

LIMITED WARRANTY

This **COMMANDO vehicle security** 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.

NOTE: ALL LCD 2 WAY REMOTE WARRANTY FOR 12 MONTHS FROM DATE OF PURCHASE

OPTIONAL ACCESSORIES

**Channel Expander
Glass Break Sensor
Interior Radar Sensor
Window Roll-Up Module
Trunk Release Solenoid**

COMMANDO

Vehicle Security

FM-5005 COMBO

REMOTE AUTO ALARM & REMOTE STARTER SYSTEM INSTALLATION MANUAL

Alarm Features

One 5 Button Two Way LCD Display Withe Pager Remote
One 5 Button Code Hopping Remote Controls
Built-In Side-Light Relay Programmable (+/-)
Plug-in user programmable Coded Override Switch
Plug-in Dual-Zone Dual Adjust Piezo Sensor
Horn Output
Remote Door Locking/Unlocking with positive & negative outputs
Passenger Unlock Output
Two Auxiliary Channels with Selectable Output Types, (Pulsed, Timed or Latched)
User-Selectable Auto-Arming
User-Selectable Auto-Rearming
Remote Panic with Smart Locking/Unlocking
User-Selectable AutoLock - Instant or RPM dependant
Remote Keyless Entry and Accessory Activation Even in Valet Mode
Remote-Controlled Courtesy Lighting
Pre-wired LED, Sensor, and Valet Switch Connectors
Auto Activation of Auxiliary 2 Output
Auto Disarm with Auxiliary 1 Activation (Trunk Release Output)
Smart Remote Trunk Release
Alarm Trigger Identification

Starter Features

True RPM Sensing for Real Time Cranking
RPM Learning Indication
Dual Mode reliable Smart Engine Run Sensing (Tackles Mode Only)
Gas or Diesel Mode with glow plug input
Cold Start Timer (Programmable)
Dedicated Starter Active Output for factory transponder bypass
Starter Disable Output for Anti Grind feature
Factory Disarm Output
Factory Rearm Output
Two Ignition Relay Outputs
Stop & Go Mode
Selectable Engine Run Time

SYSTEM CONTENTS

Each system contains the following components:

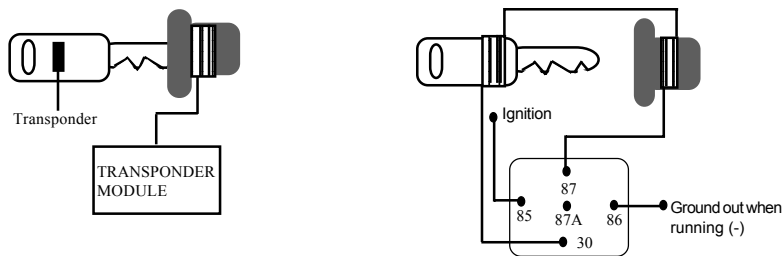
- 1- Brain Module
- 1- 5 Button Transmitter
- 1- One 5 Button Two Way LCD Display Withe Pager Remote
- 1- 6 Tone Siren
- 1- Impact Sensor Dual Zone W/ Harness
- 1- 20 pin wiring harness
- 1- (12 G.) Wire Harness W/2 Fuse Holders
- 1- 3 pin door lock harness
- 1- 4 pin wiring harness For Sensor
- 1- Red Status L.E.D.
- 1- Push Button Switch
- 1- Hood Pin 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.

PASSKEY & P.A.T.S. BYPASS

The GM PASSKEY 3 AND FORD P.A.T. 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 9 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 wen the remote starter is activated therefore maintaining the integrity of the security



PASSKEY & P.A.T.S. BYPASS:(USE THE OPTIONAL)

BPG-1 GM PASSKEY & VATS MODULE BPF-1 P.A.T.S. BYPASS MODULE

SYSTEM DIAGNOSTIC

INTRUSION ALERT

If a sensor input (door switch, shock sensor) has been violated while the system was armed, upon disarming the alarm system, the siren will confirm with 3 disarming siren chirps and 3 light flashes indicating the alarm had been tripped. Turning the ignition to on position the LED will flash 8 cycles indicating the trigger zone,

LED flashes	Description	LED flashes	Description
1	Sensor 2	6	Hood/Trunk trigger
2	Shock sensor	7	Reserved
3	Optional sensor	8	Reserved
4	Door trigger	9	Reserved
5	Reserved	10	+12 volt power interrupt error

AUTOMATIC FAULTY ZONE ELIMINATION

If while armed, a faulty zone is detected and the alarm is triggered, the siren will sound and the lights will flash for 4 cycles of 45 seconds duration each. Total 4 minutes. After these 4 cycles, the alarm will automatically reset and bypass the defective zone. Upon disarming the alarm system, 3 chirps and 3 light flashes will indicate that the alarm has been triggered.

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 (Green/White) for (+) or Hood input (Wire/Black) for (-) shorted to ground
RS will not go into Code Learning or Programming Mode.	Ignition #1 (Yellow Wire) is not getting power.	Connect the (Yellow) Wire to ignition.
Car Horn Honks and Vehicle will not start.	Vehicle has a factory alarm sys..	Connect (Violet/White) wire to Factory Alarm disarm wire.
Vehicle starts without pressing Remote Transmitter.	RS in Automatic Cold Start Activation Mode.	See manual page 4 on COLD START.
Vehicle cranks and begins to run, then shuts off.	Voltage sense is not working. Use the TACH. sense.	Extend the (Black/gray) wire from the main harness to a TACH wire.
Vehicle cranks and begins to run, then shuts off.	Vehicle has theft deterrent system that prevents starting w/o key in ignition.	See manual page 1 on Passlock PATS theft deterrent systems.

