

6 RELAY SYSTEM 5-BUTTON SERIES VEHICLE SECURITY SYSTEM

INSTALLATION MANUAL

Before you begin the installation

- Read the INSTRUCTIONS!
- Always use a multi-meter when verifying vehicle wiring.
- Before mounting the product, verify with the customer the desired location for the valet switch and LED.
- Protect the vehicle by using fender covers.
- Always look before drilling. Make sure you will not cause damage to vehicle hoses, electrical looms or physical damage to vehicle.
- Set the Polarity Jumpers inside the main unit. (see Jumper Settings)

Installation Instructions

Mounting System Module

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

Route the antenna wire away from wire looms, computer modules and metallic objects for better range.

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 Shock Sensor

Secure the shock sensor to the steering column, thick wire harness or a dash brace, using a wire tie. Make sure that the adjustment screw is accessible for later testing and adjustment.

15-Pin Main Harness:

- **BLUE/WHITE WIRE** - Passenger Unlock output (-) 500mA. Connect to an optional relay to unlock the passenger doors when the system is configured for Driver Priority Unlocking.
- **GRAY WIRE** - Auxiliary 1 output (+/-) 15A relay. Connect to an optional feature such as trunk release, etc.
- **BLACK/YELLOW WIRE** - Auxiliary 3 output (-) 500mA. Connect to a relay for an optional feature such as headlight activation, etc.
- **BLACK/WHITE WIRE** - Dome Light output (+/-) 15A relay. Connect to the wire that activates the vehicle's dome light, usually the door pin switch wire. NOTE: The dome light output is usually connected to the same wire used for the door trigger input (See GREEN and VIOLET door trigger wires).
- **RED WIRE** - +12V Battery input. Connect the red fused wire on the main harness to a constant +12V source. This source wire should be at least 20 amp supply.
- **BROWN WIRE** - Siren wire output (+) 3A. Connect to the siren's red wire. Connect the siren's black wire to ground.
- **VIOLET 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.
- **BLACK WIRE** - Ground input (-). Connect to a solid chassis ground that is clean and free of paint or dirt.
- **WHITE WIRE** - Parking Light output (+/-) 10A relay. Connect to the vehicle's parking light wire. If the vehicle's parking light circuit exceeds 10 amps a relay is required. For vehicle's with independent left and right parking light circuits, the parking light wires must be connected using diodes to keep the circuits separate. NOTE: Do not connect the WHITE wire to the vehicle's headlight circuit.
- **GREEN WIRE** - Negative door trigger (-). Connect to the door switch circuit wire that shows ground when the door is open.
- **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.
- **ORANGE WIRE** - Armed Output (-) 500mA. Connect to a relay for optional circuit defeat (See installation diagrams). The ORANGE wire provides a ground when the unit is armed to activate a fuel pump disable relay or other device (i.e. window control module, etc.).
- **WHITE/RED WIRE** - Auxiliary 2 output (-) 500mA. Connect to a relay or module for an optional feature such as power window activation or remote start, etc.
- **BROWN/WHITE WIRE** - Horn output (-) 500mA. Connect to an optional relay to activate the vehicle's horn when the alarm is triggered.
- **BLUE WIRE** - Trunk/Hood trigger (-). Connect the Blue wire to the trunk and/or optional hood pin switches. The switch must provide a ground output when switch is opened. If the optional remote start module is installed, connect the blue wire to the trunk pin switch only and connect the hood pin input on the remote start module to the hood pin switch only.

5-Pin Door Lock Connector: Plug-in connector port for door lock harness.

- WHITE WIRE - Lock relay normally closed (87a).
- GREEN WIRE - Lock relay common (30).
- BLUE WIRE - Unlock relay common (30).
- BROWN WIRE - Unlock relay normally closed (87a).
- VIOLET WIRE - Lock/unlock relays normally open (87).

Starter Defeat Connectors

Using a volt/ohm meter locate the starter wire (normally a heavier gauge wire) at the ignition switch. This wire will show +12V only during cranking. When this wire is cut the vehicle will be unable to start.

