Super Mini Vehicle Tracker

PT502



User Manual

Please read carefully before operation

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1 Product overview

PT502 is a GPS/GSM/GPRS tracking device which is specially developed and designed for vehicle real-time tracking and security. With superior GPS and GPRS modules, PT502 has good sensitivity and stable performance. Especially, PT502 is well designed to work with LiveGTS, our web-based tracking system, which is suitable for a company to establish their own tracking platform to provide real-time tracking service to their customers or manage their fleet.

Main features:

Tracking via SMS or live tracking by GPRS

Current location report

Tracking by time interval

Position logging capacity up to 7000+ waypoints

SOS alarm (available to preset 3 SOS number)

Geo-fence control

Low power alert

Speed alarm

Engine cut (optional)

Get street address by SMS request

Get Google link for current location by SMS request

Save 50% GPRS cost above in different methods when working on FMS (BOFAN Smart Report Tech, ACC, Mileage report)

Available to set different alarm notification methods when alarm (sending alarm SMS, calling or platform)

Car maintenance reminder by mileage report

Mileage and GPRS report by distance

I/O: 2 digital inputs, 1 negative and 1 positive triggering; 1 outputs.

Analog Input: 1 10 bits resolution analog inputs

For operate safely, please refer to following simple guidelines:

Proper Connection: When installing tracker in vehicle, please read the manual carefully Correct installation. Don't connect it to other incompatible devices.

Qualified Accessories: Use original parts, qualified batteries and peripheral equipments to avoid damage to PT502

Safe Driving: Drivers should not operate this device while driving.

Qualified Service: Only qualified person can install or repair PT502

Water Resistance: PT502 is not water resistance. Keep it dry. Install it inside the vehicle. Confidential Phone Number: For safety reason, don't tell other people the SIM card number of your PT502 without taking precautions of security settings.

GPS communication is liable to be affected by environmental shielding; may fail to carry out positioning during certain circumstances. It will resume the positioning function as soon as it leaves the shielding environment. This is normal. Please do not worry when

2



encountering such problem.

Each signal sent out from the system will be confirmed for successful transmission in the base station of the mobile operator. However, if system stoppage occurs or if the mobile telephone is preset to a switch off state by the customer, it cannot ensure successful transmission.

2 Parameters of PT502

Feature	Characteristics
Power Supply	+9V to +40V
Power Consumption For	Active mode(peak) < 1.0A
VBATT	Active mode(avg.) < 300mA
	Idle mode < 50mA
Operating Temperature	-20℃ to +60℃
Range	
Storage Temperature	-20℃ to +70℃
Range	
Humidity	Up to 75% non-condensing
External Antenna	Connected via the 50Ω coax connector
External SIM Card	Connected via SIM Card connector
SIM card type	3V
Transmit Power	Class 4(2W) for E-GSM 900 and 850
	Class 1(1W) for DCS 1800
	Class 1(1W) for PCS 1900
Sensitivity	-104 dBm minimum for E-GSM 900 and 850
	-102 dBm minimum for DCS 1800
	-102 dBm minimum for PCS 1900
Speech Codec	Triple rate Codec:
	Half rate –ETS 06.20
	Full rate —ETS 06.10
	Enhance Full rate-ETS 06.50/06.06/06.08
GPRS	Multi-slot Class 8(4Rx, 1Tx, 5 slot Max.)
	Support all 4 coding schemes(CS-1, CS-2, CS-3
	and CS-4)
	Maximum download speed is 85.6kbps
	Maximum upload speed is 21.4kbps
Dimensions	7.4 x 7.0 x 2.4 (cm)

3 Getting started

This section will describe how to set up your PT502

Please follow the specifications as below. Bofan is not liable for damage to the PT502 caused due to user error.



