## GSM/GPS

# **Car Tracking Alarm Terminals**

UC005

# **USER MANUAL**

Ver: 8.0

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#### INTRODUCTION

#### **Functions and Features**

#### Application:

to protect all type of cars, trucks, taxi, jeeps as well as other automobiles.

#### Locating and tracking

Dual location:

locate your vehicle through both GPS positioning and GSM base station

- Qurery locating information by telephone/ computer or via website
- Real-time or pre-set time tracking by SMS/GPRS;
- Global Track Web-based center with Google-earth or Google-Map support and clear satellite image view

#### Anti-theft functions:

- Door open/ Acc on/car vibration/car moving /power down Alert
- ◆ Alert report to the preset phone by auto-dial and SMS.
- Remote start off engine by phone/SMS

#### Anti-robbery functions

- Emergency Alert(SOS) button built-in
- Remote monitoring the sound in the car
- Remote-stop the engine or cut oil.

#### **Simple Operation**

- Voice system(Local language support) and SMS remote-control
- Locking door automatically when Arming. Unlock when disarming.

#### Other useful functions

• With backup battery: after Power Failure Alert, it will supply power

- Auto-arming function
- Shock sensor sensitivity adjustment available
- Light flash and sound reminder

#### **Technical Specification**

- > GSM Work Frequency: 850(Optional) /900 /1800 /1900MHz
- > GPS(SiRFstarIII chipset) : Frequency: L1, 1575.42 MHz.
  - Minimum signal tracked: -159dBm
- > Temperature: Working Temp -20°C ~ +60°C
- > Humidity: 20—95%
- > GSM Antenna

Cable type: Gain:3dBi cable-length:3-5meters connector :SMA

Portable antenna: Gain:2dBi height: 5cm connector: SMA

- > GPS Antenna: Voltage:3V cable-length: 3-5 meters connector: SMA
- > Remote control: Working frequency: 315Hz/433MHz.

Code: 1527/2240 study

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

Control Distance: 20-100M

- > Mainframe Power supply: 12 or 24V DC
- > Backup battery: Poly-Li battery, 600mAh 3.7V
- > Mainframe Dimension: 125x108x26mm
- > Weight: G.W.:1.45Kg/set (including accessories) Package dimension: 285\*250\*90cm

Export carton dimension: 520\*295\*480cm (10PCS)

#### **Safety Instructions**

- > Please not use the device in the areas where wireless device are prohibited.
- > Please use the accessories in the package, such as the antennas and relay.
- > Please go to a professional car shop or car factory to install the system.

#### ACCESSORIES

#### **User Necessaries**

- 1. 1-3 mobile phones (Note: with SMS functions.)
- 2. A valid GSM SIM card for the devices (with Caller ID & SMS/GPRS functions and enough balance);

#### **Basic components**

1. Main Unit



- 2. Remote control: Maximum 3pcs
  - '
    Alarm/lock
  - '
    '
    '
    Unarm/ unlock your car
  - '□X' a) Press the key only: turn off siren, alarm and lock your car
    b) Press it and the ■: turn off siren, unarm and unlock the car.
    c) Interrupt siren ring when there is a wrong alert.
  - Activate car lights and siren to search for your car. Press <sup>(</sup>V) key on the remote control. Your car light will flash and the siren will ring over 5 seconds.
- 3. GSM antenna

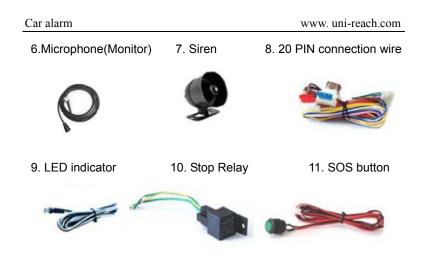
4. GPS antenna 5. Vibration sensor

( adjustable sensitivity)



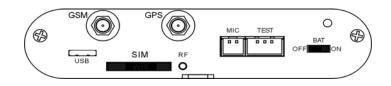


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INSTALLATION

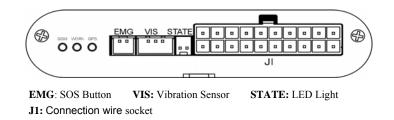
#### Panels & Sockets



GSM: GSM AntennaGPS: GPS AntennaRF: RF-AntennaSIM: SIM Card SlotMIC: MonitorBAT: Backup Battery SwitchUSB: load-down dataTest Socket: for factory usage only

