INSTALLATION GUIDE 1600

1600M

UltraStart

Advanced Remote Vehicle Starting System

AUTOMATIC AND MANUAL TRANSMISSION MODELS

WWW.ULTRASTARTERS.COM

See website for a full size printable version of this manual.

WARNING!! NEVER INSTALL A AUTOMATIC REMOTE STARTER IN A MANUAL TRANSMISSION VEHICLE SERIOUS INJURY OR DEATH CAN RESULT

TECH SUPPORT

E-Mail Tech Support: support@ultrastarters.com
Check Our Web Site: www.ultrastarters.com

FCC/ID Notice

This device complies with Part 15 of the FCC rules. Operation is subject to the following conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.
CAUTION: Changes or modifications not expressly approved by the part responsible for compliance void the user's authority to operate this devise.

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DIAGNOSTICS

PARK LIGHTS	STATUS LED	DIAGNOSTIC CODE
3 Flashes	Series of 3 Flashes	Door Opened "M" Models
3 Slow Flashes	LED's On Solid	System Is In Service Mode
4 Slow Flashes	Series of 4 Flashes	Not in Reservation Mode "M" units
5 Flashes	Series of 5 Flashes	Hood Pin Opened
5 Slow Flashes	Series of 5 Flashes	Ignition On During Start Attempt
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 horn will honk (optional) the same number of times as the events in memory. (Maximum four events, four honks)

NOTE: If the horn does not honk, there are no events in memory.

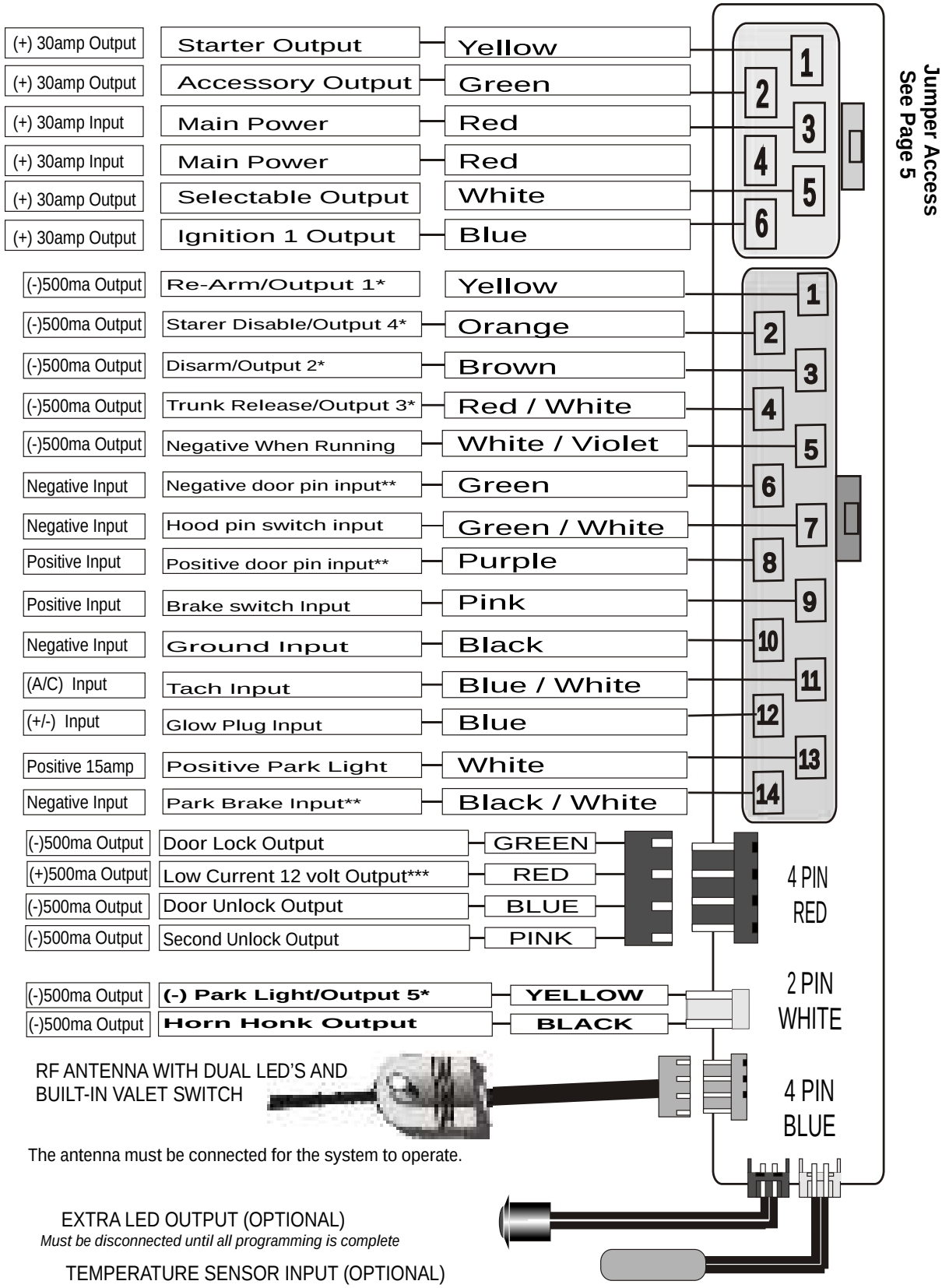
Step 3 - Press the Program Button once to view the last shut down code. The (optional) Horn will honk once to confirm code one. (If the horn does not honk, there are no codes in memory).

