

HORNET®

Model 745T

➤ ***Owner's Guide***

limited lifetime consumer warranty

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

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

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

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

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

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

\$2,500 Limited Theft Protection Guarantee

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

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

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

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

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

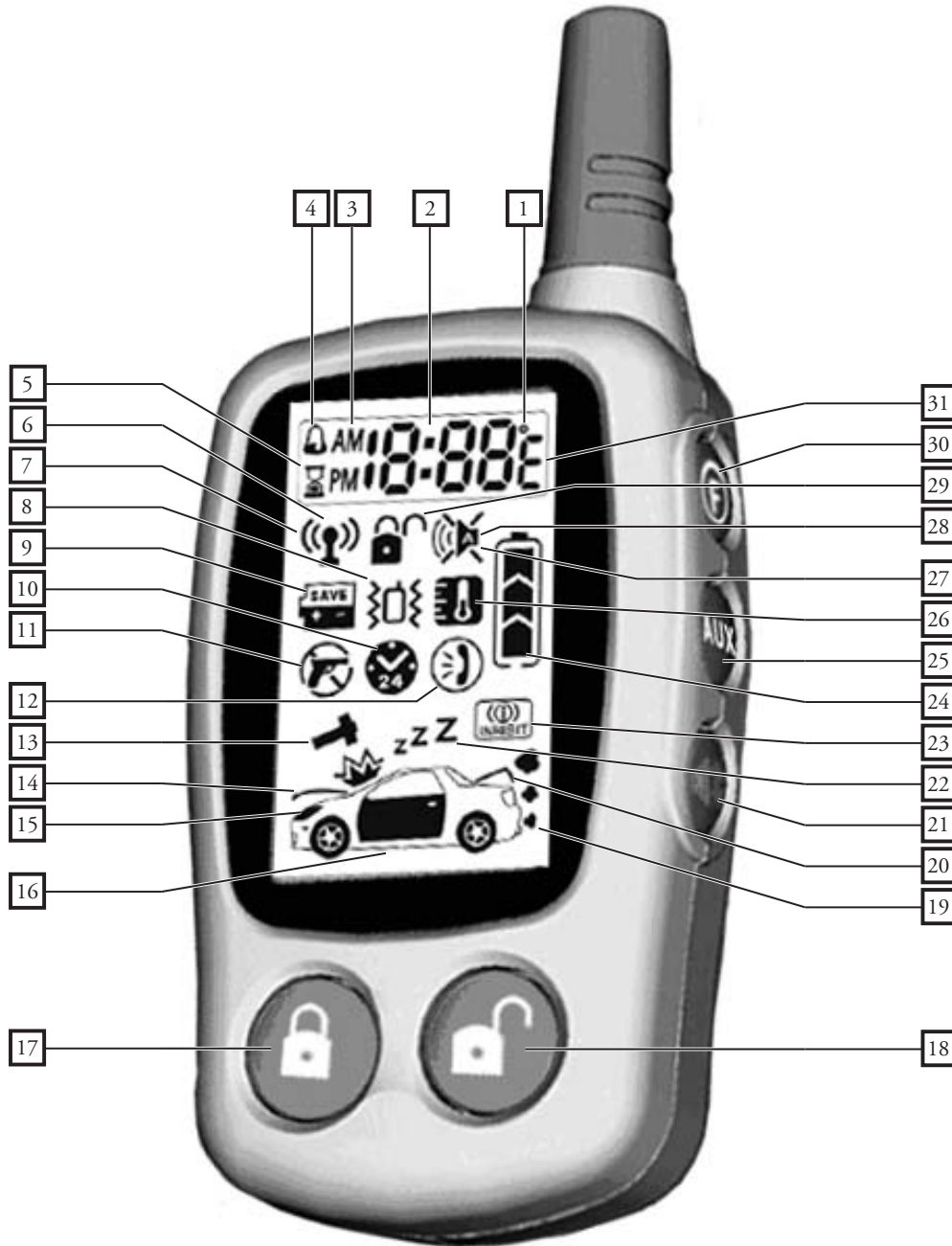
- Date of purchase
- Your full name and address
- Authorized dealer's company name and address
- Type of alarm installed
- Year, make, model and color of the automobile
- Automobile license number
- Vehicle identification number
- All security options installed on automobile
- Installation receipts

