



# SatPHONE.pro SMS Protocol

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# 1 Contact numbers

## 1.1 Set contact numbers

Set emergency contact numbers		
<b>Command</b>	A<n>,<SMS Yes/No>,<call Yes/No>,<phone number>	
<b>Description</b>	<n> Value range: 1~10 Contact number sequence	<SMS Yes/No> Value range: 0~1 0 - Do not receive SMS when there is an alarm 1 - Receive SMS when there is an alarm
	<Call Yes/No> Value range: 0~1 0 - Do not receive Call when there is an alarm 1 - Receive Call when there is an alarm	<phone number> Mobile number or Landline. if mobile number/landline set as blank, then the current sending number will be fixed as a contact number.
<b>Reply</b>	For example: <b>A1,1,1,15899795842</b> or <b>A1,1,1</b> A1,1,1 reply: Set contact number 1 ok.	
<b>Default setting</b>	No default setting	
<b>Explanation</b>	The first 1 means contact number A1. The second 1 means the person will receive an alarm from device via text message. The third 1 means the person will receive a call if there is an alarm from device.	

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## 1.2 Check the contact numbers

### Check the contact numbers

Command	A?
Reply	For example: A1: 1,1,15899795842 A2: 1,0,13632770106 A3: 0,1,15986236978 A4: 0,0,13556987345 A5: 1,1,18965423695

## 1.3 Remove contact numbers

### Remove contact numbers setting

Command	removeA<n>
Description	<n> Value range: 1~10 contact number sequence
Reply	<b>removeA5</b> reply: Contact number 5 removed.
Default setting	No default setting
Explanation	Delete authorized numbers

## 2 Password

### 2.1 Add a password for all commands

#### Add password setting

Command	P<pwd>
Description	<pwd>

	The password must be 1~6 digital numbers.
Reply	P321654 reply: Set password ok.
Default setting	No default setting
Explanation	<ul style="list-style-type: none"> <li>- After sending the above command, then it will require a password in front of all commands. For example: 321654Loc, 321654A1 etc</li> <li>- The pre-set password won't be erased by changing a new sim card.</li> <li>- Be sure to keep the new password in mind, otherwise, you must ask your distributor to restore the original setting in case of losing the new password.</li> <li>- Make sure the new password is in 6 digits, or else the tracker cannot recognize the password.</li> </ul>

## 2.2 Change password

Change password setting	
Command	<old pwd>P<new pwd>
Description	<old pwd> and <new pwd> Password must be 1~6 digital numbers.
Reply	321654P123456 reply: Your password has changed successfully.
Default setting	No default setting
Explanation	The password now is changed to 123456

## 2.3 Delete password

Delete password setting	
Command	<pwd>P0
Description	<pwd> Your current password.
Reply	123456P0 reply: Password deleted successfully.
Default setting	No default setting
Explanation	If the user deletes the password, then all SMS commands do not need to add a



password.

### 3 SMS White List

SMS white list	
Command	sms<n>
Description	<n> Value range: 0~1 0 - device can receive a text message from all numbers. 1 - device is only allowed to receive SMS from A1~A10 numbers.
Reply	sms0 reply: Allow device to receive a text message from all numbers. sms1 reply: Allow device to receive text message only from authorized numbers.
Default setting	SMS0

### 4 SOS Alarm Settings

#### 4.1 SOS button

SOS button settings		
Command	SOS<mode>,<time>	
Description	<mode> Value range: 1~2 1 - long press SOS button 2 - double click SOS button	<time> Value range: 1~100 Note: the unit is 0.1 second (User pushes the SOS button time.)
Reply	For example: SOS1,20 reply: Set long press 2 seconds ok. SOS2,20 reply: Set double click 2 seconds ok.	
Default setting	SOS1,20	

<b>Explanation</b>	The unit is 0.1 second if set 20, it means 20*0.1 seconds= 2 seconds The above setting means long press 2 seconds to trigger SOS alarm. Double click SOS button in 2 seconds to trigger SOS alarm
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## 4.2 SOS alarm ring time and talk time

