Robin Call Enable:** this function is controlled by Akuvox SmartPlus. You can check whether it is enabled or not.
- **Robin Call Timeout:** to check the call time interval in between the Robin call number in a targeted Robin Call group. For example, if you set the time interval as 10 seconds, then the call (if not answered in 10 Sec.) will be terminated automatically and be transferred sequentially to the next robin call number in the targeted robin call group.



**Note:**

- Robin Call function should be supported by **SmartPlus**, please contact Akuvox technical support for more information.

## 9.6. Web Call Configuration

In addition to make IP/SIP call directly on the device, you can also make the call on the device web **Phonebook > Phonebook > Contacts** interface without approaching to the device physically for testing purpose etc.

Contacts

---

Dial  Auto ▼ Dial Hang Up

**Note:**

- **"Auto"** as the default value in the field is not clickable for selection. It enables the door phone to select appropriate SIP account to call out.

## 9.7. Call Settings

### 9.7.1. Maximum Call Duration Setting

R29 series 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 calling automatically. To do this configuration in device web **Intercom > Basic > Max Call Time** interface.

Max Call Time

---

Max Call Time  (2~30Minutes)

**Parameter Set-up:**

- **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.

## 9.7.2. Maximum Dial Duration Setting

Maximum Dial duration is consisted of Maximum dial-in time duration and the maximum dial-out time. Maximum dial in time refers to the maximum time duration before the door phone hang up the call if the call is not answered by the door phone. In contrary, Maximum dial-out time refers to the maximum time duration before the door phone hang up itself automatically when the call from the door phone is not answered by the intercom device being called to. To do this configuration on device web **Intercom > Basic > Max Dial Time** interface.

Max Dial Time		
Dial In Time	<input type="text" value="60"/>	(30~120Sec)
Dial Out Time	<input type="text" value="60"/>	(5~120Sec)

### Parameter Set-up:

- **Dial In Time:** enter the dial in time duration for you door phone (ranging from 30-120 sec.) for example, if you set the dial in time duration is 60 second 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.

### 9.7.3. Call Session Timer Setting

IP Intercom call quality can be improved through the configuration of the session timer on the device web **Account > Advanced > Session Timer** interface.

Session Timer	
Active	Disabled ▼
Session Expire	1800 (90~7200s)
Session Refresher	UAC ▼

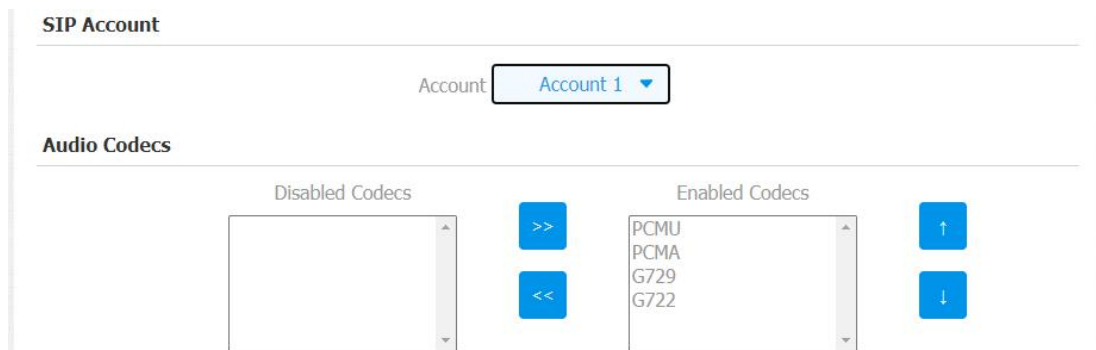
#### Parameter Set-up:

- **Active:** click to enable or disable the Call session timer function. Call session timer is "**Disabled**" by default.
- **Session Expire:** enter the session call duration before the call expires or ends automatically for refreshment. For example, if you set the session expiration as 1800 second (Ranging from 90- 7200 sec.) you can have the door phone to terminate the ongoing call with others intercom device in 1800 second.
- **Session Refresher:** select UAC (**User Agent Client**) or UAS (**User Agent Server**) for the call session refreshment.

# 10. Audio & Video Codec Configuration for SIP Calls

## 10.1. Audio Codec Configuration

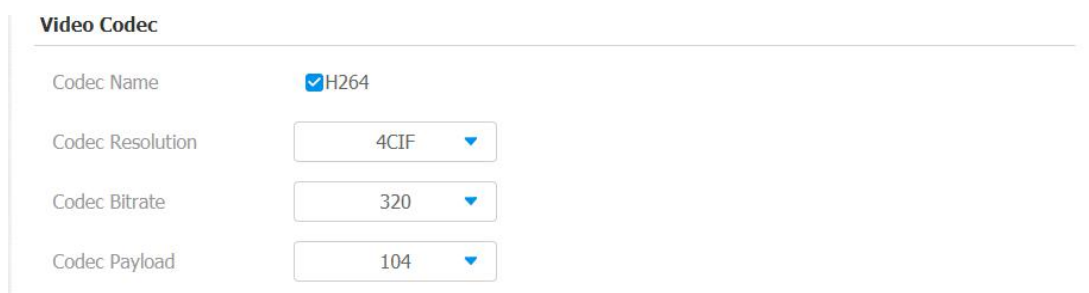
R29 series supports four types of Codec (PCMU, PCMA, G729, G722) for encoding and decoding the audio data during the call session. Each type of Codec varies in terms of the sound quality. You can select the specific codec with different bandwidth and sample rate flexibly according to the actual network environment on device web **Account > Advanced > SIP Account** interface.



Codec Type	Bandwidth Consumption	Sample Rate
PCMA	64 kbit/s	8kHz
PCMU	64 kbit/s	8kHz
G729	8 kbit/s	8kHz
G722	64 kbit/s	16kHz

## 10.2. Video Codec Configuration

R29 series support H264 codec that provides a better video quality at much lower bit rate with different video quality and payload. To do the configuration on device web **Account > Advanced > Video Codec** interface.



Video Codec	
Codec Name	<input checked="" type="checkbox"/> H264
Codec Resolution	4CIF
Codec Bitrate	320
Codec Payload	104

### Parameter Set-up:

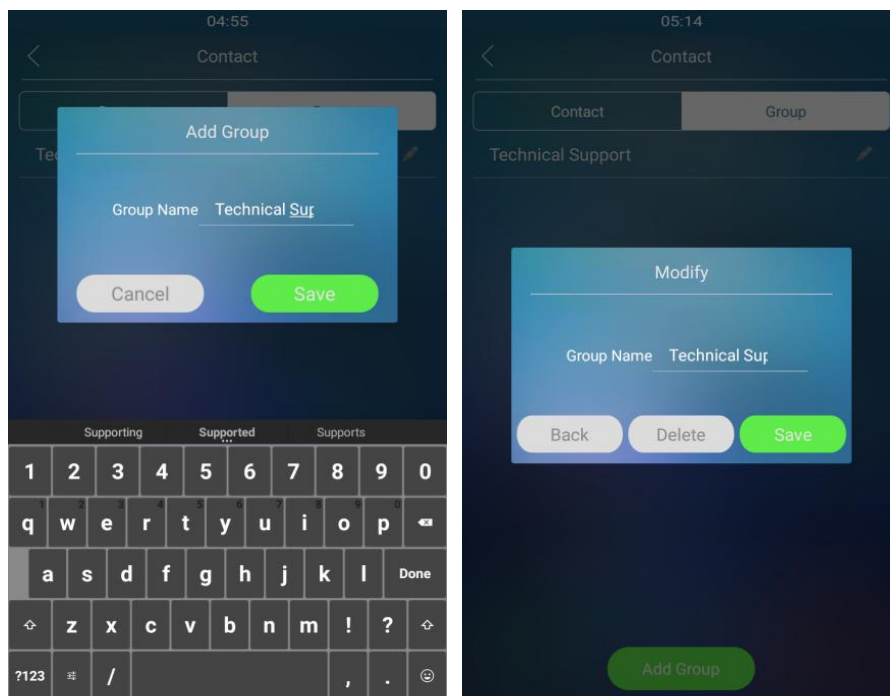
- **Codec Name:** Check to select the H264 video codec format for the door phone video stream. H264 is the video codec by default.
- **Code Resolution:** select the code resolution for the video quality among four options: "QCIF", "CIF", "VGA", "4CIF" and "720P" according to your actual network environment.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

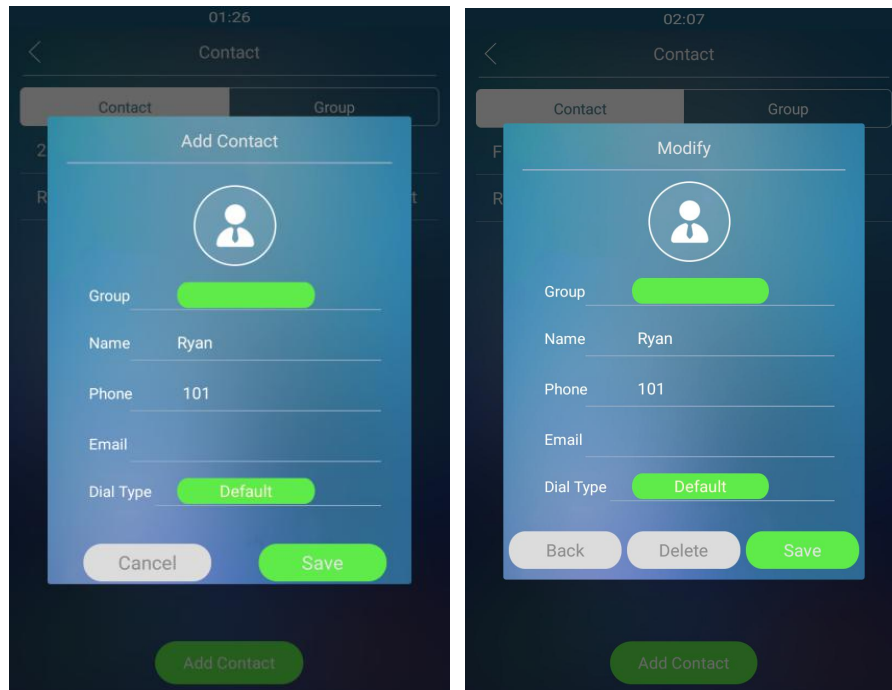


# 11. Phone book Configuration

## 11.1. Phone book Configuration on the Device

You can configure the phone book in terms of adding and modifying groups or contacts on the device directly. To configure the phone book on the device **Contact** screen.





### Parameter Set-up:

- **Group:** click the green tab to select the group name you have created. You cannot select the group name if no group name has been created.
- **Name:** enter the contact name, which is required.
- **Phone:** enter the phone number of the contact, which is required.
- **Email:** enter the contact's Email, which is optional.
- **Dial Type:** select and assign the group name to an account. If you select default option, then the contact number will be call out from SIP account 1 if the contact number are set up in both SIP Account 1 and 2.

**Note:**

- Only the SIP numbers of the contacts can be called out through SIP account. IP numbers are not valid for this application.
- Group must be created first before you can select or change the Group in **Add Contact** screen and **Modify** screen.

**Tip:**

- You can swipe your finger left and right on the contact screen to switch between contact and group setting without pressing their respective tabs.

## 11.2. Phone book Configuration on the Web Interface

### 11.2.1. Managing Contact Groups on the Web Interface

You can configure contact and contact groups by adding and editing them on the web **Phonebook > Local Book > Group Setting** interface.

**Group**

<input type="checkbox"/>	Index	Name
<input checked="" type="checkbox"/>	1	Technical Sup..
<input type="checkbox"/>	2	Sales

1/1

**Group Setting**

Name

### 11.2.2. Contact Configuration on the Web Interface

Contact can also be configured on the web **Phonebook > Local Book > Contact setting** interface where you can also upload the contact pictures if needed.

**Contact Setting**

Name  Phone

Email  Group

Dial Type  Lift Floor Number

Photo

Note: **Please upload the photo before editing contact if necessary**

Before After

**Parameter Set-up:**

- **Name:** the name of contact.
- **Phone :** the phone number of contact. It supports IP address and SIP number.
- **Email:** the email address of contact.
- **Group :** choose a default or pre-configure group for the contact. Or choose Hidden Contacts to hide this contact.
- **Dial Type:** choose one high priority account to call out the contact.
- **Lift Floor Number:** Enter the floor number of the contact if needed.

**Note:**

- The recommend contact picture size is 2M and .jpg, png format.

**11.2.2.1. Contact Management**

You can search, display, edit and delete the contacts in your phone book. Moreover, you can also dial out using the contact number directly. To do this configuration on device web **Phonebook > Phonebook > Local Phone book** interface.

**Local Phonebook**

Contact:  ▾

Search:

Dial:   ▾

<input type="checkbox"/> Index	Name	Phone	Group	Dial Type	Email	FloorNum	Priority Of Call
<input type="checkbox"/> 1	Fred	<a href="#">107</a>	Technical S up..	Default		1	Firstly
<input type="checkbox"/> 2	Randy	<a href="#">108</a>	Technical S up..	Default		0	Firstly
<input checked="" type="checkbox"/> 3	Ryan	<a href="#">101</a>	Technical S up..	Default		0	Firstly

1/1

### 11.2.2.2. Contacts Import and Export on the Web Interface

When the contact becomes so many that you can not afford to manage each contact one by one manually, you can import and export the contacts in batch on the device web **Phone - Import/Export - Import/Export Config&Contacts** interface.

