Hawk®
ALARM • IMMOBILISER

HA - FM10

ALARM MANUAL

ISO 9001 QS 9000 FC CE

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**THIS INSTRUCTION MANUAL IS IMPORTANT.
PLEASE READ IT BEFORE INSTALLING THE UNIT.**

Warning! Safety first

Remote Engine Start

When properly installed, this system can start the vehicle via a command signal from the remote control transmitter.

Therefore, never operate the system in an enclosed area or partially enclosed area without ventilation (such as a garage). It is the user's sole responsibility to properly handle and keep out of reach from children all remote control transmitters to assure that the system does not unintentionally remote start the vehicle. **THE USER MUST INSTALL A CARBON MONOXIDE DETECTOR IN OR ABOUT THE LIVING AREA ADJACENT TO THE VEHICLE. ALL DOORS LEADING FROM ADJACENT LIVING AREAS TO THE ENCLOSED OR PARTIALLY ENCLOSED VEHICLE STORAGE AREA MUST AT ALL TIMES REMAIN CLOSED.** These precautions are the sole responsibility of the user.

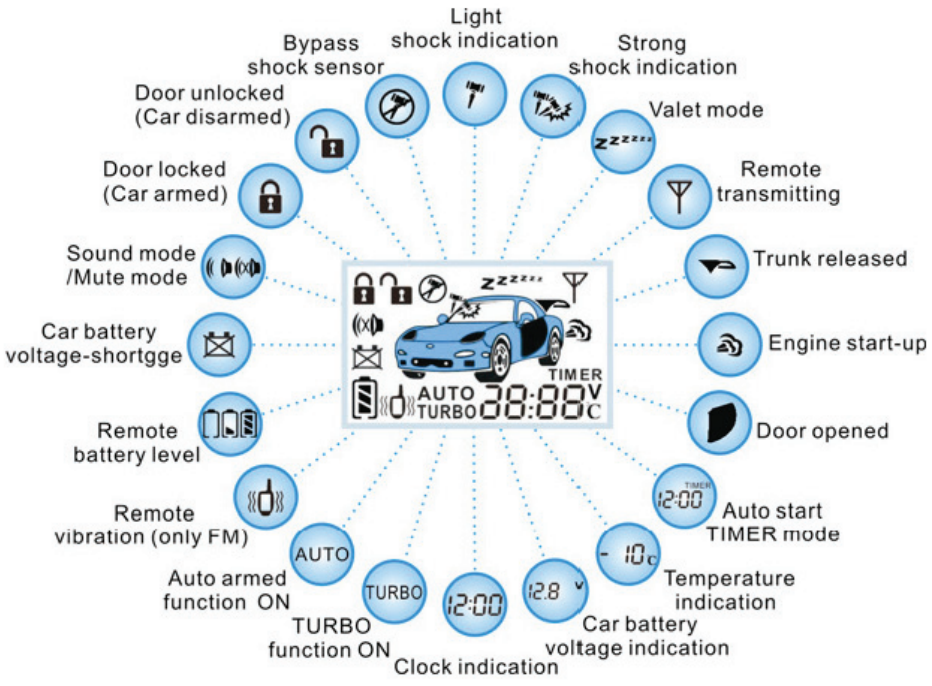
Use of this product in a manner contrary to its intended mode of operation may result in property damage, personal injury, or death. (1) Never remotely start the vehicle with the vehicle in gear, and (2) Never remotely start the vehicle with the keys in the ignition. The user must also have the neutral Safety feature of the vehicle periodically checked, wherein the vehicle must not remotely start while the car is in gear. If the vehicle starts in gear, cease remote start operation immediately and consult with the authorized dealer to fix the problem.

OPERATION OF THE REMOTE START MODULE IF THE VEHICLE STARTS IN GEAR IS CONTRARY TO ITS INTENDED MODE OF OPERATION. OPERATING THE REMOTE START SYSTEM UNDER THESE CONDITIONS MAY RESULT IN PROPERTY DAMAGE OR PERSONAL INJURY. YOU MUST IMMEDIATELY CEASE THE USE OF THE UNIT AND SEEK THE ASSISTANCE OF AN AUTHORIZED DEALER TO REPAIR OR DISCONNECT THE INSTALLED REMOTE START MODULE. HAWK CAR ALARM WILL NOT BE HELD RESPONSIBLE OR PAY FOR INSTALLATION OR REINSTALLATION COSTS.

Note:
Range of LCD Alarm system is based on line of sight, unobstructed testing in ideal conditions. Actual range will vary due to local conditions including but not limited to environment, terrain, physical obstructions, vehicle location and orientation interference and other possible impediments.

CONTENTS

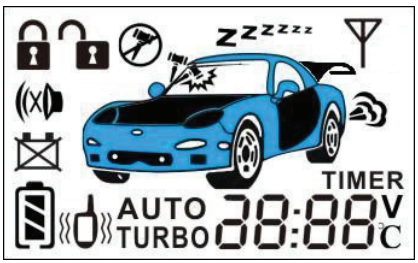
FUNCTION ICONS



BUTTON FUNCTION

System status	Button	Function
Ignition OFF	**I** (🔒) 0.5 sec	Arm / Car finder
Ignition OFF	**II** (🔓) 0.5 sec	Disarm
Ignition OFF	**II** (🔓) 2 sec	Remote engine start
Ignition ON	**II** (🔓) 2 sec	SOS
Any	**III** (⚷) 0.5 sec	Check car condition
Any	**III** (⚷) 2 sec	Channel 2 output
Ignition ON	**I** +**III** (🔒+⚷) 0.5 sec	Revise PIN code
Ignition ON	**II**+**III** (🔓+⚷) 0.5 sec	Anti car-jacking
Ignition ON	**II**+**III** (🔓+⚷) 2 sec	Programming setting
Any	**IV** (F) 2 sec	" F " function setting
Any	**V** (☀) 0.5 sec	LCD Back light ON 3 sec
Any	**V** (☀) 2 sec	LCD Back light ON 60 sec
" F " function: you can choose different function in the menu, press button **I** to ON, press button **II** to OFF.		

LCD FEATURES



Icons	Icon Description
	Signal transmitting
	Door locked (Car armed)
	Door unlocked (Car disarmed)
/	Mute mode / Sound mode
AUTO	Auto arm ON
Zzzz	Valet mode
	Triggered by shock sensor
	Bypass shock sensor
	Remote battery level
	Car battery voltage-shortage
	Remote vibration
	Trunk release
	Door opened
TURBO	TURBO ON
TIMER	Auto start TIMER mode
	Engine start-up
88:88	Clock indication

FUNCTION

1. Programming setting

System can program functions, please follow steps below:

1. Disarm the system, then switch ON ignition;
2. Press and hold II+III 2 sec, LED will flash once – pause – flash once , and siren will sound 1 sec . It means that user come to program mode and stay in the 1st level. Within 20 sec, you can press button I, II, III to confirm the function.
3. Follow below step within 20 sec (If nobody presses button or somebody switch OFF ignition, system will exit program setting mode, LED will stop flash):
   Press emergency switch twice within 2 sec, program mode will come from 1st level to 2nd level, siren will sounds twice to confirm, LED will flash twice – pause – flash twice.
   Then press emergency switch 3 times within 3 sec to come next point, Siren sounds 3 times and LED flashes 3 times – pause – flash 3 times.
   If user needs to come 11th level, please press emergency switch 11 times within 11 sec, siren will sound 11 times, LED will flash 11 times – pause – flash 11 times.
4. Press and hold II 2 sec, if siren sounds 2 sec, all F function and program setting will be default setting (underlined in part).

Programming table

Function level	Description of function	Press **I**, Siren 1 chirp	Press **II**, Siren 2 chirps	Press **III**, Siren 3 chirps	Press **I + II**, Siren 4 chirps	Press **I + III**, Siren 5 chirps
1st	Door alarm delay time	5 sec	30 sec	**OFF**		
2nd	Pulse for central lock	**Ver.1**	Ver.2	Ver.3	Ver.4	Ver.5
3rd	Central lock auto	Ver.1	**Ver.2**			
4th	Break line (CH1) Method choosing	**Ver.1**	Ver.2			
5th	Enabling impulse length for CH2	Ver.1	**Ver.2**	Ver.3		
6th	Safe roadside parking function	Ver.1	**Ver.2**			
7th	Starter operation time for auto start	**Ver.1**	Ver.2	Ver.3	Ver.4	Ver.5
8th	Starter ON delay before engine start	**2sec**	5sec	10sec		
9th	IGN2 ON/OFF at remote start-up	Ver.1	**Ver.2**	Ver.3		
10th	Trunk/hood trigger setting	**Ver.1**	Ver.2			
11th	Temperature reach high level	Ver.1	Ver.2	**Ver.3**		

Description of programming functions:

1st: Alarm delay time for dome-light delay: 5 sec / 30 sec / **OFF**

2nd: Pulse length for central lock

Version 1: 0.5 sec to close, 0.5 sec to open

Version 2: 3.5 sec to close, 3.5 sec to open

Version 3: 0.5 sec to close, two 0.5 sec pulses to open

Version 4: two 0.5 sec pulses to close, two 0.5 sec pulses to open

Version 5: 25 sec to close, 0.5 sec to open

3rd: Central lock auto function

Version 1: Ignition ON, press foot brake, central lock closes automatically; Ignition off, central lock open automatically

Version 2: Ignition ON, press foot brake, central lock do not close ; Ignition off, central lock do not open

4th: Break line (Channel 1) method choosing

Version 1: Break line output –250mA constant pulse when armed

Version 2: Break line output –250mA constant pulse when disarmed

5th: Enabling impulse length for Channel 2

Version 1: Channel 2 output –250mA pulse 25 sec for closing windows when armed.

