



# **2000RS-2W SERIES**

## **REMOTE START SYSTEM PRODUCT MANUAL**

## Limited Lifetime Warranty

This vehicle remote start system is warranted to the original purchaser, to be free from defects in material and workmanship. The manufacturer will repair or replace at its option, and free of charge for the first twelve (12) months, any part that proves defective in material or workmanship under normal installation, use, and service, provided the product is returned to the manufacturer freight prepaid. After the first 12 month warranty period there will be a maximum service charge of \$25.00 per calendar year (if required) for repair and/or replacement of any defective parts.

A copy of the original purchase receipt must accompany any products returned for warranty service. Warranty is limited to defective parts and/or replacement parts only and excludes any incidental, and consequential damages connected therewith.

The manufacturer of this system makes no warranty against the theft of the vehicle or its contents. This warranty is not to be construed as an insurance policy against loss.

**WARRANTY OF INSTALLATION LABOR, REMOVAL AND RE-INSTALLATION CHARGES ARE NOT THE RESPONSIBILITY OF THE MANUFACTURER.**

# Table of Contents

1.	About Your System	Page 1
2.	Remote Transmitters	Page 2
	Remote Transmitter Description	Page 2
	Adding/Replacing Transmitters	Page 3
	Two Car Operation	Page 3
	Battery Replacement	Page 3
	Optional 2-way LCD Remote Transmitter Description	Page 4
	Adding/Replacing Optional 2-way Transmitters, Selecting Vibrating Mode.	Page 4
	LCD Transmitter Battery Replacement	Page 5
3.	System Operation	Page 8
	Remote Locking	Page 8
	Remote Unlocking	Page 8
	Optional Panic Mode	Page 8
	Valet Mode	Page 8
4.	Remote Start Features	Page 9
	Remote Starting	Page 9
	Shut Down	Page 9
	Quick Stop	Page 9
	Automatic Start Mode	Page 10
	Starter Diagnostics	Page 10
5.	Extended Features	Page 11
	Ignition Door Locking	Page 11
	Ignition Door Unlocking	Page 11
	Dome Light Activation	Page 11
	Auxiliary Function Outputs	Page 11
	Turbo Timer Feature	Page 11
6.	System Installation	Page 12
	Mounting the Control unit	Page 12
7.	System Wiring	Page 13
	6-Pin Starter Harness	Page 13
	20-Pin Main Harness	Page 13
	Plug-in Connectors	Page 14
8.	Jumper Settings	Page 15
	Jumper Selection	Page 15
9.	System Programming	Page 16
	Entering System Programming	Page 16
	Default Reset	Page 16
	Programmable System Options	Page 16
	Branch Table	Page 17
10.	Wiring Diagrams	Page 19
11.	Door Lock Diagrams	Page 20
12.	Two Stage Door Lock Diagrams	Page 21
13.	Technical Information	Page 23
14.	Wiring Diagram	Back Page



# About Your System

The ScyTek Galaxy Starter is a start-of-the-art remote starting system featuring a built-in "ScyNet Network Port" that allows direct connection of optional accessory modules and a PC interface offering expanded system operation. With proper installation this system will provide superior protection and performance for many years to come.

The Galaxy Starter's built-in remote start feature is designed to offer maximum convenience by remote starting your vehicle's engine, turning on the heater/air conditioner, and then running for a pre-determined time to provide a comfortable environment once you enter your vehicle.

To ensure the safety and security of the system while it is remote started, the Galaxy Starter employs several safeguards. In the event the brake pedal is pressed while the engine is remotely running, the remote start will immediately shutdown to prevent unauthorized users from attempting to drive the vehicle. The system is equipped with a hood pin input to prevent access to the engine compartment while the vehicle is remotely running. Finally, the Valet Mode prevents the remote start feature from operating in the event the vehicle is to be serviced.

## System Contents:

- Main Unit with built-in ScyNet Network Interface Port
- Two 5-Button Random Code Remote Transmitters
- Status LED
- Coded Emergency Override / Valet Switch

## Optional ScyNet Network Interface Accessories:

- ScyNet Network Interface Software
- Two-Way FM Paging Module w/ LCD Transmitter

## Options and Convenience Features\*

This ScyTek system includes several optional inputs and outputs allowing the creation of a completely personalized convenience system by offering many optional features such as:

- Second Car Operation
- Keyless Entry
- Two Stage Door Unlocking
- Horn Honk
- Illuminated Entry
- Remote Window Control
- Power Trunk / Hatch Release
- Remote Head Lamp Control

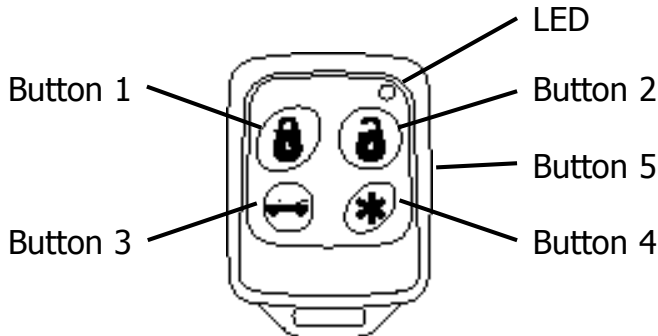
**\*May require additional parts and/or labor, see store for details.**

### PLEASE NOTE:

Some of the features described in this manual may require additional parts and/or labor, and may not be included as part of the standard installation of this unit. Additionally, many features of this security system have selectable options that must be activated or programmed during the system's installation. These items will be identified in the following sections. Please discuss these features and any questions you may have regarding the installation of this product with Your Authorized Dealer.

# Remote Transmitters

## Remote Transmitter Description



The Galaxy Starter is supplied with two 5-button Remote Transmitters used to control system operations.

**Note:** Using the optional PC or Pocket PC interface with the network software, it is possible to reconfigure the functionality of the transmitter buttons. The standard (default) setting for operation of the transmitters is described below.

*Button 1* Locks the doors and when held for 2 seconds, activates the system's Panic feature.

*Button 2* Unlocks the doors. Pressing Button 2 again operates the Passenger Unlock feature (if installed).

*Button 3* Activates the Auxiliary 1 output. This output will remain on for as long as the button is pressed.

*Button 4* Activates the Remote Start feature.

*Button 5* is the Page Shift button. Each time the Shift Button is pressed, the LED on the transmitter will illuminate and the transmitter functions will shift to the next page, allowing access to another set of features. Once shifted to another page (there are 4 pages total), the transmitter will remain on that page for 10 seconds or until a button is pressed, then return to page 1. Each time a transmitter button is pressed and held, the LED will flash a number of times to indicate from which page it is transmitting. Under normally operation, only pages 1 and 2 are used. Pages 3 and 4 are usually used for Two Car Operation (see page 3) or optional expansion modules.

*Shift then Button 1* Locks the system silently (only used if the optional audible status output is used).

*Shift then Button 2* Unlocks the system silently (only used if the optional audible status output is used).

*Shift then Button 3* Activates the Auxiliary 2 output. This output will remain on for as long as the button is pressed.

*Shift then Button 4* Activates the Auxiliary 3 output. This output will remain on for as long as the button is pressed.

## ***Adding/Replacing Transmitters***

To replace lost or stolen transmitters or to add additional transmitters into the system, have all desired transmitters ready and follow the steps below.

**Note:** Up to 4 transmitters can be programmed to operate the system. To erase any previously stored transmitter codes, be sure to program all 4 transmitter memory locations.

To program the transmitter(s):

1. Turn on the ignition key On, Off, On, Off, and back On.
  - The parking lights will flash 3 times.
2. Press and hold the Override switch for 5 seconds.
  - The parking lights will flash 5 times.
  - The LED will illuminate.
3. Press Button 1 on the first transmitter.
  - The parking lights will flash once.
4. Press Button 1 on the first transmitter again.
  - The parking lights will flash twice to indicate it has learned the code.
5. Repeat steps 3 and 4 for each transmitter (up to 4).
6. Turn off the ignition key.
  - The parking lights will flash 3 times.

