User Manual

AT-12A Waterproof GPS Tracker (Vehicle/Motorcycle)



The AT-12A GPS/GSM Tracker is a waterproof vehicle remote positioning device with built-in GPS/GSM/GPRS technology in compact size. It can transmit the longitude and latitude coordinates to your cell phone by the SMS. User could use the coordinates to find its location on the Google maps or other map software. The tracker also uploads position data to a designated server through GPRS. User can look for real-time location-tracking and historical track through the our web base server.

1. Specification

GSM module	MTK program, GSM 850/900/1800/1900 Support TCP protocol
GPS Chipset	U-BLOX 7020(Support GPS/Glonass/Galileo/Compass)
GPS sensitivity	-162dB
Hot start	1sec.,average
Warm start	30 sec.,average
Cold Start	35 sec, average
Altitude Limit	18,000 meters (60,000feet) max.

Operating temperature	-20℃－65℃
Humidity	5%To 95% Non-condensing
Dimension	96mm×55mm×20mm
Voltage	12V – 45V
Average Current When stand-by	<84mA

2. LED Status :

Orange LED--- GSM signal status

Status	**Description**
Light On	GSM work
Flash	No GSM network or SIM card not detected

Blue LED: GPS signal status

Status	**Description**

Light On	GPS Work
Flash	GPS No Work or No GPS Signal

Red LED: Battery status

Status	**Description**
Flash	Charging/Working
Light Off	No Power

3. Wiring connections



Red - (+)12V -24V

Black – ground (-)

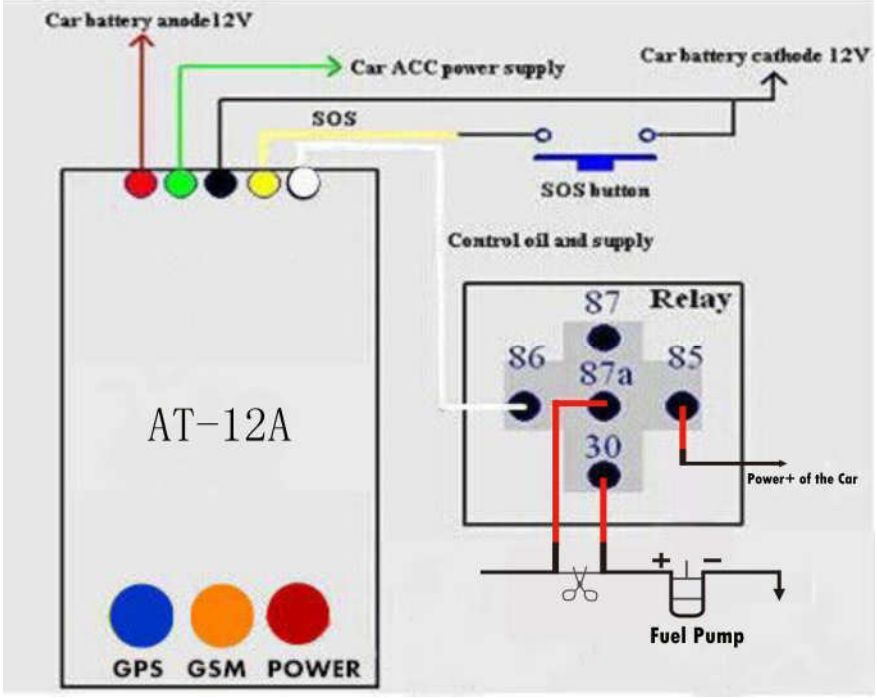
Yellow – SOS button (-) Connect other side of switch to ground (-)

Blue - engine immobilizer (-) (optional connection)

