

# GPS Tracking Device

Model NO.: M508

User Manual

Version : Rope-E160704

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**Notes:**

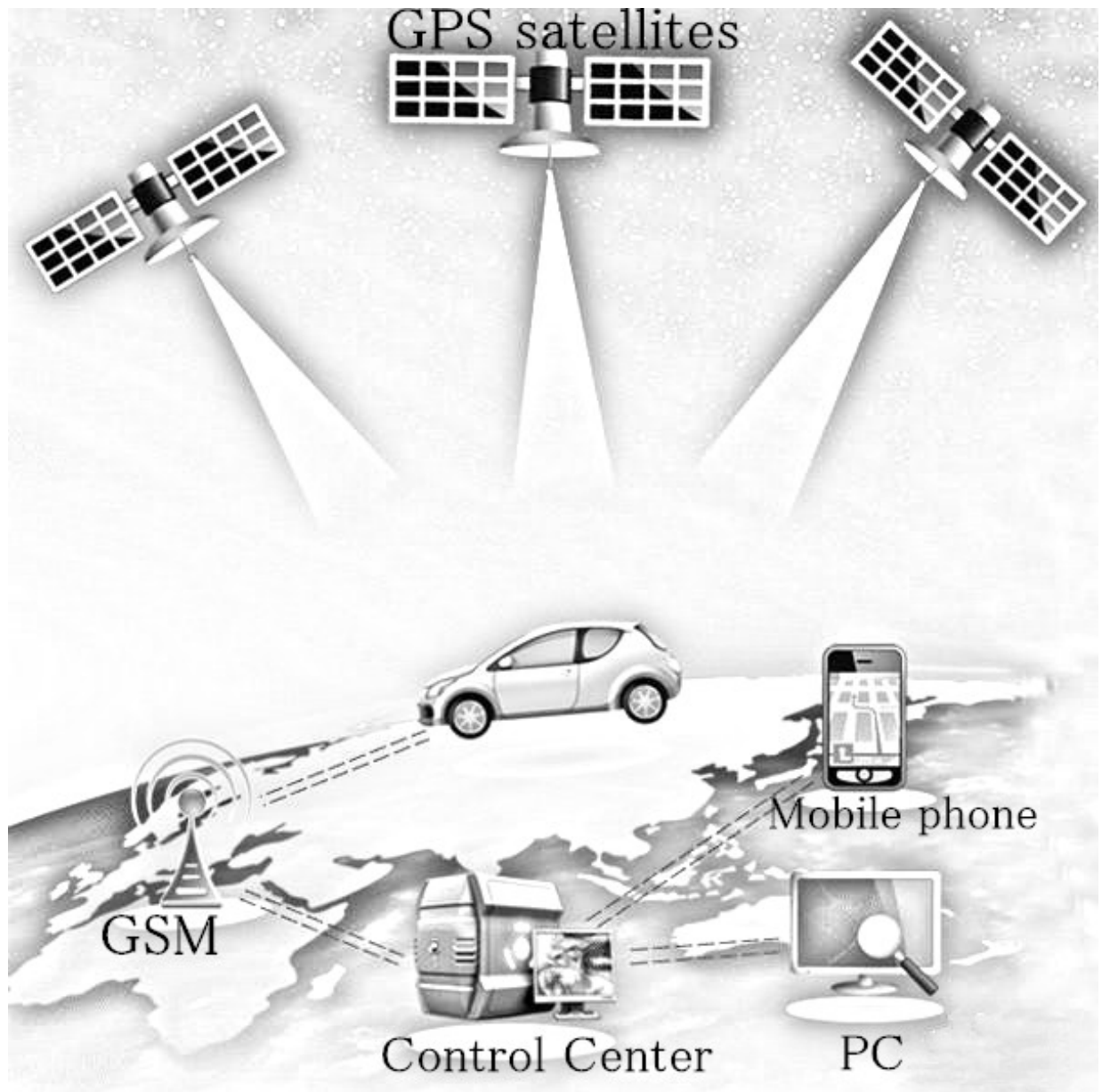
- Please mount the device steadily on the flat place before using;
- Please make sure the voltage value is right before connecting with battery, and placing the wires to where shouldn't be trodden;
- Please power off when plugging or taking out of any module or connector;
- Please keep the device dry and don't let any liquid fall into the device in case any damage caused in the device or circuit;

If any problem caused as follows, please turn to professional technician:

- When power wire, keyboard, or socket are damaged;
- When liquid infiltrating into the device;
- When the device work unusually or cannot resume to normal even operated according to the instruction;
- When the device cannot work as usual after falling, throwing or breaking;
- When there is obvious damage in the device.

