

Matrix RS 2

➤ *Owner's Guide*

limited lifetime consumer warranty

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

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

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

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table of contents

Limited Lifetime Consumer Warranty	i
What Is Included	2
Important Information	3
System Maintenance	3
Your Warranty	3
FCC/ID Notice	3
Caution	4
Transmitter Functions	4
Standard Configuration	4
Using Your System	5
Warning! Safety First	5
Arming	7
Multi-Level Security Arming (Optional Feature)	9
Arming While Driving	10
Disarming	11
Siren Silencing	11
Disarming Without a Transmitter	11
Remote Controlled Chirp Muting	12
Panic Mode	13
Valet Mode	13
Remote Controlled Valet Mode	13
Remote Engine Starting	14
Shutting Down the Remote Engine Starting System	15
Valet Take-Over	17
Timer Mode	17
Disabling the Remote Engine Starting System	19
False Alarm Control Technology (FACT)	19
Safety Features	20
Over and Under Rev Protection	20
Shut Down Inputs	21
StarterGuard Anti-Grind Circuitry	21
Diagnostics	21
Arming Diagnostics	22
Disarming Diagnostics	22
Table of Zones	23
Anti-Code Grabbing (ACG)	24
High Frequency	24
Owner Recognition	25
Smart Power Up II	25
Power Saver Mode	26
Programming Options	26
Security and Convenience Expansions	29
Glossary of Terms	31
Quick Reference Guide	33

what is included

- The control module
- An XHF receiver/antenna
- Two four-button transmitters
- A shock sensor
- A siren
- The red LED status indicator light
- A push-button Valet switch
- Your warranty registration
- Fault-proof starter interrupt relay (ready feature, may require extra labor)
- A shut-down toggle switch

important information

Congratulations on the purchase of your remote start security system. This system must be installed by an authorized dealer. Installation of this product by anyone other than an authorized dealer voids the warranty. As verification of authorization, all authorized dealers are provided with preprinted dealer certificates.

To maximize the use of this system, please review this owner's guide carefully prior to using your system. You can print additional or replacement copies of this owner's guide by accessing the Clifford website at www.clifford.com.

→ **system maintenance**

The system requires no specific maintenance. Your remote is powered by a small, lightweight 3-volt lithium battery that will last approximately one year under normal use. When the battery begins to weaken, operating range will be reduced and the LED status indicator 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 undesired operation.

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

→ caution

This product is designed for fuel injected, automatic transmission vehicles only. Use of this product in a standard transmission vehicle is dangerous and contrary to the product's intended use.

transmitter functions


The receiver uses computer-based code learning to learn the transmitter buttons. This makes it possible to assign any specific transmitter button, or combination of buttons, to any receiver function. The transmitter initially comes programmed with the Standard Configuration, but may also be customized by an authorized dealer. The buttons indicated in all of the instructions in this guide correspond to a Standard Configuration transmitter.


→ standard configuration

 **Button**

The arming, disarming and panic function are usually controlled by this button.

 **Button**


This button usually controls Remote Controlled Chirp Muting and an optional accessory output (such as trunk release). Remote Controlled Chirp Muting works by pressing  for less than one second before arming or disarming. An optional accessory

function, such as trunk release, is controlled by pressing and holding  for 1.5 seconds. This accessory output controls _____.

 **Button**

The remote engine starting function of your system is controlled by pressing this button.

 **Button**

An optional convenience or expansion option that you have added to your system can be activated by pressing . This accessory output controls _____.

using your system

 **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 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 engine starting 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.

- 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 dealer in accordance with the Safety Check outlined in the product installation guide. If the vehicle starts in gear, cease remote engine starting operation immediately and consult with the authorized dealer to fix the problem.
- After the remote engine starting module has been installed, contact your authorized dealer to have him or her test the remote engine starting 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 engine starting unit has not been properly installed. The remote engine starting module must be removed or the installer must properly reinstall the remote engine starting system so that the vehicle does not start in gear. All installations must be performed by an authorized dealer. OPERATION OF THE REMOTE ENGINE STARTING MODULE IF THE VEHICLE STARTS IN GEAR IS CONTRARY TO ITS INTENDED MODE OF OPERATION. OPERATING THE REMOTE ENGINE STARTING 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 DEALER TO REPAIR OR DISCONNECT THE INSTALLED REMOTE ENGINE STARTING MODULE. WILL NOT BE HELD RESPONSIBLE OR PAY FOR INSTALLATION OR REINSTALLATION COSTS.

