Professional Outdoors Phone
Items inside Packing Box

- Phone
- 1400MAH/1500MAH lithium ion battery
- AC charger
- Outdoors manual emergency charger
- Car charger
- External antenna of intercom
- T-FLASH memory card
- Data/charging line
- Stereo earphone
- User guide
- Warranty card

Safety

✧ For the safe and efficient use of your phone, please read the following information before use.
✧ Switch the device off when the phone is near to chemical plant, gas station or other explosives.
✧ Keep your phone out of small children's reach.
✧ Please use earphone device while driving for safety; please park your car roadside and answer calls, except in an emergency.
✧ Switch the device on a plane. Please check the AutoOnMod is off before boarding.
✧ Pay special attention to your phone when near to pacemaker, audiphone or other medical electronic equipments to avoid potential interference.
✧ No warranty for non-original accessories or fittings.
✧ Do not dismantle your phone by self. Please contact our appointed maintenance centers if your phone breaks down.
✧ It is forbidden to charge when the battery is removed.
✧ Charging should be under the environment of good ventilation and heat dissipation, far away from flammables and combustibles.
✧ Please keep your phone away from magnetic materials such as disk or credit card to avoid demagnetization.
✧ Ensure your phone no contact with any liquid. Please remove the battery and contact our appointed maintenance centers once it happens.
✧ Avoid to use your phone at too high or too low temperatures. Do not expose it to strong sunlight.
✧ Do not clean your battery with liquid or wet cloth of strong detergents.
PRECAUTION: Our company is not responsible for any mistake caused by noncompliance of suggestions or improper use.
✧ Your phone shall prevail if there is any discrepancy between the contents and your phone.
✧ The information is subject to changes without prior notice.

Special Instructions

✧ The structure of the product is designed to be waterproof/dustproof, falling protective and rolling resistant. Its waterproof performance reaches to IP57 international standard, which can bear the falling from 2 meters high to cement floor and 1.5T truck rolling which have been validated through laboratory experiments. It is not suggested for users to conduct the above tests sedulously by yourself in actual use for some uncertain personal factors. Our company is not responsible for damages caused by water seepage, falling or rolling.
✧ The navigation map is stored at the attached memory card as navigation-related file named SUNAVIMAPDATA. Please firstly backup the folder and its contents at other place and do not make any correction or deletion to folder name or contents, otherwise the normal use of navigation software will affected.

✧ The method of GPS navigation instruction is stored at the folder "user guide" of memory card as an electronic document. It is only for users with GPS navigation function version.

Summary

Your Phone

✧ The wireless device in the user guide is approved for use on the GSM850, 900, 1800 and 1900MHZ networks. For more network information, consult your network provider.
✧ When using this device, obey all laws and respect local customs, privacy and legitimate rights of others, including copyrights.
✧ Copyright protection may prevent you from copying, modifying, or transferring pictures, music, and visit other third party websites.
✧ Third party websites do not belong to our company, and our company do not endorse or assume liability for such sites. If you access links to these sites, take the appropriate precautions.
✧ Each function of the device should be used after starting up(alarm clock excepted). Please do not get started if the use of the device may cause interference or danger.
When connecting any other device, please read user guide of the device for detailed safety instruction. Do not connect incompatible products.

Network Device

Only when you apply to network provider for activation necessary service can the call function of the device be used. Many features are network dependent, and you must make some necessary agreements with wireless service provider in advance.

Your service provider may require to disable or close partial functions of the device. If so, then the functions will not appear at the function list.

The device supports WAP2.0 protocol based on TCP/IP protocol. Some functions such as MMS, network browse, IM, contact list supporting display of status message and downloads through browser or MMS, are all network dependent.

Chapter One    Getting Started

Overview

Insert SIM card

Open the back cover and insert SIM card into the card holder vertically as the right figure shown.(see figure)

PRECAUSTION: Do not distort or scratch SIM card, or contact it with static electricity, dust or dipping; if SIM card is lost, please contact your network provider for help.
NOTE: The battery cover is designed waterproof, with 2 waterproof screws which can be loosen by ordinary tools like coins when opening or closing the battery cover. When screwing, turn 6-7 semicircles clockwise and the sealing effect will be good when you feel pressed. (see figure)

- The waterproof sealing ring may be loose when the battery cover is removed. Please relocate it before closing the battery cover for the device's waterproof and dustproof performance.

- Insert and remove the battery
  - Align the exposed copper part at the head of the battery to the metal contacts in holder and insert it;
  - Then push the end of the battery into the end of cassette; (see figure). When removing battery, please tilt it up firstly from the card slot bottom and remove it out.
  - Put the battery cover on and tighten the cover screws.
Charging
✧ Open the USB waterproof rubber stopper at the left side of your phone;
✧ Connect the data line to the charger and then insert it into USB jack, and charging begins;
✧ The phone can be charged at both off and on status. The screen will display an increasing battery capacity animation when charging and the picture will be still as full capacity when the battery is charged full.
✧ When battery full, please disconnect the charger with AC power and then disconnect it with your phone. Fasten the USB jack rubber stopper for the device's waterproof and dustproof performance.

Use of battery
The performance of battery will be affected by multiple factors, including your wireless network configuration, signal intensity, and the temperature, function, setting and accessories in use, as well as the used application programme mode.
✧ More battery will be consumed and standby time will be shorten while in calling or backlight on.
✧ More battery will be consumed when GPS navigation is open.
✧ Intercom function will result in a great consumption of battery.
✧ It will be better to keep the two functions off when unnecessary.

