



R26 Series Door Phone Admin Guide

About This Manual

Thank you for choosing Akuvox's R26 series door phone. This manual is intended for end users, who need to properly configure the door phone. This manual is applicable to 26.0.3.xx version, and it provides all functions' configurations of R26C/P. Please visit Akuvox forum or consult technical support for any new information or latest firmware.

Note: Please refer to universal abbreviation form in the end of manual when meet any abbreviation letter.

Content

1. Product Overview1	I
1.1. Product Description	
1.2. Connector Introduction2)
1.3. LED Status Information	;
2. Daily Use4	ŀ
2.1. Make a Call4	ŀ
2.2. Receive a Call	ŀ
2.3. Unlock by RFID Card (Optional)4	ŀ
3. Basic Features	;
3.1. Access the Website Setting5	;
3.1.1. Obtain IP Address5	;
3.1.2. Access the Device Website5	;
3.2. Password Modification	;
3.2.1. Modify the Web Password	;
3.2.2. Session Time Out	;

3.3. Phone Configuration	7
3.3.1. Time/Lang	7
3.3.2. Network	7
3.3.2.1. DHCP Mode	7
3.3.2.2. Static IP Mode	
3.3.2.3. Local RTP	8
3.3.2.4. SNMP	9
3.3.2.5. VLAN	9
3.3.2.6. TR069	
3.3.3. Sound	11
3.4. Intercom Call	
3.4.1. Direct IP Call	
3.4.2. SIP Call	
3.4.2.1. SIP Account	13
3.4.2.2. SIP Server 1&2	14
3.4.2.3. Outbound Proxy Server	15

3.4.2.4. Transport Type	15
3.4.2.5. NAT	15
3.4.3. Auto Answer	
3.4.4. Web Call	
3.4.5. No Answer Call	
3.4.6. Multicast	17
3.4.7. Push To Hang Up	
3.5. Security	
3.5.1. Live View	18
3.5.2. RTSP	
3.5.3. ONVIF	
3.6. Access Control	
3.6.1. Relay	
3.6.2. Card Setting (Optional)	22
3.6.3. Open Relay via HTTP	23
3.6.4. Unlock via Exit Button	24

	3.7. Reboot	25
	3.8. Reset	25
4. /	Advance Feature	25
	4.1. Phone Configuration	25
	4.1.1. LED	25
	4.1.2. IR LED	27
	4.1.3. RF Card Code Display Related	27
	4.2. Intercom	28
	4.2.1. Call Time Related	28
	4.2.2. Return Code When Refuse	28
	4.2.3. SIP Call Related	29
	4.2.4. Codec	30
	4.2.5. DTMF	31
	4.2.6. Session Timer	32
	4.2.7. Encryption	32
	4.2.8. NAT	32

4.2.9. User Agent	33
4.3. Access Control	33
4.3.1. Web Relay	33
4.4. Security	35
4.4.1. Anti-alarm	35
4.4.2. Motion	35
4.4.3. Action	36
4.4.3.1. Action Parameters	36
4.4.3.2. No Answer Action	38
4.4.3.3. Push Button Action	38
4.4.3.4. Input Interface Triggered Action	39
4.4.3.5. Motion Triggered Action	39
4.4.3.6. Action URL	40
4.5. Upgrade	40
4.5.1. Web Upgrade	40
4.5.2. Autop Upgrade	41

	4.5.3. Backup Config File	. 43
	4.5.4. DHCP Option	. 44
4.6	. Log	. 44
	4.6.1. Call log	. 44
	4.6.2. Door Log	. 44
	4.6.3. System Log	.45
	4.6.4. PCAP	.45

Akuvox Smart

1. Product Overview

1.1. Product Description

Akuvox R26X is a SIP-compliant, hands-free one button video outdoor phone. It can be connected with users Akuvox indoor monitors for remote access controlling and monitoring. Users can operate the indoor phone to communicate with visitors via voice and video, and use RFID cards to unlock the door (R26C only). It's applicable in villas, offices and so on.



Figure 1.1 Product description



1.2. Connector Introduction

Ethernet (POE): Ethernet (POE) connector, which can provide both power and network connection.

12V/GND: External power supply terminal if POE is not available.

RS485A/B: RS485 terminal.

DOORA/B: Trigger signal input terminal.

RelayA/B (NO/NC/COM): Relay control terminal.

Note: The general door phone interface diagram is only for reference.







Figure 1.2-2 General interface



1.3. LED Status Information

LED Status		Description
Blue	Always on	Normal status
	Flashing	Calling
Red	Flashing	Network is unavailable
Green	Always on	Talking on a call
	Flashing	Receiving a call
Pink	Flashing	Upgrading



2. Daily Use

2.1. Make a Call

Press the call button to dial out the predefined number or IP address. If LED turns green, it means the call has been answered.

