INSTALL GUIDE

430 and 440 Series Vehicle Security Systems

REMOTE STARTERS

CAR ALARMS

ULTRA START

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Note: Some features may not be available on certain models.

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COMPONENTS

- Three Button Remote transmitter's (430 Series)   -Control Module
- Four Button Remote transmitter's (440 Series)   - Plug-in Led
- Plug-in Valet Switch (Program Switch)   - Multi-Tone Siren
- 10 Pin Main Harness   - Installation Guide
- 2 pin Keyless Entry harness   - Owners Manual

WIRING DIAGRAM

*500ma Programmable unlock output	Unlock Output (-)	**Blue**
Low current output for voltage inverter	12v+ Constant	**Red**
*500ma Programmable lock output	Lock Output (-)	**Green**

Door Locks

Connect to park lights. 15amp Maximum	Park Lights	**White**
*500ma negative output	(-) When Armed	**Orange**
*500ma negative output	Trunk Release	**Gray**
Connect to vehicles ignition wire	Ignition Input	**Yellow**
Connect to constant power. 20amp input	12 Volt Input	**Red**
Connect to Siren wire. 2amp Maximum	Siren Output	**Brown**
Connect to chassis ground	Ground Input	**Black**
Connect to door pin. **(+)** when opened	Door Input	**Purple**
Connect to door pin. **(-)** when opened	Door Input	**Green**
Connect to hood and / or trunk pin	Hood Input	**Blue**

Main Alarm Harness

Program Switch

LED

Blue

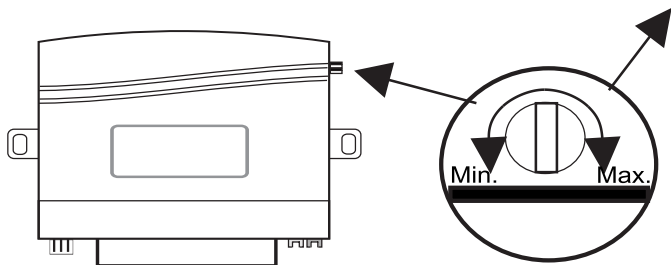**Red**

Shock Sensor Adjustment

Increase Sensitivity - Turn the adjustment screw clockwise.

Decrease Sensitivity -Turn the adjustment screw counter clockwise.

Min.   Max.

*500ma outputs are low current and are designed to activate relays

WIRING CONNECTIONS

10 Pin Connector

White	**(+) Park lights**	Park light output.
Orange	**(-) When Armed**	Negative output when system is armed.
Grey	**(-) Trunk Release**	Negative output for trunk release. **500ma max.**
Yellow	**Ignition Input**	Input from vehicles ignition wire.
RedMain	**Power Input**	Constant 12 Volt input.
Brown	**(+) Siren Output**	Positive output for siren.
Black	**Ground Input**	System ground input.
Purple	**(+) Door Input**	Positive door pin switch input.
Green	**(-) Door Input**	Negative door pin switch input.
Blue	**(-) Hood Input**	Negative input from hood pin switch.

3 Pin Connector Red

Green	**Door Lock**	Door Lock Output - ***Programmable***
12 Volt Output	Output for voltage inverter. ***Low Current Only***	
Blue	**Door Unlock**	Door Unlock Output - ***Programmable***

Recommended Installation Procedures

Mounting the module- Never mount the module in the engine compartment. Select a location under the dash to install the main module. Be certain that the module is securely attached and does not obstruct any serviceable areas. Mount the module so that it cannot be seen if looking under the dash as it could be easily unplugged by a thief. The module must be free from all moving parts.

Installing the LED- Choose a location that will be highly visible when the LED is installed. Most vehicles are equipped with knock out panels in the dashboard, these panels are easily removable and can be easily replaced if necessary. Once the location is picked, use drill bit and drill a hole through the panel. Test fit the LED into the hole. Plug the Led into the **Red** connector on the main module.

