SECURITY SYSTEM ONLY

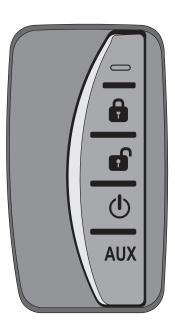
REMOTE CAR STARTER ONLY

SECURITY SYSTEM AND REMOTE CAR STARTER

AUTOMATIC / MANUAL TRANSMISSION - 1-WAYS REMOTE







User Guide

DOC#: 20140922 REV:3 © 2014 ALL RIGHTS RESERVED

FCC ID: 2ACPMV340

TABLE OF CONTENTS	
INTRODUCTION	2
CAUTION - WARNING	
NOTE	3
INDUSTRY CANADA USER NOTICE	
GOVERNMENT REGULATIONS	
USING THE REMOTE CONTROL	4
REMOTE-STARTING	4
REMOTE-STARTING THE VEHICLE	
ACCESSORY PRESET	5
READY MODE (MANUAL TRANSMISSION ONLY) DRIVING OFF	b
CANCELLING A REMOTE START	
REMOTE-STARTER FEATURES	
IDLE MODE (AUTOMATIC TRANSMISSION)	0 6
IDLE MODE (MANUAL TRANSMISSION)	
TURBO MODE (AUTOMATIC TRANSMISSION)	
TURBO MODE (MANUAL TRANSMISSION)	
VALET MODE (VIA SWITCH) / VALET CODING	
VALET CODING DISBALED (DEFAULT): VALET CODING ENABLED (OPTIONAL):	
VALET CODING ENABLED (OPTIONAL):	
COLD START TIMER MODE	
AUXILIARY USE	
REMOTE STARTING OPTIONS CONFIGURABLE FONCTIONALITY DURING INSTALLATION	10
REMOTE DOOR LOCKS	
ACTIVE OR PASSIVE ARMING	
IGNITION DOOR LOCKS	
SECURITY LOCK	
TRUNK/HATCH RELEASE (ZONE 6)	
RUNTIME RUNTIME RESET	
ALARM	
AUDIBLE CONFIRMATION	
OPEN ZONE NOTIFICATION	
FALSE ALARM DEACTIVATION	
SHOCK SENSOR (ZONE 4)	12
VEHICLE LOCATOR/PANIC MODE	
TRANSMITTER RANGE	12
FAILED REMOTE-START	
REMOTE START / ALARM DIAGNOSTICS	13

INTRODUCTION

Thank you for purchasing this Remote-Starter/Alarm system. This is a state of the art Remote-Starter/Security-System including numerous new comfort and security features, and all of the elementary features generally offered with most basic Remote-Starter systems. There are certain features listed in this manual that may not be available for your system. There may also be features listed in this manual that require additional installation or programming before they are active. In order to truly enjoy the benefits of this system, we recommend that you thoroughly review the following manual. This system contains transmitter(s) and a receiver.

CAUTION - WARNING

IT IS THE RESPONSIBILITY OF THE REMOTE CAR STARTER OPERATOR TO: ensure that the vehicle is parked in a safe and responsible manner. ensure that the vehicle is not remotely started indoors (garage, underground parking). ensure that the vehicle is not remotely started with a passenger inside. ensure that the gearshift lever is in the NEUTRAL position and the parking brake is engaged on manual transmission in order to avoid accidents upon remote starting. when leaving the vehicle, ensure that the gearshift lever is in the "PARK" position for an automatic transmission in order to avoid accidents upon remote starting. (Note: Make sure that the vehicle cannot start in "Drive" position.) ensure that the remote starter is disabled or put into valet mode before servicing. When servicing the vehicle, enable valet Mode (via switch) / VALET CODING, page 8.

NOTE

- The system can be configured in three different ways: Remote Start only, alarm only or alarm and remote starter.
- The options vary by vehicle, the components can be added to the system and the functions on the vehicle.

INDUSTRY CANADA USER NOTICE

Operation is subject to the following two conditions:

(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that required for successful communication.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

GOVERNMENT REGULATIONS

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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 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 guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to 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.

