

# **GPS Vehicle (GPS+GSM+GPRS)**

## **TR21 User Manual**

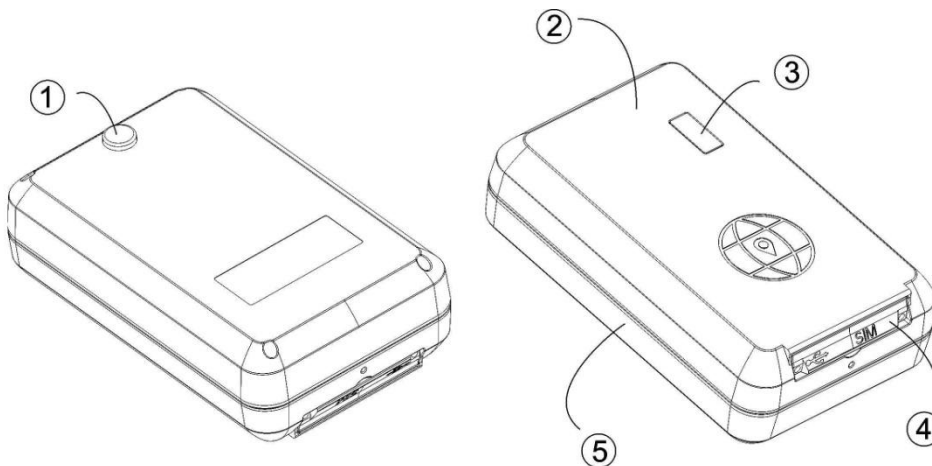


Please read the manual carefully before use the GPS Tracker so that you can install the device correctly and activate it quickly on the internet. The outlook and true color are subject to the actual product.

## 1. Technical parameter

- 1) .GSM: 850/900/1800/1900MHz
- 2) .GPRS: Class12,TCP/IP
- 3) . Working Voltage: 3.90V DC
- 4) . Working current:  $\approx 35\text{mA}$  (12vDC)
- 5) . Working current:  $\approx 4\text{mA}$  (24vDC)
- 6) .GPS locating time: Cold start $\approx 38\text{s}$  (Open sky) Warm start  $\approx 32\text{s}$   
Hot start $\approx 2\text{s}$  (Open sky)
- 7) .GPS Precision: 10m (2D RM)
- 8) . Working temperature:  $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$
- 9) . Working humidity: 20%~80%RH
- 10) . Measurement: 87 (L)  $\times$  54 (W)  $\times$  26 (H) mm

## 2. Out look



①Button ②Top Shell ③lens ④SIM card holder ⑤Bottom Shell

## 3. Device status indicators

### 3.1 blue LED (working status indicator)

After the device is turned on, the LED lights flashing (0.3 sec /3 sec).

### 3.2 red LED (charge status indicator)

This LED light is not bright, the charge of this LED flashing (0.3 sec /3 sec), full of electricity, the LED light is always bright.

All LEDs will turn off after 3 minutes. When there is a new call, the LEDs will relight and turn off 3 minutes later.

## 4. GSM Installation

### 4.1 Preparation for the installation

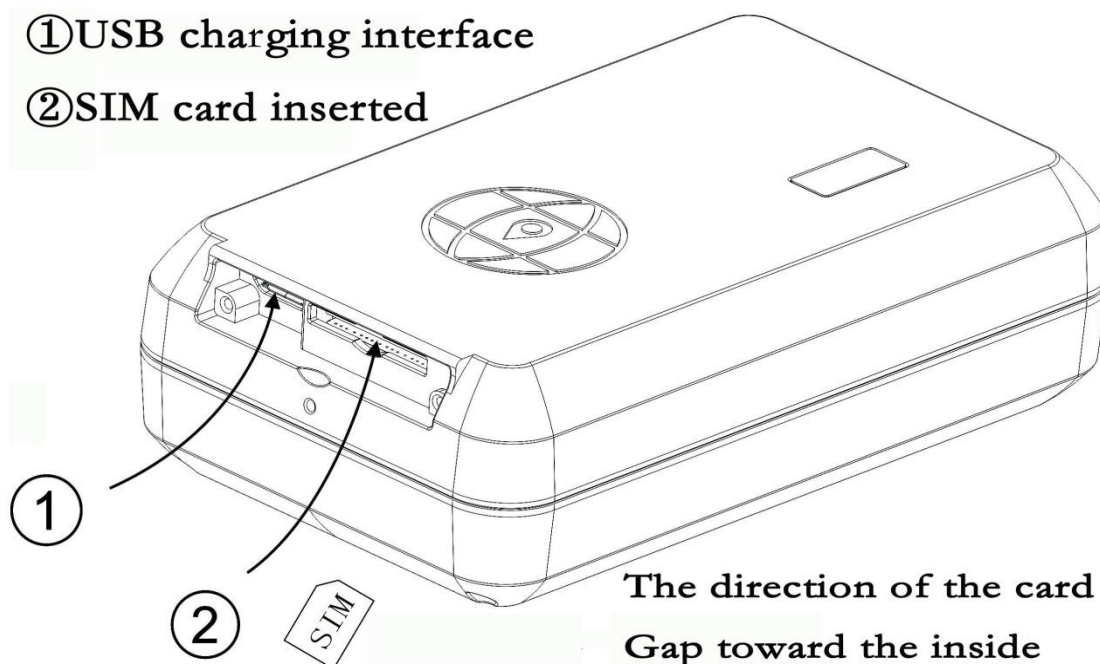
**4.1.1 Product Check.** Open the packing box and check the device's model and accessories. If the model is wrong or the accessories not complete, please contact the dealer.