SOS alarm ring time and talk time			
<b>Command</b>	SOSCALL<ring time>,<talk time>		
<b>Description</b>	<table border="1"> <tr> <td>&lt;ring time&gt; Value range: 1~60 seconds set ring time to avoid call enter the voice machine</td> <td>&lt;talk time&gt; Value range: 0~65535 seconds set the two-way talking time for the SOS alarm</td> </tr> </table>	<ring time> Value range: 1~60 seconds set ring time to avoid call enter the voice machine	<talk time> Value range: 0~65535 seconds set the two-way talking time for the SOS alarm
<ring time> Value range: 1~60 seconds set ring time to avoid call enter the voice machine	<talk time> Value range: 0~65535 seconds set the two-way talking time for the SOS alarm		
<b>Reply</b>	For example: <b>SOSCALL35S,20M</b> reply: Set ring time 35 seconds, talk time 20 minutes ok.		
<b>Default setting</b>	SOSCALL20S,10M		
<b>Explanation</b>	The unit can be H, M or S. H means hour, M means minute, S means second Ring time means stop ringing at most xxx seconds, then call to next contact number (for example A2) and the phone will hang up when time reaches xxx minutes during two way talking.		

## 4.3 SOS call loops

SOS call loops	
<b>Command</b>	loop<time>
<b>Description</b>	<time> Value range: 0~10 0 - infinite loop
<b>Reply</b>	<b>loop0</b> reply: Set unlimited loop ok. <b>loop5</b> reply: Set SOS loop 5 times ok.

<b>Default setting</b>	Loop1
<b>Explanation</b>	loop means SOS calling cycles to all authorized number

## 5 Request location

Loc	
<b>Command</b>	loc
<b>Description</b>	After sending LOC, device will be looking for the signal of Bluetooth, WIFI and GPS, if Bluetooth location is fixed, device will stop searching WIFI and GPS signal.
<b>Reply</b>	<p>Now:</p> <p>Date: 05/08/2018</p> <p>Time: 04:06:22</p> <p>Speed: 36km/h</p> <p>Battery: 34%</p> <p><a href="https://maps.google.com/maps?q=loc:27.7132778,113.5833831">maps.google.com/maps?q=loc:27.7132778,113.5833831</a></p>

## 6 Bluetooth

6.1 How to set the Bluetooth connection between the device and the charging base.

Keep connection	
<b>Description</b>	Put the device in the charging base and they will automatically pair to each other.
<b>Explanation</b>	The functions of the device and the charging base keep a connection.

- ☆ Indoor positioning *via Bluetooth*.  
(Working Logic: The first user must set coordinates for charging base, then device will search charging base location via Bluetooth once there is an alarm or location check from contact person)
- ☆ SOS button to make an alarm.  
(Working Logic: If charging base connect to EV-04 *via Bluetooth*, once user press SOS on charging base, it will send a signal to EV-04 and EV-04 will make an alarm and call to the contact person immediately.)

## 6.2 Set coordinates for charging base

### Set charging base coordinates

Command	BL<Latitude>,<longitude>
Reply	BL22.6180000,114.036 reply: Set BLE location ok.
Default setting	No default setting.
Explanation	User can set charging base location by sending a text message to EV-04 device, for example user send: BL22.618,114.036 to EV-04, then device will broadcast for 3 minutes to charging base. After that, the charging base location is set.

## 6.3 Turn on/off Bluetooth location

### Bluetooth location on/off

Command	BLE<n>
Description	<n>  Value range: 0~1  0 - Bluetooth Location off  1 - Bluetooth Location on
Reply	BLE0 reply: BLE Loc off.  BLE1 reply: BLE Loc on.
Default setting	BLE1
Note	Device will not be looking for Bluetooth location if BLE0 is set.

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## 7 Side Buttons

### 7.1 Call button (upper button)

Call button settings			
Command	X<n>,<time>		
Description	<table border="1"><tr><td>&lt;n&gt; Value range: 0~10 0 means disable the call function.</td><td>&lt;time&gt; Value range: 1~100 Note: the unit is 0.1 second Push button time. (long push)</td></tr></table>	<n> Value range: 0~10 0 means disable the call function.	<time> Value range: 1~100 Note: the unit is 0.1 second Push button time. (long push)
<n> Value range: 0~10 0 means disable the call function.	<time> Value range: 1~100 Note: the unit is 0.1 second Push button time. (long push)		
Reply	For example:  X2,20 reply: Set to dial the A2 ok.  X0 reply: Disable call button ok.		
Default setting	X2,20		
Explanation	The unit is 0.1 second, if set 20, it means 20*0.1 seconds= 2 seconds		

### 7.2 Side button 2 (lower button)

Side button 2 settings	
Command	No SMS command
Description	This button has 2 functions:  A: Double click the button to turn on/off voice prompts.  B: Press and hold button 3 seconds, and at the same time press the CALL2 button on the charging base, then device and charging base will pair to each other via Bluetooth.