Cut the BROWN starter disable wire (with the two female connectors), and connect one side to the vehicle's starter wire coming from the key switch. Connect the other BROWN wire to the wire going to the starter.

Plug the female connectors on the BROWN wires to the .250 male spade lugs on the module. With the BROWN wires connected to the module, the vehicle should be able to start.

Plug in Connectors

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

2-Pin Blue Connector: Plug-in connector port for valet switch. Mount switch in an area that is easily accessible from the driver's seat.

4-Pin White Connector A: Plug-in connector port for dual stage shock sensor.

4-Pin White Connector B: Plug-in connector port for optional dual stage radar sensor.

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 3 times.
2. Press and hold the Valet switch for 5 seconds.
 - The siren will chirp 5 times.
3. Press the Lock Button on the transmitter.
 - The siren will chirp once.
4. Press Lock Button on the transmitter again.
 - The siren will chirp twice.
5. Repeat steps 3 and 4 for each additional transmitter.
6. Turn off the ignition.
 - The siren will chirp 3 times.

Two Car Operation

With the supplied 5-button transmitter it is possible to control a second vehicle using the same primary transmitter. For Car 2 enter the Code Learning Mode as described above then substitute the steps below for 3 and 4 above.

3. Press Button 5 twice followed by the Lock Button.
 - The siren will chirp once.
4. Press Button 5 twice followed by the Lock Button.
 - The siren will chirp twice.

Entering Programming

To enter System Programming:

1. Turn on ignition.
2. Within 5 seconds, press valet switch 5 times.
 - The siren will emit a long chirp, to indicate entering program mode.
3. Press the valet switch the number times equal to the desired feature.
 - The siren will chirp each time the valet switch is pressed.
4. Within 5 seconds, press the transmitter button corresponding to the desired operating mode for that feature.
 - The siren will chirp to indicate the setting.

One chirp = Button 1

Two chirps = Button 2

Three chirps = Button 3

5. Repeat steps 3 and 4 to change additional features.

6. Turn off ignition to save changes.

Complete Default Reset

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

1. Enter System Programming.
2. Press Transmitter Button 3.
 - The siren will chirp 6 times indicating the reset signal was received.
 - All Installer and User Programming options are now set to factory default settings.
3. Turn ignition off.

Programmable Features

Step	Function	Button 1 (default)	Button 2	Button 3
1.	Siren / Horn Chirps	Siren only	Horn chirps	Horn chirps w/Warn
2.	Arming Mode	Active	Passive	Passive w/Countdown
3.	Passive Locking	Off	On	Override Code Set
4.	Ignition Locking	On	Off	
5.	Bad Zone Report	5 seconds	Off	
6.	Auto Rearm	Off	On	
7.	Door Unlock Pulse	Single	Double	
8.	Arming Chirps	Normal	Silent	
9.	Parking Light Operation	30 seconds	Flash twice	
10.	Trunk Disarm Feature	Off	On	
11.	Door Lock Pulse Width	1 second	3 seconds	
12.	Anti-Carjack Mode	Manual	Passive	Continuous
13.	Anti-Carjack Activation	Disabled	Enabled	
14.	Ignition Arming	Disabled	Enabled	

Programmable Features

1. Siren / Horn Chirps. When set for Horn Chirps, the horn will honk when arming and disarming allowing the siren to NOT be installed.
2. Arming Mode. Select between manual arming (Active) or automatic arming (Passive).
3. Passive Locking / Override Code Set. Selects whether or not the system will automatically lock the doors with Auto Rearm and Passive Arming. Pressing Button 3 during this step enters the Override Code Set mode. Press the valet switch the desired number of times from 1-15 to set the code.
4. Ignition Locking. Automatically locks/unlocks the doors with the ignition. The system will not lock the doors if any door is open when the ignition is turned on.
5. Bad Zone Report. Siren will chirp 3 times if any zone remains open 5 seconds after arming. If vehicle has delayed dome light, program this feature to OFF.
6. 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.
7. Door Unlock Pulse - Single/Double. Selects between a single pulse or a double pulse door unlock output.
8. Arming Chirps. Select Normal or Silent Arming.
9. Parking Light Operation. Selects whether the parking lights remain on for 30 seconds or flash twice after disarming the system.

