

*Model 690XV*

➤ *Owner's Guide*

## *limited lifetime consumer warranty*

Directed Electronics, Inc. ("Directed") promises to the original purchaser to repair or replace with a comparable reconditioned model any Directed 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 Directed dealer; the unit will be professionally reinstalled in the vehicle in which it was originally installed by an authorized Directed dealer; and the unit is returned to Directed, 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. Directed, 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 DIRECTED NEITHER ASSUMES NOR AUTHORIZES ANY PERSON OR ENTITY TO ASSUME FOR IT ANY DUTY, OBLIGATION OR LIABILITY IN CONNECTION WITH ITS PRODUCTS. DIRECTED DISCLAIMS AND HAS ABSOLUTELY NO LIABILITY FOR ANY AND ALL ACTS OF THIRD PARTIES INCLUDING ITS AUTHORIZED DEALERS OR INSTALLERS. DIRECTED SECURITY SYSTEMS, INCLUDING THIS UNIT, ARE DETERRENTS AGAINST POSSIBLE THEFT. DIRECTED 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 DIRECTED 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 DIRECTED SHALL BE STRICTLY LIMITED TO THE AUTHORIZED DIRECTED DEALER'S PURCHASE PRICE OF THE UNIT. DIRECTED 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 Directed dealer for details of the plan or call Directed Customer Service at 1-800-876-0800. Directed security systems, including this unit, are deterrents against possible theft. Directed 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. Directed 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

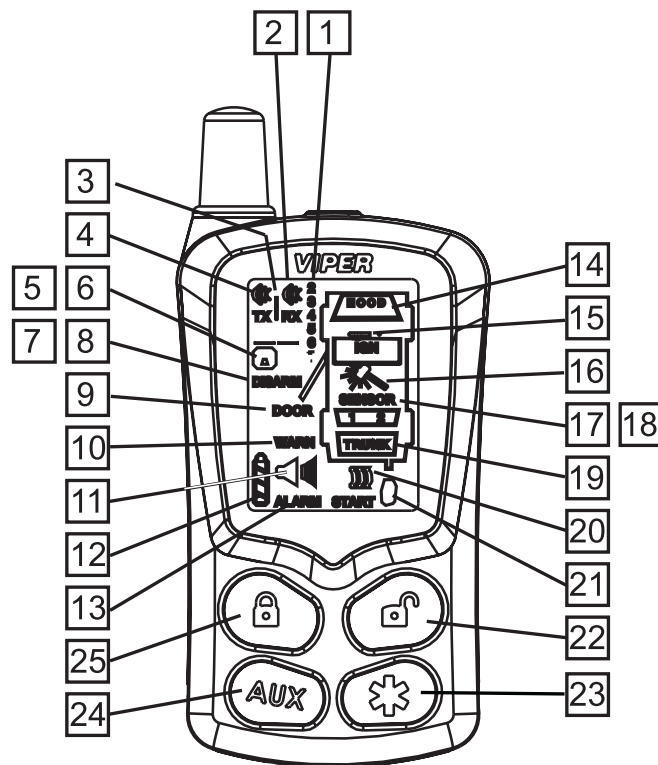
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## *remote control diagram*

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## *standard remote configurations*

1	Auxiliary Channel Out
2	Receive Indicator
3	Signal Indicator
4	Transmit Indicator
5	Lock Status Indicator
6	Unlock Status Indicator
7	Arming Status Indicator
8	Disarming Status Indicator
9	Door Switch Input Indicator
10	Warn Away® Response Indicator
11	Siren Status Indicator
12	Battery Level Indicator
13	Trigger Response Indicator
14	Hood Switch Input Indicator
15	Ignition Switch Input Indicator
16	Sensor Response Indicator
17	Sensor 1 Indicator - Full Trigger and Warn Away®
18	Sensor 2 Indicator - Full Trigger and Warn Away®
19	Trunk Switch Input Indicator
20	Vibrate Mode Indicator
21	Remote Start Indicator (n/a)
22	Disarm Button
23	Panic Button
24	Auxiliary Button
25	Arm Button

