



# **SED GPH-610R**

## **User Manual**







---

## Contents

WARNING.....	- 7 -
CHAPTER 1 GETTING STARTED .....	- 8 -
SAFETY PRECAUTIONS.....	- 8 -
SPECIFIC ABSORPTION RATE (SAR) INFORMATION .....	- 10 -
ENVIRONMENTAL CARE .....	- 11 -
PRODUCT DISPOSAL .....	- 12 -
YOUR HANDHELD .....	- 15 -
DESCRIPTION OF ICONS .....	- 17 -
PREPARATIONS.....	- 20 -
Installing the SIM card and battery .....	- 20 -
Charging the battery .....	- 23 -
CHAPTER 2 BASIC OPERATIONS.....	- 24 -
2.1 SWITCHING ON/OFF .....	- 24 -
2.2 HANDHELD MODES .....	- 25 -
Standby Mode .....	- 25 -
Call Mode .....	- 25 -
2.3 BASIC CALL FUNCTIONS .....	- 25 -
Making a Call.....	- 25 -
Answering a Call.....	- 27 -
Ending a Call .....	- 29 -
Rejecting a Call .....	- 29 -
Adjusting the Volume.....	- 29 -

---

Making an Emergency Call.....	- 29 -
Viewing Missed Calls.....	- 29 -
Menu during a Point-to-Point call .....	- 31 -
Managing Multiple Calls .....	- 31 -
2.4 GSM-R OPERATIONS .....	- 32 -
Initiating a point-to-point call.....	- 32 -
Initiating a group call.....	- 32 -
Initiating a broadcast call .....	- 32 -
Initiating a railway emergency call.....	- 33 -
Ending a group call.....	- 33 -
Ending a broadcast call .....	- 33 -
Exiting a group call .....	- 33 -
Exiting a broadcast call.....	- 34 -
Joining a group call/broadcast call .....	- 34 -
Occupying uplink during an ongoing group call.....	- 35 -
Receiving a point-to-point call in an ongoing group call or broadcast call.....	- 35 -
Receiving a group/broadcast call during a group/broadcast call .....	- 36 -
Receiving a group/broadcast call in an ongoing point-to-point call .....	- 37 -
Receiving a point-to-point call in an ongoing point-to-point call .....	- 37 -
Receiving multiple calls in a call at the same time .....	- 37 -
Automatic high-priority answering .....	- 37 -
Railway emergency calls .....	- 37 -
Operation of function numbers .....	- 38 -
CHAPTER 3 INPUT MODES.....	- 39 -

Input Language Support .....	- 39 -
Switching Between Input Modes .....	- 39 -
Word input .....	- 39 -
Alphabet input.....	- 40 -
Switching between abc/ABC .....	- 41 -
Number input.....	- 41 -
Sign .....	- 41 -
CHAPTER 4 MENU .....	- 42 -
4.1 USING A MENU.....	- 42 -
Selecting a menu through direction keys.....	- 42 -
Entering a menu by shortcut.....	- 42 -
4.2 GSM-R .....	- 42 -
Group calls .....	- 42 -
Maintenance .....	- 43 -
4.3 IDENTITY .....	- 47 -
4.4 NAMES.....	- 51 -
View .....	- 52 -
Write SMS.....	- 53 -
Add Entry .....	- 53 -
Storage Status.....	- 53 -
My vCard .....	- 53 -
My Number .....	- 53 -
Copy All .....	- 53 -
Delete All .....	- 54 -

---

4.5 SMS.....	- 54 -
Write Message.....	- 54 -
Inbox.....	- 55 -
Outbox.....	- 57 -
Archive Box.....	- 57 -
Template.....	- 58 -
4.6 SETTINGS.....	- 58 -
Broadcast.....	- 59 -
Calls.....	- 59 -
Missed Calls.....	- 60 -
Received Calls.....	- 60 -
Dialed Calls.....	- 60 -
4.7 TOOLS.....	- 61 -
Calendar.....	- 61 -
Calculator.....	- 63 -
Alarm Clock.....	- 63 -
Record.....	- 64 -
USB Mode.....	- 64 -
STK.....	- 65 -
Version Check.....	- 65 -
Working Alone (Optional).....	- 65 -
Bluetooth Setup (Optional).....	- 65 -
RF Monitoring.....	- 66 -
Cell Forcing (Optional).....	- 66 -

---

Cell Lock (Optional) .....	- 67 -
4.8 SETTINGS.....	- 67 -
Profiles.....	- 67 -
Display .....	- 68 -
Tone Setup .....	- 70 -
Security Setup .....	- 70 -
Phone Setup .....	- 71 -
Call Setup .....	- 73 -
Data Service .....	- 75 -
4.9 DOCUMENT .....	- 76 -
Picture .....	- 76 -
Video .....	- 77 -
Sound .....	- 77 -
Record .....	- 78 -
TF-card space .....	- 78 -
TF card Format.....	- 78 -
4.10 CAMERA.....	- 79 -
CHAPTER 5 REFERENCE INFORMATION.....	- 81 -
ACCESS PASSWORD .....	- 81 -
BATTERY USE.....	- 82 -
CAREFUL MAINTENANCE .....	- 83 -
CAUTION .....	- 84 -
GLOSSARY .....	- 84 -
TROUBLESHOOTING .....	- 87 -



## Warning

Copyright © 2014

Shenzhen SED Wireless Communication Technology Co., Ltd.

All rights reserved.

No part of this manual may be reproduced in any form or by any means without the written consent of Shenzhen SED Wireless Communication Technology Co., Ltd.

This manual describes the features and functions of the SED GPH-610R handheld only. Due to product version upgrades or other reasons, this manual is subject to change without notice. Unless otherwise stated, this manual serves only as an instruction manual. Any statements, information, and suggestions in this manual do not constitute a warranty of any kind, explicit or implied.

Version: C

## Chapter 1 Getting Started

The wireless device described in this manual runs on GSM-R networks. For more information about applicable networks, consult your service provider.

Your handheld is a low-power radio transmitter and receiver. It receives and transmits radio frequency signals during use. When you use the handheld for communication purposes, the system for call processing controls the transmitted power level of your handheld. The maximum operating temperature of your handheld is 40°C.

### Safety Precautions



Read the following safety precautions to avoid danger and comply with the law.

#### Children:

Store your handheld in a safe place beyond the reach of children. Do not let children play with

the handheld or its accessories. Improper use by children may damage the handheld or its accessories and cause injuries. Children may also swallow removable parts of the handheld, such as the SIM card and battery.

#### Environmental protection:

Do not dispose of the handheld or electronic accessories, such as the battery charger, headphone, and battery, with organic waste. Observe the local law, and recycle all parts of the product.

#### Traffic safety:

Strictly observe the local law and regulations governing the usage of handheld when driving. If the local law allows you to use a handheld while driving a vehicle, follow these instructions:

- Focus on steering the vehicle and pay attention to traffic;
- Use the hands-free mode to make calls;
- If driving conditions are not ideal, stop the

vehicle at the roadside before using the handheld.

Do not place your handheld above or near the airbag when it is unfolded, as the expanded airbag generates a strong external force to cause injuries.

Consult your automobile manufacturer to ensure that electronic devices used in your vehicle are not affected by radio waves.

**Public places:**

Switch off your handheld in public places if required.

**Airplanes:**

Comply with the law. The use of handhelds on airplane interferes with flight controls. Switch off your handheld before boarding.

**Near an explosion site:**

To avoid interfering with demolition works, switch off your handheld at demolition sites or in places where it is necessary to switch off bi-directional radios. Observe rules and regulations.

**Near dangerous articles:**

Switch off your handheld at gas stations or near

dangerous substances, such as fuel and chemical reagents.

**Hospitals:**

Switch off your handheld in hospitals and near medical devices marked with signs forbidding the use of handhelds.

**Pacemakers:**

Handhelds will interfere with pacemakers, please use them according to the following instructions:

- Keep a distance of at least 15 cm between the handheld in standby mode and a pacemaker;
- Do not place the handheld in a chest pocket;
- Use the ear the furthest away from the pacemaker to answer calls;
- Switch off your handheld if you feel uncomfortable.

**Hearing aids:**

If you use a hearing aid, consult your doctor and hearing aid manufacturer to check if your hearing aid is sensitive to interference from handhelds.

**Interference:**

All handhelds may suffer from interference, thus affecting performance.

**Accessories and batteries:**


Only use designated accessories and batteries. Improper use of battery may cause danger. Use chargers approved by Shenzhen SED Wireless Communication Technology Co., Ltd.

**Note:** *When inserting the battery charger to charge the handheld, do not remove the battery from the handheld or insert the battery charger into a handheld without a battery; otherwise, the handheld might be damaged.*

Do not short circuit the battery. If a metal object contacts the exposed electrode of the battery, short-circuiting occurs, which can cause damage or injuries. To prevent accidental leakage, store charged batteries properly. Take care not to place the battery in your pocket, wallet or a bag with other metal items.

**Emergency calls:**

Ensure that the handheld is switched on in a service area. Dial the emergency number in

standby mode. Then press . Inform the operator of your location. Do not end the call without instruction.

**Temperature range:**

The temperature range for using the handheld is -20°C to +55°C and the ambient temperature for adapter operation is 0°C to +40°C (Relative Humidity 20% to 80%).

**Voltage range:**

The voltage range of the handheld battery is 3.6 V to 4.2 V.

**Altitude:**

It is recommended that the handheld be used at an altitude from -100 m to 2500 m at minimum.

**Specific absorption rate (SAR) information**

THIS PRODUCT MEETS THE  
INTERNATIONAL RECOMMENDATIONS FOR  
EXPOSURE TO RADIO WAVES

Your handheld is a radio transmitter and receiver. It is designed and manufactured to not exceed the limits for exposure to radio frequency (RF) energy defined by the

international standards. These recommendations have been established by the International Commission on Non-ionizing Radiation Protection (ICNIRP) that forecasts a substantial safety margin for assuring the protection for all persons, regardless of age and health. The exposure recommendations for handhelds use a measurement unit known as the SAR. The SAR limit recommended by the ICNIRP for the handheld used by the general public is **2.0 W/kg averaged over ten grams of tissue**.

While there may be differences between the SAR levels of various handhelds and at various positions, they all meet the international protection standards for exposure to radio waves.

The highest SAR value for the GPH-610R handheld when tested for compliance against the standard is 0.652 W/kg for ICNIRP recommendation.

Tests for SAR have been conducted to use recommended operating positions with the handheld transmitting at its highest certified

power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR levels of the handheld while operating are generally below the maximum SAR value. This is because the handheld is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to the base station antenna, the lower the power output.

For limiting radio wave exposure, it is recommended to reduce the handheld call duration or use a headset. The purpose of those precautions is to keep the handheld away from the head and the body.

### Environmental care

Observe local regulations regarding the disposal of packaging materials, exhausted batteries and old handhelds and promote their recycling. SED Wireless has marked the battery and packaging with standard symbols designed to promote recycling and the appropriate disposal of waste.



Do not dispose of the battery with the general household waste.



The packaging material is recyclable.



The plastic material is recyclable (This symbol also identifies the type of plastic).

### **WEEE Marking: "Information to the Consumer"**

#### **Product disposal**

The product is designed and manufactured with high quality materials and components, which can be recycled and reused.



When this crossed-out wheeled bin symbol is attached to a

product, it means the product is covered by the European Directive 2002/96/EC.

Please be aware of the local collection regulations for electrical and electronic products.

Please act according to your local rules and do not dispose of old products with the normal household waste. The correct disposal of old products will help prevent potential negative consequences for environment and human health.

This device may contain commodities, technologies or software subject to export law and regulations from the US or other countries, which you must follow.

**Declaration of Conformity**

We,

**Shenzhen SED Wireless Communication Technology Co., Ltd.**  
**11/F, SED Science and Technology Building, Nanshan District,**  
**Shenzhen 518000**  
**China**

declare under our sole responsibility that the product

**SED GPH-610R**

R-GSM 900/DCS 1800

is in conformity with the following standards:

SAFETY: EN 60950-1:2006+A11

HEALTH: EN 50360:2001

EMC:       EN 301 489-1 V1.8.1:2008  
              EN 301 489-7 V1.3.1:2005

SPECTRUM: EN 301 511 V9.0.2:2003

We hereby declare that the above named product is in conformity with the essential requirements of Directive 1999/5/EC.

