

## **CT1X IP Phone User Manual**

Version: 2.0

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#### **Contact ATCOM**

#### **Overview of ATCOM**

ATCOM is the leading VoIP hardware manufacturer in global market. We have been keeping innovating with customer's needs oriented , working with partners to establish a total solution for SMB VoIP with IP phone , IP PBX and Asterisk cards.

With over 10 years' experience of R&D , manufacturing and service in network and VoIP filed; mission of creating the biggest value for IP terminals , we commit ourselves in supplying the competitive IP phone and other terminals for IP PBX , soft switch , IMS , NGN providers and carriers; supplying the competitive total VoIP solution for SMB market. We keep improving the customer's experience and creating the bigger value with our reliable products. Until now, our VoIP products have been available in 100+ countries and used by millions of end users.

#### **Contact Sales**

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Download Center: <a href="http://www.atcom.cn/download.html">http://www.atcom.cn/download.html</a>



## 1. Overview of CT1X



CT1X

| Туре | POE | Power adapter      |
|------|-----|--------------------|
| CT10 | No  | Necessary          |
| CT11 | Yes | Optional accessory |



#### 1.1. Interface

| Power Input  | DC 5V-1000mA or POE |
|--------------|---------------------|
| LAN Port     | RJ45                |
| PC Port      | RJ45                |
| Headset Jack | RJ9                 |

#### 1.2. Hardware

| LCD           | 132*52           |
|---------------|------------------|
| CPU           | 400MHz Dual-Core |
| LED Indicator | 1 Status Light   |

#### 1.3. Software

- > Sip 2.0 (RFC3261) and other related SIP RFCs
- > 1 SIP line registration
- > STUN
- > Jitter Buffer, VAD, CNG
- ▶ G711A, G711U, G722, G726-16, G726-24, G726-32, G726-40, G729, L16, iLBC\_13\_3, iLBC\_15\_2
- > Echo Cancellation
- SIP Domain name, Authentication and Backup SIP Server
- DTMF (RFC2833, Inband, SIP INFO)
- > Call transfer, Call forward, 3-way conference, Call hold, Call back
- > DND(Do Not Disturb), Auto answer, Blacklists, Block Call-ID, Block Anonymous call, Dial plan, IP call
- Phone book with 400 contacts and 200 blacklists
- > Call History with 400 records include answered calls, missed calls, dialed calls and forward calls
- Auto update via HTTP, HTTPS, FTP, TFTP, DHCP, RPS and PNP.
- Syslog
- SNTP,NTP
- Customized Ringtone
- > Daylight Saving time
- VLAN, OpenVPN, Span to PC port, QoS
- ➤ 802.1X, LLDP



- > Enterprise WIFI
- > WEB access with different login level
- Soft button: soft button \*4
- Redundancy SIP server
- Multi-language: English, French, Hebrew, Russian, Spanish, Chinese, Persian, Polish,

Portuguese, Turkish, German, Italian

#### 1.4. Network

- LAN/PC: Support Bridge mode
- Support VLAN
- Support Open VPN
- Support DHCP, STATIC IP
- Primary/Secondary DNS Server
- Support QoS
- Support LLDP
- > Support 802.1X
- Support Span pc port
- Support Enterprise WIFI
- Web access via HTTP&HTTPS

## 1.5. Management and Maintenance

- Support firmware updating under safe mode
- Support different level user management
- > Configuration via web , keyboard
- Support multi-language
- > Firmware and configuration file auto provision
- Support system log

#### 1.6. Protocol

- IEEE 802.3 /802.3 u 10 Base T / 100Base TX
- DHCP: Dynamic Host Configuration Protocol
- ➤ SIP RFC3261, RFC3262, RFC3263, RFC3264, RFC3265, RFC2543, RFC3489, RFC3842, RFC3515, RFC2976, RFC3428, RFC2327, RFC2782, RFC1889
- TCP/IP: Transfer Control Protocol/Internet Protocol
- RTP: Real-time Transport Protocol
- RTCP:RTP Control Protocol
- > DNS: Domain Name Server
- TFTP: Trivial File Transfer Protocol



- HTTP:Hypertext Transfer Protocol
- > FTP:File Transfer Protocol

## 1.7. Compliant and Certified Standard

- > CE: AGC01180140201E2, AGC01180140202E2
- Comply with ROHS in EU
- Comply with ROHS in China



Operation temperature: lower than 60° CStorage temperature: lower than 60° C

Humidity: 10 to 90% no dew

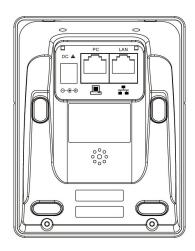
## 1.8. Packing list

| Model            | CT1X               |
|------------------|--------------------|
| Telephone        | 1 Unit             |
| Headset          | 1 Unit             |
| Headset cable    | 1 Unit             |
| Power adapter    | Optional for CT10  |
|                  | Standard for CT11  |
| Network Cable    | 1 Unit, 1.5 meters |
| Quickstart Guide | 1 Unit             |

#### 1.9. Installation

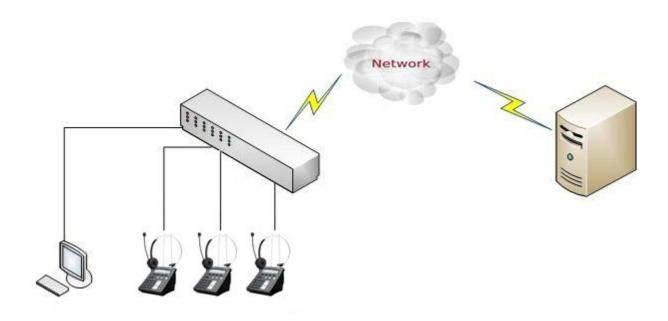
- 1.Power on
- 1. Plug in the power jack with DC 5V/1000mA or POE
- > 2. All led will be lighted once and then turn off
- > 3. After absolute boot up, login led will be lighted in red and come into standby mode.





#### 2.Connect to network

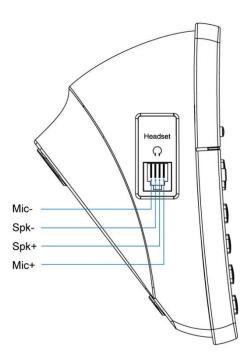
CT1X is able to be connected with network via LAN port. Under the Bridge mode, other devices (Laptop, IP phone) is able to access network via the PC port of CT1X.





#### 3.Connect to Headset

Connect the RJ-9 headset to the headset jack on the left side of the phone. The pin sequence of RJ9 port on the phone is like following picture:

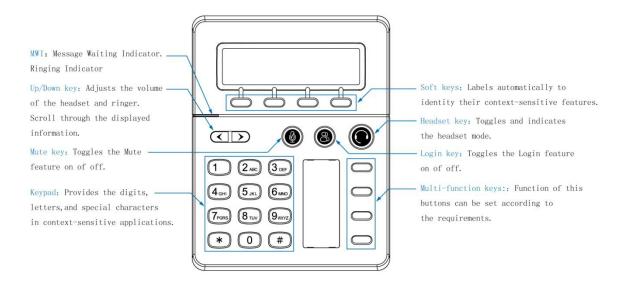


## 2. Keypad and GUI

## 2.1. Keypad



#### **Description of the keys and Screen:**





| Soft buttons        | Press to select an feature shown in the soft button features  |
|---------------------|---|
| LCD Screen          | Display screen for the phone: It shows the date, time, phone number, incoming caller's ID(if available),line/call status, extension numbers and the soft button features.                         |
| Navigation button   | <ol> <li>Move cursor up and down when pressed in menu reviewing.</li> <li>Adjust output volume when pressed in talking state</li> <li>Adjust ringer volume when pressed in idle state.</li> </ol> |
| 1~9,*#              | For entering numbers, letters or characters   |
| Programmable<br>Key | Function key can be defined as BLF, Speed dial key, CFWD, Hold, Xfer, ConF, DND, Redial, Voicemail.   |
| Menu                | Enter Keypad menu settings  |
| Mute button         | Mute/un-mute mic-phone in talking state   |
| Headset button      | Pick up phone to make outgoing calls or answer incoming calls.  |
| MWI                 | Message waiting indicator/ Ringing indicator  |
| Login button        | 1. Press to enter login interface to input SIP account username and password to register to sip server.   |
|                     | 2. Press in login-ed state to input SIP account password to logout.   |

#### **Indicator Status**

#### 1. Login indicator

| LED Status | Frequency          | Description      |
|------------|--------------------|------------------|
| Red /Flash | 500ms on/500ms off | LAN Disconnected |
| Red        | -                  | SIP Unregistered |
| OFF        | -                  | SIP Registered   |

#### 2. Mute indicator



| LED Status | Frequency | Description |
|------------|-----------|-------------|
| Red        | -         | Mute        |
| OFF        | -         | Unmute      |

#### 3. Voicemail indicator

| LED Status | Frequency          | Description    |
|------------|--------------------|----------------|
| Red/Flash  | 500ms on/500ms off | New message    |
| Red/Flash  | 250ms on/250ms off | Call ringing   |
| Red        | -                  | Normal working |
| OFF        | -                  | No new message |

#### 4. Call indicator

| LED Status | Frequency          | Description       |
|------------|--------------------|-------------------|
| Red        | -                  | In a conversation |
| Red/Flash  | 500ms on/500ms off | On-hold           |
| OFF        | -                  | Idle state        |

When boot up, all indicators will be lighted once.

When phone is stand by, all the indicators are off, WMI indicator will be lighted when the phone is working.

When updating firmware, all indicators will be flash in frequence 1s on/ 1s off.

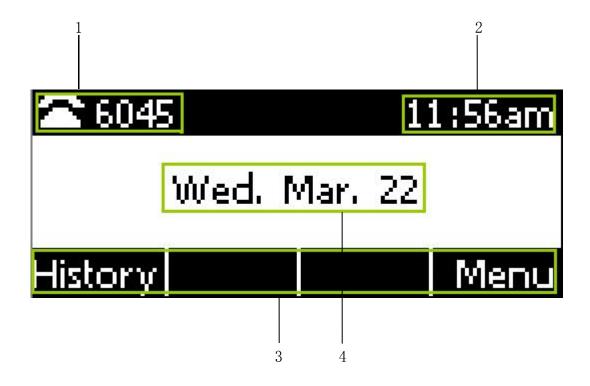
## 2.2. Starting

When start on the phone, it turns to standby status in about 50 seconds.



# Welcome

## 2.3. Standby



| Area Item | Description                         |
|-----------|-------------------------------------|
| 1         | Status: to indicate the call status |
| 2         | Time                                |
| 3         | Softkey: "History", "Menu"          |
| 4         | Date                                |

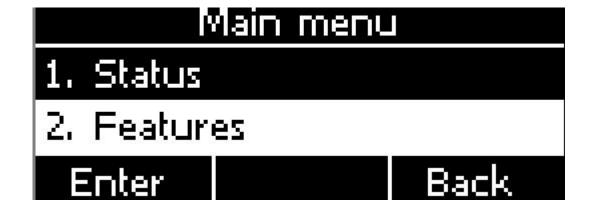


#### Icon on Standby UI

| Icon    | Description                                 |
|---------|---|
| ~       | The account is registered successfully.     |
| 2       | The account is not registered successfully. |
| 8       | The line is being occupied for dialing.     |
| \$      | New incoming call                           |
| 0       | Call hold.                                  |
| <u></u> | Unavailable Network.                        |
| ೧       | Calling via headset.                        |
| 2       | Call Forward is activated.                  |
| ×       | New Voicemail.                              |
| А       | Auto-Answer is activated.                   |
| •       | DND is activated                            |

## 2.4. Configuration

Press the "Menu" key to enter the Main Menu:





Move the navigation key and press the softkey "**Enter**" or input the corresponding Number key Select the item of Main Menu:

| Number Key <b>"1</b> " | Enter "Status"    |
|------------------------|-------------------|
| Number Key "2"         | Enter "Feature"   |
| Number Key "3"         | Enter "Directory" |
| Number Key "4"         | Enter "History"   |
| Number Key <b>"5"</b>  | Enter "Message"   |
| Number Key <b>"6"</b>  | Enter "Settings"  |
| Number Key "7"         | Enter "Display"   |

#### 2.4.1. Status info

It's able to check the status info via LCD Display or Web.