**Import/Export Config&Contacts**

Contacts:

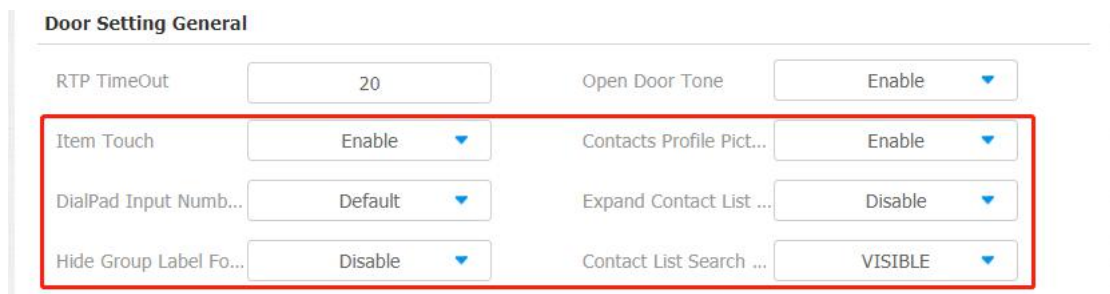


**Note:**

- The contact file format for import should be in .vcf, .csv or xml format while the contact file format for export should be .vcf format only. And the maximum contact import size is 3000.

### 11.2.2.3. Contact List Display Setting

If you want to customize your contact list display to your desired visual preference. You can go to the web **Intercom > Basic > Door Setting General** interface to do the configuration.

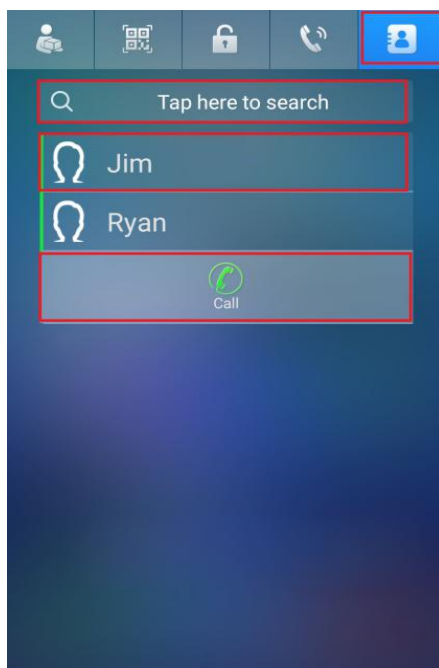


**Parameter Set-up:**

- **Item Touch:** select **Enable** or **Disable** the dial-out by pressing the contact tab. When the **Item Touch** is enabled you can press any where on the contact tab to dial out. When it is disabled, you need to press the **Call** icon in the middle of the tab to dial out.
- **Contact Profile Picture:** enable or disable the function. If the function is

enabled the uploaded contact profile picture displayed next to the contact name , if disabled the picture will not be displayed.

- **Expand Contact List View Mode:** select **"Enable"** or **"Disable"** to control contact tab size. For example, if you select **"enable"** then the contact tab will be widened. And the tab will turn to normal size when the function is disabled.
- **Hide Group Label For Contact List:** select enable or disable to control the display the of the group label. If you select disable, then only the contact tab will be displayed while the group tab will be concealed and vice versa.
- **Contact List Search Box Visible:** select Visible or Invisible to control the display of the **"Tap here to search field"** on the top of the screen. If you select **"invisible"**, then the **"Tap here to search field"** will be concealed.





## 12. Door Access Control Configuration

### 12.1. Relay Switch Setting

You can configure the relay switch(es) for the door access on the web **Intercom > Relay > Relay** interface.

Relay			
Relay ID	RelayA ▼	RelayB ▼	RelayC ▼
Trigger Delay(Sec)	0 ▼	0 ▼	0 ▼
Hold Delay(Sec)	5 ▼	5 ▼	5 ▼
DTMF Option	1 Digit DTMF ▼		
DTMF	0 ▼	1 ▼	2 ▼
Multiple DTMF	010	012	013
Relay Status	RelayA: Low	RelayB: Low	RelayC: Low
Relay Name	Front door	Back door	Hall

#### Parameter Set-up:

- **Relay ID:** you are allowed to set up three relay switches in total for the door access control ( R29Z/R29ZL has only 1 relay.)
- **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 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

resume the initial state after maintaining the triggered state for 5s.

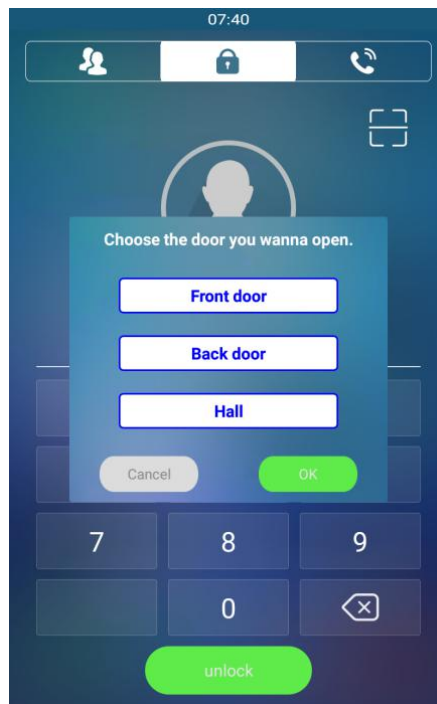
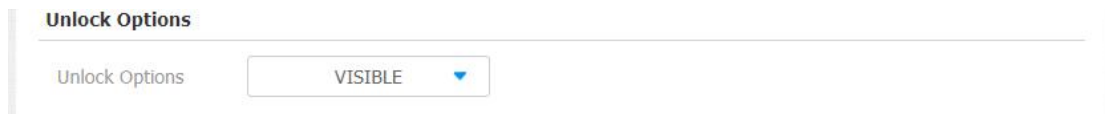
- **DTMF Option:** select the number of DTMF digit for the door access control (Ranging from 1-4 digits ) For example, you can select 1 digit DTMF code or 2-digit DTMF code etc., according to your need.
- **DTMF:** set the 1-digit DTMF code within range from ( 0-9 and \*,#) if the DTMF Option is set as "1-digit"
- **Multiple DTMF:** set the DTMF code according to the **DMTP Option** setting. For example, you are required to set the 3-digits DTMF code if **DTMP Option** is set as 3-digits.
- **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 the convenience.

**Note:**

- Only the external devices connected to the relay switch needs to be powered by powered adapters as relay switch does not supply power.

### 12.1.1. Relay Switch Control on the Door phone

If you want to control the relays in different locations using the configured PIN code on the door phone, you can press to select relay(s) you want to trigger to open the door on device web **Intercom > Relay > Unlock Options** interface.



### 12.2. Web Relay Setting

In addition to the relay that is connected to the door phone, you can also control the door access using the network-based web relay. To do the configuration on device web **Phone > Web Relay** interface.

**Web Relay**

Type  IP Address

UserName  Password

**Web Relay Action Setting**

Action ID	Web Relay Action	Web Relay Key	Web Relay Extension
Action ID 01	<input type="text"/>	<input type="text"/>	<input type="text"/>
Action ID 02	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Parameter Set-up:**

- **Type:** select among three options **Disabled**, **WebRelay** and **Both**. Select **Webrelay** to enable the web relay. Select **Disable** to disable the web relay. Select **Both** to enable both local relay and web relay.
- **IP Address:** enter the we relay IP address provided by the web relay manufacturer.
- **User Name:** enter the User name provided by the web relay manufacturer.
- **Password:** enter the password provided by the web relay manufacturer. The passwords is 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 relay manufacturer for different actions.
- **Web Relay Key:** enter the configured DTMF code, which when the door is unlock via DTMF code, the action command will be sent to the web relay automatically.

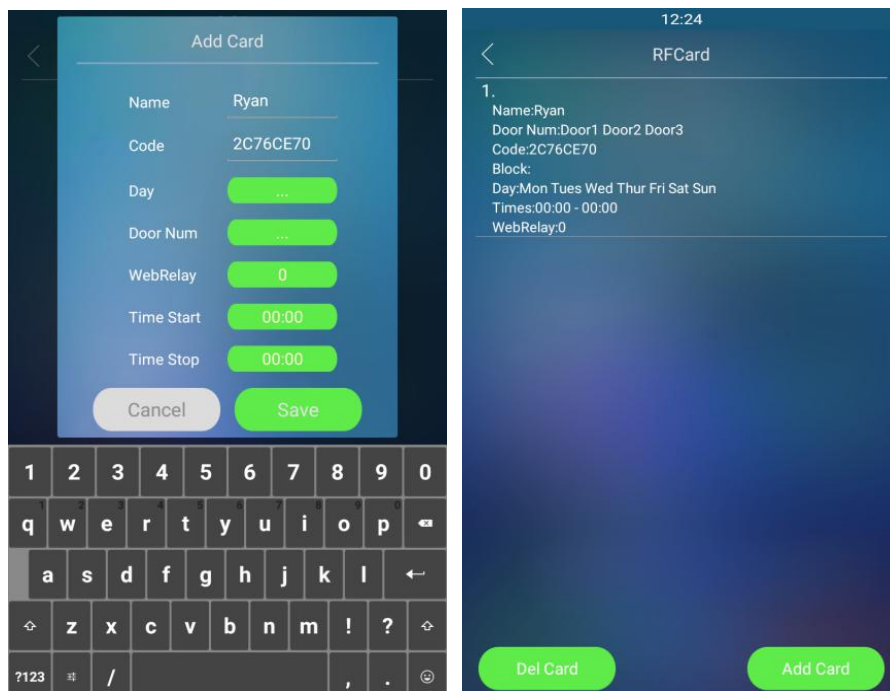
- **Web Relay Extension:** enter the relay extension information, which can be a SIP Account user name of an intercom device such as an indoor monitor, so that the specific action command will be sent when unlock is performed on the intercom device, while this setting is optional. And please refer to the example below:

<http://admin:admin@192.168.1.2/state.xml?relayState=2>.

## 12.3. Door Unlock Configuration

### 12.3.1. Configuring RF Card on the Door Phone

You can configure the RFID card directly on the device **RFID card** screen. for the door access while setting up the time schedule for the validity of the RFID card access along with the web relay that can be triggered with RIFD card etc.



**Note:**

- RFID card with 13.56 MHZ and 125 KHZ can be applicable to the door phone for the door access.

### 12.3.2. RF Card Configuration on the Web Interface

On the device web **Intercom > Card setting > Card Status** interface, you can not only configure the RF card one by one manually but also import or export the RFID card files to the device in batch in order to maximize card configuration efficiency.

**Card Status**

Card Status: Normal ▼ Apply

---

**Card Setting**

IC Key DoorNum:  DoorA  DoorB  DoorC

IC Key Day:  Mon  Tue  Wed  Thur  
 Fri  Sat  Sun  Check All

IC Key Time: 00 ▼ : 00 ▼ - 00 ▼ : 00 ▼

IC Key Tags: Frequency ▼ Frequency 0

IC Key Name:  IC Key Code

IC Key WebRelay: 0 ▼ Lift Floor Number 0 ▼

Obtain
+ Add

---

**Import/Export Card Data(.xml)**

Not selected any files
Select File
Import
Export

**Parameter Set-up:**

- **Card Status:** select "**Car Issuing**" in the field before adding the RFID card and change the status back to "**Normal**" after the card is added.
- **IC key DoorNum:** select the relay switch available for the RFID card door access.
- **IC key Day:** select the day (s) on which RFID card can be valid for the door access.
- **IC Key Time:** select the time span during a day you want the RFID card to be valid for the door access. among three options: **Allow Frequency and Forbidden** For example, if you select **Allowed** then the card is always valid for unlimited door access according to your setting. If you select **Frequency** you are required to set up the number of the RFID card access validity. If you select "**Forbidden**" then the RFID card will never be valid for the door access.
- **IC key Code:** find the RFID card code in the field.
- **Lift Floor Number:** enter the floor number if needed which is applied in the lift-summoning scenario. You can assign the specific floor number to a specific contact for the lift control. The floor number is "**0**" by default meaning not being authorized to be sent to any floor by the lift. If "**1**" is selected, then you or visitors are allowed to be sent to the first floor by lift. While the floor number range is from **0-128**.
- **IC Key WeRelay:** enter the specific number of web relay from **0-50** so that the relay can be triggered using RFID card for door access. If "**0**" is selected, it means you or visitors are not allowed to be sent to the specific floor using lift.

**Note:**

- It only supports .xml format file and the number of cards to be imported each time is 6,000 maximum.

### 12.3.2.1. Editing RFID cards

If you want to change or adjust your RFID card configurations, you can edit or delete the configured RFID cards one by one or in batch on the web **Intercom > Card setting > Door Card Management** interface.

**Door Card Management**

<input type="checkbox"/> Index	Name	Code	Block	Relay	WebRelay	FloorNum
<input checked="" type="checkbox"/> 1		2C76CE70		1	0	0
<input checked="" type="checkbox"/> 2		D4FAE432		1	0	0
<input type="checkbox"/> 3						
<input type="checkbox"/> 4						
<input type="checkbox"/> 5						
<input type="checkbox"/> 6						
<input type="checkbox"/> 7						
<input type="checkbox"/> 8						
<input type="checkbox"/> 9						
<input type="checkbox"/> 10						

1/1

### 12.3.2.2. RF Card Code Format Selection

If you want to integrate with the third party intercom system in terms of RF card door access, you can change the RF card code format to be identical with that applied in the third party system on device web **Intercom >**



Advanced > RFID interface.

