



## Model APSRS3Z Installation Manual

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#### FCC COMPLIANCE

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### Warning!

Changes or modifications made to this equipment not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment

NOTE: 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.

**PATENTED: [www.voxxintl.com/company/patents](http://www.voxxintl.com/company/patents)**

## **Before You Begin**

### **PROFESSIONAL INSTALLATION IS STRONGLY RECOMMENDED**

Roll down window to avoid locking the keys in the vehicle during installation.

Avoid mounting components or routing wires near hot surfaces or near moving parts like the steering wheel as it may prevent proper operation of the vehicle.

Tape or loom wires under the hood and dash for protection as well appearance.

Use grommets when routing wires through metal surfaces to prevent chafing and shorting.

Use a Digital Multi Meter for testing and verifying circuits. DO NOT USE A "TEST LIGHT" OR "COMPUTER SAFE PROBE" as these can set off air bags or damage sensitive vehicle computers and electronics.

**For technical support go to  
[www.avxtech1.com](http://www.avxtech1.com)  
or call 1 800 225 6074**

<b>6 Pin Power Harness:</b>	<b>1124317</b>
1 Blue	Ignition 1 (+)
2 Red/White	Battery 1 - 12V (+)
3 Green	Ignition 2 (+)
4 Purple	Accessory (+)
5 Red	Battery 2 - 12V (+)
6 Yellow	Starter Output

<b>12 Pin Input/Output Harness:</b>	<b>1124321</b>
1 Green/Orange	Tachometer Input
2 Empty Cavity	NA
3 Black/Blue	Pulse Before Start
4 Black/LT. Green	Pulse After Start
5 LT. Blue	Ground While Running Output
6 DK. Blue	(-) Trunk Release Output
7 Green/Yellow	Glow Plug Input
8 Brown	(+) Stop Input (Brake Sw.)
9 Gray	(-) Negative Stop Input (Hood Sw.)
10 Black/Red	Pulse After Shutdown
11 Black/Yellow	Pulse During Crank
12 Black/White	(-) Horn Output

<b>4 Pin Main Harness:</b>	<b>1124320</b>
1 Black	Ground
2 White/Red	Parking Light Relay Input
3 Yello/Black	To Controlling Alarm's Ign. Input
4 White	Parking Light Relay Output

<b>2 Pin Door Unlock Connector:</b>	<b>1122242</b>
1 Red	(-) Door Lock Output
2 Green	(-) Door Unlock Output

**PATENTED: [www.voxxintl.com/company/patents](http://www.voxxintl.com/company/patents)**

**This Remote Start System is designed to be used with  
Automatic Transmission- Fuel Injection Vehicles Only!**

**INSTALLATION OF THE MAJOR COMPONENTS:**

**CONTROL MODULE: (P/N 1365607)**

Select a mounting location inside the passenger compartment (up behind the dashboard). The mounting location selected must be within 24" of the ignition switch wiring harness to allow connection of the 6 pin main wiring harness.

Be certain that the chosen location will not interfere with proper operation of the vehicle. Avoid mounting the module to or routing the wiring around the steering shaft/column, as the module or wiring may wrap around or block the steering wheel preventing proper control of the vehicle. Secure the module in the chosen location using cable ties or screws as necessary.

**Do Not Mount The Module In The Engine Compartment, as it is not waterproof.**

**THE RECEIVER/ANTENNA VALET SWITCH LED ASSEMBLY: (P/N 1181256)**

The Superheterodyne Receiver Antenna Assembly which includes the LED and Valet/Programming switch provided with this unit allows routing from below the dash board for maximum operating range. Choose a location above the belt line (dashboard) of the vehicle for best reception. Special considerations must be made for windshield glass as some newer vehicles utilize a metallic shielded window glass that will inhibit or restrict RF reception. In these vehicles, route the antenna toward a rear window location for best reception. Secure the antenna with double stick tape provided. After securing the antenna with tape, we advise also securing a section of the antenna cable to a fixed support. This will prevent the antenna from dropping down in case the double stick tape is exposed to extreme heat which may loosen it's gummed surface. Route the connector toward the control module using caution not to pinch the cable as this will cause poor or no RF reception to the control module. Connect the 5 pin cable to the mating connector of control module.

