

INSTALL GUIDE

MANUAL TRANSMISSION ONLY!

REMOTE STARTERS

CAR ALARMS



ULTRA START

www.ultrastarters.com

Technical Support: 877-598-2100 ext 1

support@ultrastarters.com

Note: Some features may not be available on certain models.

Warning!!

CARBON MONOXIDE MAY CAUSE SERIOUS INJURY, EVEN DEATH!

It is the sole responsibility of the user to place the system in Service Mode when parking in an enclosed area ex: *garage*, partially enclosed area ex: *carport*, or when the vehicle is being serviced.

NEVER INSTALL IN AN AUTO TRANSMISSION VEHICLE!!!

Table of Contents

Table of Contents	Page 2
Component/Feature List	Page 3
Recommend Installation Procedures	Pages 4-5
Wiring Diagrams	Pages 6-7
Wiring Descriptions	Pages 8-10
6 Pin Connector	
Auxiliary Connectors	
Clutch Bypass	
Quick Start Installation	Page 11
Basic Installation	
Important Tach Notes	Pages 12-13
Auto Tach Learn	
Quick Learn Tach	
System Reset	Page 14
Programming Overview	Pages 15-16
Entering Program Mode	
Quick View Programming	
Program Menus	Pages 17-22
Program Menu 1 (User Settings)	
Program Menu 2 (Additional Settings)	
Program Menu 3 (Starter Settings)	
Program Menu 4 (Tach Settings)	
Remote Transmitter	Page 23
Transmitter Programming	
Battery Replacement	
Shock Sensor	Page 24
Important Security Notes	
Reservation Mode	Page 25
Door Lock Relay Wiring Diagrams	Pages 26-27
Diagnostics	Page 28

Please read manual thoroughly.

Components

- Control module
- 2 Remote Transmitters
- Antenna with built in Program Button and LEDs
- 6 pin Main harness
- 14 pin auxiliary harness
- 3 pin keyless entry harness
- 3 pin auxiliary harness (not available on all models)
- Owner and Install guide's
- Hood pin switch

Feature List

- Auto Tach (Tachless, TL series only) learning with Quick Learn
- Run Time: 4/15/45 minutes
- Door locks: .125s/.75s/3s / Double unlock / Ignition lock/unlock
- Horn* or Siren** output 5ms/10ms/50ms
- Timer Mode Star with 3 different start intervals
- Programmable Wait to Start or (+/-) diesel Glow plug input
- Ground While Running/Anti-grind protection/Starter kill
- System Override Protection/Service Mode (Valet)
- Park light and LED diagnostics
- Panic mode
- Engine Idle mode

*1271M/3271M/3266M series

**2271M/4271M/4266M series

IMPORTANT!

NEVER INSTALL IN AN AUTO TRANSMISSION VEHICLE!!!

Recommended Installation Procedures

Remote car starters and alarms should be professionally installed. Review the installation and owner manuals and acquire a vehicle wiring diagram for the vehicle to be worked on. Take a few moments to walk around the vehicle looking for any damages and make note if any are found. Also check other functions such as the lighting system, warning or check engine lights. Check if the vehicle has a factory security or anti-theft system (Transponder or PASS-LOCK). These systems will require additional parts and labor to complete the installation. Use of the proper tools and testing equipment is also very important. **Never** use a grounding style test light. Use only a **circuit safe** test light or digital **Volt/Ohm meter** to test for wires in the vehicle. It is the sole responsibility of the installer to test and verify all connections.

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 damage to the vehicle and remote starter module. The manufacture 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 wire through the firewall into the engine compartment. If possible route the wires through a factory rubber grommet. If drilling a hole through the firewall, **BE CAREFUL**. Always check for obstructions on both sides of the firewall. After drilling, use a snap in grommet to protect the wires from sharp edges. Use split loom to insulate the wires, route the wires clear of moving parts and extreme heat. The hood pin switch must always be installed and the tach wire should always be soldered and taped properly.

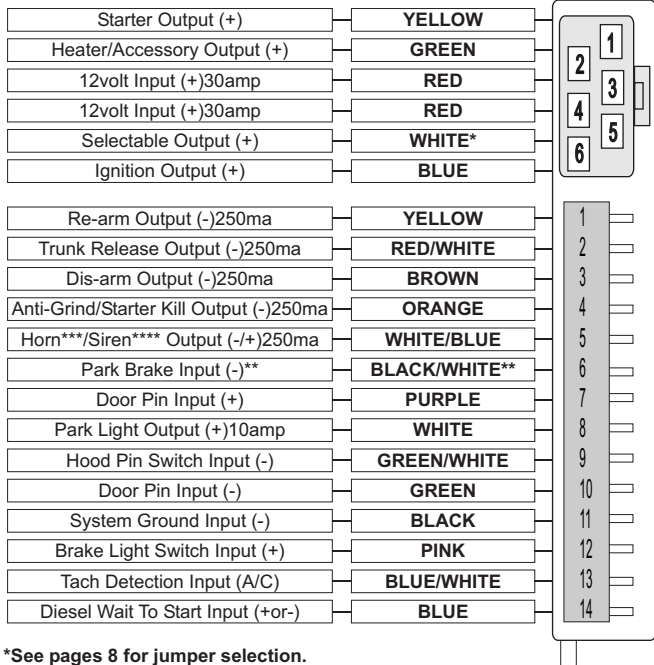
Recommended Installation Procedures

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.

Installing the External Long Range Antenna - To insure the best possible reception, place the antenna in the center of the windshield below the tint screen and behind the rear view mirror. Before attaching to the glass ensure that the surface is clean and dry. 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.

