

# CLIFFORD®

*Model RSX1.2*

➤ *Owner's Guide*

# *limited lifetime consumer warranty*

Directed Electronics ("Directed") promises to the original purchaser to repair or replace with a comparable reconditioned model any Directed unit (hereafter the "unit"), excluding without limitation the siren, the remote transmitters, the associated sensors and accessories, which proves to be defective in workmanship or material under reasonable use during the lifetime of the vehicle provided the following conditions are met: the unit was professionally installed and serviced by an authorized Directed dealer; the unit will be professionally reinstalled in the vehicle in which it was originally installed by an authorized Directed dealer; and the unit is returned to Directed, shipping prepaid with a legible copy of the bill of sale or other dated proof of purchase bearing the following information: consumer's name, telephone number and address; the authorized dealers name, telephone number and address; complete product description, including accessories; the year, make and model of the vehicle; vehicle license number and vehicle identification number. All components other than the unit, including without limitation the siren, the remote transmitters and the associated sensors and accessories, carry a one-year warranty from the date of purchase of the same. This warranty is non-transferable and is automatically void if: the original purchaser has not completed the warranty card and mailed it within ten (10) days of the date of purchase to the address listed on the card; the unit's date code or serial number is defaced, missing or altered; the unit has been modified or used in a manner contrary to its intended purpose; the unit has been damaged by accident, unreasonable use, neglect, improper service, installation or other causes not arising out of defects in materials or construction. The warranty does not cover damage to the unit caused by installation or removal of the unit. Directed, in its sole discretion, will determine what constitutes excessive damage and may refuse the return of any unit with excessive damage. TO THE MAXIMUM EXTENT ALLOWED BY LAW, ALL WARRANTIES, INCLUDING BUT NOT LIMITED TO EXPRESS WARRANTY, IMPLIED WARRANTY, WARRANTY OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF NON-INFRINGEMENT OF INTELLECTUAL PROPERTY, ARE EXPRESSLY EXCLUDED; AND DIRECTED NEITHER ASSUMES NOR AUTHORIZES ANY PERSON OR ENTITY TO ASSUME FOR IT ANY DUTY, OBLIGATION OR LIABILITY IN CONNECTION WITH ITS PRODUCTS. DIRECTED DISCLAIMS AND HAS ABSOLUTELY NO LIABILITY FOR ANY AND ALL ACTS OF THIRD PARTIES INCLUDING ITS AUTHORIZED DEALERS OR INSTALLERS. DIRECTED SECURITY SYSTEMS, INCLUDING THIS UNIT, ARE DETERRENTS AGAINST POSSIBLE THEFT. DIRECTED IS NOT OFFERING A GUARANTEE OR INSURANCE AGAINST VANDALISM, DAMAGE OR THEFT OF THE AUTOMOBILE, ITS PARTS OR CONTENTS; AND HEREBY EXPRESSLY DISCLAIMS ANY LIABILITY WHATSOEVER, INCLUDING WITHOUT LIMITATION, LIABILITY FOR THEFT, DAMAGE AND/OR VANDALISM. THIS WARRANTY DOES NOT COVER LABOR COSTS FOR MAINTENANCE, REMOVAL OR REINSTALLATION OF THE UNIT OR ANY

CONSEQUENTIAL DAMAGES OF ANY KIND. IN THE EVENT OF A CLAIM OR A DISPUTE INVOLVING DIRECTED OR ITS SUBSIDIARY, THE PROPER VENUE SHALL BE SAN DIEGO COUNTY IN THE STATE OF CALIFORNIA. CALIFORNIA STATE LAWS AND APPLICABLE FEDERAL LAWS SHALL APPLY AND GOVERN THE DISPUTE. THE MAXIMUM RECOVERY UNDER ANY CLAIM AGAINST DIRECTED SHALL BE STRICTLY LIMITED TO THE AUTHORIZED DIRECTED DEALER'S PURCHASE PRICE OF THE UNIT. DIRECTED SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, ANY CONSEQUENTIAL DAMAGES, INCIDENTAL DAMAGES, DAMAGES FOR THE LOSS OF TIME, LOSS OF EARNINGS, COMMERCIAL LOSS, LOSS OF ECONOMIC OPPORTUNITY AND THE LIKE. NOTWITHSTANDING THE ABOVE, THE MANUFACTURER DOES OFFER A LIMITED WARRANTY TO REPLACE OR REPAIR THE CONTROL MODULE AS DESCRIBED ABOVE. Some states do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights and you may also have other rights that vary from State to State.