Version 2: Channel 2 output –250mA pulse 0.8 sec for opening trunk when press button III 2 sec

Version 3: Channel 2 output –250mA potential pulse 30 sec when press button III 2 sec

6th: SRP (Safe roadside parking) function

Version 1: Lights flashes 15 times when open the door

Version 2: Lights do not flash when open the door

7th: Starter operation time for auto start-up

Version 1: Three start-up time is 0.5 sec, 1 sec, 2sec

Version 2: Three start-up times is 0.8 sec, 1 sec, 2sec

Version 3: Three start-up times is 1 sec, 1sec, 1sec

Version 4: Three start-up times is 2 sec, 2 sec, 2sec

Version 5: Three start-up times is 3 sec, 3 sec, 3sec

8th: Starter ON delay before engine start: 2 sec / 5 sec / 10 sec

9th: IGN2 signal at auto start-up

Version 1: IGN2 appear 12V all the time when auto start-up

Version 2: IGN2 appear 12V before starting, 0V during start, 12V after start

Version 3: IGN2 appear 0V before starting, 0V during starting, 12V after staring

10th: Trunk/hood triggers setting

Version 1: Nothing trigger when trunk/hood is closed, "–" trigger when trunk/hood is opened

Version 2: "–" trigger when trunk/hood is closed, nothing trigger when trunk/hood is opened

11th: Temperature rich high level and car storage battery high level setting

Version 1: Engine automatically stops when its temperature exceeds 70°c or battery voltage reaches 15.5V.

Version 2: Engine automatically stops when its temperature exceeds 80°c or battery voltage reaches 15.5V.

Version 3: Engine automatically stops when its temperature exceeds 90°c or battery voltage reaches 15.5V.

2. Arm

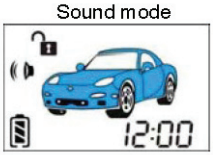
Sound mode

Mute mode

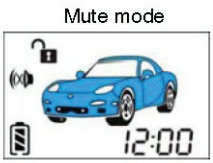
To arm your system within proper operation range, press button **I** shortly (while system in disarmed and Acc off position). Siren will sound once (siren will not sound in mute mode), lights flash once, doors lock, disable engine starter, and LED will flash slowly.
Remote controller will sound "Bi-", LCD screen will flash 5 times, and show " 🔒 " .
If the security system is armed at the same time that an input is active (such as door opened or hood / trunk opened or shock sensor is triggered), siren will sound and lights will flash.

3. Disarm

Sound mode



Mute mode



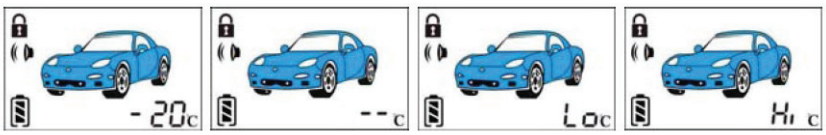
To disarm your system within proper operation range, press button ll shortly.
Siren will sound twice (siren will not sound in mute mode), lights will be on twice, doors will unlock, enable engine started. If nobody opens the door, LED will flash quickly. Before disarming your system, if door is opened or ignition on, LED will flash twice per second. If trunk is opened illegally, LED will flash 3 times per second. If shock sensor is triggered, LED will flash 4 times per second. At this time, if you switch ON ignition, LED will stop flash.
Remote controller sounds "Bi- Bi-", LCD screen will flash 5 times, and will show " 🔓 ".
If nobody opens the door and enters into the car within 30 sec, system will arm automatically.

4. Check car condition

When you change battery for remote controller, please press button III shortly, all data of F function setting (TIMER1 and TIMER2 except) will be sent to remote controller within 3 sec.
If you press button III shortly again, remote controller will sound "Bi-", LCD screen will flash 5 times, and will show car temperature. If you press button III shortly again, LCD screen will show car battery voltage.

1. Check car temperature

System check car temperature with a sensor, we suggest that you can install this sensor in the surface of engine. The range of temperature is –40°c to +85°c. In a variety of conditions, the LCD screen shows the following:



Temperature is –20℃ | Temperature sensor is OFF | Temperature is below –40℃ | Temperature is above +85℃

2. Check car battery voltage

System can check car battery voltage, if voltage is 12.8V, remote controller LCD screen shows the right picture like here.

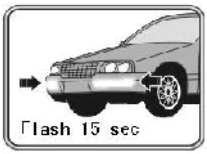
5. Car finder

In arm status, press button I shortly, siren sound 4 times (siren will not sound in mute mode), turning light flash at the same time for car finder. Remote controller will sound "Bi-", LCD screen will flash 5 times.

6. Anti-Hijacking

While driving, press button **II + III** shortly while meeting the threaten or in urgent circumstance, siren will sound and lights will flash sharply, system enters into Anti-Hijacking status. 15 sec later, system will enter into arm status unconditionally, when car is immobilised, it will not be started again.

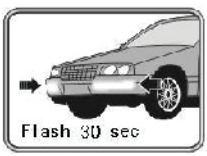
Press button II shortly can stop this function within 15 sec.



7. SOS

When driving, press and hold button II 2 sec in urgent circumstance, siren will sound 30 sec continuously and lights will flash at the same time for SOS.

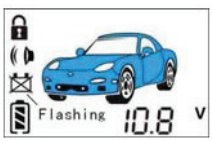
Press button II shortly can stop this function.



8. Warning for low voltage of car storage battery

When car battery voltage is lower than the initialization (11.0V), main unit will send signal to remote controller, remote controller will warn and show " ⊠ " and the car battery voltage will remind car owner. At this time, " ⊠ " will flash continuously, and the buzzer will sound once at regular intervals to remind car owner till the car owner press button to release warning.

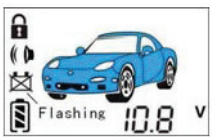
If switch on ignition, system will not test voltage of car storage battery.



9. Dual Stage Shock Sensor

In arm status, if car body is hit softly, siren will sound 5 times, and lights will flash 5 times; remote controller will sound, and LCD screen will show " ".

If car body is hit heavily, siren will sound 25 times and lights will flash 25 times; remote controller will sound and LCD screen will show " ".



When alarm triggered, press button I can stop warn, but system still in arm status. If users do not press any button to stop this warn, screen will show " " till user stop it.

10. Door alarm delay

System default setting door alarm delay is OFF, in this mode:
1. Press button I to set arm, if door (or trunk) do not be closed properly, siren will sound 3 times and lights will flash 3 times (in mute status, only lights flash 3 times), which can warn car owner to close door and set arm again. System will not warn again otherwise door is closed and opened again.
At the same time, remote controller beep will sound"Bi-Bi-Bi". If door do not be closed properly, LCD screen will show " ". If trunk do not be closed properly, LCD screen will show " ". Beep will sound "Bi-" each 30 sec to remind car owner to lock the door and trunk. When closed door and trunk properly, remote controller will not warn again.
2. While setting arm, door (or trunk) is closed properly, 2 sec later, if you open the door, system will alarm.
If car has interior light delay, please set alarm delay time 5 sec (or 30 sec), in this mode:
1. Press button I to set arm, if door (or trunk) do not be closed properly, system enter into arm status, system will not remind car owner to close the door and will not warn. Otherwise, when the car owner set arm 2 sec later, close the door and open again, 5 sec (or 30 sec) later siren will sound and lights will flash at the same time. If boot is not be closed properly, siren will sound 3 times, and lights will flash 3 times. (In mute mode, only lights flash 3 times). At the same time, remote controller beep will sound and screen will show " ", Beep will sound "Bi-" each 30 sec to warn the user to close the trunk properly.
2. While setting arm, door (or boot) is closed properly, system will arm after opening the door 5 sec (or 30 sec).

11. Pulse for central lock

System default setting is electric lock, 0.5 sec to close and 0.5 sec to open. If need, you can set program to select pneumatic lock, 3.5 sec to close and 3.5 sec to open. If you need two-step opening door function, you can set program to select pulse 0.5 sec to close and two pulses 0.5 sec to open.
Also, you can set other pulses for central lock with programming table.

12. Auto door closing when driving

System default setting auto door closing function is OFF, you can set program to ON. While driving, user can press button I to lock the central lock, or press button II to unlock, but system will not be armed or disarmed.
When switch ON ignition, you can close the door and step on foot brake, central lock will be locked automatically for safety driving. When switch OFF ignition, central lock will be unlocked automatically for easily getting off or getting on.
If a passenger needs get off during traffic, you can unlock the central lock, then step on the foot brake, central lock is not locked to facilitate the passengers to get off. When you open the door, and get off then closed the door, step on the foot brake, lock function is automatically restored.

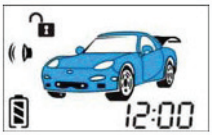
13. Channel 1 output (break line) choosing

System default setting is the main unit channel 1 output -250mA pulse for N.C. engine stopper when armed. You can set program to output -250mA pulse for N.O. engine stopper when disarmed.

