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## **These operational instructions are for Amwell® Auto Security System Model T360-500**

### **THANK YOU FOR PURCHASING THE AMWELL® GSM AUTO SECURITY SYSTEM**

Please register your Amwell® GSM Auto Security System Inc. by telephone or by logging on to our secured web site [www.amwellsecurity.com](http://www.amwellsecurity.com). When registering you will provide us with information the will identify you as the vehicle owner. If you car is stolen with your cell phone in it this will prevent anyone from calling us to requesting information. In case of warranty repair we must verify you as the original car and alarm owner. Our company has strict security procedures. By registering we will provide you assistance to help solve the problem over the phone. For you own protection in case of forgotten passwords, lost controlling phone or any unpredicted events you can contact us to reset your unit.

**Please read carefully before installation and use.**

## **Product overview**

Amwell® GSM Auto Security System is the new version of interactive two-way alarm system. GSM Auto Security System combines the GSM mobile communication, GSM locating technology, MICROCHIP rolling code technology, multi-code mating and microcomputer technology. The car owner can control the vehicle remotely by cell phone from any location. The system can call emergency help to a mobile or land phone automatically.

The use of Amwell® GSM Auto Security System will:

1. Ensure your safety and your cars security
2. Prevent theft, unauthorized joy riding, or vandalizing of your car
3. Decrease insurance costs
4. Keeps you “connected” to your vehicle by the ability to monitor it from a far distance
5. Make it convenient for taxi and transportation companies to manage their vehicles

Amwell® GSM Auto Security System can be installed in most cars, trucks and buses with an installed keyless remote entry system. The system will only work with a negative of 12V electric system, and will work with gasoline or diesel fueled engines.

**IMPORTANT:** Amwell® GSM Auto Security System should be installed by a Professional. After a Professional has installed your system it is **IMPORTANT** before you leave their place of business to make sure you have setup the first controlling phone number and check that all system functions are working properly.

The Amwell® GSM Auto Security System is not responsible if system is improperly installed. If the Amwell® Auto Security System has any malfunctions or does not function at all, wiring installation has to be rechecked. 99.9% of all alarm malfunctions are caused by wrong wiring during installation.

### Product components

**T360-500 model contains:** (see illustrations)

- 1) One base unit            2) One wireless remote keypad            3) One GSM antenna
- 4) One motion sensor        5) One relay            6) 12 PIN harness            7) Siren
- 8) 10PIN harness            9) One LED indicator            10) Microphone
- 11) One emergency button        12) Loudspeaker        And a User Manual

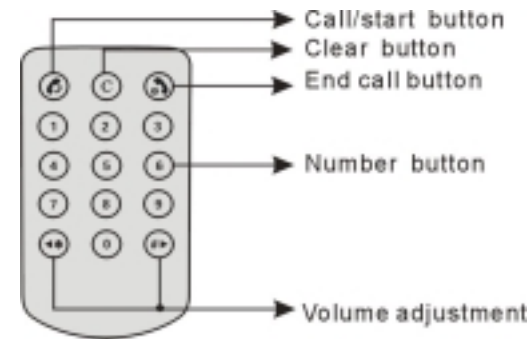
### Illustrations:

#### The base unit



(Please refer to the wiring installation diagram guide and requirements for installation)

#### Wireless keypad (T360-500 model)



(Please note: Wireless keypad will be slightly different depending on the **GSM Auto Security System** model)

## Accessories:



LED Indicator



Loudspeaker



Motion sensor 400MHZ-433MHZ



Microphone



Siren 12VDC/8R



GSM antenna 850MHZ-1900MHZ



Relay 12VDC/40A



10PIN harness and emergency button



12PIN harness

## **SIM CARD**

The SIM card is **NOT INCLUDED** with the GSM system and **MUST** be purchased separately.

When purchasing the SIM card from the Cellular telephone companies, purchase a package that best suits your needs. Some examples: How often are you going to use the cell phone feature? The minutes can add up. How often do you travel long distances or out of state?

