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| **AT08+ User Manual V1.5** |
| Updated by 2017-11-28 |



Content

[Preface 3](#_Toc23630)

[1. Product Introduction 4](#_Toc22578)

[2. Packing List 5](#_Toc16759)

[3. Technical Parameters 5](#_Toc3975)

[4. Define of LED indicator 5](#_Toc26028)

[5. Device Installation 6](#_Toc18545)

[5.1 Prepare works 6](#_Toc15860)

[5.2 SIM Card Installation 6](#_Toc23461)

[5.3 Device Connection Description 7](#_Toc16598)

[5.4 Device Install Position 7](#_Toc27560)

[6. Commands list(SMS/Serial Command) 8](#_Toc23667)

# Preface

**Thank you for choosing the company's AT08+ GPS tracking products, please carefully read the instructions before operating.**

Please check the items in package with packing list, contact with the distributor when you found something leave out.

 Disclaimer：

* Read this user manual carefully please. When you start use this product, then you are deemed to have read this user’s manual.
* This Product used as assistant tool for Security only, can’t prevent all kinds of deliberately theft or malicious damage vehicles. For the safety of your assets, you still need keep necessary vigilance and security awareness after you installed this product. We do not bear responsibility to any loss except product itself. Thanks!

# Product Introduction

AT08+ positioning device combined with positioning, monitor and observe, alarm, advertising and tracking functions, it’s easy to use, easy to operate, the main applies to Motorcycles, vehicles and other mobile object location and tracking services.

AT08+ fully supports the GPRS network data transmission function, GPRS platform can be combined with software to make it more widely used in large-scale cluster monitoring, emergency scheduling, fleet management, traffic safety management and many other fields.

**Product Features:**

* Main power cut alarm.
* Build-in GSM/GPS antenna.
* Support GPS real-time tracking(platform support).
* Support GPRS network data transmission.
* Over speed alarm.
* Vehicle mileage statistic.
* Remote Cut/Recover Engine.
* Remote upgrade by OTA.
* GSM Jamming detect.
* Move alarm(ACC OFF in protection mode).

**Note:**

* This product function based on GPRS network; need a SIM card which have GPRS data transmit and SMS functions.
* SIM card is not include in the packing list, please prepare SIM card before you use this device.
* Self-define cable can be cut if you do not use it.
* This product work voltage is (9v-36v/DC ), lower or higher will make device work improper.

|  |  |  |
| --- | --- | --- |
| **No.** | **Name** | **Count** |
| **1** | AT08+ Main device | 1 |
| **2** | 6PIN Cable | 1 |

# Packing List

# Technical Parameters

|  |  |
| --- | --- |
| **Name** | **Parameters** |
| GSM module | GSM 850/ 900/1800 /1900MHZ |
| Color | White |
| GSM module | M26 |
| GPS module | MTK 3337 High sensitivity chip |
| Working Voltage | 9V~36V@DC |
| Working Current | 40-80mA |
| Back-up Battery | 50mAh/4.2V |
| Tracker size | 80mm\*46mm\*18mm |
| Tracker weight | 40g |
| Working temperature | -30℃ - +75℃ |
| Moisture | 5% - 95% |
| Locate Sensitivity | 10m |
| Locate time | Hot start(average): <5s  Cold start(average): <20s |
| GPS Sensitivity | -165dbm |
| LED Indicator | Use red/green two color LED indicator to show the status of GSM/GPS. |

# Define of LED indicator

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **LED Color** | | **Status** | **Status describe** |
| GSM status | Red | Fast blinking (1s blink once) | | Finding SIM card |
| Red | Slow blinking (3s blink once ) | | Device read SIM card/online |
| GPS status | Blue | Fast blinking (1s blink once) | | Finding GPS( not locate) |
| Blue | Slow blinking (3s blink once ) | | GPS Located |

# Device Installation

Before you start install the device, Please check the product you get with the packing list, if you have any problem please contact us or distributor in time.

## 5.1 Prepare works

* GPS product AT08+
* Local GPRS SIM card
* 12V/24V DC power supplier

## 5.2 SIM Card Installation

This device need install a SIM Card, which must have GPRS data transmission and SMS function. In default setting, this device will use around 10MB~20MB data flow, please select suitable package.

**Note:**

* Do not install SIM Card in opposite way.
* SIM Card must open GPRS data transmission function
* Confirm the SIM Card have enough balance inside.
* Test SIM card by cellphone to check if it can connect network
* Please do not remove or insert SIM Card without power off, to avoid the damage to SIM card and device

## 5.3 Device Connection Description



|  |  |  |
| --- | --- | --- |
| **No.** | **Color** | **Describe** |
| 1 | Red | Power(+) |
| 2 | Black | GND |
| 3 | White | ACC |
| 4 | Yellow | OUT1(Immobilize) |
| 5 | Brown | OUT2 |
| 6 | Blue | SOS(DEF-) |

## 5.4 Device Install Position

To install this device you need have some necessary knowledge about Car Electronics. So please make sure you have right person to make the first installation.

