

# EXCALIBUR

REMOTE START & SECURITY PERFECTED

## RS-X70 V1.3 INSTALLATION GUIDE

### Quick Reference - Installation Overview

- 1** Choose a discreet mounting location for the module and locations for any accessories (siren, sensors, interface module, etc.). Do not mount the module yet (you might anger the install gods).
- 2** Identify vehicle connection points and plan harness routing from your mounting location. Avoid any moving vehicle parts or parts that generate heat. Also avoid any sharp metal edges. See wiring details on pages 3-9.
- 3** Cut system wires to length, prep your harnesses, and make all wire connections to the vehicle.  
**NOTE: DATA/MUX WIRES ARE SENSITIVE and MUST BE SPLICED DIRECTLY. QUICK TAPS ARE NOT RECOMMENDED.**
- 4** If you are using either of the system's data ports for accessories or modules using DBI protocol, connect these modules now and configure them for DATA MODE.  
  
Perform VEHICLE LEARN (see pages 7 and 10 for instructions). This automatically matches the IGN/ACC/START outputs to the vehicle's ignition switch, auto-detects data protocols, chooses the best engine detection method, decides whether neutral safety circuit is required, and allows you to quickly set engine and transmission types. **FASTER THAN PROGRAMMING!**
- 5** Test the system for all functions.
- 6** Secure the module(s) and harnesses to the vehicle.
- 7** Reassemble the vehicle.
- 8** Test the system for all functions again (keep the install gods happy).

**WIRE DIAGRAM: CENTER OF THIS BOOKLET**  
**FEATURE CHART: BACK COVER**

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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.

## Installation Considerations

### **BEFORE STARTING THE INSTALLATION, READ THIS ENTIRE MANUAL TO DETERMINE INSTALLATION REQUIREMENTS**

- VERIFY EACH CIRCUIT WITH A DIGITAL MULTIMETER
- IDENTIFY REQUIRED CIRCUITS FOR THE VEHICLE
- TAPE OFF OR REMOVE ANY UNUSED WIRING TO PREVENT POSSIBLE SHORT CIRCUITS
- ONLY ACTIVATE THE REMOTE START FUNCTION IN A WELL VENTILATED ENVIRONMENT
- AFFIX THE UNDERHOOD WARNING STICKER
- **AVOID ANY AIRBAG CIRCUITS, USUALLY INDICATED BY A YELLOW SLEEVE OR JACKET AROUND THE WIRING**

## 6 Pin Main Wire Harness

Most of the main wiring harness connections are high amperage circuits so it is recommended to direct splice, solder, & adequately insulate each connection. Many of these connections are made at the vehicle's ignition switch so be sure to properly route the harness away from anything that could compromise the wire insulation. The goal is to mimic the ignition switch. Keep this in mind when deciding which ignition & accessory circuits to power.

**NOTE: A low current harness for newer vehicles is available. It has 18 gauge, 100% copper wires and the RED & RED/WHITE wires are fused at 10A each.**

Order P/N: H-RS6BLC

### **RED & RED/WHITE WIRES - CONSTANT POWER (+) INPUT**

**REQUIRED.** These wires provide the constant positive 12v power supply for the system's operation. **CONNECTION:** Connect these to a constant +12 volt supply with sufficient amperage for remote starting. The +12v supply to the ignition switch is ideal. Some vehicle's have low amperage ignition switches in which case you would need to find a power supply at a fuse block or at the vehicle's battery. Fuse these wires within 6 inches of the connection to the vehicle. The two 30AMP fuses in the harness protect the system module, NOT THE VEHICLE. It is ideal to have a separate supply for each wire but, if the chosen supply is sufficient enough, you can combine both wires at the same point.

### **PINK WIRE - IGNITION/ACC/START (+) INPUT/OUTPUT**

**REQUIRED.** This connection is required & is critical to the operation of the system. It is an "IGNITION ON" input when the ignition key is turned on. By default, it is the primary ignition output for remote start operation. It turns on when remote start is activated & stays on during engine cranking for the entire remote start sequence. **CONNECTION:** Use any IGNITION, ACCESSORY, or secondary START circuit in the vehicle. This wire is defaulted for IGNITION output though it may change through the VEHICLE LEARN process (p.10) to match the connected vehicle circuit.

## 6 Pin Main Wire Harness (cont'd)

### **ORANGE WIRE - ACCESSORY/IGN/START (+) IN/OUT**

This circuit is designed to power additional IGNITION, ACCESSORY, or START circuits. By default, it functions as an ACCESSORY output & turns on when remote start is activated (slightly earlier than the ignition output), turns off during engine cranking, & turns back on for the remainder of the remote start operation.