This device complies with the Industry Canada Radio Standards Specification RSS 210. Its use is authorized only on a no-interference, no-protection basis; in other words, this device must not be used if it is determined that it causes harmful interferences to services authorized by IC. In addition, the user of this device must accept any radio interface that may be received, even if this interference could affect the operation of the device.

Warning! Changes or modifications not expressly approved by the party responsible for compliance could

USING THE REMOTE CONTROL

The remote starter is equipped with two 1-way 4-button multi-channel remote control.

	COMMAND	TIME PRESSED	DESCRIPTION
	LOCK	0,5 SEC.	Locks all doors, arm the anti-theft system and activates the Alarm (if in- stalled). Press LOCK for 3 seconds to activate the Panic Mode
		0,5 SEC.	Unlocks all doors, disarms the anti- theft system and deactivates the Alarm (if installed).
		3 SEC.	Remote-start the vehicle. Press START again to reset the runtime. (See: re- mote-starter features, page 6)
	AUX TRUNK	3 SEC.	Opens the trunk, and deactivates the Alarm (if installed). The Alarm ignores the trunk zone until it is closed.
Φ	STOP	4 SEC.	Remote-Stop.
D	AUXILIARY1	3 SEC.	AUXILIARY1 (See: Auxiliary use, page 10):
The remote flach DEL RULE when a button is pressed			

The remote flash DEL BLUE when a button is pressed.

The remote flash DEL GREEN when the remote is transmitting the informations. For car command confirmation see: audible confirmation, page 11

REMOTE-STARTING

REMOTE-STARTING THE VEHICLE

This Remote-Starter supports both manual and automatic transmission vehicles. For manual transmission vehicles see the Ready Mode section.

REMOTE-STARTING

STEP 1	Ċ	To remote-start the vehicle press the START button for approximately 3 second.
STEP 2		The parking lights will turn on to indicate a response to the Remote-Start signal.
STEP 3	START	Approximately 5 seconds later the engine will crank. Once the vehicle starts the parking lights will turn on and remain on for the entire duration of the Remote-Starter runtime, or until the Remote-Starter is shut down.

If the vehicle fails to start on the first attempt, the Remote-Starter will wait 3 seconds before it will attempt to start the vehicle again. The Remote-Starter will attempt to start the vehicle 2 times (default) before giving up. (See Failed Remote Start page 13)

ACCESSORY PRESET



<u>Heater & Heated Seat(s):</u> When leaving the vehicle it is recommended that the driver pre-set the climate controls in preparation for a later Remote-Start. When the vehicle Remote-Starts, the current (or last) setting for the climate controls, windshield wipers (and other accessories) will be used. When setting the blower motor (fan speed) and heated seats (if equipped) should not be left on HIGH. It is recommended to leave these settings on either a LOW or MEDIUM setting.

Windshield Wipers & Radio & Headlights: Some vehicles require the radio, windshield wiper, headlight circuits to become energized while running under Remote-Start. When leaving the vehicle you must ensure that the windshield wiper and headlight switches are turned off. Leaving the headlights on with some vehicles could cause them to remain on even after the Remote-Starter has shut down, resulting in a dead battery.

<u>Rear Defrost:</u> On most vehicles the Rear Defrost can only be activated after the vehicle has been started and in most cases this feature is not included with a Remote-Starter installation. On some vehicles it may be possible for the installer to hook this feature up so it either automatically enables after Remote-Start or can be enabled by using an AUX output. (See Auxiliary Outputs page 10).

<u>Driver Presets:</u> Some vehicles retain different seat, mirror and radio settings for each driver. Different driver presets are not controlled by the Remote-Starter, however they may be controlled with the Bypass/Interface Kit.

READY MODE (MANUAL TRANSMISSION ONLY)

Two activation methods are possible, please consult the salesman or installer to determine which of these modes applies to your vehicle.

There are always safety concerns for a manual transmission vehicle to accidentally start while in gear, Ready Mode alleviates these concerns. The driver must enable Ready Mode in order to Remote-Start the vehicle at a later time. Once Ready Mode is set-up the vehicle can be started/stopped at will, as many times as needed. However once the parking brake is disengaged, the hood is opened, or any of the doors are opened, Ready Mode will deactivate and the vehicle will not start until Ready Mode is reactivated.