## *what is included*

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- One control module
- One Responder transceiver
- Stinger® Doubleguard® dual-stage shock sensor
- Revenger® Soft Chirp® six-tone programmable siren
- Status LED indicator light
- Push-button Valet button
- Your warranty registration
- Failsafe® Starter Kill ready circuitry  
(may require additional labor)
- FSK transceiver

## *important information*

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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 be installed by an authorized dealer only. Installation of this product by anyone other than an authorized dealer voids the warranty. All dealers are provided with preprinted dealer certificates to verify that they are authorized.

This owner's guide should help you to get the most out of your system. Please take the time to read it prior to using the system.

## → **system maintenance**

This system needs no specific maintenance beyond remote control battery replacement. The remote is powered by a 1.5V AAA battery.

The Battery Level indicator has four level indicators that serve as a visual indication of battery charge. When the battery reaches a low charge level that requires replacement, the remote control will generate a single notification chirp, and the Battery Level indicator will flash continuously.



### **Battery Replacement**

Gently pull the end of the battery door away from the top of the remote control then slide the door up to expose the battery and remove the expired battery. Place the new battery into the remote control observing the correct polarity. When power is returned the remote control will light all icons in the LCD and generate all beeper tones once.

## → **your warranty**

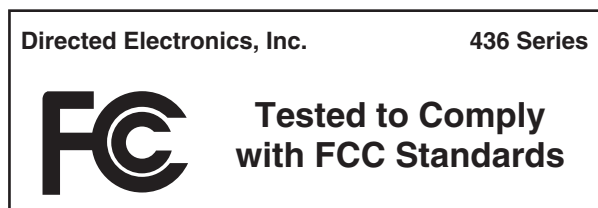
Your warranty registration must be returned and the bar code serial number must not be removed. If the warranty registration is not returned, you do not have a warranty. It is also necessary to keep your proof of purchase, which reflects that the product was installed by an authorized dealer. Make sure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

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



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## *remote control functions*

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The remote control buttons are used to send commands to the system. The descriptions below reflect the standard configuration for this system. The buttons can be custom configured for the user's specific needs by the installer.

### → **standard button configurations**



#### **Button**

The System Arm and Multi-Level Security Arming functions are controlled by pressing this button for one second.



#### **Button**

The System Disarm and High Security Disarm functions are controlled by pressing this button for one second.



#### **Button**

Silent Mode™ and an optional auxiliary function are controlled by this button. Silent Mode works by pressing this button for less than one second before arming or disarming. An optional auxiliary function, such as trunk release, can be controlled by pressing this button for 1.5 seconds.

**The auxiliary output controls \_\_\_\_\_.**



#### **Button**

The panic feature is controlled by pressing this button for two seconds.

### and Buttons

An optional auxiliary convenience or expansion function that you have added to your system can be activated by pressing these buttons simultaneously.

The auxiliary output controls \_\_\_\_\_.

### → **standard icon configurations**



The transmit icon will be displayed while the remote control is transmitting a command to the vehicle.



The receive icon will be displayed while the remote control is receiving a page from the vehicle.



The signal icon will be displayed if a command is transmitted to the vehicle but a command page is not received.



The armed status icon will be displayed when the system is locked and armed.



The disarmed status icon will be displayed when the system is unlocked and disarmed.



The disarm icon will flash while the system is disarming

**Icon**

The arm icon will flash while the system is arming.

**Icon**

The door icon will be displayed to indicate that a door is open when arming the system (Bypass Notification) or opened when the system is armed (Tamper Alert).

**Icon**

The warn icon will be displayed if the Warn Away® response has been triggered while the system is armed.

**Icon**

The siren icon will be displayed as an indicator that the siren is sounding.

