

Hornet 740T
Owner's Guide

[Limited Lifetime Consumer Warranty]

For a period of one calendar year from the date of purchase of this auto-security device, Directed Electronics, Inc. promises to the ORIGINAL PURCHASER to repair or replace (with a comparable reconditioned model), free of cost, any electronic control module which proves to be defective in workmanship or material under normal use, SO LONG AS THE SYSTEM WAS SOLD, INSTALLED, AND SERVICED BY A PROFESSIONAL AUTO INSTALLER, AND REMAINS IN THE CAR IN WHICH THE SYSTEM WAS ORIGINALLY INSTALLED. If warranty service is necessary you must have a clear copy of your sales receipt containing all of the information shown on the following page.

After the first calendar year, from the date of purchase of this auto-security device, Directed Electronics, Inc., promises to the ORIGINAL PURCHASER to repair or replace (with a comparable reconditioned model) any electronic control module which proves to be defective in workmanship or material under normal use **FOR A CHARGE OF \$45.00**, SO LONG AS THE SYSTEM WAS SOLD, INSTALLED, AND SERVICED BY A PROFESSIONAL AUTO INSTALLER, AND REMAINS IN THE CAR IN WHICH THE SYSTEM WAS ORIGINALLY INSTALLED. If warranty service is necessary you must have a clear copy of your sales receipt containing all of the information shown on the following page.

This warranty contains the entire agreement relating to warranty and supersedes all previous and contemporaneous representations or understandings, whether written or oral. IN ANY EVENT, DIRECTED ELECTRONICS, INC. IS NOT LIABLE FOR THE THEFT OF THE VEHICLE AND/OR ITS CONTENTS.

This warranty is void if the product has been damaged by accident, unreasonable use, neglect, improper service or other causes not arising out of defects in materials or construction. This warranty is nontransferable and does not apply to any unit that has been modified or used in a manner contrary to its intended purpose and does not cover batteries. The unit in question must be returned to the manufacturer, postage prepaid. This warranty does not cover labor costs for the removal, diagnosis, troubleshooting or reinstallation of the unit. For service on an out-of-warranty product a flat rate fee by model is charged. Contact your authorized dealer to obtain the service charge for your unit.

These systems are a deterrent against possible theft. Directed Electronics, Inc. is not offering a guarantee or insuring against the theft of the automobile or its contents and disclaims any liability for the theft of the vehicle and/or its contents. Directed Electronics does not authorize any person to create for it any other obligation or liability in connection with this security system.

TO THE MAXIMUM EXTENT ALLOWED BY LAW, ANY AND ALL WARRANTIES ARE EXCLUDED BY THE MANUFACTURER AND EACH ENTITY PARTICIPATING IN THE STREAM OF COMMERCE THEREWITH. THIS EXCLUSION INCLUDES BUT IS NOT LIMITED TO THE EXCLUSION OF ANY AND ALL WARRANTY OF MERCHANTABILITY AND/OR ANY AND ALL WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND/OR ANY AND ALL WARRANTY OF NON-INFRINGEMENT OF PATENTS, IN THE UNITED STATES OF AMERICA AND/OR ABROAD. NEITHER THE MANUFACTURER OR ANY ENTITIES CONNECTED THEREWITH SHALL BE RESPONSIBLE OR LIABLE FOR ANY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO ANY CONSEQUENTIAL DAMAGES, INCIDENTAL DAMAGES, TOWING, REPAIR, REPLACEMENT, DAMAGES FOR LOSS OF TIME, LOSS OF EARNINGS, COMMERCIAL LOSS, LOSS OF ECONOMIC OPPORTUNITY AND THE LIKE. NOTWITHSTANDING THE ABOVE, MANUFACTURER DOES OFFER A LIMITED WARRANTY TO REPLACE OR REPAIR THE CONTROL MODULE AS DESCRIBED ABOVE. Some states do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

\$2,500 Limited Theft Protection Guarantee

Terms and Conditions. Available only in the USA. In the event that your vehicle is stolen and not recovered, Directed Electronics, Inc. will refund to the original purchaser of the Avital system up to \$2,500 of your insurance deductible. This vehicle protection guarantee is valid only if:

- (1) The installation was performed by an authorized Avital dealer.
- (2) The warranty registration card is completed and mailed within ten (10) days of purchase.
- (3) At the time of the theft, the system was fully functional and not in "valet® mode."
- (4) The vehicle and its contents were insured at the time of the theft.
- (5) The insurance company and the police have been notified and a written stolen vehicle report was issued by the Police Department.
- (6) No less than thirty (30) days **after** the police report was issued, you mail Directed Electronics, Inc. clear photocopies of the following documents:
 - a. Proof of Purchase OR provide the system model and name of the company that installed the system.
 - b. The stolen vehicle report issued by the police.
 - c. Insurance coverage documents for the stolen vehicle, clearly showing all the details, including the vehicle identification number and the insurance deductible amount.
 - d. A dated declaration signed by you the owner of the vehicle, attesting that the vehicle has been stolen for more than thirty (30) days and has not been recovered.

This vehicle theft protection is effective for one (1) year from the date of purchase and is limited to one claim. This vehicle theft protection guarantee is valid only for the theft of the entire vehicle and specifically excludes any other considerations, including, but not limited to, damage caused to the vehicle, theft of parts, contents or any other consequential damages. Once Avital Technologies verifies that all the above listed terms and conditions have been met, a check for the insurance deductible (up to \$2,500) will be mailed within thirty (30) days.

Make sure you have all of the following information from your dealer:

A clear copy of the sales receipt, showing the following:

- Date of purchase
- Your full name and address
- Authorized dealer's company name and address
- Type of alarm installed
- Year, make, model and color of the automobile
- Automobile license number
- Vehicle identification number
- All security options installed on automobile
- Installation receipts

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What is Included

- A control module
- Two 3-button remotes
- A zone 2 impact sensor on-board the control module
- A high-powered siren
- A fault-proof starter interrupt on-board the control module
- An LED system status indicator
- A push-button Valet® switch

Important Information

Congratulations on the purchase of your state-of-the-art vehicle security system. This system has been designed to provide years of trouble-free operation. By carefully reading this guide prior to using your system, you will maximize the use of this product and its features.

System Maintenance

Your vehicle security system has no specific maintenance requirements. The remote is powered by a lightweight 3-volt lithium battery that will last approximately one year under normal use. When the battery begins to weaken, the LED on the remote will dim and you will notice reduced operating range when using the

remote. To access the battery for replacement, remove the rear cover of the remote with a small, flat-blade screwdriver.

Your Warranty

Your warranty card must be returned and the barcode serial number must not be removed. If the warranty card is not returned, no warranty will be honored on your unit. It is also necessary to keep your proof of purchase, which reflects that the product was installed by an authorized dealer. Make sure you receive the warranty card from your dealer.

FCC/ID Notice

This device complies with Part 15 of FCC rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesirable operation.


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

[Remote Functions]

This system is programmable, making it possible to assign any remote button to any specific receiver function. The remote initially comes programmed with Standard Configuration, but may also be customized by an authorized dealer. The buttons in all of the instructions in this manual correspond to a Standard Configuration remote.

Standard Configuration

Button

The arm/disarm/panic functions are usually controlled by .

AUX Button

An optional accessory function (such as trunk release), remote-controlled silent arm/disarm, and remote-controlled Valet® are usually controlled by **AUX**. (Silent arm/disarm and remote-controlled Valet® work by pressing **AUX** for less than one second. An optional accessory can be controlled by pressing and holding **AUX** for 1.5 seconds.)




This accessory output controls _____.

and **AUX** Buttons

Press these two buttons simultaneously to activate another optional accessory.

This accessory output controls _____.


Button

If you are threatened in or near your vehicle, you can press  for 1.5 seconds to trigger Panic Mode on your security system and attract attention. The siren will sound and the parking lights will flash for 30-seconds. To stop Panic Mode at any time, press , or  on the remote.

[Using Your System]

The remote buttons indicated in this manual correspond to a standard configuration remote, unless otherwise specified.

Arming

You can arm the security system by pressing  for one second. When the system arms, you will hear a short siren sound (chirp) and the parking lights will flash once. If the power door locks are controlled by the system, the doors will also lock. Once armed, the LED system status indicator will flash once per second to indicate that the system is actively protecting your vehicle. If you hear a second chirp after arming and notice that the LED system status indicator is flashing in a grouped pattern, this signals Bypass Notification. Bypass Notification is described in detail in the Diagnostics section of this manual.

Your security system can also be programmed for Passive Arming. With Passive Arming, the system automatically arms itself 30 sec-


onds after the ignition has been turned off and the last door has been closed. During the 30-second Passive Arming countdown, the LED system status indicator will flash twice as fast as it does when the system is armed. If the system is programmed for Passive Arming, care must be taken to prevent the keys from being locked in the vehicle.

NOTE: If any protected entry point, such as a door or switch-protected trunk or hood, is open, Passive Arming will not engage. Additionally, each time a sensor is triggered during the Passive Arming countdown, the countdown starts over.

Arming your security system protects your vehicle to the following degrees:

- Light impacts trigger a **warn-away** response, causing the siren to chirp and the parking lights to flash for a few seconds.
- Heavy impacts trip a **trigger sequence**, which consists of the siren sounding continuously and the parking lights flashing for 30 seconds.
- If a door is opened, the siren immediately starts chirping and the parking lights start flashing to provide an instant response. Three seconds later, the siren output changes to a continuous blast. This two-stage **progressive response** allows you time to disarm the security system with your remote, in case the door is inadvertently opened while the system is armed.
- Turning on the ignition key triggers the same two-stage progressive response as opening a door.
- The fault-proof starter interrupt prevents the vehicle's starter from cranking.

Disarming

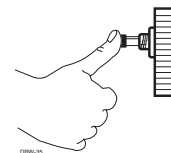
Press  to disarm the security system when it is already armed. If the power locks are controlled by the system, the doors will also unlock. Disarming is confirmed when the parking lights flash twice and the siren emits two chirps. The LED system status indicator will also stop flashing. The siren chirping either four or five times when disarming indicates Tamper Alert, which is described in the Diagnostics section of this guide.

