GPS Vehicle Tracker

User Manual (Model: VT1000)



Please Read Carefully Before Operation







Security of Rental Car

Monitoring of Public Conveyance



Ambulance assignment



Cargo Logistic Assignment





Fleet Management



Taxi Assignment



Security of the Outdoor Activities

Contents

1.	Product Overview	4
2.	Applications	4
3.	Features and Functions	4
4.	Specifications	5
5.	First Use	6
	5.1 Install SIM Card	6
	5.2 Charging	6
	5.3 LED indications	6
6.	Connect the tracker VT1000 to GPRS01 Web Server Platform	7
	Optional 1: Configure by Computer to set GPS tracker online	7
	Optional 2: SMS Commands to set GPS tracker online	12
	Settings on Topshine GPRS01 Platform	13
	① Login Topshine GPRS01 Platform	13
	2 Vehicle Information Management	14
	③ Set up information for a new group	14
	④ Set up information for a new vehicle	15
7.	Installation	17
	7.1 Install I/O Cable	18
	7.2 Power/GND	19
	7.3 Digital Input	19
	7.4 Output	20
	7.5 Install GPS/GSM Antenna	20
	7.6 Install Camera (optional)	20
	7.7 Install microphone	20
8.	Basic SMS Commands	21
	8 1 Position Report	21
	8.2 Set receiving physical address name via SMS	22
	8.3 Get Google Man's Link via SMS	22
	8.4 To cut off engine, immobilize the vehicle	22
	8.5 Set over speed alarm	22
	8.6 Oil leaking/Refuel Alarm	
	8.7 Enable Impact Alarm function	
	8.8 Two way communication Function	23
	8.9 SD Card	23
9	VT1000 Packing and Accessories	23
). 10	VT1000 Packing and Accessories	2 <i>3</i> 2 <i>1</i>
10.	Troubleshooting	24
11. Ani	nondiv 1: Configure by Computer	25 26
Ap	pendix 7. Command List	20 27
Am.	pendix 2. Command List	∠/ 21
Ap]	pendix J. How to use Califeration	31
Ap	pendix 4. Configure and use of KFID function	33
Ар	pendix 3. Fuel Sensor Instantation and Function	3/

1. Product Overview

VT1000 is a most advanced and high-cost effective GPS tracker, it is equipped with ARM9 high speedy microprocessor; using fully new and industrial grade modules, so VT1000 has high sensitivity and stable performance. Its functions also very powerful, it can supporting camera (location & driving information log on picture). Bidirectional communication; support max 64GB SD card for storing data and pictures; 4 A/D connectors for multi fuel sensor monitoring; support unique active RFID for automatic anti-theft and driver identification; support OTA (updating online) for upgrading new firmware by GPRS if needed; with harsh braking & acceleration alarm and accident alarm; and many useful functions and extensibility for fleet management and vehicle security purpose.

2. Applications

- Vehicle Real Time Tracking
- Vehicle Security/Anti-Hijack
- Fleet Management

3. Features & Functions

- * Tracking by SMS/GPRS (TCP/UDP)
- * Tracking by time/distance interval
- * OTA Function
- * Real time tracking via the web-platform
- * Get position location via call/SMS
- * Engine on/off detection
- * Built-in backup 950 mAh battery
- * Remote Engine cut off to stop the car in safe condition
- * ARM9 high speed microcontroller
- * Wiretapping/remote listening
- * Get location physical name via SMS & from the web-platform
- * Google Map link for location via SMS, it shows your location on map via mobile phone.
- * Mileage calculation with longitude and latitude via SMS; view mileage data via GPS web-based tracking centre system
- * Door open/close status detecting/ control
- * Built-in motion sensor for power & GPRS flow saving mode (sleep mode)
- * Built-in 4MB memory & position logging capacity up to 26,000+ waypoints even no GPRS signal
- * I/O: 5 Inputs, 5 Outputs, 4 Analog Inputs.
- * Over speed alert
- * Geo-fence alert
- * Power failure/low power alert
- * SOS Panic button, SOS alert

- * Harsh braking and harsh acceleration alarm
- * Suddenly acceleration/brake alert
- * Accident Alarm (optional)
- * Two way communication (Listen & Speak, need speaker support) (optional)
- * Oil leaking/Refuel Alarm (need fuel sensor support) (optional)
- * Accident alarm (need crash sensor support) (optional)
- * Support max 64G SD card store (optional)
- * Photo with location & driving information log function (need camera support) (optional)
- * Can equip with RFID kit for driver identification and auto Arm/Disarm functions (movement/towed alert, ignition alert, auto cut off engine etc) (need RFID support) (optional)

* Analog input for Temperature & Fuel sensor detecting/monitoring, support max 4 fuel sensor manage (optional)

Items	Specifications
Dimension	110*80*30mm
Weight	180g
Input voltage	DC 9V~35V/1.5A
Back-up Battery	850mAh
Velocity	515 meters/second (1000 knots) max
Operating Temperature	-20°C~75°C
Humidity	5%~95% Non-condensing
Altitude Limit	18,000 meters (60,000 feet) max
LED	2 LED lights to show GPS, GSM status
Button	1 SOS and 1 power on/off
Microphone	Default
Cold start	42sec., average
Hot Start	1 sec., average
GSM Frequency	GSM 850/900/1800/1900MHz or GSM 900/1800/1900 MHz
GPS Chip	Latest GPS SIRF-Star III Chipset
GPS Sensitivity	-158dB
Positioning Accuracy	10meters, 2D RMS
GPS Frequency	L1, 1575.42 MHz
C/A Code	1.023 MHz chip rate
Channels	20 channel all-in-view tracking
Velocity Accuracy	0.1m/s
Time Accuracy	1 us synchronized to GPS time
Default datum	WGS-84
Reacquisition	0.1 sec., average
I/O	5 Input 5 Output 1 Camera Port
	4 Analog Input 1 RS232 Port 1 MIC& Speaker Port
	1 USB Port 1 SD Card Slot

4. Specifications

5. First Use

5.1 Install SIM Card

Check that the SIM has not run out of credit (test the SIM in a phone to make sure it can send and receive SMS); Before installing the SIM card, turn off the power for VT1000, then install the SIM card as following:



Insert the holder with SIM card into the VT1000 with the chip side down ward

5.2 Charging

Connect the device with external power like car battery, and turn on its power switch and it will do charging automatically.

5.3 LED indications

Push the power switch to turn on/off VT1000



OFS LED (Red)	
Flashing (every 0.1 second)	Initializing or back-up battery power is low
Flashing (0.1 second on and 2.9 seconds off)	Device has A GPS fix
Flashing (1 second on and 2 seconds off)	Device has no GPS fix
GSM LED (Green)	
Flashing (every 0.1 second)	Initializing
Flashing (0.1 second on and 2.9 seconds off)	Device is connected to the GSM network
Flashing (1 second on and 2 seconds off)	Device is not connected to the GSM network

6. Connect the tracker VT1000 to GPRS01 Web Server Platform

Two Methods to set GPS tracker online: Configure by Computer or SMS Commands

Optional 1: Configure by Computer to set GPS tracker online

This part shows the basics of how to use the GPS tracker Parameter Editor. Note: Don't connect VT1000 to external battery when configuring.

How to Edit the Parameters of Tracker on PC ① (Buy one specific USB cable for configuration from our Company)



2 Install USB driver program for the configuration USB cable

1. Run 'CP210x_Prolific_DriverInstaller' to install the driver for the USB data cable. Note: CP210x_Prolific_DriverInstaller is in the folder 'USB-232 Driver' in the CD. Connect the USB Data Cable between VT1000 and PC.



2. Connect the configuration cable with PC, open device management of your computer, you can find "Prolific USB-to-Serial Comm. Port" ,as following picture shows.