**RFID**

RFID Display Mode:  IDCARD Display Mode:

**Parameter Set-up:**

- **RFID Display Mode:** select the card code format for the for **IC card** for the door access among five format options: **8H10D; 6H3D5D(W26); 6H8D; 8HN; 8HR**. The card code format is 8HN by default in the door phone.
- **ID Card Display Mode:** select the card format for the **ID Card** for the door access among five format options: **8H10D; 6H3D5D(W26); 6H8D; 8HN; 8HR**. The card code format is 8HN by default in the door phone

### 12.3.3. NFC and Felica Card Setting

NFC and Felica card are the two type of Cards that need to be enabled before you can use them as these two type of cards are not so frequently used as opposed to the conventional RF card such as IC card and ID cards. To enable or disable the cards on device web **Intercom > Card Setting** interface.

**Card Type Support**

NFC Enable:  Felica Enable:

**Note:**

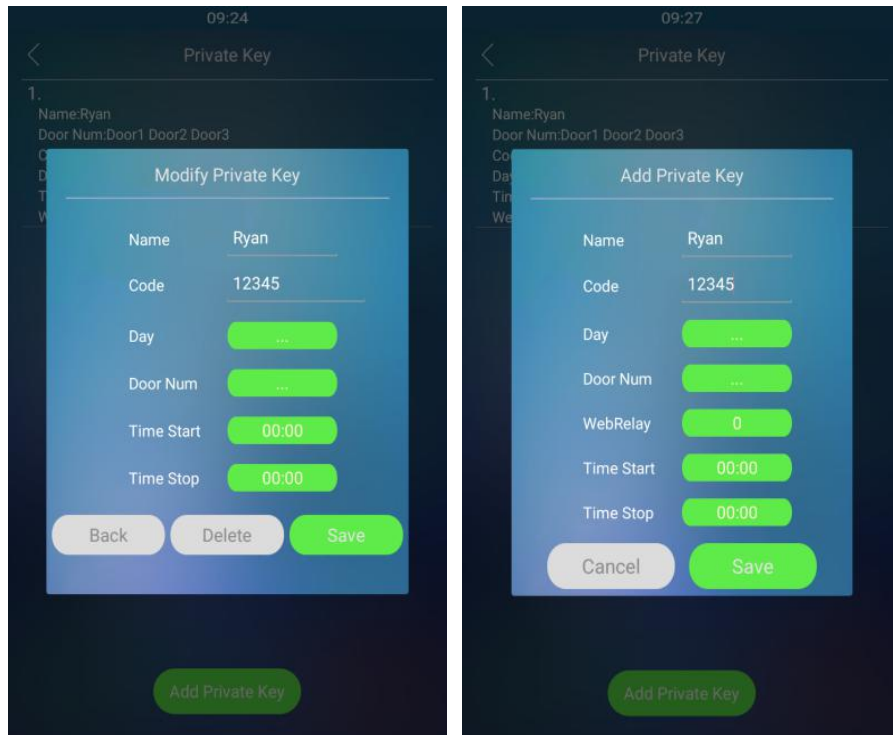
- As these two types of cards are in conflict with each other when being applied at the same time, therefore either one type of card should be disabled.

### 12.3.4. Door Unlock by PIN Code

PIN code for the door access is divided into Public PIN code and Private PIN code. Private PIN code is personalized PIN code configured for the individual resident while Public PIN code is configured and shared by residents living in the same building or in the same community.

#### 12.3.4.1. Configuring Private PIN Code on the Device

You can create Private PIN code on the device **LockPasswd** screen while setting up the time schedule for the validity of the PIN Code during a certain time span you scheduled. More over you can also set up the rely and web relay to be triggered by the configured PIN code for the door access.



**Parameter Set-up:**

- **Name:** enter the Name for the Private PIN code for identification.
- **Code:** create the PIN code to your preference for the door access.
- **Day:** set the day on which the PIN code can be valid for door access. For example, you can set the PIN code to be valid day from Monday to Sunday, or any during the week.
- **Door Num:** select the location-based relay to be triggered by the PIN code for the door access.
- **Web relay:** select the web relay that can be triggered by the PIN code.
- **Time Start:** set the start time for the validity of the PIN code during a day.

- **Time Stop:** set the end time for the validity of the PIN code during a day.

### 12.3.4.2. Private PIN Code Configuration on the Web Interface

Private PIN code as one type of door access can be configured individually or in batch on the web **Intercom > Privatekey > Private Key Setting** interface where you can create and schedule the validity of Private PIN one by one for the users or import or export the PIN code files in batch if needed.

**Private Key Setting**

PKey DoorNum  DoorA  DoorB  DoorC

PKey Day  Mon  Tue  Wed  Thur  
 Fri  Sat  Sun  Check All

PKey Time  :  -  :

PKey Name

PKey Code

#### Parameter Set-up:

- **PKey DoorNum:** select relay switches (**Door A; Door B; Door C** ) to be triggered by the PIN Code you created for the door access.
- **PKey Day:** select the day (s) on which private PIN code can be valid for the door access. For example, you select **Check All** if you want PIN code to be valid through out the week, or you can select specific day on which the PIN code can be valid.


- **PKey Time:** select the time span during a day you want the private PIN code to be valid for the door access.
- **PKey Name:** enter the Private PIN code name for identification, for example, you can enter user name as PIN code name indicating the PIN code ownership.
- **PKey Code:** enter the PIN code number to your preference.

### 12.3.4.3. PIN Code Import & Export on the Web Interface

When the PIN codes becomes so many that you cannot afford to set them up one by one manually, you can manage PIN codes in batch by importing the PIN codes the device. Meanwhile, you can export the existing PIN code file in the device if needed. To do the configuration on device web **Intercom > Privatekey > Import/Export Private Key(.xml)** interface.



However, you are required to set up the parameters properly in the PIN code file by referring to the data format and sequence in .xml PIN code files exported out before the import can be made successfully.

 **Note:**

- PIN code files to be imported should be in .xml format otherwise it will show **"File Format Error"**, while the PIN code files to be exported is in .tgz file format.

### 12.3.4.4. PIN Code Modification on the Web Interface

If you want to modify the PIN code settings such as PIN code name, PIN code validity time schedule, rearrange the relay switches to be triggered by the PIN code or delete the PIN code, you can modify the setting properly according to your need on the web **Intercom >Privatekey > Private Key Management** interface.

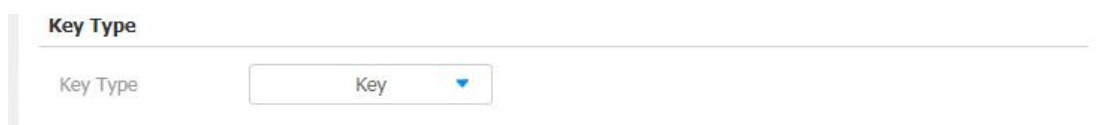
**Private Key Management**

<input type="checkbox"/> Index	Name	Code	Relay
<input checked="" type="checkbox"/> 1	Ryan	12345	123
<input type="checkbox"/> 2			
<input type="checkbox"/> 3			
<input type="checkbox"/> 4			
<input type="checkbox"/> 5			
<input type="checkbox"/> 6			
<input type="checkbox"/> 7			
<input type="checkbox"/> 8			
<input type="checkbox"/> 9			
<input type="checkbox"/> 10			

1/1

### 12.3.4.5. PIN Code Access Type Setting

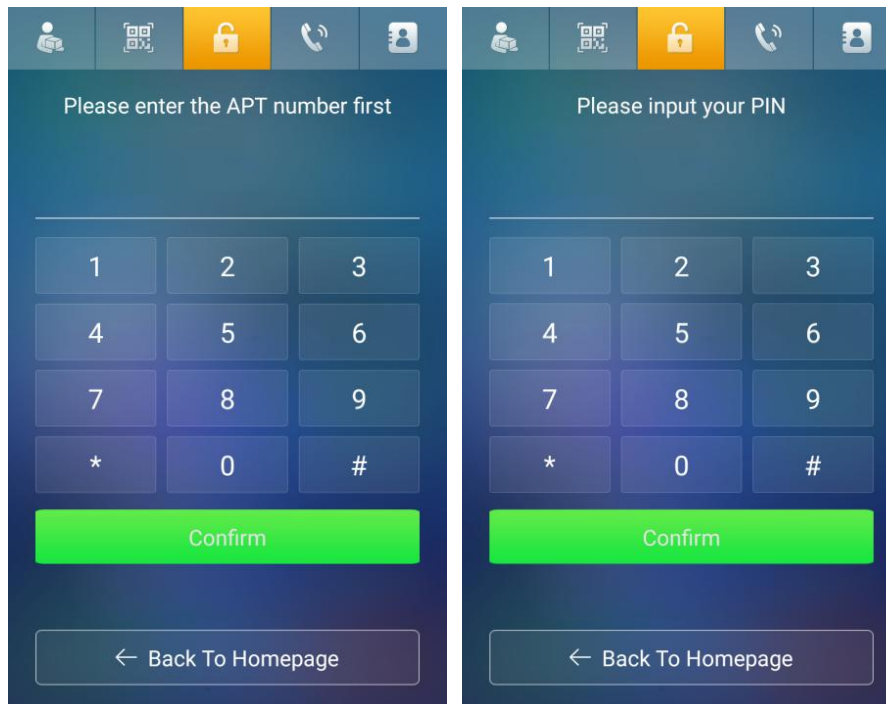
You can directly enter the correct PIN code for the door access, and you can also require visitor to enter the correct Apartment number first before entering the PIN code if needed. To do this configuration on device web **Intercom > Privatekey > Key Type** interface.



#### Parameter Set-up:

- **Key Type:** select PIN code access type between two options: **"Key"** and **"APT#+Key"**. if you select **"Key"** option, the PIN code screen will display the prompt **"Please input your PIN"** and you only need to enter the PIN code for the door access. And if you select **"APT#+Key"** the screen will display the prompt **"Please enter the APT number first"**, and you need to enter Apartment number before entering the correct PIN code.

Please see the picture below:

**Note:**

- **APT+Key** can only be applicable when the device is added to the Akuvox SmartPlus.

## 12.3.5. Public PIN Code Configuration

### 12.3.5.1. Public PIN Code Configuration on the Device

You can configure the Public PIN code directly on the device **Password** screen for the door access. In the mean time, you can also modify the public PIN code if needed.



05:36

< Password

Project Passwd Public Key Passwd

Public Key Passwd

Old Passwd Old Passwd

New Passwd New Passwd

Passwd Confirm New Passwd

Save

**Note:**

- Public PIN Code created on the device can not be valid until the PIN code function is turned on on the device web interface.

**Tip:**

- Please enter the default PIN code is null in the **Old Passwd** field when you try to set up the PIN code for the first time.

### 12.3.5.2. Public PIN Code Configuration on the Web Interface

On the device web **Intercom > Basic > Password** interface, you are allowed to configure a total of three sets of public PIN code and to set the PIN code digit according to your need. And you need to enable the public PIN code function before the PIN codes can be valid for the door access.

The screenshot shows a web interface titled "Password" with the following configuration options:

PublicKey Enable	OFF	PublicKey Bits Limit	Default(8 Bits)
PublicKey_0	77777777	PublicKey_1	
PublicKey_2		ProjectKey	9999

#### Parameter Set-up:

- **PublicKey Enable:** enable the Public PIN code function by click "on" in the field. Public PIN code door access is disabled by default .
- **PublicKey Bits Limit:** set the number of digits for the Public PIN code among 4 options: 4-digit, 5-digits, 6-digit, 7 digit and 8-digit which is number of digit by default.For example "77777777"
- **PublicKey\_0/1/2:** enter the Public PIN Code to your preference. You can set up three sets of public PIN code if need.

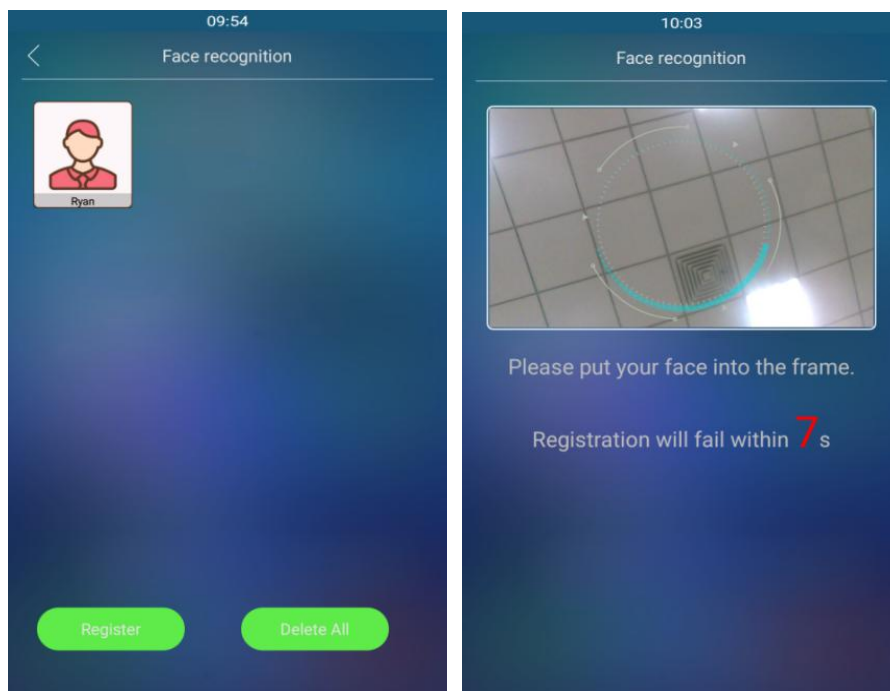
### 12.3.6. Unlock by Facial Recognition

R29 series offer you a convenient door access option through facial recognition, which allows you to enjoy a contact-free/ touch-free door

access without entering the PIN code physically or using the card for the door access.

