

# **GPS** Tracking Device



# Model NO.: M528S User Manual

Version: Rope-E19111801

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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;

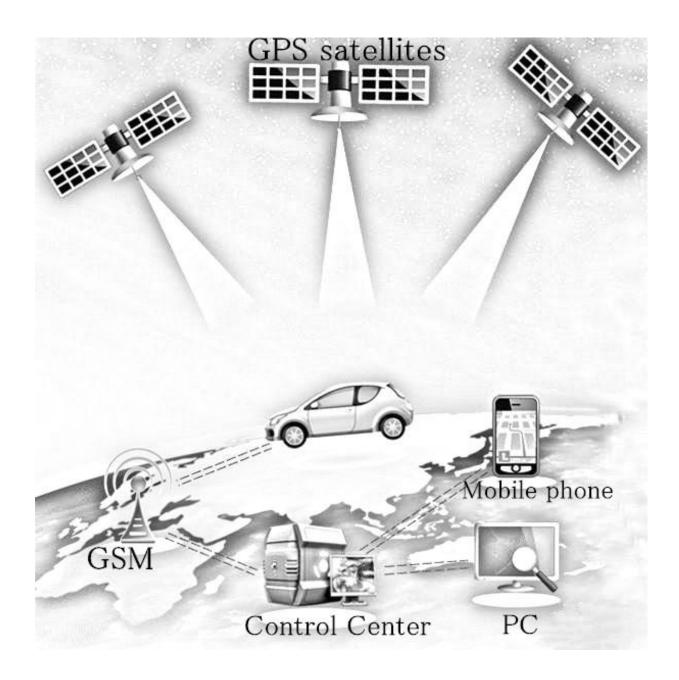
If any problem caused as follows, please turn to professional technician:

- 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) Metal cover;
- 2) External antenna;
- 3) Track by SMS or GPRS;
- 4) Real time tracking at intervals;
- 5) Cut off car engine remotely (Engine immobilization)
- 6) Resend data from signal dead zone;
- 7) Voice monitoring;
- 8) SOS alarm;
- 9) Low power alarm;
- 10) Over speed alarm;
- 11) Geo-fence alarm;
- 12) Illegal start alarm;
- 13) Parking alarm;
- 14) Idling alarm;
- 15) Tired driving alarm;
- 16) Crash alarm;
- 17) Roll over alarm;
- 18) Automatically e-call after Crash alarm/roll over alarm/SOS triggered
- 19) Fuel and temperature monitoring;
- 20) One serial RS232 port for camera, RFID reader or fuel sensor.
- 21) History playback;
- 22) Mileage statistics;
- 23) Reports statistics;
- 24) Remotely update firmware.

## 2.1 Specifications

Items	Parameters
GSM Module	Quectel M35
GSM Frequency	850/900/1800/1900 MHZ
LBS Positioning Accuracy	100-500m
GSM Antenna	Built-in
GPS Chipset	U-blox 7020
GPS Sensitivity	-159 dBm
GPS Frequency	L1, 1575.42 MHZ
Channels	56 channels examine track
GPS Positioning Accuracy	5-10m, 2D RMS
GPS Antenna	Built-in
Speed Accuracy	0.1m/s
Time Accuracy	Synchronize with GPS
GPS Data	WGS-84
Hot Start	<1s
Warm Start	<38s



Max Altitude	18000m
Max Speed	515m/s
Gravity Acceleration	<4g
Working Voltage	8VDC~46VDC
Working Current	50mA~160mA
Operating Temperature	-20°C—70°C
Humidity	5%—95%
Size	96mm × 52mm × 19mm
Simcard	Normal simcard
Battery	Rechargeable lithium polymer battery 260mAh
Internal battery Standby	>2h

