

# 90/ 95 SERIES

Advanced Remote Starters & Vehicle Security Systems

# ULTRA START

TM

## INSTALLATION GUIDE

AUTOMATIC AND MANUAL TRANSMISSION MODELS\*  
\*MUST USE M SERIES REMOTE STARTER!

**WARNING: NEVER USE AN AUTOMATIC TRANSMISSION  
STARTER IN A MANUAL TRANSMISSION VEHICLE!**

[www.ultrastarters.com](http://www.ultrastarters.com)

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

### FCC ID NOTICE

This device complies with Part 15 of the FCC rules. Operation is subject to the following conditions:

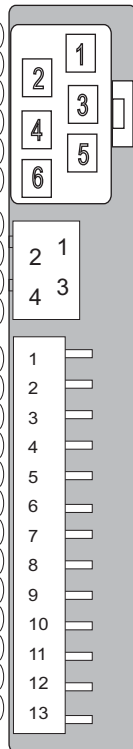
1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the part responsible for compliance void the user's authority to operate this device.

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## QUICK VIEW WIRE DIAGRAM

OUTPUT TO ACTIVATE THE STARTER CIRCUIT	YELLOW
OUTPUT TO ACTIVATE THE ACCESSORY CIRCUIT	GREEN
12VOLT/ 30 AMP MAIN POWER INPUT	RED
12VOLT/ 30 AMP MAIN POWER INPUT	RED
SELECTABLE OUTPUT* (DEFAULT 2ND IGN)	WHITE*
OUTPUT TO ACTIVATE THE IGNITION CIRCUIT	BLUE
(-) HORN OUTPUT/ (+) SIREN OUTPUT (ALARM MODELS)	BROWN**
(-) STARTER KILL/ ANTI-GRIND OUTPUT	ORANGE
SELECTABLE PARK LIGHT OUTPUT (DEFAULT POSITIVE)	WHITE
SYSTEM GROUND INPUT	BLACK
REARM OUTPUT (PULSE WITH LOCK & AFTER START)	YELLOW
DISARM OUTPUT (PULSE WITH UNLOCK & BEFORE START)	BROWN
NEGATIVE SECOND START OUTPUT	GRAY
AUXILIARY OUTPUT TO ACTIVATE TRUNK RELEASE	RED/WHITE
(-) 2ND ACCESSORY/ PROGRAMMABLE AUXILIARY 2 OUTPUT	ORANGE/WHT
AUXILIARY 1 OUTPUT/ PROGRAMMABLE OUTPUT.	WHT/VIOLET
BRAKE SWITCH INPUT (12VOLT WHEN BRAKE IS PRESSED)	PINK
PARK BRAKE INPUT (-) ("M" SERIES ONLY)	BLK/WHT***
HOOD PIN SWITCH (GROUND WHEN HOOD IS OPENED)	GRN/WHITE
TACH DETECTION INPUT (CONNECT TO COIL, INJECTOR...)	BLUE/WHITE
DIESEL WAIT TO START / TRIGGER TO START (+)	BLUE
POSITIVE DOOR INPUT (+ WHEN DOOR OPENED)	PURPLE****
NEGATIVE DOOR INPUT (- WHEN DOOR OPENED)	GREEN****



\* The selectable output can be changed in the program mode to output as a 2nd Accessory or 2nd Start output. Default output is second ignition. **\*\*This output does not change back to 2nd Ignition upon reset\*\***

\*\*(+ ) Siren output on alarm models and (-) horn honk output on starter models.

\*\*\*A "M" series remote starter must be used when installing on a manual transmission vehicle. **NEVER INSTALL AN AUTOMATIC REMOTE START IN A MANUAL VEHICLE!!**

\*\*\*\* The door pin connection is used on Manual Transmission and Alarm Models Only.

DOOR PIN CONNECTION MUST BE CONNECTED FOR PASSIVE ARMING ON NON ALARM MODELS.

**QUICK VIEW WIRE DIAGRAM**

Status LED

Program Button

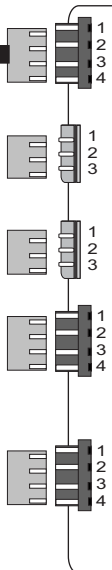


OUTPUT TO ACTIVATE DOOR LOCK CIRCUIT (-)	GREEN
OUTPUT FOR VOLTAGE INVERTER*	N/A*
OUTPUT TO ACTIVATE DOOR UNLOCK CIRCUIT (-)	BLUE
(-) WHILE RUNNING OUTPUT (BYPASS TURN ON)	WHT/VIOLET
GROUND OUTPUT FOR BYPASS MODULE	BLACK
12VOLT OUTPUT FOR BYPASS MODULE	RED

**BYPASS MODULE DATA COMMUNICATION PORT\*\*\***

The default setting is for idatalink modules. For Fortin bypass modules power-up the system with the Fortin module connected to the data port to set the default to Fortin bypass module.

