



CS-2013FM

2-Way FM Remote Start & Alarm System

CONGRATULATIONS! on your choice of a CS-2013FM 2-Way FM Paging Remote Alarm/Remote Starting System by Crimestopper Security Products Inc. This booklet contains the information necessary for installing, using, and maintaining your alarm system. If any questions arise, contact your installation dealer first, or Crimestopper Security Products Inc. at the Tech Support number listed below. This system is designed for single vehicle operation. The Remote start functions of this system are designed for use with automatic equipped transmission, fuel injected vehicles only. This system is compatible with diesel engines.

***IMPORTANT INFORMATION: Primary and Optional Features**

-PRIMARY: These are features that must be connected in order for the system to operate properly i.e. Siren, L.E.D., Power, Ground, Door pin, Hood pin (Remote Start Inhibit) etc.

-OPTIONAL: These are features to be connected only if desired or agreed upon by the installing dealer (i.e. Door Locks, Starter Disable, Trunk, and Auxiliary Remote Output etc.)

Note: Additional labor and parts will be required for some features and on vehicles equipped with Factory Anti-Theft Systems such as GM PassKey®/Passlock®/VATS, or Key-FOB based RF Transponder systems such as FORD P.A.T.S.®

TECHNICAL SUPPORT (800)-998-6880
Monday - Friday 8:00am - 4:30pm Pacific Standard Time
Website: 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 harmful 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 modifications to this equipment. Such modification could void the user's authority to use the equipment.

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INSTALLATION CAUTIONS & WARNINGS

CRIMESTOPPER SECURITY PRODUCTS, INC. and its **VENDOR** shall not be responsible or liable in any way for accidents or damage resulting from the use of this equipment. This system is designed to be professionally installed in a vehicle that is in proper operating condition. Parking brake, Transmission, Throttle, and Engine Safety features must be in working order. It is the vehicle owner's responsibility to understand the operating features of this system.

DO NOT INSTALL CS2005FM ALARM/REMOTE STARTER in vehicles with **MANUAL TRANSMISSIONS!** *There are no safety features built into this unit for manual transmission vehicles.* If accidentally left in gear, a remote started vehicle could become a self-propelled threat to life and property.

INSTALLATION CAUTIONS & WARNINGS

DO NOT REMOTE START A VEHICLE IN A CLOSED AREA OR GARAGE! Make sure that door is open or there is adequate ventilation is provided. **Failure to observe this rule could result in serious injury or death from poisonous Carbon Monoxide fumes!** Also note this warning when programming this system for Cold Start operation.

BEFORE BEGINNING INSTALLATION, check all vehicle manufacturer cautions and warnings regarding electrical service. (AIR BAGS, ABS BRAKES, AND BATTERY).

DO NOT ROUTE ANY WIRING THAT MAY BECOME ENTANGLED with brake, and gas pedals, steering column, or any other moving parts in the vehicle.

DO NOT EXCEED MAXIMUM OUTPUT RATINGS - SERIOUS DAMAGE MAY OCCUR. Limits for alarm and remote start functions are listed in the main diagram and wiring descriptions page. If you are unsure about current load, measure the load with an AMP-METER.

REMOVE MAIN SYSTEM FUSE(S) before jump starting the vehicle. **DAMAGE MAY OCCUR TO SYSTEM IF PROPER PRECAUTIONS ARE NOT OBSERVED.**

DO NOT EXTEND REMOTE START/IGNITION OUTPUT HARNESS LENGTH. Locate the control module within reach of the supplied IGNITION/START OUTPUT wires. Extending these wires could result in poor performance.

SUGGESTED COMPONENT MOUNTING

Control Module: Driver or Passenger side underdash, the unit should be placed as high as possible, not easily accessible by an intruder.

Shock Sensor: Mount with wire ties to an under dash wire harness or fasten with screws to a panel.

Siren: Under the hood to fender-well or other body surface with the open end facing downward.

LED: In a visible location on the dashboard or console.

Override/Program button: Hidden location, but accessible to the user in case the system must be disarmed without the use of the transmitter. This switch is also used to program certain features and to page/call the transceiver from inside the vehicle if necessary.

Antenna Module: Inside front windshield (as high as possible) using supplied double sided tape.

WIRING

6 PIN HI-CURRENT REMOTE START CONNECTOR:

RED:	+12V INPUT (30 Amp Fused)
RED:	+12V INPUT (30 Amp Fused)
YELLOW:	IGNITION 1 (Primary) Output
ORANGE:	ACCESSORY Output
PURPLE:	STARTER Output
BROWN:	Multi Function Output (IGNITION #2 / ACCESSORY #2 / STARTER #2) (Programmable, See option table #23. Default set for IGN 2 output)

20 PIN MAIN HARNESS PLUG:

GREEN/WHITE WIRE: +12V BRAKE INPUT

Connect this wire to the side of the brake pedal switch that shows +12V only when the brake is depressed. This input is used to reset remote start after entering the running vehicle and turning the ignition key on.

BLACK/GRAY WIRE: TACH SIGNAL INPUT (Used For Tach Mode)

Used to monitor Tach Pulses when the engine is running. Connect to negative terminal of ignition coil, crankshaft position sensor or ECM/PCM tach wire.

WHITE/RED WIRE: (-) AUX. REMOTE OUTPUT #2 (Optional)

Programmable Auxiliary Output Channel #2.

BLACK/WHITE WIRE: (-) DOME LIGHT ILLUMINATION (Optional, Requires Relay)

Connect to terminal 85 of relay. This wire turns the dome light on for 30 seconds upon disarming of the alarm. If the ignition is turned on or the alarm is re-armed, the dome light will turn off again. Connect this wire to terminal 85 of a relay. Connect terminal 86 to +12V Constant. Connect terminal 87 to +12V or ground depending on the type of Dome Light/Door Pin circuit that is in the vehicle.

YELLOW WIRE: IGNITION SWITCHED “ON” AND “START” +12 VOLTS

Connect to an ignition wire (or fuse in the fuse box) that shows +12 Volts when the key in both “On” and “Start” positions.

BLUE/YELLOW WIRE: (+12V) DIESEL GLOW PLUG INPUT

Connect Pink wire to indicator circuit that shows +12 volts while the “WAIT TO START LAMP” is on. When this wire is used, the CS-2013FM unit will wait until light turns off before attempting a remote start. Note: a relay may be required for vehicles that have a Negative Wait to Start lamp circuit.

WIRING

BLUE/WHITE WIRE: (-) PASSENGER DOOR UNLOCK OUTPUT (Optional, requires relay)

This wire activates when the unlock button on the remote is pressed a second time upon disarming. Connects to unlock circuit for passenger door or doors when using split Driver & Passenger unlock configuration.

BLUE/ORANGE WIRE: (-) NEGATIVE GROUND WHEN RUNNING (For Anti-Theft Bypass Module)

Sends a constant Ground with remote start command. Use this wire to activate a Bypass Modules.

BLACK WIRE: SYSTEM CHASSIS GROUND

Connect to chassis metal of the vehicle. Scrape away any paint or dirt from the connection point to ensure a good connection.

RED WIRE: +12V POWER INPUT (15 amp fuse)

Connect to +12 Volt source. Recommended location for this connection is at the vehicle battery positive terminal.

VIOLET WIRE: (+) DOOR TRIGGER INPUT

This wire is used for vehicles that show a positive voltage (12 volts) when the door is open such as Ford.

GREEN WIRE: (-) DOOR TRIGGER INPUT

Identify the wire that reads ground when any door is open and 12 volts when all doors are closed. Some isolated door triggers. In this case you need to run an additional wires from the other doors or go directly to the wire that triggers the vehicle’s dome light.

