



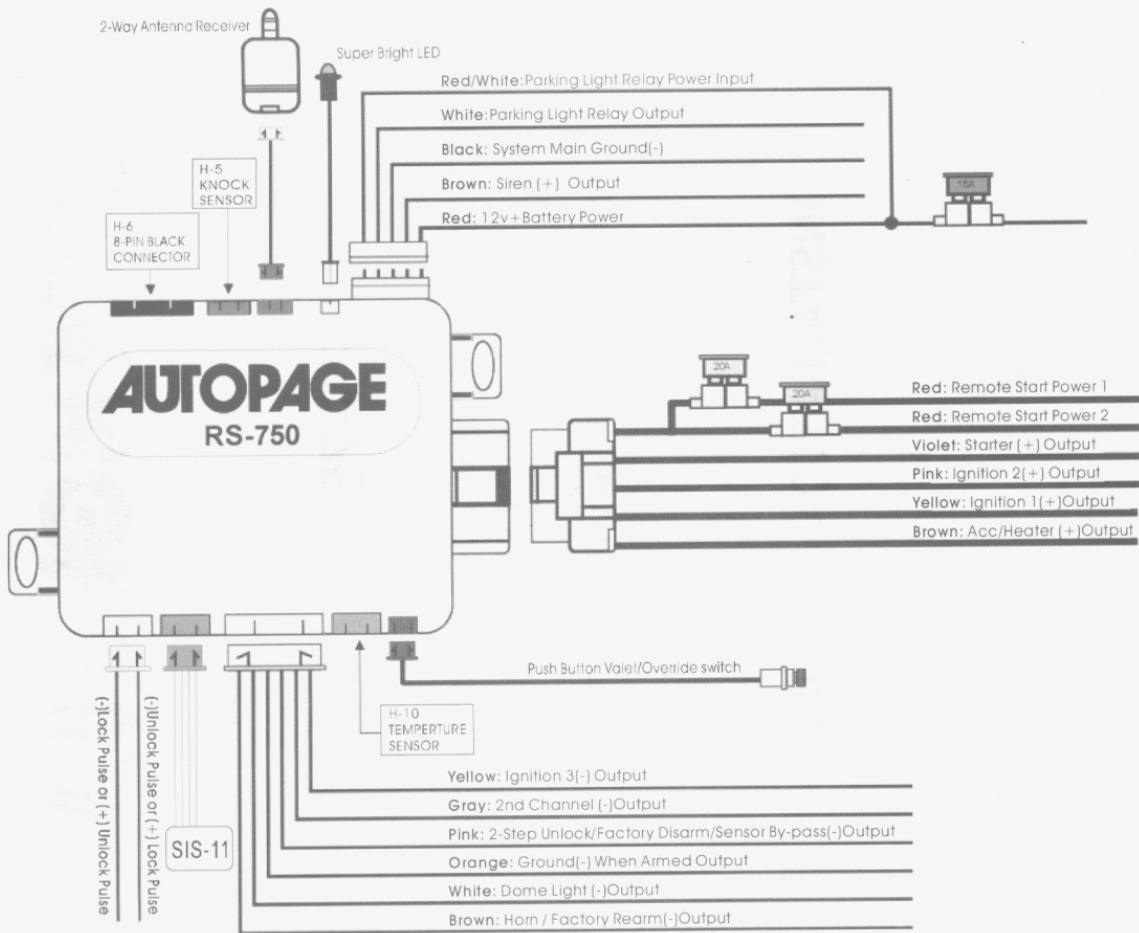
RS-750lcd

PROFESSIONAL REMOTE **CAR** STARTER
WITH ALARM SYSTEM
&
2-WAY LCD COMMUNICATION

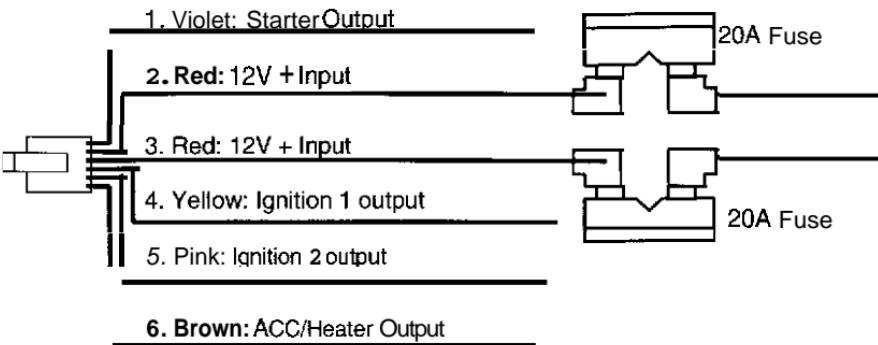
INSTALLATION MANUAL

THIS PRODUCT IS DESIGNED FOR PROFESSIONAL INSTALLATION ONLY

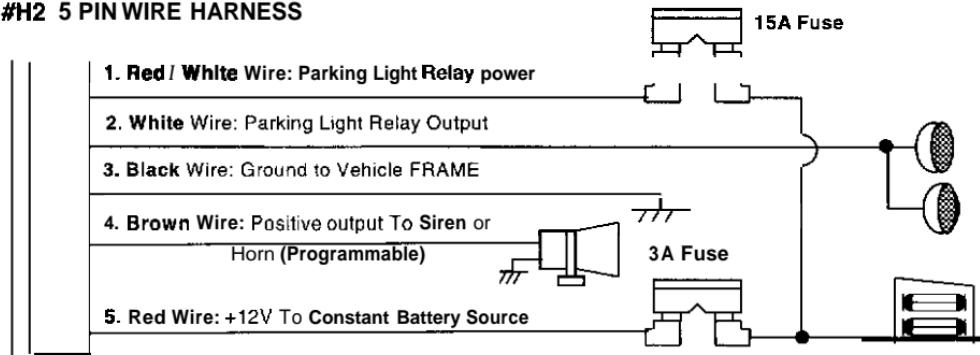
WIRING DIAGRAM



#H1 6 PIN HEAVY GAUGE WIRE HARNESS



#H2 5 PIN WIRE HARNESS

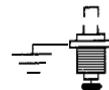


#H7 3 PIN DOOR LOCK CONNECTOR



#H6. 8 PIN BLACK CONNECTOR FOR INPUT CONNECTION:

1. **White/Black** Wire: (-) Negative Safety Shut Down input for Hood pin



2. **Black/White** Wire: (-) Neutral Safety Switch Input & (-) Remote Start Toggle Switch Input

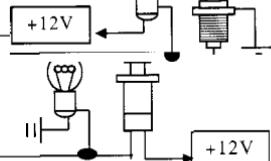
3. **White/Violet** Wire: (+) Positive Safety Shut Down input for Brake switch.



4. Blue Wire: Zone 2 / Instant Trigger Ground

5. **White/Green** Wire (-) Diesel Wait-To-Start input

6. Green Wire: Zone 3 / Negative Door Pin Trigger Input:



7. Violet Wire Zone 3 / Positive Door Pin Trigger

8. **White/Red** Wire: Tachometer Signal Input

IMPORTANT NOTE: Directly connect the **BLACK/WHITE** wire to the "GROUND" when this wire is not used.