2.2. Receive a Call

Users can use phone or indoor monitor to call R26X and R26X will answer it automatically by default. If auto answer function is disabled, pressing call button to answer incoming call.

2.3. Unlock by RFID Card (Optional)

Place the predefined RFID card on the card reader. The door phone will announce "the door is now opened" and unlock the door.13.56MHz RF card is supported on R26C.

Akuvox Smart

3. Basic Features

3.1. Access the Website Setting

3.1.1. Obtain IP Address

While R26X power up normally, hold the call button for several seconds after the statue LED turns blue and it will enter IP announcement mode. In announcement mode, the IP address will be announced periodically and "IP 0.0.0.0" would be announced if no IP address is obtained. Press call button again to quit the announcement mode.

3.1.2. Access the Device Website

Open a Web browser and access the corresponding IP address. Enter the default user name and password to login. The default

Login		
	User Name	admin
	Password	••••
		Remember Username/Password Login

Figure 3.1.2 Access the device website



administrator user name and password are shown below:

User Name: admin

Password: admin

3.2. Password Modification

Go to **Security - Basic** to modify password and session time.

3.2.1. Modify the Web Password

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

3.2.2. Session Time Out

To configure session time out value. Over the value, users need to login again to continue configuring.

Web Password Modify		
User Name	admin 🔻	
Current Password		
New Password		
Confirm Password		



9	ession Time Out
Session Time Out Value	(60~14400s)

Figure 3.2.2 Session time out



3.3. Phone Configuration

3.3.1. Time/Lang

Go to Phone - Time/Lang to configure it.

Time Zone: To select local time zone for NTP server.

Primary Server: To configure primary NTP server address.

Secondary Server: To configure secondary NTP server address, it

takes effect if primary NTP server is unreachable.

Update Interval: To configure interval between two consecutive

NTP requests.

System Time: The current time of the phone.

3.3.2. Network

3.3.2.1. **DHCP Mode**

Go to Network - Basic.

	NTP		
Time Zone	0 GMT		~
Primary Server	0.pool.ntp.org		
Secondary Server	1.pool.ntp.org		
Update Interval	3600	(>= 3600s)	
System Time	09:57:31		



	LAN Port	
• DHCP		
O Static IP		
IP Address	192.168.1.100	
Subnet Mask	255.255.255.0	
Default Gateway	192.168.1.1	
LAN DNS1	8.8.8.8	
LAN DNS2		

Figure 3.3.2.1 DHCP mode



R26X uses DHCP by default, and it will obtain IP address, subnet mask, default gateway and DNS server address from DHCP server automatically.

3.3.2.2. Static IP Mode

Go to **Network - Basic** to configure.

If selected, users could manually set IP address, subnet mask, default gateway and DNS server. The figure below shows static IP setting.

3.3.2.3. Local RTP

Go to **Network - Advanced** to configure. To display and configure Local RTP settings. **Max RTP Port:** Determine the maximum port that RTP stream can use.

	LAN Port	
O DHCP		
Static IP		
IP Address	192.168.1.100	
Subnet Mask	255.255.255.0	
Default Gateway	192.168.1.1	
LAN DNS1	8.8.8.8	
LAN DNS2		

Figure 3.3.2.2 Static IP mode

Lo	cal RTP	
Starting RTP Port	11800	(1024~65535)
Max RTP Port	12000	(1024~65535)

Figure 3.3.2.3 Local RTP



Starting RTP Port: Determine the minimum port that RTP stream

can use.

3.3.2.4. SNMP

Go to Network - Advanced to configure. 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, and it could be an IP address or any valid URL domain name.
Note: SNMP (Simple Network Management Protocols) is Internet-standard protocol for managing devices on IP networks.

3.3.2.5. VLAN

Go to **Network - Advanced** to configure. To display and configure VLAN settings.



Figure 3.3.2.4 SNMP

		VLAN	
LAN Port	Active	Disabled	•
	VID	1	(1~4094)
	Priority	0	





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.

Note: Please consult users administrator for specific VLAN settings

in your networking environment.

3.3.2.6. TR069

Go to **Network - Advanced** to configure. To display and configure TR069 settings.

Active: To enable or disableTR069 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.

		FR069	
	Active	Disabled	T
	Version	1.0	•
ACS	URL		
	User Name		
	Password	•••••	
Periodic Inform	Active	Disabled	•
	Periodic Interval	1800	(3~24×3600s)
CPE	URL		
	User Name		
	Password		



Akuvox Smart Intercom

Password: To configure Password for ACS or CPE.

