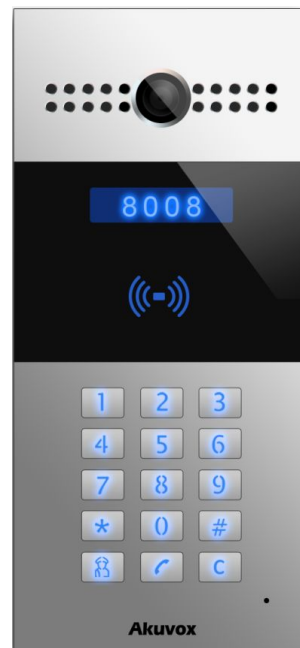




R27 Series Door Phone Admin Guide



R27A



R27C

About This Manual

Thank you for choosing Akuvox's R27A /C door phone. This manual is intended for end users, who need to properly configure the door phone. It provides all functions and configuration of R27A/C, the information detailed in this user manual applicable to firmware version 27.0.2.194 rom or lower version.

- Please verify the packaging content and network status before setting.
- The old firmware may be a little different from 27.0.2.194 rom about some configuration. Please consult your administrator for more information.

Contact us

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We highly appreciate your feedback about our products.

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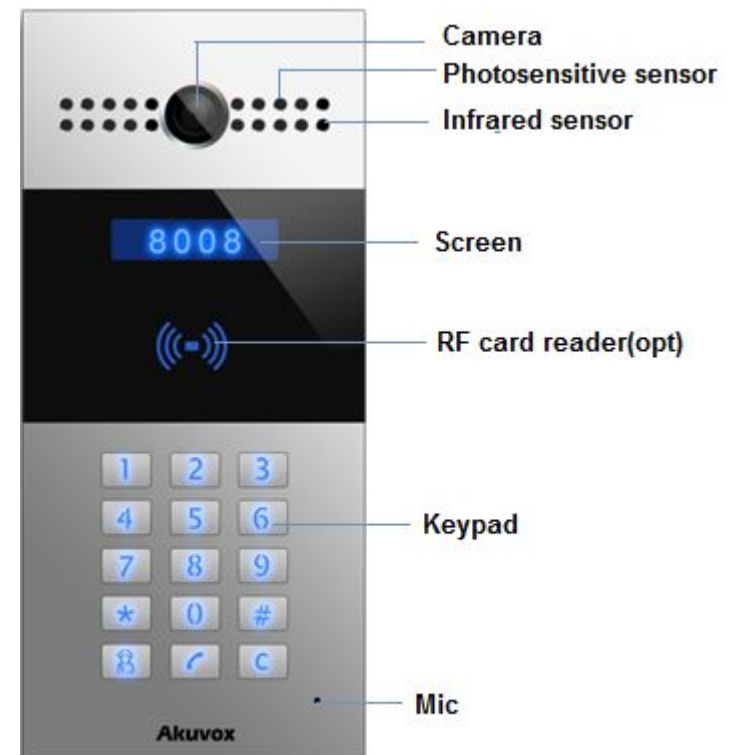
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1. Product Overview

1.1. Instruction

Akuvox R27X is a SIP-compliant, hands-free and video outdoor phone. It can be connected with your Akuvox IP Phone for remote unlock control and monitor. You can operate the indoor handset to communicate with visitors via voice and video, and unlock the door if you wish. Users can also use RF card to unlock the door(R27A only). It's applicable in villas, office and so on.



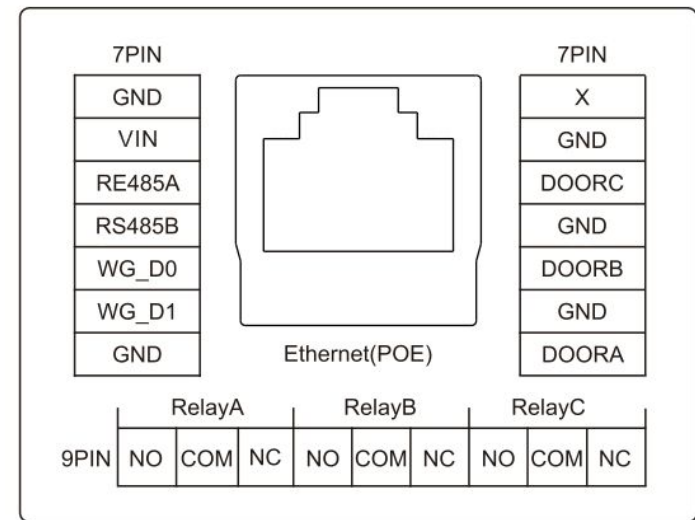
1.2.At a Glance

Features	
Physical & Power	Body material: all-aluminum
	Camera: 3 Mega pixels, automatic lighting
	Numeric keypad with extra buttons
	12V DC connector & POE
	Water-proof & Dust-proof: IP65
Sip Endpoint	SIP v1(RFC2543), SIP v2(RFC3261)
	Audio codecs: G.711a, G.711 μ , G.722, G.729
	Video codecs: H.264
	Echo Cancellation
	Voice Activation Detection & Comfort Noise Generator
Video	Resolution: up to 720p
	Maximum image transfer rate: 720p - 30fps
	High intensity IR LEDs for picture lighting during dark hours with internal light sensor
	Compatible to 3rd Party Video components, e.g. NVRs

Door Entry Features	Relays controlled individually by DTMF tones
	Camera permanently operational
	White balance: auto
	Auto-night mode with LED illumination
	Office door phone with on-site or hosted IP-PBX
	Remote site entry over Internet
	Apartment/flat intercom with door access control

1.3.Connector Introduction

Connector	
Ethernet(POE)	Ethernet(POE) connector , which can provide both power and network connection.
VIN(12V)/GND	External power supply terminal if POE is not available.
WG_D0/1	Wiegand terminal for wiegand access control
RS485A/B	RS485 terminal for automation system control(e.g. Elevator control).
DOORA/B/C	Trigger signal input terminal(e.g. Press indoor button to open relay).
RelayA/B/C	NO/NC Relay control terminal.



1.4. Daily Use

1.4.1. Making a Call

In the idle interface, press the account or IP address + Dial key  to make a call.

1.4.2. Receiving a Call

R27X will auto answer the incoming call by default. If users disable auto answer function, they can press dial key to answer the incoming call.

1.4.3. Unlock

Unlock by Pin code: Unlock the door by using predefined Public Pin or Private Pin. Press # + 8digit Pin Code + # to unlock, then you will hear “The door is now opened”. If users input the wrong Pin code, the screen will show “Incorrect Code”.

Unlock by RF Card(Only R27A): Place the predefined user card in RF card reader to unlock. Under normal conditions, the phone will announce “The door is now opened”. If the card has not been registered, the phone will show “Unauthorized”.

Unlock by DTMF Code: During the talking, the president can press the predefined DTMF code to remote unlock the door. (Please refer to chapter 3.9.1 about DTMF code setting). Then you will also hear “The door is now opened”.

2. Basic Setting

2.1. Administrator interface

Press *2396# to enter administrator interface. Administrator interface provides some advanced permissions to administrators, including System Information, Admin Settings and System Settings.

2.1.1. System Information

Press 1 to enter System Information to check IP address, Mac address and Firmware version of the door phone.

