



**AL-1660-EDPB
RS-360-EDPB**

Deluxe Alarm & Remote Start w/ BLADE Technology

April 23, 2015

Operation Guide

Temporary cover. Color cover is in a separate file.

Table Of Contents

Transmitter Overview	3
Transmitter Functions	3
Other Remote Start Features	6
Low Battery/Low Temp Automatic Starting	6
Turbo Timer Feature	7
Pit-Stop Feature	7
Manual Transmission Starting	7
Security System Features	7
Last Door Arming	7
Automatic Rearming	7
Pre-Warn Detection	8
When The System Triggers	8
Using The Valet Switch	8
Emergency Override	8
Valet Mode	8
The Status Light	9
Anti-Carjacking Protection	10
Programming Transmitters	11
Programming Features	11
User Programmable Features	12
Installer Programmable Features	15

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

Transmitter part number:
1411-03

Call your dealer or visit
www.caralarm.com to order
replacement transmitters.

Battery replacement:

Remove the small screw from the lower back case, and separate the transmitter halves. Replace the **CR2032** battery (or with 2 CR2016 batteries) and reassemble the transmitter case.



This system is ECHO compatible, which means you can upgrade at anytime to have 2-way capability and greater range (up to 1-mile!). It's a simple upgrade that only takes minutes, so talk to your dealer about upgrading with ECHO TECHNOLOGY today!!

Transmitter Functions

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



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

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



- THE SIREN / HORN 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 / UNLOCK AND THE TRUNK WILL OPEN (IF EQUIPPED).

REMOTE START: Press and release the “START” button twice within 5 seconds. (see user feature #8 for additional options)



- THE PARKING LIGHTS WILL FLASH ONCE AND THE STATUS LIGHT WILL FLASH RAPIDLY.
- 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 SLOWLY.

- If the engine stalls, the system will make up to 3 more attempts.
- Each time you park, set the climate controls as desired 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.

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 remote start activation is programmed for 1 press, the 1st press activates Run Time Extender so an additional press is required to turn off remote start.

- 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: Press and hold the “LOCK” & “TRUNK” buttons for 3 seconds.



- YOUR SYSTEM WILL ACTIVATE THE CHANNEL 4 OUTPUT.

CHANNEL 5: 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 PARKING LIGHTS WILL FLASH, AND THE DOORS WILL LOCK OR UNLOCK DEPENDING WHICH BUTTON IS PRESSED.

SILENT LOCK / UNLOCK: Press and release the “TRUNK” button twice in 5 seconds.



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

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



- THE SYSTEM WILL ENTER ALARM VALET MODE. SEE PAGE 8 FOR MORE INFO ON VALET MODES.

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.
NOTE: ALARM FUNCTIONS MUST BE ENABLED FOR THIS OPERATION

LOW VOLTAGE/TEMP AUTO START: Press and release the “START” button within 5 seconds of locking/arming the system.



- THE SYSTEM WILL GIVE ONE CHIRP TO INDICATE THE LOW VOLT/LOW TEMP (15 DEGREES ONLY) AUTOSTART IS ACTIVATED.
SEE BELOW FOR MORE INFO.

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 if the vehicle battery drops below 11 volts or the interior temperature drops to 15 (or 32) degrees fahrenheit. You must activate these features each time you park your car to use them. They can be activated one of two ways:

Method 1 - Valet Switch

- 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 valet button 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, immediately after 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.

Other Remote Start Features (cont'd)

Method 2 - With The Controller (Low Volt + Low Temp - 15 Degrees Only)

- Within 5 seconds of pressing LOCK, press the START button. You will get one chirp to confirm.

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

This is recommended for vehicles equipped with a turbocharger. It allows the engine to idle after driving to cool the turbo. When this Installer Programmable Feature (#10) 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 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.

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 to confirm. 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 #11 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 car running, hold the brake pedal, apply the parking brake, 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.
- 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 to indicate it is ready to be remote started.