The Conformity assessment procedure referred to in Article 10 of Directive 1999/5/EC has been followed with the involvement of the following Notified Body or Bodies:

TÜV Rheinland LGA Products GmbH  
Tillystraße 2  
90431 Nürnberg

The product is marked with CE and the Notified Body number according to the Directive 1999/5/EC:

**CE 0197**

**Date: 20 May 2014**

**Authorization:**

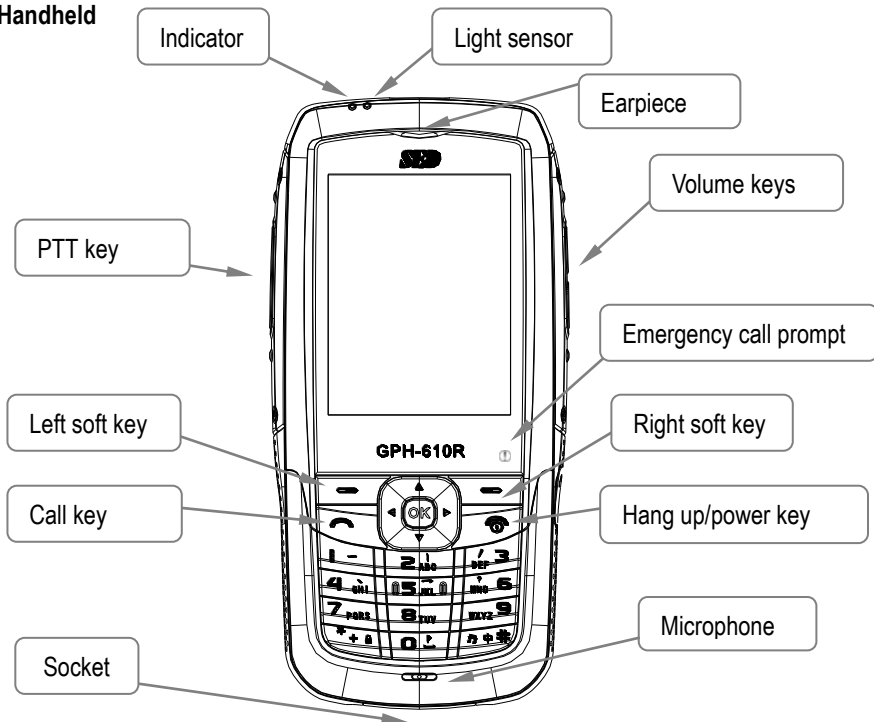
Signatu

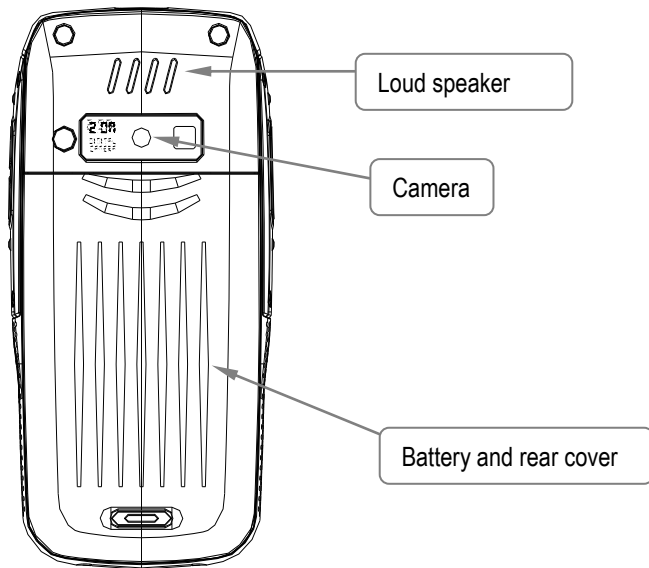


Name: Frank HE

Position: Vice President


























**Your Handheld**



**Note:** The pictures in this manual are for function illustration purposes only and may differ from your handheld.

## Description of Icons

	<b>Signal strength:</b> The number of strips indicates the signal strength in ascending order.
	<b>Network not found:</b> The handheld is out of network coverage.
	<b>Manual select mode:</b> The manual network selection mode is active.
	<b>Battery capacity:</b> The number of grids indicates capacity.
	<b>Clock:</b> Setting an alarm displays this icon on screen.
	<b>Vibration mode:</b> Incoming calls (and SMS) prompt the handheld to vibrate.
	<b>Mute mode:</b> No tone will sound upon an incoming call (and SMS).
	<b>Ring and vibration:</b> Incoming calls (and SMS) prompt the handheld to ring and vibrate.
	<b>New message:</b> Indicates a new text message. The icon blinks when storage capacity is full.
	<b>Headphone mode:</b> The handheld is set to use headphones.
	<b>Call divert:</b> The call divert function is enabled.

	<b>Roaming:</b> The handheld is in roaming mode.
	<b>Power on attaching:</b> GPRS will be attached when powered on.
	<b>GPRS attached:</b> GPRS is attached successfully.
	<b>GPRS activated:</b> The GPRS function has been activated and data is being transmitted.
	<b>GPRS error:</b> Errors occur in GPRS dialing or state.
	<b>No ASCII feature:</b> The current network does not support ASCII features.
	<b>Function number synchronization:</b> A function number requires synchronization.
	<b>Bluetooth:</b> Bluetooth device powers up.
	<b>Bluetooth:</b> Bluetooth device is connected successfully.
	<b>GPS Open but has not found the star</b>
	<b>GPS Open and has been found the star</b>
	<b>Working alone alarm has been open</b>



Cell lock or Cell forcing has been open

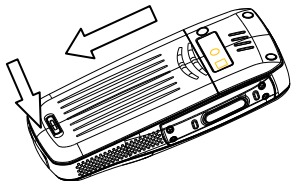
## Preparations

Insert a valid SIM card before using the handheld. SIM cards are provided by network service providers.

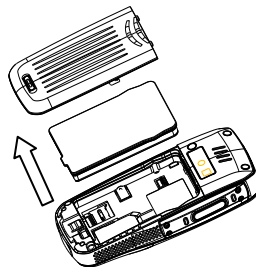
**Note:** *Keep SIM cards beyond the reach of children.*

### Installing the SIM card and battery

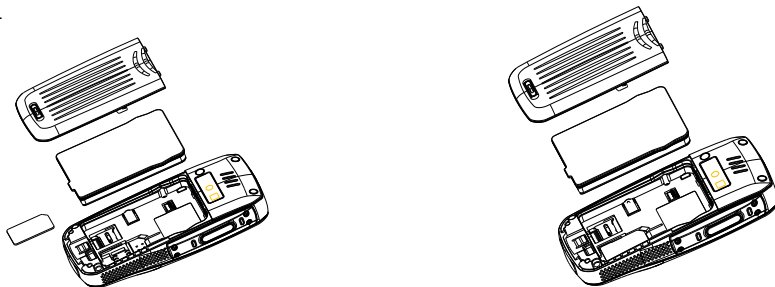
1. Press the button on the rear case, and then slide the rear case downward.



2. Take off the rear case and battery.

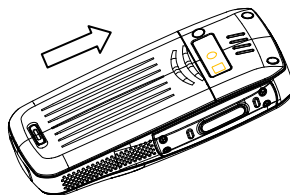
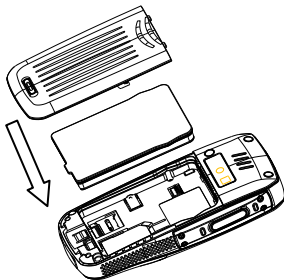


3. Ensure that the gap in your SIM card and the gap for the SIM card slot point in the same direction and that the side with a metal part faces down. Then slide the SIM card into the SIM card slot.



**Note:** The SIM card and its contact may be easily damaged due to scratching or bending; therefore, use, insert, and remove the SIM card carefully.

4. Insert the battery into the space, position the rear case on the back of the handheld, and push it upward to attach to the handheld.



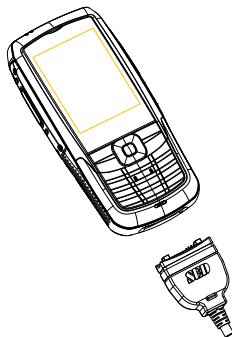


## Charging the battery

Using a travel charger:

Connect the charger to the socket at the bottom of the handheld. Ensure that the side marked with "SED" on the charger is consistent with the front of the handheld. Plug the charger connector into the power socket.

After the handheld indicates that charging is complete, remove the charger from the handheld and then remove the other connector from the power socket.






## Chapter 2 Basic Operations

### 2.1 Switching On/Off

#### Starting up

To switch on your handheld:

- Press and hold  for about three seconds to switch on the handheld. If the battery is low, the handheld automatically switches off after being switched on. Then change or charge the battery. The handheld performs a self-test. This can take several seconds. If no SIM card is inserted in your handheld, a screen prompt is displayed requesting you to insert a SIM card. After you insert a SIM card, the handheld automatically checks whether the SIM card is valid.
- If your SIM card is set with PIN check, enter the PIN and press  or .

After the PIN check succeeds, your handheld will connect to the network.

**Note:** If you enter incorrect PINs three times consecutively, the screen displays the message that the PIN is locked. You need to enter your personal unlock code (PUK).

After the handheld finds a network, you will see the network name, signal strength, time, date, and standby image on the screen.

#### Switching off

- Press and hold  slightly for about five seconds to switch off your handheld.

**Warning:** If you remove the battery when your handheld is in use, all unsaved information will be lost and the handheld or SIM card may be damaged.

Do not switch on your handheld when the use of a handheld is forbidden or can cause interference or danger.



## 2.2 Handheld Modes

### Standby Mode



Standby is the basic mode. After you switch on your handheld, the handheld enters standby mode. Here, you can

- View the present date and time, battery status, and ringing mode.

After you enter a phone number, you can

- Press  to dial the number or
- Press  to save the number in a phonebook.

When entering a menu, you can

- Press  or repeatedly press  to return to the standby mode.

**Note:** You can press the hang-up key to end a call. The screen will display that the call has ended and the handheld will automatically enter standby mode.


### Call Mode

When you make or answer a call, the handheld enters call mode.


## 2.3 Basic Call Functions

### Making a Call

Make a call as follows:



- 1 In standby mode, enter a phone number.  
Press  to call the number.

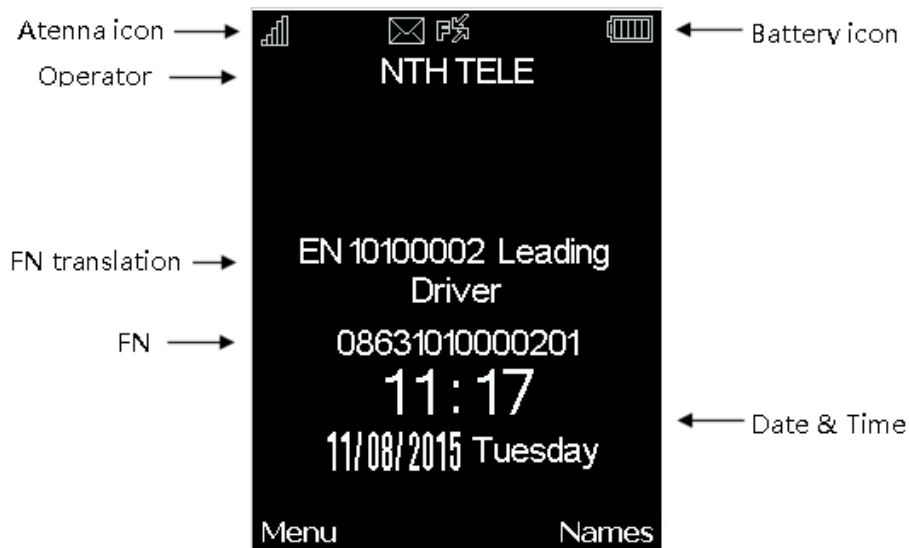
**Note:** If the connection fails, a call failure message is displayed. The dialed phone number is automatically saved in the call log.

- 2 In standby mode, you can press  to access a list of dialed calls.

### Making an International Toll Call

Enter the country code, area code, and phone number (without spaces), and then

- Press  to make an international toll call. Dial “+” when entering the country code, and hold  to input digits.






