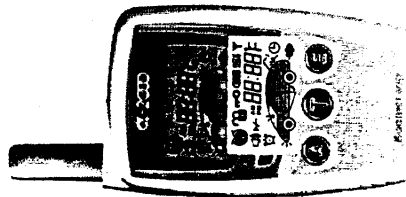


aladdin®

951-2000

USER'S MANUAL



Two-Way Communication Vehicle Alarm & Engine Starter System

- Vehicle Alarm & Immobilizer
- Remote & Programmable Engine Start
- Lifestyle Enhancing Convenience features
- LCD screen illumination
- Vibration of Remote Control



TeleVideo

INTRODUCTION

Congratulation on your purchase of the *aladdin* Vehicle Alarm & Starter System !

The *aladdin* System features state-of-the-art technology for maximum safety and satisfaction.

aladdin invites you to experience a totally new revolution in vehicle security, safety and convenience by allowing you interactive communication with your vehicle in an audible and visible way.

The *aladdin* System provides 24 hours a day surveillance for your vehicle by giving you instant visual & audio warning through your intelligent Remote Control, in the event of an illegal provocation or tampering of your armed vehicle.

Please read this manual carefully before using your System so that you are fully familiar with the operation of this latest version of the Two-Way System and can take full advantage of every marvelous feature provided by the Boomerang System.

Proper wire connections and component placement are essential for optimum System performance. Due to expertise and complexity required for proper installation of the *aladdin*

System, we highly recommend that the installation be done by an authorized dealer.

FCC User's Information

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no harmful interference to the radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

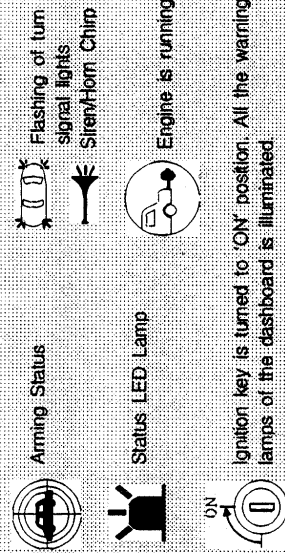
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

TABLE OF CONTENTS

1. Brief look at each device	
2. Points to note for better use	
3. Remote control function	
3-1. Door lock & arming the vehicle	10
3-2. Door unlock & disarming the vehicle	11
3-3. Trunk release	
3-4. Vehicle Locator	1
3-5. Emergency panic alarm	12
3-6. Personal alarm call	1
3-7. Mute chirp sound	1
3-8. Second car control mode	
3-9. Button lock	
3-10. Vibration mode	1
3-11. System valet mode	
3-12. Quick-stop	
3-13. CH3 operation	13
Convenience features	
4-1. IG auto door lock & unlock	24
4-2. Auto rearming	25
4-3. Auto lighting of dome light	26
4-4. Cold weather start	
Alarm functions	
5-1. Alarm by door open sensing	17
5-2. Alarm by shock sensing	17
5-3. Hidden Alarm(Alarm sound Off)	18
5-4. Engine start disable in arming status	18
5-5. System's trigger check	18
Engine start function	
6-1. Remote engine start	
6-2. Engine start memorizing for standard transmission vehicle	21
6-3. To enter the vehicle after starting engine	22
6-4. Programmed engine start	22

TABLE OF CONTENTS

Clock time set-up	
7-1. Correction of time	27
7-2. Time set-up for programmed engine start	27
7-3. Time set-up for personal alarm	28
System programming 1	
8-1. Alarm sound mode selection	29
8-2. Chirp sound mute On/Off	30
8-3. Ignition auto door lock On/Off	30
8-4. Passive arming On/Off	31
8-5. Passive door lock On/Off	31
8-6. Auto rearming On/Off	32
8-7. Personal alarm function On/Off	33
System programming 2	
9-1. Quick/stop mode selection	34
9-2. Engine running time selection	34
9-3. Cold weather start mode selection	35
9-4. Set-up of alarm time triggered by shock sensor	36
Technical support	
-1. Shut-down of battery power to the System	37
-2. System initialization	38
-3. Code memorizing of Remote Control	39
-4. Tips for Troubleshooting	40



BRIEF LOOK AT EACH DEVICE

Main control module

This module is the main computer of the Vehicle Alarm System. It is usually installed under the bottom of the vehicle dashboard.



Communication module

Transmits and receives RF signals with the Remote Control, Status LED Lamp and a Valet button is built into the Module.

At the left side is a tuning screw for adjusting the range of the Proximity door unlock sensor. (See 6-9, page 26??) It mounts to the window sun visor of the driver's seat with a clip.



Shock sensor

It senses the impact to the vehicle body. When an impact is applied to the vehicle, the sensor signals the Main Control Module to set off the Horn/Siren alarm sound and to activate the Remote Control audio and visual warning signals.



Siren

When installed, the alarm sound is set off from the siren when the vehicle is attacked. You can select your personal sound from five different modes. (See 8-1, page 29???)

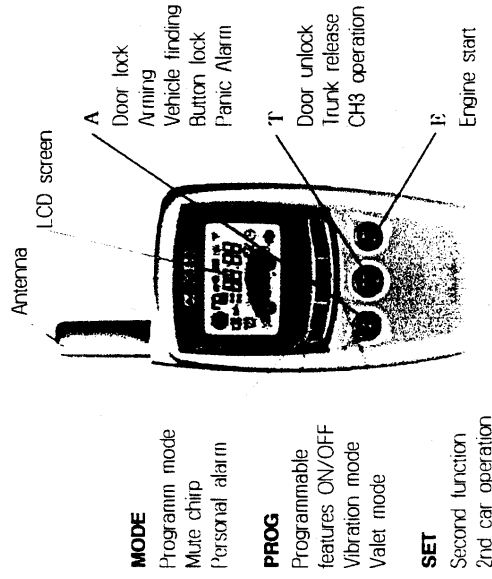


BRIEF LOOK AT EACH DEVICE

Remote Control

The Remote Control consists of TX/RX electronic circuits, LCD screen, quartz clock, melody buzzer and a vibrator.

The three rectangular buttons at the bottom of the LCD screen are used to program the System. The three lower round buttons are used to operate each function of the System.



Each graphic icon displayed on the LCD screen and each different melody/beep tone emitted from the Remote Control gives you both visual & audio information on the vehicle's status, every operating status / process of the System or System's present status.