WHITE/BLACK WIRE: (-) HOOD/TRUNK TRIGGER (Mandatory For Hood Pin)

Input trigger for a grounding hood or trunk pin switch and to inhibit remote start if the hood is open. Connect to existing hood and trunk pin switches that read ground when open. If no existing switches are available, install a new pin switch. Note: DO NOT mount new pin switches in water pathways.

ORANGE WIRE: (-) NEGATIVE ARMED OUTPUT (STARTER DISABLE)

Sends constant Ground output when system is armed. This output is used for adding a starter disable relay. For starter kill, cut starter wire and connect between 87A and 30 on relay. Connect orange wire to 85 and connect 86 to Ignition Source that has voltage in the ON and CRANKING position. Be sure to connect the Purple Remote Starter Cranking output to the Motor side of the Starter Disable Relay or it will not allow the Remote Starter to operate.

VIOLET/WHITE WIRE: (-) OEM FACTORY DISARM OUTPUT

Provides a ground pulse to DISARM the vehicle's FACTORY anti-theft system prior to Remote Start. Connect this wire to the vehicles' anti-theft disarm wire. This wire may be found coming off the Driver's door key switch or the Factory Anti-theft control module.

WIRING

WHITE/VIOLET WIRE: (-) OEM FACTORY ARM OUTPUT

Provides a ground pulse to ARM the vehicles' FACTORY after Remote Start. Connect this wire to the vehicle's anti-theft Arm wire.

BROWN WIRE: (+) SIREN OUTPUT (3 amp max.)

Connect to RED siren wire.

GRAY WIRE: (-) AUX. REMOTE OUTPUT #1 (Trunk Pop)

Provides Negative Pulse output for Factory Electronic Trunk Release. Requires relay for Positive type circuits.

WHITE WIRE: +12V FLASHING PARKING LIGHT OUTPUT

Connect to switched parking light wire at back of light switch. If this is not possible, connect directly to one of the parking lights at the front of the vehicle. European may vehicles require separate right and left circuits. Use a dual relay or 2 diodes to separate the output signal.

BROWN/WHITE WIRE: (-) HORN HONK or (-) NEGATIVE IGNITION OUTPUT (Optional, Programmable)

Negative pulsed output for Horn Honk. Can also be programmed for an additional negative run output (Option #24).

2 PIN (BLUE) PLUG: PROGRAM / OVERRIDE BUTTON

2 PIN (RED) PLUG: LED INDICATOR (Red Flashing Light)

3 PIN DOORLOCK (WHITE) PLUG:

GREEN: (-) NEGATIVE LOCK
RED: +12V For Relays
BLUE: (-) NEGATIVE UNLOCK
 9.

Connect directly to negative lock/unlock systems. If vehicle uses positive door lock signals or reversing polarity type, then external relays must be added. See Power Door Lock Wiring: Pages 8-9.

4 PIN (WHITE) SENSOR PLUG:

WHITE: NEGATIVE PRE-WARN
BLACK: SENSOR GROUND
BLUE: NEGATIVE TRIGGER
RED: SENSOR POWER

3 PIN (BLUE) DATA PLUG ON RIGHT SIDE OF MODULE: Data port for 2-WAY FM Transceiver Box & Antenna

4 PIN (WHITE) DATA PLUG ON RIGHT SIDE OF MODULE: Port for optional extended range antenna for 1-way remote control.

WIRING TABLE

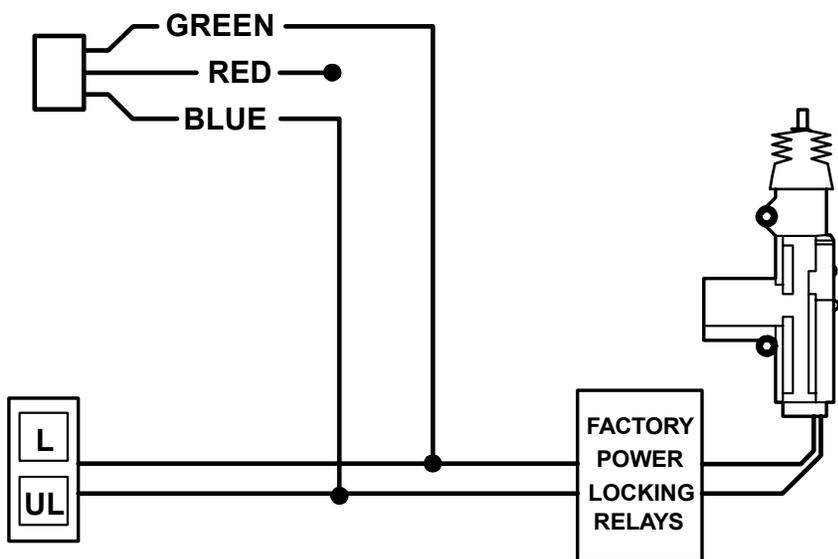
20 PIN CONNECTOR (18 GA. WIRES)

PIN #	COLOR	DESCRIPTION
1	GREEN/WHITE	(+) 12 BRAKE LIGHT INPUT
2	BLACK/GRAY	TACH SIGNAL INPUT (ENGINE RPM0
3	WHITE/RED	(-) AUXILIARY CHANNEL OUTPUT #2
4	BLACK/WHITE	(-) DOME LIGHT SUPERVISION OUTPUT
5	YELLOW	(+) 12V IGNITION SWITCH INPUT
6	BLUE/YELLOW	(+) 12V GLOW PLUG INPUT
7	BLUE/WHITE	(-) NEGATIVE PASSENGER UNLOCK OUTPUT
8	BLUE/ORANGE	(-) NEGATIVE IGN. OUTPUT (GROUND WHEN RUNNING)
9	BLACK	(-) CHASSIS GROUND
10	RED	(+) 12 POWER INPUT
11	VIOLET	(+) POSITIVE DOOR TRIGGER INPUT

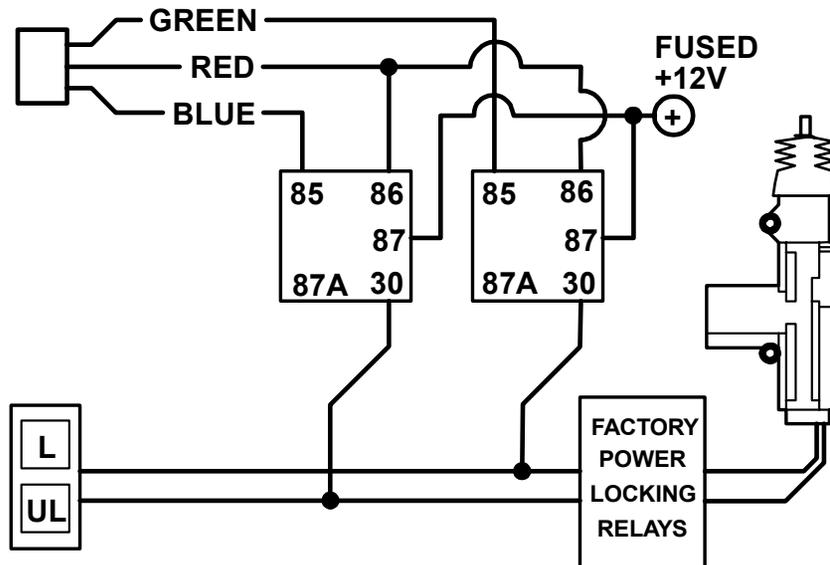
12	GREEN	(-) NEGATIVE DOOR TRIGGER INPUT
13	WHITE/BLACK	(-) HOOD/TRUNK TRIGGER INPUT
14	ORANGE	(-) ARMED OUTPUT (STARTER DISABLE)
15	VIOLET/WHITE	(-) OEM FACTORY DISARM OUTPUT
16	WHITE/VIOLET	(-) OEM FACTORY ARM OUTPUT
17	BROWN	(+) SIREN POSITIVE OUTPUT
18	GRAY	(-) NEG AUXILIARY CHANNEL OUTPUT #1 (TRUNK POP)
19	WHITE	(+) 12V PARKING LIGHT OUTPUT
20	BROWN/WHITE	(-) NEG HORN HONK OR NEG IGN OUTPUT

