

S-911 Bracelet Locator

User's Manual

Revision 1.21

 **LAIPAC
TECH**
Locate to Protect



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For Your Safety

Read these simple guidelines. Not following them may be dangerous or illegal. Read the complete user guide for further information.



Road Safety Comes First

Do not use the device for talk and text when wireless phone use is prohibited or when it may cause danger.



Interference

All wireless devices may be susceptible to interference, which could affect performance.



Switch Off In Hospitals

Switch the device off near medical equipment.



Switch Off In Aircraft

Follow any restrictions. Wireless devices can cause interference in aircraft.



Switch Off When Refuelling

Do not use the device at a refueling point. Do not use near fuel or chemicals.



Switch Off Near Blasting

Follow any restrictions. Do not use the device where blasting is in progress.



Qualified Service

Only qualified personnel may install or repair this product.



Batteries

Use only approved batteries. Do not connect to incompatible products.



Back Up Copies

It is recommended to save the phone book record and important settings.



Connecting To Other Devices

When connecting to any other device, read its user guide for detailed safety instructions. Do not connect with incompatible products.



Emergency Calls

Ensure the phone function of the device is switched on and in service.

About Your Device

The wireless device described in this guide is approved for using GSM 850/900/1800/1900 networks. Contact your service provider for more information about which GSM frequency your service provider is using. When using the features in this device, obey all laws, respect privacy, and the legitimate rights of others.

Network Services

In order to use the S-911 Bracelet Locator, you must have GSM service from a wireless service provider and subscribe with LocationNow. Many of the features in this device depend on the features of the GSM provider to function. These network services may not be available with all providers meaning you may have to make specific arrangements with your service provider before you can utilize the network services. Your service provider may need to give you additional instructions for their use and explain what charges will apply. Some networks may have limitations that affect how you can use network services in your area.

Federal Communications Commission (FCC) Statement

15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)

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

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

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) this device may not cause **harmful** interference and
- 2) this device must accept any interference **received**, including interference that may cause undesired operation of the device.

FCC RF Radiation Exposure Statement:

For body worn operation, this phone has been tested and meets FCC RF exposure guidelines when used with an accessory that contains no metal and that positions the handset a minimum of 0 cm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

SAR information: 0.297W/Kg(1g)

CE Marking

This device has been tested to and conforms to the regulatory requirements of the European Union and has attained CE Marking. The CE Mark is a conformity marking consisting of the letters “CE”. The CE Mark applies to products regulated by certain European health, safety and environmental protection legislation. The CE Mark is obligatory for products it applies to: the manufacturer affixes the marking in order to be allowed to sell his product in the European market.

This product conforms to the essential requirements of the R&TTE directive 1999/5/EC in order to attain CE Marking. A notified body has determined that this device has properly demonstrated that the requirements of the directive have been met and has issued a favorable certificate of expert opinion. As such the device will bear the notified body number 0560 after the CE mark

The CE Marking is not a quality mark. Foremost, it refers to the safety rather than to the quality of a product. Secondly, CE Marking is mandatory for the product it applies to, whereas most quality markings are voluntary.

Marking: The product shall bear the CE mark, the notified body number(s) as depicted to the right. CE0560.

SAR information: 0.443W/Kg(1g)



- Chapter 1 -

**SIM card
Installation Instruction**

Introduction

This document describes the SIM card installation procedure used for the S-911 Bracelet Locator.

1.0 Preparation before installation of SIM card

1.1 A valid SIM card

A valid SIM (Subscribe Identity Module) card must be provided by the user in order to use the Bracelet. Your local GSM Carrier will be able to provide you a GPRS DATA and voice enabled SIM card.

The SIM card must be a 3V SIM, the bracelet is not compatible with the older 5V version SIM cards.

1.2 Special tools for installation

- (1) 2 special Phillips screwdrivers are needed for the SIM card installation, one is 1.4mm in size and the other is 1.6mm in size.
- (2) 1 long nose pliers (refer to Fig1).



Fig1. 1.6/1.4 mm Philips screwdrivers and long nose pliers

2.0 SIM card installation steps

- (1) Push the **Power on/off** button to turn off the power supply (refer to Fig2).

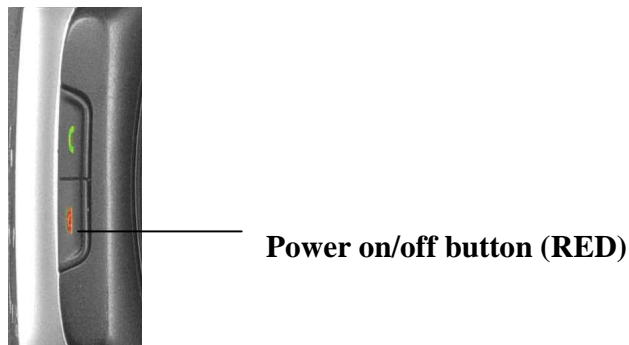


Fig2. **Power on/off button (RED)**

(2) Gently push the wristband pin with a 1.6mm size Philips screwdriver about 4mm deep until pin comes out of the other end of the wristband. (refer to Fig3).



Fig 3. Push the pin out of the wristband

(3) Same operation on the second pin (refer to Fig4).



Fig 4. Example of 2 pins sticking out of the wristband

(4) Slowly pull the 2 pins out with long nose pliers (rubber band will also work) and place them somewhere safely so you don't lose them. (Refer to Fig5).



Fig 5. Pull out the 2 pins with long nose pliers

(5) Gently unscrew and take out the 4 rear case screws with a 1.4mm size Philips screwdriver and place them somewhere safely so you don't lose them. (Refer to Fig6).



Fig 6. Unscrew the 4 rear case screws

(6) Gently open the Bracelet main case (refer to Fig7).

Do not touch the PCB or any component inside. The ESD (electrostatic discharge) can damage the unit permanently.



Fig 7. Please don't touch the PCB or any components inside.

(7) Fully insert a valid SIM card into the SIM card holder, label-up. You will see that the bottom edge of the SIM card firmly contacts the bottom line of the card holder. (Refer to Fig 8).



Fig 8. Fully insert SIM card into the card holder

(8) Close the main case carefully, and gently fix the 4 screws, refer to Fig 5 and Fig 6.

(9) Reinstall and secure the wristbands carefully by gently pushing the 2 pins into wristbands, refer to Fig 4.

CARE AND MAINTENANCE

Your device is a product of superior design and craftsmanship. The suggestions below will help you protect your warranty coverage.

- Keep the device dry. Precipitation, humidity, and all types of liquids or moisture can contain minerals that will corrode the electronic circuits.
- Do not store the device in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not attempt to open the device other than as instructed in this guide.
- Do not drop, knock, or shake the device on purpose. It will trigger the tamper alert to the monitoring centre.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the device.

- Chapter 2 -
Utility Configuration

Introduction

As a personal tracking device, if the bracelet wants to work with any Tracking Service provider's platform, such as www.LocationNow.com from Laipac Technology Inc. it should properly be integrated with Protocol and API.

Also, to support future application firmware upgrades for the bracelet, it needs a tool to download firmware.

Bracelet Utility is a tool to meet the requirements above.

