

LIMITED WARRANTY

This vehicle security systems is warranted to the original consumer purchaser, to be free from defects in material and workmanship. The manufacturer will repair or replace, at it's option, and free of charge during the first 12 months of the warranty period, any part which prove defective in material or workmanship under normal installation, use and service, provided the product is returned to our factory, transportation charges prepaid. Products returned to our factory must be accompanied by copy of purchase receipt. Warranty is limited to defective parts and/or replacement parts only and excludes any incidental and consequential damages connected therewith. The manufacturer, of this theft deterrent systems makes no warranty against the theft of vehicle or its content. This warranty is not to be construed as an insurance policy against loss.

After the first 12 months of the warranty period there will be a charge. (required) for repairing and/or replacing any defective parts.

WARRANTY ON INSTALLATION LABOR, REINSTALLATION AND REMOVAL CHARGES ARE NOT THE RESPONSIBILITY OF THE MANUFACTURER.

OPTIONAL ACCESSORIES

**Glass Break Sensor
Interior Radar Sensor
Window Roll-Up Module
Trunk Release Solenoid
Rechargeable Back-Up Battery Siren**

Thank You For Choosing

COMMANDO VEHICLE SECURITY

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COMMANDO

Vehicle Security Systems

COMMANDO – COMBO

REMOTE AUTO ALARM STARTER

&

PAGER SYSTEM

2-WAY TRANSCEIVER WITH LCD MONITOR

INSTALLATION MANUAL

- * One 3 Channel (FM LCD) Transmitter
- * 2nd Channel Output for Trunk release
- * Door Entry Protection
- * Personal Panic Feature
- * Shock Sensor / Dual Zone Dual Adjust
- * Remote Trigger Disable
- * Dome Light Supervision
- * Five Function LED Plug-In
- * 120dB 6 Tone Siren
- * Last Door Automatic Arming
- * Remote Start
- * Vacuum System Sense (Optional)
- * Factory Alarm Disarm
- * Double Pulse Unlock
- * 2nd Ignition Relay On Board
- * Tach & Spark Plug Sense
- * Flashing Parking Lights
- * Valet Override Switch Plug-In
- * Door Locking & Unlocking w/ Ign. Key
- * Remote Door Lock/Unlock Plug-In

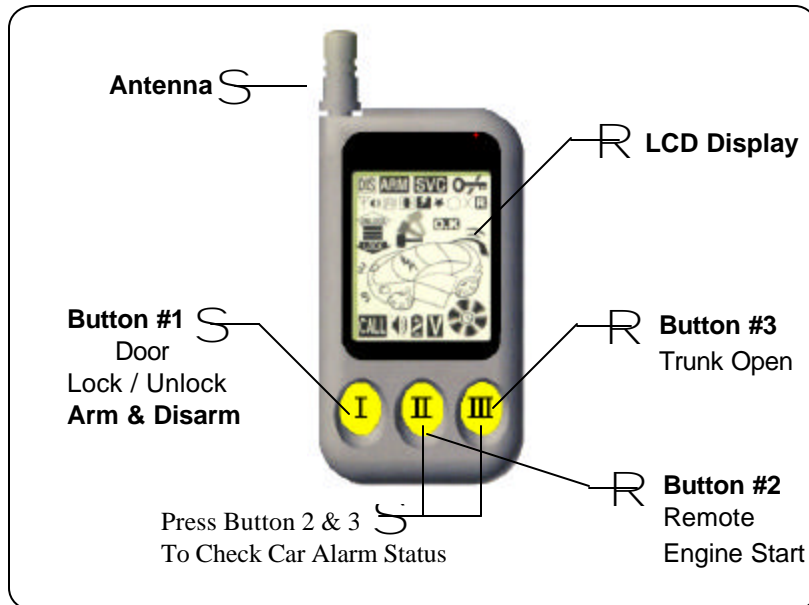
SYSTEM CONTENTS

Each system contains the following components:

- 1- Brain Module
- 1- 3 Button Transmitter (L.C.D SCREEN)
- 1- External Receiver W/ harness
- 1- 6 Ton Siren
- 1- Impact Sensor Dual Zone W/ harness
- 1- 10 pin wiring harness
- 6- (12 G.) Wires W/2 Fuse Holders
- 1- 3 pin door lock harness
- 1- 3 pin wiring harness
- 1- 2 pin wiring harness
- 1- Red Status L.E.D.
- 1- Push Button Switch

Note: Read this instruction manual thoroughly.