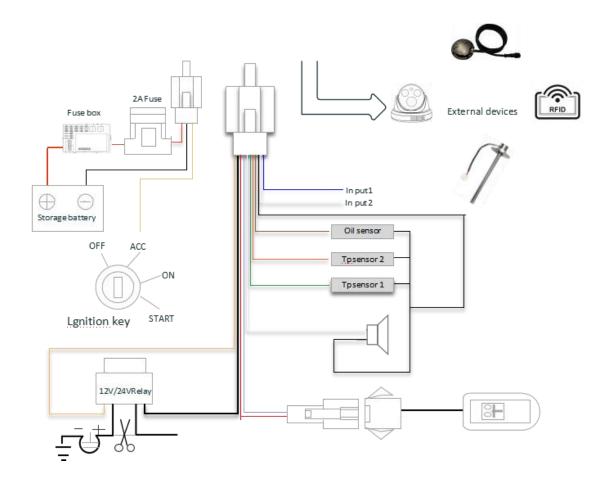
# 2.2 Packing List

No.	Name	Picture	Quantity
1	528G Tracker (including built-in battery)		1PC
2	GPS antenna		1PC
3	GSM antenna		1PC
4	3 pin power line		1PC
5	9P extension line		1PC
6	Relay		1PC
7	SOS button		•



8	magic tape	1PC
9	magic tape	1PC

# 2.3 Device wiring diagram



# 2.4 9Pin extension line interface definition list

NO.	Colour	Interface definition
1	Blue	Input detection 1 (supports high and low level detection)



2	white	Input detection 2(supports high and low level detection).		
3	brown	Resistive oil positive stage		
4	Orange	Temperature sensor 1 positive stage		
5	Green	Temperature sensor 2 positive stage		
6	Black	Resistance and temperature sensor negative		
6	2PIN interface	SOS alarm button		
7	Long yellow	Oil cut-off electric positive trigger output		
8	Long white	Positive trigger output connectable buzzer (overspeed alarm)		
9	Long black	Cut off oil negative electrode		

## 2.5 4Pin RS232 interface definition list

NO.	Colour	Interface definition			
1	Red	Controllable 5V power output			
2	Black	Power ground			
3	Yellow	Equipment 232 data reception			
4	Green	Equipment 232 data reception			

# 2.6 3Pin power cord definitions list

r r						
NO.	Colour	Colour Interface definition				
1	Red	Positive power supply(9V~48V)				
2	Black	Negative power supply				
3	Yellow	ACC				

# 2.7 List of LED definitions

LED type	LED status
GSM status indication: red light	always dark: No power / equipment failure
	send data: 0.3 second flash
	connected to server flashing interval 1s



	not connected to server flashing interval 1s
GPS status indication: green light	always dark: No power / equipment failure
	Inposition: Scintillation interval: 0.5s
	Positioning: always bright

#### 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,

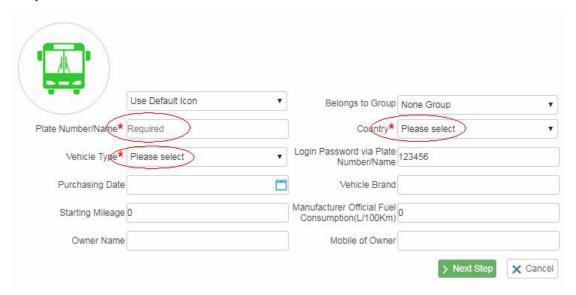
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## please click Edit.

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: +25618666820185	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	ß w
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	ď 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.

Please complete the bl	anks with "*" behind.		
Tracker Model*	M588T(Standard vehi ▼	IMEI of Tracker*	
Inserted SIM Card's	s Phone Number* +93 P	none number	
Time Zone*	Please select time zor ▼	Installation Date	
Please select installed	accessories:		
Digit	t Input for SOS	Digit Output for Engine	Mic-phone Portal
No	accessory co: ▼	No accessory co ▼	No accessory co ▼

- 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.
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	ormation , Please enter the SIM card APN se complete the blanks with "*" behind.*(		, so the system can generate the correct ontains username and password, please enter
Telecom Name*	Please select telecom	•	Enter Telecom Name
APN*			
APN Username			
APN Password			

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.

