# Model 800 ESP Owner's Guide

### Limited Lifetime Consumer Warranty

Directed Electronics, Inc. ("DEI") promises to the original purchaser to repair or replace with a comparable reconditioned model any DEI unit (hereafter the "unit"), excluding without limitation the siren, the remote transmitters, the associated sensors and accessories, which proves to be defective in workmanship or material under reasonable use during the lifetime of the vehicle provided the following conditions are met: the unit was professionally installed and serviced by an authorized DEI dealer; the unit will be professionally reinstalled in the vehicle in which it was originally installed by an authorized DEI dealer; and the unit is returned to DEI, shipping prepaid with a legible copy of the bill of sale or other dated proof of purchase bearing the following information: consumer's name, telephone number and address; the authorized dealers name, telephone number and address; complete product description, including accessories; the year, make and model of the vehicle; vehicle license number and vehicle identification number. All components other than the unit, including without limitation the siren, the remote transmitters and the associated sensors and accessories, carry a one-year warranty from the date of purchase of the same. This warranty is non-transferable and is automatically void if: the original purchaser has not completed the warranty card and mailed it within ten (10) days of the date of purchase to the address listed on the card; the unit's date code or serial number is defaced, missing or altered; the unit has been modified or used in a manner contrary to its intended purpose; the unit has been damaged by accident, unreasonable use, neglect, improper service, installation or other causes not arising out of defects in materials or construction. The warranty does not cover damage to the unit caused by installation or removal of the unit. DEI, in its sole discretion, will determine what constitutes excessive damage and may refuse the return of any unit with excessive damage. TO THE MAXIMUM EXTENT ALLOWED BY LAW, ALL WARRANTIES, INCLUDING BUT NOT LIMITED TO EXPRESS WARRANTY, IMPLIED WARRANTY, WARRANTY OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF NON-INFRINGEMENT OF INTELLECTUAL PROPERTY, ARE EXPRESSLY EXCLUDED; AND DEI NEITHER ASSUMES NOR AUTHORIZES ANY PERSON OR ENTITY TO ASSUME FOR IT ANY DUTY, OBLIGATION OR LIABILITY IN CONNEC-TION WITH ITS PRODUCTS. DEI DISCLAIMS AND HAS ABSOLUTELY NO LIABILITY FOR ANY AND ALL ACTS OF THIRD PARTIES INCLUDING ITS AUTHORIZED DEALERS OR INSTALLERS. DEI SECURITY SYSTEMS, INCLUDING THIS UNIT, ARE DETERRENTS AGAINST POSSIBLE THEFT. DEI IS NOT OFFERING A GUARANTEE OR INSURANCE AGAINST VANDALISM, DAMAGE OR THEFT OF THE AUTOMOBILE, ITS PARTS OR CONTENTS; AND HEREBY EXPRESSLY DISCLAIMS ANY LIABILITY WHATSOEVER, INCLUDING WITHOUT LIMITATION, LIABILITY FOR THEFT, DAMAGE AND/OR VANDALISM. THIS WARRANTY DOES NOT COVER LABOR COSTS FOR MAINTENANCE, REMOVAL OR REINSTALLATION OF THE UNIT OR ANY CONSEQUENTIAL DAMAGES OF ANY KIND. IN THE EVENT OF A CLAIM OR A DISPUTE INVOLVING DEI OR ITS SUBSIDIARY, THE PROPER VENUE SHALL BE SAN DIEGO COUNTY IN THE STATE OF CALIFORNIA. CALIFORNIA STATE LAWS AND APPLICABLE FEDERAL LAWS SHALL APPLY AND GOVERN THE DISPUTE. THE MAXIMUM RECOVERY UNDER ANY CLAIM AGAINST DEI SHALL BE STRICTLY LIMITED TO THE AUTHORIZED DEI DEALER'S PURCHASE PRICE OF THE UNIT. DEI SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, ANY CONSEQUENTIAL DAMAGES, INCIDENTAL DAMAGES, DAMAGES FOR THE LOSS OF TIME, LOSS OF EARNINGS, COMMERCIAL LOSS, LOSS OF ECONOMIC OPPORTUNITY AND THE LIKE. NOTWITHSTANDING THE ABOVE, THE 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 that vary from State to State.