The USB port is virtual comm. Port (com3) in this example,

A 设备管理器	
文件(F) 操作(A) 查看(V) 帮助(H)	
 Ien-THINK IDE ATA/ATAPI 控制器 IDE ATA/ATAPI 控制器 SM Driver ① 处理器 磁盘驱动器 BRH CP210x USB to UART Bridge Controller (COM3) 任首机 延振器 通 增盘 河 内存技术驱动程序 續 最标扣其他指针设备 ③ 图像设备 ◎ 网络适配器 ● 系统设备 ◎ 显示适配器 	

3. Open the GPS Tracker Parameter Editor

- 1 Connect VT1000 with PC by the configuration cable
- ② Confirm VT1000is in the Power Off states

3 Double click GPS Tracker Parameter Editor.exe and Select the COM Port, following picture shows:

GPRS TCP	- Track	er ID 2	012010506	APN CN	INET		
APN Account				APN Pass	word		
IP 96.46.9.75	Port	9500	Interv	al 3600 se	ic .		Apply
SMS Tracking							
SMS Tracking No.	ſ			Interval 0	min		Apply
Password	000000		Apply	Over Speed	0	km/h	Apply
Prefix(area code)			Apply	Time Zone	0	min	Appij
Wiretapping		-	Apply	Distance	300	m	Apply
Power Saving	0	nin	Apply	Course	35		Apply
Authorized Phone No					216	PIN	4
SMS		Call		sc	DS Button/IN1	Г	
SMS		Call	-		Button B/IN2		Read
SMS		Call [E	Button C/IN3		Write
SMS Initials							
SOS Button / IN1	SOS Alarm!						Apply
Button B / IN2	Cry For Help!						Apply
Button C / IN3	Call The Polic	æ!					Apply
E							

4. Click Start button to open the COM port,

5. Turn on VT1000 and it will connect with the Editor automatic, As soon as they connect successful, all the buttons are availability and the status bar will clue on' Tracker Connect!', first click "Read" to read the tracker's parameter, when all the parameter read out, you can write the parameter you need.

Note: "Read" button: when you click the Read button, it means Read the parameters of the tracker.

"Write" button: when you write the parameters to the Parameter Editor, then click the Write button, the parameters will write into the tracker.

GPRS	▼ Trac	ker ID 2	012010506	APN [CMNET	ŕ		
APN Account				APN Pa	ssword			
IP 96.46.9.75	Port	9500	Inter	val 3600	sec			Apply
SMS Tracking						2	_	
SMS Tracking No.				Interval 0		min		Apply
Password	000000		Apply	Over Spe	ed 0		km/h	Apply
Prefix(area code)			Apply	Time Zon	e 0		min	Apply
Wiretapping			Apply	Distance	30	0	m	Apply
Power Saving	0	min 📔	Apply	Course	35	;		Apply
Authorized Phone No	o.						PI	4
SMS		Call			SOS Bu	utton/IN1	Γ	
SMS		Call			Buttor	n B/IN2		Read
SMS		Call			Buttor	n C/IN3		Write
SMS Initials							<u> </u>	
SOS Button / IN1	SOS Alarm!				_		-	Apply
Button B / IN2	Cry For Help	I					-	Apply
Button C / IN3	Call The Pol	ice!					1	Apply
Extended Settings								

Instruction of parameter settings:

GPRS TCP	Tracker ID 2013	2010506 API	N CMNET	
APN Account		API	N Password	
IP 96.46.9.75	Port 9500	Interval 3600	sec	Apply

Item	Description
GPRS	Tick to enable GPRS function, select TCP or UDP mode
Tracker ID	Should be unique, in number, maximum 14 digits
APN, APN Account,	Put your local APN, APN username and password if necessary
APN Password	
IP, Port	Put online tracking server IP and port, our default is
	IP: <u>www.global-track.net</u> port: 9500
Interval	Time interval, to put time interval to upload a data

Note: GPRS, IP, Port is the default. You must change the APN, Tracker ID;

APN: Access Point Name, if you don't know, please ask SIM operator or search APN in Google.

Tracker ID: You should change the tracker ID. Tracker ID can be set freely by user but less than 14 digits, such as 20131122001.

uthorized Phone No.			PIN
SMS	Call	SOS Button/IN1	
ямя 🛛	Call	Button B/IN2	Read
SMS	Call	Button C/IN3	Write

Item	Description
SMS Call	To set Mobile phone No. for SMS or Calling when SOS
SOS Button/IN1	button/Input 1 is triggered (alarm), it will call/SMS to this phone
SMS Call	To set Mobile phone No. for SMS or Calling when Button
Button B/IN2	B/Input 2 is triggered (alarm), it will call/SMS to this phone
SMS Call	To set Mobile phone No. for SMS or Calling when Button
Button C/IN3	C/Input 3 is triggered (alarm), it will call/SMS to this phone

After write finished, click "Write" button to configure the VT1000's Parameters. It will pop-up a mini window, as below pictures:

	Close	Read	Write	T Auto	Tracker Connect
GPRS TCP	Tracker ID	2013112014	APN intern	et	
APN Account		A	 APN Passwor	rd	
IP 122.176.98.229) Port 7777	 Interv	al 20 sec		Apply
MS Tracking					
SMS Tracking No.			Interval 0	min	Apply
Password	000000	Apply	Over Speed) km/	'h Apply
Prefix(area code)		Apply	Time Zone 0) min	Apply
Wiretapping		Parameter	 [0) m	Apply
Power Saving	0 min	COM Opera	ite Sucess!)	Apply
Authorized Phone No			K]		
SMS					SOS Button/IN1
SMS		Call			Button B/IN2
SMS		Call			Button C/IN3
MS Initials					
SOS Button / IN1	IN1 Alarm!				Apply
Button B / IN2	IN2 Alarm!				Apply
Button C / IN3	IN3 Alarm!				Apply
Extended Settings					
		1			A == lu

Please click "Read" button again, confirm your write parameter.

When you finished the GPS Tracker Parameter Editor, then turn off the tracker, pull up the USB cable.

Note: More about configure by computer, please check Appendix 1

Optional 2: SMS Commands to set GPS Tracker online

Set ID by SMS
 Command: W000000,010,ID
 Description: every tracker has a unique ID. Tracker ID must be less than 14 digitals
 Example:
 SMS send: W000000,010,20120823
 Meaning: this tracker's ID is 20120823

2 Set APN by SMS
 Command: W000000,011,APN,APN name, APN password
 Description: APN name, APN username, APN password
 If no password required, just put in APN name only.

③ Set IP Address and Port by SMS
Description: IP address is 210.209.68.180 Port is 9500
SMS command: W<password>,012,<IP>,<port>
Example:
SMS send: W000000,012, 210.209.68.180,9500
We support domain name instead of IP address:
Example: W000000,012,www.global-track.net,9500

④ Enable GPRS Function
 Command: W<password>,013,X
 Description: X=0,close GPRS(Default)
 X=1,enable TCP
 X=2,enble UDP

(5) Set Time Interval for Sending GPRS Packet
 Command: W<password>,014,XXXX
 Description: XXXXX should be in five digitals and in unit of 10 seconds.
 XXXXX =00000, to disable this function
 XXXXX =00001~65535, time interval for sending GPRS packet and in unit of 10 seconds

Note: More GPRS01 Platform functions, please check manual of Operation Instruction of Topshine web-based tracking platform GPRS01.