Important: This unit is designed for a professional installation only.
Any installation performed by an unqualified installer, Will void the warranty.



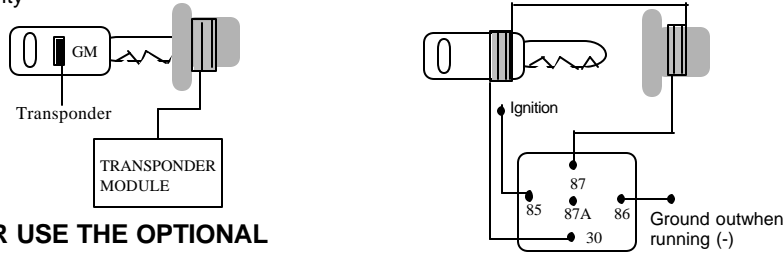
TROUBLE SHOOTING

Problem	Probable Cause	Suggestions
Unit will not operate	All power inputs are not connected to 12V+	Main inputs heavy gauge red wires and red fused wire on main harness must be connected to 12+
Keyless Entry operates but engine will not start	Remote start in Service mode LED is ON solid	Turn ignition key to ON position, press and hold service switch for 5 sec. LED will go out
Vehicle will not remote start	Safety inputs are triggered	Check Brake switch input (Yellow Wire) for (+) or Hood input (Blue Wire) for (-) shorted to ground
Engine Cranks but not long enough to allow vehicle to start.	Crank time must be increased.	Place dip switch #3 to the ON position
RS will not go into Code Learning or Programming Mode.	Ignition #1 (Yellow Wire) is on wrong connector- Ignition/Accessory #2	Connect the main ignition Input/Output to the Ignition #1 connector on the Board.
Car Horn Honks and Vehicle will not start.	Vehicle has a factory alarm system.	Connect red wire one accessory plug (red plug) to Factory Alarm disarm wire.
Vehicle starts without pressing Remote Transmitter.	RS in Automatic Cold Start Activation Mode.	To Exit mode: 1. Press brake pedal, then Press Valet Switch, Press and hold Button #2 for 5 sec. (Lights will flash 10 x's)
Vehicle cranks and begins to run, then shuts off.	Voltage sense is not working. Use the spark or Tech sense.	Extend the gray wire from the main harness to a sparkplug wire (wrap-around), put dip switch #4 in the on position.
Vehicle cranks and begins to run, then shuts off.	Vehicle has theft deterrent system that prevents starting w/o key in ignition.	See manual on Passlock PATS theft deterrent systems.