For the best performance of your battery, please obey the following suggestions:
✧ A longer charging time is of necessity for new battery or that after longtime disuse;
✧ Keep the battery temperature at or near room temperature when in charge;
✧ It is normal for longer charging time of the battery after longtime use. If shorter calling time while longer charging time be found after normal charging, please buy original battery or that approved by our company. Inferior accessories will damage your phone and cause a danger!

Some time will be needed to display the charging interface after inserting the charger when the battery was disused for a long time or battery capacity is too low. Please wait patiently.
NOTE: For any operation related to the charging(data) jack, please relocate the waterproof rubber stopper after use for the device's waterproof and dustproof performance.
Please do not dispose battery randomly for environmental protection and your safety!
PRECAUTION: Any form of battery short circuit may cause serious consequences such as explosion, fire hazard or personal injury!
Start up and shut down
Please do not start up your phone if wireless device is forbidden or its use may cause interference or danger.
Long press power key (on/off key) can start up or shut down.
Slight press on/off key during calling to end a call.
Please input your password and select "OK" if needed.

Volume control
The up and down navigation keys can be used to control handset volume during a call; The numeric keys "2" and "8" can be used during playing music; the symbolic keys "*" and "#" can be used during playing radio.

USB use
Your phone is equal to a flash disk in off state. Use a data line to connect the USB interfaces of your phone and PC, then a removable disk will appear on the PC. Choose the removable disk and now you can conduct the data transmission between your phone and PC. Meanwhile the USB connection with PC will charge your phone.

Insert T card
T memory card may be provided along with the device and be inserted well in advance.
1. Slide the T card holder to the left and turn it over.

Installation of intercom antenna
The installation of intercom antenna can activate the function of long distance intercom.
1. Unscrew the presupposed intercom antenna cap.
2. Open the intercom antenna cover at back and screw antenna into your phone locked.

Standby mode
When the phone is ready without any character input, it is at standby mode.

Chapter Two  Your Phone

Make a call
✧ Input a telephone number (area code may be necessary before a fixed phone number) and press the call key;
✧ Press the call log can dial the numbers of recent calls;
✧ Make a call by contacts names or phone numbers. See "contacts";
✧ For IDD calls, please double press * to input international code (character "+" stands for international dial code), then
input country or area code and area code (please input them as needed and no "0" before area code) and phone number.

**Answer or reject a call**
- Press the call key to answer a call and end key to end.
- Press the reject key to reject a call.

**Calling process**
During calling process, left selection key should be firstly pressed to select relative functions such as mute, handsfree, call hold, contacts, new call, message, record and background sound.
Mute: press left selection key and then select "mute" during a call, you can still hear the opposite while you are not heard; long press 
"#" at standby status will change ringtone into mute;
Dial: press numeric keys to input phone number directly and press the call key will make a dial;
Handsfree: press right selection key to activate "handsfree" function during calling, then the call will be at the amplified status;
Call hold: press left selection key during calling, then select "hold single line call" will keep both sides not heard;
Contacts: press left selection key during calling and select "contacts", you can search needed phone numbers and make calls or send messages;

Add a call: during calling, press left selection key to select "new call" to call a third one;
Record: during calling, press left selection key to select "record" to record your conversation;
Background sound: during calling, enter "options" to select "background sounds" to play background sound at the list to the opposite.

**Call waiting**
See Chapter Eleven Setting→call setting→call waiting.

**Call log**
See Chapter Three Call log.

**Contacts**
See Chapter Seven Contacts.

**Voice mailbox**
Voice mailbox is network dependent and you may apply to activate the service in advance.
More information about voice mailbox, please consult your network provider.
Edit: to edit or delete your voice mailbox number and press OK to store the number.
Contact to voice: can dial the voice mailbox numbers stored in your voice mailbox numbers function list. If you have two phone numbers and both will be with their respective voice mailbox number.

**Cell broadcast**

Cell broadcast is a service which cause all the GSM subscribers to listen to messages such as weather forecast, traffic condition which are transmitted by network provider.

Receive mode: can be selected to activate or deactivate the function message reception.

Read message: only when broadcast reception is activated can messages be read. Relative services should be activated in advance.

Language: language for message reception.

Channel setting: select, add, edit and delete channel numbers.

**Chapter Three  Call Log**

The phone can record missed, incoming and outgoing phone numbers. Only when the phone is on and located at network service area and network supported, can it record missed and incoming calls.

In the list of missed, incoming and outgoing numbers, you can check the calling date and time, edit or delete numbers on the list and save numbers to contacts.

- Missed calls: list of recent missed calls numbers;
- Outgoing calls: list of recent outgoing or test outgoing calls numbers;
- Incoming calls: list of recent incoming calls numbers;
- Delete call log: you can select and delete missed, incoming and outgoing calls of the lists;
- Call timing: can be checked last calling time, time of outgoing and incoming calls. You can clear all the timings;
- Call charges: network dependent;
- SMS counter: records of sent and received messages can be checked. And you can also delete the numbers of sent and received messages;
- GPRS counter: received and sent GPRS data flows can be checked.

**Chapter Four  Input Method**

The optional input methods include PinYin, stroke, capital English, lowercase English and numbers. When inputting words, please repeatedly press "#" key to switch different input methods. The screen will display the symbols of needed input methods.