 **arming**

You can arm the system by pressing  on your transmitter for one second. When the system arms, you will hear a short siren sound, or chirp, and 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 LED status indicator 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 LED status indicator is flashing in groups, see the Diagnostics Section of this guide. This extra chirp is called Bypass Notification.

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 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 LED status indicator will flash twice as fast as it does when the system is armed. At the 20 seconds of the countdown, the siren will chirp to indicate that the system is about to arm. At the 30 seconds, the parking lights will flash to indicate that the system is armed.

note: If any protected entry point (such as a door or a switch-protected trunk or hood) is open, the system will not passively arm (unless forced passive arming is programmed on. See Programming Options section.) Additionally, each time a sensor is triggered during the arming countdown, the 30-second countdown starts over.

Arming your security system protects your vehicle as follows:

- Light impacts trigger the Warning Zone 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 a pre-programmed period, which can range in duration from 1 to 180 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 transmitter if you inadvertently open the door while the system is armed, while still providing instant response (even if the door is immediately closed).
- Turning on the ignition key will trip the same progressive response as opening a door.
- The optional fault-proof starter interrupt prevents the vehicle's starter from cranking.

➔ **multi-level security arming (optional feature)**

note: Multi-Level Security Arming is only available when using an optional 4-button Radar Master transmitter that has been configured with separate transmitter buttons for arming and disarming.


Multi-Level Security Arming allows you to select which of the security system's inputs or sensors will be active and which will be bypassed at the time that the system is armed. (See Table of Zones section.) Pressing the arm button again within five seconds of arming the security system will activate the Multi-Level Security Arming feature. Each time the arm button is pressed


again, a different security level is selected. The different security levels can be selected as follows:

- Pressing the arm button one time: The siren chirps once. The system is armed.
- Pressing the arm button a second time within five seconds: The siren chirps twice followed by a long chirp. Zone Two is now bypassed.
- Pressing the arm button a third time within five seconds: The siren chirps three times followed by a long chirp. Zone Four is now bypassed.
- Pressing the arm button a fourth time within five seconds: The siren chirps four times followed by a long chirp. Zones Two and Four are now bypassed.
- Pressing the arm button a fifth time within five seconds: The siren chirps five times followed by a long chirp. All input zones, except the ignition, are now bypassed.


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

➔ **arming while driving**

Your system can be armed while driving the vehicle! Simply press  while the vehicle is running. The siren will chirp once to indicate that the security system is armed, and then once more to indicate that the ignition is on. The system will not respond to any input except the door triggers, and the starter interrupt

relay (if installed) will not be activated. Once you have arrived at your destination, the system will disarm when the ignition is turned off. The siren will chirp twice and the LED will then stop flashing. The system can also be disarmed at any time by pressing .

disarming

To turn off, or 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. The siren chirping either four or five times when disarming indicates Tamper Alert, which is described in the Diagnostics Section of this guide.

siren silencing

Your security system includes a Siren Silencing feature. After 6 seconds of trigger sequence, using the transmitter to disarm the security system will only stop the trigger sequence (the siren will stop and the parking lights will stop flashing). However, the system will remain armed and the doors will stay locked. This is extremely useful if you must stop the system from sounding, but are unable to visually check the vehicle. This feature allows you to silence and reset the security system when it is triggered, without having to disarm the system.

disarming without a transmitter

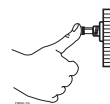
If your remote transmitter is lost or damaged, you can manually

disarm your vehicle security system. To disarm the system without a transmitter, you must have the vehicle's ignition key and know where the Valet switch is located. Be sure to check with your installer at the time of installation for both the location and the preset response (1-5 presses) of the Valet switch.

To disarm the security system without a transmitter:



Turn the ignition on and press the Valet switch the preset number of times within 15 seconds. If the



system does not disarm, you may have waited too long; turn the ignition off and repeat the process.

Location of Valet Switch _____

→ remote controlled chirp muting



Use the Remote Controlled Chirp Muting to temporarily turn off the arm or disarm confirmation chirps by briefly pressing



before either arming or disarming the security system. The confirmation chirp(s) will then be eliminated for that one operation only. To permanently turn off the arm and disarm confirmation chirps, contact your installation dealer.

note: The Warning Zone response to lighter impacts is bypassed if the system is armed using the Remote Controlled Chirp Muting. This ensures that the siren does not chirp in an environment where you don't want chirps to be emitted. The system is still capable of being triggered by heavier impacts; only the Warning Zone response generated by light impacts is bypassed.

