

GSM/GPS ALARM TRACKING KIT

# AS201E USER'S GUIDE



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# 1. Introduction

AS201E is a GSM/GPRS/GPS alarm tracking box for multi applications.

This small unit is equipped with Quad Bands GSM/GPRS module, Hi-sensitivity GPS receiver and 3D Accelerometer. It's also can be connected with optional wireless/wired accessories like fuel senor, RFID reader, iButton Probe Kit, Temperature senor, RF Key Fob, Alarm siren and Relay for external electronics device control.

It supports both GPS tracking and backup LAC/CID tracking, which brings an idea solution with no blind tracking both indoor and outdoor.

# 1.1 Instruction of Safety

- ◆ Do not disassemble the device more than it is allowed. If the device is damaged, the power supply cables are not isolated or the isolation is damaged, before unplugging the power supply, do not touch the device.
- ◆ All wireless data transferring devices produce interference that may affA ect other devices which are placed nearby.
- ◆ The device may be fitted only by qualified personnel.
- The device must be firmly fastened in the predefined location.
- The device is susceptible to water and humidity in environment with IP class greater than IP67.
- Any installation and/or handling during a lightning storm is prohibited.
- Ensure that the batteries are not immersed in water. When stored, keep the device in a cool and dry place.
- Ensure that device and batteries are not exposed to hot surfaces or direct sunlight.

# 1.2 Specification

# Physical Specification:

• Dimension: 92x64x24mm

• Weight: 140g

• Enclosure: Aluminum Metal Box

Connector:

Molex 18Pin Connector,6Pin Molex Connector and one 4Pin Molex Connector SMA Connector for GSM/GPS antenna

Mini USB port for configuration and firmware update

#### Power Supply:

• Voltage: 9-36V DC

• Power Consumption:

70-150mA(All active)

Simple Sleep: <20mA (GSM ON, GPS Off, Alarm trigger active) Deep Sleep: <5mA (GSM Off, GPS Off, Alarm trigger active)

• Internal Battery:800mAH, 3.7V

#### GPS Navigation:

Antenna: External

Receiver: uBlox NEO 6M engine



Sensitivity: -162dBm

Navigation Update: 1Sec

• TTFF: Cold Starts: 29s/Aided Starts: <1S/ Hot Starts: <1S

#### - GSM:

• Antenna: External

Modem: QUECTEL M35 /Quad Bands:850/900/1800/1900MHz

## **Radio Frequency:**

• Working frequency: 433MHz.

• Code: 1527/2240 study

• Working Voltage: 12V (27A 12V dry battery)

• Control Distance: 20-50M

#### Environmental:

• Working Temp.: -20 °C ~ +75°C

• Humidity: 20-95%

# 1.3 Typical Application

- Car, truck, trailer and other special machinery like excavator and forklift)
- Motor Homes
- ♦ Boats & Yacht







# 1.4 Package Contents

# 1.4.1 Standard Package Contents

- 1) AS201E GPS Alarm Tracker x 1PC
- 2) GSM Antenna x 1PC
- 3) GPS Antenna x 1PC
- 4) 18Pin Power+ I/O Wire harness x 1PC
- 5) Panic Button x 1PC
- 6) Engine Cut-off Relay x 1PC
- 7) Microphone x 1PC



# 1.4.2 Optional Accessories

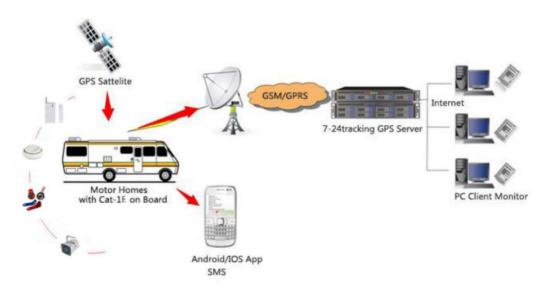


#### Note:

Please kindly noted that optional accessories are not available in the standard package. But they are available for purchase separately from manufacturer.

# 2. Knowlege Before Usage

# 2.1 How it works?



The AS201E mainframe works as a host box with multi input/outputs. The mainframe will process to get GPS location and various working status from inputs and wireless sensors, and then send those information to preset Phone Numbers or IP/Port Server via GSM network. Cell Phone or Server software can send commands to control outputs action and also acquire different information by available commands.