**HOOD PIN SWITCH: (P/N 1363699)**

The pin switch included in this package are intended for protecting the hood area of the vehicle. In all cases, the switch must be mounted to a grounded metal surface. When the pin switch is activated, (hood/trunk open), it will supply a ground to the input wire to inhibit the remote start function. In addition, the hood switch is required for the safety shut down of the remote start unit. If the vehicle is being worked on, this hood switch prevents the remote start activation even if the RF command to start is issued.

**WARNING! This switch must be installed in all applications. Failure to do so may result in personal injury or property damage.**

Mount the switch in the hood locations away from water drain paths. If necessary, a bracket may be used to move the switch away from rain gutters or allow mounting to the firewall behind the hood seal. In both cases the switch must be set up to allow the hood to depress the switch at least 1/4 inch when the hood is closed and fully extended when the hood is opened. For direct mounting, a 1/4 inch hole must be drilled. Carefully check behind the chosen location to insure the drill will not penetrate any existing factory wiring or fluid lines.

Drill a 1/4" hole in the desired location and thread the pin switch into it using a 7/16" nut driver or deep well socket. If using the mounting bracket, first secure the bracket to the desired location and secure the pin switch in the pre-threaded mounting bracket hole.

**DO NOT PLUG THE SIX PIN MAIN POWER HARNESS OR THE MULTI PIN INPUT / OUTPUT HARNESS INTO THE CONTROL MODULE UNTIL ALL CONNECTIONS TO THE VEHICLE HAVE BEEN MADE. AFTER SELECTING YOUR TARGET WIRES AS DEFINED BELOW, DISCONNECT THE NEGATIVE BATTERY CABLE FROM THE VEHICLE BATTERY PRIOR TO MAKING ANY CONNECTIONS.**

**CAUTION: Do not remove the fuse holders from this wire harness. Fuses must be used and located as close as possible to the power source for adequate protection of the vehicle.**

### **WIRING THE 6 PIN MAIN POWER HARNESS Connector (P/N 1124317)**

#### **BLUE Wire:** Ignition 1 Output

Connect this wire to the ignition 1 wire from the ignition switch. This wire will show +12 volts when the ignition key is turned to the "ON" or "RUN" and the "START" or CRANK" positions, and will have 0 volts when the key is turned to the "OFF" and "ACCESSORY" positions.

#### **RED/WHITE TRACE WIRE:** + 12 volt Battery 1 Source 20A Max

Locate the vehicle battery wire(s) at the ignition switch. Verification: These wires will register voltage in all positions of the ignition switch. Connect the Red w/White wire to the vehicle's battery wire. This wire provides power for the control circuit as well as the ignition 1 and ignition 2 relays.

#### **GREEN Wire:** Ignition 2 Output

Connect this wire to the ignition 2 wire from the ignition switch. This wire will show + 12 volts when the ignition key is turned to the "ON" or "RUN" position and in some cases the "START" or CRANK" position. This wire will show 0 volts when the key is turned to the "OFF" and "ACCESSORY" positions.

**NOTE:** See programming information (Bank 3 Selection # 7) concerning this wire to allow output during the "START" mode

#### **PURPLE Wire:** Accessory Output

Connect this wire to the Accessory wire from the ignition switch. This wire will show + 12 volts when the ignition switch is turned to the "ACCESSORY" or "ON" and "RUN" positions, and will show 0 volts when the key is turned to the "OFF" and "START" or "CRANK" positions.

#### **RED WIRE:** + 12 Volt Battery 2 Source 30A Max

Locate the vehicle battery wire(s) at the ignition switch. Verification: These wires will register voltage in all positions of the ignition switch. Connect the Red wire to the vehicle's battery wire. This wire provides power for the start relay and the accessory relay.