1. Yellow Wire: (-) 200mA Ignition 3 Control Output

2. Gray Wire: (-) 200mA Channel 2 Programmable Output

3. Pink Wire: (-) 200mA Proammable Output

2 Steps Door Unlock Output (Factory Default Setting)
or Factory Security Disarm Signal Output
or Start Status (Shock Sensor By-Pass Control) Output

4. Orange Wire: (-) 500mA Grounded Output When Armed

5. White Wire: (-) 200mA Dome Light Control Output

6. **Brown/White** Wire: (-) 200mA Programmable Output
Horn Output (Factory Default Setting)

Factory Security Rearm Signal Output

WIRING CONNECTIONS

H1: 6 PIN HEAVY GAUGE WIRING CONNECTION:

Remember: The function of this system when starting a vehicle is to duplicate the functions of the ignition key. Below, we will explain the three basic functions of the ignition switch. Since this installation will require analysis of the ignition switch functions, we recommend making the three connections below at the ignition switch harness directly.

H1/1. Violet Wire — Starter Output

Careful consideration for the connection of this wire must be made to prevent the vehicle from starting while in gear. Understanding the difference between a mechanical and an electrical Neutral Start Switch will allow you to properly identify the circuit and select the correct installation method. In addition you will realize why the connection of the safety wire is required for all mechanical switch configurations.

Failure to make this connection properly can result in personal injury and property damage.

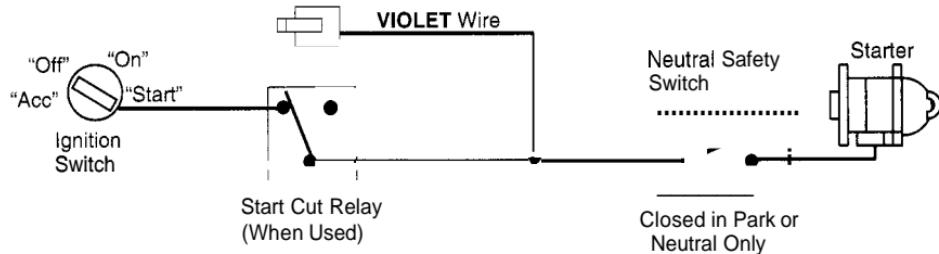
In all installations it is the responsibility of the installing technician to test the remote start unit and assure that the vehicle can not start via RF control in any gear selection other than park or neutral.

In both mechanical and electrical neutral start switch configurations; the connection of the VIOLET wire will be made to the low current start solenoid wire of the ignition switch harness. This wire has +12 volts when the ignition switch is turned to the "START" (CRANK) position only. This wire has 0 volts in all other ignition switch positions.

NOTE: *This wire must be connected to the vehicle side of the starter cut relay (when used). For the electrical neutral switch configuration, this connection must be made between the starter inhibit relay (when used) and the neutral safety switch as shown in the following diagram.*

Failure to connect this wire to the ignition switch side of the neutral safety switch can result in personal injury and property damage.

SEE NEUTRAL START SAFETY TEST FOR FURTHER DETAILS.



H1/2 & H1/3. Red Wire (2) -- +12V Power Inputs

Remove the two 20A fuses prior to connecting these wires and do not replace them until the receiver Antenna has been plugged into the control module. These wires are the source of current for all the circuits. They must be connected to a high current source. Since the factory supplies (+) 12V to the key switch that is used to operate the motor, it is recommended that these wires be connected there.

Note: *If the factory supplies two separate (+) 12V feeds to the ignition switch, connect one RED wire of the satellite to each feed at the switch.*

H1/4. Yellow Wire — Ignition 1 Output

Connect the YELLOW wire to the ignition 1 wire from the ignition switch. The ignition wire should receive "12 volts" when the ignition key is in the "ON" or "RUN" and "START" or "CRANK" position. When the ignition is turned "OFF", the ignition wire should receive "0" voltage. The YELLOW wire must be connected.

H1/5. PINK Wire – Ignition 2 Output

Some vehicles have [2] ignition wires that must be powered. Connect the PINK wire to the ignition 2 wire from the ignition switch. The ignition wire should receive "12 volts" when the ignition key is in the "ON" or "RUN" and "START" or "CRANK" position. When the ignition is turned "OFF", the ignition wire should receive "0" voltage. If the PINK wire is not used, cap the end of the wire.

H1/6. Brown Wire –Accessory Output (Heater /ACC Output)

Connect the BROWN wire to the accessory wire in the vehicle that powers the climate control system. An accessory wire will show + 12 volts when the ignition switch is turned to the "ACCESSORY" or "ON" and "RUN" positions, and will show 0 Volts when the key is turned to the "OFF" and "START" or "CRANK" position. There will often be more than one accessory wire in the ignition harness. The correct accessory wire will power the vehicle's climate control system. Some vehicle may have separate wires for the blower motor and the air conditioning compressor. In such cases, it will be necessary to add a relay to power the second accessory wire.

H2: 5 PIN WIRE HARNESS:

H2/1. RED / WHITE WIRE –PARKING LIGHT RELAY INPUT --

The RED/WHITE wire is the input to the flashing parking light relay. The connection of the RED/WHITE wire will determine the output polarity of the flashing parking light relay.

If the vehicle you are working on has +12volt switched parking lights, you don't need to connect this wire. This wire is already connected to +12volt.

If the vehicle's parking lights are ground switched, cut the RED/WHITE wire, connect the REDWHITE wire to chassis ground.

H2/2. WHITE WIRE -- PARKING LIGHT RELAY OUTPUT (+12V 10A OUTPUT) --

Connect the WHITE wire to the parking light wire coming from the headlight switch. Do not connect the WHITE wire to the dashboard lighting dimmer switch. (Damage to the dimmer will result). The limitation of the WHITE wire is 10 AMP max. Do not exceed this limit or damage to the alarm and parking relay will result.

H2/3. BLACKWIRE -- SYSTEM GROUND –

This is main ground connection of the alarm module. Make this connection to a solid section of the vehicle frame. Do not connect this wire to any existing ground wires supplied by the factory wire loom; make the connection to the vehicle's frame directly.

H2/4. BROWN WIRE -- SIREN DRIVE OUTPUT – (See Feature II - 3 Programming)

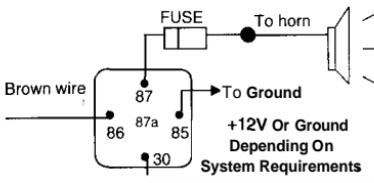
SIREN DRIVE OUTPUT (Factory default setting)

This is the positive (+) output connection for the siren. Current capacity is 2 amps. Make connection to the (+) red wire from the siren. Make the (-) black wire coming from the siren to a good chassis ground.

(+) Low Current HORN OUTPUT –

(Set Alarm Feature II – 3 To Horn Output)

This wire is provided to use the existing vehicle's horn as the alarm system's optional's warning audible device. It's a transistorized low current output, and should only be connected to the low current positive (+) output from the vehicle's horn switch.



H2/5. RED WIRE -- SYSTEM POWER (+12V CONSTANT) --

The RED wire supplies power to the system. Connect this wire to a constant +12 volt source.