**Icon**

The alarm icon will be displayed if the system has been violated, and will continue to be displayed until the 60-second siren cycle is complete.

**Icon**

The vibrate icon will be displayed when the Vibrate Mode is on.

**Icon**

The battery level icon is always displayed as an indicator of Battery charge.



#### **Icon**

The start icon is not used in this model.



#### **Icon**

The trunk icon will be displayed to indicate that the trunk is open when arming the system (Bypass Notification) or opened when the system is armed (Tamper Alert).



#### **Icon**

The Sensor 1 icon will be displayed if the Dual-Stage shock sensor has been triggered as a full-triggered or Warn Away® sequence.



#### **Icon**

The Sensor 2 icon will be displayed if an additional Dual-Stage sensor has been triggered as a full-triggered or Warn Away® sequence.



#### **Icon**

The hammer icon will flash when either Sensor 1 or 2 has been triggered as either a Warn Away® response or triggered sequence.



#### **Icon**

The ignition icon will be displayed to indicate that the ignition is on when arming the system (Bypass Notification) or turned on when the system is armed (Tamper Alert).



#### **Icon**

The hood icon will be displayed to indicate that the hood is open when arming the system or (Bypass Notification) opened when the system is armed (Tamper Alert).

### **Number Icons**

When either of the channel 2 or 3 outputs is activated the appropriate icon will be displayed for five seconds.

## *remote operation and programming instructions*

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This security system operates at 434 MHz and incorporates Directed's proprietary XHF2 out-board Responder Technology remote control. The high frequency combined with Binary Data communication achieves superior range with two-way communication.

### **system signal paging features**

A page is the signal the control module sends to the remote control as confirmation of receipt of a command or alarm system status.

When the remote control receives a page it will generate a page notification to the user (notifications are audible beeps or remote vibration) and the LCD Icons will display the current system status.

### **Command Page**

When a command (arm/disarm, remote start, or auxiliary channel) from the remote control is sent and received, the system will send a command page back to confirm receipt.

**note:** When the system is in Valet mode, the remote control will show the lock (5) and unlock (6) icons, but will not generate a command page.

### Alarm Page

If the alarm system is triggered while armed, an Alarm Page will be sent to the remote control. After receipt of an Alarm Page, the LCD icons will display the alarm system status information and the remote control will generate Alarm Page alerts.

An Alarm Page alert is a single beep or vibration from the remote control every 60 seconds to alert the user that the alarm system was triggered and will continue until the alarm page is cleared.

**note:** If the transmitter is paged with an Alarm Page and the WarnAway® is triggered before the Alarm Page is received the transmitter will report the WarnAway® only until the system is disarmed.

### Page Recognition Mode

The remote control will leave a zone icon illuminated when it has received a triggered response and will wait for you to recognize the violation. Press any button on the remote control, the LCD information and Alarm Page alerts will be cleared.

**note:** The remote control buttons will not send a command to the system until the alarm page is cleared.

## **programmable remote control features**

### **To enter programming mode**

Press and hold all four remote control buttons simultaneously until one long beep is heard. Programming Mode has now been entered.

### **Page Notification**

The remote control can be programmed to notify the user of a page by audibly beeping or remote vibration.

### **Beep Mode**

Beep Mode includes alarm arm/disarm diagnostic beeps and distinctive two-tone remote start beeps.


### **Vibrate Mode**

Vibrate Mode makes page notification silent but does not include diagnostic information or distinctive remote start notification.

### **Illumination**


Illumination for the LCD display can be programmed on or off. When programmed on the LCD will illuminate every time the remote control receives a page or transmits a command. Programming illumination on will decrease the life expectancy of the battery.

### **Beep/Vibrate Mode**


Within five seconds of entering Programming Mode, press . The remote control will beep once for on, twice for off. The vibrate icon (13) will also turn on/off with each press.




#### **Illumination On/Off**

Within five seconds of entering Programming Mode, press . The remote will beep once for on, twice for off and the light will turn on/off with each press.