**NOTE:** The system can **only** identify the set-up controlling phone number(s) (see controlling numbers) if the SIM card has the caller ID function.

We suggest using the rechargeable GSM-SIM card with national coverage.

## **GSM CAR MOBILE PHONE FEATURE**

The system has a wireless keypad, loudspeaker and an external microphone. Using the keypad, key in telephone number, press call. (**Please note:** Due to strict driving laws and your safety, pull car over to dial the number or to press the “call” button to answer a call) Your call is now hands-free. When there is an incoming call to the car security system phone number (SIM card number in base unit) it will ring. Press the “Call” button to answer the call and begin talking. To **Re-dial** the last telephone number you called, press the “call” button.

## INITIAL SETUP

The wiring, SIM card and base unit have been installed you are now ready to program your system.

Before starting see the “Quick Reference Guide” – Main Operations Menu (MOM)

**NOTE: We recommend you sit in you car with keypad for initial setup. Keypad must remain in vehicle at all times. After the initial setup, program your SIM number in GSM system into phone or phones. Your cell phone(s) or land phone(s) will control MOM. How to control the system by phone will be explained later in the manual.**

### FROM MAIN OPERATION MENU (MOM)

#### SETTING UP PASSWORD (NUMBER)

Press “\*” then “#” on the keypad, voice prompt “Welcome to GSM car alarm system”. Press 5 “change password”. (This option is used to setup the initial password for the entire system. To change password number, see change password.) Enter password number, 2 to 6 digits. (Note: Use a password number that you will **remember**, also giving this password to anyone gives them full control of the car.) This is the only way the system will let you get into the Main Operation Menu (MOM). We strongly recommend inputting a password number. It guards against accidental or unauthorized use. (If you made a mistake inputting the number, Press 2 to re-enter) Press 1 to confirm, voice prompt “set successfully.” Press 0: to exit back to **MOM**.

#### SETTING UP CONTROLLING PHONE NUMBERS

**There are 2 Controlling phone numbers and 2 emergency numbers that you can setup in your GSM system. Your cell phone number(s) and/or land phone number(s). This is the number or numbers your GSM system will call if the car is being broken into. How this works will be explained further in this manual.**

**First controlling number:** From the Menu Operations Menu (MOM), Press 6 to enter controlling number menu. Press 1 to enter first controlling number, voice prompt “Enter controlling number” key in phone number, Press #. Voice prompt reports “Your entered phone number is \*\*\*\*\*”. (If this is incorrect Press 2 to re-enter) then Press 1: to confirm, voice prompt, “Set successfully”. Press 0: exit back to (MOM).

**Second controlling number:** From the Menu Operations Menu (MOM), Press 6 to enter into the controlling number menu. Press 2 to enter second controlling number. Follow same procedure as first controlling number.

**Emergency number(s):** From the Menu Operations Menu (MOM), Press 6 to enter into the controlling number.

menu. Press 3: to enter first emergency phone number; voice prompt “Enter emergency number” key in phone number, Press #. Voice prompt reports “Your entered phone number is \*\*\*\*\*”. (If this is incorrect Press 2 to re-enter) then Press 1: to confirm, voice prompt, “Set successfully”. Press 0: exit back to (MOM).

