««EXCALIBUR>

AL-1630-EDPB

Deluxe Alarm & Remote Start

July 28, 2010

Operation Guide



Temporary cover. Color cover is in a separate file.

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This device complies with FCC 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 or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

Transmitter Overview

THE TRANSMITTER

Transmitter part number: 147-03 Call your dealer or visit www.caralarm.com to order replacement transmitters.

- 1) Antenna
- 2) Lock Button
- 3) Unlock Button
- 4) Trunk Button
- 5) Start Button

Transmitter battery replacement: Remove the small screw from the lower back case, and separate the transmitter halves. Replace the two **CR2016** batteries and reassemble the transmitter case.



LOCK / ARM: Press and release the "LOCK" button.



• THE SIREN WILL CHIRP & THE PARKING LIGHTS WILL FLASH ONCE.

<u>UNLOCK / DISARM</u>: Press and release the "UNLOCK" button.



 THE SIREN WILL CHIRP TWICE & THE PARKING LIGHTS WILL FLASH TWICE THEN ILLUMINATE FOR 30 SECONDS.



Transmitter Functions (cont'd)

TRUNK RELEASE / CHANNEL 2: Press the "TRUNK" button for 3

seconds.



 THE SYSTEM WILL DISARM AND THE TRUNK WILL OPEN (IF EQUIPPED).

REMOTE START: Press and release the "START" button twice within 5 seconds. (see user feature #21 for additional options)



 THE PARKING LIGHTS WILL FLASH ONCE AND THE STATUS LIGHT WILL FLASH RAPID GREEN. THE SYSTEM WILL TURN ON THE IGNITIONS AND PROCEED TO START THE ENGINE. ONCE THE ENGINE IS RUNNING. THE PARKING LIGHTS WILL TURN ON AND STAY ON AND THE STATUS LIGHTS WILL FLASH SLOW GREEN.

- If the engine stalls, the system will make up to 3 more attempts.
- Each time you park, set the climate controls to give you the desired interior temperature when you use the remote start. The engine will run for the preset run time (see user feature #22).

Run Time Extender: Press the "START" button one time during remote start to restart the engine run timer.

NOTE: This can only be used once per remote start cycle. If using an ECHO 2-way upgrade, The controller will give you "run time expiration" warning (2 chirps) 1 minute before the remote start cycle ends.

· If you decide not to drive your vehicle, you can turn off the remote start using the same method to turn it on (Default = press "START" twice in 5 seconds)

NOTE: If user feature #21 is programmed for 1 press, the 1st press = Run Time Extender so an additional press is required.

 Upon entering the vehicle during remote start mode, turn the ignition key to the "ON/RUN" position (NOT START !!). When you press the brake pedal, the remote start will turn off allowing the ignition key to take over.

CHANNEL 3: Press and hold the "TRUNK" & "START" buttons for 3 seconds.



 YOUR SYSTEM WILL ACTIVATE THE CHANNEL 3. OUTPUT.

Transmitter Functions (cont'd)

CHANNEL 4 (IF EQUIPPED): Press and hold the "LOCK" & "TRUNK" buttons for 3 seconds.



• YOUR SYSTEM WILL ACTIVATE THE CHANNEL 4 OUTPUT.

CHANNEL 5 (IF EQUIPPED): Press and hold the "UNLOCK" & "START" buttons for 3 seconds



• YOUR SYSTEM WILL ACTIVATE THE CHANNEL 5 OUTPUT.

PANIC: Press and hold the "LOCK" or "UNLOCK" button for 3 seconds.



• THE SIREN/HORN WILL SOUND, THE PARK-ING LIGHTS WILL FLASH, AND THE DOORS WILL LOCK OR UNLOCK DEPENDING WHICH BUTTON IS PRESSED.

<u>SILENT ARM / DISARM</u>: Press and release the "TRUNK" button twice in 5 seconds.



• THE PARKING LIGHTS WILL FLASH, AND THE DOORS WILL LOCK/ARM OR UNLOCK/DISARM DE-PENDING ON THE CURRENT SYSTEM STATUS.

Transmitter Functions (cont'd)

SENSOR BYPASS: Press and release the "TRUNK" button within 5 seconds of locking/arming the alarm system.



• THE SYSTEM WILL GIVE ONE CHIRP TO INDICATE THE SENSOR IS BYPASSED.

AUXILIARY FUNCTIONS 1-4:

The actual operation of these functions will vary from car to car. They are designed to operate extra functions like automatic sliding doors or motorized hatches. Aux 1-4 are virtual outputs only available when this system is integrated with the vehicle's data network. Consult with your installer to find out if any of these functions are available then confirm each operation and write them below.

- Auxiliary 1 Function (_____): To activate this function, press and release the "trunk" and "start" buttons simultaneously).