In the installation process, do not power on device. The following is some problem may facing in the installation process, please note:

There have two kind of way to install the device: Hidden install and Open type install. When install in special-purpose vehicle you can select hidden install, and when install in temporary vehicle you can select Open type install.

1. To avoid be broken, the install position of the device should be hidden. The suggest positions are:

➀ Covert within the dalle below the front windshield glass;

➁ Covert around the front instruments panel (the cover of the instruments should not be metal)

➂ Place Under the dalle below the rear windshield glass of the car.

1. Avoid the positions round emitters, such as reverse sensor, burglar alarm and other vehicle-mounted communication devices.
2. Use the ribbon or sponge powerful double-sided adhesive to fasten the device.
3. The device GSM Antenna and GPS Antenna are build-in, please make sure the GPS receiving surface (the side with LED indicator) face to sky and no metal shelter above when install.

**Note:**

* If there have metal thermal-protective coating or warm up coating on the windshield glass, the GPS signal will be damped. That may cause the device work abnormal, please change install position.
* If you want to install the device by Open type, you can paste the Velcro tape on the dalle below the front windshield glass, and then fasten the device on it.

# Commands list(SMS/Serial Command)

To make the device work on GPRS mode together the control center software system, we have to set some parameters to make the device know where and how to connect the server.

Note: All commands are case sensitive, please check carefully before send the command!

The following parameters must be set before you use this device:

1. Set server IP and Port

**SMS command: AS1107\*269#1,120.24.225.253,5577,0#**

Device must have a server to upload the data to; in default it is set to our server IP and Port, if you use your own server, tell us before you place an order. The setting command is No.1, for example: **AS1107\*269#1,120.24.225.253,5577,0#**

(In that command,”120.24.225.253” is the IP, “5577” is the port, “0” is UDP and upload self-def2.)

1. Set APN

**SMS command: AS1234\*269#3,CMNET,,,#**

Full name for APN is Access Point Name, which should be given when you buy a GPRS SIM Card. It is offered by GSM network supplier, like China Mobile public APN is CMNET.

It is consists of 3 parts: APN, APN user name, APN password. Some of the GSM operator do not have APN user name and APN password, just leave it blank.