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 horn will honk 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 horn(optional) will honk once.

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

WIRING DIAGRAM 1600



*** These Outputs are programable. See page 11 For programming details.**
**** These wires are only needed for Manual Transmission applications.**
***** This wire is to only be used as a low current output.**

Product Description And Installation

Components

- Control module
- RF Antenna (With Program Switch And LED's)
- 6 pin main harness with dual 30amp power inputs
- Hood pin safety switch
- 6 button Remote transmitter(s)
- 14 pin harness
- 4 pin keyless entry harness
- Install and Owners manual

Feature List

- Dual 30amp Power Inputs
- Six button Remote Transmitters
- Engine Idle Mode
- 5 Programable Auxiliary Outputs
- Window Roll-Up/Down Output
- Dual Sliding Door Control
- Programmable Driver's Door Priority Output
- Programmable Dome Light Supervision
- Programmable Starter Kill/ Anti-Grind Protection
- Programmable Passive/Active Starter Kill Output
- Dedicated (-) When Running Output
- Outputs For Pulsed/Latched/Active While Held.
- Door Locks .125s/ .75s/3.0s/Double Unlock.
- Auto Tach Learning With Manual Adjustment Option
- Programmable Horn Output (5, 10 or 20ms output)
- Dome Light Supervision
- Turbo Timer Mode
- Remote Panic Feature
- Defrost Activation
- Dual Car Operation
- Fused Park Light Output
- Park Light Diagnostics
- (+/-) Glow Plug detection
- Programable Wait to Start
- (+/-) Park Light Outputs
- Safety Start Mode.
- Run Time 15/30 or 45 minutes
- Safety Start Mode
- (-) During Crank Output
- Ignition Auto Locks

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.

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 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.

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 and clutch as gas pedals linkages. Do not place the module directly in front of a heater vent.

6 Pin Power Connector

Yellow	**Starter**	30amp output	*12volts during crank only.*
Green	**Accessory**	30amp output	*12volts in accessory off during start.*
Red	**12 power**	30amp input	*Constant12volt power*
Red	**12 power**	30amp input	*Constant 12volt power.*
Blue	**Ignition 1**	30amp output	*12volts in ignition and start positions.*
White	**Selectable**	30amp output	*Selectable Output. Bottom of page.*

14 Pin Connector

Yellow	Arm/**Output 1**	0.75sec Pulse With Lock And On Shutdown.***See P 11.***
Orange	St. Kill/**Output 4**	**(-)** While Locked & Running (Anti-Grind) ***See Page 9.***
Brown	Disarm/**Output 2**	0.75sec Pulse With Unlock And Before Start.
Red/White	Trunk/**Output 3**	Active When Unlock Button Is Held 3seconds.
Wht/Violet	(-) While Running	Negative Output While Remote Started.
Green	**(-)** Door Pin	Negative Door Trigger Input - ***1600m Only!***
Green/White	Hood Pin	Hood Pin Input - ***MUST BE CONNECTED!!***
Purple	**(+)** Door Pin	Positive Door Trigger Input - ***1600m Only.***
Pink	Brake Switch	Positive Brake Input - ***MUST BE CONNECTED!!***
Black	Ground Input	System Ground Input - ***MUST BE CONNECTED!!***
Blue/White	Tach Input	Tach Signal Input ***- MUST BE CONNECTED!!***
Blue	Glow Plug	(+ or -) Glow Plug Input - ***DIESEL ENGINE ONLY. ** S***
White	Park Lights	Positive Park light Output - ***10 Amp Max.***
Black/White	Park Brake	Park Brake Input - ***1600m Only.***