**CONNECTION:** Use any IGNITION, ACCESSORY, or secondary START circuit in the vehicle. This wire is defaulted for ACCESSORY output though it may change through the VEHICLE LEARN process (p.10) to match the connected vehicle circuit.

### **VIOLET WIRE - START (+) INPUT/OUTPUT**

This output supplies positive voltage to the vehicle's starter circuit. If using an anti-grind, be sure this is connected on the starter side of the interrupt.

**CONNECTION:** The starter circuit is typically found at the ignition switch. The proper circuit will show +12v only when the ignition key is in the START position.

### **PINK/WHITE WIRE - IGNITION/ACC/START (+) IN/OUT**

This circuit is designed to power additional IGNITION, ACCESSORY, or START circuits. By default, it functions as an IGNITION output. It turns on when remote start is activated, stays on during engine cranking, & for the entire remote start operation.

**CONNECTION:** Use any IGNITION, ACCESSORY, or secondary START circuit in the vehicle. This wire is defaulted for IGNITION output though it may change through the VEHICLE LEARN process (p.10) to match the connected vehicle circuit.

## 14 Pin Secondary Wire Harness

### **BLACK WIRE - SYSTEM GROUND (-) INPUT**

**REQUIRED.** This input provides negative ground for all system operations.

**CONNECTION:** Using a properly sized ring terminal, connect this wire to the vehicle's chassis. Using an existing bolt is preferred but make sure that the connection point is clean and free of dirt, grease, or paint. Bright shiny metal at the connection point is desired.

### **ORANGE WIRE - STATUS/ANTI-GRIND (-) OUTPUT**

This provides 500mA negative ground while the alarm is armed and/or during remote start for anti-grind operation. The operation is selectable with installer feature #16.

**CONNECTION:** This wire is connected to the orange input wire on an optional start interrupt relay.

### **BROWN/RED WIRE - BRAKE PEDAL (+) INPUT**

**REQUIRED.** This input is a critical safety circuit which disables the remote start operation whenever the brake pedal is pressed.

**CONNECTION:** Connect this to the brake switch wire that shows +12 volts when the brake pedal is pressed.

## 14 Pin Secondary Wire Harness (cont'd)

### **BLACK/WHITE WIRE - NEUTRAL SAFETY (-) INPUT**

**REQUIRED.** This input is a critical safety circuit which allows remote start operation whenever the gear selector is in park or neutral (automatic transmission), or when the parking brake is applied (manual transmission). Remote start will not operate unless this wire sees chassis ground.

**CONNECTION (Automatic Transmission):** Connect this to the neutral safety switch wire that shows (-) ground when the gear selector is in the park and neutral positions.

**CONNECTION (Manual Transmission):** Connect this to the parking brake switch wire that shows (-) ground when the parking brake is applied.

### **VIOLET/WHITE WIRE - TACH SIGNAL INPUT**

This input provides the engine's RPM signal to the remote start. This is typically the most reliable form of engine detection. To use the tach wire, you must change installer feature #3 to the tach wire setting.

**CONNECTION:** This can be connected to any trigger wire for an ignition coil, fuel injector, or the signal to the tachometer in the dash. Use a digital multimeter set for AC volts to test. The appropriate wire will read between 1-6 volts AC and will increase as the engine RPM increases.

### **BROWN WIRE - HORN (-) OUTPUT**

This output provides a 1 amp negative output to operate the vehicle's horn.

**CONNECTION:** Connect this wire to the vehicle's horn circuit. If the vehicle's circuit is something other than negative, you will need to use a relay to convert this output.

### **WHITE WIRE - FLASHING LIGHT (+) OUTPUT**

This output provides a 10 amp positive output to flash the vehicle's parking lights (typically). If the vehicle has a low current negative parking light circuit, use the WHITE/BLACK wire instead.

**CONNECTION:** Connect this wire to the vehicle's positive parking light circuit. It will show +12 volts when the parking lights are on. **BE SURE NOT TO CONNECT TO THE DIMMER CIRCUIT WHICH WILL CHANGE VOLTAGE AS YOU TURN THE DIMMER KNOB.**

### **WHITE/BLACK WIRE - FLASHING LIGHT (-) OUTPUT**

This output provides a 250mA negative output to flash the vehicle's parking lights. If the vehicle has a positive parking light circuit, use the WHITE wire instead.