Installing the Program Button- Choose a location to mount the Program Button. This location should be hidden and not visible from outside the vehicle. Once the location of the switch is picked, use a 1/4" drill bit and drill a hole. Remove the nut and push the Program Button through the hole. Replace the nut and tighten until the switch is secure. Plug the Program Button into the **Blue** connector of the main module.

Under Hood Connections- Route the hood pin (optional) and Siren wire through the firewall, into the engine compartment. Always try to pull the wires through a factory rubber grommet. If drilling through the firewall, BE CAREFUL. Check for obstructions on both sides of the firewall. After drilling use a snap in grommet to protect the wires from sharp edges.

Mounting the Siren- Choose a location in the engine compartment that is away from high heat sources and direct exposer to water. The siren should be mounted as well as grounded to solid metal. Run the wiring for the siren so that it can not be seen or reached from below the vehicle.

Step 1 - Connect All Of the Following Wires

10 Pin Power Connector

Black	**Ground Input**	System ground input.
Yellow	**Ignition Input**	Input from vehicles ignition wire.
Red	**Power Input**	Constant 12 Volt input.
Brown	**(+) Siren Output**	Positive output for siren.
White	**(+) Park lights**	Positive park light output.
Green*	**(-) Door Input**	Negative door pin switch input.
Purple*	**(+) Door Input**	Positive door pin switch input.

*Test for door pin type (+ or -) then connect the appropriate wire (Green or Purple)

Step 2- Plug-In The Module

When all the connections are done, the control module can be plugged in. Before connecting the control module, make sure the ignition is in the **OFF** position. Plug in the main harness then any other connectors that were used.

Step 3- Test And Adjust The Shock Sensor

To test the Shock Sensor.
1. Press the **Lock** button once to arm the system.
2. Wait five seconds then impact the vehicle. Lighter impacts to the vehicle should trigger the warn away (The siren will chirp three times). A harder impact to the vehicle will trigger the full alarm.(The siren will activate for 60 seconds then turn off).
3. To deactivate the alarm when triggered, press the **unlock button twice.**
To Increase The Sensitivity.
Turn the adjustment screw **Clockwise** 1/4 turn then re-test the sensitivity. Repeat this procedure until the sensitivity of the system is at the appropriate level.
** ***Do not set to sensitive.***
To Decrease The Sensitivity.
Turn the adjustment screw **Counter Clockwise** 1/4 turn then re-test the sensitivity. Repeat this procedure until the sensitivity of the system is at the appropriate level.

Step 4- Test The System

1. Open all the vehicles windows.
2. Press the Lock button to arm the system.
3. Wait five seconds (or until the dome light goes out) then reach in through a window and open the door. The alarm will then activate (repeat on all the doors).
4. Test the Shock Sensor again and adjust if necessary.
5. Insure that all additional features are working as intended.
6. If necessary proceed to Program Mode to adjust the programmable outputs.

Your Basic Install Is Complete!

PROGRAM OVERVIEW

Program mode allows you to adjust the settings and options of your system. Your system has been intelligently designed by installers with years of experience. The system's default settings do not require any program changes in most cases. However, this system does incorporate a advanced programming system with settings that can be easily adjusted

Entering Program Mode

To Enter Program Mode
1) Make sure ignition is in the off position.
2) Within three seconds turn the key **ON the OFF.**
3) Press and release the Program Button **two times.**
4) The siren will chirp and the lights will flash once to confirm entering Program Mode.
Note: *If unit does not enter Program Mode, turn ignition off and repeat steps 1-3.*
** The ignition wire(Yellow) **MUST** be connected. If it is not connected it will not be possible to enter the Program Modes.

Changing A Programmable Setting

1) Enter Program Mode As explained above.
2) When in program Mode, change the desired Program Setting by pressing the transmitter buttons in the following sequences.