The LCD screen is illuminated for approximately five seconds when you press button A or if the vehicle is tampered with. Each has a distinctive melody/beep sound when the buttons are pressed.

About two-way transmission

The System uses a two-way signal transmission, so the time required for communication takes longer than usual when communicating remotely either to operate the System or to check the operation result. That's because a large amount of information (bytes of signals) is exchanged between the TX part and RX part of the System with one press of button A.



The unique transmission logic, which has both wake-up mode and sleep mode during communication, may also delay the signal transmission. For instance, if a signal from the TX part is sent to the RX part of the Main Control Module while it is in sleep mode, the RX part may not recognize the signal sent by the TX part for a few seconds until the RX part is in wake up mode and vice versa.

For the same reason, when you shut down any of the System's operation and get no response with your first press of a button, we recommend pressing the button again after waiting several seconds.

Do not press and hold down the button of the Remote Control heavily or frequently even when there is no immediate response. Instead, we highly recommend you to press button A occasionally, when operating the System to check the present actual status of the System. You can easily verify if you are in or out of range by pressing button A in arming status. If a melody sound is emitted when you press button A, you are within the communication range.

If several beeps are emitted, you are out of communication range. If the System is being interfered with by stronger radio frequency signals, sources of high voltage electric power, or obstacles like tall buildings, the transmission range may get shorter as the System uses low output power.

Battery replacement



The Remote Control is powered by a 1.5V type LR03 AAA alkaline battery. You can check the status of battery power from the battery drain icon displayed on the LCD screen.

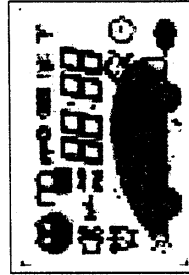
When the old battery is replaced with new one, three beeps sound from the Remote Control, the LCD screen is illuminated for approximately five seconds and the Remote Control vibrates and the clock on the LCD screen returns to AM1200 after displaying all icons. Reset the time and be sure to press button A one time to set mode to arming status before using.

Even if the battery is replaced, your programmed set value or ID remains unchanged. press button A and the Remote Control will automatically read and memorize all the previously set information saved in the Main Control Module.

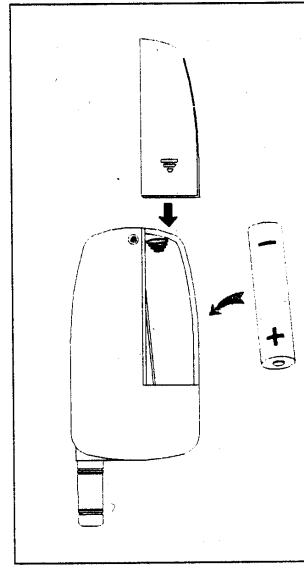
About the LCD screen

The LCD screen on the Remote Control displays graphic icons or figures. It provides you with visual information on any trigger of the sensors and around the clock surveillance of your armed vehicle as well as showing the present status of the System.

If you press button A, the LCD screen illuminates for approximately five seconds. You can program each function by checking the corresponding graphic icon or figures displayed on the LCD screen.



- Arming Mode
- Hidden Alarm
- Mute Chirp Sound
- Valet Mode
- Battery Change
- Vibration Mode
- Communication Range
- Programmable Engine Start
- Trunk Release
- Shock Sensor triggered
- Hood Open triggered
- Door Open Warning
- Engine Start
- Door Lock
- Door Unlock



REMOTE CONTROL

3-1. Door lock & arming the Vehicle



1. Close all the doors after exit.
2. Press button A.
3. With one chirp sound, turn signal lights flash one time.
4. Doors are locked and vehicle changes to arming mode in approximately ten seconds.



Lock



Flash



1 Chirp
1 Flash

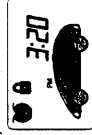


REMOTE CONTROL

3-2. Door unlock & disarming the Vehicle



1. Press button 1 in arming status.
2. Turn signal lights flash two times with two chirp sounds.
3. Doors are unlocked and vehicle is disarmed.



Unlock



2 Chirps
2 Flashes



To shut down the alarm sound, press button A.
It is recommended to press the button in between beeps on the Remote Control to make sure of shut-down.

In the event that you lock the doors with the Remote Control while any of the doors are not closed completely, a little longer chirp sound will be emitted and alarm sound will be activated approximately ten seconds later although the doors are locked. In arming mode, the red Status LED lamp indicator on the Communication Module flashes once in a second, showing that the System is actively protecting your vehicle.



If an optional relay is connected to the dome light, the dome light continues flashing while the alarm is being activated.

IMPORTANT !

Make sure that, before arming the vehicle, the switch on the dome light is at the position where it is interlocked to be turned on whenever the doors are opened. Otherwise, the alarm functions will not work correctly.

If you do not open the vehicle within approximately 30 seconds after disarming the vehicle with the Remote Control, the doors lock again automatically and the vehicle returns to arming status. (When you program the REARM mode to 'Ar ON' (See ?? , Page ??)

If the turn signal lights flash four times with four chirp sounds when you unlock/disarm the vehicle with the Remote Control, it means that one of the doors was forced open or tampered with while you were out of transmission range.

If the turn signal lights flash three times with three chirp sounds when you unlock/disarm the door with the Remote Control, it means that the Shock Sensor was triggered while you were out of transmission range.

REMOTE CONTROL FUNCTIONS

3-3. Trunk Release

SET

1. Press button SET
2. Press button 1 and the trunk opens.



If you open the trunk when in arming status or when the vehicle is being started by remote, the doors are unlocked and the System is disarmed. However, when the trunk stays open for more than approximately 30 seconds, the System returns to arming mode. (when you program the REARM mode to 'Ar ON' (- See ?? , Page ??))

3-4. Vehicle Locator

It is useful when trying to find your vehicle in a congested parking lot or in the dark at night.

SET

1. Press button SET.
2. Press button A.



10 Chirps



10 Flashes



REMOTE CONTROL FUNCTIONS

3-5. Emergency panic alarm

If you feel threatened at any time, you can trigger the Horn/Siren alarm sound from anywhere within the Remote Control's range, even from within the vehicle and while driving, whether or not the System is armed.



Press and hold down the button A for approximately five seconds.



Continues



Continues



3-6. Personal alarm call

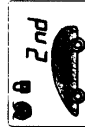
If you set the time and activate the alarm mode, the melody continues sounding, when the time arrives, for approximately 30 seconds to remind you of the appointment time or to wake you up.

