

User Manual of GPS/GSM/GPRS Car Alarm & Tracking System

(Model No.: **GT-110ZS**)



I. Welcome to use our GPS vehicle tracker

- We keep the final explanation right on this User Manual.
- Please don't unfold or maintain the device without out permission by yourself. The incorrect operations may make any damages to the device or make you hurt, in this case, our company would not take responsibility for the loss.
- Our tracking devices may not be used to violate the privacy rights of others, or in violation of local, county, state or federal statutes, our company will not be responsible for inappropriate use of these products.
- GT-110ZS is a device that uses the Global Positioning System to determine the precise location of a vehicle, moving house, trailer or other asset which GT-110ZS is installed on and to record the position of the target at regular intervals. With Sirf Star III GPS systems, it records not only position, but also velocity, Date time, direction, status of digital output ports, etc.
- The main purpose of using GT-110ZS is not only to locate the vehicles, but also to obtain information about the status of doors, windows and ignition, etc. Or remotely monitor cutting off gas and power supply, etc.
- In order to acquire more important details, you should pay much attention to some signs and supplementary information, such as:

【note】 : It means you must pay much attention, it includes many important details which you may overlook.

【caution】 : Warning information on relative topic, you should read it carefully, for fear causing unwanted loss.

【more information】 : More relative information about a certain topic, sometimes it is another easy way for the same purpose.

And if some words are marked in red color, that indicates the words should be paid much more attention.

GT-110ZS is mainly for tracking the vehicle, anti-theft, and remotely monitoring the car through I/O ports socket of device, etc. It can be realized by using a mobile phone, or check the status of your vehicle in a Server via GPRS (<http://www.gpsinn.com>). We have different options to meet different demands as below:

1. Introduction

Software Function	
Single location	√
Tracking	√
Over-speed alarm	√
Geo-fence alarm	√
SOS alarm	√
GPRS Function	√
Power cut off alarm	√
Inner Lithium battery	√
Charged by exterior DC	√
Anti-theft Alarm	√
SOS button or Button A	√1B
Switch input	√(1 ports)
Digital input	√(2 ports)
Digital output	√(2 ports)

Key Feature

For basic version, by using GT-110ZS, user can track the vehicle via both SMS and GPRS, supervise status of door, window, and ignition of the car through I/O sockets.

- Tracking via SMS or GPRS (TCP/UDP)
- Protocol: GPSTGate protocol (optional)
- Current location report
- Tracking by time interval
- Built-in motion sensor for power saving
- SOS panic button
- Geo-fencing control
- Low battery alert
- Speeding alert
- Shake sensor alert
- Engine cut
- Individual alarm system
- Wiretapping (optional)
- GPS blind area alarm
- Alert when device is turned on

2. Main functions

◆ Tracking via SMS or GPRS (TCP/UDP), multi-channels

- 1) The monitor stuff real-time tracking.
Please call the local monitor center for locating vehicle. Tell them your password, they will tell where your vehicle is.
- 2) Send SMS commands to the device; the device will report its position. Different commands for different requests, please read commands list before you use.
- 3) Reply the current position when the second owner calls.
- 4) Real-time tracking via website. <http://www.gpsinn.com> (Username and password are needed.)
- 5) Control platform can control at least 10000 vehicles. (optional)

◆ Arm or disarm by the first owner.

Call the device via the first owner.

Arm status: Call the device and it will hang up automatically. After few seconds, the device will call the first owner back and hang up automatic as well.

Disarm status: Call the device and it will hang up automatically. The device will not call the first owner back any more.

This function won't make any cost of phone call. The device hand up automatically, it means that the caller is the first owner. The device call back automatically, it means that it is in ARM status.

◆ Monitor voice

A) The device calls the phone

Use any cell phone to send command "111111MON" to device, device will call back the cell phone.

B) The device calls the appointed phone number

Send command "111111MON **phone number**" to the device and the device will call **phone number**. The phone owner can listen to the voice around vehicle.

C) Use the cell phone to call the device

Send command "111111MON phone number1, phone number2" to device, it will reply the same SMS, use the appointed phone number to call the device.

Remarks: Please set command to the device before monitor. The third way can be remembered in the device, use the appointed phone number to call the device at any time you want.

◆ Alarm when starting the engine illegally

If the car starts in ARM status, device will send SMS to the owner of car and the monitoring center "Engine ignited!" and stop the engine automatically. Disarm the car after alarm, start the car again.

◆ Alarm when opening the door illegally

If the door opens in ARM status, device will send SMS to the owner of the car and the monitoring center "Door opened". Disarm the car after alarm, relieve the alarm.

