VEHICLE SECURITY SYSTEM

Optional Remote Start Module and 2-way Transmitter Instructions Included

SYSTEM MANUAL

STANDARD FEATURES

Some of the system's standard features include:

- 4-button remote transmitter
- LED Status indicator
- Valet/Override switch
- Extended Range Receiver
- 125dB Multi-tone siren
- Dual stage impact detector
- Remote panic
- Remote Valet mode
- Remote chirp delete
- Remote sensor bypass
- Passive or active arming
- Flashing parking lights
- Auto Rearming

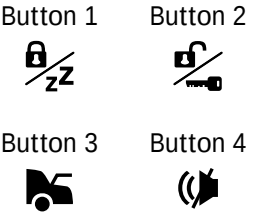
OPTIONAL FEATURES

This system has many optional features that may require additional parts and/or labor. Please contact your dealer for more details.

- Remote keyless entry (door lock/unlock)
- Illuminated entry
- LCD 2-way Remote
- Hood & trunk protection
- Trunk/hatch release
- Window roll-up
- Additional sensors
- Remote Start (optional plug-in module)
- Stop & Go Feature
- Auto Cold Start

Note: Some features may not be appropriate for certain vehicles.

REMOTE TRANSMITTER BUTTONS



Transmitter Icons

NOTE: Transmitter cosmetics may differ between models and between standard 1-way and LCD 2-way transmitters, but button functions remain the same as described below.

Each transmitter button has two operating modes: standard and level shifted. Pressing a transmitter button for less than one second activates the standard function associated with that button (such as arm or disarm). Pressing a button for more than one second changes the color of the standard transmitter's LED to green and activates the level shift feature. While the LED is green (level shifted), pressing any transmitter button accesses another level of commands providing expanded operation.

ARMING OPERATION

To arm the system press transmitter button 1:

- The siren will chirp once.
- The parking lights will flash once.
- The doors will lock.*
- The LED will turn solid for 10 seconds then start flashing slowly. After 10 seconds the system is armed.

During Arming, if the hood or trunk is open or the brake pedal is pressed, the system will wait 10 seconds for the zone to close. If a door is open the system will wait up to 60 seconds for the zone to close (depending on door zone setting during installation). If a zone remains open after the wait period, the siren will chirp and the parking lights will flash 4 times to indicate the zone is still open. That zone will be ignored, but keep all other areas remain protected.

While Armed, the system will trigger if:

- The door, hood, or trunk is opened.
- The brake pedal is pressed.
- The shock sensor detects an impact.
- An optional sensor is disturbed.

When triggered by the door or hood/trunk input the siren will sound or the horn will honk, and the parking lights will flash for 30 seconds. If triggered by a sensor, the alarm cycle will last 15 seconds. If the alarm is triggered while the optional remote start is engaged, the remote start will immediately shut down.

If a zone triggers the system 3 times during a single arming cycle, the system will bypass that zone, keeping the other zones protected, until the next time the system is armed.

If the shock sensor detects a light impact to the vehicle or an optional sensor is disturbed, the system will chirp and the parking lights will flash 5 times to warn away the potential intruder.

*Optional Feature

PASSIVE ARMING OPERATION

The passive arming feature allows the system to arm automatically without user intervention. This feature can be toggled on/off using the transmitter.

To turn passive arming on/off:

1. Press and hold button 2 for level shift.
2. Press button 4.
   - The system will enter passive arming operation mode.
   - The optional 2-way LCD transmitter display will show “LAST DOOR ARM”.

To arm the system passively:

1. Turn the ignition key off.
2. Exit the vehicle and close all doors.
   - The siren will chirp and parking lights will flash once after closing the last door.
   - The LED flashes rapidly indicating that the system is preparing to arm. (The system can be armed at any time by pressing transmitter button 1.) NOTE: Opening the hood/trunk or a door resets the passive arming timer.
   - After 30 seconds the siren will chirp to indicate the system is armed.
   - The parking lights will flash once.
   - The doors will lock.†*

† **If Passive Locking was enabled during installation.**

DISARMING OPERATION

To disarm the system press transmitter button 2.

- The siren will chirp twice.¥
- The parking lights will flash twice.¥
- The doors will unlock.*
- The dome light will turn on.*

¥ If the alarm was triggered while away, the system will respond with 3 chirps and 4 parking light flashes.

* Optional Feature.

TAMPER ALERT

If the alarm was triggered while away from the vehicle, the siren will chirp 3 times and the parking lights will flash 4 times on disarming for tamper indication. The triggered zone will be shown on the optional 2-way LCD transmitter display.

AUTO REARM

If the system was armed for at least 10 seconds, the Auto Rearm feature re-arms the system 30 seconds after disarming. The doors will also re-lock if selected during installation. NOTE: Opening the door resets the rearm timer, and opening the trunk, hood, or turning on ignition cancels the auto rearm feature. *The Auto Rearm feature must be enabled during installation.*

AUTO IMMOBILIZER

The Auto Immobilizer feature automatically engages the starter defeat relay 30 seconds after turning off the ignition. This feature provides an extra level of security even when when the alarm is not set. When immobilized, the vehicle will not start with the key until either transmitter button 2 is pressed, or the override button is pressed with the ignition on.

NOTE: The auto immobilizer feature does not operate while in the valet mode.

To turn the immobilizer on/off:

1. Press and hold button 2 for level shift.
2. Press button 3.
   - The optional 2-way LCD transmitter display will show "IMMOBILIZE".

SILENT OPERATION MODE

Press transmitter button 4 to turn the arm and disarm chirps on/off. NOTE: If the system is disarmed, pressing button 4 to change the siren status also arms the system. To disarm the system, press button 2.

NOTE: The optional 2-way transmitter will still beep to confirm systems arm/disarm.

IGNITION CONTROLLED LOCKS

The ignition controlled locks feature allows the doors to automatically lock when the brake pedal is pressed (after turning on the ignition and closing all doors), and automatically unlock when the ignition key is turned off. The ignition controlled locking feature may also be programmed for ignition lock without ignition unlock, and off (no ignition control).

NOTE: If the optional remote start module is not installed and ignition locking is desired, the feature must be programmed for use without brake. See Alarm Programmable Features.

REMOTE PANIC

In the event of an emergency (PANIC) situation, the system's siren can be triggered for 30 seconds to attract attention.

To activate the Panic Feature:

Press transmitter buttons I&2 for 3 seconds.

- The siren will sound.
- The parking lights will flash.

Press button I to exit panic mode and rearm the system. Press button 2 to exit panic mode and disarm the system. The Panic Feature will NOT operate when the ignition is on.

EMERGENCY OVERRIDE

If the transmitter becomes lost or fails to operate, the system can be disarmed by using the emergency override feature.

To override the system:

1. Enter the vehicle.
   - Because the system is armed, the siren will sound.
2. Turn on the ignition key.
3. Press the Valet switch for 3 seconds.
   - The siren will stop sounding.
   - The starter defeat is deactivated.

VALET MODE

When the system is placed into the Valet Mode the security and remote start features will be disabled. However, the optional keyless entry and trunk release features will still function if installed. The valet mode may be accessed with either the valet switch or a remote transmitter.

To enter or exit valet mode using the switch:

1. Be sure the system is disarmed.
2. Turn ignition on.
3. Press and hold the valet switch for 3 seconds.
   - The siren will chirp 3 times to enter or exit valet.
4. Turn ignition off.
   - The LED will turn on solid indicating the system is in valet mode, or turn off indicating valet mode exit.