## ***Two Car Operation***

If two vehicles are equipped with Galaxy Starter systems, for convenience both can be operated using the same remote transmitter. If all four transmitters are to be used with both cars, program transmitters A and B into the first vehicle in the manner described above. Program transmitters C and D by pressing the Shift button twice before performing steps 3 and 4 above.

When finished programming the first vehicle, program transmitters C and D into the second vehicle as normal, then program transmitters A and B by pressing the Shift button twice before performing steps 3 and 4 above.

When programmed in this manner, the driver of the first car can also operate the second vehicle by pressing the Shift button twice and the desired function button.

## ***Battery Replacement***

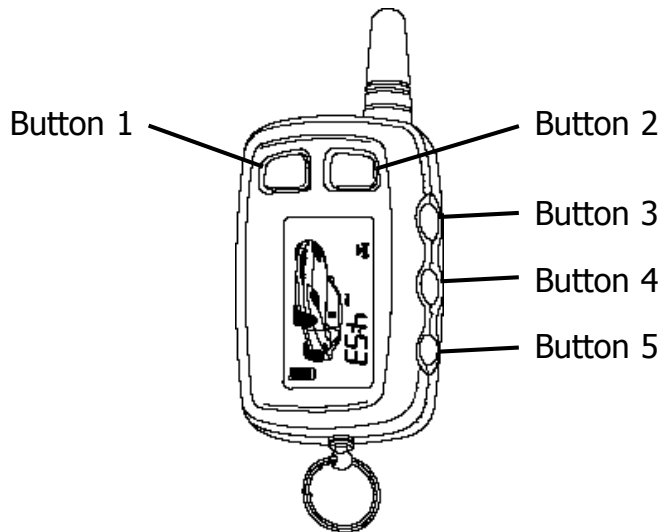
Your Galaxy Remote Transmitter uses a 12 volt alkaline battery (type 23A), which will require replacement in time. Depending on the amount of use, the battery may last up to six months or more before it needs replacement.

When the battery needs replacing, the system's operating range will decrease or the transmitter LED may not be as bright.

In order to change the battery, first remove 2 screws from the back of the transmitter and separate the top and bottom halves of the case.

While replacing the battery make sure that the positive and negative terminals are positioned correctly, then carefully reassemble the transmitter case.

## ***Optional 2-way LCD Remote Transmitter Description***



The Galaxy 2000RS-2W is compatible with the optional 2-way LCD remote transmitter, offering increased range and confirmation of any activated features.

*Button 1* Locks and Unlocks the system and when held for 2 seconds, activates the system's Panic feature. Button 1 also locks/unlocks the doors when the system is in Valet Mode.

*Button 2* Activates the Remote Start feature.

*Button 3* Activates the Auxiliary 1 output normally used for trunk release (note trunk icon on button).

*Button 4* Activates the Auxiliary 2 output. This output will remain on for as long as the button is pressed.

*Button 5* is the Confirmation and Programming button. Quickly pressing button 5 will activate the LCD display's backlighting for use in the dark. Pressing button 5 for 2 seconds activates the system's confirmation feature which will then display the current status of the system (armed, disarmed, engine running, etc.).

## ***Adding/Replacing Optional 2-way LCD Transmitters***

When adding an optional 2-way LCD transmitter to the system, follow these steps:

1. Turn on the ignition key On, Off, On, Off, On, Off, and back On. (Key On 4 times)
  - The siren will chirp 4 times.
2. Press and hold the Override switch for 5 seconds.
  - The siren will chirp 4 times.
  - The LED will illuminate.
3. Press Button 1 on the first transmitter.
  - The siren will chirp once.
4. Turn off the ignition key.
5. Repeat steps 1-4 to add an additional 2-way transmitter.

## ***LCD Transmitter Battery Replacement***

Your Galaxy Remote Transmitter uses a 1.5 volt AAA alkaline battery, which will require replacement in time. Depending on the amount of use, the battery may last up to six months before it needs replacement. When the battery needs replacing, the system's operating range will decrease, the LCD display will show only one of three bars in the battery icon, or the display and sounds may suddenly stop and start as the battery voltage drops below minimum.

In order to change the battery, first slide the battery door locking pin to the side. Carefully slide the battery cover downward until it is free. While replacing the battery make sure that the positive and negative terminals are positioned correctly, then carefully reassemble the transmitter case.

## ***Setting The Time***

The LCD display is equipped with a 12-hour clock that in addition to displaying the time, offers an alarm clock function as well as a remote activation timer.

To set the time:

1. Press and hold Buttons 2 and 3 for three seconds.
  - The remote will beep two times and three bars will be shown indicating time set mode is entered.
2. Press Button 2 until the correct hour is displayed.
3. Press Button 3 until the desired minute is displayed. The button may be held down to scroll faster.
4. When the desired time is displayed, press Button 5 to store.
  - The remote will play a melody to indicate the time has been set.

## ***Setting The Alarm Clock***

The alarm clock function can be set to play an alert melody at a specific time of day.

To set the alarm clock function:

1. Press and hold Buttons 2 and 3 until the remote beeps three times.
  - The alarm clock bell and three bars will be shown indicating alarm clock set mode is entered.
2. Press Button 2 until the desired hour is displayed.
3. Press Button 3 until the desired minute is displayed. The button may be held down to scroll faster.
4. When the desired time is displayed, press Button 5 to store.
  - The remote will play a melody to indicate the alarm clock has been set.

To disable the alarm clock function:

1. Press and hold Buttons 2 and 3 until the remote beeps three times.
  - The alarm clock bell and three bars will be shown indicating alarm clock set mode is entered.
2. Press Button 1 to disable the alarm clock.
  - The remote will play a melody to indicate the alarm clock has been disabled.

## ***Setting The Automatic Start Or Auto Activate Function***

The Automatic Start Function provides a timer that allows the vehicle to automatically remote start at a preset time of day. For non-remote start equipped systems, this feature allows activation of an auxiliary feature at a preset time of day.

To set the automatic start / auto activate function:

1. Press and hold Buttons 2 and 3 until the remote beeps four times.
  - The fan and clock will be shown indicating automatic start mode is entered.
2. Press Button 2 until the desired hour is displayed.
3. Press Button 3 until the desired minute is displayed. The button may be held down to scroll faster.

4. When the desired time is displayed, press Button 5 to store.
  - The remote will play a melody to indicate the alarm clock has been set.

To disable the automatic start / auto activate function:

1. Press and hold Buttons 2 and 3 until the remote beeps four times.
  - The fan and clock will be shown indicating automatic start mode is entered.
2. Press Button 1 to disable the alarm clock.
  - The remote will play a melody to indicate the alarm clock has been disabled.

### ***LCD Backlight***

Transmitter Button 5 is used for confirmation, transmitter programming, as well as activation of the LCD backlighting for use in the dark. Press button 5 momentarily to activate the LCD backlight.

### ***System Confirmation***

The 2-way transmitter's confirmation feature allows the current vehicle status to be displayed at any time.

To display system status:

1. Press and hold Button 5 until the display shows CON.
  - The transmitter will beep once.
2. Release Button 5.
  - The transmitter will beep once.
  - The icons representing current system status will be displayed on the LCD panel.

### ***Transmitter Programming & Vibration Mode Selection***

Pressing and holding transmitter button 5 will scroll through several transmitter programmable options that may or may not be available depending on the model of system installed- CHP, SND, and PSV. The CHP or chirp function allows remote enabling or disabling of the vehicle siren's confirmation chirps.

Note: This feature may not be available on all systems.