This product may be covered by a Guaranteed Protection Plan ("GPP"). See your authorized Directed dealer for details of the plan or call Directed Customer Service at 1-800-876-0800. Directed security systems, including this unit, are deterrents against possible theft. Directed is not offering a guarantee or insurance against vandalism, damage or theft of the automobile, its parts or contents; and hereby expressly disclaims any liability whatsoever, including without limitation, liability for theft, damage and/or vandalism. Directed does not and has not authorized any person or entity to create for it any other obligation, promise, duty or obligation in connection with this security system.

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

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

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

# *table of contents*

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limited lifetime consumer warranty . . . . .	i
what is included. . . . .	3
important information. . . . .	3
your warranty . . . . .	4
fcc/id notice . . . . .	4
caution . . . . .	4
2-way remote diagram . . . . .	5
standard remote configuration . . . . .	5
2-way remote functions . . . . .	6
standard configuration . . . . .	7
remote operation . . . . .	8
system signal paging features. . . . .	8
out of range notification . . . . .	9
programming remote . . . . .	10
using your system . . . . .	11
warning! safety first. . . . .	11
locking . . . . .	13
unlocking . . . . .	14
panic mode . . . . .	16
valet mode . . . . .	16
remote start. . . . .	17
rear defogger . . . . .	19
valet take-over. . . . .	20
short-run/turbo. . . . .	20
timer mode . . . . .	22
auxiliary outputs (options). . . . .	23
safety features. . . . .	24
starter anti-grind circuitry. . . . .	24
disabling the remote start system . . . . .	24
over and under rev protection . . . . .	25
shut down inputs . . . . .	25
code hopping. . . . .	25
high frequency. . . . .	26
owner recognition . . . . .	26
rapid resume logic . . . . .	27
power saver mode . . . . .	27
programming options . . . . .	28
security & convenience expansions . . . . .	29
glossary of terms . . . . .	31



## *what is included*

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- A control module
- An XHF2 receiver/antenna
- One 4-button 2-way remote
- One 4-button remote
- A in-vehicle status LED indicator light
- A push-button Valet switch
- Your warranty registration
- A shut-down toggle switch

## *important information*

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Congratulations on the purchase of your 2-way remote start keyless entry 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 that they are authorized.

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](http://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.

## → **fcc/id notice**

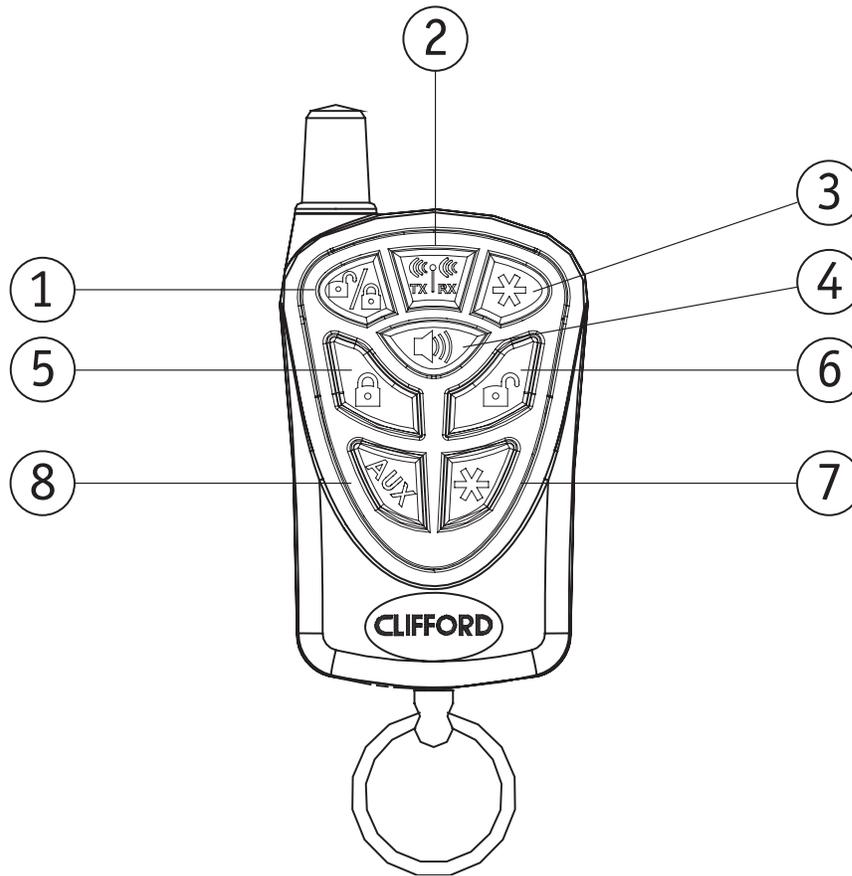
This device complies with Part 15 of FCC rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesirable operation.