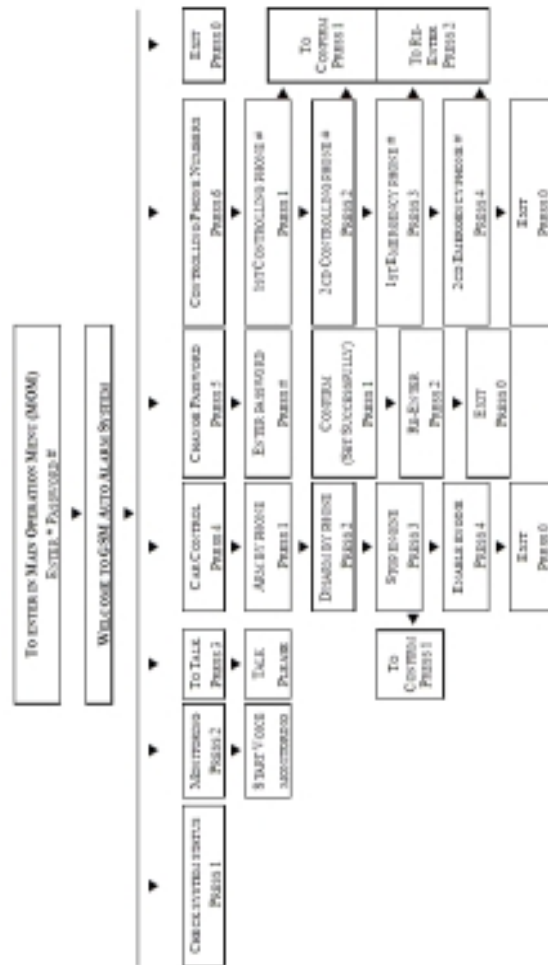
Press 4 to enter second emergency phone number; Follow the same procedure as first emergency number.

**After the initial setup is completed when you press “lock” on your car remote transmitter, it will automatically activate the GSM Auto Security System.**

# Quick Reference Guide – Main Operation Menu (MOM)

# Main Operation Menu (MOM) Options

Quick Reference Guide - Main Operation Menu (MOM)



## 1. Check System Status

Contact the base unit through one of the two controlling phone numbers, from **MOM**, Press 1 “Check system status”. According to the status of the car, voice reports: (i.e.)

- “Alarm system armed”
- “Alarm system armed, engine stopped
- “Alarm system disarmed”
- “Alarm system disarmed, car door is open”
- “Alarm system disarmed, engine stopped”
- “Alarm system disarmed, engine running”

## 2. Monitoring

Contact the base unit through one of the two controlling phone numbers, from **MOM**, Press 2 “Monitoring”, voice prompt “start voice monitoring”. There is a limited time for monitoring (5 minutes), if you want to keep on monitoring, press any key within the 5 minutes (except “0” and “3”). During monitoring, you may press “3” to start talking to person in the car. To get back to only monitoring press “2”

You can continue to monitor for another 5 minutes. If you do not press any key to continue monitoring, after 5 minutes the call will end.

During monitoring, press “0”, will exit back to the **MOM**.

## 3. To Talk

Contact the base unit through one of the two controlling phone numbers, from **MOM**, press 3 “To talk”, voice prompt “talk please”. You can talk with the person in the car for 5 minutes. You will hear a “beep” press any key (except “0” and “2”) to continue to talk for another 5 minutes. When the 5 minutes are up and you have not hit any key to continue, voice prompt “Time is out, the call ends.” Press “0” will exit back to the **MOM**.

#### 4、 Car control

Contact with the base unit through one of the two controlling phones, from **MOM**, press 4

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“Car control”, and enter into sub-menu:

##### (1) Arm system by phone

To arm the GSM Security System by phone press 1, voice prompt, “Alarm system armed by phone”, and the central lock locks the car. When car is in motion, this function is valid (stays on). **Remember** if the system is armed by phone, the system can only be disarmed by phone. You will not be able to start the engine with original car key.

##### (2) Disarm system by phone

To disarm the GSM Security System (by phone only) press 2, voice prompt, “Alarm system disarmed by Phone” central lock is unlocked.

##### (3) Stop the engine

To stop the engine press 3, when car is in motion or when engine is running when car is stopped or parked; voice prompt “confirm stopping the engine” press 1, (to exit press 0) voice prompt: “Warning! Warning! Engine will shut off in 2 minutes, pull off the road and stop the car now.” After minute: voice prompt: “Warning! Warning! Engine will shut off in 1 minute, pull off the road and stop the car now.” 30 seconds later, voice prompt, “Warning! Warning! Engine will shut off in 30 seconds, pull off the road and stop the car now.” 30 seconds later voice prompt will start a count down 9, 8, 7,6,5,4,3,2,1 the engine is stopped & directional lights will flash and siren sounds.

