

CLIFFORD®

Model 2.2
Security and Remote Start
Owner's Guide

Directed®
E L E C T R O N I C S

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Government regulations

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.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television, which can be determined by turning the equipment OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

To satisfy FCC RF exposure compliance requirements, this device should be used in hand-held, hand operated configurations only. The device and its antenna must maintain a separation distance of 20 cm or more from the person's body, except for the hand and wrists, to satisfy RF exposure compliance. This device is designed to be used in a person's hands and its operating configurations do not support normal transmissions while it is carried in pockets or holsters next to a persons' body.

This device complies with the Industry Canada Radio Standards Specification

RSS 210. Its use is authorized only on a no-interference, no-protection basis; in other words, this device must not be used if it is determined that it causes harmful interference to services authorized by IC. In addition, the user of this device must accept any radio interference that may be received, even if this interference could affect the operation of the device.

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

Warning! Safety first

The following safety warnings must be observed at all times:

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

When properly installed, this system can start the vehicle via a command signal from the remote control transmitter. Therefore, never operate the system in an enclosed area or partially enclosed area without ventilation (such as a garage). When parking in an enclosed or partially enclosed area or when having the vehicle serviced, the remote start system must be disabled using the installed toggle switch. It is the user's sole responsibility to properly handle and keep out of reach from children all remote control transmitters to assure that the system does not unintentionally remote start the vehicle. **THE USER MUST INSTALL A CARBON MONOXIDE DETECTOR IN OR ABOUT THE LIVING AREA ADJACENT TO THE VEHICLE. ALL DOORS LEADING FROM ADJACENT LIVING AREAS TO THE ENCLOSED OR PARTIALLY ENCLOSED VEHICLE STORAGE AREA MUST AT ALL TIMES REMAIN CLOSED.** These precautions are the sole responsibility of the user.

Remote starters on manual transmission vehicles operate differently than those with automatic transmission because you must leave your car in neutral. You must read this Owner's Guide to familiarize yourself with the proper procedures regarding manual transmission remote starters. If you have any questions, ask your installer or contact Directed at 1-800-753-0600.

Before remote starting a manual transmission vehicle, be sure to:

- Leave the vehicle in neutral and be sure no one is standing in front or behind the vehicle.
- Only remote start on a flat surface
- Have the parking brake fully engaged

WARNING! It is the responsibility of the owner to ensure the parking/emergency brake properly functions. Failure to do so can result in personal injury or property damage. We recommend the owner have the parking / emergency brake system inspected and adjusted by a qualified automotive shop bi-annually.

Use of this product in a manner contrary to its intended mode of operation may result in property damage, personal injury, or death. (1) Never remotely start the vehicle with the vehicle in gear, and (2) Never remotely start the vehicle with the keys in the ignition. The user must also have the neutral safety feature of the vehicle periodically checked, wherein the vehicle must not remotely start while the car is in gear. This testing should be performed by an authorized Directed dealer in accordance with the Safety Check outlined in the product installation guide. If the vehicle starts in gear, cease remote start operation immediately and consult with the authorized Directed dealer to fix the problem.

After the remote start module has been installed, contact your authorized dealer to have him or her test the remote start module by performing the Safety Check outlined in the product installation guide. If the vehicle starts when performing the Neutral Safety Shutdown Circuit test, the remote start unit has not been properly installed. The remote start module must be removed or the installer must properly reinstall the remote start system so that the vehicle does not start in gear. All installations must be performed by an authorized Directed dealer.

OPERATION OF THE REMOTE START MODULE IF THE VEHICLE STARTS IN GEAR IS CONTRARY TO ITS INTENDED MODE OF OPERATION. OPERATING THE REMOTE START SYSTEM UNDER THESE CONDITIONS MAY RESULT IN PROPERTY DAMAGE OR PERSONAL INJURY. YOU MUST IMMEDIATELY CEASE THE USE OF THE UNIT AND SEEK THE ASSISTANCE OF AN AUTHORIZED Directed DEALER TO REPAIR OR DISCONNECT THE INSTALLED REMOTE START MODULE. DIRECTED WILL NOT BE HELD RESPONSIBLE OR PAY FOR INSTALLATION OR REINSTALLATION COSTS.

