

2RP 4-BUTTON SERIES VEHICLE SECURITY SYSTEMS

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 program 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 parking light polarity jumper on the module first (see the wiring diagram on page 4).

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.

Change Programmable Features:

To Enter Programming Mode:

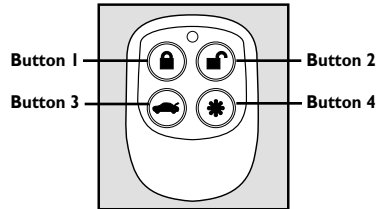
1. Turn ignition Key to ON position
2. Press valet/override switch 5 times.
3. The siren will emit one long chirp, indicating the system is now in program mode.
4. Press Valet switch the number of times that corresponds with the feature you desire to change. (Every time the valet switch is pressed the siren will give a confirming chirp).
5. Once at the desired feature location, press and release button# 1 or # 2 on the transmitter to change the feature. Siren will chirp and lights will flash 1 or 2 times to indicate which button was pressed.
6. Turn off ignition to put feature selection into memory.

Repeat the above steps each time that you want to select a feature change.

Default Reset

To reset all programmable features to their factory default settings:

1. Turn ignition to the on position.
2. Within 10 seconds press valet switch 5 times. The siren will emit one long chirp indicating the system is now in program mode.
3. Press transmitter button# 3. The siren will chirp 4 times, the lights will flash 4 times and all programmable features will be reset to the factory default position.
4. Turn off ignition.



**4-Button
Transmitter**

Programmable Feature Chart

BW2150	TX button 1 (factory default)	TX button 2
1	Passive Arming Enable	Active
2	Silent arm and disarm w/Aux 1	Silent arm disabled
3	Car Locator Feature ON upon Disarm	Flashes 2 times-Car Locator Feature Disabled
4	Auto Re-arm enabled	Auto Re-Arm disabled
5	Arm/Disarm Chirp Enabled	Arm/Disarm Chirp Disabled
6	Aux 1 without disarming alarm	Aux 1 disarms alarm
7	Auto lock /unlock w/ignition Enabled	Auto lock / unlock w/ignition Disabled
8	Lock/Unlock Pulse 1 second	Lock/Unlock Pulse 3 second
9	Doors Lock in Passive Arming	Doors will not lock in passive arming
10	1 pulse for unlock	2 pulse for unlock
11	Bad zone report in 10 seconds	Bad zone report in 60 seconds
12	Horn chirps on arm/disarm Disabled	Horn chirps on arm/disarm Enabled

Main Harness

Red (with fuse): Main System Power. Connect to a constant 12 volt positive source.

Green: Negative door trigger input. Connect to door switch which goes to ground when door is open.

Black: System Ground. Connect to solid chassis ground.

Violet: Positive door trigger input. Connect to door switch which goes to 12V positive when door is open.

Yellow: Ignition input. Connect to 12v+ ignition wire. Must provide 12V+ while car is cranking.

Blue: Hood / Trunk or 2nd Sensor negative input.

Brown: Siren output. 12v+ output, connect to Red wire of Siren.

Brown/White: Horn output (negative) Connect to horn relay wire to honk horn.

Black/White: Dome Light output (negative). Note: Relay is required, see page 8.

Orange: Armed output. (negative output), Ground output when alarm is armed.

Gray: Auxiliary 1 output (negative output). Connect to relay to open trunk/hatch or auxiliary function. Press button# 3 for 3 seconds. Output will remain ON as long as button# 3 is held down.

White: Parking light output (polarity is selectable through jumper on board for either positive or negative). Connect to wire that switches on with parking lights only. For circuits using separate left and right parking light circuits 2 diodes are required to keep circuits separate. Note: Do not connect to vehicles headlight circuit.

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

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

3-Pin White Connector: Plug-in connector port for door locks (see door lock diagrams on page 5).

GREEN WIRE: Negative Lock Output

RED WIRE: 12V+ output (Note: 12V+ output is only 300mv, do not use for supplying main power to door lock relays).