OFF ON

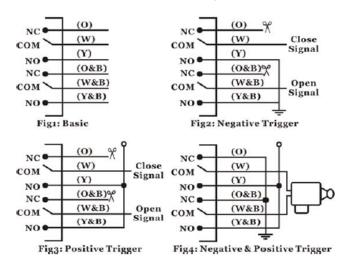




#### **Installation Process**

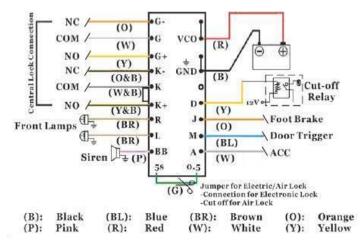
#### 1. Central lock to 20 PIN connection wire

1.1 Choose different installation according to different car central locks



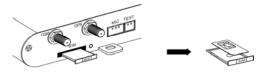
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1.2 Connect to 20PIN wires



- ① G / K----Central lock: (Max: 6PIN)
- 2 R,L ( 1PIN each ) ---Left/Right front lamps wires
- ③ BB ---Siren
- ④ VCO and GND --- Power supply(Battery)
- ⑤ Green wire---- (spare)
- ⑥ D---The yellow wire of Relay; The white wire to 12V power supply. Two green wires: Cut-off start wire or fuel line to connect them in.
- ⑦ J---Foot brake wire
- ⑧ M---Door trigger wire
- (9) A---ACC (Igniting wire)

#### 2. SIM Card Installation



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- 3. GSM----GSM Antenna Installation
- 4. GPS---- GPS Antenna Installation
- 5. MIC---- Microphone(monitor) installation
- 6. EMG---- Connect SOS button wire
- 7. VIS---- Connect Vibrator sensor
- 8. STATE --- Connect the LED wire
- 9. Plug the 20PIN into J1, the "WORK" light starts flashing.
- 10. Slide the battery switch to be "ON".
- **11. Fix:** After installation, check all the wires to be connected well, use dual glue or band to fix them firmly.

#### **Instructions Before Use**

1. After installation and power on, the system shows the following status:

GSM LED: It starts to indicate that GSM works.

GPS LED: flashing indicate GPS signal available.

WORK LED: It starts flashing to indicate normal working.

2. Factory default: Recipient: Non

User Password: 1234 Status: unarmed Time Zone: +/-0000 Shake Alert: Off Move Alert: Move000 Off Over Speed Alert: SPD000 Off

- 3. Battery: Auto-charging when it connects to power
- 4. GSM/GPS ant: locate the antennas in suitable area to get signal well.

#### **OPERATIONS**

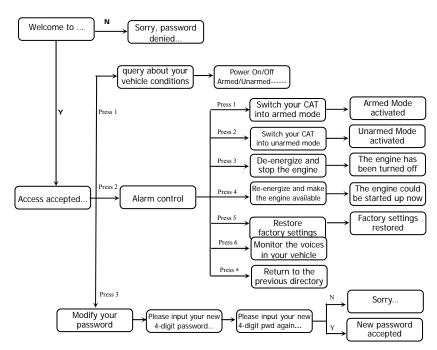
#### **SMS OPERATIONS**

User can setup, control the system and query the status of the car by send SMS command via any mobil-phone and password. And receiving SMS alert by pre-setting recipients.

SMS format: \*[User PASSWORD]\*[COMMAND]#.

Note: > User Password <u>is 4 digits or letters</u> in SMS and is abbreviated belosto: UPWD > Sending commands by **any** mobile phone via UPWD

**VOICE OPERATIONS:** Dial to the device, after 4 rings, you can operate according to the voice prompt.



Note: The PASSWORD is the same as in SMS operations.

#### 1. Alarm Setup

#### 1.1 Set up recipient A, B and C

Send the SMS to the device:

\*UPWD\*AXXXXXX\*BXXXXXX\*CXXXXXXX#

Setup ok, the reply SMS:

Armed/Unarmed;A:XXXXX, B:XXXXXX,C:XXXXXX;

#### Change or Cancel recipients: re-set with new recipients.

Note: 1) A,B,C indicates the recipients A,B,C.

- xxxxx...indicates the recipients mobile phone number. Max: 20 digits. 2 "+country code"should be added when SMS format requires
  - SMS Format: + Country Code + mobile phone number.

