

VL3000 Manager Tool User Guide V1.05 **Revelopment Kit** Hardware Design Reference Design Software Design



Document Title	VL3000 Manager Tool User Guide
Version	1.00
Date	2013-07-11
Status	Release
Document Control ID	

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2012.05.08



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Revision history

Revision	Date	Description of change	Author
V1.00	2013-07-11	Initial	Zhaolei.yang





1. VL3000 Manager Guide

1.1 Description

VL3000 manager tool is a PC software which can be used to configure VL3000 through "Data and Charge Cable" interface. It is easy for the backend server developers to configure VL3000 with the manager tool, which has user-friendly interface. The correct command messages sent to VL3000 will be displayed on the management tool. (These messages can also be sent by SMS or GPRS).

Follow the steps below to start:

- 1. Install the data cable driver "PL-2303 driver Installer.exe".
- 2. Power on VL3000.
- 3. Connect VL3000 to PC.
- 4. Run "VL3000 Manager.exe".

1.2 Terms and Abbreviations

Abbreviation	Description
APN	Access Point Name
GPRS	General Packet Radio Service
GSM	Global System for Mobile Communications
IMEI	International Mobile Equipment Identity
IP	Internet Protocol
SMS	Short Messaging Service
ТСР	Transmission Control Protocol
GPS	Global Positioning System
НРА	Horizontal Position Accuracy
VPA	Vertical Position Accuracy
DOP	Dilution of Precision
MCC	Mobile Country Code
MNC	Mobile Country Code
LAC	Location Area Code
ТА	Timing Advance

Table 1: Terms and abbreviations



2. Simtech HS-USB Modem Setting

SIMTECH HS-US	SB MODEM 9	1000 #2 (COM1)	-
13000			
OF		Concel	
	SIMTECH HS-U 13000 OK	SIMTECH HS-USB MODEM 9 413000	SIMTECH HS-USB MODEM 9000 #2 (COM1 413000 OK Cancel

Select the correct com port from the port list, which is displayed in user PC's "Device Manager" and input the password, with the default value "VL3000".

If the password is incorrect, the parameter that users set will not be downloaded to the terminal.

3. The Main Window

	👹 ¥1.3000 Manager ¥1.00	<u> </u>
	Operation Help	
	Base Setting	
	Good Configure Function Key Geo-Fence Report Mode: 0:STOP_REPORTING_MODE	
	Motion Sensor Setti Google Link Fixed Report Inform Speed Alarm APN User Name: FreeFall Detect APN Password:	
Function setting	Acceptable Incoming GPS on Need Extend Setting Renamed device with Protocol Watchdog Time ddivisionnt	
	Rest Backup Server Pasword Change IP Address: Port: 0	
	Heartbeat Interval: 30 (0 30-86400 second) SMS Number:	
	Short TCP Hold Time: 0 (0 1-9 minute)	
AT Command	AT Command	
Ai Collinaid	AT+GTQSS=v13000, "", "", "", 0, 0, 0, 0, 30, , 3, 10, 0021\$	
Operations	Read Download	
Status	Status: Write parameter setting success!	



Function setting

The function setting zone is used to set and view the parameters of the function.

> AT Command

This column shows the command message which will be sent to the terminal. The command message can also be sent to the terminal through SMS or GPRS.

Note: The last parameter of "AT command" (the parameter before '\$' character) is the sequence number for command. It will be invoked in the ACK message of the command.

> Operations

[Read]: Import the setting from the local configuration.

[Download]: Download the settings to the terminal via AT command.

Status

Display the status of operation, including the serial port status.



4. An Example to Configure VL3000

The manager tool is developed based on the VL3000 Air Interface Protocol. Refer to "VL3000 Air Interface Protocol" for detailed references.

Following is a general procedure to configure VL3000 with manager tool.

4.1 Set the Parameters of Base Setting

	🖉 ¥1.3000 Manager ¥1.00	. 🗆 🗙
	Dperation Help	
Step_1	Base Setting Global Configure	
Step_2	Function Key Report Mode: O:STOP_REFORTING_MODE	
	Motion Sensor Setti Gongle Link Fixed Renort Inform	
Step_3	AGPS Setting APN User Name:	
	FreeFall Detect Aceptable Incoming GPS on Wad	
	Extend Setting Renamed device with	
Step 4	Protocol Watchdog Time Adjustment	
	Password Change IP Address: Port: 0	
	History Logs	
Step_5	Heartbeat Interval: 30 (0 30-86400 second)	
Step_6	SHS Number:	
Step_7	Short TCP Hold Time: 0 (0 1-9 minute)	
	- AT Command	
	AT+GTQSS=v13000, "", "", "", 0, , 0, , 0, , 3, 10, 0021\$	() ()
Step_8	Read Download	
	Status: Write parameter setting success!	

Step_1: Select "Base Setting" option.

Step_2: Select "Report Mode".

There are six modes to be selected "0" - "6".

If the settings are "1", "2", "3", "4", "5", then "*Main Server*" input is mandatory. If the setting is "1", "3", "6", then "*SMS Number*" input is mandatory.

Step_3: Get the "APN", "APN User Name" and "APN Password" information from your telecom operator. Input them in the corresponding fields.

If "APN" is null, the module will use the last value.

Step_4: Input "IP Address" and "Port" of main server, backup server input is optional.

Step_5: Edit the "Heartbeat Interval", Default value is 30 seconds.

Step_6: Input "SMS Number". It is the number of mobile device to which SMS will be sent. The SMS contains AT response or event report.

