

CA-310 Installation Instructions

**PROFESSIONAL INSTALLATION
STRONGLY RECOMMENDED**

Installation Precautions:



Roll down window to avoid locking keys in vehicle during installation



Avoid mounting components or routing wires near hot surfaces



Avoid mounting components or routing wires near moving parts



Tape or loom wires under hood for protection and appearance



Use grommets when routing wires through metal surfaces



Use a voltmeter for testing and verifying circuits

Kit Contents

- (1) - Control Module
- (2) - 2 Button High Frequency Transmitters
- (1) - Multi Pin Input/Output Harness
- (1) - 2 Pin Door Lock Harness
- (1) - IRS-Shock Sensor
- (1) - Programming Switch
- (1) - Literature Package
- (1) - Siren



Technical Support

For Authorized Dealers (800) 421-3209

FCC COMPLIANCE

This device complies with Part 15 of the FCC rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

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

Warning!

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

INSTALLATION OF THE MAJOR COMPONENTS

Control Module:

Select a mounting location inside the passenger compartment (behind the dash), and secure using the two screws provided. The control module can also be secured in place using cable ties. Be certain that the chosen location will not interfere with the proper operation of the vehicle. Avoid mounting the module to or routing the wiring around the steering shaft/column, as the module or wiring may wrap around or block the steering wheel preventing proper control of the vehicle. Secure the module in the chosen location using cable ties or screws as necessary. Do not mount the module in the engine compartment, as it is not waterproof.

Siren:

Select a location in the engine compartment that is not accessible from below the vehicle. The selected location must be clear of hot or moving parts within the engine compartment. The siren must be pointed downward to prevent water retention and the flared end must be pointed away from and out of the engine compartment for maximum sound distribution. Before securing the siren, check behind your chosen location to assure that the mounting screws will not penetrate any factory wiring or fluid lines. Secure the siren mounting bracket using #8 self tapping screws or by first using the mounting bracket as a template, scribe or mark the mounting holes. Drill the marked holes using a 1/8" drill bit, then mount the siren using #8 sheet metal screws.

Dash Mounted LED:

A small Red LED included in the kit will serve as a visual indicator of the alarm's status. It should be installed in the dash, located where it can be easily seen from outside the vehicle, yet not be distracting to the driver. Once a location has been selected, check behind the panel for wire routing access, and to confirm the drill will not damage any existing components as it passes through the panel. Drill a 1/4 " hole, and pass the red and blue wires from the LED through the hole, from the front of the panel. Firmly press the body of LED into the hole until fully seated.

Valet/Programming/Override Switch

Select a mounting location that is within reach of the ignition switch, as this switch in combination with the ignition switch, will be used to program the certain features of the system. It is suggested that the switch be mounted to the lower dash panel in the driver's area within reach of the driver.

Two Stage IR-s Shock Sensor:

Select a solid mounting surface for the shock sensor inside the passenger compartment (behind the dash), and mount the sensor using cable ties, making sure to allow access to the sensitivity adjustment potentiometer for use later in the installation.

WIRING THE SYSTEM

Red: +12 VDC CONSTANT BATTERY SOURCE

Connect this wire to a +12 Volt constant source found at the vehicles ignition switch. This wire provides power for the control module.

Orange: 300 mA Ground Output When Armed -N.C. Starter Disable

This wire is provided to control the starter disable relay. Connect the orange wire to terminal 86 of the relay. Connect relay terminal 85 to an ignition wire in the vehicle that is live when the key is in the ON and CRANK positions, and off when the key is in the OFF position. (this is where the pink wire from the alarm should be connected).

NOTE: This is a normally closed starter disable arrangement, and when power is removed from the security system, the starter disable feature will not operate, allowing the vehicle to start. Code Systems does not recommend using the Orange wire to interrupt anything but the starting circuit of the vehicle.

White: Parking Light Output (+/- 15 AMP MAX)

This wire is provided to flash the vehicle's parking lights. Connect the white wire to the output side of one of the vehicle's parking lights.