#### **YELLOW Wire:** Starter Output

**Careful consideration for the connection of this wire must be made to prevent the vehicle from starting while in gear. Understanding the difference between a mechanical and an electrical Neutral Start Switch will allow you to properly identify the circuit and select the correct installation method. In addition you will realize why the connection of the safety wire is required for all mechanical switch configurations.**

**WARNING!** Failure to make this connection properly can result in personal injury and property damage.

In all installations it is the responsibility of the installing technician to test the remote start unit and ensure that the vehicle cannot start via RF control in any gear selection other than park or neutral.

In both mechanical and electrical neutral start switch configurations, the connection of the Starter wire will be made to the low current start solenoid wire of the ignition switch harness. This wire will have +12 volts when the ignition switch is turned to the start (crank) position only. This wire will have 0 volts in all other ignition switch positions

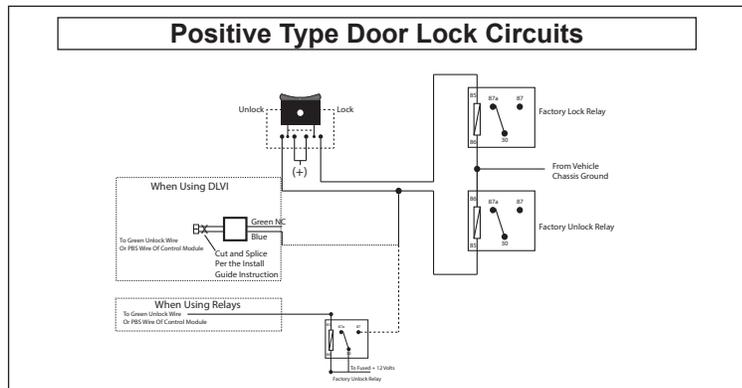
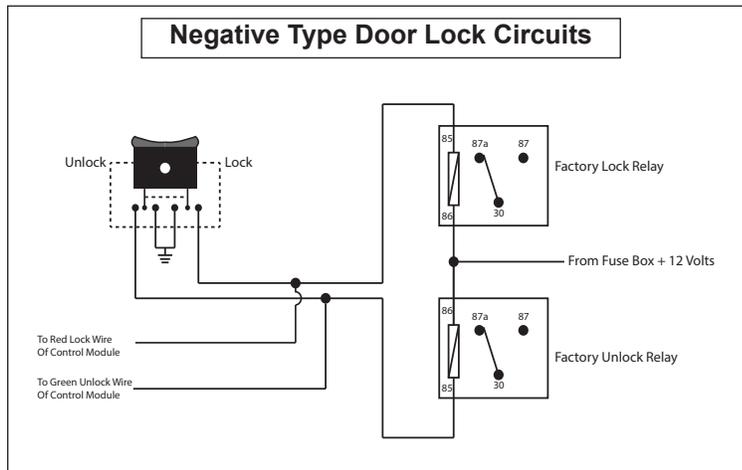
### **Wiring The 2 Pin Door Lock / Unlock Harness Connector (P/N 1122242)**

The Green Door Unlock output wires provide a pulsed ground output to control the vehicle door unlock circuit. The Red Door lock output wires provide a pulsed ground output to control the vehicle door lock circuit. The output of these wires have a maximum switching capability of 250 mA. Many vehicles today have factory door lock relays which can be connected directly to these output, however always confirm that the factory relays in your particular vehicle do not exceed the

rated 250mA output of the units door unlock/lock circuits. Plug the 2 pin connector of the door unlock harness into the mating connector shell of the control module. Determine the door lock and unlock circuit of the vehicle you are working on and wire according to the diagrams shown.

