GPS Vehicle Tracker
(GPS+GSM+SMS/GPRS)
User Manual

(V4.0)

<u>Preface</u>

Thank you for purchasing the tracker. This manual shows how to operate the device smoothly and correctly. Make sure to read this manual carefully before using this product. Please note that specification and information are subject to changes without prior notice in this manual. Any change will be integrated in the latest release. The manufacturer assumes no responsibility for any errors or omissions in this document.

1. Product packaging accessories:

1.1 power 4P line 1pc (standard accessory)
1.2 SOS Alarm button cable 1pc (optional accessory)
1.3 MIC 1pc (optional accessory)
1.4 electric relay 1pc (optional accessory)
1.5 User manual 1pc (standard accessory)

(Accessories products refer to the actual product)

2. Product features

2.1 GSM four frequency(GSM850/900/1800/1900MHZ) system global general;
2.2 built-in switching power supply, exceed wide voltage input range: 10-75 VDC;
2.3 GPS continuous GPS positioning, GPRS report regularly;
2.4 Support SMS message to check the location info;
2.5 built-in vibration sensor, realization vehicle anti-theft intelligently;
2.6 ACC the ignition signal detection,vehicle status prompted;
2.7 can connect external microphone, to realize the remote voice surveillance function
2.8 can be set up a hotline number for SOS call the police and security alarm;
2.9 can connect external SOS alarm button for emergency calls for help;
2.10 can connect external microphone, to realize the remote voice surveillance function;
2.11 built-in backup battery, realize the illegal cut the line alarm;

Content	Specs.
Dim.	94mm x 45mm x 10mm
Weight	85g
Network	GSM/GPRS
Band	850/900/1800/1900Mhz
GPS chip	UBLOX
GPS sensitivity	-159dBm
GPS accuracy	5m
Time To First Fix	Cold status 35-80s Warm status 35s Hot status 1s
voltage input	9－75V input
Battery	Build-in 3.7V 370mAh Li-ion battery
Storage Temp.	-40°C to +85°C
Operation Temp.	-20°C to +55°C
Humidity	5%--95% non-condensing

3. LED

3.1 Red LED（Power / state）

LED state	Meaning
Once a flash for 2 seconds	Working normally
Dark	Shut

3.2 Yellow LED-GSM（Power / state）

LED state	Meaning
Always light	GSM initialization
Flashing	GPRS working normally
Always dark	NO GSM signal

3.3 Blue LED-GPS（Power / state）

LED state	Meaning
Always light	GPS initialization
Flashing	GPS working normally
Always dark	NO GPS signal

4. Appearance schemes
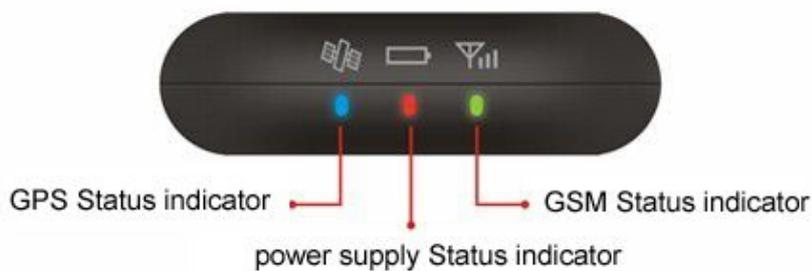
5. Preparation Installation

5.1.. Check the product
5.1.1 Open the package, and check product model and accessories. If there is something wrong or missing, please contact the distributor.

5.1.2. The selection of   SIM card must follow the distributor's suggestion.

5.1.3. Install SIM card

Firstly, open the cover of the tracker and the cover on the slot for SIM card; secondly, insert the card with the chip upside down into the slot; finally, recover the slot metal clip.

1.　　　　　　　　2.　　　　　　　　3.

Tips:

Don't insert the SIM card up-side-down.·

Make sure the SIM card with GPRS service.