Disarming Without a Remote

If your remote is lost or damaged, you can manually disarm your vehicle security system. To disarm the system without a remote, you must have the vehicle's ignition key and know where the Valet[®] switch is located. Be sure to check with your installer at the time of installation for the location of the Valet[®] switch.




To disarm the security system, turn the ignition key on and press the Valet[®] switch within 15 seconds. The system should



now disarm. If the system does not disarm, you may have waited too long to press the Valet[®] switch; turn the ignition off and repeat the process.

Location of Valet[®] Switch _____

Panic Mode

If you are threatened in or near your vehicle, you can press ***** for 1.5 seconds to trigger Panic Mode on your security system and attract attention. The siren will sound and the parking lights will flash for 30 seconds. To stop the Panic Mode at any time, press ***** or  again.

Remote-Controlled Silent Arm/Disarm

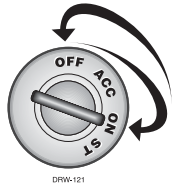
Use remote-controlled silent arm/disarm to temporarily turn off the arm or disarm chirps by briefly pressing **AUX** before either arming or disarming. The confirmation chirp(s) will then be eliminated for that one operation only. To permanently turn off the arm and disarm chirps, contact your installation dealer.

NOTE: The warn-away response to lighter impacts is bypassed if the system is armed using remote-controlled silent arm/disarm. This ensures that the siren does not chirp in an environment where you do not want chirps to be emitted. The system is still capable of being triggered by heavier impacts; only the warn-away response generated by light impacts is bypassed.

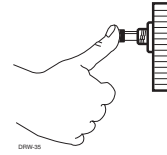
Valet® Mode

Valet® Mode prevents your security system from arming and triggering either automatically or with the remote. In Valet® Mode, the system will not arm, but all convenience functions (door locks, trunk release, etc.) remain operational. This feature is useful when washing or servicing your vehicle. You can access Valet® Mode either manually or from the remote.

To enter or exit Valet® Mode with the Valet® switch:







1. Turn the ignition on.
2. Turn the ignition off.
3. Press and release the Valet® switch within 10 seconds.



The LED system status indicator will light solidly if you are entering Valet® Mode and will turn off if you are exiting Valet® Mode.

Remote-Controlled Valet®

You can also enter or exit Valet® Mode by using the remote:

1. Open any vehicle door.
2. Press / .
3. Press **AUX**.
4. Press /  again.

The LED system status indicator will light solidly if you have entered Valet® Mode and will turn off if you have exited Valet® Mode.

Nuisance Prevention® Circuitry

Your security system has Nuisance Prevention Circuitry™ (NPC™) to prevent annoying false alarms. This circuitry is designed to prevent repetitive trigger sequences due to faulty door pinswitches or environmental conditions such as thunder, jackhammers, airport noise, etc.

Here's how it works: If the alarm is triggered by the same sensor or switch three times within a 60 minute period, your system inter-

prets this pattern of triggers as false alarms. After the third trigger, the NPC™ ignores, or bypasses, that sensor or switch (along with any other sensors or switches sharing the same zone) for 60 minutes. If the bypassed sensor is triggered again while it is already being bypassed, the 60-minute bypass period will start over. This ensures that a sensor that is continually being triggered will remain bypassed.

The vehicle doors are protected differently by NPC™. If your security system is triggered by an open door for three, full 30-second cycles (one and one half minutes), the system will bypass the doors until the trigger ceases.

NOTE: Arming and disarming the system does not reset the NPC™. The only ways to reset a bypassed zone are for that zone not to be triggered for 60 minutes or to turn the ignition key on. When testing your system, it is important to remember that NPC™ can cause zones to be bypassed and appear to not work. If five chirps are heard when disarming the system, NPC™ has been engaged. To clear the NPC™ memory, simply turn the ignition key on.

[Diagnostics]

The microprocessor at the heart of your system has the ability to constantly monitor all of the switches and sensors connected to it. It can detect any faulty switches or sensors and prevent them from disabling the entire system. It can also record and report any triggers that occur when you are away from your vehicle.

Arming Diagnostics

If the system is armed at the same time that an input is active (door opening, sensor triggering, etc.), you will hear one chirp to indicate arming and a second chirp a few seconds later to indicate Bypass Notification. A Bypass Notification chirp means that the system ignores the input that was active when the system was armed, until that input ceases. Three seconds after that input ceases, the system will resume normal monitoring. For example, if your vehicle has an interior light exit delay and you arm the system before the light turns off, you may hear a Bypass Notification chirp. Three seconds after the light turns off, however, normal monitoring resumes.

NOTE: Bypass Notification does not occur when the system is in remote-controlled silent arm/disarm mode or if the chirps have been programmed not to sound.

Disarming Diagnostics

Your system has a Tamper Alert feature that notifies you of system triggers that occur while you are away from your vehicle. If you hear four chirps when you disarm, this indicates that the system was triggered in your absence. If you hear five chirps when you disarm, this indicates that a specific zone was triggered so many times that the NPC™ has bypassed that zone. In both cases, the pattern of the flashing LED system status indicator indicates which zone was triggered (see Table of Zones). The LED does not, however, report when warn-away responses have activated; it only reports triggered sequences. The system retains this information in

its memory and will continue to chirp four or five times each time the system is disarmed, until the next time the ignition is turned on.



Table of Zones

A zone is represented by the number of LED flashes used by the system to identify a particular type of input. Standard input assignments are listed in the following table, along with spaces to write in any optional sensors or switches that you have had installed.

ZONE (Number of LED Flashes)	DESCRIPTION	DEALER-INSTALLED OPTIONS
1	Instant trigger for optional sensor, hood or trunk pins	
2	A heavier impact detected by the on-board impact sensor	
3	Door switch trigger	
5	Ignition trigger	

NOTE: The LED does not report when the warn-away response has been activated; it only reports triggered sequences.

[Stealth Coding™ Technology]

The receiver and remote use mathematical formulas called algorithms to change their codes each time the remote is used. This Stealth Coding™ Technology has been developed to increase the security of the unit. By following this set code sequence, the receiver and remote stay synchronized, even if the remote is used out of range of the vehicle. If, however, the remote is pressed many times out of range, or the battery is removed, the remote may get temporarily out of sync and fail to operate the system. To resynchronize the remote, simply press / several times within range of the vehicle. The system will automatically resynchronize and the remote will respond normally.

[High Frequency]

Your system transmits and receives at 434 MHz. This provides a cleaner spectrum with less interference and a more stable signal. Enjoy a phenomenal increase in range, even in areas with high radio interference.

[Programming Options]

Programming options control your system's normal, operational set-up. Most options do not require additional parts, but some may require installation labor.

This system's programming options are listed below, with the factory default settings in **bold**:

- **Active arming** (only with the remote) or passive arming (automatic arming 30 seconds after the last vehicle door is closed).
- **Active door locking** (only when arming with the remote) or passive door locking (selectable only when Passive Arming has been programmed).
- Arming and disarming confirmation siren chirps can be programmed **on** or off.
- Ignition controlled door lock feature, **on** or off. With this feature on, the doors will lock three seconds after the ignition key is turned on, and unlock when the ignition is turned off. The system also prevents the doors from locking when the ignition is turned on while any vehicle door is open.

[Security & Convenience Expansions]

Listed below are some of the many expansion options available for use with your system. Please consult your dealer for a detailed explanation of all the available options.

Audio Sensor: Metal on glass, glass cracking, and breaking glass produce distinctive acoustic signatures. The 506T audio sensor uses a microphone to detect these sounds, and then analyzes them with proprietary acoustic software to determine if the glass has been tampered with or broken.

Backup Battery: The 520T Backup Battery ensures that the system stays armed, triggers the alarm and keeps the optional starter interrupt active if main battery power is disconnected.

Field Disturbance Sensor: An invisible dome of coverage is established by the 508D "radar" sensor. Your security system will respond to any intrusions into this field by initiating the triggered sequence.

Power Locks: This system offers lock outputs that can control most manufacturers' power door lock systems. For other systems, additional parts may be required.

Power Trunk Release: The **AUX** output of the system can operate a factory power release for the vehicle's trunk or hatch. An optional relay is required. If the factory release is not power-activated,

then Directed Electronics, Inc.'s 522T trunk release solenoid can be added in most cases.

Power Window Control: Automatic power window control is provided with the 529T and 530T systems. These options operate power windows, by rolling them up, down, or both up and down. The 530T also offers one-touch switch operation.

Valet® Start System: For the ultimate in convenience, the Valet® Start System can start your vehicle, monitor engine functions and activate your climate control system with a push of a button! Over-rev protection, open-hood lockout, brake pedal shutoff and automatic timer shutoff are included. (This option is available only for fuel-injected, automatic-transmission vehicles.)

[Installation Options]

Installation options may require additional parts or labor. Please consult your dealer.

Interior Light Illumination: The interior domelight can be configured to illuminate for 30 seconds after the alarm is disarmed. If the system is rearmed during that 30-second period, the interior light illumination will terminate until the alarm is disarmed again. This option may require a relay to be added to some vehicles.

[Glossary of Terms]

Control Module: The "brain" of your security system. Usually hidden underneath the dash area of the vehicle. It houses the micro-processor that monitors your vehicle and controls all of the security system's functions.

Fault-Proof Starter Interrupt: Located on-board the control module, this is an automatic switch controlled by the security system that prevents the starter from cranking whenever the system is armed. The vehicle is never prevented from cranking when the system is disarmed, in Valet® Mode, or if the starter interrupt fails.

Impact Sensor: A dual-stage shock sensor, located on-board the control module, that detects impacts to the vehicle.

Input: Any physical connection to the security system. An input can be provided through a sensor, pinswitch or by existing systems in the vehicle, such as ignition or courtesy lights.

LED: A red light mounted inside the vehicle, at a location determined by the installer. The LED indicates the status of your system and also reports triggers and faults in the system or sensors.

Siren: A noise generating device, usually installed in the engine compartment of the vehicle. The siren generates the chirps and tones heard when the system is triggered.

Remote: A hand-held, transmitter control that operates the various functions of the security system.

