LIMITED LIFETIME WARRANTY

Products manufactured and sold by OMEGA RESEARCH & DEVELOPMENT, INC. (the "Company"), are warranted to be free from defects in materials and workmanship under normal use. If a product sold by the Company proves to be defective, the Company will repair or replace it free of charge within the first year and thereafter all parts to be repaired will be free with only a nominal charge for Crime Guard Keyless Entry & Security, Inc.'s labor and return shipping, to the original owner during the lifetime of the car in which it was originally installed.

All products for warranty repair must be sent postage prepaid to Crime Guard Keyless Entry & Security, Inc., P.O. Box 508, Douglasville, Georgia 30133, or send via UPS to: 981 N. Burnt Hickory Rd., Douglasville, Georgia 30134, with bill of sale or other dated proof of purchase. This warranty is

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

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



Omega Research and Development. Inc. P. O. Box 508 Douglasville, Georgia 30133 02/04 MO-CG-850i4e www.caralarm.com



OPERATION MANUAL

850i⁴e

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#	FEATURE	DEFAULT						
#1	SecureCode Programming	1 Press (n/a)						
#2	30 / 60 Second Activated Alarm Cycle	30 Seconds (U)						
#3	3 / 45 Second Arming Delay	3 Seconds (L)						
#4	Last Door Arming	OFF (U)						
#5	Automatic Rearming	OFF (U)						
#6	Auxiliary Channel #2 Also Disarms System	ON (L)						
#7	Parking Light Illumination Upon Disarm	ON (L)						
#8	Doors Lock At Ignition "On"	ON (L)						
#9	Unlock #1 At Ignition OFF	ON (L)						
#10	Unlock #2 At Ignition OFF	OFF (U)						
#11	Open Door Bypass To Features 8, 9, 10	ON (L)						
#12	Doors Lock With Last Door Arming	OFF (U)						
#13	Doors Lock With Automatic Rearming	OFF (U)						
#14	Ignition-Activated Vehicle Recovery	OFF (U)						
#15	Door-Activated Vehicle Recovery	OFF (U)						
#16	Transmitter-Activated Vehicle Recovery	OFF (U)						
#17	Chirp Confirmation	ON (L)						
#18	Remote Start Run Time 10 or 20 Minutes	10 Minutes (U)						
#19	Steady / Flashing Lights During Remote Start	Steady (L)						
#20	Remote Start Preactivation	OFF (U)						
#21	Steady Siren or Pulsed Horn Output	Steady Siren (U)						
#22	Soft or Loud Horn Confirmation Chirps	"Medium Soft" (U)						
#23	1 or 2 Button Arming / Disarming	2 Button (U)						
#24	.8 / 3 Second Doorlock Pulse	.8 Second (L)						
#25	Double Unlock Pulse	OFF (U)						
#26	Total Closure Lock Output	OFF (U)						
#27	Gasoline or Diesel Engine	Gasoline (L)						
#28	Extended Starter Cranking Time	Minimum (L)						
#29	"Tach Wire" or "Tachless " Starter Operation	"Tachless" (L)						
#30	Manual Transmission Remote Starting	OFF (U)						
#31	Turbo Timer	OFF (U)						
Page 47								

Echo is configured for "MUTE" operation (vibrates instead chirping), then in programming it will not play the musical melodies. Instead, it vibrates when the remote starting Start Melody and Stop Melody are accessed for programming.

Other Omega Echo Notes:

- The system will only transmit a signal to the Echo transceiver if the Echo was last used to operate the system (as in Arming or Disarming it). Example: if the transmitter is used to Arm the system, the system will not transmit a signal which will cause the Echo to chirp and change its icons.
- If multiple Echo transceivers are programmed to operate the system, the system will send its signal to only one transceiver- the last one used.
- When the Crime Guard 850i⁴e system does send a signal to the Echo transceiver, a few seconds is needed for this "handshake" to occur. If the system is operated in a rapid fashion, as in quickly repeating Arm and Disarm cycles, the Echo will not have time to receive the signal from the system, and therefore it will stop responding and reporting the system's status. Normally operating the system corrects this symptom.
- A final point to remember is that the Echo transceiver cannot receive a signal from the 850i⁴e system while it itself is transmitting. For normal operations, the Echo's buttons are pressed <u>and released</u>. Even when "Panic" is operated, the Echo button should be released as soon as "Panic" engages. Otherwise, the Echo cannot receive the signal from the system.

FEATURES PROGRAMMING CHECKLIST

This handy checklist simplifies the features programming process. Before attempting feature programming, please refer to pages 27-43 for the full programming procedure and a detailed description of each feature.

Step 1 - Turn the ignition "off", and press the Valet Switch 5 times. The siren will briefly sound to confirm programming mode.

- **Step 2** Press the Valet Switch the same number of times as the desired feature number. The system will chirp back the same number.
- **Step 3** Press the transmitter's "Arm/Lock" button to turn the feature "on" (1 chirp) or press the "Disarm/Unlock" button to turn the feature "off" (2 chirps).
- Repeat Steps 2 and 3 for each remaining feature to be changed

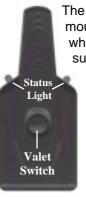
ABOUT YOUR NEW CRIME GUARD SYSTEM

Congratulations on your purchase of a new Crime Guard security and remote starting system. Crime Guard systems combine the benefits of easy-to-use convenience with "no nonsense" protection of property and person. *Please review this guide to become familiar with your Crime Guard vehicle security and remote starting system.* To operate your system, the four principal components are first described: the Remote Transmitter and Remote Transceiver, the Status Light, and the Valet Switch.

The Status Light: The multicolored Status Light, placed in a visible location in the vehicle's interior, reports the operational status of the system at all times, and also serves as a visual deterrent to break-ins and theft. Specific description of the Status Light operation may be found on pages 25-26.

The Valet Switch: The Valet Switch has three main functions:

- ✓ The Valet Switch can be used to turn off the security functions, including any automatic arming or locking features (if used), <u>and/or</u> remote engine starting functions of the system. The former is "Alarm Valet Mode"; the later is "Starting Valet Mode" (pages 23-24).
- ✓ The Valet Switch can also be used, in conjunction with the vehicle's ignition key, to perform an emergency disarming of the security system in the event the transmitter or transceiver is lost or becomes inoperable. This is referred to as "performing an Emergency Override" (pages 13-14).
- ✓ The Valet Switch is used in the procedure of programming operational features and also for encoding transmitters and transceivers to the system.



The 2-color Status Light and Valet Switch are mounted in the system's radio transceiver unit, which is typically mounted to an interior glass, such as the windshield. The Status Light is most visible, and the Valet Switch is convenient to use (the SecureCode feature protects against unauthorized disarming). If desired, Crime Guard's flexible design will allow for separately mounting an optional Valet Switch or Status Light. The Valet Switch is a critical part of your Crime Guard system! See Page 13-14 and 23-24. The Remote Transmitter and Remote Transceiver: Your system comes with two pre-learned remote controls; one is a "transmitter", and the other is a 2-way "transceiver", the Omega Echo. The remote transceiver, in addition to operating your system, also receives signals from the system, and displays a variety of system conditions on its LCD screen. Your system can be operated by as many as four transmitters and/or transceivers.

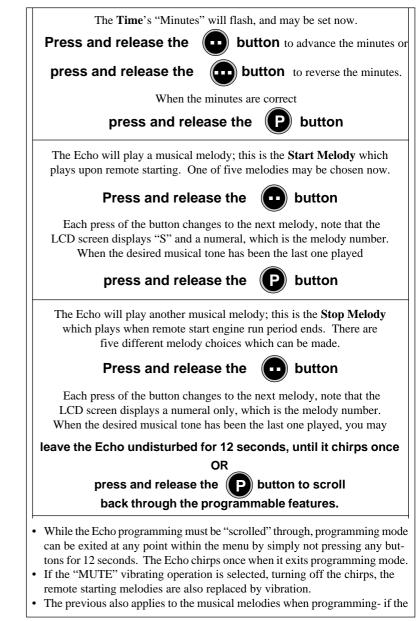
The remote transmitter and transceiver both share the same four operational buttons- the "Arm /Lock", the "Disarm/Unlock", the "Auxiliary #2" and "Auxiliary #3" buttons. The Echo transceiver has a fifth button, the "Programming" button; Echo pressing this button Remote will illuminate the LCD 2-Wav screen. Transceiver

Disarm/Unlock' "Arm/Lock' Button Button "Auxiliary "Auxiliary #3" #2" Button Button Remote 1-Wav "Auxiliary Transmitter Output #3" Button "Auxiliary Programming Output #2" Button Button "Disarm/Unlock" Button ECHO 300 Arm/Lock" Button

Remote Transceiver Icons: The LCD screen on the remote transceiver has various icons which indicate system status. When the remote transceiver is used to operate the system, it receives back a signal which causes it to chirp (emulating the siren) and display the appropriate icons. Brief descriptions of the icons are:

- The digit readout is a clock, with AM and PM indication. This readout also shows how many transmitters/transceivers can operate the system.
- The "DISARM" will also show "ARM"; this indicates the Armed or Disarmed status of the system. Neither icon is present when the system is in Valet Mode.
- The locked or unlocked padlock (windshield) reflects the true locked or unlocked status of the doors (certain programmable features can automatically arm the system, but not lock the doors). Arming with the transmitter/transceiver always locks the doors;





Page 45

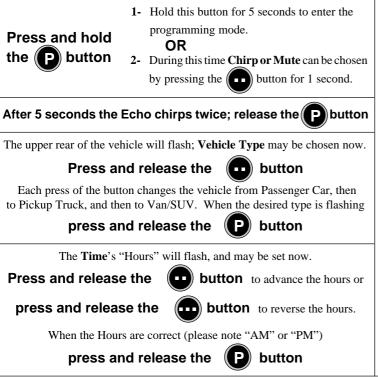
visual display; for the next 48 hours the siren will sound a brief series of chirps every time the vehicle's ignition is turned on.