2.1.2. Admin Settings

2.1.2.1. Admin card setting

Add admin card

Enter Admin Card Setting interface, and press 1 to quick add admin card. When you see “Please Swipe Admin Card...”, please place admin card in the RF card reader area. After the screen shows “An admin card is added +1”, it means adding successfully.

Clean admin card data

Enter Admin Card Setting interface, press 2 to delete the current admin card. When you see “Please Swipe Admin Card....”, and place the added admin card you want to delete in the RF card area. After the screen shows “An admin card is deleted”, it means deleting successfully.

2.1.2.2.Admin Code Setting

Admin code is used to enter administrator interface. The default code is 2396. Enter Admin Code Setting to input 4 digit new admin codes, click Dial key  to save.

2.1.2.3.Service Code Setting

Service Code Setting is used to enter user interface. The default code is 3888. Enter service code setting to input 4 digit new user codes, and click Dial key  to save.

2.1.3. System Setting

2.1.3.1. Network settings

Enter System Setting interface, and press 1 to enter Network setting. Select DHCP mode, door phone will access network automatically. Choose Static mode, users need to setup IP address, subnet mask and default gateway. Press Dial key  when you finish each step.

2.1.3.2. Station No. Settings

Users can setup the device location.

(This function can not be used now. Akuvox will perfect it in next version)

2.1.3.3. Restore default

Enter System setting, and press 3 to enter restore interface. After you are sure to make the device restore to factory setting, you can swipe your admin card or enter admin code, then the device will restore.

Notes: All configuration will be reset after restore. Please backup the data if you need.

2.2. User interface

Press *3888# to enter user interface. User interface includes Public Pin Modif, Add User Cards and Add Private Pin. These functions can only be accessed by administrator.

2.2.1. Public Pin Modify

The default public Pin is 33333333. Before you modify public Pin, users need to swipe admin card or enter admin code, then you can enter 8 digit new Public Pin, click Dial key  to save.

2.2.2. Add User Cards

User card is used to unlock. Before adding users card, users need to swipe admin card or enter admin code, then you will see “Please Swipe IC Card...”, place user card in the RF card reader area. Then the screen will show “Add IC Card +1”, it means adding successfully.

2.2.3.Add Private Pin

Users can also use private pin code to unlock. Before adding private pin, users need to swipe admin card or enter admin code. Then enter a 8 digit private pin, and click Dial key  to save.

3. Web Basic

3.1.Obtain IP address

The Akuvox R27A/C use DHCP IP by default. Press *2396# to enter Administrator interface. Enter System Information to check the phone IP address.

3.2.Access the device website

Open a Web Browser, access the corresponding IP address. Then, enter the default user name and password to login. The default administrator User Name and Password are shown below:

User Name: **admin**

Password: **admin**

3.3. Network Setting

Go to Network->Basic, dynamically or statically to obtain address.

3.3.1. DHCP

R27A/C uses DHCP by default, it will get IP address, Subnet Mask, Default Gateway and DNS server address from DHCP server automatically.

3.3.2. Static IP

If selected, you could manually set IP address, Subnet Mask, Default Gateway and DNS server. The figure below shows static IP setting.

The screenshot shows a web-based configuration interface titled "Network-Basic". Under the "LAN Port" section, the "Static IP" option is selected with a radio button. Below this, there are five input fields for network configuration: "IP Address" (192.168.1.118), "Subnet Mask" (255.255.255.0), "Default Gateway" (192.168.1.1), "LAN DNS1" (192.168.1.1), and "LAN DNS2" (empty). At the bottom right, there are "Submit" and "Cancel" buttons.

LAN Port	
☐ DHCP	
☒ Static IP	
IP Address	192.168.1.118
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
LAN DNS1	192.168.1.1
LAN DNS2	
Submit Cancel	

3.4.Account

Go to Account->Basic to configure sip account and sip server.

3.4.1. SIP Account

Status: To display register result.

Display Label: To configure label displayed on the phone's LCD screen.

Display Name: To configure name sent to the other call party for displaying.

Register Name: To enter extension number you want and the number is allocated by SIP server.

User Name: To enter user name of the extension.

Password: To enter password for the extension.

3.4.2. SIP Sever 1

Server IP: To enter SIP server's IP address or URL.

Account-Basic	
SIP Account	
Status	Registered
Account	Account 1
Account Active	Enabled
Display Label	11151
Display Name	R20
Register Name	11151
User Name	11151
Password	••••••••

SIP Server 1	
Server IP	47.88.77.14
Registration Period	1800
Port	5070
	(30~65535s)

Registration Period: Registration Period: The registration will expire after Registration period, the IP phone will re-register automatically within registration period.

3.4.3. SIP Sever 2

Server IP: To display and configure Secondary SIP server settings. This is for redundancy, if registering to Primary SIP server fails, the IP phone will go to Secondary SIP server for registering.

3.4.4. Outbound Proxy Server

An outbound proxy server is used to receive all initiating request messages and route them to the designated SIP server.

3.4.5. Transport Type

To display and configure Transport type for SIP message

SIP Server 2		
Server IP	44.88.77.15	Port 5060
Registration Period	1800	(30~65535s)

Outbound Proxy Server		
Enable Outbound	Enabled	
Server IP	75.33.92.180	Port 5060
Backup Server IP		Port 5060

Transport Type	
Transport Type	UDP

- UDP: UDP is an unreliable but very efficient transport layer protocol.
- TCP: Reliable but less-efficient transport layer protocol.
- TLS: Secured and Reliable transport layer protocol.
- DNS-SRV: A DNS RR for specifying the location of services.

3.4.6. NAT

To display and configure NAT(Net Address Translator) settings.

- STUN: Short for Simple Traversal of UDP over NATS, a solution to solve NAT issues.

Notes: By default, NAT is disabled.



The screenshot shows a configuration window titled "NAT". It contains a dropdown menu labeled "NAT" with "Disabled" selected. Below it is a text field labeled "Stun Server Address" which is empty. To the right of the text field is a label "Port" followed by a text field containing the value "3478".

3.5. Call Setting

Go to Intercom->Basic, to configure basic call setting.

3.5.1. Public Key

Key Switch: To enable or disable the password unlock , it is much useful for some special occasion which do not allow to use password.

Send Key: Limit to use the # key. It will prevent someone to enter the LCD setting illegally.

Key Value: The public key for the all occupants in a building.

No Answer Action: For sending the notification to specified email if the call is not answered.



The screenshot shows a web-based configuration interface titled "Public Key". It contains four settings, each with a label and a control element:

- Key Switch:** A dropdown menu currently set to "Enabled".
- Send Key:** A dropdown menu currently set to "Enabled".
- Key Value:** A text input field containing "33333333" with a note "(3-8 digit number)" to its right.
- No Answer Action:** A dropdown menu currently set to "Enabled".

3.5.2. Speed Dial

This Feature is used to call out 4 numbers in the same time. After setup the number you need to call, press manage center key to call .

3.5.3. Push Button Action

Action to execute: To choose suitable way to receive message or snapshot when pushing button.

HTTP URL: If you tick HTTP URL, enter corresponding HTTP server IP address in the HTTP URL area.

3.5.4. Web Call

To dial out or answer incoming call from website.

3.5.5. Call&Dial Time

Max Call Time: To configure the max call time.