**4.1.2 Choose SIM card.** Please insert a SIM card to the device. Please take dealer's advice as reference. The GSM card must be with GSM function and enough deposit.

**4.1.3 GSM installation,** open the terminal SIM interface that end of the small cap, hand holding a SIM card, the chip side down, there is a gap at the end of the inside, to promote the card slot inside you can. Need to be removed when the top pressing with a finger SIM Carol card slot on the outside, you can pop. (as follow)

① USB charging interface

② SIM card inserted



Note: don't install backwards the terminal GSM card

If your GSM card need input PIN when power on, please refer your phone's user manual and cancel it.

## 5. Terminal operation status

**5.1 boot:** terminal insert SIM card, while the anti tamper switch to play up, automatically boot. Blue light has a regular flashing (0.3 sec /3 sec), it means that the equipment is working properly.

**5.2 operating modes:** terminal has four kinds: 1. Normal mode; 2. Intelligent sleep mode; 3. Deep sleep mode; 4. Regular boot mode; (details please refer to the following instructions that sleep instruction)

Terminal default mode of operation is a smart sleep mode, that is, after the end of 3 minutes after the shutdown GPS, GPRS, in the standby power of the state, when the sensor detects movement, re open GPS, GPRS, reported the location information.

5.3 shut down: Unplug the SIM card, the terminal off after power off.

## 6 .functional characteristics

6.1 platform instant position display, at any time to view the current and historical location information.

6.2 platform can be set up electronic fence alarm,if outside zone ,receive alarms.

6.3 without external power, free installation, just plug in a hidden corner, or sucking on an iron plate.

6.4 platform GPRS remote instructions (set the administrator, modify the mode of operation, etc.), simple and convenient.

6.5 equipped with anti demolition, anti off switch, equipment was taken to move or fall, or timely reporting alarm information.

6.6 battery power is too low, timely report to the state information.

6.7 built in 3D accelerator, distinguished between motion and stationary state, intelligent power saving.

6.8 can be at any time to check the latitude and longitude of the text message.

6.9 6800MA large battery power supply, the use of more long-term.

6.10 using AGPS program, positioning time is more efficient.

## 7 .user instructions

1)CENTER		
Text command	Parameter	Sample
CENTER Add	CENTER,A,number#	1)CENTER,A,13500135000#
CENTER Del	CENTER,D#	1)CENTER,D#
Command Description	1) center number can be used to send short message instructions to restore the factory settings 2) the central number is also the function of SMS and telephone reception. 3) increase the number of central numbers with A, CETNER, delete with CENTER, D	
Command Feedback	Successful Setting: SET CENTER TEL OK!	

2)APN		
Text command	Parameter	Sample
APN Parameter	APN, network name [, account number, password]	1: APN,intenet,123,123# 2: APN,cmnet#

	Account password is optional	
Command Description	<p>APN instructions for the configuration of different countries in the operator's Internet access parameters, the user to query the APN parameters of the use of the card.</p> <p>Such as: APN need to account password, the reference example 1, does not require the account password is the reference example 2</p> <p>Note: APN has been built in many countries, if you can access the Internet does not need to set</p>	
Command Feedback	Successful Setting: SET APN OK!	