# 2.2 Factory Default Setting

Device SMS Command Password: 1234

IP/Port/APN: Empty

Alarm Alert Phone No.(A/B/C/D/G): Empty

Arm/Disarm Status: Disarmed

Speed Over Limit: Off

GEO Fence: Off

Data Transmit Mode: SMS Default when GPRS Parameter is not configured

Siren: ON

Automatic Immobilizer in Armed status: Disabled

Automatic Power supply switch from external to internal when external power low: Enabled

External Power low voltage Alert Level: less than 11.5V DC

Re-Arm: Disabled

Power Saving Mode: Simple Sleep
 SMS Data Time Zone: GMT+0
 Crash accident Logger and alert: Off

# 2.3 Power Supply

# 2.3.1 External Power and Internal Power

AS201E works with two power supply mode: External Power and Internal Battery.

It's working normally with external power supply range from 9-36V DC. When the external power is disconnected or with low voltage output, device will switch to work on internal battery automatically. And it also will send" Circuit Cut Off" or "External power low voltage" Alert to preset Alerts Phone Numbers.

# 2.3.2 Sleep Mode consumptions and how it works

## Simple Sleep when Ignition Off:

GSM Sleep with SMS/Call Active, NO GPRS Connection and GPS shut down All Alarms Detection working normally

Power Consumption in standby without alarm trigger: 10mA

## Deep Sleep when Ignition Off:

GSM Shut down, NO SMS/Call active, GPS shut down

Alarms trigger detection: Off 6seconds, detect 2seconds in recycle

Average power consumption without alarm trigger: <5mA

#### NO sleep when Ignition Off:

GSM all ON with SMS/Call active, and GPRS connected with Server with continuously data sending GPS ON

All alarm detection work normally



# 2.4 Transmitter Operation

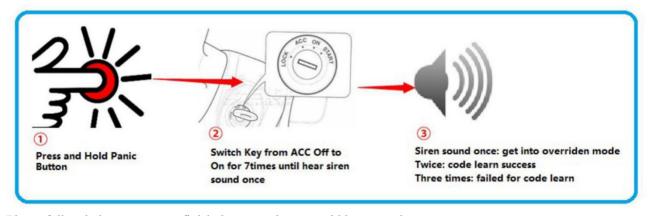
# 2.4.1 Transmitter Button functions



- Arm: Buzzer sound once, or direction light flash once
- Disarm: Buzzer Sound Twice or direction light flash twice.
- Mute Key: In siren sounding, press this button to stop the sounding.
- In panic, Activate Siren to sound. Or in parking lot, press this button for car finding.

# 2.4.2 Transmitter and wireless sensor Program to AS201E Box

If your transmitter is lost or damaged, or the transmitter battery is flat, the system can be overridden by Ignition switch conjunction with Panic Button.



Please follow below process to finish the transmitter overridden operation:

- 1) Send SMS command to clear all existing transmitter code which stored in the system
- 2) Disarm the system by SMS command
- 3) Press and Hold Panic button
- 4) Switch Key from ACC off to ON position continuously 7times
- 5) Buzzer will sound once to indicating Overridden mode entered
- 6) Press any button of the transmitter
- 7) Buzzer sound twice again to indicate override success and exit overridden mode.



If system get into overridden mode, and no transmitter button was pressed or did not receive any incoming signal during 20seconds, buzzer will sound bibibi three times and exit override mode

After you pressed the transmitter button during overridden mode, but system failed in accident due to unexpected reason, system also will sound bibib three times to indicate failure.

You can start the process again until you get it work success.

#### Note:

For other wireless sensor, like Door/window contact, Smoke and gas detectors follow the same process to integrate them to system.

# 2.5 How to configure device (Configuration)

AS201E box support configuration via SMS commands and also via PC program tool(Configurator) via connect AS201E with PC through USB cable.