PinYin input method
General instruction sequence of smart PinYin input method
✧ Input PinYin letters: press "2" to "9" to input PinYin, and the phone will list all the possible PinYin combinations according to the input letters. For instance, double press "2", it will give options such as "ba", "ca", etc.
✧ Select: press up, down, left and right keys to select Chinese characters options and press left selection key or center selection key to adopt it, and then press right selection key to clear the PinYin selection;
✧ Select and adopt and input characters: press up and down navigation keys to turn screen up and down, left and right navigation keys to search characters, left selection key or center selection key to adopt characters;
✧ Adopt associated characters: associated input will show associated characters of the former one. Press up and down navigation keys to turn screen, left and right navigation keys to search characters, left selection key or center selection key to adopt characters;
✧ Input strokes: press relevant numeric keys to input strokes according to Chinese characters' standard stroke sequence, and the screen will display characters options parallel to input strokes. Press left selection key or center selection key to adopt characters and the right key to delete the strokes from the last one.
✧ Adopt and input characters: press up and down navigation keys to turn screen, left and right navigation keys to search characters, left selection key to adopt characters;
✧ Adopt associated characters: Press up and down navigation keys to turn screen, left and right navigation keys to search characters, left selection key to adopt characters;
✧ Edit input characters: press left and right navigation keys to move cursor left and right, up and down keys to move up and down, the right selection key to delete characters;
✧ Wildcard character: numeric key "6" is the wildcard of "?", which stands for all the other strokes to list characters options.

Stroke input method
The input method is mainly composed of five kinds of strokes: horizontal stroke, vertical stroke, left-descending stroke, point, and bending, which respectively parallel numeric keys 1, 2, 3, 4 and 5.

English input method
The keys instruction is set as follows under English input status(including capital and lowercase):

<table>
<thead>
<tr>
<th>key</th>
<th>Parallel symbols or functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numeric key &quot;0&quot;</td>
<td>0, space</td>
</tr>
<tr>
<td>Numeric key &quot;1&quot;</td>
<td>Symbols</td>
</tr>
<tr>
<td>Numeric key &quot;2&quot;</td>
<td>ABC2; abc2</td>
</tr>
</tbody>
</table>
1. Select main menu→message→SMS→edit new message;
2. Edit your message in text field;
3. The phone number can be input at sending number field or from contacts. When sending to multiple parties, you can continue to add numbers or select contacts from contacts. The maximum number of multiple sending is 20 everytime.

Read and reply SMS
1. You can select inbox to read received messages. At view SMS interface, direct press call key can dial the contact's number or save its number at contacts;
2. To reply a message, please select "reply" to enter edit interface and edit a reply message;
3. Select "send".

Chapter Six MMS

Edit and send MMS
1. Select main menu→MMS→edit new MMS
2. Input a number or an email address at receiver field. To select a number or email address from memory, please select "search".
3. Edit a MMS. Select "edit content" and begin to edit. To insert a file, please select "options" and select needed folder and file content.
4. Click "done" to select "send" or other operation.

General instructions of English input method
✧ Each key is set to input multiple symbols. Quick repeated press until needed symbols appear;
✧ When inputting English punctuation marks or some special symbols, press "*" to switch to special symbols input box under English input status(including capital and lowercase).

Numeric input method
Input relevant numbers under the input method status.

Symbol input method
Press "*" key to switch to symbol input method and select needed symbols.

Chapter Five SMS

Edit and send SMS
Only with compatible functions and devices can MMS be received and displayed. The display effects may vary in different receiving devices.

NOTE: There is some restraint on MMS size by wireless network. If the size of inserted picture exceeds its limit, the device may compress it to send it by MMS.

**Chapter Seven  Email**

**Email account setting:**
Main menu→message→email→email account
Select to add or edit email account;
Email address: such as ***@163.com;
Displayed name: arbitrary fill;
User name: same as email address;
Password: same as email password;
SMTP: here is your email SMTP, such as SMTP.163.com;
POP server: here is your email POP3 address, such as POP.163.com

**Advanced setting menu**
Account setting:
Account name: arbitrary fill;
Data account: select early set data account;
Return address: the email address to return;
Other options keep default value.

**SMTP setting**
Send port: 25;
Authentication: select "open" to enter edit field, choose "yes" for "same as POP server";
POP server and signature setting:
All keep default value;
Save changes and return to "start" email account.

**Chapter Eight  Contacts**

The phone is of cardholder-type contacts. Each contact saved at phone has three numbers(phone number, home number and company number), company name, email address and fax number. Only name and phone number can be saved for each contact saved at SIM card.

Option content description:
Quick search: click "search contact" field at the bottom of contact list and input Chinese initials or English initials to locate the first satisfying record in contacts. For example, input "lg" to search "李刚".
Add a contact: a contact saved at SIM card can record the following items: name and phone number. That saved at your phone can record the following items: name, phone number, home number, company name, email address, company number,
fax number, birthday, call picture, call video, ringtone select and incoming call groups.

Copy all: copy all records from SIM card or the phone.

Import and export: it is an application of saving the phone or SIM card contacts to memory card(T-FLASH card) or inverse action. The exported contacts will be saved as (.csv) files which can be opened by EXCEL.

It is kindly advised to save the exported contacts to memory cards out of the phone for recovery use.

Preferred storage place: stored at phone or SIM card firstly.

Store status: click it to check the store status of the phone and SIM card. The store capacity of the phone is 1000 items while 250 items for SIM card generally.

Chapter Nine  Outdoors Tools

air pressure, altitude, temperature

The phone is built in atmosphere, magnetic bearing and temperature sensor, which can measure air pressure and height conversion. Instruction method:

✧ Main menu→"tools"→"outdoors tools"→"air pressure, altitude, temperature", then it will display current air pressure, altitude and temperature value.