PRE-WARN TRIGGER FOR ALARM MODELS (-)	BLUE**
FULL TRIGGER FOR ALARM MODELS (-)	GREEN**
GROUND OUTPUT FOR ADDITIONAL SENSOR (-)	BLACK**
12VOLT OUTPUT FOR ADDITIONAL SENSORS (+)	RED**

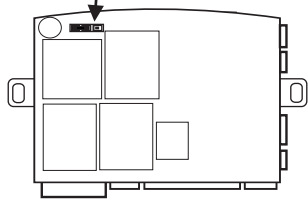
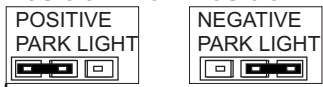


**SELECTABLE PARK LIGHT OUTPUT\*\*\*\***

BY DEFAULT THE SYSTEM COMES WITH THE PARK LIGHT JUMPER SET FOR POSITIVE PARK LIGHT OUTPUT.

TO CHANGE THE SYSTEM TO A NEGATIVE PARK LIGHT OUTPUT, PLACE THE JUMPER IN THE NEGATIVE PARK LIGHT POSITION SHOWN IN THE DIAGRAM. (**Position 2**)

**Position 1 or Position 2**



**NOTES**

INSTALL MANUAL

**PLEASE NOTE**

**\* THE CENTRE PIN OF THE KEYLESS CONNECTOR IS LOW CURRENT AND IS DESIGNED TO SUPPLY POWER TO DOOR LOCK MODULES (DO NOT CONNECT TO RELAYS) OVERLOADING THIS OUTPUT WILL DAMAGE THE MODULE!**

**\*\*THIS CONNECTOR IS USED FOR ALARM MODELS ONLY. A GROUND PULSE TO THE BLUE WIRE WILL CAUSE THE ALARM TO BEEP 3 TIMES. A GROUND PULSE TO THE GREEN WIRE WILL CAUSE THE ALARM TO ACTIVE FOR 60 SECONDS. THIS INPUT CAN BE USED FOR AN ADDITION SENSOR SUCK AS A RADAR, GLASS BREAK OR AN EXTRA SHOCK SENSOR. THIS INPUT IS TURNED ON AND OFF WITH THE MAIN SHOCK SENSOR.**

**\*\*\*THIS INPUT IS USED TO CONNECT BYPASS MODULES USING THE DATA TO DATA TYPE CONNECTION. THERE ARE 2 SELECTION TYPES. THE DEFAULT SETTING IS FOR IDATALINK MODULES. THE SECOND IS FOR FORTIN BYPASS MODULES. IF THE BYPASS KIT IS A IDATA PRODUCT SIMPLY CONNECT TO THIS INPUT AND PROGRAM THE BYPASS MODULE AS PER THE INSTRUCTIONS. WHEN INSTALLING A FORTIN BYPASS MODULES POWER-UP THE STARTER/ALARM WITH THE FORTIN MODULE ALREADY CONNECTED TO THE DATA PORT THEN PROGRAM AS PER THE INSTRUCTIONS.**

**\*\*\*\*THE THERMISTOR WILL DETECT THE ENGINE OR INTERIOR TEMPERATURE OF THE VEHICLE AND TRIGGER THE VEHICLE TO START WHEN IN COLD START MODE. THE THERMISTOR MUST BE CONNECTED PRIOR TO POWER UP TO BE DETECTED BY THE UNIT.**

**\*\*\*\*ALWAYS TEST AND CONFIRM THE PARK LIGHT POLARITY BEFORE MAKING YOUR CONNECTION TO THE VEHICLE.**

**MANUAL TRANSMISSION VEHICLES MUST BE INSTALLED USING A MANUAL TRANSMISSION MODEL. CONNECT THE PARK BRAKE AND DOOR PIN WIRES TO THE SYSTEM.**

**REMOTE STARTER. NEVER INSTALL A AUTOMATIC MODEL INTO A MANUAL TRANSMISSION VEHICLE.**

### AUTO TACH/ TACHLESS LEARNING



Start the vehicle with the ignition key.