Trigger or Triggered Sequence: The "setting off" or "tripping" of the alarm. A triggered sequence consists of the siren sounding and the parking lights flashing for 30 seconds.

Valet® Switch: A small, push-button switch mounted inside the vehicle, at a location determined by the installer. This switch is used to override the alarm when a remote is lost or damaged, or can be used to put the system into Valet® Mode.


Warn-Away Response: Light impacts to the vehicle generate the warn-away response, which consists of several seconds of siren chirps and flashing parking lights.

Zone: A zone is a separate input that the alarm recognizes as unique. Each input to the system is connected to a particular zone. Two or more inputs may share the same zone.


Cut along dotted line and fold for a quick and easy reference to keep in your purse or wallet.

QUICK REFERENCE GUIDE

To arm using your remote:

- Press  on your remote for one second. When the system arms, you will hear a short siren sound, or chirp, and see the parking lights flash once. If the vehicle's power door locks are controlled by the system, the doors will lock.

Disarming:

- Press  again. You will hear two chirps, and the parking lights will flash twice. If the power door locks are controlled by the system, the doors will unlock.


Disarming without a remote:

- Turn on the ignition. Press the Valet® switch within 15 seconds. The system should now disarm. If it does not disarm, you may have waited too long to press the Valet® switch; turn the ignition off and on and try again.

Remote-controlled silent arm/disarm:

- Press **AUX** briefly before arming or disarming, and the confirmation chirp(s) will be eliminated for that one operation only.



Panic Mode:

- Press ***** for 1.5 seconds, and you will enter Panic Mode. The siren will sound and the parking lights will flash for 30 seconds. To stop Panic Mode at any time, press ***** or  on the remote again.

To enter or exit Valet® Mode with the Valet® switch:

- Turn the ignition to the ON position, then turn to the OFF position. Press and release the Valet® switch within 10 seconds.

Remote-controlled Valet®:

- You can also enter or exit Valet® Mode by using the remote. First, open any vehicle door. Then press . Press **AUX**. Press  again. The LED system status indicator will light solidly if you have entered Valet® Mode and will turn off if you have exited Valet® Mode.

The company behind this system is Directed Electronics, Inc.

Since its inception, Directed Electronics, Inc. has had one purpose, to provide consumers with the finest vehicle security and car stereo products and accessories available. The recipient of nearly 100 patents and Innovations Awards in the field of advanced electronic technology, Directed Electronics, Inc. is ISO 9001 registered.

Quality Directed Electronics products are sold and serviced throughout North America and around the world.

Call **(800) 274-0200** for more information about our products and services.



DEI is an ISO 9001 registered company.

Directed Electronics, Inc. is committed to delivering world class quality products
and
services that excite and delight our customers.

driven to excel
Directed[®]
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G740T 09-04



Model 740T

Installation Guide

driven to excel
Directed[®]
ELECTRONICS, INC.

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Hornet®, Bitwriter™, Stealth Coding Technology™, Doubleguard®, ESP™, FailSafe®, Ghost Switch™, Learn Routine™, Nite-Lite®, Nuisance Prevention Circuitry®, NPC®, Revenger®, Silent Mode™, Soft Chirp®, Stinger®, Valet®, Vehicle Recovery System®, VRS®, and Warn Away® are all Trademarks or Registered Trademarks of Directed Electronics, Inc.

what is included

- The control module
- Two 3-button remote transmitters
- The plug-in LED system status indicator
- The plug-in Valet/Program switch
- An on-board zone 2 impact sensor
- A high-powered siren
- The 12-pin primary harness
- The 3-pin door lock harness
- The plug-in starter interrupt harness

primary harness (H1) wire connection guide

H1/1	ORANGE	(-) 500 mA GROUND-WHEN-ARMED OUTPUT
H1/2	WHITE	(+/-) SELECTABLE LIGHT FLASH OUTPUT
H1/3	WHITE/BLUE	(-) 200 mA CHANNEL 3 VALIDITY OUTPUT
H1/4	BLACK/WHITE	(-) 200 mA INTERIOR LIGHT ILLUMINATION OUTPUT
H1/5	GREEN	(-) DOOR TRIGGER INPUT, ZONE 3
H1/6	BLUE	(-) MULTIPLEX TRIGGER INPUT, ZONE 1
H1/7	VIOLET	(+) DOOR TRIGGER INPUT, ZONE 3
H1/8	BLACK	(-) CHASSIS GROUND INPUT
H1/9	YELLOW	(+) IGNITION INPUT, ZONE 5
H1/10	BROWN	(+) SIREN OUTPUT
H1/11	RED	(+)12V CONSTANT POWER INPUT
H1/12	RED/WHITE	(-) 200 mA CHANNEL 2 VALIDITY OUTPUT

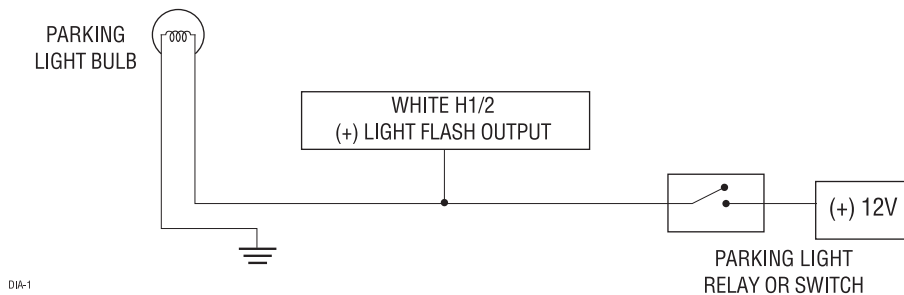
H1/1 ORANGE (-) ground-when-armed 500 mA output

This wire supplies (-) ground as long as the system is armed. This output ceases as soon as the system is disarmed. It can be used to turn on an optional sensor or to control an optional accessory, such as a window module or pager.

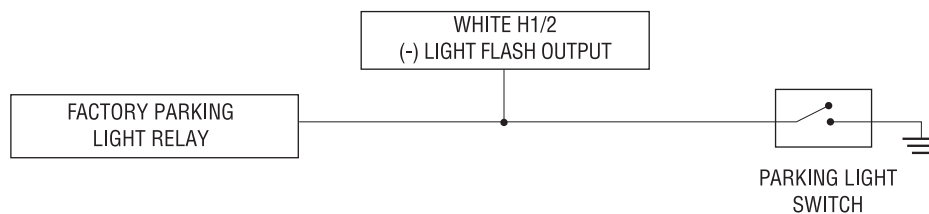
H1/2 WHITE (+/-) selectable light flash output

As shipped, this wire should be connected to the (+) parking light wire. If the light flash polarity jumper inside the control module is moved to the opposite position (see *Internal Programming Jumper* section of this guide), this wire supplies a (-) 200 mA output. This is suitable for driving (-) light control wires in Toyota, Lexus, BMW, some Mitsubishi, some Mazda, and other model cars.

(+) Positive Light Flash Output



(-) Negative Light Flash Output



NOTE: For parking light circuits that draw 10 amps or more, the internal jumper must be switched to a (-) light flash output. (See the *Internal Programming Jumper* section of this guide.) **P/N 8617** or a standard automotive SPDT relay must be used on the H1/2 light flash output harness wire.

H1/3 WHITE/BLUE (-) channel 3 output

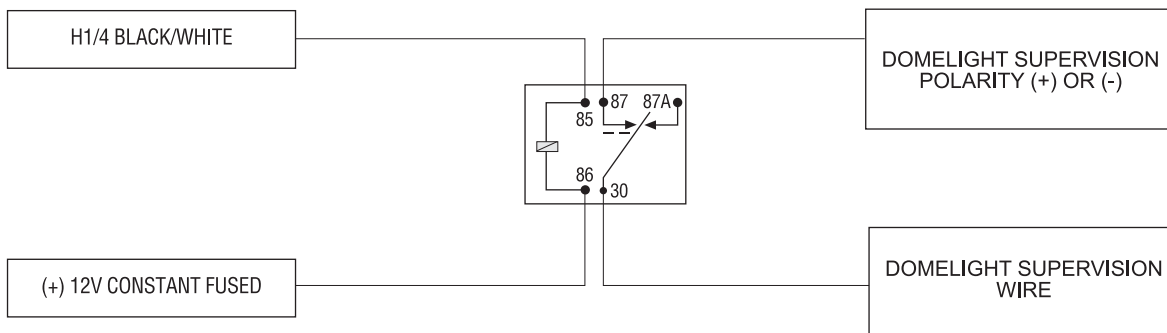
This wire provides a (-) 200 mA output whenever the transmitter code controlling Channel 3 is received. This output will continue as long as that transmission is received. Use for options such as **551T** Valet® Start system, **529T** or **530T** power window controllers, etc.

IMPORTANT! Never use this wire to drive anything except a relay or a low-current input! The transistorized output can only provide 200 mA of current, and connecting directly to a solenoid, motor, or other high-current device will cause it to fail.

H1/4 BLACK/WHITE (-) interior light illumination output

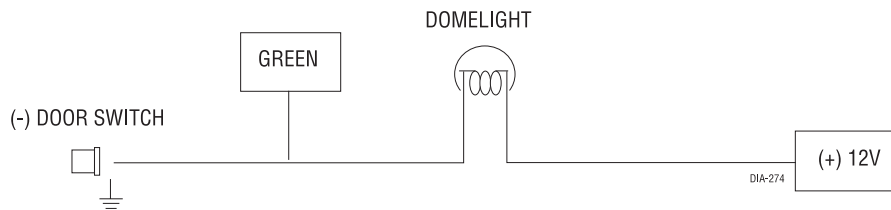
Connect the H1/4 BLACK/WHITE wire to an optional relay for interior light illumination (p/n **8617** or standard automotive SPDT relay).

IMPORTANT! This output is only intended to drive a relay. It cannot be connected directly to the domelight circuit, as the output is not able to support the current draw of one or more light bulbs.



H1/5 GREEN (-) door trigger input, zone 3

Most vehicles use negative door trigger circuits. Connect the green wire to a wire which shows ground when any door is opened. In vehicles with factory delays on the domelight circuit, there is usually a wire that is unaffected by the delay circuitry. This wire will report Zone 3.