3)SLEEEP		
Text command	Parameter	Sample
SLEEP Parameter	SLEEP,mode#	<p>0#, SLEEP (normal working mode)</p> <p>SLEEP, 1# (Intelligent sleep mode)</p> <p>2#, SLEEP (deep sleep mode)</p>
Command Description	<p>1 device factory default mode 1, intelligent sleep mode.</p> <p>2 intelligent sleep mode, the device will be closed for 3 minutes to close the GPRS, GPS, in an offline state of sleep, the movement can wake up, re connect the platform, open GPS.</p> <p>3. Deep sleep mode, equipment in completely dormant state, is not affected by the movement and stillness, only to send instructions WAKE# or center number call to wake up, every time the wake-up time only lasted 3 minutes, 3 minutes after equipment will again to enter the deep sleep state.</p> <p>4 normal mode, the device will not enter the dormant state, GPRS and GPS has been effective, unless it is in the basement and other places where no GPS signal, will let GPS sleep, GPRS has maintained a connection state.</p>	
Command Feedback	Successful Setting: Set OK, the model is: intelligent sleep mode!	

4)POWER		
Text command	parameter	Sample

POWER	POWER,time#	10#,POWER automatically boot every 10 hours 102#, POWER every 2 days to start once
Command Description	<p>1) POWER instructions are used to set the device timer switch function.</p> <p>2) after the instruction is sent, the three working modes are closed, and the timing switch mode is executed.</p> <p>3) from time to time to open the shutdown, the need to remove the switch is pressed, to perform the shutdown timer start function</p> <p>4) setting range: 1~24 hours, between 102~107, 102 said 2 days</p> <p>5) the default device is not this mode, the default is 1#, SLEEP mode.</p>	
Command Feedback	Successful Setting: Set POWER OK, Time interval: 10 hours!	

5)WAKE		
Text command	parameter	Sample
WEAK	WEAK#	WEAK#
Command Description	<p>1) WAKE commands to wake up the intelligent sleep mode and the deep sleep mode.</p> <p>2) this instruction is not valid for normal mode and timing mode</p> <p>3) when the device is not in a dormant state, the instruction is not valid.</p>	
Command Feedback	Successful Setting: Set WEAK OK!	

6)POFF		
Text command	parameter	Sample
POFF Parameter	POFF,minute#	POFF,3# 3 minutes equipment shutdown
Command Description	<p>1) POFF instruction can only play a role in the timing of the POWER boot mode.</p> <p>2) the default time is 3 minutes</p> <p>3) timed shutdown time tamper switch bounce and charge state is invalid in equipment.</p> <p>4) the time setting range: 3~10 minutes</p>	
Command Feedback	Successful Setting: Set OFF OK!	

7)SERVER		
Text command	parameter	Sample
SERVER	SERVER,	1)SERVER,83466207,b.gps18.com,7700#

	password, domain name /IP, port #	2)SERVER,83466207,121.14.139.39,8080#
Command Description	This feature is needed to modify the server IP/ domain name and port when used. Port range: 10~65535 Password: 83466207; (if there is a change, to find suppliers to confirm) Domain name: can be a domain name, or IP address.	
Command Feedback	Successful Setting: Set IP OK! IP& port: 121.14.139.39:8080	

8)GMT		
Text command	parameter	Sample
GMT Parameter	GMT, location, time zone, half time]#	1) GMT,E,8# 2) GMT,E,6,30#
Command Description	The default time zone on the terminal is the Beijing time zone E8, if you need to change the time zone, you need to send the above instructions. Scope: E/W, 0~12 Directions: where E represents the eastern time zone, W represents the Western time zone. If you need to set a half time zone is in the way of example 2, otherwise, by example 1	
Command Feedback	Successful Setting: Set GMT OK!	

9)VIBRATION		
Text command	parameter	Sample
VIBRATION Parameter	VIBRATION, The alarm level [alarm mode] #	1) VIBRATION,2,3# 2) VIBRATION,2#
Command Description	This directive is used to set the vibration alarm, the alarm level is 0~5, of which 0 for the closure of the alarm, 1 to 5, the more lower the more sensitive. Alarm mode: 1, telephone; 2, SMS, 3, telephone and short message; the default is 1 phone; alarm mode can not choose, such as example 2; must set the center number to receive SMS and telephone!	
Command Feedback	Successful Setting: Set VIBRATION OK!	

10)FCALM		
Text command	parameter	Sample
FCALM	FCALM,way#	FCALM,1# Telephone alarm
Command Description	1) this instruction in order to set up the alarm after the alarm mode.	