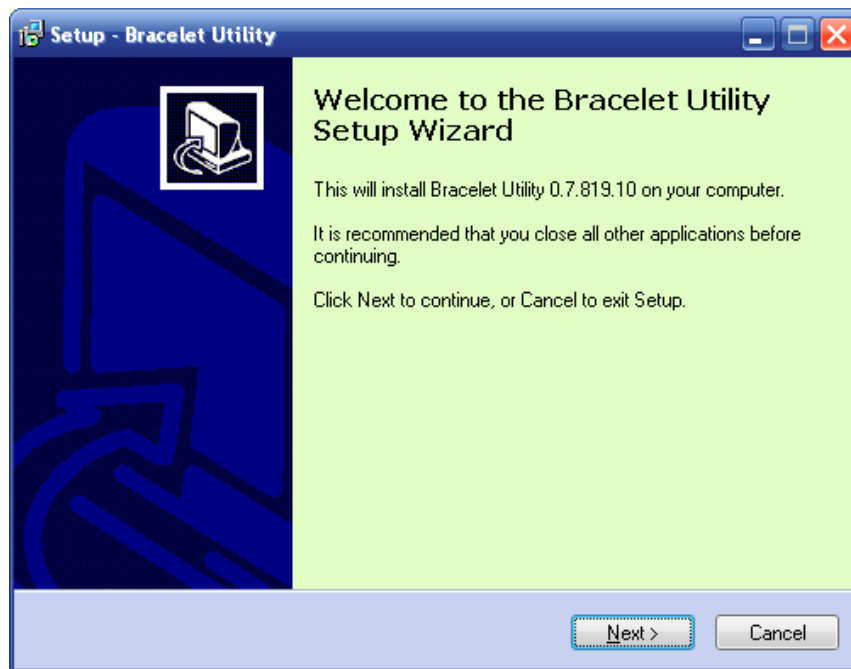
Quick Start manual only touches the configuration function part of this utility. It introduces:

- How to install this utility
- How to configure Bracelet by using default configuration file

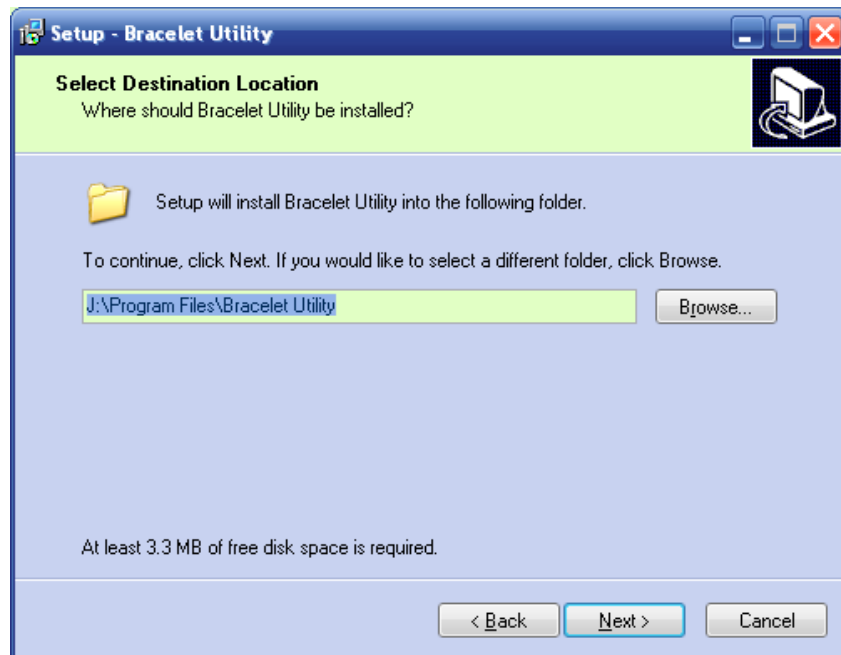
1. Installation of bracelet Utility

Step 1: Run the installation program.

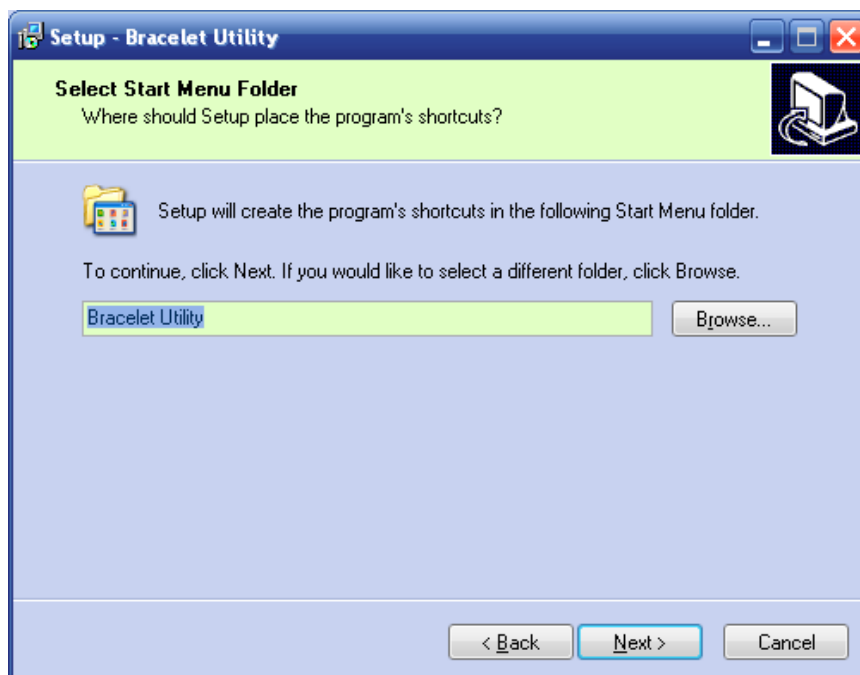
Run the "Bracelet Setup.exe" program to start Setup Wizard.



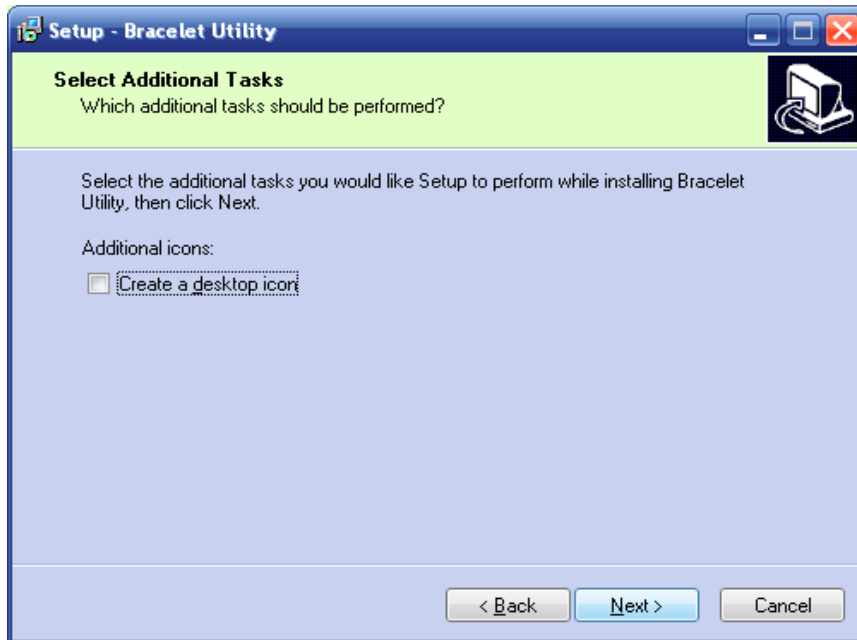
Step 2: Press the "Next" button to enter the page to Select Destination Location.