Periodic Inform: To enable periodically inform.

Periodic Interval: To configure interval for periodic inform.

Note: 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.

3.3.3. Sound

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, users will not hear the prompt voice when the door is opened.

M	lic Volume	
Mic Volume	8	(1~15)
Spe	aker Volume	
Speaker Volume	1	(1~15)
Open	Door Warning	
Open Door Warning	Enabled ~	
IP A	nnouncement	
IP Appouncement active time	0	(0~180)

Figure 3.3.3-1 Sound

IP Announcement: To setup the IP announcement active time. Over the configured value, the phone will not announce the IP when users hold the button.

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

Opendoor Tone Upload: To upload the opendoor tone by users.

3.4. Intercom Call

3.4.1. Direct IP Call

Without sip server, users can also use IP address to call each other,

but this way is only suitable in the LAN.

Go to **Phone** - **Call Feature** to enable the direct IP call for door phones first.

Then, go to **Intercom - Basic** to configure the IP address of the destination(E.g. IP address 192.168.1.100). It supports up to 8 lines simultaneously.

Choose File No file chosen	Upload Del
ile Format: wav, size: < 200KB, sample	rate: 16000, Bits: 16
Opendoor T	one Upload



	Figure	e 3.4.1-1 Direct	IP call	
	P	ush Button		
Кеу	P	ush Button Number2	Number3	Number4

Enabled V

Figure 3.4.1.1 Push button

Direct ID



After all, press the push button to make direct IP call.

If you would like to call multiple numbers at the same time, divide

them by semicolon.

Note: The push button number can also enter the SIP account.

3.4.2. SIP Call

SIP calls which use SIP numbers to make or receive calls should be supported by SIP server. Users need to register accounts and fill SIP feature parameters before using it.

Go to **Account - Basic** to configure SIP account and SIP server for door phone first. Then press the push button to make SIP call.

3.4.2.1. SIP Account

Status: To display register result.

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

	SIP Account
Status	Registered
Account	Account 1
Account Active	Enabled T
Display Label	R26
Display Name	Door_R26
Register Name	9003
User Name	9003
Password	

Figure 3.4.2.1 SIP account



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.

3.4.2.2. SIP Server 1&2

Server IP 1: To enter SIP server's IP address or URL.

Server IP 2: To display and configure secondary SIP server settings. This is for redundancy, if registering to primary SIP server fails, the phone will go to secondary SIP server for registering.

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

SIP Server 1			
Server IP	120.78.230.239	Port 5070	
Registration Period	1800	(30~65535s)	

Figure 3.4.2.2-1 SIP server 1&2

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

Figure 3.4.2.2-2 SIP server 1&2



3.4.2.3. Outbound Proxy Server

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

3.4.2.4. Transport Type

To display and configure transport type for SIP message.

- 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: DNS record for specifying the location of services.

3.4.2.5. 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.

NAT				
NAT	Disabled	•		
Stun Server Address			Port	3478



Out	bound Proxy Server	
Enable Outbound	Disabled •	
Server IP	P.	ort 5060
Backup Server IP	P	ort 5060

Figure 3.4.2.3 Outbound proxy server

Transport Type				
UDP 🔻				
	Transport Type UDP			

Figure 3.4.2.4 Transport type



Note: By default, NAT is disabled.

3.4.3. Auto Answer

Go to **Account - Advanced** to enable auto answer feature for SIP call.

Go to Phone - Call Feature to enable auto answer feature for direct

IP call without SIP proxy.

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.

Then incoming call will be answered automatically.

3.4.4. Web Call

Go to **Intercom - Basic** to dial out or answer incoming call from website.

Auto Answer	Enabled v
	Figure 3.4.3-1 Auto answer
Direct IP AutoAnswer	Enabled •
	Figure 3.4.3-2 Auto answer
Auto Answer Delay	0 (0~5s)
Auto Answer Mode	Video 🔻
	Figure 3.4.3-3 Auto answer
	Web Call

Figure 3.4.4 Web call



3.4.5. No Answer Call

Go to **Intercom - Basic** and enable the no answer call.

Go to Intercom - Basic and set the no answer call number.

3.4.6. Multicast

Go to Intercom - Multicast to configure.
Paging Barge: Choose the multicast number, the range is 1-10.
Paging priority Active: Enable to disable the multicast.
Listening Address: Enter the IP address users need to listen.
Label: Input the label for each listening address.

3.4.7. Push To Hang Up

Go to **Intercom - Basic** to configure. To enable or disable pushing button to hang up.

