

Prime ConfigTool User Guide

Revision: 1.4

Document Title	Prime ConfigTool User Guide
Version	1.4
Date	2011-11-1
Status	Release
Document Control ID	Prime MT001

Contents

Contents.....	2
1. Revision history.....	3
2. Prime ConfigTool Setup Wizard.....	3
2.1. Main setting.....	3
2.2. The log window.....	4
2.3. Query the software version of device.....	4
2.4. The config window and shortcuts.....	5
2.5. An example to configure Prime AT Lite.....	6
2.5.1. Set the parameters of Bearer setting information.....	6
2.5.2. Set the parameters of backend server register information.....	7
2.5.3. Set the parameters of quick start setting.....	8
2.5.4. Set the parameters of global configuration.....	9
2.5.5. Set the parameters of non-movement detection.....	9
2.5.6. Set the parameters of fixed report information.....	10
2.5.7. Set the parameters of function key setting.....	11
2.5.8. Set the parameters of time adjustment.....	12
2.5.9. Set the parameters of Geo-fence information.....	12
2.5.10. Set the parameters of speed alarm.....	14
2.5.11. Set the parameters of real time operation.....	14
2.5.12. Set the parameters of Geo-fence information.....	15
2.5.13. Set the parameters of speed alarm.....	15
2.5.14. Set the parameters of real time operation.....	16
2.5.15. Set the parameters of real time operation.....	17

1. Revision history

Revision	Date	Author	Description of change
1.1	2011-06-23	SHUNG	Initial
1.2	2011-09-14	SHUNG	Change logo
1.3	2011-10-26	SHUNG	GTFKS Full Powerup
1.4	2011-11-1	SHUNG	GTNMD Mode Bit0

2. Prime ConfigTool Setup Wizard

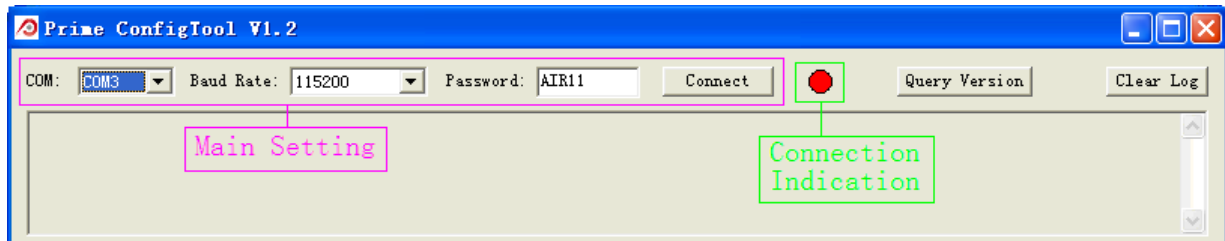
Prime config tool is PC software which can be used to configure Prime AT Lite through data cable. It is easy for the backend server developers to configure Prime AT Lite with config tool, which has friendly user interface. The correct command messages sent to Prime AT Lite will be displayed on the config tool. (These messages can also be sent by SMS or GPRS).

The administrators can also use the config tool to configure Prime AT Lite before selling. But it is strongly recommended to establish a backend server and implement the way to control Prime AT Lite by SMS or GPRS. Please refer to “Prime AT Lite Interface Protocol” for detail.

Before using the config tool please find “PL2303_Prolific_DriverInstaller_v10518.zip” in develop suit and install the drive for PL2303. After that a new COM port can be found in the PC system, and then please follow the steps as below:

1. Power on Prime AT Lite.
2. Connect Prime AT Lite to PC with data cable.
3. Run “ConfigTool.exe”.

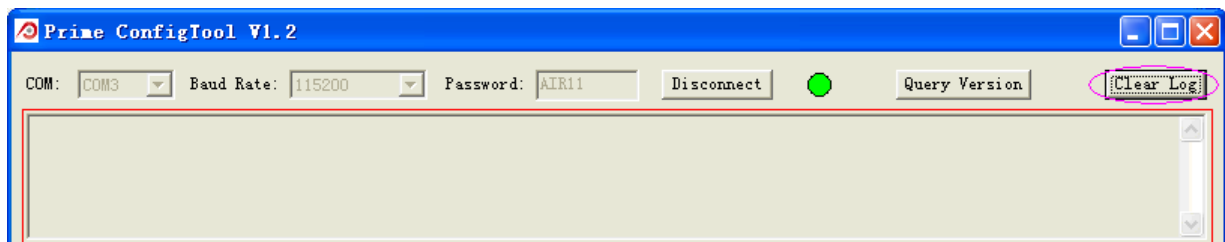
2.1. Main setting



Select the COM port, and keep the baud rate and password with default value. If the password has ever been changed in the target device, please input the new password. If the password length is less than 4 characters, the item background will be colored red, and the allowed maximum length is 6 characters.