#### **Page Mode On/Off**

After entering Programming Mode, press  within five seconds to toggle on and off. When the Page Mode is on, the remote control will wake up periodically to check for messages from the security module. It will also wake up when any button is pushed. When Page Mode is off, the remote control “sleeps” until a button is pushed, extending the life of the battery.

#### **Channel 1 Zone Select**

After entering Programming Mode, press  within five seconds to toggle between hood, trunk, and hood and trunk. The remote will beep once and show hood icon for hood, beep twice and show trunk icon for trunk, and will beep three times and show both icons for hood and trunk. The default is the trunk.

#### **To Exit Programming Mode**


To exit Programming Mode, take no action for five seconds. The remote control will generate two beeps to indicate programming mode has been exited.

## *using your system*

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The buttons used in the instructions in this manual correspond to the standard configuration. Remember, this is not the only way your transmitter may be set up. It can be custom configured to meet your needs.

### **active arming**

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.

While the system is armed, the status LED will flash approximately once 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.

### **passive arming**

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. The siren will chirp once 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 of this guide. Additionally, each time a protected entry 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 will trigger the system. The triggered sequence is between 1-180 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 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.

### ➔ **multi-level security arming**

Multi-Level Security Arming allows you to select which of the security system's inputs or sensors will be active and which will be bypassed at the time that the system is armed. (See the *Table of Zones* section of this guide.) Pressing  again within five seconds of arming the security system will activate the Multi-Level Security Arming feature. Each time  is pressed again, a different security level is selected. The different security levels can be selected as follows:


- Press  one time: The siren chirps once. The system is armed.
- Press  a second time within five seconds: The siren chirps twice followed by a long chirp. Zone 2 is now bypassed.
- Press  a third time within five seconds: The siren chirps three times followed by a long chirp. Zone 4 is now bypassed.
- Press  a fourth time within five seconds: The siren chirps four times followed by a long chirp. Zones 2 and 4 are now bypassed.
- Press  a fifth time within five seconds: The siren chirps five times followed by a long chirp. All input zones, except

the ignition, are now bypassed.

- Continued pressing of  will begin the Multi-Level Security Arming cycle over again.


**note:** Multi-Level Security Arming only applies to a single arming cycle. Once the system is disarmed and then re-armed, all the zones will be active again.

### ➔ **arming while driving**




Your system can be armed while driving the vehicle. Simply press  on your transmitter for two seconds while the vehicle is running or while the ignition is on. The siren will chirp once and then once more to indicate that the ignition is on. The security system will not respond to any input except the door triggers and the Failsafe® Starter Kill (if installed) will not be activated. The security system will disarm automatically whenever the ignition is turned off. The siren will chirp twice and the LED will stop flashing.

**note:** If programmed for the optional Vehicle Recovery System (VRS®) feature, arming with the transmitter will arm the VRS® feature. (See Vehicle Recovery System® section of this guide.)

### → **disarming**

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

### → **high security disarm**

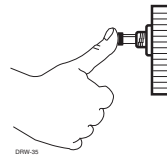
This security system offers High Security Disarm. High Security Disarm is a feature that makes it possible to silence and reset the system while it is triggering, without disarming the system. If the system is triggered and the siren has been sounding for longer than six seconds, pressing  or  on the remote 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 disabling the system should you wish to disarm it without visually checking the vehicle. Pressing  after resetting the system will disarm the system; pressing this button during the first six seconds of the triggered sequence will disarm the security system immediately. The six second timer is provided for your convenience, in case the system is accidentally triggered.

### → **disarming without a transmitter**

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



To disarm the security system, turn the ignition to the ON position. Press the Valet button the preset number of times (one to five times) within 15 seconds. After five seconds the system will disarm. If the system does not disarm, you may have waited too long; turn the ignition off and on and try again.