Speed Dial	
Key	Number
Speed Dial	103
Speed Dial2	104
Speed Dial3	105
Speed Dial4	106

Call Event	
Action to Execute	FTP ☐ Email ☐ Http URL ☒
Http URL:	http://192.168.35.48/mac=12345678

Web Call	
Web Call(Ready)	105 Auto Dial Out Hang Up

Dial In Time: To configure the max incoming dial time, available when auto answer is disabled.

Dial Out Time: To configure the max no answer call time.

3.6.Action

Go to Intercom->Action to set action receiver.

3.6.1.Email Notification

Sender's email address: To configure email address of sender.

Receiver's email address: To configure email address of receiver.

SMTP server address: To configure SMTP server address of sender.

SMTP user name: To configure user namer of SMTP service(usually it is same with sender's email address).

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

Max Dial Time	
Dial In Time	60 (30~120Sec)
Dial Out Time	60 (30~120Sec)

Email Notification	
Sender's email address	wanzheyu@gmail.com
Receiver's email address	william.wan@gmail.com
SMTP server address	smtp.gmail.com
SMTP user name	wanzheyu@gmail.com
SMTP password	••••••••
Email subject	test
Email content	test
Email Test	Test Email

SMTP password: To configure password of SMTP service(usually it is the same with the password of sender's email).

Email subject: To configure subject of email.

Email content: To configure content of email.

Email Test: To test whether email notification is available.

3.6.2. FTP Notification

FTP Server: To configure URL of FTP server.

FTP User Name: To configure user name of FTP server.

FTP Password: To configure password of FTP server.

FTP Test: To test whether FTP notification is available.

3.6.3. SIP Notification

SIP Call Number: To configure sip call number.

SIP Call Name: To configure display name of R27A/C.

FTP Notification	
FTP Server	ftp://192.168.35.118
FTP User Name	admin
FTP Password	
FTP Test	Test FTP

SIP Call Notification	
SIP Call Number	1101
SIP Caller Name	william

3.7. Card Setting (R27A Only)

Go to Intercom -> Card setting, to manage card access system.

3.7.1. Import/Export Card Data

R27A supports import or export the card data file, which is convenient for administrator to deal with a large number of cards. The maximum RF card is 500.

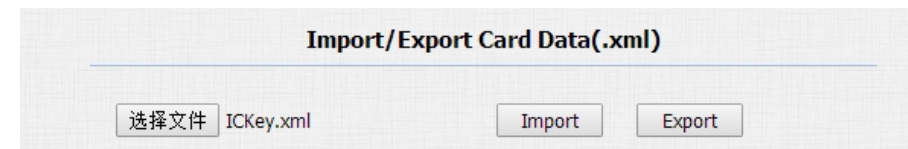
3.7.2. CardEvent

Once users make a call, it will execute the action.

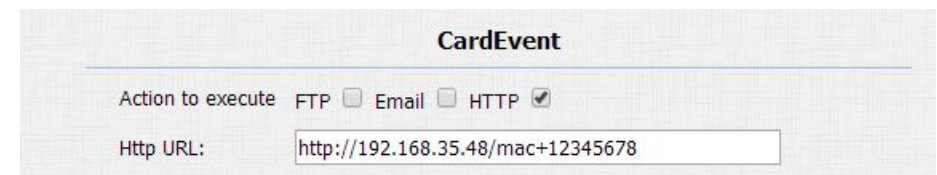
It supports 3 types - FTP, Email, and HTTP.

To setup the FTP and Email in Action interface, the FTP server and Email will receive the capture picture when reading card.

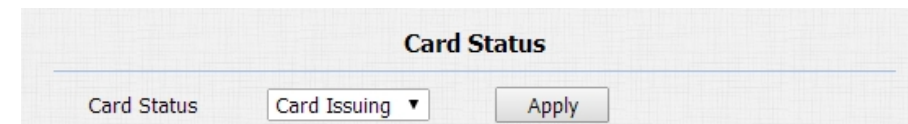
If you choose HTTP mode, enter the URL format: http://http server IP address/any information.



The screenshot shows a web interface titled "Import/Export Card Data(.xml)". It features a file selection button labeled "选择文件" (Select File) next to the text "ICKey.xml". To the right of the file selection area are two buttons: "Import" and "Export".



The screenshot shows a web interface titled "CardEvent". It has a section "Action to execute" with three radio buttons: "FTP", "Email", and "HTTP". The "HTTP" radio button is selected. Below this, there is a label "Http URL:" followed by a text input field containing the URL "http://192.168.35.48/mac+12345678".



The screenshot shows a web interface titled "Card Status". It features a label "Card Status" followed by a dropdown menu currently showing "Card Issuing". To the right of the dropdown is an "Apply" button.

3.7.3. Obtain and Add Card

- (1) Switch card status to 'Card Issuing' and click 'Apply';
- (2) Place card on the card reader area and click 'Obtain';
- (3) Name card and choose which door you want to open and the valid day and time;
- (4) Click 'Add' to add it into list.

3.7.4. Door card Management

Valid card information will be shown in the list. Administrator could delete one card's access permission or empty all the list.

Notes: Remember to set Card Status back to Normal after adding the cards.

Card Setting

IC Key DoorNum RelayA ☒ RelayB ☐ RelayC ☐

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

IC Key Time 00 : 00 - 23 : 00

IC Key Name TEST1

Door Card Management				
Index	Name	Code	Relay	
1	TEST1	A6F20C85	1	☐
2	TEST2	00013131	1	☐
3				☐
4				☐
5				☐
6				☐
7				☐
8				☐
9				☐
10				☐
Page: 1 Prev Next Delete DeleteAll				

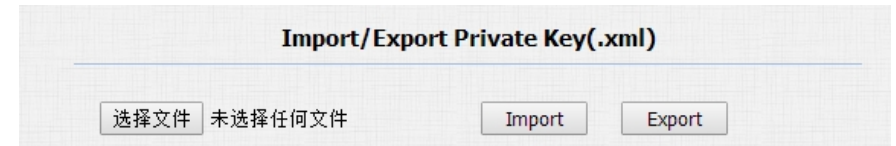
3.8.Private Key

3.8.1.Import/Export Card Data

R27A/C supports import or export the private key file, which is convenient for administrator to deal with a large number of private keys. The maximum private key is 500.

3.8.2. Obtain and Add Card

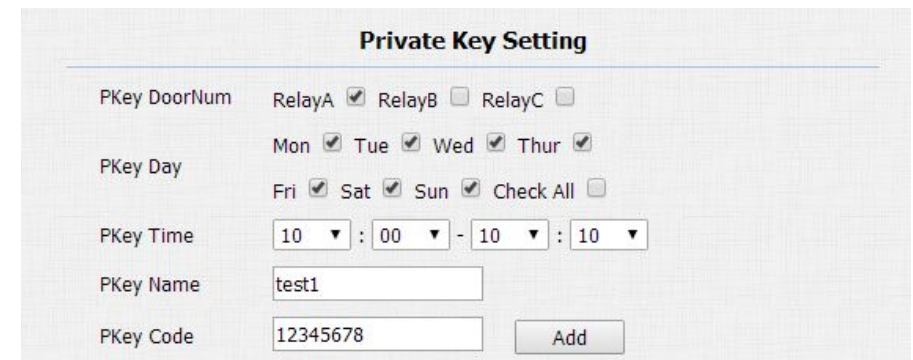
- (1)Enter the PKey Name and 8 digit PKey Code;
- (2)Select the valid day and time;
- (3)Choose which door you want to open;
- (4)Click 'Add' to add it into list.