##### (4) Enable engine

To enable the engine press 4, directional lights will stop flashing and siren sound stops. Voice prompt, “Engine enabled”.

##### (0) Exit

To exit press “0” exit back to **MOM**.

#### 5、 Changing password

Contact the base unit through one of the two controlling phone numbers from **MOM**. Press 5 to change password, voice prompt “Please enter password and press “#”, key in password,

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voice prompt “your enter password is \*\*\*\*\*”, “Confirm press 1”, (To Re-enter press 2) voice prompt “set successfully”. Password is now changed.

To exit press 0, exit back to **MOM**.

#### 6、 Controlling phone numbers

Contact the base unit by phone (NOTE: if you have set up the controlling numbers, only these controlling numbers can enter into system) to enter into operating main menu and select “for controlling phone number set press 6” then enter into next sub-menu:

##### (1) Set up the first controlling phone number

Enter into sub-menu and choose “For first controlling telephone number set press 1.”Then system prompt “Enter phone number, press # to finish”, after that, voice reports: your entered phone number is \*\*\*\*\*, for confirm press 1,for re-enter press 2,for exit press 0” then choose “confirm press 1”, finally “Set successfully”; choose “For re-enter press 2”, please input telephone number again Press 1, system will disregard the previous number.

##### (2) Set up the secondary controlling phone number

From the sub-menu to choose “for secondary controlling phone number press 2”, setup is the same as the first controlling phone number set up.

##### (3) Set up two emergency phone numbers

From the sub-menu to choose “For first emergency phone number set press 3”, setup is the same as the first controlling phone number

From the sub-menu to choose “For secondary emergency phone number set press 4”; setup is the same as the first phone number set up.

#### 7、 Exit

Press “0”: to exit out of Main Operation Menu (MOM), Voice prompt “**Thanks**, bye” the call ends.

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### **IMPORTANT NOTICE:**

**THE “STOP ENGINE” function is meant only to stop the automobile when a thief is trying to drive away. Do not play with this function. Use ONLY in an emergency and ONLY as a last resort. Playing with this function may cause an accident. Amwell® Security Systems Inc. will not take responsibility for any auto accidents that may be caused by using this function.**

#### **USE AT YOUR OWN RISK!**

**If for any reason this function is used the car on board computer (OCM) will think the car engine lacks fuel or has a lean fuel mixture. The “check engine” light may come on. When this happens, nothing is wrong with your car. Your on board computer will have to be reset by your auto mechanic or auto dealer.**

### **Alarm functions introduction**

#### **PHONE OPERATION**

##### **Dialing into the Main Operation Menu (MOM)**

When a call (SIM card number in the base unit) is made to the base unit and detects the call is from one of the two controlling phone number(s) (see **Controlling phone number set-up**).

Voice prompt; “please enter password and press #.” If you do not respond to the system within 45 seconds, a beep will sound every 5 seconds, after one minute: voice prompt “Time is out, bye.” If the correct password is entered, you will hear the voice menu: “To check system status press 1, monitoring press 2, to talk press 3, car control press 4, to change password press 5, controlling phone number set up press 6, to exit press 0.” If password entered is incorrect voice

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prompt: “Wrong password, try again.” After three attempts, voice prompt: “Wrong password bye” and the call ends.

When system is armed and you’re talking to someone or receiving an incoming call on your phone and the alarm is triggered, the “alarming call” will activate and system will cut off all other calls.