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.

# 2-way remote diagram



# standard remote configuration

- |    |   |
|----|---|
| 1. | Unlock/Lock Indicator (Orange)            |
| 2. | Receive/Transmit Indicator (Green)        |
| 3. | Remote Start/Auxiliary Indicator (Yellow) |
| 4. | Panic Indicator (Red)                     |
| 5. | Lock Button                               |
| 6. | Unlock Button                             |
| 7. | Remote Start Button                       |
| 8. | Auxiliary Channel Button                  |

# *system maintenance*

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

## **Low Battery Notification**

If the battery is low (and this feature is programmed On) the 2-way remote will emit 2 long beeps 5-seconds after a transmission is completed. The 2 long beeps will repeat every 25 seconds up to 3 times (or until a 2-way remote button is pressed).

## **Battery Replacement**

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

# *2-way remote functions*

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The receiver uses a computer-based Learn Routine to learn the 2-way remote buttons. This makes it possible to assign any 2-way remote button to any receiver function. The 2-way remote initially comes programmed with Standard Configuration, but may also be customized by an authorized dealer. The buttons in all of the instructions in this manual correspond to a Standard Configuration 2-way remote.

## → **standard configuration**

### **Button**

Controls the system Lock function by briefly pressing this button.

### **Button**

Controls the system Unlock function by briefly pressing this button.

### **Button**

Controls an optional auxiliary function, such as trunk release, can be controlled by pressing this button for 1.5 seconds.)

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

### **Button**

The remote start feature is turned On/Off by pressing this button twice.

### **and** **Buttons**

The remote start timer mode function of the system is controlled by pressing these buttons simultaneously.

### **and** **Buttons**

The Turbo/Short Run feature is controlled by these buttons (refer to the Turbo/Short Run section for additional details).

### **and** **Buttons**

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

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

## **Button**

Press and hold this button for 3-seconds to enter Panic Mode.

## **and** **and** **Buttons**

When simultaneously pressed these buttons control the rear window defogger during remote starting.

# *remote operation*

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The remote start system operates at 434 MHz and incorporates Directed's proprietary XHF2 out-board technology transceiver. The high frequency combined with Binary Data communication achieves superior range with two-way communication.

## **system signal paging features**

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

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

### **Command Page**

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

### **Alarm Page**

If the ignition is turned on while locked, the system will actuate the panic feature and an Alarm Page will be sent to the remote control. When the remote receives this Alarm Page, the remote control will generate 4 beeps 5 times and the Red LED will illuminate for 3-seconds. This will repeat every 100 seconds to alert the user that the security feature was triggered and will continue until the alarm page is cleared.

### **Page Recognition**

To clear a page alert/notification, quickly press any button on the remote control. This can be performed at any time during or after the page notification has occurred.

The remote control will not send a command to the system at this time; it will only clear future repeats of the page notification. The next time a button is pressed on the remote control it will send a command to the system.

### **→ out of range notification**

If a command is issued from the remote, but the remote is beyond the range of the vehicle to receive the command, the remote responds with 2 sets of 3 quick beeps and the Green LED will flash 6-times.

# *programming remote*

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## **To enter programming mode**

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

## **Beeps On/Off**

Press  to select beeps On/Off. One beep is notification beeps On, Two beeps is notification beeps Off. The notification beeps are programmed On from the factory and can be programmed Off if they are not desired. When programmed Off the remote will only flash the LEDs as notification of a command page or an alarm page.

## **Remote battery low notification**

Press  to select low battery notification On/Off. One beep is low battery notification On. Two beeps is low battery notification Off. The Low battery Beeps are programmed On from the factory and can be programmed Off if they are not desired. When programmed Off the remote will not give any notification that the battery charge level in the remote is low.

## **Page notification**

The remote control can be programmed to notify the user of a page (audibly beeping if the vehicle's status changes, e.g. door unlocked, engine started, vehicle violation, etc.). Press  to select page On/Off. One beep is page On, Two beeps is page Off. When programmed off the remote will not give any notification that a page was received from the vehicle.

### To exit programming mode

The remote control will exit programming mode after 2-seconds of inactivity and will emit 2 long beeps.

