

MEGALARM®

MEGA 2500

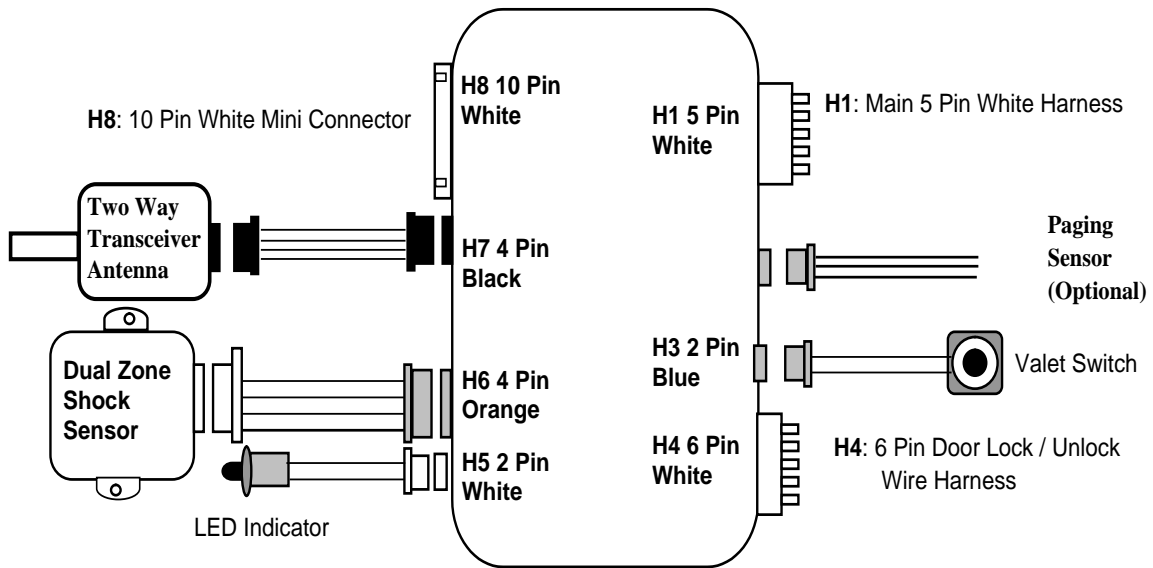
2-WAY LCD 4-CHANNEL
CAR ALARM SECURITY SYSTEM

Installation Manual

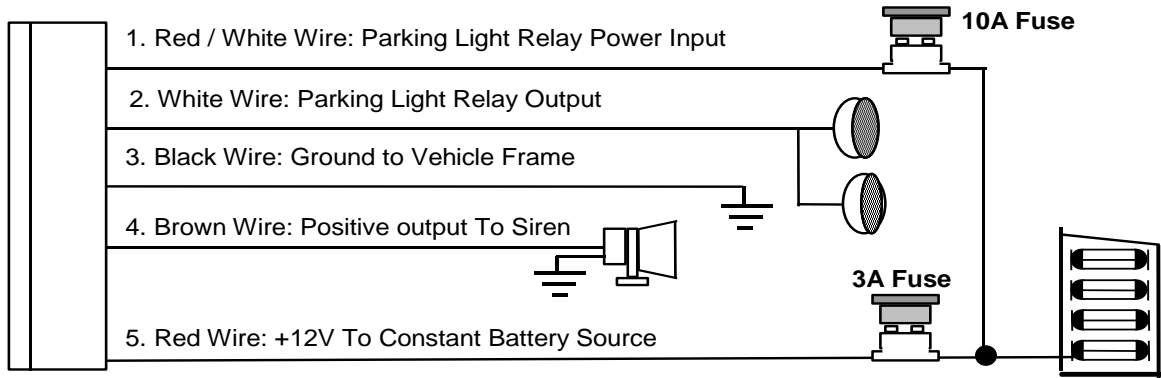


MEGATRONIX
CALIFORNIA, U.S.A.