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. The system must be Tach Learned (Tachless learned on TL models) before the remote starter will make a start attempt. If the remote starter does not make a start attempt check if the park lights are flashing a diagnostic code, if so look the code up in the Diagnostic Chart to find the shutdown input that is preventing the system from starting. If the vehicle does make a start attempt but fails to start. Check all connections and insure that all wiring is connected correctly. The vehicle may be equipped with a factory anti-theft system. Vehicles equipped with factory anti-theft systems will usually have some sort of *Security* or *Anti-Theft* light located in the instrument cluster.

Wiring Diagram



*See pages 8 for jumper selection.

** Must be connected.

***Horn (-) Output on the 1271M/3271M/3266M series

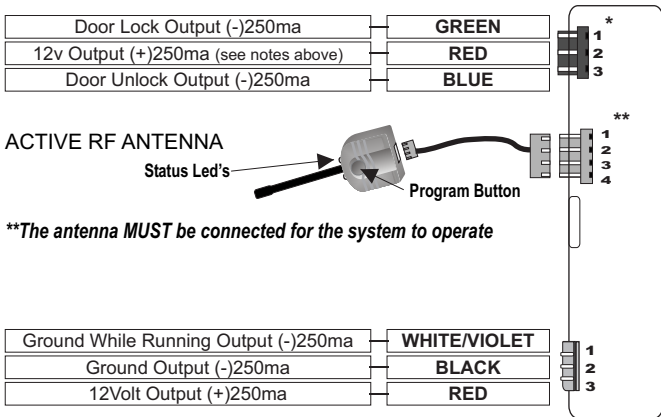
****Siren (+) Output on the 2271M/4271M/4265M series.

NOTE: 250ma outputs are low current and may require the installation of a relay for the activation of optional features and inputs.

Wiring Diagram

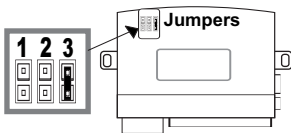
*The centre pin of the keyless entry harness is ONLY available with plug-in devices such as the VP-1, DL-3, DL-7 and Data Bus Modules.

Overloading this output will damage the remote starter.



****The antenna MUST be connected for the system to operate**

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



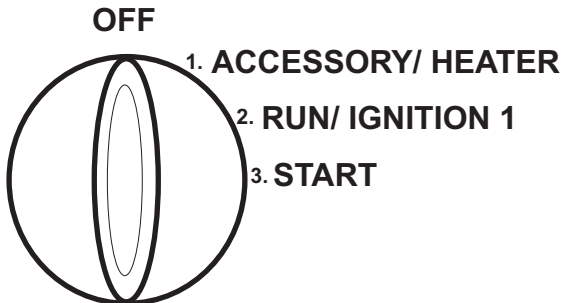
NOTE: The jumpers control the output from the **WHITE** wire on the main 6- pin harness. This is an **30amp relayed output**.

*The factory default setting of the Selectable Output jumper is position #3.

Wiring Descriptions

MAIN CONNECTOR (6pin)

Pin	Function	Description
1-YELLOW	Starter Output	- This wire will test 0V in OFF, ACCESSORY and in the ON key positions. 12v during START ONLY.
2-GREEN	Heater/Acc Output	- This wire will test 0V in the OFF and START key positions. 12-14V in the ACCESSORY key position.
3-RED	12volt Input(30amp)	- Supplies 12votls for the IGNITION, PARK LIGHT and SELECTABLE outputs.
4-RED	12volt Input(30amp)	- Supplies 12 volts for ACC and STARTER outputs.
5-BLUE	Ignition Output	- This wire will test 0V in the OFF and ACCESSORY key positions. 12V in the IGNITION and START.
6-WHITE	Selectable Output	- Output for 2nd IGNITION, 2nd ACCESSORY or 2nd STARTER.



TYPICAL IGNITION SWITCH

Wiring Descriptions

AUXILIARY CONNECTOR (14 pin)

Pin	Function	Description
1-YELLOW	Re-arm(-)	0.75 second pulse output when (1) button is pressed and after remote start shutdown. Used for factory alarm re-arm.(menu 3)
2-RED/ WHITE	Trunk Release(-)	Programmable output. Hold the (1) button for 3 seconds, output will stay active (max 5 seconds) or programmable (-)park light.
3-BROWN	Dis-arm(-)	0.75 second pulse when the (1) button is pressed and before remote starter activation. Used for factory alarm dis-arm.
4-ORANGE	Anti-Grind/Starter Kill(-)	Output active during remote start. Programmable Starter Kill (menu 3)
5-WHITE/ BLUE	Horn(-)	Output to activate factory horn. (12xx/32xx series) or
6-N/A	Siren(+)	Output to activate external siren. (22xx/42xx series)
7-PURPLE	Door Pin(+)	Input to detect 12v when door is open.
8-WHITE	Park Light(+)	10amp positive output to activate park lights. Programmable output (menu 2)
9-GREEN/ WHITE	Hood Pin(-)	Input to detect ground when hood is open. MUST BE CONNECTED.
10-GREEN	Door Pin(-)	Input to detect (-) when door is open.
11-BLACK	Ground(-)	System chassis ground input.
12-PINK	Brake Light (+)	Positive brake light switch input. Used to detect the brake switch being applied.
13-BLUE/ WHITE	Tach(A/C)	A/C Tach signal input. Used to detect engine speed to indicate vehicle is running. (Coil, Injector, cam/crank position sensors)
14-BLUE	Diesel(+/-)	Programmable Wait to Start Input. Detects 12v or negative signals.(menu 3)

Wiring Descriptions

LOCK/ UNLOCK CONNECTOR (3pin red)

Pin	Function	Description
1-GREEN	Lock(-)	Programmable LOCK output. (Menu 1)
2-RED	12volts	250ma 12volt output.
3-BLUE	Unlock(-)	Programmable UNLOCK output

ANTENNA CONNECTOR (4pin Blue)

RF Antenna with Program Button and LEDs

AUXILIARY BYPASS CONNECTOR (3pin white)

Pin	Function	Description
1-WHITE/ VIOLET	Ground While Running(-)	250ma ground output while remote starter is active.
2-BLACK	Ground(-)	250ma ground output.
3-RED	12volts(+)	250ma 12volt output.