- ◆ **Shake alarm**
- ◆ **Engine cut**
- ◆ **Alert alarms**
- ◆ **SOS panic button**
- ◆ **Low battery alert**
- ◆ **Over- Speeding alert**
- ◆ **Unique siren**
- ◆ **Move alert.**
- ◆ **Working with vehicle original alarm**
- ◆ **Protocol: GpsGate protocol (optional)**
- ◆ **Internal Polymer Lithium Ion Battery in the GT-110ZS**

3. Accessories

Accessories	Yes or No
GSM Antenna	✓
GPS Antenna	✓
Cables	✓
User Manual CD	✓
Microphone	1PC
Vehicle original alarm wire	1PC
SOS	1PC
Relay	1PC
Engine on testing wire	1PC
Shake sensor	1PC
Siren	1PC
Remote controller	2 PCS

4. Specifications

4.1 Specifications and characteristics

Feature	Characteristics
Dimension	14.5 * 8 * 3cm
Exterior Power Supply	DC 12V ~ 24V
Inner lithium battery	DC 3.8V ~ 4.2V
Exterior GSM antenna	Receive GSM signal better
Exterior GPS antenna	Receive GPS signal better
Power Consumption (Exterior voltage is 12V)	Active mode(avg.) , < 100mA; Sleep mode, < 5mA
Operating Temperature Range	-20 ~ +60 degree Celsius
Air pressure	860Kpa ~1060Kpa
Humidity	Up to 75% non-condensing
Position accuracy	<=15 meters
GSM chip	Simcom, support 4 frequency GSM 850/ 900/1800 /1900MHZ
GPS chip	Sirf-Star III (super-sensitivity and high accuracy)

4.2 Socket and Switch

Hardware	Function
A. Switch	Open/Close the unit
B. I/O Sockets	Expanding function, as below
C. GSM Antenna socket	Connect Exterior GSM Antenna
D. GPS Antenna socket	Connect Exterior GPS Antenna
E. SIM Card Holder	Hold a SIM card
F. Yellow plastic Pin	Press it to pop up the SIM Card Holder
G. Siren	It will sound when the vehicle alarm
H. Controllers	Remote control the car
I. Shake sensor	Car owner can get an SMS when somebody shakes the car in arm status
J. hand-holder	Communicates with the person.

5. Installation

Installation Guide

♣ Step1: Insert a SIM card

(1) Using a needle to press yellow plastic kit (in the hole), then pull out the holder and put SIM card on, with the chip module up.



【note】 :Please make sure SIM card can communicate with others via SMS and phone call.

♣ Step2: Connect GSM Antenna & GPS Antenna to device

(1) Fasten the connection by turning the metal end of the antenna, until the connection is very firm.

【note】 :It's better to put GPS antenna top to the open air to receive more GPS signal, or it should not be covered or shielded by any electromagnetic object.

【more information】 :GT-110ZS relies on GSM and GPS system for location and communication.

- GSM is the abbreviation of Global System for Mobile Communication. The SIM card in the device should support GSM network.
- GPRS is General Packet Radio Service, is a service technique based on GSM.
- GPS is the abbreviation of Global Positioning System. There are 24 positioning satellites around the earth sending GPS signal to tGT-110ZS straightly. In order to receive signal, the top of GPS antenna cannot be shielded or covered by any electromagnetic object. The user can put the top of GPS antenna to the open air for better GPS signal. If GT-110ZS is in a shielding environment temporarily, please don't worry, because once GT-110ZS leaves the shielding environment, it will regain GPS signal. Further, the product can provide accurate position information under dynamic condition; the precision will be 10 ~ 15 meters.

♣ Step 3: Install GT-110ZS in your car and connect to the car power.

Insert the power cable to the I/O socket tightly

【more information】 : With inbuilt lithium battery, GT-110ZS can still work even if power off. Once GT-110ZS connects to the car power, lithium battery will be charged until it's full.

【caution】: After you have completed all the procedures, please check that the wiring connections are firm and reliable, and the joints are wrapped with insulating tape tightly.