This product is designed for fuel injected vehicles only. Use of this product in a standard transmission vehicle must be in strict accordance with this guide.

This product should not be installed in any convertible vehicles, soft or hard top with a manual transmission. Installation in such vehicles may pose certain risk.

What is included

- Two five-button remote controls
- The control module with Stinger™ DoubleGuard® two-stage shock sensor
- Control center with integrated status LED and Valet override switch
- Revenger™ Soft Chirp™ six-tone siren
- A remote start defeat toggle switch
- Window decals
- Your warranty registration

Important information

Congratulations on the purchase of your state-of-the-art remote start and alarm system. 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 a preprinted dealer certificate to verify authorization.

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.

► 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.

► Replacement remotes

Your system comes with two Responder remote controls (P/N 7153X). If additional remotes are desired, please see your authorized dealer or visit www.directedstore.com to order.

► System maintenance

The system requires no specific maintenance. Your One way remote is powered by small coin cell lightweight 3-volt lithium battery that will last approximately one year under normal use. The remote uses one CR2032 cell battery. When the battery begins to weaken, the operating range will be reduced.

► Low battery indicator

When the batteries are low the alarm then emits an additional chirp upon disarming of the alarm to let you know its time to change the remote battery.

Note: The Arm/Disarm chirps should be programmed ON for the alarm to emit any additional chirps during disarm. Ask your authorized dealer if you have any questions.

► Battery Replacement

Slide the door up to expose the battery beneath the holder. Remove the expired battery. Place the new battery into the remote control. When power is returned the remote control is ready for use.

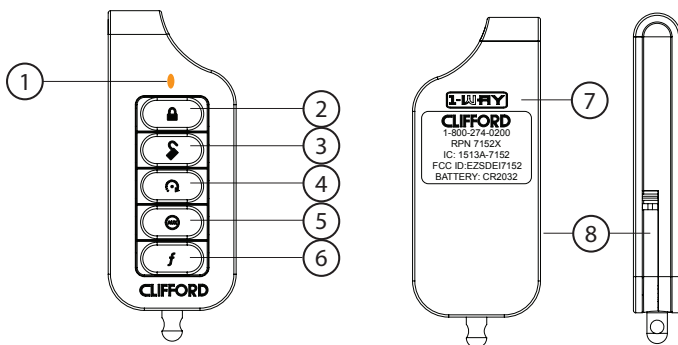
► Two Car Operation

You can use the remote control system for two cars with full command capability for both vehicles.

To change the car selection:

- Press and hold the **f** button until the amber light blinks once or twice indicating current vehicle.
one blink & beep = car 1.
Two blinks & beeps = car 2
- To scroll from one car to the other press the **f** button again. After selecting the car, operation of other features can resume. The selected car remains selected until this setting is changed.





1-way remote



Feature	Description	
1	Transmit indicator	
2	Lock button	Press for one second to arm.
3	Unlock button	Press for one second to disarm.
4	Remote start button	Press for one second to activate remote start.
5	Auxiliary button	Press and hold for 1.5 second to activate trunk release.
6	Function button	Allows access to programming and modifies operation of the other buttons.
7	Label	Back of remote has label to identify the remote as 2-way or 1-way
8	Battery Door	Remove to access batteries when necessary.

Note: If Keypad Lock is On, press **f** and then press  to exit.

► Transmitter configuration

Level Button	Direct Access	f x 1	f x 2	f x 3	f x 4
	Arm/Lock (Panic)	Silent Arm	Sensor Bypass **	Silent Alarm Sensors †	Silent Alarm All Zones †
	Disarm/Unlock (Panic)	Silent Disarm	Valet On/ Off	Car Finder	
	Starter On/Off	Reset Runtime	Timer Mode On/Off	Smart Start On/Off	Defogger On
	Trunk Release (Red/White)	AUX 1	AUX 2	AUX 3	***
f	Advance Level Change Car (3s) Enter programming (8s) *	Request Temperature * †	Runtime Remaining * †	Event His- tory Report * †	

- * **f** button must be pressed and held to access state
- ** System must be in ARMED mode to access this feature
- *** System must be in remote start mode to access this feature
- † Only applicable when upgrading to two way remote

Note: Pressing more than one button simultaneously generates an Error tone and the LED flashes.