✧ Altitude is displayed in meters;

✧ The displayed unit for air pressure is hPa. 1 standard pressure = 1013.25 hPa.

✧ Measurement unit of temperature is °C and °F. For some heat will be created on the phone after use especially after calling, temperature value measured at this moment will stand a disparity with actual one. To get a preciser temperature value, please put you phone at the measurement environment for at least half an hour.

NOTE:

✧ The short-term weather forecast provided by the phone is based on the trend analysis to accumulated periodic air pressure data. So there may be some difference between the forecasted data and actual data after reboot or battery replaced;

✧ The phone weather forecast can not be used as professional device, for reference only;

✧ A big difference with actual weather data will exist during long span movement by high speed carriers.

Altitude setting

The altitude is conversed according to ISA(international standard atmosphere). While the air pressure value of the same place will vary with different seasons, time. Thus you can set a reference value as per road marks or map elevation. The measured result of
the phone after being set will be much preciser than that of no reference value.
Setting method: select "options" on air pressure display interface to carry "altitude setting". You can input a altitude reference value to revise the conversed value according to air pressure, or reset the reference value to initial value. The phone will calculate current altitude according to the value.

Relative height setting
The difference value between appointed reference values can also be measured, which is also called relative height. Enter "relative height setting" to set the reference point as "0" to appoint a reference height.

NOTE:
✧ The built-in cathetometer measures air pressure by air pressure sensor, and then estimate current altitude and relative height according to the measured value and ISA default value. The height at same place will vary with different air pressures;
✧ The measurement of air pressure and height by the phone is not applicable to professional or industrial circumstances;
✧ The leakproofness of the phone is up to IP57 level. If there is any question, you can open the side USB seal during measurement to keep internal and external pressures same;
✧ For the air in plane is compressed, the measured air pressure and height in the circumstance are different with actual values.

Electronic compass
The phone is built in high-accuracy magnetic bearing sensor which can detect earth magnetic field; the directed north is magnetic north, which slightly differs geographic north. Special attention should be attached in use. The directions East, South, West and North is presented as their first capital letters, that's are East-E, South-S, West-W, North-N. The displayed number at compass top is the included angle between the phone head direction and magnetic north.

NOTE:
✧ The measured result will product a bigger error at or near strong magnetic field. Thus direction measurement should be avoided near the following objects: permanent magnet, metal blocks, etc.;
✧ It's impossible to get accurate measured results inside trains, watercrafts and planes;
✧ Accurate measured result is also impossible indoors, especially inside concrete steel building. The reason lies in that the metal frame of such building will absorb magnetic force from household appliances.
**Direction correction**

If you doubt the correction of measured direction, please correct it electronically.

- Correction method: on electronic interface, click "options" to enter correction interface. Select "north direction correction" and press "OK", then according to prompts, place your phone horizontal and rotate it in a constant speed clockwise for 2 circles. When the progress bar finishes a lap and pops up "done", press "back" to finish correction and begin normal measurement.
- Some difference will also produce when you are in cars because of the influence caused by metals and soundboxes inside. The correct measurement method is to place the phone horizontal inside your car and open "north direction correction" and press "OK". Then start your car and rotate clockwise for 2 circles. When the progress bar finishes a lap and pops up "done", press "back" to finish correction and begin normal measurement.

**GPS information**

Longitude, latitude, altitude, sunrise and sunset time as well as time zone and time information of your location can be provided by received GPS information.

**Chapter Ten  Tools Box**
Audio- audio folder
Play, used as, send, detailed information, rename, copy, move, delete, delete all, multi-mark, sort by.

Videos- video folder
Play, used as, send, detailed information, rename, copy, move, delete, delete all, multi-mark, sort by.

Photos- photo folder
Play, used as, send, detailed information, rename, copy, move, delete, delete all, multi-mark, sort by.

My music- music folder
Play, used as, send, detailed information, rename, copy, move, delete, delete all, multi-mark, sort by.

Ebook- ebook folder
Open ebook, detailed information, rename, copy, move, delete, delete all, multi-mark, sort by.

Phonebook- phonebook folder
View, edit, new folder, send, used as, detailed information, rename, copy, move, delete, delete all, multi-mark, sort by.

Schedule
The function can be set by alarm clock to remind and record your routine arrangement.

Add a new note information by following instructions:
- Task type: direct select needed task type;
- Task theme: direct select blank field of task theme and input schedule text;
- Alarm clock: turn on or off alarm clock reminding;
- Repeat: one-time, everyday, every week, every month or specific reminding periods are optional.
- Priority level: select priority level according to task's importance.

Alarm clock
Alarm clock setting instruction
- Turn on or off alarm clock: left and right keys to turn on or off alarm clock function;
- Alarm clock time setting: set alarm clock time by numeric numbers;
- Repetition period setting: set alarm clock on one specific day from Monday to Sunday;
- Alarm clock ringtone setting: set alarm clock type and ringtone;
- Snooze time setting: alarm clock will ring again at appointed snooze time;
- Prompt type setting: three kinds of vibration, vibration + ringtone and ringtone are optional.
The time format of alarm clock will be consistent with that of the phone function. When the phone is off, the alarm clock will work so long as the battery is enough. The system is set with 5 alarm clocks with defaulted off status, which can be on singly or all at once as needed. When time goes for alarm clock time, the phone will make a ringtone and current time and date will flicker on the screen. To press off will stop ringing. To press snooze will stop ringing temporarily and continue to ring about 4 minutes later. If time goes for alarm clock time while the phone is still off, the phone will ring. If pressing stop, you'll be asked to power it on or not. Press "no" to power off the phone and "yes" on.