2 CHIRPS/ 2 FLASHES = TACH MODE  
3 CHIRPS/ 3 FLASHES = DATA TACH MODE  
4 CHIRPS/ 4 FLASHES = TACHLESS MODE

#### NOTES:

When tach learning the system first sends out a request for tach from the data port. If it gets a valid rpm response over 750 rpm then it goes into data tach mode (3 flashes). If there is no response, the unit will look for the tach/tachless.

Once the starter goes on then off, the unit will learn tach, if there is no tach detected within a few seconds after starting, the system will learn in tachless mode after 20 seconds.

If there is no starter detected, the system learns tach after 30 seconds. If no tach is detected the system will learn tachless after an additional 10 seconds.

### HYBRID MODES

**Hybrid mode 1** - This option requires a tach connection. Once the vehicle starts the system will not monitor the tach input and stay running for 15 minutes.

**Hybrid Mode 2**- This setting will power up the ignition wires, pulse the start output for 2 seconds then stay on/ run for 15 minutes. See Program Menu 4, Hybrid Mode 1 & 2.

The hybrid mode 2 option is best suited for "Push to Start" systems and hybrid vehicles that may not actually start until the battery voltage drops.

This mode is also ideal for vehicles with no starter wire. "Automatic Starting". This is when the vehicle's starter motor will continue to crank and start the vehicle even if the key is only turned to the start position momentarily.

### LOW IDLE LEARNING

Hold the brake then start the vehicle with the key. Place the transmission into reverse to lower the RPM. Press and release the button on the antenna twice. The system will chirp the Horn and flash the park lights two times to confirm Tach Mode or chirp 4 times/ 4 flashes to indicate Tachless Mode re-learn.

## ENTERING PROGRAM MODE

- 1 - Cycle the Ignition Key On/Off On/Off On (Leaving the key ON)
- 2 - Press and release the Program Switch 1 time. The park lights will turn on and the Horn (optional/ Siren (alarm model) will chirp to confirm program mode entered.
- 3 - Select the Program Menu by pressing...



- Press and Release the Program Switch to advance through the settings.

(Confirmed by Park Lights/ Horn/ Siren chirps & LED flashes)

5 - Press and hold the Program Switch to change the setting.

(Confirmed by Park Lights/ Horn/ Siren chirps & LED flashes)

6 - To exit Program Mode, turn the key off.

(Confirmed by Long Horn/ Siren Chirp)

**Example- Programming Menu 1, Setting 6 to 2nd Unlock.**

1 - Cycle the Ignition Key On/Off On/Off On

2 - Press and release the Program Switch 1 time. (1 chirp/ 1 flash)

3- Press and release the lock button for Menu 1. (1 chirp/ 1 flash)

4- Press and release the program button until the LEDs on the antenna flash 6 times.

\*\*The park lights will flash and the horn (optional)/ siren will chirp 6 times to confirm the current setting)

5- Press and hold the program button. The Park Light will flash once (option 1), pause then flash twice to confirm option 2 has been selected.

\*\*The horn (optional)/ siren will chirp 1 time (option 1) then 2 times to confirm the option.

6- Release the program switch and turn off key to exit.

## SYSTEM RESET

1 - Cycle the Ignition Key On/Off On/Off On (Leaving the key ON)

2 - Press and **RELEASE** the Program Switch 1 time and the park light will turn on.

(Horn/ Siren will chirp to confirm program mode has been entered)

3 - Press and **HOLD** the Program Switch for 5 seconds or until the Park Lights flash 3 times.

(Confirmed by 3 Park Lights/ Horn/ Siren chirps)

4 - Turn the ignition key **OFF** to exit.

## PROGRAM MODE



## PROGRAM MODE 1 (1 Flash/ 1 Chirp)

## PROGRAM MODE 1

SETTING # LED FLASHES	SETTING DESCRIPTION	OPTION 1 1 CHIRP	OPTION 2 2 CHIRPS	OPTION 3 3 CHIRPS
1	IGNITION AUTO-LOCK	IGNITION AUTO-LOCK / UNLOCK	IGNITION AUTO-LOCK ONLY	IGNITION AUTO-LOCKS DISABLED
2	HORN / SIREN SETTINGS	HORN / SIREN CHIRPS DISABLED	HORN/SIREN CHIRPS ENABLED	
3	DOOR LOCK PULSE OPTIONS	DOUBLE UNLOCK & SINGLE LOCK	DOUBLE LOCK & SINGLE UNLOCK	SINGLE LOCK & SINGLE UNLOCK
4	DOOR LOCK / UNLOCK PULSES	0.25 SEC PULSES	3 SEC PULSES	0.75 SEC PULSES
5	AUX CHANNEL 1	(-) IGNITION	DOME LIGHT	AUX 1 OUTPUT WITH DISARM
6	AUX CHANNEL 2	AUX OUTPUT (2&3) WITH DISARM	2ND UNLOCK	(-) ACCESSORY OUTPUT
7	PASSIVE DOOR LOCKS	PASSIVE DOOR LOCKS DISABLED	PASSIVE DOOR LOCKS ENABLED	
8	PASSIVE ARMING/ PASSIVE ST. KILL	FULL PASSIVE ARMING ENABLED	PASSIVE SAFETY REARM ENABLED	ACTIVE ARMING ONLY
9 ALARM	SHOCK / AUX SENSOR	INTERNAL SHOCK DISABLED	AUX SENSOR DISABLED	BOTH SENSORS ENABLED