If the SIM card has been inserted, but it requires you to input SIM PIN, please close the SIM PIN function under the instruction of your mobile phone user's manual.

Make sure the SIM card account has enough money

5.2. Installation

Install the tracker is hidden installation, you'd better to install it with the help of professional companies or workers authorized by the distributor. Please install it according to the following instruction.

5.2.1. To avoid the thief's destruction, the tracker should be installed in a hidden place.

5.2.2 Don't put the tracker together with the emission sources, such as the parking radar system, alarms and other vehicle-carried communication terminals.

5.2.3 You can fix the tracker with the cable tie, or glue it with wide strong sponge double-sided tapes.

5.2.4 Because the tracker has GSM and GPS antenna inside, please make sure the reception side of GPS is upward (facing the sky), and there is no metal shelter above the tracker. Suggestions are as follow:

a, Hidden area under the decoration board below the front windshield or back windshield;

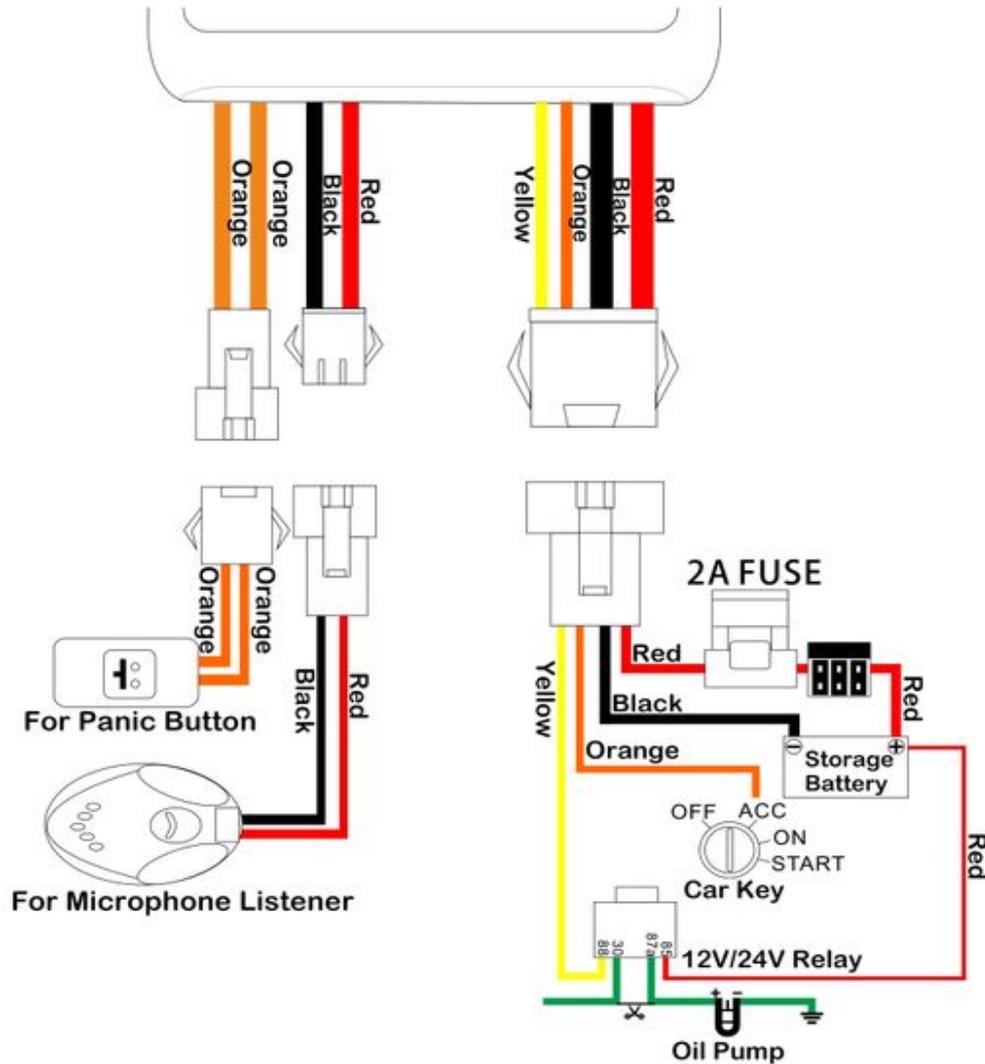b, Hidden area around the front panel (with a surface made of non-metal materials);

