INSTALLATION GUIDE

2500
2500M

Advanced Remote Vehicle Starter & Alarm

ultra **Start**

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Installation Guide

DIAGNOSTICS

PARK LIGHTS	STATUS LED	DIAGNOSTIC CODE
3 Flashes	Series of 3 Flashes	Door Opened "M" Models
4 Slow Flashes	Series of 4 Flashes	Not in Reservation Mode "M" units
5 Flashes	Series of 5 Flashes	Hood Pin Grounded (Open)
6 Flashes	Series of 6 Flashes	Brake Pedal Shutdown
7 Flashes	Series of 7 Flashes	Tach Lock-Out
8 Flashes	Series of 8 Flashes	3 Start Attempts with no start

If the remote starter has a failed start attempt or if a safety input is activated the Diagnostic Memory will store up to four shutdowns in memory. This information can then be accessed to determine the source of the shutdown.

To Enter Diagnostic Mode:

Step 1 - Turn the ignition on wait two seconds then turn off. Press the Program Button and release.
Step 2 - The system will respond with three park light flashes and the siren will chirp the same number of times as the events in memory. (Maximum four events, four chirps)
NOTE: If the siren does not chirp, there are no events in memory.
Step 3 - Press the Program Button once to view the last shut down code. The siren will chirp once to confirm code one. (If the siren does not chirp, there are no codes in memory).
Step 4 - The LED's on the antenna will flash a code corresponding to a shut down trigger. Press the Program Button again to check the second code. The siren will chirp twice to confirm code two.
Step 5 - To **Clear Diagnostic Memory.** While in Diagnostic Mode press and hold the Program Button for five seconds. The park lights will flash and the siren will chirp once.

2   **NOTE:** Once diagnostic memory has 4 improper shutdown events in memory, the system will not record any further shutdown events until the system memory has been cleared.

WIRING DIAGRAM 2500

Jumper Access

(+) 30amp Output	Starter	Yellow
(+) 30amp Output	Heater	Green
(+) 30amp Input	Main Power	Red
(+) 30amp Input	Main Power	Red
(+) 30amp Output	Selectable P.5	White
(+) 30amp Output	Ignition 1	Blue

Connector pins:
1, 2, 3, 4, 5, 6

(-)500ma Output	RE-ARM	YELLOW
(-)500ma Output	STARTER DISABLE	ORANGE
(-)500ma Output	FACTORY DISARM	BROWN
(-)500ma Output	TRUNK RELEASE	RED/WHITE
(-)500ma Output	THIRD IGNITION (-)	WHITE / VIOLET
Negative Input	(-) DOOR TRIGGER	GREEN
Negative Input	HOOD PIN INPUT	GREEN/WHITE
Positive Input	(+) DOOR TRIGGER	PURPLE
Positive Input	BRAKE PEDAL	PINK
Negative Input	GROUND	BLACK
(A/C) Input	TACH INPUT	BLUE/WHT
(-) Input	GLOW PLUG	BLUE
Positive 15amp	PARK LIGHTS	WHITE
Negative Input	PARK BRAKE	BLACK/WHITE

Connector pins:
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

(-)500ma Output	4th Ch. Programmable	White / Green
(-)500ma Output	Dome Light Supervision	Black
Positive 3 amp	Siren Output	White / Blue
Negative Input	Trunk Pin Switch Input	Red

Connector pins:
10, 11, 12, 13

STARTER DISABLE. **SEE PAGE. 7**

TEMPERATURE SENSOR INPUT (OPTIONAL)

*RF ANTENNA WITH DUAL LED's
& BUILT-IN VALET SWITCH*

4 PIN BLUE

Must be connected to operate the system

SIDE VIEW

(-)500ma Output	Door Lock	Green
(-)500ma Output	12V+ for Relays	Red
(-)500ma Output	Door Unlock	Blue
(-)500ma Output	Passenger Door Unlock	Pink

4 PIN RED

(-)Input	Sensor Full-Warn	Blue
(-) Input	Sensor Pre-Warn	Green
(-)500ma Output	Sensor Ground	Black
(+)500ma Output	Sensor 12V+ Power	Red

4 PIN WHITE

SATELLITE LINK PLUG

4 PIN WHITE

(-)500ma Output	Negative When Disarmed	Green
(-)500ma Output	Horn Honk/ 5th Channel	Pink
(+) Input	(+)Disconnect / Start trigger	Blue

4 PIN WHITE

***500ma outputs are low current and are designed to activate relays*

2500 INSTALLATION TIPS

Components

- Control module
- Remote transmitter(s)
- Antenna with built in Program Button and LED's
- 6 pin main harness with dual 30amp power inputs
- 14 pin harness
- 4 pin square harness.
- 4 pin keyless entry harness
- 4 pin Aux. sensor harness
- Multi-tone Siren
- Hood pin safety switch
- Installation guide
- Owners manual

Recommended Pre-Installation Procedures

BEFORE STARTING INSTALLATION:
- Discuss the optional features with the customer.
- Take a few minutes to review the installation and owners manuals.
- Check if the vehicle has a factory security or anti-thieft system.
   *If equipped, inform the customer of addition parts and labour.
- Do a walk around the vehicle and check for any damage.
- If installing a LED discuss the placement with customer before installing.

 Note: This remote starter is designed for fuel injected and diesel engines.

Recommended Installation Procedures

Proper Connections - Remote Starters can handle loads of up to 30 amps for extended periods of time. It is CRITICAL to insure that ALL high current connections are properly soldered and insulated with quality electrical tape. Failing to insure proper connections will result in warranty being VOID and can result in a FIRE. The manufacturer is not responsible for any such damages. It only takes a few more minutes to do the job RIGHT.

Under Hood Connections - Route the hood pin and tach wires through the firewall into the engine compartment. Always try to pull the wires through a factory rubber grommet. If drilling through the firewall, **BE CAREFUL**. Check for obstructions on both sides of the firewall. After drilling use a snap in grommet to protect the wires from sharp edges.