## PROGRAM MODE 2 (2 Flashes/ 2 Chirps)

## PROGRAM MODE 2

SETTING # LED FLASHES	SETTING DESCRIPTION	OPTION 1 1 CHIRP	OPTION 2 2 CHIRPS	OPTION 3 3 CHIRPS
1	VALET SETTINGS	SECURE VALET 15 SECONDS	STANDARD VALET	
2	PARK-LIGHT OUTPUT	30 SECONDS ON DISARM	NORMAL OPERATION	
3	HORN TIMING	5MS OUTPUT	50MS OUTPUT	10MS OUTPUT * 30ms ON ALARM
4 ALARM	SIREN OPTIONS	30 SECOND DURATION	PULSED FOR HORN	60 SECOND DURATION
5	HOOD PIN TYPE	N/C FACTORY TYPE	N/O AFTER MARKET TYPE	
6 M-SERIES	RESERVATION MODE	PARK BRAKE ON/OFF	PRESS # TO ACTIVATE	

## PROGRAM MODE

## INSTALL MANUAL



OR

## PROGRAM MODE 3 (3 Flashes/ 3 Chirps)

## PROGRAM MODE 3

SETTING # LED FLASHES	SETTING DESCRIPTION	OPTION 1 1 CHIRP	OPTION 2 2 CHIRPS	OPTION 3 3 CHIRPS
1	SELECTABLE RELAY	2ND STARTER	2ND ACCESSORY	2ND IGNITION
2	SPECIAL DOOR LOCK OPTIONS	UNLOCK BEFORE / LOCK AFTER START	LOCK AFTER STARTER SHUT OFF	NO ADDITIONAL PULSES
3	GAS / DIESEL MODE	NEG GLOW PLUG / 20 SEC DELAY	10 SECOND DELAY/ TRIGGER TO START	GAS / POSITIVE GLOW PLUG
4	RE-ARM OPTIONS	PULSE WITH LOCK	PULSE AFTER START (DEFROST / SEAT)	PULSE WITH LOCK & AFTER SHUTDOWN
5	RUNTIME	4 MINUTE RUNTIME	45 MINUTE RUNTIME	15 MINUTE RUNTIME
6	REMOTE START ACTIVATION	N/A	PRESS BUTTON ONCE TO START	
7	LED FLASHES	LEDS DO NOT FLASH WHEN LOCKED/ ARMED	LEDS FLASH WHEN LOCKED/ ARMED	
8 NEW	SPECIAL DISARM	PULSES ACC & GRW WHEN DISARMED	NORMAL DISARM	
9 NEW	1 & 2 BUTTON REMOTES	N/A	N/A	DEFAULT REMOTE

## #

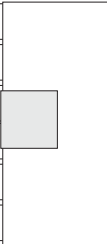
## PROGRAM MODE 4 (4 Flashes/ 4 Chirps)

## PROGRAM MODE 4

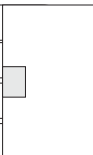
SETTING # LED FLASHES	SETTING DESCRIPTION	OPTION 1 1 CHIRP	OPTION 2 2 CHIRPS	OPTION 3 3 CHIRPS
1	TACH OPTIONS	HYBRID MODE 1	HYBRID MODE 2	AUTO TACH / TACHLESS
2	ADJUST FOR OVER-CRANK	INCREASES TACH SETTING BY 10%		
3	ADJUST FOR UNDER-CRANK	DECREASE TACH SETTING BY 10%		
4	TACH WAIT SETTINGS	300ms TACH CHECK DELAY	750ms TACH CHECK DELAY	NO TACH CHECK DELAY
5	BYPASS MODULE SELECTION TYPE	FORTIN BYPASS MODULE	IDATA LINK BYPASS MODULE	

\*The default setting is for idatalink modules. For Fortin bypass modules power-up the system with the Fortin module connected to the data port to set the default to Fortin bypass module.