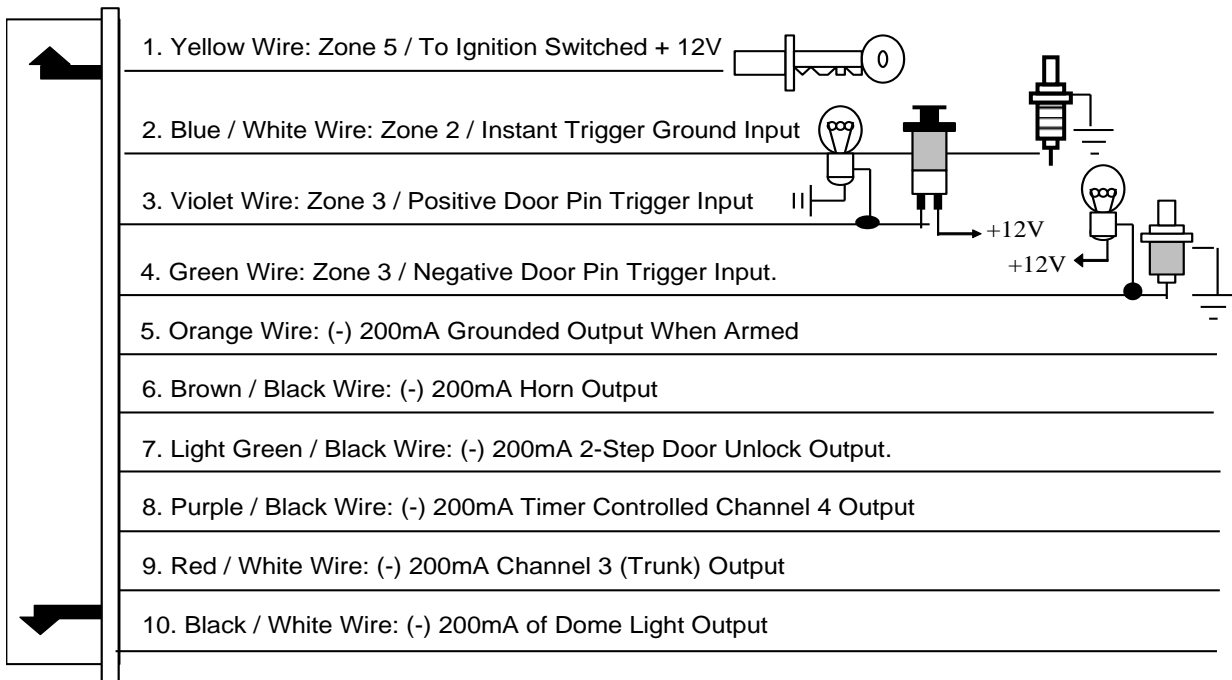
INSTALLATION DIAGRAM



H1: MAIN 5 PIN WIRE HARNESS:



H8: 13 PIN MINI CONNECTOR WIRE HARNESS:



Keep wiring away from moving engine parts, exhaust pipes, and high-tension cable. Tape wires that pass through holes on the firewall to prevent frying electrical. Watch out for sharp edges that may damage wires and causes short circuit.

CAUTION: Do not connect the wire harness to the control module until all wiring to vehicle is complete.

H1. MAIN 5 PIN WIRE HARNESS:

H1/1. Red / White Wire – Parking Light Relay Input –

The RED/WHITE wire is the input to the flashing parking light relay. The connection of the RED/WHITE wire will determine the output polarity of the flashing parking light relay.

If the vehicle you are working on has +12volt switched parking light, you do not need to connect this wire.

This wire already is connected to +12volt.

If the vehicles parking light is ground switched, cut the RED/WHITE wire and connect the RED/WHITE wire to chassis ground.

H1/2. White Wire – Parking Light Relay Output (+12 V 10A Output) –

Connect the WHITE wire to parking light wire coming from the headlight switch. Do not connect WHITE wire to the dashboard lighting dimmer switch (Damage to the dimmer will result). The limitation of the WHITE wire is 10 Amps. Do not exceed this limit or damage to the alarm and parking light relay will result.

H1/3. Black Wire – System Ground –

This is main ground connection of the alarm module. Make this connection to a solid section of the vehicle frame. Do not connect this wire to any existing ground wires supplied by the factory wire loom. Make the connection to the vehicle's frame directly.

H1/4. Brown Wire – Siren Drive or Horn Output – (Set Feature III – 2 Programming)

SIREN DRIVE OUTPUT (Factory default setting)

This is the positive (+) output connection for the siren. Current capacity is 2 Amps. Make connection to the (+) red wire from the siren. Make the (-) black wire coming from the siren to a good chassis ground.

(+) Low Current HORN OUTPUT -- (Set Alarm Feature III – 2 To Horn Output)

This wire is provided to use the existing vehicle's horn as the alarm system's optional warning audible device. It is a transistorized low current output, and should only be connected to the low current positive (+) output from the vehicle's horn switch.

H1/5. Red wire – System Power (+12V Constant) –

The RED wire supplies power to the system. Connect this wire to a constant +12 volt source.

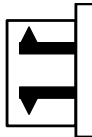
H2. 3-PIN BROWN CONNECTOR FOR OPTIONAL PAGING (KNOCK) SENSOR

An optional Paging (Knock) Sensor can be added on.

1. Detach the protective paper from the double-sided adhesive tape and attach one side of the double-sided adhesive tape to the bottom part of the Paging (Knock) Sensor.
2. After cleaning the area around the left bottom part of the front windshield so that it stays attached firmly, the Paging Sensor should be attached on the front window so that the side on which a sticker with a printed words "**Tap Here Paging Driver**" is attached face outward.
3. Hide the wire by carefully pushing it inside the space of the front windshield's mold trim.