CLUTCH BYPASS

Type 1 - Starter Wire Bypass - The starter wire travels from the key switch through the clutch switch to the starter motor. Connect the remote starters Starter Output wire directly to the starter motor side of the clutch switch.

Type 2 - Negative (High Current) - This switch grounds the factory starter relay and allows the vehicle to start. Connect a relay to ground the output side of the clutch switch wire when the remote starter is activated. The starter wire is connected at the ignition switch.

Type 3 - Connect Switch - Install a relay to connect the two wires at the switch when the remote starter is activated. The starter wire is connected at the ignition switch.

Type 4 - Disconnect Switch Install a relay to disconnect one of the wires at the clutch switch. The starter wire is connected at the ignition switch.

Testing for the correct wire is critical! Never connect to a circuit if you are not sure of its operation. Contact your dealer or technical support for more information.

Step 1 - Connect All Of the Following Wires

Main Connector (6pin)

YELLOW	Starter Output - 12volts during start position only.
GREEN	Heater/Acc Output - 12volts in the accessory position off during start and 14volts during run.
RED	12volt 30amp Input - 12volts from ignition harness or battery.
RED	12volt 30amp Input - 12volts from ignition harness or battery.
BLUE	Ignition Output - 12volts in the ignition, start and run positions.
WHITE*	Selectable Output - Selectable Output for vehicles that may require a 2nd Ignition, Accessory or Start.

Auxiliary Connector (14pin)

BLACK	System Ground Input - Connect to Chassis Ground.
WHITE	Park Light Output - Connect to Park Light system.
GRN/WHT	Hood Pin Input - Connect to the Hood Pin Safety Switch.
BLUE/WHT	Tach Input - Connect to A/C Tach source. (Above 2 volts AC)
PINK	Brake Switch Input - Connect to 12volts when the brake pedal is applied.
BLK/WHT**	Park Brake Switch - Connect to Park Brake
GREEN*** or	Door pin Input - Connect to (-) wire when door open
PURPLE***	Door pin Input - Connect to (+) wire when door open

*See jumper selector position (page 7).

**MUST BE CONNECTED.

***Connect only ONE of the door input wires.

Auto Tach/Tachless Learn

IMPORTANT! The system must be Tach Learned before remote starting.

- 1) Turn the ignition key to the "ON" position. The park lights will turn "ON"
- 2) Start the vehicle with the key. The LEDs on the antenna will turn on if a proper tach signal is detected**, after 30-35 seconds the park lights will flash and the siren will chirp twice to confirm Tach Learn.

NOTE: The LEDs will not turn "ON" for Auto Tachless Learn on the TL series.

- * If the LEDs do not come "ON" during tach learn, a proper tach signal was not detected.
- **If the park lights do not turn on check for proper connection on the BLUE ignition wire at the 6-pin connector. This wire should be connected to the vehicle main ignition wire and must not turn off during the start position. If the ignition connection is correct, reset the system (see System Reset page 14) and repeat step #1.
- ***If the park lights do not flash in auto tach learn mode it may be necessary to connect to a different tach source. It is important the ignition output from the remote starter is connected to a wire that does not turn off in the crank position. The remote starter will not tach learn if connected to the wrong wire.

For best results connect the tach wire to the coil pack or to a fuel injector wire.

New - If the original Tach source is changed a system reset must be performed before a new tach signal can be learned to the system. This does not apply if the Quick Learn feature is being used. (See page 14 for System Reset).

Your Basic Install Is Complete!

NOTES:



- 1) If the vehicle does not start when the remote starter is activated, the park lights will flash a diagnostic code. (See Diagnostic Chart page 28).
- 2) If the vehicle still does not start, check all connections and check for factory Anti-Theft system.

Important Tach Notes

Tach Learning the remote starter is one of the most important steps in the installation process. Do not tach learn vehicle while the engine is in high idle. To ensure the best possible tach setting, ensure that the vehicle is at low idle/ normal operating RPM. Vehicles such as Toyota and Honda may idle much higher when the engine is warm compared to starting the vehicle when the engine is cold. The Quick Learn feature may be used to tach learn the vehicle again but at a normal engine RPM.

Quick Learn Tach (with Blue/White connected only)

Quick Learn Tach is designed to re-learn the remote starters tach setting while the vehicle is at normal idle RPM. Vehicles such as Toyota and Honda will run at a very high idle for a number of minutes when first started. If tach learned when the vehicle is at high Idle, then remote started when the vehicle is cold. The engine does not increase to the RPM that is was learned at. The following steps can be used to learn tach at a more suitable idle:

- 1) Start the vehicle and leave it running with the ignition key until the engine idles down.
- 2) Press and hold the brake pedal. 
- 3) Press and release, then press and hold the Program Button. 
- 4) The park lights will flash to confirm Quick Learn Tach*.