Calendar
You can view detailed calendar status and past or future date status, as well as add and view past or future calendar events.
Add an event: press "OK" to enter and input event information and then press "done". The needed information are as follows: start time, stop time, theme, alarm clock, repetition, address, priority level and detailed information.

Calculator
You can input keypad numeric numbers and screen operators as needed.

NOTE: the calculator is of limited accuracy and only used for simple calculation.

Unit conversion
The function can be used for conversion of common weight and length units.

Currency conversion
You can calculate the exchange rate between domestic currency and foreign currency after exchange rate set.

World time
You can enter the interface to view various regions time worldwide.

Ebook
You can read, edit .txt documents in EBBOK folder.

Flashlight
You can select to turn on or off flashlight.

NOTE: quick method for flashlight: long press center navigation key to turn on or off flashlight.
Bluetooth
You can use Bluetooth wireless technology to establish wireless connection with other compatible devices, which may contain cellphone, computer, earphone and vehicle-mounted suite, etc. Bluetooth can be used to send pictures, video clips, music sound clips and notes, as well as to establish wireless connection with compatible PC(such as sending files).

Since devices with Bluetooth wireless technology communicate using radio waves, they do not need to be in direct line-of-sight. However, they must be within 10 metres(33 feet) of each other, although the connection may be subject to interference from obstructions such as walls or from other electronic devices.

The device conforms to Bluetooth Profile version 2.1.
Bluetooth wireless technology may be limited in some areas. Please consult local competent department or service provider.
It will consume much more battery and shorten battery lifetime when Bluetooth dependent functions are used or these functions are running background while others are used. Bluetooth connection is not available before the device activated.

Instruction method:
Activate Bluetooth: select "enable" to activate Bluetooth(please close intercom firstly for shared serial port);
Search handsfree devices: to search surrounding handsfree Bluetooth devices(such as Bluetooth handset) and input confirmation code to connect after searching done;

Remote control: remote control can be carried out after connection with remote devices;
My device: enter "my device" to search surrounding Bluetooth cellphone and the searched devices will be displayed as a list.

Setting instructions
Device can be searched: "on" indicates that the device can be searched by other Bluetooth devices;
Device name: name displayed on phones searching the device, not changeable;
Identification request: "on" means that other Bluetooth devices connecting with your phone must be identified;
Sound path setting: can set sounds saved at the phone or other handsfree devices;
Block devices: can block other devices to connect with your phone;
Storage place: the stored place where transmitted files can be viewed by other Bluetooth devices;
File transmission setting: set directory permission and set files as free accessible or readable only;
Image objects transmission setting: set shared directory which can be viewed by other Bluetooth devices;
My Bluetooth: to display basic information and functions of your Bluetooth device.
Electronic stopwatch
General stopwatch and multi-direction stopwatch are optional.
General stopwatch: including individual timing, circle timing and records viewing.
Multi-direction stopwatch: press up, down, left and right keys to start timing and press center key or left selection key to pause; continue. Press reset key at stop status will return to zero.
Other phone functions are still allowed to work normally during timing process.
To set stopwatch running background, please press end key; Returning to enter stopwatch interface can allow you to view the timing result by stopwatch running background.

Chapter Eleven setting

Profile setting
Different profile modes can be set as needed, which mainly include standard mode, meeting mode, outdoors mode, indoor mode, earphone mode, bluetooth mode and flight mode, etc.; Each mode can be set specifically as needed;
Personal setting instructions
Ringtone setting: incoming ringtone, startup and shutdown ringtone, message ringtone and keypad tone;
Volume: mainly to set ringtone and keypad tone volumes;
Prompt type: types of single ring, single vibration, vibration and ring, ring after vibration are optional.
Ring type: once, repetition and fade-in;
Other prompt tones: tones of warning, error prompt, network connection, call connection, which can be selected with a check mark inside option box;
Answer mode: select "any key" to answer a call with any key;
NOTE:
You are not allowed to dial or answer any call including emergency call when "flight mode" selected. Any function network dependent is not allowed.

Network setting
Network selection: to select local telecom operation network. The default value is automatic selection and can also be selected manually as needed;
Preference setting: in case that automatic selection is unavailable or appointed telecom operation network is needed abroad, you can search and select relative telecom servicer at list;
GPRS connection: open when needed or permanent are optional.

Personalized setting
Settings such as welcome note, greeting and off animation, screen wallpaper, screen saver picture and clock type can be carried.
Greeting and off animation
The default animation or picture in system can be set, or those made or stored individually in "custom specific" option as new greeting and off interface.

Wallpaper, screen saver picture
There are two ways to change standby wallpaper and screen saver picture, which are from system and download. Pictures inside system are built-in ones while download are those stored individually in file management, optional according to your preference.

Quick function
Add some mostly used functions into the option and define them at a key of four direction keys to start them quickly.

Appoint function keys
Some mostly used functions can be defined at four direction keys. Press any direction key to enter appointed function at standby status.

Clock type
Imitated dial clock or digital clock are optional.
network password for you to enable it. You can make restrictions on the following calling on this menu:

Dial forbidden: can enable, disenable and check dial forbidden status on all calls, international calls and international calls excluding domestic respectively.
Incoming calls forbidden: can enable, disenable and check dial restriction on all calls, i.e. all calls forbidden; or enable, disenable and check roaming incoming calls.
Enable all: enable set call restrictions.
Cancel all: cancel set call restrictions.
Change password: input old call restriction password and set new one.