METHOD 1

PROGRAMMED BY DEFAULT THIS METHOD WILL ACTIVATE THE REMOTE CAR STARTER SEQUENCE ONLY WHEN THE END USER IS USING THE REMOTE CAR STARTER REMOTE:

		The vehicle must be running.
STEP 1	and 2 4 6	Make sure that all doors are closed and the transmission is in the NEUTRAL position.
STEP 2		Engage the parking brake.
STEP 3	↓	Release the brake pedal.
STEP 4	Ċ	Press the START button for 3 seconds. The parking lights will flash once and then remain on.
STEP 5		Remove the key from the ignition barrel. The vehicle will remain running with the Remote-Starter.
STEP 6		Exit the vehicle and close all of the doors. The Remote-Starter will stop running once all the doors are closed.

METHOD 2 This method must be programmed by the installer during installation. THIS METHOD WILL ACTIVATE THE REMOTE STARTER SEQUENCE EVERYTIME THE END USER IS LEAVING THE VEHICLE.

AUTOMATIC ACTIVATION:

		The vehicle must be running.
STEP 1	1 3 5 2 4 6	Make sure the transmission is in the NEUTRAL position.
STEP 2		Engage the parking brake.
STEP 3	-	Release the brake pedal.
STEP 4		Remove the key from the ignition barrel. The engine continu to run.
STEP 5		Exit the vehicle and close all of the doors. The Remote-Starter will stop running once all the doors are closed.
The vehicle	is ready to start. O	pen any door to cancel Ready Mode and start over the sequence from step 1.
TO DEACTIV	TE READY MODE:	
• Open	any door(s)	Open the hood Disengage of the parking brake
Note : If the	parking lights flas	h 3 times when Remote-Starting, Ready Mode is not enabled.
DRIVING C		
	nicie is running wit	h the Remote-Starter, enter the vehicle and proceed with the following steps:
STEP 1		Insert the key and turn it to the ignition (ON/Run) position. Uarning: Do not turn the key to the START position when the engine is running. This may damage the ignition system on some vehicles.

STEP 2



Step on the brake pedal to disable the Remote-Starter, and put the vehicle in gear.

CANCELLING A REMOTE START

See USING THE REMOTE CONTROL, page 4

REMOTE-STARTER FEATURES

IDLE MODE (AUTOMATIC TRANSMISSION)

Idle Mode allows the vehicle to run without the key in the ignition barrel. For example, if you stop for a quick errand or delivery, simply allow the vehicle to run while you are gone. The engine will run until the Remote-

Starter runtime expires. Press START any time the vehicle is running with the Remote-Starter to reset this timer. To activate Idle Mode (automatic transmission) proceed with the following steps:

STEP 1



With the key in the barrel at the ignition (ON/RUN) position and the engine running, press the START button 3 seconds until the parking lights turn on.

STEP 2



Turn the key to the OFF position and remove the key from the ignition barrel. The vehicle will continue to run with the Remote-Starter.

The engine will continue to run until either the remote stop function is pressed (see USING THE REMOTE CONTROL, page 4), the Remote-Starter runtime expires, the parking brake is disengaged, the brake is pressed, or the hood is opened. If the Remote-Starter is shut down by transmitter it will automatically go in to Ready Mode (if all the doors are closed).

<u>WARNING : Never leave children or animals in a Remote-Started vehicle unattended.</u>

IDLE MODE (MANUAL TRANSMISSION)

Idle mode is activated in much the same way Ready Mode is activated, except for Step 1. To activate Idle Mode (manual transmission) proceed with the following steps:

IDLE MODE ACTIVATION:

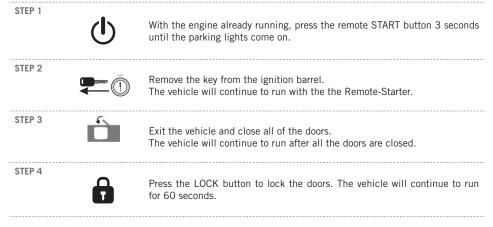
		The vehicle must be running.
STEP 1		Ensure the transmission is in the NEUTRAL position.
STEP 2	Č.	Open at least one door.
STEP 3		Engage the parking brake.
STEP 4	₩¥.	Release the brake pedal.
STEP 5	Ċ	Press the remote START button 3 seconds. The parking lights will flash once and then remain on.
STEP 6		Remove the key from the ignition barrel. The vehicle will continue to run with the the Remote-Starter.
STEP 7		Exit the vehicle and close all of the doors. The vehicle will continue to run after all the doors are closed.
STEP 8	U 4SEC.	Remote-stop the vehicle.

The engine will continue to run until either the remote stop function is pressed (see USING THE REMOTE CONTROL, page 4), the Remote-Starter runtime expires, the parking brake is disengaged, the brake is pressed, or the hood is opened. If the Remote-Starter is shut down by transmitter it will automatically go in to Ready Mode (if all the doors are closed).

<u>WARNING : Never leave children or animals in a Remote-Started vehicle unattended.</u>

TURBO MODE (AUTOMATIC TRANSMISSION)

Turbo Mode (if installed) is similar to Idle Mode but is used to cool down the turbo-charger once the driver leaves the vehicle. The Remote-Starter will continue run the vehicle for 2 minutes allowing the turbo-charger to cool down. To activate Turbo Mode (automatic transmission) proceed with the following steps:



TURBO MODE (MANUAL TRANSMISSION)

Turbo Mode (if installed) is similar to Idle Mode but is used to cool down the turbo-charger once the driver leaves the vehicle. The Remote-Starter will continue run the vehicle for 2 minutes allowing the turbo-charger to cool down. To activate Turbo Mode (manual transmission) proceed with the following steps: See IDLE MODE (MANUAL TRANSMISSION) page 7.

VALET MODE (VIA SWITCH) / VALET CODING

Valet Mode disables both the Remote-Starter and Alarm system. Whenever the vehicle is being serviced or repaired, or the vehicle is parked indoors it is mandatory that Valet Mode be enabled to prevent an accidental Remote-Start.

Note: The alarm system is not active (including Starter Kill) when the system is in Valet Mode. However you are still able to lock and unlock the doors, and release the rear hatch/trunk.

Note: When the Remote-Starter/Alarm is in Valet Mode, the LED will stay ON solid instead of flashing after the doors are locked. The LED will turn off only after the Remote-Starter/Alarm exit Valet Mode.

The valet mode can be programmed to use a coded entry in order to increase the security of your alarm system and to prevent accidents. By default, the valet button is pressed 3 times after turning the ignition. Function 30 can be programmed to use a coded value instead of the default one.

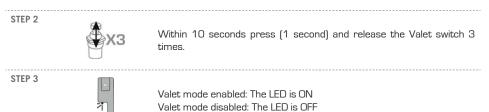
VALET CODING DISBALED (DEFAULT):

To activate and deactivate Valet Mode using the valet switch proceed with the following steps:

STEP 1



Insert the key and turn it to the ignition (ON/RUN) position. The vehicle does not need to be started.



VALET CODING ENABLED (OPTIONAL):

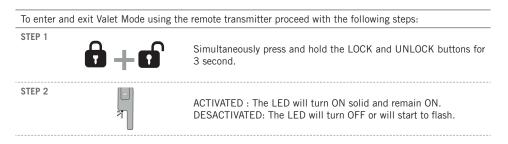
To activate and deactivate Valet Mode using the valet switch proceed with the following steps:

STEP 1		Insert the key and turn it to the ignition (ON/RUN) position. The vehicle does not need to be started.
STEP 2	X (X)	Within 10 seconds press and release the valet button 3 to 7 times (X = valet code) for 1 second. If your valet code is 7 then press and release the valet button 7 times.
STEP 3	🗳 X1	Press and hold the valet button once for 3 seconds to finish the sequence.
STEP 4	ि त्र	Valet mode enabled:The LED is ON Valet mode disabled: The LED is OFF

Note: The coded valet option allows a selection of one of the five available codes. Once the installer chooses one of the codes, note the value here so you do not forget it______.