**Location of Valet Button** \_\_\_\_\_

**Number of Pulses** \_\_\_\_\_



**important!** The unit can be programmed to respond to one to five pulses of the Valet button for the disarm function. Be sure to check with the installer for the desired programming.

### → **silent mode**

To temporarily turn off the arm or disarm chirps, use Silent Mode™. Simply press  for less than one second 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 capable of triggering. Only the Warn Away® response is bypassed.

### → **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 two seconds, and you will enter Panic Mode. The siren will sound and the parking lights will flash for the programmed siren duration. To stop Panic Mode at any time, press  on the remote transmitter again.



## → valet mode

You can prevent your security 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 security system will not arm, even with the remote transmitter, but all convenience functions (door locks, trunk release, etc.) will continue to work normally.

### 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 solidly if you are entering Valet Mode, and it will go out if you are exiting Valet Mode.

### To enter or exit Valet Mode using the transmitter:

1. Open any vehicle door.
2. Press .
3. Press .
4. Press  again.

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

### → nuisance prevention® circuitry

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

#### Example

If the alarm triggers three times within a 60-minute period and each time the same sensor or switch triggers the alarm, NPC® will interpret those 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 continually triggers will remain bypassed.

Doors are covered by NPC® differently; if the alarm is triggered by an open door for three full cycles, 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 *Programming Options* section of this guide.

## *diagnostics*

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The microprocessor at the heart of your security system is constantly monitoring all of the switches and sensors that are 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. Refer to the *System Status Chirps* and *Table of Zones* charts for diagnostic information.

### → **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 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 security system will ignore the input that was active when the system was armed, until the input goes away. Three seconds later the system will monitor that input normally. For example, if your vehicle has interior light exit delay, and you arm the system before the interior light goes out, you may hear Bypass Notification chirps. Once the light shuts off, however, the doors are monitored normally.

### → **disarming diagnostics**

Extra disarm chirps are the 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. The status LED will indicate which zone was involved. (See *Table of Zones* section of this guide.) The system will retain this information in its memory, and continue to chirp four or five times each time it is disarmed, until the next time the ignition key is turned on.

### → **system status chirps**

The siren will chirp when arming/disarming the system. The pattern of chirps will audibly report the system's status as described below.

Action	Number of Chirps	Description
Arm	1	System armed
Arm	1 (3-second delay), 1	System armed with Bypass Notification
Disarm	2	System disarmed
Disarm	4	System disarmed with Tamper Alert
Disarm	5	System disarmed NPC active

## → 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
1	Instant trigger - often used for hood/trunk pinswitches	
2	Instant trigger - a heavier impact detected by the shock sensor	
3	Door switch trigger	
4	Instant trigger - for optional sensors	
5	Ignition trigger	

## → interpreting zone diagnostics

Warn Away responses are not reported by arming or disarming diagnostics. If you receive a Bypass notification when arming or a Tamper Alert notification when disarming, look at the LED. Active or triggered zones will be indicated by a pattern of blinks by the LED.


### Example

If Zone 3 was active or triggered, the LED will blink three times with a two-second pause. Then it will blink three times again, and repeat until the ignition is turned on.

**note:** Your system stores the last two triggered zones in memory. If your system has been triggered but the LED has been reset by turning on the ignition, your dealer can still recall the last two zones that were triggered. Contact your dealer for details.

## *code hopping*

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The receiver and transmitters each use mathematical formulas called algorithms to change their codes 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 if 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  of the transmitter several times within range of the vehicle. The alarm will automatically re-sync and respond to the transmitters normally.

## *high frequency*

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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*

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Owner Recognition is a feature available exclusively from Directed. Using the Directed Bitwriter, a hand-held programming tool, your dealer can program many of the system settings. The programmer 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 a Directed Bitwriter and the necessary software. Check with your dealer for more information.