Next Step: Settings on Topshine GPRS01 Platform

Turn on the tracker VT1000, when it normal working (find the GSM & GPS signal),

(1) Login Topshine GPRS01 Platform

Website: <u>www.global-track.net</u> User Name: *** Password: ***

+ @ www.globa treckret/sizw	1	Q TT = Q N = Google +Cel (K)	P # 10 - 0 0 + - m -
075 tracking solution 👘 🕅	Like Track of Pay History 🥔 Operate Centre 🏦 Here	nge 💼 Report Centre 🏠 Synters+ 🕼 Nelp Center 🙆 Lag Out 🖛	Function Menn Menore propriet
Logo	Guizhou	Huean xargan Yeran officiana (1990) Physics Jiangel	Bap Savette Hitter Operation
Q. 15		Sharpangi Hengeong	Contraction of the second s
	Jacques Hanno Guecorgan	Herghes	Harping Hinger
- Admex	+ Garmon	Camitria	Further
202000	Caping		Fejian Peas
= Caller an	- Segurar	A PARTICIPAL AND SAVE AND	en Duranten haper
Carm.	P Charles Co	Google Van	Arry Dapas
H C SI 2001		Dage	w. Driane
arzwere	1日 - 24 11	Guangal Considera Craynos	Taiwan
CONTRACTOR CONTRA	Verprat	a trusting	Chart Husson
C (31459723	It was the second	Guangzhou Org _ reseguer	Tanen s
# 3+402723	there have	Guangzhou 🕬 ar consegutor	Tainen to 5 Moldmang
9 3 34402723 9 34402723 9 460 7225	Children S marked	Guangzhou 9 a crowygywr Swoolwei - 65beruten	Taren 5 - 5 Monteang
Sitesing Vohielo List	than and and and	Guangatou Skandinggayer Senates Statuten Fong Kong	Tarters 5 stdemany
Vehielo List	A monormalities and and and and	Guardico Schoolagaan Smalles Schoolagaan Macau Fong Kong	Tarren 5 Holomany
Vehiele List	no mana ang ang ang ang ang ang ang ang ang	Guargetor of stategyper Smacker Schoolen Hong Kong Macau	Taran s waterang
Contents Conten		Buangdou of an angener Smaller Schoolen Fong Kong University Macau	Tanan S Motosang
Vohielo List	Mark Barrier B	Buangolou on accessing Smaaler Scheroten Sterrer Macau Hong Kong	Taran s Mademang
Vohici List	Line Devid Arriver	Buancitos de reagener Emailes Statorian Fong Kong Vacau Macau	Longer, Kogunay, Hapfing, Tele Asian, 20081
Voheolo List Voheolo List Spracka Spracka Spracka Spracka Spracka Spracka Spracka Spracka	Harri Harver	Buangino na ranggyor Snaaino Shinofan Snaaino Hong Kong Snaaino Macau Hong Kong Macau Rom Autor	Turan S Nationary
Control Class	I the second of	Buangito, of reagings Encoder Statestin Hong Kong Macau Merand (2013 - seater	Langer, Magnay, HayMag Tele Josef, 2008
Vohiele List Vohiele List		Buangdou Sa reagager Smaalwo Schoolen Fong Kong Macau Macau Macau Macau S003 Austra	Hannes Holdmann I Gouge, Korgany, Haginag Tee Asia, 20080
Control Contro Control Control Control Control Control Co	train the set of the s	Buangdou Se companyer Creation Statement Watchu Watchu Watchu Watchu Watchu Watchu Watchu Watchu Watchu Watchu Watchu Watchu Watchu Watchu Watchu Watchu	Turner 5 Hotelsard Hotelsard Onger Kryster Higting Tes Alex 20001
Control 2008 C	11 mm to the part of the part	Buanglou Se reaginger Smaller Scherofen Fong Kong Verreit Macau Macau Macau S013 fuster See Fuit) Time Mage Alem Stre	Honore Honoreany I Gouge Key Auguster The Your, 201991 Chi's (IST: > On ag) Style — 203964
Control Class Control	Harri Barrio Bar	Buangdou Se aranggeer Smaalwo Schooten Fong Kong Summer Macau Ne aas 8000 huster Seat Fully Ten. Macau Seat Fully Ten. Macau	Turner 5 Nationary 1 Owge, Kryskey, HayPeg, Tek Jan, 20081 Clar's (Eff. 16: 06: 40) Clar's (Eff. 16: 06: 40) Clar's (Eff. 16: 06: 40)
Oracity O	I Terring Terr	Guargidou Se reagages Creation Contraction Long Kong Maccau	Lander of Holdmann Holdmann I Gouge, Nogunay Hayting, Tele Assa Cla ² r (ES) 12: Os = 0 Egyme - Address
Vohicolo List Vohicolo List Vohicolo List Vohicolo List Vohicolo V	La contra a Tar galar sea al La contra a Tar galar La contra a Ta	Buangalou of analogopar Smaller Sharafan Fong Kong Warren Mascau Macau	Turner 5 Modersang I Gouge, Korgany, Hajiring Tek Atau, 20088 I Chi's 165 36 106 wg Shyre Adoma

Note: Red box means the vehicle Online;

Yellow box means the vehicle offline;

Green box means the vehicle running.

② Vehicle Information Management

Centralized management of all vehicles in the platform, the "Kind, GPRS ID, Plate No." are mandatory terms, and the **GPRS ID** must be consistent with the **tracker ID**.

Set up a new group and new vehicle information. For example,

Group name: demo123

Username: demo123 (can be set different from group name)

Password: 123

Vehicle name: Benz2012

③ Set up information for a new group e.g. 'demo123'

Click picture 1 " manage"

and then click the picture 2, "Vehicle Manage."



Picture 1

Core Group Info Vehicle Info Vehicle Manage New Zedit Delete Delete Delete Delete Alarm IMEI No. Plate No. Sim no. Driver Saycaralarm 0542717782,10001, 201304001,20130204001, 20130204001,20130204001, Surveyor 20130204001,20130204001, 20130204002, 20130204002, 20130204002,20130204002, 20130204002, 20130204002, 20130204004,20130204004, Zatdirect Zatdirect Zot130118001,20130118001, 20130118001,20130118001, 20130123011	Menu	🛅 Welcome 🤤 Vehicle Mani 🖲
Image Image <th< th=""><th>Core -</th><th>Group Info Vehicle Info</th></th<>	Core -	Group Info Vehicle Info
Driver Manage 0542717782,10001, 201304001,201304001,233542717782 Surveyor 20130204001,20130204001, 20130204002,20130204002, 20130204003,20130204003, 20130204004,20130204003, 20130204004,20130204004, 20130204004,20130204004, 20130204004,20130204004, 20130204004,20130204004, 20130218001,20130118001, 2013012301	E 🕹 User Manage	IMEI No. Plate No. Sim no. Driver
POI Manage Surveyor 20130204001,20130204001, 20130204002,20130204002, 20130204003,20130204003, 20130204004,20130204004, Constrained and the second seco	🚨 Driver Manage	□ 34/calalann - 0542717782,10001, - 054717782,10001, - 054717782,10001, - 054717782,10001, - 054717782,10001, - 054717782,10001, - 054717782,10001, - 054717782,10001, - 054717782,10001, - 054717782,10001, - 0547177782,10001, - 0547177782,10001, - 0547177782,10001, - 0547177782,10001, - 0547177782,10001, - 054777777777777777777777777777777777777
2013012302,2013012302,	POI Manage	□ Surveyor □ 20130204001,20130204001, □ 20130204002,20130204002, □ 20130204003,20130204003, □ 20130204004,20130204004, □ 20130118001,20130118001, □ 2013012301,2013012301, □ 2013012301,2013012302,

Click the company name, e.g.

🔲 Welcome	📮 Vehicle Mana 🗵			
Group Info	Doloto	Vehicle Info		
	Blate No	Con Borne Con Con		
a Catdirect		511110.		
🗐 🔂 Saycaralarm	1			
0542717	782,10001,			
Click Kew in	Group Info	ou can see picture belc	DW:	
월 New Group	= ×			
Group Name:				
Company Name:				
Person:				
Tel:				
Email				
Arthreese				
ACCENTRAL				
MapInfo: Onen Street Man(Even)				
open on eer happineer	Save			
Input 'demo123' in the	blank of Group Name	Group Name: demo123		
Click Save , the	en group 'demo123' is ro	eady as below:		
IMEI No. Zatdirect	Plate No.	Sim no.	Driv	/er
④ Set up informatio	n for a new vehicle e.g.	. 'Benz123'		
			Vehicle Info	
Click the group name	🔁 demo123 , and click	New in New 9	, the	n you can see

picture below:

3
2

Input the correct Kind, GPRS ID and Plate No. and Customize Mark etc. necessary information,

click Save, then you can see group 'demo123' and vehicle 'Benz123' with tracker ID 20120602000010 have been set ready as below.

🖻 📥 Demo

demo123

GPS tracking solution 🙊 Live Track 🛹 Play History 🥜 Operate Centre ᇑ Manage 🏭 Report Centre 🛕 System 🗸 🥹 Help Center 💈 Log Out ... > Vehicle ID:20131119001 Plate No.:personal tracker Тарт 0 3 Latitude: 23.14877 Status: Engine Off Signal: GPS Address: : 23.14877 Longitude: 113.31620 Engine Off; Close; Speed: 0Km/h GPS Timestamp: 2013-11-19 11:42:21 Demo Demo-device 00000111111 101010 12341 an Vehicle Info Live Track Take Photo Labor 636022786810 akist N 654321 67622010354978 Nepal Bhutan 01 0 868686 Benz123 Guar ngl Taiwan India Myanmar (Burma) Kolkata RFID car alarm & ops tracker RFID-Test Laos acke Google search the map Map data © TK310 big man Locate Alarm(0) mt08 personal tracker 14 4 Page 1 / 1 🕨 🕅 🧬 Interval: 10 🗸 S 🗸 Auto Refresh Receive Time Speed Fuel(L) Temp... Mileage Alarm Plate No. Driver(ID) State vt1000 2013-11-19 11:... 0 .18 Engine Off, Clos 1 person... .00 0

Once again into the main interface, select the little red box, you will see the tracker location. Such as following picture:

7. Installation

- Please select experienced technicians to install this system.
- The installation should be carried in the working condition for this system.
- Install this system in a secret place.
- Prevent this system from dust and humidity.
- Connect the wires of the mainframe. The Relay can control oil pump wire or electric wire (ACC). It suggested connecting it to oil pump wire.
- Connect the wires of other wires, leave the plug unplugged.
- Fixing, wiring connecting, binding should be carried on carefully.