**Line switch**
Line 1 and line 2 can be switched.

**Advanced setting**
Blacklist: harassment calls or forbidden calls can be added to blacklist to block their incoming calls;
Automatic redial: "on/off" can be set for automatic redial. After a failed test dial, you can add up to 10 times of test dials to try to get through a number.
IP dial: three IP access numbers are available. The function can only be enabled when dialing from contacts and its instructions:

sequence is as follows: press "option" to select IP dial and add the set IP access number before contact number and dial it.

Background sound: different background music, sounds and your favorable music can be set during a call.
Call time display: call time displayed or not during a call.
Call time prompt: one sound or periodic prompt sound at integer minutes can be set for you to know call time length. You can also select to close the function.
Automatic time limit: time length can be set as needed. When the call time goes up to set length, it will automatically end.
Reject and send a message: if it is not convenient to answer a call, you can press reject key to hang it up and a prepared rejection message will send meanwhile.

**Safety setting**
Privacy protection: can make encipherment protection on contacts, SMS, call log, photo album, video player, music player, file document and management tools, etc.
Default password: 1122. The password can be changed at "password setting" menu of privacy protection.
Anti-theft tracking: the default password is system password. When the function enabled, it will send messages to all numbers in contacts list of the function when SIM cards change, which works as the function of phone tracking.

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40

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41
SIM card lock: some restrictions can be set for SIM card use. PIN code is needed to lock or unlock it. PIN code will be provided along with SIM card. If you enter the code incorrectly three times in a row, you need to unblock the code with the PUK or PUK2 code. Advanced phone lock: the phone password can be used to lock or unlock your phone. The locked phone can be used only to dial emergency calls after starting up, and only by phone password input can be used normally; Auto keylock: is used only to lock numeric keys area to avoid unexpected dials. Quick keylock: press left selection key and press "*" key within 3 seconds after entering standby interface. Fixed dial number(FDN): it will set phone use restriction that when the function enabled, you can only dial stored numbers at fixed dial numbers list. Whether FDN can be used or not is up to SIM card type and your network provider. Forbidden numbers: to set forbidden dialed numbers, SIM card dependent. Change password: to change SIM card PIN code, PIN2 code and phone password. Factory reset: reset some settings back to factory default status. Factory reset password is 1122.

Initial setting
Time and date: to set city, time and date formats and select to set time format as 24-hour system and date format, as well as update time according to time zone. Language: to select the phone language displayed (the phone supports multiple languages and preset with simplified Chinese and English), with default value of simplified Chinese. Time switch setting: four groups of on/off time switches can be set. Preferred input method setting: your most familiar input method can be set preferred as needed. LCD backlight setting: LCD backlight time length can be set.

Chapter Twelve Multimedia Application
Camera
Take a photo: enter "camera" interface and press "OK" to take a photo. To take one more, continue to press "OK" key and the photos will be stored at photo album. The camera lens lie at the back side of the phone and the screen is as the viewfinder window. All the photos created by camera are stored as JPG format. If they are downloaded to PC, please view them by proper softwares.
If the storage capacity is not enough to take new photos, some old photos or other files list in "file document" function table should be deleted to free up storage capacity. You can directly click table keys to view options.

Photo album
All the photos are stored at photo album. The up and down keys are used to view the former or later photo.

Photo album options instructions
View: to view the photo;
Slideshow: loop play photos, of which times and speed can be set;
Edit: to change pixel and crop its dimension;
Send: send photos through MMS, Email, bluetooth etc.;
View mode: list mode or matrix mode is optional to view photos;
Use as: photos can be set as wallpapers, screen savers, greeting and off animation and incoming call pictures;
Rename: to rename a photo;
Delete: to delete a photo;
Storage place: the phone or memory card can be set.

Music player
To select and play music on the list stored at "My music" folder of the phone or memory card.

Play instructions: up function key: play, pause; down key: stop;
left and right keys: switch between the former one and later one;
Volume adjustment: numeric key "2" "8" to adjust volume;
Sound effect setting: sound special effect and bass boost are optional. Sound special effect provides playing effects such as off, equalizer, echo effect and stereo environmental audio.
Table setting: lyrics on or off;
Bluetooth setting: enter "music player"—list—option—setting—bluetooth setting, to enable or disable bluetooth stereo.

Recording
You can record files with formats of .amr, .awb, .wav.
Select "recording" to enter record interface, press up navigation key to start and pause recording, left selection key to continue, and right selection key to stop and ask about saving or not.
To play a record, click "list" to enter record files list and select "play" to play a record.

Recording options instructions:
New record: to make a new record
List: to view all records
Play: to play the stored records before entering options
Add: to continue recording stored records
Rename: to rename a record
Delete: to delete stored records
Use as: to use a record as profile mode ringtone
Send: to send a record through MMS, Email, bluetooth
Setting: to set record storage place, format and quality
NOTE: recording will not work during a data calling or GPRS connection.

**Video recorder**
You can record video clips of .3GP format.
To record a video clip. Select video recorder and press "OK" key to record or pause. After a pause, to press "OK" key to continue recording and to store it by pressing the lower right key, which will ask you to store it or not.

**Video options instructions:**
Video recorder setting: white balance, exposure compensation, night mode and flicker avoiding can be set;
Video setting: the quality, size, time, sound effect and compressed format of the video can be set;
Special effect place: video can be selected to be stored at the phone or memory card;
Default value reset: to select "OK" to reset default value.