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Step_7: Set "Short TCP Hold Time". It can be set only when "*Report Mode*" is set to "1" or "2". **Step_8:** Download the base setting. The parameters of GTQSS are changed.

	<i>∰</i> ¥L3000 Manager ¥1.00				
	Operation Help				
		Jobal Configure — — —			
Step_1	Global Configure Function Key	Device Name:	DevName		
	Geo-Fence Motion Sensor Settin≰	Satellite Number:	0	(0-8)	
	Google Link Fixed Report Informat	GPS Fix Delay Time:	4	(0-99 second)	
Step_2	Speed Alum	Battery Report Interval:	5	(0 5-1440 minute)	
	FreeFall Detect	Power Down Delay:	6	(1-30 second)	
	- GPS on Need	Geofence Check Interval:	0	(0 30-86400 second)	
	Renamed device with +	SSM2 Battery Percentage T	'hreshold:		
	Time Adjustment		50	(0-99 %)	/
	- Password Change	Button Mask			
Share 2		• 0000 will not clu	se TCP/TP connection	n when GTNMR hannens (default)	
Step_3					
		C 0010:will close 1	CP/IP connection whe	en GTNMR happens.	ノ
		-Event Mask-			
		🗖 +RESP: GTBAT	🗖 +RESP: GTINF	+RESP: GTPWD	
Step 4		+RESP: GTBCI	+resp: gtcep	+RESP: GTDEP	
		+RESP: GTMOV	₩ +RESP: GINMR	+RESP: GTPKS	
		AT Command			
		AT+GTCFG=v13000,,DevName	, 5, 6, 0, 50, , , 0000, 180	0, , 0, 4, 999, 200, , , , , , 0022\$	
Step_5		Read		Download	
	•				
	Status: Write parameter s	etting success!			<u> </u>

4.2 Set the Parameters of Global Configure

Step_1: Select "Global Configure" option.

Step_2: Set a group of parameters:

- ♦ Set "Device Name". Set the device name, the length of string is 3-10 bytes. Null input means it is the current value without change.
- ♦ Set "Satellite Number". Normally, 4 satellites are relatively reasonable value. Default value is 0.
- ♦ Set "GPS Fix Delay Time".

After successful fix, the position information is deemed valid only when the consecutive positioning seconds are not smaller than the set value. Default value is 0 second.

- ♦ Set "Battery Report Interval". It is the time interval for periodically reporting battery level. Default value is 5 minutes.
- Set "*Power Down Delay*". The terminal will send data to server after user presses power key for more than 3 seconds to power off the terminal. The power delay time is the maximum time to complete data transmission, after which the terminal will be shut down completely. Default value is 6 seconds.





\$	Set "Geofence	Check Interval". Location interval for geofence evaluation, if any
	geofences are p	rovisioned. Each geofence is evaluated against the location returned
	at this interval.	0 means no check.
\diamond	Set "SSM2 bat	tery percentage threshold": Under the premise of setting the "Super
	sleep mode" pa	arameter to automobile mode (value 2), if the battery percentage is
	lower than this	value, the terminal will enter super sleep mode unconditionally.
	Note: It is edita	ble only when "Super sleep mode" parameter is set to 2.
Step_3: Set	"Button Mask".	
	0000: Not clo	ose TCP/IP connection when GTNMR happens. (default)
	0010: Close 7	CP/IP connection when GTNMR happens.
Step_4: Set	"Event Mask".	
To	tally nine events a	are listed. If the event is chosen, the corresponding report message
car	be sent to the ba	ckend server when that event happens. Otherwise, it will not send the
rep	ort message to th	e backend server.
"+]	RESP:GTBAT"	Real time battery level report
"+]	RESP:GTINF"	Device information report. It is reported when the terminal is
		powered on.
"+]	RESP:GTPWD"	Device power down report. It is reported when the terminal is
		powered down.
"+]	RESP:GTBCI"	Report illegal incoming call if the incoming call number is not in the
		white list set in Google link function.
"+]	RESP:GTCEP"	Connect to external power supply report
"+]	RESP:GTDEP"	Disconnect from external power supply report
"+]	RESP:GTMOV"	Movement detected by motion sensor report
"+]	RESP:GTNMR"	Non movement detected by motion sensor report.
"+]	RESP:GTPKS"	Power Key Short Press Event Report.

Step_5: Download global configuration. The parameters of GTCFG are changed.



	🍯 ¥L3000 Manager ¥1.00	
	Operation Help	
Shan 1	Base Setting	Function Key
Step_1	Function Key	Power Key
Step 2	Motion Sensor Setting	• Enable O Disable
	- Google Link - Fixed Report Informat - Speed Alarm - AGTS Setting - FreeFall Detect - Acceptable Incoming Y - GPS on Need - Extend Setting	SOS Key Function © 0:Fix GPS first, then report SOS event with real GPS information. © 1:Report SOS event immediately: fix GPS, then report SOS event periodically.
Step_3	Renamed device with t - Frotocol Watchdog - Time Adjustment - Reset - Password Change - Reading - Kistory Logs	 C 2:Build voice communication only. C 3:Build a voice call; send SOS SMS message; report SOS event periodically. C 4:Report SOS event; build a voice call; send SOS SMS message; report SOS event for one time.
Step_4		Disconnect call C Enable C Enable
Step_5		SOS Report Interval: 10 (5-600 second)
Step_6		SOS Number:
Step_7		Power Key Interval: 600 (0-3600 second)
		AT Comm and AT+GTFKS=v13000, 1, 0, 10, , 0, , 600, 0021\$
Step_8	Status: Write parameter s	
	status, strice parameter a	

4.3 Set the Parameters of Function Key

- **Step_1:** Select "*Function Key*" option.
- Step_2: Set "Power Key" function. Default value is "1".
- Step_3: Set "SOS Key Function". Default value is "0".
- Step_4: Set "Disconnect call" function. Default value is "0".
- **Step_5:** Set "SOS Report Interval". It indicates the interval of GPS information report. Default value is 10 seconds.
- **Step_6:** Set "SOS Number". It is the number to which voice communication connects.
- Step_7: Set "Power Key Interval". Minimum power key report
- Step_7: Download function key settings. The parameters of GTFKS are changed.