White w/Red: Parking Light Polarity Input

This wire is provided as a polarity input of the pulsed parking light output relay.

- a) For vehicles with positive switching parking lights. Connect the White/Red wire to a +12 VDC constant battery source.
- b) For vehicles with negative switching parking lights. Connect the White/Red wire to a solid chassis ground source.

Black w/Red: Positive Siren Output

Route this wire through a rubber grommet in the firewall, and to the siren location.

Connect the Black/Red wire to the positive wire of the siren. Secure the black ground wire of the siren to chassis ground.

Black: Chassis Ground

Connect this wire to a solid, metal part of the vehicle's chassis. Do not confuse this wire with the thin black antenna wire that exits the control module independently.

Tan/Black: Trunk Disarm Input (+)

This wire will determine if the vehicle's trunk has been opened using the factory (OEM) keyless entry transmitter, and prevent the alarm from triggering when the factory (OEM) keyless entry transmitter is used. This wire requires a positive trigger input and must be wired to the +12 volt trunk control wire from the vehicles keyless entry system, or the switched +12 volt side of the vehicles trunk release solenoid.

Grey: (-) Hood/Trunk Trigger

This is an instant on ground trigger wire. It must be connected to the previously installed hood and/or trunk pin switches.

Green: Negative Door Trigger Input

If the vehicle's courtesy light switches have a (-) ground output when the door is opened (GM and most Imports), you must connect the Green wire to the negative output from one of the door switches.

WARNING:

Do not use the green wire if the vehicle has + 12 volt output type door switches.(see Purple Wire).

Violet: Positive Door Trigger Input

If the vehicle's door courtesy light switches have a + 12 volt output when the door is opened (most Fords and some Imports), you must connect the Violet wire to the positive output from one of the door switches. In most cases, the Violet wire will only needs to be connected to one door switch, no matter how many doors the vehicle has.

WARNING:

Do not use the Violet wire if the vehicle has ground output type door switches. (see Green Wire)

Pink: (+) 12 VDC Ignition Source

Connect this wire to the ignition 1 wire from the ignition switch. This wire will show +12 volts when the ignition key is turned to the ON, RUN and START positions, and will have 0 volts when the key is turned to the OFF and ACCESSORY positions.

Blue: 30 Second Output When ARMED (-) or Passive Door Lock Output (-)

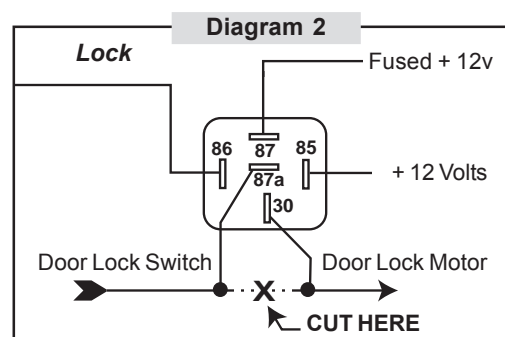
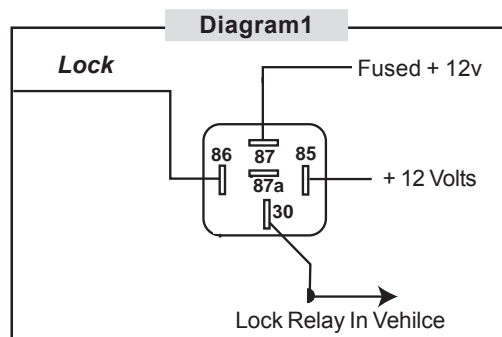
This wire is programmable to provide either a 30second pulsed output when the CA310 is ARMED or a pulsed ground output to the factory door lock control relay for a passive door locking feature. The maximum current draw through these outputs must not exceed 300 mA.

3 Wire Ground Switched Door Locks

In this application, the blue wire provides a ground pulse during passive arming, or the pulsed ground lock output. Connect this wire to the wire that provides a low current ground signal from the factory door lock switch to the factory door lock control relay.