## Using the Phonebook to Make Calls

Select a phone number from the phonebook to make a call, and then

- Press  to dial the number.

## Re-dialing the Last Number








In standby mode,

- Press  twice to dial the number you dialed last time.  
The last dialed number is automatically saved in the handheld.
- Press  to access a list of dialed numbers, in the number list, you can select a number, and press  to dial the number.

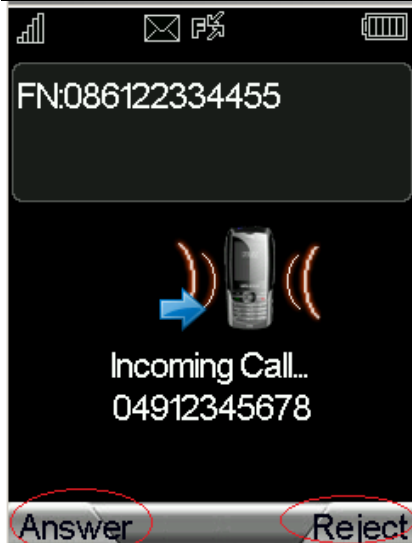
**Note:** Your network service provider has set one or multiple emergency call numbers (for example, 112). You can call these emergency numbers even if no SIM card is inserted in your handheld.

## Answering a Call

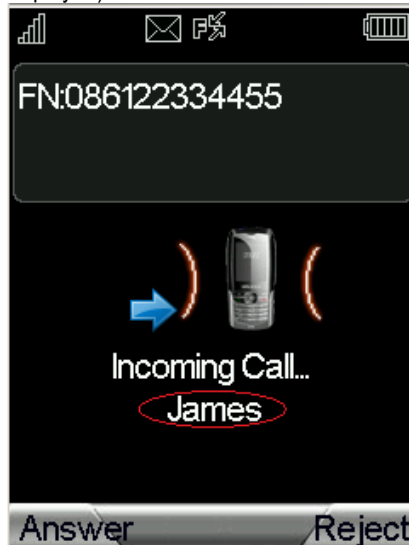
When receive an incoming call, the handheld displays information about the call. If you have subscribed to the incoming number display function (contact your network service provider for commissioning), the incoming number (or the name if stored in the phonebook) as well as the function number are displayed on the screen of your handheld. Then

- Press  to answer the call which is the default answer mode.  
To change the answer mode, choose **Menu>Settings>Call Setup>Answer Mode**, and select **Send Key** or **Any Key**.
- Press  or  to answer a call if the answer mode is set to **Send key**.
- Press any key except , , ,  to answer an incoming call if the answer mode is set to **Any Key**.

**Note:** At present, the handheld supports call answering by any key for calls in standby mode.




During the call, the duration of the call and the caller number are displayed on the screen (if the number is in your phonebook, the name is displayed).





**Note:** An incoming call will interrupt any other menu operation or function.





## Ending a Call

- Press  To end a call.  
After the call ends, the duration of the call is displayed on the screen.

## Rejecting a Call

You can press  or  to reject an incoming call.

## Adjusting the Volume



- Press  and  on the right side of the handheld to adjust the volume in standby mode, and on the time counter or number entry interface during a call.
- Press  on the time counter interface to enter the hands-free mode during a call. The loud speaker will become active and emit a sound. The word **Handsfree** will be displayed on the screen.
- Press  again to exit the hands-free mode.

**Note:** After the handheld enters the hands-free mode, the speaker may be loud. Therefore, do not place the handheld near your ear before pressing the hands-free key.


## Making an Emergency Call

### When no SIM card is inserted

Switch on your handheld. When the screen prompts you to insert a SIM card,

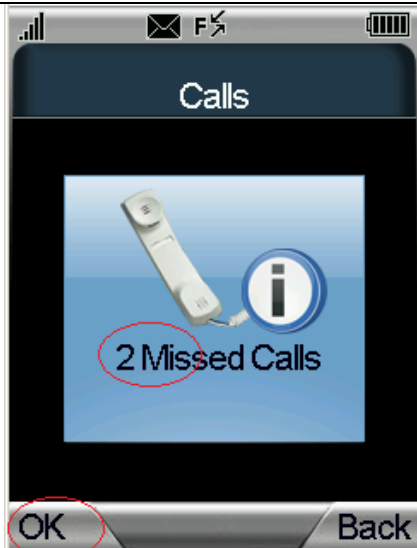
- Press  or  and then make the emergency call.


### When a SIM card is inserted



- In standby mode, enter the emergency number (e.g. 112) and press .

## Viewing Missed Calls

If you do not answer an incoming call, the missed call number is automatically saved in a call list.



- Choose **Menu> Calls > Missed calls** and open the list. You can press  to directly dial the number in a missed call. When you miss a call, the number of missed calls is displayed on the screen in standby mode.

- Press  in the list of missed calls to display details about each missed call, including the phone numbers of missed calls, and the time of the last three missed calls from a single number and the missed call times.
- Press  to display the following menu to maneuver records on the list interface:

**1 View:** View details.

**2 Call:** Calls this number.



**3 Write message:** Writes a message to this number.

**4 Save to Phone:** Saves this number in the phonebook.

**5 Edit and Dial:** Edits this number and then dials the new number.


**6 Delete:** Deletes this call record.

**7 Delete All:** Deletes all missed call records.

Press  to confirm the operation, or press  to cancel the operation.




## Menu during a Point-to-Point call

During an ongoing call, you can press  to enter a menu. This menu contains options: **Hold/Unhold**, **Phonebook**, **SMS**, **Mute/Unmute**, **Cell Forcing** (Optional) and **Cell Lock** (Optional).

## Managing Multiple Calls

Before using this function, you may need to obtain this service from the service provider. During an ongoing call or when a call is held, you can make a second call.

When you make a second call during an ongoing call, the first call is held, and the handheld calls the second number. If the second call is answered, the numbers of the ongoing call and the held call are displayed on the screen. You can follow the screen prompt and press  to access the following menu:

**1 Swap Calls:** Swaps the ongoing and held calls.

**2 Drop Active:** Drops the current ongoing call.

**3 Drop Hold:** Drops the held call.

**4 Drop All:** Drops all ongoing and held calls.

**5 Build Multi-Call:** Sets up triple calls in teleconference mode.

When setting up a telephone conference, the operation menu will show two additional items:

**1 Split to Private Call:** Makes possible a private call with any party in this telephone conference.

**2 Drop Remote Party:** Hangs up the call of any party in this telephone conference.

## 2.4 GSM-R Operations

The GSM-R function is a dedicated function of this handheld, specifically designed and developed for railway-related services. It needs to be supported by the GSM-R network and a dedicated SIM card.


### Description

**Point-to-point call:** Indicates a point-to-point voice call.

**Group call:** A group call that allows multiple listeners but only one speaker at the same time. The user presses and holds the PTT key to occupy the right to speak, and releases the PTT key to stop speaking. The listener can press the PTT key to gain the right to speak when available. After successfully seizing the right to speak, the user can do so.

**Broadcast call:** A broadcast call is similar to a group call. Only the initiator of the call is allowed to speak, and does not need to hold the PTT key. Other users can listen to the call, but cannot gain the right to speak.

### Initiating a point-to-point call

In standby mode, you can input the phone number, short number or function number of the called party, and press  to initiate a call according to screen prompts. The last registered function number will be passed to the network by UUS1. Refer to the procedure for making a call in the basic call functions.

### Initiating a group call

In standby mode, you can input a group call number and press the call key. Your handheld will automatically prompt the call menu according to SIM card settings. You can initiate a group call by select the group call in the menu. You can also choose **Menu > GSM-R > Group Calls** and select **Group Call**.

### Initiating a broadcast call


In standby mode, you can input a broadcast call number and press the call key. Your handheld will automatically prompt the call menu according to SIM card settings. You can

initiate a broadcast call by selecting the broadcast call in the menu. You can also choose **Main Menu > GSM-R > Group Calls** and select **Broadcast**.

**Note:** The screen will not prompt you the menu for selecting group/broadcast calls if an incorrect or inactivated group/broadcast call number is inputted in standby mode. Then you cannot initiate a group/broadcast call.

### Initiating a railway emergency call





In standby mode, you can

- Press and hold the Right soft key  to initiate a railway emergency call. The screen will prompt you a confirmation message before initiating the railway emergency call.
- Press the PTT key to confirm it, which is the only way to initiate a railway emergency call.

### Ending a group call


The initiator of a group call can end the group

call as follows:

Press  during the ongoing group call. The screen informs you that  means 'Close', and  means 'Leave'. Press  to end the group call.

**Note:** The dispatcher can also end a group call. Others except the group call initiator can exit a group call but cannot end the group call.





### Ending a broadcast call

- Only the initiator of a broadcast call can end the broadcast by directly pressing .


**Note:** The dispatcher can also end a broadcast call. Others except the broadcast call initiator can exit a broadcast call but cannot end the broadcast call.

### Exiting a group call

The initiator of a group call can exit the group call as follows:

- Press  during the ongoing group call. The screen informs you that  means 'Close', and  means 'Leave'. Press  to exit the group call.


The recipients of the group call can

- Press  to exit the group call.

**Note:** Users cannot exit certain high-priority group calls.

### Exiting a broadcast call

The recipients of the broadcast call can

- Press  to exit the broadcast call.

**Note:** Users cannot exit certain high-priority broadcast calls.



### Joining a group call/broadcast call

You can join a group call or broadcast call in the following ways:

- 1 When you receive the alert tone for a group call or broadcast call, you can join the call.

2 During a group or broadcast call, you can enter the number of the group call or broadcast call in standby mode. The handheld automatically joins the group call or broadcast call.

### **Occupying uplink during an ongoing group call**

During a group call, the screen prompts you to



- Press the PTT key if the right to speak is available. In this case, you can hold the PTT key to gain the right to speak. If you successfully gain the right to speak, the handheld prompts you to speak. In this case, you can address the group.
- If you release the PTT key, you will resume listening only, and the previous listeners will be indicated by a Roger beep. If no prompt for speaking is displayed on the screen, you can only listen to the group call.

**Note:** You cannot occupy the uplink of an


*ongoing broadcast call.*

### **Receiving a point-to-point call in an ongoing group call or broadcast call**

When you receive a point-to-point call during a group or broadcast call, the handheld notifies you that you have a new paging message.

- Press  to return to the standby mode to wait for the alert tone message of this paging message, or press  to ignore it.

You may also

- Press  to wait for the alert tone message of this paging message.

Before this:

If you have the right to speak in a group call, release this right and exit the group call.

If you are a listener during a group call, exit the group call.

If you are the initiator of a broadcast call, end the broadcast call.

If you are the recipient of a broadcast call, exit the call temporarily.

After viewing the alert tone message of a new point-to-point call,

- Press  to answer this call or press  to reject the call.

After the current call is rejected or the call ends and if the previous group call or broadcast call is not completed, you will automatically join the previous group or broadcast call.

**Note:** If the wait for the new point-to-point call message times out, the current call is regarded as having ended. If the priority of the incoming point-to-point call is at a high level, you will automatically exit the current group call or end the current broadcast call and return to the standby mode to wait for the alert tone of this point-to-point call. In this case, you can choose to answer or reject this call. If the priority of the ongoing group call or broadcast call is at a certain level, you will not be able to answer the point-to-point call.

## Receiving a group/broadcast call during a group/broadcast call

If you receive the alert tone for a new group call or broadcast call while another is in progress, you can

- Press  to reject the new call
- Press  to answer the new call.

Before answering the new call:

If you have the right to speak in the previous group call, you will release the uplink and exit that group call.

If you are a listener in the previous ongoing group call, you will exit that group call.

If you are a recipient of the previous broadcast call, you will exit that broadcast call.

If you are the initiator of the previous broadcast call, you will close that call.

## Receiving a group/broadcast call in an ongoing point-to-point call

If you receive the alert tone of a group call or broadcast call during an ongoing point-to-point call, you can

- Press  to reject the new call
- Press  to answer the new call.

## Receiving a point-to-point call in an ongoing point-to-point call

Refer to the instructions on managing multiple calls in Basic Call Functions.

## Receiving multiple calls in a call at the same time

If you receive multiple calls in a call at the same time, you can choose to answer one of the calls through a list on the screen.


## Automatic high-priority answering

If the priority of a call received in idle mode meets automatic answering, your handheld automatically answers this call.