**Video player**
Click video player to select and play stored video clips at file management;
Press "*" key to switch to landscape mode and reset portrait mode.

**Video player instructions:**
Play: to play an appointed video clip;
Rename: to rename a video clip;
Delete: to delete an appointed video clip;
Delete all: to delete all the video clips at video player;
Storage place: to set storage place, the phone or memory card.

**FM radio**
Enter FM radio interface and listen it by earphone or speaker.
The down function key is to start and stop FM radio. When it is on, click up function key to enter automatic search mode and click left or right function key for automatic channel seeking, and press left or right function key directly for manual seeking.
NOTE: the earphone must be connected to ensure its effect when FM radio is enabled.

**FM radio options instructions:**
Channels list: convenient to select channels on the list;
Manual input: input preferred channels or go to appointed channels manually;
Automatic search: click "automatic search" to store all channels to the list directly;
Setting: on/off of background play, player appearance select, on/off of the phone speaker.

**Chapter Thirteen  Network Service**

The network service means WAP service and network service provided by SIM card provider. You should ensure that the needed network service function has been enabled before use.

International network service
Home page: to log in home page. Home page is the set WAP site at the activated connection setting. The preset default site will be used if your specific setting is not set.
Bookmark: open bookmarks list; select one to view, add, edit, set mainpage or delete the bookmark etc.;
Network history: the function will record the websites you viewed;
Stored webpages: stored webpages;
Input a website: to input a WAP site;
Service inbox: to store messages from servicer;
Setting: to set web browsing. The network provider should be set firstly before you use GPRS network;
NOTE: GPRS service is network dependent which is available when it is enabled and at coverage area.

**Date account**
GSM data
Select one to enter:
Account name: name of the account, revisable;
Number: number of the account;
User ID: account name of dialup servicer (not WAP gateway);
User password: password of dialup servicer (not WAP gateway);
Line form: imitated or digital;
Speed: proper transmission speed;
Main DNS address: to input relative address;
Secondary DNS address: to input relative address.

**GPRS data**
Select one to enter:
Account name: name of the account, revisable;
GPRS connection point: to input cmwap or cmnet;
User ID: account name of dialup servicer (not WAP gateway);
User password: password of dialup servicer (not WAP gateway);
Identification type: enipherment method for identification.

**Chapter Fourteen  intercom**
Intercom knowledge:
TX: it means transmitting frequency, which must be consistent with the RX value of the opposite, or the opposite can not receive it. For example, when GWB is 12.5K, its mantissa must be 125 or its integral multiples; its frequency range should be 400.1~469.9875MHz.
RX: it means receiving frequency, which must be consistent with the TX value of the opposite, or you can not receive it. For example, when GWB is 12.5K, its mantissa must be 125 or its integral multiples; its frequency range should be 400.1~469.9875MHz.

SQ value: it means squelch level, of which level and electrical level rise along with numbers, indicating a stronger squelch control ability of less interference from noise or other irrelevant signals and little noise, while less easy to receive needed useful feeble signals, vice versa. Level "0" is the lowest level which is of no squelch control function.

Continuous Tone Controlled Squelch System(CTCSS): it means the continuous voice control squelch control system, commonly referred to as subaudio frequency, which is the technology of voice frequency transmission that voice frequency signals attached with lower frequency(67Hz-250.3Hz). It is called as subaudio frequency in that its frequency range is lower than standard frequency. After received signals intermediate frequency demodulated by intercom, the subaudio frequency signals are filtered, shaped and input into CPU to be compared with the set CTCSS frequency and to enable mute or not. If the set values differ, you can not listen to the opposite.

Gain Band Width(GBW): generally there are two kinds that one is 12.5KHZ, and other 25KHZ, indicating the frequency interval between every channel.

Power: it can be divided into high and low powers, of which low transmit frequency is used at short distance, about 0.5W and electricity savable; while high power about 1W.

Volume: to adjust intercom volume.

Interface instructions:
Press down navigation key to enter intercom interface(the words color displayed green now), or enter main menu and click intercom icon to enter it. Remember to close bluetooth firstly before enabling intercom. Press up and down navigation keys to adjust intercom volume. Press down intercom key to enter send status while loosen to receive status.
Press center navigation key to enter quick setting mode(the words color displayed white now):
Press numeric keys to edit frequency and left and right keys to move cursor.(NOTE: the input frequency range is 400.1~469.9875MHz)
Press "*" key to switch high/low transmit power;
Press "+" key to switch GBW;
After setting and press navigation OK key, and the words color becomes green after one second. Setting done.
Press "options" to set:
Power adjustment: to select high/low transmit power. The default value is high power;
Channel list: to set channel 1-20. Enter channel list and press left key option to edit it, and input relevant value(400.1～469.9875) and press left key to save it.
Manual input SQ: to adjust intercom SQ, with numeric 1-8 optional.
CTCSS: to eliminate interference signals of same frequency, with the default value of 0.

**Background running:**
Press right selection key on intercom interface to switch to background running. Thus you can dial a call or send a message while keep intercom running without exiting.
When the intercom is background running, an intercom symbol will be at the screen status bar, which indicates that the intercom is still running. If you need to close it, please reenter intercom interface to press power key to close it.