To enter or exit valet mode using the remote:

1. Press and hold button 1 for level shift.
2. Press button 1 again to turn valet mode.
   - The parking lights will flash 4 times to enter and 3 times to exit valet.
   - The LED will turn on solid indicating the system is in Valet Mode, or turn off indicating Valet Mode exit.
   - The optional 2-way LCD transmitter display will show "zzz" for valet .

OPTIONAL TRUNK RELEASE

The activate the system's auxiliary feature (or trunk release) press button 3 for level shift, then press button 3 again. If the vehicle's trunk pin is connected to the alarm, the optional 2-way LCD transmitter will show the trunk open.

OPTIONAL TRUNK DISARM

The trunk disarm feature allows the alarm to disarm automatically when the auxiliary output is used to activate the optional trunk release. This eliminates having to first disarm the alarm before activating the trunk release.

NOTE: This feature must be programmed during installation and only functions if auxiliary is programmed for momentary output.

CAR LOCATOR FEATURE

The activate the system's car locator feature press button 3 twice rapidly. The siren will chirp and the parking lights will flash 6 times.

REMOTE SENSOR BYPASS

To bypass the shock sensor's warn-away while the system is armed, press button 1 twice rapidly. To bypass the sensor completely, press button 1 twice again. Pressing button 1 twice a third time will re-activate the sensor. The parking lights will flash to indicate the mode:

One Flashes = Normal
Two Flashes = Sensor 1 Warn away Bypass
Three Flashes = Sensor 1 Complete Bypass

If an optional dual-zone sensor is connected to the optional sensor port, that sensor's warn-away feature can be bypassed while the system is armed by pressing button 4 twice rapidly. To bypass the sensor completely, press button 4 twice again. Pressing button 4 twice a third time will re-activate the sensor. The parking lights will flash to indicate the mode:

Four Flashes = Sensor 2 Warn away Bypass
Five Flashes = Sensor 2 Complete Bypass

NOTE: The system must be armed for at least 10 seconds prior to activating the remote sensor bypass feature.

ANTI-CARJACK FEATURE

When selected, the optional anti-carjacking feature monitors the vehicle's doors while the ignition is on. If a door is opened, the anti-carjacking feature will trigger, with progressively higher levels of alert. *The Anti-Carjacking feature must be enabled during installation.*

To activate anti-carjack protection:

1. Make sure the ignition is on and all doors are closed.
2. Press the valet switch once.

If the carjack feature is triggered:

- The LED will flash rapidly.
- Warn Trigger will activate after 30 seconds. The parking lights will begin flashing and the siren will begin chirping.
- Full Trigger will activate after 60 seconds. The siren will sound continuously and the starter defeat will turn on and remain on until the carjack feature is deactivated .

To deactivate anti-carjack if not triggered:

Press the valet switch for 3 seconds.

- The siren will chirp 3 times.

- or -

Turn off the ignition with all doors closed.

To deactivate anti-carjack after Warn Trigger:

Press the valet switch for 3 seconds.

- The siren will chirp 3 times.

- or -

Press transmitter button 2.

To deactivate anti-carjack after Full Trigger:

Press the valet switch for 5 seconds.

- or -

Enter PIN if programmed for PIN mode.

SECURE PIN CODE

The system may be programmed to override only when a 2-digit personal identification number is entered using the valet switch. PIN code override mode must be selected during installation or PIN code mode will not operate.

To disarm the system with a PIN code:

1. Open door, alarm system will trigger
2. Turn ignition on
3. Press the override switch the number of times equal to the first digit of the PIN.
4. Turn ignition off, then back on.
5. Press the override switch the number of times equal to the second digit of the PIN.
6. Turn ignition off.
   - The system will disarm.

   Example: PIN=2,3 Press valet switch two times, turn ignition off then back on, and press valet switch 3 more times.

CREATING A SECURE PIN CODE

When first programmed for PIN code override mode, the default code is set to 1,1. To change the PIN code first program the system for PIN code operation, then follow the steps below:

To change the PIN code:

1. Be sure the ignition is off and the system is disarmed.
2. Press the valet switch 4 times.
3. Turn ignition on.
   - The siren will chirp 4 times.
4. Press the valet switch once.
   - The siren will chirp once and enter 1st digit PIN programming.
5. Pick a 1st digit number from 1 to 4, and press the transmitter button equal to that number (example: number 2=button 2).
   - The siren will chirp a number of times equal to the button pressed.
6. Press the valet switch again.
   - The siren will chirp twice and enter 2nd digit PIN programming.
7. Pick a 2nd digit number from 1 to 4, and press the transmitter button equal to that number (example: number 3=button 3).
   - The siren will chirp a number of times equal to the button pressed.
8. Turn ignition off.

NOTE: Record the new PIN. Once the PIN code mode is entered the standard Emergency Override will not disarm the system.

SURF MODE

The Surf Mode allows the system to be armed or disarmed using just the key and override switch. While in surf mode the transmitter may be safely left at home or inside the vehicle's trunk when engaging in an activity that may damage the transmitter such as surfing, swimming, white-water rafting, going over Niagara Falls in a barrel.

To arm the system in surf mode:

1. Make sure ignition is on and all doors are closed.
2. Press valet switch 3 times.
   - The siren will chirp once.
3. Turn ignition off and exit the vehicle.
   - After 20 seconds the system will arm.

If the door, hood, or trunk zone is triggered, the lights will flash but the siren will be delayed for 20 seconds allowing time to enter the Emergency Override or PIN code.

To disarm the system in surf mode follow the steps for Emergency Override, or PIN code override if programmed.

OPTIONAL REMOTE START FEATURES

Important: Only start the vehicle in a well ventilated area. Do not use in a closed garage or indoors. Be sure to familiarize yourself with all features prior to using the remote start.

REMOTE STARTING THE VEHICLE

To remote start the vehicle:

1. Press and hold button 2 for level shift.
2. Press button 2 again.
   - The parking lights will begin flashing (or remain on depending on programming).
   - Approximately 2 seconds later the system will attempt to start the vehicle.
   - Once the car has started, the heater or air conditioner will turn on and run for the pre-programmed time. If the engine fails to start on the first attempt, it will attempt to start 3 more times. If the vehicle fails to start after a total of 4 times the system will shut down.

To drive the vehicle after Remote Starting:

Unlock the door by pressing button 2 on the remote transmitter. Enter vehicle, turn ignition key to the on position

NOTE: Do not turn the key to the start position as the engine is already running.

Once the ignition key is turned on, press the brake pedal and shift the car into the proper gear and you may now drive the vehicle.

NOTE: If brake pedal is pressed prior to turning on ignition, engine will turn off.

REMOTE ENGINE SHUTDOWN

If the vehicle has been remotely started and you desire to turn the vehicle off, simply press and hold button 2 for level shift, then press button 2 again. After the motor has turned off the doors will relock. This feature must be programmed during installation.

STOP AND GO

The Stop and Go feature allows the vehicle to remain running without use of the ignition key during short stops.

To activate the Stop and Go feature:

1. Make sure the engine is running.
2. Press and hold button 2 for level shift.
3. Press button 2 again.
4. Turn ignition off.
   - The doors will unlock.
   - The dome light will turn on.
   - The engine will remain running.
5. Exit the vehicle and lock the doors using transmitter button 1.

To resume driver control:

1. Unlock the doors by pressing transmitter button 2.
2. Turn on the ignition.
   - The vehicle resumes driver control, when the brake pedal is pressed.