This product may be covered by a Guaranteed Protection Plan ("GPP"). See your authorized DEI dealer for details of the plan or call DEI Customer Service at 1-800-876-0800. DEI security systems, including this unit, are deterrents against possible theft. DEI is not offering a guarantee or insurance against vandalism, damage or theft of the automobile, its parts or contents; and hereby expressly disclaims any liability whatsoever, including without limitation, liability for theft, damage and/or vandalism. DEI does not and has not authorized any person or entity to create for it any other obligation, promise, duty or obligation in connection with this security system.

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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# Standard Configuration

- controls the **Arm**, **Disarm** and **Panic** functions.
- is used for **Silent Mode**, **Remote Valet** and optional **Trunk Release**.
- controls an optional Auxiliary Output.
- controls another optional Auxiliary Output.
- and pressed simultaneously control another optional Auxiliary Output.
- and pressed simultaneously control another optional Auxiliary Output.

### What is Included

- 7-Channel Receiver
- A pair of four-button transmitters
- A Stinger® DoubleGuard® dual-output shock sensor
- The Revenger® Soft Chirp® six-tone programmable siren
- The red status LED indicator light
- A push-button Valet<sup>®</sup> switch
- Your warranty card
- FailSafe® Starter Kill ready circuitry (may require additional labor)

# 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. Due to the complexity of this system, it must only be installed by an authorized dealer. Installation of this product by anyone other than an authorized dealer voids the warranty. All dealers are provided with preprinted dealer certificates as proof of authorization.

This owner's guide should help you to get the most out of your system. Please take the time to read it thoroughly prior to using this system. Additional or replacement copies of this manual may be downloaded from the DEI\* website at www.directed.com.

#### System Maintenance

This system requires no specific maintenance. Your remote control is powered either by a miniature 12V battery, type GP23A, or a lightweight 3-volt lithium battery, both of which will last approximately one year under normal use. Contact your dealer if you have any questions. When the battery weakens, operating range will be reduced and the LED on the remote will dim.

#### **Your Warranty**

Your warranty card must be returned and the bar code serial number must not be removed. If the warranty card is not returned you do not have a warranty. Make sure you receive the warranty card from your dealer. It is also necessary to keep your proof of purchase, which indicates that the product was installed by an authorized dealer.

#### FCC/ID Notice

This device complies with Part 15 of 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.

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

# Transmitter Functions

The receiver uses a computer-based Learn Routine to learn the transmitter buttons. This makes it possible to assign any button on the remote transmitter to any receiver function. Two possible transmitter configurations are described in this section. Remember that there are many alternate custom configurations that can be programmed by your dealer.

#### Standard Configuration

The standard configuration is how the transmitters come programmed initially. If you would like a custom configuration, contact an authorized dealer.

#### **Button I**

The arm, disarm, and panic functions are usually controlled by pressing .

#### **Button II**

Silent Mode<sup>\*\*</sup>, Remote Valet<sup>\*\*</sup>, and optional trunk release (if equipped) functions are usually controlled by **11**. (Silent Mode and Remote Valet work by pressing **11** for less than one second. Trunk release requires you to press and hold **11** for 1.5 seconds.)

#### **Button III**

An optional auxiliary convenience or expansion function tha	t you
may have added to your system can be activated by pressing	
This auxiliary output controls	·

#### **Button IV**

Another optional auxiliary convenience or expansion function	that you
may have added to your system can be activated by pressi	ng 🚺.
This auxiliary output controls	

#### **Buttons I and II**

Another optional auxiliary convenience or expansion function that you may have added to your system can be activated by pressing and simultaneously.

This auxiliary output controls \_\_\_\_\_\_.

#### **Buttons III and IV**

Another optional auxiliary convenience or expansion function that you may have added to your system can be activated by pressing and simultaneously.

This auxiliary output controls \_\_\_\_\_\_.

#### **Expanded Configuration**

A remote that uses the expanded configuration operates similarly to many factory keyless entry remotes. An expanded configuration transmitter allows you to arm, disarm, and activate Panic Mode with separate transmitter buttons. The expanded configuration also allows you to utilize Multi-Level Security Arming, an additional feature that cannot be utilized when using a standard configuration transmitter. (See Multi-Level Security Arming Section of this guide for details about this feature.) The transmitter buttons are used for the following functions in the expanded configuration:

#### **Button I**

The arming and Multi-Level Security functions are usually controlled by . Pressing . for one second will arm the system. Pressing . again within five seconds of arming activates Multi-Level Security.

#### **Button II**

Pressing for one second will disarm the system. If configured for optional progressive unlocking, pressing when disarming will only unlock the driver's door. A second press of will then unlock the passenger doors.