And the basic status and details status will be optional displayed on LCD display

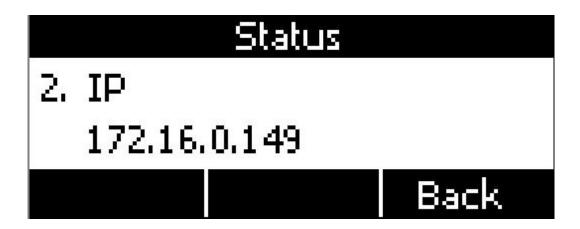
- 1. Basic Status——IP address.MAC address. Firmware version.
- 2. Details Status——Network info. Production info and Account info in details.

#### **Basic Status**

You're able to check the basic status as below:

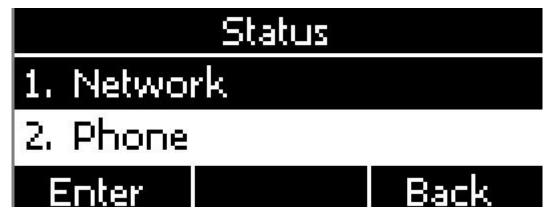
- 1. Press the "Menu" key and select the "Status" of Main Menu.
- 2. Move the navigation key, the status display the Model, IP, MAC, Firmware, More





#### **Details Status**

Select "More" and then press the softkey "Enter" to check details info, and move the navigation key to check more.



Press the softkey "Enter" to check status info, and "Back" to return the Basis Status page.

Check the Status info via Web

- 1. Check the IP address of IP phone;
- 2. Type the IP address on a web browser;
- 3. Input the username and password, the default user and password for Administrator is (admin, admin), for general user is (user, user), and then press "**Enter**".
- 4. By default, the Status info will be displayed.

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#### 3. Call Function

#### 3.1. Answer the calls

When there is an incoming call, phone will remind user with ringing. There are 2 ways to answer the call:

#### A. Answer by headset

Keep your microphone connected with the RJ9 headset jack, when there is an incoming call, press and talk with the caller. If you want to hang up, please press again

#### B. Answer by softkey

When there is an incoming call, please press the first soft button to answer it.

#### 3.2. Make Calls

#### A. Use the headset

Press Key, input the phone number and press soft key "**Send**" to dial the number. When caller hear the tones of "du~~du~~" and the phone number your dialed is being displayed on the LCD, the phone at the side of being called should be ringing. If the called party answers this calling, the call is established and the calling timer is started immediately.

#### B. Dial from phone book

- 1. Press "Menu" key to enter the menu and choose "Contact" option. Press "Enter" soft key and then find the contact person by navigation keys. When the certain contact person is highlighted, press "Dial" or just pick up the handset to call this number.
- 2. Pick up the headset, press "**Contact**" soft key, then find the contact person and press "**Dial**" soft key.

#### C. Dial from call history



- 1. Press "Menu" key to enter the menu and choose "History" option, then select one of call history entry, and press "Dial" soft key or pickup the handset to call this number.
- 2. Pickup the headset, press "**History**" soft key, then select one of call history entry, and press "**Dial**" soft key to call this number.

#### 3.3. Pre-dial

It's a method to dial a phone number immediacy at standby mode.

The method is as below:

- A. Dial-up the phone number at standby mode
- B. Press soft key "**Dial**" or Press to send out the number.

#### 3.4. Multiple line dial-up

CT1X supports up to 8 concurrent calls. If there is a new incoming call when you're talking on CT1X, the new incoming call will be displayed on LCD and status indicator LED will be fast blinking. User can press soft key "Hold" then press "Answer" to receive the new incoming call.

#### 3.5. Call Hold

The current calling will be hold by pressing soft key "**Hold**", and the held call will be resumed after pressing soft key "**Resume**". Even on 3-way conference calling, the conference will be held after pressing "**Hold**" key, and be resumed to 3-way conference after pressing "**Hold**" Key again. Remember the conversation is still on hold without being ended even if hung up under the status of hold.

#### 3.6. Call Transfer

1. Attended call transfer

The attended transfer allows user to call a third-party before transferring the calling.



While calling, press the "**Transfer**" soft key to hold the current call and dial the target number you want to transfer to on the activated line and press "**Send**" soft key to call that number. After the target party answers the call, press "**Transfer**" soft key again to complete the transfer.

If the target number has been setup in the current BLF list, and you have already finished the necessary setup on Webpage of CT1X, there is an easier way to complete the attend transfer. While calling, press the corresponding BLF key of the target number and then press the "**Transfer**" soft key, the attend transfer will be achieved.

#### Blind call transfer

The blind transfer allows user to transfer a call without speaking to the third party. On the user side, the call will be ended as soon as the target phone number is dialed.

Operating steps: Press "Xfer" soft key to get the transfer status, then press "Bxfer" soft key, input the transfer target number and press "Send" soft key.

If the target number has been setup in the current BLF list, and you have already finished the necessary setup on Webpage of CT1X, there is an easier way to complete the Blind transfer. While calling, press the corresponding BLF key of the target number, the blind transfer will be achieved.

#### 3.7. Mute calls

The input audio will be not transmitted to peer phone after pressing key, To un-mute, just press key again.

## 3.8. 3-Way Conference

1. While on calling, press the soft key "**Conf**", input the 3<sub>rd</sub> party's phone number and then press the softkey "**Dial**" or press the soft key "**Conf**" and press the corresponding BLF key to invite the 3<sub>rd</sub> party to join a conference call.



- 2. After the third party answers the call, pressing "**Conf**" key again to establish the 3-way conference
- 3. The initiator of 3-way conference can press the soft key "**Hold**" to hold the conversation with other two parties, and press "**Resume**" to back to 3-way conference.
- 4. If the initiator hangs up the call or press the soft key "**End Conf**", the conference will be ended and the calling between the other two parties will be hung up as well.
- 5. The initiator of 3-way conference can press the soft key "**Split**" to separate the conference call, and the calling between initiator and the other two parties are still active but under the status of Call hold.
- 6. After split the 3-way conference, press the soft key "More" and then press the softkey "Join" to resume the 3-way conference or press the softkey "Conf" to setup a new 3-way conference call.

## 3.9. Hang up the phone

- Softkey hang up
   While on calling, press the softkey "End Call" to hang up.
- 2. Headset Hang up

Press key at headset model, the current calling will be hung up.

#### 3.10. Voicemail

Press "Menu" key to enter the menu to configure voicemail number if you have never configured it previously. Otherwise, the voicemail number will be called after pressing it.

## 4. Call Features

In this part, we will introduce the following content:



- Call Forward
- Call Waiting
- Auto Answer
- DSS Keys
- Key as send
- Hotline
- Anonymous Calls

#### 4.1. Call Forward

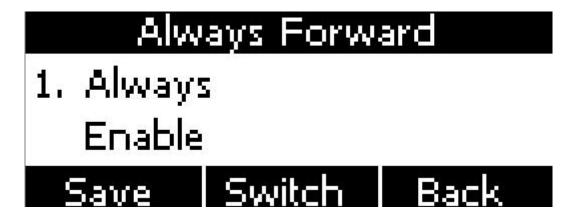
"Call Forward" includes "Always Forward", "Busy Forward", "No Answer Forward".

"Always Forward" has the highest priority, and "Busy Forward" has the same priority as "No Answer Forward", that means once the function of "Always Forward" is activated, other call forward features will be unavailable.

Any type of Call forward feature is activated, the Icon 2 will be indicated on the LCD Display.

## 4.1.1. Always Forward

All incoming calls will be forwarded to target phone number once the "**Always Forward**" activated, setup this feature as follow and please move the navigation to check more:

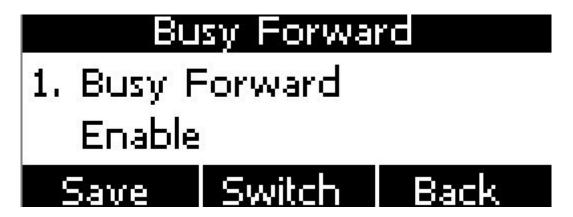




| Item       | Operation  | Description   |
|------------|--|---|
| Always     | Press the soft key " <b>Switch</b> " to setup              | Switch on or Switch off the feature.  "Enable" mean this feature is enabled, "Disable" mean this feature is disabled.                     |
| Forward to | The Number key, "*"key, and "#"are permitted to be input.  | Setup the target phone number which all incoming calls transferred to   |
| On Code    | The Number key, "*" key, and "#"are permitted to be input. | The feature code to enable all incoming calls forward, the phone will send the feature code directly to open all incoming calls forward   |
| Off Code   | The Number key, "*" key, and "#"are permitted to be input. | The feature code to disable all incoming calls forward, the phone will send the feature code to close all incoming calls forward directly |

#### 4.1.2. Busy Forward

It means the phone is busy once the phone is not at standby mode. Setup this feature as below:



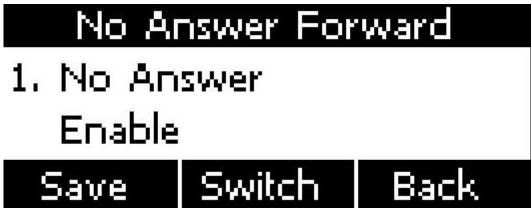
| Item       | Operation   | Description  |
|------------|---|--|
| Busy       | Press the softkey " <b>Switch</b> " to setup      | Switch on or Switch off the feature.  "Enable" mean this feature is enabled,  "Disable" mean this feature is disabled. |
| Forward to | The Number key, "*" key, and "#" are permitted to | Setup the target phone number which all incoming calls transferred to  |



|          | be input.   |  |
|----------|---|--|
| On Code  | The Number key, "*" key, and "#" are permitted to be input. | The feature code to enable busy calls forward, the phone will send the feature code directly to open busy call forward   |
| Off Code | The Number key, "*" key, and "#" are permitted to be input. | The feature code to disable busy calls forward, the phone will send the feature code directly to close busy call forward |

#### 4.1.3. No Answer Forward

All incoming calls will be forwarded after time out, once the feature of "No Answer Forward" is activated. Setup this feature as below, and please move the navigation key to check more:



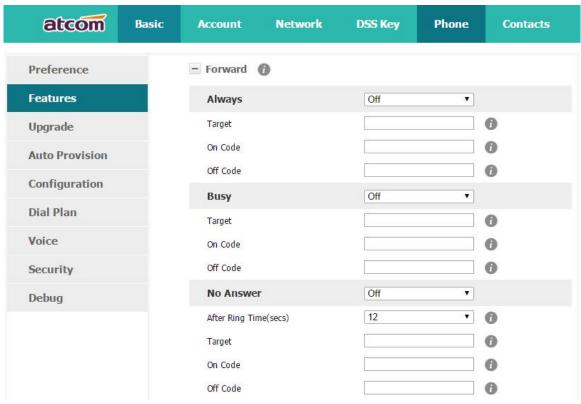
| Item               | Operation   | Description   |
|--------------------|---|---|
| No Answer          | Press the softkey " <b>Switch</b> " to setup                | Switch on or Switch off the feature.  "On" mean this feature is activated,  "Off" mean this feature is unactivated.               |
| Forward to         | The Number key, "*" key, and "#" are permitted to be input. | Setup the target phone number which all incoming calls transferred to   |
| After Ring<br>Time | Press the key or softkey "Switch" to setup                  | Setup timer for no answer status. All incoming calls will be forwarded after time out once Call forward when no answer activated. |
| On Code            | The Number key, "*" key, and "#" are permitted to be        | The feature code to enable no answer call forward, the phone will send the feature code directly to open all                      |



|          | input.  | incoming calls forward  |
|----------|---|---|
| Off Code | The Number key, "*" key, and "#" are permitted to be input. | The feature code to disable all incoming calls forward, the phone will send the feature code directly to close all incoming calls forward |