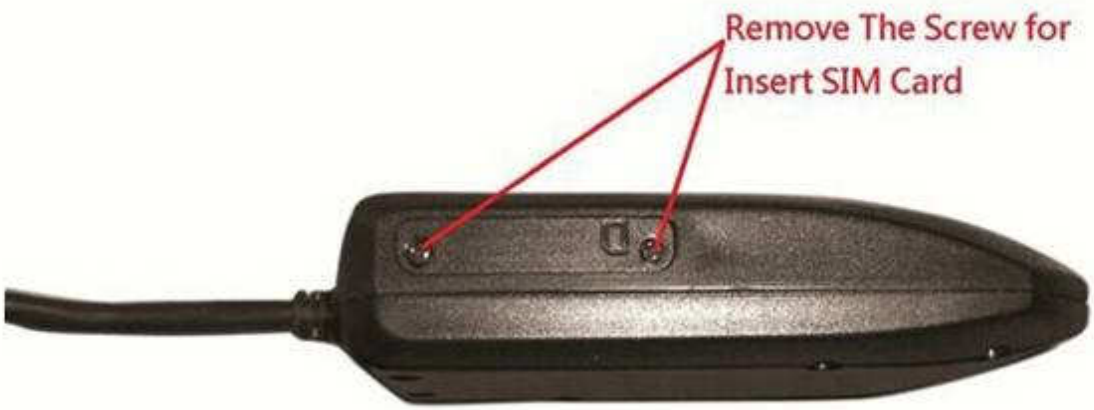
Green - ACC detect, stop battery charge while vehicle off.

4. Connect the Relay

The Blue cable is control the fuel of the car and connects pin 86 of relay which is a coil end. Pin 85 of the relay which is another coil end connects fuel channel to supply 12V power (please note working volt of the relay is consistent with working volt of the product). Pin 30 and Pin 87a are always closed ends and connect fuel channel power circuit in series. Please install wire in a correct way. supplier will not be responsible for device damage caused by wrong installation.



Remove the back plate, insert SIM car into SIM slot. Make sure enough charges in the SIM card.



5. The Place of the tracker in the Vehicle :

Front windshield decorative below the covert

Front panel (skin for non-metal material) around the shadow

Rear window below decorative



6. Work Mode

This tracker have two work mode which is SMS and GPRS Mode. SMS mode is for off line tracking by Mobile phone. GPRS Mode is for on line tracking by computer and mobile phone .

7. Tracker Default Work Mode

The Original password of the tracker is : 0000

The Default work mode is : Sleep Mode

The Default voice is : ON

About the Alarm information, The Tracker will send all of the alarm information to the first pre-saved number except the SOS Alarm that send it to all 1, 2 ,3 pre-saved number

Detail Operation

1. Controller phone number

Command: * controller phone number * user password *Sequence number (1-3) **
Eg: *13900000000*0000*1-3**
Reply : SET USER NUMBER 1-3 OK
Note: 1. Tracker can have three pre-saved number
2. New Number can cover the old number
3. No pre-saved number also can control the tracker, but alarm information only to pre-saved number

2. Work Mode Exchange :

SMS Mode Command：700+ user password
Eg: 7000000
Reply: SET MODE OK, CURRENT MODE: SMS

GPRS Mode Command：710+ user password
Eg: 7100000
Reply: SET MODE OK, CURRENT MODE: GPRS

3. Change user password

Command: 777+new password +old password (4 figures)
Eg: 77712340000
Reply: SET USER PASSWORD OK

4. Request the single position

Command: 666+ user password
eg: 6660000
Reply: when the tracker receive the command, then will send the position with longitude and latitude

5. Request location with Google map URL link

Command 1: 669+ user password
Eg: 6690000
Reply : When the tracker receive the command, tracker will send a Google link to the sender

6. Daily Report

Command: 665+user password+HHMM

eg: 66500001022

Reply : SET DAILY REPORT OK.

Close timing report: 665+user password+OFF

eg: 6650000OFF

Reply : SET DAILY REPORT OFF

Note: HH stands for hour with defined range of [00, 23]. MM stands for minute with defined range of [00, 59].