Installing the External Long Range Antenna - To insure the best possible reception, place the antenna in the center of the windshield, behind the rear view mirror. Before attaching to the glass ensure that the surface is clean and dry. For best results with range, place the antenna below the tint screen. Run the cable under the head liner and behind the A-pillar panel. Be careful not to pinch the antenna cable. Plug the antenna into the **BLUE** connector on the Control Module.
NOTE: This step is not used on Alarm Only Units with no External Antenna.

Mounting The Control Module - Never mount the module in the engine compartment. Select a location under the dash to install the main module. Be certain that the module is securely attached and does not obstruct any serviceable areas. Do not force or jam the module into tight places instead of mounting. The module must be free from all moving parts such as brake, clutch and gas pedal linkages. Do not place the module directly in front of a heater vent.

Testing The System - When the installation is complete, it will be necessary to test that the system is working correctly. The system's default programming will work on the majority of vehicles, but might need to be adjusted for some applications. If the installation requires special timing or additional features, proceed to Program Mode.

ATTENTION: Hood Pin MUST always be connected!!

NOTE: Always inform user to place system in Service Mode before any service work is performed on the vehicle.

6 Pin Power Connector

Yellow	Starter	30amp output	*12volts during crank only.*
Green	Heater	30amp output	*12volts in accessory. Off during start.*
Red	12 power	30amp input	*Constant 12volt power at ignition harness.*
Red	12 power	30amp input	*Constant 12volt power at ignition harness.*
Blue	Ignition 1	30amp output	*12volts in ignition and start positions.*
White	Selectable	30amp output	Jumper Selectable. **See Page 5.**

14 Pin Connector

Yellow	Re-Arm	0.75sec Pulse With Lock And On Shutdown.
Orange	(-) Output	Negative While Locked - ***Starter Program Mode.**
Brown	Disarm	0.75sec Pulse With Unlock And Before Start.
Red/White	3rd CH	Trunk Release - Active When The Unlock Button Is Held For 3seconds.
White/Violet	(-)Running	Negative Output While Running.
Green	(-) Door	Negative Door Trigger Input - *Manual Trans And Alarm Units Only.*
Purple	(+) Door	Positive Door Trigger Input - *Manual Trans And Alarm Units Only.*
Green/White	Hood Pin	Negative Hood Pin Input - *MUST BE CONNECTED!!*
Pink	Brake	Positive Brake Input - *MUST BE CONNECTED!!*
Black	Ground	System Ground Input - *MUST BE CONNECTED!!*
Blue/White	Tach	Tach Signal Input **-** *MUST BE CONNECTED!!*
Blue	Glow Plug	Negative Glow Plug Input - *DIESEL ENGINE ONLY. **Starter Program Mode.*
White	Park Lights	Positive Park light Output - *10 Amp Max.*
Black/White	Park Brake	Negative Park Brake Input - *Manual Transmission Models Only.*

4 Pin Connector Square

White/Green	Channel 4	**Programmable**- See Alarm Settings. **Menu 2.**
Black	Dome Light	Negative Output For Dome Light Supervision.
White/Blue	Siren	Positive Output For Siren.
Red	Trunk Pin	Negative Input for Trunk Pin.

4 Pin Connector Red

Green	Door Lock	Door Lock Output - **Programmable - Menu 1 Setting 3.**
Red	12 Volts	**Low Current Output.** Use With Voltage Inverter
Blue	Door Unlock	Door Unlock Output - **Programmable - Menu 1 Setting 3.**
Pink	2nd Unlock	Door Unlock Output - **Programmable - Menu 1 Setting 3.**

3 Pin Connector White

Green	(-) Disarmed	Negative Output When The System Is Disarmed.
Pink	Horn/5th Channel	Programmable Output.
Blue	(+) Disconnect	(+) Disconnect Or Instant Start Trigger.

Jumper Selections

The jumpers control the output on the white wire from the six pin harness. Place the jumpers in the above order to change the output.
Note: The default setting is second ignition.

Output on White wire	Jumper position
Second Starter	Position 1
Second Accessory	Position 2
Second Ignition	**Position 3**

Back View Of Module

Jumpers   3 2 1

Installation Guide

2500 QUICK START INSTALL

Step 1 - Connect All Of the Following Wires

6 Pin Power Connector

Yellow	Starter Output	Connect To The Vehicles Starter Wire.
Green	Heater Output	Connect To The Vehicles Accessory Wire.
Red	12 power Input	Connect to Constant 12 Volt Power Source- *High Current.*
Red	12 power Input	Connect to Constant 12 Volt Power Source- *High Current.*
Blue	Ignition 1 Output	Connect To the Vehicles Primary Ignition.
White	Selectable Output	Select Jumper Position (If Necessary). **See Page 5.**

14 Pin Power Connector

Black	System Ground	Connect To Chassis Ground.
Pink	Brake Switch	Connect To (+) When Brake is Applied.
White	Park Lights	Connect To (+) Park Light System.
Green/White	Hood Pin	Connect To Hood Pin Switch.
Blue/White	Tach	Connect To Tach Source.
White/Blue	Siren / Horn	Connect To (+) Siren or Horn.
Green or	(-) Door Input	Connect the Green wire to a (-) door pin system.
Purple	(+) Door Input	Connect the Purple wire to a (+) door pin system.

Manual Transmissions Only

Black/White   Park Brake   Connect (-) Parking Brake

Manual transmission vehicles must have a **"M" Series** Remote Starter Installed. Manual Transmission Units Must Be Placed Into Reservation Mode To Operate. *See Page 10.*

Step 2- Plug-In The Module

When all the connections are done, the control module can be plugged in. Before connecting the control module, make sure the ignition is in the **OFF** position. Plug in the 6 pin harness then the 14 pin followed by any other connectors that were used.