***The Systems Default Setting Are Shown In Bold Lettering.

Quick View Programming

Programmable Feature	Press Buttons	One Chirp	Two Chirps
Shock Sensor Status	*#3-#3-#1*	Disabled	**Enabled**
Arm / Disarm Chirps	*#2-#1-#1*	Chirps Off	**Chirps On**
Ignition Auto Locks	*#1-#3-#2*	Off	**On**
Door Lock Pulse Length	*#1-#3-#1*	3 Second	**.75 Second**
Double Pulse Unlock	*#2-#2-#1*	Two Pulses	**Single Pulses**
Door Input / Voltage Sense	*#1-#1-#3*	Voltage	**Door Pin**
Passive / Active Locks	*#3-#2-#2*	**Active**	Passive
Passive / Active Arming	*#1-#2-#3*	***Active***	Passive
System Reset	*#3-#3-#3*	*Confirmed by Three Siren Chirps*	

System Reset

This feature will reset the module to it's factory programmed default setting. This feature will not delete transmitter codes from memory.

To Reset The System To Factory Defaults.
1) Turn the ignition key On then Off.
2) Press the Program Button two times. The system will respond with two siren chirps.
3) Press the transmitter buttons in the following order: *#3-#3-#3.* The system will respond with three siren chirps to confirm the system has been re-set to factory defaults.

PROGRAMMABLE FEATURES

Enter Program Mode

Entering program mode is done by the following steps:
1) Make sure ignition is in the off position.
2) Turn the ignition key ON - OFF, leaving **key in the OFF position.**
3) Press and release the Valet button two times.
4) The siren will chirp one time to confirm entering program mode.
   (*If this does not happen, turn ignition off, wait five seconds and repeat steps 1-4*).

Passive / Active Arming

To change settings:
1 - Enter Program Mode - (Ignition ON-OFF, followed by Valet 2 times)
2 - Press & release transmitter buttons in the following sequence
#1 - #2 then #3
3 - The siren will respond with the following:

1 Chirp	**Active Arming**
2 Chirps	Passive Arming

Repeat sequence to change selection

Passive / Active Arming

To change settings:
1 - Enter Program Mode - (Ignition ON-OFF, followed by Valet 2 times)
2 - Press & release transmitter buttons in the following sequence
#3 - #3 then #2
3 - The siren will respond with the following:

1 Chirp	**Active Locks**
2 Chirps	Passive Locks

Repeat sequence to change selection

Door Lock Timing

To change settings:
1 - Enter Program Mode - (Ignition ON-OFF, followed by Valet 2 times)
2 - Press & release transmitter buttons in the following sequence
#1 - #3 then #1
3 - The siren will respond with the following:

1 Chirp	3 Second Door Locks
2 Chirps	**0.75sec Pulses**

Repeat sequence to change selection

Ignition Auto Locks

To change settings:
1 - Enter Program Mode - (Ignition ON-OFF, followed by Valet 2 times)
2 - Press & release transmitter buttons in the following sequence
#1 - #3 then #2.
3 - The siren will respond with the following:

1 Chirp	**Auto Lock Disabled**
2 Chirps	Auto Lock Enabled

Repeat sequence to change selection

PROGRAMMING

Double Pulse Unlock

To change settings:
1 - Enter Program Mode - (Ignition ON-OFF, followed by Valet 2 times)
2 - Press & release transmitter buttons in the following sequence
#2 - #2 then #1.
3 - The siren will respond with the following:

1 Chirp	Double Pulse Unlock
2 Chirps	**Single Pulse Unlock**

Repeat sequence to change selection

Voltage / Door Pin Sensing

To change settings:
1 - Enter Program Mode - (Ignition ON-OFF, followed by Valet 2 times)
2 - Press & release transmitter buttons in the following sequence
#1 - #1 then #3
3 - The siren will respond with the following:

1 Chirp	Voltage Sensing- No Door Pin Connection Needed
2 Chirps	**Door Pin- Door Pin Connection Required**

Repeat sequence to change selection

Chirp Delete

To change settings:
1 - Enter Program Mode - (Ignition ON-OFF, followed by Valet 2 times)
2 - Press & release transmitter buttons in the following sequence
#2 - #2 then #1
3 - The siren will respond with the following:

1 Chirp	Chirps Disabled
2 Chirps	**Chirps Enabled**

Repeat sequence to change selection

Shock Sensor Disable

To change settings:
1 - Enter Program Mode - (Ignition ON-OFF, followed by Valet 2 times)
2 - Press & release transmitter buttons in the following sequence
#3 - #3 then #1
3 - The siren will respond with the following:

1 Chirp	Shock Sensor OFF
2 Chirps	**Shock Sensor ON**

Repeat sequence to change selection

Transmitter Programming

Follow the steps below to program the transmitters to the system s memory

Step 1 - Turn the Ignition key *ON then OFF - Leaving Key Off.*
Step 2 - Press and release the Program Button *twice then press and hold.*
Step 3 - The siren will respond with five chirps to confirm Transmitter Program Mode.
Note: If the siren does not respond, repeat Steps1&2
Step 4 - Continue to hold the Program Button and press lock button on each of the transmitter's to be programmed(Maximum of 3 Different transmitter codes).
Step 5 - The system will respond with a siren chirp each time a transmitter is programmed.

Exit   - After five seconds the system will exit transmitter program mode automatically.

NOTE: You must program ALL of the transmitters to be used at one time. For the owner's security any transmitters not programmed at this time will be erased from memory.

*** *This system will store a maximum of three transmitter codes in memory.*

Deleting Transmitters

Follow the steps below to permanently delete a transmitter code from the system s memory.

Step 1 - Turn the Ignition key *ON then OFF - Leaving Key Off.*
Step 2 - Press and release the Program Button *twice then press and hold.*
Step 3 - The siren will respond with five chirps to confirm Transmitter Program Mode.
**Note:** If the siren does not respond, repeat Steps1&2
Step 4 - Continue to hold the Program Button and press lock button on only the transmitters that are intended for use on the system.(*Maximum of 3 Different transmitter codes).
Step 5 - The system will respond with a siren chirp each time a transmitter is programmed.

Exit   - After five seconds the system will exit transmitter program mode automatically.

All previous transmitter code are now deleted from the systems memory.

Basic Transmitter Functions
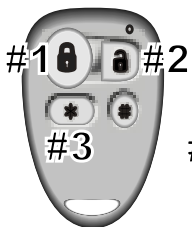
Button #1- Press and release to arm the alarm and lock the doors.
  - Press and hold to activate Panic mode.
  - Press and release to deactivate triggered alarm.

#1 #2
#3

#1 #2
#3

Button #2 Press and release to disarm and unlock the doors**.**
  - Press and hold to activate the Trunk Release.
  - Press and release to deactivate triggered alarm.

Button #3 Press and hold to activate the Car Finder Mode.

SYSTEM OPERATION

Lock Doors & Arm The Alarm

1. Press & release the *LOCK* button on the remote transmitter.
2. The park lights will flash and the siren will chirp once.
3. The doors will lock.
4. The LED will start flashing within five seconds.

Unlock Doors & Disarm The Alarm

1. Press & release the *UNLOCK* button on the remote transmitter.
2. The park lights will flash and the siren will chirp twice.
3. The doors will unlock.
4. The LED will stop flashing.

Silent Arm And Disarm

1. Press & release the button three, then press & release the lock or unlock button.
2. If the doors are locked this will unlock the doors without siren chirps, the park lights will flash two times to confirm the doors have unlocked.
3. If the doors are unlocked this will lock the doors without siren chirps, the park lights will flash one time to confirm they have locked.

Trunk Release

1. Press and hold the *UNLOCK* button for three seconds.
2. The doors will unlock, continue holding the unlock button three seconds. the Trunk release will then activate. The trunk release will be confirmed by one park light flash.
3. For safety reasons, the trunk release output will not activate when ignition key is in the "On" position.

