# RS900 / RS901 SERIES V

### **OPERATING INSTRUCTIONS**

CONGRATULATIONS on your choice of a CoolStart<sup>™</sup> Remote Engine Starter by Crimestopper Security Products Inc. This booklet contains the information necessary for using & maintaining your remote start system. If any questions arise, contact your installation dealer or Crimestopper Security Products Inc. at (800) 998-6880.

#### \*\*IMPORTANT NOTES:- RS901 MODEL\*\*

RS901 Model is an add-on/expansion unit, without remotes or an antenna, which must be controlled by an existing alarm or keyless entry system. Some features including "Infinity Run" feature are not available when using an RS901 system.

#### **TECHNICAL SUPPORT: (800) 998-6880**

Monday - Friday 8:00am - 4:30pm Pacific Std. Time Web Site: www.crimestopper.com E-mail: email@crimestopper.com

CRIMESTOPPER SECURITY PRODUCTS, INC. 1770 S. TAPO STREET, SIMI VALLEY, CA. 93063

This device complies with FCC Rules part 15. Operation is subject to the following two conditions: 1) This device may not cause interference, and (2) this device must accept any interference that may be received, including interference that may cause undesired operation. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. Such modification could void the user's authority to operate the equipment.

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### **OPERATION CAUTIONS & WARNINGS**

**CRIMESTOPPER SECURITY PRODUCTS, INC.** and its **VENDORS** shall not be liable for any accident resulting from the use of this equipment. This system is designed to be professionally installed into a car or vehicle in which all items, such as parking brake and all associated components, door switches, transmission shift linkage, throttle linkage, and all engine safety features, are in perfect working condition.

**DO NOT install the Remote Engine Starting System on MANUAL TRANSMISSION vehicles.** If accidentally left in gear the vehicle could become a self-propelled threat to life and property.

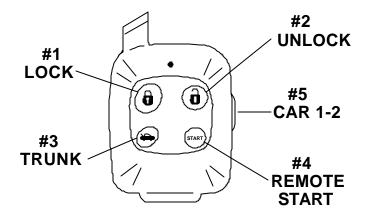
**IT IS ABSOLUTELY THE OWNER'S SOLE RESPONSIBILITY TO:** A) Understand the operation of this system and its safety features. B) Check for proper operation of these safety features prior to accepting delivery of the vehicle from the installation facility. C) Check and maintain the condition of the vehicle and all items relative to the proper operation of this system and its safety features. D) Always leave the doors and windows closed and locked to protect against accident and theft.

**DO NOT remote start the vehicle in a closed garage.** Make sure that the garage door is open or there is adequate ventilation. Failure to observe this rule could result in **injury or death** from poisonous Carbon Monoxide fumes.

**IT IS ABSOLUTELY THE OWNERS SOLE RESPONSIBILITY TO:** make certain the vehicle PARKING BRAKE is properly adjusted and will hold the vehicle securely in all parking conditions, and to periodically check and maintain proper adjustment.

### USING THE REMOTE TRANSMITTER (RS900)

The transmitter supplied with this system has Four (4) buttons / channels. The button configuration is Factory-set and unchangeable. (RS901 model does not include remote transmitters: For add-on / OEM use only)

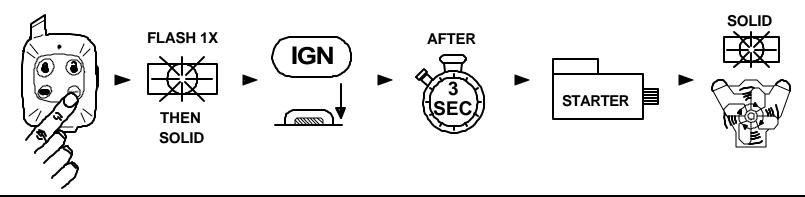


**TRANSMITTER BUTTONS** 

### **REMOTE ENGINE CONTROL**

#### **REMOTE ENGINE STARTING - SUCCESSFUL START:**

- 1) Press and release the remote start button. (For RS901 models, activate Green Start input wire.)
- 2) Parking lights flash once, then turn on solid, Ignition/Acc On turn on.
- 3) After a few seconds the Starter Motor engages, Parking lights and Acc circuits will turn off while cranking.
- 4) Engine Starts and Runs. Parking Lights and Acc turn back on, Doors Lock.
- 5) Engine will remain running for programmed run time until reset with Brake pedal. If needed, the engine can be turned off with remote transmitter by pressing and releasing the Start button. (For RS901 model, activate the Green Start input wire.