PROGRAMMING THE ECHO TRANSCEIVER FUNCTIONS

The Omega Echo transceiver has several user-programmable features:

- \checkmark Chirp or Mute The chirps may be turned off, and replaced with vibration.
- ✓ Vehicle Type Choices are a passenger car, pickup truck, or van/SUV.
- ✓ **Time Adjust** To set the Echo's clock time.

✓ **Start Melody**; and **Stop Melody** These are played with remote starting. Configuring these features as desired is a simple process, using the Echo unit's three round side buttons, as follows:



disarming with the transmitter/transceiver will unlock the doors <u>unless</u> the system is activated and sounding.

- "VALET" indicates Alarm Valet Mode, replacing the "ARM" or "DISARM" icons. A musical tone occurs when placing the system into Alarm Valet Mode.
- When "BAT LOW" appears the transceiver's 1.5 volt AAA battery should be replaced with a new battery.
- The transceiver's chirps and musical tones may be turned off, which makes the unit vibrate instead; "MUTE" indicates this state.
- The "3" within a circle appears when the Auxiliary #3 is operated.
- "HOOD/TRUNK" indicates that this zone the vehicle is or has been violated. If associated with the system being activated, the transceiver also emits chirps, until any button is pressed. In this case, the icon remains flashing until the ignition switch is turned on.
- If a remote starting attempt is made, and systems aborts it due to a violated safety circuit, the "crossed-out key" on the hood area will appear (this is accompanied by a musical tone).
- The "CARJACK" icon within the vehicle's front tag frame indicates that this operation has been activated, which can be performed by any of three methods.
- On the vehicle's windshield is a "hammer" and "impact" icon. When the shock sensor detects light impact, causing the system to prewarn, the "impact" icon alone will momentarily appear, accompanied by three chirps. If the sensor detects a harder impact or breaking glass, activating the system, the full hammer and impact icons appear, and the transceiver chips until any button is pressed, and the icon remains flashing until the ignition switch is turned on.
- The "DOOR" icon will indicate that the system was activated via the door detection circuit. The transceiver chirps until any button is pressed, and the icon remains flashing until the ignition is turned on.
- The "start" icon at the rear of the vehicle confirms remote starting. This icon is accompanied by a musical melody, and stays on while remote starting is operating; during which the puffs will change to appearing sequentially.
- The "2" within a circle indicates use of the Auxiliary #2, which is most commonly used for a remote trunk release feature.
- The "transmitting tower" icon is an in-range indicator. It is present if the last transmission from the transceiver was answered by a return signal from the system. Should the transceiver be operated, and no return signal is received, this icon will disappear.
- The various lines at the upper rear of the vehicle graphic represent a unique Omega feature which allows the user to customize the vehicle type represented by the display. Options are: passenger car, pickup truck, and sport utility/van.

Further transceiver operational details appear in following sections describing system operation. Programming the transceiver is explained on pages 44-45.

USING YOUR CRIME GUARD SYSTEM

Arming the Crime Guard system turns on the antitheft protection, disables the vehicle's starter and locks the doors (provided an interface is installed). Once the system is **Armed**, any intrusion attempt will **Activate** it, sounding the siren and flashing the lights to attract attention. **Disarming** the system turns off the protection, allowing normal use of the vehicle.

There are three methods of Arming the security system:

- 1- The first method is to use the transmitter or transceiver, by pressing and releasing its "Arm/Lock" button. The system must not be in Alarm Valet Mode (page 23-24), and the vehicle's ignition switch must be off. Every press of the "Arm/Lock" button arms the system, even if it is already armed.
- 2- The second method is to press and release the transmitter or transceiver's "II" button twice within 5 seconds. This is "Silent Arming".
- 3- The third method is Last Door Arming, which configures the system to automatically arm every time you exit the vehicle. This method of arming is programmable, and may be used or not used as desired.

REMOTE ARMING BY TRANSMITTER OR TRANSCEIVER To Arm the System:

Press & Release the "Arm/Lock" Button () on Either



- The siren will chirp twice (or four times if a zone is bypassed) <u>unless</u> the silent arming procedure is followed.
- The parking lights will flash twice (or four times if a zone is bypassed).
- The doors will lock*.
- * An optional doorlock interface must be installed

program the feature, follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released thirty one times. The system's response will be thirty one siren chirps, and the Status Light flashing thirty one times, pausing, then repeating. Within 10 seconds, press and release the transmitter's "Arm/Lock" button to turn on the Turbo Timer feature (the siren will chirp once) or the "Disarm/Unlock" button to turn it off (the siren will chirp twice).

PROGRAMMING TRANSMITTERS OR ECHO TRANSCEIVERS

Your Crime Guard 850i⁴e system is capable of being operated by as many as four controllers; these can be any combination of standard Crime Guard transmitters or Omega Echo transceivers. Regardless of which, the transmitter or transceiver must be encoded, or programmed, to the system in order to operate it (excepting the originals, which were programmed at the factory). This programming procedure is identical for a transmitter or Echo transceiver. To program additional or replacement transmitters or transceivers, follow this procedure:

Have all of the transmitters or transceivers at hand (when one is programmed, all others are erased).

- Step 1 Turn the vehicle's ignition "on".
- Step 2 Within 5 seconds of turning "on" the ignition, press the Valet Switch 5 times. The siren will chirp once, confirming that the system is ready to learn a transmitter.
- Step 3 Within 10 seconds press and release the "Arm/Lock" button (the "locked padlock" graphic). The siren will chirp once, confirming that the system learned the transmitter.
- Step 4 Repeat the previous step for each transmitter or transceiver which is to operate the system.

Only the "Arm/Lock" button is pressed in programming; when it is learned all of the other buttons' functions are automatically assigned. The system will remove itself from the programming mode if 10 seconds expire without its receiving a signal, if the ignition is turned "off", or upon four transmitters or transceivers being programmed into the system.

Please note that programming a transmitter to the system will activate the audible Unauthorized Transmitter Alert warning and the extended Status Light

required to use this feature. To program the feature, follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released twenty nine times. The system's response will be twenty nine siren chirps, and the Status Light flashing twenty nine times, pausing, then repeating. Within 10 seconds, press and release the transmitter's "Arm/Lock" button to configure the system for Tachless operation (the siren will chirp once) or the "Disarm/Unlock" button to configure the system for Tach Wire operation (the siren will chirp twice).

Feature #30

Stick Shift Remote Starting (Factory Default "Tachless")

This feature changes the parameters of the 850i⁴e's remote start operation to be suitable for manual transmission-equipped vehicles via a "setup" procedure which must be followed upon exiting the vehicle. When this feature is turned on, the operator must set the parking brake and then press the transmitter's "Arm/Lock" and "Disarm/Unlock" buttons, which keeps the engine running after removing the ignition key. After exiting, the user must then arm the 850i⁴e and lock the vehicle doors by pressing the transmitter's "Arm/Lock" button. Only after this will the system accept a remote start command, and the vehicle must remain undisturbed until that point. The complete instructions for remote starting, including Stick Shift Remote Starting, is on pages 18 through 22.

Programming Stick Shift Remote Starting: The operation of this feature depends on the correct connection of the safety wire to the vehicle's parking brake; please refer to the "Installation Manual" for proper connection of this wire. To program the feature, follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released thirty times. The system's response will be thirty siren chirps, and the Status Light flashing thirty times, pausing, then repeating. Within 10 seconds, press and release the transmitter's "Arm/Lock" button to configure the system for Stick Shift Remote Starting operation (the siren will chirp once) or the "Disarm/Unlock" button to turn this operation off (the siren will chirp twice).

Feature #31

Turbo Timer (Factory Default Setting OFF)

This feature, described on pages 21-22, when turned on configures the 850i⁴e to automatically keep the engine running for 2 minutes after it is turned off. This operation is designed specifically for vehicles having turbocharged engines (the user may temporarily bypass the feature if desired).

<u>Programming Turbo Timer</u>: The operation of this feature is dependent upon the correct connection of the safety wire to the vehicle's parking brake; please refer to the "Installation Manual" for proper connection of this wire. To • The starter interrupt will engage.

• The Status Light will begin to flash slowly in Red.

Three seconds after arming, the security system becomes fully armed, and will activate to an alarm condition should an intrusion attempt be detected.

Upon Arming with the Echo Transceiver, it will:

- The transceiver will chirp twice (or four times if a zone is bypassed).
- The "ARM" icon will appear.
- The "locked lock" icon appears, confirming that doors have locked.
- The number of operating transmitters or transceivers is briefly displayed.

Arming Bypass:

When arming the system using the transmitter or transceiver, if any protected zone or sensor circuit is in a violated condition, the affected zone or circuit will be automatically bypassed. This is "Arming Bypass", which allows the system to still arm and protect the other normal, non-violated zones. In the case of a bypassed zone or circuit, should the violated condition return to normal, 5 seconds after becoming normal the system restores protection to the previously bypassed zone or circuit.

If the hood and trunk zone, or sensor circuit is bypassed when the system is armed, instead of the normal arming confirmation the siren will chirp four times and the parking lights will flash four times to alert you. However, if a door zone is bypassed, the siren and light confirmation will be the normal two chirps and flashes, as many vehicles are equipped with a delayed interior light illumination. In these vehicles, the interior light delay would typically cause the system to indicate a bypass if the system is armed during the delay. In these cases, the arming indication is normal, and the door zone is protected by the system five seconds after the interior light turns off.

When the remote transceiver is used and Arming Bypass occurs, it will chirp four times itself (instead of two) and flash the icon of the violated zone.

LAST DOOR ARMING BY EXITING THE CAR

Last Door Arming:

Last Door Arming is a programmable feature which configures the system to arm itself without the need of a command from the transmitter or transceiver. This convenient feature offers a high level of security and may entitle the vehicle owner to an insurance discount since the user does not need to remember to arm the system each time the vehicle is exited. The Last Door Arming feature may include, if desired, the automatic locking of the vehicle's doors when the system arms itself.*

The Last Door Arming process:

- 1- When the vehicle's ignition has been turned off, the system waits until a door is opened. When the door is closed, or when the last door is closed when more than one door is opened, the siren will chirp twice, the parking lights will flash twice, and the Status Light will begin flashing Red rapidly. The Last Door Arming countdown has begun.
- 2- Thirty seconds later the siren will again chirp twice, the parking lights will again flash twice, the starter interrupt will engage, and the Status Indicator Light will begin flashing Red slowly. If programmed, the vehicle's doors will also lock.* Three seconds after these actions occur, the system is fully armed.