Import/Export Private Key(.xml)

选择文件 未选择任何文件

Import Export



Private Key Setting

PKey DoorNum RelayA ☒ RelayB ☐ RelayC ☐

PKey Day Mon ☒ Tue ☒ Wed ☒ Thur ☒

Fri ☒ Sat ☒ Sun ☒ Check All ☐

PKey Time 10 : 00 - 10 : 10

PKey Name test1

PKey Code 12345678 Add

3.8.3. Private Key Management

Valid private key information will be shown in the list. Administrator could delete private key information or empty all the list.

3.9. Relay Setting

Go to Intercom->Relay, to configure relay.

3.9.1. Relay

There are three terminal of relay: NO, NC and COM. NO stands for normally open contact while NC stands for normally closed contact.

Relay ID: R27A/C supports three relays, user can configure them respectively.

Private Key Management				
Index	Name	Code	Relay	
1	test1	12345678	1	☐
2				☐
3				☐
4				☐
5				☐
6				☐
7				☐
8				☐
9				☐
10				☐
Page: 1 ▾ Prev Next Delete DeleteAll				

Notes: Relay operate a switch and does not deliver power, so user should prepare power adapter for external devices which connects to relay.

Relay Type: Default state means NC and COM are normally closed, while Invert state means NC and COM are normally opened.

Relay Delay: To configure the duration of opened relay. Over the value, the relay would be closed again.

DTMF Option: To select digit of DTMF code, R27A/C support maximum 4 digits DTMF code.

DTMF: To configure 1 digit DTMF code for remote unlock.

Multiple DTMF: To configure multiple digits DTMF code for remote unlock.

Relay Status: Low means that COM is connecting to NC while High means that COM is connecting to NO.

3.9.2. Open Relay via HTTP

User can use a URL to remote unlock the door.

Switch: Enable this function. Disable by default.

The screenshot shows a configuration window titled "Relay". It contains three columns for RelayA, RelayB, and RelayC. The settings for each relay are as follows:

Relay ID	RelayA	RelayB	RelayC
Relay Type	Default state	Default state	Default state
Relay Delay(sec)	3	3	1
DTMF Option	1 Digit DTMF		
DTMF	0	0	0
Multiple DTMF			
Relay Status	RelayA: Low	RelayB: Low	RelayC: Low

The screenshot shows a configuration window titled "Open Relay via HTTP". It contains the following fields:

Switch	Disabled
UserName	
Password	*****

UserName & Password: Users can setup the username and password for HTTP unlock.

URL format:

http://IP_address/fcgi/do?action=OpenDoor&UserName=&Password=&DoorNum=1

3.10. Input

R27A /C supports two input triggers Input A/B/C(DOOR A/B/C), and go to Intercom->Input to configure.

Input Service: To enable or disable input trigger service.

Trigger Option: To choose open circuit trigger or closed circuit trigger. Low means that connection between Door terminal and GND is closed, while High means the connection is opened.

Action to execute: To choose which action to execute after triggering.

The screenshot displays a web-based configuration interface for two input triggers, Input A and Input B. Each section contains the following fields:

- Input Service:** A dropdown menu. For Input A, it is set to 'Enabled'; for Input B, it is set to 'Disabled'.
- Trigger Option:** A dropdown menu. For both Input A and Input B, it is set to 'Low'.
- Action to execute:** A row of four checkboxes: FTP, Email, Sip Call, and HTTP. All are currently unchecked.
- Http URL:** A text input field, currently empty.
- Action Delay:** A text input field with a value of '0' and a unit specification '(0~300 Sec)'.
- Open Relay:** A dropdown menu. For Input A, it is set to 'RelayA'; for Input B, it is empty.
- Door Status:** A text label. For Input A, it says 'DoorA: High'; for Input B, it is empty.
- Light Status:** A text label. For Input A, it says 'LightA: Warning'; for Input B, it is empty.

Http URL: To configure URL, If HTTP action is chosen.

Open relay: To configure relay to open.

Door status: To show the status of input signal.

4. Web Advance

4.1. Intercom-Advanced

AEC Level: AEC(Configurable Acoustic and Line Echo Cancelers) is used to adjust the echo effect during the communication. The default value is 700. Increase the level, the echo control is better.

Photoresistor: The setting is for night vision, when the surrounding of R27A/C is very dark, infrared LED will turn on and R27A/C will turn to night mode. Photoresistor value relates to light intensity and larger value means that light

AEC Setting	
AEC Level	700

Photoresistor	
Photoresistor Setting	5 - 37 (0~100)

intensity is smaller. User can configure the upper and lower bound and when photoresistor value is larger than upper bound, infrared LED will turn on. As contrast, when photoresistor value is smaller than lower bound, infrared LED will turn off and device turns to normal mode.

Tamper Alarm: R27A integrates internal gravity sensor for the own security, and after enabling Tamper Alarm, if the gravity of R27A/C changes dramatically, the phone will alarm. Gravity Sensor Threshold stands for sensitivity of sensor.

LCD Text: User can customize the LCD Text during the idle by yourself. Such as “Welcome” or something others.

AccountStatus Enabled: the LCD text will only be shown if the the account is valid.

LCD Text Enable: Switch this feature.

LCD Text: Display content.

The image shows a configuration interface with two sections: 'Tamper Alarm' and 'LCD Text'. The 'Tamper Alarm' section has a 'Tamper Alarm' dropdown set to 'Disabled' and a 'Gravity Sensor Threshold' input field with the value '32' and a range '(0~127)'. The 'LCD Text' section has an 'AccountStatus Enabled' dropdown set to 'Disabled', an 'LCD Text Enable' dropdown set to 'Enabled', and an 'LCD Text' input field containing the text 'welcome'.

Tamper Alarm	
Tamper Alarm	Disabled ▼
Gravity Sensor Threshold	32 (0~127)

LCD Text	
AccountStatus Enabled	Disabled ▼
LCD Text Enable	Enabled ▼
LCD Text	welcome

Wiegand: Using to integrate with some wiegand access control. R27A/C can be used as wiegand input or output.

Wiegand Type: Support Wiegand 26, 34. The different number means different bits.

Wiegand Mode: Input or Output. Typically, when you select input, we generally connect the wiegand input device, such as the wiegand card reader. Or R27A/C can be used as output, It is generally used to connect the third-party Access Control, then R27A/C change the card information as wiegand signal, then transfer to the access control module.

4.2.LED Setting

User can control three parts LED -Screen, keypad and Card area by yourself. And also can setup the valid time. For example start time from 18-23, means the LED will light up from 6pm to 11pm.