### **REMOTE ENGINE CONTROL**

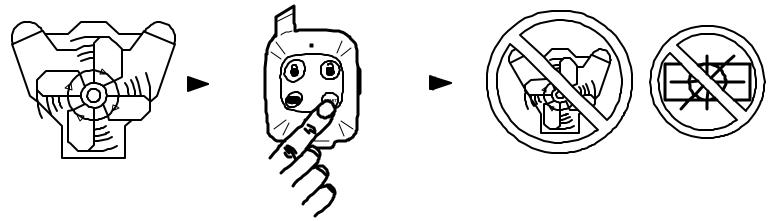
#### **REMOTE ENGINE STARTING - UNSUCCESSFUL START**

In the event that the engine does not start on the first attempt, the system shuts down for a few seconds, then attempts to restart the engine a 2<sup>nd</sup> and 3<sup>rd</sup> time. For hard starting engines, the unit will allow a starter crank time of up to13 seconds maximum. This should provide ample cranking time for difficult starts, but is limited to 13 seconds to help prevent damage to the starter from over cranking.

- 1) If engine starts on 2<sup>nd</sup> or 3<sup>rd</sup> attempt, see steps 4 & 5 above of "Successful Start".
- 2) If Third attempt fails to start engine, the system will turn off and doors will remain locked. NO FURTHER ATTEMPTS WILL BE MADE AUTOMATICALLY

#### TURNING OFF A REMOTE STARTED ENGINE:

- 1) Engine is running in Remote Start (Parking lights ON).
- 2) Press and release the remote start button. (For RS901 model activate Green Start input wire.)
- 3) Engine turns & parking lights OFF, Doors re-lock/re-arm.



#### IDLE DOWN MODE:

This mode allows the unit to take over operation of the parked vehicle while the ignition key is removed and you exit the vehicle. The vehicle is put into a remote running condition before you exit and it will remain running for the programmed run time or until you come back.

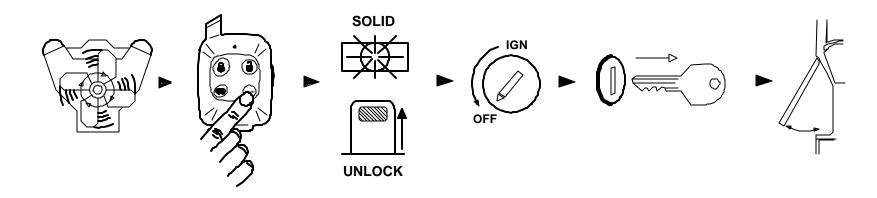
#### Examples:

- You pull up to a convenience store for a quick stop, "Idle Down" mode keeps engine running when you exit the vehicle, (with keys in hand) remote lock doors or arm alarm. When you return, unlock or disarm alarm, turn ignition ON and drive away.
- On some Turbocharged vehicles it is recommended that the driver leave the car at idle for a short time before turning the car off to allow the turbo to cool down.

### **REMOTE ENGINE CONTROL**

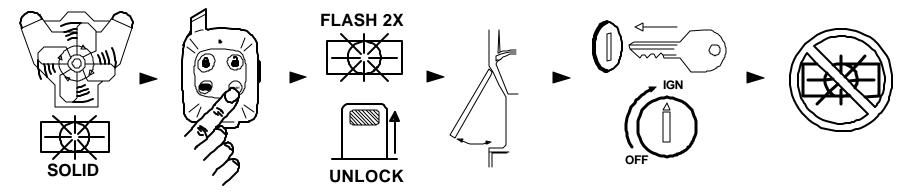
#### IDLE DOWN MODE - EXITING THE VEHICLE:

- 1) With vehicle engine running with key, press and release the Remote Start button. (For RS901 model activate Green remote start input wire.)
- 2) Parking Lights will turn ON.
- 3) Doors will unlock, or if brake pedal is being depressed doors will unlock when it is released.
- 4) Turn OFF Ignition and remove key. Engine should remain running.
- 5) Exit vehicle then remote lock doors if desired.
- 6) Engine will remain running for programmed run time or until you return (whichever comes first).