SET

1. press button SET.

MODE

2. Press button MODE and a clock icon will appear on the LCD screen.



See ??, page ??? to set the alarm.

In 'CA ON' mode, the Remote Control sounds the melody alarm automatically at the set time everyday. In 'CA OFF' mode, Remote Control sounds the melody alarm only one time after your pressing the SET button then the MODE button.

STOP

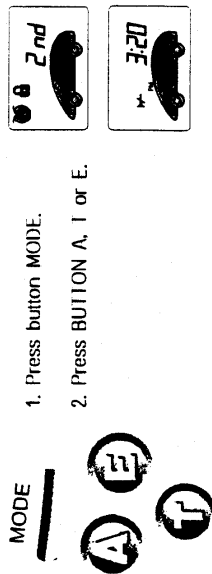
REMOTE CONTROL

3-7. Mute chirp sound

The Siren chirp can be muted when placed in this mode.

It would be better to turn off the chirp sound not to disturb your neighbors, for instance, if you operate the System late at night in a residential area.

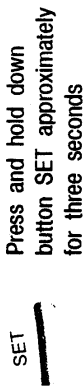
(A). If you want the chirp sound muted in one operation only,



(B). If you want the chirp sound muted whenever the system is being operated the System, program the System to disable the chirp sound. (See ??8-2, page 30 "So Of")
Then, icon will be displayed on the LCD screen.

3-8. Second Car Operation Mode

If you install the Systems in your two different vehicles, you can operate the 2nd Car with one Remote Control when placed in this mode.
(See 10 set this mode, See ??8-2, page)



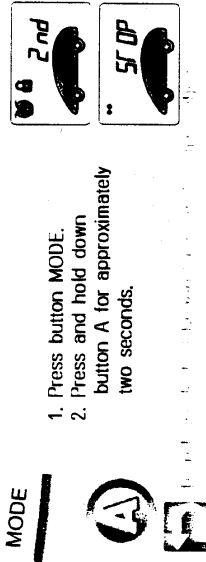
- In this mode, icon displays on the LCD screen.

REMOTE CONTROL

3-9. Button Lock Mode

If you wish to disable the signal transmission function from the Remote Control, you may implement this function, to lock out any other button operation.

It prevents from any inadvertent pressing of buttons by others.

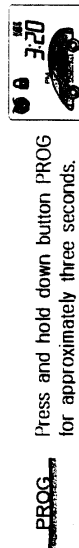


The difference from Valet Mode is that :

the buttons are totally inoperative in Button Lock mode while in Valet Mode, the remote door lock/unlock or trunk release function works when you press the button.
Even in the Button Lock mode, the System's status or any sensor's trigger in your vehicle is normally delivered to the Remote Control.

3-10. Vibration mode

This is useful when you are in a noisy place and it is difficult to hear the beep sound from the Remote Control. In this mode, the Remote Control vibrates if your vehicle is tampered with.



- If set to this mode, icon displays on the LCD screen.

REMOTE CONTROL MODULE

3-11. System valet mode

This mode is convenient when you are leaving your vehicle to other persons. When in the valet mode, the System's function will be on temporary hold. However, the functions like remote door lock/unlock or trunk release continue to work normally. There are different ways of setting temporary hold on the System's function.

To set on the Remote Control

1. Turn the Ignition Key to 'ON' position in disarming status.

2. Press button SET.

3. Press button PROG for approximately three seconds.

4. With a chirp sound,  icon displays on the LCD screen.

 1 Chirp
Continues lighted on



In the Valet mode → the eyeballs will not be displayed.



REMOTE CONTROL MODULE

3-12. Quick Stop Function

You can lock the doors and arm the System even when the engine is running. It is useful when you want to drop by some place while driving without shutting down the engine.

1. While the engine is running

2. Press button E.

3. Exit from the vehicle and press button A to lock the doors.


- In this mode, all the alarm function works except the shock sensor trigger and the engine continues running for the set time.
(See ??, page ?? to set the time for Quick Stop mode)



3-13. CH-3 mode

When placed in this mode, you can remotely operate such devices like the Window Roll Up Module or Sliding Door with the Remote Control. Please consult with your nearby dealer for the installation of the devices.

1. Press button PROG.

2. Press button I.


CONVENIENCE FEATURES

4-1. IG auto door lock & unlock

Approximately three minutes after turning the ignition key to the 'ON' position, the doors are automatically locked. When you turn off the engine, the doors are unlocked immediately.

The red status LED lamp on the Communication Module starts blinking when the IG auto door lock sequence starts. It stops blinking when the doors are locked approximately three minutes later.

The IG auto door lock function will be disabled if you turn on the ignition key while the doors stay open. Therefore, be sure to turn on the ignition key after closing all the doors to enable the IG lock function.

If the vehicle has a factory-equipped speed sensing door lock system, you should make sure to disable the function by programming the System to [dr OF] mode. (→ See 8-3, page 7730*dr OF*)

4-2. Auto re-arming

The doors are locked automatically and the System returns to arming status by itself if the doors happened to be unlocked by pressing the button of the Remote Control inadvertently or you do not open the door within approximately 30 seconds after disarming the vehicle with your Remote Control.

4-3. Auto lighting of dome light (optional)

The dome light stays turned on for approximately eight seconds after you unlock the doors with the Remote Control. It is convenient when you approach your vehicle in the dark at night. When the Siren alarm is set off, the dome light in the vehicle also flashes to draw added attention to passers-by. To use this function, consult with your nearby dealer.

4-4. Cold weather start

This function protects the vehicle's engine from severely cold weather. No extra setup is required if programmed according to the process in the System Programming 2 mode. (→ See 9-3, page 3577) After setup, simply park your vehicle after arming the System and the engine will start running and shut down automatically for the set time at every 1 hour, 2 hours or 3 hours' interval according to your set time.

ALARM FUNCTIONS

5-1. Alarm by door, hood or trunk open sensing

The System goes into arming status if you lock the doors after exiting from your vehicle and by arming the System with Remote Control after the elapsed preset delay time. In arming status, if the doors/hood/trunk are opened without using the Remote Control, the Horn/Siren alarm sounds and the turn signal lights continue flashing while the System immediately reports the triggered alarming status to the Remote Control. On the LCD screen, 'door', 'Hood' or 'OPEN' will be indicated and displayed according to the triggered point with each simultaneous flash of ??, ??, ?? icon and warning beeps will continue sounding from the Remote Control.