Then click the “Connect” button to establish a connection between the config tool and the device. If the connection is successful, the Connection Indication will change to green color.

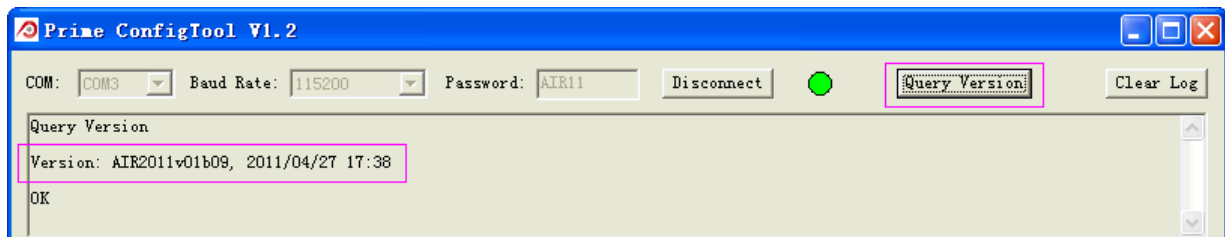
2.2. The log window



The log window shows all the log which have been sent back to config tool from the target device.

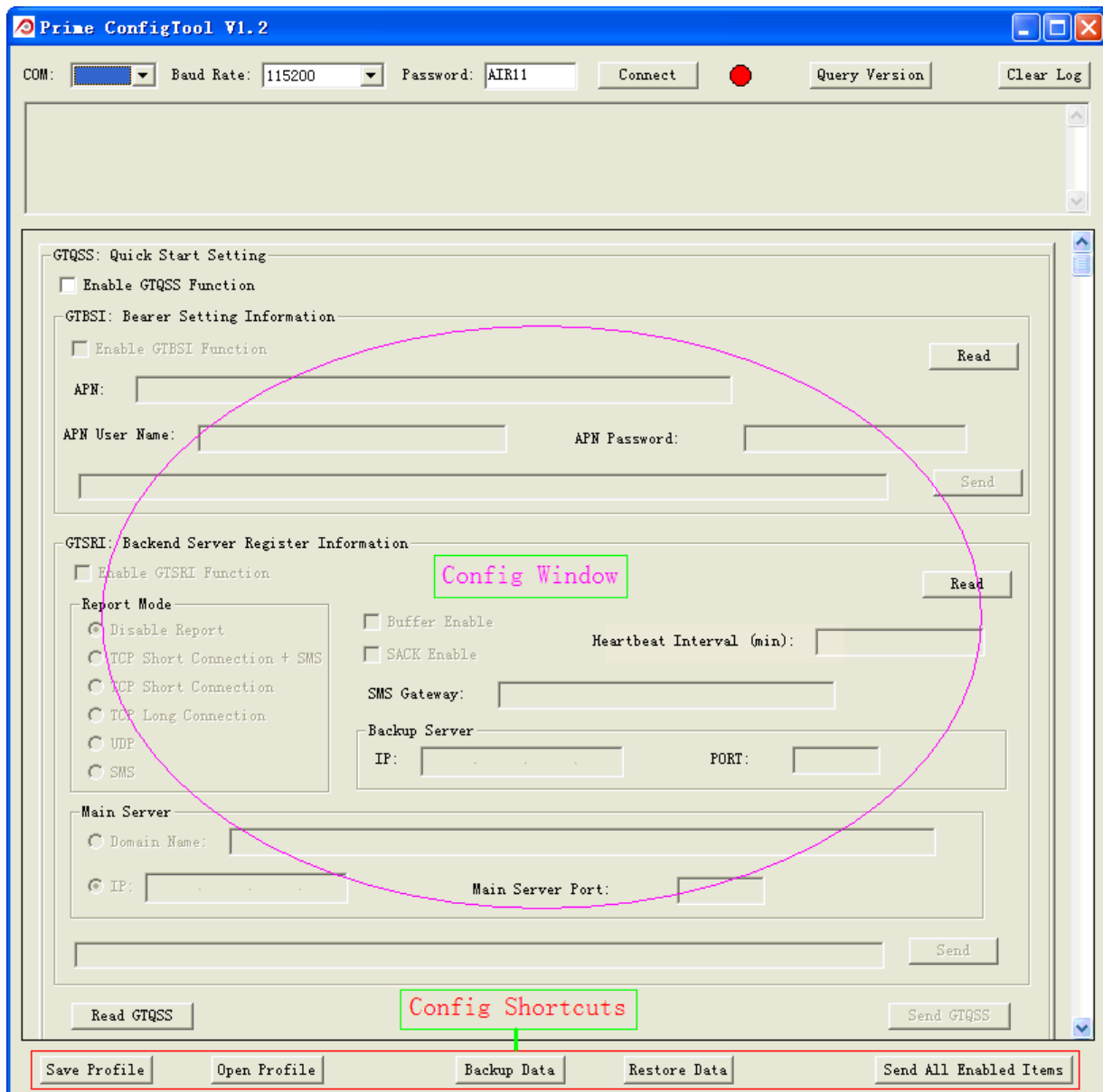
When click the “Clear Log” button, all the log will be cleared.