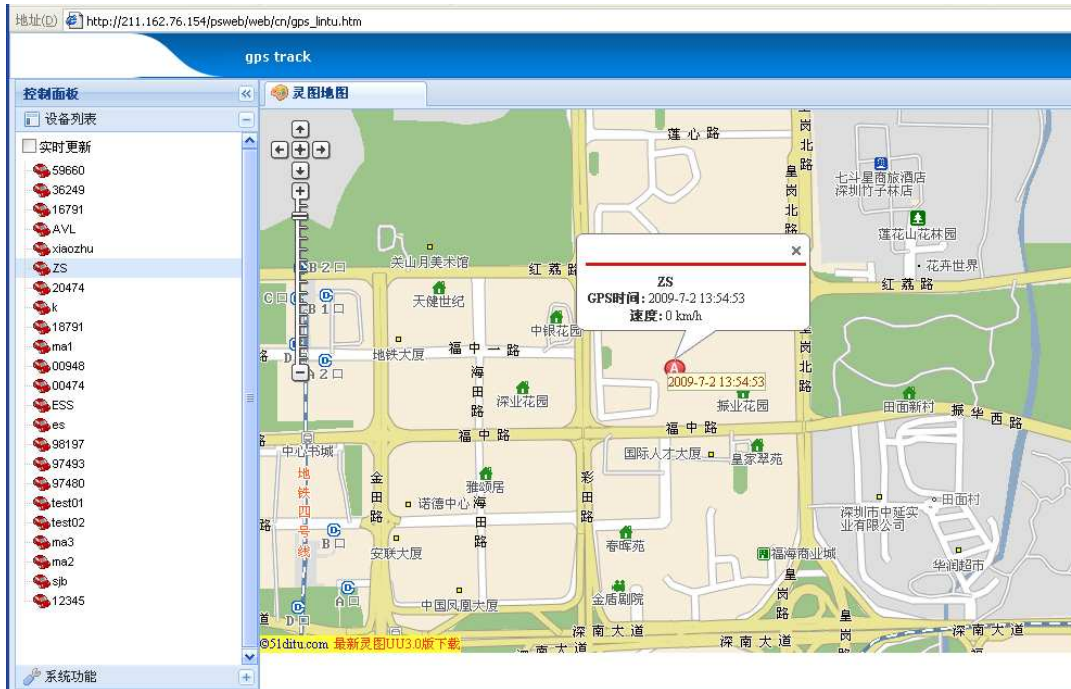
6. SMS commands

#	Commands	Explanation	Reply	Remarks
1	111111*10 T1*20 T2*	To set the car owner T1, T2: cell phone number or telephone number.	111111*10T1*20T2*	The 1 st phone number is the 1 st owner, it can check the position, receive Alarm, and arm/disarm when the owner call the device. The 2 nd phone number is the 2 nd owner; it can receive alarm from the device.
2	111111PSW&&&&&&	Setting the new password.	111111PSW new password	Default password is: 111111, we strongly recommend you to change the password when you start to use device. Please remember you new password.
3	111111ARM	ARM	ARM successfully with latitude & longitude	
4	111111STP	Stop the car by the owner	Car stopped, with latitude & longitude	
5	111111DSM	Disarm	DISARM successfully with latitude & longitude	
6	111111CHK	Ask for the position	the current status with latitude & longitude	
	W111111,100	Request the position with a Google link	A Google link with longitude & latitude	
7	111111RES	Relieve after stop the car	Cancel successfully	The owner can cancel the alarm and relieve after stop the car (it can relieve the SOS alarm. If the car is stopped by the center software, the command will not be executed.)
8	111111MONphone number	Monitoring the voice around the car		Device will call you back on the appointed phone number. e.g. if password is 111111, the command 111111MON13800138000 will cause the system to call you back on 13800138000 and activate the secret microphone so that you can listen to conversation of people inside the vehicle
9	111111STP(X)	If speed reaches the preset value, car will stop automatically		X: speed that you want to set.
10	111111OVF:X			Default 200Km