#### 4.1.4. Setup Call Forward Via Web

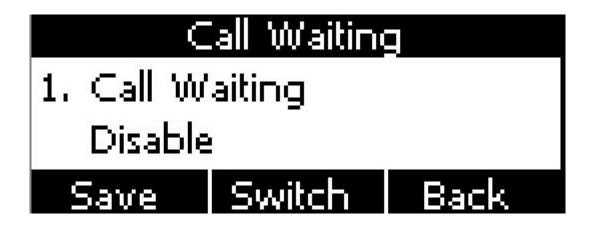
Set Call Forward via web: **Phone→Features→Forward.** 



## 4.2. Call Waiting

The feature of "Call Waiting" is available by default. If switch off this feature, whatever multiple SIP accounts had been registered successfully, only one single active calling is permitted (for example Dialing, Ringing, Calling, Holding).





| Item              | Operation   | Description   |
|-------------------|---|---|
| Call Waiting      | Press the key or softkey " <b>Switch</b> " to setup | Switch on or Switch off the feature.  "Enable" mean this feature is enabled, "Disable" mean this feature is disabled.                         |
| Call Waiting Tone | Press the key or softkey " <b>Switch</b> " to setup | Switch on or Switch off the prompt playing. " <b>Enable</b> " mean this feature is enabled, " <b>Disable</b> " mean this feature is disabled. |

Setup call waiting via web: "Phone"  $\rightarrow$  "Feature"  $\rightarrow$  "General information"  $\rightarrow$  "Call Waiting".

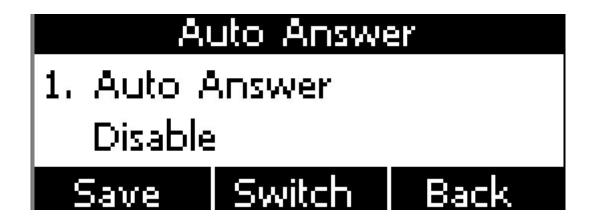
Setup call waiting Tone via web: "Phone" $\rightarrow$  "Feature" $\rightarrow$  "Audio Settings" $\rightarrow$  "Call Waiting Tone".

#### 4.3. Auto Answer

The feature of "Auto Answer" is switched off by default. All incoming calls will be answered automatically when the phone is standby once "Auto Answer" is activated. "Auto Answer" when the phone is under "on Calling" status.

Please move the navigation key to check more:





The Icon Awill be indicated once "Auto Answer" is available.

Setup "Auto Answer" via Web: "Phone"→ "Feature"→ "General information"→ "Auto Answer"

## 4.4. DSS Keys

The programmable keys include Programmable feature keys and Soft key on Standby UI.

#### N/A

N/A means this key is not permitted to be set as a programmable key and use the default feature.

#### Conference

The 3-way conference will be setup by pressing the key "Conf" while on calling. For more info, please refer to <a href="#">Chapter 2.8</a>.

The configuration item **Label** is a name to identify the key on LED, can be set as "conference".

#### Hold

The same feature as the key . For more info, please refer to <u>Chapter 2.5</u>.

The configuration item **Label** is a name to identify the key on LED, can be set as "hold".

#### DND

Press this key will switch on or switch off the feature of "DND".



The configuration item **Label** is a name to identify the key on LED, can be set as "DND".

#### Redial

The same feature as the key .

The configuration item **Label** is a name to identify the key on LED, can be set as "redial".

#### Call return

Automatically dial the latest phone number in history.

The configuration item **Label** is a name to identify the key on LED, can be set as "return".

#### **Call Pickup**

Press this key to pick up if new incoming call to the monitored phone number.

| Item  | Description                           |
|-------|---------------------------------------|
| Value | The phone number monitored for pickup |
| Label | A1X cannot definition label           |

Reminding: This code must be set for pickup, and this code can be set via Web only.

Set the Pickup code as follow:

Set the pickup code for one single Account: **Account→Advanced→Select an account to be** configured→Directed Call Pickup Code.

Set the pickup code for all Accounts: Phone→Features→Call Pickup→Direct Call Pickup.

Direct Call Pickup Code (Direct Call Pickup should be set as Enable).

#### **Call Park**

Press this key while on calling, the phone will dial the specified phone number, user will receive a code on the phone prompt, and then press the soft key "Transfer", the current calling will be parked successfully. At this moment, user is able to continue the parked calling with any other phones which registered on the same SIP server by dialing the code which user have received.



| Item  | Description   |
|-------|---|
| Value | The code for pickup the parked call and it is provided by SIP server. |
| Label | A1X cannot definition label   |

#### **DTMF**

Press this key while on calling, the phone will send the configured "Value" automatically.

| Item  | Description                                    |
|-------|--|
| Value | The value sent to remote end while on calling. |
| Label | A1X cannot definition label                    |

#### **Directory**

Press this key to access Directory.

#### **Speed Dial**

Press this key while standby state, the specified target phone number will be dial from the specified account.

| Item  | Description                            |
|-------|--|
| Value | The target phone number for speed dial |
| Label | A1X cannot definition label            |

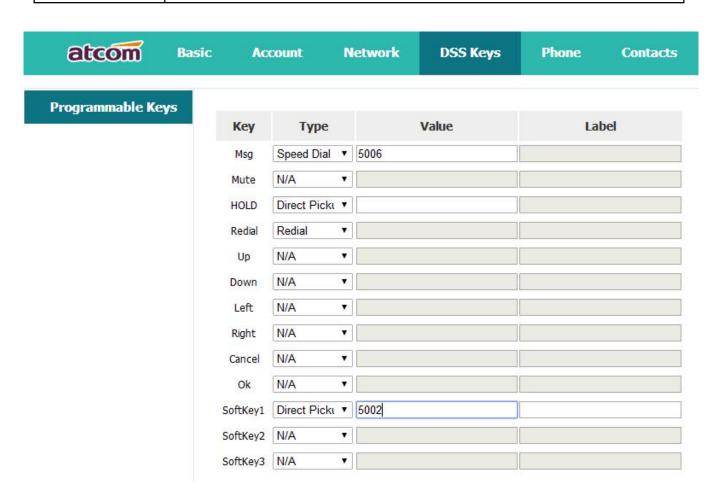
#### **Intercom**

Press this key when the phone is idle, the phone will dial the specified "Value", and there mote end will answer the call automatically.

Note: This feature is supported by specified servers only.



| Item  | Description                          |
|-------|--------------------------------------|
| Value | The target phone number for Intercom |
| Label | A1X cannot definition label          |



## 4.5. Key as Send

The key "Key as Send" has the same function as the soft key "Dial".

Reminding: This key is not available while pre-dial. It's the only way to press the soft key "Dial" or pickup the handset to finish pre-dial.

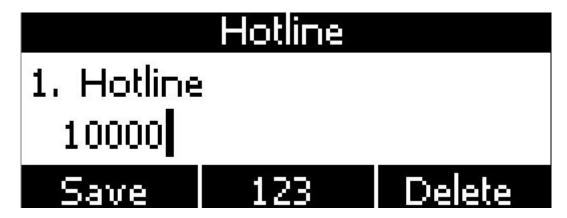
The default value is "#", and it could be set as "\*". If set the value as "disable", it means the function "Key as Send" is forbidden.

Set "Key as Send" via web: Phone→Features→General Information→Key As Send.



#### 4.6. Hotline

Once "Hotline" has been set, the phone will automatically dial the hotline via the 1st available line if the phone stay in the standby status exceed the specified waiting time and there is no input (or input something and then all deleted).



| Item            | Description  |  |
|-----------------|--|--|
| Hotline         | Set up the hotline number, the value is null by default.         |  |
| Hotline timeout | Set up the timeout for hotline activation, 4 seconds by default. |  |

Set hotline via web: **Phone→Features→General Information→Hotline.** 

Set Hotline Time-out(secs) via web: **Phone→Features→General Information→Hotline Time-out(secs).** 

## 4.7. Anonymous Call

This function includes making anonymous calls and blocking all anonymous calls.

If switch on the feature "Anonymous call", all outgoing calls will be displayed as anonymous call in the remote end.

If switch on the feature "Rejection", all incoming anonymous calls will be blocked automatically. please move the navigation key to check more:



# Anonymous Call

## Anonymous Call Enable

Save Switch Back

| Item               | Operation   | Description   |
|--------------------|---|---|
| Accounts           | press the soft key " <b>Switch</b> " or to modify,          | Select the Account for anonymous call.  |
| Anonymous<br>Call  | press the soft key " <b>Switch</b> " or to modify,          | Switch on/off the feature of making anonymous calls.  |
| Call On Code       | The Number key, "*" key, and "#" are permitted to be input. | Set the feature code to turning on anonymous call, the phone enables anonymous call by sending the feature code to the server                       |
| Call Off Code      | The Number key, "*" key, and "#" are permitted to be input. | Set the feature code to turning off anonymous call, the phone disables anonymous call by sending the feature code to the server                     |
| Rejection          | press the soft key " <b>Switch</b> " or to modify           | Switch on/off the feature of blocking anonymous calls.  |
| Reject On<br>Code  | The Number key, "*" key, and "#" are permitted to be input. | Set the feature code to turning on anonymous call rejection, the phone enables anonymous call rejection by sending the feature code to the server   |
| Reject Off<br>Code | The Number key, "*" key, and "#" are permitted to be input. | Set the feature code to turning off anonymous call rejection, the phone disables anonymous call rejection by sending the feature code to the server |



Set Anonymous Call via web: Account→Basic→Select the Account→Anonymous Call.

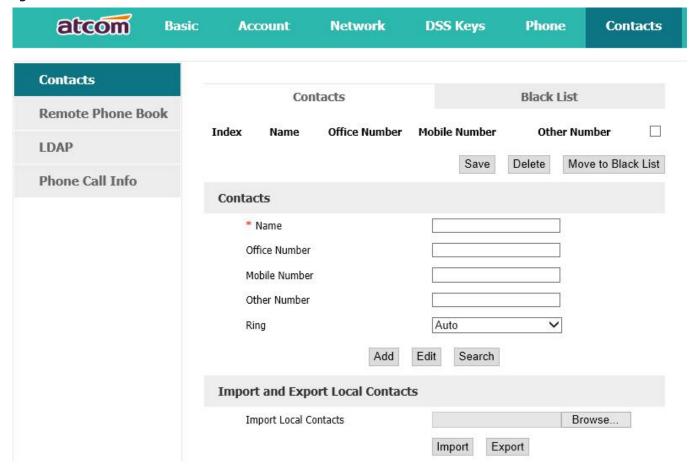
Set Anonymous Call Rejection via web: **Account→Basic→Select the Account→Anonymous Call Rejection.** 

#### 4.8. Contacts

The content of Directory includes local phonebook and blacklist. Enter Directory as follow,

- 1. Press the soft key "Contacts" when the phone is standby
- 2. Press the navigation key
- 3. Press the menu key , and then select "Contacts"

Configure the "Contacts" via Web:





All operations on Directory via Web will be not active until click "Save". When too much item existed in the Directory, it will be an easy way to search by keyword about name, Office Number, Mobile Number or other Number. The exactly matched item will be listed, otherwise you will be prompted "Not find the specified contact".