## 1. Product Introduction

GPS Tracking device mainly consists of two parts such as GPS module and GSM module. GPS module is for getting location data from satellite, and GSM module is for transferring data to server so that people can check the information via PC or mobile phone. Our GPS Tracking device, with the best quality, stable performance and versatile functions, can be applied to various kind of fleet management like construction trucks, rental cars, logistics vehicles and public transportation, anti-theft system and security purpose.



## 2. Characteristics

- 1) GSM 850/900/1800/1900 Quad band
- 2) Wide for voltage input range: 11-50VDC(can customized 40-90VDC)
- 3) GPS continuous positioning, GPRS timing interval
- 4) Get location via SMS & web platform & APP.
- 5) Built-in vibration sensor, theft-proof
- 6) ACC ignition detection, car status prompt
- 7) Tele-cutoff (petrol/ electricity) remotely
- 8) Setting three SOS numbers for voice monitoring remotely and received SOS alarm
- 9) Emergency alarm
- 10) Voice monitor function
- 11) Power off alarm when the power supply is disconnected intentionally (with backup battery)
- 12) Support geo-fence alarm, over speed alarm

### 2.1 Red LED (power/working status)

LED Status	Meaning
Always keep on	Working normally
Continuously in dark state	Power off/Internal fault

### 2.2 Blue LED(GPS status indicator)

LED Status	Meaning
Fast Flashing (bright 0.1s dark 2.9s)	GPS located
Slow flashing(bright 1s dark 2s)	Searching GPS signal
Continuously in dark state	Power off/Internal fault

### 2.3 Green LED (GSM status indicator)

LED Status	Meaning
Fast Flashing (bright 0.1s dark 2s)	GSM working
Slow flashing(bright 1s dark 2s)	Start GSM
Continuously in dark state	Power off/Internal fault
Always keep on	Dialing out /talking