2.3. Query the software version of device



When click the “Query Version” button, the version information will be displayed.

2.4. The config window and Shortcuts



In the config window, we can set and view the parameters of the functions. If any inputted parameter is not correct, the item background will be colored red.

There are five shortcuts:

Save Profile:

When this button is clicked, all the config parameters, commands and the associated activation status will be saved to the profile file.

Open Profile:

When this button is clicked, all the config parameters, commands and the associated activation status will be loaded from the existed profile file.

Backup Data:

When this button is clicked, all the config parameters will be extracted from the target device and be saved to the backup file. Furthermore, you can select to go on extracting the movement locus log.

Restore Data:

When this button is clicked, all the config parameters will be loaded from the backup file and be sent to the target device.

Send All Enabled Items:

When this button is clicked, all the enabled config commands will be sent to the target device.

2.5. An example to configure Prime AT Lite

The config tool is developed based on the Tracker Air Interface Protocol. Please refer to “Prime AT Lite Interface Protocol” for detail.

Following is a general procedure to configure Prime AT Lite with config tool.

2.5.1. Set the parameters of Bearer setting information

STEP1: Select “Enable GTQSS Function” and “Enable GTBSI Function”, after that the parameters of GTBSI can be changed and the "Send" button is enabled.

STEP2: When “Enable GTBSI Function” is selected, the command message which shall be sent to Prime AT Lite will be generated based on input and displayed here. Please note this command message can also be sent to Prime AT Lite through SMS or GPRS.

STEP3: It is recommended to read the parameters from Prime AT Lite and edit based on them.

STEP4: Set APN information. Please refer to “Prime AT Lite Interface Protocol” for the meaning of each choice.

STEP5: Click the “Send” button; download the parameters of GTBSI to Prime AT Lite.

2.5.2. Set the parameters of backend server register information

The screenshot shows the 'GTSRI: Backend Server Register Information' dialog box. It contains several sections and fields:

- Enable GTSRI Function:** A checkbox labeled 'Enable GTSRI Function' (STEP1) is checked.
- Report Mode:** A group box containing radio buttons for 'Disable Report', 'TCP Short Connection + SMS', 'TCP Short Connection', 'TCP Long Connection' (STEP4), 'UDP', and 'SMS'.
- Buffer Enable:** A checkbox labeled 'Buffer Enable' (STEP5) is checked.
- SACK Enable:** A checkbox labeled 'SACK Enable' (STEP6) is unchecked.
- Heartbeat Interval (min):** A text box containing '0' (STEP7).
- SMS Gateway:** A text box (STEP8).
- Backup Server:** A group box containing:
 - IP:** A text box containing '0 . 0 . 0 . 0' (STEP9).
 - PORT:** A text box containing '0'.
- Main Server:** A group box containing:
 - Domain Name:** A text box.
 - IP:** A text box containing '0 . 0 . 0 . 0' (STEP10).
 - Main Server Port:** A text box containing '12345'.
- Command Message:** A text box at the bottom containing the command 'AT+GTSRI=AIR11,3,,1,0.0.0.0,12345,0.0.0.0,0,,0,0,,0,0002\$' (STEP2).
- Buttons:** A 'Read' button (STEP3) is in the top right, and a 'Send' button (STEP11) is in the bottom right.