### 12.3.6.1. Facial Recognition Configuration on the Device

If you want to access the door by facial recognition, you can configure the facial recognition directly. Moreover, you can modify the the facial recognition configuration on the device **Face** screen if needed.



### 12.3.6.2. Basic Facial Recognition Configuration on the Web Interface

R29 series door phone allow you to adjust facial recognition accuracy, recognition intervals according to your actual need. And you can also

improve the recognition quality and user experience through the basic facial recognition setting on device web **Intercom > Face > Face Basic** interface.

The screenshot shows the 'Face Basic' configuration page. It contains several settings:

- Face Recognition:** Set to 'Enable'.
- Offline Learning:** Set to 'Enable'.
- Recognize Option:** Set to 'Normal'.
- Tips When Succeed:** Set to 'Default'.
- Antispoofing Option:** Set to 'Normal'.
- Facial Recognition Interval:** Set to '5'.
- Recognition Tips:** Text input field containing 'Please take your mask'.
- OpenDoor Succeeded Tips:** Text input field containing 'Welcome, please wear your mask'.
- OpenDoor Failed Tips:** Text input field containing 'OpeningFailed'.

#### Parameter set-up:

- **Face Recognition:** click on **Enable** to turn on the facial recognition function. Facial recognition is enabled by default.
- **Recognize Option:** click to select the facial recognition accuracy level among four options: **Low, Normal, High, Highest**. For example, if you select **Highest** then there will be the least possibility that someone else will be mistaken for you by mistake or in another way round in the facial recognition.
- **Anti-spoofing Option:** select Anti-spoofing level among four options: **Low, Normal, High, Highest**. For example, if you select "**Highest**" then there will be the least possibility that the device will be fooled by digital images or the pictures of any kinds.
- **Facial Recognition Interval:** select time interval between every two facial recognition from 1-8 minutes. For example, if you select "**5**" then you have to wait for 5 minutes. before you are allowed to perform the facial

recognition again.

- **Offline Learning:** select **Enable** if you want to improve the device recognizing capability, focusing on the major facial characteristics while sidelining the minor changes occurred to your face. Facial recognition accuracy improves as the number of facial recognition increases.
- **Recognition Tips:** customize the tips which will be shown up when unit detects a face.
- **OpenDoor Succeeded Tips:** customize the tips which will be shown up when the relay triggered by face recognition successfully.
- **OpenDoor Failed Tips:** customize the tips which will be shown up when the relay triggered by face recognition failed.

### 12.3.6.3. Facial Recognition Improvement

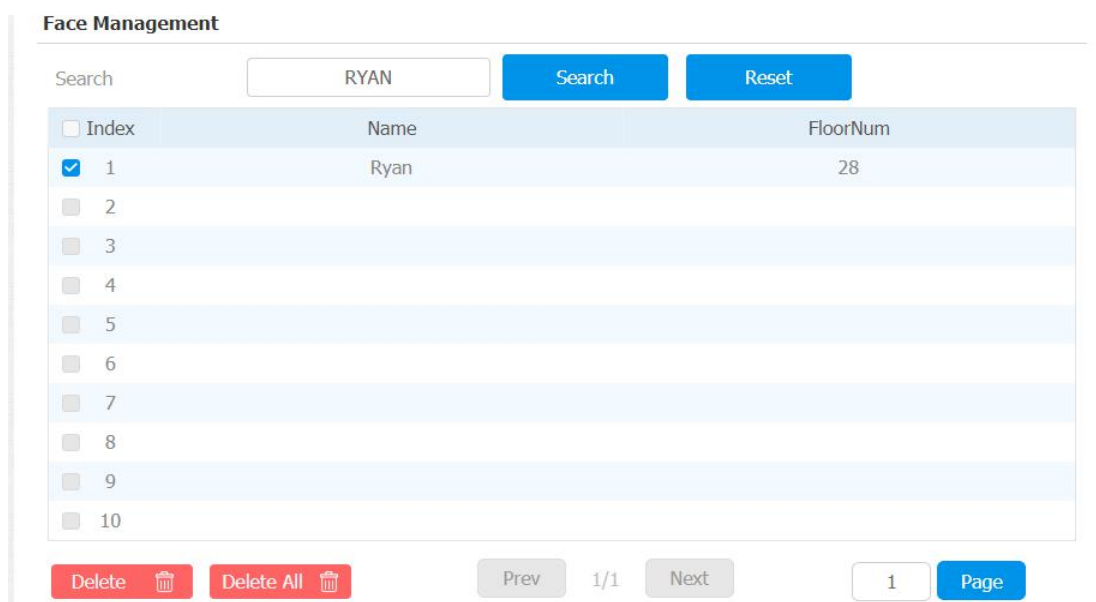
If you want to improve the facial recognition accuracy and user experience, you can do it by allowing your data and debug information to be uploaded to Akuvox Cloud. To do the configuration on device web **Intercom > Face > Face Experience Improvement** interface.



The screenshot shows the 'Face Experience Improvement' configuration page. It features a dropdown menu for 'Face Experience Im...' currently set to 'Disable'. Below it, there are three input fields for 'Export Log' with values '2020', '8', and '1'. A blue 'Export' button with a download icon is positioned to the right of these fields.

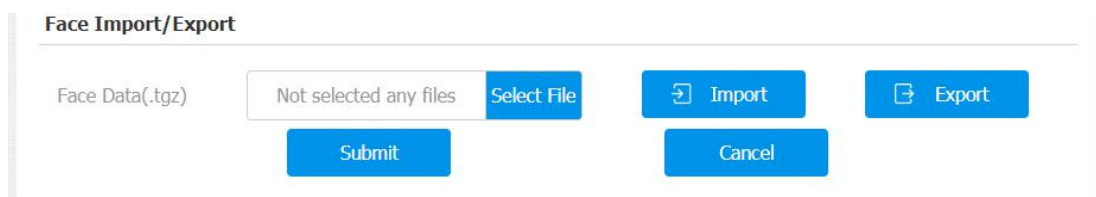
### 12.3.6.4. Facial Recognition Data Management

You can search and find your facial data collected in the device or you can also delete the data separately or in batch if needed on device web **Intercom > Face > Face Management** interface.



### 12.3.6.5. Facial ID data Import&Export

R29 series support facial ID data to shared among Akuvox R29 series door phones through import and export on device web **Intercom > Face > Face Import/Export** interface while you can also export the facial data out of the door phone and then import to a third party device.



**Note:**

- The facial ID data export format is .tgz while the import format is .zip.

### 12.3.6.6. Lift control via Facial Recognition

Facial recognition for the door access and also work with lift control, for example you can have the lift to take you to the floor you live at through the facial recognition. You can do the configuration on device web **Intercom > Face > Face Setting** interface.

The screenshot shows the 'Face Setting' configuration page. It contains three input fields: 'Building' with the value '1', 'Lift Floor Number' with a dropdown menu showing '2', and 'Room No.' with the value '609'. To the right of these fields is a blue 'Edit' button.

#### Parameter Set-up:

- **Building:** setup which building the resident lives in on the device screen when adding a new face. This option is only available on R29Z/R29ZL.
- **Lift Floor Number:** enter or edit the floor number for the lift control. For example if you set the floor number at "28" then the lift will send you to 28th floor automatically. However, the floor number must be corresponded to the specific contact.

- **Room No.:** setup correct room number for the resident on the device screen when adding a new face. This option is only available on R29Z/R29ZL.

### 12.3.7. Unlock by QR Code

QR code is another option for door access. If you want to apply QR code access, you need to enable the QR code function on device web **Intercom > Relay > Open Relay via QR** interface.



**Note:**

- The function should work with Akuvox cloud. For more information, please contact Akuvox technical support.

### 12.3.8. Unlock by Bluetooth

You can also gain the door access by mobile phone with Bluetooth which is used together with Akuvox SmartPlus. You can shake the mobile phone closer to the door phone for the door access. To configure bluetooth on device web **Intercom > BLE > BLE Basic** interface.



**BLE Basic**

BLE Enable	<input type="text" value="Disabled"/>	BLE Mode	<input type="text" value="Central"/>
Rssi Threshold	<input type="text" value="72"/>	(-85~-50db)	
Delay	<input type="text" value="5"/>	(Sec)	

### Parameter Set-up:

- **BLE Enable:** enable or disable the bluetooth function. Bluetooth is turned off by default. On R29Z/R29ZL it is enabled by default.
- **BLE Mode:** select "**Central**" mode to enable the door phone to able to receive bluetooth signal. BLE mode is "**Central**" by default.
- **Rssi Threshold:** select the signal receiving strength from -85~-50db in absolute terms, The higher value it is , the greater strength it has. The default value is 72db in absolute terms.
- **Delay:** select the time interval between the every two Bluetooth door accesses.

### 12.3.9. Unlock by HTTP Command on Web Browser

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

Open Relay via HTTP

Enable	<input type="text" value="OFF"/>	UserName	<input type="text"/>
Password	<input type="password" value="....."/>		

**Parameter Set-up:**

- **Enable:** enable the HTTP command unlock function by clicking on on **Enable** field.
- **UserName:** 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>

**Note:**

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

## 12.3.10. Unlock by Exit Button on the Door

When you need to open the door from inside using the Exit button installed by the door, you can configure the door phone Input A/B/C to trigger the three relay switches maximum for the door access on device web **Intercom** > **Input** > **Input A/B/C** interface.

Input A			
Input Service	Enable	Trigger Option	Low
Action To Execute	<input type="checkbox"/> FTP <input type="checkbox"/> Email <input type="checkbox"/> HTTP <input type="checkbox"/> TFTP		
Http URL			
Action Delay	0	(0~300Sec)	
Open Relay	RelayA	Door Status	DoorA: High

### Parameter Set-up:

- **Input service:** select " **Enable** " to be able to use the Input function.
- **Trigger Option:** select the trigger options according the actual operation on the exit button.
- **Action To Execute:** select the method to carry out the action among four options: FTP, Email, HTTP, TFTP.
- **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.

- **Open Relay:** set up relays to be triggered by the actions.
- **Door Status:** display the status of input signal.



**Note:**

- R29Z/R29ZL has only 2 Input interfaces.

### 12.3.11. Unlock by Reception Icon

In the building mode, R29 series door phone provide residents and visitors a quick door access by pressing the the **Reception** on the home screen of the door phone. To do the configuration on device web **Intercom > Key/Display > Reception Action In Building** interface.

**Reception Action In Building**

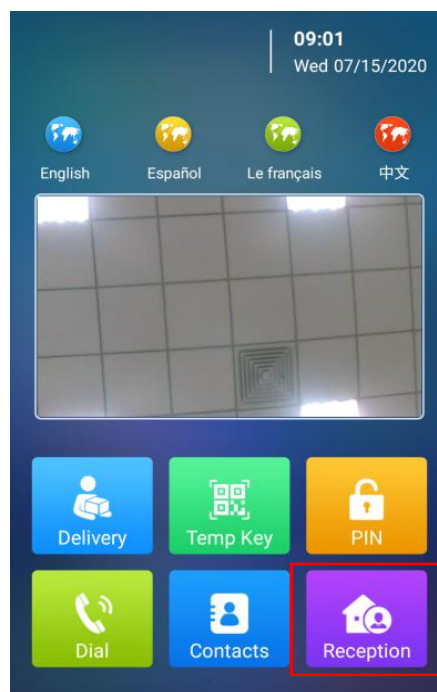
Dial Type	<input type="text" value="Default"/>	Open Relay	<input type="text" value="None"/>
Action To Execute	<input type="checkbox"/> HTTP		
Http URL	<input type="text"/>		

#### Parameter Set-up:

- **Dial Type:** select the SIP account for the application. If you select "**default**" then account one will be selected automatically.

- **Open Relay:** select the relay(s) to be triggered by pressing the Reception Icon.
- **Action To Execute:** check HTTP option. When this feature is triggered, the door phone will send the HTTP command to the third party system.
- **HTTP URL:** enter the URL command to be sent for the door access. For example:

<http://192.168.35.127/fcgi/do?action=OpenDoor&UserName=admin&Password=12345&DoorNum=1>



### 12.3.12. Unlock by DTMF code

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

**DTMF**

Type	<input type="text" value="RFC2833"/>	How To Notify DTMF	<input type="text" value="Disabled"/>
DTMF Payload	<input type="text" value="101"/>		(96~127)

### Parameter Set-up:

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



#### Note:

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

### 12.3.13. DTMF White List

In order to secure the door access via DTMF codes, you can set up the DTMF whitelist on device web **Intercom > Relay > DTMF** interface so that only the

caller numbers saved in the door phone can use DTMF code to gain door access.

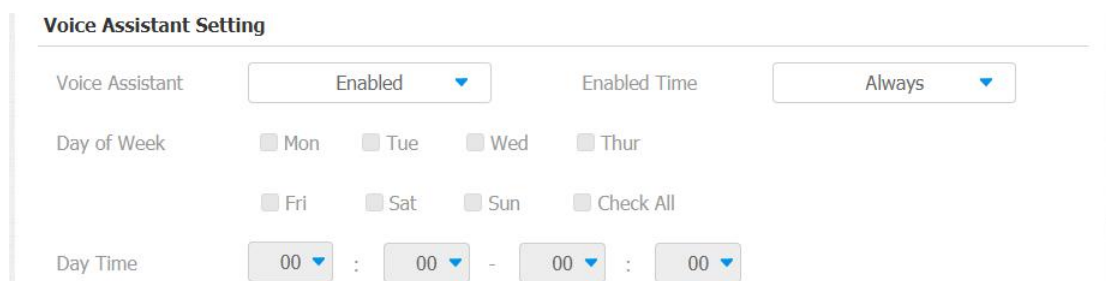


### Parameter Set-up:

- **Whitelist Enable:** select **Enable** or **Disable** to enable or disable the function. If enabled, only the caller number that are saved in the door phone can open the door via DTMF code and vice versa. For example, all the contact number in the phone-book are valid. If disabled, any numbers in and out of the white list are valid for DTMF code door access.