4 Pin Connector Red

Green	Door Lock	Door Lock Output - **Programmable.**
Red	12 Volt Output	***Low Current Output For Voltage Inverter.***
Blue	Door Unlock	Door Unlock Output - **Programmable.**
Pink	2nd Unlock	2nd Unlock Output/ Output - **Programmable.**

2 Pin Connector White

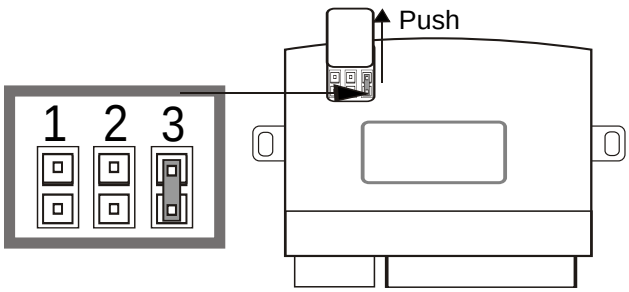
Yellow	(-) Park Lights	Negative output for negative park light system.
Black	(-) Horn/ **Output 5**	Negative output for horn activation-

Jumper Selections

Jumper Position One- *Second Starter* Output On the White Wire.
Jumper Position Two- *Second Accessory* Output On The White Wire.
Jumper Position Three- *Second Ignition** Output On The White Wire.

The jumpers control the output on the white wire from the six pin harness. To change the output of this wire, place the jumper in one of the following positions

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



Step 1 - The Following Wires Must Be Connected!

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
Red	**12 power Input**	Connect to Constant 12 Volt Power Source
Blue	**Ignition 1 Output**	Connect To the Vehicles Primary Ignition.

14 Pin Power Connector

Black	**System Ground**	Connect To Chassis Ground.
Pink	**Brake Switch**	Connect To (+) When Brakes Applied.
White	**Park Lights**	Connect To (+) Park Light System.
Green/White	**Hood Pin**	Connect To Hood Pin Switch.
Blue/White	**Tach Input**	Connect To A/C Tach Source.

Manual Transmissions Only

Violet	**(+) Door Input**	Connect this wire to negative door pin switches.
Green	**(-) Door Input**	Connect this wire to positive door pin switches.
Black/White	**Park Brake**	Connect this wire to the vehicles park brake wire.

NOTE: Manual Transmissions MUST be set into RESERVATION MODE!

Step 2- Plug-In The Module

Make all wiring connections before connecting the module. The ignition must be in the **OFF** position. Plug in the 6 pin connector followed by the 14-pin connector then any other connectors that were used. When the system is powered up the system will respond by flashing the park lights and honking the horn (Optional) twice. If this does not happen, disconnect the module and check that the system has a good ground and that the ignition wire has no voltage present.

Step 3- Auto Tach Learn

1) Plug in the module. (See above)
****The park lights should flash twice upon power up.
2) Turn the Ignition Key to the ON position. (The Park Lights will turn on).
3) Start the vehicle with the ignition key, The LED's on antenna will come on solid when proper tach signal is detected*. The Tach Learning process will take up to 36 seconds. When the system has learned the Tach the park lights flash and the horn (Optional) will honk twice to confirm Tach Learning**.
Note: 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 turn on or flash erratically, A proper tach signal was not detected.
** 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*.
***The ignition 1 input Must be connected to a wire that does Not turn off in the Start position.
***The Tach wire must be above 2 Volts A/C for proper detection.**
*****To relearn a tach signal the system must first be reset to defaults. See page 7.*****

Programming Overview

Program mode allows you to adjust the settings and options of your system. 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 5 menus with numerous options and settings that can be easily adjusted for custom installations.

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

Additional Settings - Page 8.
This menu contains additions settings

Starter Settings - Page 9
This menu controls features and settings associated with remote car starter applications.

Tach Settings - Page 10
This menu allows the programming and adjustment of the Tach Signal

Auxiliary Output - Page 11
This menu contain the settings for the Auxiliary Outputs of the system.

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 "ON"**
3) Press and release the Program Button on the antenna 1 time.
4) Park lights will come on and the horn will honk to confirm entering program mode.
5) Select Desired Program Menu by the following:

Press Button #1	**Lock**	**User Options**	**See Page 8.**
Press Button #2	**Unlock**	**Additional Settings**	**See Page 8.**
Press Button #3	**Start**	**Remote Start Options**	**See Page 9**
Press Button #4	#	**Tach Adjustment Menu**	**See Page 10.**
Press Button #5	**Aux**	**Advanced Auxiliary Control**	**See Page 11.**

6) The selected mode will be confirmed by a horn honk 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 move to Another menu and change another setting without re-entering the Program Mode.
8) Turning off the ignition or 30 seconds of no activity will exit the Program Mode.