STEP1: Select “Enable GTQSS Function” and “Enable GTSRI Function”, after that the parameters of GTSRI can be changed and the "Send" button is enabled.

STEP2: When “Enable This Function” is selected, the command message which shall be sent to Prime AT Lite will be generated based on input and displayed here. Please note this command message can also be sent to Prime AT Lite through SMS or GPRS.

STEP3: It is recommended to read the parameters from Prime AT Lite and edit based on them.

STEP4: Set Report Mode. Please refer to the “Prime AT Lite Interface Protocol” for detail.

STEP5: Set Buffer Enable. Please refer to the “Prime AT Lite Interface Protocol” for detail.

STEP6: Set SACK Enable. Please refer to the “Prime AT Lite Interface Protocol” for detail.

STEP7: Set Heartbeat Interval. Please refer to the “Prime AT Lite Interface Protocol” for detail.

STEP8: Set SMS Gateway. Please refer to the “Prime AT Lite Interface Protocol” for detail.

STEP9: Set the parameters of the secondary backend server.

In the “IP Address” text box, input the internet IP address and port number of the secondary backend server. The valid value of port number is 0-65535.

STEP10: Set the parameters of the main server.

Input the domain name or internet IP address and port number of the main backend server. The valid value of port number is 0-65535.

STEP11: Click the “Send” button; download the parameters of GTSRI to Prime AT Lite.

2.5.3. Set the parameters of quick start setting

STEP1: Select “Enable GTQSS Function”, after that the parameters of GTQSS can be changed and the “Send” button is enabled.

STEP2: When “Enable GTQSS Function” is selected, the command message which shall be sent to Prime AT Lite will be generated based on input and displayed here. Please note this command message can also be sent to Prime AT Lite through SMS or GPRS.

STEP3: It is recommended to read the parameters from Prime AT Lite and edit based on them.

STEP4: Set the parameters of all functions. Please refer to the “Prime AT Lite Interface Protocol” for detail.

STEP5: Click the “Send GTQSS ” button; download the parameters of GTQSS to Prime AT Lite.

2.5.4. Set the parameters of global configuration

The screenshot shows the 'GTCFG: Global Configuration' dialog box. It includes the following elements:

- STEP1:** A checkbox labeled 'Enable This Function' is checked.
- STEP3:** A 'Read' button is located in the top right corner.
- STEP4:** The main configuration area includes:
 - 'GPS On Need': A dropdown menu set to '1: Close GPS chip after retrieving GPS information every time'.
 - 'New Password': An unchecked checkbox.
 - 'Device Name': A text field containing 'AIR2011'.
 - 'GPS Fix Delay (s)': A text field containing '5'.
 - 'Report Items Mask': A text field containing '001F' with a 'Set Report Mask' button.
 - 'Event Mask': A text field containing '0FFF' with a 'Set Event Mask' button.
 - 'EPB Mode': An unchecked checkbox.
 - 'LED On': A checked checkbox.
 - 'Location By Call': A checked checkbox.
 - 'Info Report Enable': A checked checkbox.
 - 'Info Report Interval (s)': A text field containing '300'.
- STEP2:** A text field at the bottom displays the generated AT command: `AT+GTCFG=AIR11,,AIR2011,,,1,5,001F,,,0FFF,0,1,1,300,1,,,,,0002$`.
- STEP5:** A 'Send' button is located at the bottom right.

STEP1: Select “Enable This Function”, after that the parameters of GTCFG can be changed and the "Send" button is enabled.

STEP2: When “Enable This Function” is selected, the command message which shall be sent to Prime AT Lite will be generated based on input and displayed here. Please note this command message can also be sent to Prime AT Lite through SMS or GPRS.

STEP3: It is recommended to read the parameters from Prime AT Lite and edit based on them.