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

11. Door Lock Pulse Width. Selects between a 1-second and a 3-second output for vehicles equipped with vacuum door locking systems.

12. Anti-Carjack Mode. Selects one of three Anti-Carjacking modes: Active, Passive, or Full-Time. Anti-Carjack Activation must be enabled for any Anti-Carjack mode to operate (see step 13).

Active. Pressing transmitter Button 4 with the ignition on will manually activate the Anti-Carjacking feature.

Passive. When selected, the Anti-Carjacking feature will activate whenever a door is opened while the ignition is on.

Continuous. When selected, the Anti-Carjacking feature will automatically activate each time the ignition is turned on.

13. Anti-Carjack Activation. Enables or disables the anti-carjacking feature.

14. Ignition Arming. When enabled the system can be armed while the ignition is on for an extra level of security.

Test System and Adjust Shock Sensor

Arm and disarm system, checking that the siren chirps and parking lights are functioning normally. Make sure that the programmed features are performing correctly, ie.: ignition locks, passive arming, passive locks, etc.

Test the doors and hood/trunk inputs (make sure all doors trigger the system, not just the drivers door).

Adjust the shock sensor.

Arm the system and try starting the vehicle, it should not start.

Arm the system and disarm it with the ignition and valet switch.

If programmed to passively arm make sure that the system arms properly.

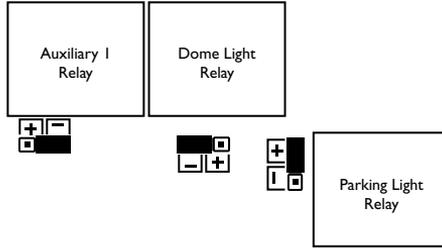
Check the range of the remote transmitters.

Tie up wire harness, and replace any under dash panels.

Make sure the customer has physical knowledge of the location of the valet/override switch.

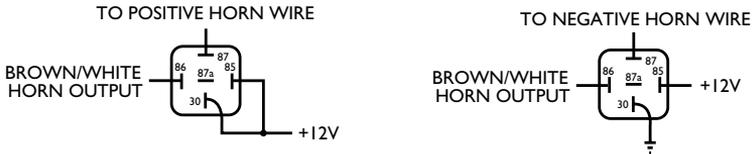
JUMPER SETTINGS

The output polarity for the built-in parking light and dome light relays is determined by the placement of the jumper on the 3 pins next to each relay. The default settings are illustrated below.