table of contents

limited lifetime consumer warranty	i
remote configurations	3
LCD 2-way configuration	3
standard 4-button configuration (both remotes)	4
LCD 2-way remote additional controls	6
what is included	7
important information	7
system maintenance	8
your warranty	9
fcc/id notice	9
Standard LCD 2-way icon configuration	10
LCD 2-way remote operation	15
system signal paging features	16
using your system	16
active arming	17
passive arming	17
warn away® response description	18
triggered response description	19
disarming	20
high security disarm	20
disarming without a remote	21
silent mode	22
panic mode	22
valet mode	23
setting the clock	24
nuisance prevention® circuitry	24
diagnostics	25
arming diagnostics	26
disarming diagnostics	26
system status chirps	27
table of zones	27
code hopping	28
high frequency	29
rapid resume logic	29
programming options	29
security & convenience expansions	30
installation options	32
glossary of terms	32

remote configurations

→ LCD 2-way configuration



1	Vehicle Interior Temperature Indicator
2	Numeric Display
3	AM/PM Indicator
4	Alarm Clock Mode Indicator
5	Timer Function Indicator
6	Transmit Range Indicator
7	Transmission Indication
8	Vibrate/Beep Mode Indicator
9	Power Saver Mode Indicator
10	Remote Start Timer Mode Indicator
11	No Function
12	Vehicle Page Mode Indicator
13	Full Trigger Shock Sensor Indicator
14	Hood/Trunk Open or Trigger Indicator
15	Parking Light Indicator
16	Door Open or Trigger Indicator
17	Arm/Lock Button
18	Disarm/Unlock Button
19	Remote Start Indicator
20	Hood/Trunk Open or Trigger Indicator
21	Remote Start Button
22	Valet Mode Indicator
23	Remote Start Safety Shutdown Indicator
24	Battery Level Indicator
25	Auxiliary Button
26	Temperature-Controlled Remote Start Indicator
27	Silent Arm/Disarm Mode Indicator
28	Full Trigger Alert Indicator
29	Arm/Disarm Indicator
30	Function Button
31	Celsius/Fahrenheit Indicator

→ standard 4-button configuration (both remotes)



controls the **Arm** and **Panic On/Off** function. The arming is controlled by pressing this button. The panic alarm is triggered by pressing and holding this button. Press again to cancel the panic alarm



controls the **Disarm** and **Panic Off** function. Press this button to disarm the system or to cancel the panic alarm.



controls **Silent Mode™** and **Auxiliary** channel **2** output. Silent mode works by pressing this button for less than one second before arming or disarming. And optional auxiliary function, such as trunk release, can be controlled by pressing and holding this button for 1.5 seconds.

The auxiliary output controls _____.





controls the **Panic** function by pressing and holding this button for 1.5 seconds.



and pressed together control channel **3** output, and optional auxiliary convenience or expansion function that you have added to your system.


The auxiliary output controls _____.

 and  pressed together control channel 4 output, and optional auxiliary convenience or expansion function that you have added to your system..

The auxiliary output controls _____.

→ LCD 2-way remote additional controls

note: The controls listed below are applicable only to the LCD 2-way remote.

 The LCD backlighting will turn on when pressed for less than one second; when held for more than five seconds the transceiver will enter adjustment mode allowing the setting of the clock, timer mode, and audible melody selection. For more information, please refer to the *Function Button Configurations* section of this guide.

and Buttons

The numeric display toggles between the time of the day and the alarm clock when these buttons are pressed simultaneously.

and Buttons

Press these buttons simultaneously to activate the parking timer. Each additional press will toggle through the available options (10 min., 20 min., 30 min., 1 hour, 1.5 hours, 2 hours, and off).

and Buttons

When pressed simultaneously these buttons toggle between beep notification and vibrate notification.

and Buttons

When pressed simultaneously these buttons activate battery saver mode, which will drop power consumption on the transceiver battery to zero when the alarm is inactive or disarmed.

what is included

- Control module
- 544N transceiver/antenna
- One 4-button remote
- One 2-way LCD remote
- Impact sensor on-board control module
- High powered siren
- Fault-proof starter interrupt relay on-board control module
- Status LED indicator light
- Push-button Valet button
- Your warranty registration

important information

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

By carefully reading this Owner's Guide prior to using your system, you will maximize the use of this system and its features. You can print additional or replacement copies of this manual by accessing our web site at www.directed.com.