7. SOS Alarm

When press the SOS button more than 3 seconds, it will call and send location to three controller phone number , the information state is "STATE: SOS"

8 . Geo- Fence

Turn On Geo-fence
Command: 211+ password
Eg: 2110000
Reply: GEO-FENCE ON

Set Geo Fence Command: 005+user password+Rzzz.z
E.g: 0050000R1.0 (1000M)

Reply: GEOFENCE ON

Turn geo-fence off
Command: 210+ password
Eg: 2100000
Reply: GEO-FENCE OFF

9. Battery low voltage alert

While device detect internal battery is low power, it will send the position message with STATE: Power Low Alarm

10. Cut Fuel

Open Cut Fuel Command: 940 + user password
Eg : 9400000
Reply : POWER OFF OK

Close Cut Fuel command : 941 + user password
Eg:9410000
Reply : POWER ON OK

11 .Alert while power off

Open the power off alert Command: 011 + user password
eg: 0110000
Reply: POWER ALARM ON

Close the power off alert Command: 011 + user password
eg: 0110000
Reply: POWER ALARM OFF

12. Tow alarm

Turn on tow truck alert: 181 + user password + TX

Eg: 181000015 (15 seconds)

Reply : TOWED ALERT ON

Turn off tow truck alert: 180 + user password

Eg: 1800000

Reply : TOWED ALERT OFF

Note: X is the continuous time, the wide is 【15，100】, the unit is second

13. Mileage Statistics(Software Support)

Set initial mileage value (zero clearing)

Command: 142+PW<+M+X>

Eg : 1420000

Reply : MILEAGE STATISTICS RESET OK

Eg : 1420000M1000

Reply : SET TOTAL MILEAGE OK,CURRENT：1000

Note: M is delimiter, X is initial mileage value with unit of meter

Read current mileage

Command: 143 + user password.

eg: 1430000

Reply : MILEAGE STATISTICS:ON，CURRENT TOTAL MILEAGE:XX.

14. Time Zone

Command: 896 + user password + D + NN

Eg: 8960000E08

Reply : TIME ZONE SET OK,CURRENT：E8.

Note : D takes E or W to indicate east or west time zone respectively. N takes a 2-digit number (1-12) to indicate time zone number.

15. Overspeed Alarm

Command : #122#user password#X##

Eg: #122#0000#120##

Reply: SET RATE LIMIT:120

Close command : #122#0000#0##

Note : X is speed benchmark value, which is an integral number. unit is KM/H with defined domain of [0, 999].

16. Set Defence Alarm ON/OFF

Open Defence Alarm : 125#
Reply : OK

Set Up Defence：712+password

Eg：7120000

Reply：SF OK
Set Down Defence：713+password
Eg： 7130000
Reply：CF OK

17. Set Sleep Mode ON/OFF

Open Sleep Mode command :SLEEP,000000,1

Close Sleep command : SLEEP,000000,0

Explanation : Tracker will close gps/gsm/power in sleep mode for save power, once shake, tracker will work again

18 . Voice ON/OFF

Voice ON command : 150+password

Eg : 1500000

Reply : Voice: ON

Voice OFF Command : 151+password

Eg : 1510000

Reply : Voice : OFF

Explanation : tracker will call and send message to pre-saved number in Voice on mode when take alarm, and will not call but only send message to pre-saved number in voice off when take alarm .

19. Set Access Point Name (APN)

Command1：#803#user password#APN##
eg：#803#0000#CMNET##
Command2 : #803#user password#APN#APN user name#APN password##
Reply: SET GPRS APN OK

20. Set server IP address and Port

Command：#804#user password# IP # Port ##
Eg:#804#0000#115.160.150.155#8080#
Reply: SET SERVER IP AND PORT OK

21. Set Data upload interval time

Command：#805#user password# X #1# (ACC ON)
eg：#805#0000#20#1##
Reply: SET GPS SAMPLING TIME AND QUANTITY OK

Command：#809#user password# X #1# (ACC OFF)
eg：#805#0000#300#1##
Reply: GPRS REPORT SAMPLING 2 OK
Note : X is mean interval time, the unit is seconds，the wide is【10，59999】，1 is mean the interval quantity, when X=0, Close the upload function

Special Command :

1、Reset Command : *RESET#0000##
2、Restart Command *RESTART#0000##
3、Read the current setup information Command: *RCONF# and *RCONF1#