If the priority of a received call during an ongoing call is higher than that of an existing call and the received call has automatic answering priority, your handheld automatically answers the new call.


**Note:** In the call process, before automatically answering a call of high priority, the handheld handles the previous call according to the type of the previous call and whether you are the initiator of the previous call.

## Railway emergency calls

If railway emergency calls are allowed, you can just hold down the Right soft key  to make a railway emergency call on the standby interface.



### Operation of function numbers

In standby mode, you can directly enter the character string of a function number and then press  to register, de-register, interrogate, or forcibly de-register the function number. You can also choose **Identity** to perform operations related to the function number. The registered function number will be displayed on the idle screen. If more than one function numbers is registered, the last registered number will be displayed.



## Chapter 3 Input Modes

When using a handheld, you need to input text information from time to time. For instance, when you want to add a new phonebook, write a new message, or set a certain function, you need to use the correct input mode. The handheld will provide you with a proper input mode to fit the current language.

In German, the handheld provides several input modes:



- **Smart German:** You can enter German words in this mode.
- **German alphabet:** You can enter a single German alphabet in this mode.
- **Smart English:** You can enter English words in this mode.
- **English alphabet:** You can enter a single English alphabet in this mode.
- **123:** You can enter digits in this mode.
- **Sign:** You can enter signs in this mode.

### Input Language Support

This handheld supports English, German.

### Switching Between Input Modes

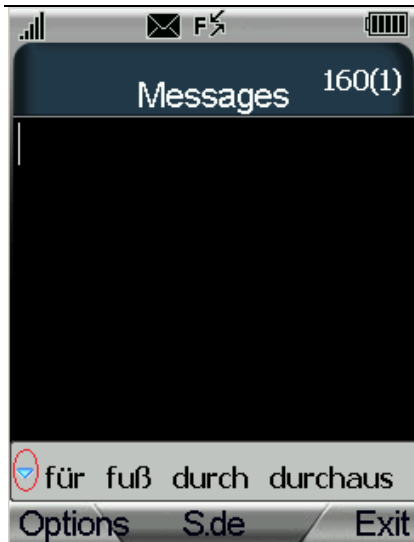
When you access text input, the current input mode is displayed at the bottom of the screen. You can

- Press  to switch to another input mode, or
- Hold  to select the upper case or lower case.

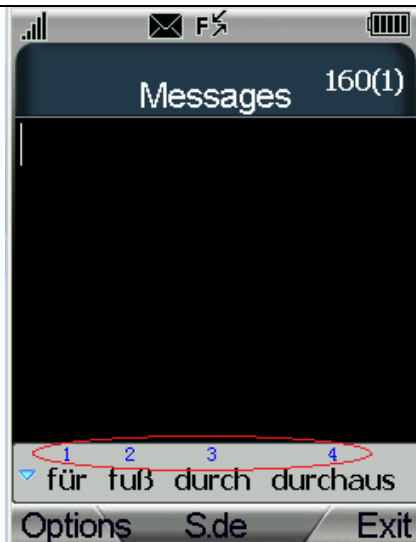
### Word input

In smart input mode, you can sequentially

- Press the key of a letter in a word, and the system searches the library and then displays the matched words.




You can press up or down button to view words, and press OK button to select words, and then use numeric button to input words.




### Alphabet input

The alphabet input mode has alphabets of different languages. After entering the alphabet input mode, press the corresponding number key for a letter to enter that letter. For instance,

press  once to enter A, press it quickly twice to enter B, and three times to enter C.

### Switching between abc/ABC

When using the alphabet input mode, hold  to switch between abc and ABC.


### Cursor roll

In text mode, you can

- Press a direction key to move the cursor.



### Number input

The number input mode is identified by "123". You can

- Press  to switch to the number input mode and enter numbers in a text area.
- Press the corresponding number key to enter the desired number.

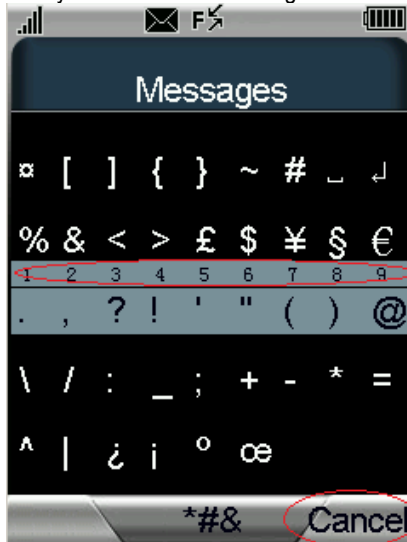
### Sign

You can enter signs in the main text area.

- Press  to switch to "\*&#" symbol input,
- Press  to exit. Method for entering


signs:

- Press the up or down key to select a line, and then press the corresponding number key to enter the desired digit.






## Chapter 4 Menu

### 4.1 Using a Menu

This handheld provides a series of functions to suit your needs. These functions consist of menus and sub-menus. You can press direction keys and  or use shortcuts to access the desired menus and sub-menus.

#### Selecting a menu through direction keys

1. In standby mode, press  to enter a main menu.
2. If the main menu contains certain sub-menus such as **SMS**, you can find the desired sub-menu by pressing direction keys and then press  to enter the sub-menu. If the sub-menu you choose contains sub-menus, repeat this step.

**Note:** Press  to return to the previous menu. This operation does not change menu

*settings. If a menu option is marked by a digit, you can also press the number key to select the option.*

### Entering a menu by shortcut

In standby mode, you can press shortcut keys to enter menus or sub-menus. To set shortcut keys, choose **Settings > Phone Setup > Shortcuts**.



### 4.2 GSM-R

GSM-R function is a dedicated function of this handheld specifically designed and developed for railway-related services. It requires support from the GSM-R network and dedicated SIM cards. This menu covers the following functions: making railway calls, managing special-purpose railway function numbers, and making and managing group or broadcast calls.



#### Group calls


You can use functions in this menu to make group or broadcast calls. You can also directly enter a number or string on the standby

interface and press  to initiate a call.


**1 Group Call:** This menu lists activated group call numbers provided by the SIM card. You can select one number and press  or  to initiate a call.

***Note:** During an ongoing group call, if the right to speak is available, you can press the PTT key to gain the right to speak. You can speak when the screen prompts you to do so.*

**2 Broadcast:** This menu lists activated group call numbers provided by the SIM card. You can select one number and press  or  to initiate a call.

**3 GRP ID Management:** This item lists the group call numbers provided by the SIM card. You can select or de-select one or multiple numbers according to the actual condition to facilitate selection during a call. To select a number, press the direction key to reach the number, press . The result of this operation depends on the permission settings

of your SIM card.

**4 BCT ID Management:** This item lists the broadcast numbers provided by the SIM card. You can select or de-select one or multiple numbers according to the actual status to facilitate selection during a call. To select a certain number, press the direction key to the number, press . The result of this operation depends on the permission settings of your SIM card.

***Note:** A group call number or broadcast call number not selected in Group ID management or Broadcast ID management is not displayed in Initiate a group call or Initiate a broadcast call. The group call or broadcast call will not be received. Therefore, operate with caution.*

## Maintenance

Maintenance settings are settings that are not normally accessible by the user in operation modes. These settings will normally be accessible only by authorized maintenance personnel.

**1 Train Emergency GC:** You can use this menu to make Emergency GC active/inactive in SIM card.

**2 Set PtP Call Priority:** You can use this menu to set the MO ptp call priority

**3 RF Monitoring:** After entering the menu **Tools->RF Monitoring**, you can look up network information on your handset. Generally, the first page on your handset displays the information of serving cell, and page 2 to page 7 display the information of its six strongest neighbor cells.

Support serving cell Serving Cell: BCCH, RX,  
C1, C2, CI, LAI, RQ, BSIC, RM, TX, TS,  
Neighbor Cells: BCCH (the Channel), RX,

C1, C2, FNO, QBO, BSIC, RM, TX.

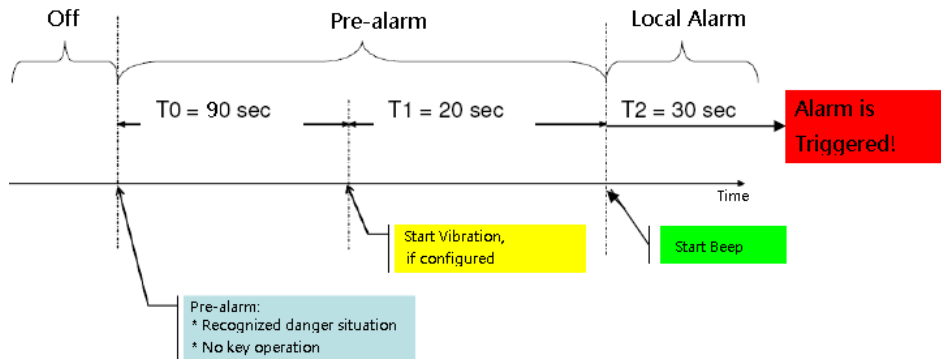
#### **4 Working Alone:**

You can process working alone related setting in this menu item.

ON/OFF: You can use this menu to open or close the working alone function, this option is set to OFF by default. An icon will be prompted in the standby interface if open this function.

##### **1) Automatic Alarming**

After opening the working alone function, the handset will automatically alarm when it detected the operator is in danger.



- (1) The handset will start pre-alarming once the handset has detected the operator is in danger. The pre-alarm state has two phases: t0 and t1. There is no visual indication when the pre-alarm started. T0 phase lasts 90 seconds, and then enters t1 phase if the operator is

still motionless. The handset will vibrate continuously after entering t1 phase.

- (2) If the operator is detected to still be in danger after pre-alarming, the handset will start local alarming (t2 phase) to emit a loud bummer for danger prompting. The t2 phase

will last 30 seconds.

- (3) If the operator is detected to still be in danger after local alarming, the handset will start remote alarming without any inquiry. The remote alarming contains two processes: firstly the handset will send SMS to all the preset contacts, while the SMS will not be resent if sending failure. Then the handset will call all the preset numbers one by one, and automatically enter hands free mode if connected successfully.
- (4) If the operator is detected to still be in danger after calling all the preset contacts, the handset will wait for

preset repetition time and start remote alarming again.

**Note:** *The operator will only receive emergency calls and allowed incoming calls after alarming started.*

**Note:** *When the handset detects the operator has come back to safety from the alarming state and entered dangerous state again straight away, the handset will start from pre-alarm state(t0 phase).*

## 2) Manual Alarming


The operator can start working alone alarm by long pressing SLEFT key whether working alone function is open or not. The process is as follow:

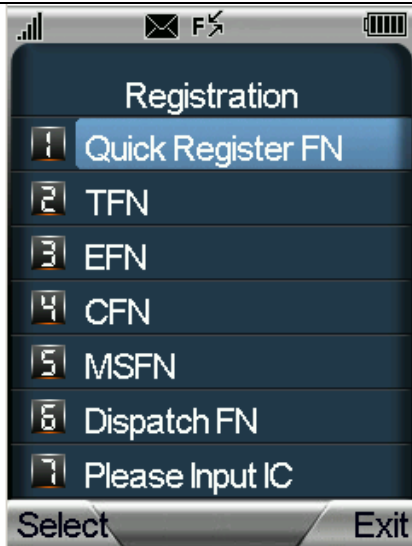


- (1) Long pressing SLEFT key, an inquiry box will be popup.
- (2) Start working alone alarm after the confirmation. At this time, the handset will send SMS to all the preset contacts and then call they one by one. The process of alarming is the same with that of remote alarming in automatic alarm.

After calling all the preset contacts, the first round of working alone alarm finishes and the handset will popup an inquiry box to ask the operator to terminate the alarm or not, which is the only way to terminate the manual alarm. The handset will start the next round of alarming if the operator does not terminate the alarm,

### 4.3 Identity


If your SIM card can register a function number, you can perform operations related to function numbers through this menu. This menu provides management, including function number registration, de-registration, interrogation, and switching. You can directly enter a character string on the standby interface and press  to register, de-register, interrogate, and forcibly de-register a function number with the network. The results of registration, de-registration, interrogation and forcible de-registration are related to network settings and the input number.