**3 Wire Negative Switched Door Lock Circuits:**

In this application, The Green wire of the 2 pin harness provides a negative pulse during the unlocking sequence. Connect the Green wire to the low current negative signal wire from the factory door unlock switch to the factory door unlock relay.



**NOTE: Resistive Circuits, Multiplex Circuits As Well As 4 Wire Polarity Reversal and 5 Wire Alternating 12 Volt Door Lock Control Circuits**

These applications require the use of additional components which may include relays, fixed resistor, a door lock interface, or a data module. You can search the vehicle @ [www.Flash-It.com](http://www.Flash-It.com) for vehicle specific information, or contact our tech service line or web site for additional information.

### **Wiring The 12 Pin Input / Output Harness, Connector (P/N 1124321)**

The auxiliary 12 pin connector provides low current outputs to control various functions in the vehicle during different stages of the Remote Start unit's operation. Understanding these outputs and the time in which they occur will allow you to determine if they are needed for the particular vehicle you are working on as well as how to use them.

#### **1) Green/Orange: Tachometer Input Signal**

This wire will continually monitor the engine's tach rate while the unit is under power of the Remote Start module. Route this wire to the vehicle ECM tach input or through the firewall into the engine compartment and connect to the negative side of the ignition coil. This Remote start unit learns the tach rate of the vehicle and in most cases will operate properly from one multi coil unit pack regardless of the number of cylinders. If the vehicle has a single coil for each cylinder, it may be necessary to connect to one of the vehicle's electronic fuel injector wires for proper RPM signal.

#### **2) Empty Cavity, No Connection**

#### **3) Black/Blue: Pulsed Negative Output Before Start**

The Blue/Black wire will provide a 1 second 250 mA pulsed negative output 1 second before the remote start unit activates as well as when the transmitter is used to Unlock the system. Typical use for this output would be to disarm a factory theft deterrent system to prevent false triggering of the factory alarm when the remote start unit engages or when the transmitter is used to unlock the doors.

**NOTE:** This output can be selected to operate like the door unlock output as set in alarm feature setting #1 by selecting feature #17 of Bank 3 to "as feature1 Bank2".

#### **4) Black/LT. Green: Pulsed Ground Output After Start**

The Black/LT Green wire will provide a 1 second 250 mA pulsed ground output after the vehicle is started under control of the remote start unit. Typically this wire will be used to re-lock the vehicle doors if the doors unlock automatically when the factory anti-theft system is disarmed.

#### **5) LT. Blue Wire: Ground Output While Running Under Remote Start Control**

This wire provides a 250mA ground output that becomes active 2 seconds before the Remote Start module initializes and remains grounded while the module is active plus an additional 1 seconds after the system turns off. In all of the applications described below, a relay will be required.

The LT. Blue wire can be used to accommodate the following situations:

##### **A. Shock Sensor By Pass:**

##### **B. Additional Ignition Output:**

##### **C. GM VATS Key Override:**

#### **6) DK. Blue Wire: (-) Trunk Release Output**

The Dark Blue wire supplies a 250mA ground pulsed output whenever channel three of the receiver is accessed. Pressing the pre-programmed transmitter button for three seconds will access channel three. This is a low current output and must be connected to a relay to supply power to the trunk release or the circuit you wish to control. Connect the Dark Blue wire to terminal # 86 of a 30 amp automotive relay Connect terminal # 85 of the relay to a fused + 12 volt source. Connect the common, normally open, and normally closed contacts of the relay to perform the selected function of channel 3.