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## 8 Vibration

Vibration setting	
Command	vibrate<n>
Description	<n> Value range: 0~1
Reply	<b>Vibrate1</b> reply: Vibration On! <b>Vibrate0</b> reply: Vibration Off!
Default setting	Vibrate1
Explanation	Device will be vibrating when user push SOS button, tilt alarm, fall alarm, incoming call, press side button, turn on/off device.

## 9 Beep

Beep setting	
Command	beep<n>
Description	<n> Value range: 0~1
Reply	<b>beep1</b> reply: Beep On! <b>beep0</b> reply: Beep Off!
Default setting	beep1
Explanation	This command is to control all the voice prompts on/off made by SOS, tilt, fall, motion alarms and other voice warnings.

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## 10 Call

### 10.1 Incoming call

Incoming call setting	
Command	callin<n>
Description	<n> Value range: 0~1 0 - All numbers can call in 1 - Only authorized numbers can call in
Reply	<b>callin0</b> reply: Allow all numbers to call in. <b>callin1</b> reply: Allow only authorized numbers to call in.
Default setting	callin1
Scenario	who can call the device?

### 10.2 Answer the incoming call

Answer the incoming call setting		
Command	answer<n>,<time>	
Description	<n> Value range: 0~1 0 - automatic answering the call 1 - press any button to answer the call	<time> Value range: 1~10 seconds automatic answering the call after how many seconds ringing.
Reply	For example: <b>answer0,5</b> reply: Set automatic answering call ok. <b>answer1</b> reply: Set to press the button to answer the call ok.	
Default setting	answer0,5	
Explanation	The way of answer the incoming call.	

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## 10.3 Hang up the call

Hang up the call setting	
Command	hangup<n>
Description	<n> Value range: 0~1 0 - users cannot hang up on their own 1 - user can hang up the call by press SOS button
Reply	<b>hangup0</b> reply: Set hangup0 ok. <b>hangup1</b> reply: Set hangup1 ok.
Default setting	Hangup1
Explanation	The way of hang up the call.

## 10.4 Call back

Call back setting	
Command	callback<phone number>
Description	<phone number> Value range: Mobile Number or Landline
Reply	For example: <b>callback123456789</b> reply: call 123456789 ok.
Default setting	No default setting.
Explanation	Device will call the set number immediately after the message is sent.



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## 11 Volume

### 11.1 Incoming call ringtone volume

Incoming call ringtone volume setting	
Command	rt<level>
Description	<level> Volume range: 0~100
Reply	For example: <b>rt0</b> reply: Turn off ringtone ok. (incoming call) <b>rt50</b> reply: Set ringtone volume 50 ok. (incoming call)
Default setting	rt70
Explanation	volume adjustment for a ringtone.

### 11.2 Speaker volume

Speaker volume setting	
Command	speakervolume<level>
Description	<level> Volume range: 0~100
Reply	For example: <b>Speakervolume90</b> reply: Set speaker volume 90 ok.
Default setting	Speakervolume80
Explanation	Speaker volume adjustment for two way talking.

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## 11.3 Speaker switch

### 11.3.1 Speaker on/off for SOS alarm

SOS speaker setting	
Command	<code>soospeaker&lt;n&gt;</code>
Description	<n> Value range: 0~1
Reply	<code>soospeaker0</code> reply: Turn off speaker ok. (SOS call) <code>soospeaker1</code> reply: Turn on speaker ok. (SOS call)
Default setting	<code>soospeaker1</code>
Explanation	The speaker can be turned on/off if the call made by the SOS alarm.

### 11.3.2 Speaker on/off for CALL button

Call button speaker setting	
Command	<code>xspeaker&lt;n&gt;</code>
Description	<n> Value range: 0~1
Reply	<code>xspeaker0</code> reply: Turn off speaker ok. (call button) <code>xspeaker1</code> reply: Turn on speaker ok. (call button)
Default setting	<code>xspeaker1</code>
Explanation	The speaker can be turned on/off if the call made by the CALL button.