**Note:** The system can only identify the set-up controlling phone(s) number if SIM card has call ID function.

#### **ALARM FUNCTION**

**(All conditions below are activated when car is “Armed”)**

##### **(1) Shaking alarm**

If the car receives any vibration or gets shaken it triggers the system by what’s called “Shaking alarm”. The first time this happens, the siren sounds and the directional lights flash and continuously for 5 seconds. If it happens a second time, it now triggers the system, directional lights flash for 25 seconds and siren sounds continuously for 25 seconds. The base unit calls the programmed controlling phone number(s), when you answer the call, voice prompt “Car shake”.

##### **(2) Car door opened alarm**

There are a couple of scenarios with the “Car door opened alarm” feature:

When an unauthorized person breaks in and opens the door; the car door lock/unlock sensor will detect the intrusion and the alarm will go off. The directional lights will flash and the siren

sounds for 25 seconds. The alarm unit will call the programmed controlling phone number(s). When call is answered, voice prompt “car door open” 5 times.

When system is armed by telephone, nobody can open the door and start engine with the car key. If anybody opens the door and starts the engine with or without original car key, system

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will turn off the engine. **Remember** when the system **is armed by phone**, the system **can only be disarmed by phone**. (This will prevent someone who has taken your car keys with car remote transmitter from getting into the car and starting the engine.)

### **(3) Car started alarm**

When someone starts your engine and tries to drive off, the system will detect the intrusion. The directional lights will start flashing and the siren will sound for 25 seconds. The base unit will call the programmed controlling phone number(s). When call is answered, voice prompt “engine started”.

### **(4) Power off alarm**

If someone cuts the car battery cable to disarm the factory alarm, the base unit will call the controlling phone number(s) automatically. When call is answered, voice prompt “System power off.” (it will repeat this 5 times). Enter into **MOM**. During this time the directional lights and siren will not operate.

### **(5) Emergency help**

During an emergency situation: press the emergency button and hold for 3 seconds. The base unit will call the preprogrammed emergency phone numbers. When someone answers the call, voice prompt “Emergency call”. During this time the directional lights and siren will not operate. This person will have access to **MOM** and must use option 3 “To talk” to communicate with driver.

### **(6) If no answer for the alarm call**

When the base unit call does not get answered by the first controlling phone number the system will dial the second number automatically. If the second number doesn't get answered,

the system will call first controlling phone number again till someone answers the call. The system calls back the first controlling phone number and second controlling phone numbers will keep calling these two numbers until someone answers the call. If you have voice mail on your controlling phone, system will leave voice message and will stop calling other controlling phone number.

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### **(7) Trunk release alarm**

If an unauthorized person opens the trunk, the directional lights flash and siren sound for 25 seconds. The system will dial the controlling phone number(s) automatically. (This feature will act in the same manner as car door opened.) When call is answered, voice prompt “Car door open.”

### **(8) Auto functions**

(1) When “arm” the system (with car key transmitter or phone) but the car door or trunk isn't fully closed: the directional lights will flash and siren will sound 3 times. If this is not corrected, 30 seconds later alarm will go off, siren sounds and directional lights flash continuously, the base unit will call the controlling phone number(s).

(2) When the owner closes the door but forgets to arm the system within 10 seconds, system siren sounds 3 times and directional lights flash.

(3) When car battery is disconnected for any reason, the system will keep the previous status

(4) When you park the car, turn ignition off and open the door; the directional lights will flash for 15 seconds.

(5) When you are enter an area with no GSM signal, voice will warn you “No GSM signal in this area.”

## **LED indicator lights on the base unit**

When ignition is shut off: indicating GSM network signal status:

LED flashes fast, shows no GSM signal

LED flashes slow, shows GSM signal good

Car starts: LED goes off

When system is armed: LED flashes twice and will flash 3 times and will flash steadily every 5 seconds.

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Alarm is triggered by vibration or shaking: LED flashes 4 times.

Alarm set by car remote or by phone on/off: LED flashes for 2 seconds and flashes every 5 second

When system disarmed status: LED is on for 3 seconds

If emergency button is pressed for 3 seconds or longer: LED is on continuously

## Function of factory car alarm remote transmitters

Using the car remote transmitter to lock the door will activate the base unit to arm the system.

