



SP-R59P IP Phone User Manual

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1.Overview

1.1.Introduction



The Akuvox R59P is a featured 6-line IP phone with full duplex hands-free speakerphone. It can be directly connected to an Internet Telephony Service Provider or to an IP PBX.

Based on the SIP standard, the Akuvox R59P has been tested to ensure comprehensive interoperability with equipments from VoIP infrastructure leaders enabling service providers to quickly roll-out competitive, feature rich services to their customers.

Akuvox R59P is very easy to understand, configure, and deploy. The web interface is designed to provide a clean and user-friendly configuration window so that users won't get lost in complicated menus and maintenance.

1.2.Features

➤ **Highlights**

- HD Voice
- Up to 6 SIP Accounts
- 4.3" 480x272 Graphical LCD with Backlight, 4-bit Grayscale
- Support 3-way Conference
- Support PoE
- Fully Compatible with Asterisk, BroadSoft Platform

➤ **Phone Features**

- 6 Lines (Support 6 SIP accounts)
- Support Call Waiting, Call Forwarding, Call Transfer
- Call on Hold, Mute, Auto-answer, Redial, DND
- Local 3-Way Conference
- Volume Adjustable, Ring tones Selectable
- Speed Dial, Hotline
- Daylight Saving Time
- Network Packet Capture
- Country Ringtone Signal
- Direct IP call
- Auto Redial, Call Return
- Dial Plan
- XML Browser
- Hot Desking
- Keypad Lock
- Action URL/URI
- Phonebook (500 groups), Blacklist (100 groups), call logs (100 entries)
- 5 Remote Phone Book URL supported
- LDAP
- Multi-Language Support
- Multicast listening

➤ **IP-PBX Features**

- SMS, Voicemail, MWI Message Notification
- Music on hold, Intercom

- BLF(Busy Lamp Field)
- Call Pickup, Group Call Pickup
- Call Recording
- Anonymous Call, Anonymous Call Rejection

➤ **Network Features**

- SIP V1(RFC2543), V2(RFC3261)
- Static IP/DHCP for IP configuration
- 3 DTMF modes: In-Band, RFC2833, SIP INFO
- HTTP/HTTPS Web Server for Management
- NTP for Auto Time Setting
- TFTP/FTP/HTTP/HTTPS Protocols
- 802.1Q VLAN

➤ **Administration Features**

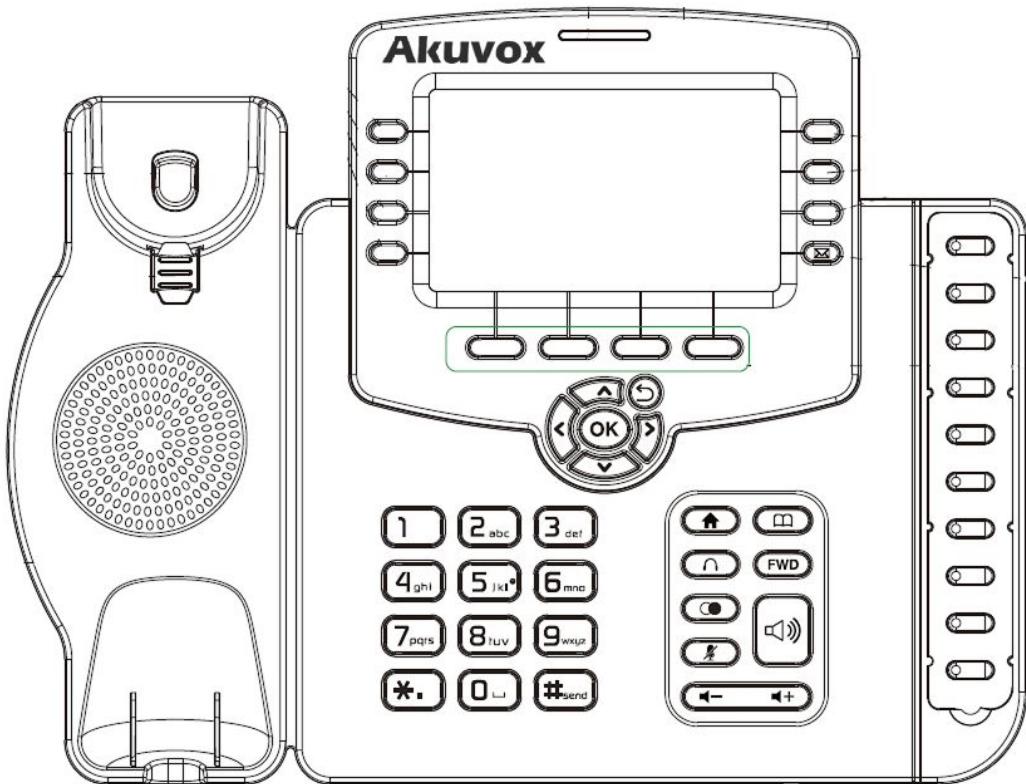
- Auto provisioning using FTP/TFTP/HTTP/HTTPS/PnP
- Dial through IP PBX Using Phone Number
- Dial through IP PBX Using URL Address
- Configuration Managements with Web, keypad on the phone, and Auto Provisioning
- SNMP
- TR069

➤ **Security Features**

- Support HTTPS (SSL)
- Support SRTP for Voice Data Encryption
- Support Login for Administration
- SIP Over TLS

1.3. Keypad

- Keypad, LED, and function key definitions



- Keypad Description

Key	Key name	Function Description
	Navigation	Assists you in selecting an item that you want to process under the menu by pressing the Up, Down, Right or Left key. Press the center key to save.
	Soft Keys 1/2/3/4	Key combination includes functions such as History/Favorites/Redial/CallReturn/HotDesking/XML Browser/DND/Menu/MSG>Status/Book/FWD/PickUp/Group PickUp/Intercom/Speed Dial/and so on.
	Line Keys 1/2/3/4/5/6	Key combination includes functions such as History/Favorites/Redial/Account/ACD/BLF/BLFList/CallReturn/HotDesking/Record/XML Browser/DTMF/DND/

Menu/MSG/Status/Book/Fwd/PickUp/Group

PickUp/Intercom/Speed Dial/and so on.



Home

Back to the Home page



Book

View Local Phone Book/Blacklist/Remote Phone Book



Headset

Use the headset to call out or call in



Forward

Forward the call to the third part



Redial

View the Missed Calls, Incoming Calls and Dialed Calls.



Mute

Press this key in calling mode and you can hear the other side, but the other side cannot hear you.



Volume -/+

Turn down or turn up the volume by pressing the “-” key or the “+” key.



Handfree

Make the phone into hands-free mode.



Digital keyboard

Inputting the phone number or DTMF.



Indicator light

Blinking light indicates there is an incoming call.



Voice Message

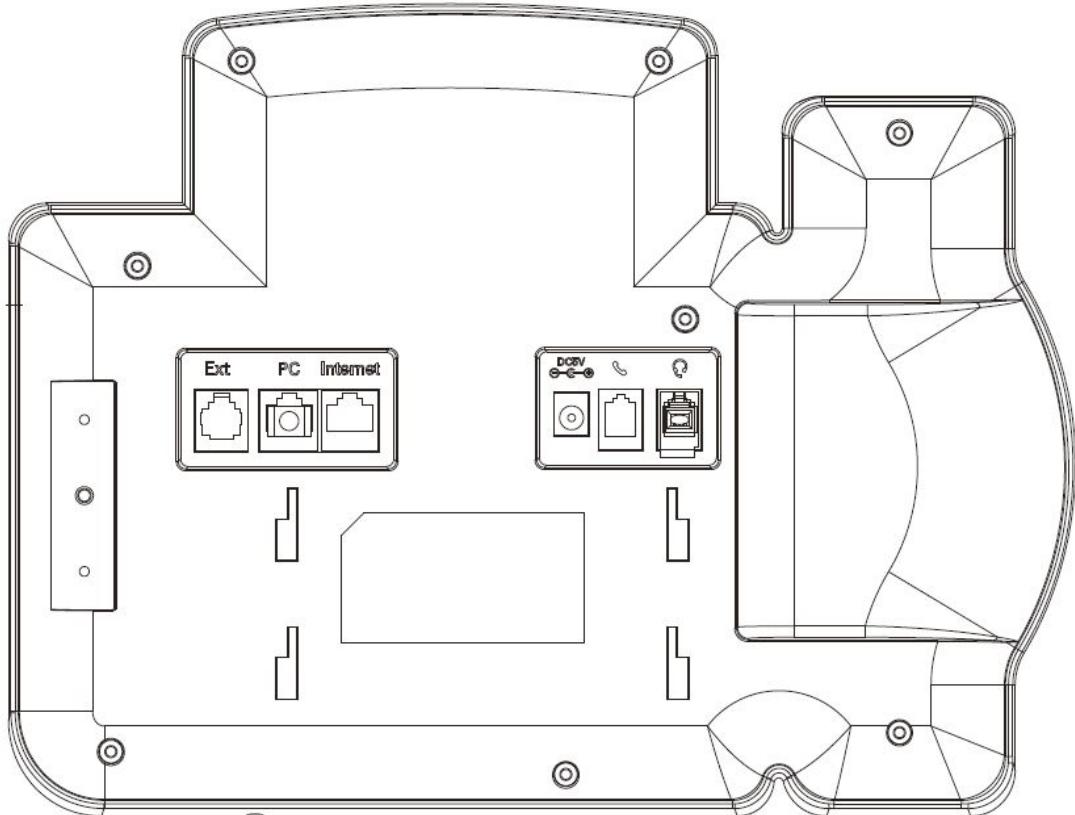
Voice Message view



Dss Key

Key combination includes functions such as History/Favorites/Redial/Account/ACD/BLF/BLFLList/CallR eturn/HotDesking/Record/XML Browser/DTMF/DND/ Menu/MSG/Status/Book/Fwd/PickUp/Group PickUp/Intercom/Speed Dial/and so on.

➤ Rear view and panel descriptions



Port	Port name	Description
	Power switch	Input: 5V DC 1.2A
	Internet	10/100M Connect it to Network
	PC	10/100M Connect it to PC
	Ext	Port type: RJ-12 connector
	Handset	Port type: RJ-9 connector
	Headset	Port type: RJ-9 connector

1.4. Icons introduction

Register success	
Register failure	
Registering	
Deactivated account	
Auto answer	
No disturb	
Always Forward	
Network disconnection	
Ring off	
Headset mode	
New voice message	
New text message	
Missed calls	

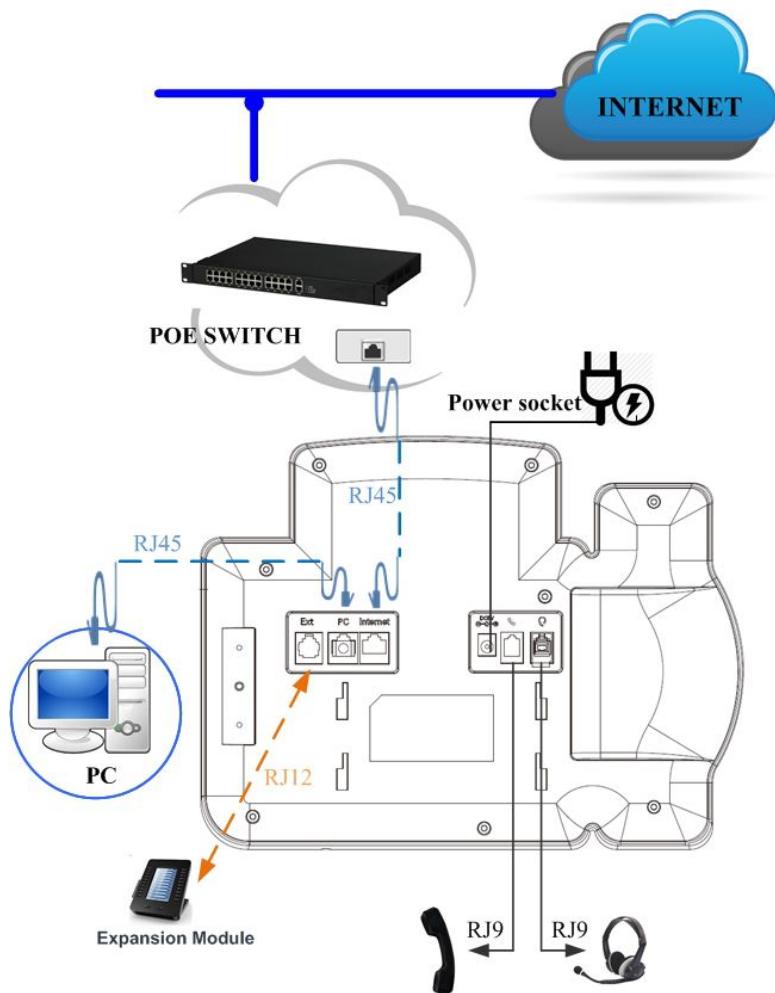
2. Installation

2.1. Check package contents

Please refer to the package list below to check the completeness of package

Name	Quantity
SIP IP Phone unit	1
handset	1
RJ-9 Cable	1
Power Adapter	1
RJ-45 Cable	1
Stand	1
Quick installation guide	1

2.2.Connection diagram



2.3.Installation Steps

Step 1 – Connect the power

Connect the provided power adapter to the Power port and plug the adapter into an available power outlet. The LCD will display “Initializing, Please Wait...”

Note1: Never use a power adapter other than the one provided with Akuvox R59P

Note2: Only Internet port supports POE.

Step 2 – Connect to the Internet

Connect one end of the RJ-45 Ethernet cable to the Internet port at the back of the Akuvox R59P and the other end to wall network jack.

Step 3 – Connect the computer

Connect one end of the RJ-45 Ethernet cable to the PC port at the back of the Akuvox R59P and the other end to the Ethernet port on your computer.

Step 4 – Configure the device

Launch the web browser on your computer, and enter the IP address of the phone into the address bar. The login screen will appear if the address is correct. Enter the user name and password to log into the web console.

NOTE: Each phone has its own IP address, you can check it by pressing the OK key on the keyboard when the phone is idle

3.Functions

3.1.MAKE A CALL

3.1.1. Call devices

User can make a phone call via the following methods:

1. Pick up the handset,  icon will be shown on the idle screen.
2. Press the Handfree key,  icon will be shown on the idle screen.
3. Press the Headset key if the headset is connected to the Headset Port in advance.
The  icon will be shown on the idle screen.

User can also dial the number first, and then choose the method user will use to speak to the other party.

3.1.2. Call Methods

User can press an available line key if there is more than one account, then

1. Dial the number User wants to call.
2. Press History softkey. Use the navigation keys to highlight User choice (press Left/Right key to choose Missed Calls, Incoming Calls and Outgoing Calls).
3. Press the Redial key twice to call the last number called or press Redial key to enter All Calls interface to choose the number to dial out.
4. Press the programmable keys which are set as speed dial key. Then press the speed dial programmable key to make the call if necessary.

3.2.Answer a call

1. If User is not on another phone, lift the handset to use, or press the Speaker key/

Answer softkey to answer using the speaker phone, or press the headset key to answer the headset.

2. If User is on another call, press the answer softkey to answer new incoming and hold the current talking. During the conversation, User can alternate between Headset, Handset and Handfree by pressing the corresponding keys.