#### **Button III**

Silent Mode<sup>®</sup>, Remote Valet<sup>®</sup>, and optional trunk release are all controlled by pressing . Silent Mode<sup>®</sup> and Remote Valet work by pressing for less than one second. Pressing for 1.5 seconds will activate the trunk release function.

#### **Button IV**

Pressing IV at any time will activate Panic Mode.

#### **Button Combinations**

Four unique combinations of buttons can be assigned to control convenience or expansion options that you may have added to your system. Consult your authorized dealer for details.

## **Using Your System**

The remote button numbers in this manual correspond to the standard configuration unless otherwise specified. Remember, this is not the only way your transmitters can be programmed. Your transmitters may also be programmed for expanded configuration or custom configured by a dealer to meet your needs.

#### Arming

You can activate, or arm, the system by pressing • for one second. When the system arms, you will hear a short siren sound, or chirp, and the parking lights will flash once. If the vehicle's power door locks have been connected to the system, the doors will also lock.

While the system is armed, the status LED will flash approximately twice per second, indicating that the system is actively protecting your vehicle. If you hear a second chirp after arming and see the status LED flashing in groups, refer to the Diagnostics section of this guide. This extra chirp is called Bypass Notification.

The system can also be programmed to arm itself automatically (called passive arming). If the system is programmed for passive arming, it will automatically arm 30 seconds after the ignition is turned off and the system detects you leaving the vehicle by opening and closing a door. Whenever the system is in its 30-second passive-arming countdown, the status LED will flash twice

as fast as it does when the system is armed. The siren will chirp one time 20 seconds after the last door has been closed. The system is not actually armed at that point. The system arms and the doors lock (if connected and programmed for passive locking) at the 30-second mark, but the siren will not chirp. The early chirp provides you with a 10-second warning prior to arming.

**NOTE:** If any protected entry point (such as a door or a switch-protected trunk or hood) is open, the system will not passively arm (unless forced passive arming is programmed on. See Programming Options section.) Additionally, each time a sensor is triggered during the arming countdown, the 30-second countdown starts over.

When armed, your vehicle is protected as follows:

- Light impacts will trigger the Warn Away® signal. When triggered, the siren will chirp and the parking lights will flash for a few seconds.
- Heavy impacts trigger the programmed full trigger sequence.
- If a door is opened, the system will immediately start chirping the siren and flashing the parking lights. Three seconds later, the siren output changes to a continuous blast. This progressive response gives you time to disarm the system with your transmitter if you inadvertently open the door while the system is armed, while still providing an instant response (even if the door is immediately closed).
- Turning on the ignition key will trip the same two-stage response as opening a door.
- The optional starter kill prevents the vehicle's starter from cranking.

#### **Arming While Driving**

Your system can be armed while driving the vehicle! Simply press and hold on your transmitter for 1.5 seconds while the vehicle is running or the ignition is on. The system will chirp once and then once more to indicate that the ignition is on. The system will not respond to any input except the door triggers and the starter kill relay (if installed) will not be activated. The system will disarm automatically when the ignition is turned off. The siren will chirp twice and the LED will stop flashing.

#### Multi-Level Security Arming

Multi-Level Security Arming allows you to select which of the system's inputs or sensors you want to be active and which you want to be bypassed. (Refer to the Table of Zones section in this manual.) Pressing (only on an expanded configuration transmitter) again within five seconds of arming the system will activate Multi-Level Security. Each time is pressed, a different security level is selected.

Multi-Level Security provides the following levels of security:

- Pressing once: The siren chirps once. The system is armed.
- Press a second time within five seconds: The siren chirps twice followed by a long chirp. Zones Two and Five are now bypassed.
- Press a third time within five seconds: The siren chirps three times followed by a long chirp. Zones Four and Six are now bypassed.

- Press a fourth time within five seconds: The siren chirps four times followed by a long chirp. Zones Two, Four, Five and Six are now bypassed.
- Press **1** a fifth time within five seconds: The siren chirps five times followed by a long chirp. All input zones are now bypassed with the exception of Zones Seven and Eight.

**IMPORTANT:** Multi-Level Security is only available with a system using the expanded configuration. This feature cannot be accessed through a standard configuration transmitter.

#### Disarming

To disarm the system, press again. You will hear two chirps, and the parking lights will flash twice. If the siren chirps either four or five times when disarming, refer to the Diagnostics Section of this guide. This is called Tamper Alert. If power locks are connected to the system, the doors will unlock. The vehicle's interior light will also illuminate for 30 seconds. The interior light will automatically turn off if the ignition is turned on within the 30-second period.

