Product description

1. Circuit Descriptions of GPS Vehicle Tracker (For TK110)

- (1) MCU chip, real-time reads the latitude and longitude output of GPS module
- (2) MCU chip, real-time listen and read the commands output of the SIM340DZ.
- (3) Through the transistor B772, MCU controls external relay to cut off / restore the fuel supply loop
- (4) Once MCU detects the signal from engine ignition switch, it will send out alert message.
- (5) Once MCU detects the signal of cut-off power supply lines, it will send out alert message.
- (6) Once MCU detects the voltage output signal from vibration sensor, it will send out alert message.
- (7) Once MCU detects the signal of the door switch, it will send out alert message.
- (8) Once the SOS button is pressed down, MCU will detect the signal & send out alert message for help.
- (9) After receipt monitoring command, MCU connects monitoring circuit to carry out monitoring.
- (10) The MCU Frequency is 3.6864MHZ

2. Main function of device

- (1) Check the car's location, speed & direction via SMS;
- (2) Cut off the car power/fuel supply by SMS, to stop the car;
- (3) Movement Alert:

Once the car is parked, you can send the SMS instruction to put the system in movement alert status. Then, if the car moves, the system will send SMS to inform you. It is a very useful function, which enables the tracker to work as the car alarm too;

(4) Geo-fence Alert:

User can set a certain zone by SMS, once the vehicle runs over the fence, the alarm will send SMS to inform you;

(5) Over-speed Alert.

User can set a certain speed limitation by SMS. Once the vehicle is running over this speed, the system will send SMS to inform you;

- (6) Built-in rechargeable backup battery. If the system's main power supply is cut off or low enough, system will send SMS to warn you;
- (7) Two kinds of location information; user could locate the precise location by GPS. If there is no GPS signal, user could also locate the car by CPS (cellular positioning system - located by GSM network)

- (8) Monitor the voice around the car via telephone;
- (9) Anti-robbery switch, send out SMS for help in case of hijack; (optional function)
- (10) Track the car by SMS or by online mapping (The software is optional).

3. Specifications

Size of the main unit:	7.5*5.4*2.5 (CM)
Weight of the main unit:	0.1KG
Working temperature:	-20 ~ 65°C
Humidity:	0 ~ 95%
Radio technology:	GSM/GPRS 850/900/1800/1900
Frequency:	GSM 850: 824.2MHz—848.8MHz
	GSM900:880.2MHz—914.8MHz
	GSM1800:1710.2MHz—1784.8MHz
	GSM1900:1850.2MHz—1909.8MHz
Modulation type:	GMSK
RF Power:	GSM850/900: 32dBm±2
	GSM1800/1900: 29dBm±2
GPS chip:	Latest SiRF-Star III chipset
GPS Receive frequency	1575±5MHz
GSM antenna and Gain	External Patch Antenna, 3.5dBi Gain,SMA-B connector
GPS antenna's Gain	Antenna Gain: -3dBic at 10°; 3.5dBic at zenith;
	Amplified Gain: 27dB typ.
Working voltage:	12VDC/ or 24 VDC for Battery
Power Consumption:	Working current: ≤250mA;
	Static current: ≤60mA;
	Peak current: 300mA;
Internal Backup battery	Rechargeable 3.7V 750mAh Li-ion battery