NOTE: The System MUST be “Tach Learn” before the “Quick Learn” feature will function.

TIP: “Manual Low Idle Learn”. While in “Auto Tach Learn” mode, firmly apply the park brake and press the brake pedal. Place the transmission into reverse gear this will lower the Engine Idle.

System Reset

The system reset will clear any changes made to the Program Menu as well as the Tach setting.

- 1) Turn the ignition key from “Off” to “On” 3 times, **ON-OFF-ON-OFF-ON** within three seconds. (Leave the key in the **ON** position)
- 2) Press and release the **Program Button** located on the antenna. The park lights will turn on and the siren or horn (optional) will chirp one time.
- 3) Then press and hold the **Program Button** until the park lights flash and the siren or horn (optional) will chirp 3 times slowly to confirm system reset. ***System is now reset to factory defaults.***

NOTE: System Reset does not delete the remote transmitter codes from memory.

Important! When the system reset is complete, the system **must** be Auto Tach/Tachless learned before the remote starter will operate.

Entering Program Mode

Ignition 3x
On/Off
On/Off On



Press and
Release the
Program Button



For Menu 1,
press the
Ⓛ button

For Menu 2,
press the
Ⓛ button

For Menu 3,
press the
* button

For Menu 4,
press the
button

- 1) With the ignition in the OFF position, turn the ignition key from “Off” to “On” 3 times, ON-OFF-ON-OFF-ON within three seconds.

NOTE: Leave the key in the ON position

- 2) Press and release the Program Button. The park lights will flash and the horn (optional) or siren will chirp to confirm entering program mode.
- 3) Select desired Program Menu (See below). The park lights will flash and the horn (optional) or siren will chirp to confirm the selected menu.
- 4) Select Programmable Setting:
 - a) *Press and release* the Program Button the correct number of times to select the desired Program Setting. The park lights and LEDs will flash and the horn (optional) or siren will chirp to indicate the Program Setting that has been selected. *For example:* 1 flash/chirp= Program Setting 1; 2 flashes/chirps= Program Setting 2; etc...
 - b) *Press and Hold* the Program Button until the park lights flash and the horn (optional) or siren chirps to confirm the desired setting. *For example:* 1 flash/chirp= Setting 1; 2 flashes/chirps= Setting 2; etc...
 - c) Turning the ignition key to the “Off” position or 30 seconds of no activity will exit Program Mode. This will be confirmed with a light flash and a long siren chirp or honk (optional). The Program Menu may be changed at any time by pressing the transmitter button (below), this will allow the installer to jump from one menu, then quickly jump to another menu and change another setting without re-entering Program Mode.

Program Menus

Menu 1: User Settings (Ⓛ Button)

Pages 17-18

This program menu is for the adjustments for the user and door lock options.

Menu 2: Additional Settings (Ⓛ Button)

Page 19

This program menu is for additional settings.

Menu 3: Starter Settings (* Button)

Pages 20-21

This program menu is for various remote car starter applications.

Menu 4: Tach Settings (# Button)

Page 22

This program menu is for tach signal adjustments.

Quick View Programming

Menu 1 - Press (i)	1 Flash	2 Flashes	3 Flashes
1 Ignition Lock	Enabled	Lock Only	Disabled
2 Siren Output	Type 1	Type 2	All chirps
3 Lock&Unlock Options	Double Unlock	3 second	3/4 second
4 Unlock/Disarm	125ms	750ms	
5. Passive Locks*	Disable	Enable	
6. Shock Sensor*	Disable	Enable	
7. Passive Arming*	Type 1	Type 2	Disable

Menu 2 -Press (i)	1 Flash	2 Flashes	3 Flashes
1 Secure Service Mode	15 seconds	5 seconds	
2 Park Light Output	30 seconds	(-) Park Light	(+)Park Light
3 Siren Timing	5ms	50ms	10ms
4 The (⊕) Button Output	Trunk	N/A	Car Finder
5 Reservation Mode	Manual	Auto Reservation	

Menu 3 -Press *	1 Flash	2 Flashes	3 Flashes
1 Lock/ Unlock Type	Type 1	Type 2	Normal
2 Gas/ Diesel	Negative	15 second	Gas/Positive
3 Rearm Output	Type 1	Type 2	Rearm
4 Run Time	4 Min	45 Min	15 Min
5 Crank Time	10 seconds	3 seconds	5 seconds
6 Starter Disable/GWR	Active	Passive	GWR
7 Safety Start**	2 Press Start	1 Press Start	

Menu 4 -Press #	1 Flash	2 Flashes	3 Flashes
1 Low Idle Learn	Low Idle Learn		
2 Adjust For Over Crank	Reduced by 10%		
3 Adjust For under Crank	Increased by 10%		

Bold type indicates settings that are Factory Default.

*Alarm versions ONLY!

**Not available on 3271M/3266M and 4271M/4266M series.

See the following pages for more detailed programming instructions.

Menu 1- User Settings



Ignition 3x
On/Off
On/Off On



Press and
Release the
Program
Button



Press and
Release the
i button for
Menu 1



Press and Release
the Program Button
Number of Times for
the Setting Chosen



Press and Hold
the Program Button
to Change Option

Setting 1 Ignition Auto Lock

- | | | |
|-----------------------|-------------------------|--|
| 1) Enable | 1 Flash/Chirp | Doors Lock/Unlock with Ignition key. |
| 2) Ignition Lock Only | 2 Flashes/Chirps | Doors Lock when ignition is turned "ON" only. |
| *3) Disable | 3 Flashes/Chirps | Lock/Unlock with remote transmitter ONLY. |

Press & Release the Program Button 1 Time (Setting 1) Confirmed with 1 LED flash.