#### **High Security Disarm**

This system proudly offers High Security Disarm. High Security Disarm is a feature that makes it possible to silence and reset the system when it is triggering, without disarming the system. If the system is triggered, and the siren has been sounding for longer than six seconds, pressing the disarm button on the transmitter will stop the trigger and return the unit to the armed

state. The system will not disarm, but rather reset. This prevents you from having to disable the system should you wish to stop the triggered sequence without visually checking the vehicle. Pressing the disarm button again, after resetting the system, will disarm the system. Pressing the disarm button on the transmitter during the first six seconds of the triggered sequence will disarm the system immediately. The six second timer is provided for your convenience, in case you inadvertently trigger the system.

#### Disarming Without a Transmitter

This feature allows you to disarm the system without the remote transmitter should it be lost, damaged or disabled. In order to disarm without a transmitter, you must have the vehicle's ignition key and know where the Valet switch is. Be sure to check with the installer for the location of the Valet switch.



To disarm the security system, turn ignition to "on" position. Press and release the Valet switch within 15 seconds. The



system should now disarm. If it does not, you may have waited too long. Turn the ignition off and on and try again.

#### LOCATION OF VALET SWITCH

It is also possible to disarm the system using the Ghost Switch. Please see the following Ghost Switch<sup>™</sup> section of this guide.

#### Ghost Switch

A Ghost Switch is actually a factory switch that already exists in your vehicle that can be set up to function as an optional protected disarm switch. Any factory switch in your vehicle may be used as long as it switches positive voltage. Your installer can help you to determine which switches will work in your vehicle. Some possible switches are power window, radio turn-on, or defroster switches.

Once a switch has been selected, you may choose the number of pulses (from 1 to 5) that must be applied to the switch to disarm the system. After programming is complete, the Ghost Switch will function as a disarm switch for both the security system and optional VRS.

**NOTE:** The Valet\* switch still retains its disarm capability unless the system is programmed to Ghost Switch Only disarm mode. See Programming Options for more details.

To use the Ghost Switch<sup>™</sup> to disarm the system without a transmitter:

Turn on the ignition. Pulse the Ghost switch the preselected number of times. After one second the system will disarm. If the Ghost Switch is pulsed the incorrect number of times, you will have to turn the ignition off and repeat the procedure. If you have not selected the pulse count, the default count is two pulses.

**NOTE:** Connection of the Ghost Switch may require extra labor. Consult with your dealer for details.

#### Silent Mode

**NOTE:** The Warn Away\* response to lighter impacts is bypassed if the system is armed using Silent Mode. This ensures that no chirps will be emitted by the siren in an area you want chirp-free. The system is still fully capable of triggering. Only the Warn Away response will be overridden.

#### **Panic Mode**

If you are threatened in or near your vehicle, you can attract attention by triggering the system with your transmitter! Just press for 1.5 seconds, and you will enter Panic Mode. The siren will sound and the parking lights will flash for a 30-second period. To stop Panic Mode at any time, press on the transmitter again.

#### Valet Mode

You can prevent your system from automatically arming and triggering by using Valet\* Mode. Valet\* Mode is very useful when washing the vehicle or having it serviced. In Valet Mode, the system will not arm, even with the transmitter, but all optional convenience functions (door locks, trunk release, etc.) will function normally. Remember to check with the installer for the location of the Valet switch.



To enter or exit Valet Mode:

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



The status LED will light solid if you are entering Valet Mode, and it will go out if you are exiting Valet Mode.

#### **Remote Valet**

The operations described in this section indicate transmitter buttons that correspond to the standard configuration. Remember, this may not be how your transmitter is set up.

- 1. Open any door.
- 2. Press .
- 3. Press II.
- 4. Press | I again.

The status LED will light solid if you are entering Valet Mode, and it will go out if you are exiting Valet Mode.

#### **Nuisance Prevention Circuitry**

Your system has DEI\*'s Nuisance Prevention\* Circuitry (NPC\*), which prevents annoying repetitive trigger sequences due to faulty door pin switches or environmental conditions such as thunder, jackhammers, airport noise, etc.

Here's how Nuisance Prevention Circuitry works: The alarm triggers three times. Each time, the same sensor or switch is triggering the alarm. The three triggers activate within 60 minutes of each other. NPC will interpret this pattern of triggers as false alarms. After the third trigger, NPC bypasses that sensor or switch (along with any other sensors or switches sharing the same zone) for 60 minutes.