H1/6 BLUE (-) multiplex trigger input, zone 1

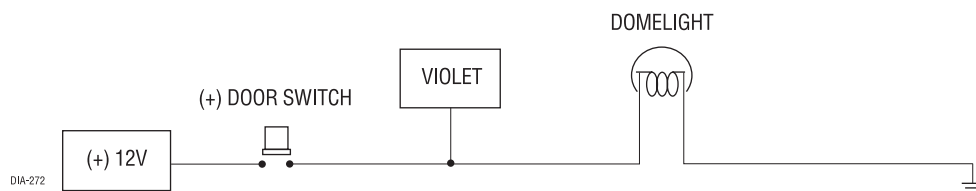
This wire will respond to a negative input with an instant trigger. Inputs shorter than 0.8 seconds will trigger the Warn Away response, while triggers longer than 0.8 seconds will instantly trigger the full alarm cycle. This wire is ideal for hood and trunk pins and will report on Zone 1. This wire can also be used with Directed Electronics 506T Glass Breakage Sensor, as well as other Directed Electronics single stage sensors.

The H1/6 BLUE multiplex trigger wire can be used to shunt sensors during operation, using the auxiliary channels. When any of the auxiliary channels are transmitted, the H1/6 BLUE wire monitors for a ground. If ground

is detected within 5 seconds of transmission, the sensors and the multiplex trigger input on the BLUE wire will be shunted until 5 seconds after the ground is removed. This allows the customer to access the trunk, remote start the vehicle, or roll the windows down without first disarming the alarm. (See *Bypassing Sensor Inputs* section of this guide.)

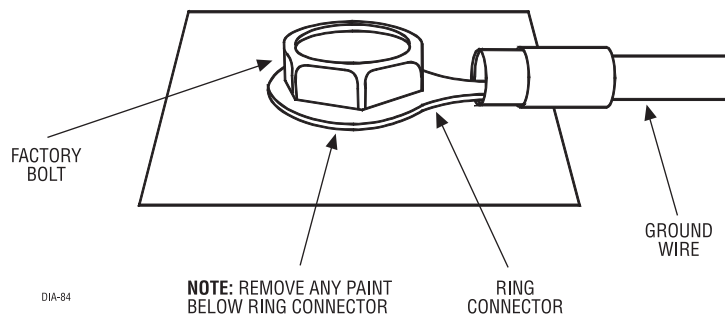
H1/7 VIOLET (+) door trigger input, zone 3

This wire is used in vehicles that have a positive (+) switched dome light circuit. Connect the violet wire to a wire that shows (+)12V when any door is opened, and ground when the door is closed. This wire will report Zone 3.

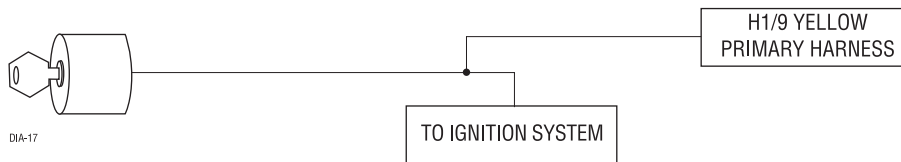


H1/8 BLACK (-) chassis ground connection

Remove any paint and connect this wire to bare metal, preferably with a factory bolt rather than your own screw. (Screws tend to either strip or loosen with time.) We recommend grounding all your components, including the siren, to the same point in the vehicle. See the following diagram.

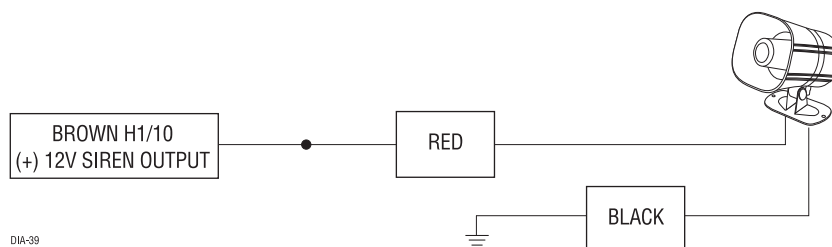


Connect this wire to an ignition source. This input must show (+)12V with the key in run position and during cranking. Make sure that this wire cannot be shorted to the chassis at any point. This wire will report Zone 5.



H1/10 BROWN (+) siren output

Connect this to the red wire of the siren. Connect the black wire of the siren to (-) chassis ground, preferably at the same point you connect the control module's black ground wire.



H1/11 RED (+)12V constant power input

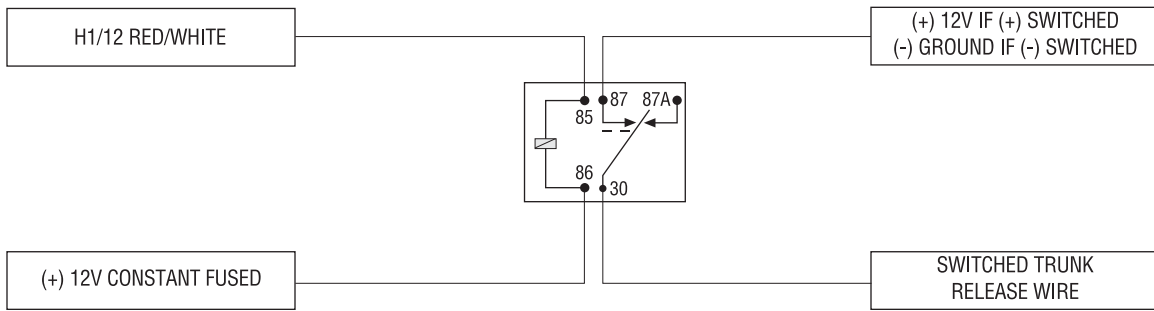
Before connecting this wire, remove the supplied fuse. Connect to the positive battery terminal or the constant 12V supply to the ignition switch.

NOTE: Always use a fuse within 12 inches of the point you obtain (+)12V power. Do not use the 15A fuse in the harness for this purpose. This fuse protects the module itself.

H1/12 RED/WHITE channel 2, (-) 200mA output

When the system receives the code controlling Channel 2, for longer than 1.5 seconds, the red/white wire will supply an output as long as the transmission continues. This is often used to operate a trunk/hatch release or other relay-driven function.

IMPORTANT! Never use this wire to drive anything but a relay or a low-current input! The transistorized output can only supply 200 mA of current. Connecting directly to a solenoid, motor, or other high-current device will cause it to fail.



door lock harness (H2) wire connection guide

H2/1	GREEN	(-) LOCK, (+) UNLOCK OUTPUT
H2/2	OPEN	UNLESS USING 451M
H2/3	BLUE	(+) LOCK, (-) UNLOCK OUTPUT

This security system can control two common power door lock types without any additional parts! With certain vehicles, or if an actuator is to be installed, either a **451M** Door Lock Relay Satellite or two relays will be required.

type A: positive (+) 12V pulses from the switch to the factory relays

This security system can control Type A door locks directly, with no additional parts. The switch will have three wires on it, and one will test (+)12V constantly. The others will alternately pulse (+)12V when the switch is pressed to the lock or unlock position.

If you cannot get to the switch, and you find a set of wires that pulse (+)12V alternately on lock and unlock, you must take care to ensure that it is not a Type C direct-wire system.

IMPORTANT! *If you mistake a Type C direct-wired system for a Type A positive-pulse system, the module will be damaged!*

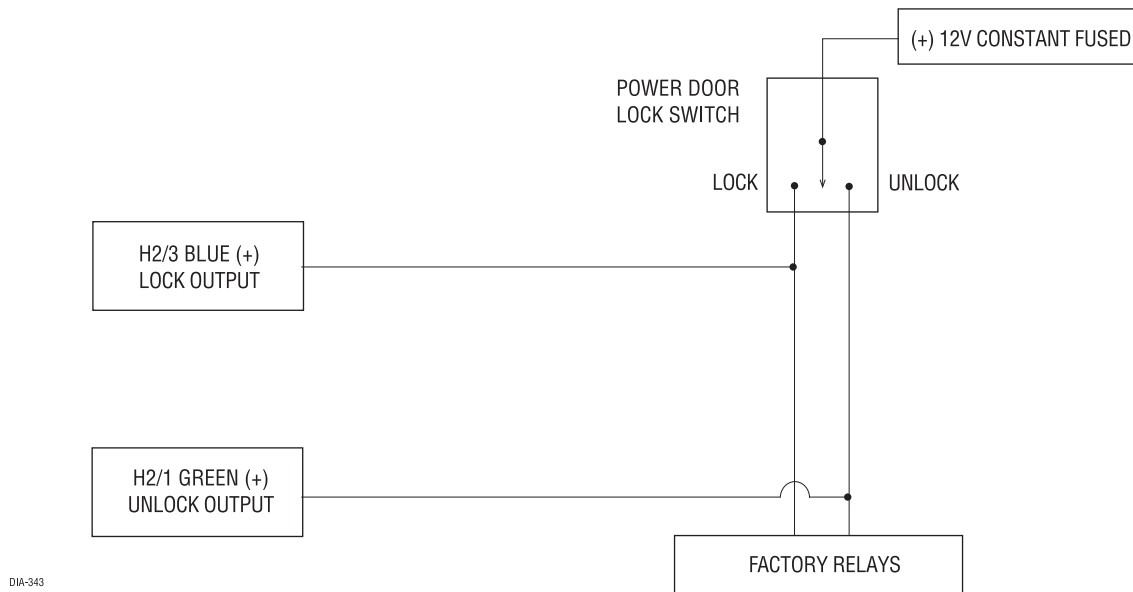
Here is a test: Cut the wire which pulses (+)12V on lock, and then operate the switch to unlock.

- If all doors unlock, the vehicle uses a Type A system.
- If you lose all door lock operation in both directions, you are operating the master switch in a Type C system.
- If one or more, but not all, motors stop operating, you have cut a wire leading directly to one or more motors.

Reconnect the wire and look for another wire.