③ Recipient number shows blank if you do not set up it.

**Exp:** Recipient A,C setup: \*1234 \*A+8613666504824\*B\*C+8613666502528# (+86 refers to China code; 136xxxxxrefers to Recipients mobile number)

#### 1.2 Set up Time-zone

Ser	id the SMS to the device:	*UPWD * GMT+/	/-xxxx#
	Setup OK, the reply SMS:	GMT+/-xxxx Set	tup OK !
Note:	'+' is east zone; '-' is west zone		
Exp:	Setting up East 8 zone(GMT+0	8:00), the SMS is	*1234*GMT+0800#
	West 3:30 zone(GMT-3	:30), the SMS is	*1111* GMT-0330#

#### 2. Basic Operations

#### 2.1 Arm the Device :

If ACC Off and the doors are closed, When arming the system, the doors are auto-locked and windows are closed.

#### A: Arm the system manually:

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> Press ' key on the remote control, the siren sounds once.

> Press '  $\chi\chi$  ' key, the device turns into Alarmed Mode. Siren turns off.

**B: Auto-Armed:** When disarming. 25 seconds without opening doors, the system auto-armed.

#### C. Armed by SMS:

Send the SMS: \*UPWD\*S# SMS reply: Armed;Engine:on/off;Door:close/open; LAC:xxxxx; CID:xxxxx; Time: XX-XX-XX XX:XX Speed:xxxkm/h S/N:xxdxxmxxs W/E:xxxdxxmxxs

\* Setup successfully: Alarmed---; Setup unsuccessfully: Unarmed---

#### D. Armed by Voice Operations: Refer to the voice operations

#### 2.2 Disarm the Device

When the system is disarmed, the doors are auto-unlocked.

#### A. Disarmed manually:

Press '**m**'' key on the remote control. After disarming the device, the siren sounds twice.

#### B. SMS disarmed:

Send the SMS: \*UPWD\*C#

SMS replies: Unarmed;Engine:on/off;Door: close/open; Lac:xxxx;CIDxxxx;Time:xx-xx-xx xx:xx:xx Speed:xxxkm/h S/N:xxdxxmxxs W/E:xxxdxxmxxs

\* Setup successfully : Unarmed---; Setup unsuccessfully: Alarmed---.

#### C. Disarm by Voice Operations: refer to part Voice operations

Note: > In Unarmed Mode, if door is open, the front lights flashes periodically. > In engine-on status, you press the brake to lock the door.

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#### 2.3 Modify Password

#### A. By SMS:

Send the SMS to the device: \*UPWD\*EXXXX#

Successfully, it replies : Password has been changed!

**Note:** xxxx refers new PASSWORD. It is constituted by 4 ASCII codes. Factory default:1234.

B. By Voice Operations: (Please refer to: 'Voice Operations')

#### 2.4 Shake Alert ON/OFF

# Off: Send the SMS to the device: \*UPWD\*N# Successfully, it replies: shake alert off ! On: Send the SMS to the device: \*UPWD\*H# Successfully, it replies: shake alert on!

#### 2.5 Enforced power off / Relieve

#### A. Enforced –off by SMS

Send the SMS in emergency:	*UPWD*STOP#
Successfully, it replies:	Engine will be turned off !

Note: > After the command in operation, engine cann't turn on again . > To restart your engine, you will have to Relieve 'STOP' command.

#### **Re-energize By SMS:**

Send the SMS to the device: \*UPWD\*K# Successful, it replies: Relieve 'STOP' & Unarmed!

#### B. Power Off and relieve by phone: (refer to Voice Operations)

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#### 2.6 Move Alert on/off

Move Alert: On armed Mode, car moving happen and over a certain range, the device will send a 'Move alert' SMS to recipients.

#### Move Alert ON :

Send the SMS to the device: \*UPWD \*MOVExxx# the reply SMS: MOVExxx Alert On!

Note: xxx :  $300 \sim 999$ . It indicates the alert range is a circle which center is the parking position and radius is xxx metre.

#### Move Alert off :

Send the SMS to the device :	*UPWD *MOVE000#
Setup OK , the reply SMS :	MOVE Alert Off !

#### B. Move alert On/Off by phone: refer to Voice Operations

#### 2.7 Over Speed Alert On/Off

Over speed Alert: Setup the function, if the car drives at over limit speed, alert SMS will be sent to recipient A.