#### 4.8.1. Local Contacts



Name and phone number are permitted to be saved into the local phonebook, and up to 400 items. It's able to add new group, new contact, edit or delete exist contact or dial, also move the item to blacklist.

#### 4.8.2. Make calls from directory

Path to set on the phone: →Contacts→Local Contacts→All contact-> Select the record→Dial。

If only one phone number saved with the selected contact person, the phone number will be dialed while calling the contact person.

If multiple phone numbers saved with the selected contact person, user must select one of the phone numbers for dialing while calling the contact person.

#### 4.8.3. Add new contact



Path to add new contact on the phone: Press → Contacts → Local Contacts → All contact → Add.



| Item   | Operation  | Description  |
|--------|--|--|
| Name   | Input by number keys,"*"or "#"key, change the input-method via pressing the soft key "abc" | It's used to identify different phone numbers. Any reduplicated names are not permitted in the contacts.   |
| Office | Input by number keys, "*"  | You can save three numbers at most. While calling a contact person in contacts,  |
| Mobile | or "#"key, change the input-method via pressing  | the phone will redirect to the page that to select one number to dial when multiple  |
| Other  | the soft key " <b>abc</b> "  | numbers are saved for one contact record   |
| Ring   | Press the key **Switch" to modify the account ID.  | It's used to bundle each item with the corresponding ringtone, and the optional value is "Auto" or "Ringtone 1"to "Ringtone 10". "Auto" means the default ringtone will be played if new incoming call happened, otherwise the selected ringtone will be played. |

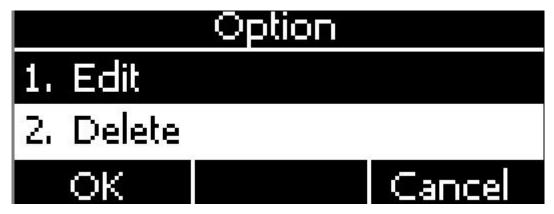
Add new contact via web: **Contacts→ Contacts→Input messages→Add→Save.** 

#### 4.8.4. Edit the contact

User must re-edit the contact item while updating one item of local phonebook.



Path to edit the contact on the phone: Press → Contacts → Local Contacts → All contacts → Select the item to edit → Option → Edit → OK.



Edit the contact item via Web: Contacts→ Contacts→ click on the item to edit→modify messages→Click "Edit"→Click "Save".

#### 4.8.5. Delete the contact

Path to delete the contact on the phone: Press → Contacts → Local Contacts → All contacts → Select the item to delete → Option → Delete → OK → OK.

Press the soft key "Cancel" at the Warning UI to stop deleting.

Delete the contact item via web: Contacts→ Contacts→ Select the item to delete→Click on "Delete"→Click on "Save".

#### 4.8.6. Move to blacklist





Path to move to blacklist on the phone: **Press** → **Contacts** → **Local Contacts** → **All contacts** → **Select the item to move** → **Option** → **Move to Blacklist** → **OK** → **OK**.

Press the soft key "Cancel" at the Warning UI to stop this operation.

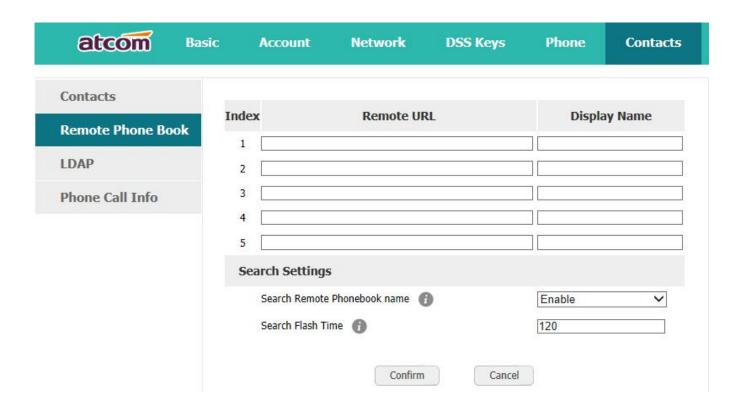
Move the contact item to blacklist via web: Contacts→ Contacts→ Select the item to move to blacklist→Click on "Move to black List"→Click on "Save".

#### **Blacklist**

The purpose of blacklist's feature is to block the phone number inside blacklist to call the host phone number, but it's available for the hosted phone number to call any phone number in the black list.

The most operation of blacklist is the same as local phonebook except for the feature "Move to Contacts", it means moving an item of blacklist to local phonebook to resume the phone number to dial the host phone number normally.

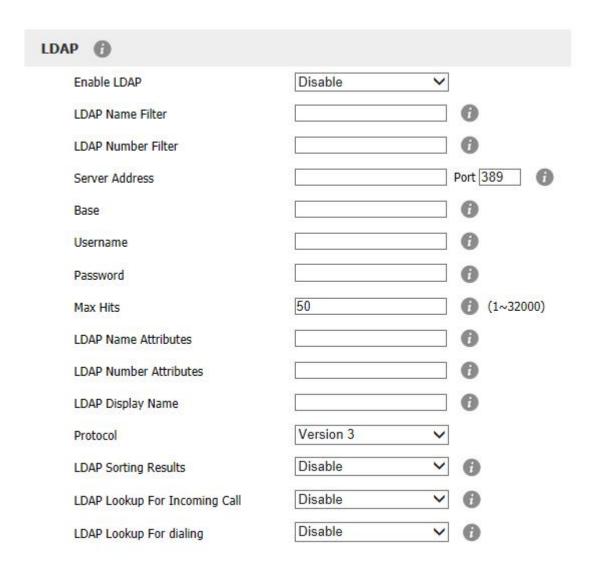
## Remote phonebook





- 1. Remote URL: Set a remote phonebook download path. Support the TFTP,FTP,HTTP and HTTPs server.
- 2. Display name: Set a display name on the phone.
- 3. Search Remote Phonebook name: Select "Yes" or "No" to enable or disable search remote phonebook name.
- 4. Search Flash Time: Set the search flash time. Defauts to 120.

#### **LDAP**



- 1. Enable LDAP: Select "Yes" or "No" to enable or disable LDAP.
- 2. LDAP Name Filter: Set the name of the LDAP search attributes.



- 3. LDAP Number Filter: Set the number of the LDAP search attributes.
- 4. Server Address: Set the LDAP server domain name or IP address.
- 5. Port: Set the LDAP server port number. Default to 389.
- 6. Base: Set the LDAP search base.
- 7. Username: Set the LDAP server username.
- 8. Password: Set the LDAP server password.
- 9. Max Hits(1~32000): Set the maximum number of search results from the LDAP server.
- 10. LDAP Name Attributes: Set the name of the attributes returned from the server.
- 11. LDAP Number Attributes: Set the number of the attributes returned from the server.
- 12. LDAP Display Name: The contact record the name of the displayed on the LCD.
- 13. Protocol: Set the phone to support LDAP protocol version. Defauts to version 3.
- 14. LDAP Sorting Results: Set the phone to sort the search results.
- 15. LDAP Lookup For Incoming Call: Set the phone for LDAP search when incoming call.
- 16. LDAP Lookup For dialing: Set the phone for LDAP search when dialing,

# 4.9. History

It includes the dialed, answered, missed and transferred items, maximum 400 items.

User is able to review or delete any item of the history on the phone. And enter "History" in below ways:

- 1. Press the key
- 2. Press the key , then select "History"
- 3. Press the soft key "History" while phone is under standby status



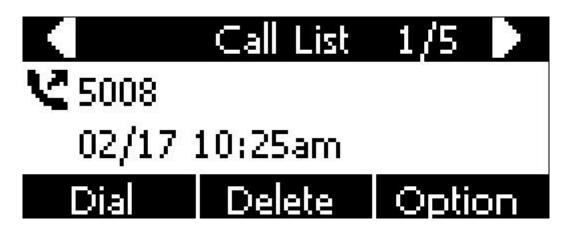
When any operations above is done, details info of all recent history will be listed on LCD display, include the type of each item, the name of contact person, date and time.

Also, user is able to check the detail info of call history via Web, but only review operation is allowed while accessing via web.

| atcom Ba          | sic /     | Account         | Network D                  | SS Keys       | Phone C       | ontacts |
|-------------------|-----------|-----------------|----------------------------|---------------|---------------|---------|
| Contacts          | Die       | aled List       | Missed List                | Received List | Forwarded     | Liet    |
| Remote Phone Book | Die       | aleu List       | MISSEU LISE                | Received List | roiwaiucu     | LISC    |
| LDAP              | Inde<br>x | Datetime        | Local Identity             | Name          | Tel Numbe     |         |
| Phone Call Info   | 1         | 2016/1/13 10:46 | 5030@172.16.0.<br>240:5060 | 5001          | 5001@172.16.0 | .240    |
|                   | 2         | 2016/1/13 10:45 | 5030@172.16.0.<br>240:5060 | 5031          | 5031@172.16.0 | .240    |
|                   | 3         | 2016/1/13 10:45 | 5030@172.16.0.<br>240:5060 | 5002          | 5002@172.16.0 | .240    |

## Make calls from history

Path to make calls from history on the phone: **Enter history UI→Select the item to dial→ Dial.** 



Delete one item from history

Path to delete one item from history on the phone: **Enter history UI→Select the item to delete→Delete.** 



# Check the details of history

Path to check the details of history on the phone: Enter history UI→Select the item to check→Option→Detail→Press or "OK".

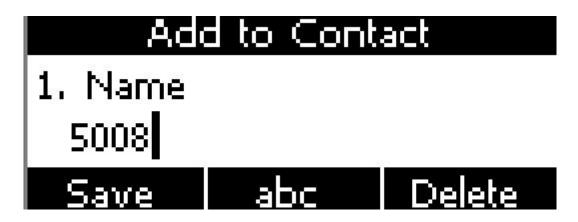


#### **Add to Contact**

 Enter "Call History"→Select the target item→Option→add to Contact→Press the key or soft key "Confirm".

At this moment an "edit" page will be popped up.

please move the navigation key to check more



The item of "Office", "Mobile" and "Other" are able to be switched over between "Old Number" and current number. If the being operated item had been saved already in the contacts, "Old Number" will be the previous value, otherwise "Old Number" will be null. The UI page of "Add to Blacklist" is the same as above.



- 2. Modify the contact name, phone number and ringtone.
- 3. Press the key or soft key "Saved" to save the modification, press the key or soft key "Cancel" to Cancel the modification.

#### Add to Blacklist

For more info about this operation, please refer to Add to Contact.

Delete all History's records

Path to delete all history's records on the phone: **Enter History UI→Option→Delete all→**Press or "OK".

# 4.10. Message

User will benefit from the feature of voicemail when they're not available to answer an incoming call or missed some incoming calls. However this feature must be supported by Server. Voicemail must be set up before using it.

Set the voicemail via Web: Account→Basic→Select an account to configure→Voice Mail.

Sometimes the voicemail push can't be reached in time, because the configuration problem with Server, you must configure some related parameter via Web to make the phone automatically send its request to Server for getting voicemail info.

Set "Subscribe for MWI" via web: Account→Advanced→Subscribe for MWI.