POWER DOOR LOCK WIRING

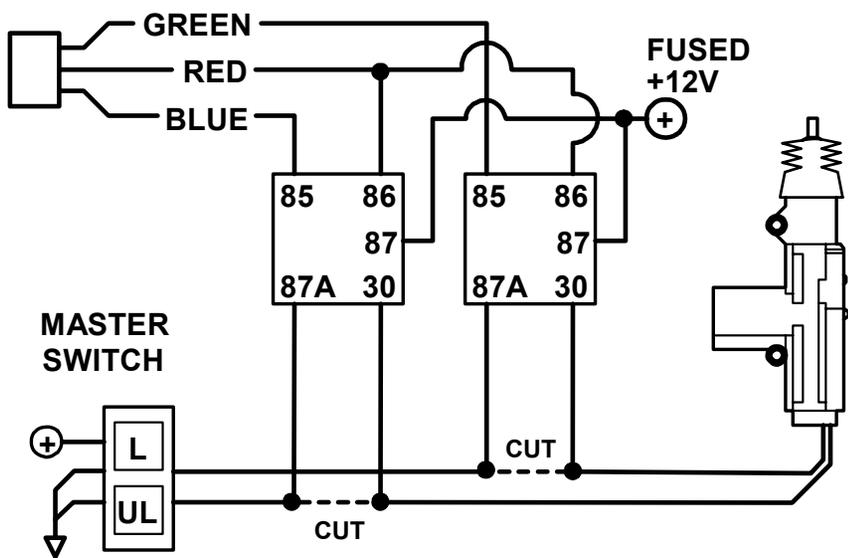
NEGATIVE TRIGGER DOORLOCK WIRING



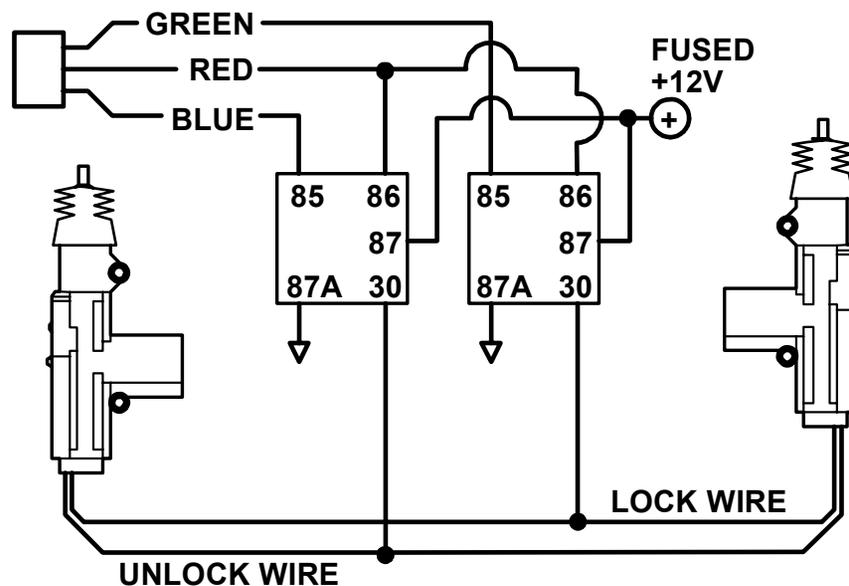
POSITIVE TRIGGER DOORLOCK WIRING



REVERSE POLARITY DOOR LOCK WIRING

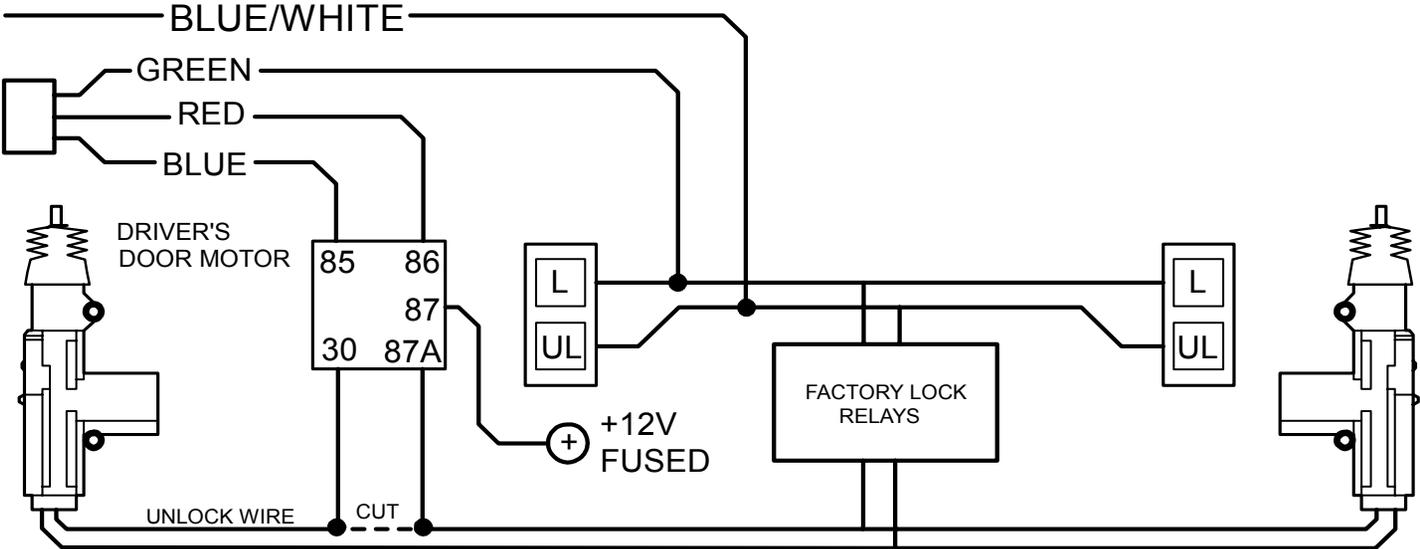


AFTERMARKET DOOR LOCK WIRING

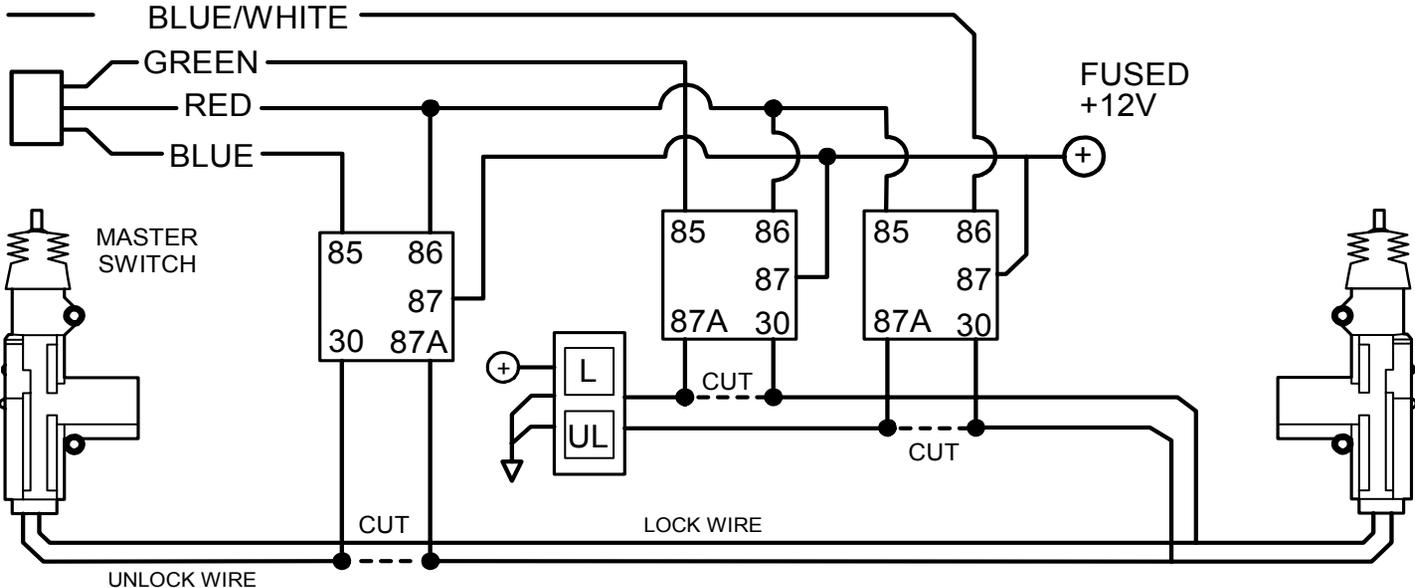


SEPARATE DRIVER'S DOOR UNLOCK WIRING

NEGATIVE TRIGGER DOOR LOCKS



WIRING FOR REVERSE POLARITY DOOR LOCKS



REMOTE START:TACH & TACHLESS MODE

The CS2013FM system includes both Tach and Tach-less modes for engine sensing & starter control. This system can be programmed for either mode, but it is set to Default in “Tachless Mode”. It will work for most vehicles in Tach-less mode.

SMART SENSE TACH-LESS MODE:

When the system is in “Smart Sense” Tachless mode, the module monitors the vehicle’s voltage, and RF noise level reference each time a remote start is performed. No Tach wire is required when using “Smart Sense” Tach-less mode. The Smart Tachless system works from the existing +12V power connections of the unit. **DO NOT USE THE BLACK/GRAY TACH WIRE WHEN IN TACHLESS MODE!**

TACH (RPM MONITOR) MODE:

Tach Mode provides reliable remote starting performance though engine speed sensing. When using Tach Mode, the BLACK/GRAY wire is used for Tach signal [Engine RPM] input. Most modern engines include various points where the Engine Speed [Tach] or A/C signal may be obtained. Tach Signal examples: Negative (-) side of ignition coil, at the Distributor or Ignition Control Module, Coil Pack, Engine Computer, or Crankshaft Sensor. Sometimes Fuel injection solenoids, and Alternator stator pins can be used. *These Tach Signal locations mentioned are provided as a guide, your vehicle may differ. Some locations will NOT be a good location for Tach source due to RF noise or Computer Data.*

****IMPORTANT - TACH MODE IS A 2-PART PROCESS!****

The CS-2013FM unit must be set up for Tach mode because it is set for Tach-less mode by Default. PART 1 is to go into the programming option #20 and set the unit for Tach mode. Once the unit is set for Tach mode (RPM monitor), you must learn the Tach Signal of the Vehicle in a second set of steps. Carefully read BOTH sets of steps to become familiar with these options before programming the unit.

SET THE CS-2013FM FOR TACH MODE:

1. Turn Ignition ON and within 10 seconds press the valet/program button 5 times. The siren should chirp 3 times.
2. Within the next 5 seconds press the override/program button [again] 20 times. The siren will chirp once for each button press. Press carefully and DO NOT lose count. Option #20 is for “Tach or “Tach-less” mode.
3. Press the #2 Unlock Button on remote transmitter. The unit will now be set for Tach Mode (RPM Monitor).
4. If lights do not flash twice for confirmation, then try another tach source or try the tach finder.

SEE NEXT PAGE FOR TACH (Engine RPM Signal) LEARNING STEPS.

TACH (RPM SIGNAL) LEARNING

LEARNING THE TACH (RPM) SIGNAL:

1. Have the Black/Gray Tach wire connected to your Tach source.
2. Start engine with key.
3. Within 10 seconds, press the valet/program button 5 times, the siren should chirp 3 times.