AUTO COLD START

This feature allows the system to start and run the vehicle every 1, 2, 4, or 12 hours (selectable by your installer) in a 24 hour period.This allows the engine to remain at an operational temperature in extremely cold weather. Auto Cold Start interval timing must be chosen during installation.

Engaging the Auto Cold Start feature:

To turn Auto Cold Start on:

1. Press and hold the brake pedal.
2. Press and hold button 2 for level shift.
3. Press button 1.
4. Release the brake pedal.
   - The vehicle will start and run the first interval to confirm cold start activation.

Use the Remote Engine Shutdown procedure before first run cycle is completed. The Auto Cold Start feature will remain engaged and start at the pre-programmed intervals.

NOTE: The Auto Cold Start feature is not compatible with manual transmission vehicles.

Disengaging the Auto Cold Start feature:

The Auto Cold Start feature can be deactivated by pressing the brake pedal.

SAFETY FEATURES

The System will not start the vehicle if the brake pedal is pressed or the hood is open. Also, if the brake is pressed or the hood is opened while remote running, the remote start will shut down.

MANUAL TRANSMISSION MODE

On manual transmission vehicles, the remote start feature will not operate unless the proper vehicle exit sequence is performed. This operating mode protects against in-gear starting but is not completely without risk. Installation and safe use of the remote start feature on a manual transmission vehicle is at the sole risk of the vehicle's owner, and the manufacturer assumes no liability for installation in manual transmission vehicles.

Manual Transmission Safe Mode Exit Sequence: With the engine running and the parking brake set, press the unlock button. Turn ignition off (engine will stay running) and open the doors, then exit the vehicle. When all doors are closed, press lock button to turn off the engine and arm the system. The system will be able to remote start as long as the alarm is not disarmed prior to remote starting.

NOTE: If the turbo timer feature is programmed, the engine will not turn off until the end of the turbo timer program cycle.

TURBO TIMER MODE

For vehicles equipped with a turbo-charged engine, the optional turbo timer feature may be programmed to run the engine at idle for an additional period of time after the ignition is turned off. The run-time may be programmed for a 1, 3, or 6 minute cycle, allowing the turbo proper time to cool down, extending its life.

To activate the Turbo Timer feature:

1. Make sure the engine is running.
2. Press button 2.
3. Turn ignition off.
   - The engine will continue to run for 1, 3, or 6 minutes.
4. Exit the vehicle.

LED AND PARKING LIGHT INDICATIONS

STATUS INDICATOR (LED) FUNCTIONS

On Solid = Valet Mode

Slow Flash = System Armed

Rapid Flash = Passive Arming

Rapid Flash w/ Ignition on = Open Zone Warning

Rapid Flash while Ignition on and Anti-Carjack Mode Active = Entering Carjack Warning Stage

Double Flash = Auto Cold Start Mode Activated

PARKING LIGHT FUNCTIONS

On Solid = Vehicle Remote Starting

Flash I x = System armed

Flash 2x = System disarmed

Flash 4x = Defective zone warning (after arming)

Flash 4x = Tamper indication (after disarming)

TRANSMITTER FUNCTION QUICK REFERENCE

TRANSMITTER OPERATION CHART

Operation	System Status	Ignition	1st Button	2nd Button
Arm	Disarmed	Off	Button 1	
Disarm	Armed	Off	Button 2	
Remote Valet	Disarmed	Off	Button 1 Level Shift	Button 1
Remote Start	Either	Off	Button 2 Level Shift	Button 2
Auxiliary 1	Either	Off	Button 3 Level Shift	Button 3
Toggle Chirp Mode	Either	Off	Button 4*	
Immobilizer	Disarmed	Off	Button 2 Level Shift	Button 1
Panic Mode	Either	Off	Buttons 1&2 together	
Stop N Go	Disarmed	On	Button 2 Level Shift	Button 2
Turbo Timer	Disarmed	On	Button 2	
Manual Trans Mode	Disarmed	On	Button 2	
Auto Cold Start	Disarmed	On	Button 2 Level Shift	Button 1**
Car Locator	Either	Off	Button 3	Button 3***
Shock Sensor Adjust	Disarmed	Off	Button 4 Level Shift	Button 4
Sensor Bypass (Main)	Armed	Off	Button 1	Button 1****
Sensor Bypass (Opt)	Armed	Off	Button 4	Button 4****

* If system is disarmed, Button 4 will arm system and change chirp mode (normal to silent or vice versa)

** Brake pedal must be pressed while performing button sequence

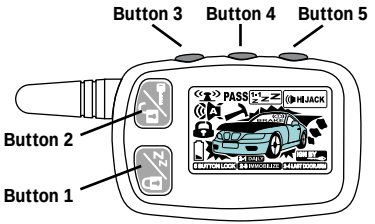
*** Must press button two times very quickly

**** Press multiple times to switch between normal, warning bypass, and full bypass

Level Shift: Pressing and holding a transmitter button for more than one second enters the Level Shift mode for two seconds. The 1-way transmitter's LED turns Green to indicate level shift, while the optional 2-way transmitter plays a chime to indicate level shift. While in level shift mode, pressing a transmitter button accesses the system's special features such as Valet, Auxiliary, etc. After two seconds, the transmitter will automatically exit level shift mode if no other transmitter button has been pressed.

OPTIONAL 2-WAY TRANSMITTER WITH LCD DISPLAY
OPERATING INSTRUCTIONS

REMOTE TRANSMITTER LAYOUT



5-Button 2-way LCD Transmitter

Each LCD transmitter button has two operating modes: standard and level shifted. Pressing a transmitter button for less than one second activates the standard function associated with that button (such as arm or disarm). Pressing a button for more than one second activates the level shift feature, then plays a chime and vibrates to signal the level is shifted. While the transmitter is level shifted, pressing transmitter buttons 1-4 accesses another level of commands providing expanded operation.

The basic operation of the optional 2-way LCD transmitter is the same as the standard 4-button transmitter, with a few added features. The built-in LCD display provides visual confirmation of system operations and status. After a function such as arming is selected, the LCD display will show confirming icons to indicate that the function has taken place. Additionally, the LCD display shows any intrusion attempts as they occur, and indicates the triggered zone. In addition to LCD display, the 2-way transmitter also provides audible and vibration alert in case the display is out of view. And, for night-time use the LCD is equipped with a backlight feature which is activated by pressing button 5.

SYSTEM STATUS RECALL

Real-time system status can also be recalled at any time by pressing transmitter button 3 for less than one second. The system's current status will be shown on the LCD display.

RANGE INDICATION

The LCD display has an antenna icon that flashes every 4 seconds while the system is armed, to indicate the transmitter is in-range of the vehicle. 60 seconds after disarming the antenna icon will stop flashing. If the transmitter is not in-range of the vehicle when pressing a button, a low pitched audible alert will be heard.

LOW BATTERY

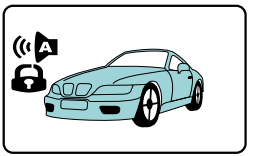
When the transmitter battery is in need of replacement, the display will show the battery icon. Replace with a fresh AAA alkaline battery.

BUTTON LOCK

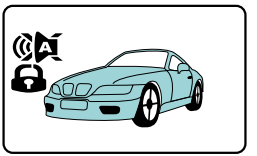
The transmitter is equipped with a button lock feature to avoid accidental feature activation while in a purse or pocket. To lock the buttons press button 1 and button 5 together. To unlock the buttons press button 2 and 5 together.