Many domestically-made GM vehicles use Type A locks. However, many more GM vehicles are Type C than in previous years. The full-size pickups (1989-later), many of the S10 Blazers, the Corvette, '95 Cavalier/Sunfire 1993 and newer, Camaro/Firebird all use Type C door locks, and cannot be controlled without a 451M! Almost all domestically-built Fords are Type C. Ford builds almost no Type A systems. Chrysler builds both Type A and Type C, so test carefully.

IMPORTANT! Remember that the functions of these wires reverse between Type A and Type B!

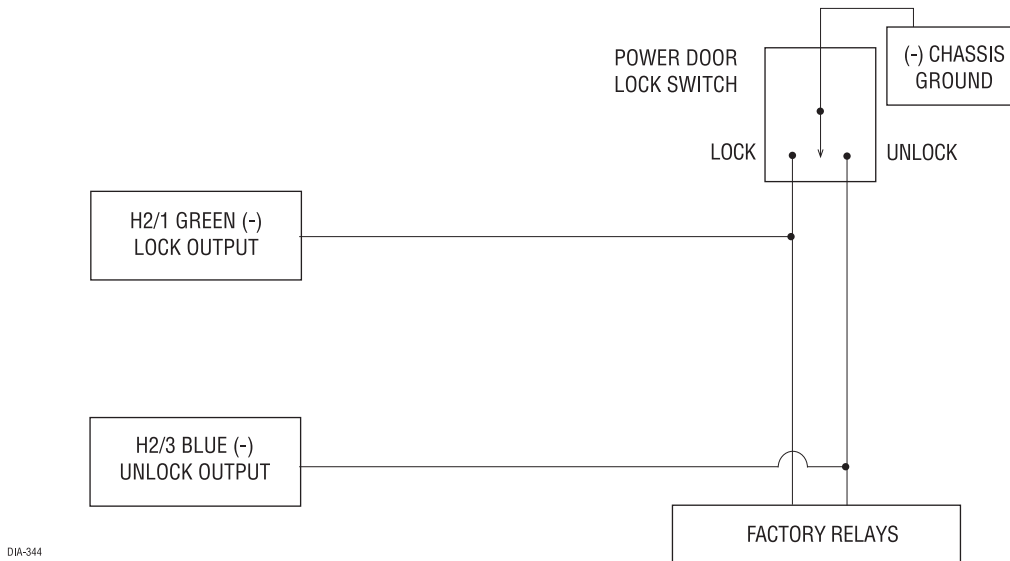


type B: negative (-) pulses from the switch to the factory relays

This system is common in many Toyota, Nissan, Honda, and Saturn models, as well as Fords with remote-controlled door lock/unlock (some other Fords also use Type B).

The switch will have three wires on it, and one wire will test ground all the time. One wire will pulse (-) when the switch locks the doors, and the other wire will pulse (-) when the switch unlocks the doors. This type of system is difficult to mistake for any other type.

IMPORTANT! Remember that the functions of these wires reverse between Type A and Type B!

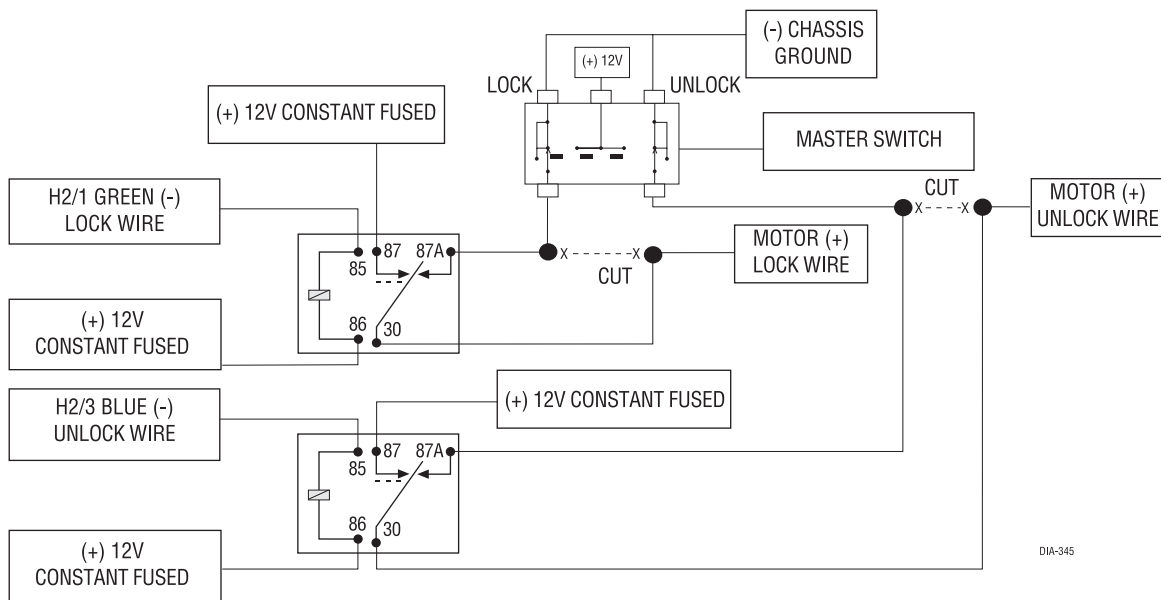


type C: reversing polarity

Interfacing with a reversing polarity system requires either two relays or one **451M** (not included).

It is critical to identify the proper wires and locate the master switch to interface properly. Locate wires that show voltage on lock and unlock. Cut one of the suspect wires and check operation of the locks from both switches. If one switch loses operation in both directions and the other switch operates in one direction only, you have located one of the target wires. The switch that lost all operation is the master switch. If one switch works both directions and the other switch works only one direction, you have a Type A system. If both switches still operate, but one or more doors have stopped responding entirely, you have cut a motor lead. Reconnect it and continue to test for another wire. Once both wires have been located and the master switch identified, cut both wires and interface as shown below.

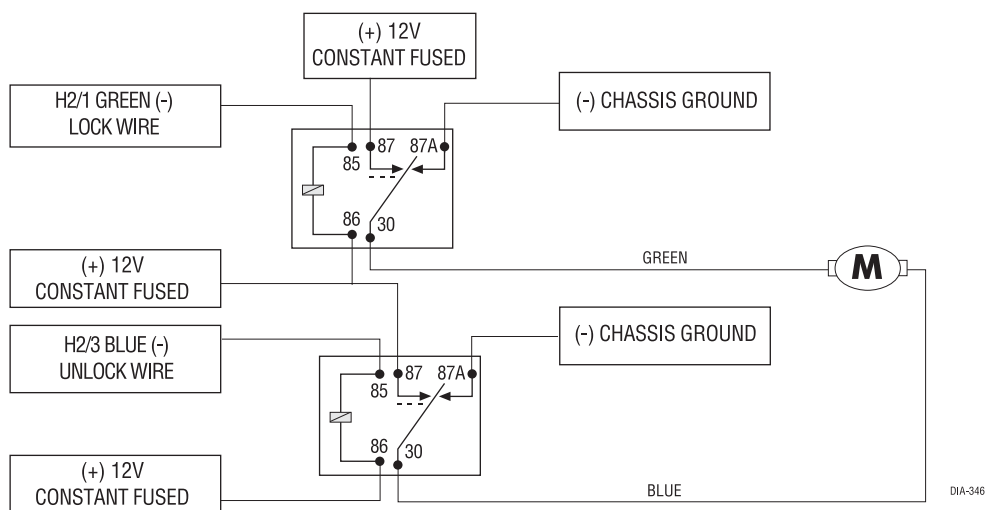
IMPORTANT! If these are not connected properly, you will send (+) 12 volts directly to (-) ground, possibly damaging the alarm or the factory switch.



type D: after-market actuators

In order for this system to control one or more after-market actuators, a **451M** or two relays (optional) are needed.

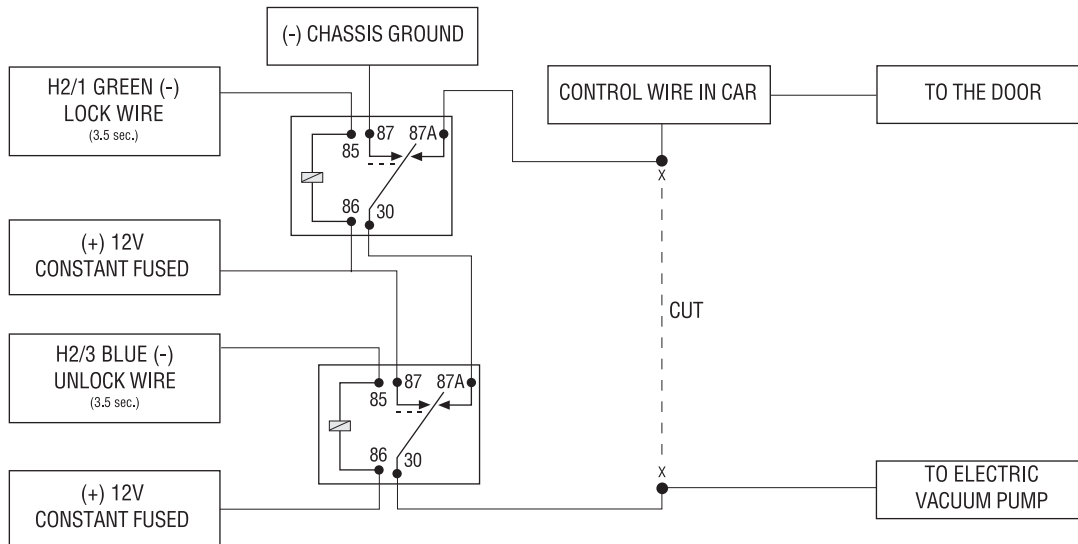
Vehicles without factory power door locks require the installation of one actuator per door. This requires mounting the door lock actuator inside the door. Other vehicles may only require one actuator installed in the driver's door if all door locks are operated when the driver's lock is used. This type of installation is required to operate factory lock systems in Volvo (except 850), SAAB, and most Mazda, Isuzu and Subaru models. The fuse used on 12-volt inputs should be 7.5A per motor installed in the vehicle.



type E: mercedes-benz and audi (1985 and newer)

Door locks are controlled by an electrically activated vacuum pump. Some Mercedes and Audi models use a Type D system. Test by locking doors from the passenger key cylinder. If all the doors lock, the vehicle's door lock system can be controlled with just two relays (optional). The control wire can be found in either kick panel and will show (+)12V when doors are unlocked and (-) ground when doors are locked.