When the door is unlocked using remote transmitter, the door base unit will disarm the system.

Sound or mute alarm on car remote transmitter depends on the design of the car.

If the original car alarm has functions: car finder (panic button), trunk release, and/or mute, your Amwell® Auto Alarm System will support these functions.

Working voltage: 12V negative ground

Static current: 40mA-60mA

Working frequency when arming and disarming: 400MHz-433MHz

Telephone frequency QUAD system; same as the GSM

Alarm time, stays on until system is disarmed or the alarm system call is answered.

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(2) Output voltage of control interface

Stop engine voltage: 0V

Fuel pump line voltage: 0V

Loudspeaker voltage: 12V

(3) Input voltage

Checking door sensor voltage: 0V

Checking key sensor voltage: 12V

(5) Working temperature

Base unit: storage in -30 ~ +85C (-22F ~ +176F)

Working temperature: -20~+75C (- 4F ~ +176F)

Working humidity: 25%~95%

Accessories: storage in -40~+100 (-40F ~ +148F)

Working temperature: -20~+85 (-4F ~ \*185F)

Working humidity: 25%~95%

(6) Dimension of base unit

T360-500: 120mm x 83mm x 35m

## Technical Data

(1) Alarm unit

## **NOTICE TO INSTALLERS**

### **Before installation make sure that car battery is disconnected.**

Connect alarm unit through provided harness to car electric installation using installation diagram as guide.

(See wiring diagram guide for base unit and the central lock wiring diagrams.)

Make sure that **power switch on the base unit is on the OFF position.**

Use pin tool to take out the **SIM** cardholder out of the **SIM** slot. Push-button in gently, (it's the little yellow color button located on left side of **SIM** card slot), press in until the **SIM** cardholder springs out.

Before placing the **SIM** card in the **SIM** cardholder, **DO NOT TOUCH SIM CARD WITH FINGERS.** This is to prevent static accumulation in SIM card. We recommend using rubber gloves. If **SIM** card gets charged with static, the alarm may not function properly the first few times.

Place the **SIM** card into the **SIM** cardholder. (The **SIM** card has a notched corner, so does the **SIM** cardholder. When lined up the **SIM** card will lay right in.) Slide cardholder back into the **SIM** slot of alarm base unit. Make sure the cardholder is faced down when putting it back into the **SIM** slot of the alarm base unit. The **SIM** slot has tiny guide rails to guide the **SIM** cardholder into place. Push the **SIM** cardholder in until it locks into place. Observe the LED integrator GSM signals,

**Set power switch to the on position on the alarm base unit** and then set up:

Enter in a Controlling number and perform **ALL** GSM Security System alarm functions checks.

If the **Amwell®** Auto Security System has any malfunctions or does not function at all, recheck wiring installation. Nearly all alarm malfunctions are caused by wrong wiring during installation.

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## **Trouble shooting:**

**Problem:** Auto Security System will not respond to call

**Solution:**

- (1) Check if GSM signal is OK.
- (2) Check if SIM Cardholder is seeded into the SIM slot properly.
- (3) Check if the car battery is connected and the on/off switch on the body of the unit is in "on" position.
- (4) SIM card may have been charged with electric static during installation.
- (5) Turn ignition key into ACC position and press the emergency button 5 times within 5 seconds. This is to **RESET** GSM Auto Security System (directional lights flash 2 times, the system will reset).

**Problem:** Calling the controlling phone number(s) when there is no alarm triggered

**Solution:**

- (1) Check if the motion sensor sensitivity is set too high.
- (2) Check if the door lock/unlock module is working properly
- (3) Check if the car battery is not discharged and is properly connected

**Problem:** The central lock can't lock automatically when driving

**Solution:**

- (1) Check if the all doors are completely closed.
- (2) Check if the wire connection of central lock module is wired correctly.
- (3) Check the car battery is not discharged and is connected securely.