Note: The  will flash during the Incoming interface

3.3.Mute

You can press the Mute key  to make the user NOT be heard by the other party, but User can hear the other party,  icon will be shown on the LCD, and press the Mute key again to recover.

3.4.Call Hold/Resume

1. Press the Hold button or Hold softkey to put User active call on hold.
2. If there is only one call on hold, press the hold softkey to retrieve the call.
3. If there are more than one call on hold, press the line button, and the Up/Down button to highlight the call, and then press the Resume button to retrieve the call.

3.5.Do Not Disturbed (DND)

If you enable DND mode, the phone will reject to answer all calls automatically and play busy tone, the UI will present missed calls at the same time.

- DND On Code: The Code 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.
- DND Off Code: The Code 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.

3.6.Call Waiting

To configure Call Forward via Phone interface:

1. Press Menu -->Features-->Call Waiting-->Enter.
2. Use the Left or Right key to activate or deactivate call waiting.
3. Then press the Save key to save the changes.

3.7.Call Completion

To monitor the status of the other phone and send a prompt when the status changing. For instant, if users make a call and the callee is unavailable to answer the call, the feature will notify the user when the callee is available to receive the call. This function only can be triggered when receiving 486 Busy message. Moreover, if the phone enable the voice message, the function is also unavailable.

To configure Call completion via Phone interface.

- 1.Press Menu→Feature→ Call Completion->Enter
- 2.Use the Left or Right key to enable or disable call completion.
- 3.Then press the Save key to save the changes.

Note: Not all servers can support call completion.

3.8.Call Forward

You can set the static forward to transfer all the incoming calls to a specified number; Also you can use dynamic forward to transfer all the incoming calls to the target number inputted by the user when the phone is ringing.

Forward: Enable call forward feature, Options as follows:

- Always forward: All the incoming calls will be the Switched unconditionally to specified number.
- Busy Forward: The incoming calls will be the Switched to specified number when the phone is busy.

- No answer Forward: The incoming calls will be switched to the specified number when the ring tone is time out without answer.

To configure Call Forward via Phone interface:

1. Press Menu -->Features-->Call Forward-->Enter, or just press FWD key to enter Call Forward interface;
2. There are 3 options: Always, Busy, and No Answer.
3. If User chooses one of them, enter the phone number User wants to forward to receiving party. Press Save to save the changes.

3.9.Call Transfer

You can use the following two ways to transfer talking to the other party:

- Blind Transfer: Transfer talking directly to the other party without any negotiation.
- Consultation Transfer: Transfer talking to the other person involved after the other person involved answer the incoming and with consultation.

3.9.1. Blind Transfer

1. Press the Trans softkey during the talking;
2. Enter the Trans number interface, and then Input the number you will transfer to;
3. Press the FWD key or the Trans softkey to transfer the hold talking to the number you want to transfer to;
4. Return to the Idle automatically ;

Note: The UI will display Hold status interface when the number you want to transfer to is not existed.

3.9.2. Consultation Transfer

1. Press the Trans softkey to enter the number you want to transfer to during the

- talking; Input the number you want to transfer to ;
2. Press the OK key on the phone keyboard or the Dial key to make a call;
 3. Press the Trans softkey to finish transfer after the other person involved answer the incoming and with consultation; You can finish transfer via putting down the handset or press the Cancel softkey to cancel transfer if you currently use handset to make or answer a call.

3.10.Conference

You can use the local conference feature to hold a 3-way conference by pressing the Conference softkey to invite the current talking and one line talking held to attend conference. The Network conference feature allows you to add or delete the party who attend the conference.

The local conference feature of IP phone Akuvox R59P can invite two parties at most to attend conference. The conference type of IP phone Akuvox R59P is Local conference with default.

3.10.1.Create Local Conference

1. Create talking with first party;
2. Press the New softkey to create a new talking;
3. Press the Back softkey of dial interface to hold talking with first party.
4. Input the number of second party and press the OK key on the phone keyboard or the Dial key or the Send softkey to make a call; When the second party answer your call, inquire whether they want to attend conference;
5. Press the Conference softkey to start 3-way conference.
6. Press the Split softkey to split to two lines standalone talking, then this two parties talking are under Hold status;
7. HOLD Press the Resume softkey to resume the current talking;
8. Press the Cancel softkey or the  key to cancel the conference talking and

return to Idle :

3.10.2. Make two lines talking attend conference

1. Use two different accounts to create two lines talking in the phone (For example, use account 1 to create line 1 talking and account 2 for line 2).
2. Press the Up or Down key on the phone keyboard to select the talking you will create for conference, the talking must be on activated status (For example, select the talking in account 1)
3. Press the conference softkey to add the two lines talking to conference.

Note: You can press the Hold softkey to hold the conference, also you can press the Split softkey to split the conference to two standalone talking, press the Cancel softkey to end conference.

3.11. Call Park

You can use Call Park feature to park the current talking, and then resume the Parking talking in another phone (For example, in another phone of another office or conference). Press the Call Park key to park the current talking during the talking. If success, you will hear voice announce or see the reserved extension number on the phone LCD. Dial the reserved extension number in another phone to resume the Parking talking.

Note: Not all server can support Call Park feature.

To configure Call Park via Phone interface:

PATH: Press Menu-->Features-->Call Park-->Press Left or Right key or Switch softkey to enable Call Park--> Press the Down key to set Target number-->Press the Down key to set Account-->Press the Save softkey to save;

3.12.Pickup

You can use pickup to answer other users' incoming call. The IP phone Akuvox R59P supports specified pickup and group pickup.

Note: Press the group pickup only to answer line 1 incoming call if there are many lines incoming calls in group.

3.12.1.Specified Pickup

Specified pickup can answer specified user's incoming calls

1. Set specified pickup key via phone interface

PATH: Press Menu-->Features-->Programmable keys-->Soft Keys-->PickUp-->Press Down key to set label/Value--> Save softkey;

2. Use specified pickup feature

When the user of specified pickup number is off or busy, you can press the pickup key to answer incoming call.

3.12.2.Group Pickup

Group pickup can answer group's user incoming calls. Group pickup needs to set group members.

1. Set group pickup via phone interface

PATH: Press Menu-->Features-->Programmable keys-->Soft Keys-->Group PickUp -->Press Down key to set label/Value/Account--> Save softkey;

2. Use group pickup feature

When anyone in group receives an incoming call, you can press the group pickup key to answer.

3.13.Speed Dial

You can use the Speed Dial feature to dial the specified contact speedily

PATH: Press Menu-->Features-->Programmable keys-->Soft Keys-->Speed Dial
-->Press Down key to set label/Value/Account--> Save softkey;

3.14.Auto-redial

When hang-up by the other party, call failure during the calling, the phone will enter the auto-redial screen, and begin to count. Press OK for redial now or wait for the time is up. After trying designated times, the phone will hang-up automatically.

To configure Auto Redial via Phone interface:

1. Press Menu -->Features-->Auto Redial-->Enter;
2. Use the Left or Right key to activate or deactivate Auto Redial.
3. Use the Up or Down key to configure Interval and Times;
4. Then press the Save key to save the changes.

3.15.Hot line

The Hot line refers to the number you often dial. You can set hot lines in the phone, the phone will dial the hot line number automatically when you pick up the handset, press the hand-free or the account key. Also you can set the timeout of dialing the hot line number, then the phone will dial the hot line number automatically after the timeout interval.

To configure Hot line via Phone interface:

1. Press Menu -->Features-->Hot line-->Enter
2. Use the Left or Right key to activate or deactivate Hot line.
3. Use the Up or Down key to configure Number and Timeout.
4. Then press the Save key to save the changes.

3.16.Intercom

To configure Intercom via Phone interface:

PATH: Press Menu-->Features-->Programmable keys-->Soft Keys-->Intercom--> Press Down key to set label/Value/Account--> Save softkey;

1. Press the Intercom key when the phone is available. The phone will connect the extension number of remote user automatically.
2. Press the Intercom key or the Back softkey to end the intercom.
3. Answer the intercom incoming calling.
4. In default situation, the IP phone Akuvox R59P will answer the intercom incoming calling automatically and make a noise. You can set the phone to enable silent mode when picking up the intercom call so that the other will not hear you.

The features of intercom:

Intercom Feature	Note
Allow Intercom	Enable or disable Auto-receive intercom
Intercom Mute	Enable or disable Mute mode after receiving intercom incoming

3.17.HotDesking

In some working place, the people are always walking around. HotDesking feature will make the staffs login his account on any computer in the company. In some public places, the working people is not fixed, anyone can use HotDesking for logging his account, and setting the phones to the familiar mode, such as the remote function of the computer.

3.17.1.Set the HotDesking Key

To configure HotDesking via Phone interface:

PATH: Press Menu-->Features-->Programmable keys-->Soft Keys-->HotDesking--> Press Down key to set label--> Save softkey;

3.17.2.HotDesking Feature

1. After setting the HotDesking on Soft-key, back to the idle screen.
2. Pressing the HotDesking, and enter the HotDesking screen.
3. If you press clear on the screen, the phone will begin to clear the information stored on the phone.
4. After clear the setting, the phone will enter the account setting screen.
5. After entering the account information, back to the home screen, and begin to use the new account.

3.18.XML Browser

XML Browser allows the users to develop and deploy custom services. Users need to pre-configure a custom service functions on the server, such as news, weather report, stock information. The user receives and displays the service information on the IP phone from the server, and all service information are transmitted in XML object.

To configure XML Browser via Phone interface:

PATH: Press Menu-->Features-->Programmable keys-->Line Keys/Soft Keys/Function keys/DSS keys (DSS keys only for Akuvox R59P)-->XML Browser--> Press Down key to set Label/Value--> Save softkey.

3.19.Call Recording

You can record calls by pressing a record key on the phone. The IP phone only supports record.

- Record: The phone sends SIP INFO message containing a specific header “Record: on/off” to trigger a recording.

Note: Call record is not available on all servers. Contact your system administrator for more information.

To configure a record key via phone user interface:

PATH: Press Menu-->Features-->Programmable keys-->Line Keys/DSS keys(DSS keys only for Akuvox R59P)-->Record--> Save softkey.

Note: The way in which you listen to the recordings may be different on different servers. Contact your system administrator for more information.

3.20.Keypad Lock

You can lock the keypad of your phone temporarily when you are not using it. This feature helps to protect your phone from unauthorized use.

Keypad Lock can be set to ON or OFF, how long to enable this function during the phone is idle and you can choose to lock the function keys or all keys. And this function can only be configured through the web UI, please refer to the web interface for the details.

- Function Keys: The function keys are locked. You cannot use the LINE KEYS, MESSAGE KEY, SOFT KEYS, NAVIGATION KEYS, and FUNCTION KEYS until unlocked.
- All Keys: All keys are locked.

3.21.Busy Lamp Field (BLF)

Busy Lamp Field (BLF) is used to monitor a specific user for status changes on IP phones. For example, you can configure a BLF key on a supervisor's phone to monitor the phone user status (busy or idle). When the monitored user places a call, a busy indicator on the supervisor's phone indicates that the user's phone is in use.

BLF LED Mode

BLF LED Mode provides two kinds of definition for the BLF key LED status.

Line key LED

LED Status	Description
------------	-------------

Solid green	The monitored user is idle.
Fast flashing green	The monitored user receives an incoming call.
Slow flashing green	The monitored user is dialing. The monitored user is talking.
Off	The monitored user does not exist.

DSS Key LED (DSS keys only for Akuvox R59P)

LED Status	Description
Solid green	The monitored user is idle.
Slow flashing red	The monitored user receives an incoming call.
Solid red	The monitored user is dialing. The monitored user is talking.
Off	The monitored user does not exist.

To configure a BLF key via phone user interface:

PATH: Press Menu-->Features-->Programmable keys-->Line Keys/DSS keys(DSS keys only for Akuvox R59P)-->BLF--> Save softkey.

3.22.BLFListCode

BLF List: While using BroadSoft platform, the accounts which are monitored by the sip phone will reply the subscribe news in the form of xml list to improve efficiency.

BLF List Code: While using BroadSoft platform, when press BLF List key configured the BLF LIST CODE, can Pick up call or Barge in call.

Note: BLFListCode is supported by Broadsoft platform, Please consult your administrator further information.

3.23.Automatic Call Distribution(ACD)

Automatic Call Distribution (ACD) enables organizations to manage a large number of phone calls on an individual basis. ACD enables the use of IP phones in a call-center role by automatically distributing incoming calls to available users, or agents. ACD depends on support from a SIP server. ACD is disabled on the phone by default. You need to enable it on a per-line basis before logging into the ACD system.

To configure a ACD key via phone user interface:

PATH: Press Menu-->Features-->Programmable keys-->Line Keys/DSS keys(DSS keys only for Akuvox R59P)-->ACD--> Save softkey.

3.24.DSS Key

Three types of DSS keys: Line Keys, Soft Keys and Function Keys. The details will be introduced in the following. The use of soft keys and function keys are almost the same. The Akuvox R59P IP phone supports 10 DSS keys.

DSS Key combination includes functions such as:

History/Favorites/Redial/Account/ACD/BLF/BLFList/CallReturn/HotDesking/Record/X
ML Browser/DTMF/DND/ Menu/MSG/Status/Book/Fwd/PickUp/Group
pickUp/Intercom/ Speed Dial

To configure a DSS key via phone user interface:

PATH: Press Menu-->Features-->Programmable keys-->DSS keys.

3.25.Hotelng

Hotelng function enables the customer to login the own sip account on the Host IP phone, after login to the phone, the customer can use his own guest account on the

host IP phone.

Note: Hoteling is supported by Broadsoft platform, Please consult your administrator further information.

Application:

1、 Remote Work

1.1. User goes to the branch office, his own extension number is 4723 in head office;

1.2. User uses the remote work function, find a idle host IP phone;

1.3. User can login the extension number 4723 on this host IP phone, to call in and out using his own extension number.

2、 Work on different time division

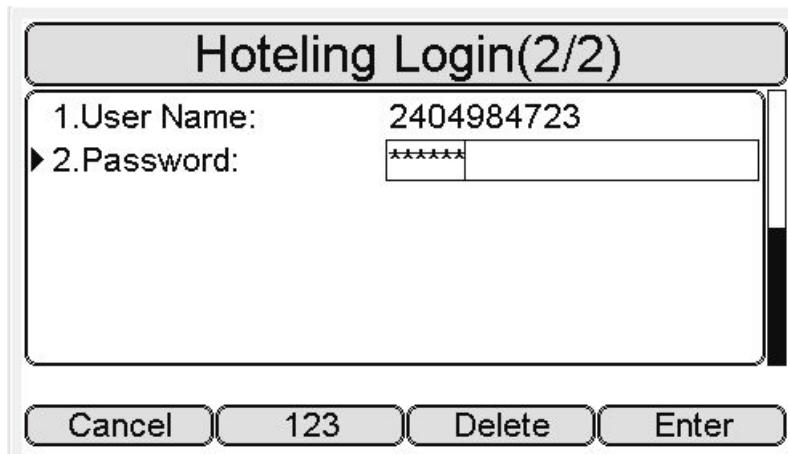
2.1. Users A and B work on different time division at a same table with a same host IP phone, their extension numbers are 4722 and 4723.