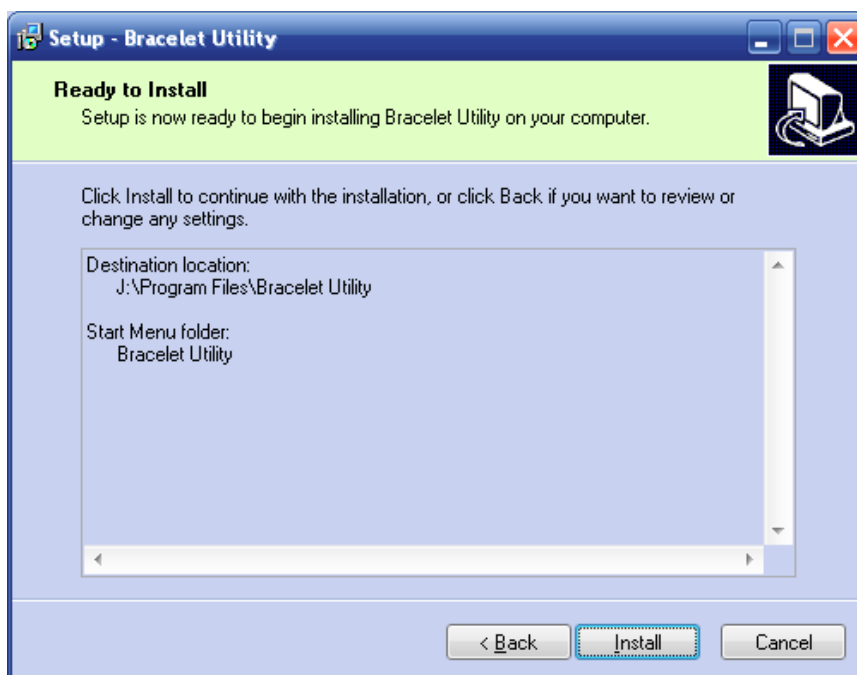
Step 3: If you don't want use the default folder, please type the name of the new folder and in box or press "Browse" open dialog to select another desired folder, then press the "Next" button to enter the next page.



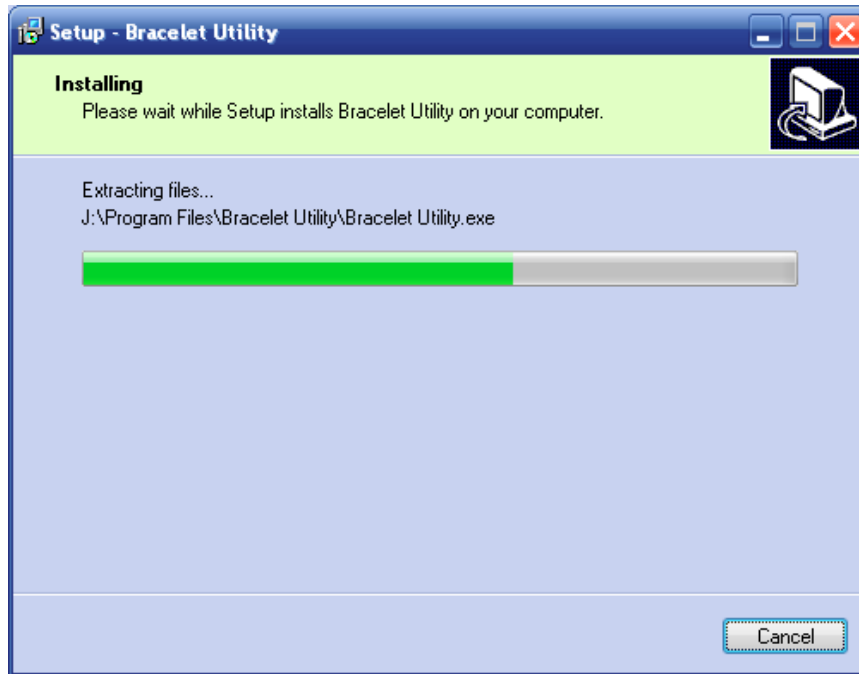
Step 4: Select the Start Menu Folder, and then press the "Next" button to go to the next page.



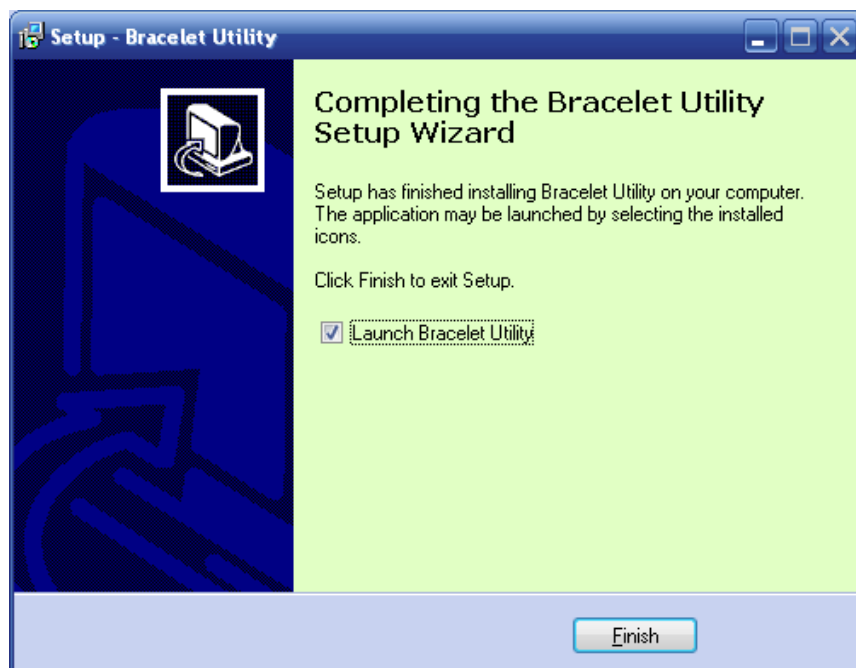
Step 5: If you want to create a shortcut icon on your desktop, please check the "Create a desktop icon" item. Then press the "Next" button to go to the next page.



Step 6: If nothing needs be changed, press the "Install" button. Otherwise, you can press the "Back" button to go back to the previous page.



Step 7: After extracting the files to destination directory, the installation is finished. The last step is optional which will ask if you want launch the Utility immediately. If you do not want to run the utility, uncheck the "Launch Bracelet Utility" item and press "Finish" to complete the installation. If the item is checked, the Utility will run after the installation dialog is closed.



The next step is to install USB driver required by Bracelet Utility

2. Installation of USB Driver

The following steps are only required when Bracelet, at first time, connects to PC through certain USB port, which has never gone through the installation procedure.

Step1 - Open the utility and select configuration

Step2 - Connect Bracelet and PC with USB cable

Step3 - Turn on Bracelet and ignore the display shown on Bracelet LCD screen

Step4 - Select proper Hardware Wizard and start USB Driver Installation



After several seconds the PC screen will show like above, then, check “Yes, this time only” and click “Next” button



Select “Install the software automatically (Recommend)” and click “Next”

Remark

If the following message pops up, click “Continue Anyway”.