**NOTE: Parking Light/Trunk Release Swap.**

Bank 2 Feature #19 allows the Dark Blue wire to be swapped with the on board parking light relay. In other words, when this feature is selected "ON" the on-board relay will operate when the Trunk button of the transmitter is pressed, and the Dark Blue wire will provide a low current (-) negative output to function as the parking lights would normally do. Flash when armed or disarmed, on when remote starting, etc...If you want to use the parking light relay to function as the trunk release output source and the dark blue to function as an output for the parking light indications, select this feature "On" and wire the options accordingly

**7) Green w/ Yellow trace Wire: Diesel Wait To Start Input**

The Green/Yellow wire, when connected to the wire that get + 12 volts during the glow plug preheat stage will delay the starter output until this wire drops the 12 volts. In other words, in a Diesel vehicle with glow plug preheat circuit, when the ignition is turned on, the vehicle will not crank until the glow plugs are hot enough to fire the atomized fuel oil when injected into the cylinder. By connecting this wire to the glow plug + 12 volt wire, when the remote start unit activates the ignition one output, the glow plug output also activates. The remote start sees the green/yellow with positive voltage and waits for this to go inactive( drop the 12 volts) before activating the starter motor. If this wire is not used or you have difficulty accessing the glow plug preheat circuit, you may elect to utilize the Diesel timed output as specified in Remote Start feature selection Bank 3 Feature #11. **NOTE:** If green/yellow is used, it will override or negate any setting of bank 3 feature #11.

**8) Brown Wire: Brake Positive Inhibit Input**

The Brown wire provides an instant shutdown for the Remote Start Control module whenever it gets + 12 volts. If the Brake lights switch in the vehicle switches + 12 volts to the brake light circuit, connect the Brown wire to the output side of the brake switch. This will allow the Remote Start to shut down if an attempt is made to operate the vehicle without the key while running under the control of the Remote Start. In most vehicles, in order to shift into gear, the brake pedal must be depressed. The brake input will in turn cause the remote start unit to shut off.

**9) Gray Wire: Negative Inhibit Input**

The Gray wire provides an instant shutdown for the Remote Start Control Module whenever it is grounded. Connect the gray wire to the hood pin switch previously installed. This wire must be routed through a grommet in the firewall and connected to the hood pin switch. If the pin switch is to be used with an alarm system, connect this wire using a diode assembly.

**IMPORTANT! DO NOT RELEASE THIS VEHICLE TO THE CONSUMER UNTIL YOU CONFIRM THE OPERATION OF THE HOOD PIN SAFETY SHUT DOWN FEATURE.**

**WARNING!** This connection is a safety wire and must be connected to a hood pin switch and tested as described. Failure to do so may result in personal injury or property damage. This wire may also be used if the vehicle brake light circuit switches ground to the brake lights. An isolation diode must be used for ground switched brake light circuits and must be connected to the output of the brake switch.

To test this circuit, while the vehicle is running under control of the remote start unit, open the vehicle's hood. The remote start unit should shut down immediately. If not, check the wiring to the control module and the under hood pin switch.

**DO NOT RELEASE THE VEHICLE TO THE CONSUMER IF THIS CIRCUIT DOES NOT PERFORM AS SPECIFIED.**

**10) Black/Red Wire: Pulsed Ground Output After Shutdown**

The Black/Red wire will provide a 1 second 250 mA pulsed ground output after the remote

start unit shuts down and the G.W.R. O/P turns off. This output will occur regardless of whether the circuit times out or is manually terminated. Typically this output will be used to re-lock the vehicle doors if the doors unlock automatically when the ignition circuit transitions to off.

**11) Black/Yellow Trace Wire: Ground Output During Start (Crank)**

The Black/Yellow wire will provide a 250 mA ground output while the starter output of the remote start unit is active. This output can be used to activate the Crank Low/Bulb Test wire found in some GM vehicles. This wire is also referred to as the ECM wake up wire in some Chrysler vehicles.

**12 Black/White Wire: (-) Horn Output**

The black w/ white trace wire is provided to beep the vehicle's horn. This is a transistorized low current output, and should only be connected to the low current ground output from the vehicle's horn switch.

If the vehicle uses a + 12 VDC horn switch, then connect the black w/ white trace wire to terminal 86 of a 30Amp automotive relay, and connect relay terminal 85 to a fused + 12 VDC battery source. Connect relay terminal 87 to the vehicle's horn switch output, and connect relay terminal 30 to a fused + 12 VDC battery source

**NOTE:** The outputs above are low current outputs and must be used with a relay if the circuit's requirement is more than 250 mA.