2.2、 A logins the extension number 4722 in the morning, logout after A leaves.

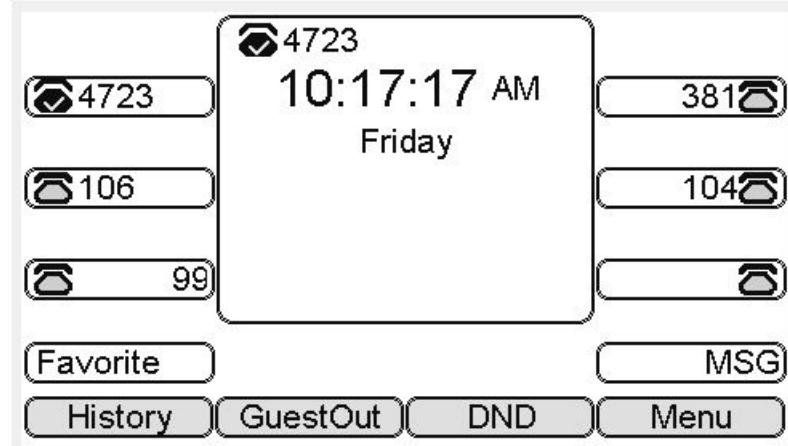
2.3、 B logins the extension number 4723 in the evening, using the number 4723 to call in and out, logout after B leaves.



The host IP phone number is 2404984724



Press GuestIn softkey to login the extension number 4723 and password



The extension number 4723 is ready for use

3.26.Application

3.26.1.Text Message

The IP phone Akuvox R59P can send and answer text message. The phone will make a “Du” sound and present “N piece of new message” on the LCD(For example: 1 new message), and a twinkling message icon will appears.



Note: Not all servers support message feature.

Read Text Message

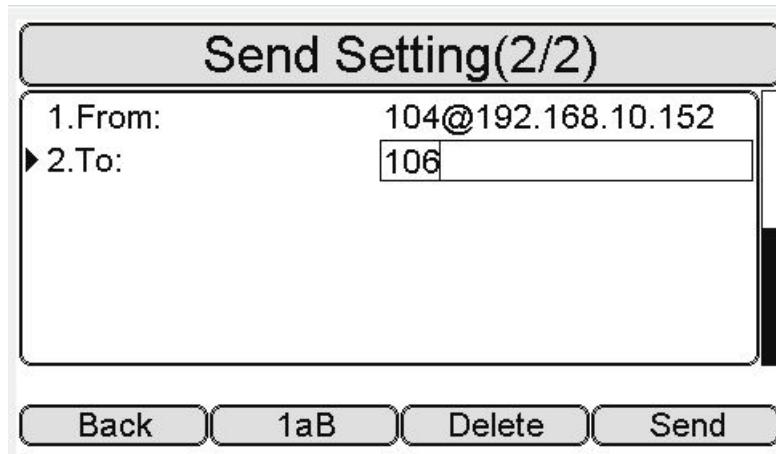
1. Access Menu->Message->Text Message-> In box
2. Press the OK key on the phone keyboard or the Enter softkey to enter the Text Message interface, Press the OK key on the phone keyboard or the Enter softkey to enter the in-box interface.
3. Select the message you will read and Press the OK key on the phone keyboard or the Enter softkey to read.

Send Text Message

1. In the Idle, press the Menu softkey.
2. In the mail menu interface, press the Down key on the phone keyboard to select Message, press the OK key on the phone keyboard or the Enter softkey to enter Message interface.
3. In the Text Message interface, select “New Message”; Press the OK key on the phone keyboard or the Enter softkey to enter new message and edit it, press the “abc” softkey to switch the input methods.
4. Press the OK key on the phone keyboard or the Send softkey to send message;
5. Press the Left or Right key on the phone keyboard or the Switch softkey to switch

to the relevant addresser.

6. Input the number of addresser:



7. Press the Send softkey to send message.

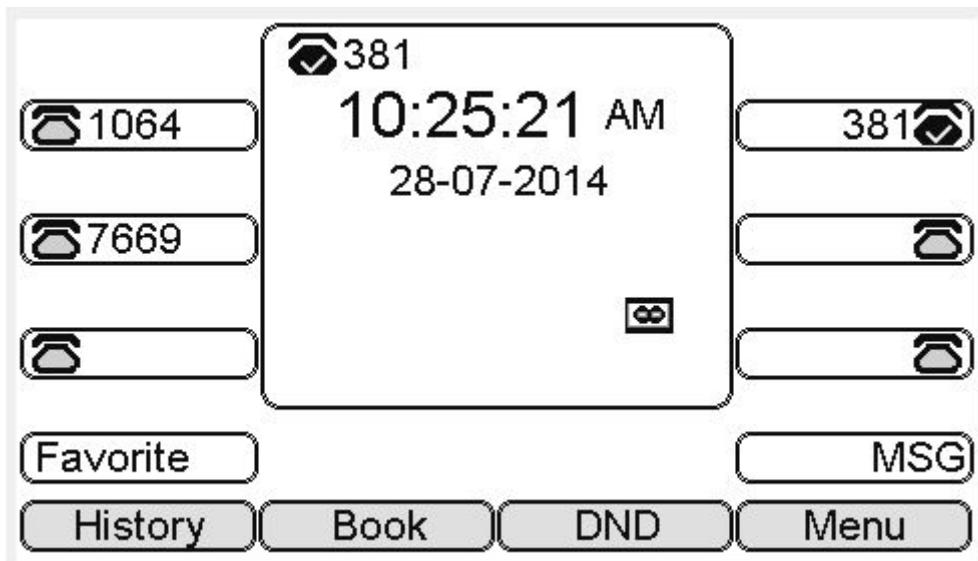
Delete Text Message

1. In the Idle, press the Menu softkey.
2. Press the main menu interface, Press the Down key on the phone keyboard to select message, Press the OK key on the phone keyboard or the Enter softkey to enter the Message interface.
3. In the Text Message interface, press the Down key on the phone keyboard to select in-box.
4. Press the OK key on the phone keyboard or the Enter softkey to enter the in-box interface.
5. Select the message you want to delete and press the Delete softkey.
6. Delete all the text messages in the in-box. Press the Delete softkey and select "Delete All", press the OK softkey then all the messages in the in-box will be deleted.

3.26.2.Voice Message

The IP phone Akuvox R59P can send or answer voice message. The phone will make a "Du Du" sound as well as the LED light of message flashes green, and the LCD

presents “New Voice Message” on the LCD with a twinkling voice message icon.



Note: Not all servers support voice message.

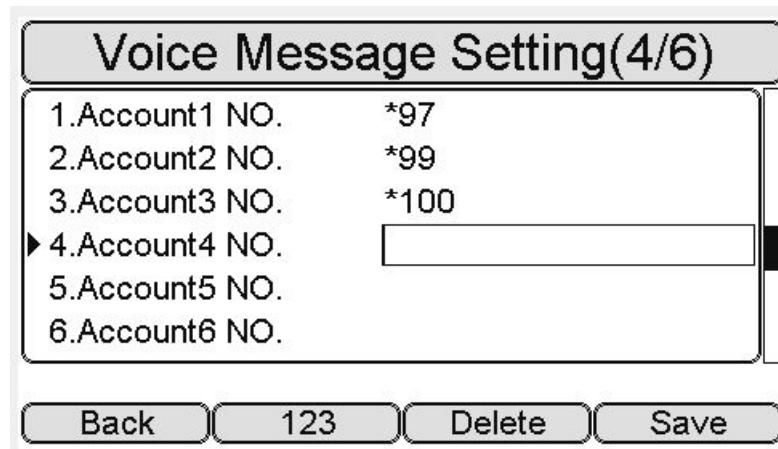
Voice Message

You can leave a message when the user who you call is busy or unavailable. Leave a message according to the voice prompt of server, and then hang up after leaving the message.

Set Visit account number of voice message via phone interface.

1. In the Idle, press the Menu softkey.
2. In the Idle, Press the Down key on the phone keyboard to select message, press the OK key on the phone keyboard or the Enter softkey to enter the Message interface.
3. In the Message interface, Press the Down key on the phone keyboard to select the voice message, Press the OK key on the phone keyboard or the Enter softkey to enter the Voice Message interface.
4. Select the Voice Message Setting.
5. Press the OK key on the phone keyboard or the Enter softkey to set account 1, input voice message visit account number(For example: *97), press 123 softkey to switch the input methods.

6. Press the Down key on the phone keyboard to set account 2, input the Visit account number of voice message(For example: *99), press 123 softkey to switch the input methods.
7. Press the Down key on the phone keyboard to set account 3, input voice message visit account number(For example: *100), press 123 softkey to switch the input methods.



8. Press the OK key on the phone keyboard or the Save softkey to save and return to message interface.

Check voice message

1. Press the Message key or the Connect softkey to call the Visit account number of voice message.
2. Check voice message according to voice prompt.
 - Set the Visit account number of voice message firstly before check voice message. The LED light of Message will darken after all the voice messages checked.
3. Check voice message via phone interface
 - Access Menu-> Message->Voice Message-> New Message. The LCD displays new messages and old messages of each account.

Voice Message View(1/6)

► 1.1064	UnRegistered
2.381	1 new 3 old; urgent 0 new 0 ...
3.7669	UnRegistered
4.104	0 new 0 old; urgent 0 new 0 ...
5.(Empty)	UnRegistered
6.(Empty)	UnRegistered

Back

Conn

- Select the account you will check and press the Connect softkey to check voice message.



4. *Settings*

4.1. Basic Settings

4.1.1. Language

You can change the language using the method below:

Press Menu -> Settings -> Basic Setting -> Language

4.1.2. Date & Time

1. The IP phone displays Time and Date in Idle status. You can set the Time and Date obtain from SNTP server automatically or you can set the time and date manually.
2. Set SNTP via phone interface: Access Menu -> Settings -> Basic Setting -> Date & Time -> SNTP Setting.
3. To set the date & time format via the phone interface, access Menu -> Settings -> Basic Setting -> Date & Time -> Format Setting:
 - Access the Time Format in Format Setting interface, then press the Left or Right key on the phone keyboard, or the Switch softkey to select the time format (12Hour or 24Hour).
 - In the Date &Time Format interface, press the Up or Down key on the phone keyboard to access the Date Format. Press the Left or Right key on the phone keyboard or the Switch softkey to select the date format to process setting.
 - The phone supports four Date formats. The selected date format will appear in the Idle. For example, if the time was “2011-09-13”, the date formats in the menu and the corresponding formats displayed in the Idle as follows:

Date Format	Example(2015/11/18 Wed)
YYYY-MM-DD	2015-11-18
YYYY/MM/DD	2015/11/18
DD-MM-YYYY	18-11-2015
DD/MM/YYYY	18/11/2015
WW-DD-MM	Wed 18 Nov
WW-MM-DD	Wed Nov 18

4.1.3. Backlight

Set the screen backlight level and duration of backlight

Press Menu -> Settings -> Basic Setting ->Backlight

4.1.4. Password Setting

This function is to set into the advanced Settings password

Press Menu -> Settings -> Advanced Setting ->Password Setting

A dialog box “Enter Password:” appears, enter the password: admin (default), then Press the OK key on the phone keyboard, Input the currently password, the new password, then confirm new password to modify the current password.

4.2. Sound Settings

4.2.1. Phone Volume

1. The Volume key can be used to adjust the volume of handset, hands-free or headset during a call. Also, the key can be used to adjust the ring tones volume in the Idle mode.
2. Adjust the volume via the phone interface, access Menu -> Settings -> Basic Setting

-> Phone Volume. In the Volume Setting interface, access the Handset Volume, Hand-free Volume or Headset Volume interface, then press the + or - softkey or Left or Right key to adjust the volume. Press the Save softkey to save the operation or press the Back softkey to cancel operation.

4.2.2. Ring Tones

1. The Ring Tone refers to incoming ring tone, which reminds the user that there is an incoming call. The IP phone Akuvox R59P supports phone ring tone to distinguish the incomings from other near phones' ring tone; Besides, The IP phone Akuvox R59P supports specifying different incoming ring tones for multi-accounts in one phone equipment, At the same time, the IP phone Akuvox R59P also supports setting specific incoming ring tone for contacts.
2. To set the ring tone via the phone interface, access Menu -> Settings -> Basic Setting -> Ring Tones.

4.3. Phone Book

4.3.1. Local Phone Book

The Local Phone Book is used for storing the contacts names and number. The Akuvox R59P can store up to 500 entries contacts. You can add, edit, delete, search, or call any contact from the Local Phone Book.

4.3.1.1. Add contacts manually:

Add contacts manually from the Local phone book via Phone interface:

Press Phone book -> Local phone book -> Add to Contacts.

Select the relevant group (For example: contacts) and Press the OK key on the phone keyboard or the Enter softkey in the UI to enter All Contacts.

1. Press the Add softkey to enter the Add Contact interface.
2. Input name in the relevant area.
3. Press the Down key on the phone keyboard to input the office number in the relevant area.
4. Press the Down key on the phone keyboard to input mobile number in the relevant area.
5. Press the Down key on the phone keyboard to input other number in the relevant area.
6. Press the Down key on the phone keyboard to enter Account selection; Press the Left or Right key on the phone keyboard or the Switch softkey to select the relevant account, if Auto selected, the phone will select the current available account automatically when the contact called from Local phone book.

4.3.1.1.2. ADD contact from All Calls History:

Add contact from All Calls History in the phone interface:

1. Press the History softkey;
2. Press the Up or Down key on the phone keyboard to select the contact you want to add;
3. Press the Option softkey to add to contacts.

4.3.1.1.3. Search Contacts

1. Press the Book softkey in the Idle interface to enter the Phone Book menu.
2. Select the Local Phone Book, Press the OK key on the phone keyboard or the Enter softkey to enter the Local Phone Book.
3. Press the Search softkey to search contacts.
4. Input keywords such as name, any character of number or whole phone number, press the Search softkey or the OK key to enter the Search Contacts interface.

4.3.2. Blacklists

100 Blacklists contacts are available with Akuvox R59P IP phone. You can add, edit, delete, search or call contact. Any call from the number in the blacklists will be rejected.

PATH: Press Phone book -> Blacklist -> Add.

4.3.3. Remote Phone Book

1. Access the remote phone book, add the contacts to the local phone book from the remote phone book or make calls from the remote phone book. 5 URLs of remote phone book is available to set.
2. Set the remote phone book via web interface:
3. Access Book-> Remote Phone Book.
4. Input URL of phone book.
5. Input the phone book name.
6. Click the Submit key to submit.
7. Access the remote phone book via phone interface:
8. Access Book->Remote phone book.
9. Select the relevant Remote Group and press the Enter softkey. The phone will load the remote group information, and the LCD will display the contacts of this remote group.
10. Press the  key or the Back softkey to unlink.
11. Press the Book softkey to enter the Phone Book Menu.

4.4. History Management

The History management of IP phone Akuvox R59P contains dialed calls, received calls, missed calls and forwarded calls and support 100 logs storage at most. You can

check the history, make calls from the calls history and delete the calls history.