Car Finder Mode

1. Press and hold the ✱ button for two seconds.
2. The system will flash the park lights and chirp the siren five times.

**This feature can help find your vehicle in a crowded parking lot.

Panic Mode

1. Press & hold the *LOCK* button for three seconds.
2. The park lights will flash and the siren will activate.

PANIC MODE DISABLE
1. Press *LOCK* button to disable the panic mode and to lock the doors.
2. Press *UNLOCK* button to disable the panic mode and unlock the doors.
3. Panic Mode will stay activated until disabled by the remote transmitter.

Service Mode

1. The system must be disarmed and the ignition is turned OFF.
2. Press and release the lock and unlock buttons at the same time, then press and hold the lock button for five seconds.
3. The system will respond with **five chirps** and park light flashes to confirm that the system is in Valet mode.
4. The LED will stay **ON** steady to confirm Valet Mode.

Exit Service Mode

1. Press and release the lock and unlock buttons at the same time, then press and hold the lock button for five seconds.
2. The system will respond with **two chirps** and park light flashes to confirm that the system has exited Valet mode.
3. The LED will turn **OFF.**

Note: If the LED does not turn off, check that all the door's are closed. The LED stays On solid when a door is left opened.

Emergency Service Mode

Emergency Service Mode temporarily disables the alarm system. This feature can be used if the remote is lost or if the system malfunctions.

ENTERING VALET MODE

1. While the ignition is "On" press and hold the Service button for five seconds. The siren will chirps f**ive** times.
2. Alarm functions will be disabled and the LED will be **ON** steady. The door-locks and trunk release are still operational.
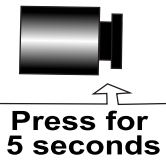
EXITING VALET MODE

1. While the ignition is **"On"** press and hold the Service button for five seconds. The siren will chirps **two** times.
2. The system returns to normal operation.