## 12 LED

LED on/off	
Command	<code>led&lt;n&gt;</code>
Description	<n> Value range: 0~1

	0 - led off 1 - led on
Reply	<b>led0</b> reply: LED off. <b>led1</b> reply: LED on.
Default setting	LED1

## 13 Time Zone

LED on/off					
Command	tz<time>:<minute>				
Description	<table border="1"> <tr> <td>&lt;time&gt;</td> <td>&lt;minute&gt;</td> </tr> <tr> <td>Value range: +00 ~ +14 -00 ~ -14</td> <td>Value Range: 0, 15, 30, 45</td> </tr> </table>	<time>	<minute>	Value range: +00 ~ +14 -00 ~ -14	Value Range: 0, 15, 30, 45
<time>	<minute>				
Value range: +00 ~ +14 -00 ~ -14	Value Range: 0, 15, 30, 45				
Reply	For example: <b>tz+08</b> reply: Set time zone +8 ok. <b>tz+08:15</b> reply: Set time zone +8:15 ok.				
Default setting	tz+00				

## 14 Prefix

Prefix setting					
Command	Prefix<n>,<text>				
Description	<table border="1"> <tr> <td>&lt;n&gt;</td> <td>&lt;text&gt;</td> </tr> <tr> <td>Value range: 0~1 0 - prefix off 1 - prefix on</td> <td>Value range: maximum characters can be 100.</td> </tr> </table>	<n>	<text>	Value range: 0~1 0 - prefix off 1 - prefix on	Value range: maximum characters can be 100.
<n>	<text>				
Value range: 0~1 0 - prefix off 1 - prefix on	Value range: maximum characters can be 100.				
Reply	For example: <b>prefix1,Emma</b> reply: Set Emma ok.				

Default setting

Prefix0

## 15 Battery

### 15.1 Low Power Alarm Setting

#### Low power alarm setting

Command	low<n>,<level>	
Description	<n> Value range: 0~1 0 - Low power alarm off 1 - Low power alarm on	<level> Value range: 0~100
Reply	For example: <b>low1,15</b> reply: Set low power alarm 15% ok. <b>low0</b> reply: low power alarm off.	
Default setting	Low1,20	

### 15.2 Battery Status

#### Check battery level

Command	battery
Reply	For example: <b>battery</b> reply: Battery: 88%

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## 16 Find My Device

Find my device	
Command	<b>findme</b>
Reply	No reply
Description	After sending the text message "findme" to the device, it will play voice prompt "I am here" and last for 30 seconds, the finder can cancel the voice prompt by press the button when device is found.

## 17 Turn off device remotely

Turn off device by SMS	
Command	<b>OFF</b>
Reply	No reply
Description	Once device receives this command, the device will be turned off automatically.

## 18 IMEI and Firmware Version

Check device IMEI and firmware version	
Command	<b>V?</b>
Reply	For example:  <b>IMEI: 860123569872427</b>  <b>GSM signal strength: 28</b>  <b>Software version: V04.8601.2001</b>

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## 19 Alarms

### 19.1 SOS emergency alarm

<b>Alarm Example:</b>	For example:  Mom.  Help Me!  Date: 05/08/2018  Loc Time: 04:06:22  Alarm Time: 04:06:10  Speed:36km/h  Battery:34%  <a href="https://maps.google.com/maps?q=loc:27.7132778,113.5833831">maps.google.com/maps?q=loc:27.7132778,113.5833831</a>
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### 19.2 Fall alarm

Fall alarm setting			
Command	fl<n>,<sensitivity level>,<call Yes/No>		
Description	<n>	<sensitivity level>	<call Yes/No>
	Value range: 0~1 0 – Fall down alarm off 1 – Fall down alarm on	Value range: 1~9 9 - most sensitive 1 - least sensitive	Value range: 0~1 0 – Do not receive a call when there is an alarm 1 – Receive call when there is an alarm
Reply	For example:  f11,1,1 reply: Set fall down alarm ok!  f10 reply: Fall down alarm off.		
Default setting	f11,1,1		

<b>Alarm example</b>	<p>Mom Fall down alarm!</p> <p>Date: 05/08/2018</p> <p>Loc Time: 04:06:22</p> <p>Alarm Time: 04:06:10</p> <p>Speed: 36km/h</p> <p>Battery: 34%</p> <p>maps.google.com/maps?q=loc:27.7132778,113.5833831</p>
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## 19.3 GEO fence alarm