Press & Hold the Program Button until the appropriate # of park lights/siren chirps, then release

Press & Release the Program Button to proceed to the next step.

Setting 2 Siren/Horn Chirp Settings (14 pin auxiliary connector, pin 5)

- | | | |
|-------------------------------|-------------------------|-----------------------------------|
| 1) Lock/Unlock chirps Disable | 1 Flash/Chirp | Chirps for Panic/Car Finder Only. |
| 2) Lock/Unlock chirps Enable | 2 Flashes/Chirps | No Chirps for Start ONLY |
| *3) All Chirps Enable | 3 Flashes/Chirps | Chirps for all features. |

Press & Release the Program Button 2 Times (Setting 2) Confirmed with 2 LED flashes.

Press & Hold the Program Button until the appropriate # of park lights/siren chirps, then release.

Press & Release the Program Button to proceed to the next step.

Setting 3 Door Lock Options

- | | | |
|--------------------------------------|-------------------------|--|
| 1) Double Unlock Pulse | 1 Flash/Chirp | .75 Second lock & 2 unlock pulses |
| 2) 3 Second Lock & Unlock | 2 Flashes/Chirps | 3 Second Lock & Unlock Pulses |
| *3) .75 Sec Lock & Unlock | 3 Flashes/Chirps | .75 Second Lock & Unlock Pulses |

Press & Release the Program Button 3 Times (Setting 3) Confirmed with 3 LED flashes.

Press & Hold the Program Button until the appropriate # of park lights/siren chirps, then release.

Press & Release the Program Button to proceed to the next step.

Setting 4 Door Unlock & Disarm Pulse Duration

- | | | |
|--------------------------|-------------------------|---|
| 1) Short Pulses | 1 Flash/Chirp | 125ms pulses on Unlock & Disarm outputs |
| *2) Normal Pulses | 2 Flashes/Chirps | 750ms pulses on Lock/Unlock & Disarm outputs |

Press & Release the Program Button 4 Times (Setting 4) Confirmed with 4 LED flashes.

Press & Hold the Program Button until the appropriate # of park lights/siren chirps, then release.

Press & Release the Program Button to proceed to the next step.

Setting 5 Active/Passive Locks (2271M/4271M/4266M series ONLY)

- | | | |
|---|-------------------------|--|
| 1) No Auto-Lock with Passive Arm | 1 Flash/Chirp | Doors do not auto-lock with passive arming |
| *2) Doors Auto-Lock with Passive Arm | 2 Flashes/Chirps | Doors Lock when passive arming |

Press & Release the Program Button 4 Times (Setting 5) Confirmed with 5 LED flashes.

Press & Hold the Program Button until the appropriate # of park lights/siren chirps, then release.

Press & Release the Program Button to proceed to the next step.

***(Default Settings)**

Menu 1- User Settings...continued

Setting 6 Sensor Enable/Disable (2271M/4271M/4266M series ONLY)

1) Sensor Disabled 1 Flash/Chirp Impact Sensor Disabled

***2) Sensor Enabled 2 Flashes/Chirps Impact Sensor Enabled**

Press & Release the Program Button 6 Times (Setting 6) Confirmed with 6 LED flashes.

Press & Hold the Program Button until the appropriate # of park lights/ siren chirps, then release.

Press & Release the Program Button to proceed to the next step.

Setting 7 Passive/Active Arming (2271M/4271M/4266M series ONLY)

1) Passive Arming 1 Flash/Chirp Auto Arms 30 seconds after last door is closed

2) Active Arming with Rearm 2 Flashes/Chirps If unlock is pressed and no door is opened

***3) Active Arming 3 Flashes/Chirps Arms with remote transmitter only**

Press & Release the Program Button 7 Times (Setting 7) Confirmed with 7 LED flashes.

Press & Hold the Program Button until the appropriate # of park lights/ siren chirps, then release.

Press & Release the Program Button to proceed to the next step.

Menu 2- Additional Settings



Ignition 3x
On/Off
On/Off On



Press and
Release the
Program
Button



Press and
Release the
Ⓜ button for
Menu 2



Press and Release
the Program Button
Number of Times for
the Setting Chosen



Press and Hold
the Program Button
to Change Option

Setting 1 Secure Valet Mode (time required to set the system into Service Mode)

- | | | |
|------------------|------------------|--|
| 1) Secure Valet | 1 Flash/Chirp | Hold the Program Button for 15 seconds |
| *2) Normal Valet | 2 Flashes/Chirps | Hold the Program Button for 5 seconds |
- Press & Release the Program Button 1 Time (Setting 1) confirmed 1 LED flashes.
 Press & Hold the Program Button until the appropriate # of park light/siren chirps, then release.
 Press & Release the Program Button to proceed to the next step.

Setting 2 Parking Light/Trunk Output (14 pin auxiliary connector, pins 2&8)

- | | | |
|-------------------------|------------------|---------------------------------------|
| 1) 30 sec. Output | 1 Flash/Chirp | On for 30 seconds when Ⓜ is pressed |
| 2) Negative Park Lights | 2 Flashes/Chirps | Switches the Park Light/Trunk Outputs |
| *3) Park Lights | 3 Flashes/Chirps | 2 Flashes when Ⓜ is pressed |
- Press & Release the Program Button 2 Times (Setting 2) confirmed 2 LED flashes.
 Press & Hold the Program Button until the appropriate # of park light/siren chirps, then release.
 Press & Release the Program Button to proceed to the next step.