- Auxiliary 2 Function (_____): To activate this function, press and release the "lock" and "trunk" buttons simultaneously).
- Auxiliary 3 Function (______): To activate this function, press and release the "unlock" and "start" buttons simultaneously).
- Auxiliary 4 Function (______): To activate this function,

press and release the "unlock" and "trunk" buttons simultaneously).

Other Remote Start Features

LOW BATTERY/LOW TEMP AUTOMATIC STARTING

This feature will automatically start the engine should the vehicle battery drop below 11 volts or the interior temperature drop to 15 (or 32) degrees fahrenheit. This feature is very useful when the vehicle is parked for a long period of time in cold climates. You must activate these features each time you park your car to use them.

• Turn the ignition switch "on", then "off" (engine not running), and within 7 seconds press the valet switch twice. If there is a 2 second delay without additional presses, the horn will honk 3 times activating low voltage start mode.

• To activate low temp starting, enter low voltage start mode as described above but, before the horn honks, press the valet switch 1 time (15 degrees) or 2 times (32 degrees) within 5 seconds. The horn will honk to confirm your selection.

NOTE: When low temp start mode is activated, low voltage start is also activated. These features will operate once every two hours until the ignition key is turned "ON".

TURBO TIMER FEATURE

It is typically recommended that vehicles equipped with turbocharged engines allow the engine to idle after driving to cool the turbocharger. When this Installer Programmable Feature (#4) is enabled, the system will automatically keep the engine running as follows:

With the engine running, hold the brake pedal and engage the parking brake. When the brake pedal is released, the system will keep the engine running for

Other Remote Start Features (cont'd)

the programmed time (1, 2, or 3 minutes), and then automatically turn it off.

• The system may be locked while the engine is running. Turbo Timer can be prevented from engaging, or "bypassed" if desired, by turning the engine off before engaging the parking brake, or if it's already engaged, step on the brake pedal to turn the engine off.

PIT-STOP FEATURE

This feature allows you to leave your engine running for making quick errands. To use this feature, have the engine running normally from the ignition switch and your foot off the brake pedal. Press the Valet Switch twice; the parking lights will flash and the horn chirps 5 times. Turn the key off and the engine will remain running for the programmed run time.

MANUAL TRANSMISSION STARTING

Remote starting with a manual transmission requires a different installation method and installer feature #5 must be turned on. Also, a setup procedure that ensures the transmission was left in neutral must be performed each time you leave your vehicle and intend to use remote start later. Perform these steps:

1) With the engine running, hold the brake pedal, apply the parking brake, then release the brake pedal.

2) Use the transmitter as if you were activating remote start (default: press START twice). The green status light will start to flash slow.

3) Turn off the ignition key and exit the vehicle.

4) Press LOCK on the transmitter. The engine will shut down (unless turbo timer is on) and the status light will flash green every 2 seconds to indicate it is ready to be remote started.

NOTE: Manual transmission starting is canceled if you enter the vehicle after performing the setup procedure.

Security System Features

LAST DOOR ARMING

This system can be configured to arm automatically when all the vehicle's doors are closed (see user feature #2). When this feature is utilized, the siren/horn will chirp once when all of the doors are closed. At that point, it will start a 30 second count-down (indicated by a fast flashing status light). After 30 seconds, the system will arm (and lock the doors if configured to do so). During the 30 second arming delay, if a point of entry is opened, the countdown will pause until all entry points are closed again. Turning ON the ignition key will cancel the last door arming sequence until the key is turned off and the doors are all closed once again.

AUTOMATIC REARMING

This automatically rearms the alarm if the system is disarmed from the remote. (see user feature #3 to enable). When disarmed by remote, the system will start a 90 second countdown (fast flashing status light) to arm the system. This is useful if the controller may accidentally disarms the system when it's kept in a purse or pocket where other items could potentially press the buttons. ENHANCED AUTO REARM allows you to cancel the countdown by pressing UNLOCK a second time within 5 seconds of the first press to disarm the alarm.

Security System Features (cont'd)

PRE-WARN DETECTION

This system's impact sensor is designed, in addition to detecting a full impact, will warn away potential violators when it detects a light impact to the vehicle. The system will respond by chirping the siren/horn 3 times and locking the doors. This is very useful when an intruder attempts to unlock the door with "slim jim" types of devices. **WHEN THE SYSTEM TRIGGERS**

If the system were to be compromised while armed, it will trigger sounding the siren/horn and flashing the parking lights for 30 seconds (programmable). When disarming the system after a trigger event, the siren/horn will chirp 4 times and the parking lights will flash 4 times instead of the standard 2 times.

LOCK ON TRIGGER: If a door is opened when the system is triggered, it will wait until the door is closed again, then lock the doors. This patented feature is useful to further deny a thief of further access to the vehicle.

STORM SAFE MODE: When the system is triggered, pressing the "UNLOCK" button will stop the alarm from sounding but will leave the doors locked. This function is useful if you have a false triggering situation due to violent weather.