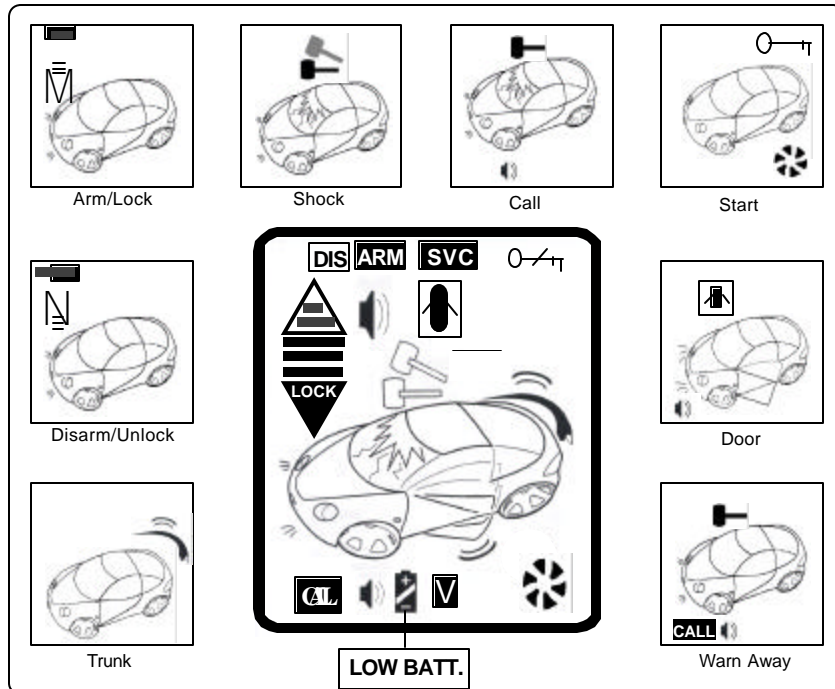
PASSKEY & P.A.T.S. BYPASS

The GM PASSKEY 3 AND FORD P.A.T.S.. Antitheft system works with a glass tube called a transponder located in the ignition key that sends and receives data via a coil on the ignition switch. A module that controls fuel distribution to the engine receives this information. If the module does not receive a proper code or no code when starting, it will cut the fuel supply to the engine. Some manufacturers of aftermarket security offer modules to bypass this security to allow you to add a remote starter. If you do not have one of these modules available to you, can use the following method.

From pin 87 run a 22 (G). Wire to the key cylinder where you wrap the wire tightly 8 to 10 times around the cylinder, leave approx. 3 inches before wrapping it around one of the vehicles keys then returning the end of the wire to pin 30. This will introduce the key into the circuit only when the remote starter is activated therefore maintaining the integrity of the security



OR USE THE OPTIONAL
BPG-1 GM PASSKEY & VATS MODULE
BPF-1 P.A.T.S. BYPASS MODULE



REMOTE ALARM FUNCTIONS

TRANSMITTER BUTTON OPERATION:

ACTIVE ARMING MODE:

Arm the alarm system by pressing the transmitter button #1, once momentarily. The alarm will arm and will confirm with 1 siren arming chirp, LED will be solid and start to flash slow after 10 seconds.

PASSIVE ARMING MODE:

In passive arming mode, upon closing the last door there will be a 30 second arming delay. The LED will be flashing rapidly indicating that the system is in passive arming phase. After 30 seconds, the alarm will arm by itself. (Programmable)

DISARMING THE SYSTEM:

Disarm the alarm system by pressing transmitter button #1, Alarm disarms and will confirm with 2 disarming siren chirps, Lights will flash twice, LED will turn off. Optional starter disable feature will be deactivated, Door locks will unlock automatically - Dome light will be illuminated for 30 seconds or until ignition key is turned to accessory "ON" position.

SILENT REMOTE PAGE BACK:

Press and release button # 2 for 10 Times. Now the remote will arm/disarm the alarm without sound on page back. Repeat above to hear sound from remote on page back.

PANIC MODE:

For emergency situations, press and hold button #1, of the transmitter for 3 seconds. This will activate the panic mode. The alarm siren will sound and the parking lights will flash for 60 seconds (or until the transmitter button #1 is pressed again for 1 second).

ALARM TRIGGERED:

If a violation of the vehicle is taking place, the siren will sound and the parking lights will flash for 60 seconds. After this 60 seconds duration, the alarm will automatically reset and resume protecting the vehicle.

INTRUSION ALERT:

If a sensor input (door switch, shock sensor) has been violated while the system was armed, the LED will be flashing rapidly and upon disarming the alarm system, the siren will confirm with 3 disarming siren chirps and 3 light flashes. Check the vehicle and its contents to verify if any violation has taken place.

STATUS CHECK OF SYSTEM:

Press remote button # 2' & 3' At The same time for one Seconds. And the remote will display status of alarm without disturbing the last position.

VALET MODE: 2-step procedure

This feature is designed to temporarily disable the alarm and starter for valet parking or Auto service. While the alarm is in the disarmed state, insert the ignition key and turn to the ignition "ON" accessory position. Press & hold the valet switch for 5 seconds, the system will chirp

And LED lights solid, remove the key from the ignition. Now The alarm & Starter will be in the valet mode. (ONLY KEYLESS ENTRY WILL WORK)

NOTE: You cannot arm or disarm the alarm while the system is in valet mode. However, you can still use the transmitter to lock and unlock the doors, while the alarm is in valet mode.

EMERGENCY OVERRIDE SWITCH:

In the event that you lose your transmitter and cannot disarm the alarm:

Open the door, the alarm will sound. Insert the ignition key and turn to the ignition "ON" accessory position. Press & Hold the valet switch for 5 seconds. The alarm will chirp & disarm, the LED will be solid, the starter disable feature will be deactivated and you will now be able to start your car.