Adjust the sensitivity of sensor. If you turn the tuning screw at the center of the Paging Sensor clockwise, the sensitivity goes sharp (higher) and if turned counter-clockwise, the sensitivity goes dull (lower).

H6. 4 PIN ORANGE CONNECTOR FOR 2 STAGE SHOCK SENSOR



4. **Green Wire / Warn Away Input**
3. **Blue Wire / Zone 4 Ground Trigger**
2. **Black Wire / Negative**
1. **Red Wire / +12Volts**

H7. BLACK 4-PIN CONNECTOR. – TWO-WAY TRANSCEIVER/ANTENNA MODULE

The Two-way transceiver/antenna mounts on the location above the belt line (dashboard) of the vehicle for best reception. We suggest you mount it on the lower left or upper left-hand side of the windshield.

Warning! Do not mount in such a manner that it obstructs the driver's visibility.

- Remove the protective tape backing.
- Carefully align the two-way transceiver/antenna and apply to windshield.
- Route the black connector wire behind the trim and connect to the two-way transceiver/antenna.
- Connect the other end to the control module.
- Special considerations must be made for type of windshield glass, as some newer vehicles utilize a metallically shielded or infrared and UV radiation absorbing window glass that will inhibit or restrict RF reception. In these vehicles, route the two way transceiver/antenna module away from metallic shielded window glass as far as possible, there might be an area of the windshield that does not have this.

H8. 10-PIN MINI CONNECTOR WIRE HARNESS.

H8/1. Yellow wire – To Ignition Switched +12V –

This wire is connected to switched 12 volts source. This wire should receive "12 volts" when ignition key is in the "ON" and "START" position. When ignition is turned "OFF", this wire should receive "0" voltage.

H8/2. Blue / White wire – (-) Instant Trigger or Major trigger Input (Zone 2) –

This wire is the ground trigger input wire for hood/trunk pin switches.

H8/3. Violet wire – Positive Door Switch Sensing Input –

This wire is the positive trigger input wire for positive door pin switch. This wire is the connection for "positive" type factory door pins (typical of Ford vehicles). Locate the "common wire" for all door pins and make the connection of the Violet Wire here.

H8/4. Green wire – Negative Door Switch Sensing Input –

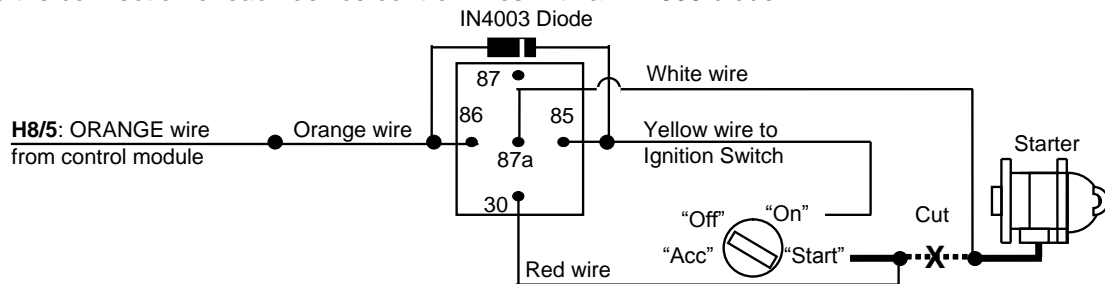
This wire is the ground trigger input wire for negative door pin switch. This wire is the connection for "grounding" type factory door pins. Locate the "common wire" that connects the door pin switches. Make the connection of the GREEN Wire here.

H8/5. Orange wire – (-) 200mA Grounded Output When Armed –

This wire will become grounded when the alarm is armed. The current capacity of this wire is 200mA. This output can control the starter disable, when an intrusion is detected and the system is triggered. The vehicle is prevented from any unauthorized starting.

- Find the wire from the starter solenoid, (usually located on the starter) and going to the ignition switch.
- When found, use voltmeter, connect one probe of the voltmeter to ground and connect the other end of the probe to the starter wire. It should receive "12 volts" only when the ignition key in the "START" position.
- After locating the correct wire, cut it in half, try to start the vehicle. The engine should not "crank over".
- If extended wires are needed, they must be exactly the same gauge as the cut wire. Connect the cut wire from the key switch to the RED wire (pin #30) of the relay, and connect the starter wire to the WHITE wire (pin #87a) of the relay.
- Connect the ORANGE Wire from the control module to the ORANGE wire (pin #86) of the relay.
- Connect the ORANGE wire (pin #85) of the relay to a switched 12 volts source from the ignition switch.