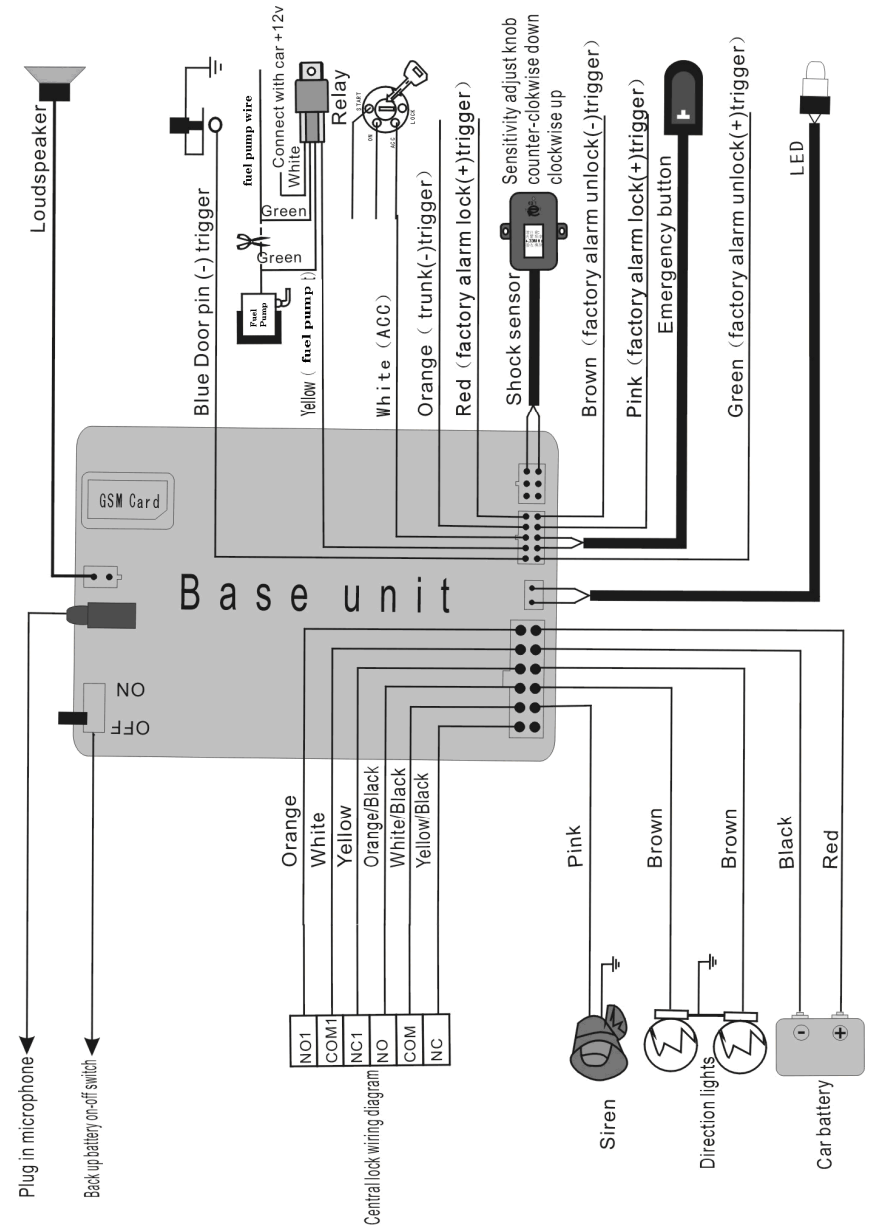
**Problem:** The user can't start the car under system-disarmed status