# 2.5.1 Configure by SMS commands

Command Name	SMS Command Format	System Reply	Remark	
Setup/Delete Center SMS service *1234*G8613480877140#		Armed/Unarmed;G:xxxxxxxx		
Number G	*1234*G#	Armed/Unarmed;G:	A/B/C is for Alarm SMS alerts, D number is call center for voice response G number is SMS master Number for al priority	
Setup/Delete authorization Phone	*1234*AXXXXX*BXXXXXXXXXXXXXXXXXXXXXXX	Armed/Unarmed; A:xxxxxB:xxxxxC:xxxxxD:xxxxxxx		
Nos.	*1234*A*B*C*D#	Armed/Unarmed;A:B:C:D:		
Query all Service Phone No.	*1234*YY#	Armed/Unarmed;A:XXXXXB:XXXXC:XXXXD:XXXXXXG:XXXXXXXXXXXXXXXXXXX		
Modify SMS command Password	*1234*E4321#	Password has been changed!		
Setup SMS Data Time Zone	*1234*GMT+/-XXXX#	GMT+/-XXXX Setup OK!	Default is UTC time. This zone only	
Query Time zone	*1234*GMT#	GMT+/-XXXX Setup OK!	will effect on SMS data.	
Setup GPRS Parameter	*1234*GPRS:863070015806069,211.154.142.150,9114,T,CMNE T,user,pass#	GPRS Parameter:863070015806069,211.154.142.150,9114,1,CMNET,User,P ass	T=0, TCP;T=1, UDP	
Query GPRS Parameter	*1234*QP#	GPRS Parameter:863070015806069,211.154.142.150,9114,1, CMNET,,SMS/SMS+GPRS		
Data Update Time Interval	*1234*ITV0010#	ITV Enabled:60	Setup the Positoin report frequency	
Setup G sensor	*1234*CS*m,x.x,y.y,z.z#	Crash Sensitivity 5,5.0,8.0,7.0	M is installation direction. (Range 1-6) x.x is the X axis alert limit (0.0-8.0)	
	*1234*GOFF#	Accident Alert Off	y.y is the Y axis alert limit (0.0-8.0) z.z is the Z axis alert limit (0.0-8.0)	
	*1234*GON#	Accident Alert ON		
SMS/GPRS Priority Mode Setup	*1234*SMS#	SMS Mode Activated		
	*1234*SMS+GPRS#	SMS+GPRS Mode Activated		
	*1234*SL*O#	Simple Sleep Activated!	Details working condition check user's Manual 2.3.2 Part.	
Sleep Mode Setup	*1234*SL*A#	Deep Sleep Activated!		
	*1234*SL*C#	Sleep Deactivated!		

For more commands information, please contact technical support or your seller!

Website: www.anbtek.com mail: info@anbtek.com

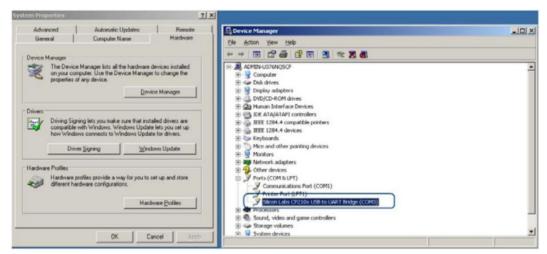


# 2.5.2 Configure by PC tool "AS201E Configurator"

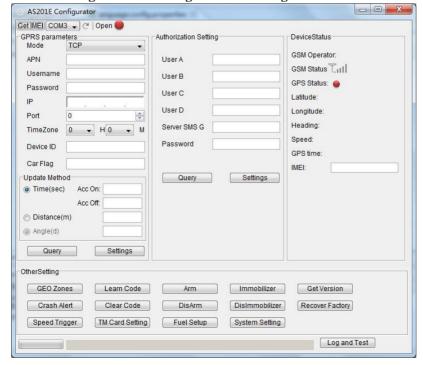
1) Connect AS201E with PC via USB cable:



2) Install CP2102 USB-Serial Driver:



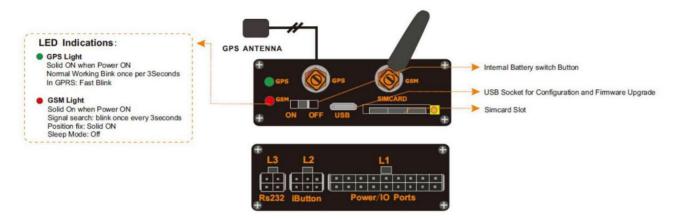
3) Run AS201E configurator.exe and get into following interface:



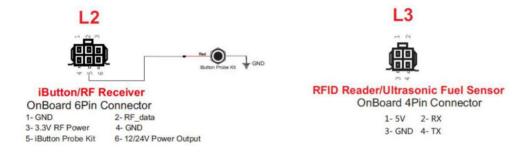


# 2.6 I/O Introduction and Definition

## 1) Main I/O ports Introduction:



## 2) I/O Pin slot Definition:



#### 3) L1 18Pin Port Pin slot definition:

	Wire Description	Pin No.	Wire Color	Function/Specification Description
	Power	9	Red/White	Power positive pole, 9-36VDC
		18	Black/White	GND
		6	Purple/White	Over speed Buzzer(=0V,Effect)
		8	Yellow	Siren/Hazard Light(12/24V, Effect)
	Output  L1 Molex 18Pin Connector Input	7	Blue	Lock Door(=0V, Effect)
		16	Blue/White	Unlock Door(=0V, Effect)
T 1 3 6 1		12	Brown/White	Mute-Control (=0V, Effect)
		15	Grey/White	Engine Immobilizer (=0V, Effect))
		17	Red	Ignition status Detection(=0V, Off)
Connector		4	White	Door Status( =0V: Open)
		3	Orange/White	Panic Button(=0V:effective)
		13	Blue/White	ShortCall(=0V, Effective)
		5	Black/White	Temperature AD
	Arm/Disarm LED	14	Yellow/White	LED +
	Microphone	1	Orange	Mic+
	Wierophone	10	Balck/White	Mic-
	2W Speedres	2	Green/White	Speaker +
	3W Speaker	11	Black/White	Speaker -



# 2.7 How to insert Simcard to AS201E



# 3. Functions and Operation

# 3.1 Arm/Disarm

#### – Arm/Disarm:

Arm: In armed status after ARM operation, any illegal events happened in I/O ports or Wireless sensor will trigger Siren sound and SMS alerts.

Disarm: Opposite to Arm, user is free to do any operation but no alarm alert will be triggered.

#### - Re-Arm:

Re-Arm is a function which is automatic arm again if the system was disarmed wrongly by mistakes and kids press.

#### Trigger condition:

If in Armed status, the system was disarmed, and get no Door open or Ignition status operation within 60 Seconds, system will automatic arm once.

 $AS201E\ system\ allow\ user\ to\ enable/disarm\ Re\text{-}arm\ function\ according\ user's\ usage\ habit.$ 

#### - Re-Arm function Enable/Disarm Method:

Enable SMS command: \*1234\*REARMON#
Disable SMS command: \*1234\*REARMOFF#

# 3.2 Alarm Alert functions

In Armed status, any illegal operation which happened in I/O ports and wireless sensor will trigger an alarm action.

In alarm, the alarm siren will sound for 20seconds, and also send alarm alert via SMS and missed call to preset phone numbers A/B/C.

Please check following alarm events alert system:



Functionality	A	В	С	D	G	Alarm Siren Sound	Server
Shock alarm	SMS Once	SMS Once	SMS Once			20Seconds Sound	Yes
External Power Disconnection	SMS Once	SMS Once	SMS Once			20Seconds Sound	Yes
Ignition ON	SMS Once	SMS Once	SMS Once			20Seconds Sound	Yes
Panic Alarm	SMS Once	SMS Once	SMS Once				Yes
GEO In/Out Alarm	SMS Once	SMS Once	SMS Once				Yes
Speed Over Alarm	SMS Once	SMS Once	SMS Once		with sire	nzzer==>>over timer n/light warning and zer activated until low limit	Yes
Fuel stealing	SMS Once	SMS Once	SMS Once			20Seconds Sound	Yes
Crash Accident Alert	SMS Once	SMS Once	SMS Once				Yes
External battery Low	SMS Once	SMS Once	SMS Once				Yes
Temperature	SMS Once	SMS Once	SMS Once				Yes
iButton	SMS Once	SMS Once	SMS Once	25			Yes
Voltage							
External Battery Charge Alert	SMS Once	SMS Once	SMS Once				Yes
Daily Travel Mileage SMS Report	SMS Once						
Call-IN Direct for voice Listen-in				yes	yes		Yes
Wireless sensor Trigger Alert(Smoke, PIR, Gas, Magnetic Door sensor)	SMS Once	SMS Once	SMS Once		SMS Once	20Seconds Sound	Yes

# 3.3 Remote stop Oil/Power supply for engine (Immobilizer)

# 1) Remote cut off Oil/Power supply for engine:

By SMS Command: \*1234\*STOP#

Operation from smart Phone App command Operation from Server Platform Command

# 2) Release engine cut-off to allow start



By SMS Command: \*1234\*K#

Operation from Smart Phone App command Operation from Server Platform Command

#### 3) Automatic Ignition starter lock in armed status

In Armed status, the system will keep Oil/Power supply in locked status. This is to protect burglar ignore alarm alerts and start vehicle to drive away.

This function is default as Disabled. If the user want to activate this function, can use SMS command sent AS201E inserted SIMCARD number to switch on and off this feature.