	👹 ¥L3000 Manager ¥1.00				
Step_1	Operation Help Base Setting - Global Configure - Function Key GeomFence - Motion Sensor Setting - Google Link - Fixed Report Informat - Speed Alarm - AGPS Setting	GEO O GEO 1 GEO 2	GEO 3 GEO 4	1	
Step_2	FreeFall Detect Acceptable Incoming Y GPS on Need	Confirming Retries:	0	(0-7)	
Step_3	Extend Setting Renamed device with t	Mode:	0:disable Geo-H	ence	J
Step_4	- Protocol Watchdog Time Adjustment	Figure:	1: circularity v	ith center and radius	I
	- Reset - Password Change - Reading - History Logs	Redius: Longitude0: Longitude1:	р р р	(50-6000000 meter) Latitude0: 0 Latitude1: 0	
Step_5		Longi tude2: Longi tude3:	0 0	Latitude2: 0 Latitude3: 0	
		Longi tude4: AT Command AT+GTGE0=v13000,0	0 , 0, 0, 0, 0, 1, 0, 0, 0,	Latitude4: 0	
Step_6	Status: Write parameter se	tting success!	Read	Download	

4.4 Set the Parameters of Geo-Fence



- Step_2: Set the parameter "Confirming Retries". When a geofence violation is first detected, there shall be this many position retries which attempt to confirm that the position is consistently in violation. The retries shall occur 10 seconds apart. If any of the retries return a position that does not qualify, then the GTGEO report will not be sent. Failure to get some or all of the retry fixes shall not prevent the alarm. 0 means no retry.
- Step_3: Select "Mode".

0: disable the fence

- 1: report when it enters the Geo-Fence range.
- 2: report when it leaves the Geo-Fence range.
- 3: report when it enters or leaves the Geo-Fence range.
- Step_4: Select "Figure".
 - 1: circularity with center and radius
 - 2: circularity with center and one point on the circle
 - 3: triangle
 - 4: quadrangle

Note: It can be selected only when "Mode" is not 0.

Step_5: Set the graphic parameter.

Step_6: Download Geo fence setting. The parameters of GTGEO are changed.

Note: Maximum five fences can be set. After the fences settings are completed, the terminal will calculate and set the entire fence based on input parameters.

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	<i>4</i> VL3000 Manager V1.00				_
	Operation Help				
Step_2	Base Setting Global Configure Function Key	Motion Sensor Setting-			
Step_1	Geo-Fence Motion Sensor Settin Google Link	M-threshold:	1	(0 1-127)	
Step_3	Fixed Report Informat Speed Alarm	ueray time.	2	(0]1-255 (10 millisecond))	
Step_4	- AGPS Setting - FreeFall Detect	Static Arbitration T	ime: 120	(0 1-65535 secon	
Step_5	GPS on Need Extend Setting	Axis:	β∶enable x y axes accele	eration	
Step_6	Renamed device with 4 Protocol Watchdog	Mode:	1:enable motion sensor f	Function	
Step_7	Time Adjustment Reset Password Change	Super Sleep Mode:	0:disable		
Step_8		AT - Command AT+GTMSS=v13000, 1, 2	;, , 120, 6, 1, 0, 0022\$	Download	
	Status: Write parameter s	etting success!			

4.5 Set the Parameters of Motion Sensor Setting

Step_1: Select "Motion Sensor Setting" option.

Step_2: Set "*M*-threshold" parameter.

<M-threshold>: M-threshold is a parameter to decide the threshold of Movement Event Report. The movement is judged when terminal detects that its acceleration exceeds the preset acceleration threshold and movement time exceeds the preset movement cycle. Then it will report these events to GPS module. GPS module will process the request and follow the requirement whether to report the data to the server.

<M-threshold> = Acceleration value (g)/0.063

0 means to use the default value1.

Step_3: Set *"M-delay-time"* parameter. It is the time that the terminal's acceleration maintains. The range is 0-255. The measure unit is 10 milliseconds.

0 means to use the default parameter 2 (*10 millisecond).

- Step_4: Set "Static arbitration time" parameter. When terminal enters still from movement, the still status will be judged if the still time exceeds that parameter. 0 means to use the default parameter 120 seconds.
- **Step_5:** Set *"Axis"* parameter.
 - 2: only enable x axis acceleration
 - 4: only enable y axis acceleration
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6: enable both x and y axes acceleration

Step_6: Set "Motion Sensor Enable" parameter.

- 0: disable motion sensor function.
- 1: enable motion sensor function.
- Step_7: Select "Super Sleep Mode" parameter.
 - 0: disable
 - 1: normal mode
 - 2: automobile mode

Step_8: Download motion sensor setting. The parameters of GTMSS are changed.