	Figure 3.4.5-1 No Answer call
o Answer Call1	



	Multicas	st Setting		
Paging Barge		1	•	
Paging Priority Ad	ctive	Enabled	•	
	Prior	ity List		
IP Address	Listening Add	lress	Label	Priority
1 IP Address	224.1.6.11:1200		Test	1
2 IP Address				2
3 IP Address				3
4 IP Address				4

Figure 3.4.6 Multicast

Push To Hang Up						
Push To Hang Up	Enabled •					

Figure 3.4.7 Push to hang up



3.5. Security

3.5.1. Live View

Go to Intercom - Live Stream to check the real-time video from R26X. In addition, users also can check the real-time picture via URL: http://IP_address:8080/picture.jpg Users can also check the real-time video via URL: http://IP_address:8080/video.cgi

PelcoController: The R26X doorphone can support the pelco-d protocol and control the direction of camera cradle head.

3.5.2. RTSP

R26X supports RTSP stream, go to **Intercom - RTSP** to enable or disable RTSP server. The URL for RTSP stream is:



Р	elcoControl	ler	
	TiltUp		
PanLeft	cTiltDown	PanRight	

Figure 3.5.1 Live view





rtsp://IP_address/live/ch00_0.

RTSP Stream: To enable RTSP video and select the video codec. R26X supports H.264 video codec.

H.264 Video Parameters: H.264 is a video stream compression standard. Different from H.263, it provides an 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 H.264.

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.

MJPEG Video Parameters: Called motion joint photographic experts group. It is a video encoding format, in which each image is

	RTSP Stre	am
RTSP Video Enabled	Ø	
RTSP Video Codec	H.264	•
	1.264 Video Pa	ramete
Video Resolution	VGA	•
Video Framerate	30 fps	•
Video Bitrate	256 kbps	•
Nideo Resolution	1 PEG4 Video Pa VGA	aramete
Video Framerate	30 fps	T
Video Bitrate	2048 kbps	T
M	IJPEG Video Pa	ramete
Video Resolution	VGA	T
Video Resolution Video Framerate	VGA 30 fps	•

Figure 3.5.2-2 RTSP



compressed separately by JPEG. MJPEG compression can produce high quality video image and has a flexible configuration in video definition and compressed frames.

To modify the resolution, framerate and bitrate of MJPEG.

3.5.3. ONVIF

R26X supports ONVIF protocol, which means R26X's camera can be searched by other devices, like NVR, which supports ONVIF protocol as well.

Go to **Intercom - ONVIF** to configure ONVIF mode and its username/password.

Switching ONVIF mode to undiscoverable means that users must program ONVIF's URL manually.

The ONVIF's URL is:

http://IP_address:8090/onvif/device_service

Ba	sic Setting	
Onvif Mode	Discoverable •	
UserName	admin	
Password	•••••	

Figure 3.5.3 ONVIF



3.6. Access Control

3.6.1. Relay

Go to Intercom - Relay to configure relay.

There are three terminals of relay: NO, NC and COM. NO stands for

normally open contact while NC stands for normally closed contact.

Relay ID: R26X supports two relays, users can configure them respectively.

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, R26X supports maximum 4 digits DTMF code.

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

Relay				
Relay ID	RelayA	•	RelayB	•
Relay Type	Default state	•	Default state	٠
Relay Delay(sec)	3	•	3	٠
DTMF Option	1 Digit DTMF	•		
DTMF	0	•	0	۲
Multiple DTMF				
Relay Status	RelayA: Low		RelayB: Low	

Figure 3.6.1 Relay



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.

Note: Relay operate a switch and does not deliver power, so users

should prepare power adapter for external devices which connects to relay.

3.6.2. Card Setting (Optional)

Go to Intercom - Card setting, to manage card access system. Import/Export Card Data

R26X supports import or export the card data file, which is convenient for administrator to deal with a large number of cards. The maximum card data file is 200K which is around 500 cards. **Note**: Please consult administrator for the template RFID cards data file.

Import/Expo	ort Card Data(.x	ml)
Choose File No file chosen	Import	Export

Figure 3.6.2-1 Card setting



Obtain and Add Card

- Switch card status to "Card Issuing" and click "Apply";
- Place card on the card reader area and click "Obtain";
- Name card, choose which door you want to open and the valid day and time;
- Click "Add" to add it into list.

Note: Users can use card to access only when card status has been switched to "Normal".

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.

3.6.3. Open Relay via HTTP

Users can use a URL to remote unlock the door.

Go to Intercom - Relay to configure.

Switch: Enable this function. Disable by default.