Setting 3 Siren Chirp Timing (14 pin auxiliary connector, pin 5)

- | | | |
|------------------------|------------------|-----------------------------|
| 1) 5 ms Pulse Output | 1 Flash/Chirp | Short(Quiet) siren Output |
| 2) 15 ms Pulse Output | 2 Flashes/Chirps | Long(Loud) siren Output |
| *3) 10 ms Pulse Output | 3 Flashes/Chirps | Normal(Medium) siren Output |
- Press & Release the Program Button 3 Times (Setting 3) confirmed 3 LED flashes.
 Press & Hold the Program Button until the appropriate # of park light/siren chirps, then release.
 Press & Release the Program Button to proceed to the next step.

Setting 4 - The Ⓜ Button Output

- 1) Trunk
- 2) N/A
- *3) Car Finder

Press & Release the Program Button 4 Time (Setting 4) confirmed 4 LED flashes.
 Press & Hold the Program Button until the appropriate # of park light/siren chirps, then release.
 Press & Release the Program Button to proceed to the next step.

Setting 5 Reservation Mode

- | | | |
|-----------------------|-----------------|--|
| 1) Manual Reservation | 1 Flash/Honk | Activate Reservation Mode by pressing Ⓜ Button |
| *2) Auto Reservation | 2 Flashes/Honks | Activate Reservation Mode by pressing brake |
- Press & Release the Program Button 5 Time (Setting 5) confirmed 5 LED flashes.
 Press & Hold the Program Button until the appropriate # of park light/horn (optional)honks, then release.
 Press & Release the Program Button to proceed to the next step.

Menu 3- Starter Settings



Ignition 3x
On/Off
On/Off On



Press and
Release the
Program
Button



Press and
Release the
* button for
Menu 3



Press and Release
the Program Button
Number of Times for
the Setting Chosen



Press and Hold
the Program Button
to Change Option

Setting 1 Special Door Lock/Unlock Operations (Factory Alarm Rearm).

- 1) Type 1 1 Flash/Chirp Unlock before start. Lock pulse after start and shutdown.
- 2) Type 2 2 Flashes/Chirps Lock pulse ONLY after remote start shutdown.
- *3) Type 3 3 Flashes/Chirps Default Lock/ Unlock Pulses.**

Press & Release the Program Button 1 Time (Setting 1) Confirmed with 1 LED flashes.

Press & Hold the Program Button until the appropriate # of park lights/siren chirps, then release.

Press & Release the Program Button to proceed to the next step.

Setting 2 Gas/Diesel Mode (14 pin auxiliary connector, pin 14)

- 1) (-) Input 1 Flash/Honk (-) Glow Plug input. Waits maximum 30 seconds.
- 2) Time Delay 2 Flashes/Honks Waits for approximately 15 seconds.
- *3) Gas/ (+) Input 3 Flashes/Honks Waits 2 seconds if no diesel input is detected.**

Press & Release the Program Button 2 Times (Setting 2) Confirmed with 2 LED flashes.

Press & Hold the Program Button until the appropriate # of park lights/siren chirps, then release.

Press & Release the Program Button to proceed to the next step.

Setting 3 Rearm Output (14 pin auxiliary connector, pin 1)

- 1) Type 1 1 Flash/Chirp Pulse after start and with lock.
- 2) Type 2 2 Flashes/Chirps Pulse after start only.
- *3) Factory Re-arm 3 Flashes/Chirps Pulse with lock and after starter shutdown.**

Press & Release the Program Button 3 Times (Setting 3) Confirmed with 3 LED flashes.

Press & Hold the Program Button until the appropriate # of park lights/siren chirps, then release.

Press & Release the Program Button to proceed to the next step.

Setting 4 Run Time

- 1) 4 Minutes 1 Flash/Chirp Runs for approx. 4 minutes when activated.
- 2) 45 Minutes 2 Flashes/Chirps Runs for approx. 45 minutes when activated.
- *3) 15 Minutes 3 Flashes/Chirps Runs for approx. 15 minutes when activated.**

Press & Release the Program Button 4 Times (Setting 4) Confirmed with 4 LED flashes.

Press & Hold the Program Button until the appropriate # of park lights/siren chirps, then release.

Press & Release the Program Button to proceed to the next step.

***(Default Settings)**

Menu 3- Starter Settings - continued

Setting 5 Maximum Crank Time

- 1) 10 Seconds 1 Flash/Chirp 10 sec max time that the starter will stay engaged.
 - 2) 3 Seconds 2 Flashes/Chirps 3 sec max time that the starter will stay engaged.
 - *3) 5 Seconds 3 Flashes/Chirps 5 sec max time that the starter will stay engaged.**
- Press & Release the Program Button 5 Times (Setting 5) Confirmed with 5 LED flashes.
Press & Hold the Program Button until the appropriate # of park lights/siren chirps, then release.
Press & Release the Program Button to proceed to the next step.

Setting 6 Anti-Grind/Starter Kill (14 pin auxiliary connector, pin 4)

- 1) Active 1 Flash/Chirp (-)When locked and during remote start (Anti-Grind).
 - 2) Passive 2 Flashes/Chirps (-)When locked/30 seconds after ignition is OFF or #2 pressed
 - *3) GWR 3 Flashes/Chirps (-) Output during remote start only. (Anti-grind/ Bypass)**
- Press & Release the Program Button 6 Times (Setting 6) Confirmed with 6 LED flashes.
Press & Hold the Program Button until the appropriate # of park lights/siren chirps, then release.
Press & Release the Program Button to proceed to the next step.

