T360-269 User's Manual

Amwell GPS Tracking Unit

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Version 2.1

Index

1. Product preface

Thank you for choosing our company's T360-269-GPS tracking anti-theft products, please carefully read the instructions before operating.

T360-269 satellite positioning system combined with anti-theft, positioning, monitor and observe, alarm for help, advertising, vehicle scheduling, image capture and tracking functions, it's easy to use, easy to operate, the characteristics of a full-featured, the main applies to vehicles and other mobile object location and tracking services.

T360-269 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, location-based services, traffic safety management and many other fields.

Product Features：

■ Support GPS positioning mode.

■ Support GPRS network data transmission.

■ Support for multi-directional terminal parameter settings.

■ Support for automatic sleep, standby operating current is only 100mA.

■ Support for peer-to-peer monitoring, point to group control, group all-round monitoring of the group.

■ Combined with anti-theft, positioning, monitoring control, alarm, such as first aid and tracking multiple functions with a full range of integrated products.

【Notes】

✓ T360-269 is based with GPRS version and required SIM card supports GPRS data transfer function.

✓ There are several SMS command setting on product setting

✓ Instructions require all importers of capital and lowercase letters in English can be, but need to use standard punctuation marks in English punctuation, must not use other input methods in place of punctuation. Message content and all instructions are no spaces between characters.

✓ T360-269 is not with waterproof capacity; select the dry location to install the device, also pay attention to moisture-proof and waterproof.

✓ Please correct installation of your use of T360-269 products, not in the non-compatible devices installed on T360-269 Products.

✓ Please correct installation of your use of T360-269 products, do not install it in the non-compatible devices.

✓ Specified function please refer to "Centre platform operation instruction"

2. Technician parameter

Name	Parameter			
Gift Box Dimension	245mm × 155mm × 51mm			
Color	Black			
Working voltage	9V -- 30V DC			
Working current	80 mA – 120 mA（12V/DC）			
Back-up battery life time	Up to 1 hour			
Tracker size	145mm X 104mm X 36mm			
Weight	Tracker weight	0.4kg	Total packet	0.58kg
Working temperature	-35℃ -- 85℃			
Moisture	5% -- 95%（Non-water vapor condensation state）			
GSM Frequency	900MHz/1800MHz **or** 850MHz/900MHz/1800MHz/1900 MHz			
GPS Module	Latest U-BLOX locating module from Sweden or Skylab			
GPS Sensitivity	-159Db			
GPS Frequency	1575.42 MHz			
Receiving panel structure	GPS module 32-channel			
Locating accuracy	< 5m （95％）			
Cold start time	< 45s(in average）			
Heat start time	< 2 s (in average）			
LED indicator light	usage of green / red dual-color LED indicator light shows the GPS / GSM status			
GSM Chipset	HUAWEI or SIMCOM			

3. T360-269Packing list

3.1. Standard Accessories

Accessory	QTY	Image	Function
Packing	1PCS		Gift box packing
Main device	1PCS		T360-269 main device
GSM Antenna	1PCS		Receiving GSM network signal
GPS Antenna	1PCS		Receiving satellite locating signal data
Relay	1PCS		Implementation of the core components of cut off and restoration of circuits/circuit of the relevant action command
MIC	1PCS		User to monitor the voice inside the vehicle, to assist users to determine more accurate
9PINcable	1PCS		Product and vehicle or other equipments installing cable connecting with the main wire（SOS button included）.
Binding cables	3PCS	/	For fixing the main device and wire used
Double stickers	2PCS	/	For fixing the main device and wire used

3.2. Optional accessories

Name	QTY	Image	Function
Dispatching screen	1PC		1-Show the dispatching information from the monitoring center which is very convenient for dispatching management. 2-Call conversation with monitoring centre by conencted to a earphone on side of the LCD 3-To programming the main device such as APN/IP/PORT
Advertising screen	1PC		LED Pixel：16*128 For advertising exposure with the terminal
Bus Camera	1PC		Photographing in vehicles
Taxi camera	1PC		Photographing in vehicles

3.3. Packing View and Serial setting cable

T360-269 User's Manual

4. T360-269Indicator light description

LED light	Light on	Light off	Description
Green	5 seconds	1 second	GPS located
Green	1 second	1second	GPS unlocated
Green	0.5Second	0.5Second	Initialization
Red	1 second	1second	Searching for GSM network
Red	0.5S	3S	GSM network normal
Red	Flashing quickly		transferring /receive GPRS data
	Light off		Device power failed or LED indicator light error
Red	Light always on		In call or dialing

5. Functions Description

5.1. 6 channels signal detecting

It can detect the following signal: ACC, engine, air conditioner, door, SOS, GPS antenna open, GPS antenna short circuit. Control center can check out this state any time and monitor the signal.