NOTE: Manual transmission setup will cancel if you enter the vehicle.

Security System Features

NOTE: Security features are optional for the RS-360-EDPB. Talk to your dealer to learn more about upgrading.

LAST DOOR ARMING

This system can be configured to arm automatically when all the vehicle's doors are closed (see user feature #9). When enabled, the siren/horn will chirp once when all of the doors are closed. It will start a 30 second countdown (indicated by a fast flashing status light) after which, the system will lock and/or arm. The 30 second arming delay will be paused while a point of entry is open. Turning ON the ignition key will cancel the arming sequence until the key is turned off and the doors are all closed once again.

NOTE: Installer feature #13 must be on and the system must be wired for security functions

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.

NOTE: Installer feature #13 must be on and the system must be wired for security functions

Security System Features (cont'd)

PRE-WARN DETECTION

This system's impact sensor (optional for the RS-360-EDPB) 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. This is very useful when an intruder attempts to unlock the door.

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 on page 9 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, it will re-arm that zone.

Using The Valet Switch

EMERGENCY OVERRIDE

If you lose or break your controller, you'll 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 (user feature #13)

STEP 4 - Turn the ignition "OFF".

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 will turn off.

The status lights, located in the window-mount antenna, provide a visual indication of the system's 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 transmitters 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 lights 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 the vehicle's engine.

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: 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: The neutral safety circuit was triggered.

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

7 FLASHES: The hood was opened.

Anti-Carjacking Protection

The system is equipped with two separate Anti-Carjacking protection features (ignition, open door, or both) that are selectable via user feature #12. 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.

NOTE: SecureCode (see user feature #13) is required if it has been customized.

TYPES OF ANTI-CARJACKING PROTECTION

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.

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.

Programming Transmitters

Standard Programming: Use this method to program additional or replacement transmitters. Before you begin, have all transmitters at hand.

Step 1 Then, turn the ignition “on” (do not crank the engine).

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.

Step 4 Then, turn the ignition “off” or wait 10 seconds to exit programming mode.

Programming Features

A matrix of all programmable features and their options are on the last page of this guide. For detailed information on each feature, please refer to the next section. Use the procedure below to make any necessary changes.

TO MANUALLY CHANGE FEATURES:

Step 1 Turn the ignition key “ON”, then “OFF” (do not crank the engine)

Step 2 Within 5 seconds of step 1, press the valet switch 5 times to access user features (Press 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 equal to the selected feature.

Step 4 Change the feature by pressing the remote button that matches the desired setting.

~ The siren/horn will chirp equal to the selected setting.

Step 5 If you wish to change more features, repeat steps 3 & 4 at this time.

Step 6 To exit programming, turn the ignition key “ON” then “OFF”. Or, it will exit automatically after 10 seconds of no activity.

User Programmable Features

Feature #1 - Remote Start Run Time

10 Minutes (press "**lock**" button to program) - **DEFAULT**

5 Minutes (press "**unlock**" button to program)

15 Minutes (press "**trunk**" button to program)

20 Minutes (press "**start**" button 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**" button to program)

Unlock: ON, RS: Flash (press "**unlock**" button to program)

Unlock: Flash, RS: ON (press "**trunk**" button to program)

Unlock: Flash, RS: Flash (press "**start**" button to program) - **DEFAULT**

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**" button to program)

Medium Low (press "**unlock**" button to program)

Medium High (press "**trunk**" button to program) - **DEFAULT**

High (loudest) (press "**start**" button 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**" button to program) - **DEFAULT (RS-360-EDPB)**

Pulsed Horn Medium (press "**unlock**" button to program)

Pulsed Horn High (press "**trunk**" button to program)

Steady Siren (press "**start**" button to program) - **DEFAULT (AL-1660-EDPB)**

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 horn honk options will affect all horn honk outputs used as well as change the BROWN wire's function.