OPTIONAL 2-WAY TRANSMITTER INDICATIONS

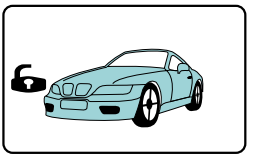
The optional 2-way LCD transmitter displays more than 20 different screens to provide real-time indications for feature activation and system status. the different display indications are shown below for reference.



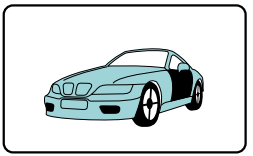
Arm



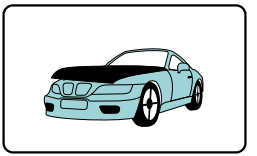
Silent Arm



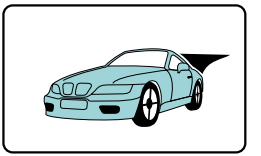
Disarm



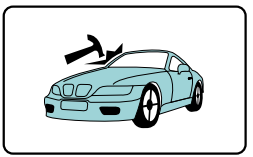
Door Open



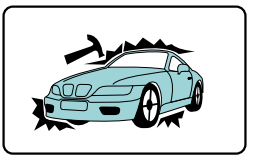
Hood Open



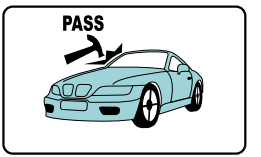
Trunk Open



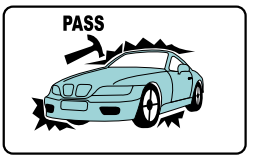
Warn-Away Trigger



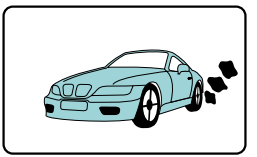
Shock Sensor Trigger



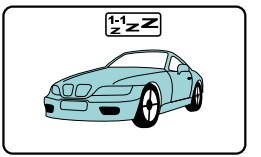
Warn-Away Bypass



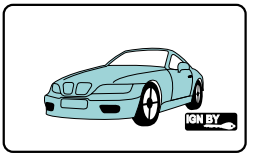
Shock Trigger Bypass



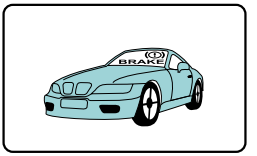
Engine Run



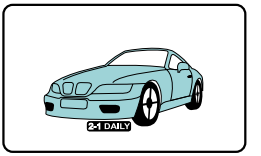
Valet Mode



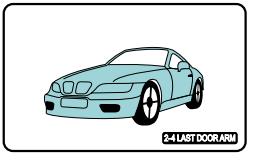
Ignition Key On



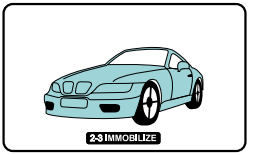
Brake Pedal



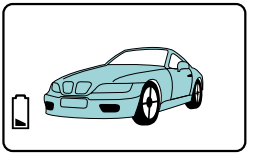
Cold Start



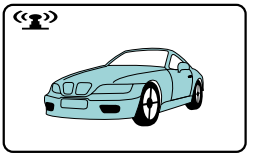
Passive / Last Door Arm



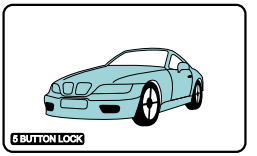
Immobilize



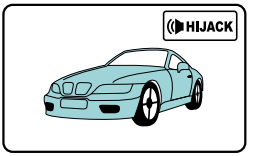
Low Transmitter Battery



Range Indicator



Button Lock



Anti-Carjack Mode

VEHICLE SECURITY SYSTEM

Optional Remote Start Module and 2-way Transmitter Instructions Included

INSTALLATION INSTRUCTIONS

BEFORE INSTALLING THIS PRODUCT PLEASE READ THE INSTALLATION DIRECTIONS THOROUGHLY!!

BEFORE YOU BEGIN

This system is compatible with electronic fuel injected engines only! Not intended for use with carbureted engines.

- This product must be installed by qualified personnel according to these instructions and and observing all safety features.
- Check to see if the vehicle is equipped with any type of factory security system.
- Check to see if there is a pin switch for the hood, if not one must be installed.
- Verify that the vehicle starts and idles properly before beginning the installation.
- Always use a multi-meter to verify wiring.
- Before mounting the product, verify with the customer the desired location for the valet switch and LED.

MOUNTING SYSTEM COMPONENTS

Mounting Siren

Mount the siren in a suitable place under the hood, away from hot and moving engine parts such as manifolds, fan belts, etc. Make sure the siren cannot be accessed from underneath the vehicle or through the grill. Face the siren down so that water cannot accumulate inside the siren bell. Protect wires running through the firewall using either tape or split loom tubing. If a new hole is needed, protect the wire from chaffing by installing a proper size grommet.

Mounting System Modules

Mount the security and optional remote start module under the dash where it will be difficult for a potential thief to locate them, and away from moving parts such as brake pedals, etc.

Mounting LED

Mount the LED in an area that is easily seen from outside either side of the vehicle. Consult with the vehicle's owner to verify placement before drilling.

Mounting Override Switch

Mount the override switch in an area that is not easily seen yet within reach of the driver from the seated position. Consult with the vehicle's owner to verify placement before drilling.

Mounting Extended Range Receiver

Mount the extended range receiver (or transceiver on 2-way equipped systems) to the inside of the windshield using the supplied double-sided tape. Make sure the chosen location does not obscure the driver's view.

Mounting Shock Sensor

Mount the shock sensor to an under dash brace or similar support structure using a tie-wrap or the supplied double-sided tape. Higher sensitivity may be found in some vehicles by tie-wrapping the sensor to a wire loom.

ALARM MODULE WIRING

6-Pin Door Lock Harness

Plug-in connector port for door lock harness. *See Door Lock Wiring Diagrams*

- BLUE/BLACK WIRE - Lock relay N/C (87a)
- BLUE WIRE - Lock relay Common (30).
- GREEN WIRE - Unlock relay Common (30).
- GREEN/BLACK WIRE - Unlock relay N/C (87a).
- BLACK/RED WIRES - Lock/Unlock relays N/O (87). Connect this wire to the 14-pin harness short RED wire or short BLACK wire for polarity input. *See description for RED and BLACK wires below.*

NOTE: For vacuum locking systems, cut the BLACK/RED jumper to allow separate polarity inputs for lock and unlock relays.

14-Pin Main Harness

• RED WIRE - +12V Battery input. Connect the red fused wire on the main harness to a constant +12V source. Connect the short RED wire to the door lock polarity input on the 6-pin harness for positive or reverse polarity lock systems.

• BLACK WIRE - Ground input (-). Connect to a solid chassis ground that is clean and free of paint or dirt. Connect the short BLACK wire to the door lock polarity input on the 6-pin harness for negative lock systems.

• BLUE WIRE - Dome Light output (-) 500mA. The BLUE wire can programmed for use as a 20 or 30 second timed output after either disarming the system (Dome Light) or after arming the system (Window Roll-up). *See Alarm Programmable Features*

Dome Light (default): Connect to a relay to activate the vehicle's dome light. The dome light relay output is usually connected to the same wire used for the door trigger input (See BLUE/RED and BLUE/BLACK wires).

Window Roll-up: Connect to a relay or other device to operate window modules or other desired features.