Installation Diagram

	Output5 (Yellow wire) (Optional) Output4 (Yellow wire) (Optional)	Central Locking	
	Output3 (Yellow wire) (Optional)		
	Output2 (Yellow wire) N/C	Relay Cut o	ff X Oil pump
	Output1 (Yellow wire)	Yellow Green	I''I
	GND (Black wire)	White	Green
	Power +12V/24V (Red wire)		
/T1000	Input1 (White wire) SOS B	utton	<u>Ļ Ļ</u>
	Input2 (White wire) (Optional)	Door NEC Trigger line	Car Battery
	Input3 (White wire) N/C	Door NEG. mgger ine	+12V/24V
	Input4 (White wire)	ACC	2
	Input5 (White wire) (Optional)	Door BOS Trigger line)
	AD1 (Blue wire) (Optional)	te wire block wire	ν
	AD2 (Blue wire) N/C	ed wire GND	+12
	AD3 (Blue wire) N/C +12V/24V	Euel sensor	
	AD4 (Blue wire) N/C		



7.1 Install I/O Cable

The I/O cable is a 16-pin cable including power, analog input, negative/positive input and output.



PIN Number	Color	Description
Input 1/SOS	White wire	Digital Input 1 (negative triggering), E.g. connect SOS panic
		button
Input 2	White wire	Digital Input 2 (negative triggering), E.g. detecting status of
		vehicle door on/off
Input 3	White wire	Digital Input 3 (negative triggering)
Input 4	White wire	Digital Input 4 (positive triggering), e.g. detecting the ACC
Input 5	White wire	Digital Input 5 (positive triggering)
AD 1	Blue wire	10 bits Resolution Analog Inputs. 0-6V DC Detection. It can
		be used to connect with temperature/fuel sensor etc.
AD 3	Blue wire	10 bits Resolution Analog Inputs. 0-6V DC Detection. It can
		be used to connect with temperature/fuel sensor etc.
Output 1	Yellow wire	Output1. It can be used to connect with relay for engine
		immobilization.

Output 2	Yellow wire	
Output 3	Yellow wire	E.g. connected with siren
Output 4	Yellow wire	E.g. Unlocked car door
Output 5	Yellow wire	E.g. Lock car door
AD2	Blue	10 bits Resolution Analog Inputs. 0-6V DC Detection. It can
		be used to connect with temperature/fuel sensor etc.
AD4	Blue	10 bits Resolution Analog Inputs. 0-6V DC Detection. It can
		be used to connect with temperature/fuel sensor etc.
GND	Black	Ground, Negative
POWER	Red	DC in (power source). Input voltage: 9V-36V, 12V suggested.

7.2 Power/GND

Connect GND (Black) and power(Red) wires to the battery of vehicle.





7.4 Output Example: Control fuel-cut

7.5 Install GPS/GSM Antenna



Note: Do not shield or cover the GPS Antenna with any objects containing metal.

7.6 Install Camera (optional) (More specific details refer to Appendix 4)





7.7 Install Microphone and Speaker (optional)



8. Basic SMS Commands:

Note:

1 The default password is 000000, you should change the password when use the device.

Change user's password: W000000,001,******

(000000 is old password; *****is new password)

② Command Letter must be capitalized.

8.1 Position Report

Description: To know the position of your car, send an SMS or make a telephone call directly to the device and you will receive an SMS with its location and other information.

Command: W000000,000 For example: Send SMS: W000000,000 Received SMS as below picture:



Another easier way is call the device's phone, After ring for a while hang up the phone, then You will receive a position SMS by the device.

Item	Description
ID: 1234567890	The tracker's ID number
	The engine is turned off
Latitude=23 08 57.58N, Longitude=113 18	Latitude and longitude information, "N" in
59.31E	latitude means North; "E" in longitude means
	East.
Speed=0.00Km/h	Speed information
Odometer=0.013km/h	Odometer information
2012-09-23,11:22	Date and time

You can copy this coordinate get from the SMS into *http//:maps.google.com* and see its location as picture:



8.2 Set receiving physical address name via SMS

Description: To know specific address of device, send an SMS and you receive an SMS with its

location physical address name.

Command: W000000,111

Example: SMS send: W000000,111

Then you will receive an SMS as below picture: (Note: This function need support of the

GPRS01 or SMS01 tracking platform, address

SMS will be received in text format.)



8.3 Get Google Map's Link via SMS

Description: You will get a Google map URL after sent the command, click the URL, then the location can be shown directly on Google maps on your mobile phone.

Command: W000000,100

For example: Send SMS: W000000,100 Then you will get the SMS as below picture:

Note: By click the link, you can get the location in Google map from your mobile phone.



8.4 To cut off Engine, immobilize the vehicle

① Command: W000000,020,P,F

Description: P=1, means output1; P=2, means output2 ... P=5, means output5

F=0, to disable this output function; F=1, to enable this output function

SMS send: W000000,020,1,1

If the output1 is connect to oil-cut relay, this command is to enable the engine-cut function, the engine oil pump line will be cut-off to immobilize the vehicle.

While send W000000,020,1,0 is to restore the engine oil pump line and the vehicle can be started again.

8.5 Set over speed alarm

Command: W000000,005,XX

Description: XX(the speed preset value) XX=00, disable XX=[01<XX<20](unit:10Km) Example:

SMS send: W000000,005,10

SMS receive: SET OK! SPEED LIMIT:100Km/h

Meaning: If your speed is over 100Km/h, an alarm SMS will send to your phone to warn you.

8.6 Oil leaking/Refuel Alarm

SMS command: W000000,094,X

Description: $X = 000 \sim 199$ (unit: second), means for fuel capacity change exceed preset value in the time interval X, it will send out oil leaking or fueling alarm, send alarm data to tracking platform, the leaking protocol number is 0x74, the fueling protocol number is 0x76. And if X is less than or equal to 5 seconds, then the function will be disabled. System default value is 10

seconds.

8.7 Enable Impact Alarm Function: SMS command: W<password>,028.1 Meaning: If the vehicle impact, an alarm SMS will send to your phone to warn you Disable Impact alarm function: SMS command: w<password>,028,0 When sending out impact alarm, alarm data will be sent to platform, alarm code is 0x14 System's default setting is disable function of impact alarm 8.8 Two way communication Function: SMS Command: W<password>,050,AB A=1, means open auto-answer function; A=0, means the function is close; the system's default is A=0 B=1, means Open the horn sound, B=0, means the horn sound is close, the system's default is B=0 For example: SMS send: W000000,050,11 Meaning: Two way communication function is open. 8.9 SD Card

It use to store pictures, max 64G, can store more than 800,0000 pictures. When snap picture one time, it will store on SD card, it also upload the picture to platform at

the same time.

Note: More SMS Commands, please check Appendix 2: Command List

9. VT1000 Packing and Accessories

Accessories	QTY	IMAGE	FUNCTION
Main unit	1 piece		VT1000's function
GSM Antenna	1 piece		Receiving GSM network signal
GPS Antenna	1 piece		Receiving satellite locating signal data

Relay	1 piece	To cut-off/restore the power/fuel supply
16 PIN wire	1 piece	Mainly used to connect to the vehicle
Microphone	1 piece	Voice monitoring

10. Optional Accessories

Optional Accessories	Image	Function
Active RFID Kits		anti-theft and driver(student) ID identification function
Passive RFID Kits		anti-theft and driver(student) ID identification function
Temperature Sensor		Temperature monitoring
Fuel Sensor		Fuel Monitoring
Siren		When trigger alarm, it will alarm sound loudly.

SD Card		Store pictures, max 64G, can store more than 800,0000 pictures.
Camera	No.	Snap photos, when trigger alarm, it will auto snap photo.
Speaker		
Configure USB cable	USB configure cable	Configure tracker's parameter Upgrading the tracker's firmware

11. Troubleshooting

Problem: Unit will not turn on		
Possible Cause:	Resolution:	
Wiring was not connected properly	Check and make sure wiring connection is in order.	
Battery needs charging	Recharge battery	

Problem: Unit will not respond to SMS	
Possible Cause:	Resolution:
GSM antenna was not installed properly	Make VT1000 connected to GSM network.
GSM Network is slow	Wait for SMS. Some GSM networks slow
	down during peak times or when they
	have equipment problems.
Unit is sleeping	Cancel sleeping mode
Wrong password in your SMS	Insert the correct password
The SIM in VT1000 has run out of credit	Replace or top up the SIM card
No SIM card	Insert working SIM card. Check in phone
	that the SIM can send SMS messages.
SIM card has expired	Check in phone that the SIM can send
	SMS messages. Replace SIM card if
	needed.