DRIVER CALLING:

When alarm is in disarm mode, press VALET Push Button switch momentarily will Page the remote with 4 Beeps to indicate a calling function from the Vehicle.

BEFORE INSTALLATION

1- Before you start installation:

Verify that the vehicle is equipped with an electronic fuel injection and automatic transmission. Verify that the vehicle starts and idles properly and inform the customer where the location of the program/service switch will be. You must also check to see if the vehicle contains a factory alarm system and whether it has a pin switch for the hood, if it does not have a pin switch you must install one. Finally always use a volt/ohm meter or computer safe tester when testing the wires.

2- Remote Start Overview:

Basic Remote Start Module Functions:

Provide the starter and ignition with a 12 volt output to start the vehicle, you may also put a 12 volt output on the accessory circuit so you will be able to turn on the air conditioning and heater. Now you may install safety inputs to prevent the vehicle from starting at times which can cause injury to service personnel or non authorized drivers. Furthermore you must program the start output long enough so you can start the vehicle without damage to the starter. Also program visual verification of the vehicle being started, such as parking lights or LED.

3- Remote Start Basic Notes:

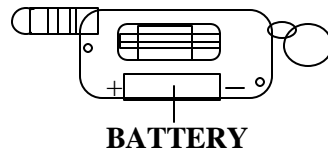
The remote start module senses the vehicle's successful start By One of the following: CURRENT, TACHOMETER, SPARK, COIL, AND VACUUM SWITCH (optional). The module will first look for a voltage drop when the vehicle starts, if this method does not work, use the green wire on the main harness to sense either the Tach wire, spark or coil noise. To do this you must first place dip switch #1 to the off position. Then extend the green wire to the engine compartment and tie the sense wire to a spark plug or a coil wire. The green wire is also designed to connect to a Tach wire. The vacuum switch is designed to provide a ground output until the engine is started and the switch is placed in line with one of the vehicle's vacuum hoses. If you plan on using the vacuum switch you must place dip switch #2 to the off position.

LOW BATTERY INDICATOR :

The Pager will indicate when it is time to replace the battery by lighting the BATTERY symbol. this indication is not for the pager but rather the remote transmitter. Audible paging "beeps" will become none audible before battery replacement is necessary for the remote transmitter.

REPLACING THE BATTERY :

Remove battery cover. and Remove old battery. Replace with 1.5V AAA Battery



**AUTOMATIC TRANSMISSION ONLY
DO NOT INSTALL ON MANUAL TRANSMISSION**

"" Manufacturer is not responsible for any injury or damage to cars with manual transmission ""

PROGRAMMING THE UNIT

BEFORE PROGRAMING ANY TRANSMITTERS OR TESTING THE UNIT MAKE SURE THE ANTENNA - RECEIVER IS PLUGED IN TO THE UNIT. !!!!!!!

1- CODE TEACHING:

Turn the ignition key 3 times ON/OFF, ON/OFF, ON, the siren will chirp. Leave the ignition key in on position, press the valet switch for 5 seconds until the siren chirps 3 times, Then press button # 1 on the remote transmitter. The siren will chirp once, if you want to teach another transmitter with different code press # 1 on the second transmitter the siren will chirp once. You can teach up to 2 different codes. After 10 seconds the LED starts flashing, now the alarm has learned the code of the transmitters.

2- REMOTE PROGRAMMABLE FEATURES:

To enter program mode:

- 1- Turn Ignition key ON
- 2- Within 10 seconds press **VERRIDE** switch 5 times. Siren will Sound with Long Chirp then Release switch. Now in program mode.

To access feature change:

- 1.- Press program switch the number of times that corresponds with the feature you desire to change.

Example: If you want to turn feature #4 off, then press program switch 4 times.

- 2- Siren and LED will flash each time switch is pushed.
- 3- Press button #1 for one sec, on remote to turn feature **ON** - SIREN will chirp 1 time.
- 4- Press button #2 for one sec, on remote to turn feature **OFF** - SIREN will chirp 2 times.
- 5- System will automatically exit program mode.
- 6- Once a programmable feature has been entered, the LED will flash the number of times corresponding with the program feature that was chosen.