ZONE VIOLATION RECALL: The system is capable of telling you which zones were triggered last. The system's status light will flash to indicate which zone was triggered. This occurs during the alarm cycle AND after disarming. The system will store the last triggered zone until the vehicle's ignition key is turned on. See "The Status Light" section of this manual for further explanation of this feature.

NUISANCE PREVENTION: If the system prewarns 5 times within 15 minutes, it will bypass the zone for the remainder of the 15 minutes before rearming the pre-warn zone. Additionally, if a full trigger zone is left open, the system will trigger a total of 3 times before bypassing the zone. Once the zone is closed again, it will re-arm that zone.

Using The Valet Switch

EMERGENCY OVERRIDE

If you were to lose or break your controller, you'd need to perform an emergency override to disarm the system and use your vehicle. To do so, use the following steps: **STEP 1** - Enter the vehicle (the alarm should sound)

STEP 2 - Turn the ignition key to the "ON" position

STEP 3 - Press the valet switch (located in the window-mount antenna) once

NOTE: Enter your SecureCode at this time if programmed via user feature #1 STEP 4 - Turn the ignition "OFF".

VALET MODES

ALARM VALET MODE, while active, completely disables all security functions. Keyless entry and remote start are still operable. To enter valet mode, perform the following steps:

STEP 1 - Disarm the system either with the controller or by performing an emergency override (make sure not to hold the brake pedal).

STEP 2 - Press and hold the valet switch for 2 seconds. The system will chirp once and the RED status light will turn on.

Using The Valet Switch (cont'd)

REMOTE START VALET MODE, disables remote start. Keyless entry and alarm functions still operate. To enter remote start valet mode, perform the following steps: **STEP 1** - Disarm the system (by remote or by emergency override)

STEP 2 - Hold the brake pedal then press and hold the valet switch for 2 seconds. The system will chirp once and the GREEN status light will turn on.

FULL VALET MODE combines both alarm & remote start valet modes. To activated full valet mode, follow these steps:

STEP 1 - Enter remote start valet. You will hear a chirp.

STEP 2 - Release the brake pedal but continue holding the valet switch. After 2 seconds, you will hear a second chirp.

STEP 3 - Immediately release the valet switch. The status light will alternate between RED and GREEN every second.

EXITING VALET MODES - Press and release the valet switch once. The status light will turn off. This procedure is the same for all forms of valet mode.

SECURECODE

SecureCode allows you to customize the number of valet presses required to perform an emergency override. SecureCode has 2 stages with the first requiring 1-9 button valet presses and the second requiring 0-9 valet button presses. This gives you 99 possible combinations. To program a custom SecureCode, please refer to user feature #1.

To perform an emergency override with SecureCode, use the following steps:

STEP 1 - With the system armed, enter the vehicle (the alarm will activate).

STEP 2 - Turn the ignition switch to the "ON" position.

STEP 3 - Within 5 seconds of step 2, press the valet switch to enter the first digit of your programmed code.

STEP 4 - After a few seconds, the siren will stop sounding and chirp once (confirming stage 1). The siren will then continue sounding.

STEP 5 - Now, within 5 seconds of step 4, press the valet switch to enter the second digit of your code. If the code is correct, the alarm will disarm.

If the code is entered incorrectly, turn the ignition key OFF, then back ON to try again. If 2 failed attempts are made, no further attempts can be made for 2 minutes.

The Status Light

The status lights, located in the window-mount antenna, provide a visual indication of the system's status via GREEN (remote start status) and RED (alarm status) lights. **SECURITY SYSTEM STATUS (RED LIGHT):**

OFF: The alarm is disarmed and not performing any automatic functions.

ON CONSTANT: The alarm is in valet mode.

FLASHING SLOW: The alarm is armed and monitoring all entry points.

FLASHING FAST: One of the automatic arming features is in progress.

AUTOMATIC TRANSMITTER VERIFICATION (RED LIGHT):

Every time you turn on the ignition key, the status light will flash a number of times equal to the number of transmitters programmed to the system. This unique security feature protects you from a potential thief (valet attendant, mechanic, installer, etc.) from adding their own transmitter without your knowledge and accessing your vehicle and it's contents at a later time (the perfect crime!).

ZONE VIOLATION RECALL:

If the security system is triggered, upon disarming, the RED status lights will

The Status Light (cont'd)

flash a number of times to indicate exactly which zone(s), has been violated. It will store the last 2 violated circuits and continually repeat the flash pattern until the system is disarmed and the vehicle's ignition key is turned ON.

2 FLASHES: Hood trigger

3 FLASHES: Door trigger

4 FLASHES: Sensor port trigger

REMOTE START STATUS (GREEN LIGHT):

OFF: The remote start is off and in standby mode.

ON CONSTANT: The remote start is in valet mode.

FLASHING SLOW: The engine was started successfully and is running.

FLASHING FAST: The remote start sequence has begun and is in process of starting the vehicle's engine.