## *using your system*

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### → **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 2-way remote control. 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 2-way remotes 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 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.

### **locking**

Pressing  for one second arms the system by activating the starter kill and locking the doors (if the door locks are connected). The horn will honk (if connected) and the parking lights will flash once to confirm arming of the system. While the system is armed, the in-vehicle status LED will flash once per second. The Failsafe® Starter Kill will also prevent the vehicle's starter from cranking.

The system can also be programmed to arm the optional Failsafe® Starter Kill automatically (called Passive Mode). If the system has been programmed for Passive Mode, the Failsafe® Starter Kill will automatically activate 30 seconds after the ignition has been turned off. After the ignition has been turned off, the in-vehicle status LED will flash rapidly to indicate that the system is in Passive Mode.

If Passive Mode has been programmed on, then it is also possible to program the system for Passive Locking. With Passive Locking, the vehicle doors lock automatically at the same time that the Failsafe® Starter Kill is activated. If Passive Locking is programmed on, care must be taken to prevent the keys from being locked in the vehicle.

**note:** For Passive Mode to be effective, the Failsafe® Starter Kill relay must be installed.

The remote responds to active arming with one beep and the Orange LED will flash 3-times to indicate successful locking of the system.

If after 2-seconds the remote beeps once, the Orange LED flashes 6-times and the Red LED lights for 3-seconds, the system has detected an open hood.

## → **unlocking**

Pressing  for one second disarms the system and unlocks the doors (if connected). The horn will honk twice (if connected) and the parking lights will flash twice to confirm disarming of the system. The optional Failsafe® Starter Kill will be deactivated. The in-vehicle status LED will turn off, unless the system is programmed for Passive Mode. In Passive Mode, the in-vehicle status LED will flash rapidly when the system is disarmed. This indicates that the system will re-engage the starter kill and re-lock the doors (if Passive Locking has been programmed) in 30 seconds unless the ignition is turned on.

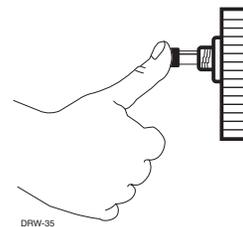
The remote will indicate unlock notification with 2 beeps and 3 flashes of the Orange LED.

### → **disabling the starter kill without a 2-way remote**

If your 2-way remote is lost or damaged, you can manually override the starter kill. To do this, you must have the vehicle's ignition key and know where the Valet button is located. Be sure to check with your installer at the time of installation for the location of the Valet button.



To override the starter kill, turn the ignition to the On position. Press the Valet button once within 10 seconds. The in-



vehicle in-vehicle status LED will stop flashing and the vehicle should start. If it does not start you may have waited too long; turn the ignition Off and On and try again.

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

The remote will indicate the starter kill disable notification with 2 beeps and 3 flashes of the Orange LED.

## → panic mode

If you are threatened in or near your vehicle, you can attract attention by triggering the system with your 2-way remote. Just press  for 3-seconds, and you will enter Panic Mode. The horn will honk (if connected) and the parking lights (if connected) will flash for the programmed duration. To stop Panic Mode at any time, press  or  on the 2-way remote.

The remote responds with one flash of the Red LED upon entering Panic Mode and two flashes of the Red LED upon exiting Panic Mode.

**note:** In order for Panic Mode to be effective, the vehicle's horn (or optional siren) as well as the vehicle's parking lights must be connected.

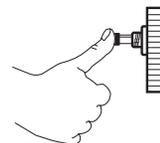
## → valet mode

You can prevent your system from automatically activating the Failsafe® Starter Kill and locking the doors by using Valet Mode. This is very useful when washing the vehicle or having it serviced. In Valet Mode, the starter kill cannot be activated, even with the 2-way remote, but all convenience functions (door locks, remote start, etc.) will continue to work normally.

### To enter or exit Valet Mode:



1. Turn the ignition On.
2. Turn the ignition Off.
3. Press and release the Valet button once within 10 seconds.



The in-vehicle status LED will light steadily if you are entering Valet Mode, and it turn off if you are exiting Valet Mode.

The remote will respond with 3 Orange LED flashes on entering and 2 beeps and 3 Orange LED flashes on exiting Valet Mode.

## **remote start**

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 2-way remote twice within 3 seconds.
2. The parking lights will flash to confirm that the vehicle will attempt to start.
3. In gasoline vehicles, the engine will start 4 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. Once the vehicle has started, it will run for the pre-programmed period of time (either 12, 24, or 60 minutes - see Programming Options section of this guide) or until a shut-down input is triggered.