VALET MODE (VIA REMOTE)

Valet Mode disables the remote-starter and alarm. Whenever the vehicle is being serviced or repaired, or the vehicle is parked indoors it is mandatory that Valet Mode be enabled to prevent an accidental Remote-Start. **Note**: The alarm system is deactivated (including Starter Kill) when the system is in Valet Mode. However you are still able to lock & unlock the doors, and release the rear hatch/trunk. This method of enabling/disabling Valet Mode uses the remote transmitter instead of the valet switch indicated in the preceding section.



COLD START TIMER MODE

Mode will remote-start the vehicle when the tempeture is below -5°C / 23°F every 1.5 or 3 hours and run for 3, 5, 7 or 15 minutes (6, 14 or 30 for diesel engines), depending on programming. The remote-starter will repeat this sequence for up to a maximum of 24 hours. For manual transmission vehicle's READY MODE must be enabled, and if at any time READY MODE is disabled this sequence will cancel.

🕂 WARNING Do not start the vehicle indoors (garage, underground parking).

To enable Cold Start Timer Mode proceed with the following steps.



Simultaneously press and and hold the START and AUX buttons for 3 seconds.

To disable Cold Start Timer Mode do any of the following:

- Simultaneously press and and hold the START and AUX buttons for 3 seconds. until the parking light flash twice.
- Put the Remote-Starter/alarm into Valet Mode. Remote-Start the vehicle.
- Open the hood.
- Press the brake pedal.
- Turn the key to the ignition (ON / RUN) position.
- Disable Ready Mode (manual transmission).

Note: If the Alarm is triggered during Remote-Start (Cold Start), the vehicle will stop running, but Cold Start will not cancel it's schedule.

AUXILIARY USE

Aux 1 : Drivers side sliding door (if installed) :



Press the UNLOCK button for 3 seconds.

Note: The function of the auxiliary outputs may vary depending on the vehicle and the installation. In most cases these outputs are not used, and in some cases they may be used to control other features such as the power windows, sunroof, or heated seats. Check with the installer to find out what AUX outputs have been installed, and what they control.

REMOTE STARTING OPTIONS

CONFIGURABLE FONCTIONALITY DURING INSTALLATION

This Remote-Starter is designed to be highly flexible when integrating into original equipment (OEM). With the following programmable options the Remote-Starter/Alarm can control most electronic systems within the vehicle.

WARNING: This Remote-Starter must be installed by a trained professional. Improper modifications to any of the following settings could adversely affect the reliability of the Remote-Starter and/or the vehicle's operation.

Configurable Options:

- Remote Door Locks
- Active or Passive Arming
- Trunk/Hatch Release
- Security Lock - Runtime Reset
- Secure Transmitter Mode
- Ignition Door Locks
- Runtime

REMOTE DOOR LOCKS

If the Remote-Starter is installed with door locks, you will be able to lock and unlock the vehicle without using the key or OEM key fob.

To UNLOCK the doors and DISARM the Alarm:

۵	Press the button for ond.		The parking lights will flash twice and the LED will turn OFF to con- firm the signal. The Starter-Kill will also deactivate allowing the ve- hicle to be started with the key. If UNLOCK is pressed again (consec- utively) the horn will honk twice (if installed) to confirm. <u>Note: The</u> <u>system can be configured during installation so the horn confirms</u> <u>UNLOCK on the first attempt.</u>
---	---------------------------------	--	---



Press the LOCK button for second. The parking light will flash once and the LED will turn ON to confirm the signal. The Starter-Kill will activate preventing the vehicle from being started with the key. If LOCK is pressed again (consecutively) the horn will honk once (if installed) to confirm. **Note: The system can be configured during installation so the horn confirms LOCK on the first attempt.**

ACTIVE OR PASSIVE ARMING

Passive Mode will allow the Alarm to automatically rearm itself 60 seconds after it is disarmed if no door(s) (or trunk) are open(ed). Opening a door before the 60 seconds has expired will reset the timer but will also prevent the Alarm from locking the doors. This option is enabled by default and the Alarm will never arm as long as at least one door is left open. When this feature is disabled the Alarm is considered to be in Active Mode which requires the remote transmitter to arm the Alarm.