Once the automatic USB driver installation has completed, please click “Finish” to exit
3 Configuring Bracelet

3.1 Start Bracelet Utility

There are 2 ways to start this utility

Method 1 – Start from “Start Menu”

Run utility from Start Menu. Select **Start Menu** → **All Programs** → **Bracelet Utility** → **Bracelet Utility**.

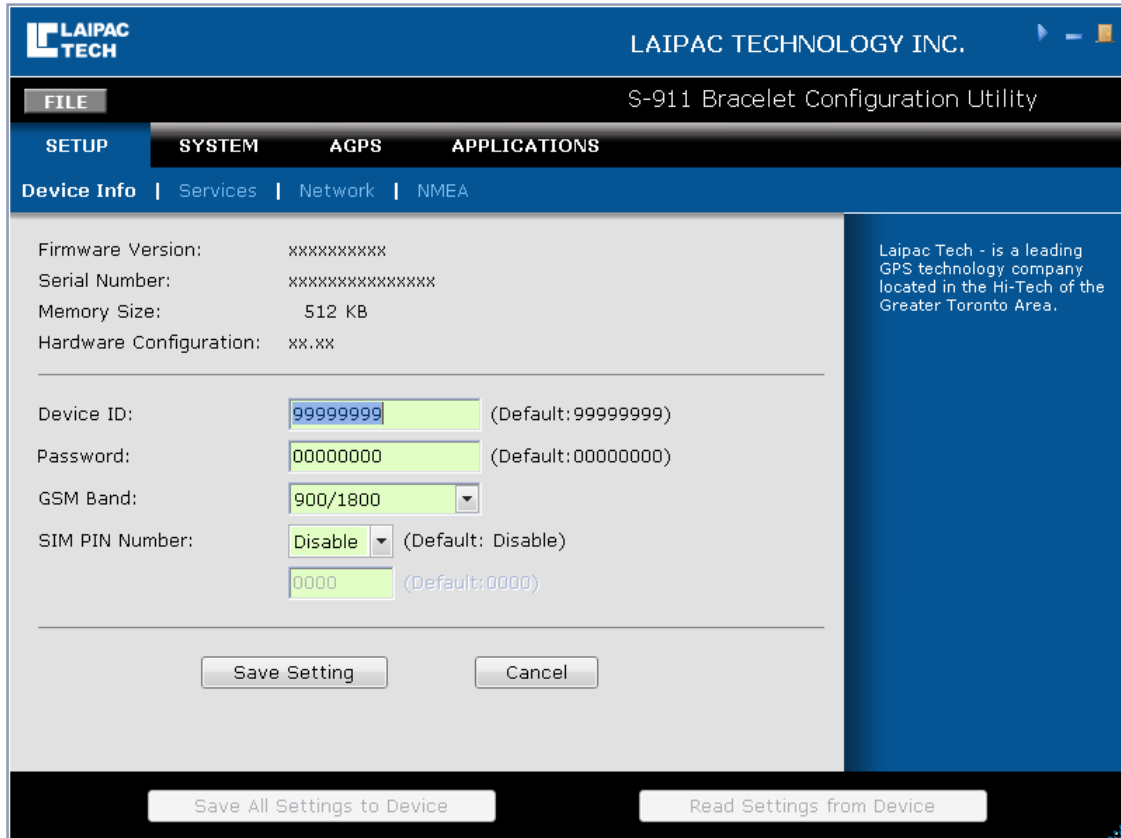
Method 2 -- Start by using Desktop Shortcut



Run utility from Desktop. If you check "Create a desktop icon" during installation, you can double-click the icon on desktop to launch it.



Click the “Configuration” button. By clicking this, you will select utility’s configuration function



3.2 Enter into Configuration Mode

Step1 - Power on Bracelet unit and connect it to PC through provided Micro USB cable.

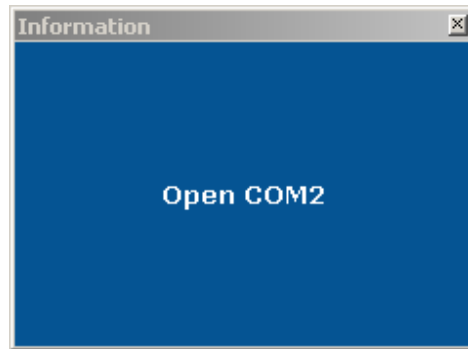
Step2 - Press “menu” key to enter into main menu.

Step3 - Select “Configuration” sub menu by pressing “Up” or “Down” key then press “OK”.

Step4 - Select the 4th sub menu “PGM. Download” by pressing “Right” key and press “OK”.

The “Resetting...” will be shown on Bracelet LCD Screen.

On the PC side, an information window will pop up at the corner of your screen, which will say “Found a new device” followed by “Open COM#”



3.3 Configuring Bracelet by using default configuration file

If this is your first time configuring the Bracelet, to speed up the configuration process, it's suggested that you configure Bracelet by using default configuration file that comes with Bracelet Utility. The file name is "Bracelet_configuration.cfg". Otherwise, you can go to section 3.4 directly.

Click "FILE" button on Top-left corner and select "open". Then select your configuration file from the directory which includes suggested configuration file and open it.