→ system maintenance

The system requires no specific maintenance other than battery replacement for the remotes.

LCD 2-Way Remote Battery Replacement

The 2-way remote is powered by a 1.5V AAA battery. The Battery Level indicator has three level indicators that serve as a visual indication of battery charge. When the battery reaches a low charge level that requires replacement, the transceiver will generate a single notification chirp, and the Battery Level indicator will flash continuously.



To replace the battery, gently pull the battery cover release tab, then slide the door down to expose the battery and remove the expired battery. Place the new battery into the transceiver observing the correct polarity. When power is returned the transceiver will light all icons in the LCD and generate a musical tone.

4-Button Remote Battery Replacement

Your remote is powered by a small, lightweight 3-volt lithium battery (CR2032) that will last approximately one year under normal use. When the battery begins to weaken, operating range will be reduced and the LED on the remote will dim.

→ your warranty

Your warranty registration must be completely filled out and returned within 10 days of purchase. Your product warranty will not be validated if your warranty registration is not returned. Make sure you receive the warranty registration from your dealer. It is also necessary to keep your proof of purchase, which reflects 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 undesirable operation.

Directed Electronics, Inc.

544 Series



**Tested to Comply
with FCC Standards**

Directed Electronics, Inc.

477T Series



**Tested to Comply
with FCC Standards**

Directed Electronics, Inc.

474V/P/S Series



**Tested to Comply
with FCC Standards**

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

→ Standard LCD 2-way icon configuration



The vehicle interior temperature icon has no functions



The numeric display icon will show the hours and minutes.



The AM/PM icon indicates the time before or after noon.



The alarm clock mode icon indicates that the alarm clock mode is active.



The timer function icon flashes during timed functions including parking timer.



The transmit range indicator icon stays visible as long as the system is within operating range.



The remote transmission indicator icon displays when the transceiver is transmitting a signal.



The vibrate/beep mode icon appears when the transceiver is set to vibrate mode.



Icon

The power saver mode can be turned on or off with the transceiver. This icon displays the status.



Icon

The remote start timer mode icon has no function.



Icon

No function.



Icon

The vehicle page mode icon displays when the alarm module is paging the transceiver.



Icon

The full trigger shock sensor icon indicates that the shock sensor has been triggered by a hard shock.



and



Icons

The hood/trunk open or trigger icon illuminates when the hood or trunk trigger has been activated or the hood or trunk is open, and bypasses those zones until it is closed.



Icon

The parking light icon will flash twice when armed or disarmed. The icon also flashes during WarnAway.



Icon

The door open or trigger icon illuminates when the door trigger has been activated or the door is open, and bypasses that zone until it is closed.



Icon

The remote start icon has no function.



Icon

The Valet mode icon appears when the system is in Valet mode.



Icon

The remote start safety shut down icon has no function.



Icon

The battery level icon indicates the level of power remaining in the battery.



Icon

The temperature-controlled remote start icon has no function.



Icon

The silent arm/disarm icon appears when the system has been armed or disarmed in the silent mode.



Icon

The full trigger alert icon illuminates when the security system has been triggered by a heavy impact, door trigger violation, optional sensor violation, or a hood/trunk trigger.



Icon

The arm icon appears when the vehicle is armed and locked. The disarm icon appears when the vehicle is disarmed and unlocked.



Icon

Celsius/Fahrenheit icon indicates the current mode of the displayed temperature either in Celsius or Fahrenheit.