Changing the Programmable Settings

To Select and Change A Program Setting:

1) Enter **Program Mode**.
2) Select the desired **Program Menu.** *(See pages 8 through 11.)*
3) Press & release the **Program Button** the correct number of times to select the desired Program Setting(*as listed on pages 8 through 11.*) The park lights will flash and the horn (optional) will honk to indicate the current setting that is selected.
4) Press and hold the Program Button until the parking lights / horn confirm the selected setting. The park lights will flash and the horn will honk to indicate the option selected within the setting.

SYSTEM RESET

1) - Within 3 seconds turn the ignition key ON-OFF-ON-OFF-ON (Leaving the Key ON).
2) - Press and release the Program Button.
3) - The park lights will come ON
4) - Quickly press and hold the Program Button a second time for 8 Seconds. The park lights will Flash and the horn (Option) will honk three times.
The System Is Now Re-Set To Factory Defaults.

Menu 1 - User Settings

Setting 1- Ignition Auto Lock

1 Ignition Lock Enabled	1 Light Flash	Lock when ignition is turned On unlock when off
2 Ignition Lock Only	2 Light Flashes	Lock when ignition is On, no unlock when Off.
***3 Ignition Lock Disabled**	**3 Light Flashes**	**Doors do not Lock or Unlock with Ignition**

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

Setting 2- Horn Honk Settings

1 No lock unlock honks	1 Light Flash	The horn honks for Panic and Car Finder Mode only.
2 Lock & Unlock honks	2 Flashes	Honks for Lock, Unlock, Panic and Car Finder Mode.
***3 All chirps enabled**	**3 Flashes**	**All horn honks enabled**

Press the Program Switch 2 times to select setting 2 (This will be confirmed by 2 LED flashes and 2 horn honks)
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 and 3 horn honks)
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 - Door Unlock & Disarm Pulse Duration

1 Short Pulses	1 Flash	125ms pulses with Unlock and on the disarm output.
2* Normal	**2 Flashes**	750ms pulses with Lock, Unlock and disarm output.

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 horn honks.
Release the Program Button . Press momentarily to move to next program step or repeat to change selection.

Note: Programming this option will change the pulse length of this output from 750ms to 125ms.

PROGRAM MODE 2 - ADDITIONAL

Setting 1 - Secure Valet Mode

1 Secure Valet Active	1 Flash	Ignition "ON" and Program Button is held for 15 seconds
2* Normal Valet Active	**2 Flashes**	**Ignition "ON" and Program Button is held for 5 seconds**

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 horn honks.
Release the Program Button . Press momentarily to move to next program step or repeat to change selection.

Setting 2 - 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
3* Normal Parking Lights	**3 Flashes**	**2 Park Light Flashes on disarm**

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 horn honks.
Release the Program Button . Press momentarily to move to next program step or repeat to change selection.

Setting 3 Horn Honk Timing

1 5ms Pulsed Output	1 Flash	Short (Quiet) Pulses
2 20ms Pulsed Output	2 Flashes	Long (Loud) Pulses
***3 10ms** Pulsed Output	**3 Flashes**	**Normal (Medium) Pulses**

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 horn honks.
Release the Program Button . Press momentarily to move to next program step or repeat to change selection.

Setting 1- Special Door Lock/ Unlock Operations

1 Type 1	1 Flash	Unlock before start, lock after start and and shutdown
2 Type 2	2 Flashes	Lock pulse after the remote starter shuts off
3* Normal Operation	**3 Flashes**	**No additional re-lock pulses**

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

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

1 Negative Input/ 30seconds	1 Flash	Waits a maximum 30 seconds before starting.
2 Timed Delay/ 15 Seconds	2 Flashes	Ignition ON for 15 seconds before remote starting
3* Gas/ Positive Glow Plug	**3 Flashes**	**Waits 2 seconds to start if no diesel input is detected**

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

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

1Type 1	1 Flash	Pulse after start and with lock
2Type 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 Switch 3 times to select setting 3 (This will be confirmed by 3 LED flashes and 3 horn honks)
Press and hold the Program Switch until you receive the appropriate # of park light flashes and/or horn honks.
Release the Switch. Press the Program 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 Switch 4 times to select setting 4 (This will be confirmed by 4 LED flashes and 4 horn honks)
Press and hold the Program Switch until you receive the appropriate # of park light flashes and/or horn honks.
Release the Switch. Press the Program button 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 5 Seconds	2 Flashes	5 sec Max time that starter will stay engaged
3* 3 seconds	**3 Flashes**	**3 sec Max time that starter will stay engaged**

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

Setting 6- Starter Kill/Anti-Grind- Orange wire on 14-Pin connector.

