



SatPHONE.tag SMS Protocol

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1 Contact numbers

1.1 Set contact numbers

| Set emergency contact numbers | | |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Command | A<n>,<SMS Yes/No>,<call Yes/No>,<phone number> | |
| Description | <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. |
| Reply | For example: A1,1,1,15899795842 or A1,1,1 A1,1,1 reply: Set contact number 1 ok. | |
| Default setting | No default setting | |
| Explanation | 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. | |

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 | removeA5 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"> - After sending the above command, then it will require a password in front of all commands. For example: 321654Loc, 321654A1 etc - The pre-set password won't be erased by changing a new sim card. - 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. - Make sure the new password is in 6 digits, or else the tracker cannot recognize the password. |

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 | |

| | |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Explanation | 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 |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

4.2 SOS alarm ring time and talk time

| SOS alarm ring time and talk time | | | |
|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Command | SOSCALL<ring time>,<talk time> | | |
| Description | <table border="1"> <tr> <td><ring time> Value range: 1~60 seconds set ring time to avoid call enter the voice machine</td> <td><talk time> 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 | | |
| Reply | For example: SOSCALL35S,20M reply: Set ring time 35 seconds, talk time 20 minutes ok. | | |
| Default setting | SOSCALL20S,10M | | |
| Explanation | 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 | |
|--------------------|--------------------------------------------------------------------------------------------|
| Command | loop<time> |
| Description | <time> Value range: 0~10 0 - infinite loop |
| Reply | loop0 reply: Set unlimited loop ok. loop5 reply: Set SOS loop 5 times ok. |

| | |
|------------------------|--------------------------------------------------------|
| Default setting | Loop1 |
| Explanation | loop means SOS calling cycles to all authorized number |

5 Request location

| Loc | |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Command | loc |
| Description | 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. |
| Reply | <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>maps.google.com/maps?q=loc:27.7132778,113.5833831</p> |

6 Bluetooth

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

| Keep connection | |
|--------------------|-------------------------------------------------------------------------------------|
| Description | Put the device in the charging base and they will automatically pair to each other. |
| Explanation | 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. |

7 Side Buttons

7.1 Call button (upper button)

| Call button settings | | | |
|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Command | X<n>,<time> | | |
| Description | <table border="1"><tr><td><n> Value range: 0~10 0 means disable the call function.</td><td><time> 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. |

8 Vibration

| Vibration setting | |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Command | vibrate<n> |
| Description | <n> Value range: 0~1 |
| Reply | Vibrate1 reply: Vibration On! Vibrate0 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 | beep1 reply: Beep On! beep0 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. |

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 | callin0 reply: Allow all numbers to call in. callin1 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: answer0,5 reply: Set automatic answering call ok. answer1 reply: Set to press the button to answer the call ok. | |
| Default setting | answer0,5 | |
| Explanation | The way of answer the incoming call. | |

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 | hangup0 reply: Set hangup0 ok. hangup1 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: callback123456789 reply: call 123456789 ok. |
| Default setting | No default setting. |
| Explanation | Device will call the set number immediately after the message is sent. |

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: rt0 reply: Turn off ringtone ok. (incoming call) rt50 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: Speakervolume90 reply: Set speaker volume 90 ok. |
| Default setting | Speakervolume80 |
| Explanation | Speaker volume adjustment for two way talking. |

11.3 Speaker switch

11.3.1 Speaker on/off for SOS alarm

| SOS speaker setting | |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Command | <code>soospeaker<n></code> |
| Description | <code><n></code> 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<n></code> |
| Description | <code><n></code> 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<n></code> |
| Description | <code><n></code> Value range: 0~1 |

| | |
|-----------------|-----------------------------------------------------------|
| | 0 - led off 1 - led on |
| Reply | led0 reply: LED off. led1 reply: LED on. |
| Default setting | LED1 |

13 Time Zone

| LED on/off | | | |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------|
| Command | tz<time>:<minute> | | |
| Description | <table border="1"> <tr> <td><time> Value range: +00 ~ +14 -00 ~ -14</td> <td><minute> Value Range: 0, 15, 30, 45</td> </tr> </table> | <time> Value range: +00 ~ +14 -00 ~ -14 | <minute> Value Range: 0, 15, 30, 45 |
| <time> Value range: +00 ~ +14 -00 ~ -14 | <minute> Value Range: 0, 15, 30, 45 | | |
| Reply | For example: tz+08 reply: Set time zone +8 ok. tz+08:15 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><n> Value range: 0~1 0 - prefix off 1 - prefix on</td> <td><text> Value range: maximum characters can be 100.</td> </tr> </table> | <n> Value range: 0~1 0 - prefix off 1 - prefix on | <text> Value range: maximum characters can be 100. |
| <n> Value range: 0~1 0 - prefix off 1 - prefix on | <text> Value range: maximum characters can be 100. | | |
| Reply | For example: prefix1,Emma 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: low1,15 reply: Set low power alarm 15% ok. low0 reply: low power alarm off. | |
| Default setting | Low1,20 | |

15.2 Battery Status

Check battery level

| | |
|---------|----------------------------------------------------|
| Command | battery |
| Reply | For example: battery reply: Battery: 88% |

16 Find My Device

| Find my device | |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Command | findme |
| 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 | OFF |
| 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 | V? |
| Reply | For example: IMEI: 860123569872427 GSM signal strength: 28 Software version: V04.8601.2001 |

19 Alarms

19.1 SOS emergency alarm

| | |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alarm Example: | For example: Mom. Help Me! 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:27.7132778,113.5833831 |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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 | | |

| | |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alarm example | <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> |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