REMOTE START DIAGNOSTICS (GREEN LIGHT):

The remote start system can also indicate which zone caused the last remote start cycle was ended. To see this indicator, place the system into alarm valet mode. Immediately after the chirp, the GREEN status light will flash to indicate what caused remote start to end.

1 FLASH: Run time expired.

2 FLASHES: Brake pedal was pressed.

3 FLASHES: Engine stalled or a bad tach signal.

4 FLASHES: Received transmitter command to stop.

5 FLASHES: Gear selector was moved from park(or the parking brake was released).

6 FLASHES: The alarm was triggered or low battery voltage.

COMBINATION INDICATIONS:

This indication reflect combinations of functions involving the security system AND remote start.

SLOWLY ALTERNATES GREEN/RED: System is in full valet mode.

SOLID GREEN W/ RED FLASH: System is in remote start valet w/ the alarm armed. SOLID RED W/ GREEN FLASH: System is in alarm valet w/ remote start activated. FAST ALTERNATES GREEN/RED: Alarm armed w/ remote start activated.

SLOW FLASHING GREEN W/ 1-4 RED FLASHES: Zone violation recall during

remote start mode.

SLOW FLASHING RED W/ 1 GREEN FLASH: System is armed and ready to remote start in manual transmission mode.

Anti-Carjacking Protection

The system hass three separate Anti-Carjacking protection features which are programmable. Once activated, the user has 53 seconds to cancel the Anti-Carjacking protection process by pressing the Valet Switch <u>once</u>. If Anti-Carjacking 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. <u>The Valet Switch may still be pressed once during this period to cancel the Anti-Carjacking process</u>.

If the Anti-Carjacking process is not cancelled before the 60 seconds, the system will enter an alarm condition. 30 seconds after this occurs, or should the ignition be turned off in the meantime, the stater interrupt will engage. It will not respond to the transmitter at this time, nor will the system reset. It 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. If the SecureCode has been customized, the correct number of Valet Switch presses must be made.

The three types of Anti-Carjacking protection features are:

Ignition Activated Anti-Carjacking activates every time the vehicle's ignition is turned on. The Valet Switch must be pressed within 60 seconds of activating to cancel Anti-Carjacking. This is User Programmable Feature #17.

Door Anti-Carjacking activates when a door is opened after the vehicle is started and the engine is running. The Valet Switch must be pressed within 60 seconds after activation to cancel Anti-Carjacking. This is User Programmable Feature #18. **Transmitter Anti-Carjacking** is activated by pressing and holding the "CH3" button (1-way transmitter: "trunk & "start") for 3 seconds, while the vehicle's ignition is on. The Valet Switch must be pressed within 60 seconds after this is done to cancel Anti-Carjacking. This is User Programmable Feature #19.

Programming Transmitters

Standard Programming: This method to program additional or replacement transmitters does not affect the Unauthorized Transmitter Alert (UTA) feature. Before you begin, have all transmitters which are to operate the system at hand.

Step 1 Then, turn the ignition "on".

Step 2 Within 5 seconds of Step 1, press the Valet Switch 5 times. The siren/horn will briefly sound, confirming that the system is ready to learn a transmitter code.
Step 3 Press the "lock" button on each transmitter one at a time. The system will chirp the siren/horn once to confirm that each was learned. If a code is not received within 10 seconds of Step 2, the learning process will automatically exit.

If the Unauthorized Transmitter Alert feature is on, programming a transmitter to the system will activate the "UTA" warning and the extended Status Light indication. For the next 48 hours, the siren/horn will sound a brief series of chirps every time the vehicle's ignition key is turned on.

Special Programming procedure to turn on the UTA feature: Using this method to program transmitters or optional controllers, and to turn on the Unauthorized Transmitter Alert feature.

Follow the same steps as the Standard Programming, but on any transmitter/controller being programmed instead of pressing the "**lock**" button, press the "**lock**" and the "**unlock**" buttons together. This action turns **on** the Unauthorized Transmitter Alert feature and at the same time programs the transmitter or controller to operate the system.

Once the Unauthorized Transmitter Alert feature is turned on, the warning will sound for 48 hours after any transmitter programming. This feature can only be turned off again by sending the system back to Omega for a reset.

Programming Features

Step 1 Turn the ignition key "ON", then "OFF"

<u>Step 2</u> Within 5 seconds of step 1, press the valet switch 5 times to access user features (10 times to access installer features).

~ The siren/horn will sound and the status light will turn on.

Step 3 Within 10 seconds of step 2, press the valet switch the number of times corresponding with the desired feature's number.

 \sim The siren/horn will chirp, the status lights, and the parking lights will flash equal to the selected feature.

<u>Step 4</u> Change the feature by pressing the transmitter button that corresponds with the desired setting. The siren/horn will chirp to correspond with the chosen setting.

User Programmable Features

Feature #1 - SecureCode

DEFAULT - 1 Press

SecureCode is a unique patented feature which allows you to custom select the number of Valet Switch presses in two stages, instead of a single "1 press", which would be required in order to perform an Emergency Override. If any of the three anticarjacking features are utilized, a customized SecureCode would also be required to turn it off once it is fully activated. The SecureCode operation is described on page 9.