H3.2 PIN WHITE CONNECTOR FOR THE LED STATUS INDICATOR:

The led indicator status should be mounted in a highly visible area such as top of the dashboard, on top of the shifter console or on dashboard face. Leave at least 6mm space behind the mounting location for LED housing. Once a suitable location is chosen, drill a 6mm hole. Run the LED wires through the hole then press the 2-pin LED housing into the place. Route the LED wires to the control module.

H4. RED 3-PIN CONNECTOR –TWO-WAY TRANSCEIVER/ANTENNA MODULE

The Two-way transceiver/antenna mounts on the windshield (Inside). We suggest you mount the transceiver/antenna on top center of windshield above rear view mirror.

Warning! Do not mount in such a manner that it obstructs the driver's view.

- Remove the protective tape backing.
- Carefully align the two-way transceiver/antenna and apply to windshield.
- Route the black connector wire behind the trim and connect to the two-way transceiver/antenna.
- Connect the Red connector end to the control module.

NOTE: Special considerations must be made for windshield glass as some newer vehicles utilize a metallic shielded window glass that will inhibit or restrict RF reception. In this vehicle, route the two-way transceiver/antenna module away from metallic shielded window glass as far as possible.

H5.3-PIN BROWN CONNECTOR FOR PAGING KNOCK SENSOR

The Paging (Knock) Sensor can be installed to the system.

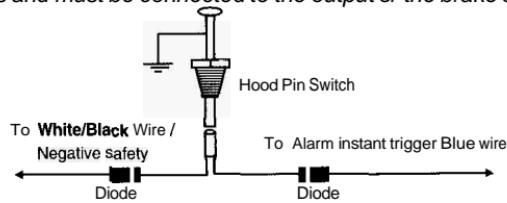
1. Detach the protecting paper from the double-sided adhesive tape and attach one side of the double-sided adhesive tape to the bottom part of the Paging (Knock) Sensor.
2. After cleansing the area around left bottom part of the front window so that it stays attached firmly, the Paging Sensor should be attached on the front window so that the side on which a sticker with a printed words “**Tap Here Paging Driver**” is attached face outward.
3. Hide the wire by carefully pushing it inside the space of the front windshields interior trim. Adjust the sensitivity of the Paging Sensor. Turn the sensitivity screw at the center of the Paging Sensor clockwise to increase sensitivity. Turn the sensitivity screw counter-clockwise to decrease the sensitivity.

H6: 8 PIN MINI BLACK CONNECTOR:

H6/1. WHITE/BLACK WIRE – NEGATIVE (HOOD) SAFETY SHUT DOWN INPUT --

The WHITE/BLACK wire provides an instant shutdown for the remote start, whenever it is grounded. Connect the wire to the hood pin switch. This wire must be routed though a grommet in the firewall and connected to the hood pin switch. If the pin switch is to be used with an alarm system, connect this wire with diode.

Important! This connection is a safety wire and must be connected as shown and tested as specified. Failure to do so may result in personal injury or property damage. See detail of wiring in the following diagram. This wire may also be used if the vehicle brake light circuit switches ground to the brake lights. An isolation diode must be used for ground switched brake light circuits and must be connected to the output of the brake switch.



H6/2. BLACK/WHITE wire – (-)Neutral Safety Switch Input –

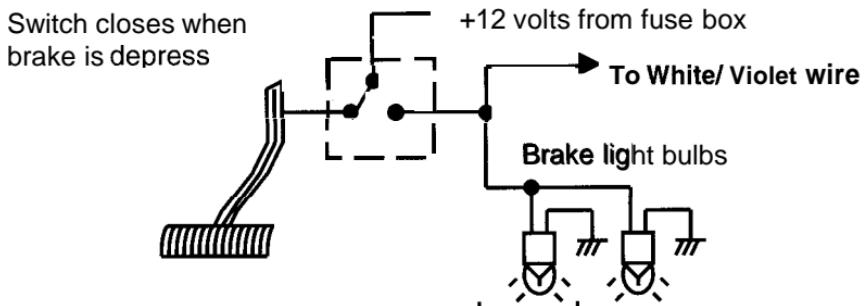
When the BLACK/WHITE wire is grounded, the remote start unit is operable. When this wire is open from ground, the remote start is disabled.

1. An optional "remote start toggle switch" can be added to temporarily disable the Remote Start Device, it can prevent the vehicle from being remote started accidentally. This feature is useful if the vehicle is being serviced or stored in an enclosed area. To disable the remote start, move the optional remote start enable toggle switch to the OFF position. To enable the remote start, move the optional remote start enable toggle switch to the ON position.
2. If needed, this wire can connect to the PARWNEUTRAL switch in the vehicle. (See the TESTING YOUR INSTALLATION GUIDE)

IMPORTANT NOTE: Directly connect the **BLACK/WHITE** wire to the "GROUND" when this wire is not used.

H6/3. WHITE/VIOLET WIRE:– POSITIVE SAFETY SHUT DOWN INPUT

This wire provides an instant shutdown for the remote start, whenever it gets +12volts. If the brake lights switch in the vehicle switches +12 volts to the brake light circuit, connect this wire to the output side of the brake switch. This will allow the remote start to shut down if an attempt is made to operate the vehicle without the key while running under the control of the remote start. In most vehicles, in order to shift gear, the brake pedal must be depressed. The brake input will in turn cause the remote start unit to shut off. See below diagram.



H6/4. BLUE WIRE -- GROUND INSTANT TRIGGER INPUT --

This wire is the ground trigger input wire for hood/trunk pin switches. If the pin switch is to be used with in conjunction with the Remote Start pinswitch, connect this wire with a diode.

H6/5. WHITE/GREEN WIRE —(-) DIESEL WAIT – TO- START INPUT–

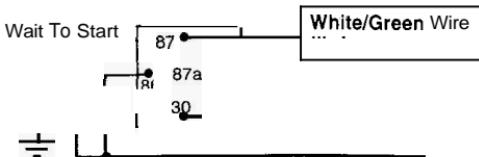
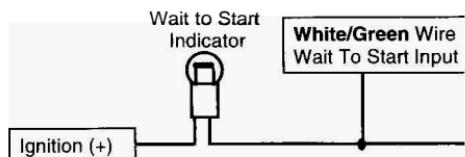
In diesel vehicles it is necessary to interface with the wire that on the WAIT-TO-START light in the dashboard. This wire illuminates the bulb until the vehicle's glow plugs are properly heated. When the light goes out the vehicle can be started. This wire is always at the connector leading to the bulb in the dashboard. It can also be found at the Engine Control Module (ECM) in many vehicles.

To test and determine the polarity of this wire:

1. Set your multi-meter to DVC or DC voltage (12V or 20V is fine).
2. Attach the (+) probe of the meter to (+) 12V.
3. Probe the wire that you suspect leads to the bulb with the (-) probe of the meter.
4. Turn the ignition switch to the ON position.
5. If the meter indicates 12 volts until the light goes out you have isolated the correct wire and the wire's polarity is negative (ground while the bulb is on).
6. If the meter reads zero volts until the light goes out and then reads 12 volts, you have isolated the correct wire and the wire's polarity is positive.