14. Channel 2 output choosing

Channel 2 output can program to 0.8 sec pulse for opening trunk, 25 sec pulse for closing window, or 30 sec potential pulse. Factory default setting is 0.8 sec.

1. Remote open boot



Press and hold button III 2 sec, the main unit channel 2 output -250mA pulse 0.8 sec to open the boot. Remote sound "Bi-" and screen shows " ".

Note:

1. Lever boot can not be opened.
2. In arm status, open the boot, system will be disarmed and door will be unlocked.
3. In arm status, if boot is opened illegally, siren will sound 25 sec, and lights will flash at the same time, car can not be started. Remote will show " " and will sound "Bi-Bi-Bi-".

2. Close window(comfort output)

Simply press button I shortly to arm your system, the main unit channel 2 output -250mA pulse 25 sec to close window. Simply press button II will stop close window, the same time system will be disarmed.

3. Potential pulse

Press and hold button III 2 sec, the main unit channel 2 output -250mA potential pulse 30 sec, you can press and hold button III 2 sec to stop it.

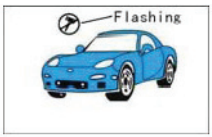
15. Clock setting

Press and hold button **IV** (**F**)2 sec, remote controller sound "Bi-" , clock hour figure will flash and system enter into clock hour setting status. At this time, press button **I** shortly, figure will add **1**, press and hold button **I** , figure will add **1** continuously. Press button **II** shortly, figure will reduce **1**, press and hold button **II** , figure will reduce 1 continuously. Press button **III** shortly to confirm.

Press button **IV** (**F**) shortly, remote controller sounds "Bi-", clock minute figure will flash, system will enter into clock minute setting status. At this time, press button **I** shortly, figure will add **1**, press and hold button **I** , figure will add **1** continuously. Press button **II** shortly, figure will reduce **1**, press and hold button **II** , figure will reduce **1** continuously. Press button **III** shortly

Press and hold button **IV** (**F**) 2 sec, remote controller sounds "Bi-Bi-", clock setting exit. If user do not press and hold button **IV** (**F**) 2 sec to exit after setting, time figure will flash 10 sec to exit automatically.

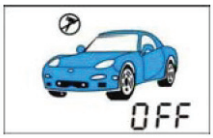
16. Temporary Isolation of Shock / Ultrasonic Sensors



Press and hold button **IV** (**F**) 2 sec, then press button **IV** (**F**) shortly many times, till remote controller LCD screen icon " " flashes.

At this time, press button **I** shortly, remote controller sound "Bi-", LCD screen shows " **ON** ", shock sensor alarm function is ON, system can receive shock sensor alarm signal.

At this time, press button II shortly, remote controller sound "Bi-Bi-", LCD screen show " **OFF** ", shock sensor alarm function is OFF, system can not receive shock sensor alarm signal.



Hint:

If you do not need shock sensor, it is possible to temporarily disconnect the sensor when leaving children or pets in the car. You can set it to off this function.

Note:

When re-power the remote and control the main unit, this function will be recovered to default setting. It means system has shock sensor alarm function.

17. European mute mode ON/OFF

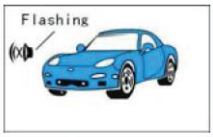
Press and hold button IV (F) 2 sec, then press button **IV** (**F**) shortly many times, till remote controller LCD screen icon " " flashes.

At this time, press button I shortly, remote controller sound "Bi-", LCD screen shows " **ON** ", Europe mute function is ON.

At this time, press button II shortly, remote controller sound "Bi-Bi-", LCD screen shows " **OFF** ", Europe function is OFF, siren will sound.

Set European mute mode ON, press button I shortly to set arm, lights flash once but siren will not sound, and you can press button **I** shortly again within 5 sec to check system status, lights flash once and siren will sound.

In this mode, siren will not sound (except: car is stolen or in Anti-Hijacking mode, siren will sound unconditionally).



18. Valet mode ON/OFF

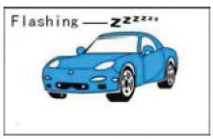
Press and hold button IV (F) 2 sec, then press button **IV** (**F**) shortly many times, till remote controller LCD screen icon " " flashes.

At this time, press button I shortly, remote controller sounds "Bi-", LCD screen shows " **ON** ", valet mode is ON, all functions will be stop except open and close central lock.

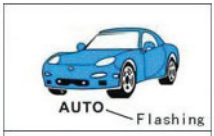
At this time, press button II shortly, remote controller sounds "Bi-Bi-", LCD screen shows " **OFF** ", valet mode is OFF, all function can be used.

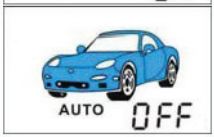
Note:

When re-power the remote and control the main unit, this function will be recovered to default setting, and all function can be used.



19. Auto arm function ON/OFF





Press and hold button **IV** (**F**) 2 sec, then press button **IV** (**F**) shortly many times, till remote controller LCD screen icon " **AUTO** " flashes.

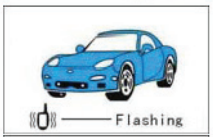
At this time, press button I shortly, remote controller sounds "Bi-", LCD screen shows " **AUTO ON** ", auto arm function is ON.

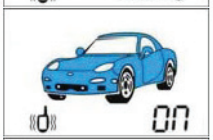
At this time, press button **II** shortly, remote controller sounds "Bi-Bi-", LCD screen shows " **AUTO OFF** ", auto arm function is OFF.

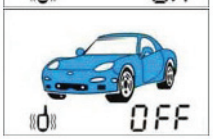
Set auto arm function ON, stop engine, get off the car, close the door properly, if user do not set arm, 10 sec later, siren will sound 3 times and turning light flash 3 times, system activate break line but doesn't enter into arm status 30 sec later, and central lock will not be locked.

At the same time, remote controller received the signal, if the door is not locked, beep will sound. Then, LCD screen will show " ".

20. Remote controller vibration ON/OFF (optional)





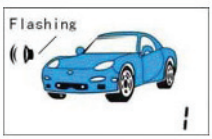


Press and hold button **IV** (**F**) 2 sec, then press button **IV** (**F**) shortly many times, till remote controller LCD screen icon " " flashes.

At this time, press button I shortly, remote controller sounds "Bi-", LCD screen shows " **ON** ", remote controller vibration function is ON.

At this time, press button II shortly, remote controller sounds "Bi-Bi-", LCD screen shows " **OFF** ", remote controller vibration function is OFF.

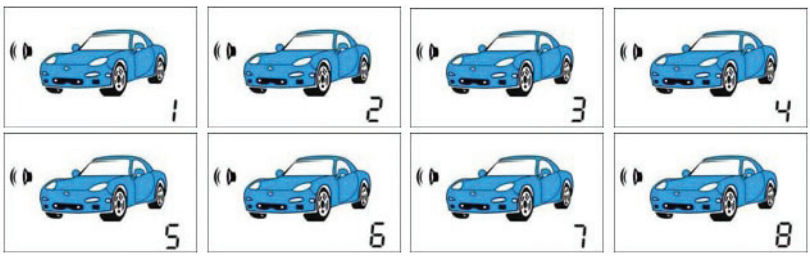
21. Set siren volume for LCD remote fob



You can set siren volume.

Press and hold button IV (F) 2 sec, then press button IV (F) shortly many times, till the remote screen icon " " flashes.

At this time, press button I shortly or press button II shortly select the volume from 1st level to 8th level, remote screen shows:



Then press button **III** shortly to confirm the volume level.

22. SRP (Safe roadside parking) function ON/OFF

System default setting SRP function is OFF, you can set it to ON.
If you park the car roadside and open the door, lights will flash 15 times to warn.

23. Power disconnecting memory

When re-powered, system will keep the original status before power off.

24. Trigger memory

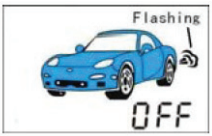
When disarm, if car is triggered (shock or opening doors), siren will sound 4 times and lights will flash 4 times. Otherwise, siren will sound twice and lights will flash twice (in mute status, siren will not sound).

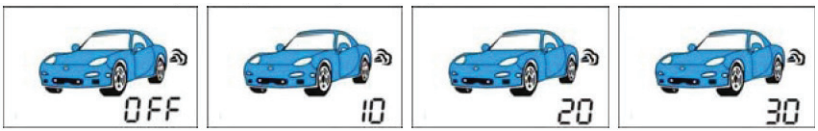
25. Trigger status identification

If the alarm system is triggered under the state of arm, there will be two ways of warning: one is hitting (such as the car door and windows by hit or external impact, etc.), the siren will sound intermittently (in the state of mute only the lights flash, the siren does not sound); the other is trigger (such as the car door is opened or the engine is started), the siren will sound continuously.

26. Engine auto start work time setting

System default setting, auto start function is OFF. You can set engine work 10 min or 20 min or 30 min.
Press and hold button **IV** (**F**) 2 sec, then press button **IV** (**F**) shortly many times, till the remote screen icon " " flashes.
At this time, press button **I** shortly or press button **II** shortly to select the time OFF, 10 min, or 20min, or 30 min, remote screen shows:





Then press button **III** shortly to confirm.
If user sets start function OFF, when remote controller enters into F function, LCD screen will not show low temperature auto start, low car storage battery level auto start and Timely auto remote engine start.