	1) 2 telephone alarm; 2 short message alarm, 3 telephone + short message alarm 3) the default off state, that is, to prevent the alarm reporting platform, no phone calls and text messages
Command Feedback	Successful Setting: Set FCALM OK!

11)TIMER		
Text command	parameter	Sample
TIME Parameter	TIMER,Upload time	TIMER,30#
Command Description	1 time range: 10~60 seconds; 2 the default is 10 seconds to upload! 3 timing boot and deep sleep mode has been dormant, upload interval is invalid.	
Command Feedback	Successful Setting: Set TIMER OK!	

12)LANG		
Text command	parameter	Sample
parameter	LANG,1# ,LANG,0#	LANG,1# Set Chinese LANG, 2#Set English
Command Description	When the text message to view the address, set to Chinese is returned to the Chinese address, English is returned to the URL position link;	
Command Feedback	Successful Setting: Set LANG : EN	

13)FACTORY		
Text command	parameter	Sample
FACTORY	FACTORY#	FACTORY#
Command Description	This instruction is used to restore the factory settings. Restore factory settings for all users to add and modify the content will be restored!	
Command Feedback	Successful Setting: Set FACTORY OK! to restore the factory settings!	

14)RESET		
Text command	parameter	Sample
RESET	RESET#	RESET#
Command Description	This instruction is used to restart the device	
Command Feedback	Successful Setting: RESET OK!	

15)PARAM		
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Text command	parameter	Sample
PARAM	PARAM#	PARAM#
Command Description	This instruction is used to query the parameters and default parameters set by the device.	
Command Feedback	IMEI:351190012535936 APN:cmnet IP:www.gps18.com:7700 CENTER:13800138000 UPLOADING TIME:10S LANGUAGE: Chinese GMT: time zone (E/W8)	device IMEI operator GPRS node server IP and port center number moving uploading interval language(CN/EN) time zone(E/W 0~12)

16)STATUS		
Text command	parameter	Sample
STATUS	STATUS#	STATUS#
Command Description	The command is designed for checking the device's working status.	
Command Feedback	BATTERY:100% GSM Signal: HIGH GPS:FIXED GPS Signal: HIGH Voltage: 4.18	-- Battery status (SOC) --GSM Signal strength --GPS Location condition --GPS Signal strength --Battery voltage (V)

17) 123		
Text command	parameter	Sample
123	123	123
Command Description	This command is used to query the current location description	
Command Feedback	Set to Chinese, the Chinese address is returned to the description, if the language is English, to return to the URL position link: Shenzhen, Xinzhou, Guangdong eleven street, No. 26	

18)WHERE		
Text command	parameter	Sample
WHERE	WHERE	WHERE
Command Description	This directive is used to check the current latitude and longitude, time and other information of the equipment.	
Command Feedback	Successful Setting: Equipment current longitude, time, speed, IMEI number	

19)URL		
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Text command	parameter	Sample
URL	URL#	URL#
Command Description	This directive is used to link the GOOGLE map of the query device	
Command Feedback	<Datetime:12-07-05 13:21:30> http://maps.google.com/maps?q=N22.54.88,E113.95265	

20)VERSION		
Text command	parameter	Sample
VERSION	VERSION#	VERSION#
Command Description	This directive is used to query the version information of the current device	
Command Feedback	VERSION:YSJ.XXX.XXX.V01 IMEI:35868800000158	

21)FEE		
Text command	parameter	Sample
FEE parameter	FEE,Query number,contents#	FEE,10010,102# Query mode of China Unicom FEE,10086,101# China Mobile query mode
Command Description	This instruction is used to query the current calls status of the device SIM card Query number: SIM is the operator of the query number Content: the contents of the query, such as mobile CXYE or 101 is the balance of the query	
Command Feedback	Return the call query results returned by the operator	

**Note: the comma in the instruction must be English comma, not Chinese comma, the middle can also be separated by #, instead of a comma**

## 8 .charging reminder

Equipment using the built-in charging head and line charging, can not be used indiscriminately charging line charging, because we have fast charging and built-in charging, fast charging charging current up to 1a, with other different specifications of charging head and line, may cause damage to the equipment.

## 9. anti tamper alarm

9.1 terminal adsorption on a piece of iron (tamper can not switch is in a self-locking state), when a terminal is picked up, the tamper switch bounce, to the platform reporting alarm information.

9.2 at the same time will send a message to the center number or call (the premise is to open a text message or telephone alarm function).

