

# **GPS Tracking Device**

# Model NO.: M588FS

# **User Manual**

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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;

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

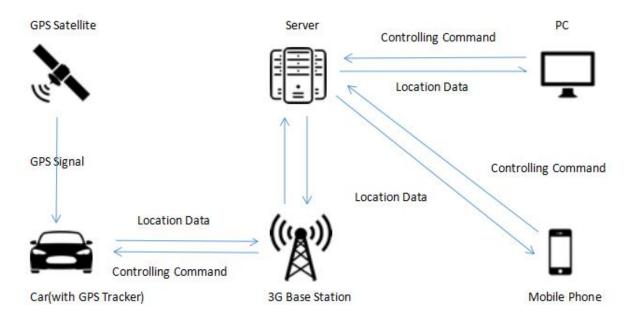
- When power wire, keyboard, or socket are damaged;
- When liquid infiltrating into the device;
- When the device work unusually or cannot resume to normal even operated according to the instruction;
- When the device cannot work as usual after falling, throwing or breaking;
- When there is obvious damage 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) Built-in antenna;
- 2) Track by SMS, 3G or 4G (support 4G and 3G WCDMA sim card);
- 3) Real time tracking at interval;
- 4) Cut off car engine remotely (Engine immobilization);
- 5) Resend data from signal dead zone;
- 6) SOS alarm;
- 7) Low power alarm;
- 8) Overspeed alarm;
- 9) Geo-fence alarm;
- 10) Parking alarm;
- 11) Idling alarm;
- 12) Tired driving alarm;
- 13) History playback;
- 14) Mileage statistics;
- 15) Reports statistics;
- 16) Remotely update firmware.
- 17) SMS alarm notification.



# 2.1 Specifications

Items	Parameters			
Main specification	'			
Size	83mm × 46mm × 16mm			
Weight	210g			
Built-in battery	150MA/3.7V			
Working Voltage	9—90V			
Operating Temperature	-20°C—60°C			
Storage temperature	-20°C—80°C			
Sensor	Precision shock sensor			
Air interface protocol				
Transfer Protocol	TCP/UDP optional			
Power detection	Upload alarm information when the main power is disconnected			
Data transmission	Update GPS data in real time, support customization			
Oil quantity monitoring	Real-time monitoring of changes in oil volume			
GPS data	Real-time location update			
Vibration alarm	When the vehicle is stationary and vibration ,it will be uploaded.			
GSM specification	·			
GSM Frequency	EC200U-CN:			
	LTE-FDD B1/B3/B5/B8			
	LTE-TDD B34/B38/B39/B40/B41			
	GSM B3/B8			
	EC200U-EU:			
	LTE-FDD B1/B3/B5/B7/B8/B20/B28			
	LTE-TDD B38/B40/B41			
	GSM B2/B3/B5/B8			
	EC200U-AU:			
	LTE-FDD B1/B2/B3/B4/B5/B7/B8/B28/B66			
	LTE-TDD B40/B38/B41			
	GSM B2/B3/B5/B8			
GSM module	Quectel EC200U-CN/EU/AU			
Root mean square error	S degree			
Dynamic output range	-15~-108d			
Receiving sensitivity	-107dBm			
Maximum frequency error	±0.1ppm			
GPS specification				
Sensitivity	Cold start: -145dBm			
	Hot start: -156dBm			
	Warm start: -145dBm			



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	Navigation: -160dBm
	Track: -162dBm
Positioning Accuracy	<5m
First positioning time	Cold start: average 32s
Connector	
Communication antenna	Internal
Locate antenna	Internal
LED indicator	Power, indicating status

# 2.2 Standard packing list

NO.	name	quantity	unit
1	M588F Host (including built-in battery)	1	pc
2	Instruction manual, Warranty card, certificate	1	pc
3	SOS alarm button	1	рс
4	Packing box	1	рс
5	3pin power cable	1	pc
6	Velcro	1	pc