5.2. Alert function

Alert Method: GPRS; Sound and Light alert; SMS.

Alert Detail:

Enter geo-fencing alert, out of geo-fencing alert, over time parking alert, fatigue driving alert, over speed alert, Robbed alert, Main power disconnected alert, illegal open door alert, illegal ignition alert, fuel consumption alert, GPS short circuit alert.

This kind of alert can be setting as different state, such as only stop to sending alert or sending alert one time after receiving control center confirmation.

5.3. Geo-fencing

Support 16 channels geo-fencing, alarm methods that can be selected: enter alarm, out alarm, alarm all, no alarm.

5.4. Anti-explode function(optional)

it will be required to turn off all of wireless device when refueling in some special position. This function is used to stop the GPRS data transfer when ACC off.

5.5. History data checking

Support history track checking and playback, Alarm information history checking.

5.6. Support three data transfer mode

UDP/TCP/SMS command supported, support setting by RS232/GPRS/GSM, All of the command is ASCII code, easy to used and check.

5.7. Real-time monitor function

Uploading data about car state and position in preset time and preset times.

5.8. Supporting various external device

Support devices Such as dispatch screen, Camera, RFID card reader, LED display, text broadcasting devices, fuel sensor. also has reserve com port.(Support maximum 4 different types devices at the same time)

5.9. Listen-in function:

The monitor center should send a command to unit to dial designated number to listen-in.

5.10. GPRS Blank area data re-upload

Device will record GPS data in device flash when device into a GPRS blank area, it can record 3000~6000 points (can be adjust as required).

5.11. Fatigue driving

The time can be setting, monitor fatigue driving state. After alert, data uploading to the center, and save in database.

5.12. GPS mileage statistic

Device can record vehicle driving mileage.

5.13. Support speaker (optional)

5.14. Support at most 4 cameras

5.15. Support Free To Air device firmware upgrade

5.16. Support DNS in data uploading to server

6. T360-269 Main device installation

After you get T360-269 product, please familiar with it and test it before you install it in a Car, please check the packing list and make sure the packing and product quality well.

6.1. Prepare works

- ✧ Amwell GPS product
- ✧ Serial setting cable and TEsetting software
- ✧ Local GPRS SIM card
- ✧ 12V DC power supplier
- ✧ Computer with COM port (if do not have COM port, can use USB to serial cable instead)

6.2. Setting steps

**Step1**. Insert SIM card into the Amwell GPS device.
**Step2**. Connect the antennas (GSM antenna and GPS antenna) to device
Step3. Connect the power cable to 12V DC power supplier (according to the diagram of device connection in 3.0)
Step4.Connect the device with your computer via serial setting cable (or via serial cable and USB to serial cable)
Step5.Start program TEsetting
    Step5.1. Select communicate type and set communicate port.