NOTE: If more than one electronic device will be connected to the ORANGE Wire, it will be necessary to isolate the connection of each device control wires with a 1N4003 diode.





H8/6. Brown / Black wire – (-) 200mA Horn Output –

This wire is provided to use the existing vehicle's horn as the alarm system's optional warning audible device. It's a transistorized low current output, and should only be connected to the low current ground output from the vehicle's horn switch. When the system is triggered, the horn will sound.

H8/7. Light Green / Black wire – (-) 200mA 2-Step Door Unlock Output –

The 2-step door unlock feature will work for the most fully electronic door lock circuit. The vehicle must have an electronic door lock switch (not the lock knob or key switch), which locks and unlocks all of vehicle's doors. When wired for this feature, pressing the disarm (or unlock) button one time will disarm the alarm and unlock the driver's door only. If, you press the disarm (or unlock) button two times within 3 seconds, the alarm will disarm and all the doors will unlock.

H8/8 Purple / Black wire – (-) 200mA Channel 4 Programmable Output –

This wire is built-in user-programmable timer output provides a ground through this wire. Press the transmitter  and  buttons at the same time. You may program the built-in timer to send a ground signal for any time interval between 1 second and 2 minutes. For instance, this timer output may be used to turn on the headlight with the remote control. Also on certain BMW, Mercedes Benz, Jaguar and Volkswagen cars, you can use this unique timed output to allow remote closure of all power window and sunroof without the need for an external module!

H8/9. Red / White wire – (-) 200mA Channel 3 (Trunk) Output –

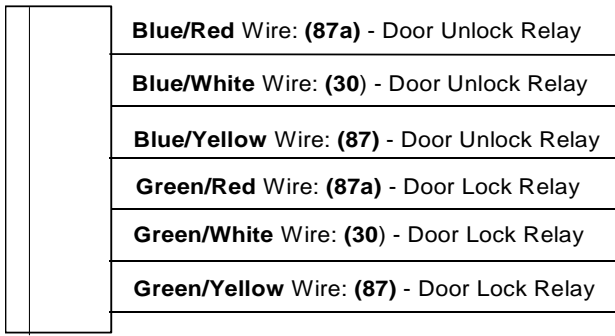
This will become a 1 second pulse ground by activating channel 3 on the transmitter for two seconds. The current capacity of this wire is 200mA. This feature allows you to remote control the trunk release or another electric device. This output can also be programmed to provide the following type of output: 1-second pulse, latched, timer control, and pager. (See Alarm Feature **III - 3** Programming

H8/10. Black / White wire – (-) 200mA Dome Light Control Output –

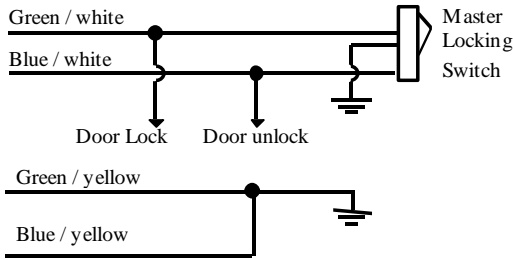
This wire becomes grounded when the dome light control circuit is active. The current capacity of this wire is 200mA. This wire can control the operation of the interior lights. An optional 10 Amp relay can be used on this system for interior lights operation.

- Upon disarming, the interior lights will remain on for 30 seconds.
- If the vehicle is violated, the interior lights will flash for the same duration as the siren.

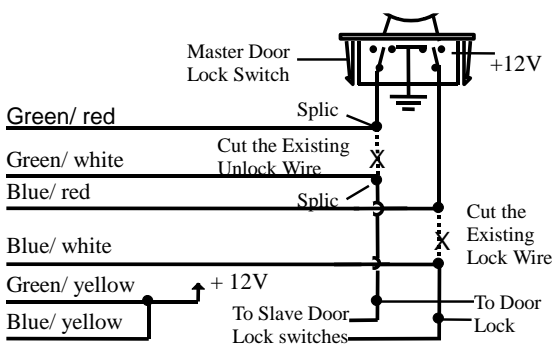
H4. 6 PIN DOOR LOCK HARNESS:



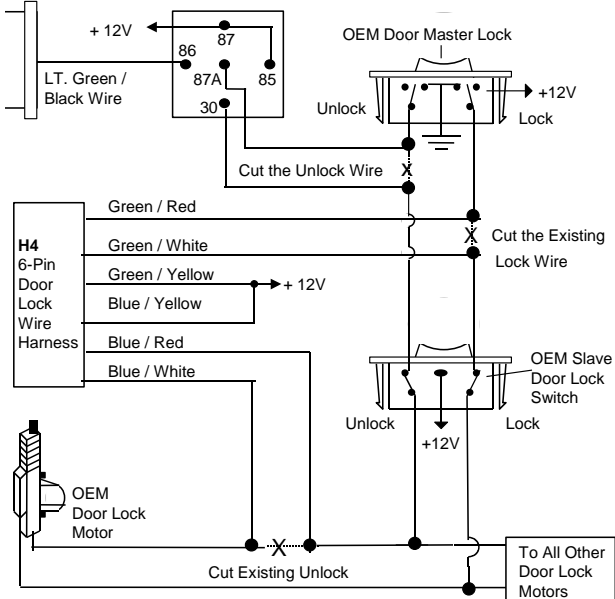
NEGATIVE TRIGGER DOOR LOCK SYSTEM



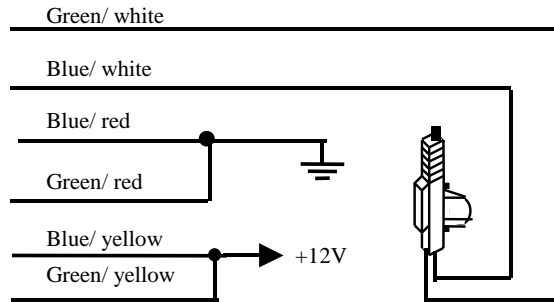
ALTERNATING DOOR LOCKS



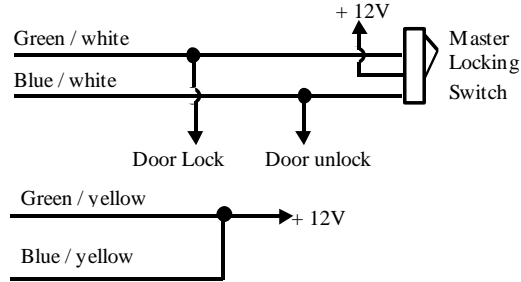
2 STEP DOOR UNLOCK WIRE CONNECTION FOR 5 WIRE ALTERNATING DOOR LOCKS



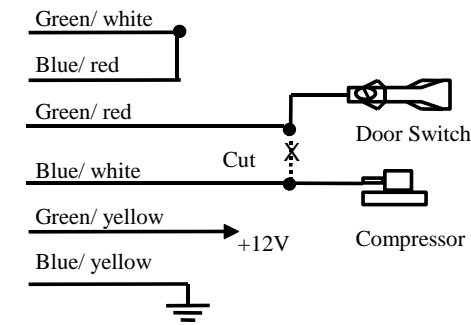
INSTALL NEW DOOR LOCK MOTORS



POSITIVE TRIGGER DOOR LOCK SYSTEM



VACUUM OPERATED DOOR LOCKING SYSTEM

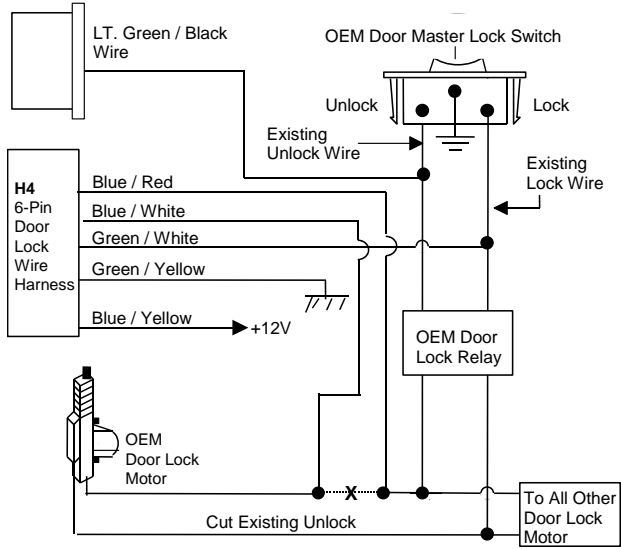


VACUUM OPERATED DOOR LOCKING SYSTEM:

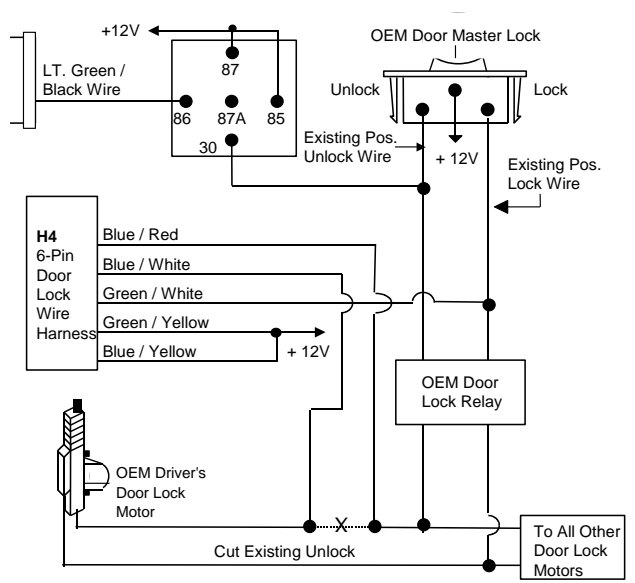
TYPICAL OF MERCEDES BENZ AND AUDI.

