

# **EXCALIBUR**

**REMOTE START & SECURITY PERFECTED**

**AL-1670-B**  
**RS-375-3DB**  
**RS-375-3D**  
**RS-370**

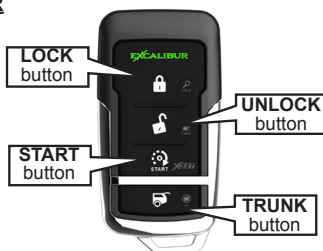
**OPERATION GUIDE V1.3**

Temporary cover. Final cover is in a separate file.

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## THE CONTROLLER



System	Controller(s)		Battery	
AL-1670-B	1415-03 (x2)		CR-2016 (2 per controller)	
RS-375-3DB	1412-03 (x2)		CR-2032 (1 per controller)	
RS-370-3D	1412-03 (x2)		CR-2032 (1 per controller)	
RS-370	1415-03	1416-07	CR-2016 (x2)	CR-2032 (x1)

### Transmitter battery replacement:

Remove the small screw from the lower back case, and separate the transmitter halves. Replace the batteries and reassemble the transmitter case.

**Call your dealer or visit [www.caralarm.com](http://www.caralarm.com) to order replacement controllers.**



**IF YOUR ANTENNA HAS THE ECHO 2-WAY READY LOGO, YOU CAN UPGRADE TO 2-WAY JUST BY ADDING A 2-WAY CONTROLLER. ASK YOUR DEALER ABOUT:**  
**MODEL 1510-03 (LCD 2-WAY)**  
**MODEL 1511-03 (LED 2-WAY)**

## Controller Functions

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



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

## Controller Functions (cont'd)

**UNLOCK / DISARM:** Press and release the UNLOCK button.



- THE SIREN WILL CHIRP TWICE & THE PARKING LIGHTS WILL FLASH TWICE.

**REMOTE START:** Press and release the START button twice within 5 seconds (see user feature #8 to change).



- THE PARKING LIGHTS WILL FLASH ONCE AND THE STATUS LIGHT WILL FLASH RAPIDLY.
- THE SYSTEM WILL PROCEED TO START THE ENGINE.
- ONCE THE ENGINE IS RUNNING, THE PARKING LIGHTS WILL TURN ON AND THE STATUS LIGHT WILL FLASH SLOWLY.

- 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 #1).

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

**NOTE:** This can only be used once per remote start cycle.

- 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 #8 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.

**TRUNK RELEASE / CHANNEL 2:** Press the TRUNK button for 3 seconds.



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

**CHANNEL 3:** Press and hold the TRUNK & START buttons for 1 second.



- YOUR SYSTEM WILL ACTIVATE THE CH. 3 OUTPUT.  
\* ONLY AVAILABLE ON -B AND -3DB MODELS

**CHANNEL 4:** Press and hold the LOCK & TRUNK buttons for 1 second.



- YOUR SYSTEM WILL ACTIVATE THE CHANNEL 4 OUTPUT.

**CHANNEL 5:** Press and hold the UNLOCK & START buttons for 1 second



- YOUR SYSTEM WILL ACTIVATE THE CHANNEL 5 OUTPUT.

## Controller Functions (cont'd)

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



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

**SILENT ARM / DISARM:** Press and release the TRUNK button twice in 5 seconds.



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

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



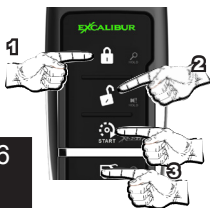
- THE SYSTEM WILL GIVE ONE CHIRP, AFTER LOCKING, TO INDICATE THE SENSOR IS BYPASSED.

**LOW VOLTAGE & HIGH/LOW TEMP AUTO START:** Press and release UNLOCK, LOCK, START within 5 seconds.



- THE SYSTEM WILL GIVE ONE CHIRP TO INDICATE THE LOW VOLTAGE & HIGH/LOW TEMP AUTO START IS ACTIVATED.
- SEE PAGE 8 FOR MORE INFO.

**REMOTE VALET:** Press LOCK then UNLOCK then TRUNK + START within 5 seconds.



- THE SYSTEM WILL ENTER VALET MODE. SEE PAGE 11 FOR MORE INFO ON VALET MODE. TO EXIT VALET VIA REMOTE, REPEAT THESE STEPS

### AUXILIARY FUNCTIONS 1-4:

The actual operation of these functions will vary from car to car. They are designed to operate extra vehicle functions like automatic sliding doors or motorized hatches. Aux 1-4 are virtual outputs only available on certain vehicles 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 for your vehicle. If so, confirm each operation with the controller and write each function in the blank spaces provided 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).