Wiegand	
WiegandType	wiegand-26 ▼
Wiegand Mode	Input ▼

LED Control	
Screen LED Enable	Enabled ▼
Start Time (H)	00 - 23 (0~23)
KeyPad LED Enable	Enabled ▼
Start Time (H)	18 - 23 (0~23)
Card LED Enable	Enabled ▼
Start Time (H)	18 - 23 (0~23)

4.3. Live Stream

Go to Intercom->Live Stream, check the real-time video from R27A. In addition, user also can check the real-time picture via URL: http://IP_address:8080/picture.jpg

4.4. RTSP

R27A/C supports RTSP stream, go to Intercom->RTSP, to enable or disable RTSP server. The URL for RTSP stream is:
rtsp://IP_address/live/ch00_0

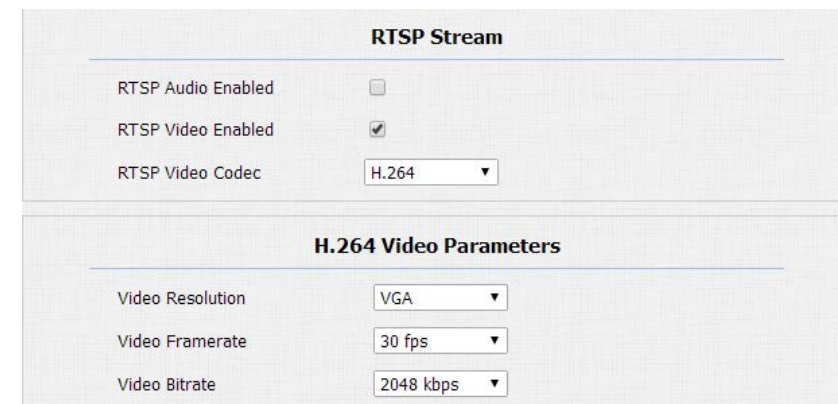
RTSP Stream: To enable RTSP video and select the video codec. R27X supports H264 video codec.

H.264 Video Parameters: H264 is a video stream compression standard. Different from H263, it provides an



The screenshot shows the 'RTSP Basic' configuration section. It contains a single setting: 'RTSP Server Enabled' with a checked checkbox.

RTSP Basic	
RTSP Server Enabled	☒



The screenshot shows two configuration sections. The first is 'RTSP Stream' with three settings: 'RTSP Audio Enabled' (unchecked), 'RTSP Video Enabled' (checked), and 'RTSP Video Codec' (set to 'H.264'). The second is 'H.264 Video Parameters' with three settings: 'Video Resolution' (set to 'VGA'), 'Video Framerate' (set to '30 fps'), and 'Video Bitrate' (set to '2048 kbps').

RTSP Stream	
RTSP Audio Enabled	☐
RTSP Video Enabled	☒
RTSP Video Codec	H.264

H.264 Video Parameters	
Video Resolution	VGA
Video Framerate	30 fps
Video Bitrate	2048 kbps



The screenshot shows the 'MPEG4 Video Parameters' configuration section, which is currently empty.

MPEG4 Video Parameters	
------------------------	--

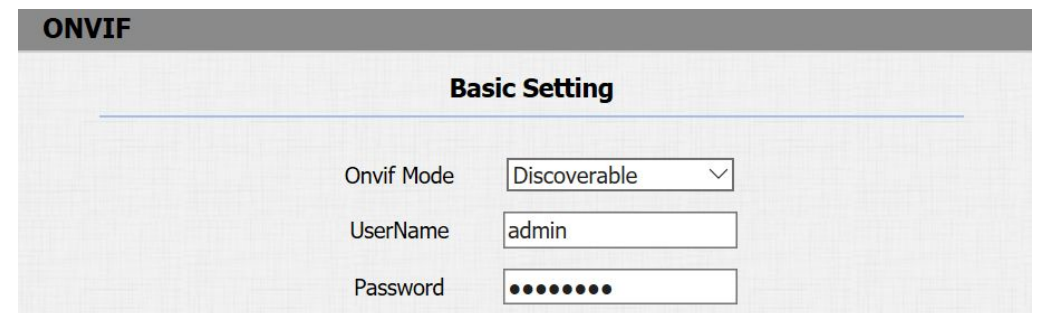
approximately identical level of video stream quality but a half bit rate. This type of compression is sometimes called MPEG-4 part 10. To modify the resolution, framerate and bitrate of H264.

MPEG4 Video Parameters: MPEG4 is one of the network video image Compression standard. It supports the maximum Compression ratio 4000:1. It is an important and common video function with great communication application integration ability and less core program space.

To modify the resolution, framerate and bitrate of MPEG4.

4.5.ONVIF

R27A/C supports ONVIF protocol, which means R27A/C's camera can be searched by other devices, like NVR, which



The screenshot shows the ONVIF configuration interface. At the top, there is a grey header bar with the text "ONVIF". Below this, the title "Basic Setting" is centered. The interface contains three configuration items: "Onvif Mode" with a dropdown menu showing "Discoverable", "UserName" with a text input field containing "admin", and "Password" with a text input field containing ten dots for masking.

ONVIF	
Basic Setting	
Onvif Mode	Discoverable
UserName	admin
Password	••••••••••

supports ONVIF protocol as well. Go to Intercom->Onvif, to configure Onvif Mode and its UserName/Password.

Switching Onvif Mode to Undiscoverable means that User must program Onvif's URL manually.

The Onvif's URL is:

http://IP_address:8090/onvif/device_service

4.6.Motion

R27A/C supports motion detection, go to Intercom->Motion to configure detection parameter.

Motion Detection: To enable or disable Motion Detection

Motion Delay: To configure minium time gap between two snapshot.

Action to execute: To choose which action to execute after triggering.

The screenshot shows the 'Motion Detection Options' configuration page. It is divided into three main sections: 'Motion Detection Options', 'Action to execute', and 'Motion Detect Time Setting'.

- Motion Detection Options:**
 - Motion Detection:** A dropdown menu set to 'Disabled'.
 - Motion Delay:** A text input field containing '10', followed by '(0~120 Sec)'.
- Action to execute:**
 - Action to execute:** A row of checkboxes for FTP, Email (checked), Sip Call, and HTTP.
 - Http URL:** An empty text input field.
 - Close Relay:** A dropdown menu set to 'None'.
 - SDMC Upload:** A dropdown menu set to 'Disabled'.
- Motion Detect Time Setting:**
 - Days of the week: Mon, Tue, Wed, Thur, Fri, Sat, Sun, and a 'Check All' checkbox.
 - Time: A digital clock format with dropdowns for hours (00), minutes (00), seconds (23), and milliseconds (59).

Close Relay : When the action is triggered, choose the corresponding relay to unlock, it is more suitable for some urgent case.

SDMC Upload: Upload the capture to the SDMC.

Http URL: To configure URL, If HTTP action is chosen.

Motion Detect Time Setting: To make Motion Detect Time for a whole week.

4.7.Account-Advanced

Go to Account->Advanced to configure advanced settings for account.

4.7.1.Audio Codec

Sip Account: To choose which account to configure.

The screenshot shows the 'Account-Advanced' configuration page for a SIP Account. The 'SIP Account' section has a dropdown menu set to 'Account 1'. The 'Codecs' section features two lists: 'Disabled Codecs' (empty) and 'Enabled Codecs' (containing PCMU, PCMA, G729, and G722). Navigation buttons include '>>' and '<<' between the lists, and up/down arrows next to the 'Enabled Codecs' list.

SIP Account	
Account	Account 1

Codecs	
Disabled Codecs	Enabled Codecs
	PCMU
	PCMA
	G729
	G722

Audio Codec: R27A/C support four audio codec - PCMA, PCMU, G729, G722. Different audio codec requires different bandwidth, user can enable/disable them according to different network environment.

Bandwidth consumption and sample rates.

PCMA: 64kbit/s 8kHz

PCMU: 64kbit/s 8kHz

G729: 8kbit/s 8kHz Least consumption

G722: 64kbit/s 16kHz Best quality

4.7.2. Video Codec

R27A/C support H264 standard, which provides better video quality at substantially lower bit rates than previous standards.