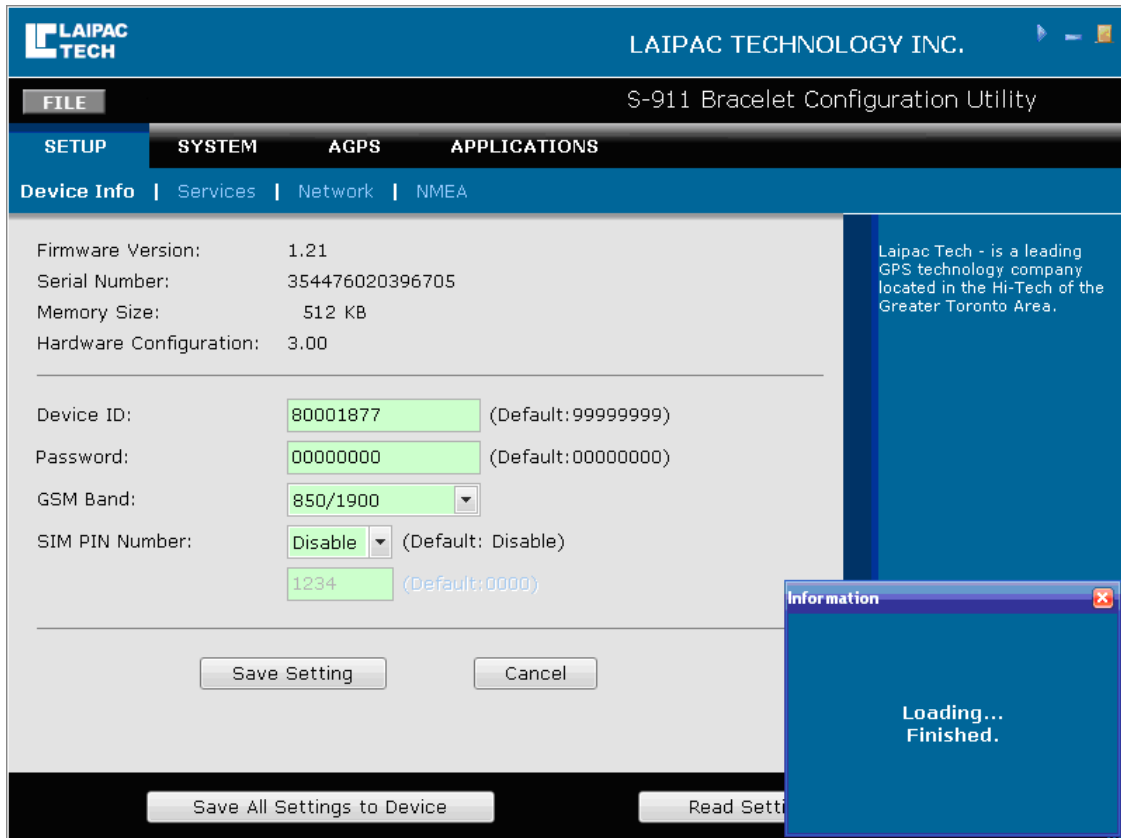


Turn to 3.5

3.4 Acquiring parameters of configuration from Bracelet

You can also acquire those parameters used for configuration by reading them from Bracelet unit, which has been configured before.

Click the “Read setting from device” button as show bottom right corner of pic. A window will pop up at the corner of your screen saying “Loading...” followed by “Finished.”

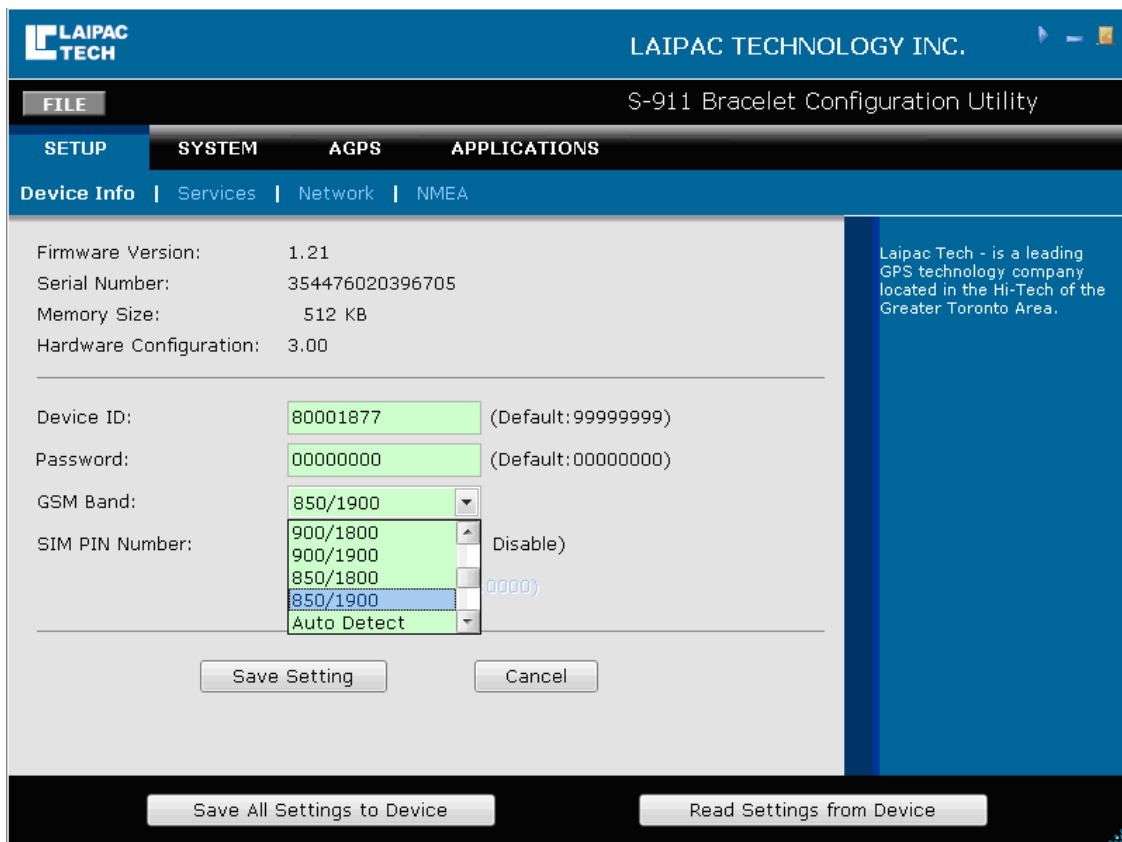


3.5 Bracelet configuration example

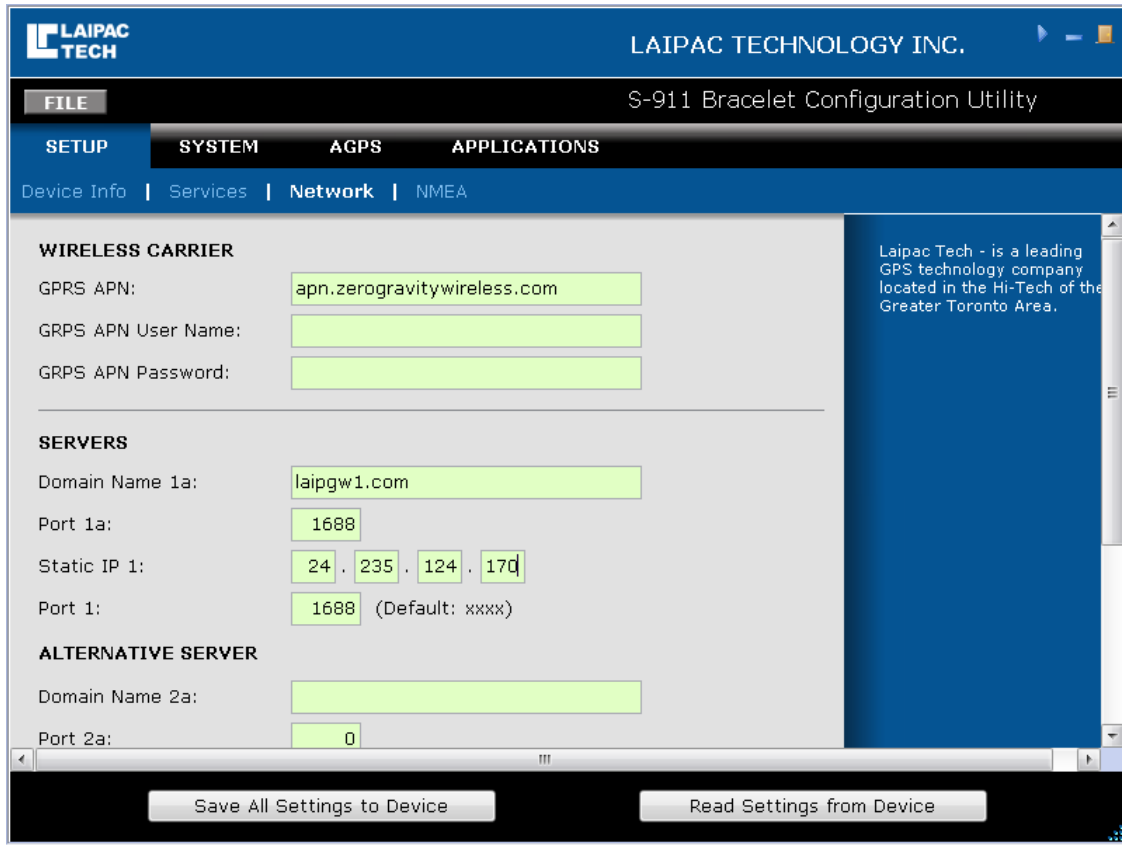
Here is an example that shows you how to configure a Bracelet unit, which will be registered on www.LocationNow.com

Step 1 Go through the procedure suggested by section 3.3

Step 2 Click GSM Band selection box and set correct band parameter from its drop-down menu.