## 12.3.14. Unlock by Voice Assistant

Voice assistant in R29 series allow you to get door access without pressing the buttons on the device for convenience or for the hygiene concern etc. Once the a specific voice command is used, the voice assistance can help transfer the command into the specific action for the door door access. To do the configuration on device web **Intercom > Basic > Voice Assistant Setting** interface.

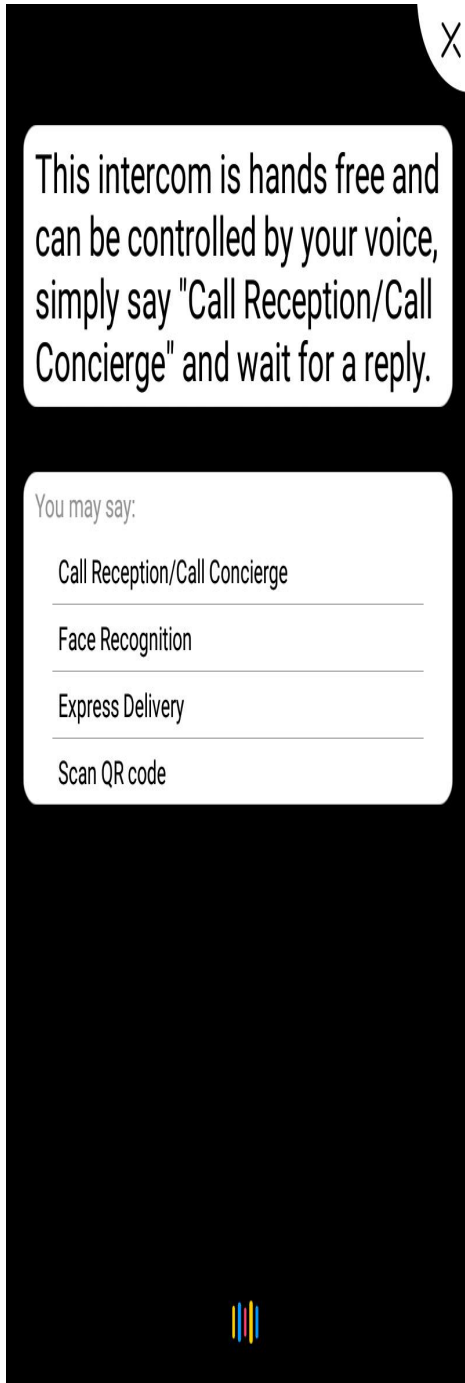


**Parameter Set-up:**

- **Voice Assistant:** enable the voice assistant function if you want to apply the function.
- **Enable Time:** select between the two options "**Always**" and "**Schedule**". If you select "**Always**" the voice assistant will be always enabled and if you select "**Schedule**" the voice assistant will be valid according to schedule you set up.
- **Day of Week:** select the day(s) on which the voice assistant is valid, or you can select "**Check All**" when you want the function to be valid through out the week.
- **Day Time:** select the **start time** and **end time** for the validity of the voice assistant.

**The voice assistant function on the device is shown as below:**





<p><b>Call Reception/Call Concierge</b></p>	<p>This voice command is used to call to Reception or concierge for the door access as the voice assistant will automatically initiate the call using the configured number.</p>
<p><b>Face recognition</b></p>	<p>This voice command helps to skip to face recognition on the home screen for the door access.</p>
<p><b>Express Delivery</b></p>	<p>This voice command helps you to skip to the dial screen where you are required to scan the QR code in front the camera or the enter the temporary PIN for the door access.</p>
<p><b>Scan QR code</b></p>	<p>When this voice command is used, the screen will skip to the dial screen where you are required to hold the QR code up to the camera for the door access.</p>

## 12.3.15. Body Temperature Measurement for Door

### Access

R29 series provide you with an optional body temperature measurement function designed to be applied in the situation where the measurement becomes necessary for the safety of the residents and visitors etc. Residents and visitors are required to go through temperature measurement along with optional mask detection check before they are allowed for the door access.

### 12.3.15.1. Body Temperature Measurement Configuration

You can configure the body temperature measurement function on device web **Intercom > Body Temperature > Measuring Body Temperature** interface in terms of defining the normal temperature as well as making schedule for the validity of the function etc.

### Measuring Body Temperature

Mode

Mask Detection

Temperature Unit

Normal Body Tempe...  (Below 99.14 °F)

(If the detected temperature is lower than 93.2 °F, the device will prompt low temperature, please try again later)

Action To Execute  SIP/IP Call

SIP/IP Call Number

Open Relay  DoorA  DoorB  DoorC

Day  Mon  Tue  Wed  Thur

Fri  Sat  Sun  Check All

Time  :  -  :

### Parameter Set-up:

- **Mode:** select either **"Forehead"** mode or **"Wrist"** mode for temperature measurement according to your need.
- **Mask Detection:** select **"Enable"** or **"Disable"** to turn on or turn off the mask detection. When enabled, the device will check if the visitor is wearing a mask or not while reminding the visitor with the announcement **"please wear a mask"** while visitors wearing mask will be prompted either **"Keep face in the frame"** or **"Keep wrist close to the sensor"** depending on the mode that is selected. Warning alarm will be triggered when the body temperature measured is detected higher than the defined normal body temperature.
- **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 37.3 degree Celsius as the normal temperature, then any body temperature measured higher than 37.3

degree Celsius will be deemed as abnormal temperature, while the temperature lower than 34 degree Celsius will be deemed as low body temperature.

- **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 is 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 box in the **Action to Execute** field.
- **Open Relay:** select the relay switches to be triggered.
- **Day:** select the day on which the relay(s) is valid for the application. Or you can select "**Check All**" option to make the application valid throughout a week.
- **Time:** select the start time and end time for the validity of the application during a day.

### 12.3.15.2. Ambient Temperature Configuration

In order to offset the minor variations on the temperature as affected by the ambient temperature in the different places where the device is installed or in the different time of a day, you are required to configure the temperature setting on the basis of time segments during a day on device web **Intercom > Body Temperature - Ambient Temperature Setting** interface.

**Ambient Temperature Setting**

ID	Start Time	End Time	Ambient Temperature
1	02 : 00	08 : 00	25.0 (10~40°C)
2	08 : 00	14 : 00	25.0 (10~40°C)
3	14 : 00	20 : 00	25.0 (10~40°C)
4	20 : 00	02 : 00	25.0 (10~40°C)

**Parameter Set-up:**

- **Start Time/End Time:** select the start time and end time temperature by referring to the actual temperature measured at the time segments ranging from 10- 40°C degree Celsius. For example, when you divide the time into four time segments, then each of the time segments will be six hours (24 hours a day), while the end time of one segment should be the start time of the next time segment. You can divide the time segments according to your need.
- **Ambient Temperature:** enter the ambient temperature degree. Accuracy can be ensured for the actual temperature value within the range from 10- 40 degree Celsius .

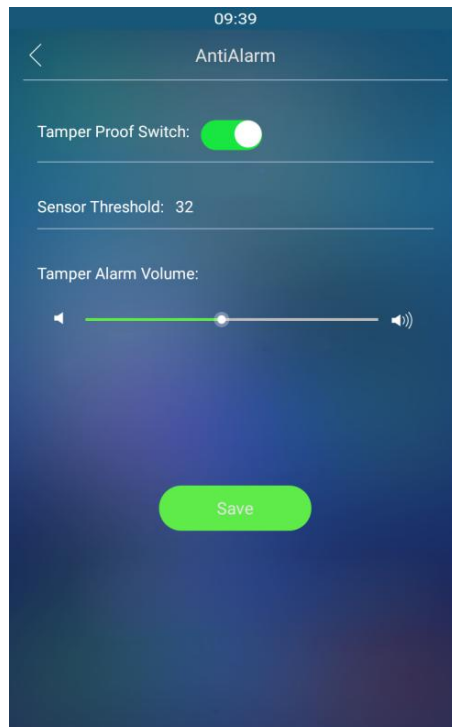
## 13. Security

### 13.1. Tamper Alarm Setting

Tamper alarm function serves as a protection against any unauthorized removal of the devices by triggering off the temper alarm while sending out calls to the designated location. Tamper alarm will be triggered off when the door phone changes its gravity value as opposed to its original gravity value set up when the device is installed.

#### 13.1.1. Tamper Alarm Configuration on the Device

Tamper alarm can be conveniently set up and adjusted directly on the door phone **Temper Alarm** screen. You can set up the gravity value as well as the adjusting the gravity sensor sensitivity according to your actual need.



### 13.1.2. Tamper Alarm Configuration on the Web Interface

You can also set up the temper alarm function in terms of switching on the function and setting up the gravity sensor sensitivity to suit your need on device web **Intercom > Advanced > Tamper Alarm** interface.



#### Parameter Set-up:

- **Tamper Alarm:** click to select "ON " in the Tamper Alarm field in order to

enable the anti-theft alarm function.

- **Gravity sensor Threshold:** set the threshold for the gravity sensory sensitivity. The lower the the value is, the higher the value will be. The gravity sensor value is 32 by default.

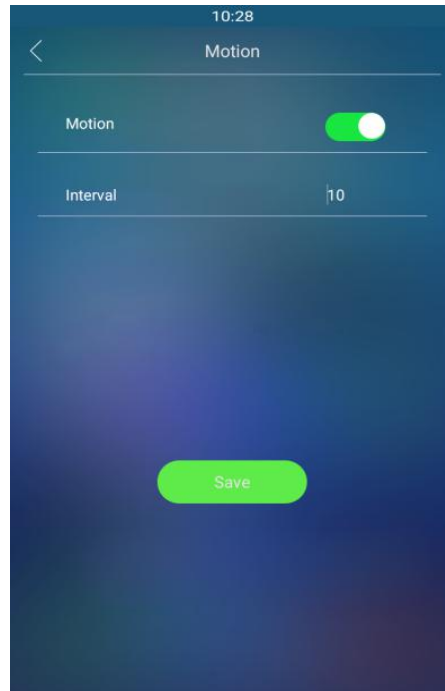
## 13.2. Motion Detection

Motion Detection is often used for unattended surveillance video and automatic alarm. The images collected by the camera at different frame rates will be calculated and compared by the CPU according to a certain algorithm. When the picture changes, if someone walks by, the lens is moved, the number obtained by the calculation and comparison result will exceed the threshold and indicate that the system can the corresponding processing is made automatically.

### 13.2.1. Motion Detection Setting on the Device

You can turn on the motion detection and set up the motion detection interval on the device **Motion** screen.





### Parameter Set-up:

- **Interval:** IR detector receives an event, delays the number of seconds set by interval before triggering motion. When triggering, it will determine whether the time when the IR received the event is within 3 seconds from the time when the trigger was triggered. Interval is 0 second, it will not trigger motion. If interval is 1-3 seconds, as long as the image movement is detected once in front of IR detector, motion will be triggered. If interval time over 3 seconds, for example, the interval is 10s, after the image movement is detected in front of IR detector, the image movement is detected again within 7s-10s, that is, motion is triggered.

### 13.2.2. Motion Detection Setting on the Web Interface

On the device web **Intercom > Motion > Motion Detection Options** interface, you can not only configure the time interval but also the motion detection sensitivity and notification type when the motion detection action is triggered.

**Motion Detection Options**

Enable	<input type="text" value="OFF"/>	Notification	<input type="text" value="FTP"/>
Timing Interval	<input type="text" value="10"/> (0~65535Sec)		<input type="text" value="FTP"/>
Detection Accuracy	<input type="text" value="20"/>		<input type="text" value="EMAIL"/>

### Parameter Set-up:

- **Enable:** click on "ON" "OFF" to enable or disable the motion detection function.
- **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 smaller value it is , the greater sensitivity. the default detection accuracy value is "20".
- **Notification:** select the notification type between FTP and Email. If you select "FTP" than the notification will be sent in FTP to a designated serve while if you select " Email" then the notification will be sent in the form of emails when motion detection action is triggered.

## 13.3.Security Notification Setting

### 13.3.1. Email Notification Setting

If you want to receive the security notification via email, you can configure the Email notification on the web **Intercom > Action > Email Notification** interface properly.

Email Notification			
Sender's email addr...	<input type="text"/>	Email SendName	<input type="text"/>
Receiver's email addr...	<input type="text"/>	Email RecvName	<input type="text"/>
SMTP server address	<input type="text"/>	Port	<input type="text"/>
SMTP user name	<input type="text"/>	SMTP password	<input type="password"/>
Email subject	<input type="text"/>		
Email content	<input type="text"/>		

#### Parameter Set-up:

- **Sender's email address:** enter the sender's email address from which the email notification will be sent out.
- **Email SendName:** enter the name of the email sender.
- **Receiver's email address:** enter the receiver's email address.
- **Email RecvName:** enter the 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 sender's email address.

- **SMTP password:** configure the password of SMTP service, which is same with sender's email address.
- **Email subject:** enter the subject of the email.
- **Email content:** compile the emails contents according to your need

### 13.3.2. FTP Notification setting

If you want to receive the security notification via FTP, you can configure the FTP notification on the web **Intercom - Action- FTP Notification** interface properly.