4.6 Set the Parameters of Google Link

	# VL3000 Manager V1.00	- 🗆 ×
	Operation Help	
Step_1 Step_2	Base Setting Global Configure Function Key GeorFance Motion Sensors Setting GeorFance AGRS Setting FreeFall Detect Acceptable Incoming V GFS on Ned Extend Setting Renamed device with ' Protocol Watchog Time Adjustment Rest Password Change Reading History Logs AT Command AT Command	
Step_3	Road	
	Status: Write parameter setting success!	

Step_1: Select "Google Link" option.

- Step_2: Set the number in "White Call List". Once incoming call is from white call list, terminal will terminate the call, and send a SMS to that number which contains a web link leads to current location of terminal. User can click the link to get the terminal's current location.
- **Step_3:** Download Google Link setting. The parameters of GTGMP are changed.



	<i>∭</i> ¥L3000 Manager ¥1.00		
	Operation Help		
	Base Setting Global Configure	Fixed Report Information	4
Step_2	- Geo-Fence	Mode: 1:enable fixed report function 💌	
Step_1	- Motion Sensor Setting Google Link - Fixed Report Informat - Speed Alarm	Discard no fix © 0:to report last known GPS position if there is no GPS fix	
Step 3	KOPS Setting	C 1:to send nothing if there is no GPS fix	
		Begin Time (009MM): 0 End Time (009MM): 2359	
	Extend Setting Renamed device with 1	Check Interval 1: 120 (0 5-86400 second)	
	Protocol Watchdog Time Adjustment 	Send Interval 1: 360 (0 5-86400 second)	
Sten 4	Password Change	Check Interval 2: 120 (0 5-86400 second)	
	History Logs	Send Interval 2: 360 (0 5-86400 second)	
		Movement Detect Mode: 0:disable	
		Movement Speed: (0 1-999 km/h)	
		Movement Distance: 0 (0 1-9999 meter)	
		Report Mask	
Step 5		🗖 Velocity 🧮 Azimuth 🥅 Altitude	
Step_5		GSM Information 🔽 Send Time	
		AT Command	
		AT+GTFRL=#13000, 1, 0, , , 0, 2359, 120, 360, 120, 360, 0000, , , 0, 0, 0, , , , 0021\$	
Step_6		Read	
	Status: Write parameter s	setting success!	

4.7 Set the Parameters of Fixed Report Information

Step_1: Select "Fixed Report Information" option.

- Step_2: Select "Mode".
 - 0: disable Fixed Report Function.
 - 1: enable Fixed Report Function.
- Step_3: Select "Discard no fix".
 - 0 to report last known GPS position if there is no GPS fix;
 - 1 to send nothing if there is no GPS fix.
- **Step_4:** Set a group of parameters:
 - ♦ Set "Begin Time" and "End Time". The start time and end time of scheduled fixed report. It is noticed to use UTC time here.
 - ♦ Set "Check Interval 1". The time interval to fix GPS when the terminal is in motion state. 0 means no check. Default value is 120 seconds.
 - ♦ Set "Send Interval 1". The period to send the position information when the terminal is in motion state. 0 means not to send. Default value is 360 seconds.
 - ♦ Set "Check Interval 2". The time interval to fix GPS when the terminal is in motionless state. 0 means no check. Default value is 120 seconds.
 - ♦ Set "Send Interval 2". The period to send the position information when the terminal is in motionless state. 0 means not to send. Default value is 360 seconds.
 - Select "Movement Detect Mode".
 0: disable (default)





1: enable

- ♦ Set "Movement Speed". The speed threshold of movement detection. 0 means not to detect speed.
- ♦ Set "Movement Distance". The distance threshold of movement detection. 0 means not to detect distance.
- **Step_5:** Configure the composition of GPS position information for fixed report.
 - ♦ <Veloctiy>
 - \diamond <Azimuth>
 - \diamond <Altitude>
 - ♦ GSM Information including: GSM LAI and CI, including <MCC>, <MNC>, <LAC>, <CELLID>,<CSQ RSSI>,<TA>.
 - ♦ <Send Time>

Step_6: Download fixed report information setting. The parameters of GTFRI are changed.

4.8 Set the Parameters of Speed Alarm



Step_1: Select "Speed Alarm" option.

- Step_2: Select the "Mode"
 - \diamond 0: disable speed alarm
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- \diamond 1: enable when current speed is in the range.
- \diamond 2: enable when current speed is out of the range.

Step_3: Set a group of parameters.

- \diamond Set "*Min Speed*". The lower limit of the speed range.
- \diamond Set "*Max Speed*". The upper limit of the speed range.

Set "*Speed Check Interval*". Location interval for speed check purpose. If motion sensor is enabled and no motion is detected then location interval is skipped. 0 means not to check.

 \diamond Set "Speed Send Interval". After the speed alarm is triggered, the GTSPD report is sent every time interval with the latest speed. Speed alarm reports shall not be sent more often than this interval.

 \diamond Set "*Confirming Retries*". When the speed is first detected in the range for speed alarm, there shall be this many position retries attempt to confirm that the speed is consistently in the alarm range. The retries shall occur 10 seconds apart. If any of the retries returns a speed that does not qualify, then the GTSPD report will not be sent. Failure to get some or all of the retry fixes shall not prevent the alarm. 0 means no retry.

Step_4: Download the change of user password. The parameters of GTSPD are changed.