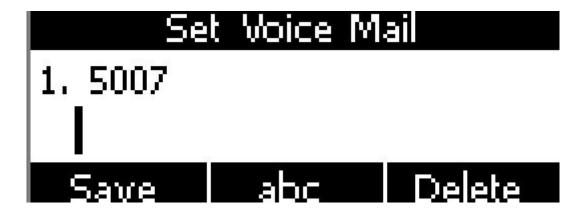
Set "MWI Subscription Period(secs)" via web: **Account→Advanced→MWI Subscription Period(secs).** 

## **Set Voice Mail**

There are 3 different methods to set up the voicemail,



- 1. Press the key after factory set
- 2. Press the key for a while
- 3. Press the key →Select "Message"→Setup Voicemail



View Voice Mail

User is able to check voicemail in below ways:

1. Setup voicemail number→Press the key



2. Press the key →Select "Message"→"View Voicemail"



Select the account with "N new N old mail", and press the soft key "Connect", the corresponding voicemail will be connected.



Select the account with "Unregistered", and press the soft key "Connect", the setting page of Voicemail will be popped up.

# 4.11. Settings

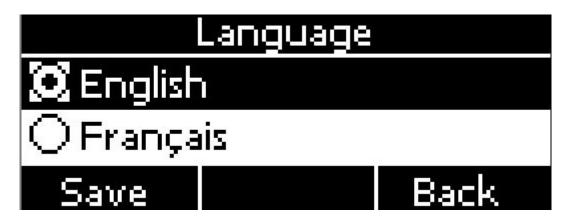
Basic settings and Advanced settings will be introduces in this part,

## **Basic Settings**



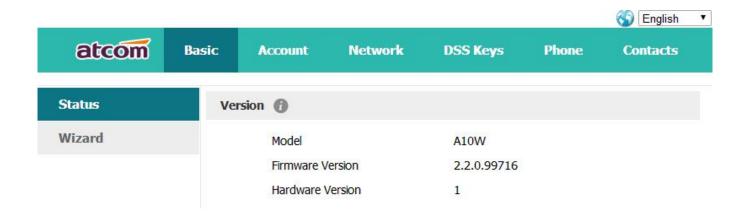
## 1. Language

CT1Xsupports multiple language, to modify the language, please press the key →Setting →Basic setting→Language→Select the target language and press the soft key "Save".



Set language via web: There is a drop-down box at the top left corner of webpage, choice one kind of language and click, the language will take effect immediately.





#### 2. Time & Date

Time & Date will be displayed at the standby page of CT1X, and these info will be related with all process of IP phone. "Time & Date" can be gained by NTP Server automatically or set manually.

NTP Setting

Path to set on the phone: Press → Settings → Basic Settings → Time & Date → NTP Settings.

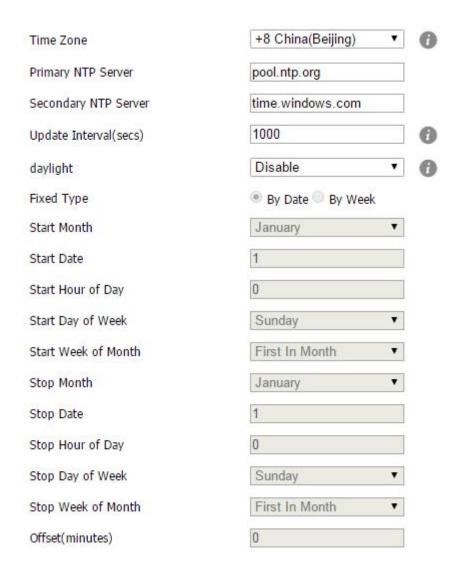
Please move the navigation key to check more:





| Item                    | Operation   | Description  |
|-------------------------|---|--|
| Time Zone               | Press the key or soft key " <b>Switch</b> " to modify it.       | Select the correct Time Zone for the IP phone.                                     |
| NTP Server              | Key in the IP address of domain name by the number keys,"*","#" | Specify the NTP Server   |
| Secondary NTP<br>Server | Key in the IP address of domain name by the number keys,"*","#" | Specify the standby NTP<br>Server  |
| Daylight-Saving<br>Time | Press the key or soft key "Switch" to modify it.                | Optional: "Off", "Auto" or "Manual". And "Manual" mean user must set this via web. |

Set NTP via Web: Phone→Preference.





| Item                     | Operation                     | Description   |
|--------------------------|-------------------------------|---|
| Time Zone                | Click drop-down box to select | Set a time zone matches condition   |
| Primary NTP<br>Server    | Manual input                  | The primary NTP server that provide time and date                         |
| Secondary NTP<br>Server  | Manual input                  | The secondary NTP server that provide time and date                       |
| Update<br>Interval(secs) | Manual input                  | The interval that the phone gains time and date from NTP server           |
| Daylight                 | Click drop-down box to select | A switch to control the status that whether to enable the daylight or not |
| Fixed Type               | Radio content                 | Daylight fixed type, only the specified items are configurable            |
| Start Month              | Click drop-down box to select | The month that the daylight rule begins taking effect                     |
| Start Date               | Manual input                  | The day that the daylight rule begins taking effect                       |
| Start Hour of Day        | Manual input                  | The hour of day that the daylight rule begins taking effect               |
| Start Day of Week        | Click drop-down box to select | The day of week that the daylight rule begins taking effect               |
| Start Week of<br>Month   | Click drop-down box to select | The week of month that the daylight rule begins taking effect             |
| Stop Month               | Click drop-down box to select | The month that the daylight rule stops taking effect                      |
| Stop Date                | Manual input                  | The day that the daylight rule stops taking effect                        |
| Stop Hour of Day         | Manual input                  | The hour of day that the daylight rule stops taking effect                |
| Stop Day of Week         | Click drop-down box to select | The day of week that the daylight rule stops taking effect                |
| Stop Week of<br>Month    | Click drop-down box to select | The week of month that the daylight rule stops taking effect              |

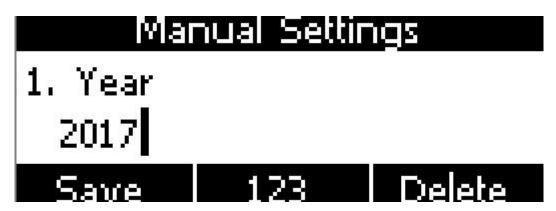


| Offset(minutes) | Manual input | The offset time that daylight rule takes effect |
|-----------------|--------------|---|
|                 |              |   |

Manual Settings

Path to set on the phone: Press → Settings → Basic Settings → Time & Date → Manual Settings.

Please move the navigation key to check more:



| Item   | Operation  | Description |
|--------|--|-------------|
| Year   | Key in "Year" with the number key, "*"and "#"            | Date info   |
| Month  | Key in "Month" with the number key, "*"and "#"           |             |
| Day    | Key in " <b>Day</b> " with the number key, "*"and "#"    |             |
| Hour   | Key in " <b>Hour</b> " with the number key, "*"and "#"   | Time info   |
| Minute | Key in " <b>Minute</b> " with the number key, "*"and "#" |             |
| Second | Key in " <b>Second</b> " with the number key, "*"and "#" |             |

Set the Time & Date manually via web: **Phone→Preference.** 





| Item        | Operation  | Description   |
|-------------|--|---|
| Manual Time | Click the drop-down box to select                                    | A switch to control the status whether to enable the manual time or not |
| Date        | Manual input, click "Generated Date" to gains date from the computer | Set date manually   |
| Time        | Manual input, click "Generated Time" to gains time from the computer | Set time manually   |

## 3. Time&Date Format

Path to set on the phone: Press → Settings → Basic Settings → Time & Date Format.

please move the navigation key to check more:



| Item  | Optional | Example of result |
|-------|----------|-------------------|
| Clock | 12 hour  | 03:30pm           |



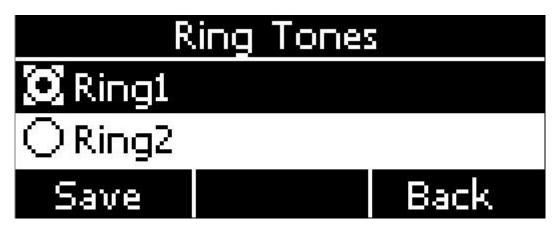
|      | 24 hour     | 15:30           |
|------|-------------|-----------------|
|      | WWW MMM DD  | TuesdayOct.16   |
|      | DD-MMM-YY   | 16-Oct16        |
|      | YYYY-MM-DD  | 2016-10-16      |
| Date | DD/MM/YYYY  | 16/10/2016      |
|      | MM/DD/YY    | 10/16/16        |
|      | DD MMM YYYY | 16,Oct.,2016    |
|      | WWW DD MMM  | Tuesday,17,Oct. |

Set the Time &Date Format via Web: **Phone→Preference** 

## 4. Ringtones

10 different ringtones have been provided by CT1X for selection. Path to set on the phone:





For the selected ringtone, there is a dot inside the circle. Press the key to select other ringtone for playing.

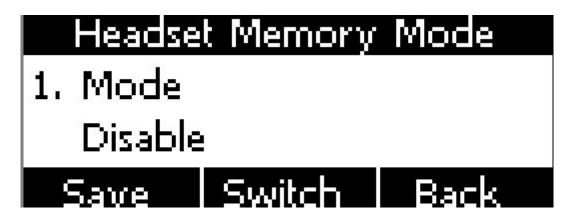
Set ringtones via Web: **Account→Basic→Ring tones.** 

## 5. Headset Memory Mode



Headset memory mode can be used to control the default device to make or answer calls. This function is disabled by default, which means the phone will communicate with others by hand-free when pre-dial or making calls from history or contacts, and so is the situation that pressing "Answer" soft key to accept an incoming call. Once this function is enabled, the phone will make or answer calls by headset. Long press can change the status of the "Headset Memory Mode".

This function can be configured on the phone only: Press → Settings → Basic Settings → Headset Memory Mode.



# 6. Phone Unlock PIN

Phone Unlock PIN: Unlock the phone locked conditions.

please move the navigation key to check more and press the cancel key to back the function,





| Item        | Operation    | Description                 |
|-------------|--------------|-----------------------------|
| Current PIN | Manual input | Input the phone current PIN |
| New PIN     | Manual input | Set the new PIN             |
| Confirm PIN | Manual input | Confirm the new PIN         |

# **Advanced Settings**

Password will be requested while accessing the page of "Advanced Settings". This password is the same as the user's ("admin") to access.

#### 1. Account

path to set the account info on phone: Press →Settings→Advanced Settings→Input password→Accounts.

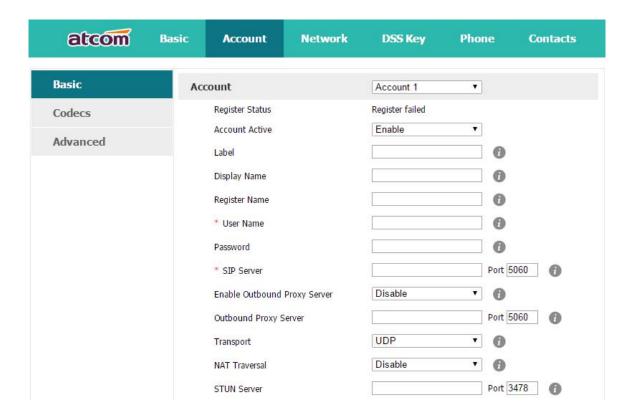


# Account 1 1. Activation Enable Save Switch Back

| Item               | Description  |  |
|--------------------|--|--|
| Activation         | The status of account, the default is "Enable", if set this as "Disable", the account will be forbidden. |  |
| Label              | It will show on the phone, can skip this item  |  |
| Display Name       | Parameter that in the SIP, if the SIP Server is supportable, this name will show on the phone of called  |  |
| Register Name      | The register ID, supplied by SIP Server, can skip this item  |  |
| User Name          | Account ID   |  |
| Password           | Password for account   |  |
| SIP Server         | The address that accounts needed to register from  |  |
| Outbound<br>Status | The status of Outbound Server, "off" by default  |  |
| Outbound Proxy     | IP address of Outbound Agency  |  |
| Stun Status        | The status of Stun Server, "off" by default  |  |
| Stun Server        | IP address of Stun Server  |  |

Configure account via web: **Account→Basic** 





#### 2. Set Password

The password for Advanced Settings also is used for Web access as the role "admin". Path to

set password on phone: Press → Settings → Advanced Settings → Input password → Set Password.