For a remote start, the remote responds with remote start tones and the Yellow LED illuminates for 3-seconds.

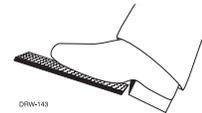
For a remote start Off, the remote responds with remote start off tones and the Yellow LED flashes 3-times.

**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.

#### When you are ready to drive the vehicle:



1. Insert the ignition key and turn it to the ON (not the START) position.
2. Press the brake pedal.



**note:** If the brake pedal is pressed before the key is in the ON position, the engine will shut down.

While the vehicle is running during remote start 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 button is put into the OFF position.
- The pre-programmed run time (12, 24, or 60 minutes) has elapsed.
- 2-way remote button  is pressed twice again to stop the engine.
- The remote responds with remote start off tones and the Yellow LED flashes 3-times.

## ➔ rear defogger

To turn the rear defogger output OFF:

1. Simultaneously press & release the  +  +  buttons on the remote control.
2. The lights will flash 2 times.
3. The rear defogger output will no longer activate when the vehicle is remote started.

**note:** If the remote start is on the parking lights will turn off then flash 2-times before returning to their normal output and the defogger output, if active, will cease.

To turn the rear defogger output ON:

1. Simultaneously press & release the  +  +  buttons on the remote control.
2. The lights will flash 3 times.
3. The rear defogger output will once again activate when the vehicle is remote started.

note: If the remote start is on the lights will turn off then flash 3-times before returning to their normal output and the defogger output will activate as programmed.

## → 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 2-way remote twice within 3 seconds. Then wait five 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. (See the previous *Remote Start* section for a complete list of shut-down inputs.)

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

4. The remote start responds with remote start tones and the Yellow LED illuminates for 3-seconds.

## → short-run/turbo

Short run turbo 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 short-run/turbo:**

1. Park the vehicle and set parking
2. Remove your foot from the brake pedal and leave the engine running.
3. Press and release the  and  buttons at the same time.
4. The remote start responds with remote start tones and the Yellow LED is illuminated for 3-seconds.
5. The lights will flash to indicate the remote start has entered short run turbo mode.
5. Turn off the key, the engine will keep running.
6. Exit and secure the vehicle.
7. The engine will turn off after the programmed run time.

The remote responds with remote start tones and the Yellow LED illuminates for 3-seconds.

## → timer mode

By pressing the remote  and  buttons the parking lights will flash 4 times and then start the vehicle and run for the set duration. The remote start can be shut off by the 2-way remote by pressing the remote start button  twice and remain in timer mode, but if any other shut down zones or the ignition become active the timer mode will cancel.

1. Press Timer mode buttons.
2. The vehicle will confirm with 4 parking light flashes.
3. After a 1-second delay the vehicle will start.
4. The system will start the car and will run for the specified duration, unless shut down by the remote start button .
5. The system will start every 3 hours (for a maximum of 6 starts) until canceled by the brake, hood, or neutral safety shut-down wires.

On entering Timer Mode the remote will respond with the Start On notification. The remote will respond with the Start and Stop notification during each Start and Stop of the Vehicle while in Timer mode.

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

To exit timer mode, turn the ignition switch on any time the engine is running. The parking lights will flash 4 times, indicating timer mode has been exited.

## *auxiliary outputs (options)*

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This system also supplies outputs that can control convenience options such as remote control trunk release and window automation. Consult your dealer for available options for your system.

Channel 2 Trunk release: When connected, pressing  for 1.5 seconds will remotely release the vehicle trunk lid.

Channel 4 auxiliary output: When connected, pressing  and  will immediately activate this output to control an additional convenience option.

The remote will respond with a page notification consisting of an output tone (once) and the Yellow LED will flash 3-times. This occurs at the remote after the system has received the command to activate any of the Auxiliary outputs.

# *safety features*

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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 your system's remote start 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** \_\_\_\_\_

## → **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 system uses several inputs to shut down the remote start operation of the motor or prevent remote start if certain inputs are active. These are the 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 start from activating while it is being pressed.

## *code hopping*

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The receiver and 2-way remotes use a mathematical formula called an algorithm to change their code each time the 2-way remote is used. This technology has been developed to increase the security of the unit. The control unit knows what the next codes should be. This helps to keep the 2-way remote “in sync” with the

control unit even if you use the remote control out of range of the vehicle. However, if the remote has been pressed many times out of range of the vehicle, or the battery has been removed, it may fall out of sync with the control unit and fail to operate the system. To re-sync the remote simply press  several times within range of the vehicle. The alarm will automatically re-sync and respond to the 2-way remotes normally.