• BLACK/RED WIRE - Starter defeat/anti-grind output (-) 500mA. The BLACK/RED wire is terminated beside the small YELLOW ignition jumper in a 2-pin connector for the supplied starter defeat relay socket. Connect the relay socket for starter defeat (and anti-grind protection with optional remote start module connected). The starter defeat output is programmable for normally open or normally closed operation. *See Starter Defeat Relay Diagrams and Alarm Programmable Features*

• ORANGE/VIOLET WIRE - Brake switch input wire. Connect this wire to the brake switch wire that provides +12V when the brake pedal is pressed. This safety input **must** be connected when used with the optional remote start module or the remote start feature will not operate. If the remote start module is not connected, leave this wire disconnected and set Alarm Programmable Feature #3 to either button 2, 3 or 4 setting. *See Alarm Programmable Features*

• BLUE/RED WIRE - Positive door trigger (+). Connect to the door switch circuit wire that shows +12V when the door is open. This type of door circuit is usually found on Ford vehicles.

• ORANGE/WHITE WIRE - Trunk trigger (-). Connect to an optional trunk pin switch that shows ground when the trunk is open.

• GREEN/BLACK WIRE - Parking Light output (+) 7.5A relay. Connect to the vehicle's parking light wire. If the vehicle is equipped with more than four parking lights a relay is required. For vehicle's with independent left and right parking light circuits, connect the GREEN/BLACK wire to one side and the GREEN/YELLOW wire to the other. NOTE: Do not connect the GREEN/BLACK or GREEN/YELLOW wire to the vehicle's headlight circuit.

• GREEN/YELLOW WIRE - Parking Light output (+) 7.5A relay. Used for vehicle's with independent left and right parking light circuits; see GREEN/BLACK wire.

• YELLOW WIRE - +12V Ignition input. Connect to a main ignition wire at the ignition switch harness. This wire shows +12V when the ignition is on and while cranking. The voltage must not drop when the car is starting.

• GRAY WIRE - Siren output (+) 2A. Connect to the siren's red wire. Connect the siren's black wire to ground. If the siren is not installed, the GRAY wire may be connected to a relay to pulse the vehicle's horn. Alarm Programmable Feature step 8 must be set to Horn mode. *See Alarm Programmable Features*

• YELLOW/BLACK WIRE - Auxiliary / trunk release output (-) 500mA. Connect to a relay for optional features such as trunk release, etc.

• BLUE/BLACK WIRE - Negative door trigger (-). Connect to the door switch circuit wire that shows ground when the door is open.

• ORANGE/GRAY WIRE - Hood trigger (-). Connect to an optional hood pin switch that shows ground when the hood is open.

Starter Defeat/Anti-Grind Relay Socket

See *Starter Defeat Relay Wiring Diagrams* for expanded wiring and programming information.

• BLACK/RED and YELLOW WIRES - Combined in 2-pin harness. Plug into 2-pin connector from 14-pin main harness.

• BLUE WIRE - Starter defeat output to starter wire. After cutting the vehicle's starter wire, connect the BLUE wire to the side running to the starter.

• BLUE/WHITE WIRE - Normally closed starter defeat input. After cutting the vehicle's starter wire, connect the BLUE/WHITE wire to the key side of the ignition wire if normally closed operation is desired (default).

• BLUE/RED WIRE - Normally open starter defeat input. After cutting the vehicle's starter wire, connect the BLUE/RED wire to the key side of the ignition wire if normally open operation is desired. Alarm Programmable Feature step 10 must be set to button 2. *See Alarm Programmable Features*

Alarm Module Connectors

4-Pin Connector: Plug-in connector for optional dual-zone sensor. See *Alarm Module Wiring Diagram* for pin descriptions.

2-Pin Connector: Plug-in connector for valet/override switch. Mount switch in an area easily accessible from the driver's position.

2-Pin Connector: Plug-in connector for LED. Mount LED in an area where it may be easily seen from either side of the vehicle.

4-Pin Connector: Plug-in connector for extended range receiver.

3-Pin Blue Connector: Not used.

3-Pin Black Connector: This connector links the alarm module to the optional remote start module using a 3-wire data-link harness.

2-Pin White Connector: Plug-in connector for shock sensor.

OPTIONAL START MODULE WIRING

6-Pin Main Starter Harness

• BLUE WIRE - Main accessory output (+). 12V output for heater and/or air conditioning system. For cars with more than one accessory wire add a relay(s) to power the extra accessory wire(s) or set dip switch #3 to ON and use the GREEN wire for second accessory.

• YELLOW WIRE - Main ignition output (+). Connect to the main ignition wire that switches +12 V and does not drop out during cranking.

• GREEN WIRE - Second ignition output (+). Connect to the vehicle's second ignition wire (if equipped). This wire may be optionally set for use as a second accessory wire or second starter wire. *See Dip Switch Settings*

• BLACK/YELLOW WIRE (small) - not used.

• BLACK/YELLOW WIRE (large) - Start output (+). Connect to the vehicle's starter wire.

NOTE: If using the supplied starter defeat/anti-grind relay socket, the large BLACK/YELLOW wire should be connected to the same point as the solid BLUE wire from the relay socket.

• RED WIRE -Main power input (+). Using the supplied inline fuse holder, connect directly to the vehicle's battery or alternate power source with a minimum 30 Amp supply.

7-Pin Starter Options Harness

• BLACK WIRE - Ground input (-). Connect to a solid chassis ground that is clean and free of paint or dirt.

• GRAY/BLACK WIRE - Tachometer input. If the tach wire is unavailable, leave the GRAY/BLACK wire disconnected, and set dip switch #2 to ON.

• ORANGE/VIOLET WIRE - Glow plug light input (+). For diesel vehicles without a glow plug wire, no connection is needed. A 10-second timer will engage before cranking the starter. Most diesel vehicles will have a glow plug wire located in the instrument cluster. For these vehicles, test the wire to confirm proper operation and connect to it. Negative glow plug wire systems will show +12V when the the glow plug (wait-to-start) light is on, then show ground when the light turns off. Positive glow plug wire systems will show ground when the wait-to-start light is on. The ORANGE/VIOLET wire automatically senses the system type and should be connected directly to the glow plug wire. When using the glow plug input, program Remote Start Programmable Feature #8 with button 2. For vehicles without a glow plug wire, a 10-second timer will automatically countdown before cranking the starter if no glow plug connection is sensed.

• PINK WIRE - Auxiliary start input (-). This wire can be used as an optional auxiliary start or stop input when connected to an external device that supplies a pulsed ground output.

• BLACK/RED WIRE - Ground when running output (-). This wire provides a ground when the remote start is engaged to activate an optional factory security bypass module.

• ORANGE/GRAY WIRE - Hood trigger (-). Connect this wire to an optional hood pin switch. The switch must provide a ground when the switch is opened.

NOTE: If the ORANGE/GRAY wire on the alarm module is already connected to the hood pin, this wire may be left disconnected.

• YELLOW/BLACK WIRE - Factory disarm output (-). The YELLOW/BLACK wire can be programmed for use as a Factory Disarm output, Ignition 3 output, Pulsed Defrosted output, or Latched Defroster output.

Factory Disarm (default): Connect to the wire that requires a ground pulse to disarm the factory alarm. The YELLOW/BLACK wire will pulse on disarm or remote start.

Ignition 3: For vehicles with a 3rd ignition circuit, the YELLOW/BLACK wire may used to trigger a relay for Ignition 3 power supply.