#### ENTERING A VEHICLE DURING "IDLE-DOWN" or "INFINITY RUN" MODES:

- 1) With engine running in "IDLE DOWN" (parking lights ON), unlock door via remote or key.
- 2) Enter vehicle and be careful not to step on brake pedal! (Remote Start Reset)
- 3) Turn Ignition to ON/RUN position, then depress brake pedal to reset the Remote Starter. Parking lights will turn off indicating the Remote Start is OFF and Vehicle is running by the Key. Drive away as normal.



### **REMOTE ENGINE CONTROL**

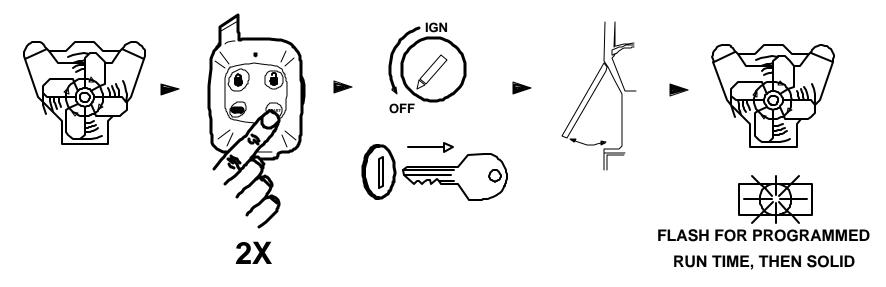
#### **INFINITY RUN MODE (RS900 IV ONLY)**

This mode can only be engaged when "Idle Down" is being engaged. Infinity mode allows the vehicle engine to remain running *INDEFINITELY after the programmed run time elapses*. This mode will allow the vehicle to be left running and unattended *without* the ignition key in the switch preventing the vehicle from being stolen. This mode can be beneficial to law enforcement or commercial trucks that need to remain running unattended for long periods of time.

#### INFINITY RUN MODE - EXITING THE VEHICLE: (NOT AVAILABLE ON RS901)

1) With vehicle engine running with the key, press and release the Remote Start button on the transmitter once, pause a few seconds, then press and release the remote start button a second time.

- 2) Parking Lights will start flashing, and doors will unlock.
- 3) Turn Ignition switch OFF, remove key and exit the vehicle. Engine should remain running.
- 4) The vehicle's parking lights will flash for the programmed run time of 12, 24, or 36, or 48 minutes and then switch to solid while motor runs indefinitely or until fuel supply runs out.



#### TIMED 4 HOUR SELF START MODE

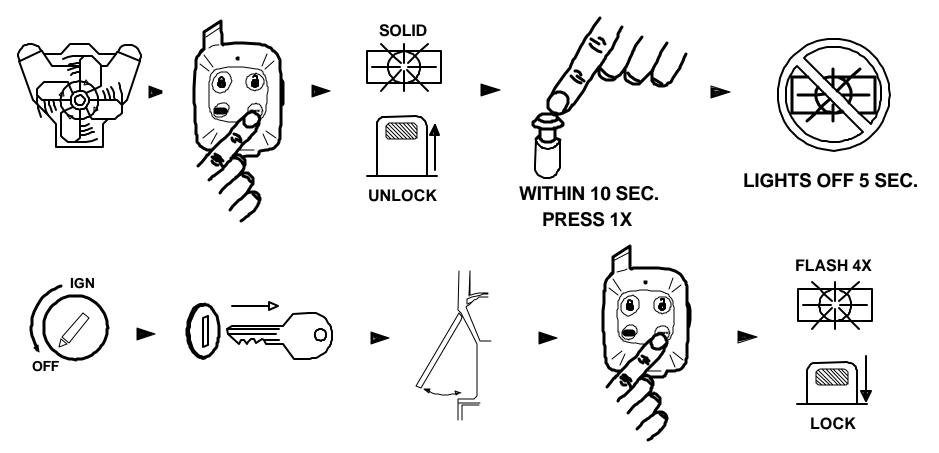
This mode allows the vehicle to be programmed to self-start every 4 hours and run for the programmed run time. This can be helpful during extremely cold conditions where engine fluid freeze-up is a concern. Be sure that the vehicle is outdoors or in a well ventilated area. Once the timed self-start mode is set, the unit will start every 4 hours and run for the programmed time. To reset this mode either start the vehicle with the key or via remote control.