## *high frequency*

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Your system transmits and receives at 434 MHz. This provides a cleaner spectrum with less interference and a more stable signal. Enjoy a phenomenal increase in range, even in areas with high radio interference.

## *owner recognition*

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Owner Recognition is a revolutionary new feature available only 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 2-way remote that is used with the system. Then, whenever a specific 2-way remote is used, the system will recall the settings assigned to that 2-way remote. 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.

## *rapid resume logic*

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

## *power saver mode*

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Your system will automatically enter Power Saver Mode while locked 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 locked: After the system has been armed for 24 hours the in-vehicle status 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 in-vehicle status LED 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 status LED will come back on the next time the ignition is turned on and then back off.

## *programming options*

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

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

- The ignition controlled door lock feature **on** or off: When this feature is programmed on, the doors will lock three seconds after the ignition is turned on, and unlock when the ignition is turned off. If your installer is programming the security system with the Directed Bitwriter, ignition lock and unlock are independent features that can be programmed separately.
- Passive door locking (with passive arming) or **active door locking** (only when locking with the 2-way remote). Passive locking allows the vehicle's doors to lock (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.)

**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.

- The engine can be programmed to run when remote started 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.
- 3, 6, 9, or 12 minute timer mode run time. Your system can be programmed to allow the vehicle to run for 3, 6, 9, or 12 minutes when remote started in timer mode. Can be set up to 16 minutes by your installer.
- 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.

**Domelight Supervision:** This domelight will illuminate for 30 seconds each time the system is unlocked using the 2-way remote. This is useful for seeing inside the vehicle at night prior to entering it.

**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.

**Progressive Door Unlocking:** For added security, your system can be configured to unlock the driver's door only, leaving the passengers doors locked. Pressing the unlock button an additional time will unlock the passenger doors. This option requires additional parts and labor.

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

# *glossary of terms*

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**2-Way Remote:** Hand-held, 2-way transceiver which operates the various functions of your system.

**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.

**Failsafe® Starter Kill:** An automatic switch controlled by your system that prevents the vehicle’s starter from cranking whenever the system is locked. The vehicle is never prevented from cranking when the system is unlocked, 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 the hood pinswitch or ignition.

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

**Valet® Button:** A small push-button switch mounted at a discretionary location inside the vehicle. It is used to override the starter interrupt when a 2-way remote is lost or damaged, or to enter or exit Valet® Mode.



# QUICK REFERENCE GUIDE

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



## To arm using your remote

- To arm the system press  for one second. The doors will lock (if connected). The LED will begin to flash. The vehicle's horn (if connected) will honk and the parking lights will flash once to confirm arming.

## To disarm using your remote

- To disarm the system press  for one second. The doors will unlock (if connected). The vehicle's horn (if connected) will honk twice and the parking lights will flash twice.

## Disabling the Failsafe® Starter Kill without a transmitter

- Turn on the ignition. Press and release the Valet button within 10 seconds. The LED will stop flashing and the vehicle should start.

## To remote start the vehicle

- Press  twice within 3 seconds. The parking lights will turn on (if connected) and the vehicle will start and run for the programmed duration.

## To enter or exit Valet Mode

- Turn the ignition to the "ON" position. Turn the ignition back off. Press and release the Valet button within 10 seconds. The status LED will light steadily if you have entered Valet Mode. To exit Valet Mode, repeat the steps above. The LED will turn off when exiting Valet Mode.

## To activate Panic Mode

- Press and hold  for 1.5 seconds.

## To activate Timer Mode

- Press  and  to start the vehicle, and run it for the set duration.

## To activate Turbo Mode

- Park the vehicle and set parking brake. Remove your foot from the brake pedal and leave the engine running. Press and release the  and **AUX** buttons.

## To disable the remote start system

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

Location of Shutdown Switch \_\_\_\_\_

## Valet Takeover

- Press and release  on the transmitter twice in 3 seconds. Turn the ignition key to the OFF position. Once the vehicle has started, it will run for the pre-programmed period of time (12, 24, or 60 minutes).

## Rear Window Defogger

- Press the ,  and **AUX** buttons simultaneously to turn the defogger on or off when remote starting. When a remote start is initiated, the parking lights will flash 2-times if the defogger is set to off, and will flash 3-times if the defogger is set to on.

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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.



Directed Electronics is an ISO 9001 registered company.

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

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