\*1234\*AUTOCUTON#

\*1234\*AUTOCUTOFF#

# 3.4 Power Saving

The system is designed to have different sleep mode when ignition off. In different sleep mode, the power consumption are different. Details please check <2.3.2 Sleep Mode consumptions and how it works>.

The user can use SMS command to configure device to be in different Sleep mode to save vehicle battery consumption. Check <2.5.1 Configure by SMS commands >

# 3.5 Shock Alert ,Crash accident alert and Crash accident data logger

AS201E box is with built-in 3D Acceleration sensor (G sensor) on board.

The device use this G sensor created three functions.

#### 1) Shock Alarm

AS201E will detect all X,Y,Z acceleration always, any changes in all X,Y,Z axis will be calculated, every changes

over 0.1G, system calculated for shocking once, every 5Seconds scan and calculate once.

We use 5seconds average shocking times as shocking sensitivity to generate Shock Alarm alerts in Armed Status.

SMS commands for adjusting shocking sensitivity:

\*1234\*VS\*xxx#

(xxx=001-200)

1=most sensitive

200= Most insensitive.

Switch On/Off Shocking Alarm SMS commands:

\*1234\*H# <Switch On shocking Alarm>

\*1234\*N# <Switch Off Shocking Alarm>



#### 2) Accident Alert for A/B/C Numbers

By configure AS201E installation position and X,Y,Z axils value to setup the accident alert value limit as trigger conditions. AS201E provides two ways to configure:

# - Configure By SMS commands \*1234\*CS\*m,x.x,y.y,z.z#

M for the custom direction value (1-6)

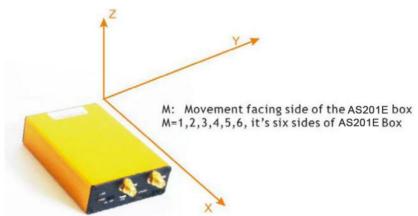
x.x corresponding to X axis value (0.0-8.0)

x.y corresponding to Y axis value (0.0-8.0)

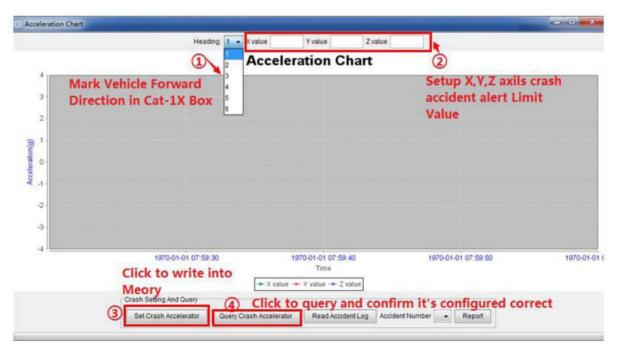
x.z corresponding to Z axis value (0.0-8.0)

#### Note:

Check as following picture which we defined the X,Y,Z direction for the accelerator sensor. And M is the movement sides serial NO. It can be any one as user self-define. Just make sure it's the movement facing side.



# Configure by Configurator program:



Any axils exceed the configured G value, it will trigger the accident alert.



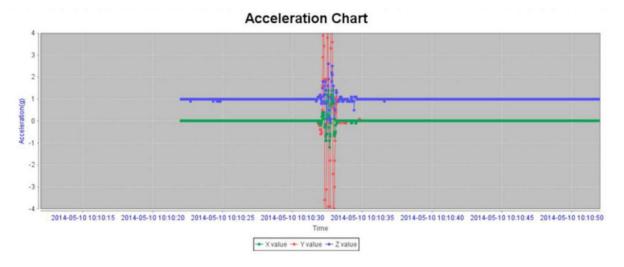
#### 3) Crash accident data logger for before/After 15Seconds in accident time

AS201E will record recent 3Times Accident G varies truth in memory. And allow user to load out via USB connection through the Configurator program. And recover back all details information via chart. Check as following picture:

A. By click "Read Accident Log" button to download AS201E recorded Accident Data, This process will take several minutes before download finish.



B. Display accident data log via chart with time frame and G value varies:



# 3.6 Voice Listen-in

Call Center Number D and SMS center Service No. G call AS201E, the system will put through to Voice Listen-in mode directly.

