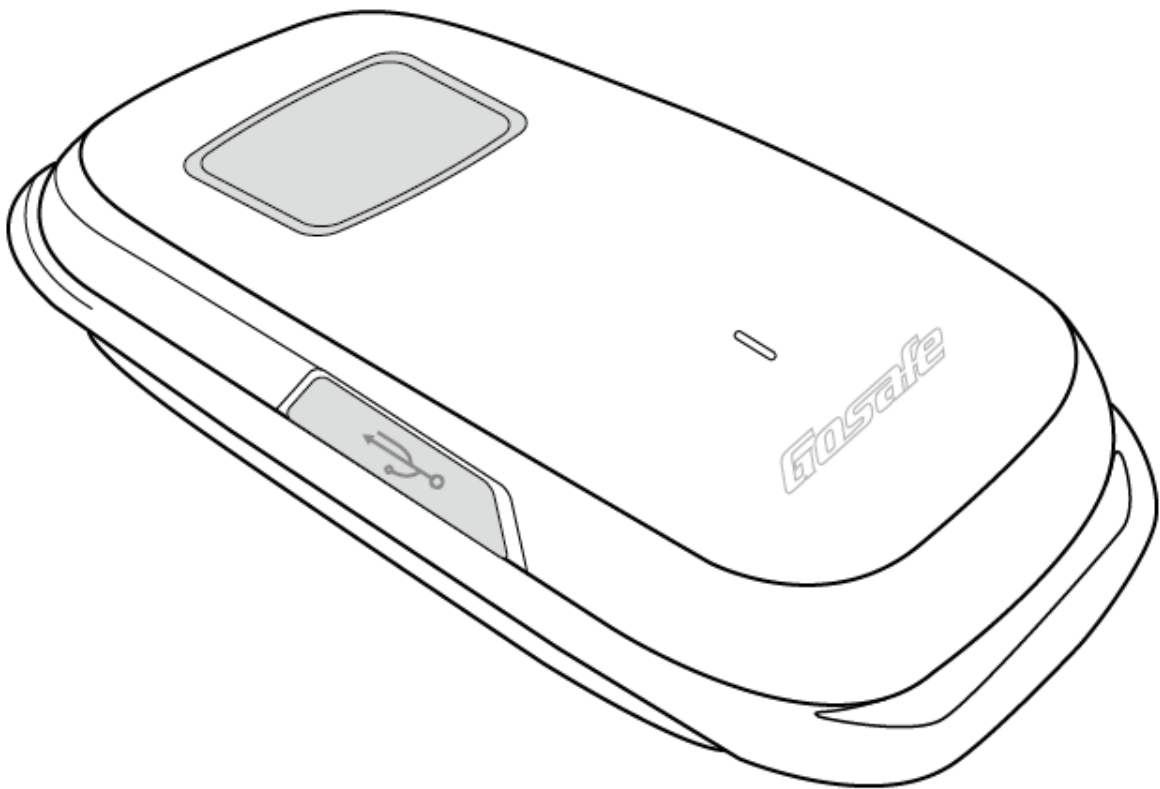


Gosafe[®]



G2P User Manual v1.0

LEGAL NOTICE

- ◆ Copyright © 2014 Gosafe.
- ◆ All rights reserved. Reproduction, transfer, distribution or storage of part or all of the contents in this document in any form without the prior written permission of Gosafe is prohibited.
- ◆ Other products and company names mentioned herein may be trademarks or trade names of their respective owners.

SAFETY

Using connectors, ports, and buttons

Never force a connector into a port or apply excessive pressure to a button, because this may cause damage that is not covered under the warranty. If the connector and port don't join with reasonable ease, they probably don't match. Check for obstructions and make sure that the connector matches the port and that you have positioned the connector correctly in relation to the port.

Operating temperature

G2P is designed to work in ambient temperatures between and stored in temperatures between -20°C to +50°C. G2P can be damaged and battery life shortened if stored or operated outside of these temperature ranges. Avoid exposing G2P to dramatic changes in temperature or humidity. When you're using G2P or charging the battery, it is normal for G2P to get warm.

Explosive atmospheres

Do not charge or use G2P in any area with a potentially explosive atmosphere, such as a fueling area, or in areas where the air contains chemicals or particles (such as grain, dust, or metal powders). Obey all signs and instructions.