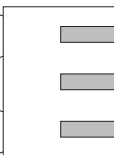
**6-PIN CONNECTOR**

OUTPUT TO ACTIVATE START CIRCUIT	YELLOW	
OUTPUT TO ACTIVATE ACCESSORY/ HEATER CIRCUIT	GREEN	
30A HIGH CURRENT 12VOLT INPUT	RED	
30A HIGH CURRENT 12VOLT INPUT	RED	
SELECTABLE OUTPUT (DEFAULT SECOND IGNITION)	WHITE*	
OUTPUT TO ACTIVATE IGNITION CIRCUIT	BLUE	

**4-PIN CONNECTOR**

(+) SIREN/ HORN OUTPUT (-)	BROWN	
STARTER-KILL/ ANTI-GRIND OUTPUT	ORANGE	
JUMPER SELECTABLE PARK LIGHT OUTPUT (+ OR -)	WHITE	
SYSTEM GROUND INPUT	BLACK	

**4 PIN AUXILIARY SENSOR CONNECTOR**

NEGATIVE OUTPUT FOR UNLOCK	GREEN	
12+ OUTPUT FOR DOOR LOCK MODULE		
NEGATIVE OUTPUT FOR UNLOCK	BLUE	

**PIN-1 YELLOW Starter Output**-This wire will test 0V when the key is off, in the Accessory position and when the Ignition is in the on position. The starter wire is 12volts during the start/ crank position only.

**PIN-2 GREEN Heater/Acc Output**-This wire will test 0V when key is off, 12volts in the ACC and IGN positions and off during start/ crank position.

**PIN-3 RED 12volt Input(30amp)**- This input supplies the 12volt power for the Ignition, Park Lights and the Selectable output.

**PIN-4 RED 12volt Input(30amp)**- This input supplies the 12volt power for the Accessory and Starter outputs.

**PIN-5 WHITE Selectable Output** - 2nd Ignition, Accessory or Start output. Programmable.

*Note: This output does not switch to default when the system is reset.*

**PIN-6 BLUE Ignition Output**- This wire will test 0V in the off and Accessory positions the switch to 12volts in the Ignition and Start positions.

**PIN-1 BROWN (-) Horn (Siren on alarm models) (Programmable)**- Connect to the negative horn wire on the vehicle for non alarm models. Connect to (+) wire on the siren (Red or Brown) for alarm models.

**PIN-2 ORANGE Starter Kill/ Anti-Grind**- This wire can be connected to an additional relay to disable the start circuit when the lock button is pressed. The output will also stay on when remote started, this will prevent the starter motor from being re-engaged while the vehicle is running.

**PIN-3 WHITE Jumper Selectable Park Light Output (+ or -)**- Connect to the vehicles positive park light wire or change the jumper and connect to the vehicle negative park light wire. The default position of the jumper is **Positive Park light Output**.

**PIN-4 BLACK System Ground Input**- Connect to chassis ground.

**PIN 1- GREEN- Negative Lock Output**

*Connect to lock wire from the switch on vehicles with a negative type switch. \*\*LOW CURRENT ONLY\*\**

**PIN 2- 12volt Output for Door Lock Module**

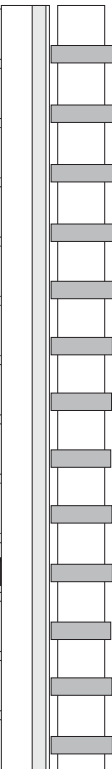
*This output will supply 12volts for a plug-in type door lock module. Do not use this input to power-up relays*

*\*\*LOW CURRENT ONLY\*\**

**PIN 3- BLUE- Negative Unlock Output**

*Connect to lock wire from the switch on vehicles with a negative type switch. \*\*LOW CURRENT ONLY\*\**

**13 PIN CONNECTOR**

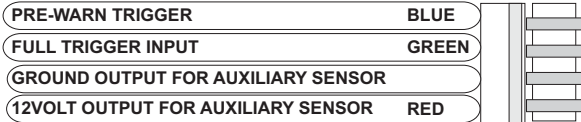
OUTPUT FOR FACTORY ALARM RE-ARM	YELLOW	
OUTPUT FOR FACTORY ALARM DIS-ARM	BROWN	
NEGATIVE STARTER OUTPUT	GRAY	
OUTPUT FOR TRUNK RELEASE ACTIVATION	RED/WHT	
NEGATIVE ACCESSORY OUTPUT/ AUXILIARY OUTPUT 2	ORG/WHT	
AUXILIARY OUTPUT 1/ PROGRAMMABLE OUTPUT	WHT/VIO	
BRAKE SWITCH INPUT (+) WHEN BRAKE IS PRESSED	PINK	
PARK BRAKE INPUT. M SERIES REMOTE STARTER ONLY.	BLK/WHT	
HOOD PIN SWITCH INPUT	GRN/WHT	
TACH WIRE INPUT	BLUE/WH	
WAIT TO START (DIESEL VEHICLES) / TRIGGER TO START	BLUE	
POSITIVE DOOR PIN INPUT (ALARMS AND MANUAL* ONLY)	PURPLE	
NEGATIVE DOOR PIN INPUT (ALARMS AND MANUAL* ONLY)	GREEN	