<b>FTP Notification</b> <input type="text"/>	
FTP Server <input type="text"/>	FTP User Name <input type="text"/>
FTP Password <input type="password"/>	FTP Path <input type="text"/>

#### Parameter Set-up:

- **FTP server:** enter the address (URL) of the FTP server for the FTP notification.
- **FTP User Name:** enter the FTP server user name.
- **FTP Password:** enter the FTP server password.

- **FTP Path:** enter the folder name you created in FTP server.

### 13.3.3. TFTP Notification Setting

If you want to receive the security notification via TFTP, you can configure the TFTP notification on the web **Intercom > Action > TFTP Notification** interface properly.



TFTP Notification

TFTP Server

Submit Cancel

#### Parameter Set-up:

- **TFTP server:** enter the address (URL) of the TFTP server for the TFTP notification

## 13.4. GDPR Setting

GDPR (**General Data Protection Regulation**) is used to encrypt the card data entered, if you want to better protect the card data you can set the GDPR function properly on the web **Intercom > Advanced > GDPR** interface.



GDPR

GDPR Enable

Submit Cancel

**Parameter Set-up:**

- **GDPR Enable:** click "ON" or "OFF" to enable or disable the GDPR function. If enabled, the card data will be encrypted automatically a card is being added and vice versa. GDPR function is "OFF" by default.

### Card Setting

IC Key DoorNum  DoorA  DoorB  DoorC

IC Key Day  Mon  Tue  Wed  Thur  
 Fri  Sat  Sun  Check All

IC Key Time  :  -  :

IC Key Tags

**IC Key Code**  0

IC Key WebRelay   0

## 14. Monitor and Image

### 14.1. Mjpeg Image Capturing

R29 series allow you to capture the Mjpeg format monitoring image if needed. You can enable the Mjpeg function and set the image quality on the web **Intercom > Advanced > Mjpeg Service** interface.

Mjpeg Service

Mjpeg Service Enable  Image Quality

#### Parameter Set-up

- **Mjpeg Service Enable:** switch "ON" or "OFF" in the Mjpeg Service Enable field to enable or disable the Mjpeg service.
- **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 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 door phone with

the IP address:192.168.1.104, you can Enter "http://192.168.1.104:8080/picture.jpg" on the web browser.

## 14.2.Live Stream

If you want to check the real-time video from the R29 series door phone, you can go to the the device web **Intercom > Live Stream** interface to obtain the real-time video or you can also enter the correct URL on the we browser to obtain it directly.



Enter the correct URL (**http://IP\_address:8080/video.cgi**) on the web browser if you want to obtain the real-time video directly with going to the web interface.





## 14.3. RTSP Stream Monitoring

R29 series support RTSP stream that allows intercom devices such as indoor monitor or the monitoring unit from the third party to monitor or obtain the the real time audio/ video (RTSP stream) from the door phone using the correct URL.

### 14.3.1. RTSP Basic Setting

You are required to set up RTSP function on device web **Intercom > RTSP > RTSP Basic** interface in terms of RTSP Authorization, authentication and password etc., before you are able to use the function.

RTSP Basic			
RTSP Enable	<input type="text" value="Enabled"/>	RTSP Authorization	<input type="text" value="Enabled"/>
RTSP User Name	<input type="text" value="admin"/>	RTSP User Password	<input type="text" value="....."/>
RTSP Authentication...	<input type="text" value="Digest"/>		

### Parameter Set-up:

- **RTSP Enable:** click on Enable and Disable in **RTSP Enable** field to turn on or turn off the RTSP function.
- **RTSP Authorization:** click on Enable and Disable in RTSP Authorization field to enable or disable 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 indoor monitor for authorization.
- **RTSP User Name:** enter the name used for RTSP authorization.
- **RTSP User Password:** enter the password for RTSP authorization.
- **RTSP Authentication Type:** select RTSP authentication type between "Basic" and "Digest". "Basic" is the default authentication type.

### 14.3.2. RTSP Stream Setting

You can select the video codec format for the RTSP stream for the monitoring and configure video resolution and bit-rate etc., based on your actual network environment on the web **Intercom > RTSP > RTSP stream** interface.

**RTSP Stream**

RTSP Video Codec:

---

**H.264 Video Parameters**

Video Resolution: <input type="text" value="VGA"/>	Video Framerate: <input type="text" value="25 fps"/>
Video Bitrate: <input type="text" value="1024 kbps"/>	Video Resolution2: <input type="text" value="VGA"/>
Video Framerate2: <input type="text" value="25 fps"/>	Video Bitrate2: <input type="text" value="512 kbps"/>

**Parameter Set-up:**

- **RTSP Video Codec:** select between two type of codec option: H.264 and Mjpeg according to your need.
  
- **Video Resolution:** select video resolutions among seven options: **QCIF, QVGA, CIF, VGA, 4CIF, 720P, 1080P**. The default video resolution is **720P**. and the video from the door phone might not be able to be shown in the indoor monitor if the resolution is set higher than **720P**.
  
- **Video Resolution2:** select video resolution for the second video stream channel. While the default video solution is **VGA**.
  
- **Video Framerate:** **25fps** is the video frame rate by default.
  
- **Video Framerate2:** **25fps** is the video frame rate by default for the second video stream channel.
  
- **Video Bitrate:** select video bit-rate among six options: **128 kbps, 256kbps, 512kbps, 1024kbps, 2048 kbps, 4096kpbs** according to your network environment. The default video bit-rate is **2048 kpbs**.

- **Video Bitrate2:** select video bit-rate among the six options for the second video stream channel. While the second video stream channel is **512 kpbs** by default.

**Note:**

- R29 series supports two video stream channels for H.264 codec video stream.

## 14.4. ONVIF

Real-time video from the R29 series door phone camera can be searched and obtained by the Akuvox indoor monitor or by the third party devices such as NVR (**Network Video Recorder**) you can configure the ONVIF function in the door phone web **Intercom > ONVIF** interface so that other device will be able to see the video from the door phone.

Basic Setting

Onvif Mode	<input type="text" value="Discoverable"/>	UserName	<input type="text" value="admin"/>
Password	<input type="password" value="....."/>		

**Parameter Set-up:**

- **Onvif Mode:** select "**Discoverable**" or "**Non- Discoverable**" to turn on or turn off the the ONVIF mode. If you select "**Discoverable**" then the video from the door phone camera can be searched by other devices. ONVIF mode is "**Discoverable**" by default.

- **UserName:** 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.

## 14.5. Door Phone Camera Exposure Adjustment

Door phone camera exposure can be adjusted on the web **Intercom > Camera > Camera Control** interface in order that indoor monitors or third part devices can obtain the video with improved quality.

**Camera Control**

Exposure Mode	<input type="text" value="ON"/>
Exposure Gain	<input type="text" value="4"/>

## Parameter Set-up

- **Exposure Mode:** select exposure mode among three options: " **OFF**", "**ON**", "**Auto**". If you select "**ON**" then you are allowed to set up **Exposure Grain** from **4** to **10**, the higher the grain value is, the brighter the video will be (the default grain value is "**4**"). If you select "**Auto**" then the camera video brightness will be changed along with the exposure grain changes due to ambient environment changes. the exposure mode is "**OFF**" by default.

# 15. Logs

## 15.1. 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 **Phonebook > Phonebook > Call Log** interface and export the call log from the device if needed.

The screenshot shows the 'Call Log' interface. At the top, there are filters for 'Call History' (set to 'All'), 'Active' (set to 'Enabled'), and an 'Export' button. Below these are date pickers for 'Time' (mm/dd/yyyy) and a 'Name/Number' search field with a 'Filter' button. The main area contains a table with the following data:

<input type="checkbox"/>	Index	Type	Date	Time	Local Identity	Name	Number
<input checked="" type="checkbox"/>	1	Received	2020-08-07	08:31:05	192.168.1.10 4@192.168.1.104	192.168.1.53	<a href="#">192.168.1.53</a> <a href="#">@192.168.1.53</a>
<input type="checkbox"/>	2						

At the bottom, there are buttons for 'Delete', 'Delete All', 'Prev', 'Next', and 'Page' (set to 1).

### 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.
- **Active:**select **“Enable”** or **“Disable”** to turn on or turn off the call log function.

- **Time:**select the specific time span of the call logs you want to search, check or export.
- **Name/Number:** select the “Name” and “ Number” options to search call log by the name or by the SIP or IP number.

## 15.2.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 web **Phone > Door log** interface.

The screenshot shows the 'Phone-DoorLog' interface. At the top, there is a title 'Phone-DoorLog'. Below the title, there are several controls: an 'Active' dropdown menu set to 'Enabled', an 'Export' button, a 'Status' dropdown menu set to 'All', a 'Time' range selector with two date input fields (mm/dd/yyyy), and a 'Name/Code' search input field with a 'Filter' button. Below these controls is a table with the following data:

<input type="checkbox"/>	Index	Name	Code	Type	Date	Time	Status
<input type="checkbox"/>	1	FaceKey	Ryan	Face	2020-07-31	09:55:01	Success
<input type="checkbox"/>	2	FaceKey	Ryan	Face	2020-07-31	09:54:56	Success
<input type="checkbox"/>	3	Unknown	33333333	Password	2020-07-31	09:02:07	Failed
<input type="checkbox"/>	4	Unknown	88888888	Password	2020-07-31	09:02:02	Failed
<input type="checkbox"/>	5	Unknown	2222	Password	2020-07-31	09:01:40	Failed

At the bottom of the interface, there are buttons for 'Delete', 'Delete All', 'Prev', 'Next', and 'Page' (set to 1).

### Parameter Set-up:

- **Active:** select “Enable ” or “ Disable ” to turn on or turn off the door log function.
- **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 door log by the name or by the PIN code.

## 16. Debug

### 16.1. System Log for Debugging

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

The screenshot shows the 'System Log' configuration page. It contains the following fields and controls:

- LogLevel:** A dropdown menu currently set to '3'.
- Export Log:** A blue button with a right-pointing arrow icon and the text 'Export'.
- Export Debug Log:** A blue button with a right-pointing arrow icon and the text 'Export'.
- Remote System Log:** A dropdown menu currently set to 'Disabled'.
- Remote System Ser...:** A greyed-out text input field.
- Submit:** A blue button at the bottom left.
- Cancel:** A blue button at the bottom right.

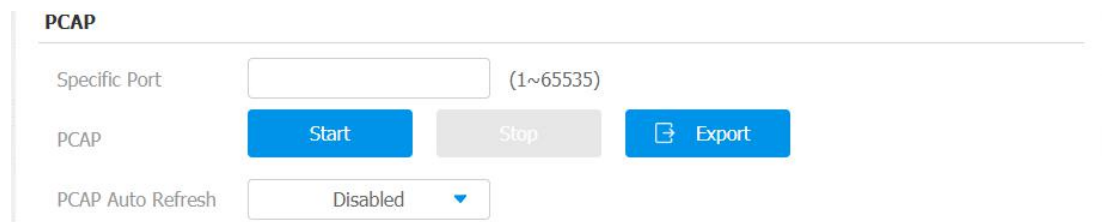
#### Parameter Set-up:

- **LogLevel:** select log levels from 1 to 7 levels. You will be instructed by Akuvox technical staff about the specific log level to be entered for debugging purpose. The default log level is "3". the higher the level is, the more complete the log is.
- **Export Log:** click the **Export** tab to export temporary debug log file to a local PC.
- **Export Debug Log:** click the **Export** tab to export debug log file to a local PC.

- **Remote System Log:** select "Enable" or "Disable" if you want to enable or disable the remote system log.
- **Remote System Server:** enter the remote server address to receive the the device log. And the remote server address will be provided by Akuvox technical support.

## 16.2.PCAP for Debugging

PCAP in R29 series door phone is used to capture the data package going in and out of the devices for debugging and troubleshooting purpose. You can set up the PCAP on the device web **Upgrade > Advanced > PCAP** interface properly before using it.



The screenshot displays the PCAP configuration interface. It includes a text input field for 'Specific Port' with a range indicator '(1~65535)'. Below this, there are three buttons: a blue 'Start' button, a grey 'Stop' button, and a blue 'Export' button with a download icon. At the bottom, there is a dropdown menu for 'PCAP Auto Refresh' currently set to 'Disabled'.

### Parameter Set-up:

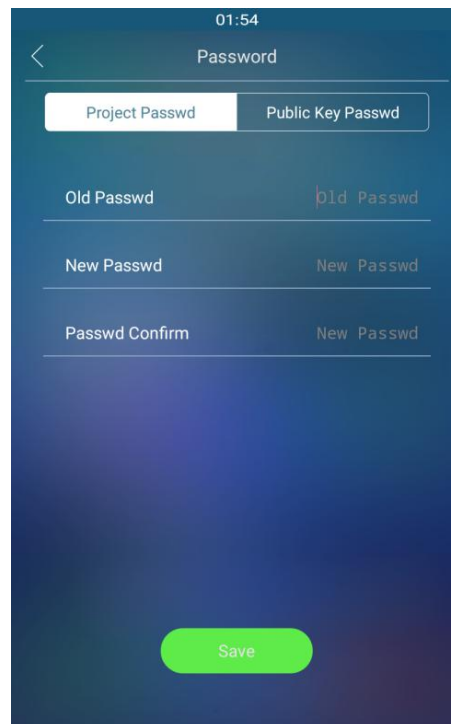
- **Specific Port:** select the specific ports from 1-65535 so that only the data packet from the specific port can be captured. You can leave the field blank by default.
- **PCAP:** click **Start** tab and **Stop** tab to capture the a certain range of data packets before clicking **Export** tab to export the data packets to you 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 packet even after the data packets reached its 50M maximum in capacity. If you set it as "**Disable**" the PCAP will stop data packet capturing when the data packet captured reached the maximum capturing capacity of 1MB.