PROGRAM LOCATION		
	ON	OFF
# 1	PASSIVE	ACTIVE
# 2	PASSIVE W/ DOOR LOCK	PASSIVE NO LOCK
# 3	AUTO REARM	NO REARM
# 4	CHIRP WHEN ARM & DISARM	CHIRP DISABLE
# 5	1 PULSE FOR UNLOCK	2 PULSE FOR UNLOCK
# 6	0.7 SEC. DOOR LOCK PULSE	3 SEC. DOOR LOCK PULSE
# 7	IGNITION AUTO LOCK & UNLOCK	NO IGNITION AUTO LOCK
# 8	COLD START DISABLE	COLD START ENABLE
# 9	COLD START EVERY 2 HR	COLD START EVERY 1 HR
# 10	TRUNK OPEN W/O DISARM ALARM	TRUNK OPEN WITH DISARM ALARM
# 11	DISABLE CHIRPS ON PASSIVE	CHIRPS ON PASSIVE COUNT DOWN
# 12	ARM REPORTS IN 10 SEC.	ARM REPORTS IN 60 SEC.
# 13	RUN TIME 15 MIN.	RUN TIME 25 MIN.
# 14	LOCK BEFORE & AFTER START	DISABLE
# 15	LOCK AFTER SHUTS DOWN ENGINE	DISABLE
# 16	LIGHTS 2 FLASH UPON DISARM	LIGHTS STAYS ON 30 sec. UPON DISARM

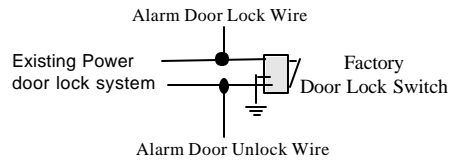
RESET TO FACTORY DEFAULT SETTING:

ENTER PROGRAM MODE (SEE ABOVE)

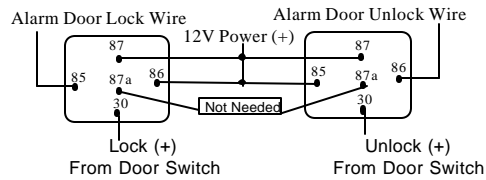
PRESS AND HOLD CHANNEL 3 (OR BUTTON #3) FOR 5 SECONDS LIGHT WILL FLASH 3 TIMES .AND ALL PROGRAMMABLE FEATURES WILL GO BACK TO FACTORY DEFAULT SETTINGS. (WHICH IS ALL ON)

DOOR LOCK WIRING DIAGRAM

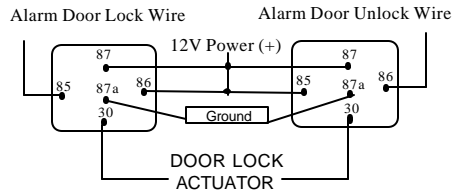
3 Wire Negative Door Lock System



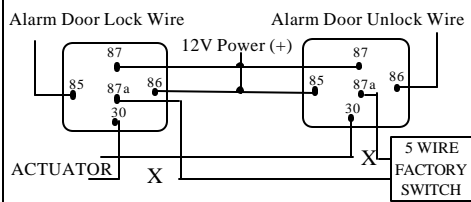
3 Wire Positive Door Lock System



Aftermarket Power door lock Actuator



5 Wire "Ground at rest" Door Lock System



Or use the optional DL-INV or D-DLS

Stop-N-Go Feature:

If you wish to exit the car and remove the ignition key but keep the car running.

- 1- While Ignition is on Position Press the brake pedal and hold.
- 2- While pressing the brake pedal press button # 1 on the transmitter for 2seconds.
- 3- The LED should now be flashing rapidly.
- 4- While In STOP-N-GO Mode The Parking Lights Will Flash 5 Times.
- 5- Release the brake pedal and turn the ignition switch to OFF position, Remove key. Now you may exit the vehicle and lock the doors with the keyless entry feature. When reentering the vehicle simply turn ignition key to ON position (Do not start), Press the brake pedal and the STOP & GO feature will be OFF.

Cold Start Feature:

- 1- Press And Hold Brack Pedal
- 2- Press And Hold Valet Switch
- 3- Press Button #2 for 3 seconds, Parking Lights will flash five (5) times. Then Engine starts for 30 seconds, to acknowledge the setting. Once programmed the engine will start every 2 hours or one hour as program for 15 or 25 minutes, for total of 12 times only.