BLUE WIRE: Negative Unlock Output

2-Pin Red Connector: Plug-in LED Port

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

ADDING TRANSMITTERS

To enter Code Learning Mode:

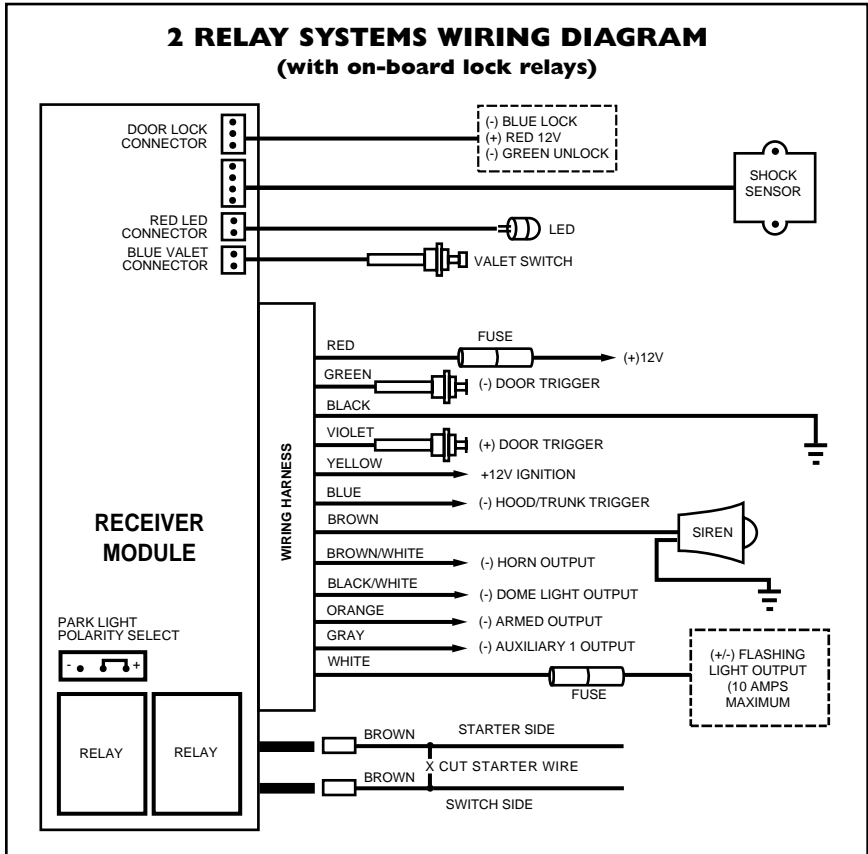
1. Turn ignition key on three times within 5 seconds and leave in the on position (ON, OFF, ON, OFF and ON)

- Siren will chirp and lights will flash three times.
- Press and hold valet switch for 5 seconds.
 - Siren will chirp and lights will flash five times.
 - Release the valet switch.
 - Program new transmitter by pressing button 1.

- Siren will chirp 1 time.
- Repeat step 4 for each new transmitter to be added.
 - Turn ignition key off. siren will chirp and lights will flash 3 times.

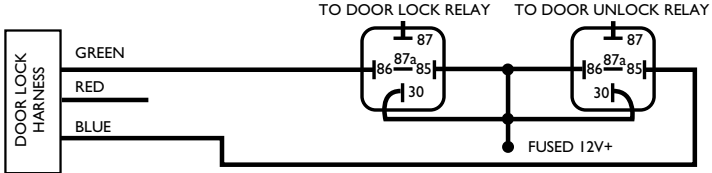
The transmitters are now programmed to the system. The system can learn up to 4 transmitters.

2 RELAY SYSTEMS WIRING DIAGRAM (with on-board lock relays)

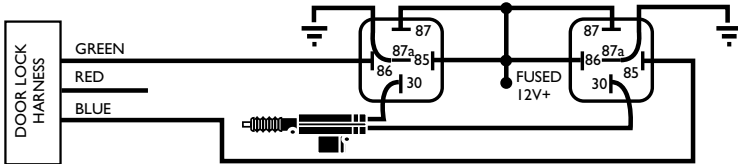


DOOR LOCK DIAGRAMS (with on-board lock relays)