Connect the White/Green wire to the wire in the vehicle that sends the signal to turn on the WAIT-TO-START bulb in the dashboard. In most diesels the wire is negative (ground turns on the bulb) and this wire can be directly connected to the wire in the vehicle. If the vehicle uses a positive wire (12V to turn the bulb) a relay must be used to change the polarity.

(-)Wait To Start Wire



H6/6. GREEN WIRE -- NEGATIVE DOOR SWITCH SENSING INPUT --

This wire is the ground trigger input wire for negative door pin switch. This wire is connection for "grounding" type factory door pins locate the "common wire" that connects the door pin switches. Make the connection of the GREEN Wire here.

H6/7. VIOLET WIRE -- POSITIVE DOOR SWITCH SENSING INPUT--

This wire is the positive trigger input wire for positive door pin switch. This wire is connection for "positive" type factory door pins (typical FORD MOTOR). Locate the "common wire" for all door pins and make the connection of the VIOLET Wire here.

H6/8. WHITE/RED wire—Tachometer Signal connection—

This input provides the remote start system with information about the engine's revolutions per minute (RPM). It can be connected to the negative side of the coil in vehicles with conventional coils. In multi-coil and high energy ignition system locating a proper signal may be more difficult. Once connected, you must Program the Start Feature II - 3 to "Tachometer checking type" (default setting) and teach the system the RPM signal.

(See Start Feature II - 4 / 6 Programming.)

To test for a tachometer wire, a multi-meter capable of test AC voltage must be used. The tachometer wire will show between 1V and 6V AC at idle, and will increase as engine RPM increases. In multi-coil ignition systems, the system can learn an individual coil wire. Individual coil wires in multi-coil ignition systems will register lower amounts of AC voltage. Also, if necessary, the system can use a fuel injector control wire for engine speed sensing. Common locations for a tachometer wire are the ignitions coil itself, the back of the instrument gauges, vehicle engine computer, and automatic transmission computer.

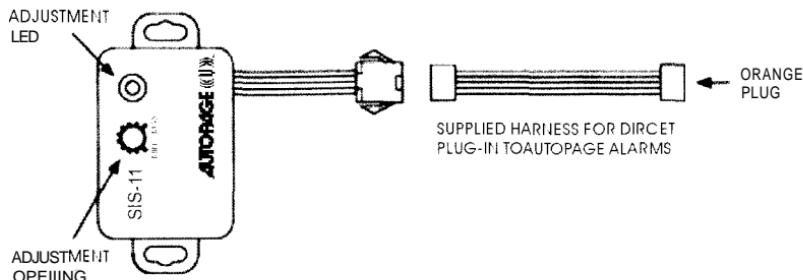
IMPORTANT! Do not test tachometer wires with a test light or logic probe. The vehicle will be damaged.

How to find a tachometer wire with your multi-meter

1. Set the ACV or AC voltage (12V or 20V is fine.)
2. Attach the (-) probe of the meter to chassis ground.
3. Start and run the vehicle.
4. Probe the wire you suspect of being the tachometer wire with the red probe of the meter.
5. If this is the correct wire the meter will read between 1V and 6V.

NOTE: No connection of this wire is required, if you use the voltage or timer checking type mode.

H8.4-PIN ORANGE CONNECTOR FOR SIS-11 SHOCK SENSOR:



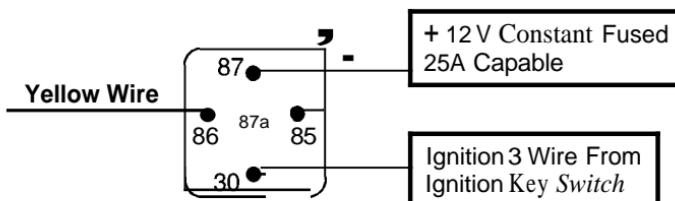
The SIS-11 may be mounted to any flat surface or may be wire-tied to any under-dash wire harness. Do not mount the SIS-11 under the engine hood. The SIS-11 is not waterproof. The SIS-11 will tolerate most mounting positions and still allow a broad range of adjustment.

DO NOT MOUNT THE SIS-11 UPSIDE DOWN. ADJUSTMENT WILL NOT BE POSSIBLE.

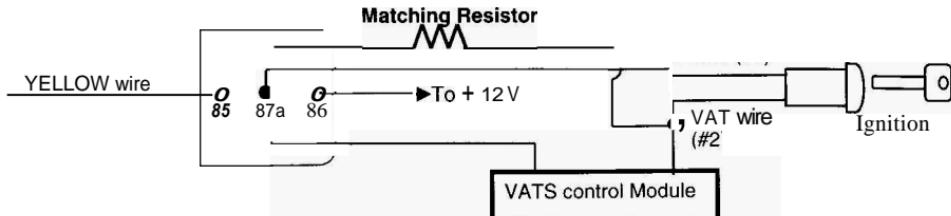
To adjust the SIS-11, insert a small blade flat screwdriver into the adjustment opening next to the adjustment LED.

Adjust counter-clockwise for less sensitivity, and clockwise for increased sensitivity. Each time a shock is applied to the vehicle, the RED LED will light indicating the SIS-11 is responding. Allow approximately five (5) seconds between each test and adjustment.

H9: 6-PIN MINI WHITE CONNECTOR WIRE HARNESS:

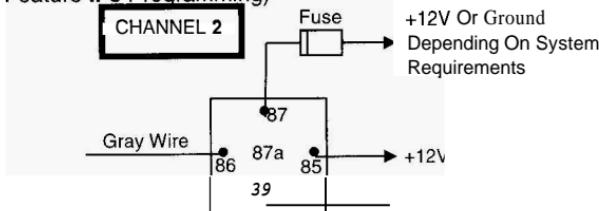


- Cut (#1) wire (as shown), and connect the ignition switch side of the cut wire to terminal #87a of the relay. Connect the other side of the (#1) wire to terminal #30.
- Connect the previously selected resistor from terminal #87 to the second (#2) wire (as shown).



H9/2 . GRAY WIRE – (-) 200ma CHANNEL 2 Programmable Output –

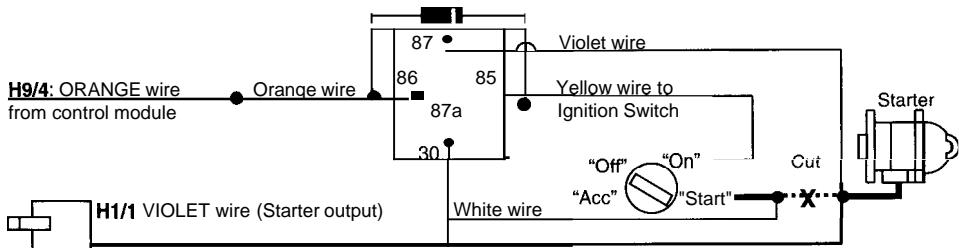
This will become a 1 second pulse ground by activate channel 2 on transmitter for two seconds, the current capacity of this wire is 200 mA. This feature allows you to remote control trunk release or other electric device. This output can also be programmed to provide the following type of output: momentary, latched, latched-reset with ignition, 30-second timed. (See Alarm Feature II-6 Programming)



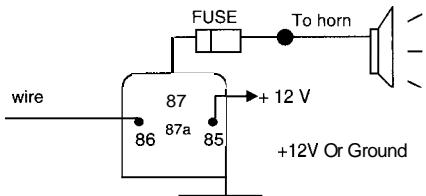
H9/4. ORANGE WIRE – (-) 200ma GROUNDED OUTPUT WHEN ARMED --

This wire will become grounded when the alarm is armed. The current capacity of this wire is 200mA. This output can control starter disable, when an intrusion is detected and the system is triggered. The vehicles prevent from any unauthorized starting.