SIM has PIN code set	Remove PIN code by inserting SIM in you phone and deleting the code
SIM is warped or damaged	Inspect SIM, clean the contacts. If re-inserting does not help try another to see if it will work.
Roaming not enabled	If you are in a different country your SIM account must have roaming enabled
Battery is low	Recharge the unit and the GSM will start working.

Problem: SMS from VT1000 states 'Last'		
Possible Cause:	Resolution:	
Unit does not have clear view of the sky	Move the antenna of the unit to a	
	location where the sky is visible.	
VT1000 is in an inner place	Wait for the target to come out	

Appendix 1 Configure by computer

SMS Tracking No.	· I		Interval 0	min		Apply
Password	000000	Apply	Over Speed	0	km/h	Apply
Prefix(area code)		Apply] Time Zone	0	min [Apply
Viretapping		Apply	Distance	300	m	Apply
Power Saving	0 min	Apply	Course	35	- [Apply

Item	Description	
SMS tracking No. Interval	To put a mobile phone number for automatic tracking	
	by SMS at certain time interval in minutes	
Password	To set SMS command password, the default is	
	000000,	
Over Speed	To set speed limit for over speed alarm	
Prefix(area code)	To set country code	
Time Zone	To set time zone, GMT*60 (minutes), if in west half	
	western hemisphere, "-" is necessary to put ahead	
Wiretapping	To set wiretapping mobile phone number	
Distance	To set track and upload data by certain distance in	
	meters	
Power Saving	To set time enter into standby mode when shaking	
	not detected to save power and GPRS data traffic	
Course	To set upload data via angle shifting by certain angles	

SOS Button / IN1	SOS Alarm!	Apply
utton B / IN2	Cry For Help!	Apply
Button C / IN3	Call The Police!	Apply

SOS Button/IN1	To customize the reply SMS text when SOS Button/Input1 triggered
Button B/IN2	To customize the reply SMS text when Button B/Input 2 triggered
Button C/IN3	To customize the reply SMS text when Button C/Input 3 triggered

Extended Settings		
Call For SMS	Cut Off Power	Apply

Call for SMS	Tick it to reply SMS when calling in
Cut off Power	Tick it to send alert when the external power be cut off

Appendix 2: Command List

Description	Command	Remarks
Get current location	W******,000	Get current location of VT1000
Get location in	W******,100	http://maps.google.com/map
Google map URL		s?f=q&hl=en&q=22.542563
format via SMS		,114.077971&ie=UTF8&z=
		16&iwloc=addr&om=1
Change user's	W******,001,######	***** is old password
password		####### is new password
Set interval for	W******,002,XXX	XXX is the interval in minute. If
automatic timed		XXX=000 it will stop tracking
reports		
Set preset phone		F=0, to disable this function;
number		F=1, only sending SMS;
for SOS button		F=2, only calling preset phone number;
		F=3, both SMS and calling (default)
	W******,003,F,P,T1,T2	P is the button number and should be 1,or 2,
		or 3.
		If SOS button is linked to IN1, then P=1.
		T: Preset phone number
		(T must be less than 16 digits)
		T1: When no T2, T1 for short message
		number or dial the number; when have T2, T1
		for message number.

		T2: for dial the number.
Set over speed alarm	W******,005,XX	XX (the speed preset value)
When VT1000 speeds		=00, disable
higher		=[01 <xx<20] (unit:="" 10km)<="" td=""></xx<20]>
than the preset value,		
it will		
send one over speed		
alarm		
SMS to the SOS		
preset		
number.		
Set Geo-fence alarm	W******,006,XX	XX (set distance from current central point
(foursquare)		place)
When the VT1000		=00, disable
moves out		=01, 30m
of preset scope, it will		=02, 50m
send		=03, 100m
one Geo-fence SMS		=04, 200m
to the		=05, 300m
SOS preset number.		=06, 500m
		=07, 1000m
		=08, 2000m
Extend Settings	W******.008.ABCDEF	A=0, disable position report function
U	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	GHIJ###	when a call is made to VT1000
	GHIJ###	when a call is made to VT1000 A=1, enable position report function to
	GHIJ###	when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000
	GHIJ###	when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert
	GHIJ###	when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert I=1, enable power failure alert
	GHIJ###	when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert I=1, enable power failure alert The functions of BCDEFGHJ are
	GHIJ###	when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert I=1, enable power failure alert The functions of BCDEFGHJ are remained for furthur use.
	GHIJ###	when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert I=1, enable power failure alert The functions of BCDEFGHJ are remained for furthur use. ### is the ending character.
Set Geo-fence alarm	GHIJ### W*****,017,data	when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert I=1, enable power failure alert The functions of BCDEFGHJ are remained for furthur use. ### is the ending character. data is the coordinates which include:
Set Geo-fence alarm	GHIJ### W*****,017,data W*****,117,data	 when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert I=1, enable power failure alert The functions of BCDEFGHJ are remained for furthur use. ### is the ending character. data is the coordinates which include: Lower-left X, Lower-left Y,Upper-right
Set Geo-fence alarm 017 command is for	GHIJ### W*****,017,data W*****,117,data	when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert I=1, enable power failure alert The functions of BCDEFGHJ are remained for furthur use. ### is the ending character. data is the coordinates which include: Lower-left X, Lower-left Y,Upper-right X,Upper-right Y
Set Geo-fence alarm 017 command is for alarm when tracker	GHIJ### W******,017,data W******,117,data	when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert I=1, enable power failure alert The functions of BCDEFGHJ are remained for furthur use. ### is the ending character. data is the coordinates which include: Lower-left X, Lower-left Y,Upper-right X,Upper-right Y For example,
Set Geo-fence alarm 017 command is for alarm when tracker moves out the preset	GHIJ### W*****,017,data W*****,117,data	when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert I=1, enable power failure alert The functions of BCDEFGHJ are remained for furthur use. ### is the ending character. data is the coordinates which include: Lower-left X, Lower-left Y,Upper-right X,Upper-right Y For example, 11404.0000,E,2232.0010,N,11505.1234,E,23
Set Geo-fence alarm 017 command is for alarm when tracker moves out the preset scope;	GHIJ### W*****,017,data W*****,117,data	when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert I=1, enable power failure alert The functions of BCDEFGHJ are remained for furthur use. #### is the ending character. data is the coordinates which include: Lower-left X, Lower-left Y,Upper-right X,Upper-right Y For example, 11404.0000,E,2232.0010,N,11505.1234,E,23 33.5678,N
Set Geo-fence alarm 017 command is for alarm when tracker moves out the preset scope; 117 command is for	GHIJ### W*****,017,data W*****,117,data	when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert I=1, enable power failure alert The functions of BCDEFGHJ are remained for furthur use. ### is the ending character. data is the coordinates which include: Lower-left X, Lower-left Y,Upper-right X,Upper-right Y For example, 11404.0000,E,2232.0010,N,11505.1234,E,23 33.5678,N Note:
Set Geo-fence alarm 017 command is for alarm when tracker moves out the preset scope; 117 command is for alarm when tracker	GHIJ### W*****,017,data W*****,117,data	when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert I=1, enable power failure alert The functions of BCDEFGHJ are remained for furthur use. #### is the ending character. data is the coordinates which include: Lower-left X, Lower-left Y,Upper-right X,Upper-right Y For example, 11404.0000,E,2232.0010,N,11505.1234,E,23 33.5678,N Note: 1. Lower-left X,Y (longitude and latitude)
Set Geo-fence alarm 017 command is for alarm when tracker moves out the preset scope; 117 command is for alarm when tracker moves in.	GHIJ### W*****,017,data W*****,117,data	when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert I=1, enable power failure alert The functions of BCDEFGHJ are remained for furthur use. ### is the ending character. data is the coordinates which include: Lower-left X, Lower-left Y,Upper-right X,Upper-right Y For example, 11404.0000,E,2232.0010,N,11505.1234,E,23 33.5678,N Note: 1. Lower-left X,Y (longitude and latitude) should be smaller than Upper-right X,Y;
Set Geo-fence alarm 017 command is for alarm when tracker moves out the preset scope; 117 command is for alarm when tracker moves in. When the tracker	GHIJ### W*****,017,data W*****,117,data	<pre>when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert I=1, enable power failure alert The functions of BCDEFGHJ are remained for furthur use. #### is the ending character. data is the coordinates which include: Lower-left X, Lower-left Y,Upper-right X,Upper-right Y For example, 11404.0000,E,2232.0010,N,11505.1234,E,23 33.5678,N Note: 1. Lower-left X,Y (longitude and latitude) should be smaller than Upper-right X,Y; 2. All longitudes and latitudes should be in</pre>
Set Geo-fence alarm 017 command is for alarm when tracker moves out the preset scope; 117 command is for alarm when tracker moves in. When the tracker moves in or out, it	GHIJ### W*****,017,data W*****,117,data	when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert I=1, enable power failure alert The functions of BCDEFGHJ are remained for furthur use. ### is the ending character. data is the coordinates which include: Lower-left X, Lower-left Y,Upper-right X,Upper-right Y For example, 11404.0000,E,2232.0010,N,11505.1234,E,23 33.5678,N Note: 1. Lower-left X,Y (longitude and latitude) should be smaller than Upper-right X,Y; 2. All longitudes and latitudes should be in ASCII format as follows:-
Set Geo-fence alarm 017 command is for alarm when tracker moves out the preset scope; 117 command is for alarm when tracker moves in. When the tracker moves in or out, it will send an SMS	GHIJ### W*****,017,data W*****,117,data	when a call is made to VT1000 A=1, enable position report function to get position SMS by Calling VT1000 I=0, disable power failure alert I=1, enable power failure alert The functions of BCDEFGHJ are remained for furthur use. #### is the ending character. data is the coordinates which include: Lower-left X, Lower-left Y,Upper-right X,Upper-right Y For example, 11404.0000,E,2232.0010,N,11505.1234,E,23 33.5678,N Note: 1. Lower-left X,Y (longitude and latitude) should be smaller than Upper-right X,Y; 2. All longitudes and latitudes should be in ASCII format as follows:- Longitude: DDDMM.MMMM,E/W. 4 places

