

尺寸：126*80mm 材质：105克铜版纸 风琴折

1.Start Guide

1.1 Packaging

- GPS tracker
- Power cable
- Audio cable
- SOS cable
- MIC
- Relay
- User manual

1.2 Main Functions

- Real-time GPS+AGPS tracking
- Track by time interval or distance
- Remotely fuel/power cut-off
- Listen-in
- TTL
- Instant alerts for vibration, overspeed, etc.
- External power supply cut-off alarm
- Two-way talk
- Door status detection
- Multiple analog & digital I/Os
- Battery charging protection

1.3 Specifications

Frequency	GSM 850/900/1800/1900MHz
GPRS	Class 12, TCP/IP
Operating Voltage	9-36VDC / <300mA
Location Time	Cold Start: < 35s
	Hot Start: < 2s
Storage	32Mb~32Mb
Battery	450mAh
Location Accuracy	<10 meters
Operating Temperature	-20°C ~ +70°C
Dimension	80.9 (L) ×55.8 (W) ×23.4 (H) mm
Weight	95g

2.My Device

2.1 Appearance

5.9 Restore oil/electricity

When alarm is all-clear, you can send restore oil/electricity command by platform, APP or SMS and restore vehicle power. (See command list 7-16)

5.10 Restart device

If GPRS is abnormal (device is offline), user can send SMS command **RESET** to restart the device. Device will reboot after 20 seconds after receiving the command.(See command list 7-17)

5.11 Door detection

The device is able to detect door status. It uploads car status to platform and APP timely. Negative triggering is default. When car door's status is negative triggering, there is no need to set. Instead, if car door status is positive triggering, the triggering way has to be modified. (Command:**DOOR,1#**). See 3.2 diagram-1 for wiring way. (See command list 7-18)

Notice

Negative triggering (default): when door is open, signal level of door is 0V; when door is closed, signal level of door is power voltage. Positive triggering: when door is open, signal level of door is power voltage; when door is closed, signal level of door is 0V.

5.12 Analog signal

The device can measure car battery's voltage and upload it to platform/APP in fixed time based on your needs. Purple line (ADC) of device extended port can receive analog signal, like voltage of external device, analog temperature sensor and fuel sensor. Voltage range of analog input is 0~30Vdc. See 3.2 diagram for wiring way. (See command list 7-19)

2.2 LED indicators

GPS LED Indicator - Blue		
	0.1s ON & 0.1s OFF	Searching GPS signal
	Steady on	GPS is fixed
	OFF	Sleep or not work

GSM LED Indicator - Green		
	0.1s ON & 0.1s OFF	GSM initializing
	0.1s ON & 2s OFF	Receive GSM signal normally
	Steady on	Connected to GPRS network
	OFF	No GSM signal

Power Status - Red		
	0.1s ON & 0.1s OFF	Low battery
	2s ON & 2s OFF	Full charged
	0.1s ON & 2s OFF	Normal operating
	Steady on	Device is charging
	OFF	Low battery/Power off

Flash in a loop Device is in defense status

3. Wire Connection

3.1 Wire Definition

14	GND	12	ACC	10	SOS+	8	OUT2+	6	IN1	4	TX	2	GND
15	PW+	13	ACC	11	SOS+	9	Relay	OUT1-	5	RX	5V_OUT		


MIC + SPK

Line	Color	Description	Definition
1		MIC + SPK	3.5mm
2		GND	Ground
3		5VDC_OUT	Controllable
4		TX	Transmit data
5		RX	Receive data
6	Green	IN1	Configurable positive input/negative input
7	White & yellow	OUT 1-	Negative output
8	White & red	OUT2+	Controllable positive output (power voltage), ≥500mA current
9	Yellow	Relay	Fuel/Power cutoff
10	Black	SOS-	SOS (Negative)
11	White	SOS+	SOS (Positive)
12	Purple	ADC	Detect 0.3-30V voltage
13	Orange	ACC	ACC
14	Black	GND	Ground
15	Red	PW+	Power: 9-36V

3.2 Wiring diagram

Notice: Purple line (ADC) of terminal connects to analog signals line, like voltage of external device, analog temperature sensor, fuel sensor. Voltage detected by analog signal ranges from 0~30Vdc.