Notes:

- If the remote transceiver was last used to operate the system, when Last Door Arming is used to arm the system the transceiver will chirp twice and show the "ARM" icon when system becomes fully armed 30 seconds after the last door is closed. If the doors are programmed to also lock*, the "locked" icon will also appear when this occurs.
- If a door is reopened during the thirty second period between the first and second set of double chirps, the countdown will stop and reset. When the reopened door is closed again, the 30 second countdown starts over again at the beginning.
- Last Door Arming is separate from, and does not effect the operation of arming by using the transmitter or transceiver.
- All protected points must be closed or otherwise in a non-violated state for the Last Door Arming sequence to start. Unlike active arming from the transmitter or transceiver, the system can not bypass an open or detected zone and arm itself.

To temporarily prevent the system from arming itself:

- Place the system into Alarm Valet Mode using the Valet Switch (pages 23-24).
- Leave a vehicle door open. Although this varies depending on the vehicle, in most cases turning on the interior light will be detected by the system as an open door.
- Although the system will not Last Door Arm while the ignition is on, leaving the ignition key turned on without the engine running is not recommended.

* An optional doorlock interface must be installed

button to configure the system for gasoline engines (the siren will chirp once) or the "Disarm/Unlock" button to configure the system for diesel engines (the siren will chirp twice).

Feature #28

Extended Starter Cranking Time (Factory Default Setting Minimum)

This feature operates in conjunction with the next feature's "Tachless" setting. The Crime Guard 850i⁴e's processor is capable of detecting the running engine by two separate methods- the use of the vehicle's tachometer ("tach") wire for a direct engine RPM input, or by monitoring the fluctuating voltage levels caused by the starting process. This feature sets the duration of the starter output's base timing for the voltage sensing type of starter output operation. There are four different base starter output time durations.

Programming Extended Starter Output Time:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released twenty eight times. The system's response will be twenty eight siren chirps, and the Status Light flashing twenty eight times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's button for one of these Extended Starter Output Times settings:

"Arm/Lock" button	=	minimum (.7 second)	(one siren chirp)
"Disarm/Unlock" button	=	low medium (1.25 seconds)	(two siren chirps)
"II" button	=	high medium (1.75 seconds)	(three siren chirps)
"Ill" button	=	maximum (2.5 seconds)	(four siren chirps)
The default-set minimum	is sut	fficient for most vehicles; the	e Extended Starter
Cranking Time can be use	d for	difficult-to-start engines.	

Feature #29 "Tach Wire" or "Tachless" Starter Operation (Factory Default "Tachless")

This feature selects the system's method of detecting the starting and running of the engine during remote start operation. "Tachless" mode engages the starter for a predetermined time (previous feature), during which it is monitoring voltage changes in order to release the starter. While the Tachless method is adequate for most vehicles, the "Tach Wire" connection is the most reliable form of engine running information input, and its use is recommended. The Tach Wire option has a set 3 second starter cranking time, during which it is directly monitoring the engine's RPM to release the starter when the engine runs. To use this feature, the system's tach input wire must be connected, and a tach learning process followed. **Programming the Tach Wire or Tachless feature**:

Prior to programming this feature, please refer to the "Installation Manual" for proper wiring connection and the Tach Learning Procedure, both of which are

Programming Single or Double Unlock Pulse:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released twenty five times. The system's response will be twenty five siren chirps, and the Status Light flashing twenty five times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to configure the double unlock pulse (the siren will chirp once) or the "Disarm/Unlock" button to configure the single unlock pulse (the siren will chirp twice).

Feature #26

Total Closure Lock Output (Factory Default Setting OFF)

If the vehicle is has an existing total closure feature, this programmable feature gives the installer the option of interfacing the system to operate this feature. Typically, this option would close all windows and the sunroof, in addition to locking the doors, when arming the system. Consult with the installer on this option, as the vehicle must be properly equipped to utilize this system feature. Turning this feature on changes the door lock output pulse to a 28 second duration.

Note: When using this feature, upon Arming the system, should the "Disarm/ Unlock" button be pressed during the 28 second lock output period, the output will stop only- the system will not Disarm. Pressing the button again will Disarm the system, and at any time after the 28 second lock output period.

Programming Total Closure Lock Pulse:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released twenty six times. The system's response will be twenty six siren chirps, and the Status Light flashing twenty six times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to configure the 28 second door lock pulse for total closure (the siren will chirp once) or the "Disarm/Unlock" button to configure the short door lock pulse (the siren will chirp twice).

Feature #27

Gasoline Or Diesel Engine (Factory Default Setting Gasoline)

This feature changes the system's timing of the ignition and starter output sequence for remotely starting vehicles with a diesel engine.

Programming Gasoline or Diesel Engine:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released twenty seven times. The system's response will be twenty seven siren chirps, and the Status Light flashing twenty seven times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock"

SYSTEM ARMED & ACTIVATED

While the system is in the Armed state:

- The Status Light will be flashing slowly Red to confirm that the system is armed, and also serve as a visual deterrent.
- The starter interrupt circuit is engaged.
- All protected zones are being monitored for intrusion attempts.

Should an Activation into the Alarm Condition occur:

- The changing-tone electronic siren will loudly sound.
- The parking and interior lights will flash.
- The doors will lock,* regardless of their locked or unlocked status. This feature is unique- if the system detects that a door is opened, it waits until the door is closed before relocking it, denying the thief reentry.

An activated alarm condition has a duration of 30 seconds (60 is optional) unless the system is disarmed using the transmitter, transceiver, or the Valet Switch. If all protected zones are secure at the end of the alarm condition, the system will stop and rearm automatically, ready to detect another entry attempt. If a protected zone is still violated at the end of the alarm condition, the system will reactivate for up to two additional alarm cycles. After the third alarm cycle the system will automatically rearm and bypass the open zone until that zone returns to a normal "non-violated" state.

• Once the system resets after it has been activated, upon disarming the audible and visual confirmation will change to indicate the activation. This is the "Activation Alert", which is explained on pages 11-12.

The Echo Remote Transceiver's reaction to the alarm condition:

If the remote transceiver was previously used to arm or operate the system, it will react to an alarm activation, provided it is within range of the system. Upon receiving a signal from the activated system, the transceiver will:

- The transceiver will start chirping, and continue chirping until any transceiver button is pressed.
- An icon will start flashing, indicating which protected zone's violation caused the system's alarm condition.

When silencing the transceiver's alarm chirps, please note the differences of pressing it's buttons:

• Pressing "Arm/Lock" will rearm the system, stopping both system's alarm condition (leaving it armed) and the transceiver's chirping.

* An optional doorlock interface must be installed

- Pressing "Disarm/Unlock" will disarm the system, leaving the doors locked, stopping both system's alarm condition (leaving it disarmed) and the transceiver's chirping.
- Pressing <u>and releasing</u> any of the three other buttons will simply stop the transceiver's chirping, but leave the security system still sounding in its alarm state.

The remote transceiver will display the flashing icon indicating the violated zone, while the system is disarmed, until the ignition switch is turned on.

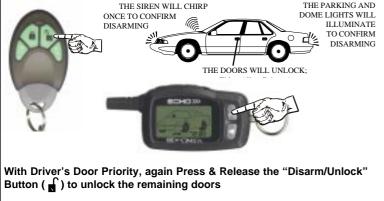
DISARMING THE SYSTEM

There are three methods of Disarming the security system:

- 1- The first method is to press and release the transmitter or transceiver's "Disarm/Unlock" button to disarm the system. This is the normal method.
- 2- The second method is to press and release the transmitter or transceiver's "II" button twice within 5 seconds. This is "silent Disarming".
- 3- The third method is for emergencies, should the transmitter become lost or inoperable. This is the "Emergency Override", and uses the ignition key and the Valet Switch.

REMOTE DISARMING BY TRANSMITTER OR TRANSCEIVER

To Disarm the System:



*An optional doorlock interface, in either standard form or driver's door priority form, must be installed

Disarming the system with every press of that same button. When this feature is programmed for "1 Button Operation", the system's operation with the included transmitter and/or Echo pager is: "Locked Lock" button = Arm or Disarm (alternates)

"Unlocked Lock button = Auxiliary #2 output

"Il" button = Auxiliary #3 output

"III" button = nothing (open for other receiver unit)

"Locked Lock" & "Unlocked Lock" buttons together = remote start

Programming Transmitter 1 or 2 Button Operation:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released twenty three times. The system's response will be twenty three siren chirps, and the Status Light flashing twenty three times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to configure the system for "1 Button Operation" (the siren will chirp once) or the "Disarm/Unlock" button to configure the system for "2 Button Operation" (the siren will chirp twice).

Feature #24

Door Lock/Unlock Pulse Duration (Factory Default Setting .8 Second)

This feature, for the installer's use, offers the selection of a .8 second or a 3 second pulse duration of the system's doorlock outputs. Certain vehicles have power doorlocking systems which are vacuum operated, and thus require a longer output pulse from the Crime Guard system. While use of this feature is determined by the type of vehicle the system is installed in, this feature does save the owners of such vehicles the added expense of a special adapter.

Programming Door Lock/Unlock Pulse Duration:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released twenty four times. The system's response will be twenty four siren chirps, and the Status Light flashing twenty four times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to configure the doorlock pulse for .8 second (the siren will chirp once) or the "Disarm/Unlock" button to configure the doorlock pulse for 3 seconds (the siren will chirp twice).

Feature #25

Double Unlock Pulse (Factory Default Setting OFF)

This is another power door lock-related feature for the installer's use; some newer vehicles require a double pulse to remotely unlock the doors and/or to disarm a factory-equipped security system. for use with a vehicular horn, when the system has an alarm activation this output pulses .5 second, .5 second off for the duration of the activated alarm period. An optional relay, configured by the installer, is needed to utilize this feature. When the electronic siren is used, the output should be steady.