4. Push program button again (21) times, you should get a siren chirp for each button press. Be careful and DO NOT LOSE COUNT. This unit is now at option #21-Tach Learning.
5. Press the #1 Lock Button on remote transmitter. The unit will record and program your Tach source.

NOTE (1): The Tach Signal locations suggested on page10 are provided as a guide, your vehicle may differ. Some locations will NOT be a good location for Tach source due to RF noise or Computer Data. The CS-2013FM may not detect a clean signal. If you are unable to locate a Tach Source, use the “Smart Sense Tachless” mode.

NOTE (2) The CS2013FM is in “Smart Sense Tachless” Mode [by default]

OPTION PROGRAMMING STEPS (USE 1-WAY REMOTE ONLY!)

****IMPORTANT NOTE: When programming options, you can ONLY USE THE ONE-WAY REMOTE****

Follow steps below to access Programming Options:

1. Turn the ignition on, within 10 seconds press the override/program button 5 times. Siren should chirp 3 times
2. Within the next 5 seconds press the override/program button [again] the number of times that corresponds to the listed feature below. The siren will chirp once for each button press.
3. Once you are at the desired option number, press Button #1, 2 or 3 on the ONE WAY remote to change the option. Button #1 gives one light flash/chirp and Button #2 give two flashes/chirps, Button #3 gives three flashes/chirps.
4. Turn OFF Ignition when finished changing an option. Change ONE option at a time and repeat steps 1 thru 3.

****SEE OPTIONS TABLE ON PAGE****

OPTION PROGRAMMABLE OPTIONS TABLE

Option #	Option Description	BUTTON #1	BUTTON #2	BUTTON #3
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1.	Passive Arming	Disabled*	Enable	
2.	Active Re-Arm	Disabled*	Enable	
3.	Silent Arm/Disarm	Chirps*	No Chirps	
4.	Lock when IGN turns ON/ Custom Override mode	Enabled*	Disabled	Custom Override Mode
5.	Unlock when IGN turns OFF	Enabled*	Driver's door only	NO IGN Unlock
6.	Double Unlock Pulse	1 Pulse*	2 Pulses	
7.	Door Lock Pulse: 1 or 3 sec.	1 Second*	3 Seconds	
8.	Passive Lock	Disabled*	Enable	
9.	Beach Mode (Remote-less Disarm)	Disabled*	Enable	
10.	Open Zone Warning	5 Seconds*	OFF	
11.	Aux #2 output actives when armed	Disabled*	Enable	
12.	Aux #1 output type	Pulsed*	Timed (10 Seconds)	Latched
13.	Aux #2 output type	Pulsed*	Timed (10 Seconds)	Latched
14.	Disarm with Aux #1 Activation	Disabled*	Enable	
15.	Remote Start while in VALET	Disabled*	Enable	
16.	Lock Upon Remote Start	Lock*	No Lock	
17.	Lock Upon Engine Shutdown	Lock*	No Lock	
18.	Engine Run Time	24 Minutes	12 Minutes*	
19.	Cold Start Feature	Every 2 Hours	Every 1 Hour*	
20.	Tach or Tachless mode	Tachless*	Tach	
21.	Tach Programming/Engine Type	Learn Tach*	Gas Engine	Diesel Engine
22.	Enable 2-Way FM pager	Enable*	Program Additional 2-Way pagers	
23.	BROWN (Multi Remote Start Output Wire	IGNITION 2*	ACCESSORY #2	STARTER #2
24.	Brown/White Wire Function	Pulsed Horn Honk Output*	Negative IGN output	

*** = INDICATES FACTORY DEFAULT VALUE**

OPTION PROGRAMMING

1. PASSIVE ARMING

This option controls the Passive (Automatic) Arming feature and the Hands free mode. Button #1 = Passive Arming OFF. Button #2 = Enables Passive Arming. When Passive arming is enabled, arming will occur 30 Seconds after the ignition is turned off and the last door has been closed.