#### Over speed alert on:

Send the SMS to the device: \*UPWD \*SPDxxx,SS# Setup OK, the reply SMS: Over speedxxx alert on !

#### Note:

 xxx: choose 020~999, min speed is 20Km/H; max limited speed is 999 Km/H. If xxx is less than 20, you may not receive the "Over speed Alert" SMS
 ss: 01~99min, indicates the interval of speed detecting.

#### Over speed alert off:

Send the SMS to the device:	*UPWD *SPD000#
Setup OK, the reply SMS:	Over speed alert off !

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#### 2.8 Resume to Factory Default

#### A. By SMS:

Send the SMS to the device: \*UPWD\*V#

Setup successful, it replies: Factory Default Restored!

#### B. By phone :(Please refer to 'Voice Operations')

#### 2.9 Wrong Message

In case SMS command invalid, you will receive the prompt SMS reply: Invalid command, please confirm!

#### 3. Query

#### **3.1 Recipients Query**

Send the SMS: \*UPWD\*Y#

SMS reply: Armed/Unarmed;A:XXXXXX,B:XXXXXX,C:XXXX;

#### 3.2 Status Query

#### A. Status Query By SMS:

Send the SMS to the device: \*UPWD\*X#

#### ■ GPS is available, reply SMS

Armed/UnArmed;Engine:on/off;Door:close/open;Power:on/off;LAC:X XXXX;<u>CID:XXXXX;</u>Time:xx-xx-xx xx:xx:xxSpeed:xxxkm/h;S/N:xxdxxmxxs W/E:xxxdxxmxxs

GPS fails to position

Armed/UnArmed;Engine:on/off;Door:close/open;Power:on/off; LAC:XXXXX;CID:XXXXX;NO GPS

#### B. Query by voice operations: (Please refer to 'Voice Operations')

The voice system will tell you the status: Power status; Alarm/Unarmed; Engine On/Off ; Door lock/unlock and GPS data.

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#### 3.3 GPS Data Query

#### A. GPS Data Query: (Format: Degree/ Minute/Second)

Send the SMS: \*UPWD\*GPSM# SMS reply: Time:xx-xx xx:xx:xx Speed:xxxkm/h S/N:xxdxxmxxs W/E:xxxdxxmxxs

#### B. GPS Data Query: (Format: Degree)

Send the SMS: \*UPWD\*GPSD# SMS reply: Time:xx-xx-xx xx:xx:xx Speed:xxxkm/h S/N:xx.xxxx W/E:xxx.xxxx

#### C. GPS Data Query: (GPS Standard Format)

Send the SMS: \*UPWD\*GPS# SMS reply: \$GPRMCxxxxxx

Note: GPS fails to position, SMS reply: NO GPS

#### 3.4 Vehicle Address Query

- A. Locate by Google-earth
- B. By monitor center
- C. By web-based Center service to login.

#### 4. Function Operation

#### 4.1 Restart the device:

Press and hold '
'key on the remote control for 20 seconds to restart the system.

#### 4.2 Lock door by press the footbrake

when disarmed mode and ACC on, Press the footbrake, doors are locked .

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#### **ALERT REPORT**

#### 1. Alert type

Active status	Armed	Unarmed	No limit
Alert type	Shake Alert Door –open Aert Engine-On Alert Move-on Alert		Highjack Alert (SOS) Power-Off Alert

#### 2. Alert Report Mode

Locale response: The GSM LED starts flashing to indicate alerts. The car light will be glint and the siren will ring.

SMS report: Recipients will receive alert SMS.

Voice report: The device will auto-call the recipient A to report alert.

#### 3. Alert Report

#### 3.1 Shake and sensor Alert:

On Armed Mode, when the Vibration or other sensors is actived, Alert will be reported to Recipient A via SMS, car lights will be glint and the siren will ring to scare at each alert.

Shake Alert	Format	Rec A	Rec B	Rec C
Locale	Armed Mode: voice and lighe caution			
	Mute Alarmed: No voice and lighe			
<b>CMC</b>	Shake Alert;LAC:xxxxxCID:xxxxx;Time:xx-xx-xx	$\checkmark$		
SMS	xx:xx:xx Speed:xxxkm/h S/N:xx.xxxx W/E:xxx.xxxx			
Phone	No			

Note: > Continuous vibrates send alert 30s each time.