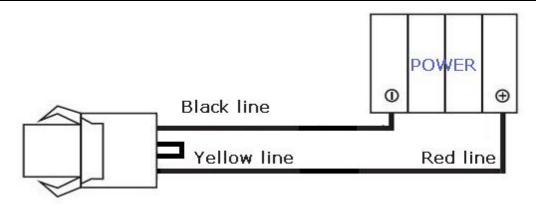
# 2.3 Definition of the line of the oil quantity detection connector

NO	Color	Meaning
1	Blue	Oil signal
2	Green	Oil signal input

# 2.4 Definition of the line of the Relay connector

NO	Color	Meaning
1	Yellow	Relay positive control terminal
2	Black	Relay negative control terminal





## 2.5 Definition of the line of the power connector

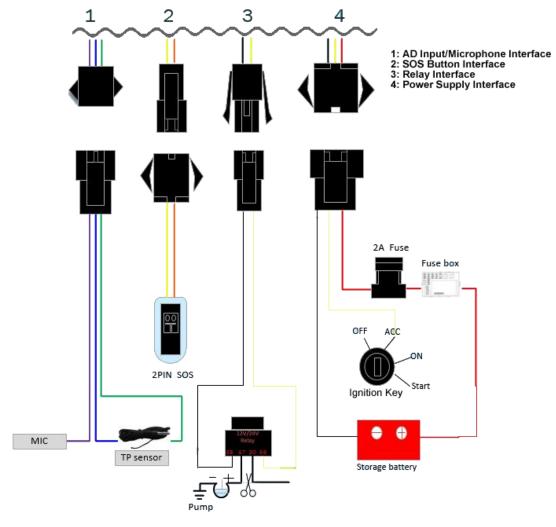
NO	Color	Meaning
1	Red	Positive power supply(9V~48V)
2	Black	Negative power supply
3	Yellow	ACC

#### 2.6 Definition of the line of the LED connector

LED type	LED status
	Not bright: No power/device failure
Red(Power Indicator)	Normal flash(1 time/S): Connected to the server
	Slow flash (1 time/2S): In the network
	Slow flash: 1time/200ms ,Data transmission

# 2.8 Device wiring diagram





#### 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 or removing the SIM card

The SIM card should have GPRS credit

Ensure the SIM card is able to send and 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 is upwards sky without 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;

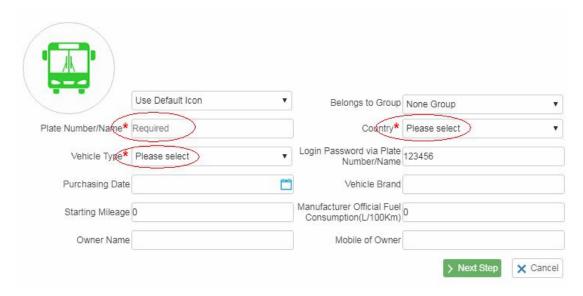
#### 4. Web based tracking online activation

- 4.1 Open website www.overseetracking.com and login with the user & password that created by Rope
- 4.2 Click Information Management
- 4.3 Click **Vehicle Tracker List** and you will see all your vehicles are listed there. Please note, to add more devices, please contact your sales.

Please check the Tracker Status, if it is Unactivated, please click Activate. If it is Activated, please click Edit.