To turn the siren chirps on or off:

1. Press and hold Button 5 until the display shows CHP.
  - The transmitter will beep twice.
2. Release Button 5.
  - The transmitter will beep once.
  - The LCD panel will show a siren if the chirps are enabled or "off" if the chirps are disabled.

The SND or sound function allows to Select of the transmitter's confirmation with Tones or Vibration mode.

To turn the transmitter confirmation tones on or off:

1. Press and hold Button 5 until the display shows SND.
  - The transmitter will beep three times.
2. Release Button 5.
  - The transmitter will beep once.
  - The LCD panel will play a tone if the sounds are enabled or "off" The Remote will Vibrate .

The PSV or passive function allows the passive arming mode to be enabled or with the transmitter.

Note: This feature may not be available on all systems.

To enable or disable the passive arming mode:

1. Press and hold Button 5 until the display shows PSV.
  - The transmitter will beep four times.
2. Release Button 5.
  - The transmitter will beep once.
  - The LCD panel will play a tone if the sounds are enabled or "off" will be displayed if the chirps are disabled.



**System Armed** indicates the doors are locked and the alarm is on.



**System Disarmed** indicates the doors are unlocked and the alarm is off.



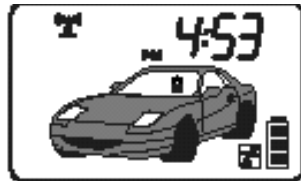
**Engine Run** indicates the engine is running on remote start equipped systems



**Trunk Release** indicates the trunk or auxiliary function has been activated.



**Door Open** indicates the door zone has been triggered.



**Shock Sensor** indicates the shock sensor has been triggered.



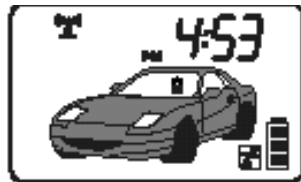
**Warn Away** indicates the warn away has been triggered.



**Trunk Open** indicates the trunk or hood zone has been triggered.



**Lock** indicates the doors are locked and the system is in valet mode.



**Valet Mode** indicates the system has been placed into valet mode.



**Unlock** indicates the doors are unlocked and the system is in valet Code.



**Panic** indicates the panic mode has been triggered.



**Alarm Clock** indicates the programmable timer function has been set.



**Auto Run** indicates the automatic remote start timer has been set.



**Battery Low** indicates the battery inside the transmitter needs to be replaced.

# System Operation

## **Remote Locking**

To Lock the doors:

1. Turn off the ignition.
2. Press Button 1.
  - The audible status output will beep (if connected)
  - The doors will lock.
  - The parking lights will flash once.
  - The LED will turn on red, to indicate the doors are locked.
3. 10 seconds after Locking:
  - The LED will start blinking as a theft deterrent.

## **Remote Unlocking**

To Unlock the doors:

- Press Button 1.
- The audible status output will beep (if connected)
  - The doors will unlock.
  - The parking lights will flash twice.
  - The dome light will turn on.
  - The LED will turn off.

## **Optional Panic Mode**

In the event of an emergency the transmitter's remote Panic feature can be used to instantly trigger the optional horn honk or audible status output, if connected.

To activate the Panic Mode:

1. Press and hold Button 1 for 3 seconds.
  - The horn will honk (if connected).
  - The parking lights will flash.
  - The doors will unlock allowing access to the vehicle.\*
2. Press Button 2 to stop Panic Mode.

\* **If the ignition is on when the Panic feature is activated, the doors will lock for personal safety.**

If not deactivated using Button 2, the Panic Mode will automatically exit after 30 seconds and the system will be restored to its previous Locked/Unlocked state.

## **Valet Mode**

The Valet Mode temporarily disables the remote start system so the vehicle may be serviced by a mechanic. The remote transmitters will continue to lock/unlock the doors, and operate the optional auxiliary functions.

To activate or deactivate the Valet Mode:

1. Turn on the ignition.
2. Press and hold the override switch for 5 seconds.
  - The parking lights will flash once to confirm the Valet Mode is on.
  - The parking lights will flash twice to confirm the Valet Mode is off.
3. Turn off the ignition.

# Remote Start Features

## **Remote Starting**

To Remote Start the System:

1. Be sure the system is not in Valet Mode.
2. Press and hold Button 4 for three seconds.
  - The parking lights will turn on.
  - The LED will flash rapidly.
  - The engine will start and run for the duration of its programmed Run Time.\*
  - The heater or air conditioner will turn on (if turned on prior to exiting the vehicle).

**\*If the engine fails to start on the first attempt, it will repeat the starting procedure 2 more times. If the vehicle fails to start after a total of 3 times the parking lights will flash 4 times and the doors will lock (if installed).**

Turn on the ignition and press the brake pedal to disengage the remote start feature and drive the vehicle.

## **Shut Down**

When the the Remote Start feature is active, any of the following actions will shutdown the engine:

1. Pressing Button 4.
  - After the engine shuts down the doors will lock (if installed).
2. Pressing the Brake Pedal.
3. Opening the Hood.
4. Remote Start Time-Out (completion of the timed run cycle).

## **Quick Stop**

The Quick Stop Feature allows you exit the vehicle while keeping the engine running for quick stops.

To leave the vehicle running:

1. While engine running Push Start Button on the Remote Transmitter until the parking lights flash.
  - The parking lights will turn on.
2. Remove the key from the ignition switch.
3. You may now exit the vehicle and lock the doors manually or using the Remote Transmitter

To resume control of the vehicle:

1. Unlock the doors manually or by pressing Button 4 on the Remote Transmitter\*.
2. Turn on the ignition.
3. Press the Brake Pedal to disengaged the remote start.

**\*If optional keyless entry feature is installed.**

## ***Automatic Start Mode***

The Automatic Start Mode allows the vehicle to automatically start the vehicle every one or two hours and run for the preset Run Time.

To turn on Auto Cold Starting:

1. Turn Ignition switch Off and wait for 3 seconds.
2. Turn Ignition switch On and Off three times ending with Ignition in Off position
3. Press the Valet switch within three seconds

Side lights will flash indicating that the Cold Start mode has been activated.

To turn off Auto Cold Starting do one of the following:

- Turn on the ignition.
- Lock and Unlock using the remote
- Panic the system

## **Starter Diagnostics**

Starter doesn't start and Side Lights flash:

3 Times -

Engine RPM not detected

Hood Trigger is active

4 Times - Brake Trigger is active

5 Times - Unit is in Valet (service) mode, and start is disabled.

## Extended Features

### **Ignition Door Locking**

For added safety, the Ignition Door Locking feature allows vehicles equipped with power door lock systems to automatically lock the doors when the ignition is turned on. If a door is open when the ignition is turned on, the Ignition Door Locking feature is disabled to protect against locking the keys inside the vehicle.

### **Ignition Door Unlocking**

For added convenience, this feature automatically unlocks the doors after the ignition key is turned off. If the optional Passenger Unlock feature is installed, the Ignition Door Unlocking feature can be programmed to unlock only the driver door as a higher measure of safety, especially when children are present. The Ignition Door Unlocking feature may also be completely disabled if desired.

### **Dome Light Activation**

If the optional Dome Light Activation feature is installed, the dome light will turn on when the system is disarmed using the Remote Transmitter, and remain on for 30 seconds or until the ignition is turned on.

### **Auxiliary Function Outputs**

The Galaxy Starter system is equipped with 2 Auxiliary Channel Outputs allowing the convenience features of the system to be further expanded. These outputs can be programmed for pulsed, timed, or latched operation, and used to add a number of optional features such as: power trunk release, remote engine start, power window activation, power sunroof control, auxiliary lighting, audio/video system control, and more.

The **Pulsed** operation setting allows an output to activate as long as the button is held.

The **Timed** operation setting allows an output to activate when the transmitter button is pressed, and remain activated for 10 seconds or until the transmitter button is pressed again.

**Note:** With the optional ScyNet network interface and Wizard software, the timed output can be programmed for any time between 1 second and 255 seconds.