Click “Network” on the top.



GPRS APN: Provided by your SIM card provider, it is the carrier’s APN (access point name) through which the device will transmit data to the Internet.

GPRS APN User Name: Provided by your SIM card provider, this is the username for your device to access the carrier’s data network. If it doesn’t exist, leave blank.

GPRS APN Password: Provided by your SIM card provider, this is the username for your device to access the carrier’s data network. If it doesn’t exist, leave blank.

Domain Name 1a: server gateway domain name.

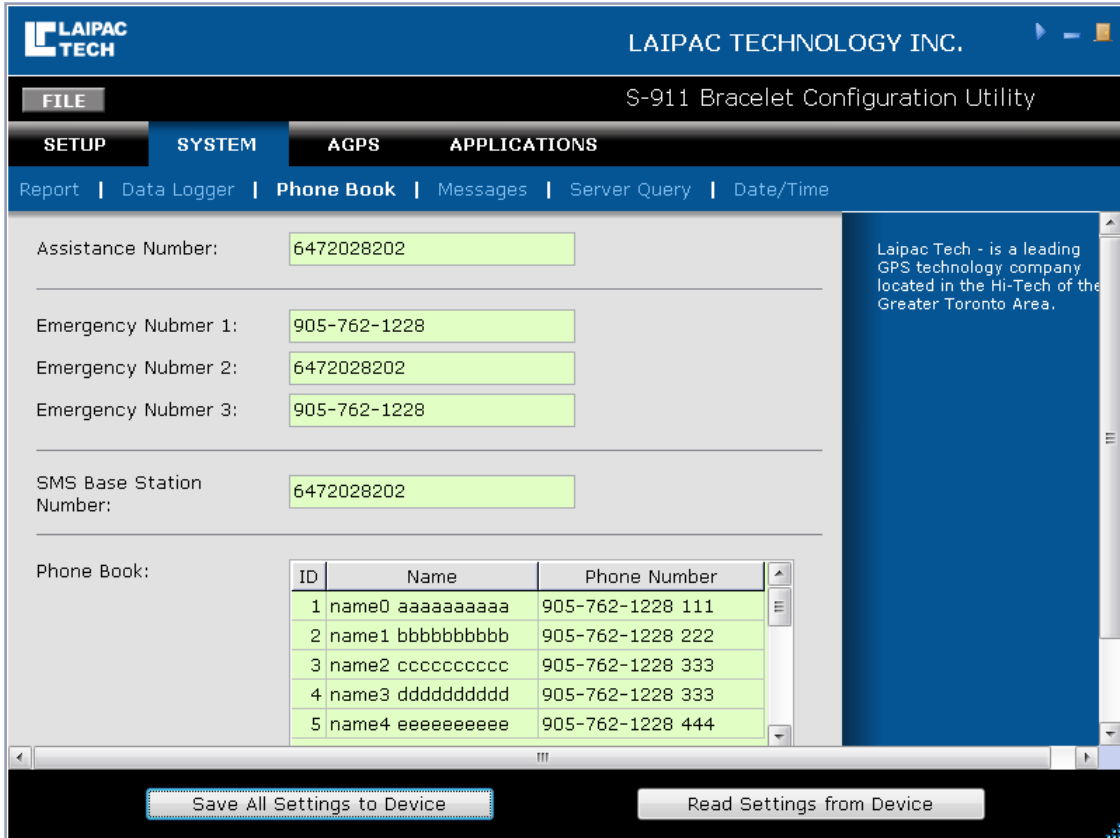
Port 1a: server gateway port.

Static IP 1: server gateway static IP (for back up).

Port1: server gateway port (for back up).

Note: the server setting parameters shown above is for our LocationNow.com Server.

Click “SYSTEM” then click Phone book



Assistance number: When SOS event is generated, this number will be called.

Emergency Number 1-3: emergency phone book numbers.

SMS Base Station Number: When SOS event is generated this number will be sent an SMS.

Phone Book: 10 phone book items.

Click “Messages” for 10 SMS setting

LAIPAC TECHNOLOGY INC. S-911 Bracelet Configuration Utility

FILE | SYSTEM | AGPS | APPLICATIONS

Report | Data Logger | Phone Book | Messages | Server Query | Date/Time

Short Messages:

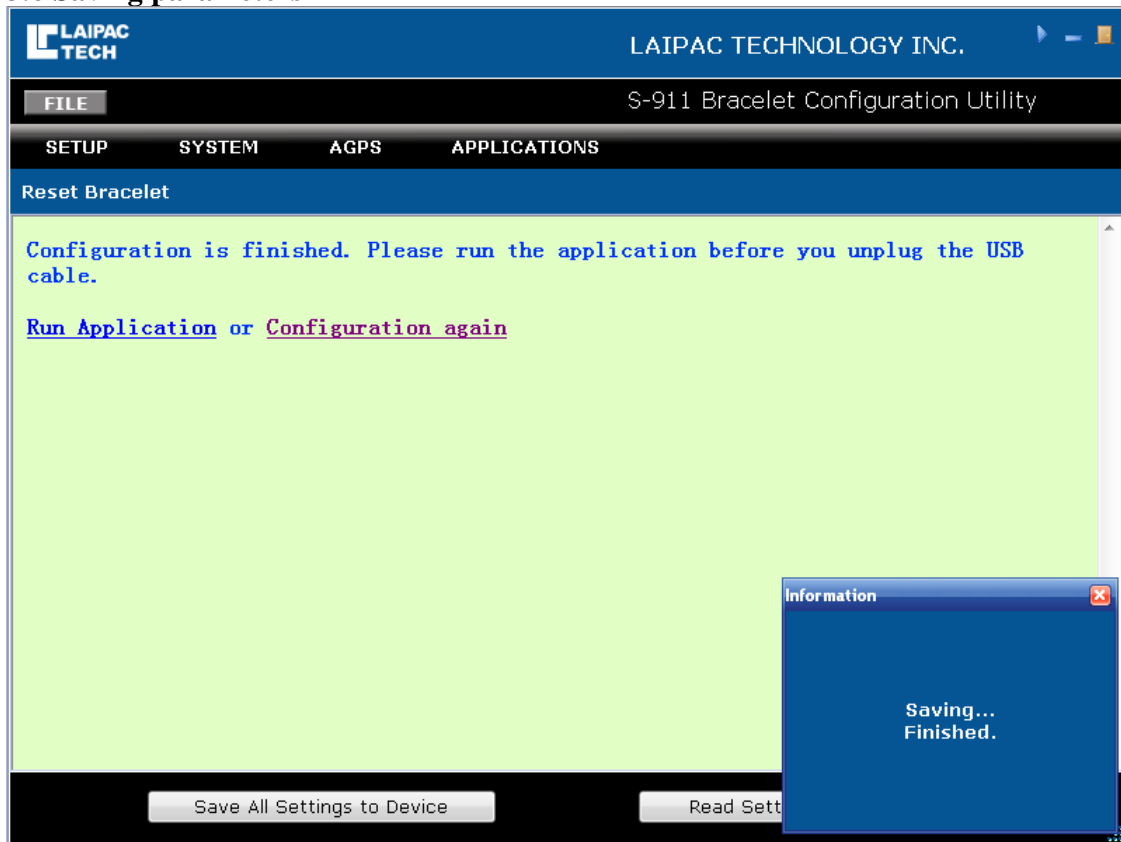
ID	Messages
1	call me plz.
2	Are you ok? Give me a call if you can.
3	What's going on? Send message back.
4	I am bussy so far, call me later.
5	You mother is looking for you, call her right now.
6	The Diablo 3 is starting, have you got it?
7	Hurry up!
8	Help!!! Call my brother for me please.
9	S-911 bracelet is a very good tracking device.
10	how are you doing.

