Model 600
Owner's Guide

Code Hopping™

High Frequency

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.

Table of Contents

What is Included

- The control module
- A pair of Four-button transmitters
- A Stinger® DoubleGuard® dual-output shock sensor
- A Revenger® Soft Chirp® six-tone programmable siren
- A red Status LED indicator light
- A push-button Valet® switch
- Your warranty card
- FailSafe® Starter Kill (Ready feature, may require additional labor)

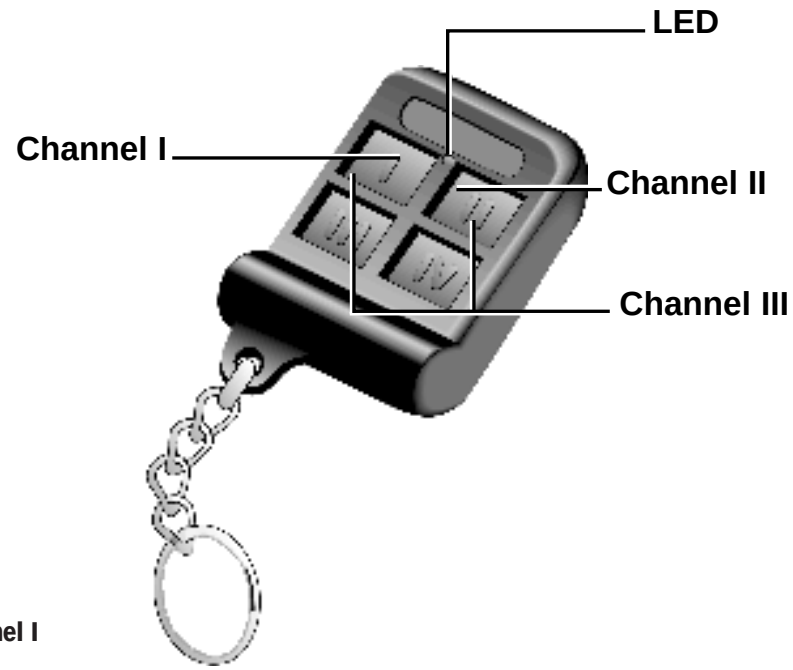
CONGRATULATIONS on your purchase of a state-of-the-art vehicle security system. This system has been designed to provide years of trouble-free operation. Due to the complexity of this system, it must be installed by an authorized dealer only. Installation of this product by any other person other than an authorized dealer voids the warranty. All dealers are provided with a preprinted dealer certificate to verify that they are authorized.

THE SYSTEM REQUIRES NO SPECIFIC MAINTENANCE. Your remote control is powered by a miniature 12V battery, type GP23A, that will last about a year under normal use. When the battery weakens, operating range will be reduced and the LED on the remote will be dim.

YOUR WARRANTY card must be returned and the bar code serial number must not be removed. If the warranty card is not returned, you don't have a warranty. 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.**

THIS OWNER'S GUIDE is designed to help you get the most out of your system. Please take the time to read it thoroughly prior to using the system.

Transmitter Buttons



Channel I

The arm/disarm and panic functions are usually controlled by Button I.

Channel II

The Silent Mode™, Remote Valet® and optional trunk release functions are usually controlled by Button II. Silent Mode and Remote Valet work by pressing Button II for less than 1 second. Trunk release requires you to press Button II for 1.5 seconds.

Channel III (for options)

Usually controlled by pressing Buttons I and II at the same time. These assignments can be changed if needed, such as for two-car operation from one remote.

Using Your System

Arming

You can turn on, or **arm**, the system by pressing Button I of your transmitter for 1 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. While the system is armed, the Status LED will flash about twice a second, showing that the system is actively protecting your vehicle. If you hear a second chirp after arming and see the Status LED flashes in groups, see the Diagnostics section. This extra chirp is called **Bypass Notification.**

The system also can 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 "sees" you leave 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.

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 the 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 in the following ways:

- 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 will trigger the system. The **trigger sequence** is 30 seconds of constant siren and flashing parking lights.
- 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 instant response (even if the door is immediately closed).

- Turning on the ignition key will trigger the same progressive response as opening a door.
- The optional Failsafe starter kill prevents the vehicle's starter from cranking.

Arming While Driving

Your system can be armed while you are driving the vehicle! Simply press Button I on your transmitter while the vehicle is running. 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. Once you have reached your destination, the system must be disarmed by pressing Button I on the transmitter once more. The siren will chirp twice and the LED will stop flashing. If you do not disarm the system, it will trigger when any door is opened to exit the vehicle.