1. Set Device ID

**SMS command: AS1234\*269#2,18000001#**

1. Query IP, PORT,ID

**SMS command: AS1234\*269#C#**

**Note:**

**The device serial/dispatch command are the same as SMS command, as following list.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Name** | **Command** | **Reply** | **Instruct** |
| **1** | Set server IP/Port | AS1107\*269#1,120.24.225.253,5577,0# | 120.24.225.253;5577,0;OK | Reply content is “IP” “Port”, connection type:  0: UDP; 1: TCP |
| Set URL | AS1107\*269#1,120.24.225.253,5577,0,URL,# |
| **2** | Set Device ID | AS1234\*269#2,12007845# | 12007845;OK | Current “ID” |
| **3** | Set APN | AS1234\*269#3,CMNET,,,# | CMNET,,;OK | APN setting |
| **4** | Restart Device | AS1234\*269#B# | GSM/restart; OK | Device restart |
| **5** | Factory set | AS1234\*269#F# | Reset OK; | All parameters recover to factory, beside IP/Port/ID/APN |
| **6** | Check connection info | AS1234\*269#C# | \*U:122.114.126.6,6666,1\*A:cmnet,,**\*N:34231801**,**M6**,N1,**60,3600**,0,0,R1,Q25  ,**G1,8**,**Z+0**,J0,0,E0,P1,AT09(2o) 1.5 | \*N: device ID;  M6: Online;  G1,8: G1 locate, G0 not locate, 8 located satellite;  Z+0: Timezone, GMT. |
| **7** | Angle upload | **AS1234\*269#9,X#** |  |  |
| **9** | Position query2 | AS1234WHERE2# | <http://maps.google.com/maps?hl=en&q=+22.59303,+113.87110> |  |
| **10** | Open/close Sleep mode | AS1234\*269#I,SX# | X=0, close sleep mode;  X=1, open sleep mode | When open this function, device will turn to sleep mode when ACC off for 5 mins. and wake up when ACC on or alarm or SMS trigger. |
| **11** | Check FW version | AS1234\*269#V# | Version:AT09(2o) 1.5@Jul 31 2017 11:13:27 |  |
| **12** | Set the authorized SIM number | AS1234\*269#5,XXX,XXX,  XXX,# | XXX,XXX,XXX,XXX, set ok | Need to add country code in each number.like china is +86, then the number should be: AS1234\*269#5,12345678912,,,,# (max: 4 numbers) |
| **13** | Authorized SIM number query | AS1234\*269#P# | 8612345678912,,,,;OK | To check the authorized numbers. |
|  | Set listening number | AS1234\*269#6,x,x,x,# |  | Number which can call for listening. |
| **14** | Cut fuel | AS1234ENGINE:OFF# | ENGINE:OFF;OK |  |
| AS1234\*269#O1,1# |  |
| **15** | Recover fuel | AS1234ENGINE:ON# | ENGINE:ON;OK |  |
| AS1234\*269#O1,0# |  |
| **16** | Set TIMEZONE | AS1234TIME:+/-X# | +:means east;  -:means west;  X is 0-12. | Example:  set GMT+8 Command:  AS1234TIME:+8# |
| AS1234\*269#I,Ex# |  | AS1234\*269#I,E8# |
| **17** | SMS set ACC ON/OFF upload interval | AS1234\*269#7,x,y,z,# | x=ACC ON upload interval, unit seconds;  y=ACC OFF upload interval, unit seconds;  Z=Jamming immobilize delay time, unit: minute. |  |
| **18** | SMS set over speed | AS1234SPEED:x,y# | X: over speed value;  Y: duration time, sec.  SET SPEED:30(Km/h);OK | unit：km/h；x is speed； |
| **19** | SMS set mileage | AS1234MILEAGE:x# | SET MILEAGE:50(Km);OK | unit：km；x is mileage； |
| **20** | Check IMEI | AS1234\*269#\*I# | IMEI: 460079155373814 |  |
| **27** | Enable Anti-jamming | AS1234\*269#\*J,X# | X=0 disable;  X=1 enable |  |
| **30** | Set harsh accelerate | AS1234\*269#a1,X,# | Default: Accelerate:14km/h/s |  |
| **31** | Set harsh decelerate | AS1234\*269#a2,X,# | Default: Decelerate:20km/h/s |  |
| **32** | Query harsh acc/dec parameters | AS1234\*269#a# |  |  |
| **33** | OUT2 | AS1234\*269#O2,x# | X=1, OUT2 enable;  X=0, OUT2 disable | Optional |
| **34** | Check IMEI | AS1234IMEI# |  |  |
| **35** | Upgrade by OTA | AS1234\*269#W,IP,PORT;# |  |  |
| **36** | SMS set Geo-fence | **AS1234REGION:ABCDEFG#**  For example:  AS1234REGION:01022347771135225302236346113535610100# | A：Region Number(support one region each time);  B：Region small latitude( Four byte: 02234777=22+34.777/60=22.57961)  C：Region small longitude ( Four byte 11352253=113+52.253/60=113.87088)  D：Region large latitude( Four byte:  02236346=22+36.346/60=22.605767）  E：Region large longitude ( Four byte  11353561=113+53.561/60=113.89268）  F：Region ID(HEX, range:  0x01-0xff)  G：Region alarm type  (0x00 Enter region alarm;  0x01 Exit region alarm;  0x02 Enter and Exit region alarm) |  |
| **37** | Clear region command | AS1234REGION:CLEAR# | REGION CLEAR OK |  |
| **38** | Enable position ACK | AS1234\*269#\*M,1# | Open ACK ok |  |
| **39** | Setting fatigue driving | AS1234\*269#p,T1,T2,# | T1=fatigue driving time,T1=0 close;T2=resting time | FATIGUE DRIVING:30,10;OK |
| **40** | Check fatigue setting | AS1234\*269#p# |  | FATIGUE DRIVING:30,10;OK |
| **41** | Query ID,IMEI etc. | AS1234\*269#S# | SN:39900723,IMEI:862151039900723 |  |
| **42** | ACC alarm(SMS ONLY) | AS1234\*269#\*S,x# | x=0,means closed;  x=1,means acc off alarm;  x=2,means acc on alarm;  x=3,means both enable; | eg:  AS1234\*269#\*S,1#,  reply:ACC OFF Alert ok; |
| **43** | motion state(Detect moving with out ACC wire) | AS1234\*269#0,x,y,z# | X: speed value trigger for ACC ON;  Y: speed value trigger for ACC OFF;  Z: duration time trigger for ACC OFF. | For example: AS1234\*269#0,8,0,10# |
| **44** | Set mileage ratio | AS1234\*269#L,1,X,# | X range: 100-200 | AS1234\*269#L,1,110,# |
| **45** | Check mileage ratio | AS1234\*269#L,0# |  | MileageRate:110;OK |
| **46** | Set Idle alarm | AS1234\*269#i,x# | x is idle duration, unit is minute;  Speed for idle is 10km/h, fixed in FW | IDLE:5;OK |
| **47** | Set Move alarm(ACC OFF) | AS1234\*269#mv,x# | x=move distance, unit is m(ACC OFF, x>100m) | MOVEALARM:300;OK |
| **48** | Query idle/move param | AS1234\*269#R# | sp:0,0s stp:0 dr:30,5 **idl:5** **mv:300** ack:0 unlock:0 sleep:0 def2:0 hour:0 |  |