STEP4: Set the parameters of all functions. Please refer to the “Prime AT Lite Interface Protocol” for detail.

STEP5: Click the “Send” button; download the parameters of GTCFG to Prime AT Lite.

2.5.5. Set the parameters of non-movement detection

STEP1: Select “Enable This Function”, after that the parameters of GTNMD can be changed and the "Send" button is enabled.

STEP2: When “Enable This Function” is selected, the command message which shall be sent to Prime AT Lite will be generated based on input and displayed here. Please note this command message can also be sent to Prime AT Lite through SMS or GPRS.

STEP3: It is recommended to read the parameters from Prime AT Lite and edit based on them.

STEP4: Set the parameters of this function. Please refer to the “Prime AT Lite Interface Protocol” for detail.

STEP5: Click the “Send” button; download the parameters of GTNMD to Prime AT Lite.

2.5.6. Set the parameters of fixed report information

STEP1: Select “Enable This Function”, after that the parameters of GTFRI can be changed and the "Send" button is enabled.

STEP2: When “Enable This Function” is selected, the command message which shall be sent to Prime AT Lite will be generated based on input and displayed here. Please note this command message can also be sent to Prime AT Lite through SMS or GPRS.

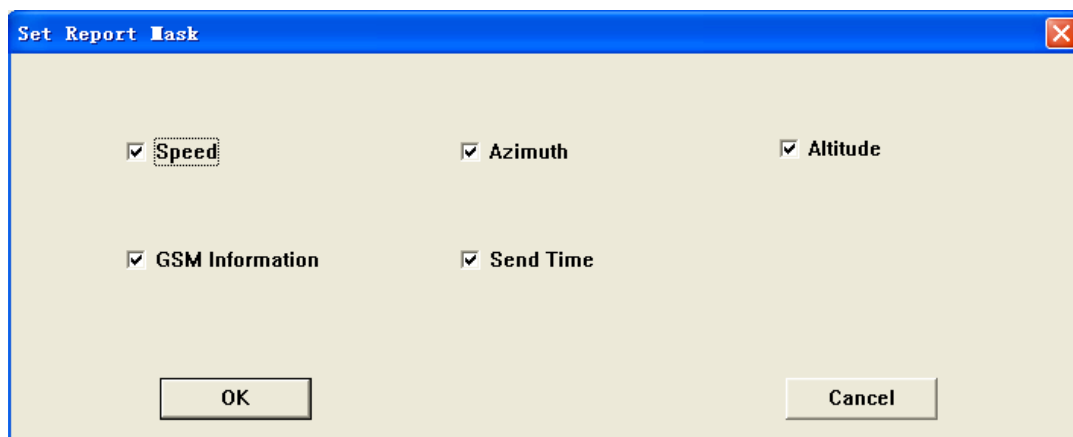
STEP3: It is recommended to read the parameters from Prime AT Lite and edit based on them.

STEP4: Set mode .Please refer to the “Prime AT Lite Interface Protocol” for detail.

STEP5: Select “Invalid Position For No Fix” and “AGPS Disable”.

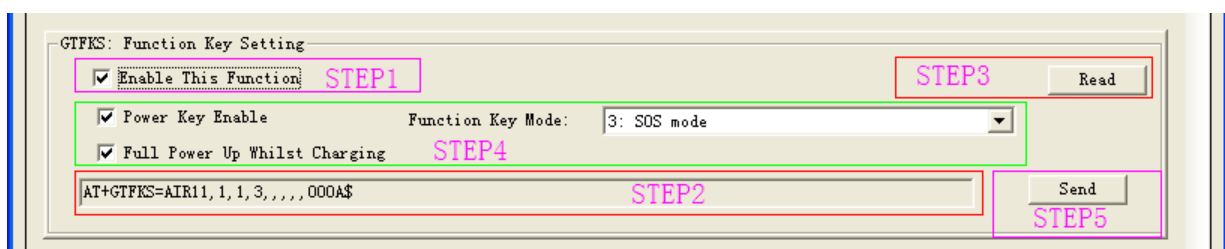
STEP6: Set the parameters of this function. Please refer to the “Prime AT Lite Interface Protocol” for detail.

STEP7: Set report mask, please click “Set Mask”, then there will pop up POP box. You may need to set according to report mask parameters.