Programming Steady Siren or Pulsed Horn Output:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released twenty one times. The system's response will be twenty one siren chirps, and the Status Light flashing twenty one times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Disarm/Unlock" button to turn on the steady siren output (the horn/siren will chirp twice) or the "Arm/Lock" button to turn on pulsed horn output (the horn/siren will chirp once).

Feature #22

Soft or Loud Horn Confirmation Chirps (Factory Default Setting Medium Low)

This feature is only available for use when the previous feature is programmed for the "Pulsed Horn" setting. If the system is configured to use the vehicle's horn, this feature allows four different volume levels of chirping the vehicle's horn in a satisfactory manner.

Programming the Chirp Confirmation:

Programming this feature uses all four transmitter or transceiver operation buttons. Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released twenty two times. The system's response will be twenty two siren chirps, and the Status Light flashing twenty two times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver buttons according as follows, which the systems chirp response also indicated:

"Arm/Lock" button	=	lowest volume chirp	(one chirp)
"Disarm/Unlock" button	=	medium low volume chirp	(two chirps)
"II" button	=	medium high volume chirp	(three chirps)
"III" button	=	highest volume chirp	(four chirps)

Bear in mind that while programming this feature, all buttons can be sequentially pressed, and the setting with the best chirp confirmation be chosen.

Feature #23

1 Or 2 Button Arming / Disarming (Factory Default Setting 2 Button Operation)

This feature changes the configuration of how the transmitter or Echo transceiver operates the system. In the factory default setting of "2 Button Operation", one of the transmitter/transceiver's buttons will only Arm the system (the "Arm/Lock" button), and a second button will only disarm the system (the "Disarm/Unlock" button). When this feature is programmed to the "1 Button Operation" setting, a single transmitter/transceiver button alternates Arming and

Upon Disarming the System will:

- The siren will chirp once (or three times if an alarm activation occurred) <u>unless</u> the silent disarming procedure is followed.
- The parking and dome lights will illuminate for 30 seconds (5 seconds is optional) unless the vehicle's ignition is turned on. If the system has been activated, the parking lights will flash 3 times before illuminating.
- The doors will unlock, either all doors or driver's door only.*
- The starter interrupt will disengage.
- The Status Light will show one of these features or conditions:

 Flashing Red rapidly = Automatic Rearming feature is in progress.
 Off = System disarmed (Automatic Rearming feature not selected).
 Flash Red /Pause = Indicates violated zone if system has been activated.

Upon Disarming with the Echo Transceiver, it will:

- The transceiver will chirp once (or three times if the system was activated).
- The "DISARM" icon will appear.
- The "unlocked lock" icon appears, confirming that doors have unlocked.
- The number of operating transmitters or transceivers is briefly displayed.

When Disarming and Driver's Door Priority unlocking is utilized, if the "Unlock/Disarm" neither the system nor the transceiver will repeat the Disarming confirmation indicators. As the system does not transmit a signal to the transceiver, its "in range" icon will disappear, and then reappear again when the system is next Armed, or other remote function is used.

Safety Disarm Feature:

Pressing and releasing the "Disarm/Unlock button while the system is activated in the alarm condition will disarm the system, but the doors will remain locked. This is the "Safety Disarm" feature, which allows the vehicle to remain secure, even though an activated system has been disarmed. Safety Disarm will also cancel Automatic Rearming (if it is programmed to operate). This feature is also very useful when the vehicle is exposed to environmental conditions such as storms, trains or heavy vehicles, which may cause false activations.

Safety Disarm is a temporary "one time" operation which occurs only while the system is activated. To remotely unlock the doors after a Safety Disarm, simply press the "Disarm/Unlock" button again.

Activation Alert:

If the system experiences an alarm condition and resets itself, upon disarming the siren will chirp three times and the parking lights will flash three times instead of the normal one chirp and one light flash. Additionally, the Status Light will be flashing a "Zone Violation Code". When the alarm condition activation occurred, the Status Light changes from flashing slowly to flashing two to four times between pausing to indicate which protected zone was violated.

- The Zone Violation Code will continue to be displayed until the vehicle's ignition is turned on.
- The Status Light will display the Zone Violation Code in place of fast flashes indicating Automatic Rearming.
- Should the system be rearmed before the ignition clears the Zone Violation Code memory, the Status Light shows the normal slow flashing.
- The system can store up to two consecutive Zone Violation Codes. If more activations occurred, the two most recent codes are displayed.

Echo Transceiver Activation Alert:

If the Echo transceiver has been used to Disarm the system, it will show a flashing icon for the zone which caused the system to activate into the alarm condition. As long as the system is disarmed, the Echo will display this icon, until the ignition is turned on. The Echo will store one Zone Violation Code.

Automatic Rearming:

Automatic Rearming is a programmable feature which ensures that your system is never inadvertently disarmed. It is possible to accidentally or unknowingly operate the transmitter from a pocket or purse. You may not even be aware of an accidental disarming due to the enhanced operating distance offered by the Extended Range Transmitter.

How It Works:

Whenever the system is disarmed by the transmitter, this feature starts a 90 second countdown, which is indicated by a rapidly flashing Red Status Light. During this 90 second period, if no protected entry points are opened and the vehicle's ignition is <u>NOT</u> turned on, the system will automatically arm itself at the end of the countdown. If desired, the system can also be programmed to automatically relock the doors when this occurs.

Automatic Rearming Notes:

- Turning on the vehicle's ignition cancels Automatic Rearming.
- Opening a door will suspend the 90 second countdown.
- All protected zones must remain non-violated during the 90 second Auto-

configure the system for 20 minute remote start engine run time (the siren will chirp once) or the "Disarm/Unlock" button to configure the system for 10 minute run time (the siren will chirp twice).

Feature #19 Steady/Flashing Lights During Remote Start (Factory Default Setting Steady)

This Feature configures the system's operation of the vehicle's parking lights when the engine is running after it has been remotely started. The factory default setting has the parking lights illuminating steady during the engine run time; the other option flashes the parking lights on and off during the engine run time.

Programming Steady or Flashing Parking Lights:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released nineteen times. The system's response will be nineteen siren chirps, and the Status Light flashing nineteen times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to configure the system for steady parking lights (the siren will chirp once) or the "Disarm/Unlock" button to configure the system for flashing parking lights (the siren will chirp twice).

Feature #20

Remote Start Preactivation (Factory Default Off)

This feature requires that the user press the Valet Switch once before exiting the vehicle in order for the remote starting operation to be available for later use. With Preactivation is turned off, remote starting can be performed at any time, and repeatedly if desired. If this feature is turned on, the system will not attempt to start the engine unless the Valet Switch was pressed some time prior to the starting attempt, as when leaving the vehicle.

Programming Preactivation:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released twenty times. The system's response will be twenty siren chirps, and the Status Light flashing twenty times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to configure the system Preactivation operable (the siren will chirp once) or the "Disarm/Unlock" button to configure the system to turn off the Preactivation operation (the siren will chirp twice).

Feature #21

Steady Siren or Pulsed Horn Output (Factory Default Setting Steady Siren)

This feature allows the choice using of the vehicle's horn for the audible output of the security system instead of the electronic siren. When programmed the Vehicle Recovery operation from the transmitter or transceiver in the event that you are forced from your car. "Remote Activated" Vehicle Recovery is one three methods of activating this feature, which is explained on page 27.

Programming Transmitter Activated Anti Car-Jacking:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released sixteen times. The system's response will be sixteen siren chirps, and the Status Light flashing sixteen times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to turn on the Transmitter Activated Vehicle Recovery feature (the siren chirps once) or the "Disarm/Unlock" button to turn the feature off (the siren chirps twice).

Feature #17

Chirp Confirmation (Factory Default Setting On)

This feature allows the permanent removal of the system's chirping the siren as an audible confirmation when performing functions such as Arming and Disarming. Please note that utilizing this feature to remove the confirmation chirps does not affect siren chirping operations associated with the Unauthorized Transmitter Alert warning, sensor prewarning or Programming Mode.

Note: Using this feature to turn off the siren chirps also turns the chirps in the Echo transceiver- the Echo emulates the system's siren chirps.

Programming the Chirp Confirmation:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released seventeen times. The system's response will be seventeen siren chirps, and the Status Light flashing seventeen times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to turn the Chirp Confirmation on (the siren will chirp once) or the "Disarm/Unlock" button to turn the Chirp Confirmation off (the siren will chirp twice).

Feature #18 Remote Start Run Time 10 Or 20 Minutes (Factory Default Setting 10 Minutes)

This Feature sets the period of time that the engine will run after being remotely started. If the engine is not stopped by a transmitter or transceiver, or a safety circuit violation, the engine will automatically stop upon the expiration of the selected time period.

Programming 10 or 20 Minute Run Time:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released eighteen times. The system's response will be eighteen siren chirps, and the Status Light flashing eighteen times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to

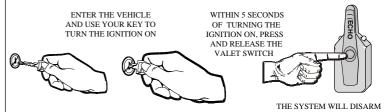
matic Rearming period. For example, if a vehicle door is opened during the 90 second period, the countdown will stop. When the door is closed, the system resets and starts a new 90 second countdown period.

- The Automatic Rearming sequence is indicated by a fast flashing Red Status Indicator Light, unless the system has been activated, in which case a Zone Violation Code will flash instead (pages 25-26). The ignition switch must be turned on to erase a violation code.
- If the system is disarmed while it is activated (siren sounding and lights flashing) Safety Disarm will cancel the Automatic Rearming for that disarming operation only. The next time the system is armed, Automatic Rearming will be initiated upon the subsequent disarming.

DISARMING BY EMERGENCY OVERRIDE

Emergency Override:

In the event that your transmitter is lost, damaged, or its batteries have become exhausted, the Valet Switch <u>and</u> the vehicle's ignition key may be used to disarm the system. These Emergency Override instructions reflect a default setting of "1 press"; the "SecureCode" programmable feature allows the user to customize the number of Valet Switch presses needed for the Emergency Override. The SecureCode Emergency Override is described on the following page.