1 Auxiliary Output	1 Flashes	Output activated by button 5. See page 11 for options.
2 Active Starter Kill	**2 Flashes**	**locked, Before ignition and 2 seconds after ignition**

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

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

Menu 4 - Tach Settings

Setting 1- Method 1- Auto Tach Learn

1) Plug in the module, the park lights will flash and the horn will honk two times.*
***If the lights do not flash check connections. Ign must be off when plugged-in.**
2) Turn the Ignition Key to the ON position. (The Park Lights will turn on).
3) Start the vehicle with the ignition key, The LED's on antenna will come on solid when proper tach signal is detected*. The Tach Learning process will take up to 36 seconds. When the system has learned the Tach signal the park lights flash and the horn (Optional) will honk twice to confirm Tach Learning**.
Note: The system will flash the park lights seven times if not Tach Learned and the start button is pressed. Must be tach learned before remote starting.
* If the LED's do not turn on or flash erratically, A proper tach signal was not detected.
** If the park lights do not flash in auto tach learn mode it may be necessary to connect to a different tach source. Connect the tach wire to the coil pack or fuel injector wire*.
******The Tach wire must be above 2 Volts A/C for proper detection.**

Setting 1- Method 2- Low Idle Learn

This option is used for vehicles that maintain a HIGH or erratic idle after starting and need more that 30 seconds to establish a stale idle.

1) - Enter Program Mode (Ignition ON-OFF-ON-OFF-ON) then press the Program button 1 time.
2) - Enter Program Menu 4 - Press the # button on the remote transmitter.(Button #4).
3) - Start Vehicle - Using the key, make sure not to turn the key. Do not turn key off then start.
4) - Press the Program Button - One time (The LED's on the will start flashing in single cycles)
5) - Press And Hold - The Program Button for five seconds or until the horn (Optional) honks once.
6) - Release Button - The LED's will turn on solid if a proper Tach is detected.

Setting 2- Adjust For Over-Crank

1) - Enter Program Mode (Ignition ON-OFF-ON-OFF-ON) press the Program button one time.
2) - Enter Program Menu 4 - Press the # button on the remote transmitter.(Button #4).
3) - Press the Program Button - Two times (The LED's on will start flashing in cycles of two)
4) - Press And Hold - The Program Button for five seconds or until the horn (Optional) honks once.
5) - Release Button - And exit program mode. Test the remote starter and adjust again if needed*.
* Try changing to a different tach source if adjustment is not successful.

Note: Each time the park lights flash (Horn honks) the tach is decreased by 10%. Continue to hold the program button to reduce the Tach by multiple percentages.

Setting 3- Adjust For Under-Crank

1) - Enter Program Mode (Ignition ON-OFF-ON-OFF-ON) then press the Program button on the antenna 1 time.
2) - Enter Program Menu 4 - Press the # button on the remote transmitter.(Button #4).
3) - Press the Program Button - Three times (The LED's on the antenna will start flashing in cycles of three)
4) - Press And Hold - The Program Button for five seconds or until the horn (Optional) honks once.
5) - Release Button - Exit program mode. Test the remote starter a number of times and adjust again if needed*.
* Try changing to a different tach source if adjustment is not successful.

Note: Each time the park lights flash (Horn honks) the tach is increased by 10%. Continue to hold the program button to reduce the Tach by multiple percentages.

New Auxiliary Output Menu.

The auxiliary output menu allows the installer to choose the output on a desired wire from the main unit. This option will allow for such things as custom remote features, additional remote starter accessories and button configurations.

Enter menu 5 By pressing button 5, located to the left of the # & * buttons.

Setting 1 - Output 1 - Yellow wire on the 14-pin connector

1 Ground On Start	1 Flash	Ground output During crank (Bulb test/ Caravan 2nd Starter...)
2 Park Light (Negative)	2 Flashes	Negative output upon park light activation
3 Re-arm	3 Flashes	See starter settings options, Setting 3

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

Setting 2 - Output 2 - Brown wire on the 14-pin connector

1 Dome Light Supervision	1 Flash	30 second output on unlock
2 Second Lock Output	2 Flashes	Press Unlock twice within 3 seconds (Window Roll-up...)
3 Disarm	3 Flashes	.75 Second pulse on Unlock and start