Geo fence alarm setting					
<b>Command</b>	geo<n>,<on/off>,<leave/enter>,<distance>				
<b>Description</b>	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>&lt;n&gt;</p> <p>Value range: 1~4</p> <p>GEO fence numbers</p> </td> <td style="width: 50%; vertical-align: top;"> <p>&lt;on/off&gt;</p> <p>Value range: 0~1</p> <p>0 - Geo fence alarm off</p> <p>1 - Geo fence alarm on</p> </td> </tr> <tr> <td style="vertical-align: top;"> <p>&lt;leave/enter&gt;</p> <p>Value range: 0~1</p> <p>0 - leave the preset area</p> <p>1 - enter the preset area</p> </td> <td style="vertical-align: top;"> <p>&lt;distance&gt;</p> <p>Value range: 100~65535 meters</p> <p>The unit can be M or KM</p> <p>M = meters, KM = kilometers</p> </td> </tr> </table>	<p>&lt;n&gt;</p> <p>Value range: 1~4</p> <p>GEO fence numbers</p>	<p>&lt;on/off&gt;</p> <p>Value range: 0~1</p> <p>0 - Geo fence alarm off</p> <p>1 - Geo fence alarm on</p>	<p>&lt;leave/enter&gt;</p> <p>Value range: 0~1</p> <p>0 - leave the preset area</p> <p>1 - enter the preset area</p>	<p>&lt;distance&gt;</p> <p>Value range: 100~65535 meters</p> <p>The unit can be M or KM</p> <p>M = meters, KM = kilometers</p>
<p>&lt;n&gt;</p> <p>Value range: 1~4</p> <p>GEO fence numbers</p>	<p>&lt;on/off&gt;</p> <p>Value range: 0~1</p> <p>0 - Geo fence alarm off</p> <p>1 - Geo fence alarm on</p>				
<p>&lt;leave/enter&gt;</p> <p>Value range: 0~1</p> <p>0 - leave the preset area</p> <p>1 - enter the preset area</p>	<p>&lt;distance&gt;</p> <p>Value range: 100~65535 meters</p> <p>The unit can be M or KM</p> <p>M = meters, KM = kilometers</p>				
<b>Reply</b>	<p><b>GEO1,0</b> reply: The first GEO fence canceled.</p> <p>User can set with or without coordinates in the text message, for example:</p> <p><b>GEO1,1,1,100M</b> reply: Set geo fence 1 in, 100 M radius ok.</p> <p><b>GEO1,1,1,500M,22.65897,114.985231</b> reply: Set geo fence 1 in, 500 M radius ok.</p> <p>Never fix GPS location reply: Unable to set GEO fence now, please fix the GPS location first.</p>				
<b>Note</b>	We strongly recommend that the alarm distance should not be less than 100				

	meters.
<b>Alarm example</b>	<p>GEO fence alarm 1!</p> <p>Date: 05/08/2018</p> <p>Loc Time: 04:06:22</p> <p>Alarm Time: 04:06:10</p> <p>Speed:36km/h</p> <p>Battery:34%</p> <p>maps.google.com/maps?q=loc:27.7132778,113.58338</p>

## 19.4 No motion alarm

No motion alarm setting			
<b>Command</b>	nmo<n>,<static time>,<call Yes/No>		
<b>Description</b>	<p>&lt;n&gt;</p> <p>Value range: 0~1</p> <p>0 - no motion alarm off</p> <p>1 - no motion alarm on</p>	<p>&lt;static time&gt;</p> <p>Value range: 60~36000</p> <p>seconds</p> <p>The unit can be H/M/S</p> <p>H = hour, M = minute,</p> <p>S = second</p>	<p>&lt;call Yes/No&gt;</p> <p>Value range: 0~1</p> <p>0 - Do not receive a call when there is an alarm</p> <p>1 - Receive call when there is an alarm</p>
<b>Reply</b>	<p>For example:</p> <p><b>NMO1,80M,1</b> reply: Set no motion alarm 1 hour 20 minutes ok</p> <p>(If device doesn't move (no motion) for 80 minutes, in 81 minutes, no motion alarm will be activated, device will send a text message or make a call immediately.)</p> <p><b>NMO0</b>: reply: No motion alarm off.</p>		
<b>Default setting</b>	NMO0		
<b>Alarm example</b>	<p>No motion alarm.</p> <p>Date: 05/08/2018</p> <p>Loc Time: 04:06:22</p>		



Alarm Time: 04:06:10  
 Speed:36km/h  
 Battery:34%  
[maps.google.com/maps?q=loc:27.7132778,113.58338](https://maps.google.com/maps?q=loc:27.7132778,113.58338)