**Solution:**

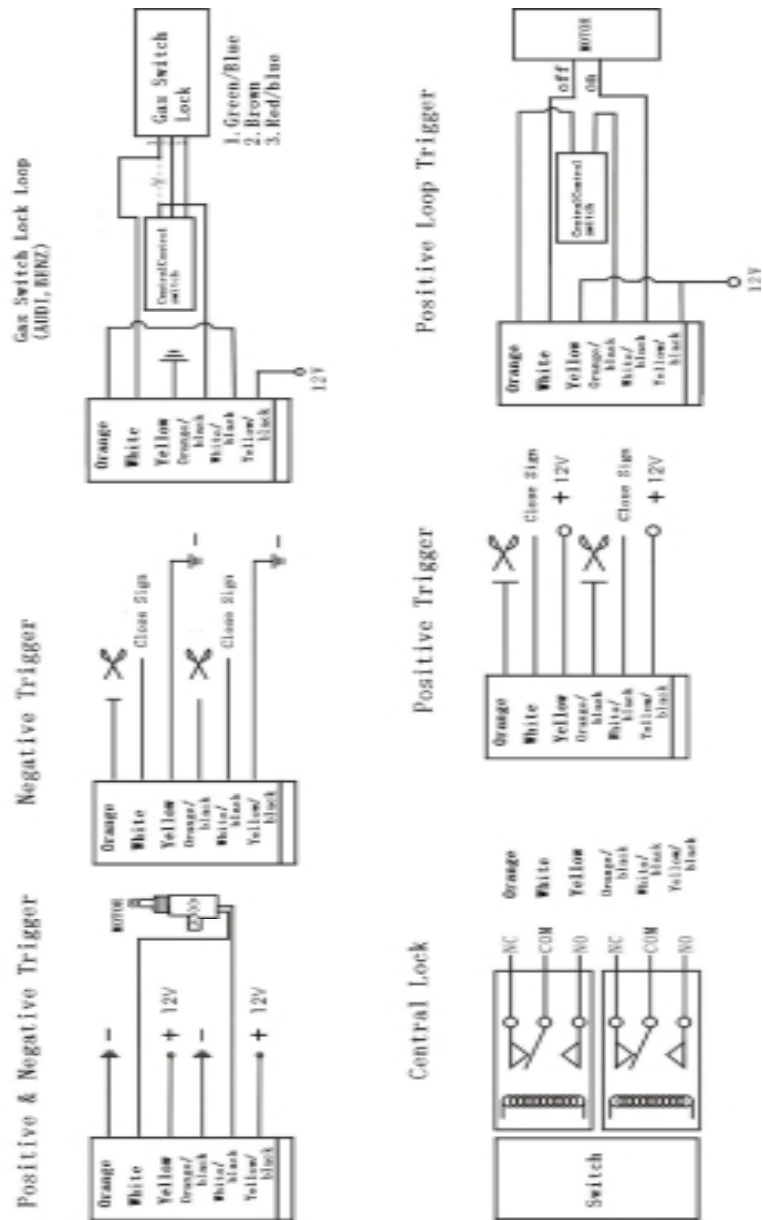
- (1) Check if car battery is not discharged.
- (2) Check if the ignition and engine connection are OK.

Our company reserves the right to amend product performance index and function without notice in advance.

## Wiring Diagram Guide for base unit

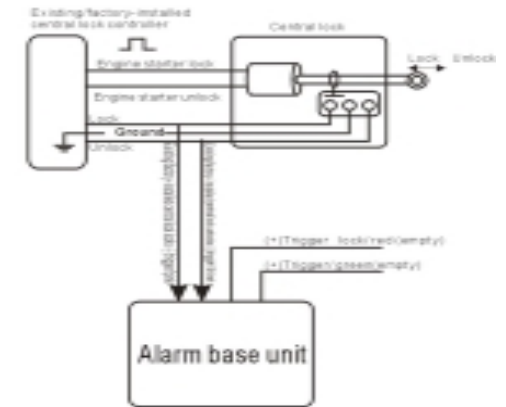


## Central lock wiring diagram Guide



## Compatibility wiring diagram guide Compatibility Wiring Diagram

### (-)Trigger connection



### (+)Trigger connection