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

Setting 3 - Output 3 - Red/White wire on the 14-pin connector

1 Dome Light Supervision	1 Flash	30 second output on unlock
2 Second Lock Output	2 Flashes	Press Unlock twice within 3 seconds (Window Roll-up...)
3 Trunk Release	3 Flashes	Output for .75 seconds or until the button is released

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

Setting 4 - Output 4 - Orange wire 0n the 14-pin connector

1 Park Light (Negative)	1 Flash	Negative output upon park light activation
2 Dome Light Supervision(Button 5)	2 Flashes	30 second output on unlock
3 Latched Output (Button 5)	3 Flashes	Activated on first button press, deactivates on second press.
4 60 Second Output(Button 5)	4 Flashes	Output will activate for 60 seconds when button 5 is pressed.
5 Momentary Output (Button 5)	5 Flashes	Output will activate for .75 seconds when button 5 is pressed

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

Note: Setting 6 in the Starter Settings menu must be programmed for option 2 (Auxiliary Output) before this menu will operate as an Auxiliary output.

Setting 5 - Output 5 - Yellow wire on the 2-pin white connector

1 Momentary Output (Button 6)	1 Flash	Output will activate for .75 seconds when button 5 is pressed
2 60 Second Output (Button 6)	2 Flashes	Output will activate for 60 seconds when button 5 is pressed.
3 Latched Output (Button 6)	3 Flashes	Activated on first button press, deactivates on second press. (Button 5)
4 Ground On Start	4 Flashes	Ground output During crank (Bulb test/ Caravan 2nd Starter...)
5 Park Light (Negative)	5 Flashes	Negative output upon park light activation

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

Auxiliary Outputs

Ground On Start (Low Current)*
This output will supply a 500ma ground output at the same time the starter motor engages. The output will stay on until the starter motor disengages. This output can be used for Low Crank (Bulb Test) activation on the GM Passlock system, GM Daytime Running Lights, Second Starter Relays and Negative starter wire like what is found on the 2001/2002 Dodge Caravans.

Park Lights (-) (Low Current)*
This output will supply a 500ma ground output for the activation of negative park light systems. This output will work exactly as the positive park light output does.

Second Lock (Low Current)*
This output will supply a 500ma ground output if the lock button is pressed twice within three seconds. This output can be used to trigger such things as Window Roll-up Modules and power sunroof control.

Dome-Light Supervision (Low Current)*
This output will supply a 500ma ground output for 30 seconds when the unlock button is pressed. This output can be used to turn on the vehicles Dome Light circuit for added safety and convenience. The output will turn off when the ignition is turned on and the brake is pressed.

Latched Output (Low Current)*
When activated this output will latch and supply a 500ma ground output. The latched output will stay active until the ignition is turned on, the system is armed, disarmed or if the same button(s) is pressed again.

60 Second Output (Low Current)*
When activated this output will supply a 500ma ground output for a period of 60 seconds. The output will stay active until the ignition is turned on, the system is armed or disarmed by the remote transmitter.

Momentary Output (Low Current)*
When activated this output will supply a 500ma ground the output will stat on until the activation button is released. This output can be used to trigger such things as Window Roll-up Modules and power sunroof control.

Note: Buttons 5 and 6 on the remote transmitter must be programmed on before they will control any functions. Button 5 must be programmed on first in the Starter settings menu, setting six, option 2 (Aux. Output). Button number 6 must be programmed in the Auxiliary Options Menu setting #5

***Low current outputs are designed to activate relays and should never be used for accessory's that require more than 500ma.**

Manual Transmission Remote Starters.

Never Install A Automatic Transmission Remote Starter Into A Manual Transmission Vehicle!!!

If installing on a convertible vehicle,(NOT RECOMMENDED) Install a radar sensor to protect the proximity of the gear shift lever. The radar should be connected so that if the field is disturbed the radar sensor module will trigger the door or hood input which will cancel the Reservation Mode.

The Following Wires Must Be connected In Addition The Basic Starter Connections:

Wire Color	Function	Connection
- ***Black/White***	Park Brake Input	Connect to the vehicles park brake wire*****
- ***Green***	(-)Door Pin Sensing	Connect to Negative door pin system.**
- ***Violet***	(+)Door Pin Sensing	Connect to Positive door pin system.***

***** This wire is located at the park brake switch. The wire will switch to (-) when the park brake is applied.**Never connect the Black/White wire straight to a ground!!!**

****** A Negative door pin wire will be (+) or neutral when the door is closed then switch to (-) when the door is opened. Always ensure that **all** the vehicles doors are sensed by this wire.

******* A Positive door pin wire will be (-) or neutral when the door is closed then switch to (+) when the door is opened. Always ensure that all the vehicles doors are sensed by this wire.