2. ACTIVE RE-ARMING

This option controls the Active Re-arming feature. Button #1 = Active Re-arming OFF. Button #2 = Enables Active Re-arming. Active Re-arming allows the system to re-arm itself 30 seconds after disarmed with the transmitter if a door has not been opened. This is handy if the vehicle is accidentally disarmed (via the Transmitter in your pocket) without your knowledge. (Accidental Disarm Protection)

3. SILENT ARMING / DISARMING (CHIRP DEFEAT)

With this feature, the system can be programmed to Arm and Disarm without the siren chirp using the regular Lock/Unlock Buttons. Flashing parking lights will be the only Arm/Disarm confirmation.

4. IGNITION-LOCK / CUSTOM OVERRIDE

This option controls whether the door locks when Ignition is turned on and the custom override feature. There are 3 selections: Button #1 = Lock with vehicle Ignition ON. Button #2 = Do Not Lock with ignition. Button 3 (Trunk)= Custom override programming mode. (See custom override section on Page 16)

The custom override feature allows the user to set a “personalized” override code. If the system has to be manually disarmed (overridden) without the remote, the user can customize the number of button presses (2-15x) to do this other than the default operation, which is a single press and hold of the button.

5. IGNITION-UNLOCKING

This option controls door unlocking when Ignition is turned OFF. There are 3 selections: Button #1 = Unlock all doors when Ignition is turned OFF. Button #2 = Unlock Drivers door only*. Button 3 = NO Ignition Unlock. *Only applicable when using optional Driver’s priority unlock feature.

6. DOUBLE UNLOCK PULSE

The option controls whether the unit will send 2 unlock pulses when the Unlock button is pressed. This feature may be required for interfacing this alarm with an existing Factory Keyless Entry or Alarm system in a vehicle. These systems are found on some Nissan, VW, Toyota, and Lexus vehicles.

7. DOOR LOCK PULSE TIME

Controls the amount of time (1 sec. or 3 sec.) for the lock/unlock pulse. The 3 sec. setting is only required for 1980’/90’s European Vehicles that require a long pulse to do Vacuum door lock systems.

OPTION PROGRAMMING

8. PASSIVE LOCKS

This option controls whether the doors will lock when Passive Arming occurs. Note: May increase the risk of locking keys in the vehicle. When selected ON, the alarm will lock the doors when passive arming.

9. REMOTE-LESS DISARM “BEACH MODE” (Note: this option also requires Passive arming/Passive locks)

This option allows the system to be disarmed without the remote as long as the key is inserted and turned ON within 10 seconds. This feature only operates after the system has passively armed. Upon opening the door, the siren will chirp for 10 seconds, the key must be inserted and turned on, or the alarm will trigger. (See page 21 for information.)

10. DOOR OPEN WARNING

This option controls the door the delay time in which the alarm system begins to monitor the Door circuit. If your system begins to give you warning chirps because of delay dome light or courtesy lighting, then disable this option by selection Button #2.

11. WHITE/RED WIRE: AUX #2 OR SECOND ARMED OUTPUT

This option controls the system’s White/Red Aux. #2 output. Button #1 = Auxiliary Channel #2 or Button #2 = Constant Ground a a 2nd armed output when system is armed.

12. GRAY WIRE: AUX #1 OUTPUT CONFIGURATION

This option allows you to configure how the system’s Aux. Channel #1 output operates. There are two choices: Button #1 = Pulsed. Button #2 = Timed-10 Seconds. Button #3 = Latched

13. WHITE/RED WIRE: AUX #2 OUTPUT CONFIGURATION

This option allows you to configure how the system’s Aux. Channel #2 output operates. There are two choices: Button #1 = Pulsed. Button #2 = Timed-10 Seconds. Button #3 = Latched

14. DISARM WITH AUX. #1 OUTPUT (TRUNK POP)

Controls whether the system will or will not DISARM when the trunk pop or AUX. channel #1 is activated. When the feature is turned ON, the unit will DISARM with trunk-pop or using an auxiliary device connected to the Gray wire.

15. REMOTE START WHILE IN VALET MODE

Allows to user to determine whether the system will allow a remote start when in Valet mode.

16. LOCK UPON REMOTE START

Controls whether the system will Lock or not lock when a remote start occurs.

17. LOCK UPON ENGINE SHUTDOWN / ABORT

Controls whether the system will Lock or not lock when a remote start “times out” or is aborted by the user.

OPTION PROGRAMMING

18. REMOTE START ENGINE RUN TIME:

Controls the amount of running time for remote start: 12 or 24 Minutes.

19. COLD START INTERVAL TIME

Controls the time between remote engine starts when the “Cold Start” feature is activated: Every 1 or 2 hours.

20. TACH or TACHLESS MODE

Controls whether the system operates in Tachless mode or Tach mode using Engine RPM.

21. TACH LEARNING / GAS / DIESEL ENGINE

This option controls tach learning and engine type. There are 3 selections: Button #1 = System will learn tach (ENGINE MUST BE AT IDLE). Button #2 = Set the system for GAS engine: Remote Start will occur 3 seconds after IGNITION turns on. Button #3 = Sets the system for DIESEL engine: Remote Start will wait for 10 seconds before remote starting to allow for Glow Plug warm-up.

22. ENABLE & LEARN 2-WAY FM PAGER

This option allows the system to operate with a 2-way remote pager expansion module and learn a Pager Remote. Button #1 = Enables the system to work with the 2-Way paging expansion module. Button #2 is used when learning a new 2-way FM remote/pager to the system. (See page 17 for 2-Way remote programming steps)

23. BROWN WIRE: MULTI-FUNCTION REMOTE START OUTPUT

This option allows you to configure how the system’s Brown Remote Start Output operates. There are three choices: Button #1 = 2nd Ignition Output. Button #2 = 2nd Accessory Output. Button #3 = 2nd Starter Output

24. BROWN/WHITE WIRE: (-) NEG HORN HONK or NEG. IGN OUTPUT

This option allows you to configure how the system’s Brown/White wire operates. There are two choices: Button 1) = Pulsed output for Horn Honk. Button 2 (Unlock) = Neg. Ignition output.

OPTION RESET PROCEDURE PROGRAMMING

OPTION RESET PROCEDURE (Restores ALL Values listed with an *):

1. Turn the Ignition ON and press the Program/Override button 5 times. The siren will chirp 3 times indicating you are in programming mode.
2. Press the #3 Button on the Transmitter. The system will chirp (6) six times indication all options have been reset to Default values (Column #1).

CUSTOM “PERSONAL” OVERRIDE CODE

Custom override allows the user to set a specific number of button presses (2 to 15) required to perform an emergency override/disarm of the alarm system. This helps to defeat the common perception of a thief that if you turn the vehicle's ignition on and press the valet button, most alarms will shut down. This feature increases the level of security of your alarm system, however **MUST MEMORIZE** how many button presses you have changed your system to use or the unit will not disarm!!!

1. Follow steps to enter Option Programming mode. (See page 11)
2. Press program button 4 times to go to option #4 "Lock with Ignition/Custom Override".
3. Press the Button #3 on the remote transmitter.
4. Carefully press and release the program/valet button the number of times you desire in order to perform emergency disarm on this alarm system. Press the program button 2-15 times only.

To test feature: Set the alarm. Trip alarm system, turn key ON, press the program/valet button 2-15 times as programmed above continuing to HOLD DOWN valet button on the LAST PRESS for 10 seconds. Alarm should disarm. If system does not disarm, then disarm with the remote transmitter and try again. If system still does not disarm, then repeat steps above.

REMOTE SENSOR ADJUST MODE (USE 1-WAY REMOTE ONLY!)