- 🗆 🗙 *ể* ¥L3000 Manager ¥1.00 Operation Help Base Setting AGPS Setting + Global Configure AGPS mode: • Step_2 O:not use AGPS Function Key Geo-Fence Motion Sensor Setting Autonomous control ○ 0:don't use AssistNow autonomous Google Link Fixed Keport Informat Step 3 1:use AssistNow autonomous Speed Alarm AGPS Setting Step 1 Freefall Detect Acceptable Incoming Y agps.u-blox.com:46434 Online Address: GPS on Need jianying. hu@sim. co Online User: Extend Setting Renamed device with + Protocol Watchdog Online Password: Step 4 Time Adjustment Online Retry Times: 3 (0-9) Reset Password Change Online Update Interval: 120 (0 20-240 minute) Reading History Logs Offline Address: Offline Retry Times: (0-9) Step 5 Offline Almanac Age: 1440 (0|30-20160 minute) AGPS Event Mask +RESP:GTAGP AssistNow online AGPS mask Step_6 +RESP: GTAGP AssistNow offline AGPS mask AT Command AT+GTAGP=v13000, 0, 1,, agps. u-blox. com: 46434, jianying. hu@sim. com, Nbafcq, 3, 120, , , , Read Download Step_7 • + -Status: Write parameter setting success!

4.9 Set the Parameters of AGPS Setting

Step_1: Select "AGPS Setting" option.

Step_2: Select the "AGPS Used"

0: not to use AGPS

1: use AssistNow online AGPS



2: use AssistNow offline AGPS

3: use both AssistNow online and offline AGPS

Step_3: Select the "Autonomous control"

Step_4: Set a group of online parameters.

- ♦ Set "Online Address". AssistNow online server Address
- ♦ Set "Online User". AssistNow online server User Name
- ♦ Set "Online Password". AssistNow online server password
- ♦ Set "Online Retry Times". AssistNow online server connect retry times limit
- Set "Online Update Interval". Update local online data from AssistNow online server time interval.

Step_5: Set a group of offline parameters.

- ♦ Set "Offline Address". AssistNow offline server Address
- ♦ Set "Offline Retry Times". AssistNow offline server connect retry times limit
- Set "*Offline Almanac Age*". It indicates the period exceeds which the almanac will be invalid. It is recommended to set it to be more than 4 hours. 0 means no update.

Step_6: Select the "*AGPS Event Mask*" to configure which AGPS event will be reported to the backend server.

Step_7: Download the change of AssistNow Online/Offline Server information. The parameters of GTAGP are changed.

4.10 Set the Parameters of Free Fall Detect

	🖉 ¥L3000 Manager ¥1.00	
	Operation Help	
Step_2	Base Setting -Gobal Configure -Function Key -Goo-Fence Motion Sensor Setting -Google Link -Fixed Report Informat Could be the configure of the set	
Step_1	AGTS Setting FreeFill Distort AGTS on Need F-count: 25 (1-255) (1-255)	
Step_3	Krend Setting Renamed davice with t Frotocol Watchdog Time Adjustment Reset Password Change Reading History Logs	
Step_4	Read Download	
	Status: Write parameter setting success!	



Step_1: Select "FreeFall Detect" option.

Step_2: Select *"Mode"* to disable/enable freefall detection.

Step_2: Set *"F-count"*, the time that the terminal's acceleration maintains.

Step_3: Download the change of freefall detection. The parameters of GTFFA are changed.

4.11 Set the Parameters of Acceptable Incoming White List Number

	# ¥I 3000 Manager ¥1 00	
	Operation Help	
Step_1 Step_2	Operation Help Base Setting -Base Setting -Bould Configure -Function Key -Geo-Fence -Motion Sensor Setting -Speed Alarm -Akers Setting -Rest Red -Extend Setting -Remaind davice with t -Protocol Watchdog -Time Advistment -Reset	
Step_3	AT Command AT Command AT+GTSNUM=v13000,,,,,00215 Read Download Status: Write parameter setting success!	

Step_1: Select "Acceptable Incoming White List Number" option.

Step_2: Set the number in "*Acceptable White Call List*" column. The two adjacent phone numbers are separated with a comma. Once there is an incoming call from this call list, the terminal will answer the call automatically.

Step_3: Download the setting. The parameters of GTSNUM are changed.



	<i>掌</i> ¥L3000 Manager ¥1.00		
	Operation Help		
Step_2	Base Setting -Gobal Configure -Function Key -Geo-Fence -Motion Sensor Setting -Google Link -Fixed Report Informat -Speed Alarm 40PS Setting	on Need Mode C O:normal mode C 1: always on mode	
Step_1	All Detect Arceptable Incoming V GFS on Need Extend Setting -Renamed device with t -Protocol Watchdog -Time Adjustment	GPS in View: I (D-9) GPS SNR: 15 (D-50) Searching Seconds: 99 (5-99)	
Step_3	- Reset - Password Change Booding History Logs	AT-Command AT+GTGON=v13000,0,,1,15,99,,,,0021\$	
Step_4		Read	
	Status: Write parameter sett	ing success!	

4.12 Set the Parameters of GPS on Need

Step_1: Select "GPS on Need" option.

- Step_2: Select the mode.
 - 0: normal mode
 - 1: always on mode
- Step_3: Set GPS parameters.
 - \diamond <*GPS in view*>: minimum numbers of GPS in View that SNR is larger than 0

 - \diamond <Searching seconds>:
 - If <mode> equals to 0,

After GPS have worked for <Searching seconds>, if the numbers of GPS is less than<GPS in view>, at the same time, GPS signal sum value is less than <GPS SNR>, GPS will be powered off for this round.