Setting 7 Safety Start (Not available on 3271M/3266M/4271M/4266M series)

- 1) 2 Press 1 Flash/Chirp Must Press the button twice within 3 seconds to start.
 - *2) 1 Press 2 Flashes/Chirps Must Pres the button once to start.**
- Press & Release the Program Button 7 Times (Setting 7) Confirmed with 7 LED flashes.
Press & Hold the Program Button until the appropriate # of park lights/siren chirps, then release.
Press & Release the Program Button to proceed to the next step.

***(Default Settings)**

Menu 4- Tach Settings



Ignition 3x
On/Off
On/Off On



Press and
Release the
Program
Button



Press and
Release the
button for
Menu 4



Press and Release
the Program Button
Number of Times for
the Setting Chosen



Press and Hold
the Program Button
to Change Option

Setting 1 Low Idle Learn- Same function as doing the Quick Tach Learn.

This option is used for vehicles that maintain a High or Erratic idle after starting and need more than 30 seconds to establish a stable idle.

- 1) Enter Program Mode.
- 2) Press and release the # button on the remote.
- 3) Start the vehicle.
- 4) Press and release the Program Button (LEDs will be flashing one time)
- 5) Press and hold the Program Button for 3 seconds.
- 6) Release the Program Button. LEDs will be on steady to indicate correct tach signal. The park lights will flash twice and the siren will chirp twice to confirm that the tach signal has been learned.

NOTE: Must Tach Learn (see page 12) before Low Idle or Quick Tach learn.

Setting 2 Over-Crank Adjustment.**

- 1) Enter Program Mode.
- 2) Press and release the # button on the remote.
- 3) Press and release the Program Button twice. (LEDs will flash 2 times consecutively)
- 4) Press and hold the Program Button.

NOTE: The park lights will flash and the siren will chirp one time each time the park lights flash and the siren chirps the setting is increased.

- 5) Release the Program Button. (Exit Program Mode and test remote starter)

Setting 3 Under-Crank Adjustment.**

- 1) Enter Program Mode.
- 2) Press and release the # button on the remote.
- 3) Press and release the Program Button three times. (LEDs will flash 3 times consecutively)
- 4) Press and hold the Program Button.

NOTE: The park lights will flash and the siren will chirp one time each time the park lights flash and the siren chirps the setting is increased.

- 5) Release the Program Button. (Exit Program Mode and test remote starter)

****Repeat steps 1-5 if necessary.**

Remote Transmitter Learn

STEP 1 - Within 3 seconds turn the ignition key to the “ON” position three times leaving “ON” the third time.



STEP 2 - **Press and hold the Program Button.** The park lights will turn “ON” and the siren will chirp once. **Continue to hold the Program Button**, the park lights will turn “OFF” and the siren will chirp 5 times quickly.



NOTE: If the parking lights do not turn “ON”, release the Program Button and turn the ignition to the “OFF” position, wait 5sec and repeat steps 1 & 2.

STEP 3 - While holding the Program Button, press and release the button on each of the remote transmitters to be programmed

NOTE: The system will respond with one chirp when a code is learned.

Battery Replacement

The transmitter battery should be changed at least once every year to maintain proper operating range. Replace with a quality 23A 12volt Alkaline battery (1-Way remote). Replace with a quality 1.5V battery (2-Way remote).

Shock Sensor 2271M/4271M/4266M series

Shock Sensor Programming/ Adjustment

To enter shock sensor programming:

Press and hold the **ⓘ** and the **Ⓜ** buttons for three seconds.
The park lights will flash and the siren will three times.

While the park lights are "ON", strike the vehicle with the amount of force wanted to trigger the alarm.

NOTE: The siren will chirp 3 times each time the system detects impact.

Adjusting the shock sensor:

Press and release **ⓘ** to increase sensitivity (up to 10 chirps/ flashes).
Press and release **Ⓜ** to decrease sensitivity (down to 1 chirp/ flash).

NOTE: Be careful not to impact the vehicle in a area that may cause damage.
The most common location for testing and setting the shock sensor is the vehicles A-pillar. The A-Pillar is the metal support that runs from the roof of the vehicle to the hood area.

To exit and save shock sensor programming:

Press and hold the **ⓘ** and the **Ⓜ** buttons, the siren will chirp and the park lights will flash the number of times of the shock sensor impact level chosen.

Example: Level 5 = 5 Chirps/ 5 Park Light flashes

IMPORTANT SECURITY NOTES!

If the system has been triggered (shock sensor, door input..), the siren will sound for approximately 60 seconds. Press and release the **ⓘ** or the **Ⓜ** button to silence the siren (the system will remain armed).

Press and hold the **ⓘ** button to disarm the system. The siren and park lights will flash three times to indicate the system had been triggered.

Reservation Mode



Very Important! Do not set Reservation Mode if the vehicle is occupied.

Manual transmission remote starters must be set into Reservation Mode before the remote starter will activate. The activation type of Reservation Mode is determined when the system is installed.

Auto Reservation Mode (Default)

- Step 1** - While the vehicle is running, place into neutral and apply the park brake.
- Step 2*** - Press and release the brake pedal twice. The park lights will flash twice, the siren or horn (opt.) will chirp twice and the doors will unlock (opt.).
- Step 3** - Turn the ignition key off and the vehicle will continue running.
- Step 4**** - Within 30 seconds, exit the vehicle and close all the doors. The vehicle will then shut off.