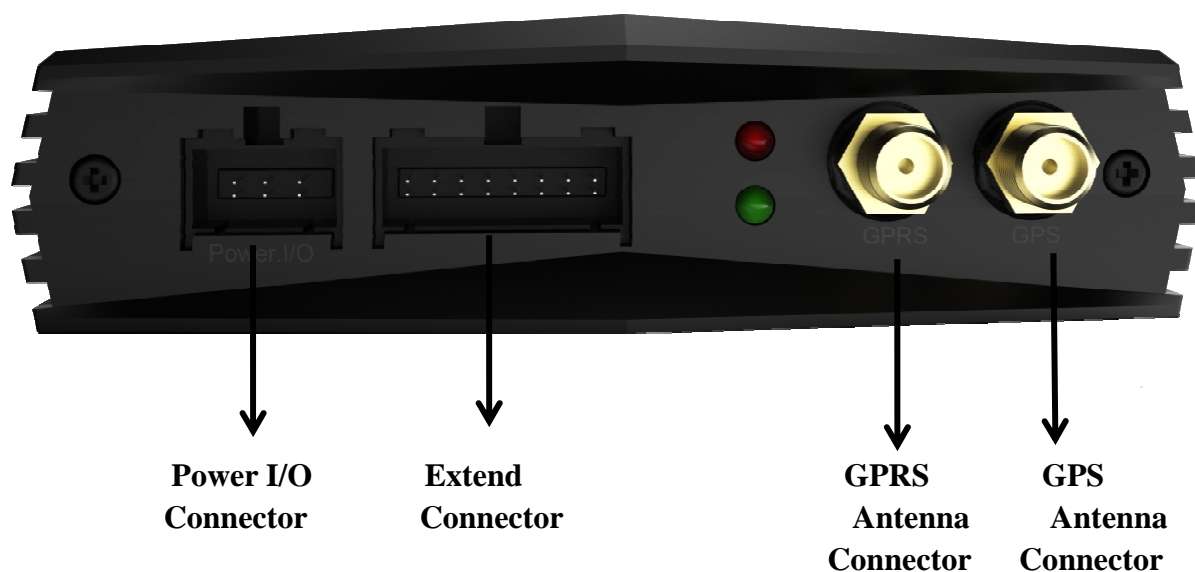
## 2.4.Specifications

Items	Parameters
work voltage	11VDC-36VDC
work current	50mA-160mA
GSM module	inside contain frequency GSM 850/900/1800/1900Mhz
Communication protocol	TCP
GPS module	Ublox 7
GPS sensitivity	-165dBm
C/A coding	1.023 MHz chip rate
Position accuracy	5-15m
Cold boot	26s
Work temperature	-20~70℃
Humidity	5% to 95% noncondensing
Gravity Acceleration	<4g
Operating Temperature	-20℃—65℃
Humidity	5%—95%
weight	50g

## 2.5 Device outlet specification

Line No.	Specification	Color	Instruction
1. 2	microphone	red/black	Connect to Microphone
3. 4	Power	Black(V-) red (V+)	Connect to vehicle storage battery
5	ACC	white	Connect to ACC ignition
6	Motor	yellow	Connect to relay control line
7.8	SOS button	red, black	Connect SOS button

## 2.6 Device wiring diagram

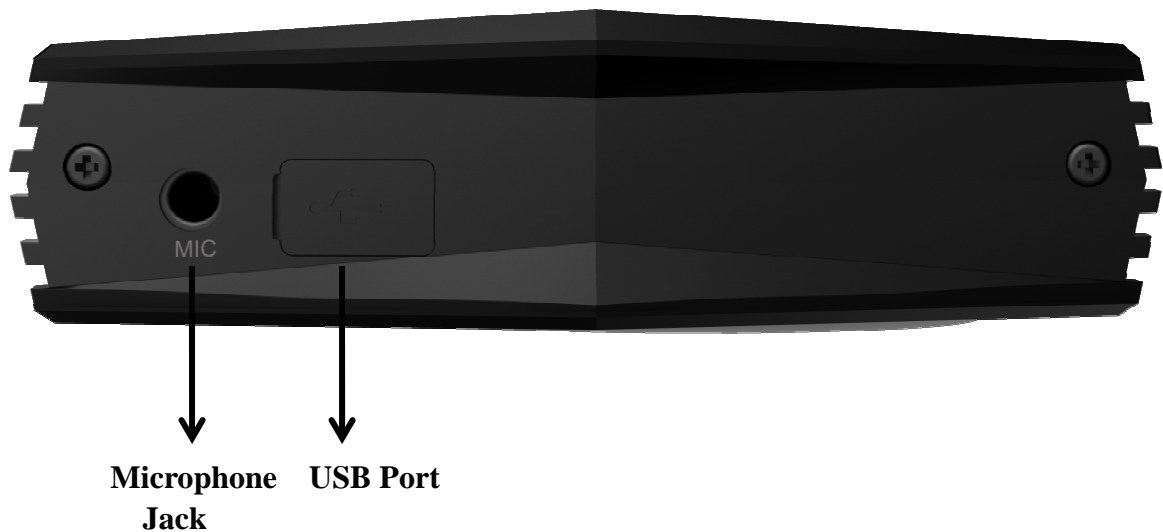


### Power I/O Connector:

1. Black and purple cables for microphone
2. Black cable to power+
3. Red cable to power-
4. White cable to ACC
5. Yellow cable for relay(from relay to tracker: yellow to yellow, black to black)

### Extend Connector:

1. The first row:
  - 1st cable to power+ of camera
  - 2nd cable to GND
  - 3rd cable to RX of fuel sensor
  - 4th cable is for >5V high voltage detection
  - 5th cable is for >5V high voltage output
  - 6th cable is for >5V high voltage output
  - 7nd cable to GND
  - 8nd cable to power+ of speaker
2. The second row:
  - 1st cable to TX of camera
  - 2nd cable to RX of camera
  - 3rd cable to TX of fuel sensor
  - 4th cable is for AD input
  - 5th cable is for <5V low voltage detection
  - 6th cable to TX of RFID reader
  - 7nd cable is RX of RFID reader
  - 8nd cable to power- of speakerThe 8nd cable to power- of speaker



### 3. Method of installation

#### 3.1. Preparation before installation

3.1.1 Open the packing box to check whether the type of device is correct and whether the accessories are included, or else please contact your distributor.