Radio frequency interference

Observe signs and notices that prohibit or restrict the use of mobile phones (for example, in healthcare facilities or blasting areas). Although G2P is designed, tested, and manufactured to comply with regulations governing radio frequency emissions, such emissions from G2P can negatively affect the operation of other electronic equipment, causing them to malfunction. Turn off G2P or use Airplane Mode to turn off the G2P wireless transmitters when use is prohibited, such as while traveling in aircraft, or when asked to do so by authorities.

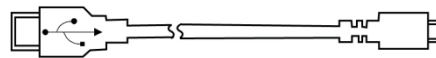
Charging

Charge G2P with the included USB cable, or with other third-party cables and power adapters that are compatible with USB 2.0, or power adapters compliant with one or more of the following standards: EN 301489-34, IEC 62684, YD/T 1591-2009, CNS 15285, ITU L.1000, or another applicable mobile phone power adapter interoperability standard.

Contents

1. Packing list.....	1
2. Specifications	1
3. Features and event	2
3.1. Features	2
3.2. Supported event list.....	2
4. Overview	3
4.1. Front.....	3
4.2. Rear	3
5. Getting started	4
5.1. Install SIM card.....	4
5.2. Set up by SMS command	4
6. LED behavior	5
7. User command.....	6
1.Command UNO0	6
2.Command UPW0.....	6
3.Command USPO;0	6
4.Command USPO;1	6
5.Command UNO1	7
6.Command UPW1.....	7
7.Command USP1;0	7
8.Command USP1;1	8
9.Command MEI.....	8
10.Command PRQ.....	8
11.Command TZN	9
12.Command DNU	9
13.Command APN	9
14.Command SVR.....	9
15.Command SVP;0.....	10
16.Command SVP;1.....	10
17.Command SOS.....	10
18.Command BMC	11
19.Command GFS.....	11
20.Command PSS	11
21.Command LED.....	12
22.Command MGR.....	12
23.Command CID	12
8. Message sample.....	13

1. Packing list



2. Specifications

Physical	Dimension	66.5(L)*35.5(W)*12.5(H)mm	
	Weight	N/A	
Environment	Operating temperature	-20°C to +50°C (with backup battery)	
Bluetooth	NOT Supported	N/A	
USB	Micro USB	2.0	
CPU	ARM	SC6531	
LED indicator	1 LED indicators	GSM & GPS & POWER	
Power supply	External	N/A	
	Lithium battery	Type	Rechargeable, Li-Po 3.7V, 600mAh
Power consumption	Standby: 2.5mA@3.7V, Operating: 130mA@3.7V		
GSM/GPRS	Antenna	Built-In	
	Model	SPREADTRUM SC6531	
		Quad band: 850/900/1800/1900MHz	
		Multiple-slot Class 8 (dual band)/12 (quad band)	
		GPRS class 12/Station class B	
TCP/IP over PPP			
SIM card	1.8V & 3.3V, Micro SIM		
GPS	Internal antenna	FPC	
	External antenna	Not supported	
	Model	u-Blox G7020	
	Channel	50 Parallel Channels	
	Accuracy	Autonomous<2.5M	
	Sensitivity	-162dBm	
Sensor	Acceleration sensor	Built-In, 3 axis	
Flash storage	16Mbits	Built-In	

3. Features and event

3.1. Features

- ✓ SOS button to trigger instant SOS message
- ✓ Daily life water proof standard
- ✓ A-GPS supported
- ✓ Private activity hour mode
- ✓ Circular Geo fence supported
- ✓ Dynamic report interval on preset conditions
- ✓ Replaceable battery
- ✓ Mobile application & PC configuration utility
- ✓ Fall down detection