## 17. Password Modification

### 17.1. Modifying Device Setting Password

Project passwords is what needs to be entered before you are allowed to enter the setting password, which enables you to enter the the device **Password** screen for the configuration and adjustment. You can change the Project password on the device directly.

**Note:**

- The initial project password is "9999", which can be considered as the old password when you modify the project password for the first time.

## 17.2. Modifying Device Web Interface Password

On the device web **Intercom > Basic > Password** interface, you can access and change both the project passwords and setting password if needed.

**Password**

PublicKey Enable	ON	PublicKey Bits Limit	Default(8 Bits)
PublicKey_0		PublicKey_1	
PublicKey_2		ProjectKey	9999
User Setting Key	3888		

### Parameter Set-up:

- **ProjectKey:** enter the four digit project new password to replace the old one. The initial project password is "9999"
- **User Setting Key:** enter the four digit setting password to replace the old one. The initial setting password is "3888"

## 18. Firmware Upgrade

Firmwares of different versions for R29 series door phone can be upgraded on the device web **Upgrade > Basic** interface.

### Upgrade-Basic

Firmware Version	29.30.2.13	Hardware Version	29.3.0	
Upgrade	<input type="text" value="Not selected any files"/>	<input type="button" value="Select File"/>	<input type="button" value="Submit"/>	<input type="button" value="Cancel"/>
Reset To Factory Setting	<input type="button" value="Submit"/>			
Reboot	<input type="button" value="Submit"/>			

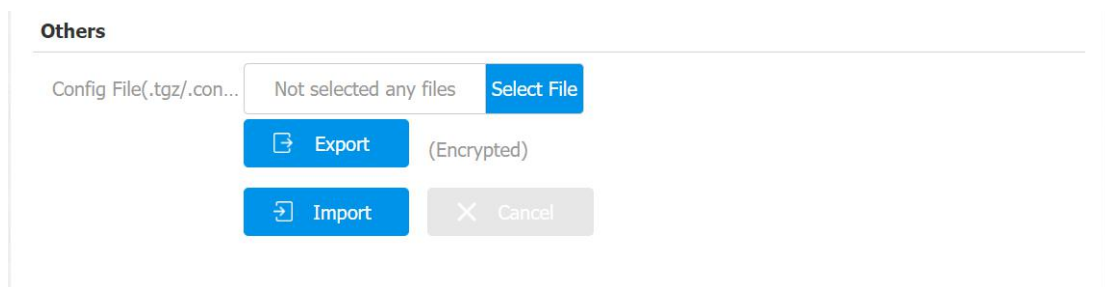
**Note:**

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

## 19. Backup

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

interface if needed.





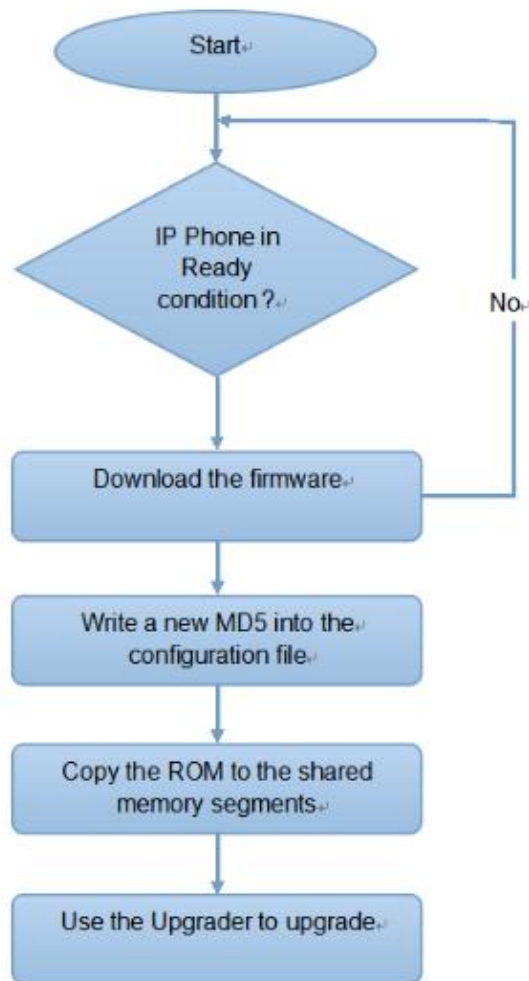
## 20. Auto-provisioning via Configuration File

Configurations and upgrading on R29 series door phone can be done on the web interface via one-time auto-provisioning and scheduled auto-provisioning via configuration files, thus saving you from setting up configuration needed one by one manually on the door phone.

### 20.1. Provisioning Principle

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

**Please see the flow chart below:**



## 20.2. Configuration Files for Auto-provisioning

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

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

- **General configuration provisioning:** a general file is stored in a server from which all the related devices will be able to download the same configuration file to update parameters on the devices. For example :

r000000000083.cfg.

- **MAC-based configuration provisioning:** MAC-based configuration files is used for the auto-provisioning on a specific device as distinguished by its unique MAC number. And the configuration files named with device MAC number will be matched automatically with the device MAC number before being downloaded for the provisioning on the specific device.



**Note:**

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

## 20.3.AutoP Schedule

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

**Automatic Autop**

Mode	Repeatedly	▼	
Auto Clear MD5	Disabled	▼	
Schedule	Sunday	▼	
	22	Hour(0~23)	0 Min(0~59)
Clear MD5	<a href="#" style="background-color: #007bff; color: white; padding: 5px 15px; text-decoration: none;">Submit</a>		
Export Autop Templ...	<a href="#" style="background-color: #007bff; color: white; padding: 5px 15px; text-decoration: none;"> Export</a>		

**Parameter Set-up:**

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

## 20.4.DHCP Provisioning Configuration

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

**Automatic Autop**

Mode Repeatedly

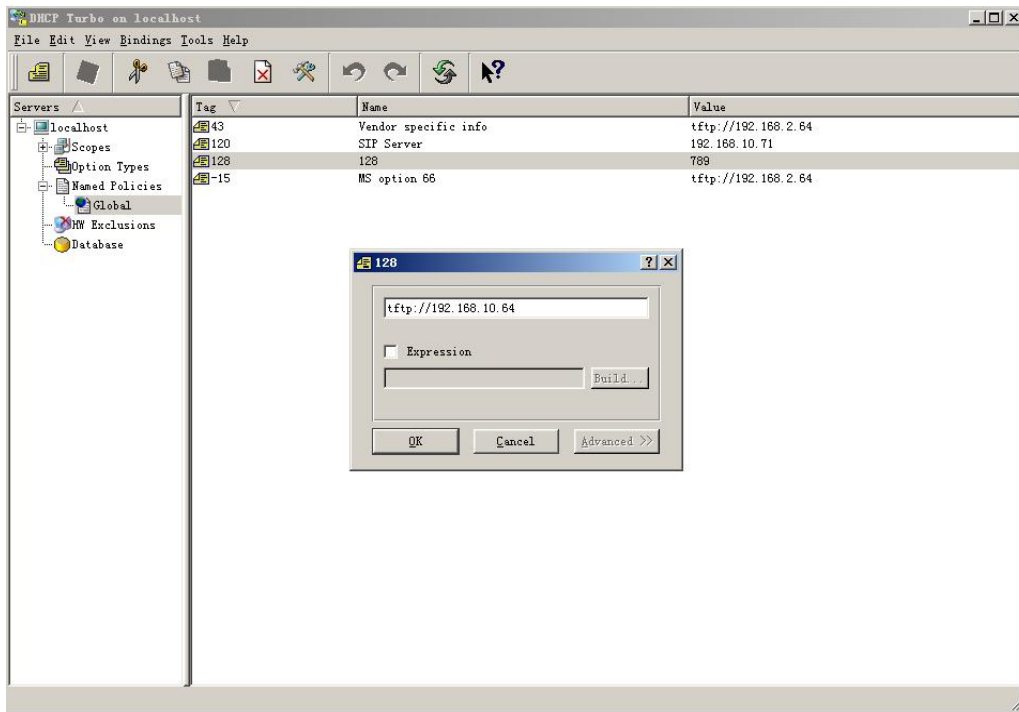
Auto Clear MD5 Disabled

Schedule Sunday

Hour(0~23)  Min(0~59)

Clear MD5 Submit

Export Autop Templ... Export



**Note:**

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

**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 "r0000000000xx.cfg" taking R29 as an example "r000000000029.cfg" ( 10 "zeros" in total while the MAC-based configuration file for the specific device provisioning is with the format "MAC\_Address of the device.cfg, for example "0C110504AE5B.cfg."

## 20.5. Static Provisioning Configuration

You can manually set up a specific server URL for downloading the firmware or configuration file on device web interface. If an autop schedule is set up, the door phone will perform the auto provisioning on a specific timing according to autop schedule you set up. In addition, TFTP, FTP, HTTP, and HTTPS are the protocols that can be used for upgrading the device firmware and configuration. To download the Autop template on **Upgrade > Advanced > Automatic Autop**, and setup Autop server on **Upgrade > Advanced > Manual Autop** interface.

**Automatic Autop**

Mode	<input type="text" value="Repeatedly"/>		
Auto Clear MD5	<input type="text" value="Disabled"/>		
Schedule	<input type="text" value="Sunday"/>		
	<input type="text" value="22"/>	Hour(0~23)	<input type="text" value="0"/> Min(0~59)
Clear MD5	<input type="button" value="Submit"/>		
Export Autop Templ...	<input type="button" value="Export"/>		

**Manual Autop**

URL	<input type="text" value="tftp://192.168.35.88"/>	User Name	<input type="text" value="admin"/>
Password	<input type="password" value="....."/>	Common AES Key	<input type="password" value="....."/>
AES Key(MAC)	<input type="password" value="....."/>	<input type="button" value="AutoP Immediately"/>	

### 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.

**Note:**

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

**Note:****Server Address format:**

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



**Tip:**

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

## 21. Device Integration with Third Party

## Device

### 21.1. Integration via HTTP API

HTTP API is designed to achieve an network-based integration between the third party device with the Akuvox intercom device such R29 series door phone. You can configure the HTTP API function on the web **Intercom > HTTP API** interface for the integration.

HTTP API			
HTTP API	Enabled	Auth Mode	WhiteList
User Name	admin	Password	.....
IP01		IP02	
IP03		IP04	
IP05			
<input type="button" value="Submit"/>		<input type="button" value="Cancel"/>	

#### Parameter set-up:

- **HTTP API:** select “**Enable**” or “**Disable**” to enable or disable the HTTP API function for the third party integration. For example, if the function is disabled any request to initiate the integration will be denied and be returned HTTP 403 forbidden status.
- **Auth Mode:** select among four options: “**None**” “**WhiteList**” “**Basic**”, “**Digest**” for authorization type, which will be explained in detail in the following chart.

- **User Name:** 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".
- **IP01-IP05:** enter the IP address of the third party devices when the "WhiteList" authorization is select for the integration.

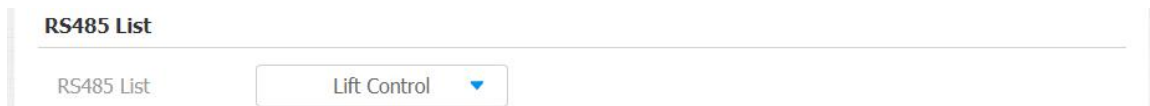
**Please refer to the following description for the Authentication mode**

NO.	Authorization Mode	Description
1	<b>None</b>	No authentication is required for HTTP API as it is only used for demo testing.
2	<b>Normal</b>	This mode is used by Akuvox developer only
3	<b>WhiteList</b>	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
4	<b>Basic</b>	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.
5	<b>Digest</b>	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".
6	<b>Token</b>	This mode is used by Akuvox developer only

## 21.2. RS485 Integration Mode Configuration

Integration between R29 series door phone and third party devices such as intercom device for door access and lift control should be configured in the device web interface before the integration can be made.

RS485 Integration mode should be configured properly on the door phone's web **Intercom > RS485 > RS485 List** interface before you can implement the integration between the door phone and the third party devices.



### Parameter Set-up:

- **RS485 List:** select integration mode among four Options: **None, OSDP, Dahua, Lift Control, Trump Tower Lift Ctrl.** The detail for the four options will be provided in the following chart.

NO.	Integration Mode	Description
1	<b>None</b>	If you select " <b>None</b> " then the RS485 integration will be disabled.
2	<b>OSDP</b>	If you Select " <b>OSDP</b> " Mode, then the integration communication between the R29 series door phone and the third party device is via OSDP protocol. You are required to check for the device integration protocol and make sure if that they use the same integration protocol.
3	<b>Dahua</b>	Dahua is originally manufacturer of the Dahua lift controller, which is also seen as an integration mode for the integration with the Dahua lift controller in the OEM project.
4	<b>Lift Control</b>	" <b>Lift control</b> " is seen as an integration with the third party lift controller in the OEM project. " Lift control" is also applicable to such lift controller such as "CHIYU"
5	<b>Trump Tower Lift Ctrl</b>	Trump Tower Lift Ctrl is also seen as a integration mode for the OEM project.



**Note:**

- Please consult with Akuvox technical support if you have any inquires on integration mode of any OEM lift controller integration project.

## 21.3. OSDP Setting

If you choose OSDP integration mode on device web **Intercom > RS485 > OSDP Advance Setting** interface, you can not only check for OSDP status but also obtain the authentication from the third party devices for various applications such as door access etc.