3.1.2 Choose SIM card: each device needs to insert a GSM SIM card.

Please refer to the distributor's suggestions to choose the SIM card.

3.1.3 Installing SIM card into the tracker, open the device with screwdriver and put the SIM card into the tracker (do not insert the SIM card backwards).

Note:

Power off before installing SIM card , or removing the SIM card

The SIM card should have GPRS charge

Ensure the SIM card is able to send the receive SMS

#### 3.2 Installation

The device installation is covert. Please refer installation to an auto electrical contractor.

NOTE:

3.2.1 To prevent theft of the device, it should be installed as covertly as possible. Covertly installation is suggested.

3.2.2 Avoid placing the device close to higher power electrical devices, such as reversing radar, anti-theft device or other vehicle communication equipment;

3.2.3 The device should be fixed into position with cable ties or wide double-side tape.

3.2.4 The device has built-in GSM antenna and GPS antenna. During installation, please make sure the receiving side face is up, with no metal object above the device to interfere with GPS reception. The

following places are suggested for installation:

- shelter in the decorated board below the front windshield;
- shelter around the front instrument panel (non-metallic material face);
- in the decorated board below back windshield;

#### 4. Web based tracking online activation

The GPRS web based tracking platform allows real time tracking with the latest Google maps.

Service platform login website : <http://211.154.139.208:8000/webgps/>

Vehicle management platform website : <http://211.154.139.208:8000/vms/>

After you added device successfully on the VMS platform , you can send the SMS Commands to activate device

##### 1. Set IP and PORT

SMS command format :

**ss,apn,user\_name,user\_code,ip,port,system number,password**

**E.g.:**

**ss,cmnet, , ,211.154.139.208,7000, 13862626201,123456**

**Notes:**

If no username and password, please leave it blank,

e.g: ss, apn, , ,IP,Port ,system number>Password

the system number on the platform should be the last 11digital number ,start from 13

eg: 13862626201

#### 5. SMS Configuration

Function	Command	Notes
change password	pwd,old_pwd,new_pwd Eg : pwd,123456,666666	Default password is 123456 Replied SMS: Config OK=Set successfully Config failed=fail to set
set SOS specific number	service,phone1,phone2,phone3,password Eg: service ,13512345001,13512345002,13512345003,123456,	When configure OK, when press SOS button, device will sends the information to the service number that has been set up after the alarm is triggered. SOS Information content: Your Vehicle Triggered emergency alarm, now the location Of the car is <a href="http://maps.google.com/maps?q=Latitude,longitude">http://maps.google.com/maps?q=Latitude,longitude</a>
Delete SOS specific number	service, , , ,123456 To the number you want to delete, just leave it blank between“ , , ” For example, if you want to delete phone number 1, the sms command as below: service, ,phone number 2,phone number 3,123456	You can choose to delete some or all the SOS specific numbers.





	If want to delete all the 3 specific numbers. SMS Command is: service, , , ,123456	
Checking Parameter setting	param,password e.g: param,123456 Replied SMS content, eg TCP, CMNET, 1, 1, 211.154.139.208, 7000, 13188888888	Setting parameters of reply terminal Reply of terminal: TCP, APN, APN user name, APN password, port, system number When the password is wrong, it will reply as: Get status failed
Reboot device	Restart,password Eg: restart,123456	After receiving this command, the device will reboot after 1min
Restore factory password	ResetPwd	Set successfully = Setting password has been recovered to be 123456
Check GPS location	tgoogle,password	After sending this command to device successfully , it will reply a location Google Map Link, you can check where the car is by clicking Link .
Close oil	disable eng, password	After the command is carried out, it will reply : Disable engine OK To ensure the safety of the driver and the car, this command is valid only under two conditions: the GPS is located; the speed is less than 15km/h.
Recovery oil	enable eng,password E.g: enable eng,123456	After the command is carried out, it will reply : Enable engine OK
Monitoring	tap,password E.g : tap,123456	When device to receive the instruction, will give the number of the number of the transmission of this call to the phone, after listening to the listener mode
set up defences	arm,password E.g : arm,123456	Config OK=Set successfully Config failed=fail to set After set up arm, ACC ignition will automatic to send an illegal ignition information to the server