Defroster: Most rear defroster circuits are usually activated by either a pulsed or latched output from a switch in the vehicle. Test the vehicle's switch with a multi-meter to determine the type of activation pulse required, and also verify that the defroster automatically turns off when the defroster cycle is complete. Connect the YELLOW/BLACK wire to a relay to trigger the vehicle's defroster circuit and program Remote Start Programmable Feature #8 for the proper circuit type. *See Remote Start Programmable Features*

3-Pin Black Connector: The data-link 3-wire harness links the remote start module with the alarm module.

SYSTEM PROGRAMMING

Entering Programming

To enter System Programming

1. Turn on ignition.
2. Within 5 seconds, press valet the proper number of times for the desired mode:
   5 presses = Alarm Programming
   10 presses = Remote Start Programming
   - The siren will chirp to indicate programming mode entered:
     5 chirps = Alarm Mode
     10 chirps = Remote Start Mode
3. Press the valet switch the number times equal to the Feature you want to change.
   - The siren will chirp each time the valet switch is pressed. A long chirp is equal to 5 presses. (Example: step 7 = 1 long chirp and 2 short chirps.)
4. Within 5 seconds, press the transmitter button corresponding to the desired operating mode for that Feature.
   - The siren will chirp either 1, 2, 3, or 4 times to indicate the button setting.
5. Repeat steps 3 and 4 to change additional features.
6. Turn off ignition to save changes.

Complete Default Reset

Follow this procedure to set the Programming Features to factory default settings.

1. Enter Alarm or Remote Start Feature program mode.
2. After entering programming mode, press Transmitter Button 1.
   - The siren will chirp once indicating the reset signal was received.
   - All Programming options are now set to factory default settings.
3. Turn ignition off.

Alarm Programmable Features

1. Auto Rearm. Automatically rearms the system in case of accidental disarming. The system must be armed for at least 10 seconds before disarming, and the hood/trunk must not be opened or Auto Rearm will be bypassed. Auto Rearm with Lock will also lock the doors upon rearming.

2. Blue Wire Programming. Selects between a 20 or 30 second output after disarming for Dome light operation (default), and a 20 or 30 second output after arming for window roll-up.

3. Ignition Lock/Unlock. Automatically locks the doors when ignition is turned on and

ALARM PROGRAMMABLE FEATURES

Step	Function	Button 1	Button 2	Button 3	Button 4
1.	Auto Rearming	Off	On/No Lock	On/Re-Lock	
2.	Blue Wire Activation	Disarm 20s	Disarm 30s	Arm 20s	Arm 30s
3.	Ignition Lock/Unlock	Brake/On	On/On	On/Off	Off/Off
4.	Door Lock/Unlock Pulse	1secL/1secUL	3secL/3secUL	1secL/1secULx2	30secL/1secUL
5.	Passive Arm Locking	No Lock	Lock		
6.	Override Mode	No PIN Code	PIN Code		
7.	Open Door Report	60 seconds	Instant	30 seconds	45 seconds*
8.	Siren or Horn Mode	Siren	Horn		
9.	Auxiliary Output Timing	Momentary	10s Timed	30s Timed	Latched
10.	Starter Defeat Relay	Normally Closed	Normally Open		
11.	Anti-Carjack Mode	Off	On		
12.	Trunk Disarm Feature	Off	On		

unlocks when ignition is turned off. The system will not lock if any door is open when the ignition is turned on. Brake/On mode- the doors will lock after closing all doors and pressing the brake pedal with ignition on; the doors will unlock when ignition is turned off. On/On mode- the doors will automatically lock or unlock when ignition is turned on and off. On/Off mode- the doors will automatically lock with ignition, but not unlock with ignition. Off mode- no ignition control of door lock system.

4. Door Lock/Unlock Pulse. Selects between four door lock configurations: a 1-second lock and unlock pulse (standard), a 3-second lock and unlock pulse (for vacuum locks), a 1-second lock and two 1-second unlock pulses (for some Japanese cars), or a 30-second lock pulse and 1-second unlock pulse (for automatic window roll-up on some European cars).

5. Passive Locking. Allows the system to automatically lock the doors on Passive Arming.

6. Override Mode. Selects normal or PIN code mode for Emergency Override feature.

7. Open Door Report. Sets the amount of delay before providing an open door zone warning after arming. Settings are 60-second delay, instant (no delay), 30-second delay, and 45-second delay with instant triggering (no warn after delay).

8. Siren / Horn Output. Selects between siren or horn programming for the siren output wire. Note: when the siren or horn mode is set for chirps, the arm/disarm chirps may be toggled on or off at any time using the transmitter. If the siren or horn chirps are set to off, the chirps cannot be toggled on/off using the transmitter.

9. Auxiliary Function. Selectable for Momentary, Timed, or Latched operation.

Momentary operation provides an output for .8 seconds.

Timed operation provides an output that turns on for 10 /30 seconds or each time the transmitter button is pressed. If the button is pressed again during the timed period, the output will turn off.

Latched operation provides an output that turns on when the transmitter button is pressed and turns off when the button is pressed again.

10. Starter Defeat Relay operation. Selects between normally closed (default) or normally open operation.

11. Anti-Carjack Mode. Enables the Anti-Carjacking feature.

12. Trunk Disarm Feature. When selected, activating the Auxiliary function to open the trunk will automatically disarm the system.

IMPACT SENSOR ADJUST

The system's impact sensor has 8 levels of sensitivity (level 1=most sensitive) which can be adjusted using the remote transmitter.

To adjust the system's impact sensor:

1. Make sure the system is disarmed and ignition is turned off.
2. Press and hold button 4 for level shift.
3. Press button 4 again to enter adjust mode.
   - The siren will chirp a number of times to indicate the current sensitivity level.
4. Press button 1 to decrease sensitivity or button 2 to increase sensitivity.
   - The siren will chirp a number of times to indicate the new sensitivity level.
5. Test the sensitivity.
   - The siren will chirp 5 times to indicate warn-away and sound for 3 seconds to indicate full trigger.
5. When desired sensitivity is reached, press and hold button 4 for level shift.
6. Press button 4 again to exit adjust mode.

Remote Start Programmable Features

1. Engine Run Time. Selects between 10, 15, 20, and 30 minute run cycles.

2. Turbo Timer Feature. For vehicles equipped with a turbocharger, this feature allows the engine to continue running for up to 6 minutes after the ignition is turned off, so the turbo has time to cool down.

3. Cold Temperature Starting. Allows the vehicle to automatically start and run every 1, 2, 4, or 12 hours for severe cold weather.

4. Parking Light Mode. Selects the operation of the parking light output while the vehicle is remote started. Choose between flashing output, constant output, and off.

5. Lock with Remote Start. Automatically locks the doors after remote starting.

6. Lock with Remote Shutdown. Automatically locks the doors 5 seconds after the remote start is shut down.

7. Yellow/Black Wire Programming. Selects between Factory Disarm, 3rd ignition (relay required), and Pulsed or Latched Defroster output. When set for Factory Disarm output, the Yellow/Black wire pulses on disarm and remote start to turn off a factory alarm. When set for 3rd Ignition output, the wire turns on with Ignition 1 and 2 relays. When set to Pulsed Defroster output, the wire pulses 10 seconds after remote starting. When set to Latched Defroster, the wire turns on 10 seconds after remote starting and remains on for 5 minutes.

8. Diesel Wait-to-Start Mode. Selects between the 10 second countdown timer for diesel vehicles without a glow plug wire, or between glow plug wire monitoring for vehicles with a wait-to-start indicator light.