The **Latched** operation setting allows an output to activate when the transmitter button is pressed, and remain activated until the transmitter button is pressed again.

### **Turbo Timer Feature**

The optional Turbo Timer feature allows vehicles with turbocharged engines to remain running after the ignition key is removed, for proper cool-down of the turbocharger. The Turbo Timer feature requires connection to the vehicle's parking brake wire and is compatible with most gasoline powered engines, and diesel engines where a glow plug connection is not required.

To activate the Turbo Timer feature:

1. Leave the engine running after parking the vehicle.
2. Set the vehicle's parking brake.
  - The Turbo Timer will begin a two-minute run cycle to allow the turbocharger to cool down.
3. Turn OFF the ignition and exit the vehicle.

To deactivate the Turbo Timer feature:

1. Turn OFF the ignition.
2. Press the brake pedal.
  - The Turbo Timer countdown will automatically stop and the engine will shutdown.

**WARNING:** the Turbo Timer feature is not intended for use inside garages or other non-ventilated areas. Make sure to deactivate the Turbo Timer feature when parking in such areas.

# System Installation

1. Thoroughly read and become familiar with the installation instructions before beginning the installation.
2. Review system contents:
  - Main Unit
  - Two 5-Button Remote Transmitters
  - Harnesses
    - 6-Pin starter harness
    - 20-Pin main harness
    - 4-Pin auxiliary start harness
    - 3-Pin door lock harness
    - LED harness
    - Override Switch harness
3. Verify vehicle is equipped with electronic fuel injection, and starts/idles normally before installation.
4. Determine if vehicle is equipped with a factory theft deterrent system and obtain proper bypass module if required.
5. Find a location to mount the hood pin switch that will not interfere with the opening of the hood, and is not in a position that can accumulate water. The hood pin is a safety device that must be installed to avoid remote starting during engine servicing.
6. Verify with the owner, mounting locations for all visible components, including the LED and Valet switch.
7. Verify with the owner, the optional features of the Galaxy Starter and the features that must be programmed during installation.
8. Inspect and perform a function test of all vehicle systems before and after the installation.
9. Always use a Volt / Ohm meter for testing vehicle circuits. Never use a test light.
10. Always look before drilling any holes or mounting self-tapping screws. Be sure fuel lines and exterior wiring looms are clear as they are often close to the chassis and difficult to see.
11. Protect all wires running from the engine compartment to the interior of the vehicle by covering with electrical tape and split loom tubing. Be sure to use a grommet when routing wires through the firewall.
12. Properly fuse any additional accessories such as window modules, door lock actuator, etc., making sure to power them separate from the alarm module. This will ensure the functionality of the security system in the event of an accessory failure.

## ***Mounting the Control Unit***

The control unit must only be mounted in the interior of the vehicle. Do not mount the main unit in the engine compartment. Choose a mounting location that will not be easily accessible to a thief, and will not interfere with the operation of any vehicle components such as foot pedals, steering column, air vents, seat rails, etc.

Do not mount the control unit until after setting the internal jumpers and performing a complete operation check of the system. After installation is complete and performance verified, the control unit can be easily mounted using wire ties through the mounting tabs on the bottom of the unit.

# System Wiring

## 6-Pin Starter Harness

- Pin 1 **RED WIRE A:** Main Power Input A (+). Connect to the battery or constant power wire at the ignition switch with a minimum 25 Amp supply. Remove fuse until installation is complete and wiring is checked.
- Pin 2 **RED WIRE B:** Main Power Input B (+). Connect to the battery or constant power wire at the ignition switch with a minimum 25 Amp supply. Note: if connecting at the ignition switch it is highly recommended to use separate power wires for each Red wire, each with a minimum 30A supply. Remove the fuse until the installation is completed and all wiring is checked.
- Pin 3 **BROWN WIRE:** Second Ignition Output (+). The Brown wire provides +12V for a second ignition wire. This wire may instead be programmed for use as a second accessory or second starter wire.
- Pin 4 **ORANGE WIRE:** Accessory Output (+). Connect to the accessory wire coming from the ignition switch that supplies power to the heater/air-conditioner. Some cars may have multiple accessory wires.
- Pin 5 **YELLOW WIRE:** Ignition Output (+). Connect to the main ignition wire that provides +12V when the ignition is on and while cranking the starter.
- Pin 6 **VIOLET WIRE:** Starter Output (+). Connect to the the vehicle's starter wire.

## 20-Pin Main Harness

- Pin 1 **GREEN/WHITE WIRE:** Brake Input (+). Connect to the wire that shows +12V when pressing the brake. The Green/white wire is a safety shutdown wire that must be connected.
- Pin 2 **BLACK/GRAY WIRE:** Tach Input. Connect to the vehicle's tach wire or a fuel injector wire if the tachless mode does not provide satisfactory operation.
- Pin 3 **WHITE/RED WIRE:** Auxiliary 2 Output (-) 500 mA. Connect to a relay or module for an optional feature such as power window activation, etc. This output may be programmed for momentary, timed, or latched operation.
- Pin 4 **BLACK/WHITE WIRE:** Dome Light Output (-) 500 mA. Connect to the wire that activates the vehicle's dome light, usually the door pin switch wire. NOTE: The dome light output can usually connect to the same wire used for the door trigger input (see Green and Violet door trigger wires).
- Pin 5 **YELLOW WIRE:** +12V Ignition Input. The Yellow wire must connect to a main ignition wire at the ignition harness. This wire must show +12V when the ignition is on and while cranking the starter. The voltage must not drop when the car is starting.
- Pin 6 **BLUE/YELLOW WIRE:** Glow Plug Input (+). For vehicles equipped with diesel engines the Blue/yellow wire must be connected to the wait-to-start light in the gauge panel. This wire will show +12V when the light is on, and ground when the light turns off. If the wait-to-start wire shows ground when the light is on, a relay must be installed (see wiring diagrams).
- Pin 7 **BLUE/WHITE WIRE:** Passenger Unlock Output (-) 500 mA. Connect to a relay to unlock the passenger doors when the system is configured for Driver Priority Unlocking.
- Pin 8 **BLUE/ORANGE WIRE:** Ground When Running Output (-) 500 mA. Connect to an optional factory security bypass module if required.
- Pin 9 **BLACK WIRE:** Ground Input (-). The Black wire must connect to a solid chassis ground. Clean away any paint or dirt to insure the best possible ground.
- Pin 10 **RED WIRE:** Module Power Input (+). Connect to a constant source of +12V.
- Pin 11 **VIOLET WIRE:** Positive Door Input (+). 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.
- Pin 12 **GREEN WIRE:** Negative Door Input (-). Connect to the door switch circuit wire that shows ground when the door is open.

- Pin 13 **WHITE/BLACK WIRE:** Hood Pin Input (-). Connect the to the hood pin switch. The switch must provide a ground output when switch is opened.
- Pin 14 **ORANGE WIRE:** Anti-Grind Output (-) 500 mA. The Orange wire provides a ground output to activate a relay for anti-grind protection.
- Pin 15 **VIOLET/WHITE WIRE:** Factory Disarm Output (-) 500 mA. The Violet/white wire provides a ground output on disarming and before remote starting to disarm a factory security system. Connect to the wire that requires a ground pulse to disarm the factory security system.
- Pin 16 **WHITE/VIOLET WIRE:** Factory Rearm Output (-) 500 mA. The White/violet wire provides a ground output on remote start shutdown to rearm a factory security system. Connect to the wire that requires a ground pulse to rearm the factory security system.
- Pin 17 **BROWN WIRE:** Audible Status Output (+) 3A. The Brown wire may be connected to an optional audible status indicator such as a siren or piezo device.
- Pin 18 **GRAY WIRE:** Auxiliary 1 Output (-) 500 mA. Connect to a relay for an optional feature such as trunk release, etc. This output may be programmed for momentary, timed, or latched operation.
- Pin 19 **WHITE WIRE:** Parking Light Output (+/-) relay. Connect the White wire to the circuit that shows +12V or ground only when the parking lights are on and set the internal parking light relay jumper to the proper polarity. For parking light circuits exceeding 10 amps, a relay is required. For vehicle's with independent left and right parking light circuits, diodes must be installed to keep the circuits separate. NOTE: Do not connect the WHITE wire to the vehicle's headlight circuit.
- Pin 20 **BROWN/WHITE WIRE:** Horn Output (-) 500 mA. Connect to a relay to honk the vehicle's horn when the panic feature is triggered. This wire may instead be programmed as an ignition 3 relay trigger.