**4 Pin Main Harness, Connector (P/N 1124320)**

**1) Black Wire: Chassis Ground**

Connect the Black wire to a known vehicle ground source or to a solid clean metal part of the chassis. Be certain to remove any paint or grease and secure this wire with a self tapping screw and ring terminal.

**2) White w/ Red trace Wire: Parking Light Relay Input Wire**

(See Note Trunk Release Swap)

This wire is the common contact of the on board parking light flasher relay. If the vehicle you are working on has +12 volt switched parking lights, connect this wire to a fused + 12 volt source. (Max. 15 Amps)

**NOTE:** If the vehicle's parking lights are ground switched, connect this wire to chassis ground.

**NOTE:** PARKING LIGHT/TRUNK RELEASE SWAP. See reference after Dark Blue Trunk Release wire concerning Bank 2 Feature #19. When selecting this feature "ON" use the White / Red wire of this connector for the trunk release source, either 12VDC or Ground, vehicle dependent, and the White wire of this connector to connect to the trunk release solenoid.

**3) Yellow w/ Black trace Wire: (+) Output To Alarm Ignition Input**

This is the positive output that will connect to an alarm system allowing the alarm to operate while under control of the remote start. This wire can connect to an existing alarm system, or if available to the factory alarms ignition input.

**4 White Wire: Parking Light Relay Output (See Note Trunk Release Swap)**

This wire is the normally open contact of the on board parking light flash relay. Connect this wire to the vehicle's parking light feed wire. This is the wire that gets switched on, either (+) or (-), when the vehicle's parking light switch is activated.

### **5 Wire Antenna Receiver Connector (P/N 1124318)**

Connect the mating end of the previously mounted receiver harness to the mating connector on the module. This harness will be the supply for the LED, Valet Switch as well as the RX & 5VDC of the receiver.

#### **Programming Tach Rate:**

**NOTE: All applications require that tach be programmed.**

The unit will not operate unless tach is programmed. If an attempt is made to start the vehicle via the remote start without first programming tach, the unit will flash the parking lights 7 times indicating tach has not been learned and stored. If the tach rate is not properly programmed for the specific vehicle, the unit may not realize that the vehicle is running and in certain instances re-engage the starter motor.

To learn tach:

1. Turn the ignition key to the On position.
2. Press and release the valet/program push button switch 3 times.
3. Immediately turn the ignition key Off.
4. Press and hold the valet/program push button switch, then start the vehicle using the key.
5. When the unit senses the tach signal, the parking lights will begin to flash.
6. Wait for at least 5 flashes
7. Release the valet/program switch. The parking lights come on for three seconds to indicate that the learned tachometer signal is stored and the unit is out of the tachometer learn mode.

**NOTE:** If the unit fails to learn tach rate due to an improper tachometer connection or a poor tach source, the parking lights will not flash. To correct this situation, locate and connect the Green/Orange wire to the proper tach signal, and then repeat the tach learn routine.

#### **PROGRAMMING BANK 1 (TRANSMITTERS):**

- 1) Turn the ignition key to the on position.
- 2) Press and release the valet/programming switch 3 times (Siren Chirps Once).
- 3) Press the Button of each transmitter you want programmed until the parking lights flash.
- 4) Turn the ignition switch off to exit the programming mode.

#### **PROGRAMMING BANK 2 (ALARM FEATURES):**

You can enter bank 2 from bank 1 by turning the ignition key off then on from step 4 of Bank 1, the lights will flash twice, or You can also go right to bank 2 by:

- 1) Turn the ignition key to the On position.
- 2) Press and release the valet/programming switch 3 times (Lights Flash Once).
- 3) Turn the ignition key off then on.
- 4) Press the pushbutton switch once to advance to feature 1, twice to advance to feature 2, etc, then use the button of the transmitter to select the feature setting.