authorized phone	value available.
number for SOS.	Latitude: DDMM.MMMM,N/S. 4 places of
	decimal. '0' is needed to be stuffed if no
	value available;
	3. Send W*****,017 or W*****,117
	without data to disable this function.

Presetting by SMS for GPRS tra	acking	
Set ID for VT1000 by SMS	W*****,010,ID	Tracker ID must be less than 14 digits
Set APN by SMS	W******,011,APN,APN	APN Name, APN Password If
	Name, APN Password	no password required, just insert APN
		name only;
		APN defaulted as 'CMNET';
		APN name + password not
		over 39
		characters.
Set IP Address and Port by	W******,012,IP, Port	IP: xxx.xxx.xxx
SMS		Port: [1,65536]
Enable GPRS Function	W******,013,X	X=0, close GPRS (default);
		X=1, enable TCP
		X=2, enable UDP
Set Time Interval for	W******,014,XXXXX	XXXXX should be in five
Sending GPRS Packet		digitals and in
		unit of 10 seconds.
		XXXXX=00000,to disable this
		function;
		XXXXX=00001~65535, time
		interval for sending GPRS
		packet and in unit of 10
		seconds.
Output Control	W******,020,P,F	P=1, Out1
		=2, Out2
		=3, Out3
		=4, Out4
		=5, Out5
		F = 0, to disable the output
		=1, to enable the output
Output Control (Safe	W******,120,ABCDE	ABCDE represents Out1,
mode)		Out2, Out3,
This function is achievable		Out4, Out5 respectively.
when the speed is below		If A or B or C or D or E,

10km/h and GPS is		=0, to disable the output
available		=1 to enable the output
		=? to remain previous status
Set nower saving mode	W***** 026 XX	XX=00 to disable this
when VT1000 is still	,020,711	function
(In power saving mode GPS		$XX=01_{2}.99$ to set this
stops working GSM enters		function It is in
standby mode and ston		unit of minuto
sonding out massage until it is		Example:
activited by an SMS or an		If VV=10 VT1000 will onter
incoming call)		nower
incoming can)		saving mode in 10 minutes
		after it is
	117444444 030 T	The day of the second second second
Set phone number for	W ******,030,1	I is the telephone number for
wiretapping		wiretapping and max. 16 digits
Set time zone difference	W******,032,1	1=0, to disable this function
		T=[1, 65535] to set time
		difference in
		minutes to GMT.
		Default value is GMT
		+, not necessary for those
		ahead of
		GMT. For example, either
		+120 or 120
		is acceptable.
		-, required for those behind
		GMT. For
		example, -120.
Set character for SOS alert	W******,033,P,Char	Char P is the button number.
message		P=1, 2, or 3.
		Char is the character in SOS
		message
		and max 32 characters
Set tracking by driving angle	W******,036,Degree	Measured by Degree(s),
change function		Degree=0,disable this
		function; X=1-359, means set
		angle degree interval in this
		function.
Set tracking by distance	W******,045,X	Measured by Meter(s),
function		X=0, disable this function;
		X=1-65535, means the
		distance interval in this
		function.

Set clear/reset odometer	W******,046	To clear and reset odometer
function		information to zero.
Set function of receiving	W******,111	This function need support of
location physical address name		the GPRS01 or SMS01
via SMS		tracking platform, address
		SMS will be received in text
		format.
Get version and serial	W******,600	To get version and serial
number		number of
		current firmware
Get IMEI No.	W******,601	To get device IMEI No.
Reboot GPS and GSM Module	W******,900###	### is the ending character.
Initialization	W******,990,099###	### is the ending character.
To turn all the parameters /		
settings (except for the		
password) to factory default.		
Password Initialization	W888888,999,666	This command will reset the
		current password to factory
		default password 000000

Appendix 3: How to use Camera

1. Install camera





2. Take photo when trigger alarm

2.1 Send SMS commands to set take photos:

Description	Command	Remarks
		A : Snap or not when IN1 alert triggered, A=1
		means snap, A=0 means no action
		B : Snap or not when IN2 alert triggered, B=1
		means snap,B=0 means no action
		C: Snap or not when IN3 alert triggered, C=1 means
		snap, C=0 means no action
		D: Snap or not when IN4 alert triggered, D=1
		means snap,D=0 means no action
		E: Snap or not when IN5 alert triggered, E=1

Configure		means snap, E=0 means no action
SMS for the	W <password>,108,ABCDEFGHIJ###</password>	F: Snap or not when over speed alarm triggered,
extended		F=1 means snap, F=0 means no action
photoing	Example: W000000,108,100000000###	G: Snap or not when movement alarm triggered,
parameters	It means when In1 (SOS) alarm triggered,	G=1 means snap, G=0 means no actions
	it will automatic snap.	H: Snap or not when Geo-fencing alarm triggered,
		H=1 means snap, H=0 means no actions
		I: Snap or not when power fail alert triggered, I=1
		means snap, I=0 means no actions
		J: Snap or not when Oil/fuel leakage alarm
		triggered, J=1 means snap, J=0 means no actions
		The system all default is 0, no actions.
By send	W <password>,051</password>	
SMS to Roll		
call take		
photos:		

Camera failure alarm: when cannot snap photo, it will send SMS " CAMERA ERROR ALARM!" to SOS number, and send alarm data to platform as well.

(You can check photos on platform, Report Centre)

2.2 Configure tracker to set take photos

Open GPS tracker parameter editor (2010) V2.65 (following picture)

.UM1 🔳 📘	Start	Read	Write	F Auto		Tracker Disconnect	
GPRS	🗾 Tracker ID			NET			Extended Settings
APN Account			APN Passw	ord			photo enable
IP	Port	Interva	ıl 🛛 sec			Apply	IN1 alarm IN2 alarm IN3 alarm
3MS Tracking SMS Tracking No.	[Interval 0	min		Apply	r movement alarm r geo-fence alarm r cut power alarm
Password	000000	Apply	Over Speed		km/h	Apply	voice enable
Prefix(area code)		Apply	Time Zone		min	Apply	
Wiretapping		Apply	Distance		m	Apply	Apply
Power Saving	min	Apply	Course			Apply	RFID Settings
Authorized Phone N	0.						
SMS		Call				SOS Button/IN1	
SMS		Call				Button B/IN2	×
SMS		Call			1	Button C/IN3	Apply
SMS Initials							
SOS Button / IN1	SOS Alarm!					Apply	
Button B / IN2	Cry For Help!				1	Apply	-
Button C / IN3	Call The Police!				1	Apply	Read

In photo enable option, choose you want to select the function.

Such as select IN1 alarm, means when trigger IN1 alarm (SOS alarm), tracker will automatic snap photo.