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MODEL 1511-03 (LED 2-WAY)**

## Other Remote Start Features

### **LOW VOLTAGE & HIGH/LOW TEMP AUTOMATIC STARTING**

This feature will automatically start the engine if the vehicle battery drops below 11.5 volts or the interior temperature goes above or below the pre-programmed threshold.

#### **Programming The Activation Low Temperature Threshold:**

- Turn the ignition switch "on", then "off" (engine not running), and within 5 seconds press the valet switch twice. The siren will chirp 3 times, within 5 seconds press the valet switch equal to the desired low temperature remote start threshold.

1 press = 0 degrees F - 1 chirp confirmation

2 presses = 15 degrees F - 2 chirps confirmation

3 presses = 32 degrees F - 3 chirps confirmation

#### **Programming The Activation High Temperature Threshold:**

- Turn the ignition switch "on", then "off" (engine not running), and within 5 seconds press the valet switch three times. The siren will chirp 4 times, within 5 seconds press the valet switch equal to the desired high temperature remote start threshold.

1 press = 75 degrees F - 1 chirp confirmation

2 presses = 90 degrees F - 2 chirps confirmation

3 presses = 105 degrees F - 3 chirps confirmation

4 presses = 120 degrees F - 4 chirps confirmation

- You must activate these features each time you park your car to use them.

#### **Activation Using The Valet Switch**

- Turn the ignition switch "on", then "off" (engine not running), and within 5 seconds press the valet switch twice. After a 2 second delay without additional valet button presses, the siren will chirp 3 times activating low battery & low/high temp auto start.

#### **Activation Using The Controller**

- Within 5 seconds, press UNLOCK, LOCK, START. The siren/horn will chirp to confirm. These features will operate once every two hours until the ignition key is turned "ON".

### **TURBO TIMER MODE**

It is typically recommended that vehicles equipped with turbocharged engines allow the engine to idle after driving to cool the turbocharger. When Installer Programmable Feature #10 is ON, 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 the programmed time (1, 2, or 3 minutes).

- Turbo Timer can be bypassed by turning the engine off before engaging the parking brake. If it's already engaged, step on the brake pedal to turn the engine off.

### **PIT-STOP MODE**

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 ignitions will turn on. Turn the key off and the engine will remain running for the programmed run time. Run time extender can be used in this mode.

### **XL PIT-STOP MODE**

This feature allows you to leave your engine running for an extended period of time. To use this feature, have the engine running normally from the ignition switch and your foot off the brake pedal. Press the Valet Switch 6 times; the parking lights will flash and the ignitions will turn on. Turn the key off and the engine will remain running for 12hrs. Run

time extender can be used in this mode allowing a run time up to 24hrs. This is ideal for commercial refrigeration trucks, cleaning vans, vehicles w/ PTO, etc.



### **MANUAL TRANSMISSION STARTING**

Remote starting with a manual transmission requires that you ensure the gear selector is in NEUTRAL. There are 2 available methods.

#### **METHOD #1 - 3D MOTION SENSOR:**

Some models are equipped with a 3D motion sensor built into the antenna (optional sensors are available as an upgrade). Whenever remote start is activated, this sensor is monitored for vehicle movement. If the vehicle moves just a few inches when the engine is cranking, it will instantly turn the engine off. This safety feature allows you to enjoy remote start without performing reservation mode as described below.

#### **METHOD #2 - RESERVATION MODE:**

For extra safety, installer feature #11 can be turned on which requires you to perform a setup procedure that ensures the transmission was left in neutral when you park your vehicle. This must be performed each time you leave your vehicle to use remote start later. To do so, follow these steps:

- 1) With the engine running via the ignition switch, 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 status light will start to flash slow.
- 3) Turn off the ignition key and exit the vehicle, the engine will continue running.
- 4) Press LOCK on the transmitter. The engine will shut down (unless turbo timer is on) and the status light will flash every 2 seconds (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 #9). 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 countdown (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 #10). 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 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.

### **PRE-WARN DETECTION**

This system's impact sensor is designed, in addition to detecting a full impact, to 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.

### WHEN THE SYSTEM TRIGGERS

It will sound the siren/horn and flash the parking lights for 30 seconds (programmable). When disarming 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 feature combats "slim jim" type devices.