1. Press the History key, the LCD will display all the recent calls;
2. Press the Left or Right key on the phone keyboard to switch the lists of All Calls, Dialed Calls, Received Calls, Missed Calls and Forwarded Calls;
3. Press the Up or Down key on the phone keyboard to select the log;
4. Press the Option softkey and select the detail. The LCD will display the detailed information of this log; Press the Dial softkey, to make a call from the History;
5. Press the Option softkey to add to contacts(Move to Blacklists) from the History;
6. Press the Delete softkey to delete calls log from the History;
7. Press the Option softkey to select “Delete all” to delete all the call logs from the History.

4.5. System Customizations

4.5.1. Programmable keys

1. Press the Menu softkey in the Idle interface, access Menu->Features->Programmable keys;
2. Select the programmable key you will set and press the Enter softkey;
3. Select key style in the type area;
4. Input suitable value in the label area;
5. (Optional) Select the relevant account in the account ID area;
6. (Optional) Input suitable value in Value blank;
7. Press the Save softkey to save or the Cancel softkey to cancel.

4.5.2. SIP Account management

You can register one account or multi-account, but also can set one account key or multi-account keys for one account.

4.5.2.1. Register an Account

Register an account via phone interface:

1. Press the Menu softkey to enter setting interface to select advanced setting, input password(password: admin) to select account;
2. Select the account you want to set and press the Enter softkey;
3. Select “Enable” in the account activation status area;
4. Input the label, display name, register name, account, password and SIP separately;
5. Press the Save softkey to save or the Back softkey to cancel;
6. Repeat step 2 to 5 to finish all the account register.

4.5.2.2. Disable an Account

1. Access Menu->Settings->Advanced setting->Account (password: admin).
2. Select the account you want to disable and press the Enter softkey.
3. Select “Disable” in the account active status area.
4. Press the Save softkey to save or the Back softkey to cancel.

Note:

- 1 .The operation and interface of account 2 and 3 is the same as account 1;
2. You can configure multi-account keys for one account. The incoming calls of this account will be divided equally to different account key; Analogously, the dialings also will be divided equally.

4.6. Basic Network Settings

Through the Basic Network setting, you can set the IP Phones to get the IP address by three ways: DHCP, static IP and PPPoE, also can set the VLAN, PC port mode.

PATH: Menu -> Settings -> Advanced Setting -> Network.

4.6.1. DHCP Mode

1. In the Network Settings interface, Press the OK key on the phone keyboard or the Enter softkey to enter LAN Port:
2. In the LAN Port interface, press the Up or Down key on the phone keyboard to select DHCP (default is DHCP).
3. Press the Enter on the softkey or the OK key on the phone keyboard to enter the DHCP switch interface, it will auto return to last interface after seconds.

4.6.2. Static IP Mode

1. In the LAN Port interface, press the Up or Down key on the phone keyboard to select Static IP, then Press the OK key on the phone keyboard or the Enter softkey to enter Static IP Setting interface and input IP address.
2. Press the Down key on the phone keyboard to enter the Subnet Mask of Static IP Setting and input the subnet mask.
3. Input the IP address, Subnet mask, Gateway, DNS 1 and DNS 2 in the corresponding area, Press the OK key on the phone keyboard or the Save softkey to save.

4.6.3. PPPoE Mode

1. In the LAN Port interface, press the Up or Down key on the phone keyboard to select PPPoE, then Press the OK key on the phone keyboard or the Enter softkey to enter PPPoE Setting interface.
2. Press the Up or Down key on the phone keyboard to enter User Name, Password.
3. Input User Name, Password.

4.6.4. Configure PC Port Mode

1. In the Network Settings interface, press the Up or Down key on the phone keyboard to select PC Port, press the OK key on the phone keyboard or the Enter softkey to enter PC Port configuration interface;
2. In the PC Port configuration interface, press the Up or Down key on the phone keyboard to select Bridge mode or Routing mode;
3. Configured Bridge mode, there will pop-up “Reboot Phone”; Press OK key to reboot; (PS: Setting will take effect after reboot)
4. If cancel the reboot, the Settings will be saved but not take effect;
5. Configured Routing mode, enter routing setting interface, input according value in the corresponding position;
6. Press Save key after configuration, the phone will reboot.

4.6.5. Configure VLAN

In the Network Settings interface, press the Up or Down key on the phone keyboard to select VLAN Port, press the OK key on the phone keyboard or the Enter softkey to enter LAN Port configuration interface.

LAN Port

1. In the LAN Port interface, press the Up or Down key on the phone keyboard to select LAN Port, press the OK key on the phone keyboard or the Enter softkey to enter LAN Port.
2. In the LAN Port interface, press the Up or Down key on the phone keyboard to configure the functionality Enable, VID, Priority.
3. When the VID is empty, press the OK key on the phone keyboard or the Save softkey to save.
4. Save it after configuration.

PC Port

1. In the PC Port interface, press the Up or Down key on the phone keyboard to select LAN Port, press the OK key on the phone keyboard or the Enter softkey to enter PC Port.
2. In the PC Port interface, press the Up or Down key on the phone keyboard to configure the functionality Enable, VID, Priority.
3. When the VID is empty, press the OK key on the phone keyboard or the Save softkey to save.
4. Save it after configuration.

4.7. WebServer

In the Advanced Setting interface, press the Up or Down key on the phone keyboard to select “WebServer,” press OK key on the phone keyboard or the Enter softkey to access the disable/enable WebServer settings.

4.8. Reset to Factory

In the Advanced Setting interface, press the Up or Down key on the phone keyboard to select “Reset to factory”. Press the OK key on the phone keyboard or the Enter softkey to access the reset to factory interface.

4.9. Reboot

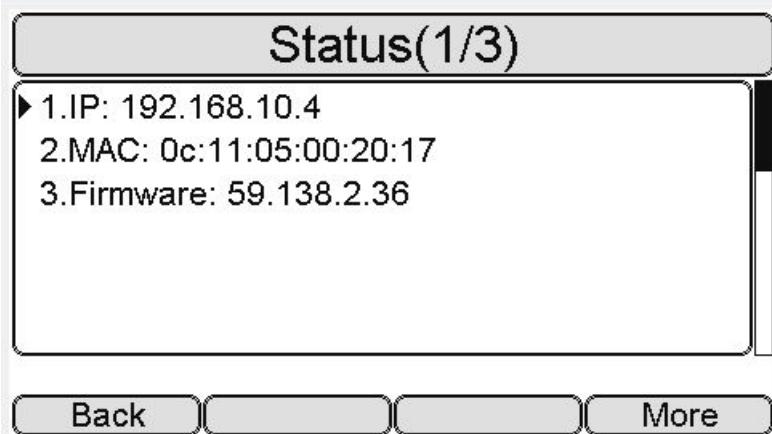
This is a function to set the phone reboot.

1. In the Advanced Setting interface, press the Up or Down key on the phone keyboard to select Reboot;
2. Press the OK key or the Enter softkey to on the phone keyboard to reboot warning interface.

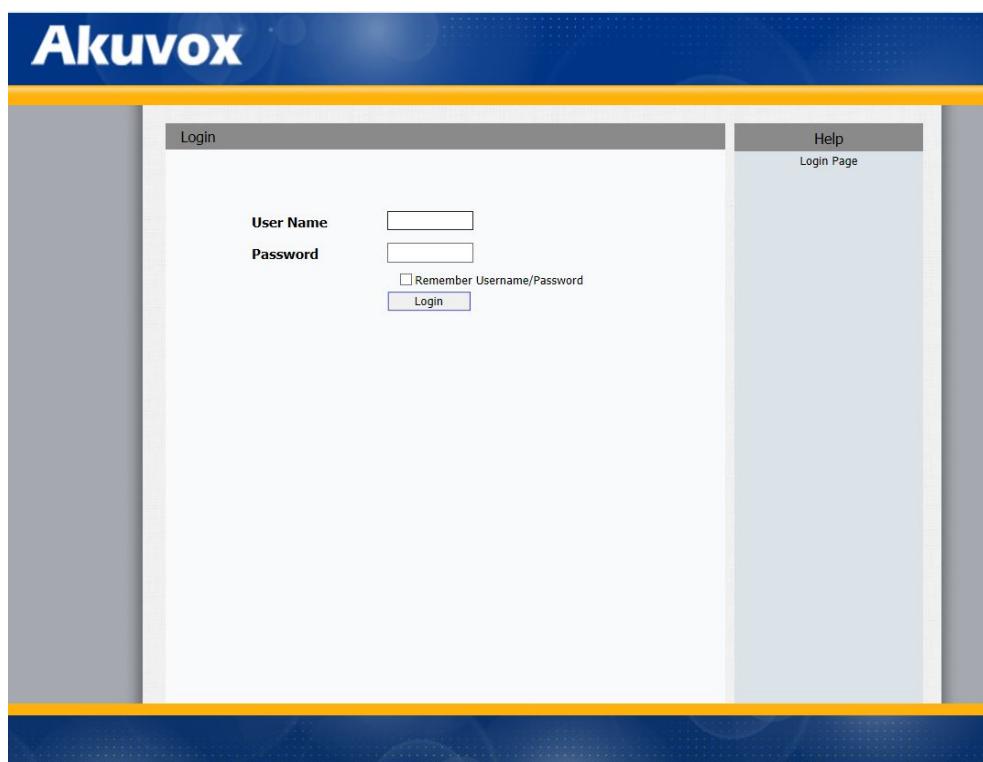
5. WEB Interface

Web user interface (we will used Web UI for short in the following context) which is used for user or administration to check or change the IP SIP phone's settings.

- Press the OK key on the phone keyboard to check the Phone's IP address.



- Type the IP address on IE: <http://192.168.10.4> input default User Name and Password: admin/admin to login the web interface.



5.1.Status->Basic

1. First you need to open a browser (for example IE)
2. Input the IP address in the browser's address bar and then press the **Enter** key
3. If successfully connected to IP phone, it will prompt a login page. In the page, please input the username and password accordingly. by default, username and password are as below:

User Name: **admin**

Password: **admin**

4. After successfully logged in, it will automatically locate to **Status->Basic** Page, as figure below shown:

The screenshot shows the Akuvox Status->Basic page. The left sidebar has a tree view with nodes like Status (Basic), Account, Network, Phone, PhoneBook, Upgrade, and Security. The main content area is divided into three sections: Product Information, Network Information, and Account Information. The Product Information section lists Model (SP-R59), MAC Address (0c:11:05:00:21:80), Firmware Version (59.0.5.187), and Hardware Version (59.0.3.0.16.0.0.0). The Network Information section lists LAN Port Type (DHCP Auto), LAN Link Status (Connected), LAN IP Address (192.168.1.11), LAN Subnet Mask (255.255.255.0), LAN Gateway (192.168.1.1), LAN DNS1 (192.168.1.1), LAN DNS2 (192.168.1.1), Primary NTP (0.pool.ntp.org), and Secondary NTP (1.pool.ntp.org). The Account Information section lists six accounts: Account1 (None@None, UnRegistered), Account2 (None@None, UnRegistered), Account3 (None@None, UnRegistered), Account4 (None@None, UnRegistered), Account5 (None@None, UnRegistered), and Account6 (None@None, UnRegistered). The right side of the page includes a Note section with input box rules, a Warning section, and a Field Description section.

Sections	Description
Product Information	To display the device's information such as Model name, MAC address (IP device's physical address), Firmware version and Hardware firmware.

Network Information	To display the device's Networking status(LAN Port),such as Port Type(which could be DHCP/Static/PPPoE), Link Status, IP Address, Subnet Mask, Gateway, Primary DNS server, Secondary DNS server, Primary NTP server and Secondary NTP server(NTP server is used to synchronize time from INTERNET automatically).
Account Information	To display device's Account information and Registration status (account username, registered server's address, Register result).

Note: Status->Basic page is used to display some basic information for IP Phone.

Please refer to corresponding page for any further information.

5.2.Account->Basic

Path: Web UI -> Account->Basic

The screenshot shows the Akuvox Web UI interface for managing account basic settings. The left sidebar contains navigation links for Status, Account (Basic, Advanced), Network, Phone, PhoneBook, Upgrade, and Security. The main content area is titled "Account-Basic" and contains several configuration sections:

- SIP Account:** Fields include Status (UnRegistered), Account (Account 1), Account Active (Disabled), Display Label, Display Name, Register Name, User Name, and Password.
- SIP Server 1:** Fields include Server IP and Port (5060). Below it is a registration period field set to 1800 (30~65535s).
- SIP Server 2:** Similar to SIP Server 1, with fields for Server IP, Port (5060), and Registration Period (1800, 30~65535s).
- Outbound Proxy Server:** Fields include Enable Outbound (Disabled), Server IP, and Backup Server IP, each with a Port field (5060).
- Transport Type:** A dropdown menu currently set to UDP.
- NAT:** Fields include NAT (Disabled) and Stun Server Address, with a Port field (3478).

A right-hand sidebar provides help notes and a warning:

- Note :** Max length of characters for input box: 255: Broadsoft Phonebook server address 127: Remote Phonebook URL & AUTOP Manual Update Server URL 63: The rest of input boxes
- Warning :** Field Description : Submit Shortcut [Submit] [Cancel]

Sections	Description
SIP Account	<p>To display and configure the specific Account settings.</p> <ul style="list-style-type: none"> ● Status: To display register result. ● Display Label: Which is displayed on the phone's LCD screen. ● Display Name: Which is sent to the other call party for displaying. ● Register Name: Allocated by SIP server provider, used for authentication. ● User Name: Allocated by your SIP server provider, used for authentication. ● Password: Used for authorization.
SIP Server 1	<p>To display and configure Primary SIP server settings.</p> <ul style="list-style-type: none"> ● Server IP: SIP server address, it could be an URL or IP address. ● Registration Period: The registration will expire after Registration period, the IP phone will re-register automatically within registration period.
SIP Server 2	<p>To display and configure Secondary SIP server settings.</p> <p>This is for redundancy, if registering to Primary SIP server fails, the IP phone will go to Secondary SIP server for registering.</p> <p>Note: Secondary SIP server is used for redundancy, it can be left blank if there is not redundancy SIP server in user's environment.</p>
Outbound Proxy Server	<p>To display and configure Outbound Proxy server settings.</p> <p>An outbound proxy server is used to receive all initiating request messages and route them to the designated SIP server.</p> <p>Note: If configured, all SIP request messages from the IP phone will be sent to the outbound proxy server forcefully.</p>
Transport Type	<p>To display and configure Transport type for SIP message</p> <ul style="list-style-type: none"> ● 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.
NAT	<p>To display and configure NAT(Net Address Translator) settings.</p> <ul style="list-style-type: none"> ● STUN: Short for Simple Traversal of UDP over NATS, a solution to solve NAT issues. <p>Note: By default, NAT is disabled.</p>

5.3.Account->Advanced

Path: Web UI->Account->Advanced

SIP Account

Codecs

Disabled Codecs	Enabled Codecs
G723_53	PCMU
G723_64	PCMA
G726-16	G729
G726-24	G722
G726-32	
G726-40	

Subscribe

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

DTMF

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

Call

Max Local SIP Port	5062 (1024~65535)
Min Local SIP Port	5062 (1024~65535)
Caller ID Header	FROM
Auto Answer	Disabled
Ringtones	Default
Provisional Response ACK	Disabled
Invite with user=phone	Disabled
PTime	20
Anonymous Call	Disabled
Anonymous Call Rejection	Disabled
Is escape non Ascii character	Enabled
Missed Call Log	Enabled
Prevent SIP Hacking	Disabled

Music Server Address

Active	Disabled
Music Server Address	

Session Timer

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

BLFList

BLFList URI	
BLFList PickUp Code	
BLFList BargeIn Code	

Broadsoft

AOC	Disabled
-----	----------

Encryption

Voice Encryption(SRTP)	Disabled
------------------------	----------

NAT

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

Conference

Type	Local
Conference URI	

User Agent

User Agent	
------------	--

Note :
Max length of characters for input box:
255: Broadsoft Phonebook server address
127: Remote Phonebook URL & AUTOP Manual Update Server URL
63: The rest of input boxes

Warning :

Field Description :

Submit Shortcut

Sections	Description
SIP Account	To display current Account settings or to select which account to display.
Codecs	<p>To display and configure available/unavailable codecs list. Codec means coder-decoder which is used to transfer analog signal to digital signal or vice versa.</p> <p>Familiar codecs are PCMU(G711U), PCMA(G711A), G722 (wide-bandth codecs), G723,G726,G729 and so on.</p>
Subscribe	<p>To display and configure MWI, BLF, ACD subscription settings.</p> <ul style="list-style-type: none"> ● 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.
DTMF	<p>To display and configure DTMF settings.</p> <ul style="list-style-type: none"> ● 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. <p>Note: By default, DTMF type is RFC2833 which is the standard. Type Inband uses inband frequency to indicate DTMF tone which is most used to be compatible with traditional telephone server. Type Info use SIP Info message to indicate DTMF message.</p>
Call	<p>To display and configure call-related features.</p> <ul style="list-style-type: none"> ● Max Local SIP Port: To configure maximum local sip port for designated account. ● Min Local SIP Port: To configure minimum local sip port for designated account. ● Caller ID Header: To configure which Caller ID format to fetch for displaying on Phone UI. ● Auto Answer: If enabled, IP phone will be auto-answered when there is an incoming call for designated account. ● Ringtones: Choose the ringtone for each account. ● Provisioning 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.