(SEE DIAGRAM NEXT PAGE)



current ground output from the vehicle's horn switch. When the system is triggered, the horn will sound.



H10.3 PIN GREEN CONNECTOR FOR TEMPERATURE SENSOR

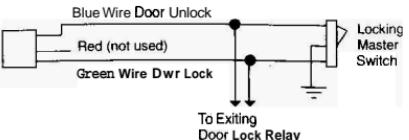
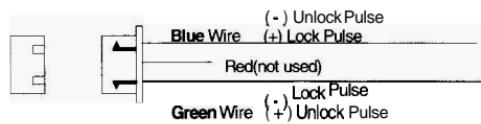
The Temperature Sensor should be installed inside the vehicle. It is used to monitor the vehicle's interior temperature and is displayed on the LCD screen. Install the sensor in an area under the dash where the sensor can be exposed to the elements of the interior, but not where it will be an obstruction to the passengers of the vehicle.

H11.2 PIN BLUE CONNECTOR FOR THE VALET SWITCH:

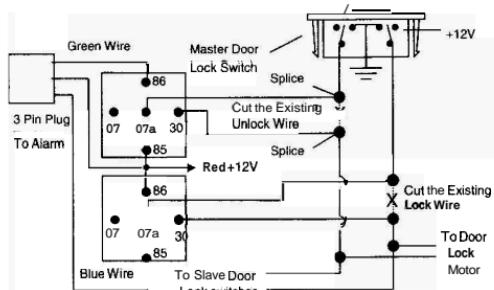
Select a mounting location for the switch that is easily accessible to the driver of the vehicle. The switch does not have to be concealed, however, concealing the switch is always recommended, as this provides an even higher level of security to the vehicle. Mount the valet switch in a hidden but accessible location. Route the valet switch wires to the control module.

H7.3 PIN DOOR LOCK CONNECTOR:

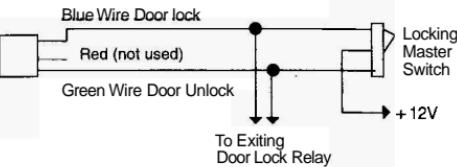
NEGATIVE TRIGGER DOOR LOCK SYSTEM



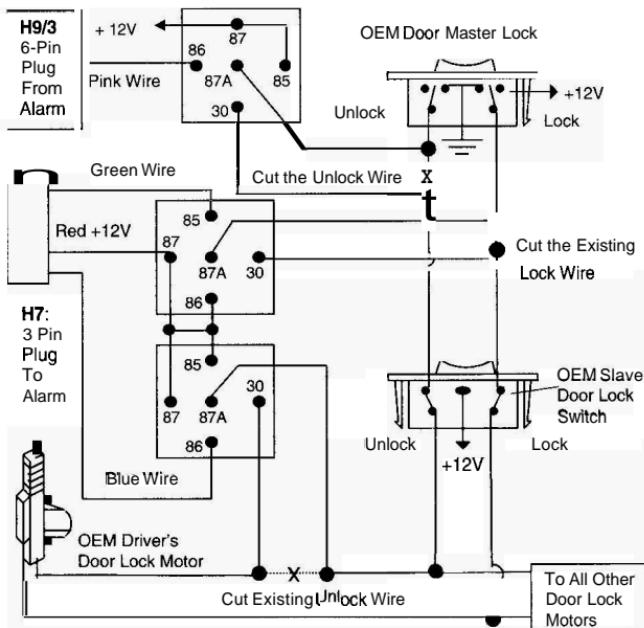
5-WIRE ALTERNATING DOOR LOCK



POSITIVE TRIGGER DOOR LOCK SYSTEM



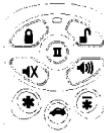
2 STEP DOOR UNLOCK WIRE CONNECTION FOR 5 WIRE ALTERNATING DOOR LOCKS



PROGRAMMING

PROGRAMMING XT-75S REMOTE TRANSMITTER

Note: This mode will only retain the last 4 remote transmitters programmed. If the transmitter memory is exceeded, the security system will start deleting transmitters from memory in chronological order.



Important Note: This program mode is for XT-75S remote transmitter programming only; do not program the XT75LCD two-way transmitter on this mode.

Enter:

- 1 Turn the Ignition 'switch 'OFF/ON' 3 TIMES and stay in ON position. Within 15 seconds.
- 2 Push the Valet switch **3 times** holding in on the 3rd push, until long chirp is heard. Then release the valet switch. You are now in the Transmitter programming mode.

Program:

- 1 Press any button on transmitter one until the siren responds with a confirming chirp. The first transmitter is now programmed.
2. Press any button on the second transmitter until the siren responds with a confirming chirp, the second transmitter is now programmed
- 3 Apply the same procedure to program 3rd and 4th

Exit:

Turn Ignition to 'OFF' position, or leave it for 15 seconds. 3 long chirps & 3 parking light flashes will confirm exit.

PROGRAMMING THE XT-75LCD TWO-WAY LCD SCREEN REMOTE TRANSMITTER

Important Note: This program mode is for XT-75LCD two-way LCD transmitter programming only; do not program other style transmitter on this mode.

Note: This mode will only retain the last 2 remote transmitters programmed. If the transmitter memory is exceeded, the security system will start deleting transmitters from memory in chronological order.

The two-way LCD screen remote transmitter can be program to operate this system. The two-way remote transmitter actively gives an immediate report to the remote transmitter on any violations occurred to your vehicle both by visual graphic icon and audio sound.

When you press a button of a two-way remote transmitter, you can make sure that your command has been correctly delivered to the system in your vehicle. The LCD screen will display a graphic icon as well as a confirming melody sound from your two-way remote transmitter.

Enter:

1. Turn the Ignition 'switch 'OFF/ON' 3 TIMES and stay in ON position. Within 15 seconds.
2. Push the Valet switch **6 times** holding in on the 6th push, until long chirp is heard. Then release the valet switch. You are now in the two-way LCD screen remote Transmitter programming mode.

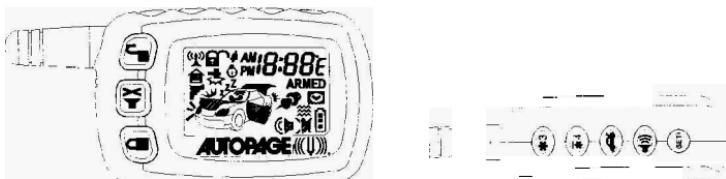
Program:

1. Press the Lock button on the transmitter until the siren responds with a confirming chirp; the first transmitter is now programmed.
2. Press the Lock button on the second transmitter until the siren responds with a confirming chirp; the second transmitter is now programmed.