## **Plug-in Connectors**

**4-Pin White Connector:** Auxiliary start input port for use with after-market security system.

- WHITE WIRE - 3 pulse remote start (-) input. Connect to the door lock output from the keyless entry system. When the lock button is pressed 3 times the vehicle will start.
- BLUE WIRE - 1 pulse remote start (-) input. Connect to auxiliary output from aftermarket alarm.
- RED WIRE - not used.
- BLACK WIRE - not used.

**2-Pin Blue Connector:** Valet switch port. Mount switch where it is accessible from the driver's position.

**2-Pin Red Connector:** LED port. Mount LED where it may be easily seen from either side of the vehicle.

**3-Pin White Door Lock Connector:** Door lock port.

- BLUE WIRE - negative unlock output (-) 500mA.
- **Not Available** (RED WIRE - (+) 100mA trigger output for optional plug-in door lock relay module).
- GREEN WIRE - negative lock output (-) 500mA.

**3-Pin Blue Network Connector:** The plug-in network connector port is located on the side of the main module. This network port may be used with the optional personal computer interface or Pocket PC for diagnostics, software customization and expanded programming options. The network also offers connection to several optional accessories. *See your dealer for more information.*

**2-Pin White Connector:** Located on the side of the main module.

- Green WIRE - Parking Brake Input (-) For vehicles equipped with a turbo charged engine. Must be connected if using the Turbo Timer feature.
- Blue WIRE - Not Used.

# Jumper Settings

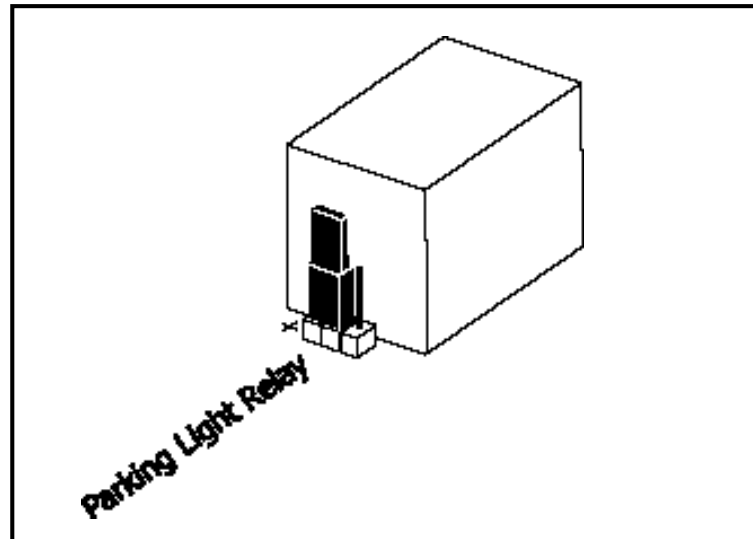
## ***Jumper Selection***

Carefully separate the top and bottom halves of the main unit case. Once the cover is removed, the parking light polarity jumper will be visible next to the parking light relay. Set the jumper for the correct polarity output as described below, then reassembly the main unit case.

**Parking Light Output.** Selects the polarity (+/-) for the output of the on-board Parking Light relay.

Left Pin + Center Pin = positive

Right Pin + Center Pin = negative



default setting shown

# System Programming

## **Entering System Programming**

Although this system is compatible with the optional FM transmitter, all programming is performed using the standard AM transmitter unless otherwise noted.

To enter System Programming:

1. Turn on ignition.
2. Within 5 seconds, press the valet switch 5 times.
  - The parking lights will provide three blinks, indicating that you have entered Programming.
3. Press the valet switch the number times equal to the System Parameter you want to change.
  - The parking lights will flash each time the valet switch is pressed.
4. Within 5 seconds, press the transmitter button corresponding to the desired operating mode for that System Parameter.
  - The parking lights will flash to indicate the setting.

1 flash	=	Button 1
2 flashes	=	Button 2
3 flashes	=	Button 3
5. When you are finished, turn off the ignition to save the changes.

## **Default Reset**

Following this procedure will set all System Programming Parameters to factory default settings.

1. Enter System Programming.
2. Press Transmitter Button 3.
  - The parking lights will flash 6 times indicating that the reset signal was received.
  - All System Programming parameters are now set to factory default settings.
  - The Valet Mode is off.
3. Turn off ignition.

## **Programmable System Options**

The following is a description of the programming options of the system. Some of the program branches control more than one option, and may require accessing a particular branch number twice in order to program all desired features.

1. **Ignition Door Locking.** Selects whether or not the system will automatically lock the doors 5 seconds after the ignition key is turned on.
2. **Ignition Door Unlocking.** Selects whether or not the system automatically unlocks the doors when the ignition is turned off. The Ignition Door Locking feature may be programmed to unlock all doors or the driver's door only. If driver's door only is selected, the optional Passenger Unlock wire must be connected. (*See Two Stage Door Lock Diagrams*)
3. **Door Unlock Pulse.** Selects between one pulse or two pulse operation for the door unlock output. Many new import vehicles' factory door locking systems require two pulses on the proper wire to unlock the doors. These systems can be interfaced directly without the use of relays or any additional circuitry by programming the system for double unlock pulse.

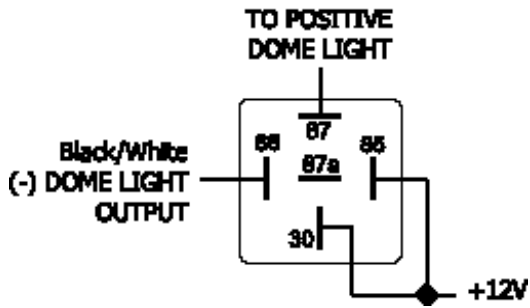
Branch	Feature	Button 1 (default)	Button 2	Button 3
1.	Ignition Door Locking	On	Off	
2.	Ignition Door Unlocking	Unlock All	Unlock Driver Only	Off
3.	Door Unlock Pulse	Single	Double	
4.	Door Lock Pulse Length	1 second	3 seconds	
5.	Aux 2 Activate on Lock	Off	On	
6.	Aux 1 Mode	Pulsed	Timed	Latched
7.	Aux 2 Mode	Pulsed	Timed	Latched
8.	Unlock with Aux 1	Disabled	Enabled	
9.	Start in Valet Mode	Disable	Enabled	
10.	Lock after Start	On	Off	
11.	Lock after Shutdown	On	Off	
12.	Engine Run Time	15 minutes	25 minutes	
13.	Automatic Start Mode	2 hours	1 hour	
14.	Engine Sense Mode	Tachless	Tach Monitor	
15.	Remote Start Program	RPM Learn	Gas Engine	Diesel Engine
16.	Ignition 2 Output Program	Ignition 2 Output	Accessory 2 Output	Starter 2 Output
17.	Horn Honk Output	Horn Output	Ignition 3 Output	
18.	Turbo Mode	Disabled	Enabled	
19.	Extended Parking Lights	On	Off	
20.	Horn Chirp Mode	Normal	Extended	
21.	Key-Less Entry Chirps	Enabled	Disabled	
22.	Remote Start Confirmation	Enabled	Disabled	