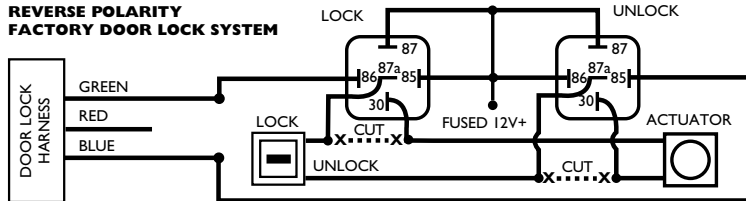
POSITIVE PULSE DOOR LOCK SYSTEM



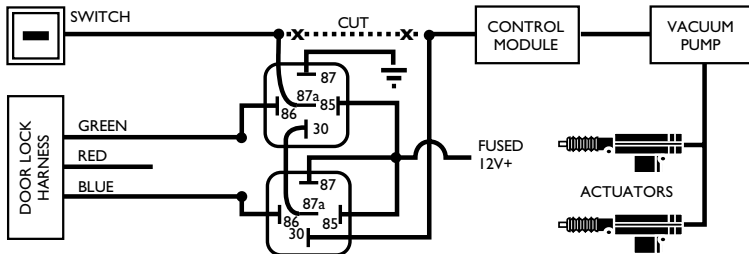
REVERSE POLARITY ADD-ON ACTUATOR



REVERSE POLARITY FACTORY DOOR LOCK SYSTEM



MERCEDES (VACUUM SYSTEM) FOR MODELS WITHOUT DOOR LOCK RELAYS



SYMPTOM	PROBABLE CAUSE	SUGGESTED CORRECTION
Alarm doesn't Arm/Disarm.	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.	Passive arming is programmed OFF. Wrong door switch polarity. Alarm in valet mode	Change programmable feature #1; 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; alarm is armed.	Repeat procedure quicker. Check connection on valet switch. Make sure alarm is not in Valet: disarm alarm.
Alarm chirps 4 times 10 seconds after system is Armed.	Factory Dome light Delay is longer than 10 seconds; Door switch or sensor is defective.	Change program step #11 to report defective zone in 60 seconds. Replace defective pin switch; Adjust or replace shock sensor.
Parking lights do not flash.	Wrong wire connected to the White wire, or polarity selection needs to be changed.	Correct the connection to the parking light wire; move the jumper next to relay on board to correct polarity (+-).
System Arms and Disarms but doesn't chirp siren	Chirp Delete mode is engaged. Siren wired improperly.	Change programmable feature #5 to enable chirps. Correct siren wiring.

SYMPTOM	PROBABLE CAUSE	SUGGESTED CORRECTION
Illuminated Entry does not activate on upon disarm.	Wrong polarity selected.	Change polarity on Dome Light Relay (See Dome Light Diagram)
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.	Locate proper starter wire and reconnect.
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 shows +12V; Door is open; Door trigger input wrong polarity.	Connect yellow wire to the proper ignition wire; Close door; Change door trigger polarity.
Car horn honks when system disarmed and door is opened.	Vehicle factory security system needs to be disarmed.	Locate disarm wire (usually located in drivers kick panel) and use unlock pulse to disarm factory system.
Alarm system intermittently works.	Bad power and ground connections.	Replace and secure power and ground connections
Car will not start and alarm does not function properly.	Vehicle battery dead or drops below 7.5 volts when trying to start the vehicle.	Replace battery or charge.

STATUS INDICATOR (LED)

FUNCTIONS

Off = System disarmed in active mode

Slow Flash = System armed

Rapid Flash = Passive arming indication
and auto re-arm

Rapid Flash (after disarm) = System was
triggered

On Solid = Valet mode

On Solid (after arming) = On for 3 seconds,
shock will not trigger alarm.

On Solid (when disarmed, and not in Valet) =
Door or hood/trunk is open.

SIREN CHIRP STATUS

1 Chirp = System Armed

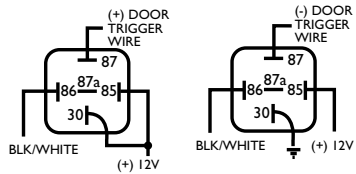
2 Chirps = System Disarmed

3 Chirps = System Disarmed, but alarm was
triggered while away

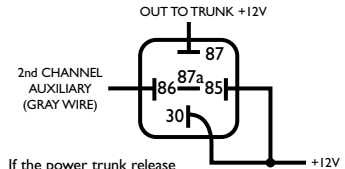
4 Chirps = 10 seconds after arming indicates
defective sensor or trigger zone

5 Rapid Chirps = Warn away triggered

DOMELIGHT SUPERVISION



TRUNK RELEASE CIRCUIT DIAGRAM:



If the power trunk release
requires a positive pulse to
operate, use this circuit.

OPTIONAL DISABLER CIRCUIT