## 19.5 Motion alarm

### Motion alarm setting

<b>Command</b>	mo<n>,<static time>,<duration time>,<call Yes/No>	
<b>Description</b>	<n> Value range: 0~1 0 - motion alarm off 1 - motion alarm on	<static time> Value range: 60~36000 seconds The unit can be H/M/S H=hour, M=minute, S= second
	<duration time> Value range: 60~36000 seconds The unit can be H/M/S H=hour, M=minute, S= second	<call Yes/No> Value range: 0~1 0 – Do not receive a call when there is an alarm 1 – Receive call when there is an alarm
<b>Reply</b>	For example: <b>mo1,05m,03s,1</b> reply: Set motion alarm ok. (If device doesn't move or no motion for 5 minutes and then detect motion after 5 minutes and the motion lasts for 3 seconds, then motion alarm will be activated, device will send a text message or make a call immediately.) <b>MO0</b> : reply: Motion alarm off.	
<b>Default setting</b>	MO0	
<b>Alarm example</b>	Motion alarm. Date: 05/08/2018	

Loc Time: 04:06:22  
 Alarm Time: 04:06:10  
 Speed:36km/h  
 Battery:34%  
[maps.google.com/maps?q=loc:27.7132778,113.58338](https://maps.google.com/maps?q=loc:27.7132778,113.58338)

## 19.6 Tilt alarm

Tilt alarm setting		
<b>Command</b>	<code>tilt&lt;n&gt;,&lt;degree&gt;,&lt;duration time&gt;,&lt;call Yes/No&gt;</code>	
<b>Description</b>	<p><code>&lt;n&gt;</code>            Value range: 0~1            0 - Tilt alarm off            1 - Tilt alarm on</p>	<p><code>&lt;degree&gt;</code>            Value range: 30~90 degree            The unit is degree</p>
	<p><code>&lt;duration time&gt;</code>            Value range: 10~3600 seconds            S= second            The unit must be S            tilt for how many seconds</p>	<p><code>&lt;call Yes/No&gt;</code>            Value range: 0~1            0 – Do not receive a call when there is an alarm            1 – Receive call when there is an alarm</p>
<b>Reply</b>	<p>For example:  <b>tilt1,45,30s,1</b> reply: Set tilt alarm 45 degrees ok.            (Device will make a 30 seconds warning beep (20 seconds is fixed into the firmware, the user can't modify the beep time) if the device is detected vertically tilt over 45 degrees and the tilt last for 30 seconds. After 30 seconds beep warning, device will send the alert to contact numbers. or If the device is automatically adjusted to less than 45 degrees before 30 seconds beep finish, the alarm will be</p>	

	automatically canceled.) <b>tilt0</b> reply: Tilt alarm canceled.
<b>Default setting</b>	Tilt0
<b>Alarm example</b>	Tilt alarm 48 degrees.  Date: 05/08/2018  Loc time: 04:06:22  Alarm time: 04:06:10  Speed: 36km/h  Battery: 34%  maps.google.com/maps?q=loc:27.7132778,113.58338

## 19.7 Over speed alarm

Over speed setting									
<b>Command</b>	speed<n>,<speed>								
<b>Description</b>	<table border="1"> <tr> <td>&lt;n&gt;</td> <td>&lt;speed&gt;</td> </tr> <tr> <td>Value range: 0~1</td> <td>Value range: 20~400 km/h</td> </tr> <tr> <td>0 – Over speed alarm off</td> <td>The unit is KM/H</td> </tr> <tr> <td>1 – Over speed alarm on</td> <td></td> </tr> </table>	<n>	<speed>	Value range: 0~1	Value range: 20~400 km/h	0 – Over speed alarm off	The unit is KM/H	1 – Over speed alarm on	
<n>	<speed>								
Value range: 0~1	Value range: 20~400 km/h								
0 – Over speed alarm off	The unit is KM/H								
1 – Over speed alarm on									
<b>Reply</b>	For example:  <b>speed1,100km/h</b> reply: Set over speed alarm 100km/h ok.  <b>speed0</b> reply: Over speed alarm canceled.								
<b>Default setting</b>	Speed0								
<b>Alarm example</b>	Over Speed alarm 110km/h!  Date: 05/08/2018  Time: 04:06:22  Speed: 110km/h  Battery: 34%  maps.google.com/maps?q=loc:27.7132778,113.58338								

