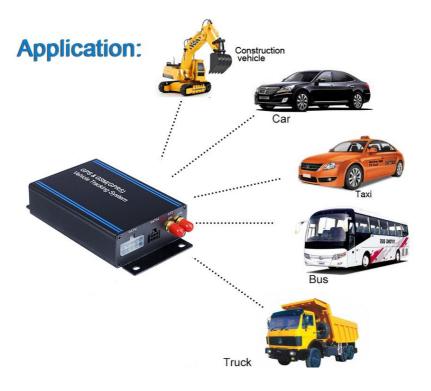
# Car tracker anti-theft (Model: MV01)

## 1 Car tracker anti-theft Introduction

MV01 integrates GPS and 4G module, it can send car location to mobile and Internet by SMS or GPRS , easy to tracking car on map real time, view status on website, lock/unlock by SMS/website and mobile , kill engine remotely, find car in the car park by control horn





# **2 Product Description**



# 2.1 Specification

4G module: SIM7670G

- LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B28/B66
- GSM/GPRS/EDGE 850/900/1800/1900MHz
- Max RF Output: 33.0dBm±2dBm
- Dynamic Input Range: -15 ~ -102dBm

#### **GPS** module:

- Frequency: L1, 1575.42 MHz
- Number of Channel: 20

#### Interface:

- 2 extend R232 port
- 1 A/D Port
- general I/O Ports
- 1 Microphone interface

#### **Battery:**

- Voltage:3.7V
- Charge:<4.2V
- Li-ion: 200~850mAh

Input Voltage: DC 9~36V

Operating Temperature: -45~65 °C

## 2.2Features:

- 1. Real-time locating
- 2. Communicate with internet by 4G/GPRS network
- 3.Lock/Unlock by SMS or GPRS
- 4. Kill engine remotely
- 5. Control horn by SMS/GPRS
- 6. E-fence/Over-speed Alarm

#### 7. Compatible original anti-theft

### 3 Installation Instructions

#### 3.1 Interface

	D	ATA	1		D	ATA	.2	GPS	GSM
1	2	3	4	5	1	2	3		
6	7	8	9	10	4	5	6		$\cup$

#### DATA1

No.	Description	No.	Description
1	DC+ (9~36V)	6	GND
2	Analog input port	7	Digital IO input port
3	GND	8	Horn
4	ACC	9	Lock
5	Kill	10	Unlock

#### DATA2 (RS232 interface):

1-TXO 2-TX1 3-Extend 4-RXO 5-RX1 6-GND



1, SIM: Port for SIM card

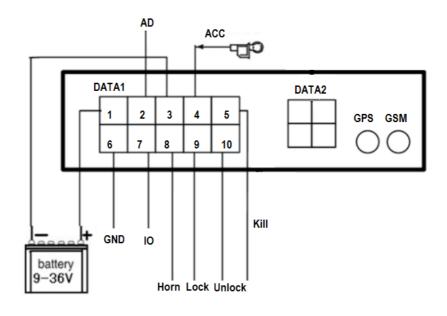
2、MIC: Connect to Microphone

3. Phone: Connect to earphone

4、LED1: Status light5、LED2: Power light

6. Reset

## 3.2 **Installation Figure**



#### 3.3 Installation and Test:

Please test after installation. If you don't need some functions, you can disconnect corresponding interface. Please make sure ACC, DC, GND installed correctly. Otherwise, the device cannot work. Please check the device status through signal light after power on:

- ➤ LED1 is off which indicates there is no power.
- ▶ LED2 flashes for one second which indicates GSM registers successfully.
- ▶ LED2 flashes three seconds once which indicates GPS is obtaining orientation
- LED2 is on which indicates work successfully that GSM has registered and GPS has obtained the orientation.
- ➤ If LED 2 is on 0.1 second then off 0.1 second for more than 3 minutes, please make sure SIM card inserts well. Without SIM card, the device cannot work.

## 4 SMS Operation Instruction

SMS Format: A\*\*\*\*\*,cmd,param1,param2...

- 1. \*\*\*\*\*is the password, Initial Password is 000000
- 2. cmd is the command ID.
- 3. Param is the command parameter. Different cmd use different parameters. All the parameters must use half-angle symbol. Wrong SMS format or wrong password, it will not respond.

## 4.1 Location Enquiry (000)

Message format: A\*\*\*\*\*,000

e.g. A000000,000

Reply: http://maps.google.com/maps?q=22.54079,113.93923

09-10-20 17:38:30 Speed:20

you can use the website to Enquiry on google Map

#### 4.2 Change Password (001)

Message format: A\*\*\*\*\*,001,New Password

e.g. A000000,001,123456

Note:000000 is the old password, 123456 is the new password.