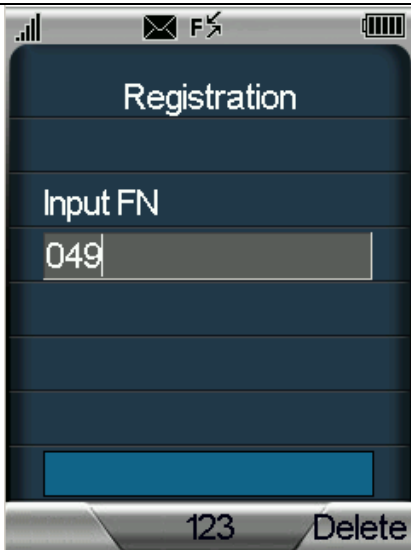


confirm the registration. The handheld sends a registration request to the network. The result is displayed in a pop-up box on the screen.

**Note:** The result of function number registration depends on network conditions and the validity of the function number.

**1 Registration:** In the GSM-R network, you can register a function number using one of the following methods:

**1) Quick Register FN:** Enter the function number to be registered on the function number entry interface, press , and



2) **TFN:** You can enter the corresponding TN number and function number according to prompts, press **OK**, and then confirm the registration. The handheld sends a registration request to the network. The registration result is

displayed in a pop-up box on the screen.

**Note:** When entering the FN number, you can press **—** to open a list and select it from the list.

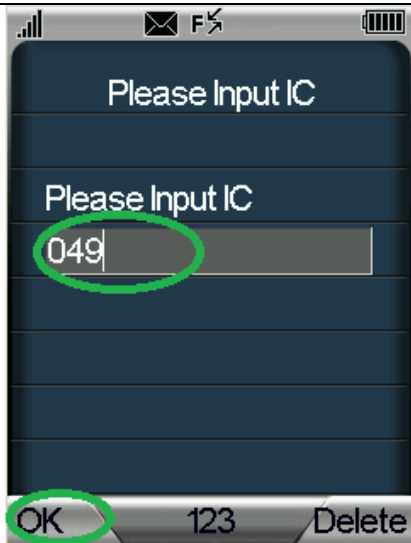
3) **EFN:** Refer to TFN.

4) **CFN:** Refer to TFN.

5) **MSFN:** Refer to TFN.

6) **Dispatch FN:** Refer to TFN.

7) **Please input IC:** This menu allows you to enter the international code of a country or an area. Enter the international code, and press **OK**. The international code is saved in the handheld. When you use the function number registration wizard to send a request for registering a function number, the saved international code is automatically added in front of the function number.



**2 Deregistration:** You can de-register a function number. This menu lists all registered function numbers. Select one, press **OK**, and then confirm the de-registration.

**3 Forced Deregistration:** If you have permission to forcibly de-register the function

numbers of other users, you can forcibly de-register a certain function number of a certain user. The MSISDN input window and the function number input window are available. Press **OK** to de-register the numbers after confirming that the numbers are correct.

**Note:** The forced de-registration of a function number may affect normal use for other users. Therefore, exercise caution with this operation.

**4 Interrogation:** You can use this menu to interrogate the current registration information of a function number. You can enter the desired function number in the input window, and press **OK**. The inquiry result is displayed on the screen.

**5 Change Current FN:** If you register multiple function numbers, you can select one function number to display. To switch to another function number, press direction keys to select a function number and then press **OK**. For an outgoing call, the functional

number and the functional identity are transferred via UUIE. If several functional registrations were made, the most recently registered number is transferred. And when changed current FN, then the current FN is displayed in idle screen, and be transferred in call.

**6 Deregister All FN:** You can use this menu to de-register all registered function numbers.

**Note:** *This function is only for temporary function numbers.*

**7 Synchronization FN:** If your function number is forcibly de-registered but the handheld does not receive a network message, you can use this menu to synchronize your function number to the network. The synchronization result is displayed in a pop-up box on the screen.

**Note:** *Operations related to a function number require interaction with the network, so it may take a while to finish the synchronization operation.*

## 4.4 Names


You can use the phonebook in the SIM card and that in the handheld to store contact records.

**Handheld Phonebook:** This phonebook can store 1000 records. Each record consists of name, phone number, common number, mobile number, company number, facsimile number, email address, and group information.


**Phonebook in the SIM card:** The phonebook in the SIM card stores contact information in the format of a name and a number. Its capacity varies with the SIM card model.


Choose **Menu > Names** to enter the phonebook.

After entering the phone book, you can see a list of all records and press direction keys to select various records. You can also press the corresponding key according to the first letter of the name to fast locate the record you want.

For instance, press  once to locate the records starting with D, or press twice to locate the records starting with E. The screen may



also prompt you to match multiple letters.

During record browsing, you can press  to dial the number of the present record. If the record is in the handheld phonebook and relates to multiple numbers, the handheld prompts you to select one of the numbers to dial.

On the browsing interface of the phone number list, you can press  to open a popup menu, which has the following options:

### View

Select one record to view details.

Select a contact person, and press  to view details, and then press . The following options are available:

**1 Call:** Select this option to dial the number related to this record. If the current record is in the phonebook in the handheld and is related to multiple numbers, the handheld prompts you to select one of the numbers to dial.

**2 Write SMS:** Select this option to send a text message to this record. A short message input

window is displayed. After entering a message, select the related number to send the message (if the current record is related to only one number, the handheld sends the message to this number directly).

**3 Edit:** Select this option to edit details about the current record.

**Note:** If this item is set with a group tone, the group tone is used; otherwise, the default tone is used.

**4 Delete:** Select this option to delete this item.

**5 Copy to SIM/Phone:** If the item is originally saved in the SIM card, select this option to copy that item to the handheld. If the item is originally saved in the handheld, select this option to copy it to the SIM card.

**Note:** When a record originally saved in the handheld is copied to the SIM card, only the name and phone number of this record are copied.

**6 Send vCard:** Select this option to send the information of the current contact in vCard format.



### Write SMS

Select this option to send a text message to this record.

### Add Entry

You can add a record of a contact person to the handheld.

The method for adding a new record to the handheld is as follows:

1. Enter the interface for adding a record. Press direction keys to select the desired input items for editing the record.
2. For the **Group** item, press  according to screen prompts to obtain the group option and select the desired content.
3. After editing is complete, press  to save the content.

### Storage Status

This function checks the total capacity and

storage status of the phonebooks, including the SIM card capacity and the handheld capacity.

### My vCard

You can use this item to maintain your name card. This menu includes **Edit my vCard** and **Send my vCard**.

1. **Edit my vCard:** Edit your information such as your name and phone number in vCard format and save it in your handheld.
2. **Send my vCard:** Send your name card in vCard format.

### My Number

You can edit and store the number from the SIM card for inquiries.

### Copy All

This menu contains four options:

**1 SIM to Phone:** You can copy the records of all contact persons in the SIM card to the handheld.

**2 Phone to SIM:** You can copy the records of all contact persons in the handheld to the SIM

card.

**Note:** When you copy a record in the handheld to the SIM card, the name and phone number of the record are copied, and the rest of the information is lost.

**3 Phone to TF:** You can restore the records of all contact persons in a TF card to the handheld.

**4 TF to Phone:** You can copy the records of all contact persons in the handheld to a TF card.

**Note:** If you edit the saved files in the TF card, it might fail to restore or may even affect the performance of the handheld.

### Delete All

This menu contains two options:

**1 Delete All in SIM:** You can delete all phone numbers in the SIM card.

**2 Delete All in Phone:** You can delete all phone numbers in the handheld.

## 4.5 SMS

The SMS is a network service. The network you are using may not support this service. For details, contact your network operator.


Depending on network support, the SMS can be sent through text, email, or fax. Before sending a text message, obtain the relevant service center number from your network operator.

In standby mode, press user-defined shortcut keys or choose **Menu > Message** to enter the SMS menu.

### Write Message




You can enter and edit a maximum of 10 pages of messages. You can also edit a text message on an SMS template.



When you start to enter characters in the window for editing a message, the screen displays the number of allowed characters and the number of current pages at the upper right corner. You can

■ press  to switch between input



modes, such as Smart German, German alphabet, Smart English, English alphabet, and 123.

- Hold  to switch between abc and ABC.
- Press  to delete one character.
- Hold  to delete all characters.

After editing a message, press  or  to choose one of the following options:

**1 Send:** You can send the message to no more than 20 numbers and save it in an outbox. In this case, you need to enter or select a number from the phonebook.

**2 Save:** Save the message in the outbox.

**3 Insert:** You can insert vCard or phrases in the message.

**1) Insert Numbers:** Enter the phonebook, view the contact list, select one contact, and insert its number into the message. If this contact has multiple numbers, the screen prompts you to select one from the list.

**2) Insert vCard:** Select a contact number from the phonebook and send it in vCard format.

**3) Phrase:** Select a phrase coming with the handheld on the edit interface.



**4) Template:** Select a previously edited short message template from the edit interface.



**4 Input Language:** Select English, German, Spanish or French.





**5 Exit:** Exit without saving the message. The content of the message will still be kept when entering the edit mode next time.









## Inbox


When you receive a message, the handheld gives off a set alert tone or vibration. The new message is saved automatically in an inbox.



The  icon is displayed on the screen to indicate the arrival of a new message. You can choose to read it at any time you wish. If the number of short messages saved in the inbox reaches a maximum number, the  icon blinks. The message types are shown below:

Press  to view the short message, or press  to choose one of the following options:







- 1 View:** Views a message.
- 2 Reply:** Replies a message to the sender.
- 3 Dial Back:** Calls the sender.
- 4 Delete:** Deletes the message.
- 5 To Archive Box:** Saves the selected message to a draft box.
- 6 Forward:** Forwards the message to others.
- 7 Delete All:** Deletes all messages in the inbox. After you select this option, the handheld displays a pop-up box for you to confirm the operation. Press  to confirm or press  to cancel the operation.
- 8 Clear Reports:** Deletes all status reports. When reading a message, press  to reply or press  to choose one of the following options:
  - 1 Reply:** Replies to the sender.
  - 2 Delete:** Deletes the message.
  - 3 Dial Back:** Calls the sender.
  - 4 Use number:** Extracts numbers from the

	Unread SMS		Updated long SMS
	Read SMS		Partial received long SMS
	Unread vCard		Unread status report
	Read vCard		Read status report



message. After you select a number, press  to choose one of the following options:



- 1) Reply:** Replies to a message from the specified number.
- 2) Dial Back:** Calls the specified number.
- 3) Save to PB:** Saves the specified number in the phonebook.
- 5 Forward:** Forwards the message to others. If it is a vCard, it is read in name card mode. You can press  to save it in the phone book, or press  to exit.

## Outbox

Messages in the outbox marked with  have been sent. Messages marked with  have not been sent.  means the vCard has been sent and  means the vCard has not been sent. For a saved message, only the first several characters of the message are displayed. Press direction keys to select a message, and press  to read the message or press  to choose one of the following options:



- 1 View:** Views the message.
- 2 Forward:** Forwards the message to others.
- 3 Delete:** Deletes the selected message.
- 4 Delete All:** Deletes all messages in the outbox. After you select this option, the handheld displays a pop-up box for you to confirm the operation.

- Press  to confirm
- press  to cancel the operation.



When you read a message, press  to send it. press  to choose one of the following options:

- 1 Forward:** Forwards the message to others.
- 2 Delete:** Deletes the selected message.

## Archive Box

Messages in the archive box are shifted from the inbox. It provides a special place to save messages. When viewing a list in the archive box, you can press  to select a draft and then press  to choose one of the following options:



- 1 View:** Views the message.
- 2 Forward:** Forwards the message to others.
- 3 Delete:** Deletes the selected message.
- 4 Delete All:** Deletes all messages in the archive box.



When you read a message, press  to send it or press  to choose one of the following options:

- 1 Forward:** Forwards the message to others.
- 2 Delete:** Deletes the selected message.

## Template

You can use common short messages as a template through this function. Select **Template** in the **Message** menu to access a list of SMS templates.

If no SMS template exists in the menu, the handheld prompts you to add an item. You can press  to edit the first SMS template, or press  to exit.



If the menu contains SMS templates, you can press direction keys to select an SMS template and then press  or  to choose one of the following options:

**1 Edit:** Accesses the window for editing a message and then edits the current SMS template.

**2 Add Entry:** Adds an SMS template.

**3 Send:** Sends the message to a number.


**4 Delete:** Deletes the current SMS template.

**5 Delete All:** Deletes all SMS templates. After a confirmation message appears, press  to delete them or press  to cancel the deletion operation.