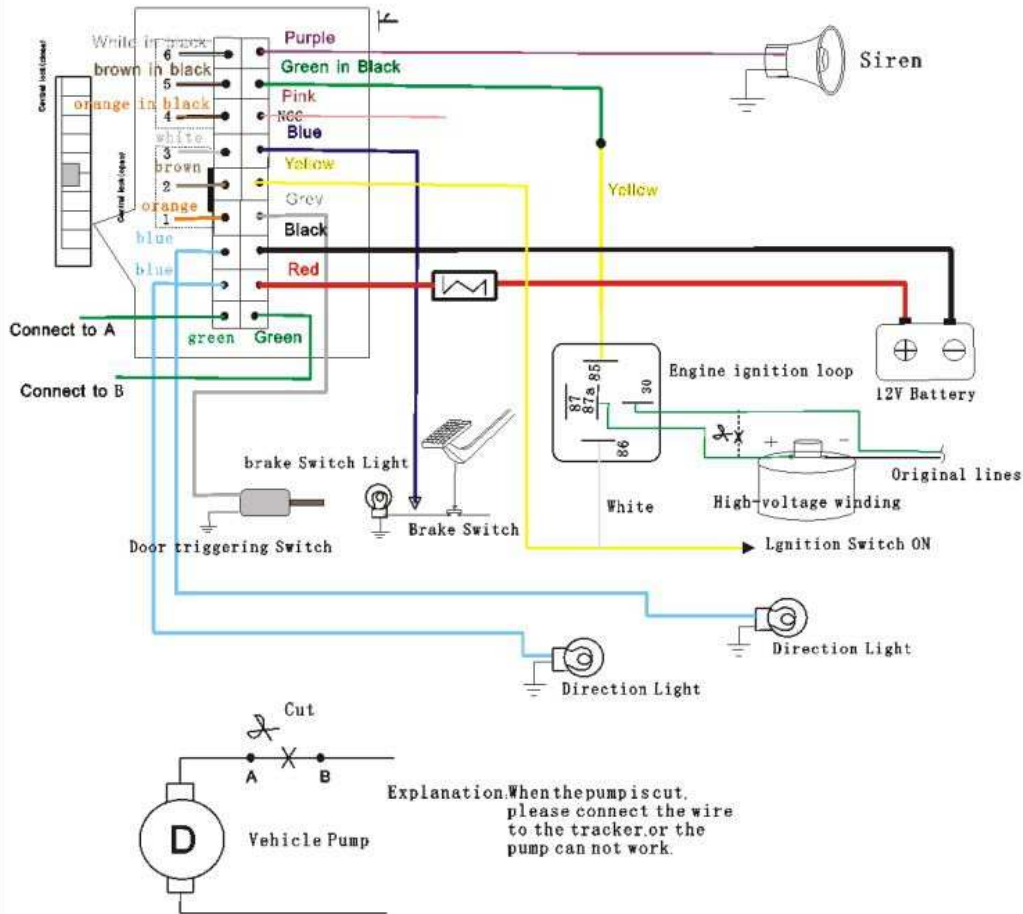
<http://www.gpsinn.com>

username: demo

Password: demo



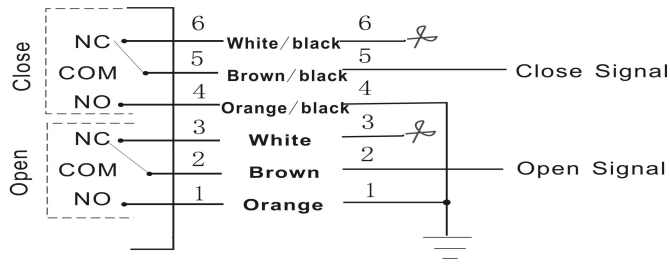
7. Attachment



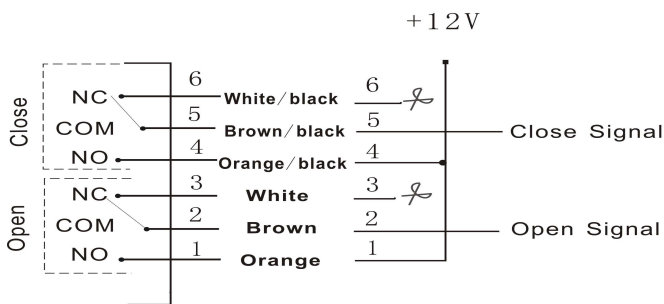
Remarks:

1. Engine wire is the green in black, easy to make mix up A/B wire (green), please pay attention to the plug hold connection.
2. If no direction between A/B green wires.
3. The white wire in the Circuit is +12V, Yellow is -12V, do not make them opposite.

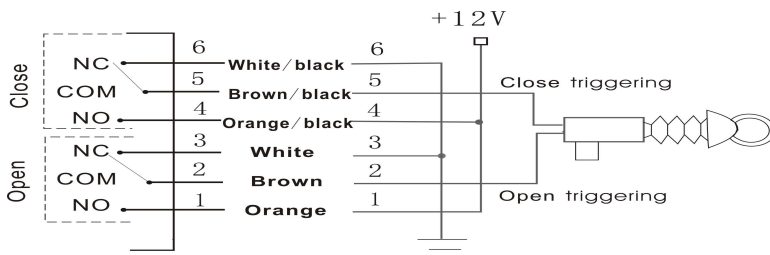
Connection with Central Lock



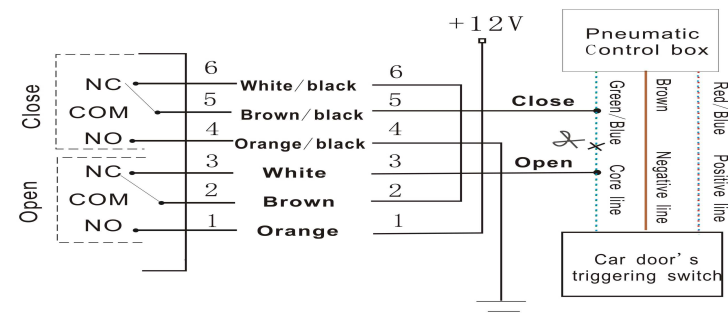
Negative Triggering



Positive Triggering



Positive/Negative Triggering



Pneumatic Lock Triggering