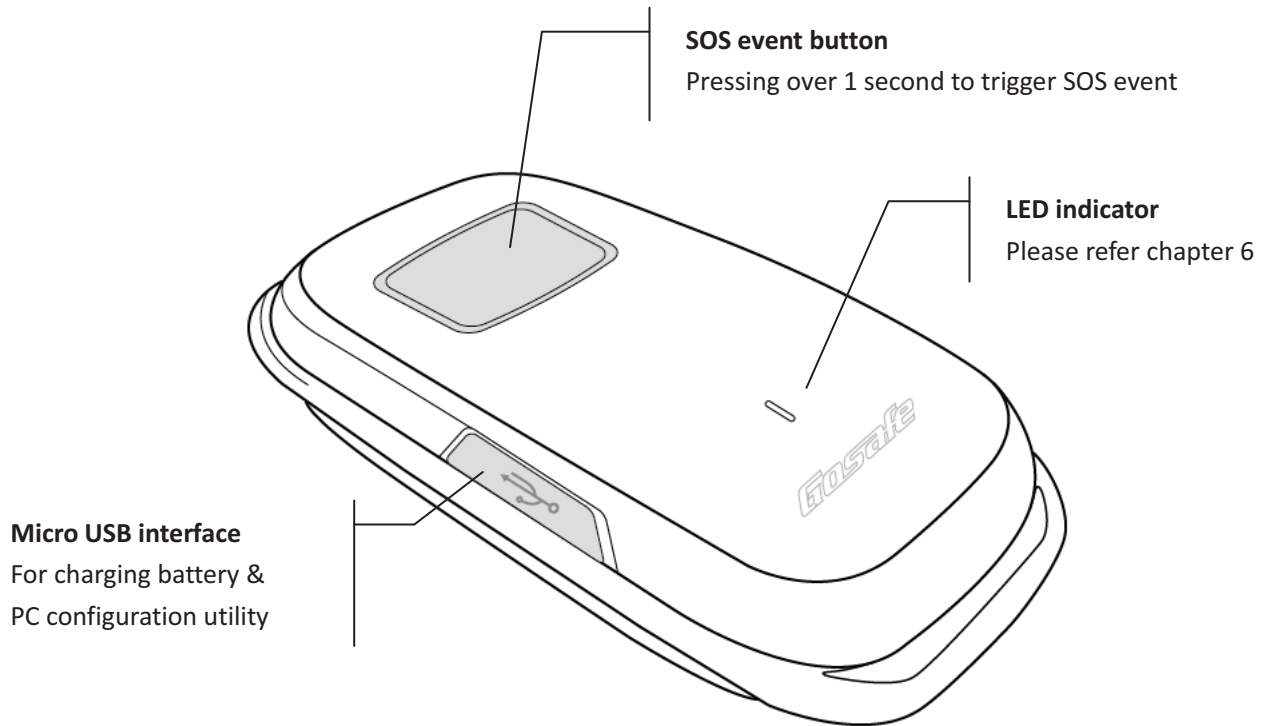
3.2. Supported event list

Tracker is capable to report below specific events instantly via GPRS/SMS channel as per setting.

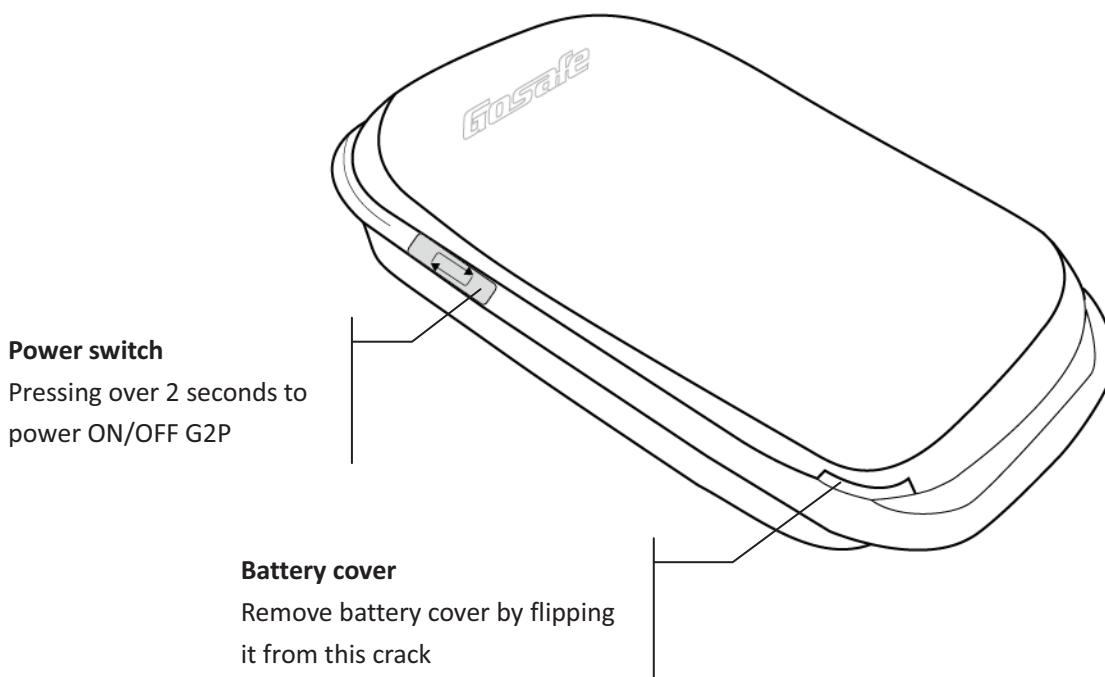
#	Event name	To user cell	To GPRS host server
1.	SOS button pressed	✓	✓
2.	Battery low voltage	✓	✓
3.	GPS unfix to fix	✓	✓
4.	GPS fix to unfix	✓	✓
5.	Entering grey area	✓	✓
6.	Leaving grey area	✓	✓
7.	Entering Geo-fence	✓	✓
8.	Leaving Geo-fence	✓	✓
9.	Fall down	✓	✓