► Feature List:

Arm

Command: Press one time to Arm

Notes: Press/hold for 1.5 seconds to Arm the system and then activate the Panic output

Disarm

Command: Press one time to Disarm

Remote Start

Command: Press one time to activate Remote Start

Aux (trunk)


Command: Press one time to open Trunk

Function shift

Command: Press 1 to 4 times. (See Function shift table)

Notes: Each Press then release, shifts the function of the command button.

Silent arm

Command: Press **f** one-time and then press 


Notes: Arms the system without chirps

Silent disarm

Command: Press **f** one-time and then press 

Notes: Disarms the system without chirps

Runtime reset

Command: Press **f** one-time and then .

Notes: Re-starts the remote start runtime counter if remote start is active.

Aux 1

Command: Press **f** one time and then press .

Notes: This is an optional feature. See your sales rep/installer for details.

Aux 2

Command: Press **f** two times and then press .

Notes: This is an optional feature. See your sales rep/installer for details.

Aux 3

Command: Press **f** three times and then press .


Notes: This is an optional feature. See your sales rep/installer for details.

Sensor Bypass

Command: Press **f** two-times and then .

Notes: Available when armed only: bypasses warn triggers. Send again to bypass Warn & Full Trigger; Send again to turn bypass off and monitor sensors normally. For more information, see Modified Arming Modes.

Valet mode

Command: Press **f** two-times and then .

Timer mode

Command: Press **f** two-times and then .

Notes: Enables or disables the remote start timer mode.

Car finder

Command: Press **f** three-times and then .


Notes: Arm/Disarm cancels the light flashes.

Smart start

Command: Press **f** three-times and then press .

Notes: Enables or disables the SmartStart feature.

Defogger

Command: Press **f** four times, and then . (Only after remote start is on.)

Notes: Automatically turns on during remote start. 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.

Panic

Command: Press and hold  for 1.5 seconds.

Notes: The siren will trigger until you hit the lock or unlock button on the remote

Using the system

➤ Arming the system

To arm the system, press the  button on the remote control.



The siren in the vehicle will “chirp” once and the parking lights will flash once. If the power door locks have been connected, the doors will lock. The system will automatically check for errors when it arms.

If errors are found when arming:

If an alarm trigger zone – such as a door, the trunk, the hood, or a sensor, was active at the time of arming, the system will “bypass”, or ignore, this trigger zone. This allows the system to continue to protect your vehicle using the remaining trigger zones.

You are notified of this active zone immediately after arming the system. The siren in the vehicle will “chirp” again and the parking lights will flash again. The Status LED indicator in the vehicle will blink in a pattern to indicate the active zone number error which was found (See Table of Zones on page 34).

Arming without the chirp (Silent Arm):

Press the  button at the bottom of the remote once, and then press the  button. The system will arm without the confirmation chirp. The parking lights will flash once.

➤ While the system is armed

- Fail-Safe Starter Kill

The starter is disabled by the system’s Fail-Safe starter kill (if installed).

Alarm Responses

The security system can generate two levels of alarm: Warn Away - Soft siren chirps and flashing parking lights.

The purpose of Warn-Away is to warn a would-be thief next to your vehicle that the vehicle is protected, but in a manner that does not call attention to it from more than a few feet away.

Full Alarm Trigger

Sounds the siren at maximum volume and flashes the parking lights. The default duration of the Full Alarm is 30 seconds. This can be programmed to any duration from 30 to 60 seconds manually. Ask your authorized dealer for details.