REMOTE START DIP SWITCHES

1. Tachless Mode Crank Time. OFF= standard (0.8 seconds) crank time. ON= extended (1.8 seconds) crank time for the tachless operation mode. Not used when RPM monitoring with tach wire is connected.

2. Engine Start Sense. OFF= Tach Start for actual RPM monitored starting. ON= Smart Start for tachless operation.

3. Ignition 2 Relay Program. OFF= Ignition 2 operation. ON= Accessory 2 operation. In accessory 2 mode the output will not turn on until after engine cranking.

4. Transmission Mode. OFF= automatic transmission. ON= manual transmission.

5. Gas/Diesel Mode. Sets the crank delay after ignition turns on. OFF= gasoline engine. ON= diesel engine. *See Orange/Violet (Glow Plug) wire description and Remote Start Programmable Features step#8*

6. RPM Signal LED. ON= Turns on the RPM LED for tach wire locating/testing.

REMOTE START PROGRAMMABLE FEATURES

Step	Function	Button 1	Button 2	Button 3	Button 4
1.	Engine Run Time	10 minutes	15 minutes	20 minutes	30 minutes
2.	Turbo Timer Mode	Off	I minute	3 minutes	6 minutes
3.	Cold Start Timer	1 hour	2 hours	4 hours	12 hours
4.	Parking Light w/Start	Flashing	Continuous	Off	
5.	Lock on Remote Start	No lock	Lock		
6.	Lock on End Start Cycle	No Lock	Lock		
7.	Yellow/Black Wire Program	Factory Disarm	Ignition 3 output	Defroster pulse	Defroster latch
8.	Diesel Wait-to-Start Mode	10 second timer	Glow Plug Input		

REMOTE START NOTES

Smart Start and Tach Start

In order for the system to properly start and run the vehicle, the unit must be able to determine if the engine is cranking or if the engine is actually running. This system is equipped with two means of detecting the engine's run status: Smart Start and Tach Start.

The *Smart Start* feature detects the engine's run status using specially designed software that interprets certain characteristics of the engine, without connection to the vehicle's tachometer wire. This feature allows a faster installation, but may not be compatible with all vehicles, or under extreme temperatures.

The *Tach Start* feature requires connection the the vehicle's tachometer wire, or an injector wire if the tach wire is not available. The Tach Start provides reliable operation with virtually any vehicle, even under extreme temperatures.

Tach Wire Locator

To aid in the locating and testing of a suitable tach wire, the start module is equipped with a LED that flashes to indicate presence of a RPM signal. To use this tach locator, set dip switch #6 to On and be sure dip switch #2 is set for RPM (Off). With the engine running, probe the suspected tach wire with the Gray/Black wire (tach input). The LED will begin flashing if the Gray/Black wire is reading a proper tach signal. If the LED does not flash, continue testing suspected tach wires until the correct wire is found. After the proper tach wire is located and all start module connections have been made, test the remote start by pressing the engine start button on the module located next to the RPM signal LED. If the engine starts and runs properly, press the button again to stop the engine.

Gas and Diesel Modes

The default setting for the engine mode is **Gas Engine**. For diesel vehicles, the engine type for dip switch #5 must be set to **Diesel Engine**. When programmed for diesel engines, the Orange/Violet wire (glow plug input) is monitored to make sure the glow plugs have warmed up before the engine begins cranking. If the glow plug wire is not connected, the unit has a built-in timer that waits 10 seconds before cranking the starter.

BYPASSING FACTORY THEFT DETERRENT SYSTEMS

Many newer vehicles are now factory-equipped with anti-theft systems that use either a resistor coded key or a passive transponder that disables the fuel system unless a properly coded key is inserted into the ignition cylinder. To integrate a remote starter into these vehicles, you must determine which type of factory anti-theft system is equipped, then use the proper bypass module for that system.

General Motors Anti-theft Systems:

Many late-model GM vehicles are equipped with one of three basic anti-theft systems; Passkey, Passlock, and Passkey 3. Standard Passkey systems are easily identified by the resistor chip visible on the shaft of the key. Passlock systems do not rely on a resistor equipped key. Instead they use a resistance code generated when the key is turned in the ignition cylinder. Both of these systems have an anti-theft indicator in the instrument cluster. To properly interface into these systems and retain full functionality of the factory anti-theft system, VATS/PASSLOCK bypass module must be installed.

The Passkey 3 system, which is found on GM vehicles 1999 and newer, is a transponder based system described below.

Passive Transponder Systems:

Passive transponder systems have become the most popular anti-theft system among vehicle manufacturers (Ford, Honda, BMW, Toyota, Nissan and others). This system requires use of a tiny passive transmitter housed in the base of the key. This device activates when placed close to the vehicle's ignition switch. The starter will usually crank but the fuel system will be disabled, not allowing the vehicle to run, if the transponder is not detected. To properly interface into transponder systems, a transponder bypass module must be installed. These modules allow full functionality of the factory anti-theft system and usually require the use of a spare key.

ADDING TRANSMITTERS

To add a new transmitter to the system have the desired transmitters ready and follow the Code Learning sequence.

To enter Code Learning Mode:

1. Turn the ignition on, off, on, off and leave on.
   - The siren will chirp.
2. Press and hold the Override switch.
   - The siren will chirp 3 times.
3. Release the Override switch.
4. Press the Lock Button on the transmitter.
   - The siren will chirp once.
5. Repeat step 3 for each additional transmitter, up to four total transmitters.
   - The siren will chirp an additional time for each added transmitter.
6. Turn off the ignition.
   - The siren will chirp 3 times.

NOTE: If a transmitter is lost or stolen, make sure to code all 4 transmitter memory locations. (Example: If only one transmitter is used, repeat step 3 three more times to remove any previously programmed transmitters.)

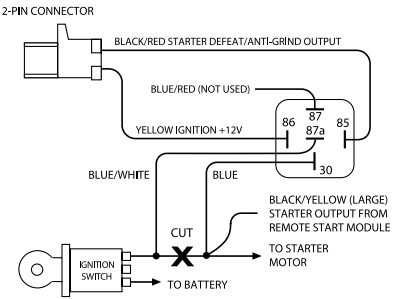
STARTER DEFEAT RELAY WIRING DIAGRAMS

The Starter Defeat/Anti-Grind relay socket can be wired in either normally closed or normally open configuration. In either configuration, the Starter Defeat relay also provides Anti-Grind protection during remote start control, to prevent accidentally grinding the starter if attempting to start the vehicle using the key. The main unit default setting is normally closed operation.

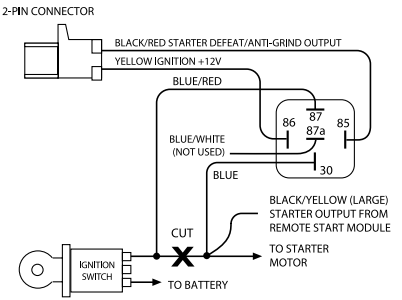
In normally closed configuration (default), the starter is only disabled when the alarm is powered up and in the armed state. In the event power to the alarm module is disconnected, the vehicle will be able to start using the key, even if the alarm had been armed prior to power loss. The normally closed configuration is considered a fail-safe because the vehicle will still start if the alarm loses power (blown fuse, etc.). This is the recommended installation method.

The normally open configuration provides a higher level of security by only allowing the vehicle to start if the system powered up and is in the disarmed state. If power to the system is lost for any reason, even while disarmed, the vehicle will be unable to start. The normally open configuration provides the highest level of security but without fail-safe. If the normally open configuration is selected, Programmable Alarm Feature step 10 must be set to button 2.