27. Remote engine start under Automatic Gear

In engine off status, press and hold button **II** 2 sec, if engine is started, lights will flash slowly, and remote controller LCD screen will show " ".
At this time, engine work 10 min continuously (user can set to 20 min or 30 min). If engine stop running within this 10 min, system will auto start once again.

During this time, if press and hold button **II** 2 sec or pull down the hand-brake or press the foot-brake, engine will be stopped.
If press button **II** shortly, user can open the door to get on the car. After opening the door, user must turn the key to ON position within 60 sec, otherwise engine will be stopped. If you press and hold button **II** 2 sec or pull down the hand-brake or press the foot-brake in this time, engine also will be stopped.

If press button II shortly, open the door and close it again, the system is still under reservation mode and can be auto started (including remote engine start and timely engine start) again.
Before using auto start, please check the car style. For manual gearshift car must be set reservation mode first. There is a wire ring outside the main unit to set car style. If your car is auto gearshift car, please cut this wire. If your car is manual gearshift car, please keep this wire.
If car door (or trunk) is opened, hand-brake is pull down or reservation mode is not successful, please press and hold button **II**, siren will sound 4 times and car can not be started. At this time, remote controller LCD screen will show " FAL " .
And " FAL " icon will stay on the LCD screen before user press any button.
If auto start is failed, while press button **III** shortly to check the car condition, remote controller LCD screen will show " FAL ".
The main unit channel 3 output -250mA pulse to bypass immobilizer while engine running.

Hint:

1. The start-up time are 3 times, 0.5 sec, 1 sec and 2 sec (can be set to other time). If it failed, please check ACC wires, ignition wires, start wires and engine start-up testing line.
2. After starting, if the car is started again, please check engine start-up testing line connection.
3. If you need to open the IGN2 when car is started, please use program.
4. During 5sec (or 30sec) alarm delay time, you can not use remote to start.

28. Starter ON delay before engine start (Diesel Mode)

This system is suitable for the car which need to warming-up before starting (such as diesel car).
Start-up delay time default setting is 2 sec, you can program to 5 sec or 10 sec.

29. Reservation mode (Gear Mode)

For manual gearshift car, user must set reservation mode first. There are two methods to set reservation mode for system.

1. Auto reservation

Please follow steps below:
1. When stop the car, push the gearlever to neutral position before engine cut off stop.
2. Pull up hand- brake.
3. Pull out the key, engine remain running 3 min more.
4. Open the door and get off within this 3 min and then close the door, engine is still running. During this time user can open and close doors many times. If set arm, engine will stop automatically, reservation mode is set successfully. If TURBO mode is ON, Engine will stop in time 1 min or 2 min or 3 min (depend on F function settings for the Turbo delay). Auto start function can be used before next driving.

2. Manual reservation

Please follow steps below:
1. When park the car, push the gearlever to neutral position before engine off.
2. Pull up hand- brake.
3. Press and hold button I 2 sec, siren will sound once and lights will flash once, main unit output ACC/IGN1/IGN2 signal. At this time, please pull out the ignition key, engine remain running 3 min.

4. Open the door and get off within this 3 min and close the door, engine is still running. During this time user can open and close doors many times. If you set arm, engine will stop automatically, reservation mode is set successfully.

Situation of failure to set reservation mode:

1. If 3 min passed, engine will stop automatically, setting fails.
2. When pull out the ignition key, but hand-brake is pull down, setting fails.

Method for disable or cancel the reservation mode:

1. If you do not need auto start or must stop the car in stall (such as parking the car on a slope), after pull out the ignition key, please hold button II 2 sec to stop the engine running and do not set reservation mode.
2. After setting reservation mode successfully and engine do not working, if user open the door, reservation mode will be cancelled.
3. If door is opened or ignited illegally, reservation mode will be cancelled.

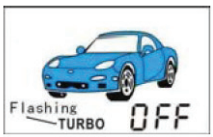
30. Outer device trigger start function

If the main unit receives outer trigger signal for engine start, system will be entered into automatic start function. If engine is started, lights will flash slowly, and remote LCD screen will show " " . At this time, engine work 10 min continuously (user can program 20 min or 30 min).

If car door is opened, or reservation mode is not successful, car can not be started. This feature is easy to install an outer module for auto start.

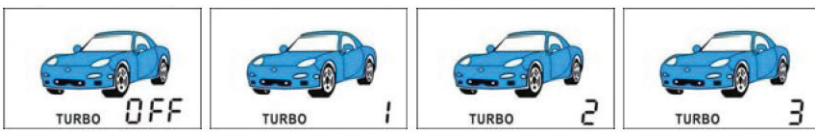
31. Turbo function

This feature is available for turbo charged vehicles that can keep the engine running automatically for 1 min (can set to 2 min or 3 min) when engine stop the car by ignition key. In idle status, the turbo-charged system temperature decreases gradually to avoid high temperature, it can effectively extend the life of the engine.



Press and hold button **IV** (**F**) 2 sec, then press button **IV** (**F**) shortly many times, till the remote screen icon " **TURBO** " flashes.

At this time, press button I shortly or press button **II** shortly to select the time from OFF, 1 min, 2 min to 3min, remote screen shows:



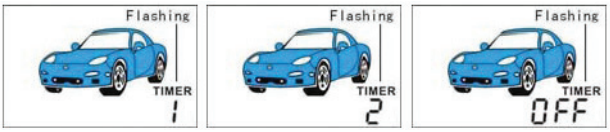
Then press button **III** shortly to confirm.

Set turbo function to ON, when engine running 2 min later, pull up the hand-brake, switch OFF ignition, the system automatically maintain the engine running for 1 min (or 2 min or 3 min). During this time, user can set arming or set disarming many times, engine will not be stopped, if user press and hold button **II** 2 sec or pull down the hand-brake, engine will be stopped.

For manual gearshift car, when set reservation mode, follow set arm and set mode successfully, but the engine remains running, which is TURBO function working.

32. Timely auto start function

You can set two timely auto start time. Press and hold button **IV** (**F**) 2 sec, then press button **IV** (**F**) shortly many times, till the remote screen icon " **TIMER 1** " or " **TIMER 2** " flashes. Default setting timely auto start function is OFF, remote screen will show " **TIMER OFF** ".



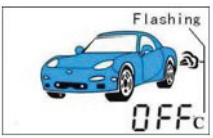
At this time, press button I shortly, it can set the auto start time, figure will increase with step 10 min, press and hold button I, figure will add 10 continuously. Press button II shortly, figure will decrease with step 10 min, press and hold button **II**, figure will reduce 10 continuously.

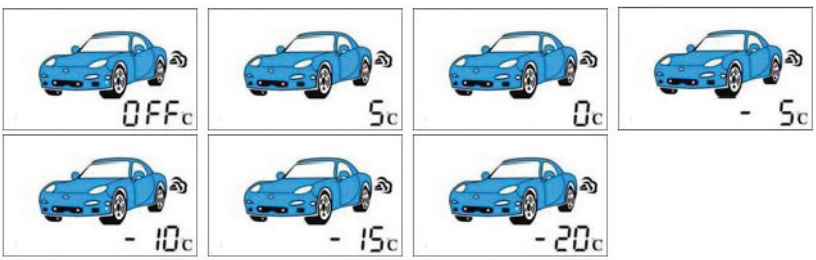
If you need to set 23:00 to TIMER 1 auto start, You can press and hold button **IV** (**F**) 2 sec, then press button **IV** (**F**) shortly many times, till the remote screen icon " **TIMER 1** ", remote screen will show " **TIMER OFF** " , then press button **I** shortly or press button **II** shortly, till remote screen shows " **23:00** ". Then press button **III** shortly to confirm, remote screen will show " **23:00** ". If you need cancel **TIMER1**, you can press button **III** shortly again to cancel, remote screen will show " **TIMER OFF** ".

TIMER 1 valid only once, but **TIMER 2** valid day by day.

33. Low temperature auto start function

Press and hold button **IV** (**F**) 2 sec, then press button **IV** (**F**) shortly many times, till the remote screen icon " °c " flashes. At this time, press button **I** shortly or press button **II** shortly to select the time from OFF, 5°c, 0°c, –5°c, –10°c, –15°c to –20°c, remote screen shows:

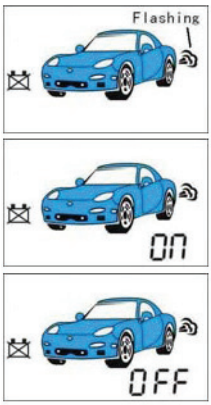




If you select the temperature –10°c, press button **III** shortly to confirm, then press and hold button **IV** (**F**) 2 sec, remote will sound "Bi-Bi-", it means that temperature setting is successful and exit.

When the engine temperature below –10°c, 10 sec later engine will auto start. At this time, engine will work 10 min continuously (user can set it to 20 min or 30 min). At this time, if temperature below –10°c, engine will auto start again.
If the temperature below 20°c after engine start twice continuously, system will cancel low temperature auto start function in this anti-theft cycle. Disarmed and armed again, this function will be available.
If low temperature start is not successful, system will auto start 2 min later. If the second start is still not successful, system will cancel low temperature auto start function in this anti-theft cycle. Disarmed and armed again, this function will be available.
Default setting low temperature auto start function is OFF, but always valid after setting ON. If you don't need this function, please set OFF.