**CONNECTION:** Connect this wire to the vehicle's negative parking light circuit. It will show ground when the parking lights are on. **BE SURE NOT TO CONNECT TO THE DIMMER CIRCUIT WHICH WILL CHANGE RESISTANCE TO GROUND AS YOU TURN THE DIMMER KNOB.**

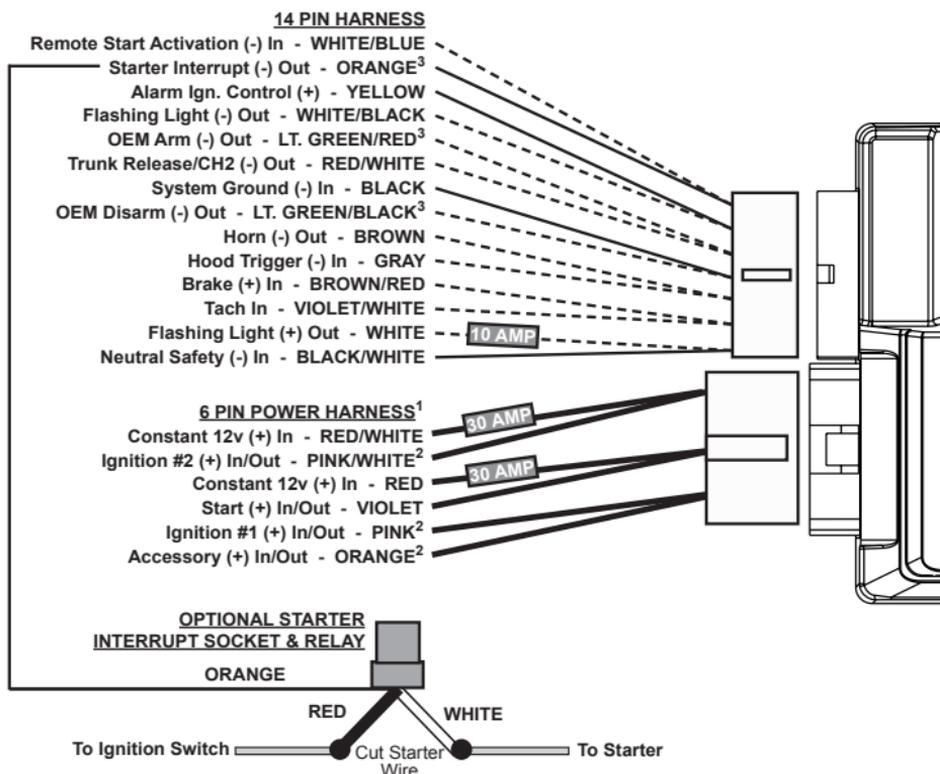
### **GRAY WIRE - HOOD TRIGGER (-) INPUT**

**REQUIRED.** This is a critical safety circuit that prevents remote start functions while the hood is opened. It also monitors the doors in manual transmission mode.

**CONNECTION:** Connect this wire to the OEM hood switch or light. It will show ground when the hood is opened. You can also use the included pin switch.

(continued on page 8)