4. Overview

4.1. Front



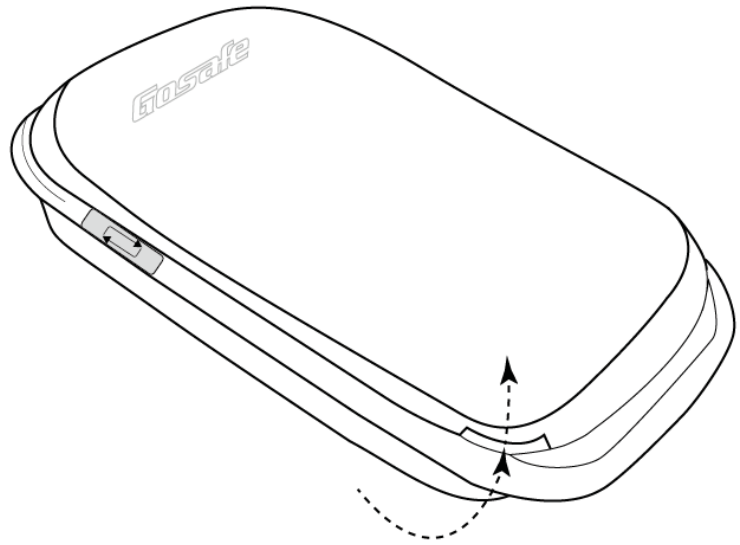
4.2. Rear



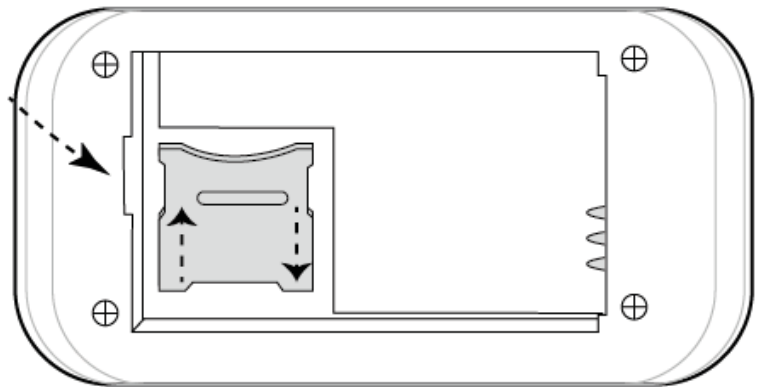
5. Getting started

5.1. Install SIM card

1 Remove cover at the shown direction from here.



2 Flip up battery from here to find the SIM card holder.

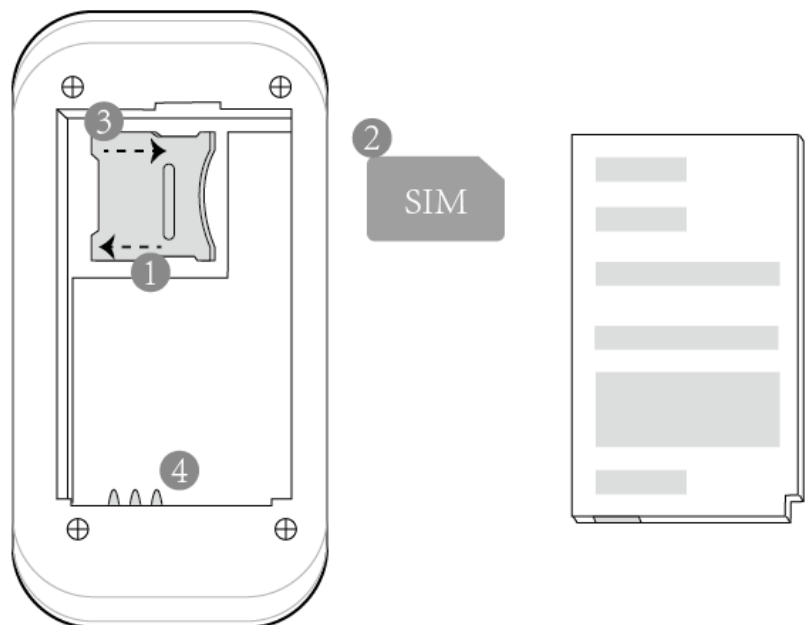


3 Step1:
