

TracUSA TL108

VEHICLE GPS TRACKER SOLUTION

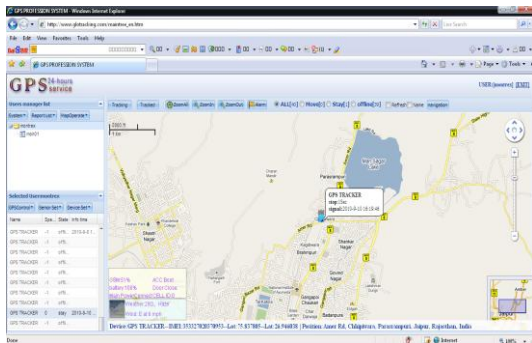


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1. Introduction

Working Based on existing GSM /GPRS network and GPS satellites, TracUSA's TL108 vehicle tracking solution is a professional system that consists of highly sensitive and reliable car GPS tracker and server/internet based tracking software. The TL108 will transmit the longitude and latitude coordinate to your cell phone by SMS(text message), but it will also transmit the coordinate, vehicle status and alarm information to the designated server by GPRS(internet connection) .This allows you to know where the vehicle is, where it has been, and what various parameters(speed etc) have been. You can also stop the vehicle by cutting off the circuit and fuel using a simple text message command. What's more, it support's hand-free phone call between the driver and call center. This solution can be widely used in the vehicle tracking, valuable assets monitoring, fleet management area.





GPS antenna



Device



GSM antenna



Cables and buttons



Microphone



Speaker

2. What's new?

- Support's hand-free phone call between driver and call center. This function is very useful for taxi, rental vehicle, ambulance and police car.
- Easy to install. Designed with inner relays, we remove the most complex part of installation.
- The server software is especially designed for tracking from a single vehicle to fleet operations, very versatile tracking software.

3. Main Features

Tracker	Software
Real-time locating and tracking on web	Server based
History replay	Based on Google map/Google earth
Hand-free phone call with call center	Support multi-users
Listen in function	Support more then 10000 trackers
Door detective	Real-time tracking
ACC detective	Set the tracking interval
SOS alarm	History replay
In or out Geo-fence alarm	SOS alarm
Speeding alarm	Speeding alarm
Power-lost alarm	GEO fence alarm
Cut off the circuit or fuel	Power-lost alarm
Customizations are welcome(your TracUSA agent will discuss options)	Customizations are welcome(your TracUSA agent will discuss options)

4. Applications

Rental vehicle monitoring and management

Monitoring kids, loved ones vehicles as to location, speed and emergency situations(SOS alarm)

Taxi/ ambulance/police car dispatch management

Fleet management

GPS tracking service

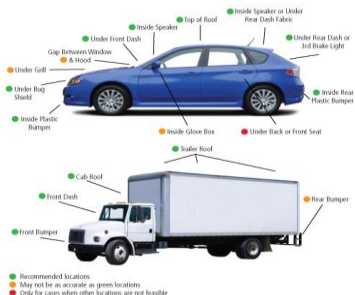
5. Specification

Content	Specs.
Dimension	96mm x 64mm x 25mm
Weight	150g
Network	GSM/GPRS
Band	900/1800Mhz 900/1800/1900Mhz 850/900/1800/1900Mhz
GPS chip	SIRF3 chip
GPS sensitivity	-159dBm
Input Voltage	9-36V DC
Cold start	42 sec.
Warm starts	38 sec.
Hot start	1 sec.
Battery	Chargeable 3.7V 870mAh battery
Operation temperature	-20°C to +70°C
Humidity	5%--95% non-condensing

6. Installation

ALL INSTALLATION SHOULD BE PERFORMED BY TracUSA's APPROVED INSTALLERS. DO NOT ALTER ANY INSTALLATION LOCATIONS, CONNECTIONS ETC. THIS WILL VOID THE LIMITED 1 YEAR WARRANTY. INFORMATION BELOW IS FOR INFORMATIONAL PORPOUSE ONLY.

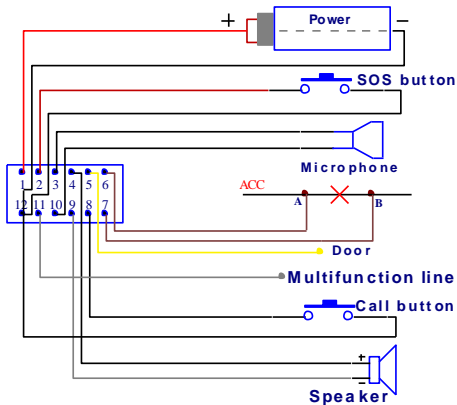
6.1 Recommend placement for GPS antenna

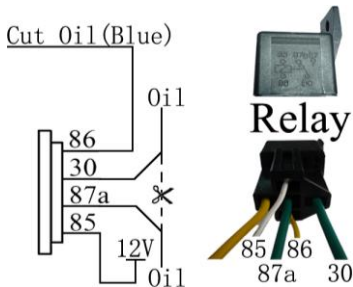


6.2. Connect the GSM antenna and GPS antenna



6.3. Connect the cables and buttons





6.4. Insert the SIM card



6.5. After inserting the SIM card into the tracker, it will be switched on automatically. GSM LED and GPS LED will be bright at the same time. That means tracker is starting. After starting the GSM LED is going to blink if the tracker has got GSM signal. The GSP LED is going to blink if the tracker has got GPS signal.