- For 'door' alarm, the door icon and 'door' will be displayed on the LCD screen.
- For 'Hood' alarm, the hood icon and 'Hood' will be displayed on the LCD screen.
- For 'trunk' alarm, the trunk icon and 'OPEN' will be displayed on the LCD screen.



5-2. Alarm by shock sensing

If any external impact is applied to the body of your vehicle, the Horn/Siren alarm sets off and turn signal lights continue flashing while the System immediately reports the triggered alarm status to the Remote Control.

- 'Sho 1' or 'Sho 2' icon flashes on the LCD screen and warning beeps continue sounding from the Remote Control.



1st stage

2nd stage Outline of vehicle icon flashes

Dual-stage shock sensing

When any slight impact is applied to the vehicle, Siren alarm sets off for approximately five seconds and turn signal lights continue flashing to warn away any potential intruders. If heavier impact is applied again, Siren/Horn alarm shall blast off for the duration of the set time. (See ??, page ???) The dual-stage sensing feature may reduce 'false' alarms.

ALARM FUNCTIONS

5-3. Hidden alarm (alarm sound off)

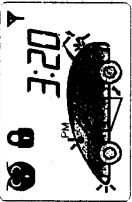
If you program the alarm sound mode to Off mode (Ho Off) (See 8-1, page ??), the vehicle's Horn/Siren will be silenced and turn signal lights will not flash even if any of the sensors are triggered in the arming status. However, loud warning beeps continue sounding from the Remote Control while the icon of the triggered sensor flashes on the LCD screen to inform you instantly about the emergency state of the triggered alarm. Therefore, in secret, you can immediately detect any unauthorized violation to your armed vehicle. This will also eliminate potential 'false' alarms which can be a nuisance in a residential area.

5-4. Engine start disable in arming status (optional)

If this optional feature is incorporated, the vehicle's engine will not start, in arming status, even with your ignition key. No prior set up is required if the option is installed as part of System installation in the vehicle. Consult with your nearby dealer.

5-5. System trigger check

If any sensors have been triggered and the Horn/Siren alarm is activated while you were beyond the RF transmission range, the corresponding icons flash on the LCD screen and warning beeps emit when you press button A of the Remote Control within the RF transmission range.



- Hood has been opened.
- Doors have been opened
- Trunk has been opened
- 1st stage shock sensor has been activated
- 2nd stage shock sensor has been activated

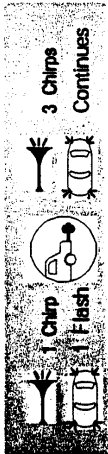
In the event that the door pin sensor is triggered after activation of the shock sensor etc., all of the corresponding icons will be displayed. However, if the door pin sensor is triggered before other sensors, other icons will not be displayed except the 'door' icon as the door trigger is assumed to be in the most urgent need of attention.

ENGINE START

6-1. Remote engine start



Press button E in arming status.



- With one chirp sound, turn signal lights flash one time to confirm that the starter motor will start after engine warm-up.
- With three chirps, engine starts to run during the remote start time, turn signal lights continue flashing every two seconds. From the Remote Control, an icon showing the gas emission flashes on the LCD screen and the melody sound emits every two minutes to remind you that the engine is running.



To shut down the engine, press button E. Or unlock and lock the doors by pressing T of the Remote Control.

IMPORTANT !

Never activate the remote starting System indoors as it can be very hazardous to your health due to vehicle exhaust.

- Blower fan, air conditioner or heater starts to operate approximately one minute after the engine starts. Before your last exit from your vehicle, make sure that the control switch of the air conditioner or heater is turned on to your desired temperature and the blow fan should be turned on too in advance.
- The remote started engine will shut down automatically when your set time has elapsed (See ??, page ?? for programming engine running time) even if you do not shut down the running engine.

- If the engine has failed to run at the first attempt, the System repeats to crank up the engine to three times with approximately a three second delay between each attempt.

- If you open a door with the ignition key while the engine is run by remote or programmed starting, the engine will shut down and the Siren alarm will be set off. While the engine is running by remote, the System senses the door pin switch's trigger although the shock sensor's trigger is bypassed.

ENGINE

6-2. Engine start memorizing for standard transmission vehicles

The System senses the neutral transmission gear position and there is no prior setup required. The System in standard transmission vehicles uses a process to sense and memorize the neutral transmission gear position before you exit the vehicle. However, if the vehicles are of automatic transmission gear, this process is omitted.



1. The engine will continue running for another one minute even after you remove the ignition key from the key cylinder.



2. Exit from the vehicle within one minute after removing the ignition key. The engine continues running but it is a normal operating process.



3. Close all the doors and press button A of the Remote Control to lock the doors.



- The engine shuts down immediately and the System is now ready for the next remote (or programmable) engine start. If the doors are opened after the process illustrated above, the prior memorization for the next remote or programmed engine start sequence is deleted and the function will not work until you repeat above steps again.



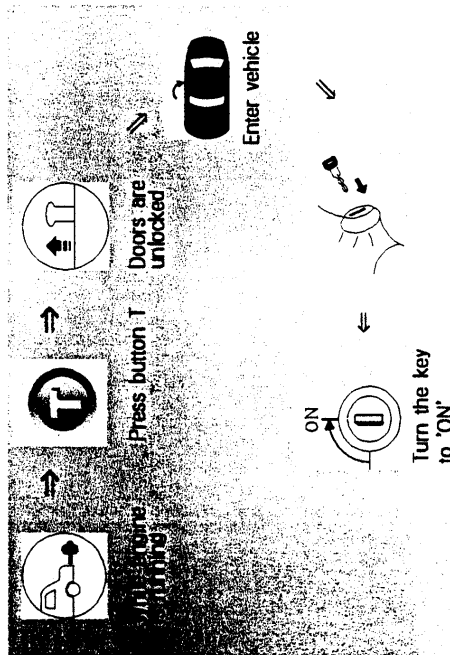
The engine will continue running for another one minute even after you remove the ignition key from the key cylinder. Exit from the vehicle within one minute after removing the ignition key. The engine continues running but it is a normal operating process. Close all the doors and press button A of the Remote Control to lock the doors. The engine shuts down immediately and the System is now ready for the next remote (or programmable) engine start. If the doors are opened after the process illustrated above, the prior memorization for the next remote or programmed engine start sequence is deleted and the function will not work until you repeat above steps again.