To interface, see diagram below. The system must be programmed for 3.5 second door lock pulses. (See *Operating Settings Remote Control Code Learning* section of this guide.)

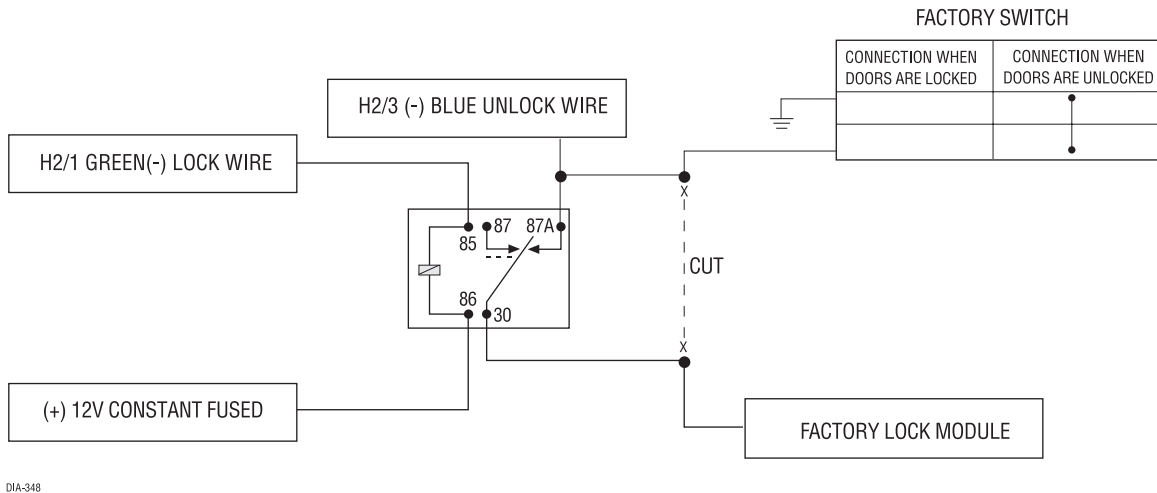


DIA-347

type F: one-wire system

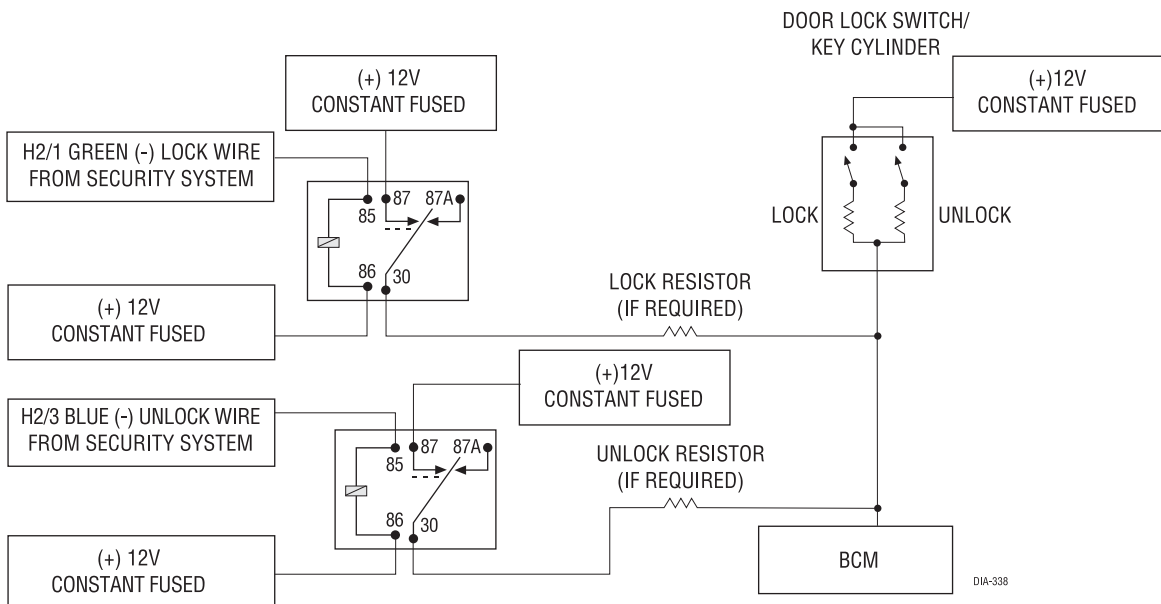
This system usually requires a negative pulse to unlock, and cutting the wire to lock the door. In some vehicles, these are reversed. It is found in late-model Nissan Sentras, some Nissan 240SX, and Nissan 300ZX 1992 and later. It is also found in some Mazda MPV's and some Mitsubishi's.

One relay (optional) is used to interface to this type of system as follows:



type G: positive (+) multiplex

This system is most commonly found in Ford, Mazda, Chrysler and GM vehicles. The door lock switch or door key cylinder may contain either one or two resistors. When interfacing with this type of door lock system, two relays or a **451M** must be used.



single-resistor type

If one resistor is used in the door lock switch/key cylinder, the wire will pulse (+)12V in one direction and less than (+)12V when operated in the opposite direction.

two-resistor type

If two resistors are used in the factory door lock switch/key cylinder, the switch/key cylinder will read less than (+)12V in both directions.

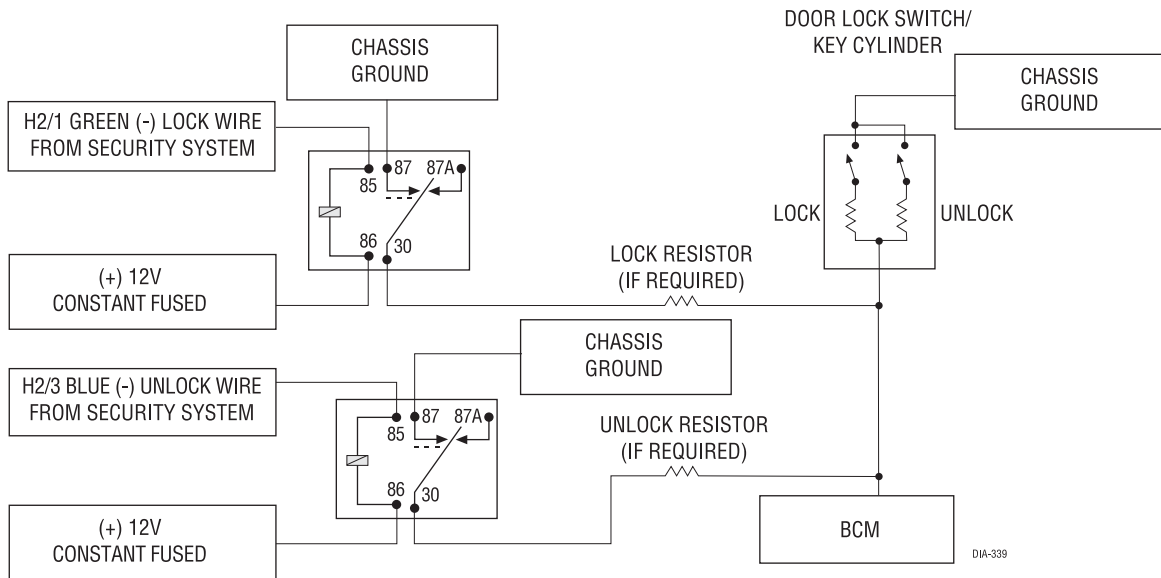
determining the proper resistor values

To determine the resistor values, the door lock switch/key cylinder must be isolated from the factory door lock system. For all testing, use a calibrated digital multimeter that is set to ohms.

1. Cut the output wire from the door lock switch/key cylinder in half.
2. Test with the meter from the switch side of the cut door lock switch/key cylinder wire to a reliable constant (+)12V source. Some good constant (+)12V references are the power input source to the door lock switch/key cylinder, the ignition switch power wire, or the (+) terminal of the battery.
3. Operate the door lock switch/key cylinder in both directions to determine the resistor values. If the multimeter displays zero resistance in one direction, no resistor is needed for that direction.
4. Once the resistor value(s) is determined, refer to the wiring diagram for proper wiring.

type H: negative (-) multiplex

The system is most commonly found in Ford, Mazda, Chrysler and GM vehicles. The door lock switch or door key cylinder may contain either one or two resistors. When interfacing with this type of door lock system, two relays or a **451M** must be used.



single-resistor type

If one resistor is used in the door lock switch/key cylinder, the wire will pulse ground in one direction and resistance to ground when operated in the opposite direction.

two-resistor type

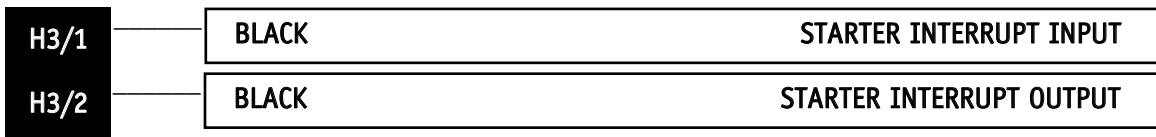
If two resistors are used in the factory door lock switch/key cylinder, the door lock switch/key cylinder will read resistance to ground in both directions.

determining the proper resistor values

To determine the resistor values, the door lock switch/key cylinder must be isolated from the factory door lock system. For all testing, use a calibrated digital multimeter that is set to ohms.

1. Cut the output wire from the door lock switch/key cylinder in half.
2. Test with the meter from the switch side of the cut door lock switch/key cylinder wire to a reliable ground source. Some good ground references are the ground input source to the door lock switch/key cylinder or the battery ground.
3. Operate the door lock switch/key cylinder in both directions to determine the resistor values. If the multimeter displays zero resistance in one direction, no resistor is needed for that direction.
4. Once the resistor value(s) is determined, refer to the wiring diagram for proper wiring.