# Wiring Overview Diagram

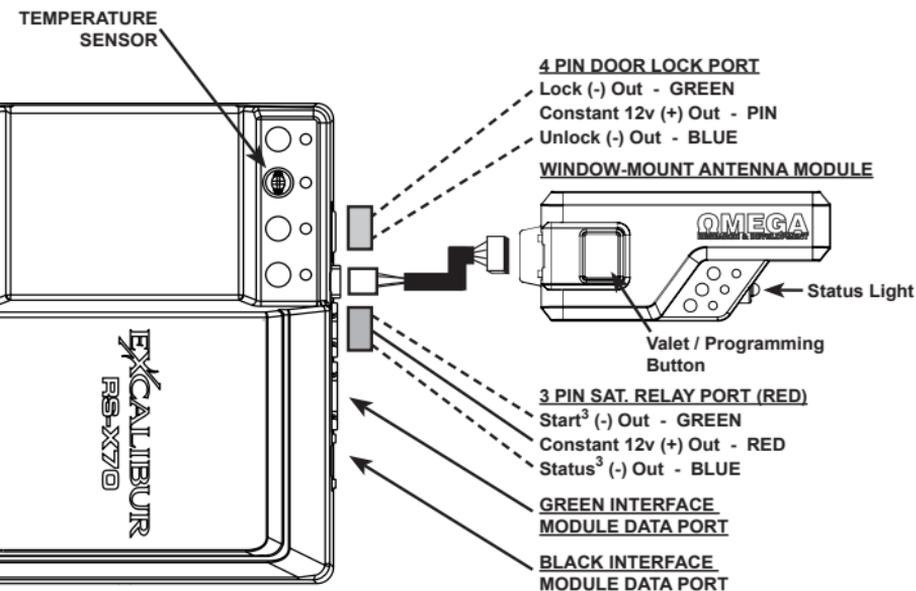


## WIRE LEGEND

- HARD WIRE CONNECTION REQUIRED
- - - - - FUNCTION SUPPORTED VIA DATA PORTS

## NOTES

1. LOW CURRENT HARNESS P/N: H-RS6BLC Available for vehicles with less than 20A ignition switches.
2. Learning output - see Vehicle Learn Procedure
3. Programmable output - see feature chart



### VEHICLE LEARN PROCEDURE

1. Connect any interface module(s) to the data port(s) and set for data mode.
2. Turn the ignition key ON (do not start)
3. Activate remote start  
System will chirp/flash lights to indicate engine type (Default: 1x = Gasoline)
4. Press valet to change engine type:  
1 chirp=Gasoline, 2 chirps=Diesel 15,  
3 chirps=Diesel 20, 4 chirps=Diesel 30
5. Start the engine with the ignition key
6. Turn the ignition key OFF  
System will chirp/flash lights equaling the # of IGN/ACC/START circuits detected (Max: 4x)
7. Within 20 seconds of Step 6, Activate remote start. Wait until engine is running and LED is flashing slow.
8. OPTIONAL: To enable Manual Transmission Reservation mode, release and set parking brake again. System should chirp/flash lights 1x.
9. TO SAVE SETTINGS: Shut down RS by pressing the BRAKE pedal.  
TO CANCEL/START OVER: Shut down RS by remote or input wire.

~ See Page 10 For Full Details ~

## 14 Pin Secondary Wire Harness (cont'd)

**MANUAL TRANSMISSION CONNECTION:** The Gray wire also serves as a door pin input (must see all doors) which is required to perform the "manual transmission setup procedure" (detailed in the operation guide). Diode isolate the hood input from the door input using two 1 or 2 amp diodes facing the cathodes (stripes) towards the vehicle wires. If the vehicle's door pin wire is positive, you must invert the signal with a relay.

### **YELLOW - ALARM IGNITION CONTROL (+) OUTPUT**

This output controls the ignition input to an outboard aftermarket alarm or keyless entry. When remote start is activated, this wire prevents the keyless/alarm from receiving an ignition ON input to allow for keyless entry operation. Otherwise, it's a direct pass through of the ignition circuit.

**CONNECTION:** Connect this wire directly to the outboard keyless entry/alarm's ignition input wire.

### **WHITE/BLUE WIRE - REMOTE START ACTIVATION (-) INPUT**

This input will activate the system's remote start function when it receives a negative pulse. Another pulse during remote start operation will turn off the remote start.

**CONNECTION:** Connect this wire to any device that you desire to activate the remote start feature. It requires a negative pulse input.

### **LT. GREEN/RED WIRE - OEM ALARM ARM (-) OUTPUT**

This output provides a 250mA negative pulse when remote start is turned off and when the system's alarm is armed.

**CONNECTION:** Connect this wire to the vehicle's OEM alarm arm circuit. Typically, it will show ground when the door cylinder key is turned to the lock position.

### **LT. GREEN/BLACK WIRE - OEM ALARM DISARM (-) OUTPUT**

This output provides a 250mA negative pulse when remote start is activated and when the system's alarm is disarmed.

**CONNECTION:** Connect this wire to the vehicle's OEM alarm disarm circuit. Typically, it will show ground when the door cylinder key is turned to the unlock position.

### **RED/WHITE WIRE - TRUNK RELEASE / CH2 (-) OUTPUT**

This output provides a 250mA negative output when the trunk release/CH2 function is activated by the controller. The output will remain as long as the controller button(s) is held.

**CONNECTION:** Connect this wire to the vehicle's existing trunk release switch if it is a low current negative circuit. If the circuit is a high current ground or a positive circuit, the use of a relay is required.

## Green & Black Data Ports

These ports provide a direct digital interface for any interface module, or other accessories, using either the DBI protocol or iDatalink protocol. **UPON THE FIRST REMOTE START ATTEMPT, THE PORT WILL AUTO-DETECT WHICH PROTOCOL TO USE. MAKE SURE ANY CONNECTED DEVICE IS PROPERLY CONNECTED**

**AND PROGRAMMED BEFORE HAND.** The Black port allows firmware flashing and feature programming via [www.omegaweblink.com](http://www.omegaweblink.com).