34. Low car storage battery level auto start function



Press and hold button **IV** (**F**) 2 sec, then press button **IV** (**F**) shortly many times, till the remote screen icon " ⊠ " flashes.
At this time, press button I shortly, remote sounds "Bi-", screen shows " ⊠ **ON** ", low car storage battery level auto start function is ON. When car battery voltage is lower than the initialization (11.5V), engine will auto start 10 sec later.
At this time, press button II shortly, remote controller will sound "Bi-", screen will show " ⊠ **OFF** ", low car storage battery level auto start function is OFF.

35. Call from the car function

Press button on antenna, LED will blinks and turning light flash 3 times. At this time, remote controller will receive CALL signal from car, buzzer will sound 25 sec and LCD screen will show " CALL " icon.

36. Revise PIN code

In disarm status,
1. Switch ON ignition,
2. Press button **I + III**, siren sound once, LED will be glowing continuously.
3. Enter into the first old PIN code (press "**Emergency switch**" **M** times, **M** is the first PIN code number).
4. Switch OFF ignition, 0.5 sec later and within 2 sec, switch ON ignition.
5. Enter into the second old PIN code (press "**Emergency switch**" **N** times, **N** is the second PIN code number).
6. Switch OFF ignition, 0.5 sec later and within 2 sec, switch ON ignition, if siren sounds 3 times, PIN code will be wrong, please repeat above procedure; if siren sounds once, PIN code will be right, please follow below procedure:
7. Enter into the first new PIN code (press "**Emergency switch**" **X** times, **X** is the first new PIN code number).
8. Switch OFF ignition, 0.5 sec later and within 2 sec, switch ON ignition.
9. Enter into the second new PIN code (press "**Emergency switch**" **Y** times, **Y** is the second new PIN code number).
10. Switch OFF ignition, 0.5 sec later and within 2 sec, switch ON ignition.

11. Please repeat 7. ~ 10. procedure, enter into new PIN code again, if siren sounds twice, new PIN code will be correct and saved; if siren sounds 3 times, system will exit revising PIN code status, new PIN code is invalid.

Note:

1. During entering into PIN code, if user do not press "**Emergency switch**" within 10 sec, system will exit entering into PIN code.
2. Effective number is 1 to 9, if Pin code is wrong when entering into PIN code, siren will sound 3 times.
3. Default setting Pin code is 11, user can revise it anytime.
4. In revising PIN code status, press **I + II + III** shortly, PIN code will recover to default setting.

37. Remote controller learning

In disarm status, close the door, following below steps:

1. Switch ON ignition, if you hold the "**Emergency switch**", the siren will sound twice, turning light will flash twice.
2. Press any button of the remote controller, the turning light will flash once, the remote controller learn successful. Learning another remote controller with same method.
3. After leaning code, release the "**Emergency switch**", then the new remote controller is already available but the old ones is cancelled accordingly.

Note:

Each main box can match at most 2 remote controllers. When learning the new remote controller, the old remote controller can not be used.

38. Emergency disarm

When remote controllers lost or damaged, and you can not use remote to release arm, Please use PIN code to release arm (enter into effective PIN code, default setting is "11") as following:

1. Open the door.
2. Switch ON ignition.
3. Enter into the first PIN code (press "**Emergency switch**" M times, M is the first PIN code number).
4. Switch OFF ignition and then switch ON.
5. Enter into the second PIN code(press "**Emergency switch**" switch N times, N is the second PIN code number).
6. Switch OFF ignition and then switch ON.

39. Emergency set arm function

If remote is damaged, user can set arm by hand. In disarm status:

1. Turn the ignition switch from OFF to ON position, repeat 3 times and stop ON position, siren will sound once, LED will be glowing continuously.
1. Press "**Emergency switch**" 8 times within 10 sec.
2. Switch OFF ignition. If setting is right, siren will sound once, and turning light will flash once; otherwise LED will stop flash.
3. Get off the car and close the door, system enters into arm status but door will not be locked; if do not close the door, system will arm automatically after 30 sec later.

Installation points to remember

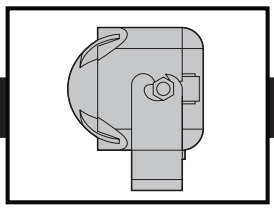
This product represents many years of research and development. It is very sophisticated and should be installed by experienced security installers only. Please do not attempt installation of this product without reading this guide. The system has been designed to provide the ultimate in security, coupled with limitless convenience and expansion options.

Do not disconnect the battery if the vehicle has an anti-theft coded radio. If equipped with an air bag, avoid disconnecting the battery if possible.

IMPORTANT! *Many airbag systems will display a diagnostic code through their warning light after they lose power. Disconnecting the battery requires this code to be erased, a procedure that can require a trip to the dealer.*

Deciding on component locations

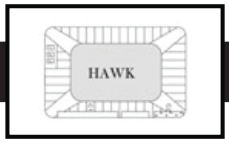
Locations for the siren



Some things to remember about mounting the siren:

- Keep it away from heat sources, such as radiators, exhaust manifolds, turbochargers and heat shields.
- Mount it where a thief cannot easily disconnect it, whether the bonnet is open or shut.
  Both the siren and its wires should be difficult to find. This usually involves disguising the wire to look like a factory harness.
- When possible, place the siren on the same side of the vehicle as the control module, where its wires will reach the control module's wires without extending them. Always run the wires through the centre of a grommet, never through bare metal!
- Point the siren down so water does not collect in it.

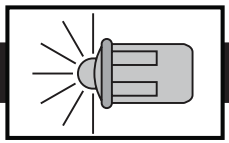
Locations for the control box



Some things to remember about where to mount the control module:

- Never put the control module in the engine compartment!
- The first step in hot wiring a vehicle is removing the driver's side under-dash panel to access the starter and ignition wires. If the control module is placed just behind the driver's side dash it can easily be disconnected.
- When mounting the control module, try to find a secure location that will not require you to extend the harness wires. Keep it away from the heater core (or any other heat sources) and any obvious leaks.
- The higher the control module is in the vehicle, the better the transmitter range will be. If you put the control module under a seat or inside a metal dashboard, range will suffer.
- Some good control module locations: above the glove box, inside the centre console, above the under-dash fuse box, above the radio etc.

Locations for the status LED



Some things to remember when positioning the status LED:

- It should be visible from both sides and the rear of the vehicle, if possible.
- It needs at least 1/2 inch clearance to the rear.
- It is easiest to use a small removable panel, such as a switch blank or a dash bezel. Remove it before drilling your 1/2 inch hole.

Locations for the Hawkguard shock sensor

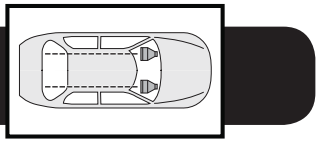
Some things to remember about where to mount the shock sensor:

- Never put the shock sensor in the engine compartment!
- Find a spot close to the control module so that the wires to not need to be extended. Keep it away from the heater core (or any other heat sources) and any obvious leaks.

How the shock sensor is mounted is the most important factor in its performance. We recommend 2 methods:

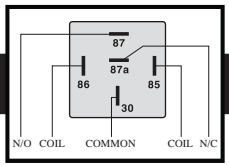
- Using double-sided tape or hook-and-loop fastener to mount to a trim panel or an air duct, or
- Wire-tying to a wire harness.

Locations for the Hawkguard Ultra soniuc sensor



Ultrasonic cells should be placed on the left and right side as high as possible so to obtain the best performance.
Inappropriate adjustment for the Ultrasonic sensor may let to a false alarm. To prevent the false alarm, make sure the sensibility of ultrasonic sensor is in an appropriate degree. An over adjustment is usually the main reason to cause false alarm.

Locations for the immobiliser relay



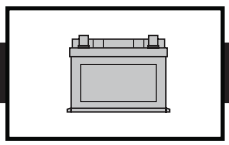
If Immobiliser relay or its connections are immediately visible upon removal of the underdash panel, they can easily be bypassed. Always make the relay and its connections difficult to discern from the factory wiring! Exposed yellow butt connectors do not look like factory parts, and will not fool anyone! For this reason, routing the immobiliser relay wires away from the steering column is recommended.

Finding the wires you need

Now that you have decided where each component will be located, you're going to find the wires in the car that the security system will be connected to:

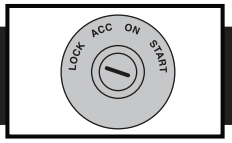
IMPORTANT! *Do not use a 12v test light to find these wires! Use a digital multi-meter for all testing.*

Obtaining Constant 12 volts



We recommend two possible sources for obtaining constant 12 volts: the (+) terminal of the battery, or the constant supply to the ignition switch. Always install a fuse within 12 inches of this connection. If the fuse also will be powering other circuits, such as door locks, a power window module, headlight control system etc, fuse accordingly.

Finding The 12v switched Ignition wire

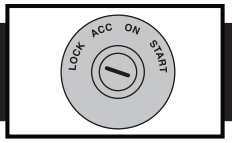


The ignition wire is powered when the key is in the run or start position. This is because the ignition wire powers the ignition system (spark plugs, coil) as well as the fuel delivery (fuel pump, fuel injection computer). Accessory wires lose power when the key is in the start position to make current available to the starter motor.