7. Set the authorized numbers

Your TracUSA representative will pre-program these numbers. This is informational only, do not attempt to change any of the preset programmed numbers. Contact

your TracUSA agent for any changes.

There are 3 SOS numbers and 1 call center number which can be set. If SOS button is pressed for 3 seconds, The SOS alarm will be sent to 3 SOS numbers by SMS(text message) and sent to the TracUSA web based server by GPRS(internet connection).

If call button is pressed for 3 seconds, the TL108 will make a call to the preset call center number. The tracker will pick up the incoming call automatically then the call center can talk with the driver using the microphone and speaker.

All of the authorized numbers do not need to be programmed, but your TracUSA agent will ask that at least one of these numbers's is provided. The tracker will accept the SMS commands from the authorized numbers only. So your TracUSA agent needs at least one cell phone number to program into the TracUSA TL108 unit.

PASSWORDS

THIS IS FOR INFORMATIONAL PORPOUSE ONLY, YOUR TracUSA AGENT WILL PRE-PROGRAM ALL OF YOUR SOS NUMBERS WHEN YOU PURCHASE AND OUR AUTHORIZED INSTALLATION SERVICE INSTALLS THE TL108 UNIT. DO NOT ATTEMPT TO CHANGE THESE SETTINGS, CONTACT TracUSA IS CHANGES ARE NEEDED.

123456 is the default password of the tracker and we will take 123456 as the password to explain all the commands in this document.

Send SMS“123456A1,phone number” to set the first SOS number.

Send SMS“123456A2,phone number” to set the second SOS number.

Send SMS“123456A3,phone number” to set the third SOS number.

Send SMS“123456A4,phone number” to set the call center number.

Note: 123456 is the default password. A must be English in capital and make sure there is no space in the command. Phone number must include the country code

E.g. send SMS “123456A1,+8613812345678” to set +8613812345678 as the first SOS number. +001 is the country code of the United States. Please do not use 00 instead of +.

8. Delete authorized numbers

Send SMS“123456A1,D” to delete the first SOS number.

Send SMS“123456A2,D” to delete the second SOS number.

Send SMS“123456A3,D” to delete the third SOS number.

Send SMS“123456A4,D” to delete the call center number.

E.g. send “123456A1,D” to delete the first SOS number.

9. Get position SMS

9.1. You can use the cell phone to call the SIM number(your TracUSA agent will provide this number at installation) that is in the tracker for 3 seconds, then hang up the call before the tracker hangs up or receives it. The tracker will reply a position SMS with latitude and longitude in it. You can put the coordinate into Google map and search for the position. The tracker will not reply the SMS location report if you do not hang up the call before the tracker hangs up or receives it. The tracker will reply position SMS to any incoming call number if you haven't set the authorized numbers yet. Once you have set the authorized number, the tracker will reply SMS position to the

authorized numbers only.

9.2. Send SMS(text message) “123456F” to the tracker by authorized number, it will reply a position SMS also.

10. Switch to listen in or talk mode

Send SMS “123456U1” to switch to the listen in mode

Send SMS “123456U0” to switch to the talk mode



The default mode is talk mode, in this mode the tracker will pick up the incoming call then the call center can talk to the driver.

In the listen in mode, the tracker will pick up the incoming call then the call center can hear the sound around the car, but the driver can not hear from the call center.

11. All of the SMS commands list

➤ name	➤ Sentence content	➤ Description
➤ Set authorized numbers	➤ 123456A1,phone number ➤ 123456A2,phone number ➤ 123456A3,phone number ➤ 123456A4,phone number	➤ A1,A2,A3 is for setting the 3 SOS numbers. ➤ A4 is for the call center number Phone number must include the country code like +8613812345678. +01 is the country code of the United States. Please do not use 00 instead of +
➤ Sample of setting authorized numbers	➤ 123456A1,+8613812345678	➤ Set +8613812345678 as the first SOS number.
➤ Delete authorized numbers	➤ 123456A1,D ➤ 123456A2,D ➤ 123456A3,D ➤ 123456A4,D	➤ A1,A2,A3 is for setting the 3 SOS numbers. ➤ A4 is for the call center number
➤ Switch to the listen in mode	➤ 123456U1	➤ The tracker will pick up the incoming call then the call center can hear the sound around the car.
➤ Switch to the talk mode	➤ 123456U0	➤ The tracker will pick up the incoming call then the call center can talk to the driver.
➤ Get position	➤ 123456F	➤ It will reply the latitude and

by SMS		longitude to the cell phone, then you can go to the Google to search the position
➤ Set continuous Tracking	➤ 123456Mx,yyyz	➤ x=1 means on, x=0 means off ➤ yyy means time interval. If z=S/M it should be <=255.if z=H, it should be<=090. It must be three numbers,030Smeans 30S ➤ Z means time unit, z=S means second, z=M means minute, z=H means hour
➤ Sample of Setting continuous tracking	➤ 123456M1,030S	The tracker will reply the position according to the time interval you set(30 seconds). If the tracker has connected to server it will send to the server by GPRS,or it will be sent to the cell phone by SMS
➤ Set the speeding alarm	➤ 123456Jx,yyy	➤ x=1 means on, x=0 means off ➤ yyy means the alarm speed, it should be<250 and must three digital, e.g. 080=80km/h. ➤
➤ Sample of setting speeding alarm	➤ 123456J1,080	➤ The tracker will send a speeding alarm to server if it is over the 80km/h