Reply: Set Password OK!

## 4.3 Real-time return setting (002)

Message format: A\*\*\*\*\*,002, XXX

XXX=0 is for STOP, value of XXX is within [15~64800] seconds.

e.g. A000000,002,30

Message replied after successful setting: **Set time interval (30) OK!**Message contains position information will be sent in every 30 seconds after successful setting.

#### 4.4 Alarm/Listen Number setting

Message format: A\*\*\*\*\*,003,P, TelNumber

P=1 is for SOS and listen

P=2 or 3 is the second\ the third listen number.

e.g. A000000,003,1,136xxxxxxxx

Message replied after successful setting: Set Telephone OK!

#### 4.5 Over-speed Alarm Setting (005)

Message format: A\*\*\*\*\*,005,XXX

XXX=[000,200] (unit: km/h)XXX=00 is close the function.

e.g. A000000,005,020

Message replied after successful setting: Set Over speed (20) KM OK!

If the vehicle is over speed you set, it will send alarm SMS to SOS mobile number. 20 KM/H Over speed!

#### 4.6 Geo-Fence Setting(006)

Message format: A\*\*\*\*\*,006,XX

XX = [00-50] (Unit:100m).

When XX=0, e-Fence is OFF. And the maximum limited value of XX is 50\*100=5000m. e.g. **A000000,006,10** 

Reply: **Set Distance** (1000)M OK!When user is out of the bound region (e.g. 1020m), a prompt message will be sent to the user: 1020m is further than 1000m!

#### 4.7 Engine Cut-off Setting (007)

Message format: A\*\*\*\*\*,007,n,x

Note:

N=1,2,3,4 1-kill 2-horn 3-Lock 4-unlock

X=1 cut off engine, x=0 resume engine,

e.g. A000000,007,1,1 -- cut off engine

A000000,007,1,0 -- resume engine

#### 4.8 Fuel data collect (017)

Message format: A\*\*\*\*\*, 017, XX

Note: XX = [0, 100], which corresponds to fuel percentage. For example: if the fuel meter shows 50% fuel, (A000000,017,50),and the device checking value is 170, it will reply: Oil interval (50:170)!You can view fuel line in GPS Vehicles Tracking system.

#### 4.9 Open/Close camera function (019)

Message format: A\*\*\*\*\*,019,X

X=0 close camera function, x=1 open camera function

e.g. A000000,019,0

#### **4.10 Restart tracker**(**099**)

Message format: A000000,099,RESETSYSTEM

## 5 GPRS Communication Settings

## 5.1 Set APN (APN(Access Point NAME))

Message format: A\*\*\*\*\*,012,APN

Length of APN is limited within 100 characters, E.g:A000000,012,cmnet

"cmnet" is the APN of China Mobile

#### 5.2 Set the IP and Port of Gprs\_Server

Message format: A\*\*\*\*\*,010,IP,PORT

e.g. A000000,010,121.37.58.10,6903

121.37.58.10 is the IP of GPRS\_server, 6903 is the port of GPRS\_Server

application (be in communication with GPS camera tracker)

## 5.3 Open GPRS function

Message format: A\*\*\*\*\*,011,X

note:

X=0 close GPRS

X=1 open GPRS ,work with IP mode

X=2 Open GPRS, work with domain mode

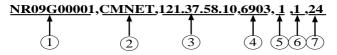
e.g. A000000,011,1

GPRS function will be open, and GPS Camera tracker will send data to Internet, Users can turn off this function though send SMS: A000000,011,0

# 5.4 Query the GPRS Setting

Message format: A\*\*\*\*\*,004

The device will send back GPRS setting parameters. You can check whether the parameter sets correctly by it.



- (1) Device ID
- (2) APN (China Mobile is CMNET, China Unicom is UNINET)
- (3) Server IP address
- (4) Server port
- (5) GPRS open status (0- off , 1- on)
- $(6) \ \ \text{GPRS connecting status} \ \ (0\text{- Internet is bad}, \ \ 1\text{- work well})$
- (7) GSM signal value (1~31), if value<10 is too weak to work well.