	Card Setting		
IC Key DoorNum	RelayA 🗹 RelayB 🗆 RelayC 🗆		
IC Key Day	Mon 🗹 Tue 🗹 Wed 🗹 Thur 🖉		
	Fri 🗹 Sat 🔲 Sun 🔲 Check All 🔲		
IC Key Time	06 ▼ : 00 ▼ - 12 ▼ : 00 ▼		
IC Key Name	Courier		
IC Key Code	FFB59828	Obtain	Add

Figure 3.6.2-2 Card setting

Door Card Management					
Index	Name	Code	Door		
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
Page 1 •	Prev	Next Delete	Delete All		

Figure 3.6.2-3 Card setting



UserName & Password: Users can setup the username and

password for HTTP unlock.

URL format:

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

3.6.4. Unlock via Exit Button

Go to Intercom - Input to configure input settings.

R26X supports two input triggers Input A/B (DOOR A/B).

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 the input terminal is triggered.

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

	Open Relay via HTTP
Switch	Disabled •
UserName	
Password	••••••

Figure 3.6.3 Open relay via HTTP

		Input A
Input Service	Disabled •	
Trigger Option	Low	
Action to execute	Sip Call 🔲 HTT	р 🔲
Http URL:		
Action Delay		(0~300 Sec)
Open Relay	None •	
Door Status	DoorA: High	
Light Status	LightA: Normal	

Figure 3.6.4-1 Unlock via exit button



Open Relay: To configure relay to open.

Door Status: To show the status of input signal.

3.7. Reboot

Go to **Upgrade - Basic**, users can reboot the phone.

3.8. Reset

Go to Upgrade - Basic, users can reset to factory setting.

4. Advance Feature

4.1. Phone Configuration

4.1.1. LED

Go to Intercom - LED Setting to configure the LED status.

Reboot	Submit
	Figure 3.7 Reboot
Reset To Factory Setting	Submit

Figure 3.8 Reset



To setup the LED lighting mode.

State: There is five states: Normal, Offline, Calling, Talking and Receiving.

Color Off: The default status is OFF.

Color On: It can support three color: Red, Green, Blue.

Blink Mode: To setup the different blink frequency.

LED Control:

Use HTTP URL to remote control the LED status.

Http format:

http://PhonelP/fcgi/do?action=LedAction&State=1&Color=1&M

ode=2500

Status: 1=Idle; 2=OffLine; 3=Calling; 4=Talking; 5=Receiving;

Color: 1=Green; 2=Blue; 3=Red; Mode: 0=Always On; 1=Always

Off; 500/1000/1500/2000/25000/3000

		LED	Status		
State	Color O	off	Color O	n	Blink Mode
NORMAL	OFF	•	Blue	•	Always On 🔻
OFFLINE	OFF	•	Red	•	2500/2500 •
CALLING	OFF	•	Blue	•	2500/2500 •
TALKING	OFF	•	Green	•	Always On 🔻
RECEIVING	OFF	T	Green	•	2500/2500 •

Figure 4.1.1-1 LED

	LED Control	
LED Control	Disabled •	
	Figure 4 1 1-2 FD	



4.1.2. IR LED

Go to Intercom - Advanced to configure.

Photoresistor: The setting is for night vision, when the surrounding of R26X is very dark, infrared LED will turn on and R26X will turn to night mode. Photoresistor value relates to light intensity and larger value means that light intensity is smaller. Users 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.

Photoresistor Photoresistor Setting 15 - 30 (0~100) Figure 4.1.2 IR LED

4.1.3. RF Card Code Display Related

Go to **Intercom - Advanced** to configure. **RFID Display Mode:** To be compatible different card number formats. The default 8HN means hexadecimal.

RI	FID	
RFID Display Mode	8HN	•





4.2. Intercom

4.2.1. Call Time Related

Go to Intercom - Basic to configure.

Max Call Time: To configure the max call time.

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.

Hang Up After Open Door: To set the time that hang up the call after open the door.

4.2.2. Return Code When Refuse

Go to Phone - Call Feature - Others to configure. Return Code When Refuse: Allows users to assign specific code

as return code to SIP server when an incoming call is rejected.

	Figu	die 4.2. I-I Call line leialeu
		Max Dial Time
Dial In Time	60	(30~120Sec)
Dial Out Time	60	(30~120Sec)
Time Out	Ha	ng Up After Open Door
Time Out	5	(0:015)

Max Call Time

(0~120Minutes)

Max Call Time

5

486(Busy Here)	•
	486(Busy Here)

Figure 4.2.2 Return code when refuse



4.2.3. SIP Call Related

Go to Account-Advanced to configure the SIP call related.

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.

Anonymous Call: If enabled, R26X will block its information when calling out.

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 messages from hacking.