Step 3- Auto Tach Learn

1) Make all the required wire connections and plug-in the Unit.
**The park lights should flash twice upon power up.
2) Turn the Ignition Key ON. (Park Lights will turn on).
3) Start the vehicle, LED's on the antenna will come on to confirm tach signal is detected**, then after two to ten seconds the park lights will turn off then flash twice to confirm tach learning.
* **The system will flash the park lights seven times if not tach learned and the start button is pressed. The system must be tach learned before remote starting.**
** **If the LED's do not come on during tach learn, a proper tach signal was not detected.**

Note: If the park lights do not flash in auto tach learn mode it may be necessary to connect to a different tach source. For best results connect the tach wire to the coil pack or to a fuel injector wire. **If necessary See Page 11. for Tach Adjustment.**

Activate Self Learning Impact Sensor

1) Press the **LOCK** button on the remote 5 times in a row. The siren should chirp 3 times and the park lights should come and stay ON.
2) While the park lights are on, strike the vehicle at the desired level to trigger the alarm.
3) The siren will respond with one chirp to confirm that the Shock Sensor is programmed.
4) Press the lock or unlock button to exit Shock Sensor learning.

Your Basic Install Is Complete!

NOTES:
1) If the unit does not start, check the starter is not in Tach Lock Out or in Program Mode.
2) If the vehicle still does not start, check all connections and check for factory security.

Programming Overview

Program mode allows you to adjust the settings and options of your system.
Your system has been intelligently designed by installers with years of experience. The system's default settings do not require any program changes in most cases. However, this system does incorporate a highly advanced programming system that includes 4 menus with numerous options and settings that can be easily adjusted for custom installations and applications.

Menu 1 - User Settings - Page 8
This program menu contains settings that adjust the way the system operates for the user.

Menu 2 - Alarm Settings - Page 9
This program menu contains settings that adjust the way the system operates for the user.

Menu 3 - Starter Settings - Page 10
This menu controls features and settings associated with remote car starter applications.

Menu 4 - Tach Settings - Page 11
This menu allows the programming of the tach signal and the manual adjustment of that setting.

Entering Program Mode

To Enter Program Mode
1) Make sure ignition is in the off position.
2) Within three seconds turn the key ON - OFF - ON - OFF - ON. **Leave in the "ON" position.**
3) Press and release the Program Button on the antenna one time.
4) The park lights will come on and the siren will chirp to confirm entering Program Mode.
5) Select the Desired Program Menu:

Press Button #1	**Lock**	**User Options**	**Page 8**
Press Button #2	**Unlock**	**Alarm Option**	**Page 9**
Press Button #3	**Start**	**Remote Start Options**	**Page 10**
Press Button #4	**Aux**	**Tach Adjustment Menu**	**Page 11**

6) The selected mode will be confirmed by a siren chirp and one park light flash.
7) The Program Menu may be changed at any time by pressing the transmitter buttons as above, this allows the installer to change a setting from one menu, then quickly jump to another menu and change another setting without re-entering the Program Mode.
8) To exit Program Mode, Turn the ignition key "OFF" or wait 30 second and the system will exit automatically. This will be confirmed by one long siren chirp and park light flash.

Note: *If unit does not enter Program Mode, turn the ignition off for five seconds and repeat steps 1-4.*
** The first ignition(Blue wire) **MUST** be connected to the vehicle's first ignition wire. If it is not connected it will not be possible to enter the Program Modes.

Changing the Programmable Settings

To Select and Change A Program Setting:
1) Enter **Program Mode**.
2) Select the desired **Program Menu.** *(See pages 8 - 11)*
3) Press & release the **Program Button** the correct number of times to select the desired Program Setting(*as listed on pages 8 - 11*). The park lights will flash and the siren will chirp to indicate the current setting that is selected.
4) Press and hold the Program Button until the parking lights / siren confirm the selected setting. The park lights will flash and the siren will chirp to indicate the option selected within the setting.
5) Turn the ignition key "Off" to exit Program Mode.

NOTE: This procedure is listed in detail below each program setting on pages 8 - 11 of this manual.

SYSTEM RESET

STEP 1 - Within three seconds turn the key ON-OFF-ON-OFF-ON *(Leaving Key ON).*
STEP 2 - Press and release the Program Button.
STEP 3 -The park Lights will turn ON.
STEP 4 - Press the Program Button a second time and hold for 8 seconds until the park lights flash and the siren will chirps three times.
The system is now re-set to factory defaults.
NOTE: Reset to defaults does not delete the transmitters from memory.

PROGRAM MODE - USER SETTINGS

Enter User Program Mode - See Page 7 for details on entering program mode

Setting 1- Ignition Auto Lock

1 Ignition Lock & Unlock Enabled	1 Light Flash	Doors Lock / Unlock when the key is turned On/ Off
2 Ignition Lock Only	2 Light Flashes	Doors Lock when ignition key is turned ON only
*3 Ignition Auto Lock Disabled	**3 Light Flashes**	**Doors do not Lock or Unlock with Ignition key**

Press the Program Switch 1 time to select setting 1 (This will be confirmed by 1 LED flash)
Press and hold the Program Switch until you receive the appropriate # of park light flashes and/or horn honks.
Release the Program Switch. Press the Program momentarily to move to next program step or repeat to change selection.

Setting 2- Horn Honk Settings

1 Lock & Unlock chirps **Disabled**	1 Flash	Honks for Panic and Car Finder Mode only.
2 Lock & Unlock chirps **Enabled**	2 Flashes	Honks for Lock, Unlock, Panic and Car Finder Mode Only.
*3 All chirps enabled	**3 Flashes**	**Honks for Lock, Unlock, Start, Panic and Car Finder Mode.**

Press the Program Switch 2 times to select setting 2 (This will be confirmed by 2 LED flashes)
Press and hold the Program Switch until you receive the appropriate # of park light flashes and/or horn honks
Release the Program Switch. Press the Program momentarily to move to next program step or repeat to change selection.

Setting 3- Door Lock Options

1 Double Pulse Unlock	1 Flash	Single .75sec.Lock pulse and double Unlock Pulse
2 3 Second Lock & Unlock	2 Flashes	3 second pulses for Lock & Unlock
*3 0.75 Second Pulses	**3 Flashes**	**0.75 second pulses for Lock and Unlock**

Press the Program Switch 3 times to select setting 3 (This will be confirmed by 3 LED flashes)
Press and hold the Program Switch until you receive the appropriate # of park light flashes and/or horn honks.
Release the Program Switch. Press the Program momentarily to move to next program step or repeat to change selection.