T360-269 User's Manual
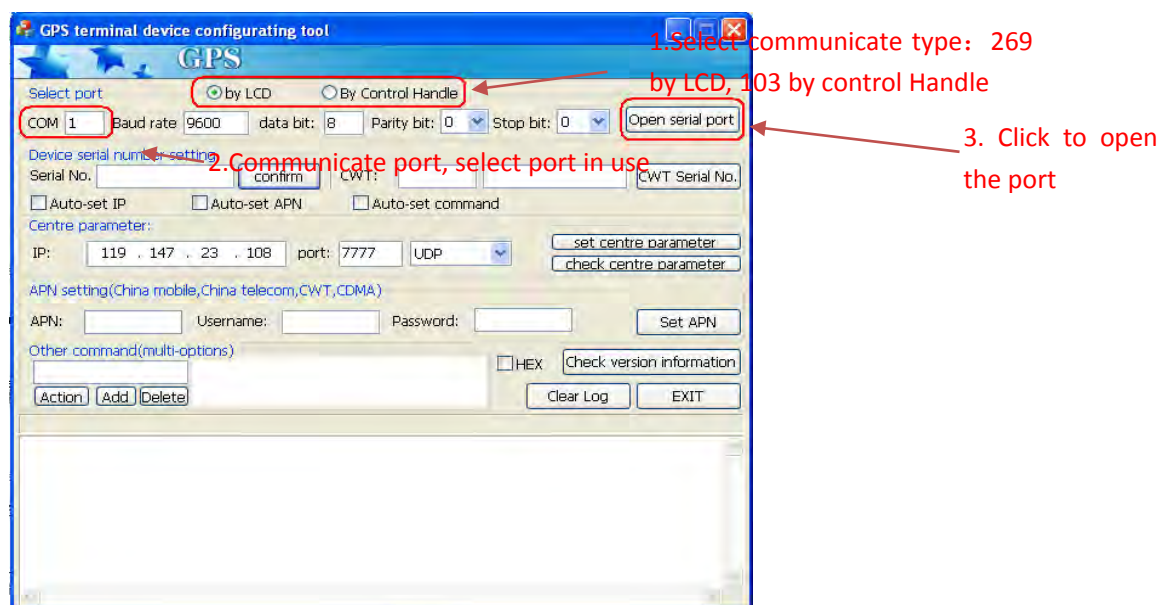
Step5.2.Check communicate
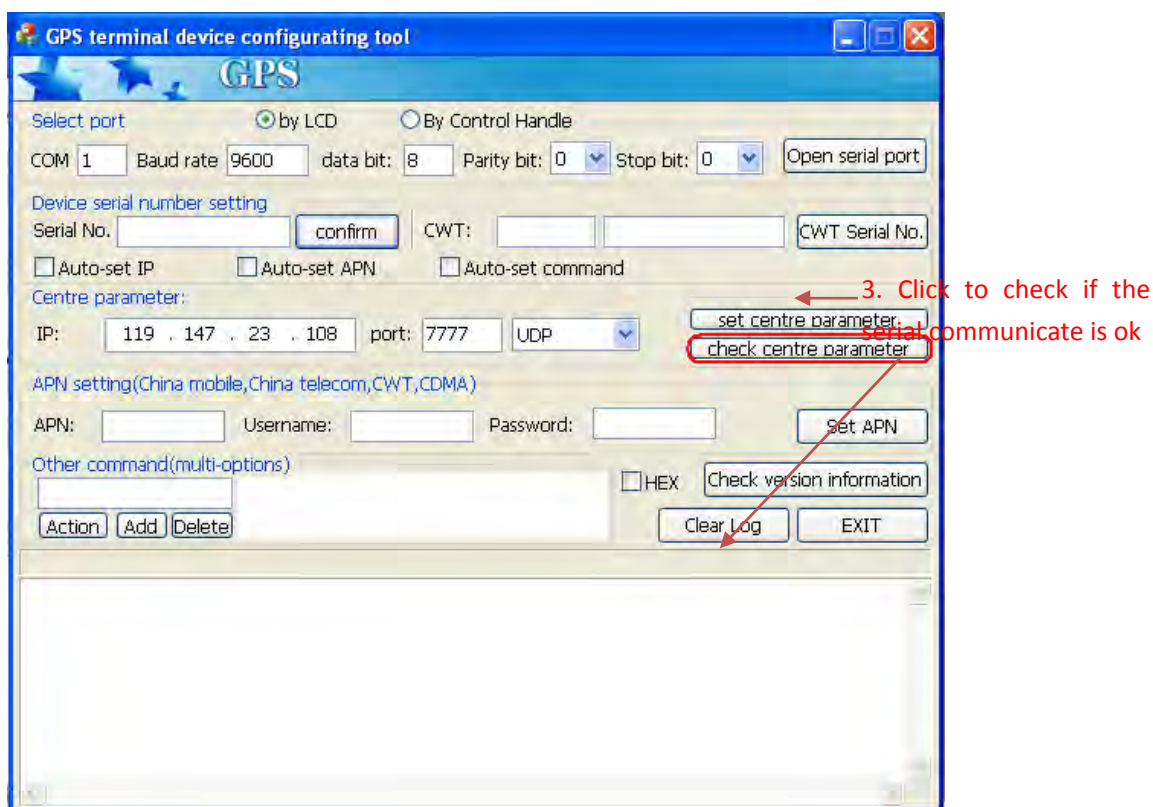
**Step5.3.** Set center parameter and APN
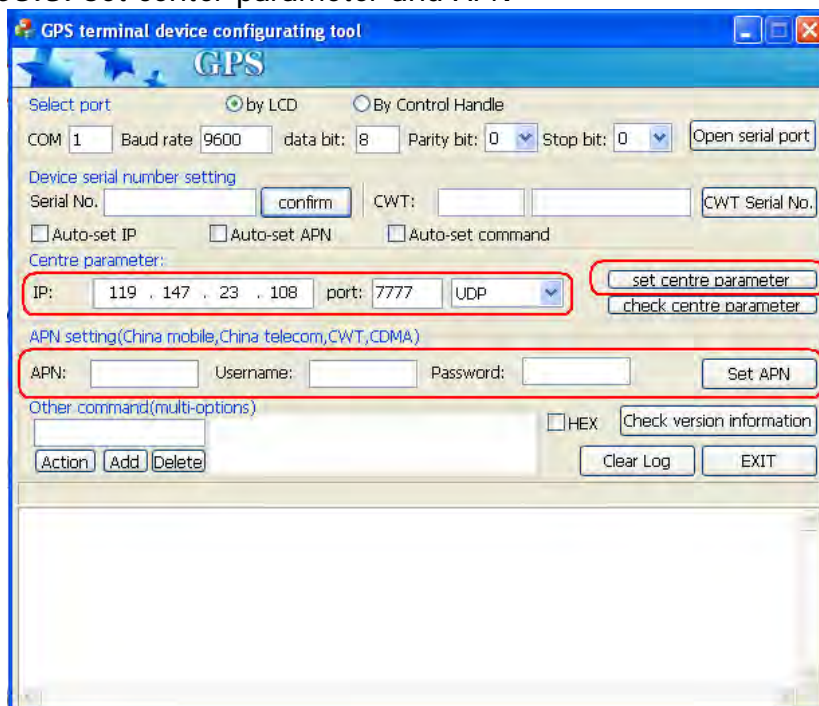
6.3. Install in a car