Save Setting Cancel

Save All Settings to Device Read Settings from Device

Laipac Tech - is a leading GPS technology company located in the Hi-Tech of the Greater Toronto Area.

3.6 Saving parameters



Click “Save All Settings to Device” button. A window will pop up at the corner of your screen saying “Saving...” followed by “Finished.”

So far you have completed all necessary setting for this unit. If you don’t need to change any other parameters, you can press “Run Application” to run the application on unit. If you need modify other parameters, please press “Configuration again” back to setting window.

We suggest backing up of the unit parameters to a file. Next time just reload parameters from this file and do the necessary modification.

4 Exit Configuration Mode

- Step1 - Disconnect USB cable from Bracelet USB port
- Step2 - Press “OK” and “Send” buttons at same time
- Step3 - Release “OK” and “Send” buttons, Bracelet will enter into normal working mode to run demo application.

- Chapter 3 -
Operation Instruction

Scopes

This document describes the S-911 Bracelet demo (V1.21) operation procedures. The corresponding hardware version is V3.0.

Features

The main features include SOS and Emergency call, phone book, SMS, instant Geo-fence, real time position reporting, and setting parameters remotely.



Fig 1

Key Layout

There are 7 keys on front and 2 keys on right side. See Fig 1 and Fig 2. Power on/off key is also used to hang up a phone call.

Pre-Operation Instruction

Before operating the unit verify that the below three steps have been completed.

1. A valid SIM card has been installed. Refer to Chapter 1.
2. The configuration parameters have been set properly. Refer to Chapter 2.
3. The unit has been charged with enough power.

Charging

There are three main conditions for charging the unit listed below.

1. When the unit is off
 - Connect the USB cable to the charger. The LCD shows Fig 3. The flashing battery ICON means charging. Stable with full battery bar ICON means that the unit has finished charging. If you unplug the USB cable, the unit will shut down by itself.
2. When the unit is on.
 - Connect the USB cable to charger. The battery ICON on main menu will flash.
3. Unit is on and is at full charging status
 - Connect the USB cable to charger. Press power on/off key and hold for 4 seconds. The Unit will change to full charging status like 1.

For conditions 1 & 3, the display shows “charging” and will switch to “Complete” with a full battery bar ICON, when the unit is fully charged.

For condition 2, when the battery finishes charging, the battery ICON will stop flashing.



Fig 2

Powering the Bracelet

To power the bracelet, press the power on/off key for 3 seconds. The LCD backlight will flash 3 times and initializing information will be shown on the display. See Fig 5. The initializing procedure will take approximately 3 seconds.



Fig 3

Main Menu

After initializing, “**Main Menu**” is shown on LCD display, see Fig 6. The ICON to the left outlines the status of GSM. The time is shown in the middle. The ICON on the far right is for battery status and the one next to battery icon is used to indicate the status of GPS.

GSM ICON: The ICON on Fig6 means GSM is fixed and provides how many bars it is connected with or otherwise shows it is trying to connect to GSM.

GPS ICON: Flashing “G” means GPS is trying to connect and a stable “G” means GPS has connected.

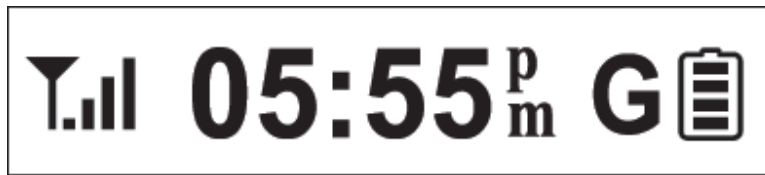


Fig 4

Menu Operation

The menu key is the main button that allows the bracelet operator to access the available menu structure. The main menus that will be covered in this section are: Emergency Call, Phone Book, Short Message, Instant Geo-fence, Current Position, Speed and Heading, and Configuration.

The instructions to navigate through these menus are listed below.

Left key: the menu title will scroll from the left side.

Right key: a part of the menu title will be shown and then scrolls across the display.

Up/Down: Navigates through menu or sub menu options.

Menu key: Returns to the Main Menu.

OK: Confirms the current selection.

1. Emergency call (see Fig s1)



Fig s1

The first sub menu “Emergency Call” will be shown on the LCD after pressing the menu key (see Fig s1). Only a part of menu title is on the screen at first. After 2 seconds, the menu title will start to scroll until any function key is pressed and stop after 45 seconds of inactivity.

1.1 Emergency call phone book

Press Left key: displays the name (see Fig s1.1.1).

Press Right key: displays the phone number (see Fig s1.1.2).

Press Up/Down: selects another phone book item.

Press Menu key: will return to the Main Menu.

Press OK: confirms the selection and calls the number.



Fig s1.1.1

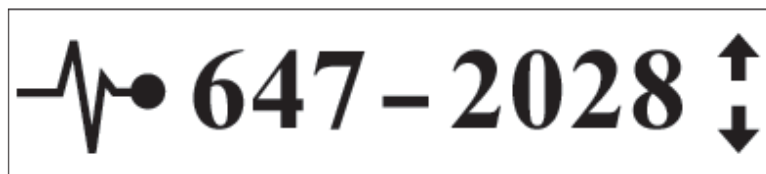


Fig s1.1.2

1.2 Calling

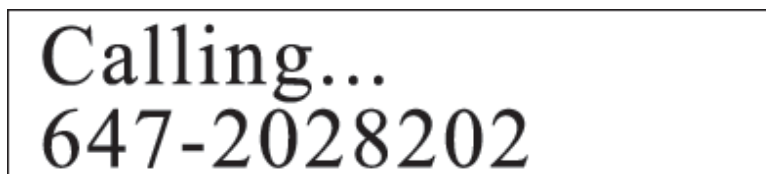


Fig s1.2

Press the Menu key or the Hang up key to cancel current call and return to the Main Menu. If call is successful, the display in figure 1.3 will appear.

1.3 Talking

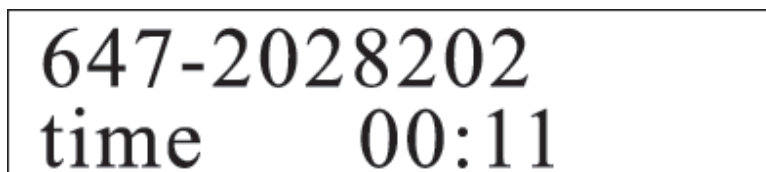


Fig s1.3

This display indicates that a 2-way voice session is open and counts the duration of the call.