Warn-Away response is triggered by:

- Lesser or lighter vibrations or impacts (detected by the Stinger Doubleguard shock sensor)
- Opening a door: the Progressive Door Trigger feature will sound the Warn Away response, followed immediately by Full Alarm
- Any attempt to start the car: the Progressive Ignition Trigger will first sound the Warn Away response, followed immediately by Full Alarm.
- An optional Proximity Sensor (508D) triggered in the outer zone.

Full Alarm response is triggered by:


- Heavier impact to the vehicle (detected by the Stinger Double-Guard shock sensor).
- Opening the trunk or hood (if connected).
- Opening a door: the Progressive Door Trigger feature will first sound the Warn-Away response, followed immediately by Full Alarm.
- An optional sensor, such as an optional Proximity Sensor triggered in the inner zone.

Note: Call the police immediately if you witness a crime in progress.

► Modified Arming Modes

The Responder gives you an unprecedented level of control over how it will protect your car. "Normal arming" means that all the Responder security features are active automatically. You can turn some security features off on a one-time basis.

Turning off the Warn Away response

1. Arm system
2. Press the **f** button twice.
3. Press the  button.

Now, slight impacts or vibrations will not trigger Warn-Away. Heavy impacts will still trigger Full Alarm.

Note: The next time you arm the system, Warn-Away will work normally.

Turning off the Sensor Full Trigger response

You can completely disable the Stinger Doubleguard Shock Sensor and any added optional sensors on a one-time basis. The entry points (doors, hood, etc.) will still be monitored. All sensors will not be able to trigger the Warn-Away response or the Full Alarm response.

1. After disabling Warn-away response, press the **f** the button twice.
2. Press the  button.

Note: The next time you arm the system, the shock sensor will work normally.

Sensor Silent Mode

In this mode, a sensor cannot trigger the siren. All entry points (doors, hood, etc.) will still trigger the siren.

Press the **f** button three times, and then press the  button.

Note: The next time you arm the system, it will function normally.

► Disarming the System

While the system is armed normally:

- Press the  button once.


The siren in the vehicle will “chirp” twice, and the parking lights will flash.

If you hear **four** chirps on disarming, the system was triggered in your absence. Immediately look at the Status LED in the vehicle and count the number of flashes between pauses. This number is important, it tells what triggered your alarm. See Disarming section under Diagnostics on page 33 for more details.


If you hear **five** chirps on disarming, the system was repeatedly triggered in your absence. Immediately look at the Status LED in the vehicle and count the number of flashes between pauses. This number is important, it tells what triggered your alarm.

The door locks (if connected) will unlock, and the parking lights will flash.

While the alarm is triggering:

Press the  button on the remote. The siren will stop sounding and disarm the alarm system.

High-Security Disarming

If you want the Full Alarm response to stop without unlocking the doors, press the  button. The system will re-arm and the current alarm response will reset.

► System override

To disarm the system without a remote control:



You will need to use your Override Switch located on your systems control center (see diagram to left) to disarm the system. The Override Switch disarms the system only if you have the vehicle key.

- Open the door. The alarm will sound. Immediately insert the key into the ignition and turn it to the RUN or ON position. (all the indicators in the dash will turn on). Press the Override Switch once.

Note: The Override Switch feature allows you to select a specific number of presses needed to disarm the alarm. If the Override Switch has been programmed to a new number of presses by your authorized dealer, that number should be indicated below.

Override Switch Number _____

► Valet mode

To enter or exit valet mode with the valet/program switch:



Turn the ignition key on and then off.



At anytime during the next 10 seconds, press and release the Valet switch. Now the Status LED lights constantly if you have entered Valet® Mode, and go out if you have exited Valet Mode.

To enter or exit Valet mode with the remote control:


Press **f** two times, and then  to put the system into/out of Valet Mode.

Note: The LED on the control center turns on solid when in Valet Mode and shuts off when exiting Valet Mode.



► Remote feature programming

The remote control has a menu for configuring user features. Before you start make sure the keypad is unlocked. (See page 13)

To program the remote user features:


1. Press and hold the **f** button on the remote for 12 seconds. (ignore the car indicator at 3 seconds). The remote emits one long beep, and the transmit LED turns on to indicate the Main Menu.
2. Press and hold the  button for 1.5 seconds: The remote beeps two-times. You are now in the Remote Configuration menu.


