

KEYLESS INTERFACE

INSTALLATION MANUAL

Before Installing:

1. Read the INSTRUCTIONS!
2. USE A DIGITAL OR ANALOG VOLT/OHM METER
3. BEFORE MOUNTING THE PRODUCT CHECK THE POSSIBLE LOCATIONS FOR THE SIREN, LED, AND MODULE BEFORE YOU PERMANENTLY INSTALL THEM.
4. PROTECT THE VEHICLE BY USING FENDER COVERS.
5. ROLL DOWN THE DRIVER'S WINDOW BEFORE STARTING THE INSTALLATION.
6. ALWAYS LOOK BEFORE DRILLING. MAKE SURE YOU WILL NOT CAUSE DAMAGE TO VEHICLE HOSES, ELECTRICAL LOOMS OR PHYSICAL DAMAGE TO VEHICLE.
7. PROGRAM THE DIP SWITCH ON THE MODULE FIRST(SEE DIP SWITCH

INFORMATION.)

8. REMOVE DOME LIGHT FUSE TO PREVENT BATTERY DRAIN.

Timing Information

Automatic reset time: 30 seconds,

Arming time (when all inputs are monitored): 10 seconds-active arm, passive 30 +10 seconds (40 total)

Door Lock output time: .75 seconds or 3 seconds (programmable via dip switch #1)

Armed output: Orange wire will produce a grounded output when system is armed.

Flashing Parking Light Output:

Armed: 1 second pulsed, *Disarmed:* 2-one second pulses. *System triggered:* 1 second pulse on, 1 second off, repeated for 30 seconds.

Dome Light Output: Output is identical to Flashing Parking Light Output.

Input Zone Out Feature:

If a door input, shock or sensor input remains on for 4 consecutive cycles (45 seconds) that input will be ignored. If the input returns to a non-triggered state for 30 seconds it will be monitored by the system again.

Using Valet/Override Switch

Valet Mode: If the system is programmed to passively arm (dip switch #4 on), and you wish to keep system from arming:

1. Disarm the system.
2. Turn ignition to the ON position.
3. Press and hold valet/override switch for approximately 3 seconds.
4. LED will turn on solid, Siren will chirp once.

To exit Valet mode: Repeat the procedure, LED will turn off and the siren will chirp twice.

INSTALLATION INSTRUCTIONS:

1. Mount the module and program dip switch functions (see page 3):

Look for a suitable mounting location under the dash or inside the vehicle that will be difficult for a potential thief to locate the module, but allow for a convenient installation position.

Keep the antenna wire away from wire looms, computer modules and metallic objects for better range. Wire tie or screw the module securely.

2. Mount the Siren:

Locate a suitable place under the hood, away from hot and moving engine parts such as manifolds, turbochargers, fan belts, etc. Secure siren by screwing bracket to a solid location under the hood.

Make sure that there is no outside access to both siren and wire from underneath the vehicle or through the grill.

Point the siren down so that water may not accumulate inside the siren bell.

Ground the black wire of the siren to a solid ground; preferably, use a star washer and ring terminal.

When running wires inside the vehicle to the module location, use either tape or split loom tubing to cover and route the red wire to the firewall. Always use either existing grommets or if a new hole is needed to be drilled protect the wire from chaffing by installing a proper size grommet.

3. Mount the shock sensor:

Mount the dual stage shock sensor using a wire tie to the steering column, or thick wire harness, or even a dash brace. Plug the harness into the shock sensor, then plug the other end into the 4 pin white connector on the module. Make sure that the adjustment screw is accessible for later testing and adjustment. Do Not mount sensor under the hood!

4. Install the Status Indicator (LED):

Locate a suitable place for the status indicator (LED), drill the appropriate size

hole (7/16"). Make sure there is enough depth for the LED to fit all the way in, and can be easily seen from outside the vehicle. Carefully run the LED and 2 pin red connector and wire harness to the module and plug into the matching red two pin connector on the module. Push the LED into the hole, it should fit snugly.

