

- If the alarm is triggered when armed.
- When the Remote Start command is sent again from a remote control

► Runtime Check

To check the amount of runtime remaining (2 way remote only):

After the vehicle is remote started, press the **f** button three-times and then hold until the remote beeps, and then release. The display will show a text indicating remaining run time.

► Manual transmission

If the vehicle has manual transmission the proper steps must be followed before leaving the parked vehicle or the remote start feature is disabled.

1. Put the transmission in neutral.
2. Press on the vehicle's foot brake.
3. Apply the emergency brake.
4. Release the vehicle's foot brake. **Note:** Pressing the brake again after this step will disable the remote start feature.
5. Within 15 seconds activate the remote start from the remote.
6. The parking lights will flash 5 times confirming that the remote start is active.
7. Turn off the ignition (the car should stay running when key is turned off).
8. Exit the vehicle and close the door.
9. Arm the alarm (the vehicle should shut off when arming the system).

You can now remote start the vehicle. If a door is opened or if the alarm

is triggered before the next remote start activation the system will not remote start.


To drive your vehicle after it has been remote started:

1. Get in without stepping on the brake.
2. Insert the ignition key and turn it to the ON position.
3. Now, step on the brake.

The remote control will play the remote start shutdown tone. **You have now taken direct control from the remote start system.**

► **Timer mode**

To activate the runtime of the vehicles engine during remote start:

1. Press the **f** button two-times and then .
2. The vehicle will confirm with 4 fast parking light flashes.
3. The system will start every 3 hours until canceled by the brake, hood, or neutral safety shut-down wires. The remote will respond with the Start and Stop remote start notification during each Start and Stop of the Vehicle while in Timer mode.


Important! Timer Mode should be used only in open areas. Never start and run the vehicle in an enclosed space such as a garage or carport.

To exit timer mode, Press the **f** button two-times and then  again.

► **Turbo timer mode**

Turbo timer mode keeps the engine running after arriving at your destination for a programmable period of 1, 3, 5 or 10 minutes. This allows the system's timer to conveniently cool down the turbo after you have

left the vehicle.

Transmit the timer mode feature with the remote while the engine is running, press **f** two-times and then . After exiting the vehicle, arm the alarm and the vehicle will remain running for the programmed runtime. (The remote start feature is still enabled).

The system monitors the engine speed and will automatically shut the engine off if the RPMs rise above or fall below the programmed levels. This feature prevents damage to the motor due to fuel delivery system failures or other problems which may cause the engine to race.

Note: To enter turbo timer mode with a manual transmission, perform the manual transmission procedure (See p.29), with the door open.

Rear defogger

The rear defogger (if connected) is programmed to automatically activate when remote start is turned on. If the interior cabin temperature is above 55° F the defogger will not activate.


To manually activate the rear defogger after remote start is on:

Press **f** four times, and then .

Valet take-over

The Valet take-over feature allows the vehicle to remain running after the key has been removed from the ignition. This feature is useful for occasions when you wish to exit and lock the vehicle for short periods of time, but would like to leave the motor running and the climate controls on.

To perform Valet take-over:

1. Before turning off the engine, press and release  on the transmitter. Then wait a few seconds.
2. Turn the ignition key to the OFF position (The engine will stay running).
3. The engine will run until the pre-programmed time elapses or a shut-down input is received.

Note: To enable Valet take-over with a manual transmission, open the door when going into a manual transmission mode. After you exit the vehicle you can arm the alarm and the car will remain running. If the vehicle shuts down when arming, then the unit did not enter the valet take-over mode.

Safety features

This system has several important safety features to ensure proper operation of the motor and prevent accidental damage to the engine or its components.

► Starter anti-grind circuitry

Whenever the vehicle is remote started, advanced anti-grind circuitry prevents the starter from engaging, even if the key is turned to the start position. This prevents damage to the starter motor if the key is turned to the start position during remote start operation.

Note: Anti-grind circuitry only works when the remote start system is operating the motor and the Failsafe® Starter Kill relay is installed.

► Disabling the remote start system

This feature allows the remote start unit to be temporarily disabled to prevent the vehicle from being remote started accidentally. This feature is useful when the vehicle is being serviced or stored in an enclosed area.

To disable the remote start, move the shutdown toggle switch to the OFF position. Check with your installer for the location.

Location of Shutdown Switch_____

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 prevent them from disabling the entire system. The microprocessor will also record and report any triggers that occurred during your absence.

Refer to System Status Chirps and Table of Zones sections of this guide for diagnostic information.

► Arming

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.

Once 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

Extra chirps 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, the system was triggered so many times that the Nuisance Protection® Circuitry has bypassed the intended zone. In either case, the status LED will indicate which zone was involved (see Table of Zones).

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)	System armed with bypass notification
Disarm	2	System armed
Disarm	4	System disarmed with Tamper Alert
Disarm	5	System disarmed

► 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	Description	Dealer installed options
1	Trunk Pin	
2	Instant trigger: a heavier impact detected by the shock sensor	
3	Door switch trigger	
4	Instant trigger: For optional sensors	
5	Ignition trigger	
6	Hood Pin	

► 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.

For 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.

► 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.

For 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 cycles, the system will bypass the doors until the trigger ceases.