Locate the wire under the driver's kick panel. Use the voltmeter connecting to ground, verify that you have the correct wire with the doors unlocked, the voltmeter will receive "12 volts". Lock the doors and the voltmeter will read "0 volt". Move the alligator clip to +12V and the voltmeter will receive "12 volts". Cut this wire and make connections. Be sure to program door lock timer to 3.5 seconds. (See Feature II - 1 Programming.)

2 STEP DOOR UNLOCK WIRE CONNECTION FOR GROUND SWITCHED DOOR LOCKS



2 STEP DOOR UNLOCK WIRE CONNECTION FOR POSITIVE SWITCHED DOOR LOCKS



PROGRAMMING

A. THE TRANSMITTERS:

Note: This mode will only retain the last 4 remote transmitters programmed. If the transmitter memory is exceeded, the security system will start deleting transmitters from the memory in chronological order.





1. Turn the Ignition switch 'OFF/ON' 3 TIMES and stay in the ON position. Within 15 seconds.
2. Push the Valet switch **3** times and holding in on **3rd** push until a long chirp is heard. Then release the valet switch. You are now in the Transmitter programming mode.
3. Press and hold any button of the transmitter until the siren responds with a confirming chirp, indicating the signal has been stored into memory.
4. If you have additional transmitters (up to 4) that need to be programmed, repeat step 3 for each transmitter.

Exit: Turn Ignition to 'OFF' position, or leave it for 15 seconds. 3 long chirps & 3 parking light flashes will confirm transmitter programming exit.

B. ALARM FEATURES PROGRAMMING:

ALARM FEATURE "I" PRORAMMING:




1. Turn the Ignition switch 'ON/OFF' 3 TIMES and stay in the OFF position.
2. Push the Valet switch **2** times and hold it on **2nd** push until **one** chirp with a long chirp is heard. Then release the valet switch. You are now in the Alarm feature 'I' programming mode.
3. Press and release the transmitter button 'A' corresponding to the feature 'A' you want to change.
 - a. The siren chirps and LED pause will indicate previously setting.
 - b. The system would advance to [2] LED flash, [2] chirp. (The factory default settings are always [1] LED flash, [1] chirp.)
4. Depress the transmitter button 'A' again to change the feature again. Simple keep re-depressing the transmitter button 'A' again until the module advances to your desired setting.
5. Depress the transmitter button 'B' corresponding to the feature 'B' you want to program.

Press Transmitter Button	One Chirp / One LED Pulse Factory Default Setting	Two Chirps / Two LED Pulses	Three Chirps / Three LED Pulses	Four Chirps / Four LED Pulses
1 	All Chirps off	All Chirps on	Siren Chirps on only	Horn Chirps on only
2 	Automatic Rearm off	Automatic Rearm on		
3 	45 seconds Delay Door Ajar error chirp.	Instantly Door Ajar error chirp		
4 * 	Without Car-jack mode	Active Car-jack mode	Passive Car-jack mode	

Exit: Turn Ignition to the 'ON' position, or leave it for 15 seconds. 3 long chirps will confirm exit.

ALARM FEATURE "II" PRORAMMING:

1. Turn the Ignition switch 'ON/OFF' 3 TIMES and stay in the OFF position.
2. Push the Valet switch **4** times and hold it on the **4th** push until **two** chirps with a long chirp is heard. Then release the valet switch. You are now in the Alarm feature 'II' programming mode.
3. Press and release the transmitter button 'A' corresponding to the feature 'A' you want to program.

Press Transmitter Button	One Chirp / One LED Pulse Factory Default Setting	Two Chirps / Two LED Pulses	Three Chirps / Three LED Pulses	Four Chirps / Four LED Pulses
1 	0.9-second door lock pulses.	3.5-second door lock pulse.	Double pulse unlock	Door lock with "Comfort Feature"
2 	Active arming	Passive arming without passive door locking	Passive arming with passive door locking	
3 	Ignition controlled door lock & unlock	Ignition controlled door lock only	Ignition controlled door unlock only	Without ignition controlled door lock & unlock

4 *	Pathway illumination feature "off"	Parking light "on" for 30 seconds upon an unlock signal	Parking light "on" for 30 seconds upon an unlock signal & 10 seconds upon a lock signal.	
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Exit: Turn Ignition to the 'ON' position, or leave it for 15 seconds. 3 long chirps will confirm exit.