4. **Door Lock Pulse Length.** Selects between a 1-second and a 3-second output for door locking and unlocking. Program to 3 seconds for vehicles equipped with vacuum door locking systems.
5. **Aux 2 Auto Activate with Arm.** When selected, the Auxiliary 2 output will activate when the system is armed. This feature can be used to roll-up windows, close sunroofs, activate accessories, etc.
6. **Auxiliary 1 Mode.** Selects from momentary, 10 second timed, or latched operation for Auxiliary 1. Momentary operation provides an output for as long as the transmitter button is pressed. Timed operation provides an output that turns on for 10 seconds each time the transmitter button is pressed. If the button is pressed again during the 30 seconds, the output will turn off. Latched operation provides an output that turns on when the transmitter button is pressed and remains on until the transmitter button is pressed again.  
Note: With the optional ScyNet network interface and Wizard software, any auxiliary function can be programmed to output for 1 second up to 255 seconds.
7. **Auxiliary 2 Mode.** Selects from Momentary, Timed, or Latched operation for Auxiliary 2.
8. **Unlock with Auxiliary 1.** When selected, activating the Auxiliary 1 output (usually used to open the trunk) will unlock the vehicle doors.
9. **Start in Valet Mode.** Selects whether or not the vehicle can remote start while in the valet mode.
10. **Lock After Start.** When selected, the doors will automatically lock after remote starting.
11. **Lock After Shutdown.** When selected, the doors will automatically lock after remote shutdown.

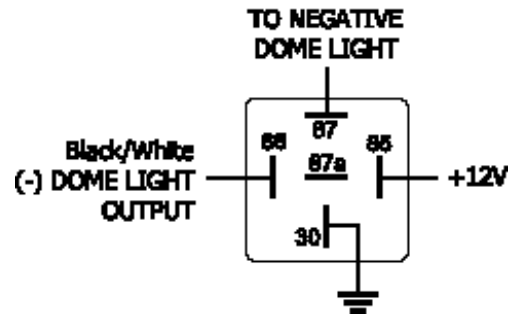
12. **Engine Run Time.** Selects between 15 or 25 minutes for the remote start run cycle.
13. **Automatic Start Mode.** Selects between every two hours or every hour for the automatic engine starting feature.
14. **Engine Sense Mode.** Selects between Tachless and Tach Monitor operation.
  - Tachless. Determines the engine status using an advanced software routine, without requiring connection to the vehicle's tachometer. Tachless operation may not be compatible with some vehicles or in severe temperatures, in which case the tach wire must be connected.
  - Tach Monitor. Monitors the vehicle's tach wire (or a fuel injection wire) in real-time to determine engine status and adjust starter crank time automatically. If programmed for Tach Monitor, the vehicle's tach signal will have to be learned before initial operation (see below).
15. **Remote Start Program.** This dual program branch sets the engine mode for Gas or Diesel, and learns the vehicle's RPM threshold. For installation into a diesel equipped vehicle, first set the engine type to diesel before learning RPM.
  - RPM Learn. After engine type is set, start the engine, re-enter Branch 15, LED will start flashing if tach signal is detected, otherwise the LED will stay solid. Press Button 1 to learn the vehicle's idle speed. The siren will chirp once to confirm. The siren will chirp four times if the tach signal was not learned.
  - Gas Engine. Sets the engine type for Gasoline.
  - Diesel Engine. Sets the engine type for Diesel and monitors the glow plug input to make sure the glow plugs are warm before cranking the starter. If the glow plug wire is not connected, the built-in timer waits 15 seconds before automatically cranking the starter.
16. **Ignition 2 Relay Program.** Selects one of three operating modes for the Ignition 2 relay output: Ignition 2, Accessory 2, or Starter 2.
17. **Horn Output.** When set for Horn Output the horn wire will pulse when the alarm is triggered. When Ignition 3 Output is selected, the output will activate during remote start to trigger a relay for Ignition 3.
18. **Turbo Timer.** When enabled, if the emergency brake has been applied Ignition power will be kept On for a predetermined time (2min. Factory Default) from the application of the emergency brake.
19. **Extended Parking Lights.** When Enabled, upon Disarming Parking lights will turn On for 30 seconds or until the Dome light turns Off.
20. **Horn Chirp Mode.** Normal mode - sets horn chirp timing for most vehicles. Extended mode - extends horn chirp for vehicles that require longer horn chirp timing.
21. **Key-Less Entry Chirps.** When enabled, system chirps when lock or unlock are activated using remote control. When disabled, no chirps will sound upon lock or unlock.
22. **Remote Start Confirmation Chirps.** When enabled, system chirps before starter activated. When disabled, no chirps will sound upon start.

# Wiring Diagrams

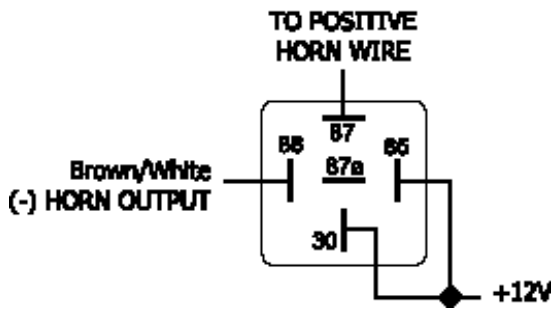
Positive Dome



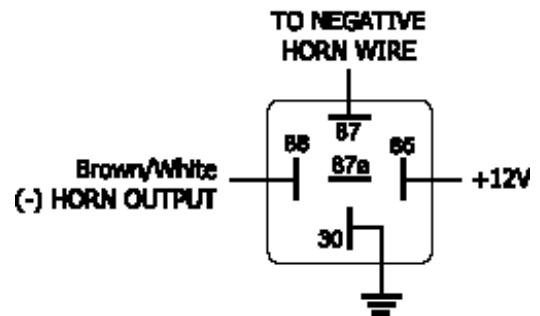
Negative Dome



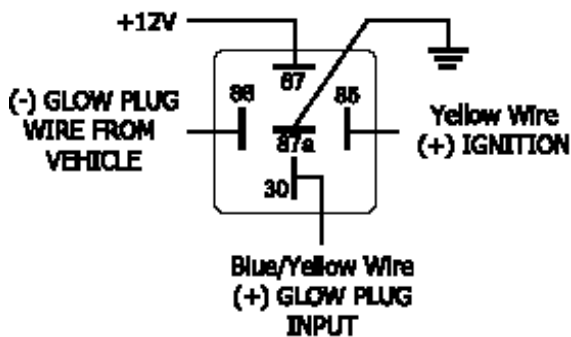
Positive Horn



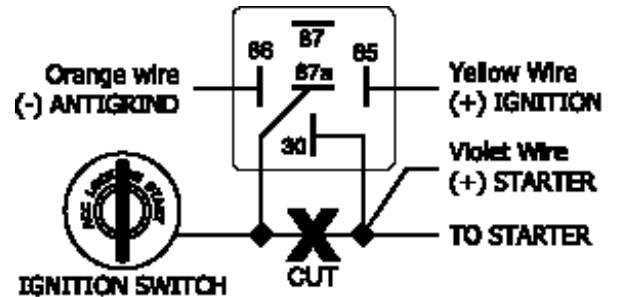
Negative Horn



Negative Glow Plug



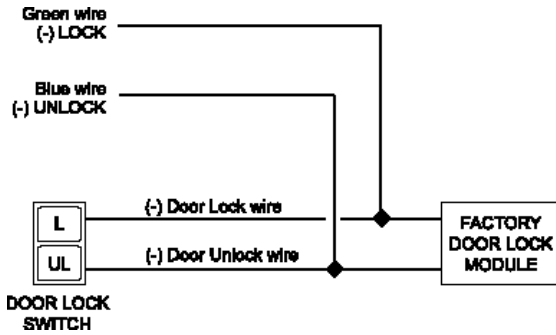
Starter Anti-Grind



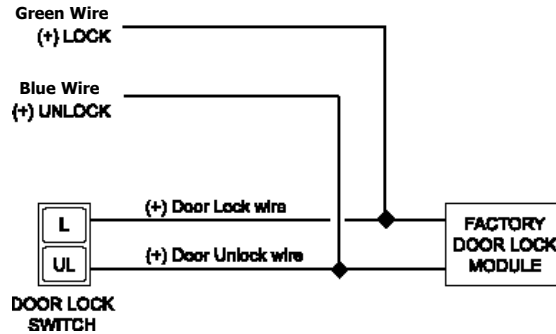
# Door Lock Diagrams

Follow the diagrams below for connecting basic door lock systems. For Two Stage door lock systems (separately unlocks driver and passenger doors) see following pages.