Owner recognition

Owner Recognition lets up to four users of the system have unique settings that meet their specific needs. It is almost like having four separate alarms in your vehicle, one for each user. This feature is only available to authorized dealers using the Bitwriter or Bitwriter 2 program tool.

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.

For example, 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.

Power saver mode

► System

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 on 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 Status LED on the Responder LE control center illuminates steadily. If the vehicle is not used (ignition is not turned on) for a one hour period while the system is in Valet Mode, the status 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.

► 2-way remote

Your Responder LE 2way remote control has a feature called remote power save mode. When programmed ON under remote options, the remote will conserve power by disabling the paging function if unused for more than 72 hours. Pressing any button on the remote will restore the paging function.

The default setting is ON. See Remote control programming section of this guide or ask your dealer for details on how to program.

Programming options

Your system has many custom programmable options. Some may require installation labor. Ask your authorized dealer for details.

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

- **Active** arming (remote only) passive arming with or without locking the doors (automatic arming without locking the doors 30 seconds after the last door has been closed), or Auto Re-arm with or without locking the doors (Automatically arms 60 seconds after disarm if no door is opened).

Arming/disarming siren chirps **ON** with or without Warn-away chirps, Or OFF with or without Warn-away chirps.

- 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.

If your installer is programming the security system with the Directed Bitwriter®, ignition lock and unlock are independent features that can be programmed separately.

- **Panic mode enabled**/disabled when the ignition is turned on or completely turned OFF. (Some states have laws against sirens sounding in moving cars.)
- **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.
- **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.
- **Comfort closure** is a programming option which closes the vehicle's windows after remote locking.

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.

Digital Tilt Sensor: The 507M tilt sensor can be added to your system to protect your car when its parked. It can protect your vehicle from being lifted and provide protection for your expensive rims.

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.

Hood Lock: Prevents the vehicle’s hood from being opened without a key, keeping thieves away from the system’s siren, the battery connections, and other components under the hood.

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.

Ultrasonic Cabin Sensor: Using the 509U Ultrasonic cabin sensor provides a field of protection inside the car to protect your belongings.

Glossary of terms

2-Way Remote: A hand-held, remote control which operates the various functions of your system and receives feedback and pages from the alarm system.

Control Center: The control center contains the system's radio-frequency antenna, the valet and override switch, and the Status LED. For maximum remote-control range, the Control Center is usually located at the top of the windshield, centered near the rear-view mirror.

Control Module: The "brain" of your system. Usually hidden underneath the dash area of the vehicle. It houses the microprocessor which monitors your vehicle and controls all of the alarm's Functions.

Failsafe® Starter Kill (if equipped): An automatic switch controlled by the security system which prevents the vehicle's starter from cranking whenever the system is armed. The vehicle is never prevented from cranking when the system is disarmed, in Valet® Mode, or should the starter kill switch itself fail. Your system is ready for this feature, however installation of this feature may require additional labor.

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

In-vehicle status LED: A light used to indicate the status of your system. It is located on your systems control center.

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 located on your systems control center. It is used to override the starter interrupt when a 2-way remote is lost or damaged, or to enter or exit Valet Mode.


Warn Away® Response: Light impacts to the vehicle generate the Warn Away® Response, which consists of several seconds of horn honks and flashing parking lights.

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.




Quick reference guide

Arming

To arm, press . When the system arms, the LOCK LED blinks for one second, with 1 beep and siren tone.

Arming while driving

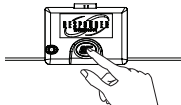
To arm the system while driving, press  on your remote while the vehicle is running. The LOCK LED blinks for one second.

Disarming

To disarm, press . The UNLOCK LED blinks for one second, and you will hear 2 beeps.

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 or pressed the button incorrect number of times. Refer to reverse side for Valet pushes and try again.



Number of Valet button pulses for disarming _____

Silent Arm

Press **f** one time and then press . Arm LED will blink for one second with no sound.


Silent Disarm

Press **f** one time and then press . Disarm LED will blink for 1 second with no sound.




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

Remote Start

Press . Remote start LED blinks for 3 seconds and remote start tone sounds.

Rear Defogger


Press **f** four times, and then press  (only after remote start is ON.) Remote start LED turns ON, and you will hear 1 beep.

To disable the remote start system


Move the shutdown toggle switch to the OFF position.

Location of Shutdown Toggle Switch _____

Valet Mode

Press **f** two times and then . The UNLOCK LED and Function LED blink and remote beeps one time. When valet Mode OFF, the remote beeps two-times.

Valet take over

Before turning off the engine, press and release  within 3 seconds. Then wait a few seconds.

Turn the ignition key to the OFF position.

The engine will remain running until the programmed time elapses or a shut-down input is received.

Location of Valet button _____



Limited lifetime consumer warranty

Directed Electronics. ("Directed") promises to the original purchaser to repair or replace (at Directed's election) 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 purchased from an authorized Directed dealer, 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. ALL PRODUCTS RECEIVED BY DIRECTED FOR WARRANTY REPAIR WITHOUT PROOF OF PURCHASE WILL BE DENIED. 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 from 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.

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This warranty is only valid for sale of product(s) within the United States of America. Product(s) sold outside of the United States of America are sold "AS-IS" and shall have NO WARRANTY, express or implied. 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.

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

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

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

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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.

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