Exit:

Turn Ignition to 'OFF' position, or leave it for 15 seconds. 3 long chirps & 3 parking light flashes will confirm exit.

Note: A Maximum of (2) two-way LCD screen remote transmitters can be programmed.



XT-75LCD TWO-WAY LCD SCREEN REMOTETRANSMITTER

FEATURE PROGRAMMING

ALARM FEATURE “I” PRARAMMING:

1. Turn the Ignition 'switch 'ON/OFF' 3 TIMES and stay in OFF position.
2. Push the Valet switch 2 times holding in on the 2nd push until 1 short & 1 long chirp is heard. Then release the valet switch. You are in the Alarm feature 'I' programming mode.
3. Press and release the transmitter button corresponding to the feature 'you want to program.
 - a. The siren chirps and LED flashes will indicate previously setting.
 - b. The factory default settings is always [1] LED flash, [1] chirp.
4. Depress the transmitter button to change the feature. Simple keep re-depressing the transmitter button until the module advances to your desired setting.

Press Transmitter Button	One Chirp / LED one pulse Factory Default Setting	Two Chirps / LED two pulse	Three Chirps / LED three pulse	Four Chirps / LED four pulse
1	All chirps on	Siren chirp on only	Horn chirp on only	All chirps off
2	Active arming	Active arming with Passive starter disable	Passive arming without passive door locking	Passive arming with passive door locking.
3	Automatic Rearm on	Automatic Rearm off		
4	With Door Ajar error chirp	Bypass Door Ajar error chirp.		
5	Without Car-jack mode	Active Car-jack mode	Passive Car-jack mode	
6	Transmitter can not Arm the System When Driving	Transmitter can be Arming the System When Driving		
7	Panic with Ignition off	Panic with Ignition on & off	Panic with Ignition on & off. Panic with No time limit.	Without Panic function.

Exit: Turn Ignition to 'ON' position, or leave it for 15 seconds. 3 long chirps & 3 parking light flashes will confirm exit.

Door Ajar Error Chirp on/off:

This feature controls the error chirp that is generated if the system is armed with the door trigger active. This is useful in vehicles that have a long dome light delay after the door has been closed. If the system is armed before the dome light has turned off, the security system will generate the door trigger error chirp. If this error chirp is not desired, use this feature to disable the door open error chirp. If the bypass chirp is turned off, no bypass chirp will be generated.

Active Arming With Passive Starter Disables: The "Ground-when-armed output will go active 60 seconds after the ignition is turned off. The LED will flash at half its normal rate when the ignition is turned off to indicate that the system will interrupt the starter in 60 seconds.

Transmitter Can Arm The System When Driving: Press and hold the  button on the transmitter for 2 seconds while the ignition is "ON". The system will arm and not respond to any trigger input except the door triggers.

ALARM FEATURE "II" PRORAMMING:

1. Turn the Ignition 'switch' 'ON/OFF' 3 TIMES and stay in OFF position.
2. Push the Valet switch **4 times** holding in on the 4th push until **2 short & 1 long chirp** is heard. Then release the valet switch. You are now in the Alarm feature 'II' programming mode.
3. Press and

Press Transmitter Button	One Chirp / LED one pulse Factory Default Setting	Two Chirps / LED two pulse	Three Chirps / LED three pulse	Four Chirps / LED four pulse
1 	0.8-second Door lock pulses.	3.5-second Door lock pulse.	Double pulse unlock	
2 	Ignition controlled door locks & unlocks	Ignition controlled door locks only	Ignition controlled door unlocks only	Without ignition controlled door locks & unlocks
3 	H2/4 Brown Wire = Constant Siren output for 6-tone siren	H2/4 Brown Wire = 5-second pulse Siren output for signal tone siren	H2/4 Brown Wire = Random pulse Siren output	H2/4 Brown Wire = Horn Output
4 	Pathway illumination feature "off"	Parking light "on" for 30- second upon an unlock signal	Parking light "on" for 30- second upon an unlock signal & 10- second upon a lock signal.	
5 	With code "hopping"	Without code "hopping"		
6 	H9/2 Gray Wire Channel 2 output = 1-second pulse output for trunk release.	H9/2 Gray Wire Channel 2 output = Momentary output	H9/2 Gray Wire Channel 2 Output = Latched (3) / Latch output and reset with ignition "on" (4) / 30-second (5) / 60-second (6) Timer controlled output	

Exit: Turn Ignition to 'ON' position, or leave it for 15 seconds. 3 long chirps & 3 parking light flashes will confirm exit.

ALARM FEATURE "111" PRORAMMING:

1. Turn the Ignition 'switch 'ON/OFF' 3 TIMES and stay in OFF position.
2. Push the Valet switch **6 times** holding in on the 6th push until 3 short & 1 long chirp is heard
Then release the valet switch. You are now in the Alarm feature '111' programming mode.
3. Press and hold

Press Transmitter Button	One Chirp / LED one pulse Factory Default Setting	Two Chirps / LED two pulse	Three Chirps / LED three pulse	Four Chirps / LED four pulse
1 				
2 	Exit the programming node. (3 long chirp & 3 lights to confirm (3 exit.)			
3 	Press & hold button 3 for 4 seconds to delete the PIR-750 sensor code	PIR-750 sensor programming mode		
4 	Override Without Password Pin Code Press & hold button 4 for 4 seconds to delete the Password pin code	Override With Password Pin Code Password Pin code programming		
5 	"TEST Mode for Zone 2 / instant trigger (-) blue & Zone 3/Door trigger (-) Green (+) Violet)	"TEST Mode for Zone 1 / The SIS -11 connected to 4-pin plug.	"TEST" Mode for Zone 4 / Optional Wireless PIR sensor	

Exit: Turn Ignition to 'ON' position, or leave it for 15 seconds. 3 long chirps & 3 parking light flashes will confirm exit.

NOTE: PIR-750 Sensor is an optional item. Must be purchased separately from dealer

PASSWORD PIN CODE SETUP

1. Turn the Ignition 'switch 'ON/OFF' 3 TIMES and stay in OFF position.
2. Push the Valet switch **6 times** holding in on the 6th push until 3 short & 1 long chirp is heard.
Then release the valet switch. You are now in the Alarm feature '111' programming mode.

You can now program or delete the password pin code as follows.

Program:

1. Press and release the transmitter  button once, [2] LED flash, [2] siren/horn chirps to indicate you in feature "Password Pin Code Programming mode".
2. Within 5 seconds, begin to enter your chosen first digit of the two digit code by pressing and releasing the valet Switch from 1 – 9 times.
3. Within 15 seconds of the first entered digit, turn the Ignition switch to "ON" position.
4. Within 15 seconds, enter your chosen second digit of the two digit code by pressing and releasing the valet Switch from 1 – 9 times.
5. Finish by turning the ignition switch to "OFF position.

If the new password code were accepted, the unit will report back the newly entered code, by flashing the LED, first indicating the first digit code has been memorized, pause and then the second digit code. The unit will report the new code three times with a one-second's pause between each code.