Manual Reservation Mode (Optional)

- Step 1** - While the vehicle is running with the key, place transmission into neutral and apply the park brake.
- Step 2** - Press and release the  button. The park lights will flash twice, the siren or horn (opt.) will chirp twice and the doors will unlock (opt.).
- Step 3** - Turn the ignition key off and the vehicle will continue running.
- Step 4** - Exit the vehicle and close all the doors.
- Step 5**** - Press and hold the  button for 3 seconds, the vehicle will then shut off.


* If the park lights **do not** flash and stay on or the siren (horn optional) chirps a third time, repeat **Step 2**.

** If the vehicle has dome light delay, the vehicle may stay running until the dome light turns off. This is normally no longer than 30 seconds.

THE VEHICLE MAY NOW BE SAFELY REMOTE STARTED.

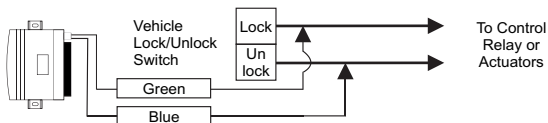
(See page 6 for Remote Starter Functions.)

If Reservation Mode is not set, the remote starter will not activate. When the button is pressed the park lights will flash 4 times. 4 flashes is the diagnostic code for "Not in Reservation Mode"

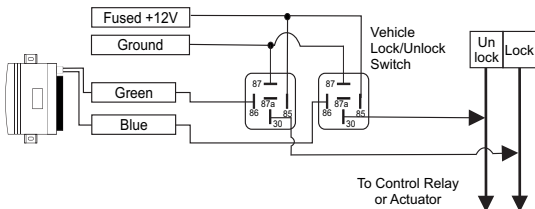
NOTE: Reservation Mode will reset if the doors of the vehicle are opened. To re-enter the vehicle without canceling the Reservation Mode (ex: forgot something..) The vehicle must first be remote started. While the vehicle is running by the remote starter the door may be opened. When done in the vehicle, close the door and remotely stop the vehicle by pressing and holding the  button.

Door Lock Relay Wiring Diagrams

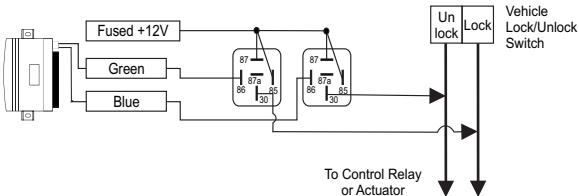
Negative Type Door Locks 250ma



Negative Door Locks (More Than 250ma)



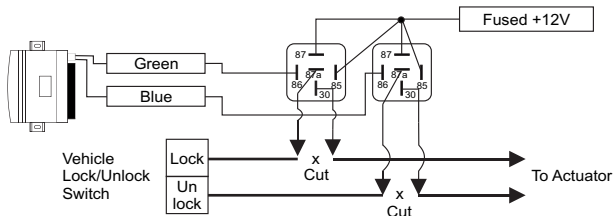
Positive Type Door Locks



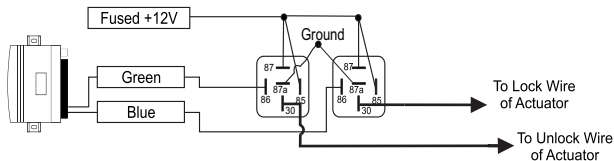
NOTE: When installing relays always use a fused power source.

Door Lock Relay Wiring Diagrams

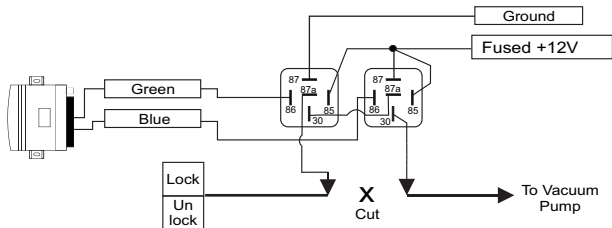
5 Wire / Reverse Polarity Type Door Locks



Aftermarket Doorlock Actuators




Vacuum Type Door Locks



NOTE: When installing relays always use a fused power source.

DIAGNOSTICS

If the remote starter does not activate when the start button is pressed the park lights will flash a diagnostic to indicate what shutdown input has been triggered. For example: *If the  button is pressed the park lights flash 3 times slowly.* Looking at the chart below this would indicate that the system is in Service Mode, simply follow the instructions listed in the owners manual on exiting Service Mode and the remote starter will begin to function as normal.

PARK LIGHTS

3 Slow Flashes
5 Flashes
5 Slow Flashes
6 Flashes
7 Flashes

STATUS LED

LEDs "ON" Solid
Series of 5 Flashes
Series of 5 Flashes
Series of 6 Flashes
Series of 7 Flashes

DIAGNOSTIC CODE

System Is In Service Mode
Hood Open
Ignition On During Start Attempt
Brake Pedal Shutdown
Tach Lock-Out

DIAGNOSTIC MEMORY

LED Flashes

5 Flashes
6 Flashes
7 Flashes
8 Flashes

Diagnostic

The system was shutdown by the brake switch input
The system was shutdown by the hood pin input
The system did not detect the tach signal.
The system made 3 start attempts without starting

To Enter Diagnostic Memory Mode:

Step 1- Turn the ignition ON then OFF. Press and release the Program Button.

Step 2- The system will respond with three park light flashes and the horn (optional) will honk 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 horn (optional) will honk once to confirm code one.
If the horn does not honk, there are no codes in memory.

Step 4- The LEDs on the antenna will flash a code corresponding to a shut down trigger. Press the Program Button again for 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.