Setting 4 -Sensor - Enable / Disable

| 1 Sensors Disabled | 1 Flash | Impact Sensors Disabled |
| *** 2 Sensors Enabled** | **2 Flashes** | **Impact Sensors Enabled - Normal Operation** |

Press the Program Switch 4 times to select setting 3 (This will be confirmed by 4 LED flashes)
Press and hold the Program Switch until you receive the appropriate # of park light flashes and/or horn honks.
Release the Program Switch. Press the Program momentarily to move to next program step or repeat to change

Setting 5 - Passive / Active Arming

1 Passive Arming	1 Flash	System Auto Arms 30 seconds after last door is closed
2 Active Arming With Rearm	2 Flashes	System Auto-Arms if unlock is pressed and no door is opened within 30sec
* 3 Active Arming	**3 Flashes**	**Alarm Arms Only with Transmitter**

Press the Program Switch 5 times to select setting 1 (This will be confirmed by 5 LED flashes)
Press and hold the Program Switch until you receive the appropriate # of park light flashes and/or horn honks.
Release the Program Switch. Press the Program momentarily to move to next program step or repeat to change selection.

Setting 6 - Active / Passive Locks

| 1 No Auto-Lock with Passive Arm | 1 Flash | Doors do not auto-lock with passive arming |
| ***2 Doors Auto-Lock with Passive** | **2 Flashes** | **DOORS LOCK WHEN PASSIVE ARMING** |

Press the Program Switch 6 times to select setting 1 (This will be confirmed by 6 LED flashes)
Press and hold the Program Switch until you receive the appropriate # of park light flashes and/or horn honks.
Release the Program Switch. Press the Program momentarily to move to next program step or repeat to change selection.

PROGRAM MODE - ALARM SETTINGS

Enter Alarm Program Mode - See Page 7 for details on entering program mode

Setting 1 - Car Finder / 5th Channel

1 Car Finder OFF   1 Light Flash   Car Finder Mode Disabled
*2 Car Finder ON   2 Light Flashes   Car Finder Mode Enabled
Note: To operate the 5th channel on button #4, setting 7 must be programmed for 5th channel output.

Press the Program Switch 1 time to select setting 1 (This will be confirmed by 1 LED flash)
Press and hold the Program Switch until you receive the appropriate # of park light flashes and/or horn honks.
Release the Program Switch. Press the Program momentarily to move to next program step or repeat to change selection.

Setting 2 - Secure Valet Mode

1 Secure Valet Active   1 Flash   Valet only if ignition "ON" and valet switch held for 15 seconds
2* Normal Valet Active   2 Flashes   Valet if ignition "ON" and valet switch held for 5 seconds

Press the Program Switch 2 times to select setting 2 (This will be confirmed by 2 LED flashes)
Press and hold the Proram Switch until you receive the appropriate # of park light flashes and/or horn honks
Release the Program Switch. Press the Program momentarily to move to next program step or repeat to change selection.

Setting 3 - Parking Light Output

1 30 Second Parking Lights on Disarm   1 Flash   Park Lights on for 30 seconds on disarm
2 Negative Park Light   2 Flashes   Switches the Park Light and the Trunk Release (3rd Channel) Outputs
3* Normal Parking Lights   3 Flashes   2 Park Light Flashes on disarm

Press the Program Switch 3 times to select setting 3 (This will be confirmed by 3 LED flashes)
Press and hold the Program Switch until you receive the appropriate # of park light flashes and/or horn honks.
Release the Program Switch. Press the Program momentarily to move to next program step or repeat to change selection.

Setting 4 - Horn Honk Timing - Pink wire on 3-pin white

1 5ms   1 Flash   Short (Quiet) Pulses
2 20ms   2 Flashes   Long (Loud) Pulses
*3 10ms   3 Flashes   Normal (Medium) Pulses
Press the Program Switch 4 times to select setting 3 (This will be confirmed by 4 LED flashes)
Press and hold the Program Switch until you receive the appropriate # of park light flashes and/or horn honks.
Release the Program Switch. Press the Program momentarily to move to next program step or repeat to change selection.

Setting 5 - 4th Channel Settings- White/Green on 4-pin square

1 Pulsed   1 Flash   Pulsed for 0.75 seconds upon 4th Channel Activation
2 Latched   2 Flashes   Latched until repeated or ignition "ON"
*3 Active   3 Flashes   Active for as long a button is held on Transmitter as long as held

Press the Lock and Start buttons together to activate the 4th Channel Output.
Press the Program Switch 5 times to select setting 1 (This will be confirmed by 5 LED flashes)
Press and hold the Program Switch until you receive the appropriate # of park light flashes and/or horn honks.
Release the Program Switch. Press the Program momentarily to move to next program step or repeat to change selection.

Setting 6 -Car Jack Mode

1   Door & Button   1 Flash   Car Jack is activated upon Button 4 or Door open while Ignition is "ON"
2   Door, Button 4   2 Flashes   Car Jack is upon Button 4 or Door open or ignition "ON" and Ignition
*3   Car Jack OFF   3 Flashes   No Car Jack Functions

Press the Program Switch 6 times to select setting 1 (This will be confirmed by 6 LED flashes)
Press and hold the Program Switch until you receive the appropriate # of park light flashes and/or horn honks.
Release the Program Switch. Press the Program momentarily to move to next program step or repeat to change selection.

Setting 7 - Horn / 5th Channel

1   5th Channel   1 Flash   Pulsed output when activated by button #4
2   Horn Honk 2   2 Flashes   Horn Honk Output - Full Alarm ONLY
*3   Horn Honk 1   3 Flashes   Horn Honk with Arm & Disarm Chirps
Press the Program Switch 7 times to select setting 7 (This will be confirmed by 7 LED flashes)
Press and hold the Program Switch until you receive the appropriate # of park light flashes and/or horn honks.
Release the Program Switch. Press the Program momentarily to move to next program step or repeat to change selection.