STEP8: Click the “Send” button; download the parameters of GTFRI to Prime AT Lite.

2.5.7. Set the parameters of function key setting



STEP1: Select “Enable This Function”, after that the parameters of GTFKS can be changed and the "Send" button is enabled.

STEP2: When “Enable This Function” is selected, the command message which shall be sent to Prime AT Lite will be generated based on input and displayed here. Please note this command message can also be sent to Prime AT Lite through SMS or GPRS.

STEP3: It is recommended to read the parameters from Prime AT Lite and edit based on them.

STEP4: Set power key enable or disable and function key mode. Please refer to the “Prime AT Lite Interface Protocol” for detail.

STEP5: Click the “Send” button; download the parameters of GTFKS to Prime AT Lite.

2.5.8. Set the parameters of time adjustment

The screenshot shows the 'GTTMA: Time Adjustment' window. It includes a checkbox for 'Enable This Function' (STEP1), a 'Read' button (STEP3), a 'Sign' dropdown (STEP4), 'Hour Offset' and 'Minute Offset' text boxes (STEP4), a 'Daylight Saving' checkbox, a 'UTC Time (YYYYMMDDHHMMSS):' text box (STEP4), a command message field showing 'AT+GTTMA=AIR11,+00,00,0,,,,,0005\$' (STEP2), and a 'Send' button (STEP5).

STEP1: Select “Enable This Function”, after that the parameters of GTTMA can be changed and the "Send" button is enabled.

STEP2: When “Enable This Function” is selected, the command message which shall be sent to Prime AT Lite will be generated based on input and displayed here. Please note this command message can also be sent to Prime AT Lite through SMS or GPRS.

STEP3: It is recommended to read the parameters from Prime AT Lite and edit based on them.

STEP4: Set the parameters of all functions. Please refer to the “Prime AT Lite Interface Protocol” for detail.

STEP5: Click the “Send” button; download the parameters of GTTMA to Prime AT Lite.

2.5.9. Set the parameters of Geo-fence information

GTGEO: Geo-Fence Information

☒ Enable This Function

GEO ID 0

☒ GEO ID 0

Mode: 0: Disable the Geo-Fence

Radius: 1000

Check Interval: 1 Times the GPS fix interval

AT+GTGEO=AIR11,0,0,,1000,1,,,,,,0007\$

Read

Send

STEP1: Select “Enable This Function” and “GEO ID X” check box, after that the parameters of GTGEO can be changed and the "Send" button is enabled.

STEP2: When “GEO ID X” check box is selected, the command message which shall be sent to Prime AT Lite will be generated based on input and displayed here. Please note this command message can also be sent to Prime AT Lite through SMS or GPRS.

STEP3: It is recommended to read the parameters from Prime AT Lite and edit based on them.

STEP4: User can define up to five Geo-Fence regions on Prime AT Lite. Each region is a circular area which is defined by central coordinate and radius. When the device enters or leaves a predefined Geo-Fence region, Prime AT Lite will send alert information to server.

“GEO ID X”: The "Send" button will be enabled when the associated ID check box is selected. After pressing the “Send” button, the rule of selected Geo-Fences will be downloaded to Prime AT Lite.

“Latitude”: 20bytes, unit: degree, example as 31.187891 degree

“Longitude”: 20bytes, unit: degree, example as 121.412248 degree

“Radius”: 7bytes, unit: meter, example as 1000 meters.

“Check Interval”: The interval of GPS checking for Geo-Fence alarm, in terms of times the GPS fix interval.

“Mode”: A numeric which indicates when to report the notification to backend server about the Geo-Fence.

0: Disable the Geo-Fence on the specified GEO ID.

1: Reports when enters the Geo-Fence.

2: Reports when leaves the Geo-Fence.

3: Reports when enters or leaves the Geo-Fence.

STEP5: Click the “Send” button; download the parameters of GTGEO to Prime AT Lite.

2.5.10. Set the parameters of speed alarm

STEP1: Select “Enable This Function”, after that the parameters of GTSPD can be changed and the "Send" button is enabled.

STEP2: When “Enable This Function” is selected, the command message which shall be sent to Prime AT Lite will be generated based on input and displayed here. Please note this command message can also be sent to Prime AT Lite through SMS or GPRS.

STEP3: It is recommended to read the parameters from Prime AT Lite and edit based on them.