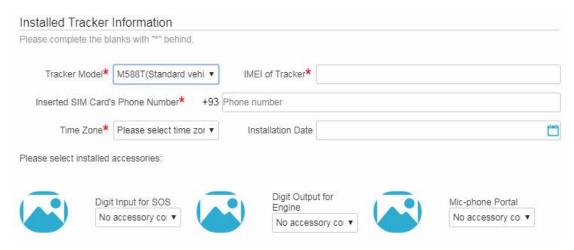
Plate Number/Name	Tracker Model	Tracker Information	Installed Accessories	My Service Expiring Date	Sub-user's Service Expiring Date	Vehicle Owner	Tracker Status	Operation
	DJ808	ID: 13000000157 IMEI: 094027849470 Phone number:					Unactivated	
M-23 UAQ 246K	DJ808	ID: 13000000158 IMEI: 011653707339 Phone number: +25619666820185	RL12: 12V Relay Mic-Rope: Mic-phone		2019-07-24	Stephen Kibuuka Tel:	Activated 2018-09-08 06:03:18	this is edit
unknown	DJ808	ID: 13000000159 IMEI: 011752301171 Phone number: +25611752301171	RL12: 12V Relay Mic-Rope: Mic-phone				Activated	区市
H 10	DJ808	ID: 13000000166 IMEI: 011752301172 Phone number: +25611752301172	RL12: 12V Relay  Mic-Rope: Mic-phone		2019-07-24		Activated 2018-09-08 06:04:00	Ø ŵ

4.4 Click **Activate**, please fill in the blanks marked with red \*. You also can fill in other blanks to complete the device information.

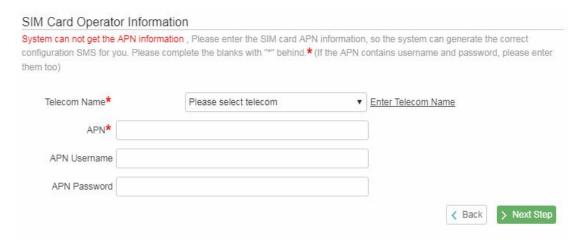




4.5 Click **Next Step** and fill in the requested blanks.



4.6 Click **Next Step** to fill in sim card APN information. Please select the telecom name, if the telecom is not listed there, please click **Enter Telecom Name** to fill in the sim card telecom name.



4.7 Click **Next Step**, OVERSEE gives the configuration SMS to you. Please copy it and send it to the gps device, after you receive reply from the gps device, it should be online.



4.8 Click Finish--Tracking Map to see if the gps device is online or not.

#### 4. SMS Command List

Function	Command	Notes
Restart	RESET#	The device would reboot in 20S after

	ROLE INTO VALION CO., ELD.	
		receiving the command.
Get Location	URL#	Tracker will reply as bellow:
		<08-16
		16:30>http://maps.google.com/maps?q=N23.
		168629,E113.433510
Check Tracker	PARAM#	Tracker will reply as bellow:
Settings		Id:0425041605765;
		TIMER:30,180;HBT:1,LOCK=0;
		SOS:,,;
		Center Number:;
		Defense time:600;
		TimeZone:E,8,0;
		APN:cmnet,,;
		Server:1,at2.truckurcar.com,9999;808
		Start stop condition:ACC
Check Tracker	STATUS#	Tracker will reply as bellow:
Status		External power:ON,28.51V;
		GPRS:Link Down
		Signal Level:30;
		GPS:Successful positioning;
		SVS Used in fix:6(8);
		GPS Signal Level:27,21,30,18,20,47,44,0;
		ACC:OFF;Defense:OFF;Relay:Enabled;
		Oil1=29,oil2=0,tp1=34,tp2=33;
Engine Control	Enable engine:	Only the center phone number can send these
	RELAY,0#	two engine control command, you need to set
	Disable engine	the phone number to be center phone number
	RELAY,1#	via following command:
		SOS,A,Phone_Number,,#
		CENTER, A,Phone_Number#

## 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.

If ring: go to the next step.

If not ring:

a. Check whether the SIM card is installed correctly or not. Check whether the connection of power-line is correct or not . (Details: If the users are testing the device in office or at home, they have to connect device with 12V DC external power supply. If it is tested in the car, make sure the installer connect all the cable correctly.)

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- b. 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
- c. Check whether the vehicle is in no GSM area, such as basement;
- 2) Check whether the device reply after sending SMS command. If reply:
- a. Check whether the APN is correct or not,
- b. Whether the port is correct or not,
- c. check whether the SIM card support GPRS.
- d. check the IMEI number is correct or not

If not reply: check the SMS command format, make sure it is correction.