**Communication distance**
At open ground: 3-5KM(original antenna)
NOTE:

You shall use the original antenna when intercom working. The unproved, remoulded or those attached with accessories may be unreachable for designed distance, even damage your intercom. The intercom antenna can not be removed at will or it will burn out power tube(power amplifier) while transmitting.
While the intercom is transmitting, keep it vertical and keep a 2.5-5cm distance between microphone and mouth. While transmitting, keep the intercom at least 2.5cm from head or body. The intercom function should be used at proper place. Please do not touch antenna area if unnecessary.
Under potentially explosive atmospheric environment or occasions, please close down your intercom unless it is certificated explosion proof. Under such environment the electric spark will lead to explosion or fire hazard.
The battery power consumption will be large if the phone is at intercom status;
The phone communication is prior to intercom. However, incoming calls will not be answered if intercom is at sending status.

### China Public Channels Frequency

<table>
<thead>
<tr>
<th>Channel No.</th>
<th>Center frequency (MHZ)</th>
<th>Frequency No.</th>
<th>Center channel (MHZ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>409.7500</td>
<td>11</td>
<td>409.8750</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>2</td>
<td>409.7625</td>
<td>12</td>
<td>409.8875</td>
</tr>
<tr>
<td>3</td>
<td>409.7750</td>
<td>13</td>
<td>409.9000</td>
</tr>
<tr>
<td>4</td>
<td>409.7875</td>
<td>14</td>
<td>409.9125</td>
</tr>
<tr>
<td>5</td>
<td>409.8000</td>
<td>15</td>
<td>409.9250</td>
</tr>
<tr>
<td>6</td>
<td>409.8125</td>
<td>16</td>
<td>409.9375</td>
</tr>
<tr>
<td>7</td>
<td>409.8250</td>
<td>17</td>
<td>409.9500</td>
</tr>
<tr>
<td>8</td>
<td>409.8375</td>
<td>18</td>
<td>409.9625</td>
</tr>
<tr>
<td>9</td>
<td>409.8500</td>
<td>19</td>
<td>409.9750</td>
</tr>
<tr>
<td>10</td>
<td>409.8625</td>
<td>20</td>
<td>409.9575</td>
</tr>
</tbody>
</table>

### Function Table

#### Basic Parameters

<table>
<thead>
<tr>
<th>Communication format</th>
<th>GSM850/900/1800/1900MHZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main screen dimension</td>
<td>2.0 QVGA 240*320 pixel</td>
</tr>
<tr>
<td>Main screen color</td>
<td>16,000,000 colors</td>
</tr>
<tr>
<td>Camera</td>
<td>2.0 mega pixel</td>
</tr>
<tr>
<td>Standby time</td>
<td>Max 500 hours</td>
</tr>
<tr>
<td>Call time length</td>
<td>Max. 11 hours</td>
</tr>
<tr>
<td>Dimension</td>
<td>120mm<em>55mm</em>24.4mm</td>
</tr>
<tr>
<td>Weight</td>
<td>134kg (battery, card excluded)</td>
</tr>
</tbody>
</table>

#### Basic Functions

- Message: SMS, MMS, bulk SMS

#### Intercom System

- PTT hardware intercom: 400MHZ all frequency intercom, 3-5km of communication distance at open ground

#### GPS System

- Multinational GPS navigation: Applicable at more than 70 countries
- GPS position: GPS position of 3m accuracy and track log function
- Sunrise and sunset: Sunrise and sunset time of any place worldwide

### Contacts

- 1000 sets of numbers
- Input method: Chinese and English input methods
- Bluetooth: V2.0 stereo transmission, data transmission
- JAVA: JAVA2.0 applications
- WAP: WAP2.0 service
- Ringtone: Ringtone, vibration and mute
- Additional functions: Alarm clock, calendar, calculator, schedule, stopwatch
- Multimedia functions: Audio and video of MP3, MP4 format play, sound record of AMR format, video record/play of 3GP format.
<table>
<thead>
<tr>
<th>Time zone and time</th>
<th>Automatic display of time zone and exact time of any place worldwide, the phone timing according to the exact time provided by GPS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sensing Device</strong></td>
<td></td>
</tr>
<tr>
<td>Compass</td>
<td>Electronic compass</td>
</tr>
<tr>
<td>Air pressure, altitude, temperature</td>
<td>air pressure, altitude, relative height, temperature display</td>
</tr>
<tr>
<td>Weather forecast</td>
<td>Short term weather forecast</td>
</tr>
<tr>
<td><strong>Triple proof structure</strong></td>
<td></td>
</tr>
<tr>
<td>Dustproof, waterproof</td>
<td>IP57 level</td>
</tr>
<tr>
<td>falling protective</td>
<td>2m</td>
</tr>
<tr>
<td>rolling resistant</td>
<td>1.5T truck through rolling</td>
</tr>
<tr>
<td><strong>Storage Capacity</strong></td>
<td></td>
</tr>
<tr>
<td>Phone memory</td>
<td>ROM: 1GB RAM: 512MB</td>
</tr>
<tr>
<td>Outer memory</td>
<td>T-FLASH supported, max.16GB</td>
</tr>
<tr>
<td><strong>Standard Accessories</strong></td>
<td></td>
</tr>
<tr>
<td>Battery</td>
<td>1400mAh</td>
</tr>
<tr>
<td>Travel charger</td>
<td>110-220V travel charger</td>
</tr>
<tr>
<td>Manual charger</td>
<td>5V outdoors manual charger</td>
</tr>
<tr>
<td>Car charger</td>
<td>12V car charger</td>
</tr>
<tr>
<td>Earphone</td>
<td>Noisecancelling earphone</td>
</tr>
<tr>
<td>Data line</td>
<td>12PIN data/charging line</td>
</tr>
</tbody>
</table>