How to find (+) 12v ignition with your multi-meter:

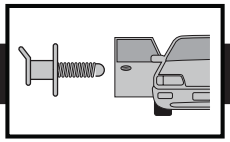
1. Set to DCV or DC voltage (12v or 20v is fine).
2. Attach the (-) probe of the meter to chassis ground.
3. Probe the wire you suspect of being the ignition wire. The steering column harness or ignition switch harness is an excellent place to find this wire.
4. Turn the ignition key switch to the run position. if your meter reads (+)12v, go to the next step. If it doesn't, probe another wire.
5. Now turn the key to the start position. the meter display should stay steady, not dropping more than a few tenths of a volt. If it drops close to or all the way to zero, go back to Step 3. If it stays steady at (+) 12v, you have found an ignition wire.

How to find starter wires 12 volts ONLY in crank position



Testing a starter wire is very simple. Start by locating the suspected wire in the vehicle. Next, take your meter's black lead and connect it to ground. Next, connect the red lead to the wire you believe is the starter wire. Crank the vehicle. The meter should ONLY show 12v when the key is in the crank position. There should be 0 volts in all other positions. Starter wires are used in Remote Car Starter Installations.
Using the above testing guidelines, you can test any wire. When testing an accessory like a horn or interior light in the vehicle, simply activate the accessory with your meter leads in place to get the meter reading. The meter should only read power and ground on accessory items when they are activated.

Finding the door pin switch circuit



The best places to find the door switch wire are:

- At the pin switch: when testing the pin switch, check wire to ensure that it 'sees' all the doors. Often, the passenger switch will cover all the doors even if the driver's switch will not.
- At the interior light: this may not be your best choice if the vehicle has delayed interior light supervision, but it will work in many Hondas, or any vehicle with completely diode-isolated pin switches.
- Once you have determined the wire colour, the easiest place to connect to the wire is often at the kick panel, at the windscreen pillar, or in the running board. When an easy location is not available, running a wire to the interior light itself is often the best solution.

How to find a door pin switch trigger wire with multi-meter:

1. Set to DCV or DC voltage (12v or 20v is fine).
2. In most Fords, fasten the (-) probe of the meter to chassis ground. In most other cars,

fasten the (+) probe of your meter to (+) 12v constant.

3. Probe the wire you suspect of being the door trigger wire. If the meter reads (+) 12v when any door is opened, you have found a trigger wire.

Making your wiring connections

There are two acceptable ways of making a wire connection – solder connections and crimp connectors. When properly performed, either type of connection is reliable and trouble-free. Regardless of whether you solder your connections or you use mechanical-type crimp on connections are mechanically sound and that they are insulated.
Cheap electrical tape, especially when poorly applied, is not a reliable insulator. It often falls off in hot weather. Use good quality electrical tape or heat shrink.

- Never twist-and-tape the wires together without soldering.
- Never use 'fuse taps' as the can damage fuse box terminals.

40. Attention for installation

H1: 6 PIN Remote start-up power socket

PIN1: Black and yellow wire – Starter switch-on wire (+12V).
It is connected to ignition lock wire where +12V appears in the "Starter" key position. This signal means engine start-up.
PIN2: Blue wire – IGN 1 wire, output signal +12V.
It is connected to ignition lock wire where +12V appears in the "Ignition ON" key position and does not disappear in the "Starter" position.
PIN3: Orange wire – An output signal +12V ACC – auxiliary equipment.
It is connected to ignition lock wire where +12V appears in the "ACC" and "Ignition ON" key position.
PIN4: Thick red wire – Remote start-up circuit power supply wire (+12V)
It is connected to ignition battery "+" terminal via 30A fuse.
PIN5: Thin red wire – System power supply wire (+12V)
It is connected to ignition battery "+" terminal via 3A fuse.
PIN6: Blue and red wire – IGN 2 wire, output signal +12V.
It is connected to ignition lock wire where +12V appears in the "Ignition ON" key position and disappears in the "Starter" position.

H2: 6 PIN central lock connection socket

System has in-built power relays for central lock control. Wiring for connection of central lock is made in a separate six-pin socket. Please refer to central lock Installation diagram.
PIN1: White wire – Central contact for central lock closing relay
PIN2: Yellow wire – Normally open contact for central lock closing relay
PIN3: Orange wire – Normally closed contact for central lock closing relay
PIN4: Orange and black wire – Normally closed contact for central lock opening relay
PIN5: Yellow and black wire – Normally open contact for central lock opening relay
PIN6: White and black wire – Central contact for central lock opening relay

H3: 8 PIN main socket 1

PIN1: No connection
PIN2: Black wire – System "–", connect to ground (Ensure reliable contact)
PIN3: Yellow and red wire – Immobiliser bypass output (–250mA), main unit output –250mA pulse while engine running.
PIN4: Green wire – Siren output (3A).
PIN5: Purple wire – Channel 2 output, wire for trunk release(–250mA, 0.8 sec, default setting) or windows closer(–250mA, 25 sec) or potential pulse(–250mA, 30 sec). This function can be program setting.
PIN6: Thick brown wire – Parking light output wire (7.5A)
PIN7: Yellow wire – Engine-immobiliser control wire (–250mA output after arming system or –250mA output after disarming system with program setting), connected to engine-immobiliser relay. Please refer to installation diagram 1 page 24.
PIN8: Thick brown wire – Parking light output wire(7.5A)

H4: 8 PIN main socket 2

PIN1: Brown/white wire – Negative hand-brake trigger input
PIN2: Brown/black wire – Positive foot-brake trigger input
PIN3: Gray wire – Negative trunk trigger input
PIN4: White wire – Negative door trigger input
PIN5: White/Red wire – Positive door trigger input
PIN6: Blue/black wire – Control input to start engine from outside device, the negative pulse time is not less than 100ms.
PIN7: Blue/red wire – Engine start testing wire 1, input for engine high-voltage, signal to be effective more than 1V. *Please refer to installation diagram 2.*
PIN8: Blue/white wire – Engine start testing wire 2 input for oil pressure sensor, signal to be effective more than 6V. *Please refer to installation diagram 2.*

Note:
Depending on your need to install testing wire 1 or testing wire 2.

H5: Selection manual or automatic gearshift car

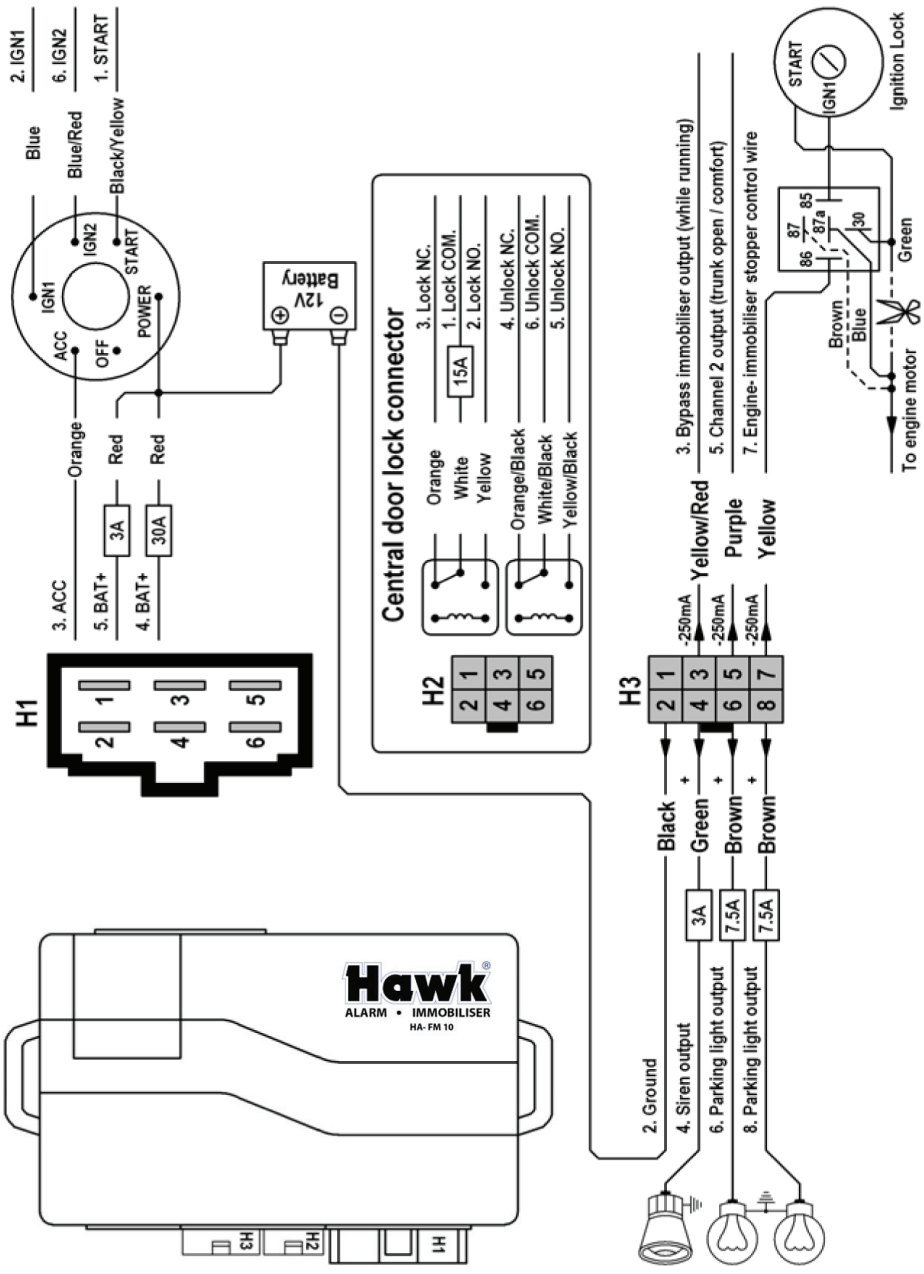
Selection of manual or automatic gearshift car is done using wire loop (refer to installation diagram 2 page 25):
Keep wire loop: Manual gearshift car
Cut wire loop: Automatic gearshift car

ATTENTION:
For manual gearshift car, please do not cut the wire loop outside the main unit.