To configure the remote control features:

1. Press, and then release the command button. The remote beeps to indicate the feature configuration.
 2. Press the  button to access the Auto keypad lock feature.
 3. Press the  button to change the Auto keypad lock feature.
- When the remote beeps once the keypad automatically locks 60 seconds after the last button operation to avoid accidental

command operations. When locked, if any command button is pressed the remote emits an error tone.

- The keypad lock feature is Off when the remote beeps twice and the keypad does not lock.

If the keypad lock is On, press **f**, and then press  to unlock the keypad.

Note: If the auto keypad lock feature is programmed On, the remote unlocks when the vehicle ignition is turned Off. The remote stays unlocked to allow time to exit and unload the vehicle, and then lock the doors with the remote. When the  button is pressed, the keypad auto lock feature resumes normally.



Remote Beeps feature

Press the  button to turn the Remote Beeps feature On and Off.

When the remote beeps once, the feature is on, the remote then beeps when pressing any button on the remote or when programming features on the remote.

When the remote beeps twice, the feature is off, the remote does not beep when pressing any button on the remote but does beep when programming features on the remote.

► 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 2 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.


Using the remote start

Read this user guide, including the Warnings section at the beginning. Ensure that the vehicle is parked in the open air and not in a garage. To use your remote start to pre-warm or pre-cool your vehicle, remember to set the climate controls to the desired settings before shutting off the engine.

► Remote starting your vehicle

Before using the remote start be sure the vehicle is parked in a safe area with proper ventilation.

To remote start the vehicle:

- Press the  button on the remote control. The vehicle parking light flashes

The preset remote start run time is 12 minutes. This can be changed to between 12 and 60 minutes (see your authorized dealer for programming changes).

Points to remember

If the hood is open or is the brake pedal is pressed, the vehicle will not start using remote start. The remote starter shuts down:

- When the brake pedal is pressed
- The hood is opened
- If the alarm is triggered when armed.
- When the Remote Start command is sent again from a remote control.

► Manual transmission vehicles

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.

► Timer mode

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

Important: Use Timer Mode in open areas **only**. Never start and run the vehicle in an enclosed space such as a garage or carport.

To activate timer mode with an automatic transmission:

1. Remote start the vehicle by pressing **f** twice and then press .
2. The parking lights flash rapidly four times.
3. After 1 second the car starts and the Timer Mode runs for the specified time period.

To activate timer mode with a manual transmission:

1. Enter the MTS mode.
2. Exit the vehicle and arm the alarm.
3. Enter the timer mode. The parking lights quickly flash 4 times to confirm entry into timer mode (vehicle does not remote start at this point). Vehicle begins the timer mode sequence.

To exit timer mode with transmitter:

- Press **f** twice and then press . Parking lights flash slowly four times confirming time mode is exited.

To exit timer mode without transmitter:

1. Make sure the remote start system is not operating the engine.
2. Turn the ignition on. Timer Mode is exited and the parking lights flash slowly four times.

Timer Mode is exited automatically after the sixth run cycle. The parking lights slowly flash 4 times when exiting timer mode.


The same procedure may be used to enter or exit Timer Mode using the remote transmitter.

Note: The Bitwriter can change the amount of times the remote start activates and, it can change the intervals between activations in timer mode.

► 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.

To activate Turbo Timer Mode with an automatic transmission:

1. Make sure the Turbo timer feature is turned on in the features grid.
2. Open the vehicle door.
3. While the vehicle is running; press the **f** button twice followed by the  button.
4. The parking lights flash once.
5. Turn off the ignition (car stays running).
6. Exit the vehicle and arm the system.

At this point the vehicle stays running for the programmed runtime.