Attention: If there is a metal insulation or a heating layer glued in the windshield, it will reduce the efficiency of GPS signal reception, and the GPS can't work well, you need to find other places to install again.

5.3 Terminal outlet definition
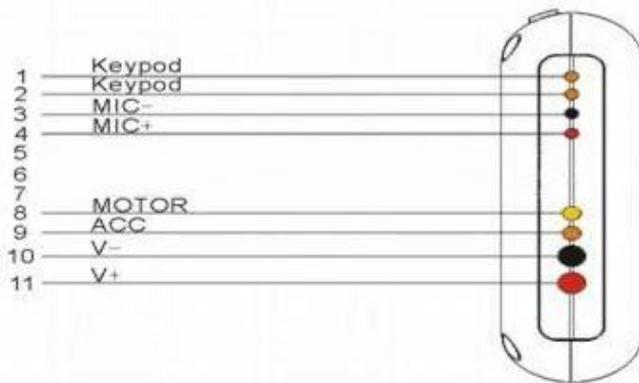
Line sequence	definition	color	Wiring instructions
1. 2	SOS	Orange、Orange	SOS help alarm
3. 4	MIC-,MIC+	black、red	Connect monitoring the microphone
8	Off power/oil	yellow	Cut oil or electric
9	ACC	Orange.	Original car security
10	V-	black（thick）	Car 12 V / 24 V battery negative
11	V+	red（thick）	Car 12 V / 24 V battery positive

5.4 Terminal wiring diagram

Orange
Orange
Black
Red

Yellow
Orange
Black
Red

Orange
Orange
Black
Red

For Panic Button

For Microphone Listener

Yellow

2A FUSE

Red
Black
Orange

Red

Red

Storage Battery

OFF   ACC
ON
START
Car Key

30
88
85
87a
12V/24V Relay

Red

Oil Pump

6. Equipment connect the matters needing attention

Power supply, the original car guard against theft, broken oil and electricity control line (4 pin)

6.1 This equipment is standard for power supply 10V-75VDC, please choose the original provide power supply cord, red line power positive, the black line for power negative; When installation, please choose to separate negative power grounding wires or by iron, don't and other ground were answered

6.2 The original car security line (Orange line)

6.3 Broken oil electricity control line (yellow line) to pick up off the gas and electric relay 86 feet (i.e. relay socket in the fine yellow line)

6.4 MIC line（2pin）
External microphones, realize voice surveillance function

6.5 SOS line（2pin）
External SOS switch button, used for emergency calls for help

7. Terminal parameter setting

Message set data: The car owner's mobile phone No. send the message code to the SIM card of the GPS device. Separated symbols is comma. The commas of the following functions data setting command is the English input format.

7.1 Basic operation Settings

7.1.1 Special No. setting (i.e., the owner number) ：
Special No. is the alarm No. You can send the command of adding special No. message to terminal for adding the No. Under the status of alarm, the terminal will send the position message to the setting

special No. and call the No. repeat till the phone is connected.

  7.1.1.1 Add the special No.：

  Command format：adm+ code+ comma+NO.　　e.g.：adm123456,138********

  Reply message：ADM！A1：138********

  7.1.1.2 Delete special number：

  Command format：noadmin+ code+ comma　　e.g.：adm123456，

  Reply message：ADM！A1：

  7.1.2 Modify the terminal password: please remember the password, if forget available owner send factory default command center number

  The default terminal password：123456

  Command format：pwd123456 666888(666888 for the new password,must be 6 to digital)

  Reply message：OK! New password: ******. Safe keeping!