Feature #5 - Ignition Controlled Lock/Unlock

Off (press "**lock**" button to program) - **DEFAULT**

Lock w/ Ignition On (press "**unlock**" button to program)

Unlock w/ Ignition Off (press "**trunk**" button to program)

Lock And Unlock w/ Ignition (press "**start**" button 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**" button to program) - **DEFAULT**

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

On (press “**lock**” button to program) - **DEFAULT**

Off (press “**unlock**” button 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**” button to program)

Press “start” button 2 times (press “**unlock**” button to program) - **DEFAULT**

Press “start” button 3 times (press “**trunk**” button to program)

Press “start” button 4 times (press **start**” button to program)

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

Feature #9 - Last Door Arming

Off (press “**lock**” button to program) - **DEFAULT**

On w/o doors locking (press “**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 #10 - Automatic Rearming

Off (press “**lock**” button to program) - **DEFAULT**

On w/o doors locking (press “**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.

Feature #11 - Confirmation Chirps

Siren + Horn (press “**lock**” button to program)

Siren Only (press “**unlock**” button to program) - **DEFAULT**

On Demand (siren+horn) (press “**trunk**” button to program)

Off (press “**start**” button 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**” button to program)

Door Only (press “**unlock**” button to program)

Ignition + Door (press “**trunk**” button to program)

Off (press “**start**” button to program) - **DEFAULT**

This selects between the 2 forms of anti-carjacking protection. Details on using anti-carjacking protection are described on page 10.

User Programmable Features (cont'd)

Feature #13 - NOT USED

Feature #14 - Ignition Activated Override

On (press "**lock**" button to program)

Off (press "**unlock**" button to program) - **DEFAULT**

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 #15 - Alarm Trigger Duration

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

60 Seconds (press "**unlock**" button to program)

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

120 Seconds (press "**start**" button 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**" button to program) - **DEFAULT**

15 Seconds (press "**unlock**" button to program)

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

45 Seconds (press "**start**" button 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**" button to program)

Off (press "**unlock**" button to program) - **DEFAULT**

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.

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 - Remote Start Activation From The WHITE/BLUE Wire

1 pulse (press "lock" button to program) - **DEFAULT**

2 pulses (press "unlock" button to program)

3 pulses (press "trunk" button to program)

4 pulses (press "start" button to program)

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

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

Ignition (press "lock" button to program) - **DEFAULT**

Accessory (press "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 #3 - Engine Detection Method

Tachless Hi (press "lock" button to program) - **DEFAULT**

Tachless Lo (press "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 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.

"**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 #4 - 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. 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 Function

Dome Light Output (press "**lock**" button to program) - **DEFAULT**

Start (press "**unlock**" button to program)

Ignition Output (press "**trunk**" button to program)

Accessory Output (press "**start**" button to program)

Status (press "**lock**" & "**unlock**" 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 for the other functions listed above.

Feature #6 Blue Satellite Port, Blue Wire Function

Ignition (press "**lock**" button to program)

Status / GWR (press "**unlock**" button to program) - **DEFAULT**

Defrost Pulse (press "**trunk**" button to program)

Pulse After Engine Off (press "**start**" button to program)

Horn (press "**lock**" & "**unlock**" button 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**" button to program) - **DEFAULT**

1.00 Second (press "**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 - Door Lock/Unlock Outputs

0.8 Second Outputs (press "**lock**" button to program) - **DEFAULT**

3 Second Outputs (press "**unlock**" button to program)

Double Pulse Unlock Output (press "**trunk**" button to program)

Total Closure Lock Output (press "**start**" button 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**" button to program) - **DEFAULT**

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

Unlock before start (press "**trunk**" button to program)

Unlock Before RS & Lock After RS (press "**start**" button 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**” button to program) - **DEFAULT**

Run 1 Minute (press “**unlock**” button to program)

Run 2 Minutes (press “**trunk**” button to program)