Release SIM holder at shown direction.

Step2:
Insert SIM card to SIM holder,
Metal part of SIM card facing to
PCB board.

Step3:
Lock SIM card holder at shown
direction.

Step4:
Align contact point to install
battery back.

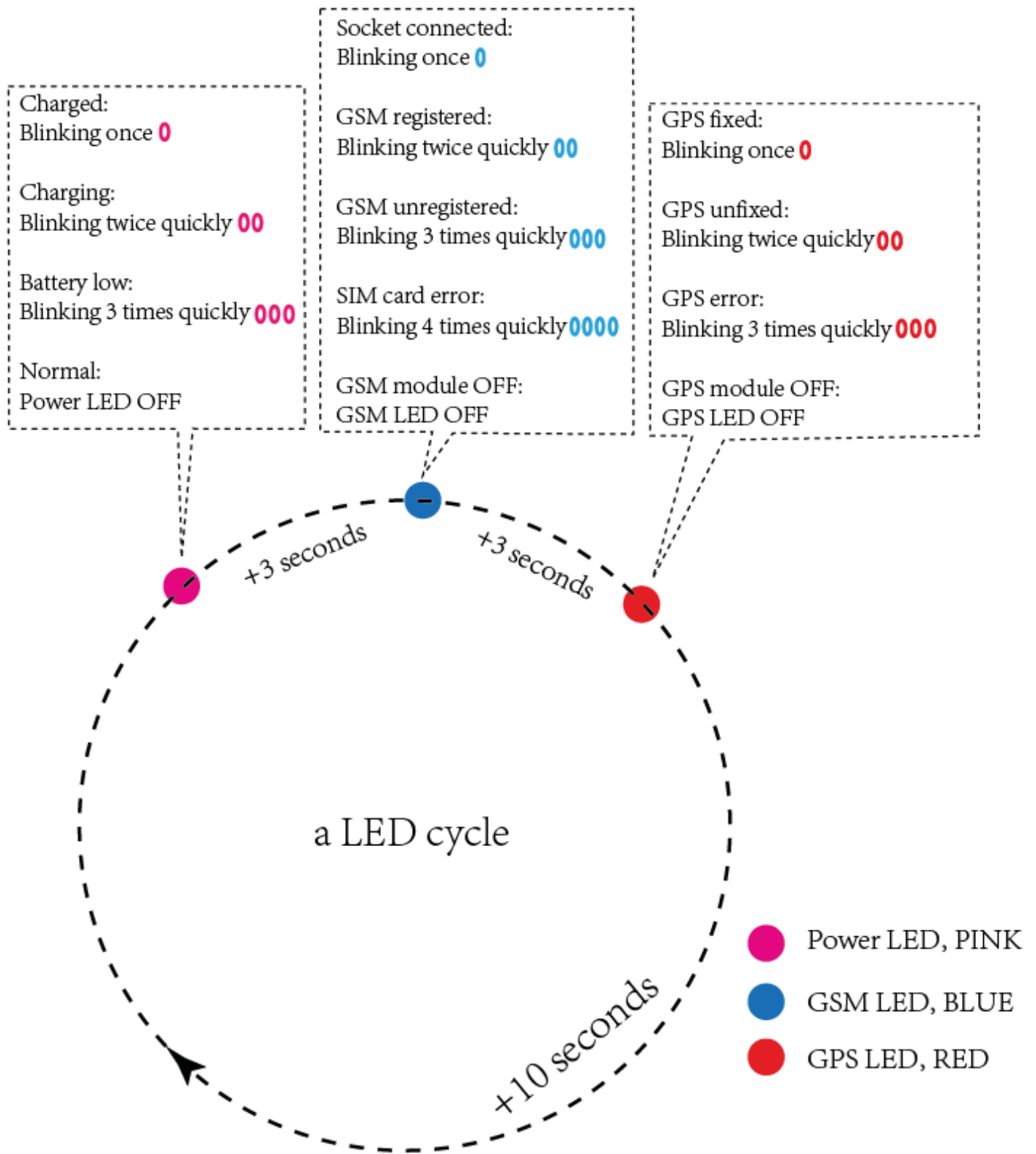


5.2. Set up by SMS command

Please refer chapter 7 “User command”.