Optional

Wiring Instruction

- The standard power supply ranges from 9V to 36VDC. Please use the power cord manufactured by the original factory. Red line means positive side while black line means negative side. During installation, negative side should connect to the ground, do not connect with other ground wires at the same time.
- ACC line (orange) connects to vehicle's ACC switch, detecting ignition on and off.
- Device's oil and electricity control line (yellow) connects to relay's 86. (thin yellow line of relay socket)

Relay wiring instruction

Relay wiring way of oil pump open circuit: On each end of the wire is thin white line (85) and thin yellow line (86). Thin white line (85) connects to the positive side of battery (12V) while thin yellow line (86) connects to the device relay control. There is an oil pump in the vehicle. Cut off the positive line. The positive side of oil pump connects to the close-end of relay.(Thick green line 87a), and the other side connects to relay's common(green thick 30).

Notice

12V relay is standard. The device is suitable for vehicles with 12V battery. If the vehicle has 24V battery, then 24V relay is needed.

- To monitor analog signals, the purple line (ADC) of extended port should be connected to the analog line.
- To check status of car door, orange line (IN1) should be connected to where between the door light and door switch (See the diagram).
- To find car remotely, please connect the yellow line (OUT1) of extended port to external relay.

3.3 Device Installation

Note :

The device should face up to the sky. Metal thermal barrier or heating layer of the windshield affects the signal. Please change installation places to receive better signal.

4. Operation of device

Power on/ Power off

Power on: Once you insert a valid SIM card and connect all the wires, turn on the device. Power LED will flash first. During signal searching process, GSM LED and GPS(Blue) LED will flash. Once Blue GPS LED keeps steadily ON, it means the device has been located and it starts to work.
Power off: Just toggle off the power switch.

Notice:

When device is connected with external power, please turn on the battery switch. The battery will then connect with the device circuits and its built-in battery will be charged. If battery is OFF, battery can't be charged. The device will be power off if no external power supply.

5. Main Functions

5.1 SOS

In emergent case, press SOS for 3 seconds to activate SOS alarm. Then the device will send SOS SMS to preset SOS numbers and then dial the numbers in a loop for 3 times until the call is picked up. Alarm message will also send to platform. (See command list 7-9)

5.2 Power cut-off alarm

When the electricity supply of device is cut off, it will activate cut-off alarm.

5.3 Low battery alarm

When battery is low, the device will activate low battery alarm. Device will send alert through SMS and to the platform.

5.4 Vibration alarm (default OFF)

When vehicle vibrates for several times, the vibration alarm will be triggered. If ignition keeps OFF for 3 minutes (ACC OFF), the device will send vibration alarm message immediately.(See command list 7-13)

5.5 Voice monitoring

Notice

- When MIC is connected while speaker is not, use pre-set SOS number to dial the device, after 10 seconds, device enters into monitoring mode automatically. The caller can hear the voice inside the vehicle.
- Pre-set SOS number is necessary.
Non-SOS number cannot activate this function.
- SIM card of device must have caller ID service.

5.6 Two-way communication

To activate this function, ensure that both MIC and speaker are connected well.
Use pre-set SOS number to dial the device, after 10 seconds, device enters into two-way talk mode.

5.7 Displacement alarm(default OFF)

Device will send movement alarm when vehicle moves out the pre-set distance (when ACC is off and GPS is fixed).

5.8 Oil/Electricity cut-off

When vehicle is stolen, oil/electricity cut-off command can be sent by platform, APP or SMS.

Notice

- Make sure ACC is correctly connected.
- When ACC is OFF, command will be executed immediately.
- When ACC is ON, but GPS is not fixed, command will be postponed.
- When ACC is ON, GPS is fixed, command will be executed when vehicle speed is less than 20km/h.

If you want to cut off/restore oil by SMS command, you have to set a center number firstly. Only the center number can send the cut off/restore oil command to the device. (See command list 7-15)

Notice

- Only the SOS number can be used to set center number.
- Only the SOS number can be used to delete center number.
- There is only one center number can be set.

VEHICLE GPS TRACKER

User Manual (Version 1.6)

This user manual has been specially designed to guide you through the functions and features of your GPS vehicle tracker.