6.3.1. Prepare for install

This device using in 12V, 24V motor vehicles, will not conflict with the original car system, in order to facilitate fault diagnosis and unusual dispute after installation, please check the pre-installation inspection and truthfully inform the owner.

➢ Check all function whether it is normal for the vehicle. Such as: lights, small lights, turn lights, fog lights, ACC, CD drive, electric windows, remote control cars in the original control, engine start, engine run and so on.

➢ Check various decorative items inside the vehicle whether standards to connect, and check if decoration of the car has damaged.

➢ Check with the product, if is damaged, if there is exposed copper phenomenon.

6.3.2. Main device diagram
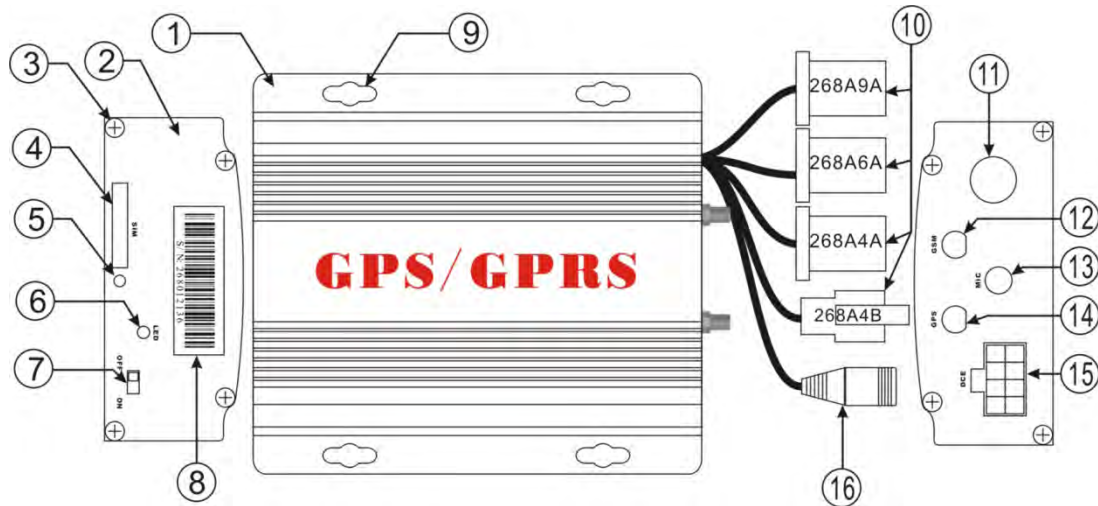
1. Main device	2. Rear cover for main device
3. Main device rear side screw	4. SIM card set
5. SIM card output hole	6. LED indicator light
7. Backup battery switches	8. Barcode (Tracker ID Number)
9. Main device fixing hole	10. Installing connector