To Disarm the System without using a Transmitter:

- **Step 1** With the system in the armed condition, enter the vehicle via the driver's door (be aware that the system will activate to an alarm condition when the door is opened).
- **Step 2** Using the ignition key, turn the vehicle's ignition on.
- Step 3 <u>Within 5 seconds</u>, press <u>and release</u> the Valet Switch once. The system will immediately disarm.

A procedure which separate, but similar, to an Emergency Override is the Alarm

Valet Mode (page 23-24), which prevents the system from performing any automatic arming operations which may be otherwise programmed to occur.

SecureCode:

SecureCode is a user-programmable custom Emergency Override required two stages of valet switch presses. The procedure for Emergency Override with a customized SecureCode is:

- **Step 1** With the system in the armed condition, enter the vehicle via the driver's door (be ready for the system to activate to an alarm condition).
- Step 2 Using the ignition key, turn the vehicle's ignition switch on.
- Step 3 <u>Within 5 seconds</u> press and release the Valet Switch the same number of times that have been programmed for stage #1.
- **Step 4** After a few seconds, the siren will stop sounding, chirp once, and then resume sounding.
- **Step 5** Now, <u>within 5 seconds</u> press <u>and release</u> the Valet Switch <u>the same</u> <u>number of times</u> that have been programmed for stage #2. Within a few seconds the siren will stop sounding, and the unit will disarm.

If a customized SecureCode has been programmed, the system will disarm a few seconds after the correct entry, and if an incorrect entry is made, the system will not disarm. See page 30 for more detailed explanation of SecureCode, and how to program a customized SecureCode.

ENHANCED REMOTE PANIC

To Activate "Enhanced Remote Panic":

Press & <u>Hold for 3 Seconds</u> the "Arm/Lock" Button ($\frac{1}{10}$) <u>OR</u> the "Disarm/Unlock" Button ($\frac{1}{10}$)



Programming Doors Lock With Automatic Rearming:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released thirteen times. The system's response will be thirteen siren chirps, and the Status Light flashing thirteen times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to turn this feature on (the siren will chirp once) or the "Disarm/Unlock" button to turn this feature off (the siren will chirp twice).

Feature #14

Ignition Activated Vehicle Recovery (Factory Default Setting Off)

The Vehicle Recovery feature activates the system into an alarm condition automatically in the event that you are forced from your car. "Ignition Activated" Vehicle Recovery is one three methods of activating this feature, which is explained on page 27.

Programming Ignition Activated Vehicle Recovery:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released fourteen times. The system's response will be fourteen siren chirps, and the Status Light flashing fourteen times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to turn on Ignition Activated Vehicle Recovery (the siren will chirp once) or the "Disarm/Unlock" button to turn this feature off (the siren will chirp twice).

Feature #15

Door Activated Vehicle Recovery (Factory Default Setting Off)

The Vehicle Recovery feature activates the system into an alarm condition automatically in the event that you are forced from your car. "Door Activated" Vehicle Recovery is one three methods of activating this feature, which is explained on page 27.

Programming Door Activated Vehicle Recovery:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released fifteen times. The system's response will be fifteen siren chirps, and the Status Light flashing fifteen times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to turn on the Door Activated Vehicle Recovery feature (the siren will chirp once) or the "Disarm/Unlock" button to turn this feature off (the siren will chirp twice).

Feature #16

Remote Activated Vehicle Recovery (Factory Default Setting Off)

This form of the Vehicle Recovery feature gives you the option of activating

Status Light flashing ten times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to turn on "Unlock #2 When Ignition Turned Off" (the siren will chirp once) or the "Disarm/Unlock" button to turn this feature off (the siren will chirp twice).

Feature #11

Open Door Bypass Of Ignition Locking (Factory Default Setting On)

This feature cancels the automatic locking or unlocking of the vehicle's doors when the ignition switch is turned on or off if one of the doors is open. This feature can be useful, for example, for leaving others within a locked vehicle when only the driver exits the vehicle. Features #8, #9, or #10 must be turned on for this feature to operate.

Programming Open Door Bypass Of Ignition Locking:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released eleven times. The system's response will be eleven siren chirps, and the Status Light flashing eleven times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to turn on "Open Door Bypass Of Ignition Locking" (the siren will chirp once) or the "Disarm/Unlock" button to turn this feature off (the siren will chirp twice).

Feature #12

Doors Lock With Last Door Arming (Factory Default Setting Off)

This feature adds the automatic locking of the doors to feature #4, Last Door Arming. If this feature is turned on, the doors will lock when the system becomes armed 30 seconds after closing the last door. Feature #4 must be turned on for this feature to operate.

Programming Doors Lock With Last Door Arming:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released twelve times. The system's response will be twelve siren chirps, and the Status Light flashing twelve times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to turn on the Doors Lock With Last Door Arming feature (the siren will chirp once) or the "Disarm/Unlock" button to turn off the feature (the siren will chirp twice).

Feature #13

Doors Lock With Automatic Rearm (Factory Default Setting Off)

This feature adds the automatic locking of the doors to feature #5, Automatic Rearming. If this feature is turned on, the doors will lock when the system rearms itself 90 seconds after being disarmed by the transmitter. Feature #5 must be turned on for this feature to operate.

"Enhanced Panic" allows you to activate Remote Panic from either the "Arm/ Lock" button or "Disarm/Unlock" button; the former locks the doors and the latter unlocks the doors when Remote Panic is activated.

To Deactivate Panic:

Press & Release either button

Deactivating Remote Panic from the "Arm/Lock" button results in the system being in the Armed state with locked doors. If the "Disarm/Unlock" button is used to deactivate Remote Panic the system will be in the Disarmed state, with unlocked doors.

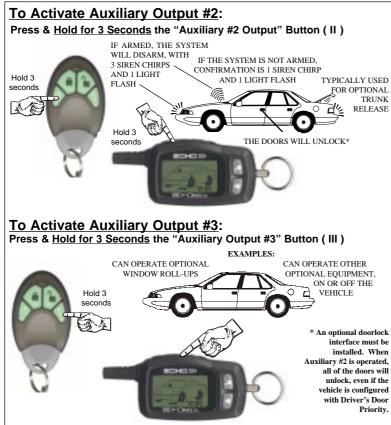
Upon Activating Panic:

- ✓ The electronic siren will sound.
- ✓ The vehicle's exterior parking lights will flash.
- \checkmark The vehicle's doors will lock or unlock, depending on button used.
- The Panic feature is designed for situations in which the user feels threatened and/or a need to attract attention.
- Panic can be activated anytime, whether the vehicle's ignition is turned on or off, and has a 30 second duration (60 seconds is optional) unless it is deactivated using the remote control.
- At the end of the Panic cycle the system will reset, enter the armed state, and lock the doors.
- If the Echo transceiver is used to activate the Panic feature, it will also chirp continuously as long as Panic is activated, although its chirps can be silenced without stopping Panic by pressing the "II", "III", or Programming button.

AUXILIARY OUTPUTS

The previous sections have described the basic everyday operations of your Crime Guard system. The transmitter or Echo transceiver is also capable of operating several other optional functions which are explained in this section.

Two auxiliary outputs are available for use (the primary output Arms and Disarms the system). One output, the Auxiliary #2 output, is also capable of Disarming the system; thus it is ideally suited for remote trunk release. Operating Auxiliary #2 will also unlock the doors and Disarm the system, should it be armed. If desired, the unlocking of the doors and disarming of the system may be programmed to not operate. The other output, Auxiliary #3 output cannot affect the armed or disarmed status of the system, nor unlock the doors as part of its operation.



Auxiliary Output Notes:

- Auxiliary #2 output may be activated anytime, provided the vehicle's ignition is off. While the ignition is on, the Auxiliary #2 output can be operated as long as a vehicle door is open; this prevents the output from being accidentally activated while driving.
- If feature #6 is programmed to have the Auxiliary #2 output disarm the system, the doors will unlock when it is activated; and there is an audible and visual confirmation: 3 siren chirps and one light flash if the system also disarms, and one chirp and light flash otherwise.
- Auxiliary #3 output may be activated at any time, regardless of the ignition being on or off, and regardless of the security system's status.
- Auxiliary #3 has no audible and/or visual confirmation.

Feature #8

Doors Lock When Ignition Is Turned On (Factory Default Setting On)

This feature configures the system to automatically lock the vehicle's doors every time that the ignition switch is turned on. An exception to this would be if feature #11 is turned on, and a door being open when the ignition switch is turned on. The two following features, #9 and #10, control the automatic unlocking operation.

Programming Doors Lock When Ignition Is Turned On:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released eight times. The system's response will be eight siren chirps, and the Status Light flashing eight times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to turn on "Doors Lock When Ignition Turned On" (the siren will chirp once) or the "Disarm/Unlock" button to turn this feature off (the siren will chirp twice).

Feature #9

Unlock #1 When Ignition Is Turned Off (Factory Default Setting On)

This feature configures the system to automatically unlock the vehicle's doors every time that the ignition switch is turned off. An exception to this would be if feature #11 is turned on, and a door being open when the ignition switch is turned off. If the system is installed without the Driver's Door Priority unlock interface, this feature unlocks all of the doors when the ignition switch is turned off. If Driver's Door Priority is installed, this feature controls the driver's door only, and the next feature will control the automatic unlocking of the other doors. Programming Unlock #1 When Ignition Is Turned Off:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released nine times. The system's response will be nine siren chirps, and the Status Light flashing nine times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to turn on "Unlock#1 When Ignition Turned Off" (the siren will chirp once) or the "Disarm/Unlock" button to turn this feature off (the siren will chirp twice).

Feature #10

Unlock #2 When Ignition Is Turned Off (Factory Default Setting Off)

Explained in the previous feature, this feature controls the automatic unlocking of all doors except the driver's door if Driver's Door Priority is installed. Programming Unlock #2 When Ignition Is Turned Off:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released ten times. The system's response will be ten siren chirps, and the

Feature #5

Automatic Rearming (Factory Default Setting Off)

This feature prevents your system from being disarmed accidentally, configuring the system to automatically rearm itself 90 seconds after it has been Disarmed by the transmitter. The operation of the Automatic Rearming feature is explained in more detail on pages 12-13.