1. Turn Ignition ON and press button #5 (side button) on the 1-Way remote 3 times, then press Button #3.
2. The siren will chirp 4 times indicating that the system is in Sensor Adjust mode.
3. You can now carefully produce some vibrations around the vehicle such as kicking a tire or slapping a bumper. When you produce an impact that would normally trigger the Pre-Warning level, the siren will chirp twice. When you produce an impact that would normally trigger the shock sensor, the siren will chirp once. When finished testing and adjusting the sensor, turn Ignition OFF, then back ON to clear this mode.

TRANSMITTER PROGRAMMING: 1-WAY REMOTES

1. Turn ignition on and off 3 times within leaving it on the 3rd time. (on/off, on/off, on) Wait for 3 seconds and siren will chirp 3 times if this was performed correctly.
2. Press the override/program button for approx. 5 seconds until 5 siren chirps are heard. LED also comes on solid.
3. Press and release Button #1 on the remote. The siren will chirp once. Press Button #1 AGAIN, you should hear 2 chirps on the second press for code-learn confirmation. Sometimes it takes a 3rd press to get the remote to learn.
4. Repeat step #3 for up to a total of (4) 1-Way remotes.
5. Turn the ignition off and wait a few seconds before trying new remotes.

ADDITIONAL TRANSCEIVER PROGRAMMING: 2-WAY FM REMOTE

1. Turn the ignition on, within 10 seconds press the override/program button 5 times. Siren will chirp 3 times indicating you are in feature programming mode.
2. Within the next 5 seconds, carefully press the override/program button 22 times. The siren will chirp once for each button press. Press Carefully and DO NOT LOSE COUNT.
3. Press Button #2 on the 1-Way remote.
4. Press Button #1 on the new 2-way FM remote, wait a second then press button 1 again. System should chirp 2x's.
5. Turn OFF Ignition.

OPERATION: (2-WAY FM REMOTE TRANSCEIVER)

2-WAY FM REMOTE OPERATION:

BUTTON #1 (Lock Symbol):

Press and release to Arm/Disarm, Lock/Unlock system.
Press and Hold for PANIC feature.

BUTTON #2 (Key Symbol):

Press and Hold for 2 seconds Start or Stop Engine

BUTTON #3 (Trunk Symbol):

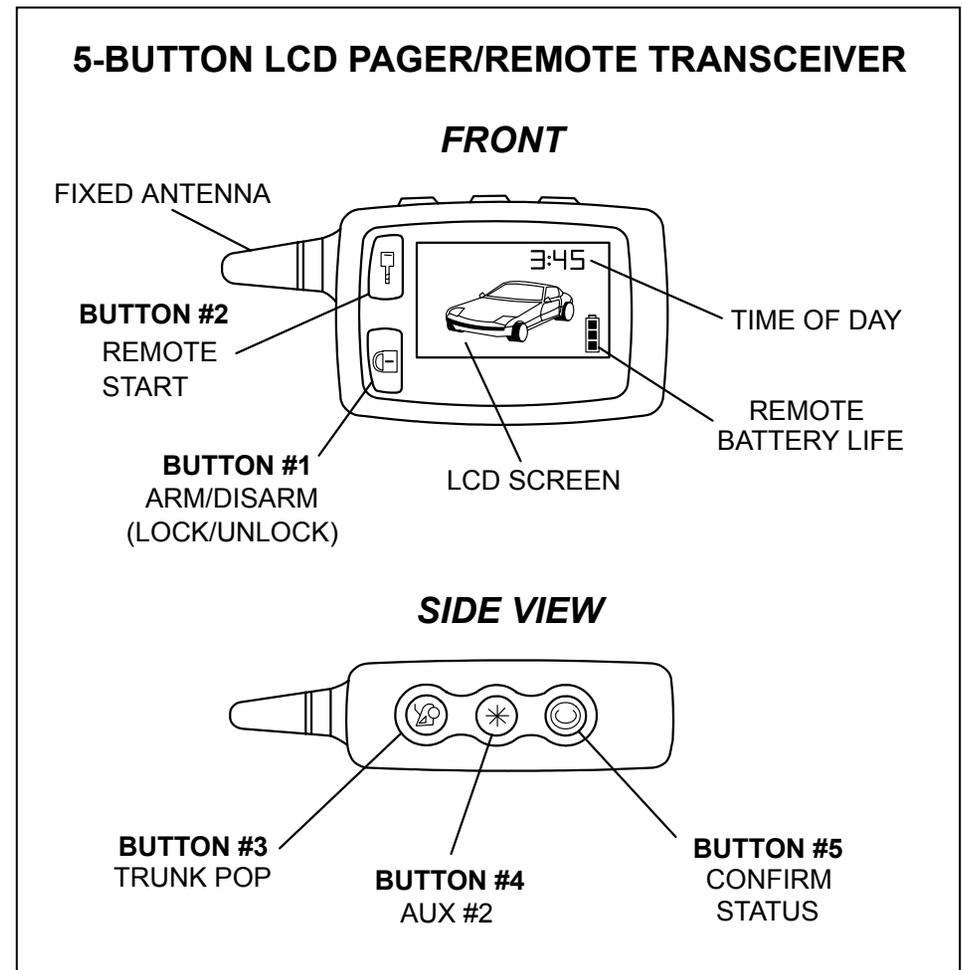
Press and Hold for trunk pop or (Auxiliary #1 output.)

BUTTON #4 (*):

Press and Hold Button #4 for 2 seconds to activate Auxiliary Channel #2 output.

BUTTON #5 (C):

Confirmation: Press and hold Button #5 for 3 seconds until "CON" is displayed on the LCD screen. Release button immediately. The remote control will query the unit in the vehicle and display the current status of arm, disarm, or engine run. Press Button #5 for 2 seconds to activate the EL Blue LCD backlighting. Press and release Button #5 to cancel incoming page/confirmation tones.



OPERATION: (1-WAY REMOTE)

5-Button One-Way Remote Functions:

BANK #1 (Directly Press Buttons)

Button 1: *Arm / Lock (Hold 4 seconds for Panic)*

Button 2: *Disarm / Unlock*

Button 3: *Aux #1 (Trunk Release)*

Button 4: *Remote Start (Hold 2 sec.)*

Button 5: *(Change to BANK #2)*

BANK #2 (Press Button 5 FIRST, then within 3 seconds Buttons 1-4)

Button 1: *Silent Arm (No Chirp)*

Button 2: *Silent Disarm (No Chirp)*

Button 3: *Aux #2*

Button 4: *Not Used*

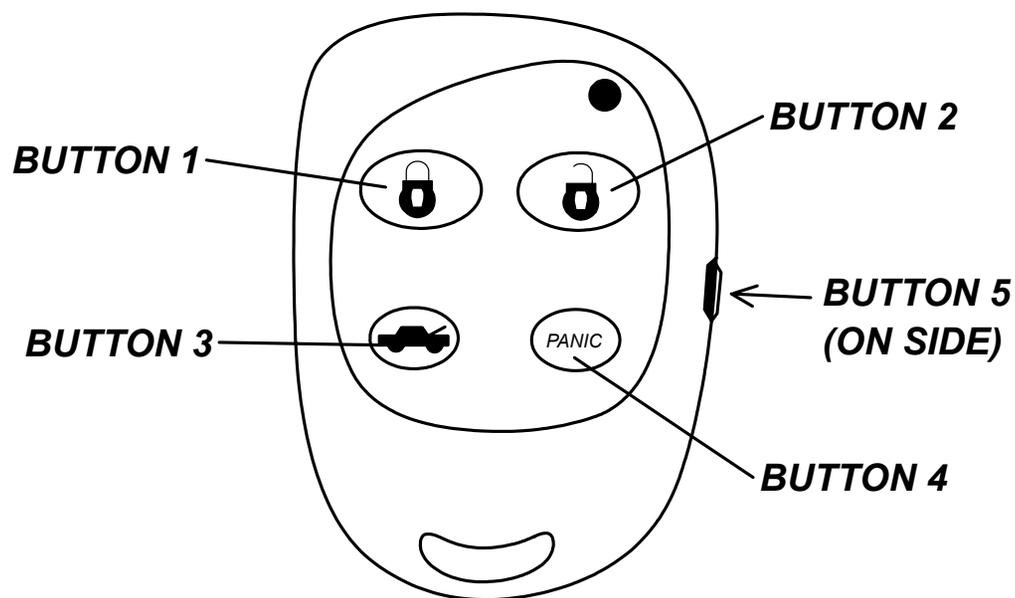
BANK #3 (Press Button #5 two times Then within 3 seconds Buttons 1-4)