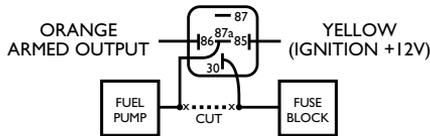


RELAY WIRING DIAGRAMS

HORN HONK DIAGRAMS

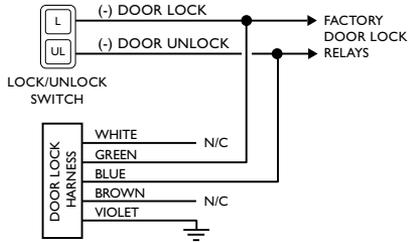


OPTIONAL CIRCUIT DISABLE

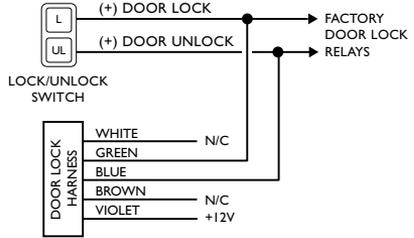


DOOR LOCK WIRING DIAGRAMS

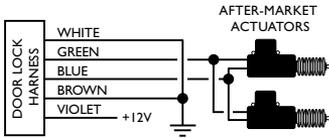
NEGATIVE PULSE LOCK SYSTEM



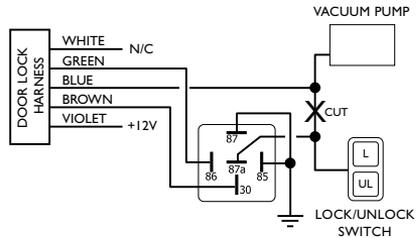
POSITIVE PULSE LOCK SYSTEM



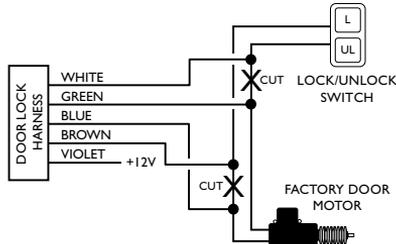
ADDING ACTUATORS



VACUUM LOCK SYSTEM

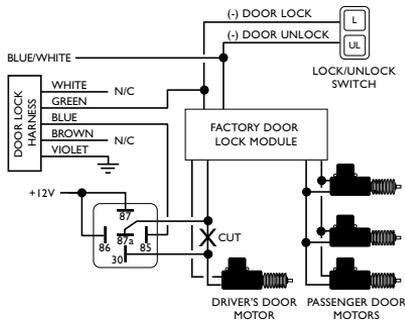


REVERSE POLARITY LOCK SYSTEM

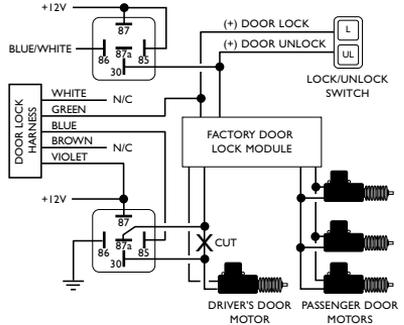


OPTIONAL TWO-STEP UNLOCK WIRING DIAGRAMS

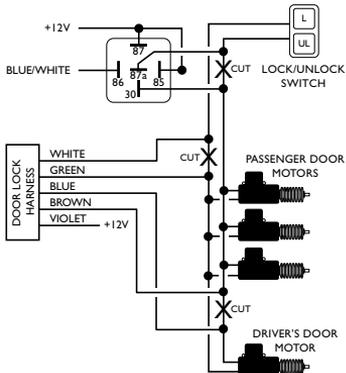
TWO-STEP UNLOCK NEGATIVE PULSE



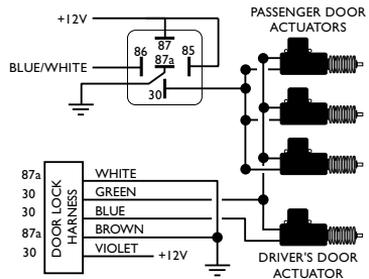
TWO-STEP UNLOCK POSITIVE PULSE



TWO-STEP UNLOCK REVERSE POLARITY



TWO-STEP UNLOCK ADDING ACTUATORS



TROUBLESHOOTING

Problem	Probable Cause	Suggested Correction
Alarm does not operate.	Alarm in Valet Mode; Ignition input has voltage on it; Missing +12V or ground.	Take alarm out of Valet mode; Turn key off and verify yellow wire is connected to correct ignition wire; Check +12V and ground connections.
Alarm will not Passively Arm.	Unit is not programmed for Passive Arming, wrong polarity door input wire, Yellow ignition input has 12V+ on it.	Program step #2 for Passive Arming; Correct door switch polarity; Change ignition input wire; Make sure alarm is not in Valet.
Alarm will not enter Code Learning Mode.	Ignition was not left in the on position after turning it on & off three times; Sequence not performed rapidly enough (5 sec.); Valet/Override Switch is defective or not plugged in.	Leave ignition in on position; Repeat procedure quicker; Replace valet switch.
Alarm chirps 4 times 5 seconds after system is Armed.	Factory Dome light Delay is longer than 5 seconds; Door open or defective pin switch; Shock sensor is not properly adjusted or defective.	If dome light delay is longer than 5 seconds program step 5 to OFF; Replace defective pin switch; Adjust or replace shock sensor.
Parking lights do not flash.	Wrong wire connected to the WHITE wire, or wrong polarity.	Connect WHITE wire to the proper vehicle wire, Change jumper polarity of Parking Light relay (see Jumper Settings).
Door locks do not lock/unlock correctly, or action is reversed	Defective GREEN or BLUE wire from door lock connector plug, GREEN and BLUE wires reversed, or wrong door lock wiring diagram used.	Check GREEN and BLUE wires on door lock connector plug, Check vehicle's door lock system for method of operation. Reverse wiring to door relays.
Illuminated Entry does not activate on upon disarm.	Wrong polarity selected.	Change jumper polarity of the Dome Light relay.