P.S.: the following instructions will send can achieve center number, be sure to keep in mind

 7.1.3 SOS No. setting

  7.1.3.1 SOS No. setting

  Command format：SOS+ comma+NO.

  e.g.：sos,138********　or　sos,138********,138********

  Reply message：SOS!S1: 138********　S2:138********

  7.1.3.2 Delete SOS number

  Command format：SOS+ comma

  e.g.：sos,　or　sos,,

  Reply message：SOS!S1:,S2:

7.2 Anti-theft alarm location query set

 7.2.1 Location query

  Command format：G123456# or where

  Reply message：<DateTime:10-11-18 18:41:04>

              http://maps.google.com/maps?q=N22.540885,E113.951341

 7.2.2 Removal and fortify

  7.2.2.1 Fortified Command format：SF or 111

   Reply message：GSM:A/B/C/D. POWER:X. Arm delay in XXS！

  7.2.2.2 Removal Command format：CF or 000

   Reply message：GSM:A/B/C/D. POWER:X. DISARMED！

 P.S.：The GSM signal 0 is no signal

 7.2.3 Rest for 10 minutes automatic fortification (default open)

  7.2.3.1 Open Command format：auto1

   Reply message：Auto arm by Standby 10 mins：ON

  7.2.3.2 Close Command format：auto0

   Reply message：Auto arm by Standby 10 mins：OFF

 7.2.4 SOS Alarm setting

   When you meet urgent case for assistance, you can press SOS button for 3 seconds and SOS will be sent out.

  SOS alarm way：1 = SMS, 2 = phone call, 3 = SMS + Call , 0 = closed

  Command format：sos3(default)

  Reply message：SOS! S1:　S2:　　SOS Alarm: SMS / Call/ SOS & Call

  Alarm content：SOS! http://maps.google.com/maps?q=22.53908%2c113.90871

           Spd:XXXkm/h 2013-07-11 21:54:33

 7.2.5 Vibration alarm setting

   Continuous vibration time for 3 seconds by default,vibration alarm time interval 5 minutes by default

  Alarm way：1 = SMS, 2 = phone call, 3 = SMS + Call , 0 = closed

  Command format：vib2,3

  Reply message：OK!　Vibration Level:X　Alarm mode: Call/SMS/Call & SMS

  Alarm content：Vibration！Please check it now! Lat: Lon:　GPS:A/V　2013-07-20 16:23

 7.2.6 Shift alarm setting(default open)

  7.2.6.1 Open Command format：move300

  Reply message：OK! Move alarm: on

  7.2.6.2 Close Connand format：move0

  Reply message：OK! Move alarm:OFF

 7.2.7 Over speed alarm(default close)

  7.2.7.1 Open Command format：spd080

Reply message：OK! Over speed alarm:　　km/h
　7.2.7.2 Close Connand format：spd0
　Reply message：OK! Over speed alarm: off
　Over speed alarm content：Over speed alarm！
　http://maps.google.com/maps?q=22.53908%2c113.90871 Spd:XXXkm/h 2013-07-11 21:54:33
　P.S.: set the range value of 050-300, speed limit 3 digits, the unit is km/hour
7.2.8 Oil outage & power outage
　7.2.8.1 cutting off the oil
　Command format：555
　Reply message：CUT OIL OK!
　7.2.8.2 opening the oil
　Command format：666
　Reply message：RESUME OIL OK!
　　When the car is stolen, the monitor platform will send the command of Oil cut-off power outages. For keeping the car safe drive the oil of the stolen car is cut off and the car can not be started.
　P.S：In order to keep the car safe, the terminal is only under GPS effective position status and make sure the car is less than 20km/h or the car is still, the oil outage and power outage can be operated .when the theft alarm is relieved, the monitor platform restore the oil & power command, the terminal recover the oil & power and you can go on driving the car.
7.2.9 Remote monitor function
　Command format：222
　Special No. send this command to the terminal SIM card, and the terminal call back to achieve the monitor function
　P.S.: Make sure to set the special No. before achieving this function
7.3 Equipment to restore the query set
　7.3.1 Recover the factory setting:
　Command format：format
　Reply message：The tracker will immediately restore the factory settings. All previous settings will be canceled.
　7.3.2 GPS re-start:
　Command format：RST
　Reply message：The tracker will immediately restart!