6. LED behavior

LED behavior is determined by command LED, by default (LED;300;10) it will acting as below, please refer command LED in chapter 7 for further information.



7. User command

1.Command UNOO

This command is to set user phone number#1 that has authority to interact with tracker.

Example:

Phone number: 13800138000, country code: +86

1234,UNOO;+8613800138000	Tracker
User SMS	G2P V1.00 UNOO:+8613800138000 BAT 60% #1

2.Command UPW0

This command is to change the default password 1234 for user phone number#1, 4 digits fixed.

1234,UPW0;5678	Tracker
User SMS	G2P V1.00 UPW0:5678 EXT_PWR=11.94V BAT 60% #2

3.Command USP0;0

This command is to set report mode0 for user phone number#1

1234,USP0;0;30S;G;W	Tracker	Remark
User SMS	G2P V1.00 USP0;0;30S;G;W BAT 60% #1	USP0;0;<Report interval>;<Paramter1>;<Paramter2> <Report interval>: Range is from 30S to 900S, 15M to 59M, 1H to 720H. S = Second M = Minute H = Hour <Parameter1>: G = GPS position preferred. O = Disable position report. <Parameter2>: T = Position is shown in text. W = Position is shown is hyper link.

Note: O is letter.

4.Command USP0;1

This command is to set report mode1 for user phone number#1

1234,USP0;1;30M;G;W	Tracker	Remark
User SMS	G2P V1.00 USP0;1;30M;G;W	USP0;1;<Report interval>;<Paramter1>;<Paramter2>

BAT 60% #1	<Report interval>: Range is from 30S to 900S, 15M to 59M, 1H to 720H. S = Second M = Minute H = Hour <Parameter1>: G = GPS position preferred. O = Disable position report. <Parameter2>: T = Position is shown in text. W = Position is shown is hyper link.
-----------------------------	---

Note: O is letter.

5.Command UNO1

This command is to set user phone number#2 that has authority to interact with tracker.

Example:

Phone number: 13800138000, country code: +86

1234,UNO1;+8613800138000	Tracker
User SMS	G2P V1.00 UNO1:+8613800138000 BAT 60% #1

6.Command UPW1

This command is to change the default password 1234 for user phone number#2, 4 digits fixed.

1234,UPW1;5678	Tracker
User SMS	G2P V1.00 UPW1:5678 BAT 60% #2

7.Command USP1;0

This command is to set report mode0 for user phone number#2

1234,USP1;0;30S;G;W	Tracker	Remark
User SMS	G2P V1.00 USP1;0;30S;G;W BAT 60% #1	USP1;0;<Report interval>;<Paramter1>;<Paramter2> <Report interval>: Range is from 30S to 900S, 15M to 59M, 1H to 720H. S = Second M = Minute H = Hour <Parameter1>: G = GPS position preferred.

	O = Disable position report. <Parameter2> T = Position is shown in text. W = Position is shown is hyper link.
--	--

Note: O is letter.

8.Command USP1;1

This command is to set report mode1 for user phone number#2

1234,USP1;1;30M;G;W	Tracker	Remark
User SMS	G2P V1.00 USP1:1;30M;G;W BAT 60% #1	USP1;1;<Report interval>;<Paramter1>;<Paramter2> <Report interval>: Range is from 30S to 900S, 15M to 59M, 1H to 720H. S = Second M = Minute H = Hour <Parameter1>: G = GPS position preferred. O = Disable position report. <Parameter2>: T = Position is shown in text. W = Position is shown is hyper link.

Note: O is letter.

9.Command MEI

This command is to query GSM module IMEI of tracker, aka device ID.

1234,MEI	Tracker
User SMS	G2P V1.00 MEI:351535053999389 BAT 60% #3

10.Command PRQ

This command is to query current position of tracker.