By pressing the hang up key will hang up the current call and return to the Main Menu.

By pressing the Menu key will return to the Main Menu screen while keeping the voice session open.

2. Phone Book (see Fig s2)



Fig s2

2.1 Phone Book Selection

Press Left key: displays the name (see Fig s2.1.1).

Press Right key: displays the phone number (see Fig s2.1.2).

Press Up/Down: selects another phone book item.

Press Menu key: will return to the Main Menu.

Press OK: confirms the selection and calls the current number.



Fig s2.1.1

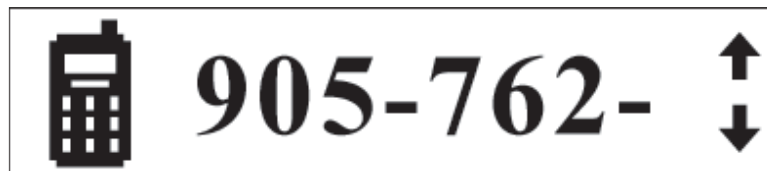


Fig s2.1.2

3. Short Message (see Fig s3)



Fig s3

3.1 Short Message Selection

Press Left key: displays the name (see Fig s3.1.1).

Press Right key: displays the short message (see Fig s3.1.2).

Press Up/Down: selects another name or SMS item.

Press Menu key: returns to the Main Menu.

Press OK: confirms the selection and sends an SMS to the phone number belonging to this name.



Fig s3.1.1



Fig s3.1.2

4. Instant Geo-fence (see Fig s4)



Fig s4

4.1 Geo Fence setting

Press Left/Right: selects different instant geo fence range.

Press Up/Down: sets the current geo fence to available or unavailable.

Press Menu key: returns to the Main Menu

Press OK: confirms the current selection and setting and then returns to the Main Menu.



Fig s4.1

5. My Position (see Fig s5)



Fig s5

5.1 Shows the current position (Latitude/Longitude)

Press the Menu key to return to the Main Menu.



Fig s5.1

6. Speed & Heading (see Fig s6)



Fig s6

6.1 Shows the current heading and speed (km/hr)

Press the Menu key to return to the Main Menu.



Fig s6.1

7. Configuration (see Fig s7)



Fig s7

7.1 Configuration selection sub menu (see Fig s7.1)

Press Left/Right: sub menu or functions selection

Press OK: confirms and goes to the selected submenu.

Press Menu: returns to Main Menu

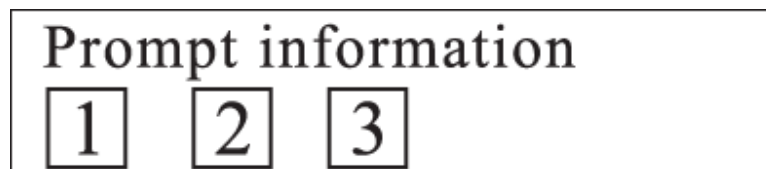


Fig s7.1

7.1.1: Set date and time

7.1.2: Set time zone.



Fig s7.1.2

Press Up/Down: changes the current value

Press OK: confirms the current menu operation setting and returns to the Main Menu

Press Menu: cancels the current menu operation setting and returns to the Main Menu

7.1.3: Set alarm.

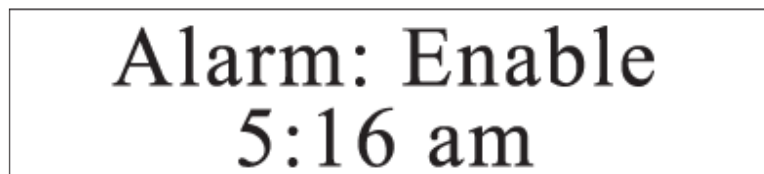


Fig s7.1.3

Press Up/Down: changes the current value

Press Left/Right: selects the next operation item

Press OK: confirms the current menu operation setting and go back to the Main Menu

Press Menu: cancels the current menu operation setting and returns to the Main Menu

7.1.4: PGM. Download.

Press OK, and the Unit will reboot with the LCD screen showing “Resetting.....”

Call/Send Key Operations

If GSM is not fixed, press the call/send key and the unit will start to connect with GSM. To go to the phone book menu directly, press the call/send key. This can only be accomplished when the bracelet is connected to GSM.

SOS Key Operations

Press and hold the SOS key for 5 seconds, see **Fig 5**

- 1) Sends the SOS information to central server by GPRS.
- 2) Sends the SOS SMS to emergency phone1.
- 3) Calls the SOS phone number.

SOS message
Sending

Fig 5

Press and hold the Power on/off key for 3-5 seconds and the unit will be shut down.

Remote Inquiring and Setting

Emergency phone numbers setting can be accomplished by remote configuration. See Fig 6.

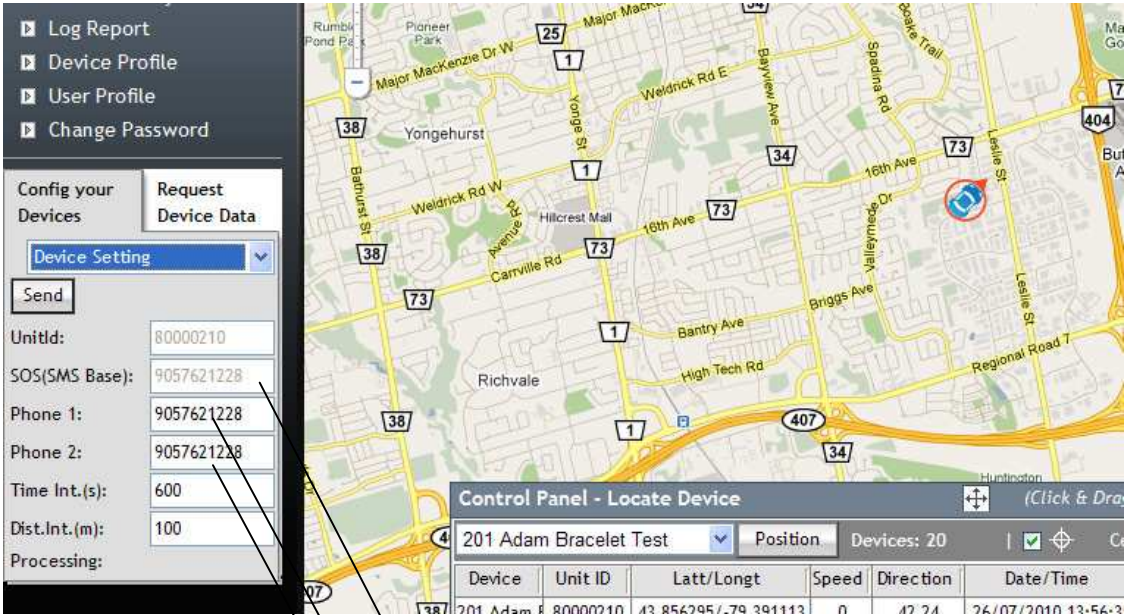


Fig 6

SOS phone number
Emergency phone number 1
Emergency phone number 2