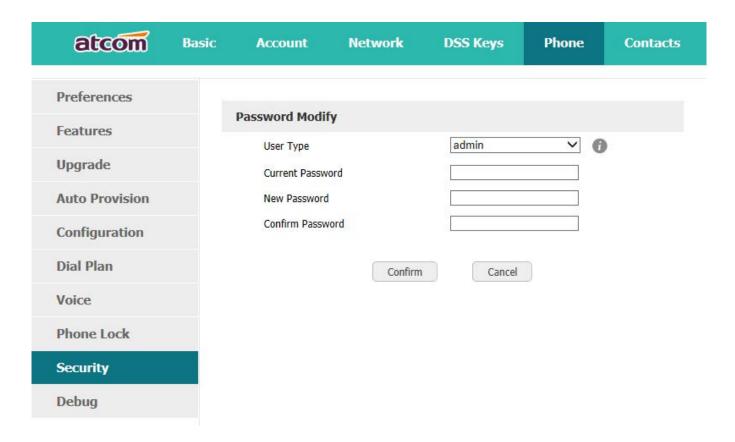


| Item | Description |
|------|-------------|
|      |             |



| Current PWD   | The current password for web access as the role of "admin", it's "admin" by default. |  |
|---|--|--|
| New PWD To set the new password, blank is acceptable. |  |  |
| Confirm PWD   | PWD Input the new password again, to confirm the new password.                       |  |

Set password via Web: **Phone→Security.** 

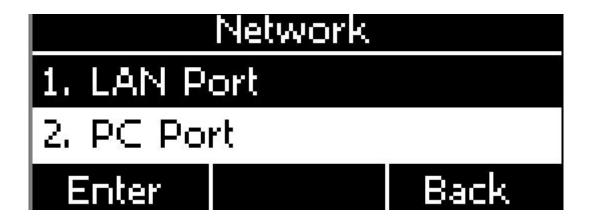


## 3. Network

Path to set network parameters on phone: Press → Settings → Advanced Settings → Input the password → Network.

please move the navigation key to check more:





#### LAN Port

Connect the phone with local network via LAN port, to gain IP address in 3 ways: DHCP, Static. Set the LAN port via Web: **Network→ Basic.** 

#### **DHCP**

The phone gains IP address via DHCP and Static DNS by default.

#### STATIC IP

If the phone gains IP address via Static IP, user must input the IP address info manually.

#### PC Port

Only bridge mode support by PC port.

#### > VLAN

The feature of VLAN must be supported by network switch, and by default this feature it's not activated.

Set the VLAN via Web: **Network** →**Advanced**→**VLAN**.

## Webserver Type



Webserver type include HTTP and HTTPS, different access port will be required by different access type, user is able to confirm the port info at the webpage, HTTP & HTTPS are both permitted by default.

Set Webserver type via Web: **Network→Advanced→WebServer→Type.** 

#### > VPN

CT1X support the feature of Open VPN, and this feature must be supported by VPN Server.



Set the VPN via Web: **Network** →**Advanced**→**VPN**.

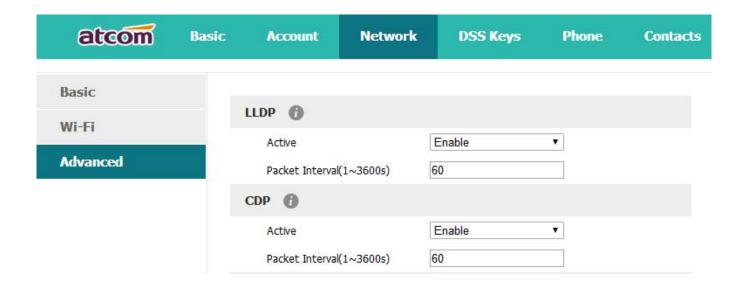


#### > LLDP

CT1X supports LLDP, and enable in default. If the phone is connected to a switch and using LLDP, the switch would notifies IP phone of VLAN information.

Set the LLDP via Web: **Network** →**Advanced**→**LLDP** 



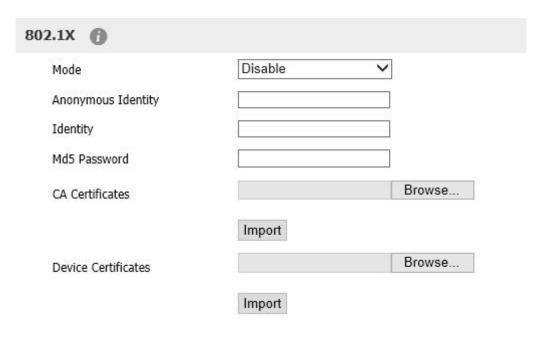


## > 802.1X

IEEE 802.1X authentication is an IEEE standard for Port-based Network Access Control(PNAC), part of the IEEE 802.1 group of networking protocols. It offers an authentication mechanism for devices to connect to a LAN or WLAN.

It supports protocol EAP-MD5, EAP-TLS, EAP-PEAP/MSCHAPv2, EAP-TTLS/EAP-MSCHAPv2, EAP-TTLS/EAP-MSCHAPv2, EAP-TTLS/EAP-GTC for 802.1X authentication.

Set the 802.1X via the webpage: **Network** →**Advanced**→**802.1X** 

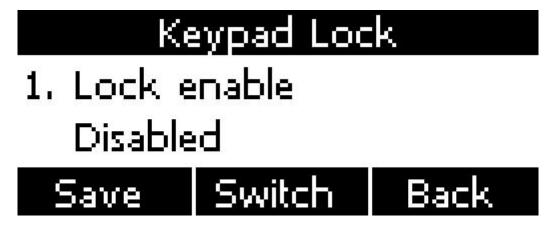


## 4. Keypad Lock

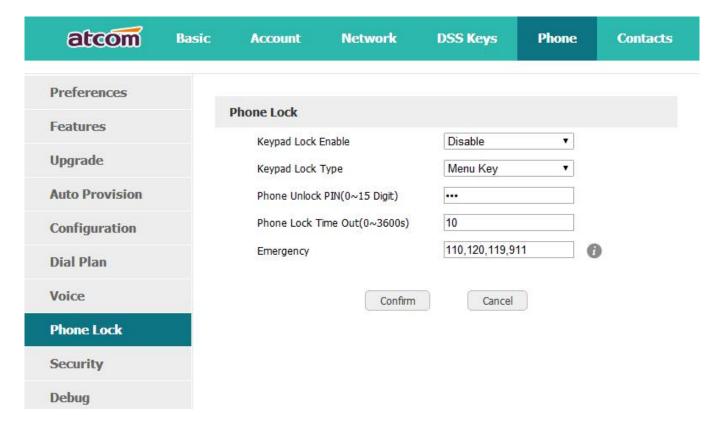


It support enable or disable the keypad lock feature, if enable, the default password is 123:

Please move the navigation key to check more



Keypad lock via webpage: phone→Phone lock

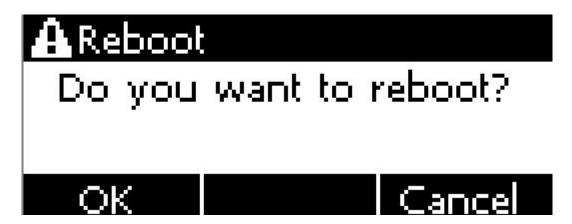


- 1. Keypad Lock Enable: select "Yes" or "No" to enable or disable keypad lock
- 2. Keypad Lock Type: Menu key/Function keys/All keys/Answer call only.
- 3. Phone Unlock PIN(0~15 Digit):set the phone unlock PIN. Range: 0~15 digit.
- 4. Phone Lock Time Out(0~3600s): set the phone lock time out. Range: 0~3600s
- 5. Emergency :set emergency number. Default to 110.120.119 and 911.

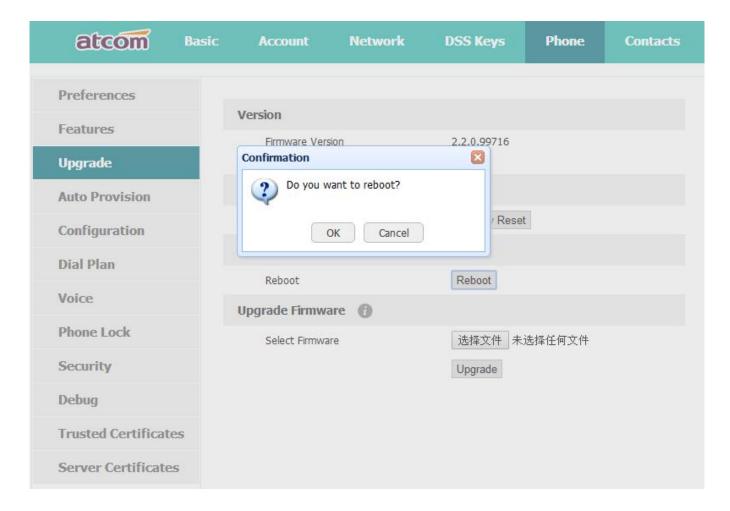


#### 5. Reboot

After the restart, the phone will back to standby interface.



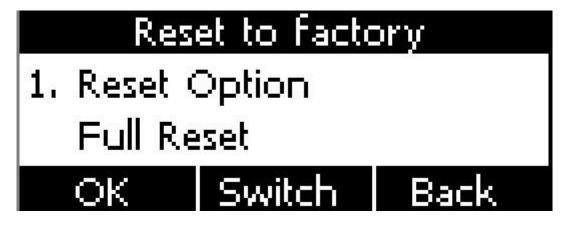
Reboot via webpage: Phone→Upgrade→Reboot



## 6. Reset to factory

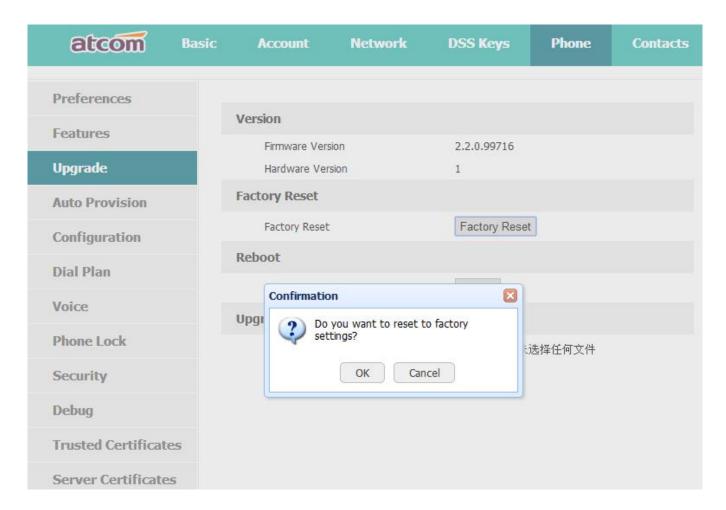


Once reset to factory, all parameter settings will back to the factory default value, and all configure will be cleared, users must be careful on this.



Reset Option: Full Reset, Config Reset and UserData Reset.

Reset to factory via Web: **Phone→Upgrade→Reset to Factory.** 





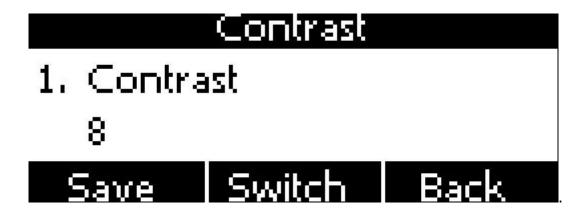
# 4.12. Display

For more convenient, users are able to adjust the contrast grade and backlight of the main LCD display.