## 20 Alarm Clock

Alarm clock setting			
<b>Command</b>	CLK<n>,<on/off>,<time>,<type>,<date>		
<b>Description</b>	<n> Value range: 1~4 Alarm clock numbers	<on/off> Value range: 0~1 0 – alarm clock off 1 – alarm clock on	
	<time> Value range: 00:00~24:00	<type> Value range: 1~4 There are 4 types of voice prompt for the alarm clock.	
	<date> Value range: 1~7 Monday to Sunday		
<b>Reply</b>	For example: CLK1,0 reply: Alarm clock 1 off. CLK2,1,19:30,3,1,2,4 reply: Alarm clock 2 on. (Set alarm clock 2 at 19:30 with alarm type 3, play every Tuesday and Thursday)		

## 21 No Disturb

No disturb time setting			
<b>Command</b>	ND<n>,<start time>,<end time>		
<b>Description</b>	<n> Value range: 0~1 0 – no disturb off	<start time> Value range: 00:00~24:00	<end time> Value range: 00:00~24:00

	1 - no disturb on		
Reply	For example: <b>ND1,19:00,06:00</b> reply: No disturb from 19:00 to 6:00 ok. <b>ND0</b> reply: No disturb off.		
Default setting	ND0		
Explanation	User will not hear any ringtone when there is an incoming call, and device will not play any voice warnings at all.		

## 22 Internet Setting

### 22.1 APN

APN setting	
Command	S1,<APN>,<username>,<password>
Reply	For example: <b>S1,internet</b> reply: Set APN ok.
Explanation	To make device online to the platform, the user needs to set up the APN. <ul style="list-style-type: none"> <li>- Some APN without user name and password, so please leave it blank.</li> <li>- Make sure that the SIM card in the tracker supports the internet function.</li> <li>- The APN can be acquired from your local Telecom companies.</li> </ul>

### 22.2 Heartbeat

Heartbeat setting	
Command	GPRSHB<time>
Description	<time> Value range: 60~86400 seconds

	<p>The unit can be H/M/S</p> <p>H=hour, M=minute, S= second</p> <p>0 means heartbeat off.</p>
Reply	<p>For example:</p> <p><b>GPRSHB5M</b> reply: Set heartbeat 5 minutes ok.</p> <p>(only work for mode 1, 2, 3)</p>
Explanation	<p>The heartbeat packet function is used to keep the Transmission Control Protocol (TCP) connection open when the interval of scheduled GPRS reporting is long.</p>

## 22.3 Modify Server IP/domain name, Port

Server IP and port setting			
Command	IP<n>,<IP/domain name>,<port>		
Description	<n>	<IP/Domain name>	<port>
	Value range: 0~1	Server IP or domain name	Server IP port
	0 – off		
	1 – on		
Reply	<p>For example:</p> <p><b>IP1,www.smart-locator.com,6060</b> reply: Set IP ok.</p> <p><b>IP0</b> reply: IP connection disabled.</p>		
Default setting	IP0		

## 22.4 GPRS connection

GPRS connection setting	
Command	S<n>
Description	<n>
	Value range: 0 and 2
	0 – GPRS off

	2 - GPRS on
Reply	S0 reply: GPRS disconnected. S2 reply: GPRS is connecting.
Default setting	S0

## 22.5 Check GPRS settings

Check GPRS settings	
Command	GPRS?
Reply	<p>For example:</p> <p>GRPS: ON</p> <p>APN: internet</p> <p>Username:</p> <p>Password:</p> <p>IP: 1, www.smart-locator.com</p> <p>Port: 6060</p> <p>Move report time: 30 minutes</p> <p>No move report time: 60 minutes</p> <p>HB: on, 20 minutes</p>

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## 23 Working Modes

### 23.1 Working mode 1

Working mode 1 setting	
Command	mode1
Description	No need to set time interval for mode1
Reply	For example: <b>mode1</b> reply: Set mode 1 ok.
Working logic	The heartbeat keep device always connects to server. Device only sends data to server when an alarm or event occurs. GPS/WIFI/BLE only triggers when there is an event. (the rest of the time, GPS is off)

### 23.2 Working mode 2

Working mode 2 setting		
Command	mode2,<movement time interval>,<no movement time interval>	
Description	<movement time interval> Value range: 30~86400 seconds The unit can be H/M/S H=hour M=minute S= second Set report time interval when device is moving.	<no movement time interval> Value range: 30~86400 seconds The unit can be H/M/S H=hour M=minute S= second Set report time interval when device is not moving.
Reply	For example: <b>mode2,03M,01h</b> reply: Set mode2, 3 minutes,1 hour ok.	