Starter Disable

The system has an optional starter disable output that can be connected by your dealer. When the starter disable relay is installed and connected to the system, the vehicle's starter will be disabled when the system is armed.
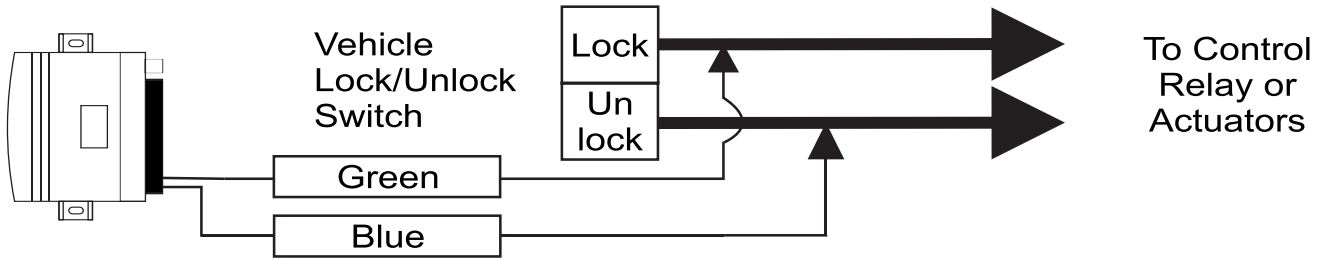
To activate the starter disable press the lock button on the remote. The system will arm and the starter will no longer operate.
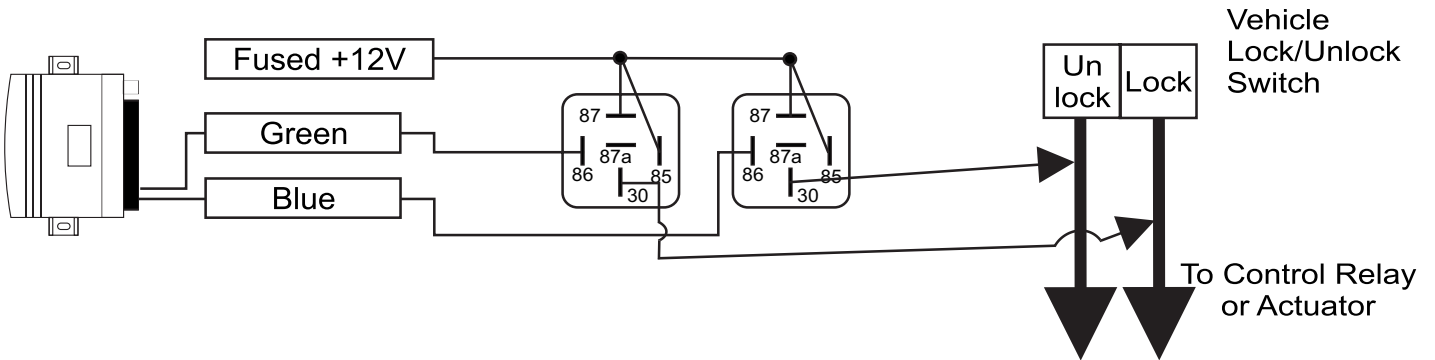
To deactivate the starter disable, press the unlock button and the LEDS will stop flashing and the starter will be re-enabled.
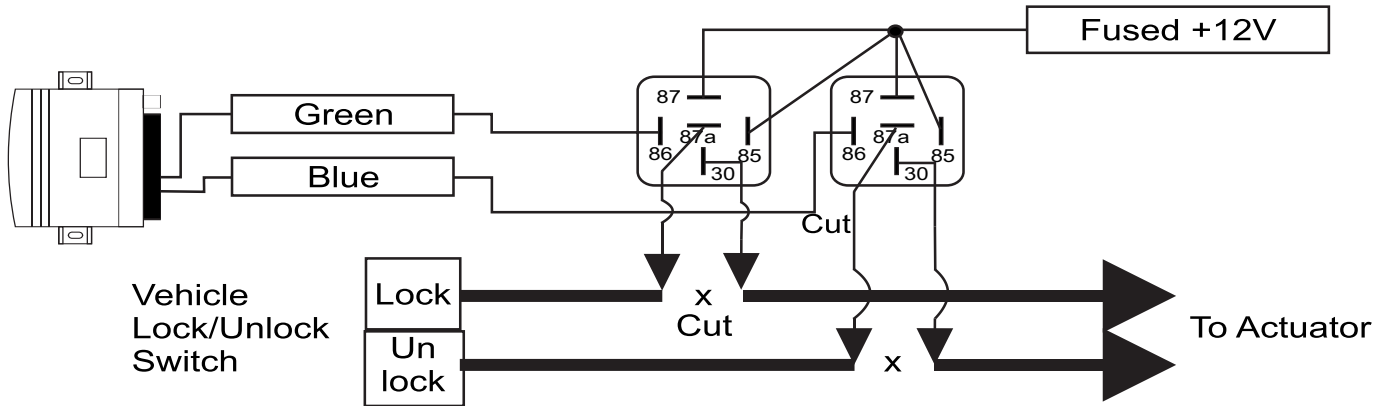
Door Lock Relays

Negative Type Door Locks

Vehicle Lock/Unlock Switch

Lock

Unlock

Green

Blue

To Control Relay or Actuators

Positive Type Door Locks

Fused +12V

Green

Blue

87
87a
86
85
30

87
87a
86
85
30

Vehicle Lock/Unlock Switch

Unlock | Lock

To Control Relay or Actuator

5 Wire / Reverse Polarity Type Door Locks

Green

Blue

Fused +12V

87
87a
86
85
30

87
87a
86
85
30

Cut

Vehicle Lock/Unlock Switch

Lock

Unlock

x
Cut

x

To Actuator

Negative Park Lights- In some cases the park lights may flash erratically after installing the negative park light relay. To correct this issue add a diode between the coil pins of the relay as shown.

Add IN4001 Diode as shown

Ground

87
87a
86   85
30

White

Negative park light output