To activate turbo timer mode with a manual transmission:

Perform the procedure for manual transmission vehicles (page 26), with the door open. Transmit the timer mode feature with the remote by pressing **f** two-times, and then . After exiting the vehicle, lock the system and the vehicle remains running for the programmed runtime. (The remote start feature is still enabled).

You can still remote start the vehicle after the turbo timer has timed out and shut off the vehicle. For safety reasons, if a door is opened (while the alarm is armed or disarmed) or if the alarm is triggered while you are away, the remote start exits the manual transmission mode and

does not remote start until the MTS sequence is re-initiated.

Note: An optional push button can be hard wired to the (-) activation input (H1/10) on the remote start. This allows the user to activate the turbo timer without having to use the remote.

When the vehicle is running follow the procedures listed above, but instead of pressing the remote, press the push button the appropriate number of times to activate the remote start (factory setting is for 1 pulse). Turn off the ignition and exit the vehicle. The car remains running for the pre-programmed amount of time.

► **Smart start**

With Smart Start you can activate remote start when the vehicle reaches a certain temperature, or when it reaches a certain voltage.

The factory setting for temperature high is 100°, and the low is 0° (F). The voltage setting is 10.5v. These settings can be adjusted or turned off by your installer using the Bitwriter.



To activate Smart Start mode:

- Press the **f** button on the remote 3 times and then press the  button.

The parking lights flash 5 times fast to confirm the remote is in Smart Start mode.

To activate Smart Start mode with a manual transmission:

1. Enter the MTS procedure.

2. Exit the vehicle and press the  button on the remote (the vehicle shuts down when locking).
3. Press the **f** button on the remote 3 times and then press the  button. The parking lights flash 5 times fast to confirm the remote is in Smart Start mode.

The vehicle remote starts when the cabin temperature reaches the programmed threshold, or when the battery reaches the programmed voltage.

Use one of the below methods to exit Smart Start mode:


- Perform the same steps to activate Smart Start mode
- Turn the ignition On to deactivate manually
- Press the brake pedal

The parking lights flash 5 times slowly to confirm the remote has exited Smart Start mode.

► Turning on the 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 press . The parking lights flash 4 times to confirm the defogger activation.

► 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 and enter into manual transmission mode, as described above. The parking lights flash five times when entering Valet take-over. Once you exit the vehicle you can lock the system and the car will remain running. If the vehicle shuts down when locking, then the unit did not enter 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) + 1	System armed with bypass notification
Disarm	2	System disarmed
Disarm	4	System disarmed with Tamper Alert
Disarm	5	System disarmed, NPC activated

► 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.

NPC requires that you change the way you test the system since NPC bypasses an input zone for 60 minutes. If the system "sees" the same zone trigger three times, and the triggers are spaced less than an hour apart, the system bypasses that input zone for 60 minutes.

If that zone does not attempt to trigger the system during the 60-minute bypass period, the zone's monitoring begins again at the end of the hour. If it does attempt to trigger while bypassed, the 60-minute bypass starts over again.

Disarming and rearming the system does not reset NPC. The only way to reset NPC™ is for the 60 minutes to pass without a trigger, or for the ignition to be turned on. This allows the system to be repeatedly triggered, disarmed and rearmed, and still allows NPC to bypass a faulty zone.

When disarming the system, 5 chirps indicate NPC is activated. The LED reports the zone that has been bypassed. (See Diagnostics section of this guide.)

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

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.

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.

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

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 1 beep from the siren.

Arming while driving

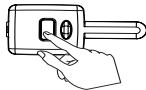
To arm the system while driving, press  on your remote while the vehicle is running.

Disarming

To disarm, press  and you will hear 2 beeps.

Disarming without a remote

Turn on the ignition. Press and release 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  one time and then press .

Silent Disarm

Press  one time and then press .

Remote Start

Press .



Rear Defogger

Press **f** four times, and then press  (only after remote start is ON.)

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 .

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 _____



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



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.