3.1 Hardware and Accessories

PT502's standard package includes:

- 1* PT502 Main Unit
- 1* GPS Antenna
- 1* GSM Antenna
- 1* Plug-in power wires

Optional accessories:

 Relay (Optional, for cutting off oil/engine to stop car, 12V relay for car, 24V relay for truck)

The state of the s	Grand States			M
 Main unit 	• GPS	• GSM	• Plug-in	• Relay
	Antenna	Antenna	Wires	(Optional)

3.2 Connecting and Installation

If you install your tracker in car directly, please follow below steps: (Note: If you test your tracker in office, please charge the tracker via 12V external power charger for 3 hours at least before operating below steps)

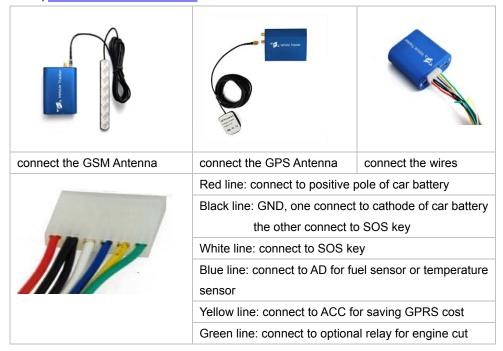
First, install the SIM card in the tracker (press the yellow button to make the Card Holder out).

Note: the SIM card must support GPRS service, and when you install this SIM card in mobile, you can use this mobile dial phone, answer coming calling, send and receive SMS. It is GSM card not CDMA card.



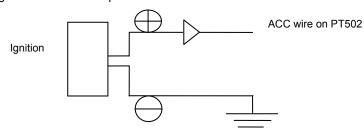


Second, connect antennas and wires



For Input Ports

Ignition Detection - Input 4

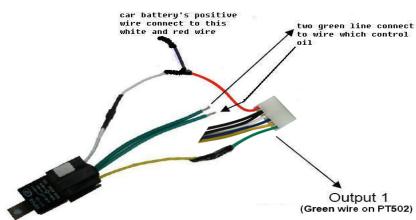


Note: When connecting PT502's ACC wire to ACC, you can set to save GPRS cost when ignition OFF. Please reference the below example of setting GPRS time interval: 000000GTI30,0,0,0,240.

For Output Ports

Engine Cut (optional)

Relay connection on PT502





After you connect relay according to above picture correctly, you can send following SMS commands to stop car or restore the circuit:

Stop Car: 000000OPC1,1
Restore circuit: 000000OPC1,0

Note: 000000 is the tracker defaulted password, if you already changed your tracker password, please use your new password.

Please don't use this feature while car/vehicle with high-speed driving, and we suggest connect relay with fuel control line in your car, Bofan is not liable for any traffic accidents.

For Analog Input



Connect fuel sensor or temperature sensor refer to above picture.

Our tracker only supports the fuel sensor which can send out 0-24V signal.

When fuel sensor sends out 0V signal, it means the tank is empty.

When fuel sensor sends out 24V signal, it means the tank with full fuel.

When fuel sensor sends any digital signal to tracker, the related fuel level will be displayed on our software when reporting data to server by GPRS

Third, push the button from OFF to ON side to <u>turn on the tracker</u> as below:





After turn on the tracker, please refer to the signal light Functionality.

GPS signal Light - indicating GPS signal status			
RED light Flashing fast	The unit is being Initialized		
RED light Flashing	latinianian accept but ODO simple description		
(on for 2 seconds and off for 2 seconds)	Initialization succeed but GPS signal does not fix		
Green light Flashing	DTF02 has CDC signal		
(on for 0.1 second and off for 2.9 seconds)	PT502 has GPS signal		
GSM signal Light - indicating GSM signal status			
RED light Flashing fast	The unit is being Initialized		
RED light Flashing	Initialization succeed but GPS signal does not fix		
(on for 2 seconds and off for 2 seconds)	Illitialization succeed but GF3 signal does not lix		
RED light Flashing	PT502 is connected to the GSM network		
(on for 0.1 second and off for 2.9 seconds)	1 1302 is connected to the Gow network		
Green light Flashing	PT502 does not connect to server successfully		
(on for 2 seconds and off for 2 seconds)	after making GPRS communication settings		
Green light Flashing	PT502 connects to server successfully after		
(on for 0.1 second and off for 2 seconds)	making GPRS communication settings		
Power Light - indicating Power status			
Green Light keep on bright	PT502 is connected with external power source		
Green Light keep on flashing	PT502 is not connected with external power		
Creen Light Neep on hashing	source but has sufficient power		
Red Light keep on flashing	PT502 is not connected with external power		
The Light Reep on hashing	source and has no sufficient power		
RED Light Flashing fast	No power, please charge immediately		