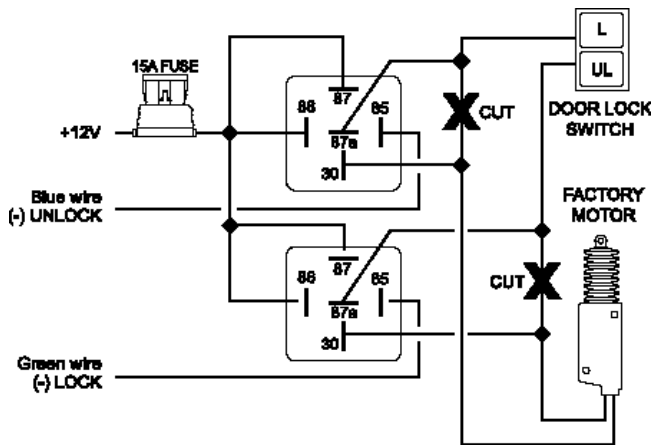
### Negative Trigger



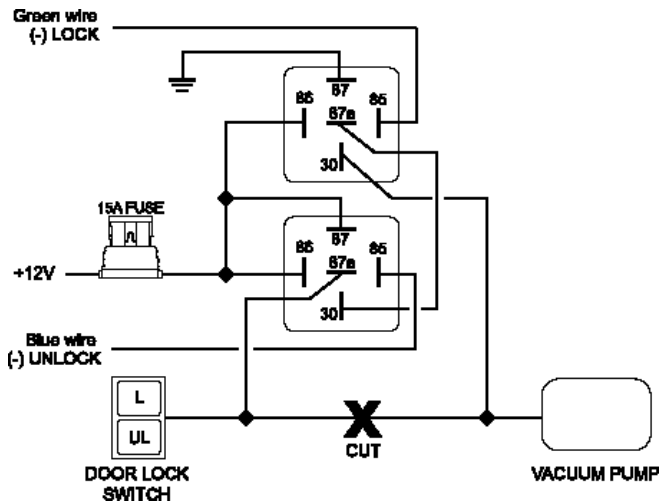
### Positive Trigger



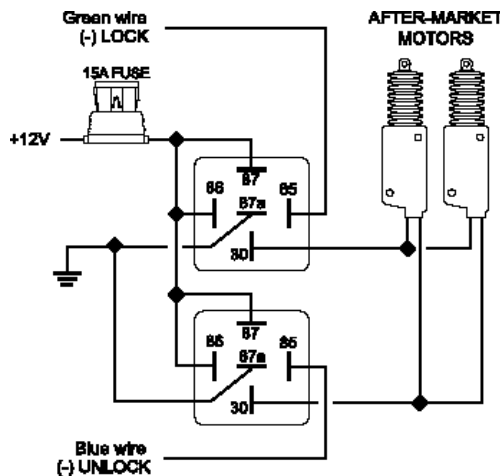
### Reverse Polarity



### Vacuum



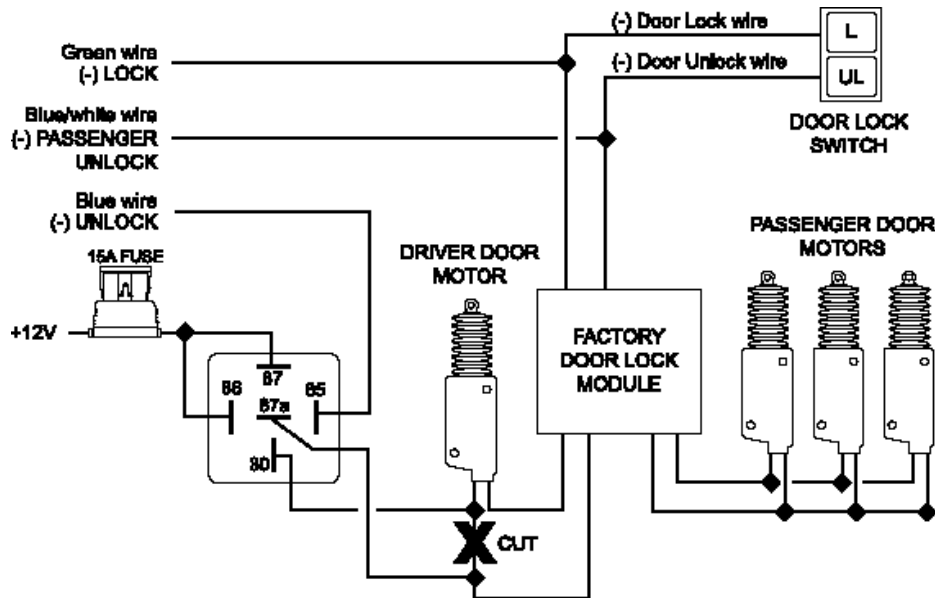
### Adding Actuator



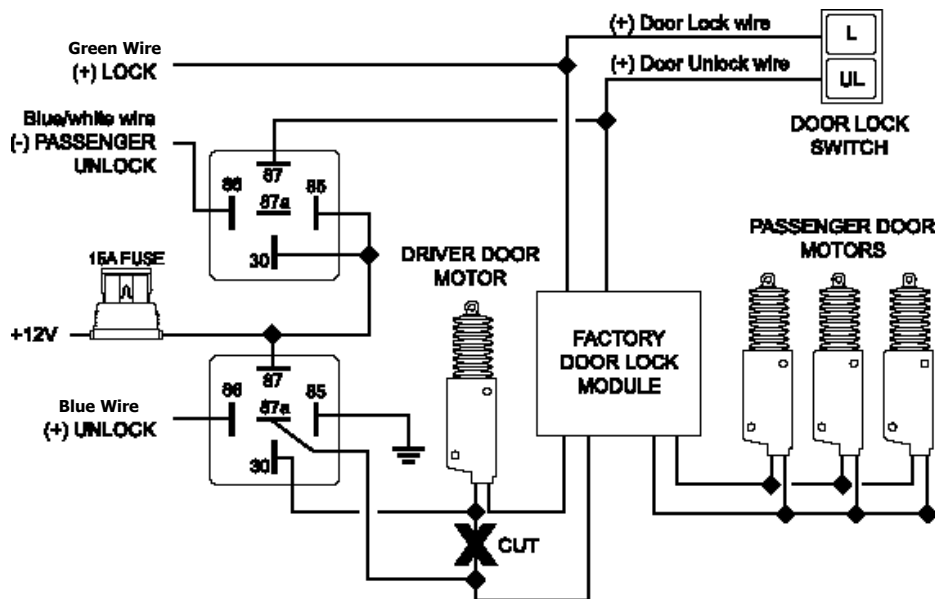
# Two Stage Door Lock Diagrams

The Galaxy Starter is equipped with a dedicated Passenger Unlock output allowing Two Stage Door Lock operation. When connected as shown below, unlocking the system will unlock only the driver's door. Pressing the unlock button again will unlock all doors.