TROUBLESHOOTING CONTINUED

Problem	Probable Cause	Suggested Correction
Range is poor.	Antenna wire is grounded; Module is picking up interference from vehicle's electrical system.	Make sure antenna is not connected to ground; Relocate module or route antenna away from computer modules.
Vehicle starts when armed.	Wrong starter wire was cut. Ignition wire does not have +12V while cranking.	Locate proper starter wire and reconnect. Connect YELLOW wire to proper ignition wire
Car will not start when system is disarmed.	Bad connection on brown starter wire harness; Defective starter defeat relay	Repair connection at starter wire; Replace module.
Keyless entry does not operate with remote.	Wrong door lock polarity; Wrong lock wires connected.	See door lock diagram; Verify vehicle lock/unlock wires.
Ignition triggered door lock feature does not operate.	YELLOW wire missing ignition; Door is open; Door trigger input wrong polarity.	Connect YELLOW wire to ignition wire; Close door; Change door trigger polarity.
Car horn honks when system disarmed and door is opened.	Vehicle's factory security system needs to be disarmed.	Locate disarm wire (usually located in drivers kick panel) and use unlock pulse to disarm factory system.
Car will not start and alarm does not function properly.	Vehicle battery dead or drops below 9 volts when trying to start the vehicle.	Charge or replace battery.

LED INDICATIONS

On Solid = Valet Mode
 Slow Flash = System Armed
 Rapid Flash = Passive Arming

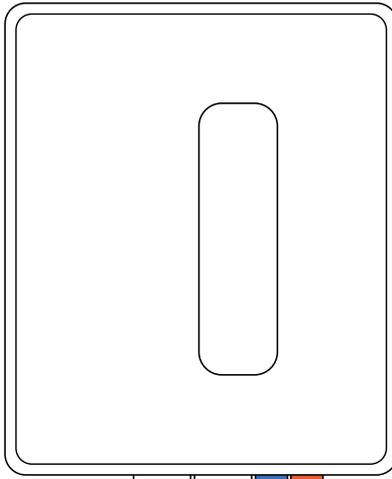
LED TAMPER ALERT INDICATIONS

1 Flash = Optional Sensor
 2 Flashes = Shock Sensor
 4 Flashes = Door Trigger
 5 Flashes = Hood/Trunk

PARKING LIGHTS FUNCTIONS

Flash 1x = Doors Locked
 Flash 2x = Doors Unlocked
 Flash 3x = Open Zone
 Indication (after arming)
 Flash 3x after Disarm =
 Tamper Alert

WIRING DIAGRAM



Optional Shock Valet LED
 Sensor Sensor

- | | |
|--------------|---|
| Blue/White | Passenger unlock output (-) 500mA |
| Gray | Auxiliary 1 output (+/- built-in relay) |
| Black/Yellow | Auxiliary 3 output (-) 500 mA |
| Black/White | Dome light output (+/- built-in relay) |
| Red | +12V Battery input |
| Brown | Siren output (+) 3A |
| Violet | Door trigger input (+) |
| Black | Ground |
| White | Parking light output (+/- built-in relay) |
| Green | Door trigger input (-) |
| Yellow | Ignition input (+) |
| Orange | Armed output (-) 500mA |
| White/Red | Auxiliary 2 output (-) 500mA |
| Blue | Hood/Trunk input (-) |
| Brown/White | Horn output (-) 500mA |
| White | Unlock Relay Normally Closed (87a) |
| Green | Unlock Relay Common (30) |
| Blue | Lock Relay Common (30) |
| Brown | Lock Relay Normally Closed (87a) |
| Violet | Lock/Unlock Relays Normally Open (87) |
| Brown | Starter Defeat |
| Brown | Starter Defeat |