**OSDP Advance Setting**

Connect Status: Disconnected

OSDP Address: 1

Dummy Card Number: 0

Send By: OSDP

Buttons: Send, Submit, Cancel

### Parameter Set-up:

- **Connect Status:** indicate OSDP based communication status.
- **OSDP Address:** you can obtain the specific OSDP Address from the solution provider.
- **Dummy Card Number:** enter the the card number in order to obtain the authentication by the third party devices such as opening the lift door, closing the door or other forms of door access etc.
- **Send by:** select in what way you want to send out the card number among three options: **"OSDP"**, **"Wiegand"** and **"None"**. if you select "OSDP" then the card number will be sent out to the third party devices via RS485. if you select "Wiegand" then the card number will be sent out via wiegand. If you select "None" then the card number will not be sent out but retained in the system.

**Note:**

- Dummy card numbers can not be sent if **"OSDP"** is not selected in the RS485 list field.

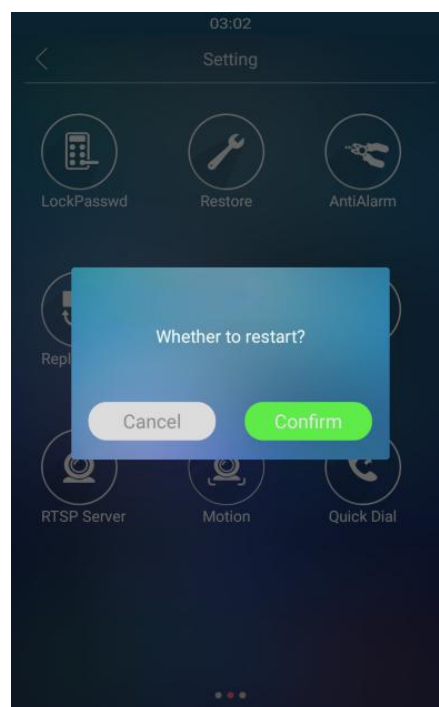


## 22. System Reboot&Reset

### 22.1.Reboot

#### 22.1.1. Reboot on the device

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



#### 22.1.2. Reboot on the web interface

If you want to restart the device system, you can operate it on the device web

**Upgrade > Basic** interface as well. More over, you can set up schedule for the device to be restarted.

The screenshot shows the 'Upgrade-Basic' interface. At the top, it displays 'Firmware Version 29.30.2.13' and 'Hardware Version 29.3.0'. Below this, there are three main sections: 
 

- Upgrade:** A text box containing 'Not selected any files', a 'Select File' button, and two 'Submit' and 'Cancel' buttons.
- Reset To Factory Setting:** A single 'Submit' button.
- Reboot:** A 'Submit' button, which is highlighted with a red rectangular border.

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

The screenshot shows the 'Reboot Schedule' interface. It contains the following fields and buttons:
 

- Mode:** A dropdown menu currently set to 'Disabled'.
- Schedule:** A dropdown menu currently set to 'Monday'.
- Time:** A text input field containing '0', with '(0~23)' indicating the valid range.
- Buttons:** 'Submit' and 'Cancel' buttons at the bottom.

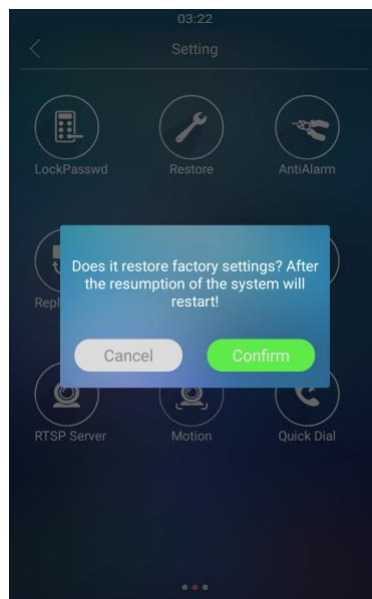
**Parameter Set-up:**

- **Mode:** **Disable** or **Enable** the mode to active or unactive reboot. Or choose **Schedule** mode for setting the reboot time regularly.
- **Schedule:** if you choose schedule mode, also need to set up the reboot schedule. From Monday to Sunday and 00: 00 to 24: 00.

## 22.2.Reset

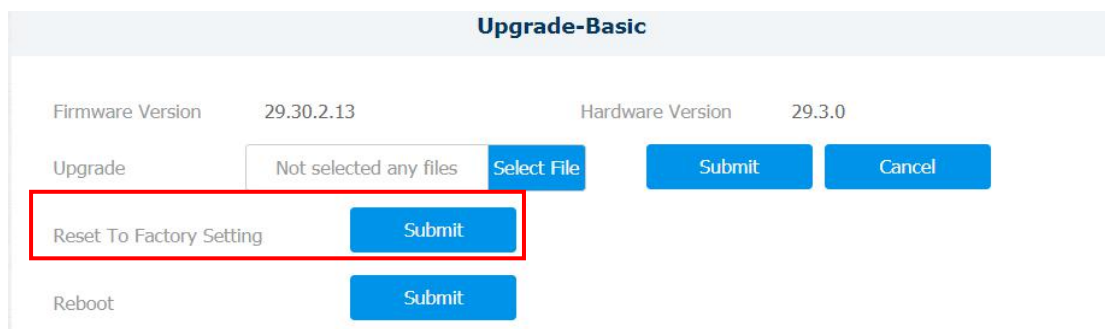
### 22.2.1. Reset on the Device

If you want to reset the device system to the factory setting, you can operate it directly on the device **Restore** screen.



### 22.2.2. Reset on the Device Web Interface

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



## 23. Abbreviations

**ACS:** Auto Configuration Server

**Auto:** Automatically

**AEC:** Configurable Acoustic and Line Echo Cancelers

**ACD:** Automatic Call Distribution

**Autop:** Automatical Provisioning

**AES:** Advanced Encryption Standard

**BLF:** Busy Lamp Field

**COM:** Common

**CPE:** Customer Premise Equipment

**CWMP:** CPE WAN Management Protocol

**DTMF:** Dual Tone Multi-Frequency

**DHCP:** Dynamic Host Configuration Protocol

**DNS:** Domain Name System

**DND:** Do Not Disturb

**DNS-SRV:** Service record in the Domain Name System

**FTP:** File Transfer Protocol

**GND:** Ground

**HTTP:** Hypertext Transfer Protocol

**HTTPS:** Hypertext Transfer Protocol Secure Socket Layer

**IP:** Internet Protocol

**ID:** Identification

**IR:** Infrared

**LCD:** Liquid Crystal Display

**LED:** Light Emitting Diode

**MAX:** Maximum

**A** **POE:** Power Over Ethernet

**PCMA:** Pulse Code Modulation A-Law

**PCMU:** Pulse Code Modulation  $\mu$ -Law

**PCAP:** Packet Capture

## 24. FAQ

Q1: How to obtain IP address of R2X

A1: ✓ For devices with single button - E21/ R20/ R23/ R26:

While E21/ R20/ R23/ R26 power up normally, hold the call button for 5 seconds after the statue LED turns blue and it will enter into IP announcement mode. In announcement mode, the IP address will be announced repeatedly. Press call button again to quit the announcement mode.

✓ For devices with multiple numeric keyboard - R27:

While R27 power up normally, press "\*2396#" to enter home screen and press "1" to go to system Information screen to check the IP address.

✓ For devices with touch screen - R29:

While R29 power up normally, in the dial interface, press "9999", "Dial key", "3888" and "OK" to enter the system setting screen. Go to info screen to check the IP address.

✓ Common method:

Using Akuvox IP Scanner to search Akuvox devices in the same LAN network.

Q2: Do Akuvox devices support Opus codec?

A2: For now, only Akuvox Android video IP phone R48G can support Opus audio codec.

Q3: What is the supported temperature range for akuvox doorphone?

A3: R20/E21/R26/R23/Standard R27/Standard R29 -- 14° to 112°F (-10° to 45°C)

R27/R29 with heating supporting --- 40 degrees

R28 -- (-40°C~55°C)

Indoorphone -- 14° to 112°F (-10° to 45°C)

IPPhone -- 32°~104°F(0~40°C)

Q4: Do Akuvox devices support Modbus protocol?

A4: No.

Q5: Failure in importing the R29 face data to another R29 using the exported face data .

A5: Please confirm the following steps:

The import format is zip;

1. After you export , you need to unzip the .tgz folder , then make the unzipped folder into .zip again.

Q55: Which version of ONVIF does R20 and R29 support?

A55: Onvif 18.06 profile S.

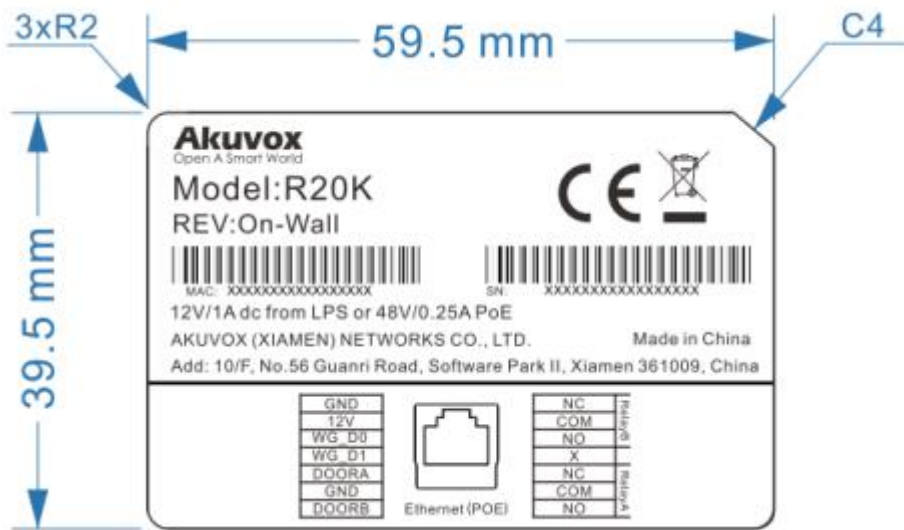
Q6: Do door phones support these card types? Prox, Legacy iClass,iClassSE,HID Mifare, HID DESFire,HID SEOS

A6: Sorry, they are not supported. They need to be implemented via hardware modifications.

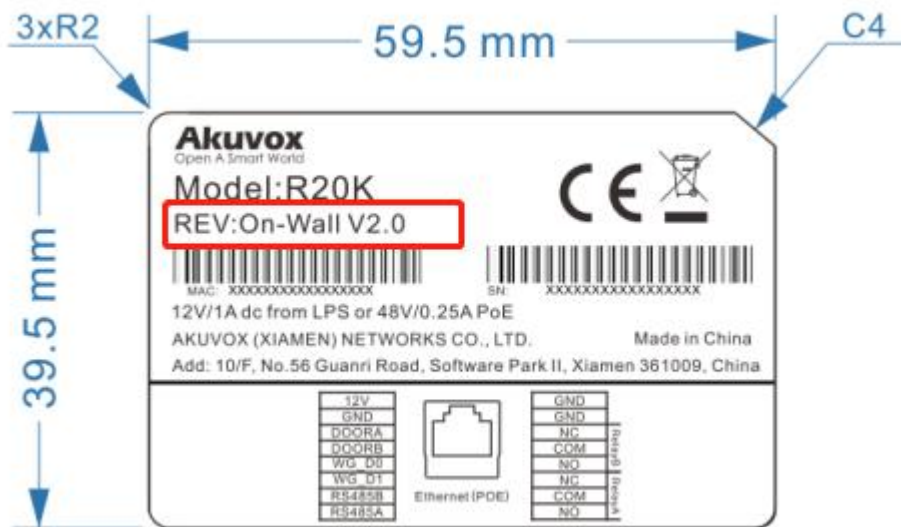
Q7: How to confirm whether my device is hardware version 1 or hardware version 2?

A7: 1.Label

- **Hardware version 1**



- **Hardware version 2**



- **Firmware Version**

The firmware is different between hardware version1 and hardware version 2.



Go to Web-Status -Firmware Version.

20.X.X.X is hardware version 1.

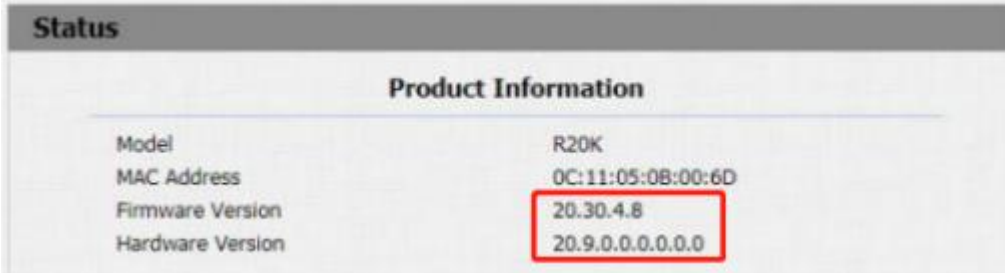
220.X.X.X is hardware version 2.

- **Hardware version**

The firmware is different between hardware version1 and hardware version 2.

Go to Web-Status -Firmware Version.

If the hardware version is 220.x, then the device is hardware version 2.



Status	
Product Information	
Model	R20K
MAC Address	0C:11:05:0B:00:6D
Firmware Version	20.30.4.8
Hardware Version	20.9.0.0.0.0.0.0

## 25. Contact us

For more information about the product, please visit us at [www.akuvox.com](http://www.akuvox.com)

or feel free to contact us by

Sales email: [sales@akuvox.com](mailto:sales@akuvox.com)

Technical support email: [support@akuvox.com](mailto:support@akuvox.com)  
+86-592-2133061 ext.7694/8162

Telephone:

We highly appreciate your feedback about our products.