### **REMOTE ENGINE CONTROL**

#### TIMED 4-HOUR SELF-START MODE – EXITING THE VEHICLE:

- 1) Engine should be running with the Key. Press and release the Remote Start button. (For RS901 model, activate Green start input wire.) Parking lights will turn on signaling the remote start unit has turned on and doors will unlock.
- 2) Within 10 seconds press and release the valet/program button once.
- 3) Parking Lights will turn OFF for about 5 seconds.
- 4) Turn Ignition switch OFF, remove key and exit the vehicle. Engine should remain running.
- 5) Once outside the vehicle, press and release the remote start button to turn off engine. (For RS901 model, activate Green Start input wire.) Doors will lock and the parking lights will flash 4 TIMES as a confirmation that the unit is in Timed Self-Start Mode.

6) The vehicle will Start by itself every 4 hours until driven with key or started via the remote control.



### **CONVENIENCE AND SAFETY FEATURES**

#### KEYLESS ENTRY (POWER DOOR LOCK CONTROL, Optional)

This system enables you to remotely lock and unlock the vehicle's doors (if equipped with power locks) through the transmitter for safety and convenience. Note: This feature may require extra labor and/or parts to install.

#### **REMOTE LOCK / UNLOCK (Optional)**

- 1) Press the Lock or Unlock transmitter button as you leave or come near the vehicle.
- 2) Parking lights will flash once for lock and twice for unlock. If vehicle is remote started, engine will remain running and lights will flash but return to solid indicating engine is still being controlled by the remote starter.

**NOTES:** Doors lock automatically when vehicle is Remote Started for safety. If your system has been setup with an optional starter kill relay, but you do not have power door locks, note the following: The lock and unlock buttons on

the remote control must still be utilized to operate the Starter disable feature.

#### **REMOTE PANIC (When used with Optional HORN HONK)**

For personal safety this unit now includes a panic feature. To sound the vehicle car horn, press the Lock Button on the remote for more than 2 seconds. The vehicle horn will honk along with flashing parking lamps for 1 minute. Reset Remote Panic by pressing either the lock or unlock button.

#### HORN CHIRP/HONK OUTPUT (Optional: with Horn connection/Horn option programming)

This feature, if installed, will provide audible confirmation chirps from the factory horn for lock and unlock. When using this feature, pressing the Lock or Unlock button a 2<sup>nd</sup> time within 3 seconds will provide a horn chirp for audible confirmation. The system can also be programmed to provide 3 chirps when a remote start is requested using the remote. Note: Horn honk/chirp feature may require extra labor and/or parts to install.

#### **REMOTE TRUNK RELEASE (Optional)**

This feature, if installed, will remotely release a factory electronic trunk or hatch through the transmitter. To operate, press and release the Trunk button (#3) to remotely open trunk or hatch. Trunk Pop may require extra labor and/or parts to install.

#### **OEM INTERFACE-RS901 MODEL: (FACTORY UPGRADE/ADD ON)**

The RS901 Expansion Module includes a programmable interface feature that allows control of most remote start features through an existing factory remote keyless entry system. The RS901 Expansion module can be installed as an upgrade to a Factory Keyless Entry System. This is referred to in this manual as activating the Green Start input. Pressing a button on the Factory remote 3 times will activate a start. This type of installation is usually connected to the lock circuit in the vehicle, therefore pushing the lock button on the Factory Remote 3 times will produce a remote engine start or turn off a remote started engine.