\*MANUAL TRANSMISSION MODEL REQUIRED.

- 1-YELLOW Re-arm(-)** (Programmable) - Supplies one .75 second pulse when locked and one .75 second pulse after remote start shutdown. Factory alarm re-arm/ RAP shutdown.
- 2-BROWN Dis-arm(-)** - .75 second pulse when unlock is pressed and one .75 second pulse before remote start activation. For factory alarm dis-arm/ "wake up".
- 3-GRAY (-) Start/ Crank** - Negative output during crank/ start.
- 4-RED/WHITE Trunk Release(-)** (Programmable)- Output will activate when the Unlock button is held for at least 3 seconds. The output will stay on for 5 seconds or until the button is released
- 5- ORG/WHT 2nd Acc (-) / Auxiliary Output 2** (Programmable) - Ground output at the same time as the primary Accessory. output. This output can be programmed to activate as and auxiliary output when the unlock and start buttons are held.
- 6- WHT/VIOLET Auxiliary Output 1/ Programmable Output** - Auxiliary output when the # button is held. Programmable to (-) Ignition/ Car Finder and Dome Light Supervision with Car Finder. **(Car Finder and Auxiliary 1 are not available on 2way models)**
- 7- PINK Brake Switch input (+)** - This wire must be connected to the wire at the brake switch that changes to 12volts when the brake is pressed.
- 8- BLACK/WHT Park Brake Input (-) Manual Transmission Only.** - Connect to the Park Brake wire. Must be connected on manual transmission models.
- 9- GREEN/WHT Hood Pin Input (-)** - Connect this wire to the supplied hood pin switch. If ground is detected on this input the remote starter will not activate.
- 10- BLUE/WHT Tach Wire Input (A/C)** - This wire is used to detect when the vehicle has started. The Tach source is typically taken from a fuel injector, coil, coil pack or crank position sensor. The Tach wire is generally found as the opposite from the common wire at the coil or fuel injector.
- 11- BLUE Wait to Start Input (+ or -)** (Programmable) - The system will wait for the input to turn off then remote start. A start delay may also be programmed to avoid this connection. Programmable trigger to start/ 2 positive pulses.
- 12- PURPLE Positive Door Input (+) Alarm & Manual Transmission Only.** - Connect this wire to the door pin switch if it changes to 12volts when the door is opened. \*Connect to door pin for Passive Arming on non alarm models.
- 13- GREEN Negative Door Input (+) Alarm & Manual Transmission Only.** - Connect this wire to the door pin switch if it changes to Negative when the door is opened. \*Connect to door pin for Passive Arming on non alarm models.

### 4 PIN AUXILIARY SENSOR CONNECTOR\*

\*ALARM MODELS ONLY



**1- BLUE Pre-Warn Trigger (-) Input**

When this wire is grounded by an auxiliary sensor (i.e: Radar Sensor) the system will chirp the SIREN 3 times.

**2- GREEN Full Alarm Trigger (-) Input**

When this wire is grounded by an auxiliary sensor (i.e: Radar Sensor) the alarm will activate for up to 60 sec.

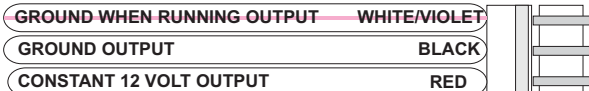
**3- BLACK Sensor Ground Output (-)**

*This wire provides a ground output for the auxiliary sensor.*

**4- RED Sensor 12volt Output (+)**

*This wire provides a 12volt output for the auxiliary sensor.*

### 3 PIN BYPASS CONNECTOR



**1- WHITE/VIOLET Wire- Ground When Running (-)**

Connect this wire to the your bypass modules negative turn on wire. When the remote starter is activated this wire will switch to ground.

**2- BLACK Wire- System Ground (-)**

Connect this wire to the ground input on the bypass module.

**3- RED Wire- 12volt Output (+) (LOW CURRENT)**

Connect this wire the 12volt input on the bypass module.