5. Install the Valet/Override Switch:

Mount the valet/override switch in a hidden location, but that can still be found by the customer for programming and emergency override situations. Run the 2 pin blue connector and wire harness to the module and plug into the matching blue 2 pin connector on the module.

6. Connect Starter

Disable Relay:

Using a volt/ohm meter locate the starter wire (normally a heavier gauge wire) off of the ignition switch. The meter will read 12V+ only during cranking. When the starter wire has been located, cut the wire, the vehicle should not be able to start now. See diagram on page 6.

7. Connect Optional Armed Output: Orange wire on the main harness

This wire provides a 250 mA ground output when the alarm is armed. It can be used to control optional modules. (i.e. window control modules, or used with another relay to interrupt another circuit- such as fuel pump, ignition).

8. Connect Horn output: Gray

Summary of Inputs and outputs:

Inputs:

- I Sensor port-4 wire (w/warn away)
- Negative door trigger
- I Negative hood/trunk trigger
- I Positive door trigger

Outputs

- Siren output: 3 amp Max - positive
- Flashing lights: relayed - 15 amp Max
- Horn Output: 500 mA- negative
- 3rd Channel: 500 mA - negative
- Armed Output: 250 mA - negative

Dip Switch Programmable Features:

- | | | |
|---|-----------------|-----------------|
| Switch #1= (+) or (-)Lock/Unlock Inputs: | ON= Positive | OFF= Negative |
| Switch #2= Advanced security disarm mode: | ON= Feature On | OFF= Basic mode |
| Switch #3= Ultra security disarm mode: | ON= Feature On | OFF= Basic mode |
| Switch #4= Passive or Active Arming: | ON= Passive Arm | OFF= Active Arm |

wire on main harness

This output is 500ma, and drives a relay to honk the horn. This is a pulsed output when the alarm is triggered (See diagram section).

9. Connect Negative door input: Green wire on main harness

Connect the green wire from the module to the wire that shows ground when all of the doors are opened. Verify with a volt/ohm meter. Make sure that all doors when opened separately make the target wire provide a ground output.

10. Connect Hood/ Trunk switch input: Blue wire on main harness

Connect the blue wire to either or both hood and trunk switches. They must provide a ground output when the trunk or hood are opened.

11. Connect Positive Door input: Violet wire on main harness

Connect the violet wire from the module to the wire that shows 12V+ when all of the doors are opened. Verify with volt/ohm meter. Make sure that all doors when opened separately make the target wire provide a 12V+ output.

12. Connect Siren Output: Brown wire on main harness

Connect the brown wire on the main harness to the red wire from the siren.

13. Connect the Flashing

Parking Light Output: White wire main harness.

Using a volt/ohm meter, locate the wire (usually on the head light switch) that shows 12V+ when only the parking lights are switched on. European vehicles may require an additional relay if they have separate wires that switch on the left and right side parking lights.

This relayed output has a maximum of 15 amps. Do not hook to head lights. (See diagram section).

14. Connect 12V+ Power Input : Red wire on main harness

Connect the red fused wire on the main harness to a constant 12V+ source. This source wire should be at least 20 amp supply. There usually is a main constant power wire on the ignition switch. Use volt/ohm meter to verify.

15. Connect the 12V+ ignition input: Yellow wire on main harness

Connect the yellow wire on the main harness to a main ignition wire. This can be also found in the main ignition switch wire harness. Your volt/ohm meter will read 12V+ when key is turned on. Make sure that this ignition wire has 12V+ on even during the starting process of the vehicle. It is important that the voltage does not drop when the car is starting. Some vehicles have ignition wires that remain or slowly drop to 0 volts. Verify that when the ignition is shut off that the

voltage drops to 0 Volts immediately. If the yellow wire has voltage on it after the key is turned off, it will keep the alarm from arming via the remote.