3 Wire Positive Switched Door Locks (Relay required see Diagram 1)

5 Wire Alternating 12 Volt (Relay required see Diagram 2)



Black/White: Illuminated Entry Output 200 mA (-)

This wire provides a 30 second ground output whenever the system is disarmed using the OEM transmitter, and pulses ground when the alarm is triggered. It is used to provide the optional entry lighting feature, and will flash the vehicle's interior light when the system is triggered. This is a transistorized, low current output, and should only be used to drive an external relay.

3 Pin White Connector: White/Blue, Light Green & Brown. OEM Keyless Entry Inputs

These wires will allow the Factory (OEM) transmitter to arm the system when the LOCK button is pressed, and disarm the system when the UNLOCK button is pressed.

White/Blue: Arm Input

Connect the white/blue to the lock motor wire of the driver's door actuator. The lock motor wire will pulse +12 volts when the LOCK button is pressed on the Factory (OEM) transmitter.

Brown: Disarm Input

Connect the Brown to the unlock motor wire of the driver's door actuator. The unlock motor wire will pulse +12 volts when the UNLOCK button is pressed on the OEM transmitter. For vehicles with two stage unlocking, the unlock motor wire of the driver's door actuator will pulse +12 volts when the UNLOCK button is pressed the first time (unlocking the driver's door), and will not show any pulses the second time the UNLOCK button is pressed (unlocking all remaining doors) on the OEM transmitter.

Light Green: Unlock Sense Input

Connect the light green wire to the positive or negative unlock wire from the door lock/unlock switch, or any passenger door unlock motor wire.

a). For vehicles with two stage unlocking, it is very important that the brown wire does not receive a pulse when the driver's door only is unlocked using the OEM transmitter.

b). For vehicles with single stage unlocking (all doors unlock with one press of UNLOCK on the OEM transmitter), connect the brown to chassis ground.

Note: You can select the polarity of this input by changing DIP Switch #2

2 Pin White Connector: Dash Mounted LED

Route the red and blue wires in the 2 pin white connector from the LED to the control module, and plug it into the mating white connector on the side of the module.

2 Pin Red Connector: Valet/Override Switch

Route the 2 pin red connector from the override switch previously mounted to the mating two pin connector on the module.

4 Pin White Connector: IRS-Shock Sensor Harness

Route the 4 pin connector from the previously installed shock sensor to the mating 4 pin connector of the module.

COMPLETING THE INSTALLATION

Adjusting the Shock Sensor: Gently turn the adjustment knob counterclockwise to turn down the sensitivity and turn clockwise to turn up sensitivity. Close the hood and trunk lids, and arm the alarm. Wait 6 seconds for the accessories trigger zone to stabilize, then test the sensitivity adjust as needed

CAUTION: Never perform this test on the vehicle's glass, as you may break the window.

WARNING ! Setting the sensitivity too high can cause false alarms due to noise vibrations from passing trucks and heavy equipment. To decrease sensitivity, turn the adjustment screw counter clockwise.

Wire Dressing: Always wrap the alarm wires in convoluted tubing, or with a spiral wrap of electrical tape. Secure these looms along the routing using cable ties. This will ensure that the alarm wires are not damaged by falling onto hot or sharp moving surfaces in the vehicle.

PROGRAMMABLE FEATURES

Changing Programmable Features:

This system has several programmable features that may need to be changed based on a specific vehicle or a customer's preference. Programmable features can be changed using a bank of 7 dip switches located on the side of the control module. To change a setting carefully flip the dip switch to the OFF position using a small screwdriver or pick. Use the chart below as reference.

Dip Switch/Feature	ON	OFF
1) Passive Lock/30" Output when Armed	30 Sec Armed Output	Pass D/L
2) ARM/DISARM Input Polairty	POS	NEG
3) UNLOCK SENSE Input Polarity	POS	NEG
4) 1 or 2 Stage Unlock	2 Stage	1 Stage
5) Passive Arming	Passive	Active
6) Entry Delay	15 Seconds Delay	Instant
7) Siren/Horn Output	Siren	Horn
8) Door Ajar Warning	Instant	30 Secs.

Defalut Settings are in **BOLD**