Step_4: Download the change of GPS power characteristics. The parameters of GTGON are changed.



Operation Help Exec Setting Goodal Configure Function Key GeorBoor Thformat Speed Alarm AGTS Setting Forefall Bletett Acceptable Incoming V Cis on Mead Freed Report Informat Speed Alarm AGTS Setting Freed Report Informat Speed Alarm AGTS Setting Freed Report Informat Step_1 Freed Alarm AGTS Setting Freed Alarm AGTS Setting Power Button Press Time: Q (1-20 seconds) Mar SOS Reports: 0 Or-65535 seconds) Talking Time: 0 History Logs AT Command AT Command AT Command Maread Download	<i>()</i> ¥L3000	Manager ¥1.00			
Base Setting Geo?bal Configure -Function Key Geo?Fence -Motion Sensor Setting -Google Link -Speed Alarm -AGPS Setting -FreeFail Detect -Acceptable Incoming ' -Frea	Operation	Help			
Step_2 Function Key Geo-Pence Accuracy Parameter Select Step_2 Google Link Fixed Report Informat Speed Alarm AGFS Satting FreePall Detect Acceptable Incoming Y GFS on Need Time Adjustment Reset Power Putton Press Time: 2 (1-20 seconds) Step_3 Reset Password Change Reset Natory Logs Nat SOS Reports: 0 0 (0-99) AI Command AT Command Time: 0 (0-65535 seconds) AI Command AT Command AT Command Step_4 Nat Command Mar SOS Negorts: 0 0 Out 0.0-65535 seconds) Talking Time: 0 (0-65535 seconds)	Base Se	Configure			
Step_2 Google Link Fixed Report Informal Speed Alarm Google Link Fixed Report Informal Speed Alarm Fixed Report Informal Speed Alarm AGFS Satting Forward-dovice-with (Protecol Watchdog Time Adjustment Reset Step_3 Pasword Change Reading History Logs Step_4 Pasword Change Reading History Logs AI Command AT Command AT Command AT Command Mar S05, 0, 0, 2, 2, 0, 0, 0,, 0021\$	- Functio	on Key Accuracy Parameter	Select		
Step_1 Google Link Field Report Informat Speed Alarm AGTS Satting FreeFall Detect Acceptable Incoming Y GPS on Need The Adjustment Reset Reset Reset Reset Reset Step_3 C 1: use accuracy parameter Satellite number used for each GTFRI report Step_1 Fower Button Press Time: 2 (1-20 seconds) Step_3 Fower Button Press Time: 2 (1-20 seconds) Max SOS Reports: 0 (0-69335 seconds) Reset History Logs Talking Time: 0 (0-65535 seconds) AT Command AT Command AT Command AT Command Step_4 Read Download Download	Step 2	Sensor Setting © 0: use accurs	cy parameter DOP for each G	GTFRI report	
AGFS Setting FreeFall Betect Acceptable Incoming Y GES on Read GES on Read Frontered device with the Adjustment Reset Reset Beading History Logs	GoogleFixed I Speed /	Link Report Informat Alarm	cy parameter Satellite numb	ber used for each GTFRI report)
Step_1 GFS on Read Step_1 Extend Sitting Remard divide ith Time: Protocol Vatchdog Lights Lit Time: Lights Lit Time: 0 O 0-65535 seconds) Reset 0 Att Command Att Command Att Command Att Gramed Reset Download	- AGPS Se - FreeFal - Accepte	etting 11 Detect able Incoming V	ss Time: 2	(1-20 seconds)	
Step_1 Researed device it h t Protocol Vatchdog Time Adjustment Reset Password Change Reset Resing History Logs Max SOS Reports: 0 (0-693) Lights Lit Time: 0 (0-65535 seconds) Talking Time: 0 (0-65535 seconds) AT Command AT Command AT Command AT 4GTAEX=v13000, 0, 2, 2, 0, 0, 0,, 0021\$ Step_4	GPS on	Need SOS Button Fress	Time: 2	(1-20 seconds)	
Step_3 I ghts Lit Time: 0 (0-65535 seconds) Reset Talking Time: 0 (0-65535 seconds) History Logs AT Command [AT+GTAEX=v13000, 0, 2, 2, 0, 0, 0,, 0021\$] Step_4 Read Download	Step_1	d device with + Max SOS Reports:	0	(0-99)	
Step_3 Password Change Password Change Talking Time: Reading History Logs AT Command AT Command AT +GTAEX=v13000, 0, 2, 2, 0, 0, 0,, 0021\$ Step_4 Download	- Time Ad	djustment Lights Lit Time:	0	(0-65535 seconds)	
AT Command AT Command [AT+GTAEX=v13000, 0, 2, 2, 0, 0, 0,, 0021\$ Step_4	Step_3	rd Change Talking Time:	0	(0-65535 seconds)	
	Step_4	AT Command	0, 2, 2, 0, 0, 0,, 0021	\$ Download	

4.13 Set the Parameters of Extend Setting

Step_1: Select "Extend Setting" option.

Step_2: Select the "Accuracy Parameter".

- 0: use accuracy parameter Dop for each GTFRI report
- 1: use accuracy parameter Satellite number used for each GTFRI report

Step_3: Extend Setting.

 \Rightarrow *<Power Button Press Time>:* configure how many seconds the power button needs to be depressed prior to powering off the unit.