	Call	
Max Local SIP Port	5062	(1024~65535)
Min Local SIP Port	5062	(1024~65535)
Caller ID Header	RPID-FROM	•
Auto Answer	Enabled	•
Anonymous Call	Disabled	•
Anonymous Call Rejection	Disabled	•
Missed Call Log	Enabled	•
Prevent SIP Hacking	Disabled	•

Figure 4.2.3-1 SIP call related



Figure 4.2.3-2 SIP call related



4.2.4. Codec

Go to Account - Advanced to configure SIP call related codec.

SIP Account: To choose which account to configure.

Audio Codec: R26X support four audio codec: PCMA, PCMU,

G729, G722. Different audio codec requires different bandwidth, users can enable/disable them according to different network environment.

Note: Bandwidth consumption and sample rates are as below:

Codec	Bandwidth	Sample Rates
PCMA	64kbit/s	8kHz
PCMU	64kbit/s	8kHz
G729	8kbit/s	8kHz
G722	64kbit/s	16kHz

Video Codec: R26X supports H.264 standard, which provides better video quality at substantially lower bit rates than previous

		Co	decs		
Disabled Codecs		Enabled Co	odecs		
	>>	PCMU PCMA G722 G729	*	1	
*	<<		-		

Figure 4.2.4-1 Codec

	Video Codec
Codec Name	✓ H264
Codec Resolution	4CIF
Codec Bitrate	2048
Codec Payload	104

Figure 4.2.4-2 Codec



standards.

Codec Resolution: R26X supports 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.

Go to Phone - Call Feature to configure multicast related codec.

4.2.5. DTMF

Go to Account - Advanced 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	
Туре	RFC2833	T
How To Notify DTMF	Disabled	V
DTMF Payload	101	(96~127)

Figure 4.2.5 DTMF

PCMU 🔻	
	PCMU V



4.2.6. Session Timer

Go to **Account - Advanced** to configure it. If enabled, the on going call will be disconnected automatically once the session expired unless it's been refreshed by UAC or UAS.

4.2.7. Encryption

Go to Account - Advanced to configure it.

If enabled, voice will be encrypted.

4.2.8. NAT

Go to **Account - Advanced** to display NAT related settings. **UDP Keep Alive message:** If enabled, R26X will send UDP keep-alive message periodically to router to keep NAT port alive. **UDP Alive Msg Interval:** Keep alive message interval.

	Session Timer		
Active	Disabled	۲	
Session Expire	1800		(90~7200s)

Figure 4.2.6 Session timer

	Encryption
Voice Encryption(SRTP)	Disabled •

Figure 4.2.7 Encryption

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

Figure 4.2.8 NAT



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

4.2.9. User Agent

Go to Account - Advanced to configure it.

To customize user agent field in the SIP message.

If users agent is set to specific value, users could see the information from network package. If user agent is not set by default, users could see the company name, model number and firmware version from network package.

4.3. Access Control

4.3.1. Web Relay

R26X can support extra web relay which is connected with the door phone via network.

	User Agent	
User Agent		

Figure 4.2.9 User agent

Web Relay	
Туре	Default
IP Address	
UserName	
Password	•••••

Figure 4.3.1-1 Web relay



Go to Phone - WebRelay to configure.

Type: Connect web relay and choose the type.

IP Address: Enter web relay's IP address.

UserName: It is an authentication for connecting web relay.

Password: It is an authentication for connecting web relay.

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.

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

Action ID	Web Relay Action	Web Relay Key	Web Relay Extension
Action ID 01	state.xml?relayState=2	1	192.168.1.99
Action ID 02			
Action ID 03			
Action ID 04			
Action ID 05			
Action ID 06			
Action ID 07			
Action ID 08			
Action ID 09			
Action ID 10			

Figure 4.3.1-2 Web relay



4.4. Security

4.4.1. Anti-alarm

Go to Intercom - Advanced to configure.

R26X integrates internal gravity sensor for the own security, and after enabling tamper alarm, if the gravity of R26X changes dramatically, the phone will alarm. Gravity sensor threshold stands for sensitivity of sensor.

4.4.2. Motion

R26X supports motion detection, go to **Intercom - Motion** to configure detection parameter.

Motion Detection: To enable or disable motion detectionMotion Delay: To configure minium time gap between two snapshots.

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

Figure 4.4.1 Anti-alarm

	Motion Detection	n Opt	ions
Motion Detection	Disabled	•	
Motion Delay	10	(0~120 Sec)

Figure 4.4.2-1 Motion

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

4.4.3. Action

R26X supports to send notifications, snapshots via email and ftp transfer method, or calls via SIP call method, when trigger specific actions.

4.4.3.1. Action Parameters

Go to Intercom - Action to set action receiver.

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.