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PROGRAM MODE - STARTER SETTINGS

Enter Starter Program Mode - See Page 7 for details on entering program mode

Setting 1- Special Door Lock/ Unlock Operations

1	Chrysler / VW Re-Arm	1 Flash	Unlock pulse before start and a lock pulse after start
2	GM Auto Re-Lock	2 Flashes	Lock pulse after remote starter shuts off
3*	**Normal Operation**	**3 Flashes**	**No additional re-lock pulses**

Press the Program Button 1 time to select setting 1 (This will be confirmed by 1 LED flash)
Press and hold the Program Button until you receive the appropriate # of park light flashes and siren chirps.
Release the Program Button. Press momentarily to move to next program step or repeat to change selection.

Setting 2- Gas/ Diesel Mode- Blue Wire on 14-Pin

1	Diesel Glow Plug	1 Flash	Waits a Maximum of 3:20 second before starting.
2	Timed Delay	2 Flashes	Ignition ON for 10 seconds before engaging remote starter
3*	**Gas Mode operation**	**3 Flashes**	**Waits 2 seconds before engaging starter output**

Press the Program Button 2 times to select setting 2 (This will be confirmed by 2 LED flashes)
Press and hold the Program Button until you receive the appropriate # of park light flashes and siren chirps.
Release the Program Button. Press momentarily to move to next program step or repeat to change selection.

Setting 3- Rearm Output- Yellow Wire on 14-Pin

1	Type 1	1 Flash	Pulse after start and with lock
2	Type 2	2 Flashes	Pulse after start only
3*	**Factory Re-arm**	**3 Flashes**	**0.75 second pulse with lock and after shutdown**

Press the Program Button 3 times to select setting 3 (This will be confirmed by 3 LED flashes)
Press and hold the Program Button until you receive the appropriate # of park light flashes and siren chirps.
Release the Program Button. Press momentarily to move to next program step or repeat to change selection.

Setting 4- Run Time

1	30 Min Run Time	1 Flash	Remote Starter runs for 30min when activated
2	45 Min Run Time	2 Flashes	Remote Starter runs for 45min when activated
3*	**15 Min Run Time**	**3 Flashes**	**Remote Starter runs for 15 min when activated**

Press the Program Button 4 times to select setting 4 (This will be confirmed by 4 LED flashes)
Press and hold the Program Button until you receive the appropriate # of park light flashes and siren chirps.
Release the Program Button. Press momentarily to move to next program step or repeat to change selection.

Setting 5-Maximum Crank Time

1	10 Seconds	1 Flash	10 sec Max time that starter will stay engaged
2	3 Seconds	2 Flashes	3 sec Max time that starter will stay engaged
3*	**5 seconds**	**3 Flashes**	**5 sec Max time that starter will stay engaged**

Press the Program Button 5 times to select setting 5 (This will be confirmed by 5 LED flashes)
Press and hold the Program Button until you receive the appropriate # of park light flashes and siren chirps.
Release the Program Button. Press momentarily to move to next program step or repeat to change selection.

Setting 6- Sensor Disconnect

1	Positive Input To Start	1 Flash	Positive pulse will activate remote starter.
2	Positive Disconnect	2 Flashes	Alarm will trigger if disconnected from 12 volts.(Same as below)
3*	**Positive Disconnect**	**3 Flashes**	**Alarm will trigger if disconnected from 12 volts.**

Press the Program Button 6 times to select setting 6 (This will be confirmed by 6 LED flashes)
Press and hold the Program Button until you receive the appropriate # of park light flashes and siren chirps.
Release the Program Button. Press momentarily to move to next program step or repeat to change selection.

Setting 7- Sensor Disconnect

1	Positive Input To Start	1 Flash	Positive pulse will activate remote starter.
2	Positive Disconnect	2 Flashes	Alarm will trigger if disconnected from 12 volts.(Same as below)
3*	**Positive Disconnect**	**3 Flashes**	**Alarm will trigger if disconnected from 12 volts.**

Press the Program Switch 7 times to select setting 7 (This will be confirmed by 7 LED flashes)
Press and hold the Program Switch until you receive the appropriate # of park light flashes and siren chirps..
Release the Program Switch. Press the Program momentarily to move to next program step or repeat to change selection.

Setting 8- Safety Start Mode

| 1 | Safety ON | 1 Flash | Must press the start button twice to remote start vehicle |
| **2*** | **Safety OFF** | **2 Flashes** | **Press the start button once to remote start vehicle.** |

Press the Program Switch 8 times to select setting 8 (This will be confirmed by 8 LED flashes)
Press and hold the Program Switch until you receive the appropriate # of park light flashes and siren chirps.
Release the Program Switch. Press the Program momentarily to move to next program step or repeat to change selection.

PROGRAM MODE - TACH SETTINGS

See page 6 for Auto Tach Learning
Setting 1- Method 2- Low Idle Tach Learning

This option is used for vehicles that maintain a high or erratic idle after starting and need more that 10 seconds to establish a stable idle.

Step 1 - Enter Program Mode (Ignition ON-OFF-ON-OFF-ON) then press the Program button on the antenna 1 time.
Step 2 - Enter Program Mode 4 - Press the **#** button on the remote.(Button #4).
Step 3 - Start Vehicle - Using the ignition key, make sure not to turn the key off at any time or your will exit programming.
Step 4 - Press the Button - One time (Led will start flashing in single cycles) then press and hold Program (5sec).
Step 5 - Release Program - Led should come on steady to indicate correct tach signal the park light will flash to confirm.

Setting 2- Adjust For Over-Crank

Step 1 - Enter Program Mode (Ignition ON-OFF-ON-OFF-ON) then press the Program button on the antenna 1 time.
Step 2 - Enter Program Mode 4 - Press the **#** button on the remote.(Button #4).
Step 3 - Press the Program Button - **2 times** (Led will start flashing 2 times).
Step 4 - Press and Hold Program - For 5 seconds until parking lights flash (each time lights flash tach is reduced 5%).
Step 5 - Release Program - Exit Program Mode and remote start to test.