To custom program a new SecureCode:

Step 1 Follow Steps 1 to 4 in the previous "Programming Features" section to access "feature #1".

Step 2 Within 10 seconds slowly press and release the transmitter's "**arm/lock**" button the number of times 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. A few seconds after the final button press, the system will chirp the horn/siren confirming the total number for stage 1.

Step 3 Configure stage 2 of the SecureCode by pressing and releasing the "**disarm/ unlock**" button the number of times desired for the stage 2. The system will confirm as it did for stage 1.

Feature #2 - Last Door Arming

 Off
 (press "arm/lock" button to program) - DEFAULT

 On w/o doors locking
 (press "disarm/unlock" button to program)

 On w/ doors locking
 (press "trunk" button to program)

 "Last Door Arming" has the system automatically arm itself every time you exit the

vehicle (the complete operation is described on page 7).

Feature #3 - Automatic Rearming

Off(press "arm/lock" button to program) - DEFAULTOn w/o doors locking(press "disarm/unlock" button to program)On w/ doors locking(press "trunk" button to program)Enhanced auto rearm(press "start" button to program)

"Automatic Rearming", described on page 7, rearms the alarm if accidentally disarmed. Options are to have Automatic Rearming operate with or without also locking the doors when the system does rearm. Enhanced auto rearm allows you to cancel the rearming sequence by pressing unlock a 2nd time after disarming.

User Programmable Features (cont'd)

Feature #4 - Starter Interrupt Functions

 Alarm Only
 (press "arm/lock" button to program) - DEFAULT

 Off
 (press "disarm/unlock" button to program)

 Automatic
 (press "trunk" button to program)

 Alarm & Anti-Grind
 (press "start" button to program)

Alarm Only - The Starter Interrupt is operable whenever the alarm is armed.

Off - Completely eliminates the Starter Interrupt output.

Automatic - This will cause the Starter Interrupt output to automatically engage 90 seconds after the ignition switch is turned "off", and after disarming the system.

Alarm & Anti-Grind - This setting engages starter interrupt when the alarm is armed AND when the system is in remote start mode.

Feature #5 - Ignition Activated Override

Off (press "disarm/unlock" button to program) - DEFAULT

On (press "arm/lock" button to program)

This feature allows an activated system to be overridden and disarmed by simply turning the ignition switch on within 10 seconds of the system's activation. After 10 seconds, the Emergency Override must be performed.

Feature #6 - Doors Lock With Ignition On

On (press "arm/lock" button to program) - DEFAULT

Off (press "disarm/unlock" button to program)

This feature configures the system to automatically lock the vehicle's doors every time that the ignition switch is turned on.

Feature #7 - Doors Unlock With Ignition Off

 On (all doors will unlock)*
 (press "start" button to program) - DEFAULT

 Off
 (press "arm/lock" button to program)

 Driver's Door Only*
 (press "disarm/unlock" button to program)

 All Doors Except Driver's Door*
 (press "trunk" button to program)

 This feature controls the unlock operations when the ignition key is turned off.
 *Driver's door unlocking must be configured when the system is installed!

Feature #8 - Open Door Bypass of Ignition Locking

On (press "arm/lock" button to program) - DEFAULT

Off (press "disarm/unlock" button to program)

This feature cancels the automatic locking or unlocking of the vehicle's doors if one of the doors is open when the ignition switch is turned on or off.

Feature #9 - Confirmation Chirps

On (press "arm/lock" button to program) - DEFAULT Off (press "disarm/unlock" button to program)

Chirps Except In Valet Mode (press "trunk" button to program)

Chirps in Valet Mode Only (press "start" button to program)

This feature removes the system's arming and disarming confirmation chirps for particular functions.

User Programmable Features (cont'd)

Feature #10 - Confirmation Chirp Volume

Medium High(press "trunk" button to program) - DEFAULTLow (softest)(press "arm/lock" button to program)Medium Low(press "disarm/unlock" button to program)High (loudest)(press "start" button to program)

This feature allows the choice of four different volume levels of the system's confirmation chirps which is demonstrated as you change the setting.

Feature #11 - Alarm Duration

30 Seconds (press "arm/lock" button to program) - DEFAULT

60 Seconds (press "disarm/unlock" button to program)

90 Seconds (press "**trunk**" button to program)

120 Seconds (press "start" button to program)

This feature allows four choices of the Alarm Duration. Caution: You should always check and determine if there are any local anti-noise or nuisance ordinances in your area, to avoid the possibility of receiving a violation citation.

Feature #12 - Parking Light Illumination Upon Disarm

On (press "arm/lock" button to program) - DEFAULT

Off (press "disarm/unlock" button to program)

This feature affects the parking light operation when the system is disarmed. When this feature is turned on, the parking lights flash twice, and then turn back on for external illumination for 30 seconds unless the ignition key is turned on during that time. If this feature is turned off, the parking lights flash twice only, and do not illuminate.