### **CONVENIENCE AND SAFETY FEATURES**

#### VALET MODE / STARTER DISABLE OVERRIDE

Before servicing your vehicle or handing the keys over to a Valet we recommend putting the unit into valet mode. The remote start function WILL NOT operate when in Valet mode. To enter Valet mode, turn the key to the ON position, press and hold Program/Valet switch for 6 seconds. The LED will turn on solid and the system is now in valet. Perform this procedure again to exit of Valet mode. The keyless entry will still function normally while in valet mode. In the event of a lost or broken transmitter, perform this step to override the Starter Disable (if installed).

#### **ANTI-GRIND / STARTER DISABLE (Optional)**

This Optional feature prevents the user from accidentally grinding the starter if the Ignition key is turned too far to the start position while engine is already running from the remote starter. The Anti-Grind/Starter Disable requires the use

of an external relay. This system must be programmed to allow the relay to work as a starter disable.

#### **PASSIVE STARTER DISABLE (Optional)**

This RS900 includes a programmable feature to allow the Optional Starter Disable to activate automatically 1 minute after the ignition is turned off. This programmable feature may provide insurance discounts or meet an insurance requirement in your providence.

#### HOOD OPEN SAFETY (Requires grounding hood pin installation)

Prevents the engine being Remote Started when hood is open and will shut OFF the engine if opened during a remote start. Eliminates risk of injury to someone working under the hood of the vehicle with a properly working hood pin installed. If Remote Start button is pressed with the hood open, the lights will flash once and the unit will not attempt a start.

#### **BRAKE PEDAL RESET**

Prevents starting or shuts off a remote started vehicle when this circuit is active or activated. Prevents unauthorized tampering. This circuit shuts the system down immediately when brake pedal is pressed if key is not in ignition and turned ON.

#### **OEM ALARM INTERFACE**

This feature is designed to Disarm and Re-arm Factory equipped security systems in conjunction with remote start and keyless entry (if needed for your vehicle). This feature will maintain the original integrity and security of your vehicle's factory equipped systems before, during, or after timed out or an aborted remote start.

#### NOTE:

When changing, charging, or jumpstarting the vehicle's battery we recommend removing the main power fuses located on the heavy gauge RED wires near the remote start module.

### TRANSMITTER PROGRAMMING

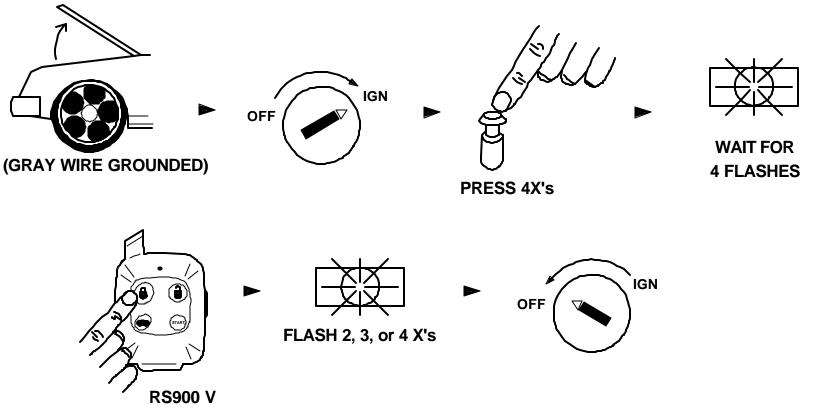
#### **TRANSMITTER PROGRAMMING:**

## Note: All transmitter codes must be learned at time of programming!! The RS900 allows storage of up to 4 different transmitter codes.

- 1. Open Hood.
- 2. Turn key to the ON position. (Doors will lock if Autolock is programmed)
- 3. Press Programming button 4 times, then after a few seconds the unit flashes the parking lights 4 times.
- 4. Press button #1 of the transmitter to be coded. You should get 2 light flashes indicating the unit is waiting for a 2<sup>nd</sup> code, then press button #1 of a second transmitter, the unit will flash 3 times indicating its waiting for the 3<sup>rd</sup> code

and 4 flashes for the 4<sup>th</sup> code. If all 4 codes are learned, the unit will automatically exit code learning mode, otherwise turn key off and close hood. See diagram below.