> The sensitivity of the vibration sensor could be adjusted.

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#### 3.2 Emergency Alert (SOS)

In emergency situation, having pressed the hidden SOS button the

trigger is actived. then the SOS alert is sent directly to the recipients.

Alert SMS to the A, B, C; And then auto-phone to B; If B is not connected to phones, continue to call recipient C .

Highjack Alert	Format	Rec A	Rec B	Rec C
Car Locale	Siren does not ring.			
SMS	Highjack Alert; LAC:xxxxxCID:xxxxx;Time:xx-xx- xx:xx:xx Speed:xxxkm/h S/N:xx.xxxx W/E:xxx.xxxx	$\checkmark$	$\checkmark$	$\checkmark$
Phone Call	Highjack Alert		$\checkmark$	

#### 3.3 Door-open Alert:

On Armed Mode, if the door is opened, the Alert will be activated.

Door-open Alert	Format	Rec A	Rec B	Rec C
Car Locale	Siren and light caution 5~6 sec			
SMS	Door open Alert; LAC:xxxxxCID:xxxxx;Time:xx-xx-xx xx:xx:xx Speed:xxxkm/h S/N:xx.xxxx W/E:xxx.xxxx	$\checkmark$	$\checkmark$	$\checkmark$
Phone Call	Door-open Alert	$\checkmark$		

#### 3.4 Engine On Alert:

On Armed Mode, if the engine is turned on, the Alert will be activated.

Engine-on Alert	Format	Rec A	Rec B	RecC
Car Locale	Siren and lighe caution 5~6 sec			
SMS	Engine on Alert; LAC:xxxxxCID:xxxxx;Time:xx-xx-xx xx:xx:xx Speed:xxxkm/h S/N:xx.xxxx W/E:xxx.xxxx	$\checkmark$	$\checkmark$	$\checkmark$
Phone Call	Engine-on Alert	$\checkmark$		

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#### 3.5 Power-off Alert:

Power-off Alert	Format	Rec A	Rec B	RecC
Locale	No			
SMS	Circuit Cut-off Alert; LAC:xxxxxCID:xxxxx;Time:xx-xx- xx:xx:xx Speed:xxxkm/h S/N:xx.xxxx W/E:xxx.xxxx	$\checkmark$	$\checkmark$	$\checkmark$
Phone	Power-failure Alert	$\checkmark$		

#### 3.6 Move Alert :

On Armed Mode, it takes effect when someone moves the vehicle away from park exceed setted range:

Move Alert	Format	Rec A	Rec B	Rec C
Car Locale	No			
SMS	Move Alert; LAC:xxxxxCID:xxxxx;Time:xx-xx- xx:xx:xx Speed:xxxkm/h S/N:xx.xxxx W/E:xxx.xxxx	$\checkmark$	$\checkmark$	$\checkmark$
Phone Call	Move Alert	$\checkmark$		

Note: Move Alert will be effected once each Alarmed Mode.

#### 3.7 Over speed Alert:

In the process of driving, when the car speed is over limited speed, the CAT will send Alert SMS to Recipient A

Over speed Alert	Format	Rec A	Rec B	Rec C
Car Locale	No			
SMS	Overspeed Alert; LAC:xxxxxCID:xxxxx;Time:xx-xx-xx xx:xx:xx Speed:xxxkm/h S/N:xx.xxxx W/E:xxx.xxxx	$\checkmark$		
Phone Call	No			

#### 4. Alert Management

4.1 Interrupt Alert: Press rewrite the remote controller to cancel alert.

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- **4.2 Monitor Alarm:** In Alert status, after the device sends alert SMS to recipients, it will call automatically to recipient, then the recipient can press "#" to monitor car.
- **4.3 Cut off power(fuel) :** When the burglar drives your vehicle away, you can stop the vehicle by a single SMS( 'STOP' command) or by phone voice prompt.