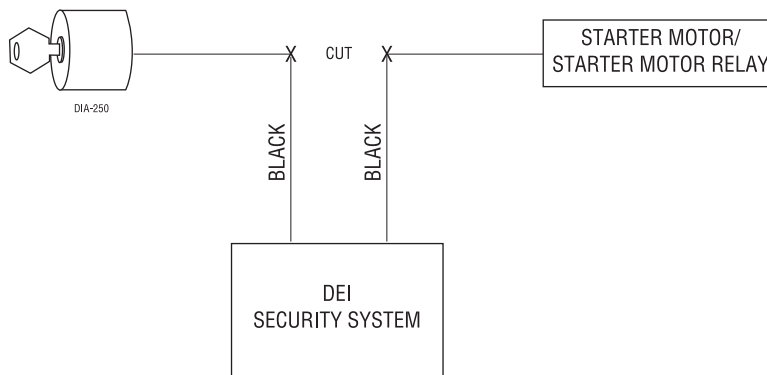
starter interrupt harness (H3) wire connection guide



H3/1 and H3/2 BLACK starter interrupt wires

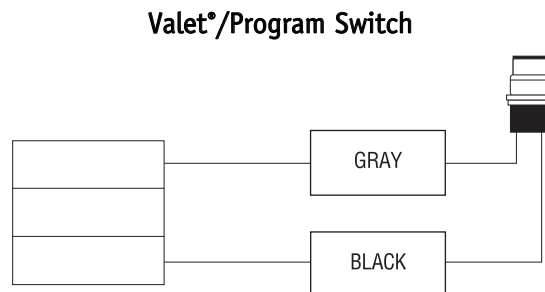
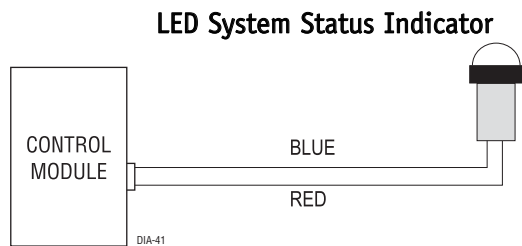
Use one of these wire as a starter interrupt input and the other as a starter interrupt output wire

NOTE: These two black wires are interchangeable.

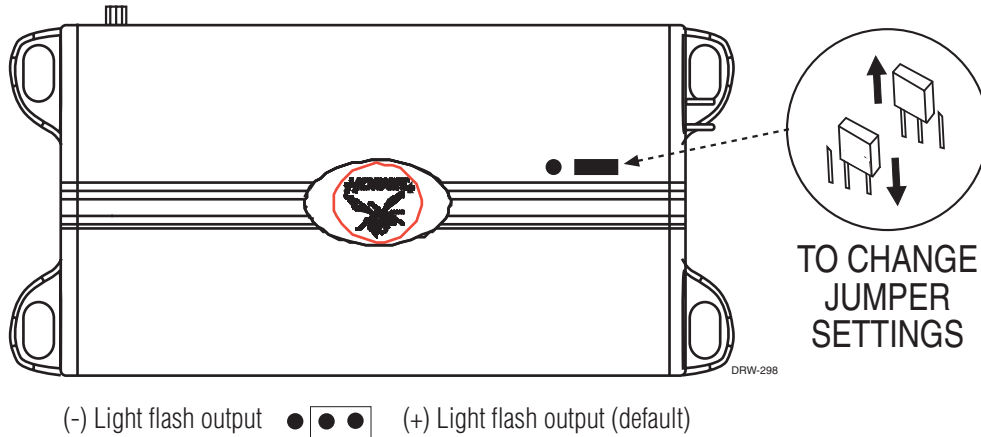


plug-in LED and valet/program switch

The LED and the Valet/Program switch both plug into the control module. The LED system status indicator plugs into the white two-pin port, while the Valet®/Program switch should be plugged into the blue two-pin port. The status LED and Valet®/Program switch each fit into 9/32-inch holes.



internal programming jumper

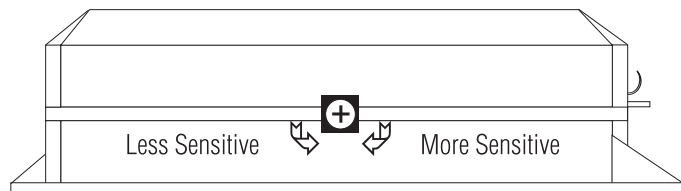


light flash jumper

This jumper is used to determine the light flash output. In the (+) position, the on-board relay is enabled and the unit will output (+)12V on the H1/2 WHITE wire. In the (-) position, the on-board relay is disabled. The H1/2 WHITE wire will supply a (-) 200 mA output suitable for driving factory parking light relays. To access the jumper, open the control module.

NOTE: For parking light circuits that draw 10 amps or more, the internal jumper must be switched to a (-) light flash output. *P/N 8617* or a standard automotive SPDT relay must be used on the H1/2 light flash output harness wire.

on-board dual stage zone 2 impact sensor



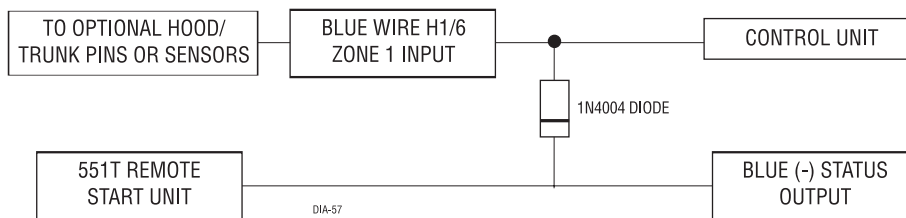
There is a dual-stage impact sensor inside the control unit. Adjustments are made via the rotary control as indicated above. Since the impact sensor does not work well when mounted firmly to metal, we recommend against

screwing down the control module. We recommend mounting the control module to a large wiring loom.

NOTE: When adjusting the sensor, it must be mounted in the same location where it will be after the installation is completed. Adjusting the sensor and then relocating the module requires readjustment.

bypassing sensor inputs

There are times when you need to temporarily bypass all sensor inputs to the unit, such as when remote starting the vehicle. Anytime an auxiliary channel output is used, all inputs are bypassed for 5 seconds. During the 5 second bypass period, ground can be supplied to the H1/6 BLUE wire without triggering the unit. When the 5 second bypass period ends, if the unit detects ground on the H1/6 BLUE wire, all trigger inputs except the door trigger input will remain bypassed until 5 seconds after ground is removed from the BLUE wire. This can be done using the status output of a 551T or 561T remote start unit as shown below:



transmitter/receiver remote control code learning

The system comes with two transmitters that have been taught to the receiver. Use the following transmitter/receiver remote control code learning to add transmitters to the system or to change button assignments if desired.

The Valet®/Program button, plugged into the blue port, is used for programming. There is a basic sequence to remember whenever programming this unit: Door, Key, Choose, Transmit and Release.



1. **Open a door.** (The GREEN wire, H1/5, or the VIOLET, H1/7 must be connected.)



2. **Key.** Turn the ignition on. (The H1/9 YELLOW switched ignition input must be connected.)



3. **Select the receiver channel.** Press and release the Valet®/Program switch the number of times necessary to access the desired channel. Once you have selected a channel, press and **HOLD** the Valet®/Program switch once more. The siren will chirp and the LED will blink the number of times corresponding to the channel that has been accessed.

NOTE: If adding a remote, a button must be taught to Channel 1 prior to programming other channels.

CHANNEL NUMBER	PRESS AND RELEASE THE VALET/PROGRAM SWITCH	TO PROGRAM FUNCTION
1	One Time	Arm/Disarm/Panic
2	Two Times	Channel 2
3	Three Times	Channel 3
4	Four Times	Arm Only
5	Five Times	Disarm Only
6	Six Times	Panic Only
7	Seven Times	Auto-learn* for 3-button transmitters
8	Eight Times	Delete all transmitters**

***NOTE:** The Auto-learn function cannot be used to program an optional four-button transmitter; the channels must be taught to the transmitter individually. See Transmitter Configuration section of this guide for a description of Auto-learn transmitter programming.

****NOTE:** If any button from a known transmitter is programmed to Channel 8, all transmitters will be erased from memory and will revert to the default feature settings. (See Features Menu section of this guide.) This is useful in cases where one of the customer's transmitters is lost or stolen. Channel 8 will erase any lost or stolen transmitters from the system's memory and can also be used to start from scratch if the transmitter buttons were programmed incorrectly.



4. **Press the transmitter button.** While **HOLDING** the Valet®/Program switch, press the transmitter button that you wish to assign to that channel. The unit will chirp indicating successful programming. You cannot teach a transmitter button to the system more than once.

NOTE: For Channel 7, press Button I (see Transmitter Configuration section of this guide) to program the Auto-learn Standard Configuration on a three-button transmitter.



5. **Release.** Once the code is learned, the Valet®/Program button can be released.

You can advance from one channel to another by releasing the Valet® /Program button and tapping it to advance channels and then **HOLDING** it. For example, if you want to program Channel Three after programming Channel One, release the Valet®/Program button. Press it twice and release it to advance to Channel Three. Then press it once more and **HOLD** it. The siren will chirp three times to confirm it is ready to receive the code from the transmitter.




Code Learning will be exited if:

- Ignition is turned off.
- Door is closed.
- Valet®/Program button is pressed too many times.
- More than 15 seconds elapses between steps.

One long chirp indicates that Code Learning has been exited.

transmitter configuration

The transmitters can be programmed with the Standard Configuration by using the Channel 7 Auto-learn* function in the Transmitter/Receiver *Remote Control Code Learning*. When programmed for Standard Configuration, the 3-button transmitter buttons are assigned to the following functions:

	Button I	operates	Arm/Disarm/Panic
AUX	Button II	operates	Channel Two
	Button III	operates	Panic
 and AUX	Buttons	operate	Channel Three

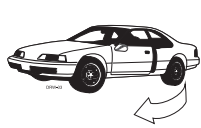
***NOTE:** *The Auto-learn function cannot be used to program an optional four-button transmitter. For a four-button transmitter, the different channels must be taught to the transmitter individually.*

operating settings remote control code learning

Many of the operating settings of this unit are programmable. They can be changed whenever necessary through Operating Settings Remote Control Code Learning. The Valet®/Program push-button switch, plugged into the blue port, is used together with a programmed transmitter to change the settings.