#### TRANSMITTER PROGRAMMING:

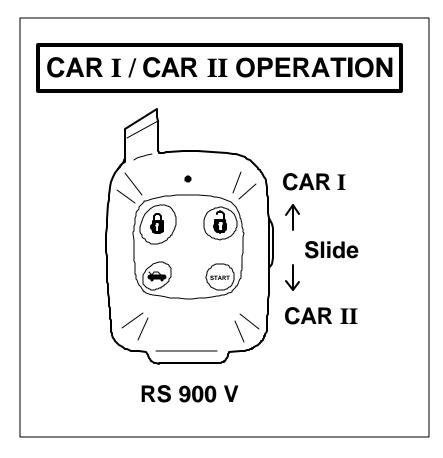


### **2-VEHICLE OPERATION**

The RS-900 V system can be used for 2 car operation. A single RS900V remote can control two independent vehicles with RS900 V systems installed.

#### SETUP:

See diagram below on how to switch your remote to car 2 operation. Once you switched your remote to Car 2, then follow the transmitter programming steps AT VEHICLE #2 and learn YOUR remote, along with Car 2's existing remotes. Transmitter programming steps are listed on page 10. This type of 2-Vehicle operation can only be performed with the CS-396 transmitter that includes a slide switch on the side of the remote for Car I or Car II operation.



### TROUBLESHOOTING: "BEFORE YOU CALL" SECTION

#### UNIT WILL NOT ATTEMPT A START (KEYLESS ENTRY STILL FUNCTIONS NORMALLY):

The unit is in Valet mode. Turn Ignition ON, press and hold valet/programming button for 6 seconds then turn key off. Unit is now out of valet mode and should perform a remote start. If optional LED indicator is installed, then it will be on solid when in Valet and OFF when out of Valet.

#### UNIT FLASHES LIGHTS ONCE AND WILL NOT ATTEMPT A START:

The unit senses a fault at the Brake (Purple wire is active) or the Hood is OPEN (Gray wire grounded). This is a safety feature of the unit. Check installation for faults and make sure hood is closed and latched and brake wire is not active.

#### NO RESPONSE FROM REMOTE TRANSMITTERS: (4 Parts)

- 1. Check for proper power/ground wiring connections at module.
- 2. Check Antenna Module connection. The antenna module included with this system must be plugged in.
- 3. Transmitters may need to be programmed to the unit. See transmitter programming steps on Page 10.
- 4. Check transmitter Batteries and replace if necessary.

#### UNIT CRANKS VEHICLE BUT ENGINE NEVER STARTS: (2 parts)

- 1. In extreme cold or severe weather conditions, the unit may take more than the first attempt to start the vehicle. The remote start unit will make up to 3 attempt to start the engine.
- 2. In some vehicles, there may be a Factory anti-theft system that will not allow the engine to run without the key in the ignition. These systems may include Factory Security Modules, GM Passkey®/Passlock®, and RF Transponder systems (Ford P.A.T.S.®). Many late 1990's and later vehicles include some type of Anti-Theft system which may require a bypass module. Check with installer to make sure that the bypass device (if equipped) is functioning properly.

#### **VEHICLE STARTS BUT "CHECK ENGINE" LIGHT COMES ON OR ENGINE RUNS BADLY: (2 parts)**

- 1. Many 1990-UP General Motors cars/trucks require a secondary ignition circuit for the Transmission computer and other on board systems. If the vehicle is started without this wire energized, there may be a "Check Engine" or "Service Engine Soon" light on the dash. This may cause damage if the vehicle is driven in this condition. Check with installer to see if this circuit is present and has been properly connected to the RS900.
- 2. In some cases [commonly Nissan vehicles], an additional "Start" (Cranking) circuit is required for the vehicle to run properly. The RS900 V system includes a wire that can be used for this Starter #2 circuit. Check with your installer for details.

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