1234,PRQ	Tracker
User SMS	G2P V1.00 LTM 2013-06-06 14:17:12 http://maps.google.com/maps?q=23.164374,113.428576&t=m&z=16 SPD 0km/h 0 CSQ -52dBm BAT 60% #5

Note: Position information in message may vary depending on setting/current status.

11.Command TZN

This command is to set local time.

1234,TZN;08:00	Tracker	Remark
User SMS	G2P V1.00 TZN:08:00 BAT 60% #6	TZN;<Time zone> <Time zone>: Format is HH;MM, range from -13:00 to 13:00.

12.Command DNU

This command is to set switching condition for report mode0 and report mode1.

1234,DUN;3	Tracker	Remark
User SMS	G2P V1.00 DNU:3 BAT 60% #6	DNU;<Parameter> <Parameter>: 0 = Always stick with mode0. 1 = When roaming switch to mode1, otherwise stick with mode0. 2 = When battery low switch to mode1, otherwise stick with mode0. 3 = Either roaming or battery low will switch to mode1, otherwise stick with mode0.

13.Command APN

This command is to set necessary information to connect with GPRS network.

1234,APN;CMNET;123;456	Tracker	Remark
User SMS	G2P V1.00 APN:CMNET;123;456 BAT 60% #6	APN;<APN name>;<Username>;<Password>

14.Command SVR

This command is to set GPRS host server IP and port

1234,SVR; 76.74.174.164;3032;;0	Tracker	Remark
User SMS	G2P V1.00 SVR:76.74.174.164;3032;;0 BAT 60% #6	SVR;<IP>;<TCP port>;<UDP port>;<Mode> <IP>: Host server IP or domain name. <TCP port>: Available TCP port <UDP port>: Available UDP port <Mode>: 0 = Using TCP protocol 1 = Using UDP protocol

15.Command SVP;0

This command is to set report mode0 to GPRS host server.

1234,SVP;0;30S;G;T	Tracker	Remark
User SMS	G2P V1.00 SVP:0;30S;G;T BAT 60% #1	SVP;0;<Report interval>;<Paramter1>;<Paramter2> <Report interval>: Range is from 30S to 900S, 15M to 59M, 1H to 720H. S = Second M = Minute H = Hour <Parameter1>: G = GPS position preferred. O = Disable position report. A = GPS and LBS position. <Parameter2>: T = Position is shown in text.

16.Command SVP;1

This command is to set report mode0 to GPRS host server.

1234,SVP;1;30M;G;T	Tracker	Remark
User SMS	G2P V1.00 SVP:1;30M;G;T BAT 60% #1	SVP;1;<Report interval>;<Paramter1>;<Paramter2> <Report interval>: Range is from 30S to 900S, 15M to 59M, 1H to 720H. S = Second M = Minute H = Hour <Parameter1>: G = GPS position preferred. O = Disable position report. A = GPS and LBS position. <Parameter2>: T = Position is shown in text.

17.Command SOS

This command is to toggle SOS button pressed event.

1234,SOS;1	Tracker	Remark
User SMS	G2P V1.00 SOS:1 BAT 60% #6	SOS;<Parameter> <Parameter>: 0 = Disable SOS button. 1 = Enable SOS button.

18.Command BMC

This command is to set threshold percentage for battery low event.

1234,BMC;30	Tracker	Remark
User SMS	G2P V1.00 BMC:30 BAT 60% #6	BMC;<Percentage> <Percentage>: Low than this value will switch to low voltage status and trigger battery low event, range is from 5 to 99.

19.Command GFS

This command is to define a Geo fence.

1234,GFS;1;25.31;113.0;1000	Tracker	Remark
User SMS	G2P V1.00 GFS:1;25.31;113.0;1000 BAT 60% #1	GFS;<Toggle>;<Latitude>;<Longitude>;<Radius> <Toggle>: 0 = Disable Geo-fence. 1 = Enable Geo-fence. <Latitude>: Latitude of centre point of circular Geo fence, In degree. <Longitude>: Longitude of centre point of circular Geo fence, in degree <Radius>: Unit is meter, range from 100 to 1000000.

20.Command PSS

This command is to toggle power saving mode.

1234,PSS;1;3;2	Tracker	Remark
User SMS	G2P V1.00 PSS:1;3;2 BAT 60% #6	PSS;<Toggle>;<Stop duration>;<Transmission idle duration> <Toggle>: 0 = Disable power saving mode. 1 = Enable power saving mode. <Stop duration>: Device stops for such duration will switch to power saving mode, unit is minute, range from 1 to 255. <Transmission idle duration> Device has not data transmission request for such duration will switch to power saving mode, unit is minute, range from 1 to 255.