→ panic mode

If you are threatened in or near your vehicle, you can attract attention by triggering the system with your transmitter. Just press and hold  for 1.5 seconds to enter Panic Mode. In Panic Mode, the horn will honk and the parking lights will flash for 30 seconds. To stop Panic Mode at any time, press .

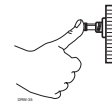
→ valet mode

Valet Mode prevents your security system from arming and triggering either automatically or when using the remote transmitter. In Valet Mode, all convenience functions (door locks, trunk release, etc.) remain operational. This feature is useful when washing or servicing your vehicle.

To enter or exit Valet Mode:




1. Turn the ignition on.
2. Turn the ignition off.
3. Press and release the Valet switch within 10 seconds.



The LED status indicator will light steadily if you are entering Valet Mode and will turn off if you are exiting Valet Mode.

→ remote controlled valet mode

You can also activate Valet Mode using the remote transmitter:

1. Open any vehicle door.
2. Press .

3. Press .
4. Press  again.



The LED status indicator will light solid if you are entering Valet Mode, or will go out if you are exiting Valet Mode.

→ remote engine starting

This feature allows you to remotely start and run your vehicle for a programmable period of time. This makes it possible to warm up the engine, as well as adjust the interior temperature of the vehicle with the climate control system. If interior heating or cooling is desired, the climate controls must be preset, and the fan blower must be set to the desired level prior to remote starting the vehicle.

important! (1) Never remote start your vehicle when the keys are in the ignition, except when performing Valet Take-Over, and (2) Never start the vehicle if it is not in either PARK or NEUTRAL.

To remote start the vehicle:

1. Press  on the transmitter for one second.
2. The parking lights will flash to warn that the motor is about to start.
3. Release the  button as soon as the parking lights flash. In gasoline vehicles, the engine will start 3 seconds after the parking lights flash. In diesel vehicles, the engine will start when the wait-to-start indicator on the vehicle's dash goes out.


4. About three seconds after the parking lights flash, the system will engage the starter until the vehicle is successfully running. If the motor is not running after six seconds, the system will stop cranking the starter. After three seconds, the system will attempt to start the motor again. If your motor is not running after three attempts, the system will stop the remote engine starting sequence. It is not necessary to disarm your system before remote starting the vehicle. The shock sensor will be bypassed whenever the system is running the motor.

important! It is unsafe to operate a vehicle's motor in a garage or other closed off area. Breathing the exhaust from the vehicle is hazardous to your health. Never activate the remote start in an enclosed space.


5. Once the remote engine starting system has successfully started the motor, it will turn the climate controls on. The motor will run for the selected period of time and the parking lights will flash or light solid while the motor is running. (See the Programming Options Section of this guide.)

→ shutting down the remote engine starting system

While the vehicle is running during remote engine starting operation, the system will monitor the vehicle and will automatically shut down the engine if the system receives any of the following shut-down inputs:

- The brake pedal is pressed.
- The hood is opened.
- The shutdown toggle switch is put into the OFF position.
- The pre-programmed run time (12, 24, or 60 minutes) has elapsed.
-  is pressed during remote start operation.


To shut down the remote start and turn off the engine:

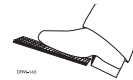
- Step on the brake pedal, or
- Press  for one second.

You may want to enter the vehicle and drive it without shutting off the motor. It is possible to shut down the remote start and drive the vehicle without shutting down the motor.

When you are ready to drive the vehicle:



1. Disarm the security system (if armed) by pressing  .
2. Enter the vehicle and turn the ignition to the ON position.
3. Step on the brake pedal.




The remote engine starting system will be shut down when you step on the brake pedal. The vehicle motor, however, will continue to run because the ignition has been turned on. The vehicle will now operate as usual.

→ valet take-over

A vehicle equipped with the Valet Take-Over system can remain running after the key is removed from the ignition. This feature is useful for occasions when you wish to exit 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  (or press and release the optional momentary switch).
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. (See the previous section for a complete list of shut-down inputs.)




note: This feature will not work if the brake pedal is being pressed.


→ timer mode

Timer Mode automatically starts your vehicle engine and runs it for a pre-programmed time period, every three hours for a total of six operation cycles. Timer Mode helps to ensure that your engine will start in the morning after being parked outside during a night of extremely cold temperatures.

important! This feature must only be used in open areas, never in an enclosed area such as a garage.




To enter Timer Mode:

1. Start the vehicle by pressing and releasing .
2. Press and release .
3. Within two seconds press and release  again.
4. The engine will shut down and the parking lights will flash four times. The engine will then restart to confirm that Timer Mode has been entered.