Setting 3- Adjust For Under-Crank

Step 1 - Enter Program Mode (Ignition ON-OFF-ON-OFF-ON) then press the Program button on the antenna 1 time.
Step 2 - Enter Program Mode 4 - Press the **#** on the remote.(Button #4).
Step 3 - Press the Program Button - **3 times** (Led will start flashing 3 times).
Step 4 - Press and Hold Program - For 5 seconds until parking lights flash (each time lights flash tach is increased 5%).
Step 5 - Release Program - Exit Program Mode then remote start to test.

Anti Car Jacking Mode

ENSURE THAT USER IS FULLY TRAINED ON THIS FEATURE!
ONLY USE THIS FEATURE WHEN SPECIFICALLY REQUESTED. ENSURE THAT USER IS TRAINED ON THE OPERATION OF THIS FEATURE IF NOT, UNWANTED RESULTS MAY ARISE.

When activated, the system waits 30 seconds then flashes LED rapidly for 30 seconds, then chirps siren as a warning for 10 seconds then goes into full alarm .

ACTIVATING CAR JACK MODE- Programmable - Menu 1, Setting 5.

Activates upon any of the following steps:
- Mode 1 & 2   While ignition is "on" press & release **#** button.
- Mode 1 & 2   Open door while ignition is "on".
- Mode 2 only   Each time ignition is turned "on"

DEACTIVATING CAR JACK MODE

1. During countdown period - Turn the ignition "On" then press and release the antenna button.
2. After the alarm has activated - Turn the ignition "Off then On" then press and hold the antenna button for 8 seconds .

Reservation Mode - Manual Trans.

Manual Transmission Remote Starters must have both the door trigger and park brake wires connected. Most installs will require a clutch bypass. This is a temporary bypass. The clutch should only be bypassed during the activation of the remote starter. Never disconnect or alter the switch to be always bypassed. Always use a **"M"** Series Remote Starter on a manual transmission vehicle.
Never install a automatic Remote Starter model into a manual transmission vehicle. It is not recommended to install a remote starter on a convertible type vehicle. If doing so It is highly recommended that a radar sensor is installed to cover the proximity of the gear shift lever. If the radar sensor is tripped the remote starter will exit Reservation Mode.

To enter Reservation Mode, the following steps must be followed.
Step 1 - While the vehicle is running, place the transmission in neutral and apply the parking brake.
Step 2 - Press and release the brake pedal. The park lights will activate.
Step 3 - Turn the ignition key off and the vehicle will stay running.
Step 4 - Exit the vehicle and close the door. The vehicle will then shut off.
Step 5 - The vehicle can now be safely remote started.

NOTE: If the vehicle has a dome light delay, the vehicle may stay running until the dome light turns off. This is normally no longer than 30 seconds. Reservation Mode will automatically be exited if the doors of the vehicle are opened. The set-up mode will then have to be repeated . Reservation Mode Must be set-up each time the vehicle is parked.

Note: If the vehicle is not in Reservation Mode and the Start button is pressed, the system will flash the park lights four times slowly.

Transmitter Programming

Step 1 - Within three seconds turn the ignition Key ON-OFF-ON-OFF-ON - **Leaving Key ON**
Step 2 - Press and hold the Program Switch - Parking Lights will come ON **if park-lights do not come on at this point, turn key off for 5 seconds, the repeat step 1.
Step 3 - Continue to hold the Program Switch until park lights go out.
Step 4 - Press the **LOCK** button on each of **1st car** remotes and press the **#** button on each of the **2nd car** remotes of the transmitters to be programmed. The park lights will flash once and the horn will honk once each time a new code is learned.

Note: Transmitter programming must done quickly. Do not pause more than one second between each transmitter. **All the transmitters** to be used must be programmed at the same time. **All transmitters not programmed at this time will be erased from memory for security. The system holds a maximum of 3 transmitter codes including 2nd car remote codes.**

You can program the same remote as a 1st car remote in one vehicle and as a 2nd car remote in a second vehicle.

Battery Replacement

The transmitter battery should be changed at least once every year to maintain proper operating range. Replace with quality23A 12volt Alkaline battery.

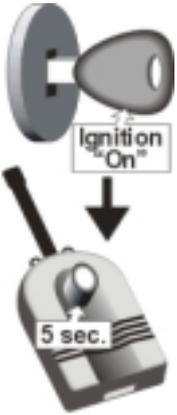| Step #1	Step #2	Step #3	Step #4
Carefully remove the screw from back of the remote.	Remove top case then replace the battery.	Replace top case. Re-install screw.	Test remote for proper operation.

System Service Mode

ACTIVATING SERVICE MODE
1. While the ignition is "ON" press and hold the Program Button for five seconds. The park lights will flash and the siren will chirp five times to confirm that the system is in Service Mode.
2. While in Service Mode the remote start functions will be disabled and LED's will be "ON" steady. Door locks and trunk release are still operational.
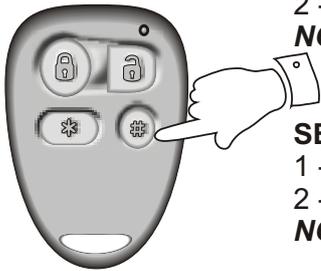
DEACTIVATING SERVICE MODE
1. While the ignition is "ON" press and hold the Program Button for five seconds. The park lights will flash and the siren will chirp two times to confirm that the system has exited Service Mode.
2. Remote start functions will return to normal operation.

Service Mode- By Remote

SERVICE MODE ACTIVATED
1 - Press & Release button 4
2 - Press & Hold Button 4 for 6 seconds until Status LED comes on Steady
NOTE: The siren will chirp 5 times as confirmation.

SERVICE MODE DEACTIVATED
1 - Press & Release button 4
2 - Press & Hold Button 4 for 6 seconds until Status LED turns off.
NOTE: The siren will chirp 2 times as confirmation.

WARRANTY- Optional Three year & lifetime warranty available. See Dealer For Details.