The operating settings dictate how the unit operates. It is possible to access and change any of the feature settings using the Valet®/Program switch.

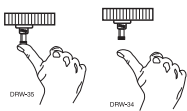
To enter Operating Settings Code Learning:



1. **Open a door.** (The GREEN wire, H1/5, or the VIOLET, H1/7 must be connected.)



2. **Ignition.** Turn the ignition on, then back off. (The H1/9 YELLOW switched ignition input must be connected.)



2. **Choose.** Within 10 seconds, press and release the Valet®/Program switch the number of times corresponding to the feature number you want to program (see the *Features Menu* section of this guide). The LED ON settings listed in the *Features Menu* table are the factory default settings.

Once the Valet/Program switch has been pressed and released the number of times corresponding to the feature you wish to program, press it once more and **HOLD** it. After a second, the LED will flash to indicate which feature you have accessed. For example, groups of five flashes would indicate access to Feature 5. The siren will also chirp five times.



4. **Transmit.** While **HOLDING** the Valet®/Program switch, you can select the desired feature settings using the remote transmitter. As shipped, the unit is configured to the default LED ON settings. Pressing Button I while **HOLDING** down the Valet/Program switch will program the feature to the LED ON settings. The siren will chirp once to indicate the one-chirp setting has been selected. Pressing Button II while **HOLDING** down the Valet/Program switch will change the setting to the LED OFF setting. The siren will chirp twice indicating that the LED OFF setting has been selected.



5. **Release.** Release the Valet®/Program switch.

To access another feature:

You can advance from feature to feature by pressing and releasing the Valet®/Program switch the number of times necessary to get from the feature you just programmed to the feature you wish to access. For example, if you just programmed Feature 1 and you want to program Feature 2:

1. Release the Valet®/Program switch.
2. Press and release the Valet/Program switch once to advance from Feature 1 to Feature 2.
3. Press the Valet®/Program switch once more and **HOLD** it.
4. The siren will chirp two times to confirm that you have accessed Feature 2.

To exit the Code Learning, do one of the following:

- Close the open door.
- Turn the ignition on.
- No activity for longer than 15 seconds.
- Press the Valet®/Program switch too many times.

features menu

FEATURE NUMBER	DEFAULT LED ON SETTINGS (PRESS TRANSMITTER BUTTON I)	LED OFF SETTINGS (PRESS TRANSMITTER BUTTON II)
1	Active Arming	Passive Arming
2	Confirmation Chirps ON	Confirmation Chirps OFF
3	Ignition-Controlled Door Lock/Unlock ON	Ignition-controlled Door Lock/Unlock OFF
4	Active Locking	Passive Locking
5	0.8-second Door Lock Pulse Duration	3.5-second Door Lock Pulse Duration
6	Double Pulse Unlock OFF	Double Pulse Unlock ON
7	Stealth Coding™ Technology ON	Stealth Coding™ Technology OFF
8	Door trigger error chirp ON	Door trigger error chirp OFF
9	Lock pulse Single	Lock pulse Double
10	Comfort closure OFF	Comfort closure ON (20-seconds)

NOTE: Factory defaults are indicated in **bold** type.

feature descriptions

1 ACTIVE/PASSIVE ARMING: When active arming is selected, the system will only arm when the transmitter is used. When set to passive, the system will arm automatically 30 seconds after the last door is closed. Passive arming is indicated by the rapid flashing of the LED when the last protected entry point is closed.

2 CONFIRMATION CHIRPS ON/OFF: This feature controls the chirps that confirm the arming and disarming of the system.

3 IGNITION-CONTROLLED DOOR LOCK/UNLOCK ON/OFF: When turned on, the doors will lock three seconds after the ignition is turned on and unlock when the ignition is turned off. If the ignition key is turned on while the vehicle door(s) are open, the door(s) will not lock.

4 ACTIVE/PASSIVE LOCKING: If passive arming is selected in Feature 1, then the system can be programmed to either lock the doors when passive arming occurs, or only lock the doors when the system is armed with the transmitter. Active locking means the system will not lock the doors when it passively arms. Passive locking means that the system will lock the doors when it passively arms.

5 DOOR LOCK PULSE DURATION: Some European vehicles, such as Mercedes-Benz and Audi, require longer lock and unlock pulses to operate the vacuum pump. Programming the system to provide 3.5 second pulses will accommodate door lock interface in these vehicles. The default setting is 0.8 second door lock pulses. See *Mercedes-Benz and Audi - 1985 and Newer (Type E Door Locks section)* diagram.

6 DOUBLE PULSE UNLOCK OFF/ON: Some vehicles require two pulses on a single wire to unlock the doors. When the double pulse unlock feature is turned on, the H2/3 BLUE wire will supply two negative pulses instead of a single pulse. This makes it possible to directly interface with double pulse vehicles without any extra parts.

7 STEALTH CODING™ TECHNOLOGY ON/OFF: This system features Stealth Coding™ Technology as an option. Stealth Coding™ Technology is a feature that uses a mathematical formula to change the system's code each time the transmitter and receiver communicate. This makes the group of bits or "word" from the transmitter very long. The longer the word is, the easier it is to block its transmission to the unit. Disabling the Stealth Coding™ Technology feature lets the receiver ignore the Stealth Coding™ Technology part of the transmitted word. As a result, the unit may have better range with Stealth Coding™ Technology off.

8 DOOR SENSOR BYPASS CHIRP ON/OFF: This feature controls the error chirp that is generated if the system is armed with the door trigger active. This is useful in vehicles that have a long dome light delay after the door has been closed. If the system is armed before the dome light has turned off, the security system will generate the door trigger error chirp. If this error chirp is not desired, use this feature to disable the door open error chirp. If the bypass chirp is turned off, no bypass chirp will be generated, even if a door is accidentally left open.

9 Double Pulse Lock. Selectable 2 pulse door lock output to operate vehicle equipped with factory “deadbolt”. Will have similar operation to that of the Double Pulse Unlock feature, but will perform the functions on the Lock wire as opposed to the Unlock wire

10 Comfort closure feature: This feature is designed to integrate with vehicles that can close the power windows and sunroof by holding the key in the driver door lock position, and will operate on both single input systems and two pulses input dead bolt systems.

If programmed on the door lock output will activate the Comfort Close output for 20 seconds. This output will begin 200mS after the final door lock output has completed regardless of the door lock programming.

If while the 20 second timer is active and closing the windows the user disarms the unit, the Comfort Close output will immediately cease before the doors unlock.

The alarm system will not monitor the zone inputs for Bypass Notification, Warn away or Full trigger inputs until after the 20 second timer has completed to avoid any false triggering of the system while the window are in motion.

nuisance prevention circuitry™

NPC™ requires that you change the way you test the system, as NPC™ will bypass an input zone for 60 minutes. If the system “sees” the same zone trigger three times AND the triggers are spaced less than an hour apart, the system will bypass that input zone for 60 minutes. If that zone does not attempt to trigger the system during the 60-minute bypass period, the zone’s monitoring will begin again at the end of the hour. If it does attempt to trigger while bypassed, the 60-minute bypass starts over again.

Disarming and rearming the system does not reset NPC™. The only way to reset NPC™ is for the 60 minutes to pass, without a trigger, or for the ignition to be turned on. This allows the system to be repeatedly triggered, disarmed and rearmed, and still allow NPC™ to bypass a faulty zone.

When disarming the system, 5 chirps indicate NPC is activated. The LED will report the zone that has been bypassed. (See *Table of Zones* section of this guide.)

table of zones

When using the Diagnostic functions, use the Table of Zones to see which input has triggered the system. It is also helpful in deciding which input to use when connecting optional sensors and switches.

ZONE NO.	TRIGGER TYPE	INPUT DESCRIPTION
1	Multiplexed	H1/6 BLUE wire. Connects to optional hood/trunk pins or an optional sensor. Inputs longer than 0.8 seconds will instantly trigger the full alarm sequence and report Zone 1.
2	On-board impact sensor	Second-stage of on-board impact sensor (heavy impacts from impact sensor).
3	Two-stage, progresses from warning to full alarm	Door switch circuit. H1/5 GREEN or H1/7 VIOLET.
5	Two-stage, progresses from warning to full alarm	Ignition. H1/9 YELLOW.

NOTE: *The Warn-away response does not report on the LED.*

troubleshooting

■ **Door input does not immediately trigger full alarm. Instead, first I hear chirps for 3 seconds:**

That's how the progressive two-stage door input works! This is a feature of this system. This is an instant trigger, remember, since even if the door is instantly re-closed, the progression from chirps to constant siren will continue.

■ **Closing the door triggers the system, but opening the door does not:**

Have you correctly identified the type of door switch system? This often happens when the wrong door input has been used. (See *H1/5 GREEN Door Trigger Input, Primary Harness Wire Connection Guide* section of this guide.)

■ **System will not passively arm until it is remotely armed and then disarmed:**

Are the door inputs connected? Is the H1/6 blue wire connected to the door trigger wire in the vehicle? Either the H1/5 green or the H1/7 violet should be used instead. (See *Primary Harness Wire Connection Guide* section of this guide.)

■ **Door input does not respond with the progressive trigger, but with immediate full alarm:**

Does the LED indicate that the trigger was caused by the impact sensor? (See *Table of Zones* section of this guide.) The impact sensor, if set to extreme sensitivity, may be detecting the door unlatching before the door switch sends its signal. Reducing the sensitivity can solve this problem.

■ **The Valet®/Program switch does not work:**

Is it plugged into the correct socket? (See *Plug-In LED and Valet/Program Switch* section of this guide.)

■ **The LED system status indicator does not work:**

You've probably guessed already, but here goes: is it plugged in? Is the LED plugged into the correct socket? (See *Plug-In LED and Valet/Program Switch* section of this guide.)

■ **Starter interrupt does not work:**

Is the correct wire being interrupted? If the vehicle starts when the starter interrupt is completely disconnected, the wrong wire has been cut.

Is the yellow H1/9 ignition wire connected to true ignition? This wire must be powered in the run and start positions in order to work properly.

wiring quick reference guide