4 Start Tracking

You can start to track your car or test the tracker after GSM and GPS light work normally. There are two ways to track the car, one is by SMS on mobile basically and the other one is via GPRS on LiveGTS software platform.

4.1 Tracking by SMS on mobile:

Tracker replies SMS with coordinates:

When you want to know the PT502 location, you can call the SIM card number in PT502 or send a SMS command to PT502 from your mobile, after some seconds, it will reply a SMS with the position Lat & Log data to your mobile.

To get position by calling:

- (a) Call the SIM card number in PT502 from your mobile phone.
- (b) PT502 will hang up automatically after several rings, then replies a position SMS to your mobile phone.



To get position by sending SMS command:

SMS Command: <password>RCP

For example: you edit this SMS: 000000RCP on your mobile phone and send it out to the SIM card number in PT502 (Notes: The default password of tracker is 000000).

After a few seconds, you will get a SMS reply with below content on your mobile phone:

Latitude = 22.5632 Longitude = 114.0940, Speed = 2.6854Km/h, Odometer = 10.98KM GPRS: ON,

EXPW: OFF, Time: 2010-12-07 08:47:45

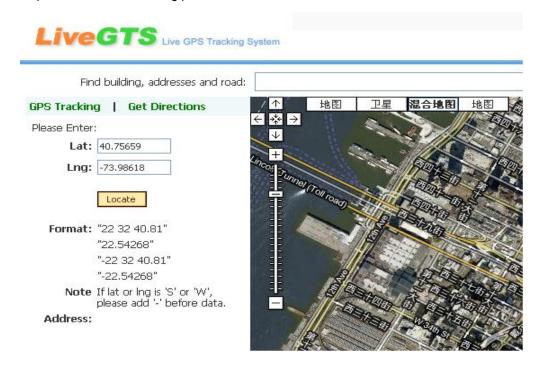
Explanation: GPRS means GPRS state:

ON: GPRS connect ok OFF: GPRS disconnect Fail: GPRS connect fail

EXPW means external power state:

(Note: when your tracker doesn't get GPS signal, it will reply a SMS with "Last: Lat=22.5632 Lng=114.0940 Speed=0.00KM/h Odometer=0.000KM GPRS:OFF EXPW:OFF Time:2010-12-08-08:58:45 It means this data is for the last place where the tracker got GPS signal successfully.)

You can visit our LiveGTS demo http://demo.livegts.com which includes the Google map, manually input the latitude and longitude in this reply SMS and click the "Locate" button. It will display the location on map. Please refer to following picture:



4.2 How to live track on LiveGTS platform:

If you want to do live tracking on platform, you need strictly set tracker ID, server, Port, APN and time interval for PT502 as per below steps 4.2.1~4.2.5.

Firstly please ensure that your SIM card in PT502 supports GPRS connection prior to setting



4.2.1 Add the tracker into LiveGTS software

Login LiveGTS: You can open your tracking website by IE and login with your account. Go to "Manage" -> "Tracker Config" -> click "Add New Tracker", please fill in name and tracker ID, select correct tracker Model, click "Modify" button to add this tracker into software successfully.

Modify GPS Tracker

°T502	PT502te	test		-		
lease	110234! Please i	456 input o er ID mo	digital n	umber	110.	
T502	PT502	5	330 300	~		
admir	admin	i i		~		
admir	admin				~	~

Note:

Name: you can use any name for your tracker

Tracker ID: Tracker ID can be any digit numbers you want, but must start with the fixed three numbers show in FMS or your private account (here in this example, tracker ID starts with fixed 110), and total numbers shoule less than 13.