The manufacturer warrants to the original purchaser of their remote starters and alarms, that the product shall be free from defects in material and workmanship. However, should this product be proven to be defective, within a two year period from the original date of purchase, the manufacturer will, without charge to the purchaser (excluding any charges incurred to have the product delivered to the manufacturer) , repair or replace any part of the remote starter and/or alarm which the manufacturer agrees to be defective. All warranties apply on to the original purchaser and the vehicle in which it is originally installed. Repairs or replacement of defective modules shall remain at the discretion of the manufacturer. All other parts, components, accessories and/or optional equipment pertaining to the remote starter and alarm are not included in the manufacturer's warranty. **This warranty is non-transferable**. Request for warranty service from any Factory Authorized Dealer **must be accompanied with the original purchase receipt or have product registered by authorized dealer on manufacturer's website**. Failure to comply with any of these conditions may result in warranty being voided.

This warranty does not cover the following: removal and reinstall labour charges, shipping charges, abuse, misuse, or accidental damages to the remote starter and alarm, automobile, and/or parts there of. This warranty is void upon modification, repairs, or alterations of any part of the System. The manufacturer does not guarantee or insure against theft of the vehicle or its contents. Alarm models are designed only to act as a deterrent against possible theft. This alarm may qualify for auto insurance discounts, contact your Insurance Agent for further information . The manufacturer shall not be held liable for any consequential damages due to breach of this or any other warranty, expressed, or implied. This warranty gives you specific legal rights. Your specific legal rights may vary for each region.

CERTAIN DAMAGES EXCLUDED - The manufacturer expressly disclaims any liability or responsibility for incidental damages caused by the product, including economic loss, loss of use of the product, car rentals, or any other costs relating to the care and custody of the product. The manufacturer disclaims liability or responsibility for any consequential damages caused by the product or resulting from its use, including the cost of repairing or replacing other property damaged by the product or caused by its use, whether or not the product is working properly. The product is intended to deter unauthorized use of the vehicles in which it is installed. The manufacturer does not warrant that the product is fool-safe against theft and/or vandalism and/or human error or misuse. The manufacturer accepts no liability or responsibility for any damage of any kind whatsoever caused to any vehicle in which the product is installed or any resulting damage from its use. The manufacturer accepts no responsibility or liability for any damage resulting to or theft of the vehicle or its contents, caused or alleged to be caused, directly or indirectly, by failure of the product.

Lock Doors & Arm The Alarm

1. Press & release the *LOCK* button on the remote transmitter.
2. The park lights will flash and the siren will chirp once.
3. The doors will lock.
4. The LED will start flashing within five seconds.

Unlock Doors & Disarm The Alarm

1. Press & release the *UNLOCK* button on the remote transmitter.
2. The park lights will flash and the siren will chirp twice.
3. The doors will unlock.
4. The LED will stop flashing.

Silent Arm And Disarm

Together

1. Press & release the *LOCK & UNLOCK* buttons at the same time.
2. If the doors are locked this will unlock the doors without siren chirps, the park lights will flash two times to confirm the doors have unlocked.
3. If the doors are unlocked this will lock the doors without siren chirps, the park lights will flash one time to confirm they have locked.

Trunk Release

3 sec.

1. Press and hold the *UNLOCK* button for three seconds.
2. The doors will unlock, continue holding the unlock button for three more seconds, the trunk release will then activate. The trunk release will be confirmed by one park light flash.
3. For safety reasons, the trunk release output will not activate when ignition key is in the "On" position.

Car Finder Mode

2 sec.

1. Press and hold the **#** button for two seconds.
2. The system will flash the park lights and chirp the siren five times.

**This feature can help find your vehicle in a crowded parking lot.

Panic Mode

3 sec.

1. Press & hold the *LOCK* button for three seconds.
2. The park lights will flash and the siren will activate.

PANIC MODE DISABLE
1. Press *LOCK* button to disable the panic mode and to lock the doors.
2. Press *UNLOCK* button to disable the panic mode and unlock the doors.
3. Panic Mode will stay activated until disabled by the remote transmitter.

2nd Car Operation

2nd Car

 # & 🔒 = Press Once to Lock Doors. Continue to hold for Panic Mode. Press 2nd Time & Hold for Constant Lock Output

 # & 🔓 = Press Once for Unlock Doors and Disarm the Alarm. Press & Hold for Trunk / Aux Output

 # & ✳ = Press Once for Start - (*2 Times if programmed for safety start*) Press & Hold for 3 seconds while running to turn off

 # Then # & ✳ = Press & Release then press START and hold for Timer Mode

Remote Start

1. Press &release the ✳ button.
2. The Park lights will flash and the siren will chirp once.
3. When the vehicle has started, the system will flash the park lights four times and then remain "On" while the vehicle is running.
4. The vehicle will continue to run for the programmed runtime. (normally 15 minutes).

EXTEND RUNTIME

1. Press & release the ✳ button while the vehicle is running.
2. The system will respond with one park light flash and one siren chirp to confirm Extended Runtime. The system will reset the run time, (normally 15 minutes).

Remote Stop

1. Press and hold the ✳ button for three seconds. The remote starter will shut down.
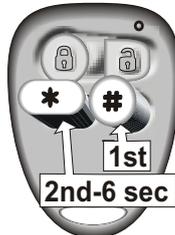2. The park lights will flash two times and the siren will chirp two times.

Note: Pressing the brake pedal or opening hood will also stop the vehicle.

Idle Mode

1. While the vehicle is running with key, press the ✳ button.
2. The park lights will turn on and the siren will chirp once.
3. Turn the ignition key "off" and the vehicle will continue to run.
4. Exit the vehicle and leave it running safely without the keys in the ignition. Lock the door while the vehicle is left running.

Timer / Optional Temp Start

1. Press & release the # button, then press and hold the ✳ button for six seconds, until the parking lights turn "on".
2. While the parking lights are "on" the start cycle can be selected.

1 hour cycle	or 0C	Press	LOCK	button	1 flash
2 hour cycle	or -5C	Press	UNLOCK	button	2 flashes
3 hour cycle	or -15c	Press	✳	button	3 flashes
4 hour cycle	or -25c	Press	#	button	4 flashes

3. System will start vehicle at selected cycle for up to 24 hours.
4. *The temp start must have the temp sensor installed and will only trigger 1 time each 2 hours if the sensor is not installed the unit will activate the timer mode.*

TO CANCEL COLD START MODE

1. Press & release the # button, then press and hold the ✳ button for four seconds.
2. The park lights will flash and the siren will chirp twice.