	(means device send data to server every 3 minutes when moving and every 1 hour when not move)
<b>Default setting</b>	mode2,10M,1H
<b>Working logic</b>	<p>Device sends data to server according to the time interval and always stays online.</p> <p>User needs to set reporting time to server when moving and when no moving.</p> <p>GPS/WIFI/BLE on when moving and off when not moving.</p>

### 23.3 Working mode 3

Working mode 3 setting	
<b>Command</b>	mode3,<time interval>
<b>Description</b>	<p>&lt;time interval&gt;</p> <p>Value range: 30~86400 seconds</p> <p>The unit can be H/M/S</p> <p>H=hour</p> <p>M=minute</p> <p>S= second</p>
<b>Reply</b>	<p>For example:</p> <p><b>mode3,01H</b> reply: Set mode3, 1 hour ok.</p>
<b>Working logic</b>	<p>Device sends data to server according to the time interval and always stays online.</p> <p>User needs to set reporting time to server when moving and when not moving.</p> <p>GPS is always on when moving and not moving (the least power-saving mode)</p>

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## 23.4 Working mode 4

Working mode 4 setting	
Command	Mode4,<time interval>
Description	<time interval> Value range: 60~604800 seconds The unit can be H/M/S H=hour M=minute S= second
Reply	For example: <b>mode4,30m</b> reply: Set mode4, 30 minutes ok.
Working logic	User needs to set reporting time to server. Device disconnects and reconnects to server after being offline for a specified time. (during offline, device can receive calls and text message) GPS/WIFI/BLE is on when device sends data to server and off when the device offline.

## 23.5 Working mode 5

Working mode 5 setting	
Command	Mode5,<time interval>
Description	<time interval> Value range: 1200~604800 seconds The unit can be H/M/S H=hour M=minute

	S= second
Reply	For example: <b>mode5,10h</b> reply: Set mode5, 10 hours ok.
Working logic	User needs to set reporting time to server. Device disconnects and reconnects to server after being offline for a specified time. (during offline, device is <b>unable</b> to receive calls and text message, the cellular chip is completely off) GPS/WIFI/BLE is on when device sends data and off when the device offline.

## 24 Continuous locate

Continuous locate setting													
Command	CL<report interval>,<duration time>												
Description	<table border="1"> <tr> <td>&lt;report interval&gt;</td> <td>&lt;duration time&gt;</td> </tr> <tr> <td>Value range: 10~600 seconds</td> <td>Value range: 60~1800 seconds</td> </tr> <tr> <td>The unit can be H/M/S</td> <td>The unit can be H/M/S</td> </tr> <tr> <td>H=hour</td> <td>H=hour</td> </tr> <tr> <td>M=minute</td> <td>M=minute</td> </tr> <tr> <td>S= second</td> <td>S= second</td> </tr> </table>	<report interval>	<duration time>	Value range: 10~600 seconds	Value range: 60~1800 seconds	The unit can be H/M/S	The unit can be H/M/S	H=hour	H=hour	M=minute	M=minute	S= second	S= second
<report interval>	<duration time>												
Value range: 10~600 seconds	Value range: 60~1800 seconds												
The unit can be H/M/S	The unit can be H/M/S												
H=hour	H=hour												
M=minute	M=minute												
S= second	S= second												
Reply	For example: <b>CL10S,600S</b> reply: Set live tracking every 10 seconds and last for 10 minutes ok.												
Default setting	CL10S,10M												
Explanation	When there is an SOS alarm, continuous locate will be activated automatically.												

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## 25 Stop sending stored historical data

### Stop sending historical data to a server

Command	flush
Reply	<b>Flush</b> reply: flush ok!

## 26 Check function settings

### Check settings

Command	status
Reply	For example: Mode:4,0 second LED: on Beep: on Vibration: on Time zone: +10:00 GEO Fence:0,0,0,0 Motion alarm: off No Motion alarm: off Tilt alert: off Fall alarm: on, level:5 Low power alarm: on,15% SOS Call:10 minutes, loop:1 side: 3 RT: 100 MIC: 9 Volume: 90

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## 27 Set GPS Map Link

Set GPS map link	
Command	GPSURLwww.google.com/maps?q=%f,%f
Description	Change GPS format when necessary. Note: Please ask your agent before making any changes.
Reply	For example: GPSURLwww.google.com/maps?q=%f,%f reply: GPSURL Set ok.