	<ul style="list-style-type: none"> ● User=phone: If enabled, IP phone will send user=phone within SIP message. ● PTime: Interval time between two consecutive RTP packets. ● Anonymous Call: If enabled, all outgoing call for the designated account will be anonymous number. ● Anonymous Call Rejection: If enabled, all incoming anonym-out call for the designated account will be rejected. ● Is escape non Ascii character: To transfer the symbol to Ascii character. ● Missed Call Log: To display the miss call log. ● Prevent SIP Hacking: Enable to prevent SIP from hacking.
Music Server Address	<p>To display or configure third-party MOH (music-on-hold) server.</p> <ul style="list-style-type: none"> ● Active: To enable or disable this MOH server, If enabled, the IP phone will play MOH from configured server. ● Music Server Address: To configure MOH server address.
Session Timer	<p>To display or configure session timer settings.</p> <ul style="list-style-type: none"> ● Active: To enable or disable this feature, If enable, the ongoing call will be disconnected automatically once the session expired unless it's been refreshed by UAC or UAS. ● Session Expire: Configure session expire time. ● Session Refresher: To configure who should be response for refreshing a session. <p>Note: UAC means User Agent Client, here stands for IP phone. UAS means User Agent Server, here stands for SIP server.</p>
BLF List	<p>To display or configure BLF List URI address.</p> <ul style="list-style-type: none"> ● BLF List URI: BLF List is short for Busy Lamp Field List. ● BLFList PickUp Code: To set the BLF pick up code. ● BLFList Bargeln Code : To set the BLF barge in code.
Broadsoft	<p>To display or configure Broadsoft AOC feature.</p> <ul style="list-style-type: none"> ● AOC: A feature used to be accounting on Broadsoft platform. <p>Note: Please consult your administrator further information.</p>
Encryption	<p>To enable or disabled SRTP feature.</p> <ul style="list-style-type: none"> ● Voice Encryption(SRTP): If enabled, all audio signal (technically speaking it's RTP streams) will be encrypted for more security.
NAT	<p>To display NAT-related settings.</p> <ul style="list-style-type: none"> ● UDP Keep Alive message: If enabled, IP phone will send UDP keep-alive message periodically to router to keep

	<p>NAT port alive.</p> <ul style="list-style-type: none"> ● UDP Alive Msg Interval: Keepalive message interval. ● Rport: Remote Port, if enabled, it will add Remote Port into outgoing SIP message for designated account.
Conference	<p>To select Local or network conference.</p> <ul style="list-style-type: none"> ● Type: To select desired conference type ● Conference URI: If network conference is selected, a network conference URI is needed.
User Agent	<p>One can customize User Agent field in the SIP message; If user agent is set to specific value, user could see the information from PCAP. If user agent is not set by default, user could see the company name, model number and firmware version from PCAP</p>

5.4.Network->Basic

Path: Web UI->Network->Basic

Note :
Max length of characters for input box:
255: Broadsoft Phonebook server address
127: Remote Phonebook URL & AUTOP Manual Update Server URL
63: The rest of input boxes

Warning :

Field Description :

Submit Shortcut

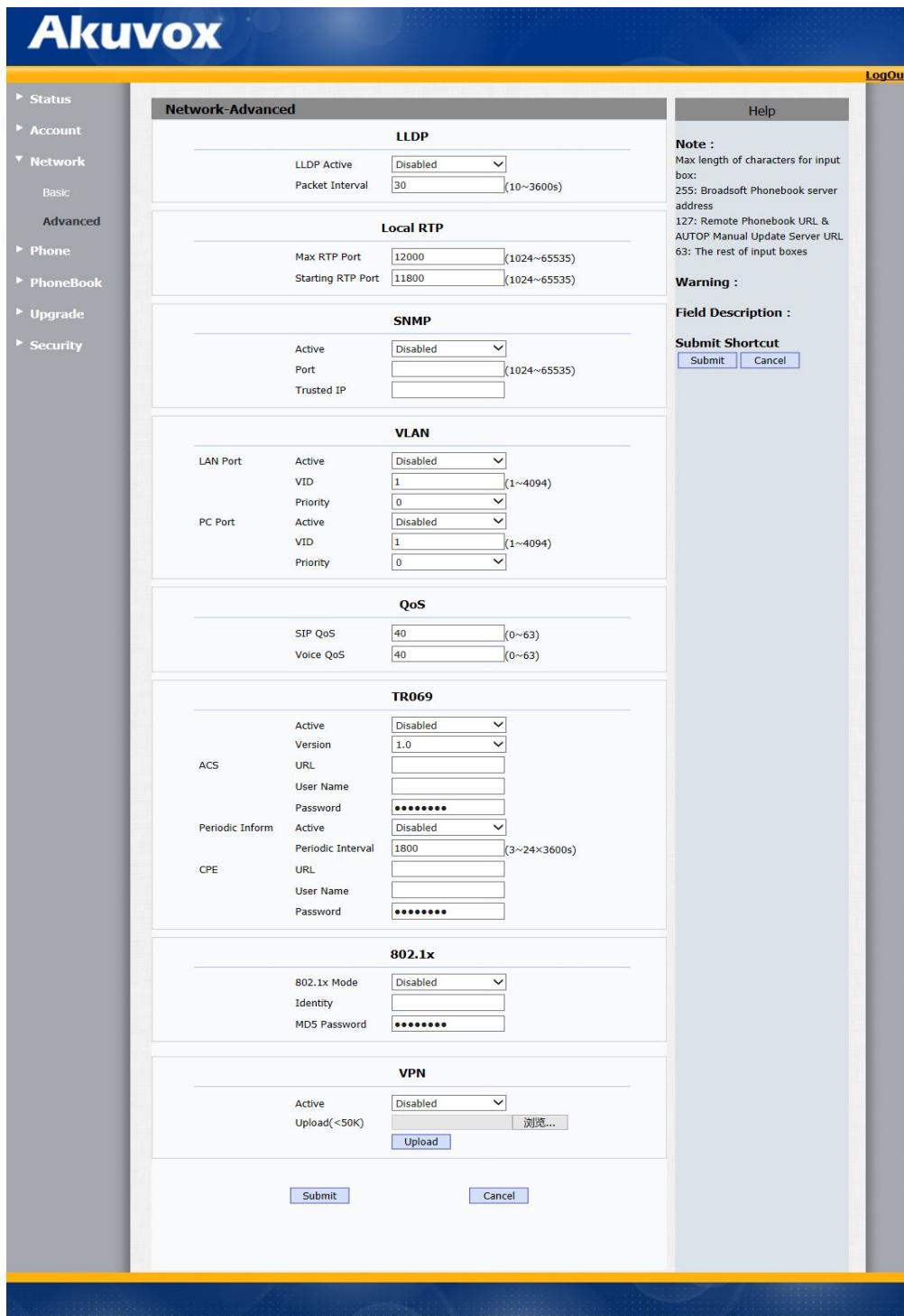
Submit Cancel

Sections	Description
LAN Port	<p>To display and configure LAN Port settings.</p> <ul style="list-style-type: none"> ● DHCP: If selected, IP phone will get IP address, Subnet Mask, Default Gateway and DNS server address from

	<p>DHCP server automatically.</p> <ul style="list-style-type: none"> ● Static IP: If selected, you have to set IP address, Subnet Mask, Default Gateway and DNS server manually. ● PPPoE: Use PPPoE username/password to connect to PPPoE server.
PC Port	<p>To display and configure PC Port settings.</p> <ul style="list-style-type: none"> ● As Bridge: If selected, IP phone will act as a switch to route all incoming and outgoing packets from PC port. ● As Router: If selected, IP phone will act as a router to route all incoming and outgoing packets from PC port.

5.5.Network->Advanced

Path: Web UI->Network->Advanced



The screenshot shows the Akuvox Network-Advanced configuration page. The left sidebar contains navigation links for Status, Account, Network (Basic, Advanced), Phone, PhoneBook, Upgrade, and Security. The main content area is titled "Network-Advanced" and includes sections for LLDP, Local RTP, SNMP, VLAN, QoS, TR069, 802.1x, and VPN. The "LLDP" section has fields for "LLDP Active" (Disabled) and "Packet Interval" (30). The "Local RTP" section has fields for "Max RTP Port" (12000) and "Starting RTP Port" (11800). The "SNMP" section has fields for "Active" (Disabled), "Port" (1024-65535), and "Trusted IP". The "VLAN" section shows settings for LAN and PC ports, including Active, VID, and Priority. The "QoS" section has fields for SIP QoS (40) and Voice QoS (40). The "TR069" section shows settings for ACS and CPE, including Active, Version, URL, User Name, and Password. The "802.1x" section has fields for 802.1x Mode (Disabled), Identity, and MD5 Password. The "VPN" section has fields for Active (Disabled), Upload (<50K), and a file upload button. A "Help" panel on the right provides notes and warnings about input fields and specific port ranges.

Sections	Description
LLDP	To display and configure LLDP settings. ● LLDP Active: To enable or disable LLDP feature.

	<ul style="list-style-type: none"> ● Packet interval: To configure the interval for LLDP admin message. <p>Note: LLDP stands for Link Layer Discovery Protocol, it's used to exchange device information between any two directly-connected devices. LLDP is often used to configure Voice Vlan automatically for IP phone.</p>
Local RTP	<p>To display and configure Local RTP settings.</p> <ul style="list-style-type: none"> ● Max RTP Port: Determine the maximum port that RTP stream can use. ● Min RTP Port: Determine the minimum port that RTP stream can use.
SNMP	<p>To display and configure SNMP settings.</p> <ul style="list-style-type: none"> ● 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. <p>Note: SNMP (Simple Network Management Protocols) is Internet-standard protocol for managing devices on IP networks.</p>
VLAN	<p>To display and configure VLAN settings.</p> <ul style="list-style-type: none"> ● LAN Port/PC Port: You can configure VLAN setting for both ports respectively. ● 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. <p>Note: Please consult your administrator for specific VLAN settings in your networking environment.</p>
QoS	<p>To display and configure QoS settings.</p> <ul style="list-style-type: none"> ● SIP QoS: To configure QoS value for all SIP message. ● Voice QoS: To configure QoS value for all audio stream(RTP streams).
TR069	<p>To display and configure TR069 settings.</p> <ul style="list-style-type: none"> ● 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

	<p>inform.</p> <p>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.</p>
802.1x	<p>To display and configure 802.1x settings.</p> <ul style="list-style-type: none"> ● 802.1x Mode: To enable or disable 802.1x. ● Identity: To input identity if 802.1x is enabled. ● MD5 password: To input MD5 password if 802.1 is enabled.
VPN	<p>To display and configure VPN settings.</p> <ul style="list-style-type: none"> ● Active: To enable or disable VPN feature. ● Upload: To upload VPN client configuration file which is used to connect to VPN server. <p>Note: For now, IP phone can only support OpenVPN.</p>

5.6.Phone ->Time/Lang

Path: Web UI->Phone->Time/Lang

The screenshot shows the Akuvox Time/Lang configuration page. The left sidebar contains navigation links for Status, Account, Network, Phone, Time/Lang, Preference, Call Feature, Voice, Key/Display, Ringtones, Tones, Dial Plan, Action URL, Multicast, PhoneBook, Upgrade, and Security.

Time/Lang

- Web Language:** Type: English
- LCD Language:** Type: English
- Format Setting:**
 - Time Format: 12Hour
 - Date Format: YYYY-MM-DD
 - Display Mode: Date
- Type:**
 - Manual
 - Date: Year: 2015, Month: 11, Day: 18
 - Time: Hour: 9, Min: 49, Sec: 52
 - Auto
- NTP:**
 - Time Zone: +1 France(Paris)
 - Primary Server: 0.pool.ntp.org
 - Secondary Server: 1.pool.ntp.org
 - Update Interval: 3600 (>= 3600s)
- Daylight Saving Time:**
 - Active: Auto, Offset: 60 (-300~300Minutes)
 - By Date
 - Start Time: Mon: 1, Day: 1, Hour: 0
 - End Time: Mon: 12, Day: 31, Hour: 23
 - By Week
 - Start Month: Jan
 - Start Week Of Month: First In Month
 - Start Day Of Week: Monday
 - Start Hour: 0 (0~23)
 - End Month: Dec
 - End Week Of Month: Fourth In Month
 - End Day Of Week: Sunday
 - End Hour: 23 (0~23)

Note :
Max length of characters for input box:
255: Broadsoft Phonebook server address
127: Remote Phonebook URL & AUTOP Manual Update Server URL
63: The rest of input boxes

Warning :

Field Description :

Submit Shortcut:

Sections	Description
Web Language	To choose the web language.
LCD Language	To choose the phone language.
Format Setting	<p>To configure time display settings.</p> <ul style="list-style-type: none"> ● Time Format: Determine what format to display on Phone UI(12 hour/24 hour). ● Date Format: Determine what format to display on Phone UI for Date. ● Display Mode: Determine what mode to display Time&Date on Phone UI.
Type	To select how to configure time, it could be set by manually or get from INTERNET automatically via NTP server.