Feature #13 - 2nd Channel Also Disarms System

On (press "arm/lock" button to program) - DEFAULT

Off (press "disarm/unlock" button to program)

"2nd channel" is most commonly used for trunk release, in which case the alarm should also disarm. This feature, turned on, configures the system to disarm when the 2nd channel is used.

Feature #14 - 3 or 45 Second Arming Delay

3 Seconds (press "arm/lock" button to program) - DEFAULT

15 Seconds (press "disarm/unlock" button to program)

30 Seconds (press "trunk" button to program)

45 Seconds (press "start" button to program)

This determines how long the system waits to arm the trigger zones.

Feature #15 - Steady Siren or Pulsed Horn

Steady Siren (press "arm/lock" button to program) - DEFAULT

Pulsed Horn Low (press "disarm/unlock" button to program)

Pulsed Horn Medium (press "trunk" button to program)

Pulsed Horn High (press "start" button to program)

This feature selects the operation of the primary siren output when the alarm is triggered. It can be configured for 3 pulse speeds if the output is used to honk the horn.

Feature #16 - Alarm Functions Bypass

Off (press "disarm/unlock" button to program) - DEFAULT

On (press "arm/lock" button to program)

This feature converts the system into a strictly Keyless Entry/Remote Start System by eliminating all antitheft alarm-oriented operations and features.

Feature #17 - Ignition Activated Anti-Carjacking Protection

Off (press "disarm/unlock" button to program) - DEFAULT

On (press "arm/lock" button to program)

This form of Anti-Carjacking is initiated by the ignition key being turned on. The Anti-Carjacking protection, and the three ways to initiate it are described on page 10.

Feature #18 - Door Activated Anti-Carjacking Protection

Off (press "disarm/unlock" button to program) - DEFAULT

On (press "arm/lock" button to program)

This form of Anti-Carjacking is initiated by a door being opened. The Anti-Carjacking protection, including the three ways to initiate it are described on page 10.

Feature #19 - Remote Activated Anti-Carjacking Protection

Off (press "disarm/unlock" button to program) - DEFAULT

On (press "arm/lock" button to program)

This form of Anti-Carjacking is initiated by activating the 3rd channel from the transmitter. The Anti-Carjacking protection, including the three ways to initiate it are described on page 10.

Feature #20 - Open Door Warning Upon Arming

Off (press "disarm/unlock" button to program) - DEFAULT

On (press "arm/lock" button to program)

When this feature is turned on, if one of the vehicle's doors is open at the time that the system is armed via the transmitter, the siren will chirp 3 times and the parking lights will flash 3 times instead of once.

Feature #21 - Remote Start Activation

 Press "start" button 2 times
 (press "arm/lock" button to program) - DEFAULT

 Press "start" button 1 time
 (press "disarm/unlock" button to program)

 Press Lock & Unlock
 (press "lil" button to program)

 This feature changes how the remote start feature is activated using the transmitter.

Feature #22 - Remote Start Run Time

10 Minutes (press "disarm/unlock" button to program) - DEFAULT

5 Minutes (press "arm/lock" button to program)

15 Minutes (press "trunk" button to program)

20 Minutes (press "start" to program)

This feature sets the period of time that the engine will run when remote started. If the engine is not stopped by a transmitter command or a safety circuit violation, the engine will automatically stop upon the expiration of the selected time period.

Feature #23 - Steady/Flashing Lights During Remote Start

Steady (press "arm/lock" button to program) - DEFAULT

Flashing (press "disarm/unlock" button to program)

This feature configures the systems's operation of the vehicle's parking lights when the engine is running during remote start.

Installer Programmable Features

This group of Installer Programmable Features are all accessed as a group in the second level of features' programming. These features have a direct affect upon the system's operations related to the installation and vehicle type **AND SHOULD ONLY BE CHANGED BY THE INSTALLER!!!**

Feature #1 - Doorlocking Functions

0.8 Second Outputs (press "arm/lock" button to program) - DEFAULT 3 Second Outputs (press "disarm/unlock" button to program)

Double Pulse Unlock Output (press "II" button to program)

Total Closure Lock Output (press "III" button to program)

This single feature gives the installer several needed options, to match the system's doorlocking outputs to suite different vehicle requirements. The total closure setting provides a 28 second lock pulse and a 0.8 second unlock pulse.

Feature #2 - Light Relay Functions

Dome Light Output(press "arm/lock" button to program) - DEFAULTDoor Lock(press "disarm/unlock" button to program)Ignition Output(press "trunk" button to program)Accessory Output(press "start" button to program)

The system has two built-in relays, which can be programmed to perform several different functions. The primary function of this relay, is to operate the vehicle's dome, or interior lighting as part of the system's operations. Optionally, if desired or needed, this relay can be programmed to be a door lock relay, or as medium-capacity ignition or accessory outputs (10A max), if needed for remote starting use.