Tracker Activation	
The information has been saved successfully, Please send these SMS commands below one by one to the tracker, successfully, the tracker will show online in tracking map.	if configure
SS,example,eg,eg,at1.trackurcar.com,7000,13000000157,123456	
	✓ Finish

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

# 5. SMS Configuration

Command meaning	Command format	Example	Tracker reply
	s,*apn*,*ip*,*port*	S,*CMNET*,*120.26.19	APN=CMNET
	,*id*,* Protocol	7.1	name=
	set*,*password*	52*,*9999*,*130432100	Password=
		27	Server
		*,*am=0*,*123456*	Ip=120.26.197.152
Online message 1			Port=9999
			Driver Id=13043210027
			ACCON=30s
			ACCOFF=120s
			Protocol type=SJCX
	ss,*apn*,*user_name	SS,*ineternet*,*123*,*4	APN= ineternet
Online message 2	*,*user_code*,*ip*,	56*,*120.26.197.152*,*9	name=123
	*port*,*id*,* Protocol set	999*,*13043210027*,*	Password=456
	*,* password *	am=1*,*123456*	Server
			Ip=120.26.197.152
			Port=9999
			Driver Id=13043210027



			ACCON=30s
			ACCOFF=120s
			Protocol type=808
	Z,* bus Number,* terminal	Z,*B8PR68,*9966455,*3	Bus Number=BPR68
	ID ,* provincial ID,* city	0,*20	Terminal ID=9966455
Set the plate number	ID,* colour of license	,*0,*2,*123456*	Province ID=30
	plate,*password*		City ID=20
			Bus Colour=2
recovery oil circuit	Restore	restore oil,*123456*	Enable engine
recovery on eneut	oil,*password*		
Cut off the oil circuit	Close oil,*password*	close oil,*123456*	Disable engine
Set up defences	arm,*password*	arm,*123456*	Deviec is defend
Cancel defences	disarm,*password*	disarm,*123456*	Deviec is undefend
	Param,*password*	param,*123456*	APN=CMNET
			name=
			Password=
			Server
Check network related			Ip=120.26.197.152
parameters			Port=9999
			Driver Id=13043210027
			ACC ON=30s
			ACC OFF=100s
			sProtocol type=SJCX
	c,oldpwd,newpwd	c,*123456*,*654321*	CODE=654321 Change
Modify the password			OK
	tgoogle,*password*	tgoogle,*123456*	http://maps.google.com/m
a			a
Check Location			ps?q=22.58632,113.9090
			7
	Status, *password*	status,*123456*	GSM=29
	, 1	,	GPRS=1
			GPS=13
Check the current running			ACC=ON
status of the car			SPEED=0km/h
			VCC=14.34V
			Vehicle static state
	CODE=num#	CODE=15612345006#	SOS
Set E-Call phone number		1522 155125 1555011	CODE=15612345006
Check the E-Call phone	CODECK#	CODECK#	SOS
number	CODECIMI	CODECINI	CODE=15612345006
iigiiioci	KNOCK=VAL,*Password*	KNOCK=VAL,*123456*	Config OK/Failed
Set the crash alarm	INTOCK VAL, I assword	KINOCK-VAL, 123430	Coming Oliviranicu
threshold			
uneshold			



Set the roll over alarm	OVERTURN=VAL,*Passwor	OVERTURN=VAL,*123	Config OK/Failed
threshold	d*	456*	
Check the parameters	PARAM,*Password*	PARAM,*123456*	
set harsh acceleration	ACCSP=val,*Password*	ACCSP=10,*123456*	Config OK/Failed
alarm, threshold should be			
between 3~50, val=0 means			
do not detect this alarm			
set harsh brake alarm,	SLOWSP=val,*Password*	SLOWSP=15,*123456*	Config OK/Failed
threshold should be			
between 3~50, val=0 means			
do not detect this alarm			
set harsh corner alarm,	DBAANG==val,*Password*	DBAANG=20,*123456*	Config OK/Failed
threshold should be			
between 3~50, val=0 means			
do not detect this alarm			
	DBA+CK,*Password*	DBA+CK,*123456*	Driving Behavior analysis
Check harsh			is on acceleration=10
acceleration/braking/corneri			km/h drag
ng alarm parameters			acceleration=15km/h
			Sharp angle=20

## 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.)
- 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.