	<ul style="list-style-type: none"> ● Manual: To set Time and Date manually. ● Auto: To get Time via NTP server. <p>Note: If you set time to be Manually, it only take effect till next reboot, after reboot, the phone will switch to Auto mode automatically, because there is no way for IP phone to record time during power off.</p>
NTP	<p>To configure NTP server related settings.</p> <ul style="list-style-type: none"> ● 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. <p>Note: NTP, Network Time Protocol is used to automatically synchronized local time with INTERNET time, since NTP server only response GMT time, so that you need to specify the Time Zone for IP phone to decide the local time.</p>
Daylight Saving Time	<p>To display or configure DST settings.</p> <p>Note: Here DST, is short for Daylight saving time, which stands for the time in the summer days when sun rises early will be adjusted forward to save daylight. The DST will take effects during the period that set by user. (all the settings for DST are all self-explanatory, please consult with your administrator for local DST details).</p>

5.7. Phone->Preference

Path: Web UI->Phone->Preference

Sections	Description
LCD Logo	The logo displays on the phone LCD.
Headset Mode	To enable or disable Headset Mode. ● Active: If enabled, the default audio track will be headset mode, if audio track is changed during a call, it will be back to headset mode after you hangup the call.
Key Press Sound	To configure the sound volume for key press. ● Volume: The valid volume range is from 0~15, by default it's 8.
Ringtone Volume	To configure the sound volume for ringtone. ● Volume: The valid volume range is from 0~15, by default it's 8.

5.8.Phone->Call Feature

Path: Web UI->Phone->Call Feature

Status

Account

Network

Phone

- Time/Lang
- Preference
- Call Feature**
- Voice
- Key/Display
- DSS Key
- Ext Key
- Ringtones
- Tones
- Dial Plan
- Action URL
- Multicast

PhoneBook

Upgrade

Security

Phone-Call Feature

Mode		Phone
Feature Key Sync	Disabled <input checked="" type="radio"/>	
Mode	<input type="radio"/> Phone <input type="radio"/> Custom	
Forward Transfer		
Account	All Account <input type="button" value="▼"/>	
Always Forward	Disabled <input type="button" value="▼"/>	
Target Number	<input type="text"/>	
On Code	<input type="text"/>	
Off Code	<input type="text"/>	
Busy Forward	Disabled <input type="button" value="▼"/>	
Target Number	<input type="text"/>	
On Code	<input type="text"/>	
Off Code	<input type="text"/>	
No Answer Forward	Disabled <input type="button" value="▼"/>	
No Answer Ring Time	30 <input type="button" value="▼"/>	
Target Number	<input type="text"/>	
On Code	<input type="text"/>	
Off Code	<input type="text"/>	
DND		
Account	All Account <input type="button" value="▼"/>	
DND	Disabled <input type="button" value="▼"/>	
Return Code When DND	486(Busy Here) <input type="button" value="▼"/>	
DND On Code	<input type="text"/>	
DND Off Code	<input type="text"/>	
Call Waiting		
Call Waiting Enable	Enabled <input type="button" value="▼"/>	
Call Waiting Tone	Enabled <input type="button" value="▼"/>	
Auto Redial		
Auto Redial	Disabled <input type="button" value="▼"/>	
Auto Redial Interval	10 <input type="button" value="▼"/> (1~300s)	
Auto Redial Times	3 <input type="button" value="▼"/> (1~100)	
Call PickUp		
Visual BLF PickUp Alert	Disabled <input type="button" value="▼"/>	
Intercom		
Active	Enabled <input type="button" value="▼"/>	
Intercom Mute	Disabled <input checked="" type="checkbox"/>	
HotLine		
Active	Disabled <input type="button" value="▼"/>	
Number	<input type="text"/>	
Delay Time	0 <input type="button" value="▼"/> (0~5s)	
ACD		
ACD Activated Auto	Disabled <input type="button" value="▼"/>	
ACD Activated Auto Timer	30 <input type="button" value="▼"/> (0~180s)	
Remote Control		
Allowed Access IP List	<input type="text"/>	
Keypad Lock		
Keypad Lock Type	Disabled <input type="button" value="▼"/>	
Keypad Unlock PIN	***** <input type="button" value="▼"/> (0~15)	
Keypad Lock Timeout	0 <input type="button" value="▼"/> (0~3600s)	
Key As Send		
Key As Send	# <input type="button" value="▼"/>	
Others		
Return Code When Refuse	486(Busy Here) <input type="button" value="▼"/>	
Auto Answer Delay	0 <input type="button" value="▼"/> (0~5s)	
Early DTMF	Disabled <input type="button" value="▼"/>	
Multicast Codec	PCMU <input type="button" value="▼"/>	
Direct IP	Enabled <input type="button" value="▼"/>	

Sections	Description
Mode	<p>To enable or disable feature key sync.</p> <ul style="list-style-type: none"> ● Feature Key Sync: To enable or disable feature key sync. ● Mode: Select the desired mode.
Forward Transfer	<p>To display and configure Forward setting.</p> <p>Note: There are three types of forward: Always Forward, Busy Forward and No answer Forward.</p> <ul style="list-style-type: none"> ● Always Forward: Any incoming call will be forwarded in any situation. ● Busy Forward: An incoming call will be forwarded if IP phone is busy. ● No answer Forward: An incoming call will be forwarded if it's no answer after a specific time.
Call Waiting	<p>To enable or disable Call Waiting.</p> <ul style="list-style-type: none"> ● Call Waiting Enable: If enabled, it allows IP phones to receive a new incoming call when there is already an active call. ● Call Waiting Tone: If enabled, it allows IP phones to play the call waiting tone to the waiting callee.
Auto Redial	<p>Auto redial allows IP phones to redial an unsuccessful call for designated times within designated interval.</p> <ul style="list-style-type: none"> ● Auto Redial: To enable or disable auto redial feature. ● Auto Redial Interval: Determine the interval between two consecutive attempts. ● Auto Redial Times: Determine how many times to redial.
DND	<p>DND (Do Not Disturb) allows IP phones to ignore any incoming calls.</p> <ul style="list-style-type: none"> ● 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 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. ● DND Off Code: The Code 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.
Call PickUp	<ul style="list-style-type: none"> ● Visual BLF PickUp Alert: To enable the BLF pick up function.
Call Park	<p>Call park allows users to park a call to a special extension and then retrieve it via any other phone within the same system.</p> <ul style="list-style-type: none"> ● Active: To enable or disable call park feature. ● Account: To determine which account to take effect.

	<ul style="list-style-type: none"> ● Target: To configure a designated target extension. <p>Note: Please consult with your telephony system administrator for special extension on your system.</p>
Intercom	<p>Intercom allows user to establish a call directly with the callee.</p> <ul style="list-style-type: none"> ● Active: To enable or disable Intercom feature. ● Intercom Mute: If enabled, once the call established, the callee will be muted.
HotLine	<p>HotLine allows user to call out a defined number automatically after hearing the dial tone without dialing any number.</p> <ul style="list-style-type: none"> ● Active: To enable or disable HotLine feature. ● Number: To set a defined HotLine number. ● Delay Time: To set the automatically call out interval after hearing the dial tone.
ACD	<p>ACD (Automatic Call Distribution) is most used in call-center market, it allows IP phone to login the system with multiple status so that the system could distribute an incoming calls to available user or agents.</p> <ul style="list-style-type: none"> ● ACD Activated Auto: If enabled, Agent status will turn to available automatically within a designated time(decided by ACD Activated Auto Timer). ● ACD Activated Auto Timer: To configure interval when will Agent status becomes available automatically. ● ACD Pwd Required: To enable the ACD password.
Remote Control	<p>Remote Control allows specific host to interact with IP phone by sending HTTP or HTTPS requests. The specific action could be answering an incoming call, hangup an ongoing call and so on.</p> <ul style="list-style-type: none"> ● Allowed Access IP List: To configure the allowed host address. <p>Note: For now, IP phone can only support IP address, IP address list and IP address pattern as allowed hosts</p>
Keypad Lock	<p>Keypad Lock allows to lock the keypad of your phone temporarily when you are not using it. This feature helps to protect your phone from unauthorized use.</p> <ul style="list-style-type: none"> ● Keypad Lock Type: To lock the phone with function keys or all keys; ● Keypad Unlock PIN: To lock the phone with a password. ● Keypad Lock Timeout: the idle interval to lock the phone.
Key As Send	Key As Send allows you to disable send key or assign pound key as send key.
Others	<ul style="list-style-type: none"> ● Return Code When Refuse: Allows user to assign specific

	<p>code as return code to SIP server when an incoming call is rejected.</p> <ul style="list-style-type: none"> ● Auto Answer Delay: To configure delay time before an incoming call is automatically answered. ● Early DTMF: To enable or disable early DTMF
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5.9.Phone->Voice

Path:Web UI->Phone->Voice

The screenshot shows the Akuvox Web UI interface for configuring voice settings. The left sidebar is a navigation menu with sections such as Status, Account, Network, Phone (which is currently selected), and various other options like Time/Lang, Preference, Call Feature, Voice, Key/Display, DSS Key, Ext Key, Ringtones, Tones, Dial Plan, Action URL, Multicast, PhoneBook, Upgrade, and Security. The main content area is titled 'Voice' and contains three configuration sections: 'Echo Canceller', 'Jitter Buffer', and 'Mic Volume'. The 'Echo Canceller' section has dropdowns for Echo Canceller (Enabled), VAD (Disabled), and CNG (Enabled). The 'Jitter Buffer' section has dropdowns for Jitter Type (Adaptive) and input fields for Min Delay (0), Nominal Delay (120), and Max Delay (300). The 'Mic Volume' section has input fields for Handset Volume (8), Headset Volume (8), and Hand Free Volume (8). At the bottom of the main area are 'Submit' and 'Cancel' buttons. The right sidebar provides notes about character length for input boxes, specific URLs for phonebook and update, and general input guidelines. It also includes a 'Help' section, a 'Warning' section, a 'Field Description' section, and a 'Submit Shortcut' section with 'Submit' and 'Cancel' buttons.

Sections	Description
Echo Canceller	<p>Echo Canceller: To remove acoustic echo from a voice communication in order to improve the voice quality .</p> <ul style="list-style-type: none"> ● VAD(Voice Activity Detection): Allow IP phone to detect the presence or absence of human speech during a call. When detecting period of “silence”, VAD replaces that silence efficiently with special packets that indicate silence is occurring. It can facilitate speech processing, and deactivate some processes during non-speech section of an audio session. It can avoid unnecessary coding or transmission of silence packets in VoIP applications, saving on computation and network bandwidth.

	<ul style="list-style-type: none"> ● CNG(Comfort Noise Generation): Allow IP phone to generate comfortable background noise for voice communications during periods of silence in a conversation. It is a part of the silence suppression or VAD handling for VoIP technology. CNG, in conjunction with VAD algorithms, quickly responds when periods of silence occur and inserts artificial noise until voice activity resumes. The insertion of artificial noise gives the illusion of a constant transmission stream, so that background sound is consistent throughout the call and the listener does not think the line has released.
Jitter Buffer	<p>Jitter buffer is a shared data area where voice packets can be collected, stored, and sent to the voice processor in even intervals. Jitter is a term indicating variations in packet arrival time, which can occur because of network congestion, timing drift or route changes. The jitter buffer, located at the receiving end of the voice connection, intentionally delays the arriving packets so that the end user experiences a clear connection with very little sound distortion.</p> <p>IP phones support two types of jitter buffers: fixed and adaptive.</p> <p>Fixed: Add the fixed delay to voice packets. You can configure the delay time for the static jitter buffer on IP phones.</p> <p>Adaptive: Capable of adapting the changes in the network's delay. The range of the delay time for the dynamic jitter buffer added to packets can be also configured on IP phones.</p>
Mic Volume	To configure Microphone volume for headset, handset and speaker mode.

5.10.Phone->Key/Display

Path:Web UI->Phone->Key/Display

Sections	Description
Line Key	Allows user to assign specific feature to the designated line key. For line key, the available feature list: DND, Menu, MSG, Status, Book, Fwd, PickUp, Group PickUp, Intercom, Speed Dial, History, Favorites, Redial, Account, ACD, BLF, BLFLList, Call Return, Hot Desking, Record, XML Browser, DTMF.
Soft Key	Allows user to assign specific feature to the designated soft keys. For softkey, the available features list: DND, Menu, MSG, Status, Book, Fwd, PickUp, Group, Pickup, Intercom, Speed Dial, History, Favorites, Redial, Call Return, Hot Desking, XML Browser.
Function Key	Allows user to assign specific feature to the designated function keys. For function keys, the available features list:

	N/A, DND, Menu, MSG, Status, Book, Fwd, PickUp, Group PickUp, Intercom, Speed Dial, History, Favorites, Redial, Call Return, Hot Desking, XML Browser.
Display	<ul style="list-style-type: none"> ● Backlight Intensity: To adjust the backlight intensity of Phone UI. ● Backlight Time: To adjust backlight on timer, once expired the backlight of Phone UI will go off.

5.11.Phone->Dss Key

Path: Web UI->Phone->Dss key

Key	Type	Value	Account	Extension
DSS Key 1	N/A		Account 1	
DSS Key 2	N/A		Account 1	
DSS Key 3	N/A		Account 1	
DSS Key 4	N/A		Account 1	
DSS Key 5	N/A		Account 1	
DSS Key 6	N/A		Account 1	
DSS Key 7	N/A		Account 1	
DSS Key 8	N/A		Account 1	
DSS Key 9	N/A		Account 1	
DSS Key 10	N/A		Account 1	

Sections	Description
Dss Key	Allows user to assign specific feature to the designated DSS key. For DSS key, the available feature list: DND, Menu, MSG, Status, Book, Fwd, PickUp, Group PickUp, Intercom, Speed Dial, History,

	Favorites, Redial, Account, ACD, BLF, BLFLList, Call Return, Hot Desking, Record, XML Browser, DTMF.
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5.12.Phone->Ext Key

Path:Web UI->Phone->Ringtones

The screenshot shows the Akuvox Web UI interface for managing external keys. The left sidebar contains navigation links for Status, Account, Network, Phone (selected), and various sub-options like Time/Lang, Preference, Call Feature, Voice, Key/Display, DSS Key, and several Ringtones and Tones options under the Phone section. The main content area has three main sections: 'Ext Upgrade' (with fields for Upload and a 'Submit' button), 'Ext Setting' (with dropdowns for Firmware Version, Expansion Module, Backlight Intensity, and Backlight Time), and 'Ext Key' (a table with 20 rows, each containing columns for Key, Type, Label, Value, Account, and Extension). A 'Note' section provides instructions for input boxes, mentioning 255 for phonebook server address and 127 for remote phonebook URL. A 'Warning' section cautions about the maximum length of characters. A 'Field Description' section defines the 'Submit Shortcut' buttons. At the bottom are 'Submit' and 'Cancel' buttons.