Note: If there is 15 seconds of inactivity, or if the ignition switch is turned "ON" for more than 5 seconds during of above steps, the unit will revert back to the last successfully stored code.
Three long chirps will confirm exit.

Delete Password Pin **Code/Override** Without Password Pin Code (Factory default setting): Within 15 seconds, press and hold the transmitter  button for 4 seconds. A one long chirps to confirm Deleted the Password Pin Code.

Example: To program the Password Code **92**, you would;

Enter:

1. Turn the Ignition 'switch 'ON/OFF' 3 times and stay in OFF position.
2. Push the Valet switch **6** times and hold it until three chirps with a long chirp is hearing then release the valet switch. You are now in the Alarm feature 'III' programming mode.

Program:

1. Press and release the transmitter  button once, [2] LED flash, [2] siren/horn chirp to indicate your are in features "Password pin code programming mode".
2. Within 5 seconds, press and release the valet Switch 9 times.
3. Within 15 seconds of the last entered 9ths digit, turn the Ignition Switch to "ON" position.
4. Within 15 seconds press the valet Switch twice.
5. Turn the Ignition Switch to "OFF" position.

You will note the LED flashing nine times, pause and then flash two times, pause. This pattern will be repeated three times indicating the new code (92) has been accepted and stored in memory.

REMOTE START FEATURE "I"PROGRAMMING

1. Turn the Ignition 'switch 'ON/OFF' 3 TIMES and stay in OFF position.
2. Push the Valet switch **8** times holding in on the **8th** push until **4** short & **1** long chirp is heard. Then release the valet switch. You are in the Remote Start feature 'I' programming mode.

Press Transmitter Button	One Chirp / LED one pulse Factory Default Setting	Two Chirps / LED two pulse	Three Chirps / LED three pulse	Four Chirps / LED four pulse
1 	10 minutes run time	20 minutes run time	30 minutes run time	5 minutes run time
2 	Factory alarm disarm with channel 2 on	Without this feature		
3 	Constant parking light output	Flashing parking light output		
4 	Door lock before start	Without this feature		
5 	H9/3 Pink Wire = Two step door unlock output	H9/3 Pink Wire = Factory Security Disarm Signal output	H9/3 Pink Wire = Start Status (Shock Sensor Bypass Control) output	
6 	H9/6 Brown/White Wire = (-) 200ma Horn Output	H9/6 Brown/White Wire = Factory Security Rerarm Signal Output		
7 	Temperature-Control Starting OFF	Temperature-Control Starting 5 F (- 15 C)	Temperature-Control Starting - 7 F (- 20 C)	Temperature-Control Starting - 22 F (- 30 C)

START FEATURE “II” PRORAMMING:

1. Turn the Ignition ‘switch ‘ON/OFF’ 3 TIMES and stay in OFF position.
2. Push the Valet switch **10 times** holding in on the 10th push until 5 short & 1 long chirp is heard. Then release the valet switch. You are in the Remote Start feature ‘II’ program mode.
3. Press and release the transmitter button corresponding to the feature ‘you want to program

Press Transmitter Button	One Chirp / LED one pulse Factory Default Setting	Two Chirps / LED two pulse	Three Chirps / LED three pulse	Four Chirps / LED four pulse
1	Exit the programming mode. (3 long chirps & 3 parking light flash to confirm this exit.)			
2	Exit the programming mode. (3 long chirps & 3 parking light flash to confirm this exit.)			
3	Tachometer checking type.	Voltage checking type	Timer checking type	
4	RPM learning Start Timer: 0.6-second	0.8-second (2 chirps), 1.0-second (3 chirps), 1.2-second (4 chirps), 1.4-second (5 chirps), 1.6-second (6 chirps), 1.8-second (7 chirps), 2.0-second (8 chirps), 3.0-second (9 chirps), 4.0-second (10 chirps),		
5	Start the system for TESTING & ADJUSTMENT			
6	Hi check level	Low check level		
7	Stop the remote start system for TESTING & ADJUSTMENT			

TACHOMETER CHECKING TYPE

1. Turn the Ignition ‘switch ‘ON/OFF’ 3 TIMES and stay in OFF position.
2. Push the Valet switch **10 times** and hold it until **five** chirps with a long chirp is hearing then release the valet switch. You are now in the Start feature ‘II’ programming mode.

Select “Checking Type”:

3. Press and release the transmitter button once to set the “Tachometer Checking Type”. [1] LED flash, [1] chirp to confirm this setting.
4. Once you complete step 3, you can program “RPM Learning Mode” as below:

RPM Learning

While the system is still in Start Feature “II” programming mode,

1. Press and release the transmitter button once, [1] chirp to indicate your in feature “RPM Learning mode”.
2. Start the vehicle with the key. (While the engine is running, the parking & LED will flash, If they don’t, please check tachometer White/Red wire connection. (H6/8)
3. Press and hold the valet switch for 2 seconds until a long chirp and the LED light comes on constant for two seconds. The RPM signal is learned.
4. Once you complete step 4, you can adjust and test “Check Level” as below:

CHECK LEVEL PROGRAMMING: (TEST and ADJUST)

While the system is in the Start Feature “II” programming mode,

1. Press the button on the transmitter to start the vehicle.
2. If everything goes well:
 - a. Press the button on the transmitter to stop engine running. You have completed this programming successfully.
 - b. Press or button on the transmitter to exit the program mode. There will be 3 long chirps for confirmation.

3. If the crank time is too long, (Engine already successfully running, while still cranks):
 - a. Press the  button on the transmitter to stop engine running.
Press  button on the transmitter to set proper "Check Level" to Low position.
[2] LED flash, [2] chirps to confirm this setting
 - b. Repeat the step1 – 4.
4. If the crank time is too short, (Engine not running, while stops cranks):
 - a. Press the  button on the transmitter to stop engine running.
Press  button on the transmitter to set proper "Check Level" to Hi position.
[1] LED flash,
[1] chirp to confirm this setting
 - b. Repeat the step1 – 4.

VOLTAGE CHECKING TYPE

Enter Start Feature 'II' Programming Mode:

1. Turn the Ignition 'switch 'ON/OFF' 3 TIMES and stay in OFF position.
2. Push the Valet switch **10** times and hold it until **five** chirps with a long chirp is hearing then release the valet switch. You are now in the Start feature 'II' programming mode.

Select "Checking Type":

3. Press the transmitter  button to set the "Voltage Checking Type". [2] LED flash, [2] chirps to confirm this setting

Once you complete step 3, you can adjust and test "Start Timer" as below:

START TIMER PROGRAMMING: (TEST and ADJUST)

While the system stay in Start Feature "II" programming mode,

1. Press the  button on the transmitter to start the vehicle.
2. If everything goes well:

Wait for 10 seconds:

- a. If the engine is still running:
 - I. Press the  button on the transmitter to stop engine running. You have been completed this programming successfully.
 - II. Press  or  button on the transmitter to exit the program mode. There will be 3 long chirps for confirmation.
- b. If the engine shuts down after the vehicle has been started.
 - I. Press the  button on the transmitter to stop engine running.
 - II. Press  button on the transmitter to set "CheckLevel" to LOW position. [2] LED flash, [2] chirps to confirm this setting
 - III. Repeat the step1 – 2.
3. If the crank time is too long, (Engine is successfully running, but starter still cranks):
 - a. Press the  button on the transmitter to stop engine running.
 - b. Press  button on the transmitter to set proper "Start Timer". The chirp & LED pause will confirms entry. (Decrease "Start Timer" is necessary.)
 - c. Repeat the step1 – 4.
4. If the crank time is too short, (Engine is not running and starter has stopped cranking):
 - a. Press the  button on the transmitter to stop engine running.
 - b. Press  button on the transmitter to set proper "Start Timer". The chirp & LED pause to confirm entry. (Increase "Start Timer" is necessary.)
 - c. Repeat the step1 – 4.