Model: must choose the correct model number PT502

Please remember click "Modify" button after you input information.

At now, please use your mobile to send below SMS commands and configure it to work with LiveGTS Software, after you done all below setting, you can back to LiveGTS software real-time to check your tracker online.

(notes: please go on next step after you already get the confirmation SMS for last step. PT502 will only reply command from a user which uses the correct password. Commands with wrong Password are ignored.)

4.2.2 Set ID for PT502

Command format : <password>GID<ID>

Example: send this SMS 000000GID11023456 to tracker

PT502 will reply with an SMS (SET OK, ID=11023456) to confirm this setting.

Note: Please use the exactly same tracker ID you preset into tracking software LiveGTS in above step 4.2.1



4.2.3 Set APN

Command: <password >APN<APN>, <User>, <Password>

Note: If your APN doesn't have username and password, please input APN only.

SMS Example: 000000APNCMNET (CMNET is China mobile's APN, no username & password for it)

PT502 will reply with an SMS (SET OK, APN: CMNET, USER: PASS:) to confirm this setting. (You can ask your GSM operator for their APN, username and password, the APN information is used to report data from SIM card to server.)

4.2.4 Set server and port

Command: <password> SVR<domain>, <Port>

Note: SVR=Server

SMS Example: 000000SVRDEMO.LIVEGTS.COM, 8502

PT502 will reply with an SMS (SET OK, IP: DEMO.LIVEGTS.COM) to confirm this setting (Recommend setting domain in this command like above example. PT502's server port is always 8502)

4.2.5 Set Time Interval for Sending GPRS Packet

SMS Example: 000000GTI30

Then PT502 will report data by GPRS to server every **30** seconds. We suggest time interval >= 30 seconds. Time interval should not exceed 65535 seconds

Note: We suggest set report time interval simply as above example when testing initially.

<u>Extended Commands for setting report time interval</u>: (If no special demand, it isn't necessary to use) Command: comma

If you want to save the GPRS cost, the normal way is to use Time Interval and ACC Ratio only, you can send below command to tracker to configure:

Example: 000000GTI30,0,0,0,240

Note: you must connect car's ignition wire with PT502's ACC when using this command.

Then PT502 will report data to server very **30** seconds when car is moving, and PT502 will report data to server every **2** hours (**30**secondsx**240**=7200seconds=**2**hours) when car ignition is OFF.

The complete command's explanation:

Example: 000000GTI30,300,30,0,240

Then PT502 will report data to server every 30 seconds when car is moving,

PT502 will report data to server every 300 meters distance,

PT502 will report data to server when car turns bend for 30 degree or over 30 degree,

PT502 will report data to server every **2** hours (**30**secondsx**240**=7200seconds=**2**hours) when car ignition is OFF.



Now back to LiveGTS and go to "Real-time" page, select your tracker ID, you will see your tracker on the map. All above settings are basic steps to connect to the software.

After PT502 connects to server successfully, you can also:

--Get street address by SMS request

The tracker must work on the LiveGTS successfully and got good GPS&GPRS signal.

Then you can send the SMS command to get the detail address instead of latitude and longitude.

Command: <password>RCA SMS Example: 000000RCA

Notes: The default password of tracker is 000000.

SMS reply: Center: Nigang West Road Side Rd, Futian, Shenzhen, Guangdong, China

(Note: tracker can only reply the detail address in English)

PT502 will only reply command from a user which uses the correct password. Command with wrong

password is ignored.

--Set Mileage Alert to remind you maintain your car

The SMS command of setting Mileage alert is:

<password>MLA<base mileage>,<increment> unit: 100 meters

SMS Example: 000000MLA100000,50000

This example means, if the tracker records the car driving more than 10000km, tracker will send one Mileage Alert for each 5000km mileage increments.

This Mileage Alert can be sent to your mobile by SMS if you set your mobile number as SOS number for this tracker installed in car.

This Mileage Alert can be also sent to your email address if you set your email address in software successfully.