Default: PSS;1;3;2

21.Command LED

This command is to set LED behavior.

1234,LED;300;10	Tracker	Remark
User SMS	G2P V1.00 LED:300;10 BAT 60% #6	LED;<Power saving>;<Cycle interval> <Power saving>: Value can be 0, and integer between 60 to 65535, unit is second. 0 = Disable LED power saving mode, LED behavior always stick with chapter 6. 60 to 65535 = Any value between will enable LED power saving mode. If battery is under “Normal” status, after power on G2P LED will only work for such duration and stop working (power saving purpose), until battery is under “Charging/Charged/Low voltage” status LED will work again as chapter 6 shown. <Cycle interval>: This value defines interval between each LED cycle, default is 10 seconds. E.g.: Command BMC set as BMC;60, command LED set as LED;300;10, and current battery is 70% full, operating on battery only. So since power ON, at the first 5 minutes LED will work as chapter 6 and then stop working, afterwards battery drops under 60% (or connect with charger) LED will start working as Chapter 6 shown again.

Note: If any LED status changes then the <cycle interval> will be forced as 5 seconds for one time.

22.Command MGR

This command is to check current accumulation mileage of tracker, unit is meter.

1234,MGR	Tracker
User SMS	G2P V1.00 MGR:100000 BAT 60% #6

23.Command CID

This command is to check CCID of tracker SIM card.

1234,CID	Tracker
User SMS	G2P V1.00 CID:89860090191149028638 BAT=3.90V #7

8. Message sample

Content of message	Explanation
G2P V1.00	<i>Device name/Firmware version</i>
LTM 2013-06-06 14:17:12	<i>Date/Time</i>
http://maps.google.com/maps?q=%n(,%e&t=m&z=16	<i>Google map hyper link</i>
SPD:0km/h 0	<i>Speed/Heading</i>
GSM -52dBm	<i>GSM network signal strength</i>
BAT 60%	<i>Built-in battery voltage</i>
#30	<i>Consumed messages</i>

Content of message	Explanation
G2P V1.00	<i>Device name/Firmware version</i>
LTM 2013-06-06 09:41:22	<i>Date/Time</i>
GPS 1.55/0.50/3/4	<i>HDOP/ALTITUDE in meter/Fixed satellite number/Time of first fixed</i>
N23.164302	<i>N means north/S means south</i>
E113.428456	<i>E means east/W means west</i>
SPD:0km/h 0	<i>Speed/Heading</i>
GSM -52dBm	<i>GSM signal strength</i>
BAT 60%	<i>Built-in battery voltage</i>
#27	<i>Consumed messages</i>

Content of message	Explanation
G2P V1.00	<i>Device name/Firmware version</i>
LTM 2013-02-28 23:51:09	<i>Date/Time</i>
MCC/MNC/LAC/CID/RSSI	<i>Base station information type</i>
460/0/2503/962C/-53dBm	<i>Main station, MNC/MNC/Local area code/Station ID/Signal strength</i>
460/0/2731/40F4/-60dBm	<i>Neighbor station 1</i>
460/0/2703/4050/-70dBm	<i>Neighbor station 2</i>
GSM -58dB	<i>GSM network signal strength</i>
BAT 60%	<i>Built-in battery voltage</i>
#20	<i>Consumed messages</i>

Content of message	Explanation
G2P V1.00	<i>Device name/Firmware version</i>
LTM 2013-06-06 14:17:12	<i>Date/Time</i>
http://maps.google.com/maps?q=%n(,%e&t=m&z=16	<i>Google map hyper link</i>
ETD:0/SOS	<i>Event ID/User defined event name</i>
GSM -52dBm	<i>GSM network signal strength</i>
BAT 60%	<i>Built-in battery voltage</i>
#301	<i>Consumed messages</i>

FCC Warning

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.

NOTE 1: 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.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC RF Exposure Information and Statement

The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Device types GPS Tracker (FCC ID: RSR-G2P) has also been tested against this SAR limit. The highest reported SAR value for body, condition is 1.169W/kg respectively. This device was tested for typical body operations with the back of the handset kept 0mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain a 0mm separation distance between the user's body and the back of the tracker. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.