AS201E also provide other two methods to start Voice listen-in Operation:

- 1) By SMS command with correct password to AS201E box to get re-call back
- \*1234\*VMxxxxxxx# <xxxxxxx is call back phone No. for system>
- 2) Via GPS tracking platform Voice Listen-in Command to start Re-call back for voice listen-in For how to operate this please check 7-24tracking Platform User's guide for reference.

# 3.7 Switch ON/Off Siren

By SMS command, user can switch ON/Off siren remotely.

\*1234\*SIRENON# <Switch On SIREN SOUND>

\*1234\*SIRENOFF# <Switch Off SIREN SOUND>



# 3.8 iButton Probe Kit

AS201E support 1-Wire iButton Key/Probe Kit for driver Identification, via the AS201E Configurator to set iButton Key , as following the picture :





By SMS command, user can activate or close this feature:

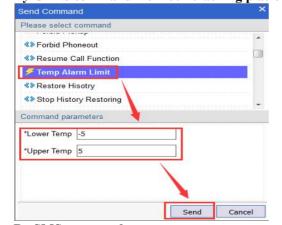
\*1234\*AUTHENIDON# < Driver Authorization Activated>

\*1234\*AUTHENIDOFF# < Driver Authorization Deactivated>

# 3.9 Temperature detection

AS201E support temperature detection, provides two ways to configure:

- By GPRS command from our tracking platform



By SMS command :



\*1234\*TMP:1, -10, +35# < Activate temperature detection, temperature range is -50°C~+150°C>

\*1234\*TMP:0# < Deactivated temperature detection>

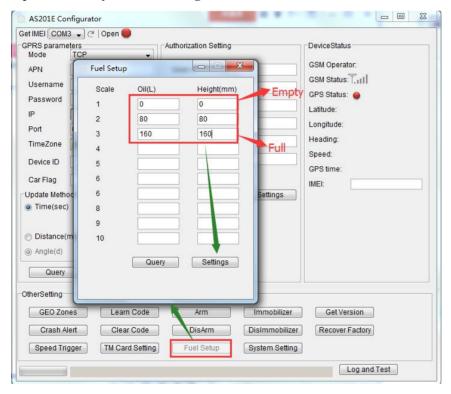
\*1234\*TMP# <Query temperature parameters>

# 3.10 Ultrasonic fuel senor configure

AS201E support Ultrasonic fuel senor.

How to install the Ultrasonic fuel senor please refer the <UF-141 Ultrasonic Fuel Sensor Installation Guide> provides two ways to configure:

Set parameters by AS201E Configurator :



How to activate the fuel senor on platform please refer the <UF-141 Ultrasonic Fuel Sensor Installation Guide>

- Set parameters by SMS commands :
  - \*1234\*OILPARA:XXX1,YYY1;XXX2,YYY2;XXX3,YYY3;XXX4,YYY4;XXX5,YYY5;XXX6,YYY6; XXX7,YYY7;XXX8,YYY8;XXX9,YYY9;XX10,YY10#

<XXX is liters >

<YYY is highly>

For example:

\*1234\*OILPARA:0,0;80,80;160,160#

- Query the fuel parameters:
  - \*1234\*OILPARA#

Response: OIL Parameters:0,0;80,80;160,160#



# 3.11 Asset maintain notice

AS201E support send the asset maintain notice via SMS message, by send the SMS command to set the parameters to to activate this feature.

#### SMS command:

\*1234\*MAINTENANCE:X,Y#

X= mileage, maximum 10000Km Y= engine running time, maximum 5000 hours If both X and Y are 0,means this feature deactivated.

#### For example:

\*1234\*MAINTENANCE:1000,0#

# 3.12 Battery Low Alert

When AS201E detected external battery output is with lower than 11.5V (This voltage can be configured by the AS201E Configurator, defaults to 11.5V), system will generate Battery low alerts to A/B/C Numbers. And stop draw vehicle battery, will switch to user internal battery for work.

After internal battery is going to use out again, system will generate another alert to A/B/C, and system will go to deep sleep to avoid killing vehicle battery dead. But keep all alarm detection alive for protection.

# 3.13 Recovery Factory Default

By click the button Recover Factory in the AS201E Configurator to be factory default setting.

By sending SMS command \*1234\*V# recover device to be factory default setting.

Be careful to use this command, because it will request you to re-configure the device again for working properly.

# 3.14 Remote Reboot

By sending SMS command \*1234\*Z# reboot AS201E remotely.

This is to solve problem if any operation fail and do quick problem shooting.

# 3.15 Locate in parking Lot

AS201E provides two methods for user to quick locate where the vehicle is by Siren sound and light flashing.