Note: only PT502 in version 1.17 above supports this Mileage Alert feature, if your PT502's firmware is lower than 1.17, please contact your sales representative to help you check and upgrade the firmware.

5 SMS Command List

(Remarks: the device password is 000000 as default)

Description	Command	Remarks
Get current location	<password>RCP</password>	RCP=Request Current Position Get current location's latitude and longitude of PT502



		www.boran.cc
Get street address by SMS request	<pre><password>RCA</password></pre>	RCA = Request Current Address Note: this command is only valid when tracker is connecting to server by GPRS successfully and GPRS signal under stable status.
Get Google map link by SMS request	<password>RCM</password>	RCM = Request Current Map (this command is still valid even don't config PT502's GPRS connecting)
Set password	<pre><password>PWD<new password=""></new></password></pre>	PWD= P asswor d (must be 6 digits)
Reset password when the previous password is forgotten	000000RPW <new password=""></new>	RPW=Reset Password Please long press the SOS button when you send this command to PT502 (Password must be 6 digits)
Set preset phone number for SOS button	<pre><password>SOS,<sosnumber1>,<so snumber2="">,<sosnumber3></sosnumber3></so></sosnumber1></password></pre>	SOS Number: Preset phone number to receive phone call or SMS from PT502. Max 16 digits. Maximum 3 SOS numbers can be set. If only set the 1st number, PT502 will send SMS and then call to this first number after pressing SOS button. If set the 2nd or 3rd numbers too, PT502 will send SMS to all 3 numbers, only call to the 1st number after pressing SOS button. Note: <password>SOS, command is for cancel all pre set numbers.</password>
Set Over Speed Alert When car speed is higher than the preset value, PT502 will send an alert SMS to the preset SOS number.	<password>SPD<max speed=""></max></password>	SPD= Speed Max Speed (the preset speed value) =0,to turn off this function =[0,500](unit: Km/h) Example: 000000SPD80 it will send alert when it is over 80Km/h



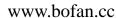
		w w w.boran.cc
Set Geo-fence Alert	<pre><password>GOF<type>,<swlat>,<sw< pre=""></sw<></swlat></type></password></pre>	GOF=Geo-Fence
	Lng>, <nelat>,<nelng></nelng></nelat>	Type =1, alert when out of range
When car leaves out or		Type=2, alert when enter this range
enters a preset scope,		SW=South-West
PT502 will send one		NE=North-East
Geo-fence alert SMS to		Example: 000000GOF0, to turn off
the preset SOS number.		this function
the preset 300 humber.		this function
Set Mileage Alert	<password>MLA<base< th=""><th>MLA=Mileage</th></base<></password>	MLA= M ile a ge
	mileage>, <increment></increment>	Unit: 100 meters
Configure Odometer	<pre><password>COD</password></pre>	COD=Config Odometer
		(unit: 100 meters)
		If send command 000000COD or
		000000COD0, it is to set the tracker's
		odometer to be "0"
		Command 000000COD100 , it is to set
		the tracker's odometer to be 10km.
		(100*100meter=10000m=10km)
		Command 000000COD5000, it is to
		set the tracker's odometer to be
		500km.
		(5000*100=500000m=500km)
Set time zone	<pre><password>TMZ<time></time></password></pre>	TMZ= T ime Z one
difference		Time from -13 to 13
		Example: 000000TMZ8
Restart	<password>RST<type></type></password>	RST= R e st art
		Type=0 or null, to reboot PT502
		Type=1, to reboot GPS
		Type=2, to reboot GSM
Reset PT502 to default	<password>DFT</password>	DFT= D efault
Request Power	<pre><password>RPO</password></pre>	RPO=Request Power Voltage
Cut Power Alarm	<pre><password>CPA<value></value></password></pre>	CPA=Cut Power Alarm
		Value=0,to disable Cut Power Alarm
		Value=1,to enable Cut Power
		Default set: 000000CPA1
Get IMEI	<pre><password>IME</password></pre>	To get IMEI number
		_