Programming Automatic Rearming:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released five times. The system's response will be five siren chirps, and the Status Light flashing five times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to turn on the Automatic Rearming feature (the siren will chirp once) or the "Disarm/Unlock" button to turn the Automatic Rearming feature off (the siren will chirp twice).

Feature #6 Auxiliary Output #2 Also Disarms System (Factory Default Setting On)

This feature configures the Auxiliary Output #2 to automatically Disarm the system at the same when it is used.

Programming Auxiliary Channel #2 Disarms System:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released six times. The system's response will be six siren chirps, and the Status Light flashing six times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to have the system Disarm when Auxiliary Output #2 is used (the siren will chirp once) or the "Disarm/Unlock" button to have Auxiliary Output #2 not Disarm the system when it is used (the siren will chirp twice).

Feature #7 Parking Light Illumination Upon Disarm (Factory Default Setting On)

This feature configures the system to illuminate the vehicle's parking and interior lights for 30 seconds when it is Disarmed. Otherwise, if this feature is turned off, the parking lights will illuminate only 5 seconds upon Disarming. Programming Parking Light Illumination Upon Disarm:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released seven times. The system's response will be seven siren chirps, and the Status Light flashing seven times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to have the parking lights turn on for 30 seconds when the system is Disarmed (the siren will chirp once) or the "Disarm/Unlock" button to have the parking lights on for 5 seconds when the system is Disarmed (the siren will chirp twice).

SILENT ARMING AND DISARMING

The transmitter or Echo transceiver can also silently Arm or Disarm the system. Pressing the "II" button twice simply reverses, or "toggles" the Armed or Disarmed status that the system is in at the time.

To Silently Arm or Disarm the System:

Press & Release the "Auxiliary #2 Output" Button (II) <u>Twice</u>

Silent Arming and Silent Disarming are both operated by double-pressing the same transmitter button.



GLASS BREAKAGE & 2-ZONE IMPACT SENSOR

Sensors: The Crime Guard 850ⁱ⁴e security system is equipped with a Glass Breakage and Dual-Zone Infrasonic Impact Sensor to increase the effectiveness of the system. The impact sensor is just one in a comprehensive line of available sensors. Other available options are: piezo shock sensors, and microwave/radar sensors which can detect objects in motion both inside and outside the vehicle.

- The Crime Guard 850i⁴e control module features dual auxiliary sensor ports, which easily allows the addition of a further optional sensor.
- If desired, the sensor zone only can be bypassed when the system is armed with the transmitter or Echo transceiver, but leaving the other protection zones in place. This feature is convenient when environmental factors, such as hail or thunder storms, may lead to the system being activated erroneously.

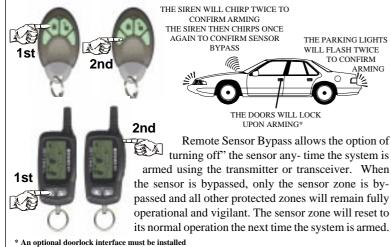
Prewarning Detection Circuit: When the sensor's prewarn zone is violated the security system will respond by chirping the siren three times and relocking all of the doors.* If the prewarn circuit is triggered five times while the system is armed, the circuit will automatically shutdown until the security system is disarmed and armed again.

• Prewarning operates from the Infrasonic Impact Sensor only; the Glass Breakage fully activates the system.

* An optional doorlock interface must be installed

REMOTE SENSOR BYPASS To Activate Remote Sensor Bypass:

Press & Release the "Arm/Lock" Button ($\frac{1}{10}$) to Arm, then Press & Release the "Auxiliary Output #2" Button (II)



REMOTE ENGINE STARTING

The remote engine starting feature should not be used when the vehicle is parked in an enclosed structure or garage!

Your Crime Guard $850i^4$ system offers the ultimate in comfort and convenience- remote engine starting. This feature allows the vehicle's interior to be warmed in the winter or cooled in the summer before you enter the vehicle. Simply leave the climate controls set to the desired settings when leaving the vehicle prior to using the remote starting feature.

The following pages explain the remote engine starting operations. If the vehicle has a manual transmission, a special procedure is required when exiting the vehicle to enable the ability to remote start. Otherwise, the activation of remote start is the same for automatic or manual transmission vehicles.

Feature #2

30 or 60 Second Alarm Duration (Factory Default Setting 60 Seconds)

This feature allows the option of a 30 or 60 second Alarm Duration, which is when the system has activated in Armed state, sounding the siren and flashing the parking lights.

Changing the Alarm Duration:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released twice. The system's response will be two siren chirps, and the Status Light flashing two times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to set the Alarm Duration for 60 seconds (the siren will chirp once) or the "Disarm/Unlock" button to set the Alarm Duration for 30 seconds (the siren will chirp twice).

Feature #3

3 / 45 Second Arming Delay (Factory Default Setting 3 Second)

This feature determines how long after the Arming confirmation chirp that the system becomes fully Armed. The Arming Delay applies to the system Arming regardless if it occurs from using the transmitter/transceiver, Last Door Arming or Automatic Rearming.

Programming 3 / 45 Second Arming Delay:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released three times. The system's response will be three siren chirps, and the Status Light flashing three times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Disarm/Unlock" button to configure the system with a 45 second Arming Delay (the siren will chirp once) or the "Arm/Lock" button to configure the system with a 3 second Arming Delay (the siren will chirp twice).

Feature #4

Last Door Arming (Factory Default Setting Off)

This feature configures the system to automatically Arm itself 30 seconds after the vehicle's last door is closed.

Programming Last Door Arming:

Follow Steps 1 to 4 on page 28; at Step 4 the Valet Switch will be pressed and released four times. The system's response will be four siren chirps, and the Status Light flashing four times, pausing, then repeating. Within 10 seconds, press and release the transmitter/transceiver's "Arm/Lock" button to turn on Last Door Arming (the siren will chirp once) or the "Disarm/Unlock" button to turn off Last Door Arming (the siren will chirp twice).

Feature #1

SecureCode (Factory Default Setting: 1 Press)

"SecureCode" allows the user to customize the number of Valet Switch presses which are required to successfully perform an Emergency Override. **The basic Emergency Override procedure is described on page 14**. Instead of a single "1 press" of the Valet Switch which would be required in order to perform an Emergency Override, two stages of Valet Switch presses must be made. In each of the two stages, the Valet Switch will need to be pressed 1 through 9 times, as programmed by the user.

Once the system is disarmed, if Alarm Valet Mode is desired, <u>without</u> <u>pressing the brake pedal</u> just press and hold the Valet Switch for 2 seconds to place the system into Alarm Valet Mode (solid Red Status Light). Should a mistake be made entering the SecureCode, after a failed attempt to achieve SecureCode, the ignition switch must be turned off, then on again before another attempt is made. Should two failed SecureCode attempts be made, the system will ignore any further presses of the Valet Switch for two minutes.

In addition to Emergency Override, if any of the three anti-carjacking features are utilized, a correct customized SecureCode would also be required to turn off anti-carjacking once it has become fully activated.

How to custom program a new SecureCode:

- **Step 1** Follow Steps 1 to 4 in the previous "How to Program Features" instructions; at Step 4 the Valet Switch will be pressed and released once (the siren chirps once) to access "feature #1".
- **Step 2** Within 10 seconds slowly press and release the transmitter's "Arm/Lock" button the number of times (1 through 9) equal to the desired SecureCode for stage 1, allow the system to respond to each transmitter button press with a siren chirp before pressing the button again.
- Step 3 After entering the first stage by pressing the transmitter "Arm/Lock" button the desired number of times, and receiving a chirp for each press, wait for the system, after the final button press, to chirp the siren again the total number of times that the button was pressed.
- Step 4 Configure stage 2 of the SecureCode by now pressing and releasing the "Disarm/Unlock" button the number of times desired for the stage 2 (1 through 9 presses). This should be done in the exact same fashion as the stage 1 entry- press the "Disarm/Unlock" button, wait for a single chirp before pressing the button again, and then when final button press is done, wait after the single chirp for the siren to chirp the total number entered.
- Step 5 Wait 10 seconds, and allow the system to time out of features programming mode (as indicated by a short sounding of the siren).

To Activate Remote Starting:

Press & Release the "Arm/Lock" Button ($\frac{1}{10}$) and the "Disarm/Unlock" Button ($\frac{1}{10}$) together



To remote start the vehicle:

- 1- Press and release together the transmitter or Echo transceiver's "Arm/Lock" and "Disarm/Unlock" buttons. The system will respond first by rapidly flashing the Status Light Green, then by turning on the ignition and flashing the parking lights once.
- 2- The starter will engage until the engine runs; 10 seconds later the parking lights will illuminate steady during the period that the engine is running from being remotely started. (having them flash instead is an option).

If the Echo transceiver is used to activate remote engine starting feature, it will further sequence status indications beyond what the system does in the vehicle. When the Echo is used for remote starting:

- It will play a musical melody, and the "start" icon, puffs of smoke, appear behind the vehicle (5 different musical melodies are programmable).
- Once the engine has started, when the vehicle's parking lights come back on the "start: icon's puffs of smoke will change to appearing sequentially.
- When the engine stops running, whether by safety condition or transceiver command, a different musical melody is played, and the "start" icon disappears. If a safety circuit stops the engine, the "crossed out key" icon will momentarily appear (but not if the transceiver's command stops the engine).
- If a safety circuit prevents the starting attempt, the "engine stopped" melody will play, and the "crossed out key" icon will appear.

Once the engine has been remotely started, it will run for 10 minutes (an optional 20 minute setting may be programmed). To remotely stop the engine again press and release together the "Arm/Lock" and "Disarm/Unlock" buttons. The system will stop the engine, and extinguish the parking lights.

• When leaving the vehicle before remote starting, remember to set the climate controls to the desired heating or air conditioning settings.

• If desired, the system's alarm function may be armed or disarmed as needed during remote start operations (the system must be disarmed before entering the vehicle).