Button 1: *Arm / Lock (Car 2)*

Button 2: *Disarm / Unlock (Car 2)*

Button 3: *Aux #1 (Trunk Release Car 2)*

Button 4: *Remote Start (Car 2)*



**GREEN LED Blinks once for Bank 1, twice for Bank 2, & 3 times for Bank 3*

NOTE: Button #4 on the 1-Way remote reads "Panic", however on the CS-2013FM system it is only used for Remote Start.

ALARM OPERATION

ARMING:

Press the #1 button (Lock Symbol) on either style remote to arm the system. The 2-way remote will confirm on the LCD display with a "LOCK" icon and an audible signal. At the vehicle, the siren will chirp once and the lights will flash once. The red LED in the vehicle will start flashing. The system will arm, (lock the doors, and the starter will be disabled if these optional features are installed).

ALARM OPERATION

DISARMING:

Press Button #1 (Lock Symbol) on the 2-Way remote. For the 1-Way remote Press Button #2 (Unlock Symbol) to disarm. The 2-Way remote will confirm with an “UNLOCK” icon on the LCD display and an audible signal. At the vehicle, the siren will chirp (2) times and the lights will flash (2) times. The red LED in the vehicle will turn off. (Doors will unlock and the interior dome light will turn on if these optional features are installed.)

ONE-TIME SILENT ARM/DISARM: (1-WAY REMOTE ONLY)

Press the Button #5 (Side button) first, then press Button #1 or #2 and the system will arm/disarm without a chirps just on a one-time basis.

SILENT ARM & DISARM: (Programmable)

The system can programmed to ARM and DISARM silently without Siren Chirps. See programming Option #3.

TRIGGERING THE ALARM:

After a short 15 second Arming delay (to allow vehicle/electronics to settle), the system becomes fully armed.

INTRUSION:

If there is an intrusion at the vehicle (door/hood/trunk opening) the alarm will sound for 45 seconds. The 2-way remote will emit an audible melody, the LCD Display will a flashing icon to inform you which zone has been violated.

SHOCK/IMPACT:

A hard impact or shock to the vehicle body will trigger the shock sensor and trip the alarm system for 20 seconds. as listed above. The LCD will display a hammer / crash icon. This may or may not mean that there is actually damage on the vehicle, but it is a reminder to you that a harder impact was detected.

ALARM PRE-WARNING:

If a low-level shock to the vehicle body is detected, the pre-warning sensor activates sounding 5 quick siren chirps and 1 light flash. The LCD remote will confirm with an audible warning and a small hammer icon.

PANIC FEATURE:

In the event of an emergency situation or to attract attention to your vehicle, press and hold Button #1 (Lock Symbol) on either remote for at least 4 seconds. The Siren will sound and lights will flash for 40 seconds. The LCD remote will emit and audible alert and the word “PAN” will display on the screen. Press Button #1 on either remote to reset.

ONE-TIME SHOCK SENSOR BYPASS:

To arm the system and bypass the shock for just that one time, press button #1 on either remote to arm, then within 10 seconds press Button #1 AGAIN. Siren will chirp 5 times and lights will flash 5 times.

ALARM OPERATION

VALET MODE:

To disable the Alarm functions of the system while still allowing door lock/unlock, turn the ignition ON and press the override/program button until the dash LED turns on solid and you hear a siren chirp (about 5 seconds). Repeat the process to exit valet mode (LED will turn off, lights flash twice, and chirps twice when exiting).

EMERGENCY OVERRIDE:

If you have lost the transmitter or it stops working for any reason and the Alarm is armed, you will have to perform an emergency override to disarm the system. Open the door with the key, (alarm will sound) turn the Ignition ON, and press and hold the override/program button at least 5 seconds. The Alarm will disarm and enter the Valet mode to allow you to use the vehicle. You can repair/replace the remote or see your installing dealer for assistance.

ALARM RANGE/STATUS CHECK: (2-Way Remote Only)

To perform a status check, or to test if you're in range of your system, quickly press and hold Button #5 (C) for at least 2 seconds. The remote control screen will display "CON", and then show the current status of the vehicle i.e. Armed, Disarmed, or Remote Started. If you do not receive the status of your vehicle, then you may be out of range.

OPEN ZONE ALERT/BYPASS:

If the system detects a faulty or open zone (Door left open) when the system is ACTIVELY ARMED, the siren will chirp (4) times, give (4) light flashes, and the faulty zone will be automatically bypassed.

TRUNK POP - AUX CHANNEL #1: (Optional)

To pop the trunk or activate an auxiliary feature, press button #3 (Trunk Symbol) on either remote for at least 2 seconds. The 2-way remote will confirm with an audible alert and opening trunk icon on the LCD display. The trunk pop feature is recommended for vehicles equipped with a Factory Electric trunk release. Extra parts and/or labor may be necessary for this feature. ***If the system is armed, pressing Button #3 may or may not also disarm the alarm system depending on programming option #14 configuration.***

AUTOLOCK & UNLOCK WITH IGNITION: (Programmable)

The system is programmed to automatically lock when the ignition is turned on and unlock when the ignition is turned off. *Both the "Ignition Lock" and "Ignition Unlock" features can be turned ON or OFF individually through the programming options of this system. See page 12.*

ONE-TIME PASSIVE ARMING DISABLE:

To disable passive arming just one time, arm the system then quickly disarm within 10 seconds.

ALARM OPERATION

PASSIVE ARMING / PASSIVE LOCK MODES: (Programmable)

If programmed for passive (Automatic) Arming, the system will Arm itself 30 Seconds after the ignition is turned off and the last door has been closed. The LED will begin flashing rapidly while counting down to Passively Arm. If a door is open or reopened during the countdown, the system will wait (LED solid) for the door or zone to close before arming. Upon Passive arming, the unit will chirp once and flash the lights once just like arming with the remote. If Passive Locks are programmed ON, then doors will also lock. The 2-Way remote will also receive a confirmation signal when the system passively arms. ***Note: Passive Arming may qualify for insurance discounts-check with your agent or proprietor. The Passive locking feature increases the risk of locking keys inside the vehicle.***

AUXILIARY CHANNEL #2: (Optional)

To activate a second auxiliary feature or device press button #4 (* Symbol) on the 2-way remote for at least 2 seconds. On the 1-Way remote, Press button #5 (Side button) first, then press button #3 (Trunk symbol). The 2-way remote will provide a confirmation with an audible alert and "0-1" on the LCD display.

ACTIVE RE-ARMING:

Active Re-arming allows the system to re-arm itself 30 seconds after it is disarmed with the transmitter in the event that a door has not been opened. This is handy if the vehicle is accidentally disarmed without your knowledge (Remote is pressed while in your pocket/purse). This feature can be turned off with the programming options.

DOME LIGHT ILLUMINATION: (Optional)

This feature turns on the vehicle's dome light upon disarm for 30 seconds or until the key is inserted and turned on. This will provide illuminated entry to your vehicle at night or in dimly lit areas for safety and security.