7.4 Commands list(pls note 123456 is the default password)

Feature name	Active command	Reply	Cancel command	reply
Begin(blank before set)	Begin123456	Begin ok		
Admin number	Admin123456+space+number	Admin ok	Noadmin123456+space+number	Noadmin ok
Sos number	Sos123456+space+number	Sos number ok	Nosos123456+space+number	Nosos number ok
Sossms	Sossms123456	Sossms ok	Nosossms123456	Nosossms ok
Soscall	Soscall123456	Soscall123456 ok	Nososcall123456	Nososcall ok
Password	Password123456+space+new	Password ok		
Sever ip&port	Adminip123456+space+ip+space+port	Adminip ok		
APN	Apn123456+space+local　apn	Apn ok		

	content			
LBS	Addjz=1	Open LBS	Addjz=0	Close LBS
GPRS	Gprs123456	Gprs ok	Nogprs123456	Nogprs ok
Time Zone	Timezone12345 6+space+8	Timezone ok	Timezone1234 56+space+-8	Timezone ok
Language	Lag1	Switched to english		
Restore factory setting	format	No reply		
Upload frequency(10-1 80s)	Upload123456 +time	Upload ok		
Sleep working mode	Sleep123456+s pace+time	Sleep time ok	Wake up by sms,call,press button	
Shock working mode	Sleep123456+s pace+shock	Sleep shock ok	Wake up by shock,sms,call, press button	
No sleep working mode	Nosleep123456	Nosleep ok		
Get location	Where or G123456#	Google map link		
One way communication	monitor	Monitor123456	In this mode,you could hear the voice around units after call it	
Shock alarm	Shock123456	Shock ok	Noshock12345 6	Noshock ok
Shock call alarm	vibcall123456	Shock call alarm ok		
Shock sms alarm	vibsms123456	Shock sms alarm ok		
Move alarm(distance: 100-5000m)	Move123456+s pace+distance	Move ok	Nomove123456	Nomove ok
Overspeed alarm(50-120k m/h)	Speed123456+ space+max speed	Speed ok	Nospeed12345 6	Nospeed ok
Set a geo-fence (stockade)	stockade+1234 56+space+long ,lat;long,lat	stockade ok	nostockade123 456	Nostockade ok
Check setting of device	Param1	Software version,date,im ei,ip&port,apn,	Param2	Admin number,sos number,move

		web platform		distance,speed, etc
Status of device	status	Bat:4,gprs:1.gsm:3,gsm:1,acc:0,oil:0,power:1,s:0		

7.5 Web platform and sever ip&port

Website	Sever IP	Port
www.lkgps.net	101.1.16.228	7700

8.App download

8.1 android version: scan below QR code

8.2 ios version: search "LKGPS" in app store

9. Faults & The solutions

Faults	Solution
Startup Fail	Check the battery and see if it is fully charged or correctly installed.
Hang up Fail	In existence of an authorized number, an unauthorized number dials up the unit. Please initialize the unit and re-set up the authorized numbers.
Monitoring failure	Please check the authorization number is set to the correct time
No GSM Signal	Please make sure SIM Card is GSM Net and installed correctly; also call display should be on; but no call transfer and PIN code off.