Sections	Description
Upload	To upload firmware for expansion module
Firmware Version	To display firmware version
Expansion Module	To mark target expansion module to be configure
Backlight Intensity	To set the backlight intensity for expansion module

Backlight Time	To set the duration of backlight
Key	<p>Allows user to assign specific feature to the designated key on expansion module.</p> <p>For keys, the available feature list:</p> <p>DND, Menu, MSG, Status, Book, Fwd, PickUp, Group PickUp, Intercom, Speed Dial, History, Favorites, Redial, Account, ACD, BLF, BLFLList, Call Return, Hot Desking, Record, XML Browser, DTMF.</p>

5.13.Phone->Ring tones

Path:Web UI->Phone->Ringtones

All Ringtones

Upload(Max Total Size: 100K)

Uploaded Ringtones

System Ringtones

Index	Keyword	Ringtone
0		Ring1.wav
1		Ring1.wav
2		Ring1.wav
3		Ring1.wav
4		Ring1.wav
5		Ring1.wav
6		Ring1.wav
7		Ring1.wav
8		Ring1.wav
9		Ring1.wav
10		Ring1.wav
11		Ring1.wav

Distinctive Ringers

Note :
Max length of characters for input box:
255: Broadsoft Phonebook server address
127: Remote Phonebook URL & AUTOP Manual Update Server URL
63: The rest of input boxes

Warning :

Field Description :

Submit Shortcut

Sections	Description
All Ringtones	<p>Allow user to upload and view ringtone files or delete uploaded ringtone files.</p> <p>Note: Ringtone files must be .wav format and has some specific requirement, please contact Akuvox technical support team for instructions how to make ringtone files.</p> <p>System ringtones files cannot be deleted thus user can only</p>

	delete uploaded ringtones.
Distinctive Ringers	Distinctive ringers allow different incoming calls to trigger distinctive ringtones. The IP phone will check "Alert-Info" header inside the incoming "invite" SIP message. And strip out the URL or keyword inside the "Alert-Info" header ,from the specific URL or keyword to match or download designated ringtones to play.

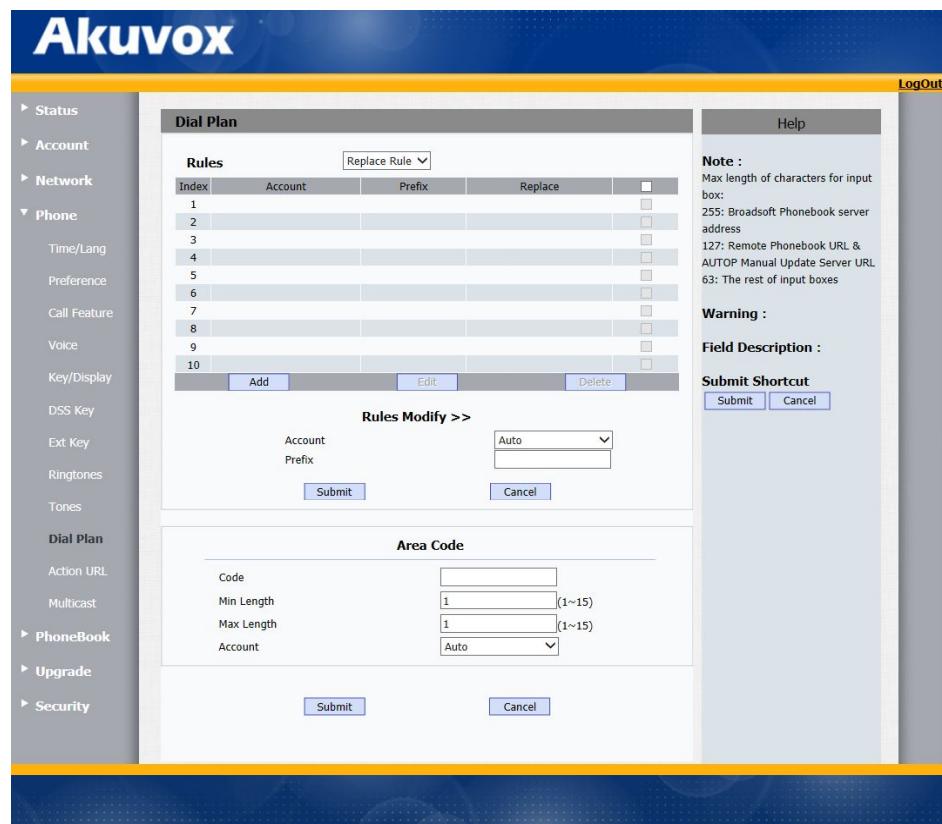
5.14.Phone->Tones

Path: Web UI->Phone->Tones

Sections	Description
Tone	<p>Allows user to select a specialized tone sets (classified by countries) or to customize own tones.</p> <p>Note: Available country tones sets are: China, Spain, Luxembourg, Sweden, Taiwan, Belgium, Denmark, Finland, Germany, Netherlands, Norway, Portugal.</p>

5.15.Phone->Dial Plan->Replace Rule

Path: Web UI->Phone->Dial Plan->Replace Rule



Sections	Description
Rules	Allow user to select Replace rule or Dial-now to display or edit.
Rules Modify	Allow user to modify selected rules information, for replace rule, you can modify related accounts, prefix and replace.
Area Code	<p>Area codes are also known as NPAs (Numbering Plan Areas). They usually indicate different geographical areas within one country. If entered numbers match the predefined area code rule, the IP phone will automatically prefix outgoing number with area code.</p> <p>Note: There is only one area code rule supported.</p>

5.16.Phone ->Dial Plan->Dial Now

Path: Web UI->Phone->Dial Plan->Dial Now

Sections	Description
Rules	Allow user to select Replace rule or Dial-now to display or edit.
Dial Now Delay	Allow user configure dial now delay time for dial now. It means user can configure the IP phone to dial out the phone number automatically after the designated delay time if it match any dial now rule.
Rules Modify	Allow user to modify selected rules information, for dial-now rule, user can modify related accounts, Dial now Rule itself.
Area Code	Area codes are also known as NPAs(Numbering Plan Areas). They usually indicate different geographical areas within one country. If entered numbers match the predefined area code rule, the IP phone will automatically prefix outgoing number with area code. Note: There is only one area code rule supported.

5.17.Phone ->Action URL

Path: Web UI->Phone->Action URL

ActionURL	
Active	Disabled
Setup Completed	
Registered	
Unregistered	
Registered Failed	
Off Hook	
On Hook	
Incoming Call	
Outgoing Call	
Established	
Terminated	
Open DND	
Close DND	
Open Always FWD	
Close Always FWD	
Open Busy FWD	
Close Busy FWD	
Open No Answered FWD	
Close No Answered FWD	
Transfer Call	
Blind Transfer	
Attended Transfer	
Hold	
UnHold	
Mute	
UnMute	
MissedCall	
IP Changed	
FWD Incoming Call	
Reject Incoming Call	
Answer New Call	
Transfer Finished	
Transfer Failed	
Idle To Busy	
Busy To Idle	

Sections	Description
Action URL	<p>To display and configure Action URL settings.</p> <p>Setup Completed: When the IP phone completes startup.</p> <ul style="list-style-type: none"> ● Registered: When the IP phone successfully registers an account. ● Unregistered: When the IP phone logs off the registered account. ● Register Failed: When the IP phone fails to register an account. ● Off Hook: When the IP phone is off hook.

- On Hook: When the IP phone is on hook.
- Incoming Call: When the IP phone receives an incoming call.
- Outgoing Call: When the IP phone places a call.
- Established: When the IP phone establishes a call.
- Terminated: When the IP phone terminates a call.
- Open DND: When the IP phone enables the DND mode.
- Close DND: When the IP phone disables the DND mode.
- Open Always Forward: When the IP phone enables the always forward.
- Close Always Forward: When the IP phone disables the always forward.
- Open Busy Forward: When the IP phone enables the busy forward.
- Close Busy Forward: When the IP phone disables the busy forward.
- Open No Answer Forward: When the IP phone enables the no answer forward.
- Close No Answer Forward: When the IP phone disables the no answer forward
- Transfer Call : When the IP phone transfers a call.
- Blind Transfer: When the IP phone blind transfers a call.
- Attended Transfer: When the IP phone performs the semi-attended/attended transfer.
- Hold: When the IP phone places a call on hold.
- UnHold: When the IP phone retrieves a hold call.
- Mute: When the IP phone mutes a call.
- UnMute: When the IP phone un-mutes a call.
- Missed Call: When the IP phone misses a call.
- IP Changed: When the IP address of the IP phone changes.
- FWD Incoming Call: When the IP phone forwards an incoming call.
- Reject Incoming Call: When the IP phone rejects an incoming call.
- Answer New Call: When the IP phone answers a new call.
- Transfer Finished: When the IP phone completes to transfer a call.
- Transfer Failed: When the IP phone fails to transfer a call.
- Idle To Busy: When the state of the IP phone changes from idle to busy.
- Busy To Idle: When the state of phone changes from

	busy to idle.
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5.18.Phone-> Multicast

Path: Web UI-> Phone-> Multicast

The screenshot shows the Akuvox Web UI interface for managing Multicast settings. The left sidebar has a tree view with nodes like Status, Account, Network, Phone (expanded), Time/Lang, Preference, Call Feature, Voice, Key/Display, DSS Key, Ext Key, Ringtones, Tones, Dial Plan, Action URL, Multicast (selected), PhoneBook, Upgrade, and Security. The main content area has a title 'Multicast' and a sub-section 'Multicast Setting'. It contains two dropdown menus: 'Paging Barge' (set to 'Disabled') and 'Paging Priority Active' (set to 'Enabled'). Below this is a 'Priority List' table with 10 rows, each with columns for IP Address, Listening Address, Label, and Priority (1-10). The table rows are numbered 1 to 10. At the bottom are 'Submit' and 'Cancel' buttons. To the right, there's a 'Help' section with notes about input box length, server addresses, and URLs, a 'Warning' section, and a 'Field Description' section. A 'Submit Shortcut' button is also present.

Sections	Description
Multicast Setting	To display and configure the Multicast setting. <ul style="list-style-type: none"> Paging Barge: Choose the multicast number ,the range is 1-10. Paging priority Active: Enable or disable the multicast.
Priority List	To setup the multicast parameters. <ul style="list-style-type: none"> Listening Address: Enter the IP address you need to listen Label: Input the label for each listening address

5.19.PhoneBook->Local Phone Book

Path: Web UI->PhoneBook->Local Book

The screenshot shows the Akuvox Web UI interface for managing local contacts. The left sidebar contains navigation links for Status, Account, Network, Phone, PhoneBook (Local Book, Remote Book, Call Log, LDAP, Broadsoft), Upgrade, and Security. The main content area is titled "Local Book". It includes sections for Contact (with dropdowns for All Contacts, Search, Dial, and buttons for Hand Up, Search, Reset), a table for contacts (Index 1-10, Name, Office Num, Mobile Num, Other Num, Group, Ring, Account), and buttons for Page 1, Prev, Next, Move To, All Contacts, Delete, and Delete All. Below this is a "Contact Setting" form with fields for Name, Office Num, Mobile Num, Other Num, Group (Default or Auto), Ring (Auto or Manual), and buttons for Add, Edit, and Cancel. The next section is "Group", showing a table for groups (Index 1-5, Name, Ring, Description) and buttons for Delete and Delete All. Below this is a "Group Setting" form with fields for Name, Ring (Auto or Manual), Description, and buttons for Add, Edit, and Cancel. The final section is "Import/Export" with tabs for Contact and Black List, each with Import, Export, and Cancel buttons and XML file selection fields.

Sections	Description
Contact	To display and select local contact type. <ul style="list-style-type: none"> ● All Contacts: To display or edit all local contacts. ● Favorites: To display or edit favorites contacts. ● Black List: To display black list contacts.
Search	To search designated contacts from local phonebook.
Dial	To dial out a call or hangup an ongoing call from Web UI. Note: For this feature, you need to have the remote control privilege to control IP phone via Web UI. Please refer to section “Remote Control” in the Web UI->Phone->Call Feature page.
Group	To display or edit Group contacts.
Group Setting	To display or change Group name, related ringtone or

	description.
Import/Export	To import or export the contact or blacklist file.

5.20.Phone Book->Remote Phone Book

Path:Web UI->PhoneBook->Remote Book

The screenshot shows the 'Remote Book' configuration page. On the left, there's a navigation menu with items like Status, Account, Network, Phone, PhoneBook (with Local Book and Remote Book sub-options), Upgrade, and Security. The main area has a title 'Remote Book' and a sub-section 'Remote Book'. It contains a table with columns 'Index', 'Local Book URL', and 'Local Book Name'. Rows 1 through 5 are listed. Below the table are dropdowns for 'Search Remote Phonebook Name' (set to 'Enabled') and 'Refresh Interval' (set to 3600). At the bottom are 'Submit' and 'Cancel' buttons. To the right, there's a 'Help' section with notes about input boxes and server addresses, a 'Warning' section, a 'Field Description' section, and a 'Submit Shortcut' section with 'Submit' and 'Cancel' buttons.

Sections	Description
Remote Book	<p>To display and configure Remote Book settings.</p> <p>Index: To select desired Remote Book item to display and configure.</p> <p>Local Book URL: To configure remote book server address</p> <p>Local Book Name: To configure display remote book name on Phone UI</p> <p>Search Remote Phonebook Name: To enable or disable search remote phonebook name</p> <p>Search Flash Interval: To set interval (Range from 120s to 2592000s)</p> <p>Note: IP phone support at most 5 remote books. Please refer to your administrator for how to establish a remote book server and how to create remote book xml file.</p>

5.21.Phone Book->Call log

Path: Web UI->PhoneBook ->Call Log

The screenshot shows the Akuvox Web UI interface. The left sidebar contains a navigation menu with sections: Status, Account, Network, Phone, PhoneBook (Local Book, Remote Book, Call Log, LDAP, Broadsoft), Upgrade, and Security. The main content area is titled "Call Log" and displays a "Call History" table. The table has columns for Index, Type, Date, Time, Local Identity, Name, Number, and a checkbox. A dropdown menu above the table is set to "All". The table contains 15 rows, each with a checkbox. Below the table are buttons for Page (set to 1), Prev, Next, Delete, and Delete All. The right sidebar includes a "Help" section, a "Note" section with details about input box lengths (255 for Broadsoft Phonebook server address, 127 for Remote Phonebook URL & AUTOP Manual Update Server URL, 63 for other input boxes), a "Warning" section, and a "Field Description" section.

Sections	Description
Call History	To display call history records. Available call history types are All calls, Dialed calls, Received calls, Missed calls, Forwarded calls. HangUp: To click to hangup ongoing call on the IP phone. Note: For “HangUp” feature, you need to have the remote control privilege to control IP phone via Web UI. Please refer to section “Remote Control” in the Web UI->Phone->Call Feature page.