Note: The automatic rearm can be deactivated by pressing the UNLOCK button.

IGNITION DOOR LOCKS

Ignition Door Locks is an automatic passenger safety feature. When enabled the Remote-Starter/Alarm will automatically LOCK the vehicles doors once the key is turned to the ignition (ON/RUN) position and the brake pedal is pressed. The Remote-Starter/Alarm will also automatically UNLOCK the vehicles doors once the key is turned to the OFF position.

SECURITY LOCK

Security Lock triggers the vehicle's door locks after the Remote-Starter has shut down. In some cases before the Remote-Starter is able to start the vehicle it must disarm the Original Equipment Manufacture (OEM) antitheft system first (if equipped) to prevent a false alarm when the vehicle is running. After the Remote-Starter runtime has expired and the Remote-Starter shuts down, the Security Lock will re-arm the OEM anti-theft system in order to return the vehicle to its original protective state.

TRUNK/HATCH RELEASE (ZONE 6)

The vehicle's trunk or rear hatch (if installed) can be opened by pressing the AUX button for 3 seconds.

RUNTIME

On gas engines the Remote-Starter can run the vehicle for either 3, 7 or 15 (default) minutes. On diesel engines the Remote-Starter can run the vehicle for either 6, 15 or 30 (default) minutes.

RUNTIME RESET

Once the vehicle is running with the Remote-Starter the runtime can be reset (before it expires) at any time by pressing the START button while the vehicle is Remote-Started. The horn/siren will sound once to confirm (If installed).

ALARM

AUDIBLE CONFIRMATION

By default the Alarm will not send an audible confirmation (horn/siren) after the first signal has been received from the remote transmitter(s).

SILENT : Press the LOCK or UNLOCK button ONCE and the park lights will flash, but the horn/siren will NOT confirm the signal.

AUDIBLE : Pressing the same button TWICE consecutively (LOCK or UNLOCK) the park lights will flash, and the horn/siren will confirm the signal.

The Alarm can be programmed to audibly confirm the signal on the first button press. (See Installation Guide).

ALARM ACTIVITY

The following characteristics enhance your vehicle's security :

If the Alarm system is active and the horn/siren is sounding :

- Press the UNLOCK button ONCE to stop the alarm sound. The Alarm will remain active and will immediately resound if a zone is (re)triggered.
- Press the UNLOCK button TWICE to stop the alarm sound, deactivate the Alarm, and unlock the doors.
- When the vehicle is unlocked the horn/siren will sound with several short chirps to indicate the zone that has previously triggered the Alarm. (See Remote-Start/Alarm Diagnostics page 13)

NOTE 1: If the vehicle is running with the Remote-Starter and the Alarm is triggered the Remote-Starter will shut down immediately. This applies to Cold Start, Turbo and Idle Modes. However the vehicle can be Remote-Started at a later time (i.e. The Alarm will not cancel Cold Start Timer).

NOTE 2: When an alarm infraction has occurred the LED on the antenna will quickly flash 3 times followed of a long pause. It will continue to flash until the alarm is disabled.

OPEN ZONE NOTIFICATION

When the LOCK button is pressed to ARM the Alarm (non Valet Mode), it will indicate if there are any zones which are currently active. The Alarm will sound with several short chirps to indicate which zone is active. A silent ARM or only 1 chirp indicates that no zones are currently active. (See Remote-Starter/Alarm Diagnostics page 13)

FALSE ALARM DEACTIVATION

This option will disable any zone that triggers the alarm 3 consecutive times. The zone will automatically reenable once the LOCK button or the UNLOCK button is pressed.

SHOCK SENSOR (ZONE 4)

The Alarm system supports FSS2Z (2 stage - 3 wire) Shock Sensors. The Shock Sensor will produce a short audible warning on a weak shock, and will trigger a full alarm on a strong shock. Whenever the vehicle is running with the Remote-Starter the shock sensor is ignored until the Remote-Starter shuts down. However the Alarm can be set to monitor the Shock Sensor if the vehicle is Armed AFTER the vehicle is Remote-Started.