19.3 GEO fence alarm

| Geo fence alarm setting | | | | | |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Command | geo<n>,<on/off>,<leave/enter>,<distance> | | | | |
| Description | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><n></p> <p>Value range: 1~4</p> <p>GEO fence numbers</p> </td> <td style="width: 50%; vertical-align: top;"> <p><on/off></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><leave/enter></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><distance></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><n></p> <p>Value range: 1~4</p> <p>GEO fence numbers</p> | <p><on/off></p> <p>Value range: 0~1</p> <p>0 - Geo fence alarm off</p> <p>1 - Geo fence alarm on</p> | <p><leave/enter></p> <p>Value range: 0~1</p> <p>0 - leave the preset area</p> <p>1 - enter the preset area</p> | <p><distance></p> <p>Value range: 100~65535 meters</p> <p>The unit can be M or KM</p> <p>M = meters, KM = kilometers</p> |
| <p><n></p> <p>Value range: 1~4</p> <p>GEO fence numbers</p> | <p><on/off></p> <p>Value range: 0~1</p> <p>0 - Geo fence alarm off</p> <p>1 - Geo fence alarm on</p> | | | | |
| <p><leave/enter></p> <p>Value range: 0~1</p> <p>0 - leave the preset area</p> <p>1 - enter the preset area</p> | <p><distance></p> <p>Value range: 100~65535 meters</p> <p>The unit can be M or KM</p> <p>M = meters, KM = kilometers</p> | | | | |
| Reply | <p>GEO1,0 reply: The first GEO fence canceled.</p> <p>User can set with or without coordinates in the text message, for example:</p> <p>GEO1,1,1,100M reply: Set geo fence 1 in, 100 M radius ok.</p> <p>GEO1,1,1,500M,22.65897,114.985231 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> | | | | |
| Note | We strongly recommend that the alarm distance should not be less than 100 | | | | |

| | |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | meters. |
| Alarm example | <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 | | | |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Command | nmo<n>,<static time>,<call Yes/No> | | |
| Description | <p><n></p> <p>Value range: 0~1</p> <p>0 - no motion alarm off</p> <p>1 - no motion alarm on</p> | <p><static time></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><call Yes/No></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> |
| Reply | <p>For example:</p> <p>NMO1,80M,1 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>NMO0: reply: No motion alarm off.</p> | | |
| Default setting | NMO0 | | |
| Alarm example | <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

19.5 Motion alarm

Motion alarm setting

| | | |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Command | mo<n>,<static time>,<duration time>,<call Yes/No> | |
| Description | <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 |
| Reply | For example: mo1,05m,03s,1 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.) MO0 : reply: Motion alarm off. | |
| Default setting | MO0 | |
| Alarm example | 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

19.6 Tilt alarm

Tilt alarm setting

| Command | tilt<n>,<degree>,<duration time>,<call Yes/No> | |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Description | <n> Value range: 0~1 0 - Tilt alarm off 1 - Tilt alarm on | <degree> Value range: 30~90 degree The unit is degree |
| | <duration time> Value range: 10~3600 seconds S= second The unit must be S tilt for how many seconds | <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 |
| Reply | For example: tilt1,45,30s,1 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 | |

| | |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | automatically canceled.) tilt0 reply: Tilt alarm canceled. |
| Default setting | Tilt0 |
| Alarm example | 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 | | | | | | | | | |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---------|------------------|--------------------------|--------------------------|------------------|-------------------------|--|
| Command | speed<n>,<speed> | | | | | | | | |
| Description | <table border="0"> <tr> <td><n></td> <td><speed></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 | | | | | | | | | |
| Reply | For example: speed1,100km/h reply: Set over speed alarm 100km/h ok. speed0 reply: Over speed alarm canceled. | | | | | | | | |
| Default setting | Speed0 | | | | | | | | |
| Alarm example | 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 | | | |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|--|
| Command | CLK<n>,<on/off>,<time>,<type>,<date> | | |
| Description | <n> | <on/off> | |
| | Value range: 1~4 Alarm clock numbers | Value range: 0~1 0 – alarm clock off 1 – alarm clock on | |
| | <time> | <type> | |
| | Value range: 00:00~24:00 | Value range: 1~4 There are 4 types of voice prompt for the alarm clock. | |
| | <date> | | |
| | Value range: 1~7 Monday to Sunday | | |
| Reply | 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 | | | |
|-------------------------|----------------------------------------|-----------------------------|-----------------------------|
| Command | ND<n>,<start time>,<end time> | | |
| Description | <n> | <start time> | <end time> |
| | Value range: 0~1 0 – no disturb off | Value range: 00:00~24:00 | Value range: 00:00~24:00 |

| | | | |
|-----------------|----------------------------------------------------------------------------------------------------------------------|--|--|
| | 1 - no disturb on | | |
| Reply | For example: ND1,19:00,06:00 reply: No disturb from 19:00 to 6:00 ok. ND0 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: S1,internet 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"> - Some APN without user name and password, so please leave it blank. - Make sure that the SIM card in the tracker supports the internet function. - The APN can be acquired from your local Telecom companies. |

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>GPRSHB5M 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>IP1,www.smart-locator.com,6060 reply: Set IP ok.</p> <p>IP0 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> |

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: mode1 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: mode2,03M,01h 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) |
| Default setting | mode2,10M,1H |
| Working logic | <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 | |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Command | mode3,<time interval> |
| Description | <p><time interval></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> |
| Reply | <p>For example:</p> <p>mode3,01H reply: Set mode3, 1 hour ok.</p> |
| Working logic | <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> |

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: mode4,30m 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: mode5,10h 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 unable 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><report interval></td> <td><duration time></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: CL10S,600S 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. | | | | | | | | | | | | |

25 Stop sending stored historical data

Stop sending historical data to a server

| | |
|---------|-------------------------------|
| Command | flush |
| Reply | Flush 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 |

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. |