ENGINE START

6-3. To enter the vehicle after starting engine

If you enter the vehicle while the engine is running and turn the ignition key to 'ON' position within one minute after unlocking the doors, you do not need to crank the starter motor again for driving.

1. Press button T while the engine is running.
2. The doors are unlocked, the System is disarmed and the flashing turn signal lights stops simultaneously.

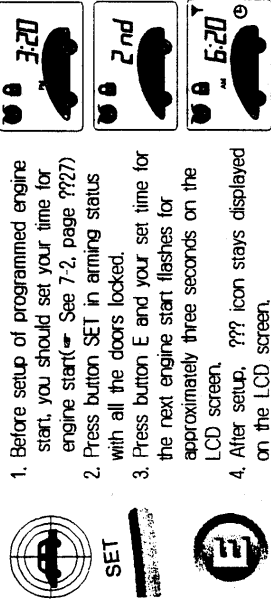


- If you do not turn the ignition key to 'ON' position within the minutes after unlocking the doors, the engine start function will not operate.
- If you enter the vehicle while the engine is running and turn the ignition key to 'ON' position, the engine will stop automatically. This is to prevent the vehicle from being driven with the engine stop. Please refer the Remote Control.

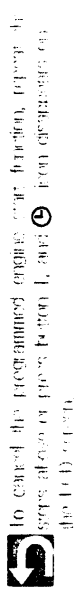
ENGINE START

6-4. Programmed engine start

The feature is very useful for the driver who runs the vehicle punctually at the same time every morning or when the vehicle is parked beyond the range of the Remote Control.



- To set or cancel the function, your vehicle should be within the range of transmission from the Remote Control and also should be in arming status with all the doors locked.



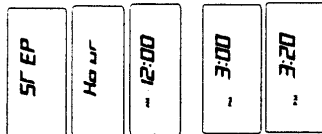
- To change the programmed engine start time, (See 7-2, page ???) and reset to new time.
- The pre-memorized time for the engine is not changed or deleted unless you do not change the programmed engine-start time. (See 7-2, page ???)
- Programmed engine start function is activated in the same condition as in the remote engine start. (See 5-1, page ???)

CLOCK TIME SETUP

7-1. Correction of time (Ex. to PM 3:20)

1. Press and hold down MODE button for three seconds and 'STEP' is displayed with one beep sound.
2. Press PROG button one time and 'Hour' indication flashes.
3. Press SET button, 'AM12:00' is displayed and figure '12' flashes for hour correction.
4. Press and hold down SET button until figure 'PM 3:00' shows.
5. Press PROG button and figure '00' flashes for minute correction.
6. Press and hold down SET button until figure '20' shows.
7. Press MODE button to save your selection and return to normal screen.

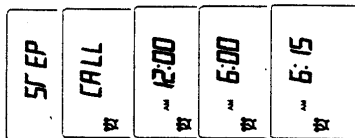
Time can be set up disarming status.



CLOCK TIME SETUP

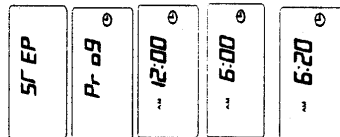
7-3. Time set-up for personal alarm (Ex. to AM 6:15)

1. Press and hold down MODE button for three seconds and 'STEP' is displayed with one beep sound.
2. Press PROG button three times and 'CALL' indication flashes.
3. Press SET button, 'AM12:00' is displayed and figure '12' flashes for hour setup.
4. Press and hold down SET button until figure 'AM 6:00' shows.
5. Press PROG button and figure '00' flashes for minutes setup.
6. Press and hold down SET button until figure '15' shows.
7. Press MODE button to save your selection and return to normal screen.



7-2. Time set-up for programmed engine start (Ex. to AM 6:20)

1. Press and hold down MODE button for three seconds and 'STEP' is displayed with one beep sound.
2. Press PROG button two times and 'Prog' indication flashes.
3. Press SET button, 'AM12:00' is displayed and figure '12' flashes for hour setup.
4. Press and hold down SET button until figure 'AM 6:00' shows.
5. Press PROG button and figure '00' flashes for minutes setup.
6. Press and hold down SET button until figure '20' shows.
7. Press MODE button to save your selection and return to normal screen.



SYSTEM PROGRAMMING 1

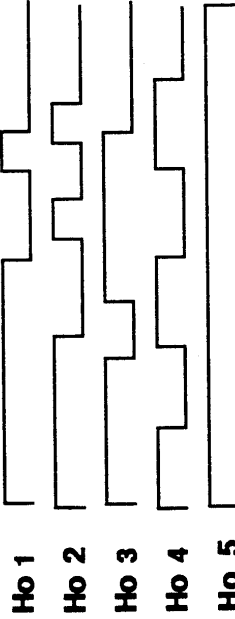
The System programming process works only in disarming status and within the RF transmission range. Depending on the circumstances or your preference, you can select, disable or change various functions and function mode of the System. The programmed value is memorized to the Main Control Module and is not deleted even if you replace the battery in the Remote Control as long as you do not initialize the System.

8-1. Alarm sound (Ho) mode selection

By selecting your personal alarm sound mode, you can easily tell whether the alarm sound activated is from your vehicle or not. Or, you can make the alarm sound off (Ho OF) to enable the Hidden Alarm function. (☛ See ??, page ??)

1. Press MODE button for three seconds and 'STEP' is displayed with two beep sounds.
2. Press MODE button once again. With one beep sound, 'SyS1' is displayed.
3. Press PROG button one time and 'Ho 1' is displayed.
4. Whenever you press SET button, 'Ho 1' to 'Ho OF' is displayed in turn. Select your desired sound mode from among 'Ho 1~Ho OF'.
5. Press MODE button to save your selection and return to normal screen.

STEP
SyS1
Ho 1
Ho OF



Ho OF Alarm sound is disabled (Hidden Alarm)

SYSTEM PROGRAMMING 1

8-2. Chirp sound mute(So) On/Off

Chirp sound, a short sound emitted from the Horn/Siren of your vehicle when you operate the System with the Remote Control, can be enabled or silenced.

1. Press MODE button for three seconds and 'STEP' is displayed with two beep sounds.
2. Press MODE button once again. With one beep sound, 'SyS1' is displayed.
3. Press PROG button two times and 'So OF' is displayed.
4. Press SET button to select from 'So ON' or 'So OF'.
5. Press MODE button to save your selection and return to normal screen.