T360-269 User's Manual

11. Installing cable derivative hole   12. GSM antenna

13. MIC set   14. GPS antenna

15. Handle setting   16. Voice speaker connector

269A9A   Main device installing cable   269A6A   Text broadcasting cable connector

269A4A   LED Display board connector cable   269A4B   Camera connecting cable

6.3.3. Main device installing

6.3.3.1. SIM card installing instruction

✧   Please set up SIM card service password before installing it into the device.

✧   T360-269 implementation of the various functions required to support the SIM card SMS message, GPRS functionality (Internet CMNET business), make sure that the SIM card with the functions (if required monitoring, call features, SIM card is also required to support voice calls function).

✧   Installation or removal of SIM card, please do that under power off the device completely, otherwise it is possible the SIM car burnt.

✧   SIM card installation or removal required for "+" screwdriver inserted back-end of equipment, forced inside the top hole until the SIM card connectors automatically exit the host. Specific installation steps please refer to the following diagrams:
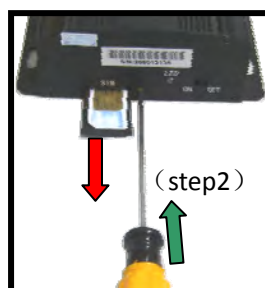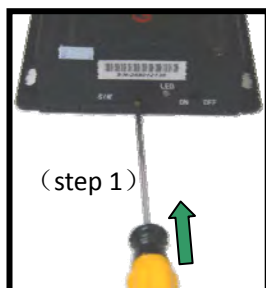
## 6.3.3.2. 269A9A cable installation diagram
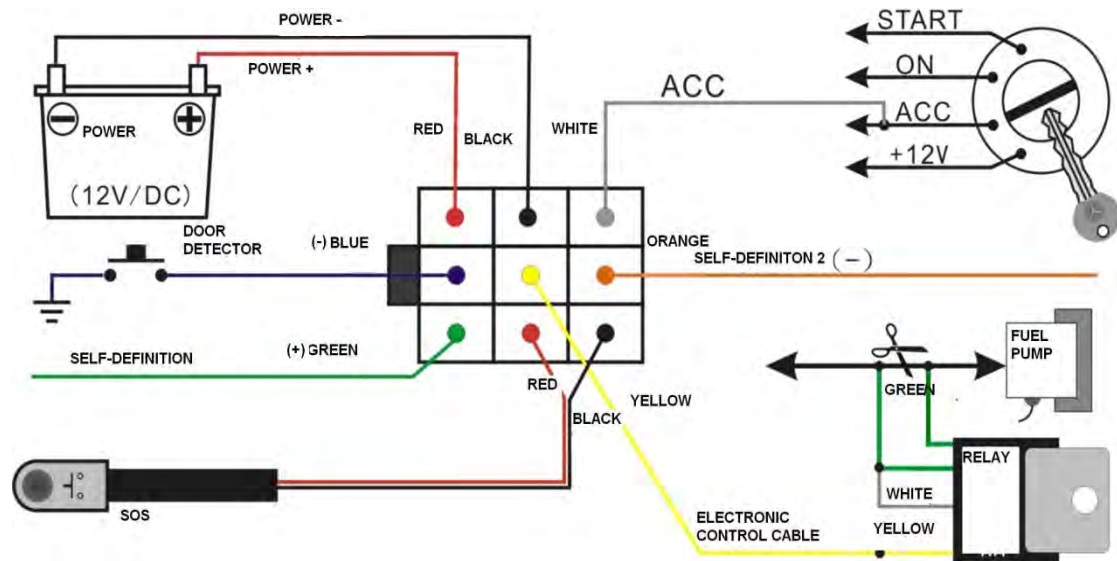
Power positive wire (red):

power positive installation in general with the battery positive, or with the fuse box's total

power input regular wire (+12 V). During installation process must choose thick (+12 V) wires. And bind up the joint.