### 6 GPS tracking system on website

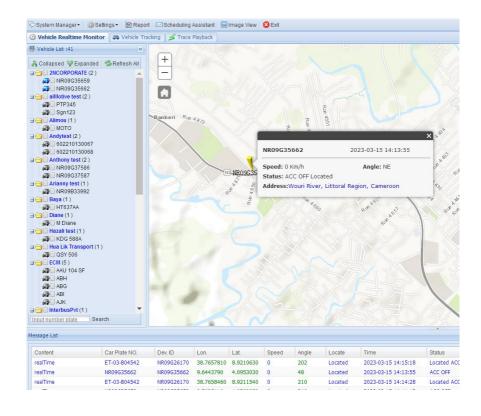
## 6.1 User Login

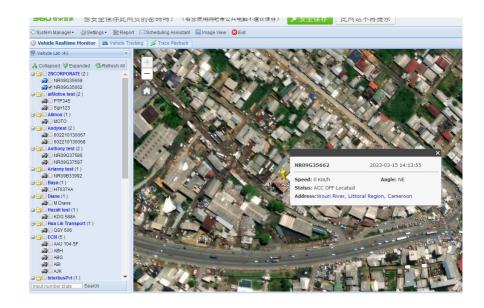
Web-based tracking system can support multiple languages. It can change language for local language by itself.



## 6.2 Vehicle real-time tracking

1 choose vehicle  $\rightarrow$ 2 map mode  $\rightarrow$  3.vehicle state, Google map have 3 model: map mode ,satellitic mode and Hybrid mode

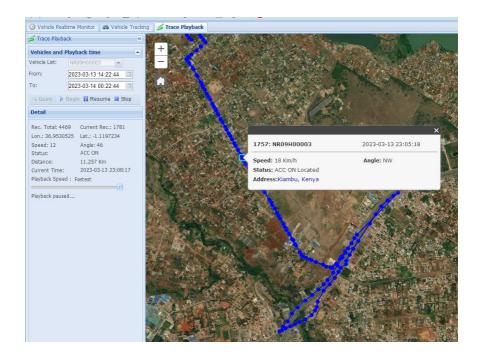




## 6.3 Vehicle history record playback

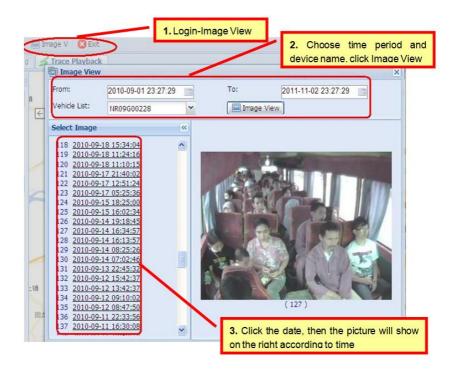
Please point run history review page

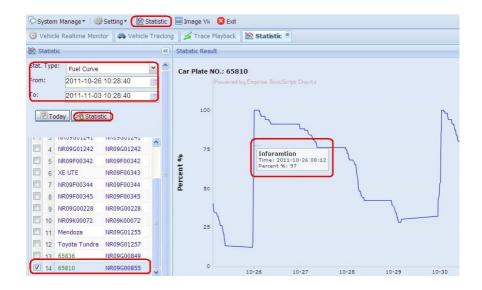
1 choose vehicle  $\rightarrow$ 2 start time  $\rightarrow$  3 inquire time  $\rightarrow$  4.setup review speed  $\rightarrow$ 5 start review process you can know that time date, speed, way and distance sum.



## 6.4 View image

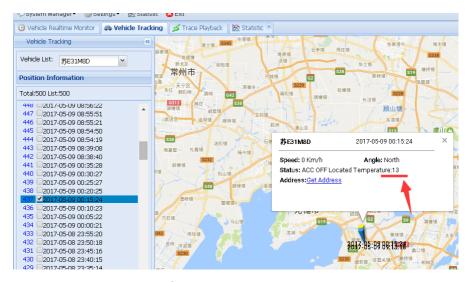
1 Select date range  $\rightarrow$  2Select Vehicle  $\rightarrow$  3View Image  $\rightarrow$  4Click the time link to display image  $\rightarrow$  5Image



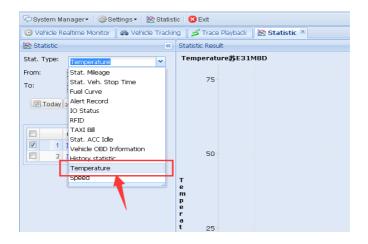


## 6.5 Temperature monitoring

Real time temperature on map and temperature curve of history



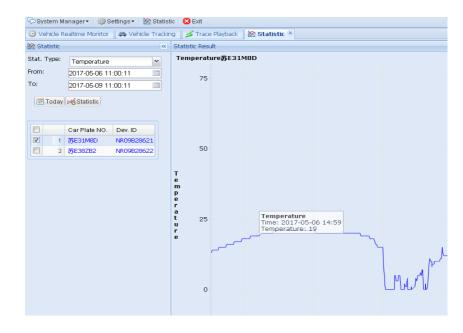
Step3: select [statistic] → Temperature



Step4:select

## vehicle→Date&time[from→to]→click [statistic]

move the mouse on the fuel curve, it will show time/percent



#### **FCC Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.