If the bypassed sensor attempts to trigger the system while it is being bypassed, the 60-minute bypass period will start over. This ensures that a sensor that continuously triggers will remain bypassed.

Doors are covered by NPC differently: If the alarm is triggered by an open door for three full cycles (one-and-one-half minutes), the doors will be bypassed until the trigger ceases.

**NOTE:** Arming and disarming the system does not reset this function! The only ways to reset a bypassed zone are for it to not trigger for 60 minutes, or to turn on the ignition. If testing your system, it is important to remember that the NPC programming can cause zones to be bypassed and appear to stop working. If five chirps are heard when disarming, NPC has been engaged. If you wish to clear the NPC memory, turn the ignition key on.

NPC is programmable. See the "Programming Options" section of this quide.

### **Diagnostics**

The microprocessor at the heart of your system is constantly monitoring all of the switches and sensors connected to it. It detects any faulty switches and sensors and prevents them from disabling the entire system. The microprocessor will also record and report any triggers that occurred during your absence.

#### **Arming Diagnostics**

If the system is armed while an input is active (door open, sensor triggering, etc.) the unit will chirp once when arming and then again a few seconds later. This is called Bypass Notification. The system will ignore the active input until it ceases. Three seconds later it will monitor that input normally. For example, if your car has interior light exit delay, and you arm the system before the interior light goes out, you may receive Bypass Notification. Once the light goes out, however, the doors are monitored normally.

**NOTE:** Bypass notification will not occur when using Silent Mode" or if chirps have been programmed OFF.

#### Disarming Diagnostics

Extra disarm chirps indicate Tamper Alert. If four chirps are heard when disarming, the system was triggered in your absence. If five chirps are heard, a zone was triggered so many times that Nuisance Prevention Circuitry™ has bypassed that zone. In either case, the status LED will indicate which zone was involved (see Table of

Zones section). The system will retain this information in its memory, and chirp four or five times each time it is disarmed, until the next time the ignition key is turned on.

#### Table of Zones

\_\_\_\_

The zone number is represented by the number of LED flashes used by the system to identify a specific input. The standard input assignments are listed below, along with spaces to write in any optional sensors or switches you have had installed.

<b>ZONE</b> (Number of LED Flashes)	DESCRIPTION	DEALER-INSTALLED OPTIONS
1	Instant trigger - often used for hood/trunk pinswitches	
2	Instant trigger - a heavier impact detected by the Double Guard Shock Sensor	
3	Door switch trigger	
4	Instant trigger - for optional sensors	
5	Warn Away trigger - a lighter impa detected by the Double Guard Shock Sensor	act
6	Warn Away trigger for optional ser	nsor
7	Panic mode activated	
8	Ignition trigger	

**NOTE:** Zones 5 and 6 report to the LED when the system is disarmed. However, they are not reported by disarming diagnostics of the siren.

### **Code-Hopping®**

The receiver and transmitters each use a mathematical formula called an algorithm to change their code each time the transmitter is used. This technology has been developed to increase the security of the unit. The control unit detects what the next codes should be. This helps to keep the transmitter "in sync" with the control unit even if you use the remote control out of range of the vehicle. However, if the transmitter has been pressed many times out of range of the vehicle, or the battery has been removed, it may get out of sync with the control unit and fail to operate the system. To re-sync the remote control simply press the arm/disarm button of the remote control several times within range of the vehicle. The alarm will automatically re-sync and respond to the transmitters 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.

# **Owner Recognition**

Owner Recognition is a revolutionary new feature available only from DEI\*. Using a personal computer, your dealer can program many of the system settings. The computer makes it possible to program different settings for each transmitter that is used with the system. Then, whenever a specific transmitter is used, the system will recall the settings assigned to that transmitter. Owner Recognition lets up to four users of the system have different settings that meet their specific needs. It is almost like having four separate alarms in your vehicle, one for each user.

**NOTE:** Owner Recognition cannot be programmed without the DEI Bitwriter or personal computer and the necessary software. Check with your dealer for more information. Additional installation labor may be required.

# Rapid Resume Logic

This DEI security system is equipped with circuitry that allows the unit to remember its alarm state if power is lost and then reconnected. If the battery is disconnected and then reconnected, the security system will power up in the same state it was in when power was lost. For example, if power is disconnected during a full trigger sequence, when power is reconnected, the unit will remain in the full trigger sequence. If power is disconnected when the unit is disarmed, it will power back up disarmed. This also applies to 2001 Directed Electronics, Inc.

the VRS sequence. If the unit loses power at any time during the VRS sequence, when the unit is powered back up it will automatically resume the VRS full trigger sequence.