The engine may be allowed to run for the pre-programmed time, or it can be shut down while running during Timer Mode operation by pressing  again. In either case, the vehicle will restart every three hours for a total of six operation cycles. If the system receives a shut-down input while the engine is running in Timer Mode, the engine will stop, but will restart, on schedule, again in three hours!

To exit Timer Mode:

Timer Mode can be exited by turning the ignition on with the key any time the engine is not running. You can also exit Timer Mode with the remote transmitter by following these steps:

1. Start the engine by pressing .
2. Press and release .
3. Within two seconds press and release  again.
4. The engine will shut down and the parking lights will flash four times to confirm that Timer Mode has been exited. If the car has already been remote started, skip Step One.

→ disabling the remote engine starting system

This feature allows your system's remote engine starting unit to be temporarily disabled to prevent the vehicle from being remote started accidentally. This feature is useful if 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. The switch can be installed in a location of your choice. Check with your installer for recommended locations.

Location of Shutdown Switch _____

→ false alarm control technology (FACT)

Your system has False Alarm Control Technology (FACT), a feature designed to prevent annoying repetitive trigger sequences due to faulty door pin switches or environmental conditions such as thunder, jackhammers, airport noise, etc.

Example: The alarm triggers three times. Each time, the same sensor or switch is triggering the alarm. The three triggers are within 60 minutes of each other. FACT will interpret this pattern of triggers as false alarms. After the third trigger, FACT ignores, or bypasses, that sensor or switch (along with any other sensors or switches sharing the same zone).

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 FACT 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.

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 FACT programming can cause zones to be bypassed and appear to stop working. If five chirps are heard when disarming, FACT has been engaged. If you wish to clear the FACT memory, turn the ignition on.

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.

→ **over and under rev protection**

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: The system uses a wire connected to the vehicle to sense engine speed. This wire must be connected in order for over and under rev protection to work.

→ shut down inputs

This security system uses several inputs to shut down the remote start operation of the motor or prevent remote start if certain inputs are active. The two most important are hood and brake inputs. The hood input will prevent the motor from starting, as well as shut it down, any time the hood is opened. The brake pedal will shut down the motor at any time during remote start operation, as well as preventing the remote engine starting from activating while it is being pressed.

→ starterguard anti-grind circuitry

Whenever the vehicle is remote started, advanced StarterGuard anti-grind circuitry will prevent 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 engine starting operation.

note: The starter anti-grind circuitry only works when the remote start system is operating the motor and the starter interrupt relay has been installed.

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.

→ **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. Once the light turns off, however, the security system resumes normal monitoring.

note: Bypass Notification does not occur when the system is in Remote Controlled Chirp Muting mode or if the notification chirps have been programmed by the installer not to sound.

→ **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 False Alarm Control Technology

(FACT) has bypassed that zone. In either case, the LED status indicator 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.

→ **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 - hood pinswitch	
2	Instant trigger - a heavier impact detected by the shock sensor	
3	Door switch trigger	
4	Instant trigger - for optional sensors	
5	Ignition trigger	

If the Warning Zone response is triggered, the LED will not report it.

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

anti-code grabbing (ACG)

This unit features Anti-Code Grabbing (ACG) with Random Code Encryption. This means the receiver and transmitters each use a mathematical formula called an algorithm to change their code each time the transmitter is used. This technology has been developed to increase the security of the unit. The control unit knows what the next codes should be. This helps to keep the transmitter "in sync" with the control unit even if you use the remote control out of range of the vehicle. However, if a transmitter button has been pressed many times out of range of the vehicle, or the battery has been removed, it may get out of sync with the control unit and fail to operate the system. To re-sync the remote control simply press  of the transmitter several times within range of the vehicle. The alarm will automatically re-sync and respond to the transmitters normally.

high frequency

Your system transmits and receives at 433 MHz. This provides a cleaner spectrum with less interference and a more stable signal. Enjoy a phenomenal increase in range – even in areas with high radio interference.

owner recognition

Owner Recognition is a feature available exclusively from Directed®. Using a Directed® Bitwriter hand-held programming tool, your dealer can program many of the system settings. The programmer makes it possible to program different settings for each transmitter that is used with the system. Then, whenever a specific transmitter is used, the system will recall the settings assigned to that transmitter. Owner Recognition lets up to four users of the system have different settings that meet their specific needs. It is almost like having four separate alarms in your vehicle, one for each user.

note: Owner Recognition cannot be programmed without a Bitwriter and the necessary software. Check with your dealer for more information.

smart power up II

This 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.