Output Control	<pre><password>OPC1,<action></action></password></pre>	OPC=Output Control
•	spasswords of of, sactions	·
(usually for stop car		Action=0,to close the output
remotely via extra relay)		=1,to open the output
Set Alarm	<pre><password>SAL<alarm><index1><inde< pre=""></inde<></index1></alarm></password></pre>	SAL= S et AL arm
	x2> <index3></index3>	Alarm =IN1, for input1(SOS alarm)
		SPD, for over speed alarm
Different alarms can be		GEO, for geo-fence alarm
set at the same time, just		MLA, for Mileage Alarm
use "," between different		SKA, for shake alarm
alarms, please refere to		LPA, for low power alarm
below example details for		IU4, for input4/ACC up
ignition on/off alarm.		(any alarm command)
		Index1=1, to alert on platform
		=0, do not alert on platform
		Index2=1, to send alert SMS
		=0, do not send alert SMS
		Index3=1, to call the preset SOS
		phone number
		=0, do not call the preset SOS
		phone number
		Default value:
		000000SALIN1111
		000000SALIN4000
		Example: 000000SALIN1111
		That means, when input 1(SOS key)
		is pressed, PT502 will have
		SOS alarm on platform, send
		alarm SMS to SOS number,
		call to SOS number.

000000SALIN4111,IU4111

abc de 1

- a Send "ignition on" alarm to software real-time page and email address
- b Send "ignition on" alarm to SOS number by SMS
- ^c Call SOS number when there is "ignition on" alarm
- d Send "ignition off" alarm to software real-time page and email address
- Send "ignition off" alarm to SOS number by SMS
- f Call SOS number when there is "ignition off" alarm
 - 1 means activate this function
 - 0 means close this function





AD alarm	<pre><password>AD1<index1></index1></password></pre>	Index 1 =[]
	<parameter>,<alarm name="">,<index2></index2></alarm></parameter>	Parameter=[0~100] (unit: %)
		Alarm name = default is AD1 alarm, if you use "fuel alarm" at here, you will get alarm fuel alarm SMS contents.
		Index2 = 4 means ACC

For example:

000000AD1<10,Fuel Low,4

After you connect fuel sensor to PT502 AD wire, PT502 will send Fuel Low alarm SMS to SOS number when tracker get AD data <10%, but this alarm is effective only when ACC on (if you connect PT502 ACC to car ignition, then it means car ignition on).

Note: if your fuel sensor keep working even when car ignition off, you don't need to set index2 as 4 at here.

000000AD1>30,Temp High,4

After you connect temperature sensor to PT502 AD wire, PT502 will send Temp High alarm SMS to SOS number when tracker get AD data >30%, but this alarm is effective only when ACC on (if you connect PT502 ACC to car ignition, then it means car ignition on).

Note: if your temperature sensor work independently, and don't depend on car ignition, then you don't need to set index2 as 4 at here.

Set Analog Voltage	<pre><password>AV<ad port=""><min pre="" voltage<=""></min></ad></password></pre>	AV= A nalog V oltage
	of sensor>, <max of="" sensor="" voltage="">,24</max>	AD Port=1 means AD1
(If your analog sensor		Min voltage of sensor=input your
max voltage is not 6V,		sensor min voltage at here
then you need to do this		
setting, to let tracker		Max voltage of sensor=input your
know what is your sensor		sensor max voltage at here, it can't be
voltage specification)		over the max voltage of tracker
		support.
Set char for alert SMS	<pre><password>ACH<alarm><char></char></alarm></password></pre>	ACH= A larm CH ar
Set char for alert SMS contents	<pre><password>ACH<alarm><char></char></alarm></password></pre>	ACH= A larm CH ar Alarm=IN1, for input1 (SOS Alarm)
	<password>ACH<alarm><char></char></alarm></password>	
	<password>ACH<alarm><char></char></alarm></password>	Alarm=IN1, for input1 (SOS Alarm)
	<password>ACH<alarm><char></char></alarm></password>	Alarm=IN1, for input1 (SOS Alarm) IN4, for input4
	<password>ACH<alarm><char></char></alarm></password>	Alarm=IN1, for input1 (SOS Alarm) IN4, for input4 SPD, for over speed alarm
	<password>ACH<alarm><char></char></alarm></password>	Alarm=IN1, for input1 (SOS Alarm) IN4, for input4 SPD, for over speed alarm GEO, for geo-fence alarm