## **Slave Contrast**

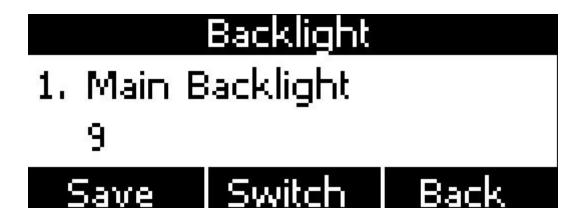
There are 9 different contrast grades for options, press the soft key "**Switch**" or the key for modification,8 is the default value.



# **Backlight**

Backlight is the brightness of LCD, also it has been defined as 9 different grades. The number "9" means the lightest.

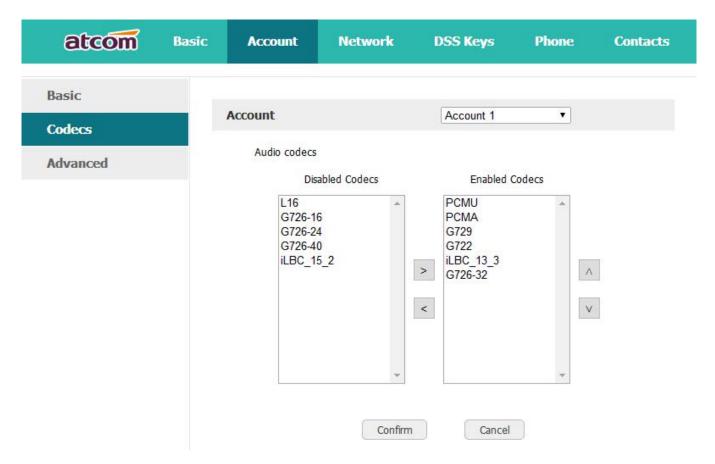




# 5. Advanced Feature

## 5.1. Codecs

CT1X support multiple codecs, users can select the codes via Web.





means to enable the item of "Disabled Codes";

means to disable the item of "Enabled Codes";

Click the button or to sort all enabled codes, the top item has the highest priority.

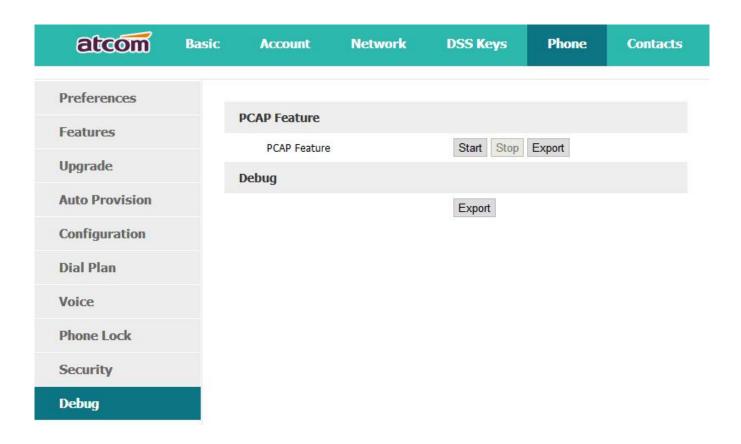
Note: Multiple different items of G726, iLBC should not activated simultaneously.

# 5.2. Capture and Upgrading

## Capture package:

It would record the phone current info.

Via webpage: **phone→Debug→PCAP Feature** 

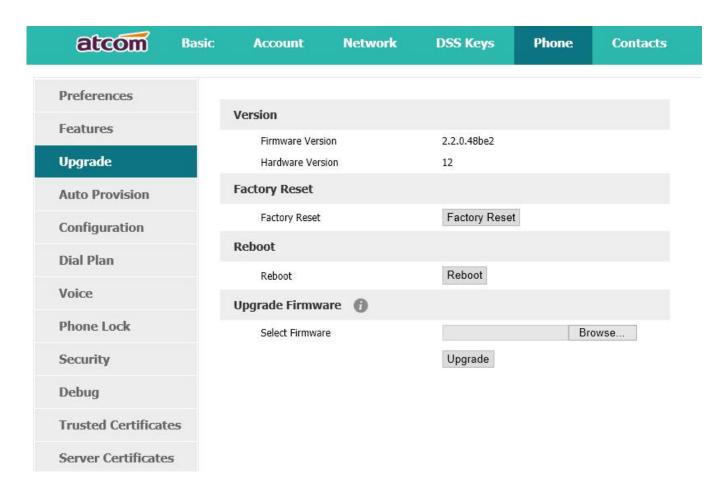




Click the button "Start" to start the capture and click the button "Stop" to end the capture. Then click the button "export" to download the capture file.

## **Upgrade firmware:**

Via webpage: **phone→ Upgrade→ Upgrade Firmware** 

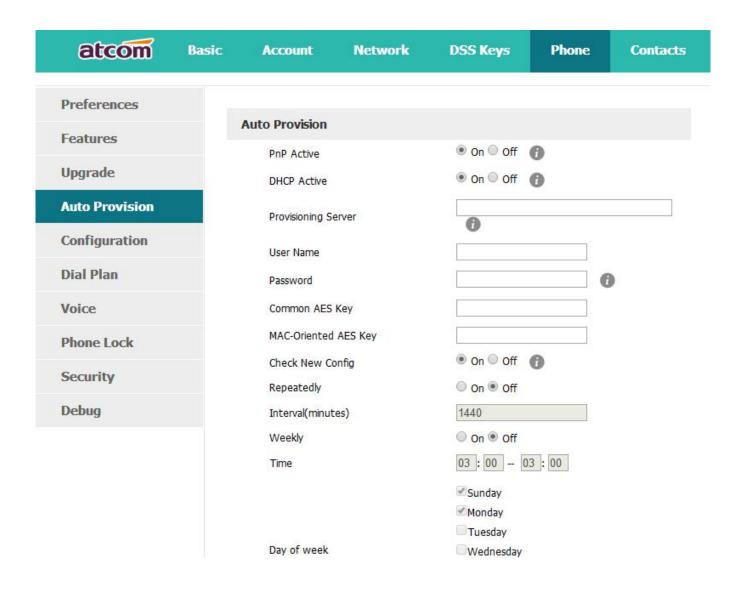


Before upgrading the firmware of phone, users are suggested to check the version of current firmware. Click the button "Choose file" to select the target local file and click "Upgrade" to process upgrading, this will cost a couple of minutes. And after reboot, the phone will be upgraded successfully.

# 5.3. Auto Provision

User is able to configure the phone to upgrade automatically.





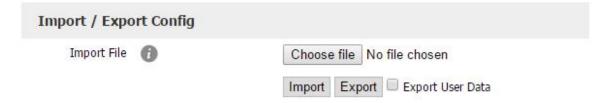
| Item                    | Description   |
|-------------------------|---|
| PnP Active              | Select "On" or "Off" to enable or disable PNP automatic updates   |
| DHCP Active             | Select "On" or "Off" to enable or disable DHCP option automatic updates   |
| Provisioning<br>Server  | The address to save control file for auto upgrading, it can filled by http, https, tftp and ftp server, for example, tftp://192.168.1.111 |
| User Name               | The username to access the file server  |
| Password                | The password to access the file server  |
| Common AES Key          | Configures the plaintext AES key for decrypting the Common CFG file   |
| MAC-oriented AES<br>KEY | Configures the plaintext AES key for decrypting the MAC-oriented CFG file   |



| Check New Config  | If set this parameter as "On", the phone will do some check for upgrading, and it will upgrade automatically once the conditions are met                           |
|-------------------|--|
| Repeatedly        | If set this parameter as "On", the phone will do some check for upgrading after "Interval(minutes)", and it will upgrade automatically once the conditions are met |
| Interval(minutes) | This parameter is configurable once the Repeatedly is "On"   |
| Weekly            | If set this parameter as "On", the phone will do the check for upgrading at a certain time in every week   |
| Time              | The time range that the phone do the check for upgrading every week, and it's configurable once the Repeatedly is "On"   |
| Day of week       | The day of week that the phone do the check for upgrading every week, and it's configurable once the Repeatedly is "On"  |

# 5.4. Export & Import configuration file

If user wants to set the same configuration on multiple phones, there is an easy way that export the configuration file from one phone and then import this file into other phones. This operation can be completed via Web only.



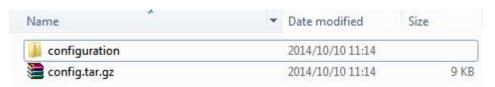
# 5.4.1. Export configuration file

There is two ways to export the configuration files,

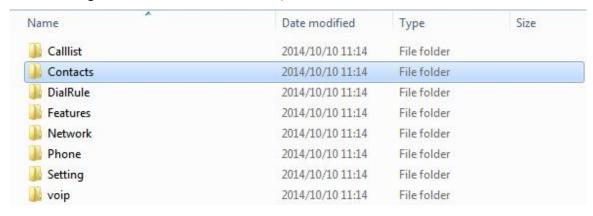
- Don't check the "Export User Data" and click "Export" directly, it will export the template of the configuration file;
- Check the "Export User Data" and then click "Export", it will export a configuration file that carries with user's configured data.

To modify the exported configuration file, you should to decompress it until you get a file names as configuration.





The content of configuration file listed as below,



# 5.4.2. Import configuration file

Click the button "Choose file" to select the target file for importing, and then click the button "Import". The phone will be rebooted a couple of minutes later, and import successfully.

Note: If some part of the configuration file has been modified manually, it must be recompressed as the format of "tar.gz" in Linux

# 5.5. Export System log

When the phone doesn't working well, System log is the best assistant tools for troubleshooting, all operation details has been recorded. This operation is available via Web only.





| Item         | Description  |  |  |
|--------------|--|--|--|
| Log Location | You can import the system log to local PC or remote Server.  |  |  |
| Server Name  | User must fill the address of server if you choose to export the system log to remote server.  |  |  |
| Log Level    | It defines the detail of system log as 5 different levels, Fatal, Error, Warning, Info, and Debug. The Debug level is the most detailed. |  |  |

# 5.6. Dial plan

The customized Dial Plan are available , for example , the rule of replacement, Instant Calling, Area code, Restriction of Outbound.

Before customizing the dial plan, user must learn the basic grammar as below,

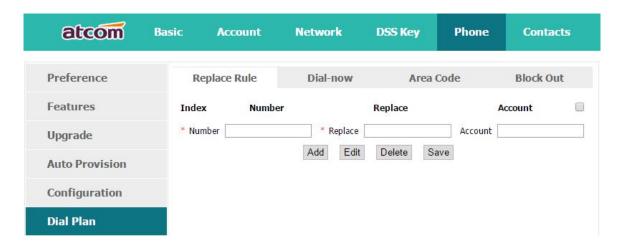
|    | Represent a character or multiple ones, e.g., "6." can match "66", "678", "6plus" and so on  |
|----|--|
| Х  | Represent one character, e.g., "6x" can match "61", "62", " 6s" and so on  |
| [] | Represent a character in one range, e.g., "83[0-5]18618"can matche"83018618","83488618" and so on  |
| () | Represent the combination of characters, e.g., "([1-9])([2-7])3" can match "923","153","773" and so on   |
| \$ | Add a number after the character " $$$ " to define the location of the characters, e.g., use the prefix " $8([1-3])(.)$ " to replace " $7$2$ ", the phone will call " $7837$ " after dialing out " $82837$ " |

Note: Any operations (add, modify or delete) on the current dial plan will be not effective until click "Save".



# 5.6.1. Replace Rule

Dial plan "Replace Rule" means to replace a batch of complicated character string by some simple characters, to make a speed dial.