**STORM SAFE MODE:** When the system is triggered, pressing the UNLOCK button will stop the alarm from sounding but will leave the doors locked.

**NUISANCE PREVENTION:** If the system pre-warns 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 Button

### 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 #13

**STEP 4** - Turn the ignition key "OFF".

### SECURECODE

SecureCode allows you to customize the number of valet presses required to perform an emergency override. This is an extra layer of security that prevents anyone from overriding the alarm even if they have a key to the vehicle. 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 #13 on Page 18.

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, you must turn the ignition key OFF, then back ON to try again. Additionally, if 2 failed attempts are made, the alarm will ignore any further attempts for 2 minutes.

### VALET MODE

Valet mode completely disables all security & remote start functions. Keyless entry is still operable. To enter valet mode, perform the following steps:

**STEP 1** - Disarm the system by remote or by performing an emergency override.

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

**EXITING VALET MODE** - Press and release the valet switch once.

### The Status Light

The status light, located in the antenna, indicates the system's current status.

### SECURITY SYSTEM STATUS

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

**ON:** 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

Every time you turn on the ignition key, the status light will flash a number of times equal to the number of controllers programmed to the system. This unique security feature combats potential thieves (valet attendant, mechanic, etc.) from adding their own transmitter without your knowledge and accessing your vehicle at a later time.

### ALARM ZONE VIOLATION RECALL

If the security system is triggered, upon disarming, the status light will 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 vehicle's ignition key is turned ON.

**2 FLASHES:** Hood trigger

**3 FLASHES:** Door trigger

**4 FLASHES:** Sensor port trigger

### REMOTE START STATUS

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

**FLASHING FAST:** The remote start sequence has begun and is in process of starting.

**2 FLASHES, PAUSE:** The engine is running while the alarm is armed.

### REMOTE START DIAGNOSTICS

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

**1 FLASH:** The hood was opened.

**2 FLASHES:** Brake pedal was pressed.

**3 FLASHES:** Bad tach signal or engine overrev.

**4 FLASHES:** The neutral safety circuit was triggered.

**5 FLASHES:** The 3D sensor detected vehicle motion.

**6 FLASHES:** Received command to stop.

**7 FLASHES:** The alarm was triggered.

**8 FLASHES:** Run time expired.

**9 FLASHES:** Low battery voltage was detected.

## Anti-Carjacking Protection

The system is equipped with two separate Anti-Carjacking protection features (ignition, open door, or both). All are programmable, and must be turned on to operate. Once activated, the user has 60 seconds to cancel the Anti-Carjacking protection process (described below). 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. The Valet Switch may still be pressed once during this period to cancel the Anti-Carjacking process.

If the Anti-Carjacking 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. 30 seconds after this occurs, or should the ignition be turned off in the meantime, the siren interrupt will engage. Once the system enters the alarm condition, it will not respond to the transmitter, nor will the system reset automatically after 60 seconds, and 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 different types of Anti-Carjacking protection 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 #12.

**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 #12.

## Programming Controllers/Transmitters

**Standard Programming:** Using this method to program additional or replacement transmitters does not turn on or otherwise 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:** Use 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 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 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, including the programming session which was used to turn it on. 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".

**Step 2** 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.

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

**Step 4** 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 - Remote Start Run Time

3 Minutes	(press LOCK to program)
10 Minutes	(press UNLOCK to program)
15 Minutes	(press TRUNK to program)
20 Minutes	(press START to program)
30 Minutes	(press LOCK & UNLOCK to program)

This sets the maximum amount of time that the remote start will keep the engine running if it is not shut down by other methods.

### Feature #2 - Flashing Light Confirmations

Unlock: ON, RS: ON	(press LOCK to program)
Unlock: ON, RS: Flash	(press UNLOCK to program)
Unlock: Flash, RS: ON	(press TRUNK to program)
Unlock: Flash, RS: Flash	(press START to program)

This feature affects the parking light confirmations for system unlock & remote start functions. With the above options, you can select any combination of:

**Unlock: Flash** - Flashes twice after unlock

**Unlock: ON** - Flashes twice then stays on for 30 seconds after unlock

**RS: ON** - Stays on during remote start mode

**RS: Flash** - Flashes once every 1.5 seconds during remote start mode

### Feature #3 - Confirmation Chirp Volume

Low (softest)	(press LOCK to program)
Medium Low	(press UNLOCK to program)
Medium High	(press TRUNK to program)
High (loudest)	(press START to program)

This feature allows the choice different chirp volume levels, and when programming it, each selection will be confirmed in the chosen volume making it easy to choose the most suitable setting.