Example to set passive arming:

- 1) Turn the ignition key to the on position.
- 2) Press and release the valet/programming switch 3 times
- 3) Turn the ignition key off, then on.
- 4) Press the pushbutton switch once to advance to features 1, door unlock output timing then use the button of the transmitter to select your desired setting.
- 5) To exit the programming mode, turn the ignition key off. The parking lights flash upon exit

## SELECTABLE FEATURES

The selectable features of this unit can be set manually as explained on the previous page.

Factory default settings are indicated by **BOLD** text below.

**NOTE:** Manual programming Keyless Entry Models with no horn output will Flash the Parking Lights instead of chirp where chirp is indicated. Also, no data will be indicated if a feature is not available for a particular model. The unit will enter the feature but no selection will be available.

Feature Selection	1 Chirp	2 Chirps	3 Chirps	4 Chirps	5 Chirps	6 Chirps
1st Door L/UL	1S/1S	3.5/3.5 Sec.	1S L, Dbl. U/L	Dbl L, 1S UL	Dbl L, Dbl UL	1S/350mS ul
2nd Accy Lock	<b>Not Available</b>					
3rd Accy. UL	<b>Not Available</b>					
4th Headlights	<b>Not Available</b>					
5th Passive Locks	<b>Not Available</b>					
6th Pass/Act Arm	<b>Not Available</b>					
7th Siren/Horn	<b>Not Available</b>					
8th Horn Chirp	10mS	<b>16mS</b>	30mS	40mS	50mS	
9th O/R Method	<b>Not Available</b>					
10th 2 Step U/L	<b>Not Available</b>					
11th Chp Del Tx	On					Off
12th Trigger Circuits	<b>Not Available</b>					
13th L/UL Poll	<b>Not Available</b>					
14th Aux Ch 5 Sel	<b>Not Available</b>					
15th Aux Ch 6 Sel	<b>Not Available</b>					
16th Aux Ch 7 Sel	<b>Not Available</b>					
17th Trigger Delay	<b>Not Available</b>					
18th DBI/ADS Select	DBI					
19th PK L/ Tnk Rel Swap	<b>Off</b>					On

### **PROGRAMMING BANK 3 (REMOTE START ):**

You can enter Bank 3 from Bank 2 by turning the ignition key off then on after you've made the changes you wanted in Bank 2, (Siren two Long Chirp). You can also go right to bank 3 by:

- 1) Turn the ignition key to the On position.
- 2) Press and release the valet/programming switch 3 times (Siren Chirps).
- 3) Turn the ignition key off then on. (Siren Short Then long Chirp)
- 4) Turn the ignition key off then on. (Siren two Long Chirp)
- 5) Press the push button switch once to advance to feature 1, twice to advance to feature 2, etc.,, then use the lock button of the transmitter to select the feature setting.

Example to set engine input check to DBI Tach:

- 1) Turn the ignition key to the On position.
- 2) Press and release the valet/programming switch 3 times (Siren Chirps).
- 3) Turn the ignition key off then on. (Siren Short Then long Chirp)
- 4) Turn the ignition key off then on. (Siren two Long Chirp)
- 5) Press the pushbutton switch five times to advance to features 5, Input Check, then use the lock button of the transmitter to select three chirps, "DBI Tach"
- 6) To exit the programming mode, turn the ignition key off. The program mode is automatically exited when there is no activity on the pushbutton switch or the transmitter lock button.