To Turn The Cold Start Feature OFF:

- 1 - REPEAT STEP ONE. LIGHTS WILL FLASHES 10 TIMES.
- 2 - DEACTIVATE BY STEPPING ON THE BRAKE.
- 3 - WHEN THE USER STARTS THE CAR WITH REMOTE CONTROL.
- 4 - DEACTIVATE BY TURNING ON THE IGNITION.

ALL THE ABOVE WILL CANCEL THE COLD START MODE.

REMOTE START FEATURES

REMOTE START FUNCTIONS:

1.- Press button #2, Siren will chirp 3 times parking lights will turn on solid, LED will begin to flash rapidly to verify that the vehicle is about to start remotely.

Ignition relays #1 & #2 will provide 12V+ output first (Yellow & Brown wires), the Red wire on the 3 pin accessory harness will pulse to turn off the factory alarm. (If applicable)

After 3 seconds the start relay will then provide 12 V+ for approximately 1 second (violet wire) or until it senses that the car has started.

Immediately after the car has started the accessory relay will provide 12V+ output (Orange wire). Air conditioning or heater should now turn on. Engine will run for 12 minutes.

2.- Press button #1 to unlock vehicle (if the keyless functions are used), and enter vehicle. Do not hit brake pedal before turning the ignition on or the vehicle will shut down.

3.- Insert the ignition key and turn to ignition position only!!! **If the key is turned all the way to the crank position, the starter will over grind and possibly damage the starter.** Once the ignition is turned on, the vehicle may be operated normally. If the vehicle needs to be remotely shut down during the run cycle, press button #2 on the transmitter Siren will chirp 6 times and the vehicle's engine will stop running.

Valet Mode:

To get into Valet mode, turn the Ignition ON, hold the push button switch for 5 seconds until the LED comes ON solid. The system will be in VALET. Only the door lock/unlock system will work on Valet (Keyless Entry).

To get out of Valet mode, turn the ignition ON and hold the switch down for 5 seconds,

Longer Crank Times:

Some vehicles require a longer cranking time, to achieve this you must turn the dip switch #2 to an off position.

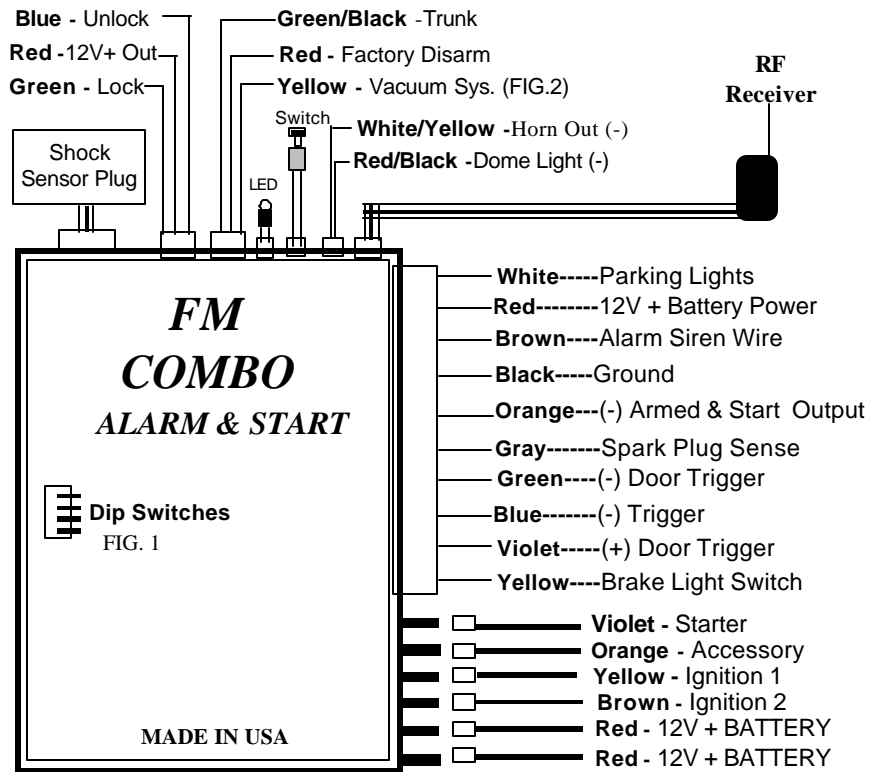
Diesel Mode:

Vehicles with a diesel engine can be remote started by placing the dip switch #3 to an OFF position. By doing this your ignition will be turned on for 20 seconds before starting the vehicle, allowing a time for your glow plugs to warm up.