### Feature #4 - BROWN Wire Audible Output

Pulsed Horn Low	(press LOCK to program)
Pulsed Horn Medium	(press UNLOCK to program)
Pulsed Horn High	(press TRUNK to program)
Steady Siren	(press START to program)
Random	(press LOCK & UNLOCK to program)

This changes the BROWN wire's audible output when the alarm is triggered. Steady siren must be selected when using a siren (other horn outputs stay at the Medium setting).

The random option will pulse the horn in a distinct long and short honk routine during the alarm trigger condition. The horn honk options will affect all horn honk outputs used as well as change the BROWN wire's function. If installer feature #6 is set to "Horn" the Brown wire will function as a steady siren when "Random" is selected.

### Feature #5 - Ignition Controlled Lock/Unlock

Off	(press LOCK to program)
Lock w/ Ignition On	(press UNLOCK to program)
Unlock w/ Ignition Off	(press TRUNK to program)
Lock And Unlock w/ Ignition	(press START to program)

This feature controls the lock/unlock operations when the ignition key is turned on/off,

### **Feature #6 - Open Door Bypass of Ignition Locking**

**On** (press LOCK to program)

**Off** (press UNLOCK 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 #7 - Unlock w/ Trunk Release**

**On** (press LOCK to program)

**Off** (press UNLOCK to program)

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

### **Feature #8 - Remote Start Activation From The Remote**

**Press START button 1 time** (press LOCK to program)

**Press START button 2 times** (press UNLOCK to program)

**Press START button 3 times** (press TRUNK to program)

**Press START button 4 times** (press START to program)

This feature changes how the remote start feature is activated from the remote.

### **Feature #9 - Last Door Arming**

**Off** (press LOCK to program)

**On w/o doors locking** (press UNLOCK to program)

**On w/ doors locking** (press TRUNK to program)

"Last Door Arming" has the system automatically arm itself every time you exit the vehicle (the complete operation is described on page 8).

### **Feature #10 - Automatic Rearming**

**Off** (press LOCK to program)

**On w/o doors locking** (press UNLOCK to program)

**On w/ doors locking** (press TRUNK to program)

**Enhanced auto rearm** (press START to program)

"Automatic Rearming", described on page 9, 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.

### **Feature #11 - Confirmation Chirps**

**Siren + Horn** (press LOCK to program)

**Siren Only** (press UNLOCK to program)

**Horn Only** (press TRUNK to program)

**On Demand (siren+horn)** (press START to program)

**Off** (press LOCK & UNLOCK to program)

This feature selects whether the siren and/or horn give confirmation chirps. Both outputs will always sound when the alarm system is triggered or in panic mode.

### **Feature #12 - Anti-Carjacking**

**Ignition Only** (press LOCK to program)

**Door Only** (press UNLOCK to program)

**Ignition + Door** (press TRUNK to program)

**Off** (press START to program)

This selects between the 2 forms of anti-carjacking protection. Details on using anti-carjacking protection are described on page 14.

## User Programmable Features (cont'd)

### **Feature #13 - SecureCode**

#### **DEFAULT - 1 Press**

SecureCode is a unique patented feature which allows you to select the number of Valet Switch presses in two stages, instead of "1 press", which would be required in order to perform an Emergency Override. If any of the three anti-carjacking features are utilized, a customized SecureCode would also be required to turn it off once it is fully activated. SecureCode operation is described on page 10.

#### **To custom program a new SecureCode:**

**Step 1** Access user feature #13 (follow the steps on page 15).

**Step 2** Within 10 seconds slowly press and release the transmitter's 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 confirming the total number for stage 1.

**Step 3** Configure stage 2 of the SecureCode by pressing and releasing the LOCK button again equal to the number of times desired for the stage 2. The system will confirm as it did for stage 1.

**NOTE:** To start over, press the valet button 13 times again.

### **Feature #14 - Ignition Activated Override**

**On** (press LOCK to program)

**Off** (press UNLOCK 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 alarm triggering. After 10 seconds, the Emergency Override must be performed.