REMOTE-LESS DISARM "Beach Mode"

NOTE: Both options #1-Passive Arming and #9-Beach Mode must be enabled to use this feature.

This feature allows you to disarm your system with the use of the Ignition Key and a 10 second entry delay without the use of a your remote control. This feature comes in handy if you are performing an activity where you do not want the remote control on your person i.e. swimming, boating, beach etc.

1. When leaving your vehicle passive arming will occur. (Keys in hand, no remote)
2. When you return to your vehicle open your door manually and enter your vehicle. A 10 second entry delay is activated upon door opening and the siren will begin to chirp.

3. Insert key into the Ignition and turn to the ON position to disarm the alarm. If the key is not turned on within 10 second (i.e. Intruder) then your system will go into a full alarm trigger.

PRIOR INTRUSION DIAGNOSTICS (ONE-WAY REMOTE ONLY)

This system includes disarm diagnostics, (through the RED LED light), that will help in determining what caused the last trigger of the alarm system. This is a valuable tool in determining what was tampered with or if there is a false alarm problem in which case you can make the necessary adjustments to correct the problem. When the system is disarmed with the remote you will hear the 3 chirps and (3 Light flashes) that indicates the alarm was triggered while you were away. When the IGNITION is turned ON, observe the LED light for a total of 5 sequences:

Shock Sensor = 2 Flashes

Door = 4 Flashes

Hood/Trunk = 5 Flashes

REMOTE START OPERATION

REMOTE ENGINE START:

Press and hold Button #2 (Key Symbol) on the 2-Way remote for about 2 seconds. For the 1-Way remote, Press and hold button #4 (Panic) for 2 seconds. At the vehicle, parking lights will turn on Ignition is powered up, and the unit will start the vehicle and run for 12 minutes. (System can be programmed for a longer 24 minute run time). Once the vehicle is running the control module will page the 2-Way remote with the engine run status. The LCD display will show an “exhaust” icon and fan icon along with an audible alert. If the vehicle fails to start on the first attempt, the system will try up to (2) more times before aborting the remote start process.

REMOTE ENGINE STOP:

To stop (abort) a remote start, Press and hold Button #2 (Key Symbol) on the 2-Way remote or Button #4 (Panic) for about 2 seconds. The 2-Way remote will receive an audible alert and the word “OFF” will display on the top of the LCD screen to confirm the engine is off. The system will remain armed if it was armed before the remote start took place. If the vehicle was not armed, it the vehicle will remain locked after the remote start abort.

ENTERING A REMOTE STARTED VEHICLE:

To enter a remote started vehicle, press button #1 (Lock Icon) to Unlock/Disarm. ON the 1-Way remote, press the #2 button (Unlock symbol). Enter your vehicle insert key and turn on to the ON position [DO NOT Turn the key to the Start position or you may damage the Starter!] When the brake is pressed to shift out of park, the remote start will reset. Vehicle operation is now taken over by the key. Drive away as normal.

IDLE-DOWN (Quick Stop 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.

REMOTE START OPERATION

IDLE-DOWN (Continued):

Examples of Idle Down uses:

- *You pull up to a convenience store for a quick stop. The "Idle Down" mode keeps engine running when you exit the vehicle (with keys in hand) and arm the alarm. When you return, unlock/disarm alarm, turn ignition ON and drive away. (No stopping and starting of engine)*
- *On Turbo vehicles, most Car manufacturers recommended that the driver leave the car at idle for a short time after driving before turning the car off allowing the turbo cool down. The convenience of the Idle down feature allows the driver to use the Remote Start system in a similar way as a turbo timer. The Driver may exit the vehicle while running, lock the vehicle by remote and turn off the engine from a distance with the remote control.*

With engine running, press the remote start button on either remote. The remote start system will turn ON. Turn Off the Ignition and remove key while engine will remains running. Be careful not to touch the brake pedal. Exit your vehicle and arm/lock the system. The Engine will remain running for programmed run time, until you return, or it can be turned off at any time through the remote start button.

COLD SELF-START MODE: (Programmable)

The vehicle can be programmed to start every 1 or 2 hours automatically during extreme weather conditions. **DO NOT leave vehicle in a closed garage with this feature activated!** (Unit starts every 1 hour by default). Use program option #19 to change interval time if needed.

1. With Ignition OFF, simultaneously press the brake pedal, the valet/program button, and the remote start button for 2 seconds.
2. The parking lights will flash 4 times for confirmation.
3. From this point on, as long as you do not arm, disarm, or turn the ignition ON, the vehicle will start by itself every hour and run for the programmed 12 or 24 minutes. **Vehicle will self-start a maximum of 12 times.** After that, you will need to repeat step #1.

TO CANCEL THE COLD SELF-START MODE: Arm, Disarm, or Turn the Ignition on. When canceling this mode, the 2-Way remote will be paged with the "OFF" engine shut down message.

HOOD OPEN & BRAKE PEDAL SAFETY CIRCUITRY

Both the hood pin and brake switch will prevent the engine from being remote started. Both circuits will also cause a remote started engine to shut down if activated while running. This helps eliminate the risk of injury to someone working under the hood or tampering of the vehicle. If a Remote start is requested with the hood/brake active, the lights will flash twice and the unit will not attempt a start.

SPECIAL 2-WAY LCD FM REMOTE-PAGER FUNCTIONS

Clock Setting:

1. Press and hold buttons #2 (Key Symbol) & #3 (Trunk Symbol) together until 2 beeps are heard.
2. Immediately release Buttons #2 & 3.
3. Observe the time display on the LCD screen. Press the #2 button to set the hour and press the #3 button the set minutes.
4. When the correct time is displayed, press button #5 (C) to set the time. The remote will emit a congratulation song and the correct time of day will now appear at the top of the LCD screen.

Alarm Clock Setting:

1. Press and hold buttons #2 & #3 together for the following sequence: [2 beeps]-[3 beeps]. If done correctly, the Alarm Clock Icon will appear.
2. Immediately release Buttons #2 & #3.
3. Observe the alarm time display on the top of the LCD screen. Press the #2 button to set the Hour and press the #3 button the set minutes for any desired alarm time.
4. Press button #5 (C) to set the alarm time. The remote will emit a congratulation song and an alarm clock icon will display next to the time of day on the LCD as an indicator the alarm has been set. **Note: Alarm clock sounds one time for each setting.** Follow steps 1, 2, and 3 to reset alarm for a new time or follow steps 1 & 3 only to set alarm for same time again.

To cancel an alarm that has already been set:

1. Press and hold buttons #2 & #3 together for the following sequence: [2 beeps]-[3 beeps].
2. Immediately release Buttons #2 & #3. The alarm clock icon should appear on the display.
3. Press button #1. The remote will emit a set of tones and the word "OFF" will appear for 5 seconds on the LCD screen.

Self-Start Timer:

1. Press and hold buttons #2 & #3 together for the following sequence: [2 beeps]-[3 beeps]-[4 beeps]. If done correctly, the Engine Icon will appear on the LCD screen.
2. Immediately Release buttons #2 & #3.
3. Observe the time display in the top of the LCD screen and press the #2 button to set the Hour and press the #3 button to set the minutes for any desired remote start time.
4. Press button #5 (C) to set the remote start time and the remote will emit a congratulation song. A clock and an engine icon will display indicating the remote start timer has set. **Note: The Remote Start Timer activates once for each setting. Vehicle must be within range of the remote control!** Follow steps 1, 2, and 3 to reset timer for a new time or follow steps 1 & 3 only to set the timer for the same time again.

To Cancel Self-Start timer:

5. Press and hold buttons #2 & #3 together for the following sequence: [2 beeps]-[3 beeps]-[4 beeps].
6. Immediately release Buttons #2 & #3. The Engine Icon should appear on the LCD display.

7. Press button #1. The remote will emit a set tones and the word "OFF" will appear for 5 seconds on the LCD screen.