Standard LCD 2-way button functions

Function	Button	Icon	Audible Indication
Lamp On (10 sec)			
Power-Saver Mode*	+		Melody
Beep/Vibrate Mode	+		4 Vibrations/ 1 Beep
Time Adjust Mode (hour)**	for 5 Seconds		2 Beeps
Time Adjust Mode (min)**	1 Time***		
Alarm Clock Set Mode (hour)**	2 Times***		
Alarm Clock Set Mode (min)**	3 Times***		
Alarm Clock Music or Power on Music Selection**	4 Times***		5 Selections 1/2/3/4/5
Alarm Clock Adjust Mode (on/off)**	5 Times***		
Timer Count Down Adjust Mode (hour)**	6 Times***		
Timer Count Down Adjust Mode (min)**	7 Times***		
Timer Count Down Ending Melody Selection 1**	8 Times***		5 Selections 1/2/3/4/5
RS Timer Count Down Mode (on/off)* (where applicable)	9 Times***		

Remote Start On Melody Selection 2 (where applicable)	10 times***		5 Selections 1/2/3/4/5
10 Min Parking Count Down Mode	+ 1 Time		Melody
20 Min Parking Count Down Mode	+ 2 Times		Melody
30 Min Parking Count Down Mode	+ 3 Times		Melody
60 Min Parking Count Down Mode	+ 4 Times		Melody
90 Min Parking Count Down Mode	+ 5 Times		Melody
120 Min Parking Count Down Mode	+ 6 Times		Melody
Parking Count Down Off Mode	+ 7 Times		Melody
Alarm Clock Mode On/Off****	+		Melody
Celsius/Fahrenheit Select Mode	+ +	or	Melody

* This function will operate in the disarmed state only.

** The button will advance the selection upward. The button will advance the selection downward or select the off setting.

*** Be sure to hold down for five seconds prior to entering timer clock adjust mode operation.

**** Press once to have the alarm clock on. Press twice to have the alarm clock off.

The remote will revert to normal operation from the set mode when 15-seconds has elapsed without a button entry.

LCD 2-way remote operation

The remote start system operates at 434 MHz and incorporates Directed's proprietary A.S.K. out-board two-way transceiver. 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 transceiver as confirmation of receipt of a command or alarm system status.

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

Command Page

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

Page Recognition Mode


The transceiver will leave a zone icon illuminated when it has received a triggered response and will wait for violation recognition. Press any button on the transceiver, the LCD information and alarm page alerts will be cleared.

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

using your system

important: Due to the complexity of this system, installation of this product must only be performed by an authorized Directed dealer.

→ **active arming**

You can arm the system by pressing  of your remote for one second. When the system arms, you will hear a short siren sound, or chirp, and see the parking lights flash once. If the power door locks are controlled by the system, the doors will also 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 note that the status LED is flashing in groups, see the Diagnostics Section of this guide. This extra chirp is called Bypass Notification, which indicates that a security sensor or switch has been bypassed and the system is not monitoring that area (zone) of the vehicle.

→ **passive arming**

The system 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 last protected entry has been closed. (e.g. the system detects that you have left 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. If the system is programmed for Passive Arming, care must be taken to prevent the keys from being locked in the vehicle.

note: If any protected entry point (such as a door or a switch-protected trunk or hood) is open, the system will not passively arm. Additionally, each time a protected entry is opened (triggered) during the arming countdown, the 30-second countdown starts over.

When armed your vehicle is protected as follows:

- Light impacts trigger the Warn Away® signal. When triggered, the siren chirps and the parking lights flash for a few seconds.
- Heavy impacts trip a Triggered Sequence. The sequence consists of the siren sounding continuously and the parking lights flashing for 30 seconds.
- 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 remote if you inadvertently open the door while the system is armed.
- Turning on the ignition key will trip the same progressive response as opening a door.
- The starter kill prevents the vehicle's starter from cranking.

→ warn away® response description

A Warn Away® Response consists of an alarm page along with the responses described below.

- **Shock Sensor** - Light impacts to the vehicle will flash the vehicle lights and chirp the siren for a few seconds.
- **Remote Control Notification** - Ten quick beeps (or vibrations).

- **Remote Control LCD** - The full trigger alert icon (28) will dimly illuminate for two seconds
- The transceiver will enter Page Recognition Mode and operate alarm page alerts.

note: Icons 13 and 14 represent alarm system zone inputs. For more information about icons and the zones they represent refer to the *Standard Remote Configurations* section.

→ triggered response description

A Triggered Response can be activated by any of the triggers listed below and consists of an alarm page along with the response described for each trigger. The Triggered Response duration is 30 seconds.