STEP
SyS1
So OF
So ON

8-3. Ignition auto door lock (dr) On/Off

If the vehicle has a factory-equipped speed-sensing door lock system, you should not use the IG lock function of this System. Disable it by setting the program to 'dr OF'. (☛ See ??6-1, page 24??)

1. Press MODE button for three seconds and 'STEP' is displayed with two beep sounds.
2. Press MODE button once again. With one beep sound, 'SyS1' is displayed.
3. Press PROG button three times and 'dr OF' is displayed.
4. Press SET button to select from 'dr ON' or 'dr OF'.
5. Press MODE button to save your selection and return to normal screen.

STEP
SyS1
dr OF
dr ON

SYSTEM PROGRAMMING 1

8-4. Passive Arming (PA) On/Off

If you program the Passive arming to 'ON' mode, the System automatically arms approximately 30 seconds after shutting down the engine, exiting from the vehicle and closing the doors even if you do not press the button on your Remote Control.

1. Press MODE button for three seconds and 'STEP' is displayed with two beep sounds.
2. Press MODE button once again. With one beep sound, 'SYS1' is displayed.
3. Press PROG button four times and 'PA OF' is displayed.
4. Press SET button to select from 'PA ON' or 'PA OF'.
5. Press MODE button to save your selection and return to normal screen.

STEP
SYS1
PA OF
PA ON

8-5. Passive door lock (PL) On/Off

If you program the Passive door lock (PL) to 'ON' mode, the doors of the vehicle automatically lock approximately 30 seconds after shutting down the engine, exiting the vehicle and closing the doors even if you do not press the button on your Remote Control.

1. Press MODE button for 3 seconds and 'STEP' is displayed with two beep sounds.
2. Press MODE button once again. With one beep sound, 'SYS1' is displayed.
3. Press PROG button five times and 'PL ON' is displayed.
4. Press SET button to select 'PL ON' or 'PL OF'.
5. Press MODE button to save your selection and return to normal screen.

STEP
SYS1
PL ON
PL OF

- ▶ The Passive door lock function works only when you program the Passive arming function to 'ON' mode.(☞ See ??, page 31??)
- ▶ If you open the doors again after closing them, the passive locking sequence is cancelled.
- ▶ If you set to 'PL ON', one chirp sound emits with one flash of turn signal lights and the doors are locked automatically, approximately 25 seconds later, with three chirp sounds.

SYSTEM PROGRAMMING 1

8-6. Timer mode On/Off [When using AUX-IN](ES)

If an additional programmable timer (RAPID) is installed, you can set.

1. Press MODE button for three seconds and 'STEP' is displayed with two beep sounds.
2. Press MODE button once again. With one beep sound, 'SYS1' is displayed.
3. Press PROG button six times and 'ES ON' is displayed.
4. Press SET button to select from 'ES ON' or 'ES OF'.
5. Press MODE button to save your selection and return to normal screen.

STEP
SYS1
ES ON
ES OF

8-7. Personal alarm function(CA) On/Off

If you activate this function, melody alarm from your Remote Control continues sounding for approximately 30 seconds when your set time arrives. In 'CA ON' mode, Remote Control gives off the melody alarm automatically at the set time everyday.

In 'CA OF' mode, Remote Control gives off the melody alarm only one time.

1. Press MODE button for 3 seconds and 'STEP' is displayed with two beep sounds.
2. Press MODE button once again. With one beep sound, 'SYS1' is displayed.
3. Press PROG button seven times and 'CA OF' is displayed.
4. Press SET button to select from 'CA OF' or 'CA ON'.
5. Press MODE button to save your selection and return to normal screen.

STEP
SYS1
CA OF
CA ON

SYSTEM PROGRAMMING

9-1. Quick-Stop(qs) mode

In this mode, you can lock the doors and arm the System even when the engine is running. The engine continues running for the time of your selection out of the mode 'qS OF'(Disable the mode), 'qS 3' (for 3 minutes), 'qS 10'(for 10 minutes) or 'qS 15' (for 15 minutes).

1. Press MODE button for three seconds and 'STEP' is displayed with one beep sound.
2. Press MODE button twice again. With one beep sound, 'Sys2' is displayed.
3. Press PROG button one time and 'qS OF' is displayed.
4. Press SET button to select 'qS 3', 'qS 10' or 'qS 15'.
5. Press MODE button to save your selection and return to normal screen.

5F EP
54 52
qS OF
qS 3
qS 10
qS 15

9-2. Engine running time(En) selection

You can select engine running time duration of 25 minutes (En 25), 15 minutes(En 15) or 5 minutes (En 5).

1. Press MODE button for three seconds and 'STEP' is displayed with one beep sound.
2. Press MODE button twice again. With one beep sound, 'Sys2' is displayed.
3. Press PROG button two times and 'En 25' is displayed.
4. Press SET button to select 'En 15', 'En 5' or 'En 25'.
5. Press MODE button to save your selection and return to normal screen.

5F EP
54 52
En 25
En 15
En 5

SYSTEM PROGRAMMING

9-3. Cold weather start mode(CS) selection

After programming the function, a beep will be emitted from the Remote Control, to remind you of your setup mode. One beep sounds whenever you press the button.

1. Press MODE button for three seconds and 'STEP' is displayed with two beep sounds.
2. Press MODE button twice again. With one beep sound, 'Sys2' is displayed.
3. Press PROG button three times and 'CS OF' is displayed.
4. Press SET button to select CS 1', 'CS 2', 'CS 3' or 'CS OF'.
5. Press MODE button to save your selection and return to normal screen.

5F EP
54 52
CS OF
CS 1
CS 2

- ▶ One beep from the Remote Control when you press the button means that your selection is at a one hour engine start interval(CS 1)
- ▶ Two beeps means two hours engine start interval(CS 2)
- ▶ Three beeps means three hours engine start interval(CS 3)

9-4. Setup of alarm time triggered by shock sensor (Sh)

The System is designed to activate the sequence of the 1st stage and 2nd stage shock sensor trigger separately. When the 1st stage sensor is triggered, a chirp sounds for five seconds. In the 2nd stage shock sensor trigger, the alarm can be activated for the duration of 10(Sh10), 20(Sh20), 30(Sh30) or 60(Sh60)seconds according to your mode selection. If you set to "Sh OF", all the shock sensor triggers are disabled.