Disarming

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

High Security Disarm

Your system includes a High Security Disarm feature. During the trigger sequence, using the transmitter to disarm the system will only stop the trigger sequence (the siren will stop and the parking lights will stop flashing). However, the system will remain armed and the doors will stay locked. This is extremely useful if you must stop the system from sounding but are unable to check the vehicle visually. The trigger will stop, but the vehicle will remain pro-

tected.To disarm with the transmitter during a trigger, press Button I on your transmitter. The siren will stop sounding. Next press Button I once more and the system will chirp four or five times (reporting the trigger), then disarm.

Disarming Without a Transmitter

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

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.

IMPORTANT: The Valet switch will not disarm the optional VRS® feature. The hidden VRS arm/disarm switch must be used (see the VRS® section.).

Silent Mode™

To temporarily turn off the arm or disarm chirps, use Silent Mode™. Simply press Button II briefly before arming or disarming, and the confirmation chirp(s) will be eliminated for that one operation only. If you want the arm/disarm chirps turned off permanently, your dealer can do this for you.

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 able to trigger. Only the Warn Away response is defeated.

Panic Mode

If you are threatened in or near your vehicle, you can attract attention by triggering the system with your transmitter! Just press Button I 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 Button I again.

Valet® Mode

You can prevent your system from automatically arming and triggering by using Valet Mode. This 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 convenience functions (door locks, trunk release, etc.) will work normally. You can access Valet mode either manually or from the remote transmitter.

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

Turn ignition to the "run" position, then turn to the "off" position. Press and release the Valet switch within 10 seconds. The Status LED will shine steadily if you have entered Valet Mode, and it will go out if you exited Valet Mode.

Using Remote Valet® as you enter or exit the vehicle:

Open any door.
Press Button I, Press Button II, Press Button I again.
The Status LED will shine steadily if you entered Valet Mode, and it will go out if you exited Valet Mode.

Nuisance Prevention Circuitry™

Your system includes Nuisance Prevention Circuitry (NPC™). This feature prevents annoying repetitive trigger sequences due to faulty door pin switches or environmental conditions such as thunder, jackhammers, airport noise, etc. Here's how it works:

Let's say the alarm triggers three times. Each time, the same sensor or switch triggers the alarm. If the three triggers are within 60 minutes of each other, NPC will interpret this pattern of triggers as false alarms. After the third trigger, 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 tries 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 a 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 seem to stop working. If five chirps are heard when disarming, NPC has been engaged. If you want to clear the NPC memory, turn the ignition on.

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 with an input active (door open, sensor triggering, etc.) the unit will chirp once when arming and one more time a few seconds later. This is called **Bypass Notification**.

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

The system will ignore the input that was active when it was armed until it goes away. 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 get Bypass Notification. Three seconds after the light goes out, however, the doors are monitored normally.

Disarming Diagnostics

Extra disarm chirps identify 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 the number of LED flashes used by the system to identify that input. The standard input assignments are listed below, along with spaces to write in any optional sensors or switches you have had installed.

Zone (Number of LED Flashes	Description	Dealer-installed options
	Instant Trigger	
	A heavy impact of the Shock Sensor	
	Door switch circuit	
	Instant trigger of optional sensor Ignition	
	Ignition	

NOTE: If the Warn Away response is triggered, the LED will not report it.

Code Hopping™ Explained

Your system receiver and transmitters 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 knows 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 remote control simply press the arm/disarm button of the transmitter 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.

Programming Options

Programming options control what your system does during normal operation, and require little or no additional parts. However, some may require additional installation labor.

The following is a list of the programmable options, with the factory settings in **bold**.

- **Active** arming (only with the transmitter) 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 selected for step one.

- The ignition-controlled door locking feature **on** or off. With this feature on, the doors will lock 3 seconds after the key is turned on, and unlock when the key is turned off.

Note: If the door is open when the ignition is turned on, the doors will not lock.

- 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 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 (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 car, it is necessary to arm and then disarm the vehicle from 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 also disabled when 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, is bypassed and cannot trigger the system. However, the remaining inputs to the system are fully operational.

Siren tones and chirp volume. The output of the Revenger™ Soft Chirp™ siren consists of six different tones in sequence. Any of these tones can be eliminated by your dealer, resulting in a unique, easily identifiable siren sound. The siren chirps can be either full volume or **6 decibels quieter** than the full alarm blast.

Vehicle Recovery System (VRS®)

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

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

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. The optional Vehicle Recovery System is armed and disarmed using a hidden push-button switch. If the system has been installed, make sure you are aware of the location of the VRS® button.