STEP4: Set the parameters of this function. Please refer to the “Prime AT Lite Interface Protocol” for detail.

STEP5: Click the “Send” button; download the parameters of GTSPD to Prime AT Lite.

2.5.11. Set the parameters of real time operation

STEP1: Select “Enable This Function”, after that the parameters of GTRTO can be changed and the "Send" button is enabled.

STEP2: When “Enable This Function” is selected, the command message which shall be sent to Prime AT Lite will be generated based on input and displayed here. Please note this

command message can also be sent to Prime AT Lite through SMS or GPRS.

STEP3: Select "Sub Command". Please refer to the "Prime AT Lite Interface Protocol" for detail.

STEP4: Click the "Send" button; download the parameters of GTRTO to Prime AT Lite.

2.5.12. Set the parameters of white call list configuration

STEP1: Select "Enable This Function", after that the parameters of GTWLT can be changed and the "Send" button is enabled.

STEP2: When "Enable This Function" is selected, the command message which shall be sent to Prime AT Lite will be generated based on input and displayed here. Please note this command message can also be sent to Prime AT Lite through SMS or GPRS.

STEP3: It is recommended to read the parameters from Prime AT Lite and edit based on them.

STEP4: Set the parameters of this function. Please refer to the "Prime AT Lite Interface Protocol" for detail.

STEP5: Click the "Send" button; download the parameters of GTWLT to Prime AT Lite.

2.5.13. Set the parameters of google link SMS configuration

STEP1: Select “Enable This Function”, after that the parameters of GTGLM can be changed and the "Send" button is enabled.

STEP2: When “Enable This Function” is selected, the command message which shall be sent to Prime AT Lite will be generated based on input and displayed here. Please note this command message can also be sent to Prime AT Lite through SMS or GPRS.

STEP3: It is recommended to read the parameters from Prime AT Lite and edit based on them.

STEP4: Set the parameters of this function. Please refer to the “Prime AT Lite Interface Protocol” for detail.

STEP5: Click the “Send” button; download the parameters of GTGLM to Prime AT Lite.

2.5.14. Set the parameters of auto unlock SIM-PIN

STEP1: Select “Enable This Function”, after that the parameters of GTPIN can be changed and the "Send" button is enabled.

STEP2: When “Enable This Function” is selected, the command message which shall be sent to Prime AT Lite will be generated based on input and displayed here. Please note this command message can also be sent to Prime AT Lite through SMS or GPRS.

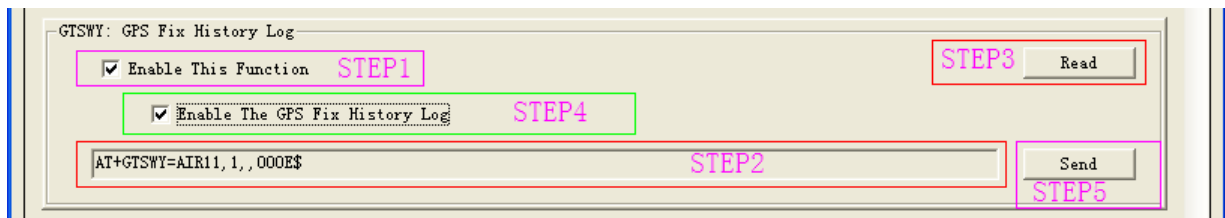
STEP3: It is recommended to read the parameters from Prime AT Lite and edit based on them.

STEP4: Set the parameters of this function. Please refer to the “Prime AT Lite Interface

Protocol” for detail.

STEP5: Click the “Send” button; download the parameters of GTPIN to Prime AT Lite.

2.5.15. Set the parameters of GPS fix history log



STEP1: Select “Enable This Function”, after that the parameters of GTSWY can be changed and the "Send" button is enabled.

STEP2: When “Enable This Function” is selected, the command message which shall be sent to Prime AT Lite will be generated based on input and displayed here. Please note this command message can also be sent to Prime AT Lite through SMS or GPRS.

STEP3: It is recommended to read the parameters from Prime AT Lite and edit based on them.

STEP4: Set the parameters of this function. Please refer to the “Prime AT Lite Interface Protocol” for detail.

STEP5: Click the “Send” button; download the parameters of GTSWY to Prime AT Lite.