Video Codec

Codec Resolution: R27A/C support four resolutions: QCIF, CIF, VGA, 4CIF and 720P.

Codec Bitrate: To configure bit rates of video stream.

Codec Payload: To configure RTP audio video profile.

Video Codec	
Codec Name	☒ H264
Codec Resolution	4CIF ▼
Codec Bitrate	2048 ▼
Codec Payload	104 ▼

Subscribe	
MWI Subscribe	Disabled ▼
MWI Subscribe Period	1800 (120~65535s)
Voice Mail Number	
BLF Expire	1800 (120~65535s)
ACD Expire	1800 (120~65535s)

Subscribe

MWI: Message Waiting Indicator which is used to indicate whether there is unread new voice message.

BLF: BLF is short for Busy Lamp Field which is used to monitor the designated extension status.

ACD: Automatic Call Distribution is often used in offices for customer service, such as call center. The setting here is to negotiate with the server about expire time of ACD subscription.

4.7.3. DTMF

To configure RTP audio video profile for DTMF and its payload type.

- Type: Support Inband, Info, RFC2833 or their combination.
- How To Notify DTMF: Only available when DTMF Type is Info.
- DTMF Payload: To configure payload type for DTMF.

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

4.7.4. Call

Max Local SIP Port: To configure maximum local sip port for designated SIP account.

Min Local SIP Port: To configure maximum local sip port for designated SIP account.

Caller ID Header: To choose Caller ID Header format

Auto Answer: If enabled, incoming call will be answered automatically.

Provisional Response ACK: 100% reliability for all provisional messages, this means it will send ACK every time the IP phone receives a provisional SIP message from SIP server.

Register with user=phone: If enabled, IP phone will send user=phone within SIP message.

Anonymous Call: If enabled, R27A will block its information when calling out.

Call		
Max Local SIP Port	5062	(1024~65535)
Min Local SIP Port	5062	(1024~65535)
Caller ID Header	FROM	▼
Auto Answer	Enabled	▼
Provisional Response ACK	Disabled	▼
Register with user=phone	Disabled	▼
Invite with user=phone	Disabled	▼
Anonymous Call	Disabled	▼
Anonymous Call Rejection	Disabled	▼
Missed Call Log	Enabled	▼
Prevent SIP Hacking	Disabled	▼

Anonymous Call Rejection: If enabled, calls who block their information will be screened out.

Missed Call Log: If enabled, any missed call will be recorded into call log.

Prevent Hacking: If enabled, it will prevent sip message from hacking

4.7.5. Session Timer

If enabled, the on going call will be disconnected automatically once the session expired unless it's been refreshed by UAC or UAS.

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

4.7.6. BLF List

To display or configure BLF List URI address.

BLF List URI: BLF List is short for Busy Lamp Field List.

BLFList PickUp Code: To set the BLF pick up code.

BLFList Bargen Code: To set the BLF barge in code.

BLFList	
BLFList URI	
BLFList PickUp Code	
BLFList Bargen Code	

4.7.7. Encryption

If enabled, voice will be encrypted.

4.7.8. NAT

To display NAT-related settings.

UDP Keep Alive message: If enabled, IP phone will send UDP keep-alive message periodically to router to keep NAT port alive.

UDP Alive Msg Interval: Keepalive message interval.

Encryption	
Voice Encryption(SRTP)	Disabled ▼

NAT	
UDP Keep Alive Messages	Disabled ▼
UDP Alive Msg Interval	30 (5~60s)
RPort	Disabled ▼

Rport: Remote Port, if enabled, it will add Remote Port into outgoing SIP message for designated account.

4.7.9. User Agent

One can customize User Agent field in the SIP message; if user agent is set to specific value, user can see the information from PCAP. If user agent is not set by default, users can see the company name, model number and firmware version from PCAP.

User Agent	
User Agent	Akuvox R27

4.8. Network-Advance

Local RTP: To display and configure Local RTP settings.

Max RTP Port: Determine the maximum port that RTP stream can use.

Starting RTP Port: Determine the minimum port that RTP stream can use.

Local RTP	
Starting RTP Port	11800 (1024~65535)
Max RTP Port	12000 (1024~65535)

SNMP: To display and configure SNMP settings.

Active: To enable or disable SNMP feature.

Port: To configure SNMP server's port.

Trusted IP: To configure allowed SNMP server address, it could be an IP address or any valid URL domain name.

Notes: SNMP (Simple Network Management Protocols) is Internet-standard protocol for managing devices on IP networks.

SNMP	
Active	Disabled ▼
Port	(1024~65535)
Trusted IP	

VLAN: To display and configure VLAN settings.

Active: To enable or disable VLAN feature for designated port.

VID: To configure VLAN ID for designated port.

Priority: To select VLAN priority for designated port.

Notes: Please consult your administrator for specific VLAN settings in your networking environment.

VLAN	
LAN Port	Active ▼
	VID (1~4094)
	Priority

TR069: To display and configure TR069 settings.

Active: To enable or disable TR069 feature.

Version: To select supported TR069 version (version 1.0 or 1.1).

ACS/CPE: ACS is short for Auto configuration servers as server side, CPE is short for Customer-premise equipment as client side devices.

URL: To configure URL address for ACS or CPE.

User Name: To configure username for ACS or CPE.

Password: To configure password for ACS or CPE.

Periodic Inform: To enable periodically inform.

Periodic Interval: To configure interval for periodic inform.

Notes: TR-069(Technical Report 069) is a technical specification entitled CPE WAN Management Protocol (CWMP). It defines an application layer protocol for remote management of end-user devices.

TR069		
ACS	Active	Disabled ▼
	Version	1.0 ▼
	URL	
	User Name	
	Password	
Periodic Inform	Active	Disabled ▼
	Periodic Interval	1800 (3~24×3600s)
CPE	URL	
	User Name	
	Password	

4.9. Time/Lang

Go to Phone->Time/Lang, to select local Time Zone for NTP server.

4.10. Call Feature

Go to Phone->Call Feature, to configure Phone-Call Feature.

DND: DND (Do Not Disturb) allows IP phones to ignore any incoming calls.

Return Code when DND: Determine what response code should be sent back to server when there is an incoming call if DND on.

DND On Code: The Code is used to turn on DND on server's side, if configured, IP phone will send a SIP message to server to turn on DND on server side if you press DND when DND is off.

Time/Lang	
NTP	
Time Zone	0 GMT ▾
Primary Server	0.pool.ntp.org
Secondary Server	1.pool.ntp.org
Update Interval	3600 (>= 3600s)
System Time	10:54:38

DND	
Account	All Account ▾
DND	Disabled ▾
Return Code When DND	486(Busy Here) ▾
DND On Code	785
DND Off Code	789

DND Off Code: The Code is used to turn off DND on server's side, if configured, IP phone will send a SIP message to server to turn off DND on server side if you press DND when DND is on.

Intercom: Intercom allows users to establish a call directly with the callee.

Active: To enable or disable Intercom feature.

Intercom Mute: If enabled, once the call established, the callee will be muted.

Return Code When Refuse: Allows user to assign specific code as return code to SIP server when an incoming call is rejected.