Arming the VRS®

To arm the VRS, push the button once. This can be done before driving or while driving the vehicle. Once the system is armed, it will go into its triggered sequence (see below) if any door is opened and closed while the engine is running. If you are forced from the vehicle, the system will trigger when you open and close the door to exit. This is how the system works to combat intersection carjacking. If ordered from the vehicle, you may press the VRS button before exiting. Arming prior to that point, however, is highly recommended.To protect against parking lot carjacking, simply press the VRS® button once before leaving the vehicle. The system will now trigger automatically the next time you or anyone drives the vehicle. This helps to protect the vehicle if someone takes your keys and transmitter remote by force in a parking lot.

NOTE: If the VRS is armed while operating the vehicle and not disarmed prior to leaving the vehicle, it remains armed and will trigger the next time the vehicle is driven.

VRS Trigger Sequence

Fifteen seconds after the last door has closed, the system's Status LED will begin flashing. This delay is to allow you to put distance between yourself and your vehicle in the event of a carjacking.

NOTE: If the system is in Valet Mode, the VRS feature will still protect your vehicle. However, the Status LED will not provide this first-level indication if the VRS triggers with the system in Valet Mode.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 on, 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 VRS 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 flashing lights will begin again.

Disarming the VRS®

Take the time to familiarize yourself with the VRS trigger sequence and the disarm procedure. It is important to recognize the VRS and know how to disarm it in case of accidental activation. Disarming the VRS is always the same whether it is triggering or not. Once again, if VRS is armed, it does not disarm automatically. You must disarm it the next time you operate the vehicle. You must manually disarm it following this procedure:

With the ignition key in the "RUN" position, press the VRS button, NOT the arm/disarm button on the remote control). Remember, neither the transmitter nor the Valet button will disarm the VRS feature. Only the hidden arm/disarm button can disarm VRS©.

Glossary of Terms

Control Unit The "brain" of your system. Usually hidden under the dashboard area of the vehicle. It houses the microprocessor that monitors your vehicle and controls all of the alarm's functions.

FailSafe® Starter Kill An automatic switch controlled by the security system which prevents the vehicle's starter from cranking whenever the system is armed. The vehicle is never prevented from cranking when the system is disarmed, in Valet mode, or should the starter kill switch itself fail. Your system is ready for this feature, however 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 to 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 Stinger® DoubleGuard® shock sensor. This sensor is mounted in the vehicle and designed to pick up impacts to the vehicle or windows.

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 unit that operates the various functions of your system.

Trigger or Triggered Sequence What happens when the alarm "goes off" or "trips." The triggered sequence 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 a transmitter is lost or damaged, or to put it into 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 the alarm can recognize as unique. Each input to the system is connected to a particular zone. Often two or more inputs may share the same zone.

Security and Convenience Expansions

Listed below are some of the many expansion options available. Please consult your dealer for a complete explanation of all the options available to you.

Field Disturbance Sensor An invisible dome of coverage is established by the 508T "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 main battery power is disconnected.

Electronic Hood Lock Prevents the vehicle's hood from being opened whenever the system is armed, keeping thieves away from the system's siren, the battery connections, and other components under the hood.

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

Power Trunk Release The Button II output of the system can operate a factory power release for the vehicle's trunk or hatch. Although the on board relay can control most power trunk releases, in some cases an optional relay is required. If the factory release is not power-activated, the DEI's 522T trunk release solenoid often can be added.

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

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. (Only for automatic-transmission, fuel-injected gasoline vehicles)

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

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

QUICK REFERENCE OPERATING CARD:

Arming

▼ You can turn on, or arm, the system by pressing Button I of your transmitter for one second. When the system arms, you will hear a short chirp, and see the parking lights flash once.

Arming While Driving

▼ Press Button I 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

▼ Press Button I. You will hear two chirps, and the parking lights will flash twice.

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.

Silent Mode™

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

Panic Mode

▼ Press Button I 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 Button I on the transmitter again.

Using Remote Valet as you enter or exit the vehicle:

▼ Press Button I. Press Button II. Press Button I again. The Status LED will light steady if you have entered Valet Mode,and go out if when you exited.

Arming the VRS®

▼ Push the VRS®. Once the system is armed, it will go into its triggered sequence once any door is opened and closed or you are forced from the vehicle.

High Security Disarm

▼ Press Button I on your transmitter. The siren will stop sounding. Next press Button I once more and the system will chirp four or five times (reporting the trigger) and disarm.

The company behind **DEI®** is Directed Electronics, Inc.

Since its inception, the company known as Directed Electronics, Inc. (DEI®) has had one purpose - to bring the proven advantages of microprocessor and I.C. technology to the automotive industry.

As a recipient of numerous patents, DEI® has established new standards in electronic design, automated manufacturing, and dealer support. Its electronic products are sold and serviced worldwide.

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

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