## 10. GPS sleep and wake up

When the terminal is in the intelligent sleep mode, still 3 minutes will enter the sleep, by the sensor control, if the sensor is detected in the motion state, it will automatically wake up GPS.

When the terminal is in a deep sleep state, GPS has been in a state of sleep, not affected by the sensor, only the center number dialed terminal number or send text messages instructions, will wake up 3 minutes.

When the monitor function is turned on, the central number of the call will not wake up the device, but directly into the listening state, then if you need to wake up the device, can only send text messages WAKE#

## 11. Trouble shooting

**9.1** The device is not online or offline on the web platform

**9.1.1** First, please check whether the three indicator is normal or not ,if there's no condition for observe, Please use the cell phone to call the terminal SIM card number, according to the reminding tone to determine the status of the terminal.

- If not connected, Indicating that the terminal temporarily can not connect or the GSM signals cannot reach your location

Terminal area may not be covered by the GSM signal or weak signal in the basement and other places, please drive to the open sky.

- If not connected, suggesting that the Terminal is insufficient Or has been shut down
- If reminding the device SIM card is out of deposit, please recharge it. If you can connect to the device when calling, and hear a beep. Du, du. noise the SIM card is installed correctly and has deposited and please check with your operator for GPRS function. You also can check by searching the internet on your mobile phone. If you can not open website ,the GPRS function has not open .please contact with the operator to open

- If the terminal is not connected and reminding shutdown

At this moment must recall vehicles to check the working status of the terminal, the processing steps are as follows:

a) check whether the two indicator lights flashing or long bright, if not bright, please check the end of the terminal and the car is plugged in

Please pull down the device and send back to your agency for maintain.

b) If the red power indicator is long light, the blue GSM indicator is not long light ,please check the SIM card for whether it is installed correctly. If installed ok ,please change another SIM card for use

**9.1.2** Please check the offline area. it's individual drops or all drops ,in order to judge if the network problem of operators.

**9.2** When GPS signal receiving abnormal, please drive to a open place to locate. In general locating time need 1 to 2 minutes for the first time, If long time no locating, Please check if the device location follows up with the requirements. Normal place is no metal block installed

**9.3** When GSM signal receiving abnormal, please check if the SIM card installed

correctly or the GSM signals may not reach your location (such as the basement), please drive to the open sky.

**9.4** The red LED is not glow when power on. Check the fuse of the power line. If the fuse is fused, please change the fuse with the seller, and check the device about the inner malfunction, then power on to use again.

#### **15.GPRS Tips**

SIM card GPRS data suggested a monthly subscription service using GPRS; If the vehicle moving for a long time every day, please change the upload interval longer, for example: TIMER,30#

## GPS locating terminal warranty card

**special announcement:**

- 1.If products has technical changes ,we've no prior notice.
- 2.The shape and color, please in kind prevail
- 3.Warranty card applies to the specified IMEI number in the following table
- 4.Please properly keep this card and receipt in case of after-sales service
- 5.The following is for the warranty reference

This form is the basic of the warranty certificate information, please fill out the form carefully

<b>Name</b>		<b>Telephone number</b>	
<b>address</b>			
<b>Type</b>		<b>IMEI</b>	
<b>Date</b>			
<b>Purchase name</b>			
<b>Agency address</b>			
<b>Agency Phone</b>			
<p>1. Hosts are guaranteed for 12 months, from date of purchase which products are not being damaged by any man-made factors</p> <p>2. Listed below are the situation which is not covered under the warranty, users need to pay maintenance fees</p> <p style="padding-left: 20px;">(1) Beyond the warranty period</p> <p style="padding-left: 20px;">(2) maintenance and repair by disassembling the machine without authorization</p> <p style="padding-left: 20px;">(3) Soak, damage or burn circuit board</p> <p style="padding-left: 20px;">(4) Installation, use, maintenance or improper storage</p> <p style="padding-left: 20px;">(5) Housings, lenses or internal damage to the antenna</p> <p style="padding-left: 20px;">(6) IMEI number tearing or blurred</p> <p style="padding-left: 20px;">(7) Warranty certificate inconsistent with the product model or has been modified</p> <p style="padding-left: 20px;">(8) Damage caused by irresistible force</p>			

## Maintenance Record

The first time			
Maintenance unit		Date	
Fault statement			
Maintenance condition			
IMEI		serviceman	

The second time			
Maintenance unit		Date	
Fault statement			
Maintenance condition			
IMEI		serviceman	