<p>➤ Set GEO fence</p>	<p>123456Ix,y,z, aabbccddeffgghhijjkkll lmmnnppppqrrssj</p> 	<p>➤ x=NO. of the GEO-fence(1-5),5 GEO fence can be set</p> <p>➤ y=1 means on, y=0 means off</p> <p>➤ z=0 means go in, z=1 means go out</p> <p>➤ e=N means the north latitude, e=S means the south latitude</p> <p>➤ j=E means the east longitude, j=W means the west longitude</p> <p>➤ aa,bb,cc,dd,kk,ll,mm,nn,qq,rr,ss must be 2 numbers.03 means 3.</p> <p>➤ fff,ppp must be 3 numbers.011 means 11</p>
<p>➤ Example of setting GEO fence</p>	<p>123456I1,1,1,511135 25N009125670E 50241115N011011173E</p> 	<p>➤ The tracker will send an alarm data if it is in/out the district.</p>
<p>➤ Set the time zone</p>	<p>➤ 123456Lxyy</p>	<p>➤ x=+ means east x=- means west</p> <p>➤ yy means the time zone, must be 2 numbers</p> <p>➤ Eastern US -05</p> <p>➤ Central US-06</p> <p>➤ Mountain US-07</p>

		➤ Western US-08
➤ Sample of setting the time zone	➤ 123456L+08	➤ Set the +08 time zone
➤ Set the low battery alarm	➤ 123456Nx,yy	➤ x=1 means on,x=0 means off yy means battery lower then yy% then send the alarm.It must be<45.it must be 2 numbers.
➤ Sample of setting the low battery alarm	➤ 123456N1,40	➤ The tracker will send a low battery alarm if the battery is lower then 40%
➤ Modify the password	➤ 123456H456789	➤ 456789 is the new password, new password must be 6 numbers
➤ cut off the ACC or fuel	➤ 123456T1	➤ The car can not be started
➤ recover ACC or fuel	➤ 123456T0	➤ The car can be started, only available for TL108
➤ Set the APN,IP and port	➤ 123456C\$\$\$\$,IP:Port	➤ \$\$\$\$ is the APN, you can get the APN from your local GSM provider.
➤ Sample of setting the APN	➤ 123456CCMNET, 119.122.101.91:7289	➤ CMNET is the APN of China mobile.
➤ Set the username and password for APN	➤ 123456O&&&&, @@@@	➤ &&&& is the username and @@@@ is the password. ➤ If the SIM card doesn't need username and password for the

		APN, you do not need to set it.
➤ Sample of setting the username and password for APN	➤ 123456Ointernet,inter net123	➤ The user name is internet and the password is internet123.
➤ Open ➤ GPRS	➤ 123456D	➤ The tracker will start to connect the server by GPRS.it will send back an SMS to confirm after it have connected the server successfully.
➤ Close GPRS	➤ 123456E	➤ The tracker will close the connection with the server.
➤ Read voltage	➤ 123456V1	➤ Read the input Voltage
➤ Get the IMEI number	➤ 123456B	➤ It will reply the IMEI number of the tracker.
➤ Check setting	➤ 123456G	➤ It will reply you its configuration

Cautions

Please comply with the instructions to extend the unit life. **Do not attempt to change any of the preset programmed settings once installed by your TracUSA representative. Please call your TracUSA representative if any changes are requested. Any customer changes will VOID all warranty's:**

1. Keep the unit dry. Any liquid, i.e. rain, moisture, may destroy or

damage the inside circuitry.

2. Don't use & store the unit in dusty places.
3. Don't put the unit in overheated or overcooled places.
4. Handle carefully. Don't vibrate or shake it violently.
5. Clean the unit with a piece of dry cloth. Don't clean in chemicals, detergent.
6. Don't paint the unit, this may cause some foreign materials left in between the parts.
7. Don't disassemble or refit the unit.
8. Please use and charger provided by manufacturer. Using other chargers will VOID all warranty's .

FCC Regulations:

●This TracUSA model TL108 AVL vehicle GPS tracking device/ mobile phone 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 TracUSA model TL108 AVL vehicle GPS tracking

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device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 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 or more 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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

- The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter

The FCC has granted an Equipment Authorization for this TracUSA Model TL108 AVL vehicle tracking device. All testing information is available by searching <http://www.fcc.gov/oet/fccid> after searching for FCC ID # **YEATL108**.

► **RF Exposure Information**

This device meets the government's requirements for exposure to radio waves.

This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

● This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.