## 4.6 Settings

You can set all parameters related to short messages. Short messages are sent and received according to the parameter settings. Enter the **Settings** menu. You can choose one of the following options:

**1 Setting:** Press  to choose one of the following options:

**1) Message Center Number:** Enter the message center number, which is required to send a text message. Press  to save the number. You need to obtain this number from your network operator.

**2) Message Types:** You can reset the message type, including text, fax, email, and user-defined messages. The message type must be supported by your network service provider.

**3) Validity Period:** You can set the period during which the messages can be kept in the message service center before being deleted. The default validity

period is "1 Week".

**2 Storage Position:** Sets the storage position of messages: **Phone First** or **SIM First**.

**Note:** *You can save 500 messages in the handheld. The short message storage capacity of a SIM card varies.*

**3 Status Report:** Enables or disables the status report.

If the status report is enabled, the network informs you that a message has been successfully sent after the recipient receives your message, and the report is saved in your inbox.

**4 Storage Status:** Displays the message storage status of the SIM card and handheld, lists the number of short messages, and shows the total capacity of the inbox and outbox.

## Broadcast

This function is a service provided by your system consultant service center to users in the system. For example, weather forecast and

traffic services may be available. Received cell broadcast messages are automatically displayed on the screen. You can directly read the messages. Check with your service provider whether this service is available.

**Reception:** Enables or disables the receiving of broadcast short messages.


**Channel:** Adds a channel or edits an existing channel.

**Language:** Sets the language allowed for receiving messages.


**Read:** Reads a received broadcast short message.



## Calls

The call log records three groups of calls: missed calls, received calls, and dialed calls. Each group contains 20 records for easy inquiry and use.

You can choose **Menu > Calls** or press  in standby mode to access a call log menu, and switch between lists of dialed calls, received calls and missed calls by pressing left and right keys.

## Missed Calls

Enter this menu. The list of missed calls is displayed on the screen. Select a missed call, and press  to display details about the call, including the phone number, the time of the last three missed calls from the number, and the total number of missed calls from the number.

Press  to call this number or press  to choose one of the following options:

**1 View:** Views the message.

**2 Call:** Calls this number.



**3 Write Message:** Writes a short message for this number.

**4 Save to PB:** Saves this number in the phonebook.

**5 Edit and Dial:** Edits this number and then calls the new number.

**6 Delete:** Deletes this record.

**7 Delete All:** Deletes all missed calls. The screen prompts you to confirm the deletion.

Press  to delete all, or press  to cancel the deletion operation.

On the details interface, press  to

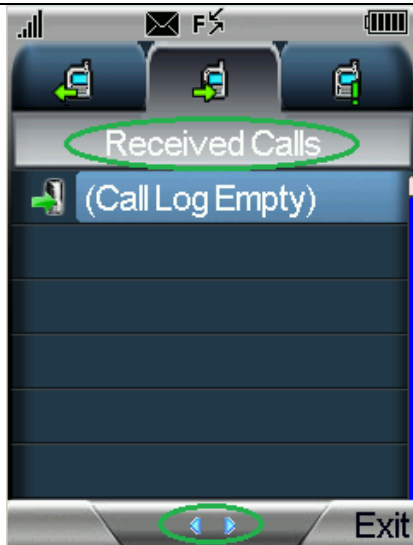
choose one of the following options:

## Received Calls

Refer to the description of missed calls.

## Dialed Calls

Refer to the description of missed calls.








## 4.7 Tools

The menu **Tools** consists of submenus **Calendar**, **Calculator**, **Alarm Clock**, **Record**, **USB Mode**, **STK**, **Version Check**, **Working Alone** (Optional), **Bluetooth Setup** (Optional), **RF Monitoring**, **Cell Forcing** (Optional) and **Cell Lock** (Optional). You can choose **Menu > Tools** to access this menu.

### Calendar

You can view the calendar from 1901 to 2100. The calendar provides information including festivals and constellations and is easy to use.

Press  to return to the previous menu.

- Press direction keys to select the date:
- press  to go to the previous month,
- Press  to go to the next month,
- Press  to go to the previous year, or Press  to go to the next year.
- Press  according to screen prompts to select **Jump**, and enter the

interface for selecting a date. You can enter the target date on the screen, and then press **OK** to go to the date or press **—** to exit.



The handheld also provides a calendar entry

function. Enter the calendar interface and press

**OK** to enter the following entry setting options:

1. **Create:** You can edit a new entry. The following options are available:
  - 1) **Enable/Disable:** Enables or disables the entry reminder.
  - 2) **Type:** The calendar has four types: **Once**, **Every Day**, **Every Week**, and **Every Year**. If **Type** is set to **Once**, **Auto Delete** can be set; **Every Week** will display the week of present day in **Date and Time**.
  - 3) **Date and Time:** You can only set the time for the calendar type **Every Day**, and set time and date for other types.
  - 4) **Content:** You can edit the content of the calendar entry.
  - 5) **Ringig:** You can set the reminder ring according to your favorites.
  - 6) **Auto Delete:** This option is valid only when **Type** is set to **Once**. The calendar will be deleted automatically in the next day after reminding.
2. **Display Day:** This option is used to shift



between dates, go to the desired date and set or view the current calendar if any.

**Note:** The “\*” icon indicates that the reminder frequency is everyday in the calendar information list.



3. **Delete All:** Deletes all the calendar entries.
4. **Storage status:** Displays the number of set calendar entries and the number of calendar entries that can be set.
5. **Display All:** Lists all the calendar entries. You can view, revise or delete an entry.



**Note:** 1. A white triangle icon is at the lower right of the present date to remind you of the calendar entry if the calendar function is set on a date.

2. The “\*” icon indicates that the reminder activated in the calendar information list.

## Calculator

The calculator can perform simple operations such as addition, subtraction, multiplication, and division. Press number keys to enter numbers, and press direction keys to select “+”, “-”, “×”, and “÷”. Select the “=” sign to display the calculated result. When the sign input field is empty,

- press  to exit the calculator,
- press  to restore to zero.

**Note:** Press  to clear one digit from the character input item, and hold  to clear all digits.

## Alarm Clock


This function allows you to:

1. Set three alarm clocks.
2. Set the time for the alarm clock to alert.
3. Sound the alarm even if the handheld is switched off.

**Alarm clock 1:** Enter the first alarm clock. Then edit the next item according to screen prompts.

1. **Name:** By default, the name is alarm clock 1. You can change the name.
2. **Enable/Disable:** After an alarm is active, it is marked with an "\*" behind the menu bar.
3. **Type:** Three option buttons are available: **Once**, **Work Day**, and **Every Day**.
4. **Set date and time:** For a one-off alarm, set the date and time for the alarm to sound. For other alarm clocks, you need to set only the time.
5. **Set the alert tone:** Select an alert tone for the alarm clock.



The methods for setting **alarm clock 2** and **alarm clock 3** are the same as the method for setting **alarm clock 1**.

**Cancel All:** Select this option, and then press  to cancel all the set alarms.

**Note:** When the set time arrives, the handheld sounds an alert tone for the alarm clock. At the same time, the name and time of the alarm clock are displayed on the screen.

## Record

Two options are available: **Start Record** and **Playback**.

1. **Start Record:** Select **Record** to start recording and start timing. At this time the screen prompts "Recording". Press  or  to stop and save the recording.
2. **View Record:** Select **View Record** to play the recorded content. For details about the operation, refer to the record description in **My Documents**.

## USB Mode

Connect the handheld to a PC by a data line, and select this menu to enter the USB mode. You can view and operate in your TF card.

**Note:** If there is a new incoming call, the handheld will automatically disconnect from the PC and get back to the standby mode; if there is a new message, the handheld will not disconnect from the PC but remind you with

*vibration.*

## STK

The availability of features in this menu depends on whether or not your SIM card supports STK. If yes, the STK menu will be displayed on the screen.

## Version Check

You can see **IMEI** and **S/W Version** in this menu.

## Working Alone (Optional)

Working alone alarm might start in the following conditions:

1. **"No Motion Alarm"** mode : The handset remains stationary without any operation on it in a preset time;

**"Tilt Alarm"** mode : The handset tilts over the set angle threshold without any operation on it in a preset time;

**Note:** default set is "No Motion Alarm" mode.

2. Working alone alarm key has been pressed

and held by the users.

You can process working alone related setting in this menu item.

**ON/OFF:** You can use this menu to open or close the working alone function, this option is set to **OFF** by default. An icon will be prompted in the standby interface if open this function.


**Note:** If support working alone, the Bluetooth is canceled.

## Bluetooth Setup (Optional)

You can make a voice call via Bluetooth device. However, you have to connect your handset with the Bluetooth device at first.

This menu has 5 submenus: ON/OFF, Name, Set Pair PINcode, Bluetooth Scan, Bluetooth List.

**1 ON/OFF:** Turn on / Turn off the Bluetooth.


The Bluetooth icon  is displayed in status bar after the Bluetooth device powers up, and it will disappear after power off.

**2 Name:** Set Bluetooth name for your handset.


The default name is SED GPH-610RE.

**3 Set Pair PINCode:** Set Bluetooth pairing PIN code.

**4 Bluetooth Scan:** Scan the surrounding Bluetooth devices. Press OK key to scan the surrounding Bluetooth devices. Pop-up box will display "No Devices" if no Bluetooth device has been found. After finding the devices, select one and press OK key. "Set Success" is prompted if the connection is successful, otherwise prompt "Fail" . The status bar

displays  after the Bluetooth device is connected successfully.

**5 Bluetooth List:** A Bluetooth device will be in the list once it has been discovered and connected ever. You can press OK key to view

the Bluetooth devices list.  will be displayed in front of the connected device. Select a Bluetooth device, press OK to view the following options:

- 1) Connect:** Connecting Bluetooth device
- 2) Pair:** Pairing with Bluetooth device
- 3) Delete:** Delete device

#### 4) Rename: Rename device

**Note:** *If support Bluetooth, the working alone is canceled.*

#### RF Monitoring

After entering the menu **Tools->RF Monitoring**, you can look up network information on your handset. Generally, the first page on your handset displays the information of serving cell, and page 2 to page 7 display the information of its six strongest neighbor cells.

Support serving cell Serving Cell: BCCH, TCH, RxLev, RxQual, BSIC, CI, Timeslot, Neighbor Cells : BCCH, RxLev, BSIC etc..

#### Cell Forcing (Optional)

You can force the mobile to camp on a target cell in idle or dedicated mode, it will force handover in dedicate mode. An icon will be prompted in status bar. Select **Cell Forcing** and press OK to enter the setting screen. You can enter ARFCN of target cell in this menu. Press OK to enable the forcing mode.

**Note:** If the forcing ARFCN is not a BCCH ARFCN, your handset will lose service. In Dedicate mode, the forcing ARFCN shall be one of the six strongest neighbor cells that BSICs have been decoded. The success of handover finally depends on the network.

### Cell Lock (Optional)

You can use this function to lock the current serving cell, it will deactivate cell reselection and handover. An icon will be prompted in status bar. You can also select **Cell Lock** and press OK key to switch between forcing mode and non-forcing mode.




**Note:** The priority of **Cell forcing** is higher than **Cell lock**. **Cell lock** and **Cell forcing** cannot be used simultaneously.



## 4.8 Settings



You can set your handheld to make it unique. Choose **Menu > Settings** or press a shortcut

key in standby mode to access the **Settings** menu.

### Profiles

You can choose any of the five profiles: **General**, **Meeting**, **Outdoor**, **Indoor**, and **Headphone**. When you connect a headphone to your handheld, the headphone profile is automatically activated. You can use the same method to set the **Volume**, **Call Alert**, **Power-On Music**, and **Power-Off Music**. You can also hold  to switch between vibration and ringing in standby mode. After selecting a profile, press  or  to display the following operation options:

- 1 Active:** Activates the current profile.
- 2 Volume:** Adjusts the volume of this profile. After selecting this option, press direction keys to adjust the volume, and then press  to confirm or press  to cancel the adjustment operation.
- 3 Call Alert:** Sets one of the following alert types: **Ring**, **Vibration**, **Vibration & Ring**, and

**Mute.** Select the desired alert type. Press  to confirm the setting and exit. Press  to exit without saving the settings.