2.3 On the platform applications



Into our GPS Tracking Platform: http://www.global-track.net, (following picture P1), login interface, (following picture P2)

Select your device, such as instructed 1; it will display your car's the logo on the map(instructed). Put the mouse on the logo, It will automatically pop up frame (instructed 3),you can click the "Take Photo" in the options (instructed 3),then it will taking photo down (following picture P3). If you want to see photos record, please click "Report Centre" (instructed 4),then The Report interface will pop up; (following picture P4)



In Reports options, there is a Picture Report, click it (instructed5), then it will display "Picture Report" interface. Choose you want to choose the vehicle (instructed6), wait for few seconds, it will display the Picture Report, click "view", Will see you want to see pictures (instructed 7)

Appendix 4: Configure and use of RFID function



RFID Reader

1. Install RFID as following:



RFID Tag



2. How to use

2.1 SMS Commands

2.1.1 Firstly, enable the RFID:

(1) Enable the RFID function: W000000,062,1

(2) Disable the RFID function: **W000000,062,0**

(3) The system default is RFID function enabled.

(4) When send the disarming SMS command"000000DSM", it will automatic disable the RFID

function, and if send the enable SMS command the RFID function will be restored.

2.1.2 Secondly To configure authorized RFID tag by SMS commands

W<password>,060,ID1

W<password>,160,ID2

W<password>,260,ID3

W<password>,360,ID4

W<password>,460,ID5

Note: The default password is **000000**

ID1, ID2, ID3, ID4, ID5 means 5 digital FRID number.

For example: if configure NO.00412 as the authorized RFID tag, then send SMS: W000000,060,00412

Tracker will reply SMS "STUDY ID OK: 1:00412; 2:00000; 3:00000; 4:00000; 5:00000", means the 1st RFID tag number is 00412, the 2nd, 3rd, 4th, 5th RFID tag not set. If the RFID tag is detected at this time, tracker will send SMS "NOW ID : 00412 ".

Note: RFID reader detecting test RFID tag distance is within 5 meters, the RFID tag must be detected before RFID can be used.

2.1.3 The ARMING SMS command: "<password>ARM "

The disarming SMS command "<password>DSM ",

When send the disarming SMS command "000000DSM", it will automatic disable the

RFID function, and if send the enable SMS command the RFID function will be restored.

2.1.4 Judge if need to cut off oil/fuel supply when the ignition alert occurs to stop engine start.

Enable function of cutting off oil-way when illegally ignite under ARM status

SMS command: W<password>,061,1

Disable function of cutting off oil-way when illegally ignite under ARM status

SMS command: W<password>,061,0

The system default setting is disable function of cutting off oil-way when illegally igniting under ARM status.

5. Command List	3.	Coi	mma	nd	List
------------------------	----	-----	-----	----	------

Description	cription Command						
Configure authorized RFID	W <password>,060,num1</password>	STUDY ID OK: 1:num1;					
tag	W <password>,160,num2</password>	2:num2; 3:num3; 4:num4;					
	W <password>,260,num3</password>	5:num5					
	W <password>,360,num4</password>						
	W <password>,460,num5</password>						
Enable the RFID detection	W <password>,062,1</password>	ENABLE OK !					
Disable the RFID detection	W <password>,062,0</password>	DISABLE OK !					
Arm	<password>ARM</password>	Vehicle is armed!					
Disarm	<password>DSM</password>						
Enable function of cutting off	W <password>,061,1</password>	System default setting is					
oil-way when illegally ignite		disable function of cutting off					
under ARM status		oil-way when illegally ignite					
Disable function of cutting off	W <password>,061,0</password>	under ARM status.					
oil-way when illegally ignite							
under ARM status							

4. Functions

4.1 To ignite in Armed status, it will check the RFID tag. If an authorized tag can be detected, it will not alert. If an authorized tag can not be detected, it will send alert SMS "Engine Is On !" to three authorized alert mobile phone numbers, and at the same time, the Output 3 will control siren to sound, and call the three mobile phones at one minute interval, and decide to cut off the oil/fuel supply according to its oil cut enable/disable status.

4.2 If vehicle door is opened in armed status, it will check the RFID tag. If an authorized tag can be detected, it will not alert; if an authorized tag can not be detected, it will send alert SMS "Door Is Open !" to three authorized alert mobile phone numbers, and the Output 3 will control the siren to sound, and call the three mobile phone numbers at one minute interval.

4.3 If the vehicle is moved/towed in armed status, it will detect the RFID tag, if no authorized tag be detected, it will send alert SMS "Movement alarm!" to the 1st alert mobile phone number.

4.4 In disarmed status, if no authorized RFID tag Is detected for successive 30 seconds, then the system will automatically arm the vehicle, and it will call the 1st alert mobile phone number, after

several rings and hang off automatically, indicating the vehicle be armed.

4.5 If alert be triggered, the siren will sound for 10 seconds and shut or immediately shut when disarm action is detected.

4.6 If illegal ignition be detected and oil/fuel supply cut off enabled, then the oil/fuel supply will be cut off, and it will be immediately restored as soon as disarm action be detected.

4.7 If the oil/fuel supply is cut off by SMS or GPRS platform, it can not be restored by disarm action.

5. RFID on the platform applications

5.1 Into our GPS Tracking Platform: http://www.global-track.net, as following picture P1, login interface, as following picture P2



5.2 Select your device, such as instructed 1; it will display your car's the current information, Driver (ID) means the driver and his/her RFID tag number such as instructed 2;

5.3 If you want to edit the driver information, please click "manage", such as instructed 3, then interface will into as following picture P3;

Menu	< E	Welcome	👃 Driver Mana	×			
Core		New 🥪 Edit 🔒	Delete anAlarm	Driver Name:		Q	
Vehicle Manage		Employeeid	License	Birthday	Expiry Date	Driver ID	Driver Name 🔺
- control montage	1	test2 _				0011259375	0011259375
🚨 User Manage	2	1234507				harrydriver	Harry
	3	AJt001	BW678909	1962-06-24	2017-04-12	Altures	Jay
🚨 Driver Manage	4	Topshine				00297	Tony
POI Manage 4				Α			
政 Daily	• 14	4 Page 1	/1 🕨 🕅 🖓				
🚨 Geo-Fence/Route	+						
🕖 Alarm	•						ш

5.4 Click Driver Manage, such as instructed 4; it will open such as instructed A;

You can click New, such as instructed 5, open as following picture P4; to add tag ID and the driver's information etc.

lete 🔬 Alarm	Driver Name:			×
License	Birthday	Ex	Driver ID*:	
BW678909	1962-06-24	20	Employeeid*:	
			Driver Name*:	
			Birthday:	
			Please choose the driver's photo file : 选择文件 未选择文件	
			Mobile:	
			Email:	
			Address:	
			License:	
			Expiry Date:	

When finished, please press "save" button.

Once again into the main interface, select the little red box, you will see the tracker location. Such as following picture:



Appendix 5: Fuel Sensor Installation and Function

1. Installation instruction

1.1 Installation flow chart:



1.2 Operation procedures:

1.2.1 Find the position

Generally installed in the middle of the fuel tank, to avoid the original fuel floater 1.2.2 Clean the oil stain on the installation position

Clean the oil stain on the installation position

1.2.3 Holing

Use hand-drill with a 42mm metal drill bit, connect the power supply and drill in the position (Note: please do not drill too fast, stop when it is about to drop, then use the screwdriver and sharp-nose plier to remove the attached metal scraps to prevent them dropping into the tank). Special note: Make sure to open the fuel tank cap before drilling; it's better to drain away all diesel, if not, just make sure not too full in the tank.

1.2.4 Cleaning work

Use the grater to polish the rough selvedge;

Use a rope-tied magnet to adsorb the iron scraps.

1.3 Flange installation

1.3.1 Put the gasket under the flange and holing, then tighten with screws.

1.3.2 Put sealing ring

1.3.3 The sensor has two circle sealing rings, first fit the bigger ring and then the small one, fix them on the top of the sensor, see the flow chart.

1.3.4 Screw tighten the sensor

1.3.5 Put the sensor into the flange opening, and screw tighten along the screw thread direction, then wiring and wrapping.

1.3.6 Power supply of the fuel sensor

The sensor power voltage is 18-32VDC. Note: Do not connect the biggest power line in the vehicle, please connect the normal size power line, otherwise will burn the sensor.