1. Press MODE button for three seconds and 'STEP' is displayed with one beep sound.
2. Press MODE button twice again. With one beep sound, 'Sys2' is displayed.
3. Press PROG button four times and 'Sh 10' is displayed.
4. Press SET button to select 'Sh 20', 'Sh 30', 'Sh 60', 'Sh OF' or 'Sh 10'.
5. Press MODE button to save your selection and return to normal screen.

5F EP
54 52
Sh 30
Sh 60
Sh OF

SYSTEM PROGRAMMING

8-8. Auto Rearm mode On/Off

When you set to On mode, the doors are locked and the System returns to arming status automatically if you do not open the doors within 30 seconds after disarming the System.

1. Press MODE button for three seconds and 'STEP' is displayed with one beep sound.
2. Press MODE button once again. With one beep sound, 'SyS1' is displayed.
3. Press PROG button eight times and 'Ar OF' is displayed.
4. Press SET button to select from 'Ar ON' or 'Ar OF'.
5. Press MODE button to save your selection and return to normal screen.

STEP
SyS1
Ar ON
Ar OF

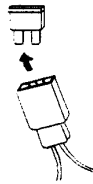
TECHNICAL

Shut-down of battery power to the System

If an unexpected error occurs or when the alarm activates without definite reasons, remove the fuse as indicated in the following steps to block the vehicle's power supply to the System.



1. Open the door with the ignition key or with other methods.
2. Check the bottom part of the dashboard (usually over the brake pedal) to find the Main Control Module.
3. Locate the heavy-gauge, six strip wire which comes out from the Main Control Module and connects to the power supply wire of the vehicle.
4. Identify a RED and RED/WHITE wire from the six strip of wire in which a black fuse holder is connected in the middle.
5. Remove the fuse from the fuse holder.



You can drive the vehicle even if the System's function is temporarily on hold by removing the fuse from the fuse holder.

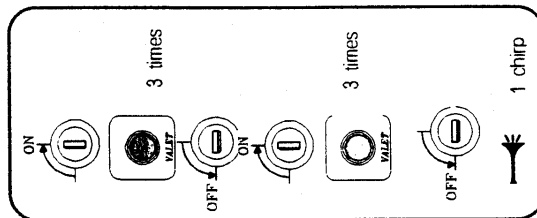
System programming P3 mode Step 1

This program setup process is required when you want to make the :

- System setup in Valet mode.
- Password change to other figures (The factory-set default password is 33)
- Code of the Remote Control memorized or to erase the code already entered
- System initialize.

Before entering into program setup mode indicated above, you should enter the default password (33) and the System in Valet mode using the following steps:

1. Turn the ignition key to ON position.
Enter the first digit of the default password by pressing the program button within ten seconds after the dashboard illuminates.
2. Press the program button (Valet button) three times as the first digit of the default password of the System is 3.
3. Turn the ignition key to OFF position.
4. Turn the ignition key to ON position again. Enter the second digit of the default password.
5. Press the program button (Valet button) three times as the second digit of the default password of the System is 3.
6. Turn the ignition key to OFF position.
With one beeping sound, the default password is entered and the System is set into Valet mode.



To return to normal mode, turn the ignition key to ON position, and with one beep sound, the System returns to normal mode.

If an unexpected error occurs or when the alarm activates without definite reasons, set the System in Valet mode according to above steps and consult with your nearby dealer.

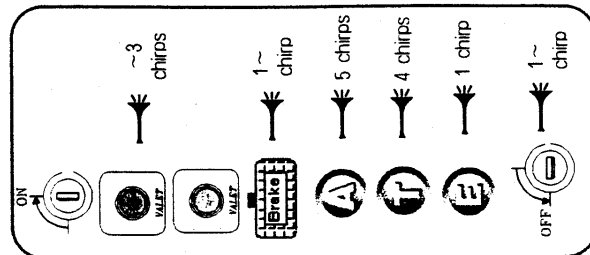
System programming P3 mode Step 2

Step No.	Function	Button A 1st No. (1~9)	Button I 2nd No. (1~9)	Button E Setting
1	Security Key			
2	Code Programm	New Remote		
3	All Code Erase	Do not press any button		
4	Factory Default Setting	ON		

P3

(A). P3-1 : Password change (ex. To change the password to figure 54)

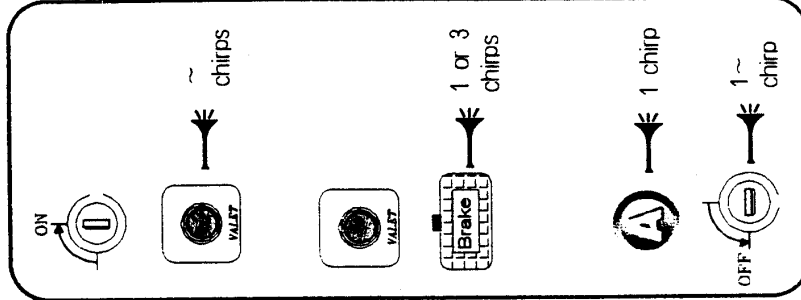
1. Turn the ignition key to ON position in the Valet mode (after completing above Step 1.)
2. Press the program button three times within ten seconds after the dashboard illuminates. And again without pause, press and hold down the program button until a long beep sound emits.
3. After pressing the program button one time, depress the brake pedal one time.
4. Press button A of the Remote Control five times to change the 1st digit to "5".
5. Press button I of the Remote Control four times to change the 2nd digit to "4".
6. Press button E of the Remote Control.
7. Turn the ignition key to OFF position. With one longer beep sound, the new password 54 is entered.



(B). P3-2 : Memorization of the Remote Control Code

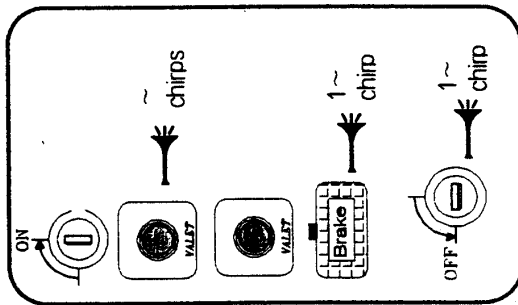
The System memorizes up to three codes of different Remote Controls.