Should the engine fail to start on the first attempt, the system will subsequently make as many as three further attempts, if needed. Please note that each starting attempt takes approximately 20 seconds for the system to check the vehicle's status, cycle the ignition and starter circuits, and then monitor vehicle status again before the next attempt.

Certain conditions will prevent the engine from remotely starting, or if remotely started already, will stop the running engine. These conditions are:

- $\checkmark~$ A pressed brake pedal.
- ✓ The gear selector not being in the "park" or "neutral" position, or alternatively, the parking brake not being set.
- ✓ An open hood.

An open door will not prevent the system from starting the engine; if the engine has already been remotely started, opening a door will not stop the running engine, unless the system is armed. Opening a door with the engine running by remote control and the system armed will result in the system going into an alarm condition, sounding the siren and flashing the lights, and stopping the engine. If a start command is sent from the transmitter, but any of the previously listed conditions are present, the system will not attempt to start the engine and will instead have a short sounding of the siren to indicate a violated safety circuit. The violated safety circuit conditions which can produce this indication are the gear selector not in the "park" position, an open hood or trunk, or a pressed brake pedal. If the system is in Starting Valet Mode, it simply will not respond to a transmitter or transceiver command.

To drive the vehicle away after remote starting, disarm the system (if needed) open the door to enter the vehicle, insert the key into the ignition switch and turn the switch to "on" or "run" position (not "start"!). Then press the brake pedal or remove the gear selector from "park"; now the engine is no longer running from the system, but rather from the ignition key. Pressing the Valet Switch also turn off the system's running the engine, but without the violated safety circuit siren sounding.

"Stick Shift" Remote Starting Setup Procedure: When the 850i⁴e is installed into a manual transmission vehicle, <u>programmable feature #30 must</u> <u>be turned on</u>. Then, whenever remote starting will be desired later the following procedure must be followed before exiting the vehicle:

Step 1 With the engine running and foot on the brake, apply the parking brake, put the transmission shifter in "neutral", and remove your foot from the brake.

To Change a Feature:

- Step 5 After accessing the desired feature, <u>within 10 seconds</u> Press & Release either the transmitter/transceiver's "Arm/Lock" button or the "Disarm/Unlock" button.
 - Pressing the "Arm/Lock" button turns the feature on; the siren will chirp once and the Status Light will turn on.
 - Pressing the "Disarm/Unlock" button turns the feature off; the siren will chirp twice and the Status Light will turn off.

To Access and Change further Features:

Step 6

If there are more features to be programmed, <u>within 10 seconds</u> of the previous action Press & Release the Valet Switch the same number of times as the next desired feature's number.

- Again the siren will chirp and the Status Light will flash as many times as the Valet Switch was pressed to indicate the new feature number which is now accessed.
- Use the transmitter/transceiver as described in Step 5 to change the newly accessed feature as desired.
- Repeat this Step 6 for each additional feature until all features are programmed.

To Exit Programing Mode:

- **Step 7** Allow 10 seconds to pass without performing any programming actions; or, turn the vehicles's ignition in.
 - The siren will sound briefly and the Status Light will go out to confirm that the system is exiting Programing Mode.

Once the system is in Programming Mode, if at any time 10 seconds elapse without programming activity, the system will automatically exit Programming Mode. To prevent the system from prematurely exiting Programming Mode, the feature can entered again by pressing the Valet Switch, or if a feature is accessed, by pressing either of the transmitter or transceiver buttons. Features may be selected and accessed in any order.

A convenient Feature Programming Checklist is on pages 46-47, which greatly simplifies the feature programming process.

Important Note: The following pages explain each of the programmable features in detail. <u>Please note that programmable features may add or change the "factory-set" operations as described in this guide</u>. Therefore, it is important to read the description of any feature before changing it from its factory-set default setting. Some programmable features are for installation-related issues only.

PROGRAMMING THE 850ī^⁴e

The Crime Guard 850i⁴e is a sophisticated, yet flexible security and convenience system. Many of its operations may be configured as the user desires. "Programming Mode" allows you to configure 31 operational features to suit your wants and needs. Your vehicle's ignition key and the Valet Switch are used to enter the Programming Mode, as described by the three steps listed below. Once in Programming Mode, the Valet Switch is used to access the desired feature, and the transmitter or transceiver is then used to change the chosen feature's status. During the process, the siren and the Status Light indicate certain conditions of Programming Mode and the chosen feature's status.

Once the system is in Programming Mode, the Valet Switch is then pressed and released the number of times equal to the feature number which is to be accessed for programming. After pressing the Valet Switch as many times as the feature number, the siren will chirp the same number of times and the Status Light will flash the same number, between pauses.

Once the feature has been selected its status, or setting, can be chosen by pressing the appropriate button on the transmitter. Basically, pressing the transmitter's "Arm/Lock" button turns the feature on, or pressing the transmitter's "Disarm/Unlock" button turns the feature off. Features which are not "on or off" features, such as the activated alarm duration of 30 or 60 seconds, are noted otherwise.

To Enter Programing Mode:

- **Step 1** Turn the vehicles's ignition on.
- **Step 2** Turn the ignition off.
- **Step 3** <u>Within 5 seconds</u>, Press & Release the Valet Switch 5 times.
 - The siren will chirp then sound briefly and the Status Light will flash to confirm that the system is entering Programing Mode.
 - •Once in Programming Mode, if 10 seconds of no programming activity occurs, the system will exit Programming Mode. Programming activity is the pressing of the Valet Switch or pressing a transmitter button once a feature is accessed.

To Access a Feature:

- Step 4 <u>Within 10 seconds</u>, Press & Release the Valet Switch the same number of times as the desired feature's number.
 - The siren will chirp and the Status Light will flash as many times as the Valet Switch was pressed to indicate the feature number which is now accessed.

- Step 2 Press and release the transmitter's "Arm/Lock" and "Disarm/Unlock" buttons together. The Status Light will begin flashing Green, and the 850i⁴e is now keeping the vehicle's engine running. Do not press the brake pedal from this point, and the parking brake must remain on.
- Step 3 Within 2 minutes, turn off the ignition key, exit the vehicle and then press the transmitter's "Arm/Lock" button to lock the vehicle. The 850i⁴e will also arm, and the previously running engine will stop. The Status Light also changes to show the "armed" indication, flashing slowly Red, but every fourth flash will be Green, indicating that the system is "armed, and ready for remote starting".

During the setup procedure, the parking brake must remain set, and the regular brake pedal must not be pressed when and after the transmitter's "Arm/Lock" and "Disarm/Unlock" buttons are pressed. After exiting the vehicle, the transmitter's "Arm/Lock" button only must be used to secure the vehicle. Using any other transmitter button will produce the appropriate system response, but the remote starting setup will be voided.

Once the system is fully setup for remote starting, it will start the engine if the next transmitter operation is pressing the "Arm/Lock" and "Disarm/Unlock" buttons together. If any other transmitter button is the remote starting setup will be voided. If the armed alarm should be triggered during this period, the remote starting setup condition will be voided.

Pit-Stop Feature: This feature allows you to turn off the ignition switch, remove your keys, leave the vehicle and lock your doors while leaving the engine running. To use this feature, have the engine running normally from the ignition switch, have the gear selector in "park", and your foot off of the brake pedal. Press the Valet Switch twice; the parking lights will flash once and the siren chirps 5 times; then turn the ignition off. The engine will remain running for the programmed run time, or it will turn off if another transmitter/transceiver signal is received, a safety circuit is violated, or if the Valet Switch is pressed.

Turbo Timer Feature: This feature is similar to the Pit-Stop operation, but it must be programmed to operate (feature #31), and it will automatically operate every time that the ignition key turns off. It is typically recommended that users of vehicles equipped with turbocharged engines allow the engine to idle a few minutes before turning it off. When this feature is programmed on, the 850i⁴e will automatically keep the engine running for two minutes as follows:

 With the engine running, hold the brake pedal and engage the parking brake. When the brake pedal is released, the 850i⁴e will keep the engine running for 2 minutes, and then automatically turn it off. The vehicle may be secured before this time by arming the system, which will also lock the doors.

After 2 minutes the engine will stop running. Turbo Timer can be prevented form engaging, if desired, by turning the engine off first and then engaging the parking brake, or step back on the brake pedal at any time to turn off the engine.

UNAUTHORIZED TRANSMITTER ALERT & AUTOMATIC TRANSMITTER VERIFICATION

This patented technology, which is standard on all Crime Guard models, eliminates an inherent weakness found in any remote-controlled vehicle security and keyless entry system. In all such systems, allowance is made for multiple transmitters to operate the system. In a matter of seconds, anyone familiar with the programming procedure can easily code their own unauthorized transmitter into the system. Although every vehicle remote-controlled keyless entry or security system is susceptible, Crime Guard security systems audibly alerts you if the system's programming mode has been accessed and visually informs you at all times of the number of remote controls capable of operating your system.

How It Works:

<u>Unauthorized Transmitter Alert</u>TM: Anytime the system has a transmitter and/or transceiver programmed, for 48 hours thereafter the siren will sound a brief series of chirps every time the vehicle's ignition is turned on. This audible warning alerts you that the system has had transmitter programming activity.

<u>Automatic Transmitter Verification</u>TM: In normal everyday use, for a period of 10 seconds after the vehicle's ignition is turned on, the system's Status Light reports the total number of transmitters or Echo transceivers which can operate the system. For example: After turning on the vehicle's ignition, if the Status Light flashes twice between pauses, two transmitters are programmed to operate the system. If the indication were three flashes between pauses, three transmitters are capable of operating the system. If the Unauthorized Transmitter Alert has been activated, this visual display period is extended to 90 seconds.

Every time that the Echo transceiver receives a signal from the system, it also momentarily shows the number of operating transmitters/transceivers; this occurs where the clock display normally shows the time.

In the event that the Unauthorized Transmitter Alert is activated, or if the Status Light ever shows a different number of authorized transmitters, you can easily reprogram your transmitters to eliminate the threat.

VEHICLE RECOVERY

Your system is equipped with three separately programmable Vehicle Recovery protection features, which also provide Anti-Carjacking protection. The Vehicle Recovery operation may be selectively activated by the ignition, by an open door, or by the transmitter or Echo transceiver.