## Two Stage Negative Trigger

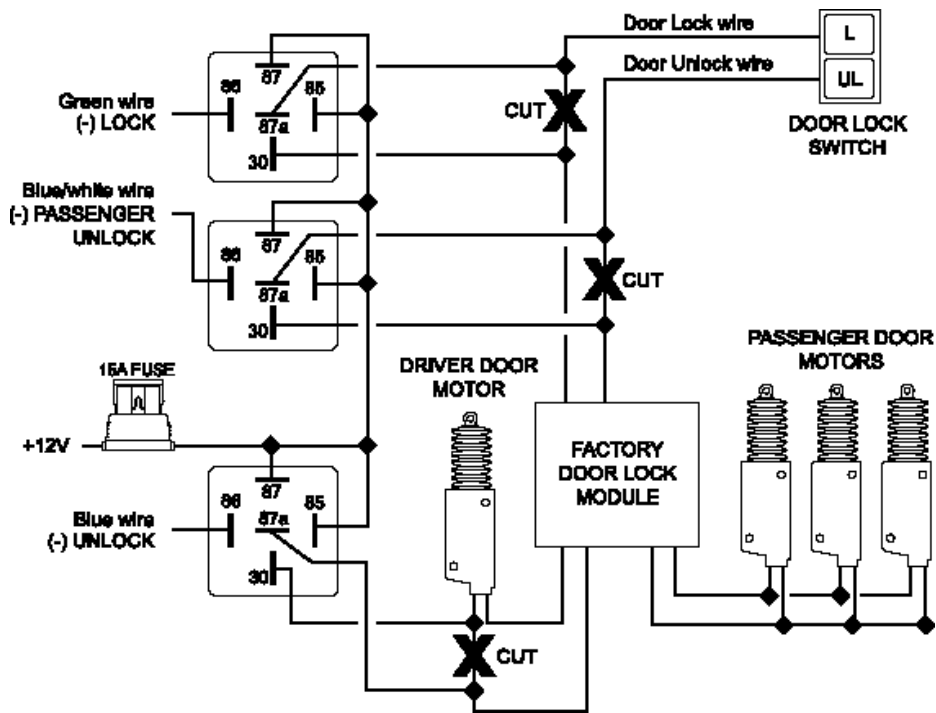


## Two Stage Positive Trigger

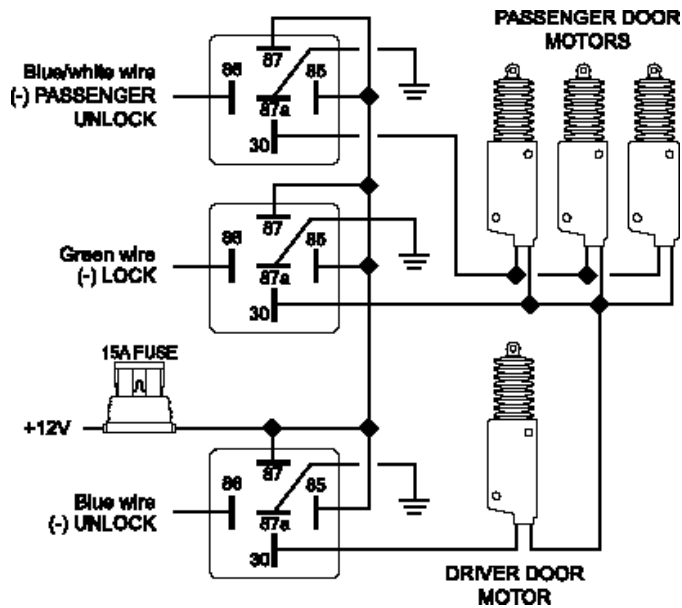


# Two Stage Door Lock Diagrams cont'd

## Two Stage Reverse Polarity



## Two Stage Adding Actuator



## Technical Information

**FCC ID: OARRXAM2000**

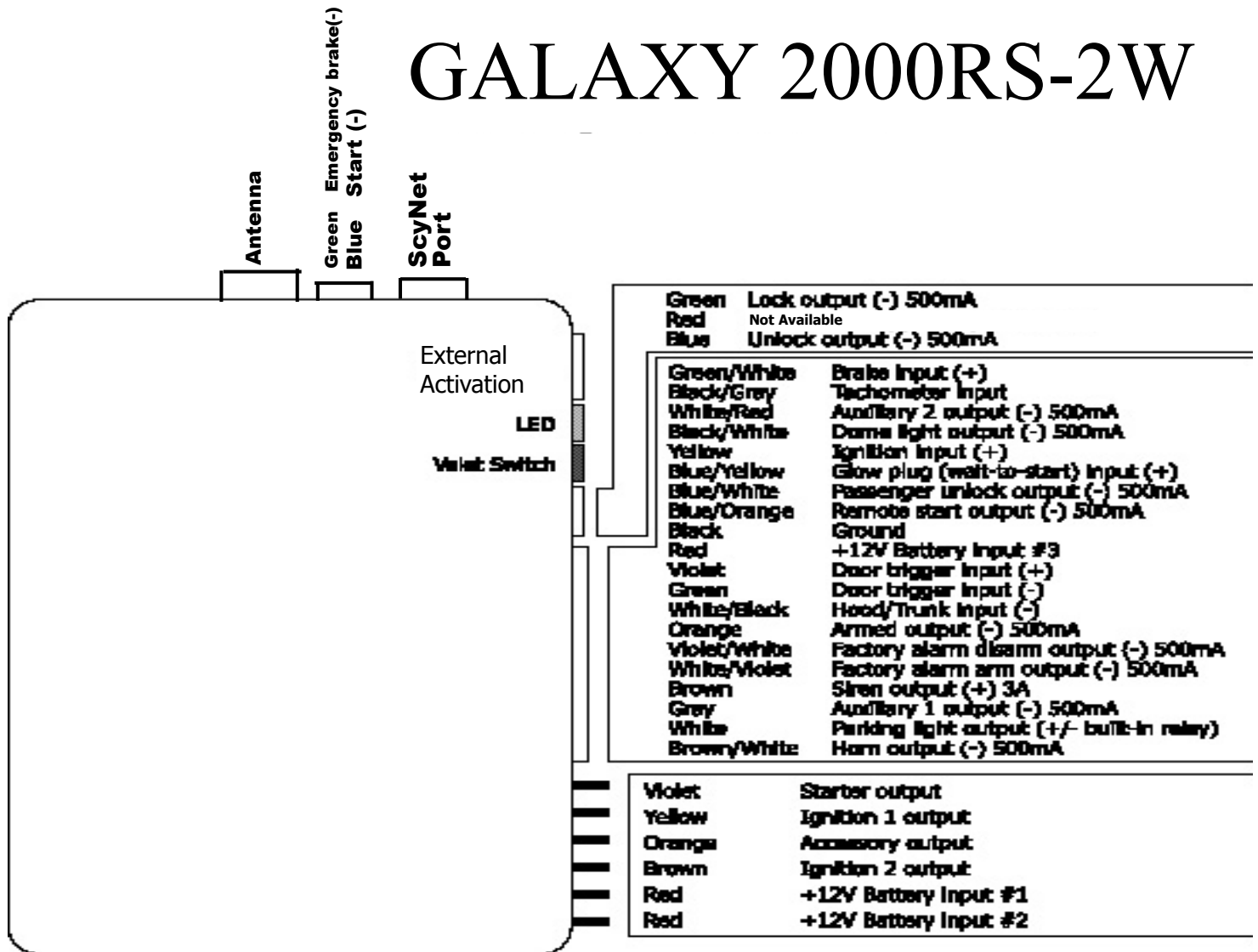
This device complies with Part 15 of FCC Rules.

Operation is subject to the following two conditions:

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

# Wiring Diagram

## GALAXY 2000RS-2W



### ScyTek Electronics

11627 Cantara Street Unit B  
North Hollywood, CA 91605