**4 Power-On Music:** Turns on or off the power-on music.

**5 Power-Off Music:** Turns on or off the power-off music.

## Display

**1 Back Light:** You can set the duration of the back light to 5, 10, 20, or 30 seconds, or 5 minutes as required.

**Note:** Usually a short duration for the back light is set to prolong the standby duration of the handheld.

**2 Greeting:** You can set the greetings displayed on the main screen.

**3 Signal LED:** After this option is set to **Enable**, the indicator in the upper left part of the handheld blinks.

During switch-on:


- 1) If no network is available (the handheld is


beyond the network service area or enters a blind area), the indicator emits a red light, and blinks at an interval of three seconds.

- 2) In the event of a missed call, the indicator emits a green light, and blinks at a short interval.
- 3) During normal use and without exception, the indicator emits a green light and blinks at an interval of three seconds.

Charging in powered-off state:

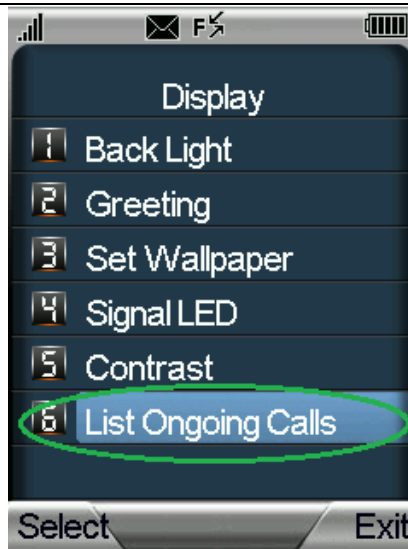
- 1) During charging, the indicator is red and is solid on.
- 2) When charging is complete, the indicator is green and is solid on.

**4 Contrast:** Select **Manual Adjust**, and press . Then press up/down direction keys to adjust screen illumination. Select **Auto Adjust**. The handheld automatically adjusts screen illumination according to the light of the environment.

**5 Auto Keypad Light:** Select **Enable** and press  to start the automatic keypad light. The keypad light automatically switches on or off according to the light of the environment.

Select **Disable** and press **OK** to close the automatic keypad light. The keypad light remains on.

**6 List Ongoing Calls:** Select **Enable** and press **OK** to activate the call display function in standby mode. The screen periodically displays the present group call/broadcast numbers on the standby interface. Select **Disable** and press **OK** to stop it.



## Tone Setup

**1 Call Ring:** You can select an alert tone for incoming calls.

**2 SMS Alert Ring:** You can select an alert tone for short messages.




**3 Group Ring:** You can set alert tones for different groups to distinguish calls from different groups.

**4 Keypad Ring:** You can select **On** or **Off**.

## Security Setup

**1 Auto Keypad Lock:** This option is set to **Close** by default, indicating that the automatic lock function of the keypad is disabled. You can set the time before the keypad is automatically locked to 10 seconds, 30 seconds, or 5 minutes in standby mode.

**Note:** You can also lock the keypad manually.

Press  on the standby interface and then press  according to screen prompts. After the keypad is locked, you can press  according to screen prompts and then press



 to unlock the keypad.


**2 PIN Code:** You can set the PIN.

**1) Enable PIN:** You can enable or disable PIN check. When PIN check is enabled, enter the PIN each time you power on the handheld. No one is allowed to use the handheld without inputting the PIN.

**2) Disable PIN:** You can enable or disable PIN code check. To enable this service, enter the correct PIN.

**3) Change PIN:** You can change the PIN according to screen prompts.

Enter the old PIN, and then press . Enter the new PIN (four to eight digits), and then press .

Enter the new PIN again, and then press .

If the screen prompts "Modifying the PIN succeeds", it indicates that you have successfully changed the PIN.

**Note:** 1 If you enter the incorrect PIN three



*times consecutively, your SIM card will be locked. In that case, contact your network service provider immediately and obtain a PUK from the network service provider to unlock your SIM card. Attempting to unlock the SIM card on your own may damage the SIM card.*

*2 You can change the PIN only after you enter the correct old PIN.*

## Phone Setup

You can set the functions, such as time, language, and shortcut keys, on your handheld.

**1 Time and Date:** You can use this item to set the time and date.


**1) Time Setting:** You can set the current time.

**2) Date Setting:** You can set the current date.




**3) Time Format:** You can choose between the 12-hour system and the 24-hour system to display time.



**4) Date Format:** You can set the date format to “YYYY/MM/DD”, “DD/MM/YYYY” or “MM/DD/YYYY”.

**5) Date Separator:** You can set separators between year, month, day to “.”, “/”, “-”, or a space.

**2 Language:** The handheld supports multiple languages for display, including English, German. Select a language and press  to save the settings. The menu and prompt messages are displayed in the selected language.

**3 Shortcuts:** You can set shortcuts to the menus. Press a shortcut in standby mode to directly enter the defined menu. Here you can set four shortcut keys:


**1) Up:** This is the shortcut key for **Camera** by default. You can set  as the shortcut to a particular sub-menu. Press  or a number key to enter the **Up** key. A list of available sub-menus is displayed. You can choose a sub-menu, and then press  to set it and exit. You can

press  on the standby interface to enter the sub-menu or press  to exit directly.



**2) Down:** This is the shortcut key for **Group Calls** by default. Refer to the method for setting the **Up** key.

**3) Left:** This is the shortcut key for **Messages** by default. Refer to the method for setting the **Up** key.

**4) Right:** This is the shortcut key for **Ongoing Calls** by default. Refer to the method for setting the **Up** key.




**4 Default Set:** This function can restore factory settings. To perform the operation, enter your password ("1234" by default), and then press  to go to **Default Set**. The following operation options are displayed:

**1) Restore Default:** Restores factory settings.

**2) Phone Password:** Enter the new password, and press . Then enter the new password again according to screen prompts and press  to confirm the

operation.

**Note:** Restart the handheld after restoring factory settings. All data previously recorded in the handheld, including the phonebook and pictures, will be lost after you restore factory settings. Therefore, back up your data first.

**5 Speed Dial Set:** You can set number keys 1 to 9 as different phone numbers. Enter numbers 1 to 9 and press  to call a number in standby mode according to your settings. You can select a number key, enter the number input interface, input the phone number or press  to enter the phone book to select one phone number, and press  to confirm the operation. The number key list is returned. The phone number or contact number is displayed behind the corresponding number key.

**6 Voicemail:** You can set or edit your voicemail number. To call your voicemail number, hold the number key 1 on the standby interface.

## Call Setup

This function allows you to perform call-related settings. Certain settings in this function require support from the network. For details, consult your network service provider.

**1 Answer Mode:** You can choose **Send key** or **Any key** as the answer mode.

**2 Call Wait:** The handheld supports functions such as call hold and call waiting. After this function is enabled, the network notifies you of another incoming call during an ongoing call. You can hold the current call and answer the new call.

**1) Query Status:** Select this option to display the current call waiting status.

**2) Activate:** Use this function to start call waiting. If you have another incoming call during a call, you will hear a light ring tone. In that case, you can hold the current call and answer the new call.

During the call, you can switch between the two calls.

**3) Deactivate:** Select this option to cancel the call waiting service.

**3 Call Divert:** Call divert is a network function. This function can divert incoming calls to another designated handheld, voice mail or pager, thus avoiding missed calls. Several divert modes are available:

**1) All Voice Calls:** All calls are diverted to the designated number.

**2) If Busy:** During a call, new incoming calls are diverted to the designated number.

**3) If No Reply:** New incoming calls are diverted to a designated number if they are not answered within a certain time limit.

**4) If Unreachable:** When the handheld is powered off or out of the service area, incoming calls are diverted to the designated number.

**5) Cancel All:** You can cancel all divert settings.

**Note:** After you select a divert mode, the handheld requires the network to handle the current settings. A short delay occurs. After

*responding, the network returns the result of the operation.*

**4 Call Bar:** This service can set restrictions for making or answering calls. This function, however, needs network support. For details, consult your network service provider. To enable call barring, you need to enter a password.

You can set call barring options on menus, including **All Outgoing Calls**, **International Calls**, **International Except Home**, **All Incoming Calls**, and **Incoming When Roaming**.



You can also select **Cancel All** to cancel all restrictions for voice calls, or select **Change Barring Password** to set the password for call barring.

**5 Anonymous:** You can apply for the Calling Line Identification Restriction (CLIR) service from the network service provider if you do not want to display your phone number to the called party. Select **Activate** to conceal your phone number, or select **Deactivate** to display

it.

**6 Network Selection:** This menu is used for selecting the network. You can choose automatic selection or manual selection. The selection state is displayed in the status bar, for details see description of the icons. The active network will be displayed on the idle screen

**Automatic:** The handheld automatically selects and registers with an available network.

**Manual:** The handheld selects a list of available networks in the current area. You can select a desired network, and press  to confirm and exit, or press  to exit.

**Preferred:** Lists the names of GSMR networks in your SIM card.

**Note:** *Automatic selection is recommended.*

*You can manually select a network only when the network enters an effective roaming agreement with your home network provider. If the network service changes, normal operations of the handheld are affected.*



## Data Service

This function allows you to configure GPRS data communication settings. If the setting is **On**, your handheld can be used as a modem. This function needs network support. For details, consult your network service provider.

**1 Data mode:** You can choose **Enable** or **Disable**. If you choose **Enable**, the data communication functions are available.

**Note:** 1 The data service function is not the USB function, it is only enabled for the handheld carrying on the data communications with a PC when using the GPRS function.  
2 If you need the function of data communications with a PC, you have to reset this option each time the handheld is powered on.

**2 Power on Attach:** You can choose **Enable** or **Disable**. If you choose **Enable**, the handheld automatically attaches to GPRS the next time you power on the handheld.

**Note:** 1 You can still connect a GPRS network even if **Power on Attach** is set to **Disable**. Each time when dialing, it will firstly make GPRS attachment.  
2 You have to ensure the data mode is activated before connecting with a GPRS network.  
3 For details about GPRS network related settings, refer to the product CD for related Operation Instructions.



**3 Serial Speed:** You can set the serial speed to 2400, 4800, 9600, 19200, or 115200. The default speed is 19200 when the handheld is powered on.

## 4.9 Document

**Document** is used to browse the information in your TF card, including **Sound**, **Picture**, **Record**, **Video**. The corresponding files in a PC are sound, picture, record, and video files.

**Note:** 1 Each document can display a maximum of 500 files. If it stores over 500 files, the excessive items cannot be displayed.  
2 When browsing the TF card, put the supported files into corresponding documents so as to view them on your handheld.

## Picture

This document lists pictures in your TF card, supporting pictures in JPG format and a maximum resolution of 1600\*1200. Select a picture in the list, and press  to view this picture or press  to open an operation menu that comprises the following options:

**1 View:** Views the picture.

**2 Delete:** Deletes the picture.

**3 Rename:** Renames the picture.



**4 Delete All:** Deletes all pictures in the document.



**5 Attribute:** Views information about the picture, such as the name, format, size, creation time and date, and picture dimension.

**1 Delete:** Deletes the selected picture.

**2 Attribute:** Views information about the selected picture, such as the name, format, size, creation time and date, and picture dimension.

## Video

This document lists videos in your TF card, supporting videos in 3GP and MP4 formats and a maximum resolution of 240\*320. Select a video in the list, and press  to play this video or press  to open an operation menu that comprises the following options:

**1 Play:** Plays this video. Press  to pause or start to play this video, press  to stop playing it.

**2 Delete:** Deletes the selected video.

**3 Rename:** Renames the selected video.

**4 Delete All:** Deletes all videos in the document.

**5 Attribute:** Views information about the video, such as the name, format, size, creation time and date, and video resolution.



**6 Video Play Mode:**

**Normal Play Mode:** Plays a video in the perpendicular direction.


**Rotate Play Mode:** Plays a video in the lateral direction to achieve a full screen effect.

## Sound

This document lists audios in your TF card, supporting audios in AMR, Midi, MP3, AAC, and WAV formats. Select an audio file in the list, and

- press  to play it or
- press  to open an operation menu that comprises the following options:

**1 Play:** Plays this audio file. Press  to

pause to play this video file, press  to stop playing it.