How It Works:

Once the Vehicle Recovery process has begun, the user has 53 seconds to cancel the process by pressing the Valet Switch once. If Vehicle Recovery is not cancelled, 53 seconds after being activated the siren will begin to chirp for 7 seconds to alert the user that the system is about to enter into an alarm condition.

If the Vehicle Recovery process is not cancelled before the 60 second countdown expires, the system will enter an alarm condition, sounding the siren and flashing the parking lights. The stater interrupt will engage 30 seconds after this occurs, or immediately should the ignition be turned off in the meantime.

<u>Once the system enters the alarm condition, it will not respond to the transmitter/transceiver, nor will the system reset automatically after 60 seconds.</u>

Once in the alarm condition, the Vehicle Recovery Protection can only be disengaged by:

Step 1 Turning the vehicle's ignition off.

- Step 2 Turning the ignition back on.
- Step 3 Within 5 seconds, perform an Emergency Override using the Valet Switch.

Level #1: Vehicle Recovery activated by the vehicle's ignition:

The Vehicle Recovery process is started every time the vehicle's ignition is turned on. This is programmable feature #14.

Level #2: Vehicle Recovery activated by an open door:

The Vehicle Recovery process is started by a door of the vehicle being opened, but only if the ignition is on when the door is opened. This is programmable feature #15.

Level #3: Vehicle Recovery activated using a remote control:

The Vehicle Recovery process is started by pressing holding the transmitter's or Echo transceiver's "III" (or, "Auxiliary Output #3") button for 3 seconds, but only if the vehicle's ignition is on. This is programmable feature #16.

and pause to indicate which protected zone was violated while the system is still armed, after it's disarmed, and until the vehicle's ignition is turned on. The system's Zone Violation memory can store two consecutive zone violations. If there have been multiple violations, the Status Light will replay the two most recent violations in the order in which they occurred.

- 9) 2 Red Flashes / Pause = System was triggered by an open hood or trunk.
- 10) 3 Red Flashes / Pause = System was triggered by an open door.
- 11) 4 Red Flashes / Pause = System was triggered by the sensor.

Starting System Status: The primary function of the Status Light is to indicate the status of the remote starting system:

- 12) Off = The remote starter system is off and in standby mode. The security system is disarmed and not performing automatic functions.
- 13) Flashing Slow Green = The engine is running after remote starting.

14) Flashing Fast Green = A remote start command has been received, and the system is in the process of starting the engine.

Remote Starting Diagnostics: Whenever the system is placed into Valet Mode, the Status Light illuminates solid Red. However, when this occurs, the Status Light will flash Red, then 1 to 6 Green flashes before resuming solid Red. This indicates why the engine stopped running from the last previous remote starting.

- 15) Red / 1 Green Flash / Red = Programmed run time expired.
- 16) Red / 2 Green Flashes / Red = Brake was pressed or hood opened.
- 17) Red / 3 Green Flashes / Red = Engine stalled or bad tach signal.
- 18) Red / 4 Green Flashes / Red = Received transmitter command to stop.
- 19) Red / 5 Green Flashes / Red = Gear selector removed from "park".
- 20) Red / 6 Green Flashes / Red = Security system triggered or low voltage.

Combination Indications: These indications occur when security and remote starting operations are, or have been, simultaneous.

- 21) Slowly Alternates Red & Green = Full Valet Mode (page 24).
- 22) Solid Green w/ Red Flash = Security Armed with Starting Valet Mode.
- 23) Solid Red w/ Green Flash = Remote starter system engaged with security system in Valet Mode.
- 24) Rapidly Alternates Red & Green = Remote starter system engaged with security system armed.
- 25) Slow Flashing Green w/ 2 to 4 Red Flashes = This indication is during remote start operation after disarming the alarm, and shows that the previously Armed alarm was activated and reset prior to the remote starting. The Red flashes are the Zone Violation (previous page), occurring with the "engine running" indicator.

ALARM VALET & STARTING VALET MODES

The Valet Switch may be located in the Status Light/Valet Switch Assembly, or, the installer may have mounted the Valet Switch in a hidden, yet accessible location. <u>Please ensure that you and others who use your vehicle are aware of the location of the Valet Switch</u>.

Alarm Valet Mode: This allows you to turn off all of the "alarm" operations of the security system while retaining the remote convenience features such as keyless entry, Panic, and the Auxiliary Outputs. The system may only be placed into Alarm Valet Mode when it's disarmed; if armed, an Emergency Override must be performed before placing into Alarm Valet Mode. Once the system is in Alarm Valet Mode, it cannot become armed from the transmitter, Last Door Arming, or Automatic Rearming.

Although both operations use the Valet Switch, Alarm Valet Mode and Emergency Override are two similar, but different procedures. Emergency Override disarms an armed and activated system, and requires the ignition key. Alarm Valet Mode turns off the alarm operations of the *disarmed* system, but without the need of the ignition key.

Alarm Valet Mode is designed for situations in which it is not convenient for the security portion of the system to be operational, such as during extended stopovers for vehicle servicing, maintenance, valet parking, washing, etc.

Starting Valet Mode: This feature is similar to Alarm Valet Mode, but its purpose is turn off the remote starting operations of the system. <u>The system may be placed into Starting Valet Mode and Alarm Valet Mode independently, or into both modes at the same time</u>. Please note that the only difference in obtaining either mode is whether or not the brake pedal is being pressed.

Alarm Valet Mode: WITH THE SYSTEM DISARMED, AND WITHOUT DEPRESSING THE BRAKE PEDAL, PRESS AND HOLD THE VALET SWITCH FOR 2 SECONDS Full Valet Mode: WITH THE SYSTEM DISARMED, PRESS AND HOLD Full Valet Mode: WITH THE SYSTEM DISARMED, PRESS AND HOLD

THE VALET SWITCH WITH AND WITHOUT DEPRESSING THE BRAKE PEDAL. HOLD THE VALET SWITCH UNTIL 4 CHIRPS TOTAL ARE HEARD.

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To enter Alarm Valet Mode:

With the system disarmed, <u>and without pressing the brake pedal</u>, Press & Hold the Valet Switch for 2 seconds.

- The siren will chirp twice, the parking lights will flash twice and the Status Indicator Light will illuminate solid Red, then a series of Green flashes, then return to solid Red. The Green flashes, numbering from 1 to 6 times, is a remote starting diagnostic code (see page 26).
- To indicate that the system is in Alarm Valet Mode, the Status Light remains solid Red whenever the system is in Alarm Valet Mode.
- To remind the user that the system is in Alarm Valet Mode, the siren will chirp once every time the vehicle's ignition is turned off.

To Enter Starting Valet Mode:

With the system disarmed, <u>and depressing the brake pedal</u>, Press & Hold the Valet Switch for 2 seconds.

- The siren will chirp twice, the parking lights will flash twice and the Status Indicator Light will illuminate solid Green to confirm that the system is in Starting Valet Mode.
- There is no audible reminder that the system is in Starting Valet mode.

To Enter both Modes (Full Valet Mode):

With the system disarmed, Press & Hold the Valet Switch for 4-6 seconds <u>with</u> <u>the brake pedal in both conditions</u>. For example, start pressing the Valet Switch with the brake pedal unpressed; as soon as two chirps are heard, press the brake pedal <u>but do not release the Valet Switch</u>. As soon as a second set of chirps is heard, the Valet Switch may be released. The system is now in Full Valet Mode. It does not matter in what order the pressed or unpressed brake pedal occurs.

- Once the system is in Full Valet Mode the Status Light will slowly alternate Green and Red to confirm that the system is in Full Valet Mode. This indication is present whenever the system is in Full Valet Mode.
- There will be the single chirp reminder every time the ignition turns off. This is for the Valet Mode part of the Full Valet Mode condition.

To Exit any of the 3 forms of Valet Mode:

Simply Press & Release the Valet Switch at any time.

• The Status Light will turn off to confirm exit from either Alarm Valet Mode, Starting Valet Mode, or both.

The Echo Transceiver's Reaction to Valet Mode:

If the Echo transceiver was last used to operate the system, when the system is placed into alarm Valet Mode it will send a signal to the Echo. When this occurs:

- It will play a musical melody.
- Whatever status icons previously displayed will be replaced by the "VALET" icon.

When the system is removed from Alarm Valet Mode, the Echo will again play a melody, and the "VALET" icon changes to "DISARMED". The "VALET" icon is for Alarm Valet Mode only; Starting Valet Mode is indicated by the Status Light only.

STATUS INDICATOR LIGHT

The Status Light visually confirms the status of the system and provides a high level of visual deterrence. Two colors are shown- Red for security operations, and Green for remote starting operations. Combinations of both colors are seen when the two operations are occurring together. The Status Light, which shares a housing assembly with the Valet Switch, is normally mounted in a location where it can be easily seen by the driver, as well as from outside the vehicle.

Security System Status: The Red colored operations of the Status Light indicate the status of the security system:

- 1) Off = The security system is disarmed and not performing automatic functions. The remote starter system is off, but in standby mode.
- 2) On Red Constant = The security system is in the Valet Mode, with the remote starter system off and in standby mode.
- 3) Flashing Slow Red = The security system is fully armed, with the remote starter system off and in standby mode.
- 4) Flashing Fast Red = Last Door Arming or Automatic Rearming is in progress, with the remote starter system off and in standby mode.

Automatic Transmitter Verification: For the first 10 seconds after the vehicle's ignition is turned on, the Status Light will flash Red a number of times that equal the number of transmitters and/or Echo transceivers that are capable of operating the system:

- 5) 1 Red Flash /pause = 1 transmitter/transceiver is programmed.
- 6) 2 Red Flashes /pause = 2 transmitters/transceivers are programmed.
- 7) 3 Red Flashes /pause = 3 transmitters/transceivers are programmed.
- 8) 4 Red Flashes /pause = 4 transmitters/transceivers are programmed.

Zone Violation: If the system enters an alarm condition, the Status Light will stop flashing slow Red and begin to flash in sequence to indicate which protected zone caused the alarm condition. The Status Light will flash