### 4 PIN DATA BYPASS

The default setting is for idatalink modules. For Fortin bypass modules power-up the system with the Fortin module connected to the data port to set the default to Fortin bypass module.

## SHOCK SENSOR ADJUSTMENTS (2WAY ALARM MODELS)

THE SHOCK SENSOR SENSITIVITY IS SET USING THE REMOTE PROGRAM MODE FEATURE. ALARM MODELS ONLY.

### ENTER REMOTE PROGRAM MODE



#### TO ENTER PROGRAM MODE

PRESS AND HOLD THE # BUTTON ON THE REMOTE FOR 4 SECONDS.  
THE REMOTE WILL BEEP 1 TIME AND THEN 3 TIMES.  
THE DISPLAY WILL SHOW "PROGRAM" & "M-1234"

### ENTER SHOCK SENSITIVITY PROGRAMMING



PRESS AND RELEASE THE UNLOCK BUTTON AND THE SENS LEVEL WILL BE DISPLAYED

### ADJUSTING THE SENSOR SENSITIVITY



PRESS AND RELEASE THE UNLOCK BUTTON TO DECREASE THE SENSITIVITY. THE LCD WILL SHOW THE CURRENT SETTING. THE LOWEST (LEAST SENSITIVE SETTING IS SEN 1.



PRESS AND RELEASE THE START BUTTON TO INCREASE THE SENSITIVITY. THE LCD WILL SHOW THE CURRENT SETTING. THE HIGHEST (MOST SENSITIVE) SETTING IS SEN 10.

PRESS AND RELEASE THE # BUTTON ON THE REMOTE TO EXIT.

If the system has been triggered (shock sensor, door input..), the siren will sound for approximately 60 seconds. Press and release the lock or unlock button to silence the siren (the system will remain armed). Press the unlock button to disarm the system. The siren and park lights will flash three times to indicate the system had been triggered.

The system can learn up to 4 different remote's. Each remote to be used **MUST** be programmed together during the same sequence. For security, when a new remote is programmed all previous remote's are deleted.

**ENTERING REMOTE PROGRAM MODE**



**Cycle the Ignition Key - ON/OFF ON/OFF ON  
(Leaving the key ON)**



**HOLD the program switch, the HORN will chirp ONCE and the park lights will turn on. (If the HORN does not chirp repeat step 1) CONTINUE TO HOLD until the HORN chirps 5 times**



**1 chirp confirms program mode entered followed by 5 chirps confirming transmitter program mode**

**PROGRAMMING REMOTE'S**



**Press & Release LOCK on the first remote.**



**Press & Release LOCK on the second remote.**



**Press & Release LOCK on the third remote.(Optional)**



**Press & Release LOCK on the fourth remote. (Optional)**



**The park lights will flash and the horn will Chirp 1 time to confirm the remote has been programmed.**



**Turn ignition key OFF to exit remote program mode when all required remote's have been programmed.**

## DIAGNOSTICS CHART

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 start 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  
4 Slow Flashes  
5 Flashes  
5 Slow Flashes  
6 Flashes  
7 Flashes  
8 Flashes

**STATUS LED**

LEDs "ON" Solid  
Series of 4 Flashes  
Series of 5 Flashes  
Series of 5 Flashes  
Series of 6 Flashes  
Series of 7 Flashes  
Series of 8 Flashes

**DIAGNOSTIC CODE**

System Is In Service Mode  
Not in Reservation Mode  
Hood Open  
Ignition On During Start Attempt  
Brake Pedal Shutdown  
Tach Lock-Out  
3 Start Attempts Without Starting

## TO ENTER DIAGNOSTIC MEMORY

**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 three time for code three...\*\*\*

**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.

\*\*\*\*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.\*\*\*\*

**LED Flashes**

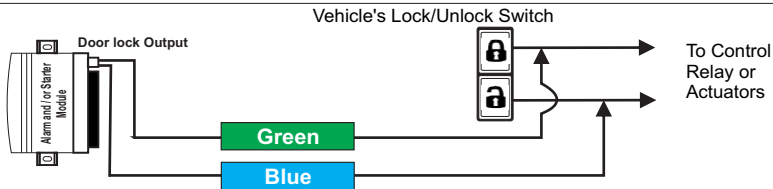
5 Flashes  
6 Flashes  
7 Flashes  
8 Flashes