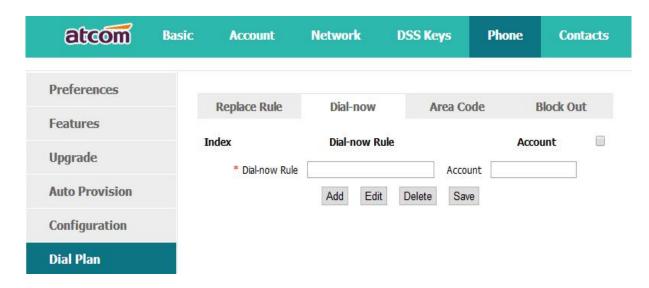
| Item    | Description   | Sample   |
|---------|---|--|
| Number  | The string works as replacer, not null  | Set Number as "6",                             |
| Replace | The string that to be replaced, not null  | Set Replace as 6032",                          |
| Account | The account to apply this dial plan, blank or 1 is valid.   | Set Account as "1".  It means when dial 6, the |
| Add     | Multiply replace rules can be configured in one phone, after one replace dial plan configured, click this button to add a new one   | phone will dial 6032.                          |
| Edit    | The existed replace dial plans are editable. The specified dial plan should be selected until it is covered with orange and the input fields "Number" and "Replace" shows the details correctly. After modifying, click button "Edit" to make it to be effect |  |
| Delete  | Delete one added or saved replace dial plan or multiple ones, click the frame after the specified replace dial plan before delete it, and then click button "Delete"  |  |



| Save | Any alteration won't take effect until the |  |
|------|--|--|
|      | button "Save" is clicked.                  |  |
|      |  |  |

## 5.6.2. Dial-now

Dial plan "Dial-now" permits the corresponding phone to be dialed instantly without pressing the soft key "Dial", once the input has been matched. It works like a hotline.



| Item          | Description   | Sample   |  |
|---------------|---|--|--|
| Dial-now Rule | The string to be dialed out automatically by the phone  | Set "Dial-now Rule" as 6xxx, keep "Account" as null  |  |
| Account       | The account to apply this dial plan, blank or 1 is valid.   | It means the phone will use the 1st  |  |
| Add           | Multiply dial-now rules can be configured in one phone, after one dial-now dial plan configured, click this button to add a new one   | available account to call 6033 after "Dialnow Time-out" seconds when inputting four figures begin with 6  Note: Dial-now rule is different with hotline. The Dial-now rule will take effect when input numbers |  |
| Edit          | The existed dial-now dial plans are editable. The specified dial plan should be selected until it is covered with orange and the input fields "Number" and "Dial-now" shows the details correctly. After modifying, click button "Edit" to make it to be effect |  |  |

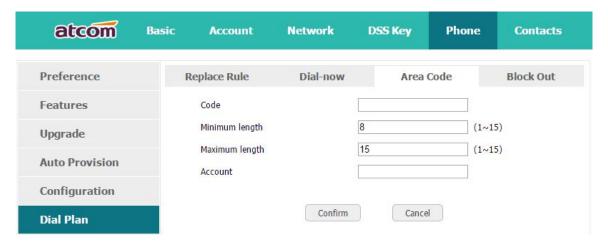


| Delete | Delete one added or saved dial-now dial plan or multiple ones, click the frame after the specified dial-now dial plan before delete it, and then click button "Delete" | matches the dial plan, and hotline takes effect in situation that the phone is in dialing |
|--------|--|---|
| Save   | Any alteration won't take effect until the button "Save" is clicked.   | state   |

Set "Dial-now Time-out" via web: **Phone→Features→General Information→Dial-now Time-out (secs).** 

## 5.6.3. Area Code

Dial plan "Area Code" has been defined to identify each different area. To call a phone number of other areas, user must add the area code to be in front of the phone number. For convenience, area code has been recommended to be configured while frequently dialing to that type of phone number.



| Item           | Description  | Sample  |  |
|----------------|--|---|--|
| Code           | The area code dialed before the number                                   | Set "Code" as "0086577", Set "Minimum length" as                                  |  |
| Minimum length | The minimum length of the number input to active the area code dial plan | ``5″.<br>It means when dialing  |  |
| Maximum length | The maximum length of the number input to active the area code dial plan | 83018618 with the 5 <sub>th</sub> account, the phone will dial 0086577 before it. |  |
| Account        | The account to apply this dial plan, blank or 1 is valid.                | Note: If the length of the  |  |



| Confirm | Apply this dial plan                  | number input in the dial UI |
|---------|---------------------------------------|-----------------------------|
|         |                                       | is not between minimum      |
|         |                                       | length and the maximum      |
| Cancel  | Recover all input fields to the state | length, area code will not  |
| Cancer  | that saved at latest time             | take effect                 |
|         |                                       |                             |
|         |                                       |                             |

# 5.6.4. Block Out

Dial plan "Block out" is used to prohibit the phone number outgoing call from some accounts.

| atcom          | Basic Accoun     | t Network      | DSS Keys   | Phone Contact |
|----------------|------------------|----------------|------------|---------------|
| Preferences    | n - t n          | de Distriction |            | PL-LO-A       |
| Features       | Replace Ru       | ule Dial-nov   | w Area Cod | le Block Out  |
|                | Block Out Number | er1            | Account    |               |
| Upgrade        | Block Out Numbe  | er2            | Account    |               |
| Auto Provision | Block Out Numbe  | er3            | Account    |               |
| Configuration  | Block Out Numbe  | er4            | Account    |               |
|                | Block Out Number | er5            | Account    |               |
| Dial Plan      | Block Out Numbe  | er6            | Account    |               |
| Voice          | Block Out Numbe  | er7            | Account    |               |
| Phone Lock     | Block Out Number | er8            | Account    |               |
|                | Block Out Numbe  | er9            | Account    |               |
| Security       | Block Out Numbe  | er10           | Account    |               |
| Debug          |                  |                |            |               |

| Item             | Description   | Sample   |
|------------------|---|--|
| Block Out Number | The number that prohibited                                      | Set "Block Out Number 1"as "10086"   |
| Account          | The account to apply this dial plan,                            | The contract of the contract o |
|                  | blank or 1  | It means the phone will enter the "Call End" UI  |
| Confirm          | Apply this dial plan  | when dial "10086"  |
| Cancel           | Recover all input fields to the state that saved at latest time |  |



# 6. FAQ

# 6.1. How to reset to factory

There are 3 methods for factory reset:

1. Factory reset via phone:



- a) Press the key
- b) Select "Settings", then press the soft key "Enter"
- c) Select "Advanced Settings", then press the soft key "Enter"
- d) Input the access password, then press the soft key "Enter"
- e) Select "Reset to factory", then press the soft key "Enter"
- f) Press the soft key "OK", then the phone will be reboot and resumed to factory default settings
- 2. Factory reset via Web:
  - a) Key in the IP address of phone with a browser,
  - b) Access the webpage of phone as the role of "admin", username/password is admin/admin.
  - c) Select "Phone"
  - d) Select "Upgrade"
  - e) Click the button "Reset to Factory"
  - f) Click the button "OK"
- 3. Factory reset during starting:
  - a) Hold the key "\*" and "#" while power on for 5 seconds
  - b) The phone will be reboot and resumed to factory default setting



# 6.2. Upgrade the firmware on safe mode

If the phone can't be started successfully, user is able to upgrade the firmware on post mode,

- a) Setup a TFTP Server and set the PC's IP address as "192.168.1.200"
- b) Copy the kernel file we supplied to the root menu of TFTP Server
- c) Ensure the TFTP Server and phone are connected to the same network switch and both reachable
- d) Long Press the key "\*" and "1" to upgrade the kernel file, and then plug in power until upgrading information displayed on LCD
- e) The phone will start downloading file from TFTP server
- f) After downloading completed, the phone will be automatically upgraded
- g) After upgrading completed, the phone will be started with the factory default settings

## 6.3. How to make IP Peer to Peer call

- 1. Press it in dialing status
- 2. To make a IP peer to peer call

Using press"\*"to choose "." that in the IP address. For example, to dial "192.168.1.100", just need input "192", "\*", "168", "\*", "1", "\*", "100".

3. Disable the IP call feature

Via webpage modify the make IP call feature:

Phone→Feature →Accept SIP Trust Server Only, press "Enable".



| atcom Basi           | c Account Network                       | DSS Keys P      | Phone Contact |
|----------------------|---|-----------------|---------------|
| Preferences          | + Call Forward                          |                 |               |
| Features             | + Do Not Disturb                        |                 |               |
| Upgrade              | <ul> <li>General Information</li> </ul> |                 |               |
| Auto Provision       | Inter Digit Time(secs)                  | 8               | (1~14)        |
| Configuration        | Auto Answer                             | Disabled        | • 0           |
| Dial Plan            | Call Waiting                            | Enabled         | • •           |
| Voice                | Hotline                                 |                 | 0             |
| Barrer and the       | Hotline Time-out(0~180 se               | cs) 4           | •             |
| Phone Lock           | Key As Send                             | #               | • 🙃           |
| Security             | Dial-now Time-out(secs)                 | 1               | •             |
| Debug                | Busy Tone Timer(secs)                   | 0               | • •           |
| Trusted Certificates | Return Code When Refuse                 | 486 (Busy here  | ) • •         |
| Server Certificates  | Return Code When DND                    | 480 (Temporaril | ly not a ▼ 🚯  |
|                      | RFC 2543 Hold                           | Enabled         | · •           |
|                      | Use Outbound Proxy in Dialo             | Disabled        | • •           |
|                      | Login Time-out(1~1000 mir               | nutes) 10       | 0             |
|                      | Hide DTMF                               | Disabled        | •             |
|                      | Watch Dog                               | Enabled         | •             |
|                      | Accept SIP Trust Server On              | Enabled         | ▼             |



# 7. Troubleshooting

# 7.1. The phone is failed to register to SIP server

- 1. First of all, check the IP address. If the LAN port is DHCP, please ensure the DHCP server has been enabled.
- 2. Check the network gateway
- 3. Check the DNS
- 4. Make sure the input account matched the one provided by Service Provider
- 5. Make sure SIP Server has been enabled already
- 6. Make sure the Port of SIP Server, it's 5060 by default

# 7.2. The phone is failed to gain IP address

- 1. Make sure the network cable has been plugged into the LAN port
- 2. Make sure the network cable or port of network switch are working fine,
- 3. Make sure the DHCP server has been enabled, and there are available IP address
- 4. Try to set the LAN port as Statics IP

# 7.3. Only one party can hear from another on calling

- 1. Try to make a IP peer to peer call, to make sure the mic and speaker are working fine
- 2. Enable STUN via Web
- 3. Set the address of STUN Server, for example stun.sipgate.com
- 4. Present this operation above and the phone will be reboot
- 5. Try to make a normal call again



# 8. Abbreviation

DND: Do Not Disturb

CFWD: Call Forward

Bxfer: Blind Transfer

Conf: Conference

Num: Number

SIP: Session Initiate Protocol

RTP: Real-time Transport Protocol

SDP: Session Description Protocol

VPN: Virtual Private Network

VLAN: Virtual Local Area Network

QoS: Quality of Service

Syslog: System log

UDP: User Data Protocol

TCP: Transmission Control Protocol

TLS: Transport Layer Security Protocol

BLF: Busy Lamp Field

DNS: Domain Name System

SRTP: Secure Real-time Transport Protocol

NTP: Network Time Protocol

VAD: Voice Activity Detection

CNG: Comfort Noise Generator



# 9. FCC Caution

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The devices complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) The device may not cause harmful interference, (2) the device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, Pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment dose cause harmful interference to radio or reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- —Increase the separation between the equipment and receiver.
- —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- —Consult the dealer or an experienced radio/TV technician for help.