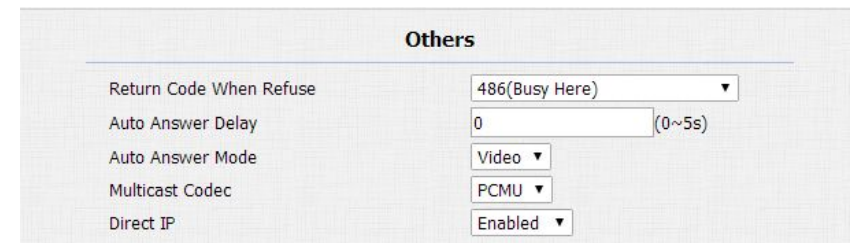
Auto Answer Delay: To configure delay time before an incoming call is automatically answered.

Auto Answer Mode: To set video or audio mode for auto answer by default.

Direct IP: Direct IP call without SIP proxy.



The screenshot shows the 'Intercom' configuration section. It has a title 'Intercom' at the top. Below it, there are two settings: 'Active' with a dropdown menu set to 'Enabled', and 'Intercom Mute' with a dropdown menu set to 'Disabled'.



The screenshot shows the 'Others' configuration section. It has a title 'Others' at the top. Below it, there are five settings: 'Return Code When Refuse' with a dropdown menu set to '486(Busy Here)', 'Auto Answer Delay' with a text input field set to '0' and a unit indicator '(0~5s)', 'Auto Answer Mode' with a dropdown menu set to 'Video', 'Multicast Codec' with a dropdown menu set to 'PCMU', and 'Direct IP' with a dropdown menu set to 'Enabled'.

4.11. Voice

Go to Phone->Voice, to configure volume and upload tone file.

Mic Volume:To configure Microphone volume.

Speaker Volume:To configure Speaker volume.

Open Door Warning: Disable it, you will not hear the prompt voice when the door is opened.

RingBack Upload: To upload the ring back tone by yourself.

Opendoor Tone Upload:To upload the Opendoor tone by yourself.

The screenshot displays a web-based configuration interface for voice settings. It is organized into five distinct sections, each with a title and a horizontal line separator. 1. **Mic Volume**: Contains a label 'Mic Volume' and a text input field with the value '8'. To the right of the input field is a range indicator '(1~15)'. 2. **Speaker Volume**: Contains a label 'Speaker Volume' and a text input field with the value '8'. To the right of the input field is a range indicator '(1~15)'. 3. **Open Door Warning**: Contains a label 'Open Door Warning' and a dropdown menu currently set to 'Enabled'. 4. **RingBack Upload**: Contains a 'Choose file' button, the text 'No file chosen', and three buttons: 'Upload', 'Delete', and 'Export'. Below these buttons, it specifies 'File Format: wav, size: < 200KB, samplerate: 16000, Bits: 16'. 5. **Opendoor Tone Upload**: Contains a 'Choose file' button, the text 'No file chosen', and three buttons: 'Upload', 'Delete', and 'Export'. Below these buttons, it specifies 'File Format: wav, size: < 200KB, samplerate: 16000, Bits: 16'.

4.12. Dial Plan

Allow user to modify selected rules information. Once user dial prefix value, it will call out Replace number.

Import&Export

R27A/C supports import or export the Dial plan, which is convenient for administrator to deal with a large number of dial plan. The maximum dial plan is 200.

Edit Dial plan

- Click Add to add new replace rules
- Select account for the replace rule
- Input a suitable prefix value. Enter the replace number.
- Click Submit to save.

All replace rules will show in the list. Users can edit or delete the existed replace rules.

Rules Management

Choose a file

No file chosen

Import

Export

Rules Modify >>

Account

Prefix

Replace 1

Replace 2

Auto ▼

103

12342

Index	Account	Prefix	Replace 1	Replace 2	
1	Auto	103	12342		☐
2					☐
3					☐
4					☐
5					☐
6					☐
7					☐
8					☐
9					☐
10					☐
Page: 1 ▼ Add Edit Delete Prev Next					

4.13. Multicast

Paging Barge: Choose the multicast number, the range is 1-10.

Paging priority Active: Enable or disable the multicast.

Listening Address: Enter the IP address you need to listen.

Label: Input the label for each listening address.

Multicast Setting	
Paging Barge	3 ▼
Paging Priority Active	Enabled ▼

Priority List			
IP Address	Listening Address	Label	Priority
1 IP Address	224.1.6.11:12000	test1	1
2 IP Address			2
3 IP Address			3
4 IP Address			4
5 IP Address			5
6 IP Address			6
7 IP Address			7
8 IP Address			8
9 IP Address			9
10 IP Address			10

4.14. Log

4.14.1. Call Log

Go to Phone->Call Log, user can see a list of call which have dialed, received or missed. And user can delete calls from list.

4.14.2. Door Log

Go to Phone->Call Log, user can see a list of door log which records card information and date.

Call Log							
Call History							
		All			Hand Up		
Index	Type	Date	Time	Local Identity	Name	Number	
1	Received	2017-12-22	06:35:09	192.168.35.3 5@192.168.35.35	Unknown	192.168.35.7 8@192.168.35.78	☐
2	Received	2017-12-21	10:39:07	192.168.35.3 5@192.168.35.35	Unknown	192.168.35.2 2@192.168.35.22	☐
3	Received	2017-12-21	10:38:50	192.168.35.3 5@192.168.35.35	Unknown	192.168.35.2 2@192.168.35.22	☐
4	Dialed	2017-12-21	09:57:26	11151@47.88.77.14	Unknown	11100@47.88.77.14	☐
5	Dialed	2017-12-21	08:48:45	11151@47.88.77.14	Unknown	11100@47.88.77.14	☐
6	Received	2017-12-21	01:59:01	11151@47.88.77.14	Extension 11103	11103@47.88.77.14	☐
7	Dialed	2017-12-21	01:43:21	11151@47.88.77.14	Unknown	11100@47.88.77.14	☐
8	Dialed	2017-12-20	09:25:45	11151@47.88.77.14	Unknown	11100@47.88.77.14	☐
9							☐
10							☐
11							☐
12							☐
13							☐
14							☐
15							☐
Page 1		Prev	Next	Delete	Delete All		

Door Log					
Door Log					
Index	Name	Code	Date	Time	
1	William	57FAC741	2017-12-22	10:30:34	☐
2					☐
3					☐
4					☐
5					☐
6					☐
7					☐
8					☐
9					☐
10					☐
11					☐
12					☐
13					☐
14					☐
15					☐
Page 1		Prev	Next	Delete	Delete All

4.15. Web Relay

R27A/C can support extra web relay. This function is more safety to use DTMF code to remote unlock.

Type: Connect web relay and choose the type.

IP Address: Enter web relay IP address.

User Name: it is an authentication for connecting web relay

password: it is an authentication for connecting web relay

Notes: Users can modify username and password in web relay website.

Web Relay Action: Web Relay Action is used to trigger the web relay . The action URL is provided by web relay vendor

Web Relay Key: If the DTMF keys same as the local relay, the web relay will be open with local relay. But if there are different, the web relay is invalid.

Web Relay Extension: The webrelay can only receive the DTMF signal from the corresponding extension number.