Feature #3 - Horn Relay Functions

Horn Output	(press "arm/lock" button to program) - DEFAULT
Door Unlock	(press "disarm/unlock" button to program)
Trunk Release	(press "trunk" button to program)
Pulse After Start	(press "start" button to program)

The primary function of this second relay, is to operate the vehicle's existing horn; either in conjunction with the electronic siren, or in place of the siren. Using both the siren and the horn creates an extremely effective security system. Optionally, if desired or needed, this relay can be programmed as a door unlock, trunk release, or pulse after start relay.

Feature #4 - Turbo Timer

Off (press "arm/lock" button to program) - DEFAULT

Run 1 Minute (press "disarm/unlock" button to program)

Run 2 Minutes (press "II" button to program)

Run 3 Minutes (press "III" button to program)

This feature, the operation of which is described on page 9, when turned on

configures the system to automatically keep the engine running briefly after it is turned off. This operation is designed specifically for vehicles having turbocharged engines (the user may temporarily bypass the feature if desired). **This feature should only be programmed by the installer**, and the operation of this feature depends on the correct connection of the safety wire to the vehicle's parking brake.

Feature #5 - Manual Transmission Mode

Off (press "disarm/unlock" button to program) - DEFAULT

On (press "arm/lock" button to program)

This feature changes the parameters of the system's remote start operation to be suitable for manual transmission-equipped vehicles via a "setup" procedure which must be followed upon exiting the vehicle to ensure the transmission is in neutral.

Installer Programmable Features (cont'd)

Feature #6 - Engine Detection Method

Tachless Hi	(press "arm/lock" button to program) - DEFAULT
Tachless Lo	(press "disarm/unlock" button to program)
Tach Wire	(press "trunk" button to program)
Data Tach	(press "start" button to program)
Crank Only	(press "lock" & "unlock" to program)

This feature selects the method in which the remote start monitors the engine's running condition in remote start mode.

"Tachless Hi" sensitivity mode has an associated base starter output time duration (see installer feature #5) and monitors the vehicle's voltage level to determine if the engine is running. This setting looks for a voltage increase of 0.3v after cranking.

"Tachless Lo" sensitivity mode operates like the "Tachless Hi" setting but looks for a voltage increase of 0.5v after cranking.

"**Tach Wire**" Before this setting is programmed, refer to the "Violet/White wire" section of the installation manual for proper wiring connection and the Tach Learn Procedure. It will crank the engine for up to 3 seconds or until a tach signal is detected.

"Data Tach" mode operates just like the "Tach Wire" setting except it takes its reading from the D2D data port instead of using the Violet/White wire. Before using, make sure this function is supported by the Databus Interface module.

"Crank Only" AKA "blind start" is similar to the "Tachless" settings however, it only makes one start attempt and does not monitor engine running conditions. This is useful for many "push-to-start" vehicles.

Feature #7 - Extended Starter Cranking Time

0.75 Second (press "arm/lock" button to program) - DEFAULT

1.00 Second (press "disarm/unlock" button to program)

1.5 Seconds (press "trunk" button to program)

2.25 Seconds (press "start" button to program)

This feature determines the crank time of the 1st start attempt when in "Tachless" mode. If the engine doesn't start on the first attempt, it will retry up to 3 more times extending the crank time by an additional 0.2 second with each attempt..

Feature #8 - PINK/WHITE (IGN #2)Wire Function

Ignition (press "arm/lock" button to program) - DEFAULT

Accessory (press "disarm/unlock" button to program)

Starter (press "trunk" button to program)

This feature changes the operation of the unit's large PINK/WHITE output wire. This feature should only be programmed by the installer.

Feature #9 - Arm, Disarm or Additional Channels

 Arm / Disarm
 (press "arm/lock" button to program) - DEFAULT

 Arm / Channel 5
 (press "disarm/unlock" button to program)

 Channel 4 / Disarm
 (press "trunk" button to program)

Channel 4 / Channel 5 (press "start" button to program)

The system has outputs designed for arming and/or disarming a factory-equipped security system. These wires may be used instead to provide further system outputs, which are remotely operated by the transmitter. These outputs are in addition to the 2nd channel and 3rd channel outputs. As shown in the programming assignment, the arm, disarm, channel 4 and channel 5 are programmable as various combinations. For example, if the disarm output is needed, but not the arm output, then channel 4 may be made available for use.

Installer Programmable Features (cont'd)

Feature #10 Gasoline Or Diesel Engine

 Gasoline
 (press "lock" button to program) - DEFAULT

 Diesel 15 Sec. Delay
 (press "unlock" button to program)

 Diesel 20 Sec. Delay
 (press "trunk" button to program)

 Diesel 30 Sec. Delay
 (press "start" button to program)

This feature changes the system's timing of the ignition and starter output sequence for gas or diesel engines. <u>Gasoline</u>: the starter output will occur 3 seconds after the ignitions turn on. When in "Tachless" mode, the engine running status is determined 10 seconds after starting. <u>Diesel</u>: the starter output will occur 15, 20, or 30 seconds after the ignitions turn on (allows for glow plug warming). When in "Tachless" mode, the engine running status will be determined 40 seconds after cranking.