Note: If any Door Pin Switches or the Park Brake Switch is not working correctly... **"DO NOT INSTALL THIS SYSTEM UNTIL THE VEHICLE IS REPAIRED!!!"**

In most cases the clutch switch will need to bypassed during Remote Starting. This is a temporary bypass, **the clutch switch should never be disconnected or altered to not work as it is indented to*.(AS A SAFETY SWITCH)***

There are several styles of clutch switches and all are bypassed in a different manner.

Reservation Mode - Manual Transmissions Only

The System Must Be Set Into Reservation Mode To Operate. 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 and the horn will honk

Step 3 - Turn the ignition key off and the vehicle will continue 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.

* 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.

To re-enter the vehicle without canceling the Reservation Mode (Forgot something...) the vehicle must first be remote started. While the vehicle is running the door may be opened, when done in the vehicle close the door and hold the start button until the remote starter shuts off. Note: When pressing the start button, the system will flash the park lights four times slowly If the vehicle has not been placed into Reservation Mode or if the Reservation Mode has been canceled. (Door Opened, Hood Opened...). Note: If the system is in the Lock position,* the Unlock button must be pressed before entering the vehicle while it is running by the remote starter.

*** This will be necessary regardless if Keyless Entry was installed or not. The remote starter is If the system is in the lock position the LED's on the antenna will flash on and of once every half second.**

Other Features

Cold Start Mode

1.Press and release the # button, then within two seconds press and hold the ✻ button for six seconds. After six second the park lights will turn "On" and the start interval can be selected.

2. While the lights are "On" press the button corresponding to the desired start interval.

1 hour cycle or 0C	Press	LOCK button	1 Park Light Flash
2 hour cycle or -5C	Press	UNLOCK button	2 Park Light Flashes
3 hour cycle or -15C	Press	✻ button	3 Park Light Flashes
4 hour cycle or -25C	Press	# button	4 Park Light Flashes

3. The system will remote start for the programmed runtime at the selected start interval for a maximum
24 hour time period then exit the Cold Start Mode.

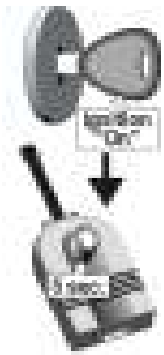
TO CANCEL COLD START MODE

1. Press & release the # button, then press and hold the ✻ button for four seconds.
2. The System will respond with two flashes and two horn honks (optional).

Starting the vehicle with the key or remote starting will cancel Cold Start Mode.
Cold Start Mode Will Automatically turn off after 24hrs.
Never set the Cold Start Mode if the vehicle is park in a Attached or adjoined Garage or Car Port.

System Service Mode (Valet Mode)

Service Mode is designed to disable the Remote Starting System. Service Mode must be activated when having the vehicle serviced. When the system is in Service Mode the Keyless Entry will still operate, if the start button is pressed the system will not start and give the diagnostic for Service Mode by flashing the vehicles park lights 3 times. The system is easily put in and out of Service Mode and should never be ignored for "Lack Of Convenience"



Activating Service Mode

1. While the ignition is in the "ON" position, press and hold the Program Button located on the antenna for five seconds. The park lights will flash five times and the horn (optional)will honk five times to confirm that the system is in Service Mode.

**** The LED's on the antenna will be "ON" solid when in Service Mode.***

Deactivating Service Mode

1. While the ignition is the "ON" position, press and hold the Program Button located on the antenna for five seconds. The park lights will flash two times and the horn (optional)will honk two times to confirm that the system has exited Service Mode.

**** The LED's will turn off and the system will return to normal operation.***

System Service Mode (Valet Mode) - By Remote

Activating Service Mode

1. Press and release button #4 then within 2 second press and hold the same button for 8 seconds. The park lights will flash five times and the horn (optional)will honk five times to confirm that the system is in Service Mode.

**** The LED's on the antenna will be "ON" solid when in Service Mode.***

Deactivating Service Mode

1. Press and release button #4 then within 2 second press and hold the same button for 8 seconds. The park lights will flash five times and the horn (optional)will honk five times to confirm that the system is in Service Mode.

****The LED's will turn off and the system will return to normal operation.***

Transmitter Programming

Step 1 - Within three seconds turn the 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** remote's and press the # button on each of the **2nd car** remote's 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 4 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.