Power negative electrode (black):

The vehicle body metal itself is a negative electrode, usually the installers will choose a screw and loosen it, then tied to negative electrode wire, tightening it. However, it will be oxidized after longtime, so it will cause bad effect to the device.
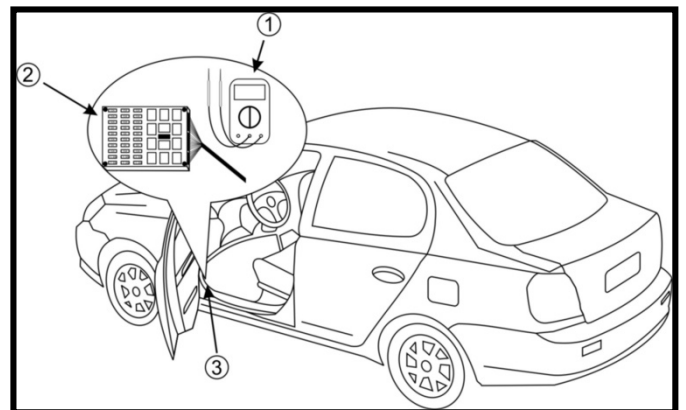
Most of the vehicles need one or more screws to the anti-oxidation process, adopted with multi-point grounding after gather up all cathode-ray by parallel way, to ensure the grounding. So we should adopt the second way for grounding. (Remarks: Its theory is the same as (+12) electricity cable, better to be thick.

ACC detecting wire(white):

This wire is majorly for detecting the ACC signal. Please refer to the illustration for the ACC signal in the vehicle key insert part.

T360-269 User's Manual

This supplier has been verified by Global Sources.
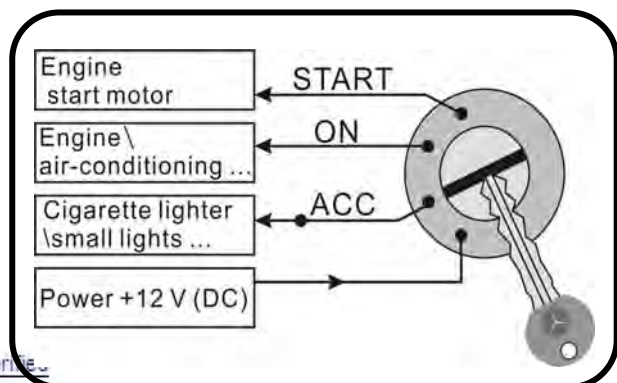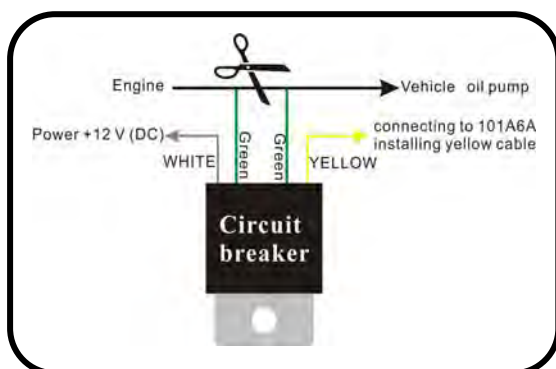
Detect door-open wire (blue):

Low trigger, for detecting the door-open signal;

Customized trigger (orange, green):

These two wires are for custom self-defined signal detection wire.

(Custom orange negative trigger line should > 0.5V, which to trigger conduction; green line custom> 6V to trigger conduction.

Electricity Power cut wire control (yellow):

T360-269 of the power control wire (yellow) is mainly used to meet with the power relay circuit to cut off the motor fuel or engine circuit, forced to stop the engine running.

Emergency button:

Basically use for the driver while face an emergency situation, can trigger the button T360-269 equipment to issued a distress call to the center information platform. Usually trigger button does not easily found location.