**2 Delete:** Deletes the selected audio file.

**3 Rename:** Renames the selected audio file.

**4 Delete All:** Deletes all audio files in the document.


**5 Attribute:** Views information about the audio file, such as the name, format, size, and creation time and date.


**6 Set as Call Ring:** Sets the selected audio file as a ring tone.

## Record

This document lists records in your TF card, including common recording tools and call recording files in AMR format. Select a file in the record list, and

■ press  to play it or

■ press  to open an operation menu that comprises the following options:

**1 Play:** Plays the record on the record list interface. Press  to pause to play the

record, press  to stop playing it.

**2 Delete:** Deletes the selected record.

**3 Rename:** Renames the selected record.

**4 Delete All:** Deletes all records in the document.

**5 Attribute:** Views information about the record, such as the name, format, size, and creation time and date.

**6 Set as Call Ring:** Sets the selected record as a ring tone.

## TF-card space

This function notifies you of the conditions of your TF card, including used space, remaining space, and total capacity of the TF card.


## TF card Format

You can use this function to eliminate all files in your TF card.

**Note:** *The files cannot be recovered after formatting. Therefore, exercise caution with formatting.*









## 4.10 Camera


Select the **Camera** menu, and press  to enable the camera function. The scene taken by the camera will be shown on the handheld display. The related information is shown at the left and right corners of the display.

At this moment, the functions of the photo camera and the video camera can be exchanged with each other by pressing **Left** and **Right**.

**1 Camera:** In camera mode, the icon for the camera function is on the top left. At this moment, you can

- press  or  to adjust the focal length of the camera,
- press  and  to adjust brightness.
- Press  to take a photo directly. The photographed image will stay on the display
- press  to display the following options:

**1) View:** Views a photo list.

**2) Shutter Sound:** Sets the shutter sound function. If you select **On**, a shutter sound will be heard while you press  during the photographing. Select **Off** to disable this function. Then there will be no sound during photographing.

**3) Picture Resolution:** Sets photo resolution to 1600\*1200, 800\*600, 320\*240 or 224\*176.







**4) Picture Quality:** Sets photo quality to **Super Fine**, **Fine**, or **Normal**.

**5) Flash Light:** Sets the flash light function. If you select **On**, the flash light function will be started during photographing. If you select **Off**, the function is disabled.

**6) Color Mode:** Sets the special photographing mode to **Black and White**, **Exposure Effect**, **Negative Effect**, or **No Effect** (to recover the common photographing mode).

**7) Night Mode:** Sets the night mode to adapt photographing in darkness. You can select **On** or **Off** to enable or disable this function.

**2 Video Camera:** In video mode, the icon for the video camera function is on the top left. At this moment, you can

- press  or  to adjust the focal length of the camera, or
- Press  and  to adjust brightness. Then
- press  to record the video directly,
- press  again to stop recording and save the video recording result.

And then the display returns to the video photographing mode automatically.

**Note:** When the memory card does not have enough space, the handheld will stop photographing and save the previous record automatically.

At this moment,

- press  to display the following options:

**1) View Video:** Opens a video document

folder and views a document list.

**2) Video Resolution:** Sets the video resolution to 240\*320 or 176\*144.

**3) Video Quality:** Sets video quality to **Super Fine**, **Fine**, or **Normal**.

## Chapter 5 Reference Information

### Access Password

The handheld and SIM card support multiple passwords to protect against unauthorized access.

#### PIN

The Personal Identification Number (PIN) protects the SIM card against unauthorized access. Usually the PIN is provided with the SIM card. When the power-on PIN is enabled, you need to enter this PIN each time you power on the handheld.

**Note:** *If you enter an incorrect PIN three times consecutively, the SIM card is locked. Then you need to enter the PUK to unlock the SIM card. Certain operators do not provide the PUK. Therefore, if you are asked to enter the PUK, contact your operator immediately. Do not enter any characters on your own.*

#### PIN2

Usually PIN2 is provided with the SIM card. PIN2 implements certain functions, such as the charge rate. These functions are implemented only when supported by your SIM card. If you enter an incorrect PIN2 three times consecutively, PIN2 is locked and you need to input PUK2 to unlock PIN2.

#### PUK

PUK is used for changing a locked PIN. PUK is provided with the SIM card. If it is uncertain, contact your local service provider. If you enter an incorrect PUK ten consecutive times, the SIM card cannot be used any more. Contact your local service provider for a new SIM card. The PUK cannot be changed. If the PUK is lost, contact your service provider.

#### PUK2

PUK2 is usually provided with certain SIM cards. PUK2 is used to change a locked PIN2.

If you enter an incorrect PUK2 ten consecutive times, you cannot use certain functions any more. Contact your local service provider for a new SIM card. The PUK2 cannot be changed. If the PUK2 is lost, contact your service provider.

### **Battery Use**

The handheld uses special rechargeable lithium batteries. The handheld can be charged through a power adapter or by connecting to a PC with a dedicated USB 2.0 line.

Charge and discharge:

A charged battery will discharge over a certain period if it is not in use.

### **Precautions on Battery Use**

- For safety reasons, do not use any damaged rechargeable batteries.
- When you use the handheld near a network base station, battery consumption is low. Therefore, the call and standby duration is largely affected by the signal strength of the cellular network and

parameters set by the network operator.

- The battery charge time depends on the remaining battery capacity and the type of the battery and charger. Rechargeable batteries can be used repeatedly, but will ultimately malfunction. When the used time of a battery (call time and standby time) declines significantly, consider buying a new battery.
- A fully charged battery will discharge if it is not in use.
- Use the designated battery and charger. Cut off the power when the charger is not in use. Do not connect the battery to the charger for over a week. Overcharging will shorten the service life of the battery.
- Do not store the battery in places of extreme temperatures; for example, in a car in summer or winter; otherwise the capacity and lifecycle of the battery will degrade. Try to maintain a constant indoor temperature for the battery. The handheld may fail to work temporarily in an environment that is either too hot or too

cold, even if the battery is fully charged. Usually the discharge characteristics of lithium-ion batteries deteriorate in an environment below zero Celsius degrees.

- Do not short battery contacts. For example: If you put an idle battery in your pocket or bag with metal objects (coins, pins or pens) and the objects directly contact the positive and negative poles of the battery (the metal bars at the back of the battery), the battery will be shorted. This would damage the core or protection circuits inside the battery.
- Dispose of (usually recycle) waste batteries according to local regulations.
- Do not expose batteries to fire.

### Careful Maintenance

The following suggestions help you comply with warranty clauses and prolong the lifecycle of your handheld. When you use the handheld, battery, charger or other accessories:

- Place the handheld and all the accessories beyond the reach of children.

- Do not put the handheld in a dusty place; otherwise, its movable parts will be damaged.
- The LCD is a vulnerable part of the handheld. Avoid dropping the handheld or hitting it with other objects. Prevent sharp objects from scratching the LCD.
- Do not put the handheld in hot places. High temperatures shorten the lifecycle of electronic devices, damage the battery, lift the edge of the device, and melt plastic parts.
- Do not put the handheld in cold places. When the handheld is moved from a low-temperature environment to a normal or high-temperature environment, vapor is generated inside the handheld as the temperature rises, thus damaging the electronic circuitry.
- Do not throw, knock or shake the handheld. Rough treatment could damage the internal circuitry.
- Do not use coarse chemical agents, solvents or strong pharmaceutical cleaning

- agents to clean the handheld.
- Do not paint the handheld. Paint may stick on the movable parts of the device and affect normal operations.
- Use only equipped or designated antennas. Unauthorized antennas, accessories or modifications can damage the handheld, and violate rules governing radio devices.
- If the handheld, battery, charger or any accessory does not work, consult the nearest qualified maintenance service provider.

## CAUTION

***RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.  
DISPOSE OF USED BATTERIES  
ACCORDING TO THE INSTRUCTIONS***

## Glossary

### Antenna

It is a device for transmitting and receiving signals. The size and shape of an antenna

depend largely on the frequency of the signals it receives. Handhelds and base stations must be equipped with antennas.

### Call Barring

It is a restriction on outgoing calls and incoming calls.

### Call Divert

It is the ability to divert voice or data calls to other handhelds or fixed phones.

### Call Hold

Call hold allows you to switch between two calls if another incoming call is received during an ongoing call.

### Call Waiting

You are notified if another incoming call is received during an ongoing call.

### Conference Call

A multi-party call can have a maximum of six parties. This function requires network support.

### Hands-free

With this function, you do not need to pick up or hold a handheld.

### LCD

Usually it refers to the screen display of a

handheld.

### **Line Recognition Service**

This service allows you to display or hide your own number when making a call.

### **PIN**

It is a security code that protects the handheld against unauthorized access. The PIN is provided with the SIM card by the service provider. The PIN can comprise 4 to 8 digits, and can be changed as needed.

### **PUK**

It is the password for unlocking the SIM card when you enter an incorrect PIN three consecutive times. The PUK consists of 8 digits, and is provided with the SIM card by the service provider.

### **Roaming**

It is a service that allows you to use the handheld in other networks than your home network, for example when you are traveling.

### **SIM Card**

This identification card with a crystal chip contains all information (including network, memory, and subscriber data) required to

operate a handheld.

### **Common SMS**

It is a network service that involves sending and receiving information to and from other users. A written or received message (with fewer than 160 characters) can be displayed, received, edited, or sent.

### **Cell Broadcast**

The network service provider sends broadcast information, such as traffic information and weather forecast, to handhelds within network coverage. The information is sent in the form of text messages to your handheld.

### **Voicemail**

If you have subscribed to the voicemail service, callers may leave a message when you cannot answer a call. To call your voicemail number, hold the number key 1 on the standby interface.

*Contact your network operator for more information.*

### **PB**

Phone Book

### **SMS**

Short Message Service

**vCard**

Electronic Business Card

**IC**

International Code

**ISDN**

Integrated Services Digital Network

**MSISDN**

Mobile Station International ISDN Number

**CN**

Coach Number

**CUG**

Closed User Group

**EN**

Engine Number

**FC**

Function Code

**FN**

Functional Number

**LN**

Location Number

**MO**

Mobile Originated

**MT**

Mobile Terminated

**PTT**

Push-To-Talk

**PLMN**

Public Land Mobile Network

**ASCI**

Advanced Speech Call Item

**STK**

SIM Tool Kit



**Troubleshooting**

If your handheld has a problem, refer to the following symptom descriptions and solutions. If the problem persists, contact the retailer or service provider.

Symptom	Solution
I cannot answer or make a call.	<ul style="list-style-type: none"><li>• Ensure that the handheld has been powered on.</li><li>• Ensure that a valid SIM card has been correctly inserted.</li><li>• Ensure that the signal strength is sufficient.</li><li>• Ensure that call barring or fixed number dialing is disabled.</li><li>• Ensure that call divert is disabled.</li><li>• Ensure that a correct network has been selected.</li></ul>
The call sound volume is low.	<ul style="list-style-type: none"><li>• Ensure that the call sound volume has been set properly.</li></ul>
The handheld does not ring.	<ul style="list-style-type: none"><li>• Ensure that the vibration mode or silent mode is not selected for incoming calls.</li><li>• Ensure that the ringing volume has been set properly.</li><li>• Ensure that call divert is disabled.</li><li>• Check if the surrounding environment is noisy.</li></ul>
The other party cannot hear me.	<ul style="list-style-type: none"><li>• Ensure that mute is off.</li><li>• Ensure that the handheld microphone is near your mouth.</li></ul>
The PIN is locked.	<ul style="list-style-type: none"><li>• Contact your service provider to obtain the PUK for unlocking.</li></ul>
The battery cannot be charged.	<ul style="list-style-type: none"><li>• Ensure that the charger is properly connected.</li><li>• Check that the battery or charger is not damaged.</li></ul>

No network is available.	<ul style="list-style-type: none"><li>• Ensure that the SIM card has been inserted.</li><li>• Check that your current position is covered by the service network.</li><li>• Move the location to change the reception status.</li></ul>
I cannot power on the handheld.	<ul style="list-style-type: none"><li>• Ensure that the battery has been installed.</li><li>• Ensure that the battery is supplying power.</li><li>• Hold the power key.</li></ul>
The standby time has shortened.	<ul style="list-style-type: none"><li>• Ensure that the battery is fully charged.</li><li>• Check whether the signal strength in your current location is weak.</li><li>• Lower the LCD backlight.</li></ul>
I hear an echo or noise.	<ul style="list-style-type: none"><li>• Move to a place with stronger signals.</li></ul>