Timer Checking Type

Enter Start Feature 'II' Programming Mode:

1. Turn the Ignition 'switch 'ON/OFF' 3 TIMES and stay in OFF position.
2. Push the Valet switch **10** times and hold it until **five** chirps with a long chirp is hearing then release the valet switch. You are now in the Start feature 'II' programming mode.

Select “Checking Type”:

3. Press the transmitter  button to set the “Timer Checking Type”. [3] LED flash, [3] chirps to confirm this setting

Once you complete step 3, you can adjust and test “Start Timer” as below:

START TIMER PROGRAMMING:(TEST and ADJUST)

While the system stay in Start Feature “II” programming mode,

1. Press the  button on the transmitter to start the vehicle.
2. If everything goes well:
 - a. Press the  button on the transmitter to stop engine running. You have completed this programming successfully.
 - b. Press  or  button on the transmitter to exit the program mode. There will be 3 long chirps for confirmation.
3. If the crank time is too long, (Engine is successfully running, but starter still cranks):
 - a. Press the  button on the transmitter to stop engine running.
 - b. Press the  button on the transmitter to set proper “Start Timer”. The chirp & LED pause will confirm entry. (Decrease “Start Timer” is necessary.)
 - c. Repeat the step1 – 4.
4. If the crank time is too short, (Engine is not running and starter stops cranking):
 - a. Press the  button on the transmitter to stop engine running.
 - b. Press  button on the transmitter to set proper “Start Timer”. The chirp & LED pause will confirm entry. (Increase “Start Timer” is necessary.)

Repeat the step1 – 4.

RETURN TO FACTORY DEFAULT SETTING:

1. Turn the ignition ON then OFF 3 TIMES and stay in OFF position.
2. Push the Valet switch **12** times and hold it until **six** chirps with a long chirp is hearing then release the valet switch. You are now in the “Return To Factory Default Setting” programming mode.
3. Press the  +  button on the transmitter together for 6 seconds, there will be a confirmation 6 chirps with 3 long chirps to confirm the system “Alarm Features I, II & III Programming” all returning to factory default setting.

Exit: Press transmitter's  button or turn the ignition switch “on” or leave it for 15 seconds. 3 long chirps will confirm exit.

SHUTDOWN DIAGNOSTICS

The unit has the ability to report the cause of the last shutdown of the remote start system.

Enter:

1. Turn the Ignition 'switch to 'ON position.
2. Press the  button on the transmitter.
3. The LED will now report the last system shutdown by flashing for one minute in the following grouped patterns:

LED Flashes	Shutdown Mode	
1	(-) Safety Shutdown input (Hood)	<ol style="list-style-type: none"> 1. Close the hood. 2. Check H6/1 White/ Black wire connection.
2	(+) Safety Shutdown input (Brake) or Neutral Safety Switch input fail.	<ol style="list-style-type: none"> 1. Check H6/3 White/ Violet wire connection. 2. Move the Enable Toggle Switch to "ON" position. (If installed.) 3. Move the gear selector to "Park/ "NEUTRAL" position. 4. Check H6/2 Black/White wire connection.
3	No RPM or Low Voltage.	TACHOMETER CHECKING TYPE: Check H6/8 White/Red wire connection VOLTAGE CHECKING TYPE: Program the "CHECK LEVEL" from "Hi Check Level" to "Low Check Level"
4	(-) Wait for Start timed out	<ol style="list-style-type: none"> 1. Check wait for start indicator 2. Check H6/5 White/ Green connection.
5	Over-rev	
6	System timed out	
7	Transmitter	

TESTING YOUR INSTALLATION:

Caution!! The follow procedure must be performed after the installation of the Remote Start Device. It is the responsibility of the installing technician to complete these tests. Failure to test the unit in the following manner may result in personal injury, property damage, or both.

1. Test the BRAKE shutdown circuit: With the vehicle in park (P), start the vehicle using the remote transmitter. Once the engine is running, press the brake pedal. The vehicle should shut down immediately. If the vehicle continues to run, check the brake circuit WHITE/ VIOLET wire (H6/3) connection.
2. Test the HOOD PIN shutdown circuit: Start the vehicle using the remote transmitter. Once the engine is running, pull the hood release and raise the hood. The vehicle should shut down immediately. If the vehicle continues to run, check the hood pin WHITE/ BLACK wire (H6/1) connection.

NEUTRAL START SAFETY TEST:

1. Set the vehicle parking brake.
2. Block the drive wheels to prevent vehicle movement.
3. Sitting in the vehicle, turn the ignition switch to "ON" or "RUN" position. But do not start the engine.
4. Step on the brake pedal and shift the gear selector into "DRIVE (D)".
5. Put your foot over the brake pedal but do not press down on it. Be ready to step on the brake to shut down the Remote Start Device.
6. Start the vehicle using remote transmitter.
 - a. If the starter does not engage, the test is complete.
 - b. If the starter engages, immediately step on the brake pedal to shut down the system, recheck your VIOLET wire (H1/1 starter output wire) connection. The heavy gauge VIOLET wire must be connected to the ignition switch side of the Neutral Start Switch. If the vehicle you are working on does not have an Electrical Neutral Safety Switch, it will be necessary to reconfigure the Remote Starts Wiring to accommodate this vehicle. The information concerning the Mechanical Neutral Safety Switch provided below will help you to determine if the vehicle you are working on has this type of safety switch and will provide alternate wiring methods to accommodate this situation.

PARK/NEUTRAL ECM INPUT:

The Park/Neutral ECM input is the preferred method of installation. This not only maintains the integrity of the factory circuit, it is also the easiest to install, providing the vehicle you are working on has this ECM input.

The installation required for this application (shown below), indicates in the slight reconfiguration of the control switch wiring. Shown is a typical GM Park/Neutral ECM input circuit. To connect the Remote Start unit to the GM Park/Neutral ECM input:

1. Locate the Orange/Black reference wire in the "C2 connector found at the ECM in GM **B** Body vehicles or, locate the equivalent reference wire in the vehicle you are installing the Remote Start Unit in.
2. Connect the BLACK/WHITE Neutral Safety Switch wire (H6/2) to this reference wire.

NOTE: If the optional remote starts enable toggle switch is installed, connect the one side of the enable switch to this reference wire and connect the other side of the enable switch to the BLACK/WHITE Neutral Safety Switch wire (H6/2) of the Remote Start unit.

The reference diagram below shows a typical GM B Body ECM reference wire and how it is to be connected to the Remote Start Unit.