Motion Detect Time Setting
Mon 🖉 Tue 🖉 Wed 🗹 Thur 🗹
Fri 🗹 Sat 🗌 Sun 🔲 Check All
00 • : 00 • - 23 • : 59 •

Figure 4.4.2-2 Motion

Email Notification	
Sender's email address	
Receiver's email address	
SMTP server address	
SMTP user name	
SMTP password	•••••
Email subject	
Email content	
Email Test	Test Email

Figure 4.4.3.1-1 Action parameters



SMTP user name: To configure user name of SMTP service

(usually it is same with sender's email address).

SMTP password: To configure password of SMTP service (usually

it is 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.

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.

SIP Notification

SIP Call Number: To configure SIP call number.

SIP Call Name: To configure display name of R26X.

	FTP Notification	
FTP Server		
FTP User Name		
FTP Password	•••••	
FTP Test	Test FTP	
	SIP Call Notification	
SIP Call Number		
SIP Caller Name		

Figure 4.4.3.1-2 Action parameters



4.4.3.2. No Answer Action

Go to Intercom - Basic to configure.

No Answer Action: For sending the notification to specified email if

the call is not answered.

4.4.3.3. Push Button Action

Go to Intercom - Basic to configure.

Enable this function, the device will record any changes of the surrounding environment then send the message or picture to the corresponding receiver.

Action to execute: Tick the suit the suitable way to receive the action message.

HTTP URL: If you tick HTTP URL, and then enter the HTTP server IP address in the HTTP URL area. When the device detects any changes, it will send HTTP network package.

No Answer	Disabled T	
Action	Dioubiou	

Figure 4.4.3.2 No answer action

	PushBu	tton Action
Action to execute FT	P 🔲 Email 🔲	Http URL
Http URL:		

Figure 4.4.3.3 PushButton action



4.4.3.4. Input Interface Triggered Action

Go to Intercom - Input to configure.

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

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

Action Delay: To configure after how long to execute to send out

notifications and trigger relay.

Open Relay: To configure which relay to trigger.

4.4.3.5. Motion Triggered Action

Go to Intercom - Motion to configure.

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

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

SDMC Upload: Upload the capture to the SDMC.

Action to execute	FTP 🔲 Em	nail 🔲 Sip Call 🔲 HTTP 🔲	
Http URL:			
Action Delay	0	(0~300 Sec)	

Figure 4.4.3.4 Input interface trigger action

	Action to execute				
Action to execute	FTP 🛛	Email 🕑	Sip Call	НТТР 🗆	
Http URL:					
SDMC Upload	Disabled	T			

Figure 4.4.3.5 Motion trigger action



4.4.3.6. Action URL

Action URL can be triggered by some predefined incidents.

Go to **Phone - Action URL**, pick **Active** to be "Enabled", pick to demand triggered incident, each "HTTP" request to have to including the key and value, use "=" to separate, each value staring with "\$." For example, "**Open Relay Success**" incident, input **http://server IP address/help.xml?mac=\$mac**, when the relay of R26X is triggered successfully, the phone will send a HTTP packet to the server, through the HTTP package to know the MAC of the phone.

4.5. Upgrade

4.5.1. Web Upgrade

Go to **Upgrade - Basic**, users can upgrade firmware. Reset to factory setting and reboot.



Figure 4.4.3.6 Action URL







Upgrade: Choose .rom firmware from the PC, and then click **Submit** to start update.

4.5.2. Autop Upgrade

Go to **Upgrade - Advanced** to configure automatically update server's settings.

PNP Option

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).

Manual Autop

Autop (Auto-Provisioning) is a centralized and unified upgrade of telephone. It is a simple and time-saving configuration for phone. It is mainly used by the device to download corresponding



Figure 4.5.2-1 Autop update

	Manual Autop
URL	
User Name	
Password	•••••
Common AES Key	•••••
AES Key(MAC)	•••••
	AutoP Immediately



configuration document from the server using TFTP / FTP / HTTP / HTTPS network protocol. To achieve the purpose of updating the device configuration, making the users 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.

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 phone to decipher common auto provisioning configuration file.

AES Key (MAC): Used for phone to decipher MAC-oriented auto provisioning configuration file (for example, file name could be 0C1105888888.cfg if phone's MAC address is 0C11058888888).



Note: AES is one of many encryption, it should be configured only

when configure file is ciphered with AES, otherwise left blank.

Automatic Autop

To display and configure auto provisioning mode settings.

This auto provisioning mode is actually self-explanatory.

For example, mode "Power on" means phone will go to do provisioning every time it powers on.

Note: Please refer to the related feature guide from Akuvox forum.

4.5.3. Backup Config File

Go to **Upgrade - Advanced** to backup the config file.

Export Autop Template: To export current config file.