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 DETERRENENTS 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

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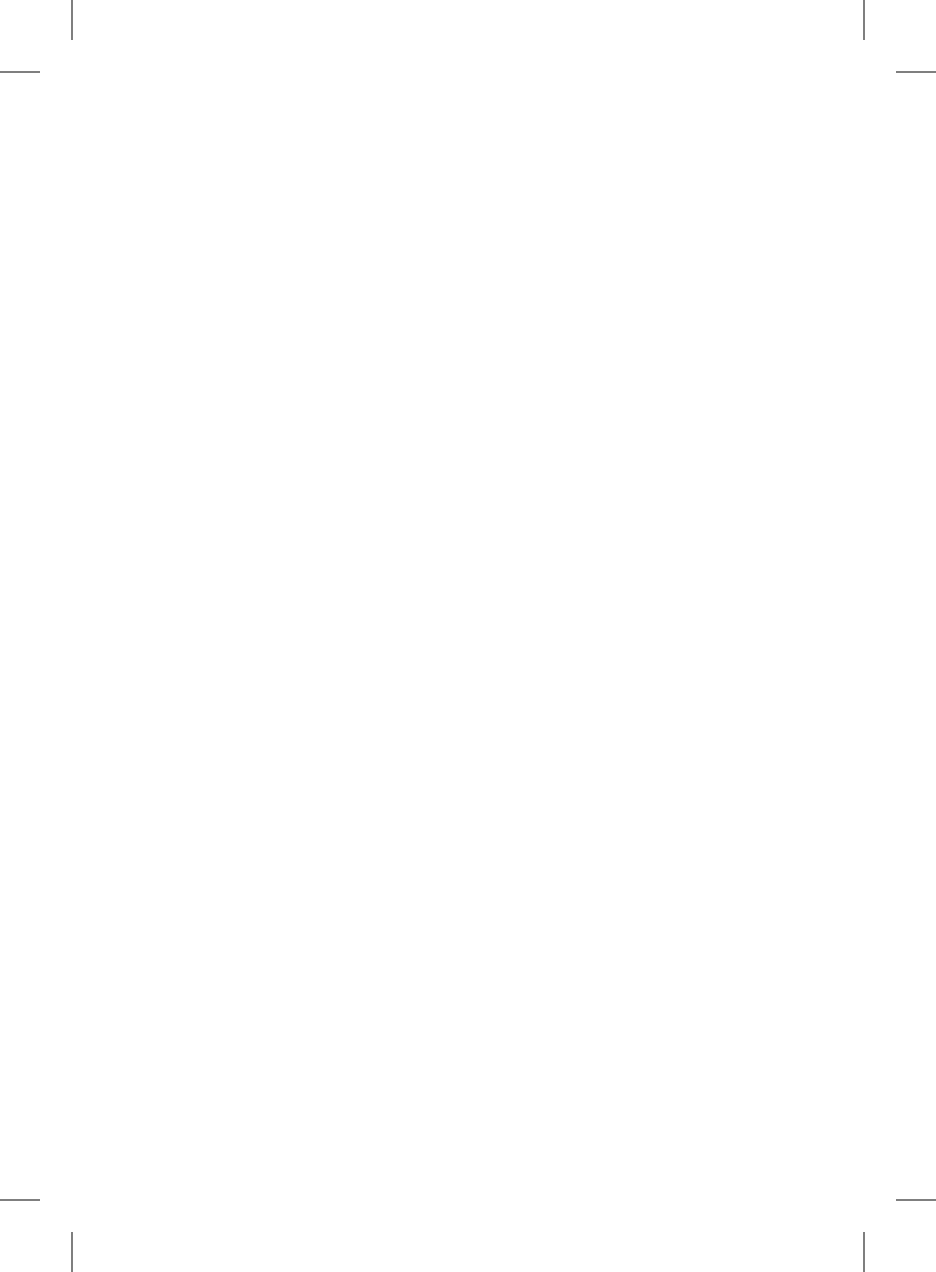
This warranty is only valid for sale of product(s) within the United States of America. Product(s) sold outside of the United States of America are sold "AS-IS" and shall have NO WARRANTY, express or implied. This product may be covered by a Guaranteed Protection Plan ("GPP"). See your authorized Directed 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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