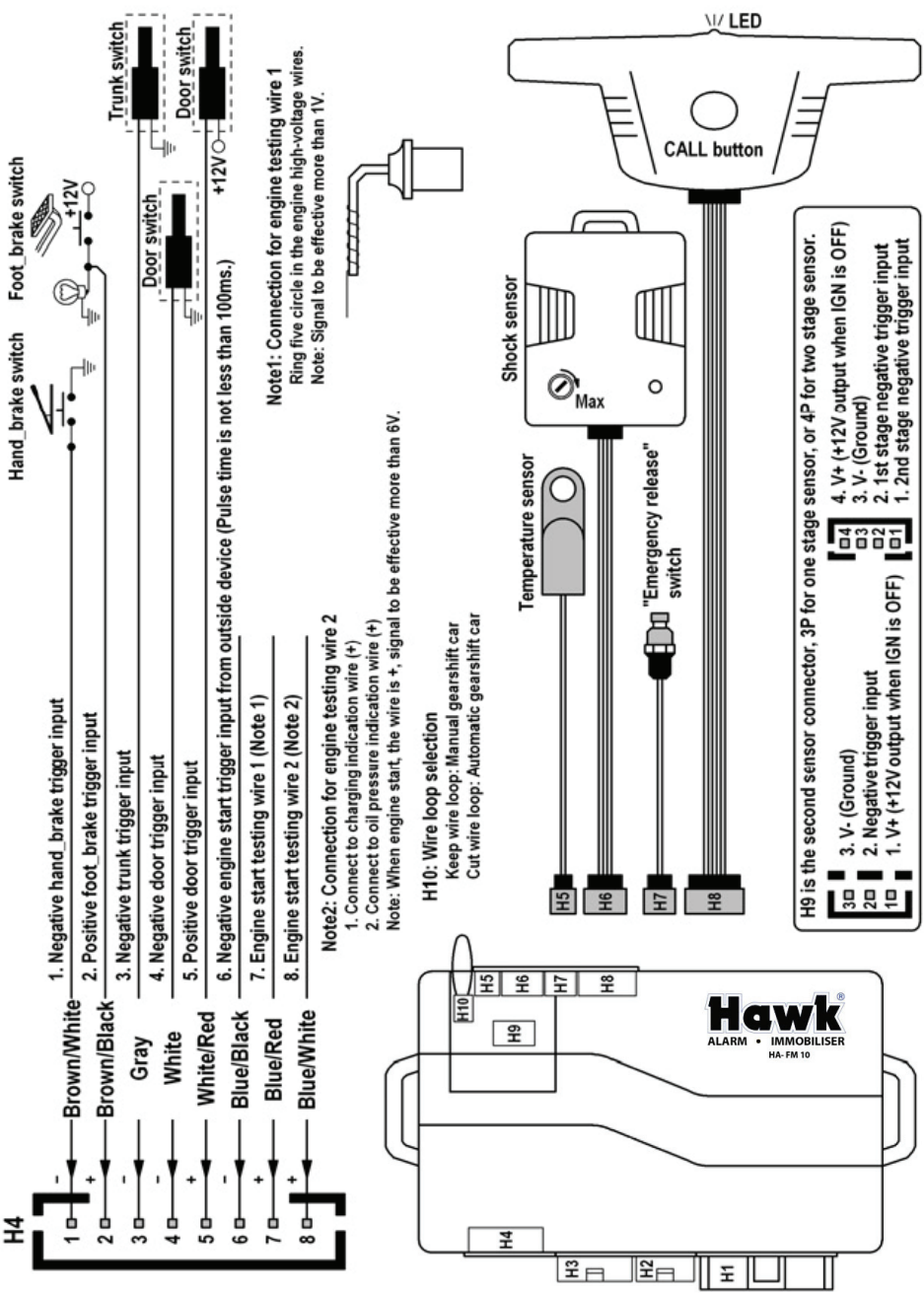
41. System parameters

1. Main unit
Working voltage: DC12V±3V
Average working current in static status: ≤20 mA
ACC output current: 25A
IGN1 output current: 25A
IGN2 output current: 25A
START output current: 25A
Turning light output current: 7.5A
Central lock output current: 15A
Siren output current: 3A
Trunk output current: –250mA
Window roll up output current: –250mA
Working frequency: 433.92MHz
2. Remote controller
Working voltage: DC1.5V
Average working current in static status: ≤1mA
Working frequency: 433.92MHz
3. Shock sensor
Working voltage: DC12V±3V
Average working current in static status: ≤2mA

INSTALLATION DIAGRAM 1



INSTALLATION DIAGRAM 2



CENTRAL LOCK TECHNICAL DIAGRAM

Diagram A
Negative locking

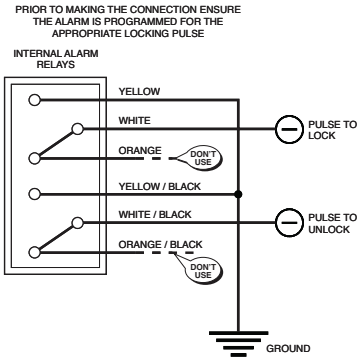


Diagram C
Single point locking

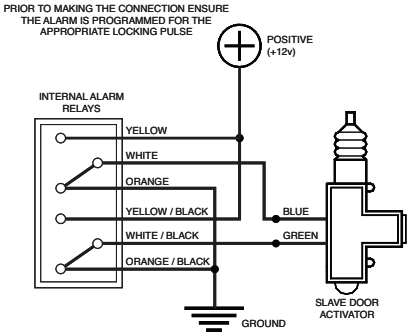


Diagram B
Positive locking

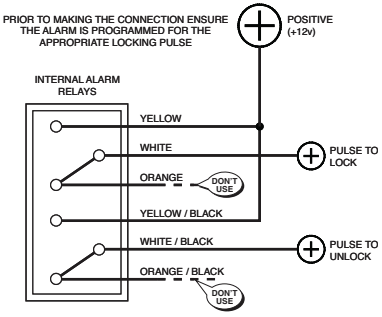
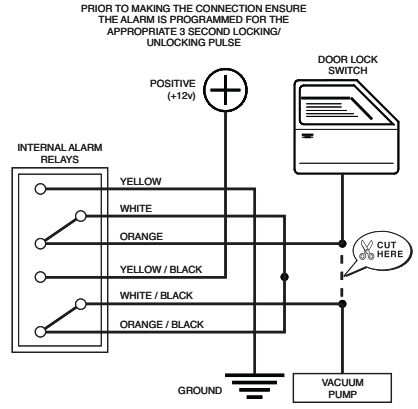


Diagram D
Vacuum locking



CENTRAL LOCK TECHNICAL DIAGRAM

Diagram E

Actuator interrupt (negative at rest)

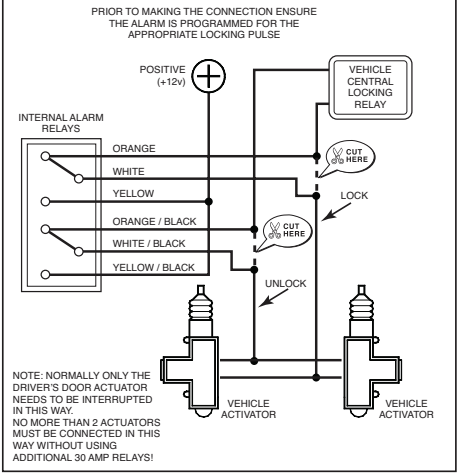


Diagram G

Positive locking with comfort closing
VW Golf vehicles only

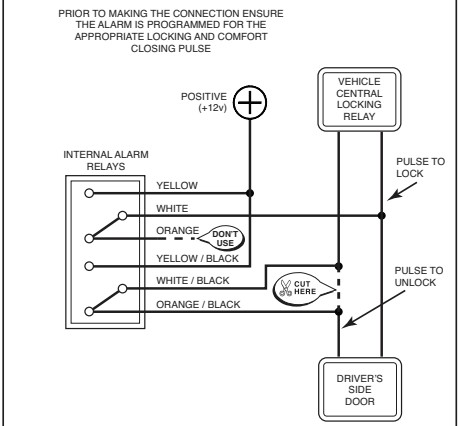


Diagram F

Negative locking with comfort closing
Vauxhall vehicles only

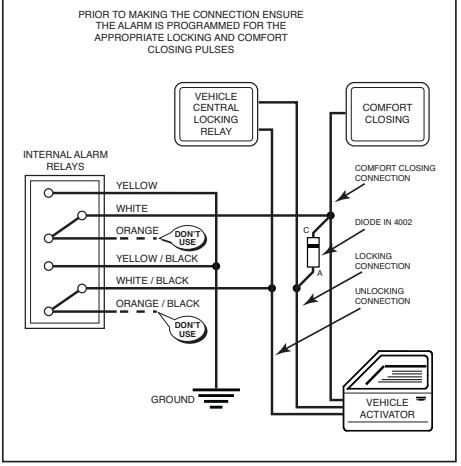
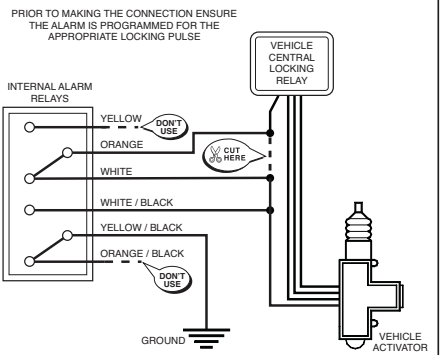