VEHICLE LOCATOR/PANIC MODE

To locate your vehicle in a busy parking lot press the LOCK button for 3 seconds to sound the horn/siren (If installed) and flash the parking lights. Press unlock to cancel this Mode.

Note: If an Alarm pre-triggered zone is in memory, this Mode will NOT clear this zone from memory.

TRANSMITTER RANGE

Several factors may affect the operating range of the remote transmitter:

- A weak transmitter battery.
- The operating environment such as in the city and airports due to radio interference, cell phone towers, etc...
- Several types of metal such as the vehicle itself, other vehicles, the windshields tint lines and large buildings.
- The vehicle's shape. Vans generally have poorer range.
- The shape of the vehicle's roof and the A-pillars cause considerable radio-frequency deflection. As a result, the direction in which the vehicle is facing with relation to the remote transmitter can affect range. Facing the front of the vehicle generally produces the greatest range; secondly facing the back. Facing either side of the vehicle will usually give the poorest range.
- The range will be significantly poorer in crowded parking lots as opposed to empty parking lots.
- Hold the transmitter at shoulder height or hold it against your chin so your body acts as a larger antenna.
- The operating range will be somewhat poorer on vehicles equipped with a factory alarm or keyless entry system.

FAILED REMOTE-START

There are several different installation factors and devices that must work together in order for your vehicle to Remote-Start properly. In some cases a failed Remote Start is not the fault of the Remote-Starter itself. Here are some things to consider when the Remote-Starter fails.

- Unmaintained Engine. If you have problems starting the vehicle with the key then the Remote-Starter will have the same difficulty.
- Low Battery. A battery's voltage can drop to less than 4 volts DC (1/3 of the original) during cold weather starting. Ensure your battery is working properly and is able to provide the proper current needed to start the vehicle in extreme temperatures.
- Low Fuel, or water in the fuel tank. Keep your fuel tank full as much as possible to prevent the build-up of condensation in the tank.
- A corroded or broken Hood Pin switch. Visually inspect the hood pin switch frequently. Cover with a dialectic grease to prevent corrosion.
- Trailer wiring. Corroded or improperly wired trailer wiring may cause the park light signal to bleed into the brake signal. This will cause the Remote-Starter to shut down as soon as the park lights are turned on.
- Problems with the Bypass Kit (if installed). If you are able to put the Remote-Starter into Ready Mode, Idle Mode, or Turbo Mode, but you are unable to Remote-Start the vehicle then the Bypass Kit may be failing. Several Remote-Start attempts with a failed Bypass Kit may lock your vehicle for several hours.
- Dash warning lights. The dash should display in exactly the same way when either starting the vehicle with the key, or with the Remote-Starter. If the dash displays any warning lights (Check Engine, ABS, or Theft) once Remote-Started then something is wrong. Stop using the Remote-Starter and have it looked at immediately.

TIP: If your vehicle is experiencing any problems either starting or running with the key have it looked at by the Remote-Starter's installer first. Having the vehicle worked on by another service centre may void any warranty and/or guarantees on the Remote-Starter and its Installation. Additionally the original installation centre may refuse all fees incurred by the latter service centre (if any).

REMOTE START / ALARM DIAGNOSTICS

Parking Light flashes (before starting) : 3x Ready mode disabled 4x Valet mode activated (The LED is on) 5x Hood open	ALAI
4x Valet mode activated (The LED is on) 5x Hood open	Par
5x Hood open	Зx
	4x
Derking Light flockes (ofter Chutdown)	5x
Parking Light flashes (after Shutdown) :	6x
1x Normal stop (Brake, Park Brake)	7x
3x Runtime expired or shut down by transmitter	8x
4x No tachometer signal	9x
5x Hood open	
6x Over crank threshold (8 seconds)	

ALARM DIAGNOSTICS			
Parking	Parking Light flashes (after disarm) :		
Зx	Door open – zone 3		
4x	Shock sensor – zone 4		
5x	Hood open – zone 5		
6x	Trunk open – zone 6		
7x	Auxilliary IN – zone 7		
8x	Tilt Sensor – zone 8		
9x	Ignition – zone 9		