Others: To export current config file (Encrypted) or import new config file.

	Automatic Autop	
Mode	Power On	•
Schedule	Sunday 🔻	
	22	Hour(0~23)
	0	Min(0~59)
Clear MD5	Submit	



Export Autop Template	Export
Figure 4.5.3	3-1 Backup config file
	Others
Config File(.tgz/.conf/.cfg)	Choose File No file chosen
	Export (Encrypted)

Figure 4.5.3-2 Backup config file



4.5.4. DHCP Option

To display and configure DHCP setting for AutoP. Option 66/43 is enable by default. It can support HTTPS, HTTP, FTP, TFTP server. **Customer Option:** Enter the server URL. Click "Submit" to save. **Note:** To make DHCP autop URL works, the PNP should be disable.

4.6. Log

4.6.1. Call log

Go to **Phone - Call Log**, users can see a list of call log which have dialed, received or missed. Users can delete calls from list.

4.6.2. Door Log

Go to **Phone - Door Log**, users can see a list of door log which records card information and data.

DHCP Option	
Custom Option	(128~254)
(DHCP Option 66/43 is Enabled by Default)	

Call	History		All	•			
Index	Туре	Date	Time	Local Identity	Name	Number	
1	Received	2018-09-30	08:28:46	192.168.35.1 0@192.168.35 .10	192.168.35.68	<u>192.168.35.6</u> 8@192.168.35 .68	

Figure 4.5.4 Backup config file

Figure 4.6.1 Call log

	Door Log							
Index	Name	Code	Туре	Date	Time	Status		
1	Courier	FFB59828	Card	2018-09-30	10:49:19	Failed		
2	unKnown	1FEDBA28	Card	2018-09-30	10:49:16	Failed		
3	Courier	FFB59828	Card	2018-09-30	10:49:09	Failed		
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
Page 1	•	Prev	Next	De	elete	Delete All		

Figure 4.6.2 Door log



4.6.3. System Log

Go to **Upgrade - Advanced** to configure system log level and export system log file.

System log level: From level from 0 to 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.

4.6.4. PCAP

Go to **Upgrade - Advanced** to start, stop packets capturing or to export captured packet file.

Start: To start capturing all the packets file sent or received from phone.

Stop: To stop capturing packets.

	System Log	
LogLevel	3 🔻	
Export Log	Export	

Figure 4.6.3 System log

РСАР				
РСАР	Start	Stop	Export	
PCAP Auto Refresh	Disabled *			

Figure 4.6.4 PCAP



Abbreviations

ACS: Auto Configuration Server	DNS-SRV: Service record in the Domain Name System	
Auto: Automatically	FTP: File Transfer Protocol	
AEC: Configurable Acoustic and Line Echo Cancelers	GND: Ground	
ACD: Automatic Call Distribution	HTTP: Hypertext Transfer Protocol	
Autop: Automatical Provisioning	HTTPS: Hypertext Transfer Protocol Secure	
AES: Advanced Encryption Standard	IP: Internet Protocol	
BLF: Busy Lamp Field	ID: Identification	
COM: Common	IR: Infrared	
CPE: Customer Premise Equipment	LCD: Liquid Crystal Display	
CWMP: CPE WAN Management Protocol	LED: Light Emitting Diode	
DTMF: Dual Tone Multi-Frequency	MAX: Maximum	
DHCP: Dynamic Host Configuration Protocol	POE: Power Over Ethernet	
DNS: Domain Name System	PCMA: Pulse Code Modulation A-Law	
DND: Do Not Disturb	PCMU: Pulse Code Modulation µ-Law	



PCAP: Packet Capture	SIP: Session Initiation Protocol
PNP: Plug and Play	SNMP: Simple Network Management Protocol
RFID: Radio Frequency Identification	STUN: Session Traversal Utilities for NAT
RTP: Real-time Transport Protocol	SNMP: Simple Mail Transfer Protocol
RTSP: Real Time Streaming Protocol	SDMC: SIP Devices Management Center
MPEG: Moving Picture Experts Group	TR069: Technical Report069
MWI: Message Waiting Indicator	TCP: Transmission Control Protocol
NO: Normal Opened	TLS: Transport Layer Security
NC: Normal Connected	TFTP: Trivial File Transfer Protocol
NTP: Network Time Protocol	UDP: User Datagram Protocol
NAT: Network Address Translation	URL: Uniform Resource Locator
NVR: Network Video Recorder	VLAN: Virtual Local Area Network
ONVIF: Open Network Video Interface Forum	WG: Wiegand

Akuvox Smart

Contact us

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

Sales email: sales@akuvox.com

Technical support email: techsupport@akuvox.com

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

We highly appreciate your feedback about our products.