## *rapid resume logic*

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This Directed system will store its current state to non-volatile memory. If power is lost and then reconnected, the system will recall the stored state from memory. This means if the unit is in Valet Mode and the battery is disconnected for any reason, such as servicing the car, when the battery is reconnected the unit will still be in Valet Mode. This applies to all states of the system including arm, disarm, VRS®, and Valet Mode.

## *power saver mode*

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Your system will automatically enter Power Saver Mode while armed or in Valet Mode, after a period of time in which no operation has been performed. This lowers the current draw to the vehicle's battery. Power Saver Mode takes over under the following conditions:

- Power Saver when the system is armed: After the system has been armed for 24 hours, the LED will flash at half its normal rate, decreasing the system's current draw.
- Power Saver in Valet Mode: When the system enters Valet Mode the LED illuminates steadily. If the vehicle is not used (ignition is not turned on) for a period of one hour while the system is in Valet Mode, the LED will shut off. If the system remains in Valet Mode, the LED will come back on the next time the ignition is turned on and then back off.



## *programming options*

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

The following is a list of the program settings, 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.
- The ignition controlled door lock feature **on** or off: With this feature on, the doors will lock three seconds after the ignition is turned on, and unlock when the ignition is turned off. The system will not lock the doors when the ignition is turned on with any door open. If your installer is programming the security system with the Directed Bitwriter, ignition lock and unlock are independent features and can be programmed separately.
- Passive door locking (with passive arming) or **active door locking** (only when arming with the transmitter). Passive locking allows the vehicle's doors to lock when the security system passively arms (after the 30 second countdown). This feature only works if passive arming has been programmed.

**note:** When programmed for passive arming and active lock, if the system is disarmed without a door being opened, the system will relock the doors when it passively rearms.

- Panic mode **enabled**/disabled with the ignition on: Some states have laws against siren capability in a moving vehicle.
- 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 been left ajar when leaving the vehicle. Forced passive arming ensures that the security 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.

- Automatic Engine Disable (AED) on or **off**: The purpose of this 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 car, it will be necessary to disarm the system with the transmitter. It is also possible to disarm the AED feature by turning the ignition key to the RUN position and pressing the Valet button the programmed number of times. 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.

- 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 Directed Bitwriter, 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 NPC® 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:** Because many states have laws regulating security systems, programming NPC® off may cause your system to violate state laws.


- Progressive door trigger **on** or off: When the system is armed and a door is opened, the system responds with ten chirps prior to beginning the full triggered sequence. If an instant trigger is desired, the progressive door trigger can be programmed off.
- Valet pulse count: The number of presses of the Valet button required to disarm the security system, AED, or the VRS® system can be programmed from one to five presses. The default setting is **one** press.

- 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 **six decibels quieter** than the full alarm blast.

## *installation options*

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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 the system is disarmed, only the driver's door unlocks. A second press of the  button unlocks the other doors.
- Vehicle Recovery System (VRS®): VRS® is an anti-carjacking device designed to help in the safe recovery of your vehicle in case of a carjacking. Please refer to the Vehicle Recovery System section of this guide for a complete explanation of how the Vehicle Recovery System operates.

## *vehicle recovery system (vrs<sup>®</sup>)*

The optional VRS<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> allows you to concern yourself with your personal safety without worrying about your property.

Directed has engineered this vehicle security system, the Failsafe<sup>®</sup> Starter Kill, and the VRS<sup>®</sup> 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 or on railroad tracks while the vehicle is in operation. It is unlike other systems that shut down your engine while it is running. This system is designed to perform starter interrupt, or starter kill. The Failsafe<sup>®</sup> Starter Kill cannot shut down an already-running engine – it can only prevent an engine from starting in the first place.

**important!** Any installation that allows this product to shut down a vehicle's engine when it is running is contrary to the product's design and intended usage, and Directed hereby expressly disclaims any liability resulting therefrom.