### 3 Pin Satellite Relay Port (RED)

#### GREEN WIRE - START (-) PROGRAMMABLE OUTPUT

This output provides a 250mA negative pulse when the large VIOLET start wire is active. It can also be programmed for PULSE AFTER START, STATUS, or DOME-LIGHT SUPERVISION. See installer programmable feature #5.

**CONNECTION:** If a negative start output is needed, connect this directly to the vehicle's negative starter circuit. Otherwise, use a relay to convert this to a high current circuit.

#### RED WIRE - CONSTANT (+) OUTPUT

This output provides a 500mA positive output to drive added relay coils.

#### BLUE WIRE - STATUS (-) PROGRAMMABLE OUTPUT

This provides a 250mA negative output slightly before & during the primary ignition output. This output is programmable. See installer feature #6.

**CONNECTION:** This is typically used to activate immobilizer bypass modules. Connect it directly to the module's activation input.

### 3 Pin Door Lock/Unlock Port (RED)

#### GREEN WIRE - LOCK (-) OUTPUT

This provides a 0.8 second 250mA negative pulse for any locking operations. The pulse timing is programmable by installer feature #8.

**CONNECTION:** Connect this to the vehicle's lock circuit for negative pulse systems. Otherwise, a doorlock interface and/or relays are required to convert the output.

#### CENTER PIN (EMPTY) - CONSTANT (+) OUTPUT

This output provides a 500mA positive output to drive the positive pin of added relay coils. It is used for Omega prewired doorlock interfaces.

#### BLUE WIRE - UNLOCK (-) OUTPUT

This provides a 0.8 second 250mA negative pulse for any unlocking operations. The pulse timing is programmable by installer feature #8.

**CONNECTION:** Connect this to the vehicle's "all door" unlock circuit for negative pulse systems. Otherwise, a doorlock interface and/or relays are required to convert the output.

### Status Lights

**All Models Except The RS-170:** The status light is built into the window mount antenna. It is best for these to be highly visible for maximum visual theft deterrence.

**RS-170:** This system includes a separate status light/valet button combo. It can be mounted in a 9mm hole in the dash.

### Valet / Programming Button

**Most Models:** The valet button is built into the window mount antenna.

**RS-170:** The valet button is built into the status light.

## Window Mount Antenna Module

Be sure to clean the glass before adhering the antenna. Mount it high in the windshield avoiding metal parts of the vehicle. Metal based window tint can decrease performance. Route the harness to the antenna module avoiding sharp objects that could compromise the harness jacket.

## 3D Motion Sensor

Some models are equipped with a motion sensor that provides added protection for remote start by shutting down the engine if motion is detected during the START output. This is ideal for manual transmission vehicles and eliminates the need for performing 'manual transmission setup' by the user. If the sensor is present, a "3D" logo will be on the antenna case.

## Vehicle Learn

Vehicle Learn is a procedure that allows you to quickly configure all vehicle dependant features. It also serves as a diagnostic tool for your IGN/ACC/START output connections on the main power harness. It's much faster than programming, saving you valuable time, & helps you discover critical mistakes.

### VEHICLE LEARN WILL:

- Detect the function of the PINK, PINK/WHITE, and ORANGE wires to automatically change the outputs to match the vehicle.
- Diagnose the PINK, PINK/WHITE, ORANGE, & VIOLET wire connections.
- Let you quickly choose engine type
- Auto-select Data-tach, tach wire, or tachless modes.
- Auto-select data port protocols
- Save tons of time in the bay!

### BEFORE YOU BEGIN:

- **Make all wire connections**
- **Connect any accessories/modules to the data ports.**  
If you are using an interface module/bypass kit, make sure it is in "DATA MODE" and programmed to the vehicle.
- **Set the parking brake if it is connected to the BLACK/WHITE wire.**

**Step 1: Turn the ignition key ON** (do not start)

**Step 2: Activate remote start by the remote, input activation wire, or smartphone control.**

The system will chirp/flash lights to indicate engine type (Default: 1x = Gasoline).

**Step 3: Press valet to change engine type, if needed:**

The system will chirp/flash lights to confirm each selection.