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 to prevent the system from draining the vehicle's battery. Power Saver Mode takes over under the following conditions:

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

programming options

- **Active arming** (transmitter only) or passive arming (automatic arming 30 seconds after the last door has been closed).
- Arming/disarming siren chirps **on** or off.
- Auto-Lock/Auto-Unlock with Smart Relocking **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. The system can also be

programmed to prevent the door from locking when the ignition is turned on with any door open. If your installer is programming the security system with the Directed® Bitwriter or a personal computer and the TechSoft Programmer, ignition lock and unlock are independent features and can be programmed separately.

- Passive door locking (with passive arming) or **active door locking** (only when arming with the transmitter). Passive locking allows the vehicle's doors to lock when the security system passively arms (after the 30-second countdown). This feature only works if passive arming has been programmed.
- Panic mode **enabled**/disabled when the ignition is turned on. (Some states have laws against sirens sounding in moving cars.)
- Forced passive arming **on** or off. If your security system is programmed for passive arming and the forced passive arming feature has been programmed on, the system will passively arm after one hour, even if a protected entry has been left open. Forced passive arming ensures that the system will be armed if a door has accidentally been left ajar when leaving the vehicle.

note: When the system passively arms after one hour, the entry point that has been left open, and anything connected to the same zone, is bypassed and cannot trigger the system. However, the remaining inputs to the system are fully operational.

- 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 or a personal computer and the TechSoft Programmer, the full triggered response can be programmed for any duration ranging from 1 to 180 seconds.
- Automatic Engine Disable (AED) on or **off**: The purpose of this feature is to protect the vehicle from being stolen at all times, regardless of whether or not the alarm is armed. If AED is programmed on, the starter of the vehicle will be disabled 30 seconds after the ignition is turned off. Once the key is turned off, the LED will flash slowly (one-half its normal armed rate) to indicate the AED arming cycle. Thirty seconds later, the starter will be disabled. To start the car, it will be necessary to arm the car with the remote and then disarm it with the remote. It is also possible to disarm the AED feature by turning the ignition key to the “run” position and pressing the Valet button the programmed number of times. AED is also disabled when the system is in Valet mode.

note: This feature will only function if the starter interrupt relay has been installed.

- Siren tones and chirp volume. The output of the 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.

- The engine can be programmed to run for any duration ranging from 1 to 60 minutes. **12 minutes** is the default. After the programmed run time, the engine will shut down and will not restart, unless in Timer Mode.
- While the remote start system is running the engine, the parking lights of the vehicle can **flash on and off** or come on and light steadily.

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.

Car*Com/Automated Vehicle Locator (AVL): Your system is compatible with Directed's Valet Car*Com and AVL systems. Car*Com offers a one-way pager system that allows many of the security and convenience features of your Directed security system to be operated from any touch tone telephone. Directed's AVL system shares the same basic Car*Com features, but takes remote vehicle paging one step further by providing web-enabled two-way GPS vehicle location services, including "bread crumb" tracking and geo-fencing capabilities.

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.

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.

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.

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.

Transmitter: A hand-held, remote control which operates the various functions of your system.

Trigger or Triggered Sequence: This is what happens when the alarm “goes off” or “trips.” The triggered sequence of your system consists of 30 seconds of siren sounding and parking light flashing.

Valet Switch: A small push button mounted at a discretionary location inside the vehicle. It is used to override the starter interrupt when a transmitter 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.



Arming While Driving

- To arm the system while driving, press  on your transmitter while the vehicle is running. The system will chirp once and then once more to indicate that the ignition is on.

Disarming

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


Siren Silencing

- For siren silencing, press  on your transmitter 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 Transmitter

- Turn on the ignition. Press the Valet switch within 15 seconds. The system should now disarm. If it does not, you may have waited too long, so turn the ignition off and on and try again.


Remote Controlled Chirp Muting

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

Panic Mode

- Press and hold  down for 1.5 seconds to activate Panic Mode. Press  to stop panic mode at any time.

Remote Engine Starting

- Press . The parking lights will turn on (if connected) and the vehicle will start and run for the programmed period of time.

Disabling Remote Engine Starting

- To disable the remote start, move the shutdown toggle switch to the OFF position.

Location of Valet Switch _____

Number of Valet Switch Pulses for Disarming _____

The company behind this system is Directed Electronics, Inc.

Since its inception, Directed® has had one purpose, to provide consumers with the finest vehicle security and car stereo products and accessories available. The recipient of 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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