### **Feature #15 - Alarm Trigger Duration**

**30 Seconds** (press LOCK to program)

**60 Seconds** (press UNLOCK to program)

**90 Seconds** (press TRUNK to program)

**120 Seconds** (press START to program)

This feature selects the period of time for which the system sounds the siren (and/or horn) and flashes the lights when triggered. **Caution: Before lengthening the Alarm Duration you should always check and determine if there are any local anti-noise or nuisance ordinances in your area.**

### **Feature #16 - Arming Delay**

**3 Seconds** (press LOCK to program)

**15 Seconds** (press UNLOCK to program)

**30 Seconds** (press TRUNK to program)

**45 Seconds** (press START to program)

This selects how long the alarm waits to monitor trigger zones after arming.

### **Feature #17 - Open Door Warning Upon Arming**

**On** (press LOCK to program)

**Off** (press UNLOCK 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 controller or transmitter, the siren will chirp 3 times and the parking lights will flash 3 times, instead of once.



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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 - Remote Start Activation From The WHITE/BLUE Wire

- 1 pulse (press LOCK to program)
- 2 pulses (press UNLOCK to program)
- 3 pulses (press TRUNK to program)
- 4 pulses (press START to program)

This feature changes how remote start is activated from the (-) activation input wire.

### Feature #2 - Vehicle Learn

- Enabled (press LOCK to program)
- Disabled (press UNLOCK to program)

When enabled, the system will allow the installer to perform vehicle learn (described in the installation guide). This allows quick programming of several vehicle specific settings.

**WARNING: This feature should only be programmed by the installer.**

### Feature #3 - Engine Detection Method

- Progressive Voltage (press LOCK to program)
- Voltage (press UNLOCK to program)
- Tach Wire (press TRUNK to program)
- Data Tach (press START 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. The best method available is auto-detected during the VEHICLE LEARN process.

“**Progressive Voltage**” mode is a new version of our popular “tachless hi” method. It uses a preset crank time (see installer feature #7) 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 but allows for voltage drops after the engine is running for 2 minutes accommodating new progressive style alternators. This method is the most universal for all vehicles.

“**Voltage**” mode looks for a voltage increase of 0.5v after cranking and constantly monitors voltage during remote start operation.

“**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 #4 - Gasoline Or Diesel Engine

- Gasoline (press LOCK to program)
- Diesel 15 Sec. Delay (press UNLOCK to program)
- Diesel 20 Sec. Delay (press TRUNK to program)
- Diesel 30 Sec. Delay (press START to program)

This feature changes the system's timing of the ignition and starter output sequence for gas or diesel engines. Gasoline: 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. Diesel: 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.

## Installer Programmable Features (cont'd)

### Feature #5 - Light Relay (B or 3DB) / Sat. Port Green Wire Function (non-B or 3DB)

Dome Light Output	(press LOCK to program)
Start	(press UNLOCK to program)
Ignition Output	(press TRUNK to program)
Accessory Output	(press START to program)
Status	(press LOCK & UNLOCK to program)
Light Flash	(press TRUNK & START to program)

This output can be programmed to perform any functions listed above. B or 3DB models utilize a built in relay. Non-B or 3DB models use a 250ma negative output on the satellite port.

### Feature #6 Blue Satellite Port, Blue Wire Function

Ignition	(press LOCK to program)
Status / GWR	(press UNLOCK to program)
Defrost 0.8 sec Pulse	(press TRUNK to program)
Defrost 10 min Pulse	(press START to program)
Pulse After Engine Off	(press LOCK & UNLOCK to program)
Horn	(press TRUNK & START to program)

This determines the function of the Blue wire on the Blue satellite relay port.

The Status setting turns on briefly before the Ignition output and stays on during remote start mode. The other pulse settings give a 0.8 second pulse under the selected condition. **Defrost Pulse** will send a pulse after start only when the cabin temperature is below freezing (32 degrees F / 0 degrees C).

### Feature #7 - Starter Cranking Time

0.75 Second	(press LOCK to program)
1.00 Second	(press UNLOCK to program)
1.5 Seconds	(press TRUNK to program)
2.25 Seconds	(press START to program)
3 Seconds	(press LOCK & UNLOCK to program)
Average	(press TRUNK & START 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. The "Average" setting will sample the last 8 cranks (by ignition key) and average the crank time automatically for increased accuracy with changing climate and vehicle conditions.