1.4 Tools required

Tools: Hand-drill, Metal hole saw, Hex tapping screws (3cm)



Pistal DrillHole sawHexagon self tapping screw

Extension cable of Fuel sensor: it's better wiring along the fuel tank, generally for a big vehicle, $9 \sim 10$ m cable is enough and $5 \sim 8$ m for a small vehicle; choose the 3-core, 0.75mm2 cable.

2 Fuel Sensor on the platform applications

2.1 Into our GPS Tracking Platform: http://www.global-track.net, as following picture P1, login interface, (as following picture P2)



P1 P2



- 2.2 Register on platform
- 2.2.1 Don't write anything in "Init Fuel", like follow picture 1:

New 🌍 Edit 🔒 De												
LNIG	Kind*:	Base Mileage:	Driver ID:	:	Customiz	e Mark(i	con54.pr	ng)				
Domo	VT310N ¥	0		_								
Demo-device	GPRS ID*:	Brand:	Driver:		200	-	100	-		ãò	-	
1234,200912	62106022784955	Mercedes-Ber 👻			-		-			00	23	
12341,62106	Plate No.*:	Type:	Model:			-	-	-			de	
20140117008	12341	Truck 👻			1	-		200	500		5	
60719020146	Sim no.:	Color:	Chassis:			_						
62106027472		1	1		des			1	ANTO NO	129	1 the	
63602278681	Group Name*: :	Time Zone(Hour):	Engine Number:			1.000		10				
67622010354	Demo-device	0.0				1	5	100		12	Ale.	
9952599030,			Manufacture Date:		100	MAR	7	A		-		
Benz123,201	Init Temp	Init Fuel	Handracture Date.		-	0	-270	IN I	-	-		
KBS205L.968	Low Temp:	Quart:	Purchase Value:				500	1	NO	ŵ		
RFID car alar	0	0	o	_		-		hard and a second				
RFID-Test,20	High Temp:	Min Fuel:	Depresenting Makes		æ.	-	*		-	-		
SJZ201(VT20	0	0	Depreciation value:		208	60 Mill			20.0		100	
TK310,69158	Min Temp:	Max Fuel:	0		-	-		180	1	- 6-		
tem,345678,	0	0	Mapinto:		-	-	-		-		Trans.	
tk103,602447	Max Temp:		Nigeria				_					
	848		Expiry Date:				-		10	-	\bigcirc	
				9		dine.			-0-		Y	
											-	
											Save	

Picture 1

2.2.2. Like picture 2

(1) Fill it up with fuel/oil in fuel tank. Let the tracker working. Then track the fuel(L) on platform: For example: the fuel(L) display: 603, this is Max Fuel, please write into "Max Fuel".

(2) Empty the fuel/oil in fuel tank. Let the tracker working. Then track the fuel(L) on platform: For example: the fuel(L) display: 0, this is Min Fuel, please write into "Min Fuel".

	Relative Track 📌 Play History 🌽	Operate Centre 🌸 Manage 📊 Report Cent	tre 🟫 System 👻 🎯 Help Cente	er 区 Log Out	
Leopardcom	Upin +	ETS Parc Parce Padurea Crang	Statle Alascom	Aleea Industriet	
	Test II	23 E95	25		
	Coogle			地图线	刘据 ©2014 GS(2011
	Coogle			地图线	灾据 ©2014 GS(2011
	Cooyle Locate Alarm(0) N ← Page 1/1 > Pi Plate No Deter(0)	C Interval: 10 × SV Auto Refresh People Time Senard Evently	Tom Milage Alarm	地图线	数据 ©2014 GS(2011 From ·
	Cooyle Locate Alarm(0) N ← Page 1/1 > Pi Plate No. Driver(D) 1 B218SAL	Interval: 10 ▼ S♥ Auto Refresh Receive Time Speed Fuel(L) 2014/02-07 00 0 521	Tem Mileage Alarm 0 635936	地图4	就据 ©2014 GS(2011 From * Address Double Click To (

Picture 2

3. Write the vehicle's fuel tank capacity into "Quart"

🛅 Welcome 🛛 🖨 V	/ehicle Man; 🛞											
Vehi 🖶 Edit Vehicle												
New Edit De	Kind*:	Base Mileage:	Driver ID:	:	Customize Mark/icenE4 ppg)							
IMEI No.	VT310N ¥	0	00000	1	customize man(const.phg)							
Demo Demo-device	GPRS ID*:	Brand:	Driver:		🍌 📾 🍇 🍯 🙆	5 🧠						
1234,200912	62106022784955	Mercedes-Ber 💙	00000									
12341,62106	Plate No.*:	Туре:	Model:		N	1						
2244,862106	12341	Truck 💌			🔉 🛰 💘 🐝 👘	- <u>-</u>						
60719020146 62106027472	Sim no.:	Color:	Chassis:		in a 💊 🈹 🍠 🕽							
63602278681	Group Name*: :	Time Zone(Hour):	Engine Number:									
67622010354 9952599030,	Demo-device	0.0	Manufacture Date:		🎐 🛋 🕴 🤝 🔹 🙆	. 4						
Benz123,2011 JACKSON,12 KBS205L,968	Low Temp:	A Init Fuel	Purchase Value:	•)	2						
RFID car alari RFID-Test,20 SJZ201(VT20	High Temp:	Min Fuel:	0 Depreciation Value:		🚳 🙈 🍰 🐲 🔦							
TK310,69158 tem.345678	Min Temp:	Max Fuel:	0 MapInfo:		• • • • • •) an						
tk103,602447	Max Temp:		Nigeria Expiry Date:	*								
	848				🐚 🐺 🕹 🐗 🚧 🚅	•						
						Save						
	N											

4. Click "Save". Finish.

2.3 Select your device, such as instructed 1; it will display your car's the current oil/Fuel (L) (instructed2).

2.4 If you want to see the history record chart. Please click "Report Centre" (instructed 3), then the Report interface will pop up; (following picture P3)



2.5 In Report options, there is a Fuel Report (Line), click it (instructed 4), then it will display instructed 5, 6; you need choose "vehicle, Time or data etc.", and click search (instructed 6), later

it will display "Fuel Line" chart.

You also can check History Report:

Report	vveicome	C HISTORY I	kep(=									
🖃 😋 All Reports	Vehicle: T926C	LP mobile 5	Time: In	terval 🗸	2014-02	-11 00:00:00	<u> </u>	4-02-12 00:00	:00 🖪 🔍			
Alarm Report		10 CH 2			101							
Alarm Count Report	Loading Report, Please wait											
Speed Report(Pie)												
Speed Report(Line)	History Report											
Expense Report												
 Orniver Ranking Report Driver Ranking Report Vehicle Performance Report Driver Performance Report Driver Performance Report Summary History Report Picture Report Trip Report ParkLog Report Report Task Task Download 	Plate	Create Time	Latitude	Longitude	Speed	Direction	Fuel	Mileage	Alarm Text	Status Text		
	T926CLP	2014/2/11	-6.72284	39.21273	0	East	57.10	7225.54		Engine Off; Close;		
	mobile 5	0:00:10										
	T926CLP mobile 5	2014/2/11 0:00:40	-6.72284	39.21273	0	East	56.70	7225.54		Engine Off; Close;		
	T926CLP mobile 5	2014/2/11 0:01:10	-6.72284	39.21273	0	East	56.80	7225.54		Engine Off; Close;		
	T926CLP mobile 5	2014/2/11 0:01:40	-6.72284	39.21273	0	East	56.80	7225.54		Engine Off; Close;		
	T926CLP mobile 5	2014/2/11 0:02:10	-6.72284	39.21273	0	East	56.80	7225.54		Engine Off; Close;		
	T926CLP mobile 5	2014/2/11 0:02:40	-6.72284	39.21273	0	East	56.70	7225.54		Engine Off; Close;		
	T926CLP mobile 5	2014/2/11 0:03:10	-6.72284	39.21273	0	East	56.80	7225.54		Engine Off; Close;		
	T926CLP mobile 5	2014/2/11 0:03:40	-6.72284	39.21273	0	East	56.80	7225.54		Engine Off; Close;		
	T926CLP mobile 5	2014/2/11 0:04:10	-6.72284	39.21273	0	East	56.90	7225.54		Engine Off; Close;		
	T926CLP mobile 5	2014/2/11 0:04:40	-6.72284	39.21273	0	East	56.80	7225.54		Engine Off; Close;		
	T926CLP mobile 5	2014/2/11 0:05:10	-6.72284	39.21273	0	East	56.80	7225.54		Engine Off; Close;		
	TOTACLE	2014/2/11	-6 77704	20 21222	0	Eart	56 90	7225 54		Engine Off: Classe		
						6						