Run 3 Minutes (press “**start**” button to program)

This feature, the operation of which is described on page 7, 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 Mode

On (press “**lock**” button to program)

Off (press “**unlock**” button to program) - **DEFAULT**

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**” button to program)

Green: iData, Black: iData (press “**unlock**” button to program)

Green: DBI, Black: iData (press “**trunk**” button to program)

Green: iData, Black: DBI (press “**start**” button to program)

Auto-Detect: (press “**lock**” & “**unlock**” buttons to program) - **DEFAULT**

This feature determines which data protocol is used on each data port. By default, this feature shouldn't need to be changed. With everything installed and connected to the data ports, upon the first remote start attempt, each port will auto-detect the type of device connected and choose the proper protocol. This can also be configured manually. **NOTE: When a BLADE is inserted, the black data port automatically switches to iData protocol.**

Feature #13 - Alarm Functions

On (press “**lock**” button to program) - **DEFAULT (AL-1660-EDPB)**

Off (press “**unlock**” button to program) - **DEFAULT (RS-360-EDPB)**

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

Feature #14 - Pulse Ignition On Disarm

On (press “**lock**” button to program)

Off (press “**unlock**” button to program) - **DEFAULT**

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**” button to program) - **DEFAULT**

Off (press “**unlock**” button to program)

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

Installer Programmable Features (cont'd)

Feature #16 - Starter Interrupt Functions

- Alarm Only** (press "**lock**" button to program)
Anti-Grind Only (press "**unlock**" button to program) - **DEFAULT (RS-360-EDPB)**
Alarm & Anti-Grind (press "**trunk**" button to program) - **DEFAULT (AL-1660-EDPB)**
Automatic (press "**start**" button 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. This prevents the starter from grinding if the user accidentally turns the key to "START" during remote start.

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.

Feature #17 Low Temp Crank Extender

- 0ms (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 #3)

Feature #18 - Arm, Disarm or Additional Channels

- Arm / Disarm** (press "**lock**" button to program) - **DEFAULT**
Arm / Channel 5 (press "**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 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.

Feature #19 - Horn Relay Functions

- Horn Output** (press "**lock**" button to program) - **DEFAULT**
Ignition (press "**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 for the other functions listed above.

User Feature Programming: Ignition on, off, press valet 5 times					
# Feature	Lock Button (Brake x 1)	Unlock button (Brake x 2)	Trunk button (Brake x 3)	Start button (Brake x 4)	Lock + Unlock (Brake x 5)
1 Remote Start Run Time	10 min	5 min	15 min	20 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	
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	On Demand	Off	
12 Anti-Carjacking	Ignition	Door	Ignition + Door	Off	
13 NOT USED					
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					
1 RS Activation (WHITE/BLUE wire)	1 Pulse	2 pulses	3 pulses	4 pulses	
2 PINK/WHITE Wire	Ignition	Accessory	Starter		
3 Engine Detection	Tachless Hi	Tachless Lo	Tach Wire	Data-tach	Crank Only
4 Gasoline or Diesel Engine	Gasoline	15 sec Diesel	20 sec Diesel	30 sec Diesel	
5 Light Relay Function	Dome Light	Start	Ignition	Accessory	Status
6 Blue Sat Port BLUE Wire	Ignition	Status	Pulse After Start below freezing	Pulse After Engine Off	Horn
7 Crank Time	0.75 sec	1 sec	1.5 sec	2.25 sec	
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	Lock + Unlock	
10 Turbo Timer	Off	1 min	2 min	3 min	
11 Manual Transmission	On	Off			
12 Data Port Protocol	Green: DBI Black: DBI	Green: iData Black: iData	Green: DBI Black: iData	Green: iData Black: DBI	Auto-detect
13 Alarm Functions	On	Off			
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	
19 Horn Relay Function	Horn	Ignition	Trunk Release	Pulse After Start	

Back Cover

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