<b>RF Programmable Features Bank 3 Is Remote Start Selectable Features:</b>						
Feature Selection	1 Chirp	2 Chirps	3 Chirps	4 Chirps	5 Chirps	6 Chirps
1st Defrost Output	<b>Not Available</b>					
2nd RF Start Chirp	Off	On	<b>On &amp; Car Finder</b>			
3rd Run Time	5 Mins	<b>10 Mins</b>	15 Mins	20 Mins	45 Mins	60 Mins
4th Parking Lights	<b>On Steady</b> Flashing					
5th Input Check	Voltage	<b>Tach</b>	DBI Tach	Hybrid		
6th Voltage Level	<b>&gt;0.5V B4 Start</b> < 0.5V B4 Start					
7th Ign. 2 Select	Off During Crank <b>On During Crank</b> Same As Accy.					
8th Ign. 3 Select	<b>Not Available</b>					
9th Diagnostics	Off On					
10th Crank Time	0.8 Sec	<b>1.0 Sec</b>	1.5 Sec	2.0 Sec		
11th Gas/Diesel	<b>Gas</b>	Diesel 10	Diesel 15	Diesel 20		
12th Transponder O/P	<b>Not Available</b>					
13th Temp Start	<b>Not Available</b>					
14th Crank Averaging	<b>Averaging</b>	Preset Time				
<b>Note:</b> When averaging, the engine must be started 4 times with the key to be effective.						
15th R/S Shock	<b>Not Available</b>					
16th Turbo Select	<b>Not Available</b>					
17th Black/Blue (Aux O/P)	<b>Single Pulse</b>	As Feat 1 Bank 2				
18th 1-2 or 3 Press Start	<b>2 Press</b>	1 Press	3 Press			

**NOTE :** When feature #5 is set for Voltage or Hybrid, the unit must also have feature #14 set for Averaging or the unit will flash the Pk. Lts. 7 times and not start

**When using the RF programmer, enter the program mode as follows:**

- Turn the ignition on
- Press and release valet switch 3 times
- Turn ignition off then on
- Press and hold valet switch for 5 seconds
- Siren chirps 2 times indicating access to RF feature program mode.

**Diagnostics:**

Diagnostic mode is automatic and will be displayed by flashing the parking lights a number of times representative of the failed start, or premature shut down based on the chart below. When a failure occurs, or a shut down occurs which is out of the ordinary the parking lights will flash 1 thru 8 times immediately after to advise what the failure could have been.

1 Flash	Run timer expired
2 Flashes	Low or no tach signal (RPM)
3 Flashes	Positive inhibit wire activation
4 Flashes	Manual Transmission Mode Error
5 Flashes	RF shutdown signal received, or manual start trigger wire reactivated.
6 Flashes	High tach signal (RPM)
7 Flashes	Tach signal has not been learned
8 Flashes	Negative inhibit wire activation

**4 PIN DATA BUS PORT (DBI Port)**

The 4 pin port located on the side of this module is for proprietary Flash-Logic data bus interface modules. These modules are used to access a variety of features in the vehicle which can be as simple as door trigger inputs, to more complex door lock outputs, or transponder interfaces for remote starting. DO NOT connect anything to this port other than the appropriate Data Bus Interface modules or damage to the Remote Start could occur. All installation instructions for the Data Bus modules will be packaged with the individual component along with the proper 4 pin wiring harness required to access the data transmit & receive as well as the proper voltage levels for the interface.

**COMPLETING THE INSTALLATION:**

After you have confirmed the operation of the Remote Start unit and tested all the safety features of the system:

1. Mount the control module up and behind the dash securing it in place with cable ties or screws. Be certain that the chosen mounting location will not inhibit any of the controls of the vehicle.
2. Securely harness and tie all wiring up and away from all hot and moving parts that they may come in contact with under the dash board or in the engine compartment areas.

**CAUTION:** Particularly avoid the area around the steering shaft and column, as wires can wrap around these mechanisms and impair the safe operation of the vehicle.

3. Apply the Caution Labels supplied with this kit to a conspicuous area in the engine compartment. Make sure to clean the surface before affixing the label.
4. Check the vehicle's wipers, lights, horn, etc, to insure proper operation.
5. Replace all panels that were removed during installation, and retest the system.
6. Explain all activated features and safety systems associated with Remote Start Unit installed to the customer.

**NOTES**