6.3.3.3. 269A6A Installation instruction (Optional)

269A6A install lines to connect the main characters are text sound broadcast device cable connector, detailed installation and use please refer to "text sound broadcast installation instructions" and "platform operating instructions" related to the contents of the operation.

6.3.3.4. 269A4A Installation Instructions (optional)

269A4A installation cable are advertisement LED connector, detailed installation and use please refer to "LED screen installation instructions "and "platform operating instructions" related to the contents of the operation.

T360-269 User's Manual

6.3.3.5. 269A4B Installation Instructions (optional)

Lines are installed 269A4B main camera cable connector; detailed installation and use please refer to the "camera installation instructions" and "platform operating instructions" related to the contents of the operation.

6.3.3.6. GPS/GSM Antenna installing Guide

The location of device is recommended to install in the following locations and require ensuring the right way, at the same time, please pay attention to the concealment.

■ In front bumper or near the headlight.

■ Between the rear case of the engine and windshield glass.

■ Before the bottom of the windshield and dashboard, GPS antenna should face to the sky. (Note: Dashboard with many metal supporting places, so please put it in the upper place, and avoid vehicle cables and speak or air condition where with strong magnetic，distance with 20CM

■ The back seat of the cab below the rear windshield.

【Note】

During the installation process, please ensure **GPS antenna head** to being on a horizontal plane , and without metal material covered.

6.3.3.7. Monitor Microphone

Please pay attention to the monitor MIC, make sure it is far away from magnetic fields, such as: sound box speakers, power cord, usually installed on the cab roof near the top.

Note (This function must support SIM card with voice function)
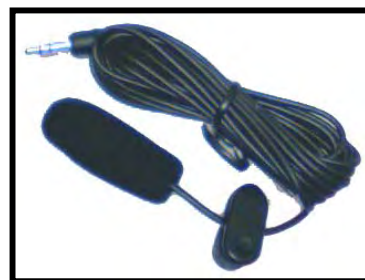
7. Extended function

Photo taking function:

✧ The camera is infrared camera. It will automatically start the infrared function while in the dark enviorenment.

✧ The camera also works even using the backup battery while the main power is off.

✧ The resolution of the photo is: 240x320 or 480x640. The size is from 10K-20K.

✧ We could send photo-taking command through the monitoring software in GPRS mode. Also it support be triggered by the SOS button or by other triggers.(like door trigger or other self-defined trigger). You can enable or disable the trigger function. Defaulted: closed.   For more details, please go to check the camera's user manual.

Note: Camera is optional devices.

8. FAQ

NO	Problem	Reason	Solution
1	Light off after device connected with power	Power installed incorrectly	1. power of positive and negative reversed installed 2. the power of the cathode not connected; 3. the original car is controlled by main power switch (mostly in 24V vehicle.)
		Power disconnection	1. The electricity installing cable is power off 2. fuse disconnect 3. Main device and the connector to installing lines bad connected
		Indicator light fail	Bad quality for the indicator light
2	Power indicator light flashing quickly or long time light on.	SIM card could not be detected after electricity power on, and the device reset repeatedly.	1. Did not put in SIM card 2. SIM card inserted into the wrong direction 3. SIM card failure.
3	Equipment are often not positioned	GPS antenna fail	1. The installation of GPS antenna location is incorrect, 2. GPS antenna quality problem, please change another one. 3. GPS antenna and main device connecting point is loosen or wrong place 4. GPS antenna head attacked by water or damp
		Signal interference	The electromagnetic interference Speaker the market part of the electronic dog, wireless MP3 signal interference explosion-proof film covered to stopped GPS signal
4	Sending SMS to SIM card inside the device, but no response	Don't reply messages	Command format error punctuation errors no money in SIM card balance
		Occasionally don't reply messages	Bad signal Installation position wrong signal shielding serious
5	There is noises when listen in	Installation problems	Please avoid magnetic field installing power supply

6	No alarm when device power off	Back-up battery failed to open	Find a local dealer to open backup battery switch
7	Unable to power on the vehicle	Installation or operation function improperly adjust	1- Due to operation mistake to cut the fuel pump. 2- relay failed or the installation wires damaged and short-cut body.