First Car

Press Once to Lock Doors and arm alarm (if equipped)
Press 2nd Time & Hold for Constant Lock Output

Press Once for Unlock doors and Disarm Alarm (if equipped)
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

Press once and hold for Car Finder
Press & Release then press START and hold for Timer Mode

2nd Car Operation

2nd Car

\# & 🔒 = Press Once to Lock Doors and arm alarm (if equipped)
Press 2nd Time & Hold for Constant Lock Output

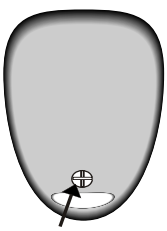
\# & 🔓 = Press Once for Unlock doors and Disarm Alarm (if equipped)
Press & Hold for Trunk / Aux Output

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

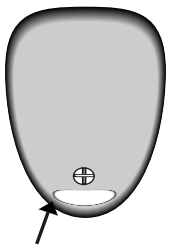
\# then \# & ✱ = Press & Release then press START and hold for Timer Mode

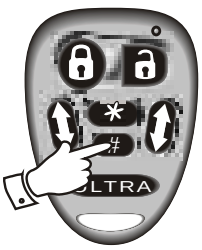
Battery Replacement

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


Carefully remove the screw from back of the remote.

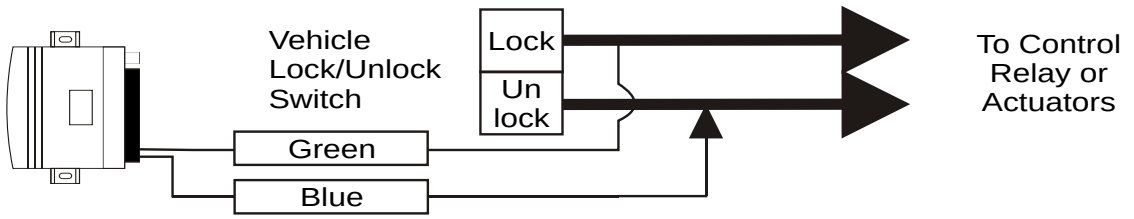
Remove top case then replace the battery.


Replace top case.

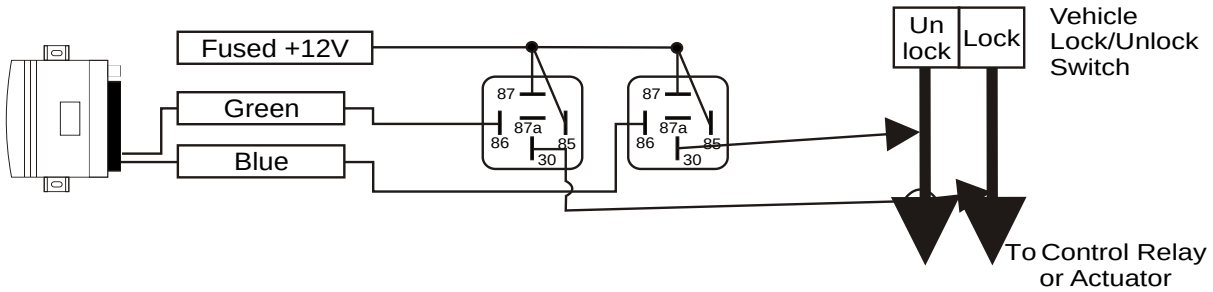
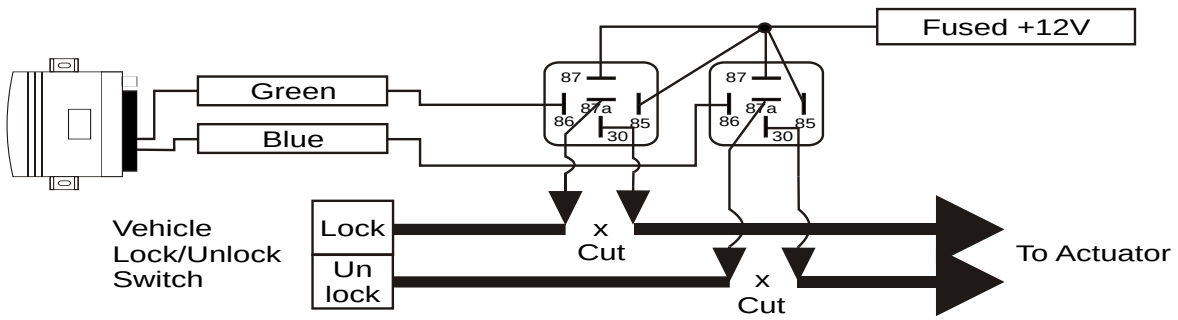


Test remote for proper operation.

Negative Type Door Locks



Positive Type Door Locks



5 Wire / Reverse Polarity Type Door Locks