Web Relay

Type	2N WebRelay ▼
IP Address	192.168.1.2
UserName	
Password	

Web Relay Action Setting

Action ID	Web Relay Action	Web Relay Key	Web Relay Extension
Action ID 01	state.xml?relayState=2	1	
Action ID 02	state.xml?relayState=2	3	
Action ID 03	state.xml?relayState=2	#	192.18.1.168
Action ID 04	state.xml?relayState=2	12	
Action ID 05	state.xml?relayState=2	123	
Action ID 06	state.xml?relayState=2	1234	
Action ID 07			
Action ID 08			
Action ID 09			
Action ID 10			

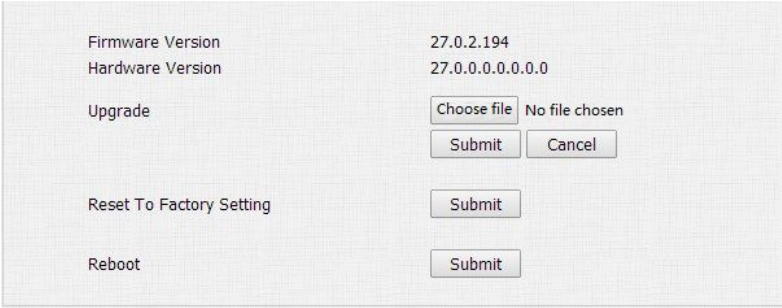
4.16. Upgrade-Basic

Go to Upgrade->Basic, user can upgrade firmware; Reset to factory setting and reboot.

Upgrade: Choose .zip firmware from your PC, then click Submit to start update.

Reset To Factory Setting: Directly click Submit to reset R27A/C. Use this function with caution. All configuration will be removed.

Reboot: Click to reboot.



The screenshot displays a web interface for the 'Upgrade-Basic' section. It features a table with the following information:

Firmware Version	27.0.2.194
Hardware Version	27.0.0.0.0.0.0.0

Below the table, there are three main sections:

- Upgrade:** Includes a 'Choose file' button, a 'No file chosen' status message, a 'Submit' button, and a 'Cancel' button.
- Reset To Factory Setting:** Includes a 'Submit' button.
- Reboot:** Includes a 'Submit' button.

4.17. Upgrade-Advanced

To display and configure manual update server's settings.

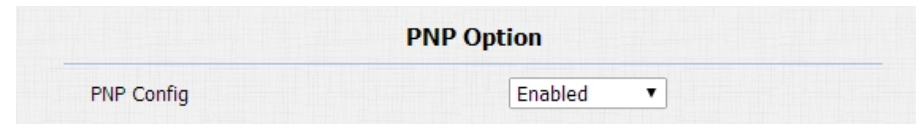
4.17.1. PNP

Plug and Play, once PNP is enabled, the phone will send SIP subscription message to PNP server automatically to get Auto Provisioning server's address.

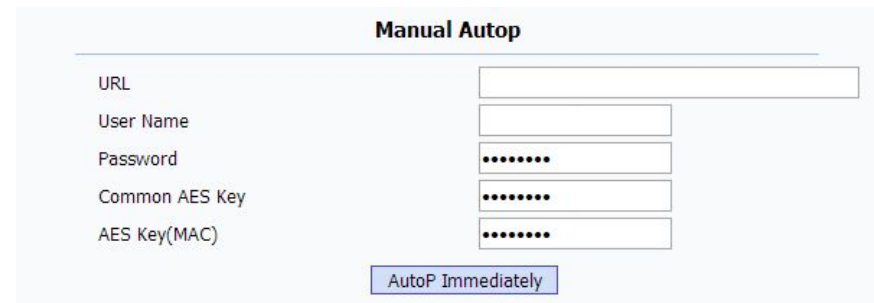
By default, this SIP message is sent to multicast address 224.0.1.75(PNP server address by standard).

4.17.2. Manual Autop

Autop (Auto-Provisioning) is a centralized and unified upgrade of IP telephone. It is a simple and time-saving configuration for IP phone. It is mainly used by the device to download corresponding configuration document from the server using TFTP / FTP / HTTP / HTTPS network protocol. To achieve the purpose of updating the device configuration, making the user to change the phone configuration more easily. This is a typical C/S architecture upgrade mode, mainly by the terminal device or PBX server to initiate an upgrade request.



The image shows a configuration window titled "PNP Option". Inside the window, there is a tab labeled "PNP Config". To the right of the tab is a dropdown menu currently set to "Enabled" with a downward arrow icon.



The image shows a configuration window titled "Manual Autop". It contains several input fields: "URL" (a long text box), "User Name" (a text box), "Password" (a text box with masked characters), "Common AES Key" (a text box with masked characters), and "AES Key(MAC)" (a text box with masked characters). Below these fields is a button labeled "AutoP Immediately".

URL: Auto provisioning server address.

User Name: Configure if server needs an username to access, otherwise left blank.

Password: Configure if server needs a password to access, otherwise left blank.

Common AES Key: Used for IP phone to decipher common Auto Provisioning configuration file.

AES Key (MAC): Used for IP phone to decipher MAC-oriented auto provisioning configuration file(for example, file name could be 0c1105888888.cfg if IP phone's MAC address is 0c1105888888).

Notes: AES is one of many encryption, it should be configured only when configure file is ciphered with AES, otherwise left blank.

4.17.3. Automatic Autop

To display and configure Auto Provisioning mode settings.

This Auto Provisioning mode is actually self-explanatory.

For example, mode “Power on” means IP phone will go to do Provisioning every time it powers on.

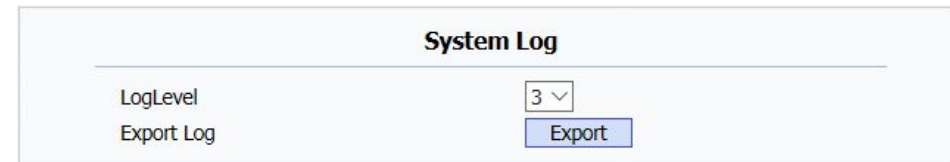
Automatic Autop	
Mode	Power On ▾
Schedule	Sunday ▾
	22 Hour(0~23)
	0 Min(0~59)
Clear MD5	Submit
Export Autop Template	Export

4.17.4. System Log

To display system log level and export system log file.

System log level: From level 0~7. The higher level means the more specific system log is saved to a temporary file. By default, it's level 3.

Export Log: Click to export temporary system log file to local PC.



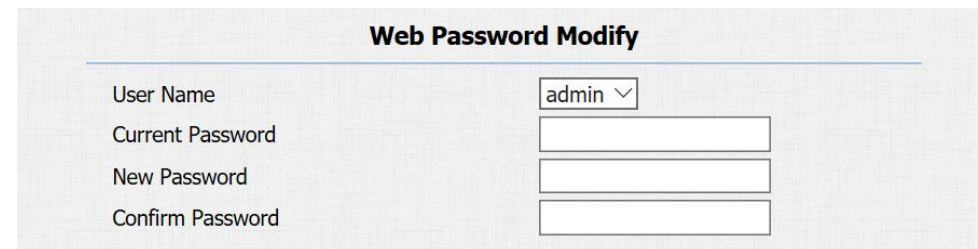
The image shows a web interface titled "System Log". It contains a label "LogLevel" next to a dropdown menu showing the value "3". Below this is a label "Export Log" next to a blue button labeled "Export".

4.18. Security-Basic

Go to Security->Basic, to modify password and session time.

4.18.1. Web Password Modify

To modify password of 'admin' or 'user' account.



The image shows a web interface titled "Web Password Modify". It contains four labels on the left: "User Name", "Current Password", "New Password", and "Confirm Password". To the right of "User Name" is a dropdown menu showing "admin". To the right of the other three labels are empty text input fields.