5.22.Phone Book->LDAP

Path: Web UI->PhoneBook->LDAP

Sections	Description
LDAP	<p>To display and configure LDAP phonebook settings.</p> <ul style="list-style-type: none"> ● Name Filter: The settings used to tell LDAP server what name attributes to search. ● Number Filter: The settings used to tell LDAP server what number attributes to search. ● Server: To configure LDAP server's address. ● Port: To configure LDAP server's port. ● Base DN: To configure searching base DN on LDAP server. ● User Name: To configure user name for accessing LDAP server. ● Password: To configure password for accessing LDAP server. ● Name Attribute: To configure which name attributes should be feedback from LDAP server. ● Number Attribute: To configure which number attributes should be feedback from LDAP server. ● Display Name: To configure display name on Phone UI when there is any searching result from LDAP server. ● Max Hits: To configure the maximum size of result response from LDAP server. ● Search Delay Time: To configure delay time before initiate LDAP searching request after you input a value

	<p>from Phone UI.</p> <p>Note: For setting details,please consult with your system administrator for further information.</p>
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5.23.Phone Book->BroadSoft

Path:Web UI->PhoneBook->Broadsoft

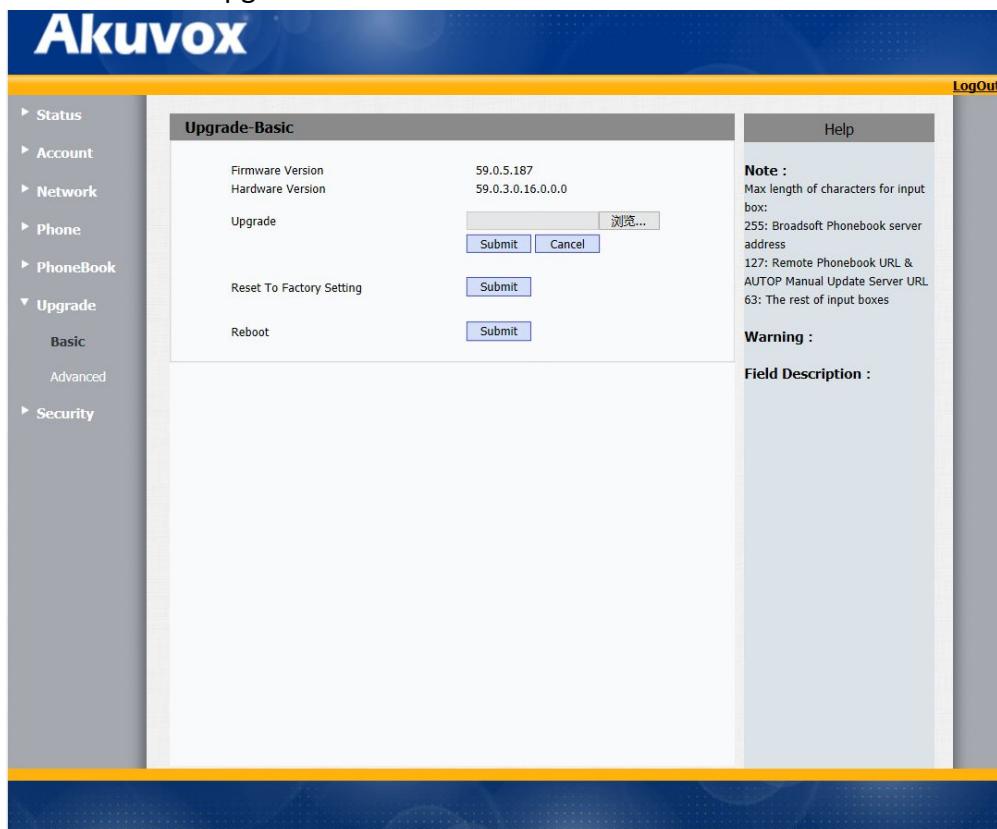
Sections	Description
Broadsoft PhoneBook	<p>To display and configure Broadsoft PhoneBook settings.</p> <ul style="list-style-type: none"> ● PhoneBook Item: To select specific item to configure. Display Name: The name displayed at IP phone's LCD screen when accessed via Phone UI. ● Server Address: Broadsoft PhoneBook server's address. ● Server Port: Broadsoft PhoneBook server's port. ● User Name: Username used to access Broadsoft PhoneBook server. ● Password: Password used to access Broadsoft PhoneBook server. <p>Note: IP phone supports at most 5 Broadsoft PhoneBook</p>

items.

For Broadsoft PhoneBook's server address, port, username and password, you need to consult your Broadsoft service provider for further information.

5.24.Upgrade->Basic

Path: Web UI->Upgrade->Basic



Sections	Description
Upgrade	To select upgrading rom file from local or a remote server automatically. Note: Please make sure it's right file format for right model.
Firmware version	To display firmware version, firmware version starts with MODEL name.
Hardware Version	To display Hardware version.
Reset to Factory Setting	Allow you to reset IP phone's setting to factory settings.
Reboot	To reboot IP phone remotely from Web UI.

5.25.Upgrade->Advanced

Path:WebUI->Upgrade->Advanced

The screenshot shows the 'Upgrade-Advanced' configuration page of the Akuvox WebUI. The left sidebar has a tree view with nodes like Status, Account, Network, Phone, PhoneBook, Upgrade (selected), Basic, Advanced, Security. The main area contains several sections:

- PNP Option:** A dropdown menu set to "Enabled".
- DHCP Option:** A section for custom DHCP options, noting "(DHCP Option 66/43 is Enabled by Default)".
- Manual Autop:** Fields for URL, User Name, Password, Common AES Key, and AES Key(MAC). A "AutoP Immediately" button is present.
- Automatic Autop:** A dropdown for Mode set to "Power On", a schedule for "Sunday 22:00", and buttons for "Submit" and "Export".
- System Log:** A section for LogLevel (set to 3), Export Log (with an "Export" button), and Remote System Log (set to Disabled).
- PCAP:** Buttons for Start, Stop, and Export, and a dropdown for PCAP Auto Refresh (set to Disabled).
- Others:** A section for Config File (.tgz/.conf/.cfg) with a "Browse..." button, "Export" (Encrypted) button, "Import" button, and "Cancel" button.

On the right side, there are "Note:" and "Warning:" sections with detailed descriptions of input field lengths and specific URLs, and a "Field Description:" section. At the bottom right are "Submit" and "Cancel" buttons.

Sections	Description
PNP Option	<p>To display and configure PNP setting for Auto Provisioning.</p> <ul style="list-style-type: none"> ● 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.

	<p>By default, this SIP message is sent to multicast address 224.0.1.75(PNP server address by standard).</p>
DHCP Option	<p>To display and configure custom DHCP option.</p> <ul style="list-style-type: none"> ● DHCP option: If configured, IP Phone will use designated DHCP option to get Auto Provisioning server's address via DHCP. <p>This setting require DHCP server to support corresponding option.</p>
Manual Update Server	<p>To display and configure manual update server's settings.</p> <ul style="list-style-type: none"> ● 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.conf if IP phone's MAC address is 0c1105888888). <p>Note: AES is one of many encryption, it should be configure only configure filed is ciphered with AES, otherwise left blank.</p>
AutoP	<p>To display and configure Auto Provisioning mode settings.</p> <p>This Auto Provisioning mode is actually self-explanatory.</p> <p>For example, mode "Power on" means IP phone will go to do Provisioning every time it powers on.</p>
System Log	<p>To display syslog level and export syslog file.</p> <ul style="list-style-type: none"> ● Syslog level:From level 0~7.The higher level means the more specific syslog is saved to a temporary file. By default, it's level 3. ● Export Log: Click to export temporary syslog file to local PC. ● Remote System Log: To enable or disable Remote System Log. ● Remote System Server: To input the syslog server address.
PCAP	<p>To start, stop packets capturing or to export captured Packet file.</p> <ul style="list-style-type: none"> ● Start: To start capturing all the packets file sent or received from IP phone. ● Stop: To stop capturing packets. <p>Note: IP phone will save captured packets file to a temporary file, this file maximum size is 1M(mega bytes), and will top</p>

	capturing once reaching this maximum size.
Others	To display or configure others features from this page. Config file: To export or import config file for IP phone.

5.26.Security->Basic

Path: Web UI->Security->Basic

The screenshot shows the Akuvox Web UI interface. The left sidebar has a tree menu with nodes like Status, Account, Network, Phone, PhoneBook, Upgrade, and Security (which is expanded to show Basic and Advanced). The main content area is titled "Security-Basic" and contains a "Web Password Modify" form. It includes fields for User Name (dropdown), Current Password, New Password, and Confirm Password. Below this is a "Session Time Out" section with a "Session Time Out Value" input field (set to 60~14400s) and "Submit" and "Cancel" buttons. To the right of the form is a "Help" panel with notes about input lengths and character sets, and a "Field Description" panel with a "Submit Shortcut" section containing "Submit" and "Cancel" buttons.

Sections	Description
Web Password Modify	<p>To modify user's password.</p> <ul style="list-style-type: none"> ● Current Password: The current password you used. ● New Password: Input new password you intend to use. ● Confirm Password: Repeat the new password. <p>Note: For now, IP phone can only support user admin.</p>

5.27.Security->Advanced

Path: Web UI->Security->Advanced

The screenshot shows the Akuvox web interface with a sidebar on the left containing navigation links such as Status, Account, Network, Phone, PhoneBook, Upgrade, and Security. Under Security, 'Advanced' is selected. The main content area has two tabs: 'Advanced' and 'Basic'. The 'Advanced' tab is active and displays two sections: 'Web Server Certificate' and 'Client Certificate'. The 'Web Server Certificate' section shows a table with one row: Index 1, Issue To IPPhone, Issuer IPPhone, Expire Time Sun Oct 9 16:00:00 2034, and a 'Delete' button. Below it is a 'Web Server Certificate Upload' form with a file input field, a 'Submit' button, and a 'Cancel' button. The 'Client Certificate' section shows a table with 10 rows indexed from 1 to 10, each with a 'Delete' button. Below it is a 'Client Certificate Upload' form with a file input field, dropdown menus for 'Index' (Auto) and 'Only Accept Trusted Certificates' (Disabled), and 'Submit' and 'Cancel' buttons.

Sections	Description
Web Server Certificate	To display or delete Certificate which is used when IP phone is connected from any incoming HTTPs request. Note: The default certificate could not be deleted.
Web Server Certificate Upload	To upload a certificate file which will be used as server certificate.
Client Certificate	To display or delete Certificates which is used when IP phone is connecting to any HTTPs server.
Client Certificate Upload	To upload certificate files, this is used as client certificate. <ul style="list-style-type: none"> ● Only Accept trusted Certificates: If this option is enabled, only trusted certificates will be accepted.

6. Troubleshooting

Issue 1: The LCD does not light up

- Check the AC power adapter. Make sure it is the one provided in your package.
- Check the power outlet. Make sure that the power that outlet you are plugging your device into is working. Try to plug a different device into the socket to make sure it has power.

Issue 2: No signal tone heard from the handset

- Check the connection cord between the handset and the phone. Make sure it is connected properly.

Issue 3: Cannot access the web interface

- Check the connection between the PC port of the device and the network port of the computer. Make sure it is fine.
- Check whether the IP address of the device is correct.
- If it is LAN, please make sure there is no IP address conflict with other devices on the network.

Issue 4: Cannot call out

- Please see the network connection status of device, if it is exception, and then check the connection of network.
- If the network connection is normal, please check whether the device has registered successfully.
- If the network connection and the registered are both normal, please confirm whether the dial rule is correct, or please communicate with the service operator.

7.Appendix : Time Zones

Time Zone	Time Zone Name
-11:00	Samoa
-10:00	United States-Hawaii-Aleutian
-10:00	United States-Alaska-Aleutian
-09:00	United States-Alaska Time
-08:00	Canada(Vancouver, Whitehorse)
-08:00	Mexico(Tijuana, Mexicali)
-08:00	United States-Pacific Time
-07:00	Canada(Edmonton, Calgary)
-07:00	Mexico(Mazatlan, Chihuahua)
-07:00	United States-Mountain Time
-07:00	United States-MST no DST
-06:00	Canada-Manitoba(Winnipeg)
-06:00	Chile(Easter Islands)
-06:00	Mexico(Mexico City, Acapulco)
-06:00	United States-Central Time
-05:00	Bahamas(Nassau)
-05:00	Canada(Montreal, Ottawa, Quebec)
-05:00	Cuba(Havana)
-05:00	United States-Eastern Time
-04:30	Venezuela(Caracas)
-04:00	Canada(Halifax, Saint John)
-04:00	Chile(Santiago)
-04:00	Paraguay(Asuncion)
-04:00	United Kingdom-Bermuda(Bermuda)
-04:00	United Kingdom(Falkland Islands)
-04:00	Trinidad&Tobago
-04:00	Curacao

-03:30	Canada-Newfoundland(St.Johns)
Time Zone	Time Zone Name
-03:00	Denmark-Greenland(Nuuk)
-03:00	Argentina(Buenos Aires)
-03:00	Brazil(no DST)
-03:00	Brazil(DST)
-02:00	Brazil(no DST)
-01:00	Portugal(Azores)
0	GMT
0	Greenland
0	Denmark-Faroe Islands(Torshavn)
0	Ireland(Dublin)
0	Portugal(Lisboa, Porto, Funchal)
0	Spain-Canary Islands(Las Palmas)
0	United Kingdom(London)
0	Morocco
+01:00	Albania(Tirane)
+01:00	Austria(Vienna)
+01:00	Belgium(Brussels)
+01:00	Caicos
+01:00	Chatam
+01:00	Croatia(Zagreb)
+01:00	Czech Republic(Prague)
+01:00	Denmark(Kopenhagen)
+01:00	France(Paris)
+01:00	Germany(Berlin)
+01:00	Hungary(Budapest)
+01:00	Italy(Rome)
+01:00	Luxembourg(Luxembourg)
+01:00	Macedonia(Skopje)
+01:00	Netherlands(Amsterdam)
+01:00	Namibia(Windhoek)

+02:00	Estonia(Tallinn)
Time Zone	Time Zone Name
+02:00	Finland(Helsinki)
+02:00	Gaza Strip(Gaza)
+02:00	Greece(Athens)
+02:00	Israel(Tel Aviv)
+02:00	Jordan(Amman)
+02:00	Latvia(Riga)
+02:00	Lebanon(Beirut)
+02:00	Moldova(Kishinev)
+02:00	Russia(Kaliningrad)
+02:00	Romania(Bucharest)
+02:00	Syria(Damascus)
+02:00	Turkey(Ankara)
+02:00	Ukraine(Kyiv, Odessa)
+03:00	East Africa Time
+03:00	Iraq(Baghdad)
+03:00	Russia(Moscow)
+03:30	Iran(Teheran)
+04:00	Armenia(Yerevan)
+04:00	Azerbaijan(Baku)
+04:00	Georgia(Tbilisi)
+04:00	Kazakhstan(Aktau)
+04:00	Russia(Samara)
+05:00	Kazakhstan(Aqtobe)
+05:00	Kyrgyzstan(Bishkek)
+05:00	Pakistan(Islamabad)
+05:00	Russia(Chelyabinsk)
+05:30	India(Calcutta)
+06:00	Kazakhstan(Astana, Almaty)
+06:00	Russia(Novosibirsk, Omsk)
+07:00	Russia(Krasnoyarsk)

+07:00	Thailand(Bangkok)
Time Zone	Time Zone Name
+08:00	China(Beijing)
+08:00	Singapore(Singapore)
+08:00	Australia(Perth)
+09:00	Korea(Seoul)
+09:00	Japan(Tokyo)
+09:30	Australia(Adelaide)
+09:30	Australia(Darwin)
+10:00	Australia(Sydney, Melbourne, Canberra)
+10:00	Australia(Brisbane)
+10:00	Australia(Hobart)
+10:00	Russia(Vladivostok)
+10:30	Australia(Lord Howe Islands)
+11:00	New Caledonia(Noumea)
+12:00	New Zealand(Wellington, Auckland)
+12:45	New Zealand(Chatham Islands)
+13:00	Tonga(Nukualofa)