- 1. By press Remote controller Siren button to make sound
- 2. By send SMS command \*1234\*L# to get AS201E driving siren sound and light flashing.



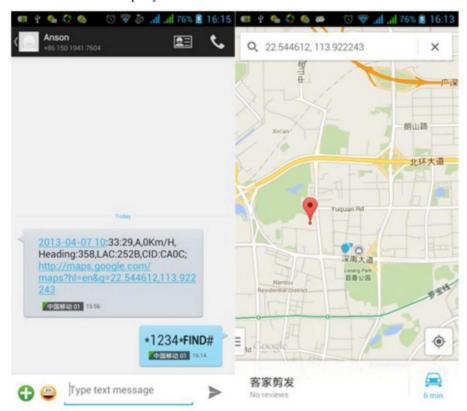
# 3.16 GPS Tracking features

# 3.16.1 Real Time Tracking

### 1) Track by SMS command

\*1234\*FIND# <To query with Google Map link reply>

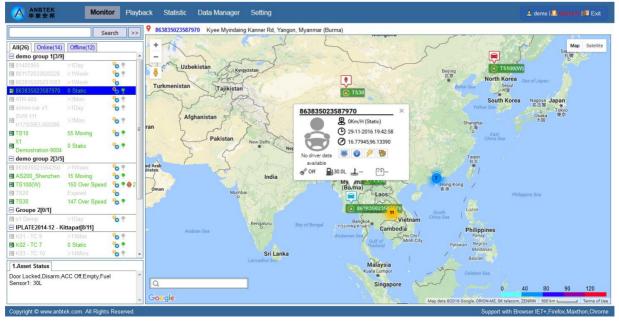
\*1234\*GPS# <To query with GPRMC format GPS co-ordinates>



### 2) Track by our GPS tracking platform

First ,you need to configure IP/Port/APN to the device .

Second, get a tracking account name and password.( Please contact your seller to got it)





# 3.16.2 Speed Limit Manage

#### 1) Speed Limit configuration:

By sending SMS command \*1234\*SPD080# configure as speed limit as 80Km/H

#### 2) Speed Over alert:

After speed limit is break, if the vehicle is not slow down to under limit within a configured time period, the AS201E will drive the siren sounding until the speed slow down to under limit.

At the same time, AS201E will activate the "immobilizer" for oil/Power supply for engine to force the driver down. <This function is default disabled by factory. Only can be used after activate by SMS command>.

Speed over SMS alert for A/B/C/G Number with contents:

Over Speed Alert;2011-12-08 12:32:13,V,60Km/H,Heading:60,LAC:2638,CID:0ECF; http://maps.google.com/maps?hl=en&q=22.537222,114.020948

And AS201E will generate this alert to 7-24Tracking platform via GPRS data either.

# 3.16.3 GEO Fencing Management

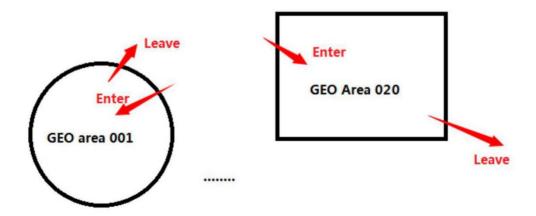
AS201E maximum allows user to create 20 GEO fencing areas. And the area shape can be circular or rectangular. Considered text message only can contain 140Bytes text, so user need to create multi-areas with more than one text message command.

GEO fencing alert support both Entry and Exit event.

Details please check following SMS command definition.

#### **SMS** command:

Circular: \*1234\*GEOZXXXYSSSUUUTTTRRRRRAAAAAAAAAAABBBBBBBBBBBBB



The parameters are explained as follows:



\*1234\* <Command header with password>

GEO <Command Name>

ZXXXY <First Area definition for area ID, area shape and events alert type>

<Z=Area shape, Z=1 means circular, Z=2 means rectangular>

<XXX is area ID. Circular ranges=001-020, rectangular ranges=021-040>

<Y=Alert type, Y=1 means entry, Y=2 means exit, Y=3 means alert both in entry and exit>

SSSUUUTTT <SSS=over speed alarm(km/h), UUU=update time interval(sec), TTT=max stop time(mins)>

ABCDR < Rectangular shape parameter format. Unit must be degrees, AB is bottom left latitude and longitude, CD

is top right latitude and longitude, please put "-" or "+" before it>

<Circular shape area parameter format, Unit must be degrees, R is radius(meter), AB is center latitude</p>

and longitude of Circular ,please put "-" or "+" before it>

Example:

Circular \*1234\*GEO1001308003003000500+22.543213+113.543213#

Rectangular \*1234\*GEO20213080030030+22.543213+113.543213+22.543213+113.543213#

# 3.13 Emergency Medical/Information Call to Center(Two way

# intercom)

AS201E has two way audio intercom functions by provided Hands free kits and Short-call button.