# Programming Options

Programming options control how your system performs during normal operation; however, some options may require additional installation parts and installation labor. Factory default program settings are indicated in **bold**:

- Active arming (transmitter only) or passive arming (automatic arming 30-seconds after the last door has been closed).
- Arming/disarming confirmation siren chirps on or off.
- Passive door locking (with passive arming) or **active** door locking (only when arming with the transmitter). This feature only works if passive arming has been programmed on.
- The ignition controlled door lock feature **on** or off: With this feature on, the vehicle doors will lock 3 seconds after the ignition is turned on, and unlock when the ignition is turned off. The system can also be programmed to prevent the door from locking when the ignition is turned on with any door open. If your installer is programming the system with a personal computer and the TechSoft Programmer, ignition lock and unlock are independent features and can be programmed separately.

- Panic mode **enabled**/disabled with the ignition on: Some states have laws against siren capability in a moving vehicle.
- Automatic Engine Disable (AED) on or **off:** The purpose of the feature is to protect the vehicle from being stolen at all times, regardless of whether or not the alarm is armed. If AED is programmed on, the starter of the vehicle will be disabled 30 seconds after the ignition is turned off. Once the key is turned off, the LED will flash slowly (one-half its normal armed rate) to indicate the AED arming cycle. Thirty seconds later, the starter of the vehicle will be disabled. To start the vehicle, it will be necessary to arm the car with the remote and then disarm it with the remote. It is also possible to disarm the AED feature by turning the ignition key to the "run" position and pressing the Valet button once. AED is disabled when the system is in Valet mode.

**NOTE:** This feature will only function if the FailSafe\* Starter Kill relay has been installed.

Forced passive arming **on** or off: If your system is programmed for passive arming and the forced passive arming feature has been programmed on, the system will passively arm after one hour, even if a protected entry has been left open. This feature is useful if a door has accidentally been left ajar when leaving the vehicle. Forced passive arming ensures that the system will be armed in every situation.

**NOTE:** When the system passively arms after one hour, the entry point that has been left open and anything connected to the same zone are bypassed and cannot trigger the system; however, the remaining inputs to the system are fully operational.

- Full trigger response **30** or 60 seconds: This determines how long the full triggered sequence lasts. Some states have laws regulating how long a security system can sound before it is considered a nuisance. If your installer is programming the security system with the DEI Bitwriter or a personal computer and the TechSoft Programmer, the full triggered response can be programmed for any duration ranging from 1 to 180 seconds.
- Nuisance Prevention Circuitry® on or off: Please refer to the Nuisance Prevention Circuitry Section of this manual for a complete explanation of how NPC operates. If NPC is programmed off, the security system will respond to inputs from any sensor indefinitely.

**NOTE:** Many states have laws regulating security systems, so programming NPC off may result in your system violating state laws.

- Progressive door trigger **on** or off: When the system is armed with a door open, the system responds with ten chirps prior to beginning the full triggered sequence. For an instant trigger, the progressive door trigger can be programmed off.
- Standard or Ghost Switch "Only disarm mode: In standard disarm mode, the Valet switch works in conjunction with the optional Ghost Switch to execute disarm commands. To enhance security, Ghost Switch Only mode may be selected. When this setting is selected, the Valet button will no longer disarm the system. The only way you can disarm your system (without a transmitter) is using the Ghost Switch.
- Siren tones and chirp volume: The output of the Revenger® Soft-Chirp® siren consists of six different tones in sequence.

Your dealer can eliminate any of these tones, resulting in a unique, easily identifiable siren sound. Siren chirps can be either full volume or **6 decibels quieter** than full alarm blast. Additional installation labor may be required.

# Installation Options

The system has many options that may require extra parts and labor. Some of the possibilities are listed here.

- Progressive unlocking: In most cars with electric power door locks, the system can be configured so that when disarmed, only the driver's door unlocks. A second press of the disarm button within 15 seconds of disarming unlocks the other doors.
- **Delayed Accessory Output (DAO):** The system provides an output whenever the ignition is turned off. This output can be used to keep the radio or power windows on when the ignition is turned off. Opening and closing a door automatically turns the output off.
- Vehicle Recovery System® (VRS): VRS is an anti-carjacking device designed to help in the safe recovery of your vehicle should you be involved in a carjacking. Please refer to the Vehicle Recovery System section of this manual for a complete explanation of how the Vehicle Recovery System operates.
- **Stereo or sensor on/off:** The system provides outputs that can be used to turn a stereo or sensor on and off via the remote.