**Diagnostic**

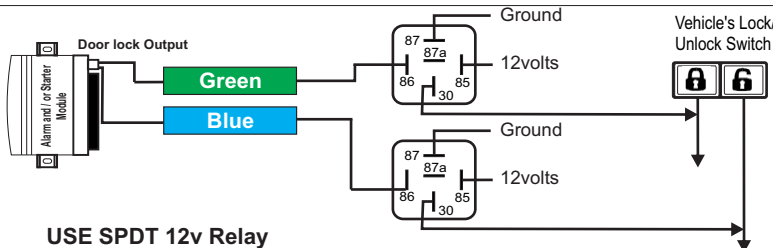
The system was shutdown by the brake switch input  
The system was shutdown by the hood pin input  
The system did not detect the Tach signal.  
The system made 3 start attempts without starting

DOOR LOCK DIAGRAMS

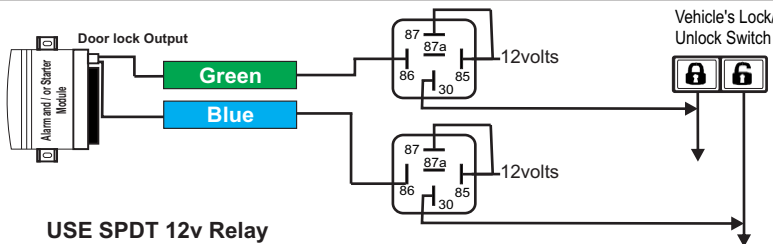
NEGATIVE DOOR LOCK  
 (LOW CURRENT)



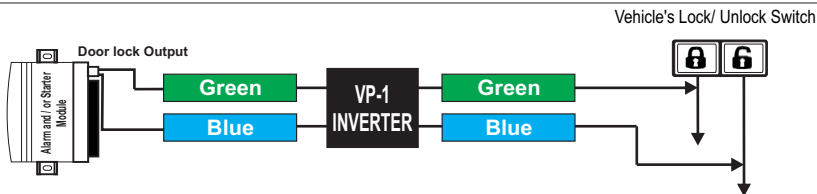
NEGATIVE DOOR LOCK  
 (LOW CURRENT)



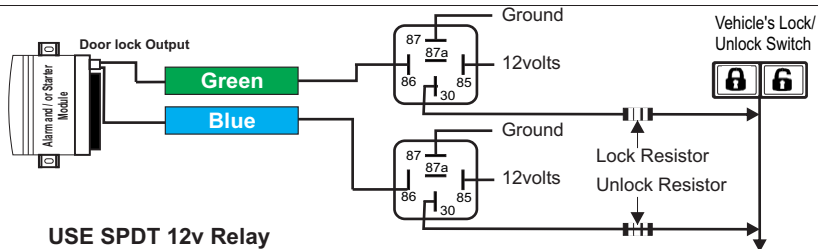
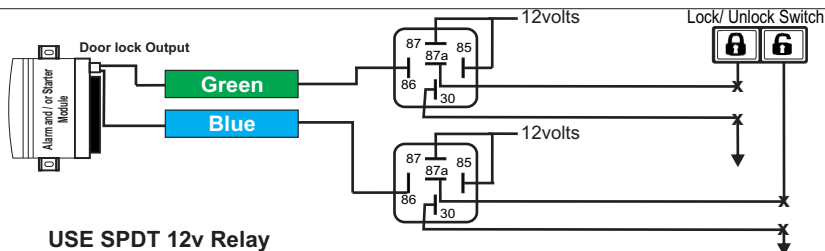
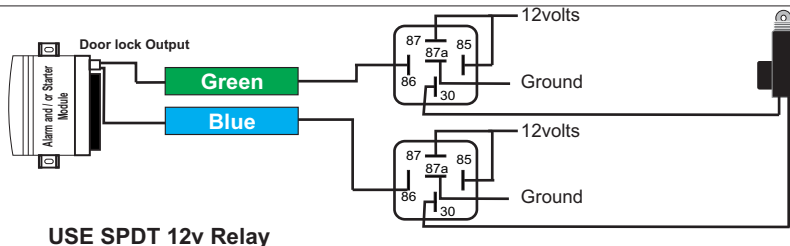
POSITIVE DOOR LOCK  
 (LOW CURRENT)



POSITIVE TYPE USING  
 INVERTER



## DOOR LOCK DIAGRAMS

NEGATIVE ONE WIRE  
DOOR LOCKSREVERSE POLARITY DOOR  
LOCK SYSTEMAFTER-MARKET DOOR  
LOCK ACTUATORS

**\*\*FOR DETAILED VEHICLE WIRING INFORMATION GO TO:  
[http://www.ultrastarters.com/wiring\\_diagrams.html](http://www.ultrastarters.com/wiring_diagrams.html)**

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