Comfort Feature:

Some Vehicles have a special "COMFORT feature". When you lock the door with the key, you just have to keep on turning the key on the door about 5 or 7 seconds and the window will close directly.

If your vehicle with "COMFORT feature" and you wish the door being locked and the window being closed automatically at the same time by remote control, you can set the alarm feature II-1 "with comfort feature".

ALARM FEATURE "III" PRORAMMING:

1. Turn the Ignition switch 'ON/OFF' 3 TIMES and stay in the OFF position.
2. Push the Valet switch 6 times and hold it on the 6th push until three chirps with a long chirp is heard. Then release the valet switch. You are now in the Alarm feature 'III' programming mode.
3. Press and release the transmitter button 'A' corresponding to the feature 'A' you want to program.

Press Transmitter Button	One Chirp / LED one pulse Factory Default Setting	Two Chirps / LED two pulses	Three Chirps / LED three pulses	Four Chirps / LED four pulses
1	Vehicles without Turbo (The system cannot be armed with the engine running)	The vehicle has an aftermarket Turbo timer installed: The system can be armed with the engine running and: The shock sensor will be bypassed as long as the engine running.		
		The shock sensor will be bypassed for one minute	The shock sensor will be bypassed for three minutes	
2	H1/4 Brown Wire = Constant siren output for six-tone siren	H1/4 Brown Wire = 5-second pulse siren output for single-tone siren	H1/4 Brown Wire = Random pulse siren output	H1/4 Brown Wire = Pulse output
3	H7/7 Red / White Wire Channel 3 = 1 second pulse output for trunk release.	H7/7 Red / White Wire Channel 3 = Latch output	H7/7 Red / White Wire Channel 3 = Timer controlled output	
4 *	H7/10 Purple / Black Wire Channel 4 = Momentary output	H7/10 Purple / Black Wire Channel 4 = Latched output	H7/10 Purple / Black Wire Channel 4 = Latched output and reset with ignition "ON"	H7/10 Purple / Black Wire Channel 4 = Timer programming (set to any interval between 1 second and 2 minutes.)

Exit: Turn Ignition to the 'ON' position, or leave it for 15 seconds. 3 long chirps will confirm exit.

Channel 3 (4) Timer Control Output Programming

1. Turn the Ignition switch 'ON/OFF' 3 TIMES and stay in the OFF position.
2. Push the Valet switch 6 times and hold it on the 6th push until **three** chirps with a long chirp is heard. Then release the valet switch. You are now in the Alarm feature 'III' programming mode.
- 3-a. Press and release the transmitter button 3 times, [3] LED flash, [3] siren/horn chirp to indicate you are in features "Channel 3 Timer Programming mode".
- 3-b. Press and release the transmitter * button 4 times, [4] LED flash, [4] siren/horn chirp to indicate you are in features "Channel 4 Timer Programming mode".
4. Press and hold the valet switch, the timer will immediately start.
5. When the desired interval has passed, release the valet switch. 1 long chirp for confirmation. (Set to any interval between 1 second and 2 minutes)

Note 1: If your built-in timer controls window/sunroof closure in your car, DO NOT change timer setting! Changing the value will adversely effect operation and may cause damage.

Note 2:





Momentary output: The momentary output selection will output a negative signal from the Channel 4 output immediately when the Channel 4 button is pressed and will continue until the button is released.

Latched output: The latched output selection will output a negative signal as soon as the Channel 3 (4) button is pressed and will continue until the button is pressed again.

Latched output / reset with ignition: The latched / reset with ignition output selection operates just like the latched output but will reset or stop when the ignition is turned on.


ALARM FEATURE “IV” PRORAMMING:

1. Turn the Ignition switch ‘ON/OFF’ 3 TIMES and stay in the OFF position.
2. Push the Valet switch **8** times and hold it on the **8th** push until four chirps with a long chirp is heard. Then release the valet switch. You are now in the Alarm feature ‘IV’ programming mode.
3. Press and release the transmitter button ‘A’ corresponding to the feature ‘A’ you want to program.

Press Transmitter Button	One Chirp / LED one pulse Factory Default Setting	Two Chirps / LED two pulses
1 	Exit the programming mode. (3 long chirps to confirm this exit.)	
2 	Override Without Password Pin Code / Press & hold  button for 4 seconds to delete pin code	Override With Password Pin Code / Password pin code programming
3 	“TEST” Mode for Zone 2 Hood & Zone 3 Door Pin Switch	“TEST” Mode for Zone 4 / the Optional Sensor connected to 4-pin plug.

Exit: Turn Ignition to the ‘ON’ position, or leave it for 15 seconds. 3 long chirps will confirm exit.