 \Rightarrow *<SOS Button Press Time>:* configure how many seconds the SOS button needs to be depressed prior to triggering the SOS.

A *(Max SOS Reports):* specify the maximum number of SOS reports (+RESP:GTSOS) are sent from the device to the server after the SOS event has been triggered. If the parameter is set to 0, it will keep SOS reports in accordance with the parameter *SOS key>* of command.

 \Rightarrow *<Lights Lit Time>:* configure how long all of the device lights remain lit after an SOS event is triggered. If the parameter is set to 0, the device lights will stay on.

 \Rightarrow *<Talking Time>:* configure the maximum length of time that a single call to or from the device can last. If the parameter is set to 0, talking time will be unlimited.

Step_4: Download the Extend Setting. The parameters of GTAEX are changed.



	🖉 ¥L3000 Manager ¥1.00	
Step_2	Operation Help Base Setting -Global Configure -Function Key -Geo-Fance -Motion Sensor Setting -Google Link -Fixed Report Informat -Speed Alarm -KRFS Setting -KRFS SETING SETIN	
Step_1 Step_3	AT Command At Com	
	★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★	

4.14 Set the Renamed Device with the Last 10 Digits of SIM Card(ICCID)

Step_1: Select "Renamed Device with the Last 10 Digits of SIM Card(ICCID)" option.

Step_2: Select the mode.

- 0: Restore the device name to original default value "DevName".
- 1: Renamed device with the last 10 digits of the SIM card (ICCID) if SIM card is then in existence.

Step_3: Download the setting. The parameters of DevName are changed.



	🖉 ¥L3000 Manager ¥1.00	
	Operation Help	
Step_2	Base Setting Frotocol Watchdog -Guobal Configure -Mode -Function Key Geo?Bance Geo?Bance Goldsable this function Motion Sensor Setting Goldsable this function -Fixed Report Informat C 1:reboot periodically according to the (Interval) and (Time) setting	
Step_3	AddYS Setting FreeFall Detect Acceptable Incening -GPS on Need Extend Setting Promoted during with d	
Step_1	Protocol Watchdog Report Before Reboot	
Step_4	Password Change C lite another	
Step_5	AT Command AT Command AT+GTD0G=v13000, 0, 2, 0000, , 1, , , , , 0021\$ Road Download Status: Write parameter setting success!	

4.15 Set the Parameters of Protocol Watchdog

Step_1: Select "Protocol Watchdog" option.

- Step_2: Select the mode.
 - 0: Disable this function.
 - 1: Reboot periodically according to the <Interval> and <Time> setting.

Step_3: Set *"Interval":* The interval to reboot the device in day.

Set "Time": At what time to perform the reboot operation when <Interval> is set.

Step_4: Select Report Before Reboot.

- 0: no report.
- 1: to report.

Whether to report the "+RESP:GTDOG" message before reboot.0 means no report, 1 to report.

Step_5: Download the setting. The parameters of GTDOG are changed.



	<i>ﷺ</i> ¥L3000 Manager ¥1.00		- ×
	Operation Help		
	Base Setting	Adjustment	
	- Function Key	Sign	
Step 2	Geo-Fence	$\mathbf C$ +:positive of the local time offset to UTC	
Step_2	- Google Link - Fived Report Informat	$\mathbf{\tilde{\bullet}}$ -inegative of the local time offset to VTC	
	-Speed Alarm		
	- AGPS Setting FreeFall Detect	Daylight Saving	
Step_3	- Acceptable Incoming Y		
000000000000000000000000000000000000000	Extend Setting	C 1:enable daylight saving time)
	Protocol Watchdog		
Step_1	Time Adjustment Reset	Hour Offset: 0 (0-23)	
Step_4	Password Change Reading	UTC Time: 20130711060417 (YYYYMMDDHHMMSS)	
" south of the tree to the tre	History Logs	old lime.)
		AT Command	
		AT+GTTMA=v13000, -, 0, , 0, 20130711060417, , , , , 0021\$	
Sten 5		Read Download	
Step_5			
	Status: VL3000 VSB device (CC	JM16) is removed or reset, COM16 closed!	COM

4.16 Set the Parameters of Time Adjustment

Step_1: Select "Time Adjustment" option.

- Step_2: Select the Sign.
 - +: positive of the local time offset to UTC.
 - -: positive of the local time offset to UTC.
- **Step_2:** Select the Daylight Saving.
 - 0: disable daylight saving time.
 - 1: enable daylight saving time.

Step_4: Set "Hour Offset": UTC offset in hour.

Set "UTC Time": The configuration UTC time.

Step_5: Download the setting. The parameters of GTTMA are changed.



4.17 Set the Reset



Step_1: Select "Reset" option.

Step_2: AT Command

Step_3: Download the setting. Reset all the protocol command parameter to factory setting, the terminal will restart itself after resetting



	¥L3000 Manager ¥1.00		- 🗆 ×
	Operation Help		
Step_2	Base Setting -Global Configure -Function Key -Geo-Fence Motion Sensor Setting -Fixed Report Informat -Speed Alarm -AGPS Setting -FreeFall Detect -Acceptable Incoming Y -Greef Son Need	Password Change User Password: User Password: New User Password: AT Command AT+GTCFG=, , DevName, 5, 6, 0, 50, , , 0000, 1800, , 0, 4, 898, 200, , , , , 0021\$	
Step_3	- Extend Setting - Renamed device with 4 - Protocol Watchdog - Time Adjustment Reset - Assume - Assume - Assume - History Logs	Download	
	◀ ► Status: VL3000 USB devic	e (COM16) is removed or reset, COM16 closed!	СОМ

4.18 Set the Parameters of Password Change

Step_1: Select "Password Change" option.