- **Sensor Trigger** - Heavy impacts to the vehicle will instantly sound the siren and flash the lights for the programmed duration and report Zone 2.
- **Door Trigger** - If a door is opened the siren will chirp for three seconds, then the siren will sound and the lights will flash for the programmed duration and report Zone 3. The three seconds allow the user time to disarm the system with a minimum of noise should a door be opened inadvertently while the system is armed.
- **Hood Trigger** - Opening the hood (if connected) will sound the siren, flash the lights for the programmed duration, and report Zone 1.
- **Trunk Trigger** - Opening the trunk (if connected) will instantly sound the siren and flash the lights for the programmed duration and report Zone 1.



- **Ignition Trigger** - If the ignition is turned on the siren will chirp for three seconds, then the siren will sound and the lights will flash for the programmed duration and the remote will flash.

When a Triggered Response is activated the transceiver will:



- Repeat four quick beeps (or vibrate) for 15 seconds.
- The full trigger alert icon (28) will turn on for 15 seconds.
- The zone icons will turn on and remain on until a transceiver button is pressed, clearing the page alert.
- The transceiver will enter page recognition mode and generate alarm page alerts.

note: Icons 13, 14, 16, and 20 represent alarm system triggered sequence zone inputs. For more information about icons and the zones they represent refer to the *Standard Remote Configurations* section.

➔ **disarming**

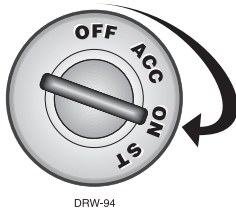
To disarm the security system, press . You will hear two chirps, and the parking lights will flash twice. If the power locks are controlled by the system, the doors will also unlock. If the siren chirps more than twice and the LED continues to flash after pressing the  button, the system was triggered in your absence (Tamper Alert). Refer to the disarming discussion in the Diagnostics Section of this guide.

→ **high security disarm**

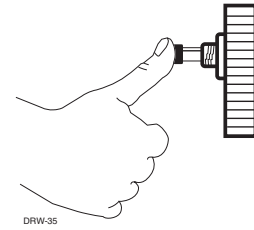
This security system offers High Security Disarm. High Security Disarm is a feature that makes it possible to silence and reset the system while it is triggering, without disarming the system. If the system is triggered and the siren has been sounding for longer than six seconds, pressing  on the remote 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 remote**

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



To disarm the security system, turn the ignition to the ON position. Press the Valet button 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 _____

→ **silent mode**

To temporarily turn off the arm or disarm chirps, use Silent Mode™. Simply press **AUX** 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 by heavy impacts. 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 remote. Just press  for 1.5 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

, , or .

The LCD 2-way remote will beep (or vibrate) continuously when the system enters panic mode. The 2-way remote will not generate a page notification when panic mode is exited.

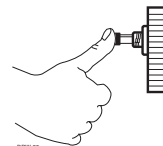
→ valet mode

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, but all convenience functions (door locks, trunk release, etc.) will continue to work normally. You can access Valet Mode either manually or with the remote.

To enter or exit Valet Mode manually:






1. Turn the ignition on.
2. Turn the ignition off.
3. Press and release the Valet button 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 remote:

Steps 2 through 3 must be quickly and smoothly completed.

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.

→ **setting the clock**

To set the clock press and hold  for five seconds, the transceiver will chirp twice and the hour selection will start flashing. Immediately press  to advance the hour selection or  to reverse the hour selection. Once the correct hour is displayed press  again and the minute selection will start flashing. Then press  to advance the minute selection or  to reverse the minute selection. Once the correct time is displayed simply stop pressing any buttons for 15 seconds and the transceiver will automatically exit the clock 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 security system while it is being bypassed, the 60-minute bypass period will start over. This ensures that a sensor that is continually being triggered will remain bypassed.

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

note: Arming and disarming the system does not reset 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 on.

diagnostics

The microprocessor at the heart of your system is constantly monitoring all of the switches and sensors connected to it. It is designed to detect 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* sections of this guide for diagnostic information.

→ **arming diagnostics**

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

note: Bypass Notification does not occur when the system is in Silent Mode or if the notification chirps have been programmed off by the installer.