Password Pin Code Setup:


1. Turn the Ignition switch ‘ON/OFF’ 3 times and stay in OFF position.
2. Push the Valet switch **8** times and hold it on the **8th** push until **four** chirps with a long chirp is heard. Then release the valet switch. You are now in the Alarm feature ‘IV’ programming mode.
3. Press and release the transmitter  button once, [2] LED flash, [2] siren/horn chirp to indicate you are in features “Password Pin Code Programming mode”.
4. Within 15 seconds, begin to enter your chosen first 9ths digit by pressing and releasing the valet switch from 1 – 9 times.
5. Within 15 seconds of the last entered 10ths digit, turn the Ignition switch to the “ON” position.
6. Within 15 seconds, enter your chosen second 10ths digit by pressing and releasing the valet switch from 1 – 9 times.
7. Finish by turning the ignition switch to the “OFF” position.

If the new password code were accepted, the unit would report the newly entered code, by flashing the LED, first indicating the first digit code has been memorized, pause, and then the second digit code. The unit will report the new code three times with a one-second pause between each code.


Note: If 15 seconds of inactivity expire, or if the ignition switch is turned “ON” for more than 5 seconds during of the above steps, the unit will go back to the last successfully stored code. [3] long chirps will confirm password programming exit.

Delete Password Pin Code (Override Without Password Pin Code):

(Factory default setting)

1. Turn the Ignition switch ‘ON/OFF’ 3 times and stay in the OFF position.
2. Push the Valet switch **8** times and hold it on the **8th** push until **four** chirps with a long chirp is heard. Then release the valet switch.
3. Within 15 seconds, press and hold the transmitter  button for 4 seconds. One long chirp to confirm that the Password Pin Code has been deleted.

Example: To program the Password Code 92, you would:

1. Turn the Ignition switch ‘ON/OFF’ 3 times and stay in the OFF position.
2. Push the Valet switch **8** times and hold it on the **8th** push until **four** chirps with a long chirp is heard. Then release the valet switch. You are now in the Alarm feature ‘IV’ programming mode.
3. Press and release the transmitter  button once, [2] LED flash, [2] siren/horn chirp to indicate you are in feature “Password pin code programming mode”.
4. Within 15 seconds, press and release the valet switch 9 times.
5. Within 15 seconds of the last entered 10ths digit, turn the Ignition Switch to “ON” position.
6. Within 15 seconds press and release the valet switch 2 times.
7. Turn the Ignition Switch to the “OFF” position.

You will note the LED flashing nine times, pause and then flash two times, pause. This pattern will be repeated three times indicating the new code (92) has been accepted and stored in the memory.


Test Mode

In this test mode, this system can test the Zone 1 Warn Away Trigger / Zone 2 Instant ground trigger / Zone 3 Door trigger and the Zone 4 optional sensor sensitivity. The installer can save time to test optional sensor sensitivity and sensor without using traditional arming/disarming procedures to test sensors.

Enter:


1. Turn the Ignition switch 'ON/OFF' 3 TIMES and stay in the OFF position.
2. Push the Valet switch **8** times and hold it on the **8th** push until **four** chirps with a long chirp is heard. Then release the valet switch. You are now in the Alarm feature '**IV**' programming mode.

3-a. Test the Zone 2 Instant Ground Trigger & Zone 3 Door Trigger:

Press and release the transmitter  button once. [1] LED flash, [1] siren/horn chirp to indicate you are in Zone 2 / instant ground trigger and Zone 3 / Door trigger test mode.



Trigger sensor	Siren chirps
Zone 2 / Instant Ground trigger (H7/2 Blue/White wire)	2
Zone 3 / Door trigger (H7/3 Violet & H7/5 Green Wire)	3

3-b. Test the Zone 1 / 2 Shock Sensor (Connected to **H2** 4 Pin Plug):

Press and release the transmitter  button again. [2] LED flash, [2] siren/horn chirps to indicate you are in shock sensor (connected to **H2** 4 pin plug) test mode.

1. Activate the warn-away (first stage optional sensor). The system will emit a short chirp.
2. Activate the full alarm (second stage optional sensor). The system will emit a long chirp.
3. Continue to test the optional sensor until you reach the proper sensitivity.

Return To Factory Default Setting:

1. Turn the ignition ON then OFF 3 TIMES and stay in the OFF position.
2. Push the Valet switch **12** times and hold it on the **12th** push until **six** chirps with a long chirp is heard. Then release the valet switch. You are now in "Return to Factory Default Setting" programming mode.
3. Press the  and  buttons at the same time on the transmitter together for 5 seconds, there will be a confirmation six chirp with 3 long chirp to confirm the system Alarm Feature I & II & III & IV Programming all returns to factory default setting.

This device complies with part 15 of the FCC rules. 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 interference that may cause undesired operation.