#### WARNING: This command might be very dangerous when the car is MOVING! <u>Please BE CAUTIOUS to active this function!</u>

#### APPENDIX

#### 1. Problem and Solutions

PROBLEMS	Cause	SOLUTIONS
Remotes are locked or	the 27A battery and code	> Replace with new battery
don't work		> Re-code the remote.
Password lost		>Get from the Carrier
SIM card can not be	> No balance in SIM card.	>Install SIMcard well
accessed to network	> Install unsuccessfully	> Keep balance
accessed to network:	>Confirm GSM network frequency .	
		> Increase sensitivity of antennas
Weak GSM signal		>Check the GSM antenna connection.
		> Put it at suitable position
No CDS sizes	>Probably caused by location and	>Check your antenna connection.
No GPS signal	weather	> Put it at suitable position
	> Network is busy (especially when	
No SMS received	GPRS is working.).	
	> SMS is delayed	
	>Confirm the power supply(12/24V) of	>The device and power must be
Alert is not reported	the vehicle	matching
	>Temperature is too low	> Work Temp over -20°C

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#### 2. Alert SMS Format

Alert mode	Switch On / Off	Alert Format	
SHAKE	Alarmed ON: *PWD*H#←→Has done the turning on shake alert! OFF: *PWD*N#←→Has done the turning off shake alert!	Shake Alert SMS to A	
OVER SPEED	During driving ON: *PWD*SPDxxx,ss# ←→Over SPDxxx alert on ! OFF: *PWD*SPD000#←→Over SPD alert off !	Overspeed Alert SMS to A	
DOOR OPEN	Alarmed	Door open Alert SMS to:A.B.C Phone call A	
ENGINE ON	Alarmed	Engine on Alert SMS to:A.B.C; Phone call A	
POWER OFF	Alarmed	Circuit Cut-off Alert SMS to:A.B.C; Phone call A	
MOVE ALERT	Alarmed ON: *PWD*MOVExxx# ↔→ Movexxx alert on! OFF *PWD*MOVE000# ↔→ Move alert off !	Move Alert SMS to:A.B.C; Phone call A	
HIGHJACK ALERT	Alarmed/ Unarmed	Highjack Alert SMS to:A.B.C; Phone call B,C	

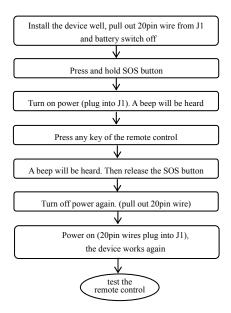
#### 3. User SMS Operation Command

Function	Command	Reply
Recipient A.B.C	*PWD*Axxxxxxxxx *Bxxxxxxxxx *Cxxxxxxxx#	Armed(UnArmed);A:xxxxxxxxxB:xxxxxxxxC:xxxxxxxx (Add '+'and natiaon code according to needs)
Time Zone	*PWD* GMT+/-xxxx#	GMT+/-xxxx SETUP OK!
New PWD	*PWD*Exxxx#	Password has been changed!
Alarm	*PWD*S#	Armed;Engine:on/off;Door:close/open; LAC:xxxxx;CID:xxxxx; Time:xx-xx-xx xx:xx:xx Speed:xxxkm/h S/N:xxdxxmxxs W/E:xxxdxxmxxs
Unarm	*PWD*C#	Unarmed;Engine:off;Door:off;Lac:xxxxx;CIDxxxxx; Time:xx-xx-xx xx:xx: Speed:xxxkm/hS/N:xxdxxmxxs W/E:xxxdxxmxx
Stop Car	*PWD*STOP#	Engine will be turned off !
Cancel STOP	*PWD*K#	Relieve'STOP'& Unarmed
Factory Setup	*PWD*V#	Factory Default Restored!
Recipient Query	*PWD*Y#	Armed(UnArmed);A:xxxxxxB:xxxxxxC:xxxxx
Car status Query	*PWD*X#	Cut-off /Armed/UnArmed;Engine:on/off;Door:close/open; LAC:xxxxx;CID:xxxxx; Time:xx-xx-xx xx:xx:xxSpeed:xxxkm/h S/N:xxdxxmxxs W/E:xxxdxxmxxs
shake alert on	*PWD*H#	Shake alert on!
shake alert off	*PWD*N#	Shake alert off !
GPS data	*PWD*GPS#	LAC:xxxxx;CID:xxxxx; \$GPRMCxxxxxxx
Query	*PWD*GPSD#	Time:xx-xx-xx xx:xx:xx Speed:xxxkm/h S/N:xx.xxxx W/E:xxx.xxxx /NO GPS

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\*PWD\*GPSM# Time:xx-xx-xx xx:xx:xx Speed:xxxkm/h S/N:xxdxxmxxs W/E:xxxdxxmxxs /NO GPS

#### 4. Remote Control RF code Setup



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