1 chirp=Gasoline, 2 chirps=Diesel 15, 3 chirps=Diesel 20, 4 chirps=Diesel 30

**Step 4: Start the engine with the ignition key**

**Step 5: Turn the ignition key OFF**

The system will chirp/flash lights the # of IGN/ACC/START circuits detected (Max: 4x).

**EXAMPLE:** If you connected the PINK, VIOLET, & ORANGE wires, the system should chirp 3x. If it only chirps 2x, one connection has a problem and should be checked.

Then start over at Step 1 to retest.

**Step 6: Within 20 seconds of Step 5, Activate remote start. Wait until engine is running and LED is flashing slow.**

- The system will poll both data ports for modules using the DBI protocol. If they do not respond, it will automatically switch to iDatalink protocol.

- After the engine is running, the system will look for data tach & tach wire availability. If detected, the system will switch to that method. If not, it will remain in tachless-hi.

## Vehicle Learn (cont'd)

**Step 7: OPTIONAL: To enable Manual Transmission Reservation mode, release and set the parking brake.** (The BLACK/WHITE wire must be connected to the parking brake.)

System should chirp/flash lights 1x.

**Step 8: TO SAVE SETTINGS: Shut down RS by pressing the BRAKE pedal.**

This disables VEHICLE LEARN (installer feature #2).

**TO CANCEL/START OVER: Shut down RS by remote or input wire.**

## Tach Programming

The vehicle's tach signal must be learned for proper operation. After making the tach wire connection, change installer feature #3 to "Tach Wlre" & perform the following steps:

**Step 1** Turn the ignition key "ON"

**Step 2** Within 5 seconds, press the brake pedal 5 times. (the siren will chirp 5 times)

**Step 3** Start the engine. The status lights will turn on indicating it has learned the current tach signal. If it does not light, check your tach connection and start over.

**Step 4** If the engine has a high idle at startup, it may be necessary to allow the idle to "settle" to around 700 RPM. If needed, you can press the valet button 1 time to resample the tach signal. The status light will flash off then back on once the signal has been resampled.

**Step 5** Turn the ignition key "OFF".

## Programming Transmitters

**Step 1** Have all transmitters which are to operate the system at hand. Then, turn the ignition "on".

**Step 2** Within 5 seconds of turning on the ignition, press the Valet button 5 times. The horn will briefly sound & the status light will turn on, confirming that for the next 10 seconds the system is ready to learn a transmitter/controller code.

**Step 3** Press the "lock" button (press "start" on 1-button models) on each transmitter one at a time. The system will chirp the horn once to confirm that each was learned. The transmitter's other button's are automatically assigned at this point. If a code is not received within a 10 second period, the learning process will end, as indicated by another horn honk.

**Step 4** Turn the vehicle's ignition "off".

## Programming Features

A matrix of all programmable features and their options are on the next page. For feature explanations, refer to the operation manual. Use the procedure below to make changes.

**NOTE: You can program features via your computer with Omega Weblink.**

Visit [www.omegaweblink.com](http://www.omegaweblink.com) for more information

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

**Step 2** Within 5 seconds of step 1, press the valet button 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 button the number of times corresponding with the desired feature's number. (The siren/horn will chirp equal to the selected feature)

**Step 4 4-button MODELS:** Press the transmitter button that matches your desired setting.

**1-button MODELS:** Press the transmitter button (OR turn on the ignition and press the brake pedal) the number of times that matches your desired setting. (The siren/horn will chirp matching 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.

### RESTORING FEATURE SETTINGS TO FACTORY DEFAULT:

**Step 1** Enter Installer Feature programming (DO NOT SELECT ANY FEATURES)

**Step 2 4-button MODELS:** Press LOCK + UNLOCK (or BRAKE x 5)

**1-button MODELS:** Press the START button 5 times (or BRAKE x 5)  
(The siren/horn will sound to indicate reset and exit programming)

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

# 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 Warn 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 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 Sat. Port GREEN Wire	Dome Light	Start	Ignition	Accessory	Status	Light Flash
6 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 Trans. 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 OEM Arm/Disarm or CH. 4/5	Arm/Disarm	Arm/CH5 Pulse	CH4 Pulse/ Disarm	CH4 Pulse/ CH5 Pulse	CH4 Latch/ Disarm	CH4 Latch/ CH5 Pulse
19 BROWN Wire	Horn	Ignition	Trunk Release	Pulse After Start		
20 Low Current Mode	On	Off				

**FEATURE SETTING KEY:**

Default Setting

Installer Feature 13 (Alarm Functions) must be ON

\* Door status required from external interface module or DATA sensor w/ analog inputs.