### Feature #8 - Door Lock/Unlock Outputs

0.8 Second Outputs	(press LOCK to program)
3 Second Outputs	(press UNLOCK to program)
Double Pulse Unlock Output	(press TRUNK to program)
Total Closure Lock Output	(press START to program)

This changes the system's doorlocking outputs to suite different vehicle requirements. The total closure setting provides a 28 second lock pulse (press LOCK or UNLOCK is during the pulse to stop it) and a 0.8 second unlock pulse.

### Feature #9 Remote Start Lock Control

Off	(press LOCK to program)
Lock After Start	(press UNLOCK to program)
Unlock before start	(press TRUNK to program)
Unlock Before RS & Lock After RS	(press START to program)
Lock After Engine Off	(press LOCK & UNLOCK to program)

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

## Feature #10 - Turbo Timer

- Off** (press LOCK to program)
- Run 1 Minute** (press UNLOCK to program)
- Run 2 Minutes** (press TRUNK to program)
- Run 3 Minutes** (press START to program)

This feature, the operation of which is described on page 8, when turned on configures the system to automatically keep the engine running briefly after the key is turned off. This operation is designed specifically for vehicles with turbocharged engines.

**NOTE: This feature is dependent on the proper wiring of the neutral safety circuit.**

## Feature #11 - Manual Transmission Reservation Mode

- On** (press LOCK to program)
- Off** (press UNLOCK 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.

## Feature #12 - Data Port Protocol

- Green: DBI, Black: DBI** (press LOCK to program)
- Green: iData, Black: iData** (press UNLOCK to program)
- Green: DBI, Black: iData** (press TRUNK to program)
- Green: iData, Black: DBI** (press START to program)

This feature determines which data protocol is used on each data port. Choose this based on the accessory being connected to the port. **NOTE: When a BLADE is inserted, this feature automatically switches the black port to the iDataLink protocol.**

## Feature #13 - Alarm Functions

- On** (press LOCK to program)
- Off** (press UNLOCK to program)
- Off- Unlock Only** (press TRUNK to program)
- Sensor Detect** (press START to program)

This feature converts keyless entry models to full alarm systems (installation changes may be required). **Sensor Detect** automatically turns on alarm functions when a sensor is connected to the sensor port or data port.

## Feature #14 - Pulse Ignition On Disarm

- On** (press LOCK to program)
- Off** (press UNLOCK to program)

This feature will pulse the ignition and activate any attached immobilizer bypass module for vehicles that require the ignition to be turned on to disarm the OEM alarm.

## Feature #15 - Lock On Prewarn

- On** (press LOCK to program)
- Off** (press UNLOCK to program)

This feature will automatically lock the doors to combat unauthorized entry from lock picking when the prewarn zone is triggered.

## Feature #16 - Starter Interrupt Functions

- Alarm Only** (press LOCK to program)
- Anti-Grind Only** (press UNLOCK to program)
- Alarm & Anti-Grind** (press TRUNK to program)
- Automatic** (press START to program)

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

**Anti-Grind Only** - The Starter Interrupt is operable whenever remote start is on.

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

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

## Installer Programmable Features (cont'd)

### Feature #17 Low Temp Crank Extender

- 0ms (press LOCK to program)
- 200ms (press UNLOCK to program)
- 300ms (press TRUNK to program)
- 400ms (press START 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 #3).

### Feature #18 - Arm, Disarm or Additional Channels

- Arm / Disarm (press LOCK to program)
- Arm / Channel 5 (press UNLOCK to program)
- Channel 4 / Disarm (press TRUNK to program)
- Channel 4 / Ch 5 Pulse (press START to program)
- Ch 4 Latch / Disarm (press LOCK & UNLOCK to program)
- Ch 4 Latch / Ch 5 Pulse (press TRUNK & START 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 controller or 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. The Latch function will reset when the remote button(s) is pressed again, the ignition is turned "on", or the system loses main power.

### Feature #19 - Horn Relay Function (3DB) / Brown Wire Function (non-3DB)

- Horn Output (press LOCK to program)
- Ignition (press UNLOCK to program)
- Trunk Release (press TRUNK to program)
- Pulse After Start (press START 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 a siren and the horn creates an extremely effective security system. This feature controls the operation of the Brown wire on non-B or 3DB models.

### Feature #20 Low Current / Motorcycle Mode

- On (press LOCK to program)
- Off (press UNLOCK to program)

This feature, when on, reduces the system's current draw by as much as 40% to maximize the vehicle's battery life while the alarm is armed. It causes the starter interrupt output to only operate when the ignition is turned on and reduces the frequency of the "armed" flashing status light significantly. This is ideal when the system is to be used on vehicles that have limited battery capacity and/or may sit for extended periods without charging the battery.