16. Connect Ground Input: Black wire on main harness

Locate a good solid chassis ground and connect to the black wire on main harness. Verify the ground with your volt/ohm meter.

17. Connect the door lock input wires: Blue and Green on 3 pin harness.

The blue wire receives a pulsed input from the unlock switch. Set polarity with dipswitch #1.

The green wire receives a pulsed input from the lock switch. Set polarity with dipswitch #1.

20. Plug in main harness and 5 pin door lock harness to module.

21. Test features and functions, adjust shock sensor.

Arm and disarm system, check that the siren chirps and parking lights are functioning normally. Make sure that the programmed features (via dip switch) are performing correctly, ie.: passive arming. Test the doors and hood or trunk inputs (make sure that you check that all doors trigger the system not just the drivers door).

Adjust the shock sensor (clockwise for

more sensitive, counter clockwise for less sensitive), make sure that it is not too sensitive.

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

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

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

Check for range with the remotes. See that they arm and disarm all the way around the vehicle; adjust the module antenna location if necessary.

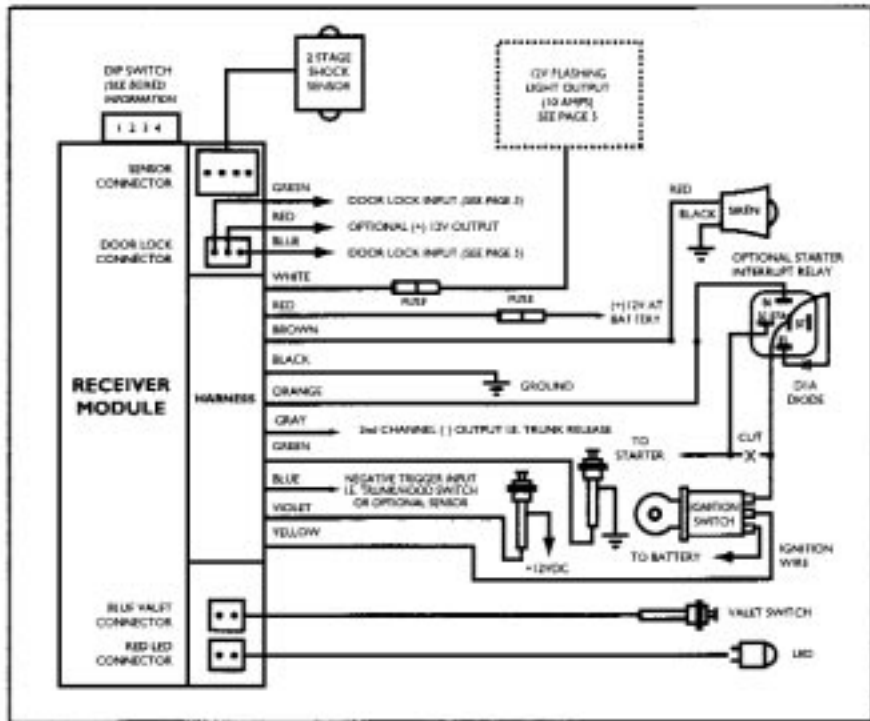
Using the remote and valet switch, check for the user features: valet mode.

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

Deliver the vehicle to customer.

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

3 CHANNEL WITHOUT ON BOARD DOOR LOCK RELAY



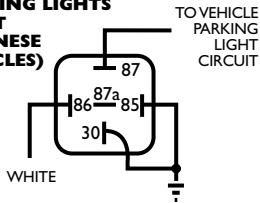
TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	SUGGESTED CORRECTION
Alarm doesn't Arm/Disarm	Alarm in Valet Mode, ignition input has voltage on it, make sure the power and ground wires show 12V+	Take alarm out of Valet mode- turn key off - wrong wire connected to yellow wire main harness
Alarm will not Passively Arm	Dip Switch #4 is OFF, wrong polarity door input wire, Yellow ignition input has 12V+ on it.	Correct Dip Switch #4, Correct door switch polarity, change ignition input wire, make sure alarm is not in Valet.