Bypassing Factory theft Deterrent Systems:

Most factory deterrent systems are now using either a resistor coded key or a passive transponder that allows the fuel system to function properly only when the coded key is inserted into ignition. Therefore when starting the vehicle remotely without the key, the vehicle's theft deterrent system will only allow the vehicle to start if it "reads" the proper coded key or transponder in the ignition. If you try and start the vehicle with any of these systems and do not bypass it then the vehicle will crank but the fuel system will shut down and not run.

REMOTE ALARM & STARTER WIRING



- WHITE:**-----Connect to the (+) side of parking lights.
- RED:**-----Connect to Battery constant 12V.+ power.
- BROWN:**-----Connect to the red wire of Siren (+) Output.
- BLACK:**-----Connect to a Good Ground.
- ORANGE:**-----Connect to a 30 Amp. Relay for Starter Kill (-) Output (PASS LOCK)
- GRAY:**-----Wrap around Any Spark Plug cable or Tachometer.
- GREEN:**-----Door pin (-) Trigger.
- BLUE:**-----Hood pin or extra Sensors (-) Trigger.
- VIOLET:**-----Door pin (+) Trigger.
- YELLOW:**-----Connect to the Brake light switch (+) when Brake is pressed.

- RED:** ----- Connect to Battery constant 12V. (+) POWER.
- RED:** ----- Connect to Battery constant 12V. (+) POWER.
- BROWN:**--- Connect to Ignition switch #2 if needed.
- YELLOW:**--- Connect to Ignition switch wire which is powered 12V.+ even on cranking.
- ORANGE:**--- Connect to Ignition switch ACC circuit (Air Cond./Heater).
- VIOLET:** ---- Connect to Starter wire witch is powered ONLY on cranking position.

-
- 4- PIN WHITE CONNECTOR:**----- Plug in Shock Sensor.
 - 3- PIN WHITE CONNECTOR:**----- Plug in Door Lock Unlock Wire.
 - 2- PIN RED CONNECTOR:**----- Plug in LED and mount in a desirable location.
 - 2- PIN BLUE CONNECTOR:**----- Plug in PROGRAM/VALET Switch.
 - 2- PIN WHITE CONNECTOR:**----- Plug in Horn / Dome Light Wire.
 - 4- PIN WHITE CONNECTOR:**----- Plug in R/F RECEIVER.
-

YELLOW: VACUUM (optional)

A. Find the existing Vacuum Hose at the intake manifold. Cut hose and install the Vacuum Tee included in the optional kit. (See FIG. 2).

B. Connect to one of the pin on the Vacuum switch , and Ground the other Pin.

Please note that Vacuum Hose other than the manifold and less than 10" vacuum may cause starter damage.

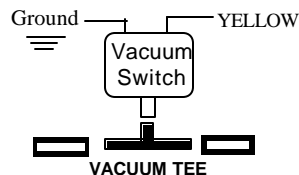
NOTE

- 1- Factory ALARM disarm pulse will be activated any time alarm disarms
- 2- The horn output will trigger with all triggers
- 3- this output is also used to bypass (GM pass-lock. Transponders type immobilizers). Ground output wire will supply ground when alarm armed, and remote starter is engaged no matter if ignition is turned on position with the key. Then brake is preset, the output will be active until user turns off the ignition to off position.

DIP SWITCH SETTINGS

FIG. 1

- | | |
|-------------------------|--------------------------|
| 1-ON= GASOLINE ENGINES | OFF= DIESEL ENGINES |
| 2-ON= NON VACUUM SENSE | OFF= VACUUM SWITCH SENSE |
| 3-ON= CRANK TIME NORMAL | OFF= CRANK TIME LONGER |
| 4-ON= SMART SENSE | OFF= SPARK PLUG OR TACH |



Optional "YELLOW WIRE" VACUUM SYSTEM HOOKUP

FIG. 2

If Vacuum Hook-Up is required
An additional Vacuum Kit can be added
That includes: Vacuum Switch, Hose,
Vacuum "T", Connectors.