For example:

000000ACHIN4Engine Start

it means PT502 will send a "Engine Start" SMS to SOS number when there is ignition on alarm.

clear Saved data <password>csv</password>	Clear Saved data	<pre><password>CSV</password></pre>	CSV= C lear S a v ed data
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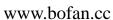


Check the settings	<password>ASK<cmd></cmd></password>	Examples: 000000ASKSVR, to check the server & port you set already 000000ASKTMZ, to check the time zone you set already
_	connecting device to server rd supports GPRS service)	
Set ID	<pre><password>GID<id></id></password></pre>	Tracker ID can't be over 13 digits.
Set APN	<pre><password>APN<apn>,<username>,< Password></username></apn></password></pre>	If your APN doesn't have username and password, type APN only; (Please get the correct APN of SIM card in tracker from your SIM card provider)
Set Server	<password>SVR<domain>,<port></port></domain></password>	Domain: the tracking platform domain name Port: 8502 (Fixed for PT502 when working on our tracking system)
Set Time Interval (for report data to software server by GPRS)	<pre><password>GTI<time interval="">,<distant interval="">, <angle>,<reserved> <acc ratio=""></acc></reserved></angle></distant></time></password></pre>	Time Interval =0,to turn off this function Time Interval =[5-65535] (unit: second) Distant Interval =0, to turn off this function Distant Interval =[100-65535], (unit: meter, suggest Distant Interval >500) Angle=0, to turn off this function Angle= [15-360], (unit: degree, suggest Angle > 30) Reserved=0 (please write 0 for reserved now) ACC Ratio=0, to turn off this function ACC Ratio ≥ 1 only integer NOT suggest use Distant Interval and Angle and ACC Ratio if you don't have special needs.



6 Trouble shooting

Problem: Device can't power on	
Possible Cause:	Resolution:
Wiring was not connected properly	Check and make sure wiring connection is in order.
Battery needs charging	Recharge battery
Problem: Device doesn't respond to SMS	
Possible Cause:	Resolution:
GSM antenna was not installed properly	Make PT502 in good GSM network coverage.
	Connect the power cable to car battery directly
Low power	or use 12V charger to charge it for 3hours at
001111	least
GSM Network is slow	Wait for SMS. Sometimes GSM network slows
	down during peak time or base has problem.
Wrong password in your SMS or wrong SMS format	Write correct password or SMS format
The SIM in PT502 runs out of credit	Recharge credit of the SIM card
No SIM card	Insert working SIM card. Check in phone that the SIM can send SMS message.
SIM card has expired	Check in phone if the SIM card can send SMS message. Replace SIM card if need.
SIM has PIN code set	Remove PIN code by inserting SIM card in your
	phone and deleting the code.
SIM is warped or damaged	Inspect SIM card, clean the contacts. If re-installing does not help, try another to check
Roaming not enabled	If you are in another country, your SIM card must
-	have roaming service enabled.
Problem: Reply SMS starts with 'Last'	
Possible Cause:	Resolution:
PT502 does not have clear view of the sky	Move the antenna of the unit to a location where the sky is visible.
PT502 is indoor	Make it work in an open area outside
Battery power is low	Recharge device
Problem: Can't real-time tracking on platfo	
Possible Cause:	Resolution:
GPRS setting is not correct.	Please set each step strictly according to user manual.
APN is wrong	Ask your SIM card provider to get the correct APN, username and password if it has and then





	set again.
Tracker ID set by SMS command is not	Check if the tracker ID you set into device is
same as that one written in software	same exactly as the one you write in software.

Welcome to contact your sales representative in our company or by email bofanelectronics@gmail.com if you have any questions.