dismiss defences	disarm,password E.g : disarm,123456	Config OK=Set successfully Config failed=fail to set
Set up on-line message	ss,apn,user_name,user_code,ip,port,id, password E.g : ss,cmnet,1,1,211.154.139.208,7000,1318 8888888,123456	Config OK=Set successfully Config failed=fail to set
Running state	status,password E.g : status,123456 Terminal reply: GSM signal strength, connection and GPRS (GPRS=0 means disconnected, GPRS=1 means connected), GPS location satellite number of tracker, ACC status, interval time of ACC ON and ACC OFF, speed threshold (default speed threshold is 120, if you had already set speed threshold, it will read the number which you had set), voltage values of external voltage.	Replied SMS content, eg GSM=31 GPRS=1 GPS=10 ACC=N0 SPEED=120 ACCON=30S ACCOFF=120S VCC=12V IMEI=356823031234501 When the password is wrong, it will reply as: Get status failed
Query service number	GetService, password	The terminal will automatically reply to the number of settings to send instructions to the number
Enable auto answer call to do voice monitoring	AUDIO-EN,password	Config OK=Set successfully Config failed=fail to set
Disable auto answer call to do voice monitoring	AUDIO-DIS,password	Config OK=Set successfully Config failed=fail to set
Restore to factory setting	Reset,password Eg: Reset,123456	Restore the IP to be 211.154.139.208, port to be 7000, china mobile APN  <b>(device version NO.before 2016-04-07 08:00:00 use this command: DEF-PARA,password )</b>
Set GPS location uploading interval time	interval,x1,x2,password  Eg: interval,30,100,123456 30==ACC ON 100==ACC OFF	Interval1 is for ACC ON, interval2 for ACC OFF <b>(device version NO.before 2016-04-07 08:00:00 use this command: GINTERVAL,X1,X2,password)</b>



Active sleep mode	sleep enable,password eg: sleep enable,123456	Config OK=Set successfully When acc off , device will not upload data to server ,to save battery life , it used for motorbike
Cancel sleep mode	sleep disable,password eg: sleep disable,123456	Config OK=Set successfully Device will restore upload data server normal .
Enable monitoring limited, only 3 service numbers can monitor track	LisLimit,ON,password Eg: LisLimit,ON,123456	<b>(device version NO.before 2016-04-07 08:00:00 use this command: LisLimite-Enable,password)</b>
Disable the limited of only service number can monitor	LisLimit,OFF,password Eg: LisLimit,OFF,123456	<b>(device version NO.before 2016-04-07 08:00:00 use this command: LisLimite-Disable,password)</b> Factory default status is disable limited

## 6. Trouble shooting

6.1. After installing it in the first time, if device cannot get connected with platform server, at this time it is “logged off” status in platform.

Follow the instructions one by one as below:

1) Call the device to see what happens.

It rings: go to the next step.

It not rings:

- check whether the SIM card installed correctly or not. Check whether the connection of power-line is correction or not . (Details: If the users are testing the device in office or at home, M588 has to connect with 12V DC external power supply. If it is tested in the car, make sure the installer connect all the cable correctly.)
- Check the LEDs’ status. In normal working status, the red LED is in bright flash 0.1s dark 2s , yellow GSM LED bright flash 0.1s dark 2s and blue GPS LED bright flash 0.1s dark 2s
- Check whether the vehicle is in no GSM area, such as basement;

2) Check whether the device reply after sending SMS command.

It replied:

- Check whether the APN is correct or not,
- Whether the port is correct or not,
- check whether the SIM card support GPRS.
- check the IMEI number is correct or not

It not replied: check the SMS command format, make ensure it is correction.

**FCC Caution:**

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

This device 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.

**IMPORTANT NOTE:****FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 50 cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: This equipment 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.