### Vehicle Recovery System (VRS<sup>®</sup>)

The optional Vehicle Recovery System feature is designed to ensure that any unauthorized user of your vehicle (even if using your keys and remote control) will not be able to permanently separate you from your vehicle.

The VRS feature cannot prevent a carjacking attempt, however, it does ensure that if your vehicle is taken by an unauthorized user, it will be disabled (after several progressive warnings) as safely as possible. Should a carjacking occur, the VRS allows you to concern yourself with your personal safety without worrying about your property.

DEI® has engineered this security system, the FailSafe® Starter Kill, and the VRS® feature to provide the best combination of personal safety and property protection available. When properly installed, the VRS can never inadvertently stop your vehicle in traffic, on railroad tracks, etc., unlike some systems that can shut down your engine while running. This system is designed to perform starter interrupt, or starter kill. The FailSafe Starter Kill cannot shut down an already-running engine; it only prevents an engine from starting in the first place.

Any installation which allows this product to shut down a vehicle's engine when running is contrary to the product's design and intended usage, and DEI\* expressly disclaims any liability resulting therefrom.

**NOTE:** For the VRS\* system to operate it must be enabled in the programming procedure by your authorized dealer.

#### Arming The VRS

To arm the VRS, press the arm button on the remote while the vehicle's ignition is on. Once the system is armed, it will go into its triggered sequence (see below) if any door is opened and closed. If you are forced from the vehicle, the VRS system will trigger when the door is opened and then closed as you leave the vehicle. This is how the system works to combat intersection carjacking. If ordered from the vehicle, you may arm the VRS before exiting. Arming prior to that point, however, is highly recommended. To protect against parking lot carjacking, simply arm the system before leaving the vehicle. The system will now trigger automatically the next time anyone drives the vehicle. This helps protect the vehicle if someone takes your keys and remote by force in a parking lot.

**NOTE:** If the system is armed while driving and not disarmed prior to leaving the vehicle, it is still armed and will trigger the next time the vehicle is driven.

#### VRS Triggered Sequence

- Fifteen seconds after the last door has closed, the system's Status LED will begin flashing. This delay allows you time to distance yourself from your vehicle in the event of a carjacking.
- Forty-five seconds later, the Soft Chirp® Revenger® siren will begin chirping and the parking lights will begin flashing. This time could be used to notify authorities that your vehicle has been hijacked, and tell them what the VRS will do next.
- Fifteen seconds after the siren chirps begin, the siren's output will change to a continuous blast.

From this point forward, when the ignition key is turned off, the VRS will immediately turn on the FailSafe starter kill. This will prevent the vehicle from being restarted, thus immobilizing it at that spot.

Three minutes after the constant siren output begins, the flashing parking lights and the siren will stop. The starter kill will remain active until the system is disarmed. If the door is opened or the ignition is turned off and on in an attempt to restart the car, the siren and light flashing will begin again.

#### Disarming The VRS

Take the time to familiarize yourself with the VRS triggering sequence and the disarm procedure. It is important to recognize the VRS sequence and know how to disarm it in case of accidental activation.

Once the VRS is armed, it does not disarm automatically. You must disarm it next time you operate the vehicle. You must manually disarm it using the following procedure:





If the system has not entered the full trigger sequence (siren full volume), turn the ignition key on and press the disarm button on the remote transmitter for one second. The parking lights will flash and the siren will chirp twice. The system is now disarmed.



If the system has entered the full triggered sequence (siren full volume), pressing the disarm button of the transmitter will not disarm VRS. You must turn the ignition to the on position and press the Valet switch. The system can also be disarmed by pressing the Ghost Switch the programmed number of times to disarm the VRS system.

**NOTE:** The system can be programmed by your dealer for Ghost Switch only disarm mode. In this mode, the Valet switch will have no affect on the VRS full trigger sequence. The optional Ghost switch must be used to disarm the system. See your dealer for details.

# **Glossary of Terms**

**Control Unit:** The "brain" of your system. Usually hidden underneath the dash area of the vehicle. It houses the microprocessor that monitors your vehicle and controls all the alarm functions.

**FailSafe** \*\* **Starter Kill:** An automatic switch controlled by the 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 kill switch fails. Installation of this feature may require additional labor.