By Configurator program or SMS commands, user can configure one Call center Voice service Number D in AS201E.

After the short call button was pressed, the AS201E will start to call this D number and connect to talk with Call center support people.





# 3.14 Remote Door Lock/Unlock

AS201E get two digital outputs for Door Lock/Unlock via central locking system. This operation can be activate via

Remote controller/SMS Commands/GPRS command of Arm/Disarm operation.

#### **SMS** commands:

\*1234\*S# < Door Lock>
\*1234\*C# < Door Unlock>



# 3.15 Mute Output control for Original car Radio

This Mute output is for audio intercom purpose. When incoming call rings, AS201E will generate a signal to for this output cable and block Radio voice.

The Mute signal output from AS201E I/O Port <L1 Pin12>

# 3.16 Arm/Disarm Status LED Indicator

In Disarmed Status: LED Off

In Armed Status: Off 3Seconds, On 2Seconds in recycle.

### 3.17 Wireless Sensor Detection

#### AS201E is with 5 wireless Defense Zones which named: H, I, J, K, L

Defense Area Name	Alarm Type Code Define	Sensor Numbers Supported
H	1=Fire Alarm	All areas supported 1/2/3/4/5 Alarm
I	2=Gas Leakage Alarm	type, and Each type can program
J	3=Intrusion Alarm	5 Sensors maximum in one area. Example
K	4= Booth Open Alarm	H1 can program 5 same Smoke
L	5=Glass Broken Alarm	Detectors

#### - SMS AlarmAlerts Format:

Area Name+ Alarm Type+ Sensor ID, Date, Time, Speed, Heading, LAC/CID code + Address Google Link

#### Example:

I Area,Gas Leakage Alarm I2;2014-06-06 14:42:49,A,0Km/H,Heading:0,LAC:2638,CID:0FA1; http://maps.google.com/maps?hl=en& q=+22.54522,+113.92223

All defense Area can be programmed to be switch ON and Off by SMS command:

\*1234\*AWAY\*H# <Switch ON Area>

\*1234\*HOME\*H# <Switch Off Area.Default setting is all defense area in ON status>

Default setting is all defense area in ON status.

#### How to program sensor to AS201E Box?

AS201E allow user to do sensor code programming via two methods: SMS Command and override via Panic button + ACC ON/Off switch.

#### 1) Override via panic button and ACC status:



#### 2) SMS Command for Wire sensors code Program

Code Program Process:

- A. Confirm what type sensor and which area to be coded program
- B. Edit SMS command \*1234\*CODE\*H1#( H area, Smoke detector)and send to AS201E SIMCARD.
- C. AS201E siren sound once indicates code pending start, within 20seconds; trigger the sensor, if success siren ounds twice indicate success. And then start another 20seconds wait for second sensor input, maximum 5 sensors can be programmed. Any fail, siren will sound BIBiBi and exit code program mode

\*1234\*ERASECODE# <Erase all defense area all sensor code> \*1234\*ERASECODE\*H# <Erase signle defense area all sensor code>

# 3.18 Daily Travel Mileage SMS report to Driver (A authorization Phone No.)

AS201E designed to have a daily travel mileage SMS report to driver at defined time every day.

#### **Configure Mileage Report Time by SMS Command:**

\*1234\*REPTIME:09:36# <Set Mileage Report Time>

 KJ 20145A
 <Vehicle Plate No.>

 2014-01-21
 <Report Date>

 1st Trip:15:39-15:51=0Km
 <First Trip mileage>

 Last Trip:15:39-15:51=0Km
 <Last Trip Mileage>

SMS 11 <SMS count>

#### Note:

Please configure AS201E Time zone to be your local time before you setup this.

# 3.19 OTA firmware

AS201E supports firmware upgrading via GPRS.

If you need upgrade the latest version of firmware, please contact your seller or technical support!

# 4. APPENDIX

- Available SMS Commands List> please contact your seller or technical support to get it.
- < AS201E Installation Diagram> please download from our website :< Download>.