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.

# User Feature Programming: Ignition on, off, press valet 5 times

CONVENIENCE

SECURITY

# Feature	Lock Button (Brake 1x)	Unlock button (Brake 2x)	Trunk button (Brake 3x)	Start button (Brake 4x)	Lock + Unlock (Brake 5x)	Trunk + Start (Brake 6x)
1 Remote Start Run Time	3 min	10 min	15 min	20 min	30 min	
2 Flashing Light Confirmations	Unlock: ON RS: ON	Unlock: ON RS: Flash	Unlock: Flash RS: ON	Unlock: Flash RS: Flash		
3 Confirmation Chirp Volume	Low	Med-Low	Med-High	High		
4 BROWN Wire: Siren / Pulsed Horn	Pulse LOW	Pulse MED	Pulse HI	Steady Siren	Random	
5 Ignition Lock / Unlock	Off	Ign On = Lock	Ign. Off = Unlock	Lock + Unlock		
6 Door Open Bypass for Feat. #5	On	Off				
7 Unlock w/ Trunk Release	On	Off				
8 RS Activation (Remote)	Start x 1	Start x 2	Start x 3	Start x 4		
9 Last Door Arming	Off	On w/o Lock	On w/ Lock			
10 Automatic Rearming	Off	On w/o Lock	On w/ Lock	Enhanced		
11 Confirmation Chirps	Siren + Horn	Siren Only	Horn Only	On Demand	Off	
12 Anti-Carjacking	Ignition	Door	Ignition + Door	Off		
13 Override Code	See operation guide for programming instructions. DEFAULT: 1,0					
14 Ignition Override	On	Off				
15 Alarm Trigger Duration	30 sec	60 sec	90 sec	120 sec		
16 Arming Delay	3 sec	15 sec	30 sec	45 sec		
17 Open Door Warning Upon Arming	On	Off				

# Installer Feature Programming: Ignition on, off, press valet 10 times

INSTALLER ONLY

1 RS Activation (WHITE/BLUE wire)	1 Pulse	2 pulses	3 pulses	4 pulses		
2 Vehicle Learn	Enabled	Disabled				
3 Engine Detection	Prog. Voltage	Voltage	Tach Wire	Data-tach	Crank Only	
4 Gasoline or Diesel Engine	Gasoline	15 sec Diesel	20 sec Diesel	30 sec Diesel		
5 Light Relay / Sat Port GREEN Wire	Dome Light	Start	Ignition	Accessory	Status	Light Flash
6 Blue Sat Port BLUE Wire	Ignition	Status	0.8 sec Defrost Pulse	10 min Defrost Pulse	Pulse After Engine Off	Horn
7 Crank Time	0.75 sec	1 sec	1.5 sec	2.25 sec	3 sec	Average
8 Door Lock/Unlock Outputs	0.8 sec	3 sec	Double Unlock	Total Closure		
9 Remote Start Lock Control	Off	Lock after Start	Unlock before Start	Unlock Before & Lock After	Lock After Engine Off	
10 Turbo Timer	Off	1 min	2 min	3 min		
11 Manual Transmission Reservation	On	Off				
12 Data Port Protocol	Green: DBI Black: DBI	Green: iData Black: iData	Green: DBI Black: iData	Green: iData Black: DBI		
13 Alarm Functions	On	Off	Off-Unlock Only	Sensor Detect		
14 Pulse Ign. on Disarm	On	Off				
15 Lock On Prewarn	On	Off				
16 Starter Interrupt	Alarm Only	Anti-Grind Only	Alarm/Anti-Grind	Automatic		
17 Low Temp Crank Extender	0 ms	200 ms	300 ms	400 ms		
18 Arm/Disarm or CH. 4/5	Arm/Disarm	Arm/CH. 5	CH. 4/Disarm	CH. 4/CH.5	CH4 Latch/Disarm	CH4 Latch/CH5 Pulse
19 Horn Relay Function / Brown Wire	Horn	Ignition	Trunk Release	Pulse After Start		
20 Low Current Mode	On	Off				

## FEATURE SETTING KEY:

Default Setting

Default For "AL-1670-B" Model When Different

UnderLine - Default For "RS-X70-3DB" Models When Different.

## **Back Cover**

**Color cover is in a  
separate file.**