Delay Dome Light - Auto Detection

If the vehicle is equipped with a factory delay dome light, the system will detect this when arming and chirp the siren 4 times 15-30 seconds after arming. This conformation will also be activated if the system is armed with the door open.
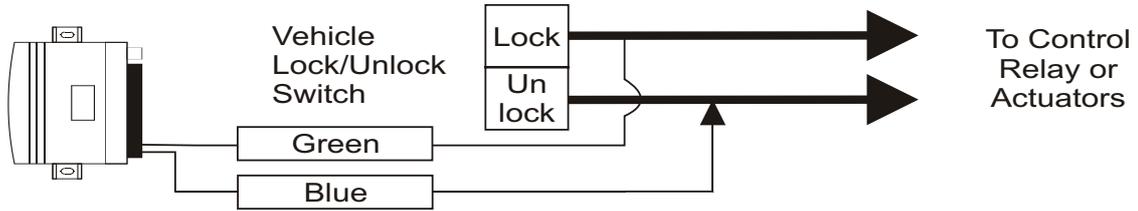
Ignition Auto Locks

This safety feature will lock the vehicles doors two seconds after the Ignition is turned to the on position. When the ignition key is turned to the off position the doors will unlock.

Note: The system can be programmed for Ignition Lock only. In this setting the door's will lock when the key is turned "On" and stay locked when the key is turned "Off".
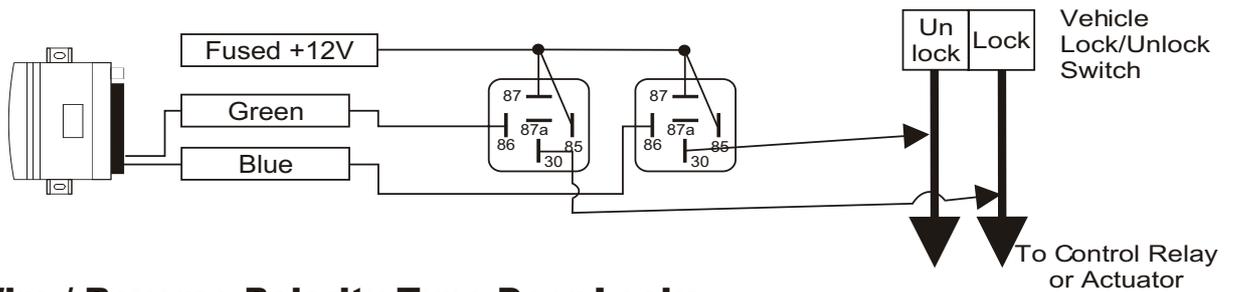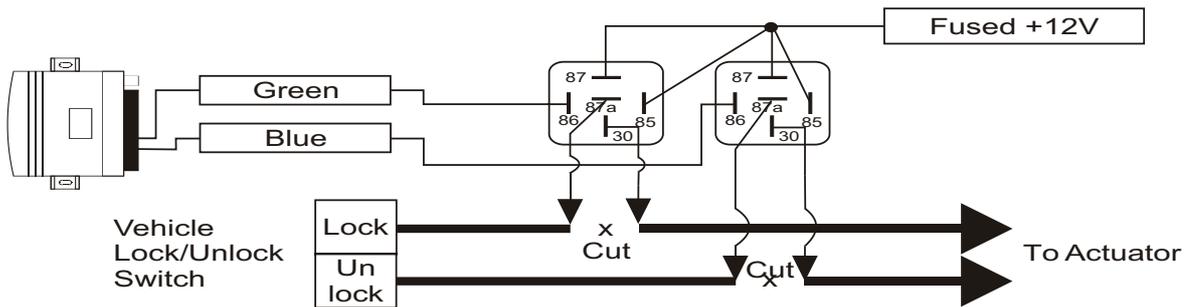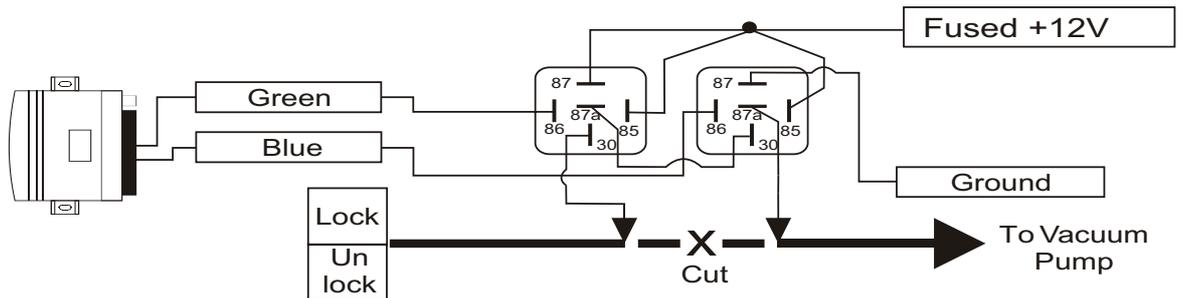
2500 RELAY DIAGRAMS

Negative Door Locks

Vehicle Lock/Unlock Switch

Green

Blue

Lock

Un lock

To Control Relay or Actuators

Positive Type Door Locks

Fused +12V

Green

Blue

87 87a 85 86 30

87 87a 85 86 30

Un lock Lock

Vehicle Lock/Unlock Switch

To Control Relay or Actuator

5 Wire / Reverse Polarity Type Door Locks

Green

Blue

87 87a 85 86 30

87 87a 85 86 30

Fused +12V

Vehicle Lock/Unlock Switch

Lock

Un lock

x Cut

Cut x

To Actuator

Vacuum Type Door Locks

Green

Blue

87 87a 85 86 30

87 87a 85 86 30

Fused +12V

Ground

Lock

Un lock

X Cut

To Vacuum Pump

Built-in Starter Disable

IG2

ACC IG1

Off Start

Cut X

To Starter Motor or Relay

Starter Disable Harness Brown wire with spade connectors.

Note: Connect the Starter Wire (Yellow) to the starter motor side of the starter disable.