Step_2: Change the user password

- ♦ Enter current password in "User Password".
- ♦ Enter new user password in "New User Password".

Step_3: Download the change of user password. The parameters of GTCFG are changed.



4.19 Reading



Step_1: Select "Reading" option.

Step_2: Click "Read Events Information", the information will show below.

Step_3: Click *"Read GPS Information"*, the information will show below.

Step_4: Click *"Read Firmware Version"*, the information will show below.



4.20 History Logs

	Base Setting Global Configure Function Key	History	Logs			
	- Motion Sensor Setting	No	Status	Prompt	Time	Data 🔺
	Google Link	90	Normal	Writing the [9]th AT command	14:05:02	07/11/201:
	- Fixed Report Informat	91	Normal	Writing the [10]th AT comman	14:05:04	07/11/201:
	Speed Alarm	92	Normal	Writing the [11]th AT comman	14:05:05	07/11/201:
	- AGPS Setting	93	Normal	Writing the [12]th AT comman	14:05:05	07/11/201:
	FreeFall Detect	94	Normal	Writing the [13]th AT comman	14:05:05	07/11/201:
	GPS on Need	95	Normal	Writing the [14]th AT comman	14:05:05	07/11/201:
	Extend Setting	96	Normal	Writing the [15]th AT comman	14:05:05	07/11/201:
	Renamed device with 1	97	Normal	Writing the [16]th AT comman	14:05:05	07/11/201:
	- Protocol Watchdog	98	Normal	Writing the [17]th AT comman	14:05:05	07/11/201:
	-Time Adjustment	99	Normal	Writing the [18]th AT comman	14:05:06	07/11/201:
Sten 2	Reset	100	Normal	Writing the [19]th AT comman	14:05:06	07/11/201:
	- Password Change	101	Normal	Writing the [20]th AT comman	14:05:06	07/11/201:
	Reading	102	Normal	Write parameter setting succ	14:05:06	07/11/201:
Step_1	AISTORY Logs	103	Normal	Comport actived!	14:05:11	07/11/201:
		104	Normal	Send task for writing parame	14:05:11	07/11/201:
		105	Normal	Writing the [1]th AT command	14:05:11	07/11/201:
		106	Normal	Write parameter setting succ	14:05:13	07/11/201:
		107	Normal	Comport actived!	14:05:15	07/11/201:
		108	Normal	Send task for writing parame	14:05:15	07/11/201:
		109	Normal	Writing the [1]th AT command	14:05:15	07/11/201:
	1	110	Normal	Write parameter setting succ	14:05:17	07/11/201
		1 ar		17.0000 107 1 · /2011/2) ·	• • • • • •	

Step_1: Select "*History Logs*" option.

Step_2: The history logs will be shown.



5. Operation Menu

The operation menu supports "Read All", "Download All", "Export Config", "Import Config", "Unlock PIN", "AT Setting", "View Log", "AT Debugging", and "Exit" functions.

<i>ể V</i> L3000 Manag	jer ¥1.00				×
Operation Help					
Read All Download All	e	Base Setting			
Export Config Import Config	ettinį	Report Mode:	0:STOP_REPORTING_MODE	•	
Unlock PIN	format	APN-	2		
AT Setting View Log		APN User Name:			
AT Debugging	ming Y	APN Password:			
Exit					
Renamed devic Protocol Watc Time Adjustme	e with (chdog ent	-Main Server IP Address:	<u>* 9 (* 1</u>	Port: 0	

5.1 Read All

Read all parameters of VL3000 and list them in the corresponding fields.

5.2 Download All

Download all settings to VL3000.

5.3 Export Config

"Export Config" exports the current configuration to a new "*.ini" file.

ave data fi	le:				?
Save As[<u>I</u>]	C VL3000 PCTools V1.00v03	•	(•	r 🕅	
AtLog.ini		53. 53			_
LoginPara	a.ini				
🌛 parafile.ir	ni				
v [v]					
Name[<u>N</u>]	conrig. ini)
Type[<u>T</u>]	Data file (*.ini)		-	Cancel	10. 10.
				Cancer	



5.4 Import Config

"Import Config" imports a configuration file.

bad data ni	e:				?
Find[<u>]</u>]	🗁 VL3000 PCTools V1.00v03	•	+ €		⊞≣ ▼
AtLog.ini		210			
3 LoginPara	a.ini				
🍓 parafile.ir	1i				
Nome [N]	Test 123 ini		_		[0]
Name (<u>N</u>)	Test123. ini			0p	en[<u>0]</u>

5.5 Unlock PIN

"Unlock PIN" unlocks the PIN of SIM card.

Unlock PIN		X
PIN:		
	Unlock FIN	

5.6 AT Setting

Password Config		×
AT Password:	v13000	
OK	Cancel	

Set the password of AT command.



5.7 View Log

The document of AT log will pop up.

5.8 AT Debugging

Send:AT		
Recv:		
OK		

User can test AT command through this window.

5.9 Exit

Exit the PC Tools.

6. Operation Attention

When accomplishing the operation with VL3000 by PC manager tools, exit the tools first then plug out the cable from VL3000. Otherwise the power saving algorithm cannot work.



Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1)This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant toPart 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that

to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance

could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

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