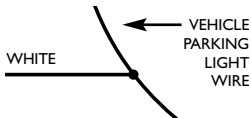
TROUBLESHOOTING (continued)

SYMPTOM	PROBABLE CAUSE	SUGGESTED CORRECTION
Parking lights do not flash	Wrong wire connected to the White wire, or requires a negative output	Correct the wire connected to the White wire. Using a SPDT relay reverse polarity on white wire (see diagrams)
Vehicle starts when armed	Wrong starter wire was cut.	Locate proper starter wire and reconnect
Car horn honks when system disarmed and door is opened	Vehicle factory security system needs to be disarmed	Locate disarm wire (drivers kick panel?) use neg. unlock pulse to disarm factory system.
Alarm system intermittently works	Bad power and ground connections	Replace and secure power and ground connections
Car won't start; Alarm won't function properly	Vehicle battery dead or drops below 7.5 volts when trying to start the vehicle	Replace battery or charge.
Unit is triggered any time it is armed.	Sensor not adjusted correctly, BLUE or GREEN wire shorted to ground.	Readjust sensor. Disconnect the BLUE or GREEN wire to see if symptom stops if so check wires for short.
Alarm will arm from transmitter but will not passively arm.	Dipswitch #4 is off.	Set dipswitch #4 to ON.
Remote Control does not arm or disarm alarm.	Wrong polarity for door lock input. Dipswitch #1: ON=(+) pulse OFF=(-) pulse or...not connected to proper door lock/unlock wires.	Check polarity on door lock wires with correct dip switch position
Valet does not work.	Bad switch or wrong activation sequence.	Repair or replace switch or check user instructions for proper activation sequence
Flashing output does not work.	Bad connection on WHITE wire or the drive polarity is wrong for the circuit being driven.	Check WHITE wire. Connect a SPDT Relay to this wire and apply the opposite polarity to the circuit being driven.
Remote control does not disarm alarm.	Dipswitches #2 or 3 in the ON position. See mode explanation.	

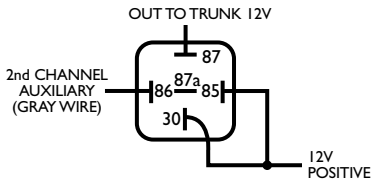
**FOR NEGATIVE
PARKING LIGHTS
(MOST
JAPANESE
VEHICLES)**



**FOR POSITIVE
PARKING LIGHTS**

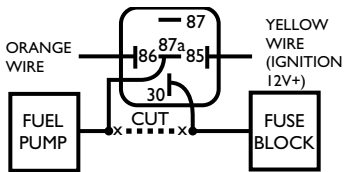


**TRUNK RELEASE
CIRCUIT DIAGRAM:**



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

OPTIONAL DISABLER CIRCUIT



STATUS INDICATOR (LED) FUNCTIONS

- Off= System off in Active Mode
- Slow Flash= System Armed
- Rapid Flash= Passive Pre Arm State
- Rapid Flash (after disarm)= System was triggered
- On Solid= In Valet
- On Solid= (After passive prearm or active arm)
- 10 second final prearm state
- On Solid= (when disarmed, and not in Valet)
- Input is open. See Test Mode.

SILENT TEST MODE

When the system is disarmed the LED will go solid every time an input is triggered. You can check the shock sensor, doors, hood, trunk, and the auxiliary sensor input as well.

SIREN CHIRP STATUS

- 1 chirp= system armed
- 2 chirps= system disarmed
- 3 chirps= System disarmed, but alarm was triggered while away.
- 4 chirps= Alarm armed but there is a trigger that remains open. (This occurs 25 seconds after system was armed)
- 5 rapid chirps= Alarm armed, shock sensor warn away output was triggered.