1. Turn the ignition key to ON position in the Valet mode (after completing Step 1 above.)
2. Press the program button three times within ten seconds after the dashboard illuminates. And again without pausing, press and hold down the program button until a long beep sound will emit.
3. After pressing the program button two times, press the brake pedal one time. At this time, you can check the number of codes entered in the System.
If one code is entered, the System emits one beep sound.
If two codes are entered, the System emits two beep sounds.
If three codes are entered, the System emits three beep sounds.
4. Press button A of the new Remote Control to memorize the code of it.
5. Turn the ignition key to the OFF position. With one longer beep sound, the new code of a new Remote Control is memorized.



(C). P3-3 : Erasing the code of the Remote Control from the System

1. Turn the ignition key to ON position in the Valet mode (after completing above Step 1.)
2. Press the program button three times within ten seconds after the dashboard illuminates. And again without pause, press and hold down the program button until a long beep sound emits.
3. After pressing the program button one time, depress the brake pedal one time, with one longer beep sound.
4. Turn the ignition key to OFF position. With one longer beep sound, the codes entered in the System will be erased.

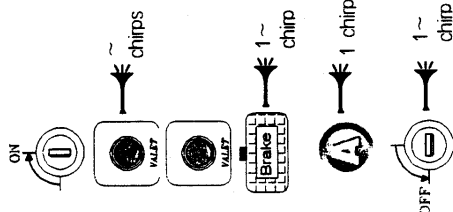


TECHNICAL SUPPORT

(D). P3-4 : Initialization of the System

If the System is initialized, all of the set values of the System returns to factory setup mode and the memorized code of the Remote Control will be deleted from the System.

1. Turn the ignition key to ON position in the Valet mode (after completing above Step 1.)
2. Press the program button three times within ten seconds after the dashboard illuminates. And again without pause, press and hold down the program button until a long beep sound emits.
3. After pressing the program button four times, press the brake pedal one time and one beep sound will emit.
4. Press button A of the Remote Control
5. Turn the ignition key to OFF position. With one longer beep sound, the System will be initialized.



IMPORTANT !

If the Remote Control is lost, be sure to change the System to valet mode (← See ??, page ??) and obtain a new Remote Control as soon as possible from the dealer. Initialize the System and memorize the code of the new Remote Control to the System unless the lost Remote Control is used illegally on your vehicle by other persons.

TECHNICAL SUPPORT

PROBLEM	POSSIBILITY & POINTS TO VERIFY OR SUGGESTION
Alarm is activated.	The vehicle has been broken into. Press A button of Remote Control to shut down the alarm and check the cause of the alarm trigger. If the Remote Control is lost, Change the System in valet and contact nearby dealer. In case both Remote Control and ignition key are lost or you do not know the reason for the malfunction. Remove the fuse which is connected in the middle of the RED wire from the Main Control Module (& See?? p37) and contact nearby dealer. Verify if the fuse is out. It is connected in the middle of the RED wire coming from the Main Control Module. Replace the fuse. (30A For vehicle use) (& See 2-6(C)??) Verify if the vehicle's battery is completely discharged. Replace the vehicle's battery.
All functions of the System do not work.	Verify if the sensitivity of the Shock Sensor is optimized. Turn the tuning screw of the Shock Sensor slowly counter-clockwise to lower the sensitivity. Check if the remote door locking function operates normally and if the red LED lamp indicator stays lighted when you turn the ignition key to the 'ON' position. If yes, the System is in Valet. Disable the Valet mode. (& See 3-12, p16??) Check if the dome light is not turned on when the doors are opened. (If dome light is wired) Make sure that the switch of the dome light is at the position where the dome light is inter locked to be turned on whenever the doors are opened. Check if the light bulb of the dome light is burned out. If yes, replace light bulb.
Siren continues sounding intermittently	Check if the remote door locking function operates normally and if the red LED lamp indicator stays lighted when you turn the ignition key to the 'ON' position. If yes, the System is in Valet. Disable the Valet mode. (& See 3-12, p16??) Check if the dome light is not turned on when the doors are opened. (If dome light is wired) Make sure that the switch of the dome light is at the position where the dome light is inter locked to be turned on whenever the doors are opened. Check if the light bulb of the dome light is burned out. If yes, replace light bulb.
Alarm Siren will not trigger.	Check if the remote door locking function operates normally and if the red LED lamp indicator stays lighted when you turn the ignition key to the 'ON' position. If yes, the System is in Valet. Disable the Valet mode. (& See 3-12, p16??) Check if the dome light is not turned on when the doors are opened. (If dome light is wired) Make sure that the switch of the dome light is at the position where the dome light is inter locked to be turned on whenever the doors are opened. Check if the light bulb of the dome light is burned out. If yes, replace light bulb.

TECHNICAL SUPPORT

PROBLEM	POSSIBILITY & POINTS TO VERIFY OR SUGGESTION
Start sequence does not work	Make sure the switch of the dome light is at the position where it is inter locked to be turned on whenever the doors are opened. Check if all the doors are closed or put the dome light switch to center position. For automatic transmission vehicles, check the position of the transmission gear. Make sure that the transmission gear is on the "P" or "N" position. Verify the connection status of the BLACK ground wire coming from the Main Control Module. Connect the wire properly.
Programmed engine start function does not work.	Make sure the  icon is displayed on the LCD screen. Activate the programmable engine start time. (See 5-4, p 23??) Check if ?? icon is displayed on the LCD screen. Check if three beep sounds are emitted from the Remote Control after removing and inserting the battery into the battery holder.
Remote Control does not work.	Check if the buttons of Remote control are locked. Press MODE ⇒ button A if there are no problems. SECOND CAR CONTROL 모드에 들어가 있는 기 확인하고 기본모드로 바꿔 것. ⇒ SET 3초간 누름. Re-initialize the System again.

TECHNICAL SUPPORT

Helpful Tips before use

- Keep the Remote Control dry.
- Do not disassemble the Remote Control.
- Be careful not to press the buttons of Remote Control with too much force or frequently because it may cause operational errors or a temporary drain of the Remote Control's battery.
- The transmission range may get shorter in the event that the System is interfered with by stronger radio frequency, sources of high voltage electric power, or obstacles like tall buildings.
- If the standard transmission vehicle is parked at a steep location, we recommend that remote or programmed engine start function be used discreetly.
- Do not activate the remote start system in an enclosed area as it can be very hazardous to your health due to vehicle exhaust.