### → **arming the vrs®**

To arm the VRS®, turn the ignition to the ON position and press the arm button on the remote transmitter for one second. The parking lights will flash and the siren will chirp once. This can be done before driving or while driving the vehicle. Once the system is armed, it will initiate its triggered sequence (see below) if any door is opened and closed. If you are forced from the vehicle, the system will trigger as the door is opened and closed. This is how the system works to combat intersection carjacking. To protect against parking lot carjacking, arm the VRS® 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 remote transmitter by force in a parking lot.

**note:** If the VRS® system is armed while operating the vehicle 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 is intended to allow you time to distance yourself from your vehicle in the event of a carjacking.

**Forty-five seconds later**, the siren begins chirping and the parking lights 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 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 and identify the VRS® trigger 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 the next time you operate the vehicle. You must disarm it with one of the following procedures:

If the system has not entered the triggered sequence (siren has not started chirping):

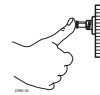


1. Turn the ignition on.
2. Press  on the transmitter for one second. The lights will flash and the siren will chirp twice.

If the system has entered the triggered sequence (siren has begun chirping), pressing the disarm button of the transmitter will not disarm VRS®. To disarm the VRS® during a VRS® trigger sequence:



1. Turn the ignition on.
2. Press the Valet switch the pre-programmed number of times to disarm the VRS system.



**note:** If the VRS® system has begun its chirping sequence, the ignition must be turned off, then on to disarm. If you are driving the vehicle at the time, pull to a safe place away from traffic and follow the triggered sequence disarm procedure.

## ***glossary of terms***

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**Control Unit:** The "brain" of your system. Usually hidden under the dash area of the vehicle. It houses the microprocessor which monitors your vehicle and controls all of the system's functions.

**Fail Safe 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 interrupt switch itself fail. Your system is ready for this feature, however installation may require additional labor.



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

**LED:** Blue 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 is a sensor mounted in the vehicle that is 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 which operates the various functions of your system.

**Trigger or Triggered Sequence:** This is what happens when the alarm "goes off" or "trips". The triggered response of your system consists of the siren sounding and parking light flashing for the programmed duration.

**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 enter or exit Valet mode.

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

**Zone:** A zone is a separate input that the alarm can recognize as unique. Each input to the system is connected to a particular zone. Two or more inputs often 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.

**Audio Sensor:** Metal on glass, glass cracking, and breaking glass each 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.

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

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

**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 turn your headlights on

whenever the windshield wipers are used. A transmitter function can also be used to turn on your parking and headlights for a programmed time.

**Power Trunk Release:** The channel two output of the system can operate a factory power release for the vehicle's trunk or hatch. (An additional relay may be required.) If the factory release is not power activated, then Directed's 522T trunk release solenoid can often be added.

**Power Window Control:** Automatic power window control is provided with the 529T and 530T systems.


**Mobile Video:** This system is compatible with Directed Video's MCB1000 Multi-Channel Controller, featuring on-screen security system programming and zone trigger information.

**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. Over-rev protection, open-hood lockout, brake pedal shutoff, and automatic timer shutoff are all included. (This feature is only for automatic transmission, fuel-injected gasoline vehicles.)


**543T XHFplus External Receiver/Antenna:** The 543T XHFplus external receiver/antenna can be used to upgrade the transmitter/receiver performance in areas of high radio interference such as military bases, airports, and hospitals.

## 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 . 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 for two second 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. Press the Valet button the programmed number of times within 15 seconds. After five seconds, the system will disarm. If it does not, you may have waited too long. 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 button 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

- Press and hold  down for one second.

### 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.

Location of Valet Button \_\_\_\_\_

Number of Valet Button pulses for disarming \_\_\_\_\_





The company behind this system is Directed Electronics, Inc.

Since its inception, Directed has had one purpose, to provide consumers with the finest vehicle security and car stereo products and accessories available. The recipient of more than 20 patents in the field of advanced electronic technology, Directed 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.



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Directed Electronics, Inc.

Vista, CA 92081

[www.directed.com](http://www.directed.com)

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