→ **disarming diagnostics**

Extra chirps that are heard when disarming the system are the Tamper Alert. If four chirps are heard when disarming the system, then the security system was triggered in your absence. If five chirps are heard when disarming the system, a zone was triggered so many times that the Nuisance Protection[®] Circuitry has bypassed that zone. In either case, the status LED will indicate which zone was involved (see *Table of Zones* section). The security system will retain this information in its memory and chirp four or five times each time it is disarmed, until the next time that the ignition 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

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

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

code hopping

The receiver and remotes use a mathematical formula called an algorithm to change their code each time the remote 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 remote “in sync” with the control unit even if you use the remote control out of range of the vehicle. However, if the remote has been pressed many times out of range of the vehicle, or the battery has been removed, it may fall out of sync with the control unit and fail to operate the system. To re-sync the remote simply press  several times within range of

the vehicle. The alarm will automatically re-sync and respond to the remote 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.

rapid resume logic

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, and Valet Mode.

programming options

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

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

- **Active** arming (from remote only) or passive arming (automatic arming 30 seconds after the last door has been closed).
- Arming/disarming siren chirps **on** or off.
- The ignition controlled door lock feature **on** or off: When this feature is programmed on, the doors will lock three seconds after the ignition is turned on, and unlock when the ignition is turned off.
- Passive door locking (with passive arming) or **active door locking** (only when arming with the remote). 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.
- 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 a dealer, resulting in a unique, easily identifiable siren sound. The chirps can be either full volume or **6 decibels quieter** than the full alarm blast.

security & 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.

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.

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

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

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

Power Trunk Release: The accessory 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, sometimes an optional relay is required. If the factory release is not power-activated, 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. These can operate power windows, and can roll them up automatically when the system is armed, roll them down, or both up and down.

installation options

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

Progressive Unlocking: 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 remaining doors.

Horn Honk: If connected, the horn will sound if the alarm is either triggered by an intrusion or activated by Panic Mode. (In most vehicles, this feature requires that an additional relay be installed.)

Interior Light Illumination: The interior domelight can be configured to illuminate for 30 seconds after the alarm is disarmed. If the system is rearmed during that 30-second period, the interior light illumination will terminate until the alarm is disarmed once again.

glossary of terms

Control Unit: The “brain” of your system. Usually hidden underneath the dash area of the vehicle. The control unit houses the microprocessor which monitors your vehicle and controls all system functions.

Fault-Proof Starter Interrupt: An automatic switch controlled by your system that 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 if the starter interrupt switch itself fails. Your system has feature-ready circuitry for the starter interrupt, however installation 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.

LCD 2-Way Remote: A hand-held, transceiver which operates and monitors the various functions of your system.

LED: A red light mounted at a discretionary location inside the vehicle. It is used to indicate the status of your system.

Shock Sensor: This system has a dual zone shock sensor. This sensor is mounted in the vehicle and designed to pick up impacts to the vehicle or glass.

Trigger or Triggered Sequence: This is what happens when the alarm “goes off” or “trips.” The triggered sequence of your system consists of the siren sounding and parking lights flashing for the programmed duration.

Valet Button: A small push-button switch mounted at a discretionary location inside the vehicle. It is used to override the starter interrupt when a remote is lost or damaged, or to enter or exit Valet Mode.

Warning Zone 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. Often two or more inputs may share the same zone.

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




QUICK REFERENCE GUIDE


Arming

- To arm, press . When the system arms, you will hear a short chirp, and the parking lights will flash once.

Disarming

- To disarm, press . You will hear two chirps, and the parking lights will flash twice.


High security disarm

- For high security disarm, press  on your remote and the siren will stop sounding. To completely disarm the security system, press again and the system will chirp 4 or 5 times (reporting the trigger).



Disarming without a remote

- Turn on the ignition. Press the Valet button 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™

- Pressing  briefly before arming or disarming will eliminate the confirmation chirp(s) for that one operation only.

Panic Mode

- Press  for 2 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  on the remote again.

Location of Valet switch _____

The company behind this system is Directed Electronics.

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 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 an ISO 9001 registered company.

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

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