Diagram H

Single wire - negative to unlock, interrupted to lock



CENTRAL LOCK TECHNICAL DIAGRAM

Diagram I

Single wire - negative to lock, interrupted to unlock

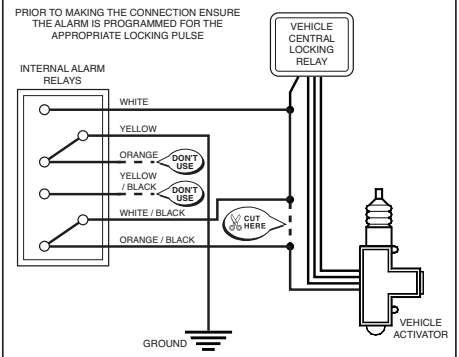


Diagram M

Central locking control resistive positive (type CHRYSLER STRATUS)

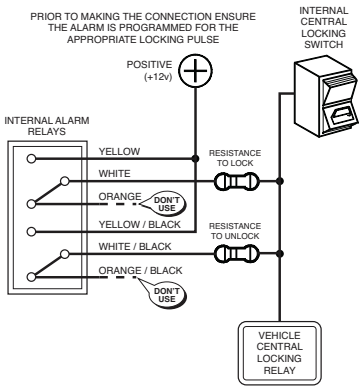


Diagram L

Central locking control resistive negative (type CHRYSLER VOYAGER)

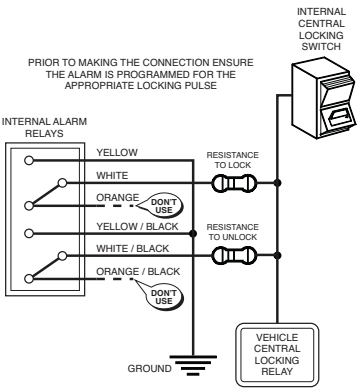
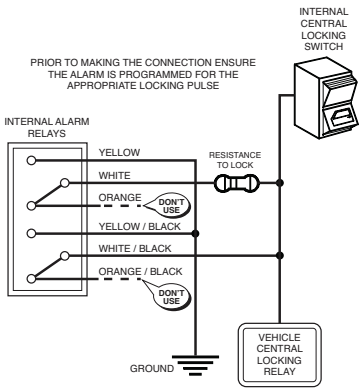


Diagram N

Central locking control resistive negative lock only (type MERCEDES)



CENTRAL LOCK TECHNICAL DIAGRAM

Diagram O

Central locking control resistive negative unlock only

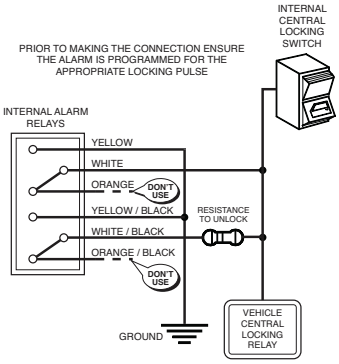


Diagram Q

Central locking control actuator switch interrupt (negative at rest) (type Honda)

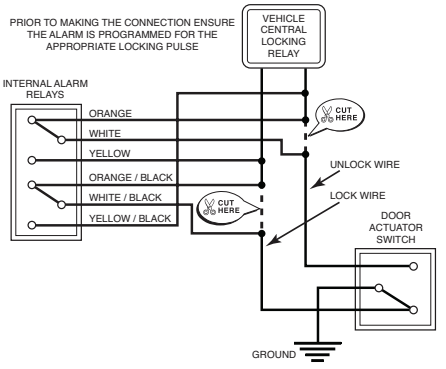
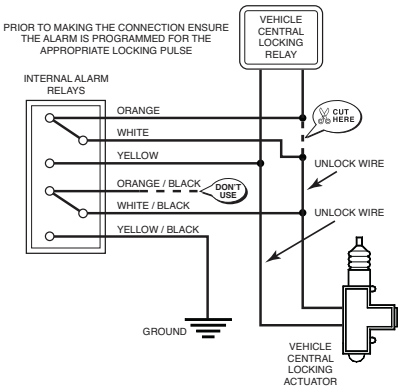


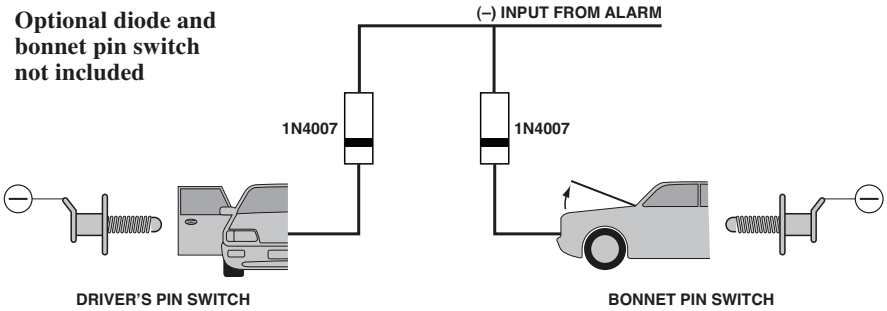
Diagram R

Central locking control negative unlock - input switched interrupt to lock



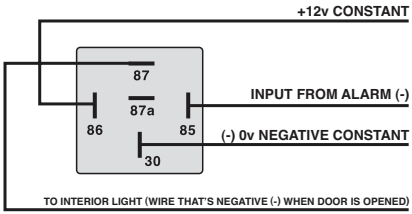
BONNET AND DOOR PROTECTION

Optional diode and bonnet pin switch not included

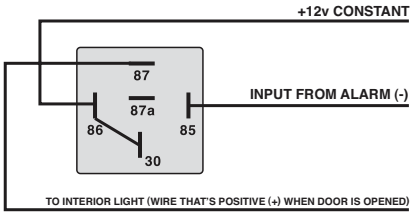


INTERIOR LIGHT SUPERVISION RELAYS

For negative interior light

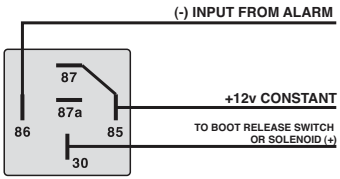


For positive interior light

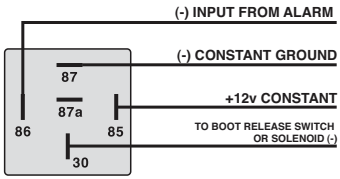


BOOT RELEASE CONFIGURATIONS

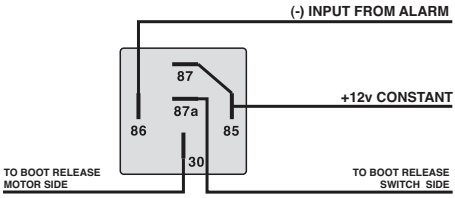
Optional extra



This configuration is used when the vehicle's boot release switch operates with a 12 volt signal to the boot solenoid. Always fuse the 12 volt supply to the relay.



This configuration is used when the vehicle's boot release switch operates with a high current ground output. The ground output from your unit may not be sufficient to trigger the switch and a relay must be added and wired in this manner. Always fuse the 12 volt supply to the relay.



This configuration is used when the output from the vehicle's boot release switch rests at ground and a 12 volt pulse cannot be applied directly to the wire. Always fuse the 12 volt supply to the relay.

NOTES

Consumer Warranty

Commercial Electronics ("HAWK®") promises to the original purchaser to repair or replace with a comparable reconditioned model any HAWK unit (hereafter the "unit"), excluding without limitation the siren, the remote transmitters, the associated sensors and accessories, which proves to be defective in workmanship or material under reasonable use during one year from date of purchase, provided the following conditions are met: the unit was professionally installed and serviced by an authorised HAWK dealer; the unit will be professionally reinstalled in the vehicle in which it was originally installed by an authorised HAWK dealer; and the unit is returned to HAWK, shipping prepaid with a legible copy of the bill of sale or other dated proof of purchase bearing the following information: consumer's name, telephone number and address; the authorised dealer's name, telephone number and address; complete product description, including accessories; the year, make and model of the vehicle; vehicle license number and vehicle identification number. All components other than the unit, including without limitation the siren, the remote transmitters and the associated sensors and accessories, carry a one-year warranty from the date of purchase of the same. This warranty is non-transferable altered, the unit has been modified or used in a manner contrary to its intended purpose; the unit has been damaged by accident, unreasonable use, neglect, improper service, installation or other causes not arising out of defects in materials or construction. The warranty does not cover damage to the unit caused by installation or removal of the unit. HAWK, in its sole discretion, will determine what constitutes excessive damage and may refuse the return of any unit with excessive damage.
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