STARTER DEFEAT NORMALLY CLOSED



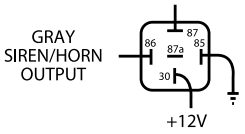
STARTER DEFEAT NORMALLY OPEN



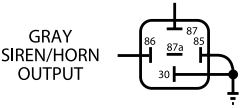
RELAY WIRING DIAGRAMS

HORN HONK DIAGRAMS

TO POSITIVE HORN WIRE

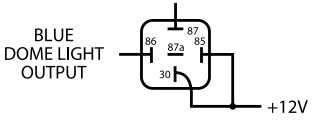


TO NEGATIVE HORN WIRE

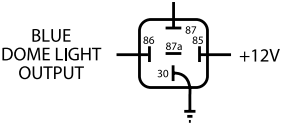


DOME LIGHT DIAGRAMS

TO POSITIVE DOME LIGHT WIRE

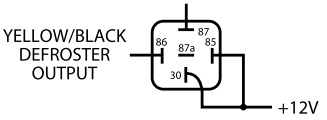


TO NEGATIVE DOME LIGHT WIRE

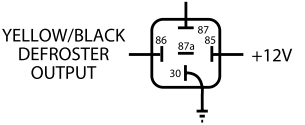


DEFROSTER DIAGRAMS

TO POSITIVE DEFROSTER WIRE

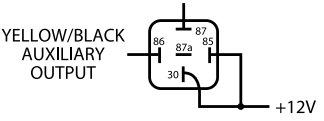


TO NEGATIVE DEFROSTER WIRE



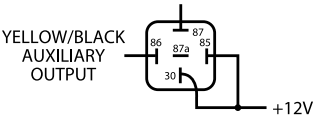
TRUNK RELEASE DIAGRAM

TO TRUNK RELEASE WIRE



OPTIONAL HEADLIGHT ACTIVATION

TO HEAD LIGHT WIRE

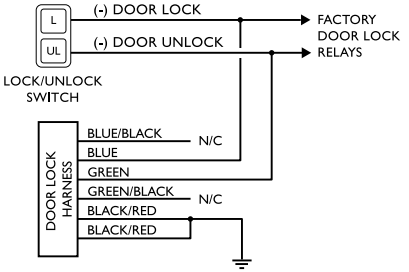


Program the Auxiliary output for timed operation and the headlights will turn on with Auxiliary for the preset timer duration then automatically turn off.

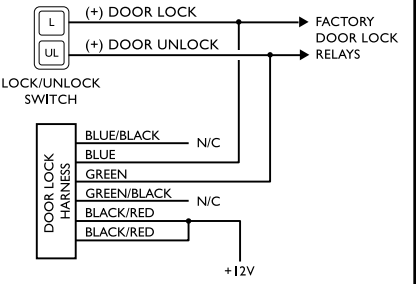
Program the Auxiliary output for latched operation and the headlights will turn on with Auxiliary and remain on until the Auxiliary function is pressed again.

DOOR LOCK WIRING DIAGRAMS

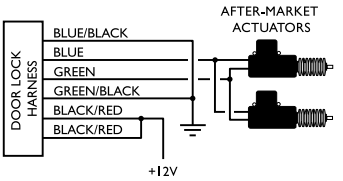
NEGATIVE PULSE LOCK SYSTEM



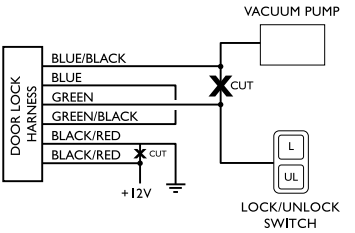
POSITIVE PULSE LOCK SYSTEM



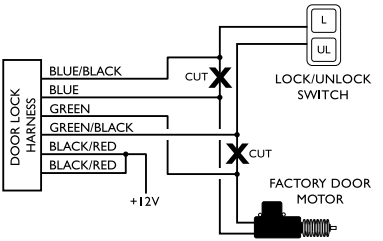
ADDING ACTUATORS



VACUUM LOCK SYSTEM

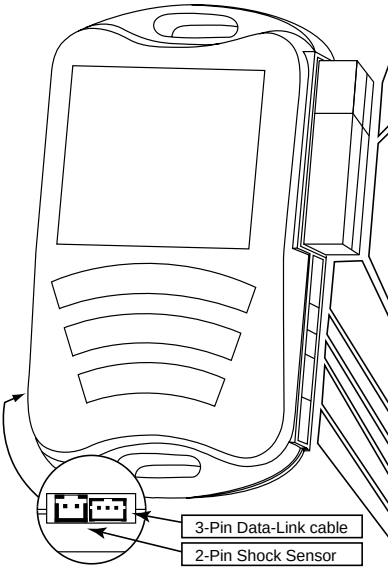


REVERSE POLARITY LOCK SYSTEM



NOTE: The Black/Red door lock polarity input wire connects to the short Red or short Black wire in the 14-pin main harness depending on door lock circuit type. For vacuum systems cut the Red/Black jumper to separate the lock/unlock relay inputs, and connect each side of the wire to the proper polarity.

ALARM MODULE WIRING DIAGRAM



Blue	Lock relay common 30 [10A fuse]
Black/Red	Lock relay normally open 87
Blue/Black	Lock relay normally closed 87a
Green	Unlock relay common 30 [10A fuse]
Black/Red	Unlock relay normally open 87
Green/Black	Unlock relay normally closed 87a

Red	+12V Battery input (+)
Black	Ground (-)
Blue	Dome light output (-) 500mA
Black/Yellow	Starter defeat/anti-grind output (-) 500mA
Orange/Violet	Brake input (+)
Blue/Red	Door trigger input (+)
Orange/White	Trunk input (-)
Green/Black	Parking light output (+ built-in relay)
Green/Yellow	Parking light output (+ built-in relay)
Yellow	Ignition input (+)
Gray	Siren output (+) 3A
Yellow/Black	Auxiliary output (-) 500mA
Blue/Black	Door trigger input (-)
Orange/Gray	Hood input (-)

Optional sensor +12V output
Ground
Optional sensor instant trigger input (-)
Optional sensor warn input (-)

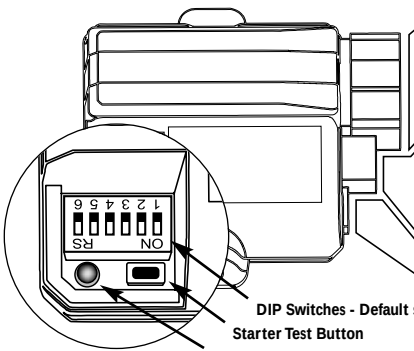
Valet switch

LED

Antenna cable

Not Used

OPTIONAL START MODULE WIRING DIAGRAM



Red	+12V Battery input (+)
Green	Ignition 2 output (+)
Blue	Accessory output (+)
Yellow	Ignition 1 input (+)
Black/Yellow	Starter output (+)
Black/Yellow	(small gauge) not used

Black	Ground (-)
Gray/Black	Tachometer input
Orange/Violet	Glow plug input (+/-)
Pink	Remote start input (-)
Black/Red	Remote start output (-) 500mA
Orange/Gray	Hood input (-)
Yellow/Black	Progammable output (-) 500mA

Data-Link Cable (links alarm and start module)

DIP Switches - Default setting is OFF position (see Remote Start Dip Switches)

Starter Test Button

RPM Signal LED

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