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

**LED:** Red light mounted somewhere in the vehicle. It is used to indicate the status of your system. It is also used to report triggers and faults in the system or sensors.

**Shock Sensor:** This system is packaged with a DoubleGuard® Shock Sensor. This sensor is mounted in the vehicle and designed to pick up impacts to the vehicle or glass.

**Siren:** Noise generating device usually installed in the engine compartment of the vehicle. It is responsible for generating the "chirps" you hear, as well as the six tones you hear while the alarm is triggered.

**Transmitter:** Hand-held, remote control that operates the various system functions.

**Trigger or Triggered Sequence:** What happens when the alarm "goes off" or "trips." The triggered response of your system consists of 30 seconds of siren sounding and parking light flashing.

**Valet** \* **Switch:** A small push button switch mounted somewhere inside the vehicle. It is used to override the alarm when the remote transmitter is lost or damaged, or to put the system in Valet \* mode.

Warn Away® Response: Lighter impacts to the vehicle will generate the Warn Away response. It consists of several seconds of siren chirps and parking light flashes.

**Zone:** A zone is a separate input that the security alarm can recognize as unique. Each input to the security system is connected to a particular zone. Often two or more inputs may share the same zone.

# Security & Convenience Expansions

Here we have listed only some of the many expansion options available. Please contact your dealer for a complete explanation of all the options available to you. All security and convenience expansions require additional parts and labor.

**Field Disturbance Sensor:** An invisible dome of coverage is established by the 508D "radar" sensor. Your system can react to any intrusions into this field with the triggered sequence.

**Backup Battery:** The 520T keeps the system armed, triggers the alarm and keeps the starter kill active if the main battery is disconnected.

**Electronic Hood Lock:** This prevents the vehicle's hood from being opened whenever the system is in alarm mode, keeping thieves away from the system's siren, the battery connections, or other components under the hood.

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

Power Trunk Release: The channel 2 output of the system can operate a factory power release for the vehicle's trunk or hatch.

(An optional relay and additional labor may be required.) If the 
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factory release is not power activated, DEI's 522T trunk release solenoid can often be added.

**Valet**\* **Start System:** For the ultimate in convenience, the Valet\* start system can start your vehicle, monitor engine functions, and power your climate control system with a push of a button! Overrev protection, open-hood lockout, brake pedal shutoff, and automatic timer shutoff are all included. (Only for automatic transmission, fuel-injected gasoline vehicles).

**Power Window Control:** Automatic power window control is provided with the 529T or 530T systems. These can operate power windows, and can roll them up automatically when the system is armed, down when you transmit channel 2 or 3, or both up and down. The 530T also provides one touch switch operation.

**Headlight and Parking Light Automation:** The 545T Nite-Lite\* will automatically turn on your parking and headlights when it gets dark. In addition, the 545T will make sure your headlights are on whenever the windshield wipers are used. A transmitter function can also be used to turn on your parking lights and headlights for a programmed time.

**Voice Module:** The 516M high quality voice module uses voice announcements to indicate many of the system functions including arm, disarm, Warn Away<sup>™</sup> and channel activation.

	Notes	

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#### **QUICK REFERENCE GUIDE:**

#### To arm using your remote

■ You can activate, or arm, the system by pressing • on your transmitter for one second. When the system arms, you will hear a short siren sound, or chirp, and the parking lights will flash once. If the vehicle's power door locks have been connected to the system, the doors will lock.

#### To disarm using your remote

■ To disarm the system, press again. You will hear two chirps, and the parking lights will flash twice. If power locks are connected to the system, the doors will unlock. If the siren chirps either four or five times when disarming, see Diagnostics section. This is called Tamper Alert.

#### **Arming While Driving**

■ Press on your transmitter while the vehicle is running. The system will chirp once and then once more to indicate that the ignition is on.

#### **Disarming Without a Transmitter**

■ Turn on the ignition. Push the Valet\* switch within 15 seconds. The system should now disarm. If it does not, you may have waited too long, so turn the ignition off and on and try again.

#### To enter or exit Valet® Mode

■ Turn ignition to "run" position, then turn to "off" position. Press and release the Valet switch within 10 seconds. The status LED will light solid if you are entering Valet Mode, and it will go out if you are exiting Valet Mode.

#### To activate panic mode

#### To exit panic mode

■ Press on the transmitter.

#### To activate Silent Mode™

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

#### The company behind this system is Directed Electronics, Inc.

Since its inception, Directed Electronics 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 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.



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

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