Feature #11 Remote Start Lock Control

Off

(press "lock" button to program) - DEFAULT

Lock After Start (press "unlock" button to program)

Unlock before start

e start (press "trunk" button to program)

Unlock Before+Lock After Start (press "start" button to program)

This feature allows for OEM alarm/lock control in relation to remote start operations thus eliminating extra wiring.

Feature #12 Low Temp Crank Extender

Oms (Off) (press "lock" button to program)

200ms (press "unlock" button to program) - DEFAULT

300ms (press "trunk" button to program)

400ms (press "start" button to program)

When the vehicle's interior temperature is below freezing, this feature adds extra crank time to the base timing (see installer feature #7). It applies to tachless modes only (installer feature #6)

Feature #13 Data Port Protocol

ADS (iData) (press "unlock" button to program)

D2D (Trilogix) (press "lock" button to program) - DEFAULT

This feature determines which data protocol is used on the data ports. Choose this based on the interface module being used. **NOTE: When a BLADE is inserted, this feature automatically switches to the ADS protocol.**

Feature #14 Lock On Prewarn

On (press "lock" button to program) - DEFAULT

Off (press "unlock" button to program)

By default, if the prewarn zone is triggered, the system will automatically lock the doors to combat unauthorized entry from lock picking. If this causes conflict with OEM vehicle functions, you can turn it off.

Programmable Features Matrix

User Feature Programming: Ignition of	on, off, press valet 5	times				
# Feature	Lock Button	Unlock button	Trunk button	"START" button		
1 Secure Code	1, 0 (default)	1, 0 (default)				
2 Last Door Arming	Off	On w/o lock	On w/ Lock			
3 Automatic Rearming	Off	On w/o lock	On w/ Lock	Enhanced Rearm		
4 Starter Interrupt Functions	Alarm	Off	Automatic	Alarm+Anti-Grind		
5 Ignition Override	On	Off	1			
6 Lock w/ Ignition On	On	Off	1			
7 Unlock w/ Ignition Off	Off	Unlock #1	Unlock #2	Unlock #1 & #2		
8 Open Door Bypass For Ign. Locks	On	Off	1	1		
9 Confirmation Chirps	On	Off	Except Valet mode	Valet Mode Only		
10 Chirp Volume	Low	Med Low	Med Loud	Loud		
11 Alarm Cycle	30 sec	60	90	120		
12 Lights Upon Disarm	On	Off				
13 Disarm Upon Trunk Release	On	Off				
14 Arming Delay	3 sec	15	30	45		
15 Siren Output	Steady	Pulse Horn Lo	Pulse Horn Med	Pulse Horn Hi		
16 Alarm Functions Bypass	On	Off				
17 Ignition Anti-carjack	On	Off				
18 Door Anti-carjack	On	Off				
19 Remote Anti-carjack	On	Off				
20 Open Door Warning On Arm	On	Off				
21 Remote Start Activation	Start x 2	Start x 1	Lock+Unlock	Î		
22 Remote Start Run Time	5 min	10 min	15 min	20 min		
23 Remote Start Light Flash	Steady	Flashing		Î		
Installer Feature Programming: Ignition	on, off, press valet 10) times	^	-0		
1 Doorlock pulse	0.8 sec	3 sec	Double unlock	Total closure		
2 Light Relay Functions	Dome light	Lock	Ignition	Acc		
3 Horn Relay Functions	Horn	Unlock	Trunk Release	Pulse after Start		
4 Turbo Timer	Off	1 min	2 min	3 min		
5 Manual Transmission	On	Off		Î		
C Engine detection	Tachless Hi	Tachless Lo	Tach Wire	Datatach		
6 Engine detection	Crank Only (pres	Crank Only (press Lock + Unlock)				
7 Crank Time	0.7 sec	1 sec	1.5 sec	2.25 sec		
8 Pink/White Ignition Wire Function	Ignition	Accessory	Start	Î		
9 Arm/Disarm/Additional Ch.	Arm/Disarm	Arm/Ch 5	Ch4/Disarm	Ch 4/Ch 5		
10 Gas or Diesel Engine	Gas	Diesel (15 sec. Delay)	Diesel (20 sec. Delay)	Diesel (30 sec. delay)		
11 Remote Start Lock control	Off	Lock after start	Unlock before start	Both		
12 Low Temp Crank Extender	0ms	200ms	300ms	400ms		
13 Data Port Protocol	D2D (Trilogix)	ADS (iData)				
14 Lock on prewarn	On	Off				

Back Cover

Color cover is in a separate file.