PROGRAMMING THE UNIT

FEATURE PROGRAMMING MODE

- 1- Turn Ignition key ON
- 2- Within 10 seconds press VALET switch 5 times. The siren will chirp 3 times indicating you are in feature programming mode.
- 3- Select the feature you want to change by pressing the valet switch the number of times as the feature number. (Every time valet switch is pressed the siren will chirp once).
- 4- Select the desired option by pressing the transmitter's buttons 1, 2 or 3.
Siren chirps will follow each button press, once for button 1, twice for button 2 and three times for button 3.

PROGRAMMING TABLE			
#s	TX But. 1 Mode 1	TX But. 2 Mode 2	TX But. 3 Mode 3
#1	Passive Arm Disable	Passive Arm Enable	
#2	Auto Rearm Disable	Auto Rearm Enable	
#3	Chirps Enable	Chirps Disable	
#4	Ignition Lock Enable	Ignition Lock Disable	Prog. Coded Override
#5	Ignition Unlock All doors	Ignition Unlock – Driver door	Ignition Unlock - Off
#6	Unlock Single Pulse	Unlock Double Pulse	
#7	Lock/Unlock Pulse 1sec.	Lock/Unlock Pulse 3sec	
#8	Lock on Passive Arm Disable	Lock on Passive Arm Enable	
#9	Door Trigger delay disable	Door trigger delay Enable	
#10	Bad door zone report in 5 sec.	Disable bad door zone report	
#11	Activate Aux.2 upon arm-disable	Activate Aux.2 upon arm-Enable	
#12	Aux.1 pulsed	Aux.1 Timed	Aux. 1 Latched
#13	Aux. 2 pulsed	Aux. 2 Timed	Aux. 2 Latched
#14	Disarm with Aux. 1 Disable	Disarm with Aux. 1 Enable	
#15	Starter in Valet Disable	Starter in Valet Enable	
#16	Door lock Upon Starter	No Door lock Upon Starter	
#17	Door lock after Shutdown	No Door lock after Shutdown	
#18	Run Time 12 Min	Run Time 24 Min	
#19	Cold Start Every 2 hours	Cold Start Every 1 hour	
#20	Smart Start Enable	RPM Start Enable	
#21	Learn RPM threshold	Set starter for Gasoline Vehicle	Set Starter for Diesel
#22	Adding 2 way FM Module	Program 2-way FM remote	
#23	Aux. Relay Out for Ignition-2	Aux. Relay Out for Accessory-2	→ Aux. Relay Out for
#24	Aux 3- Horn Out	Aux 3- Ignition Out	Starter-2

Column 1 - Factory Default

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 MODE 1)

PARKING LIGHT POLARITY SELECTION:

Remove the plastic cover of the control module and find jumpers W5 and W2 on the PCB.
Select Parking Light Polarity output by connecting the center tap to “+” or “-” of jumper W5.

TRANSMITTER BUTTON OPERATION

IMPORTANT: The microprocessor alarm system has been designed so that upon arming, Sensor 1 & 2 triggers will be delayed for 10 seconds. This is to give the electronics in the vehicle, a chance to stabilize (Window roll-up, shock sensor, etc.).

ACTIVE ARMING MODE

Press transmitter button #1 momentarily to arm the alarm system. The alarm will arm and the siren will chirp once, sidelights will blink, doors will lock automatically, optional starter disable feature will be activated and the LED will turn on solid then begin flashing slowly after a 10 second delay.

DISARMING THE SYSTEM

Press transmitter button #2 momentarily to disarm the alarm system. The alarm will arm and the siren will chirp twice, sidelights 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.

ARMING WITH TRANSMITTER (NO CHIRP)

Press transmitter button #5 momentarily. Then press button #1 the alarm will arm silently (no siren chirps).

DISARMING WITH TRANSMITTER (NO CHIRP)

Press transmitter button #5 momentarily. Then press button #2 the alarm will disarm silently (no siren chirps).

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 and 5 seconds later parking light will flash two times indicating that the system is in passive arming phase. After 30 seconds, the alarm will arm (Programmable).

ONE TIME PASSIVE ARMING DISABLE

Arm and disarm the alarm within 10 seconds, this will disable passive arming until you either turn the ignition on, or arm the alarm and wait 10 seconds then disarm.

ARMING WITH DEFECTIVE ZONE ALERT

After arming the alarm (active or passive) .if a defective zone has been detected. The alarm will confirm the detection of the defective zone by chirping the siren and flashing the lights 4 times. Also will identify the defective zone with LED. All defective zones will be bypassed until they become good then the alarm will start monitoring them except both sensor once bypassed they stay bypassed until you disarm and arm the unit.

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, armed output will be active, doors will unlock and the parking lights will flash for 30 seconds (or until the transmitter button #2 is pressed. (If ignition is on while panicking the doors will lock.

ALARM TRIGGERED

If a violation of the vehicle is taking place, the siren will sound, horn will flash, and the parking lights will flash for 45 seconds. After this 45 seconds duration, the alarm will automatically reset and resume protecting the vehicle. Sensor 1 sensor 2 triggers will sound the alarm 30 seconds.

ALARM SPECIAL FEATURES

PROGRAMING TRANSMITTERS

Turn the ignition key 3 times on/off; leave the ignition key in ON position, within 3 seconds siren will chirp 3 times.

Press valet switch for 5 seconds the siren will chirp 5 times and LED comes on solid, then press button # 1 on the remote transmitter one time. The siren will chirp once, press button #1 one more time the siren will chirp twice this will confirm that the alarm has learned that transmitter. If you want to teach another transmitter with a different code press button # 1 one time on the second transmitter the siren will chirp once. Then press button #1 one more time on the transmitter siren will chirp twice you can teach 4 different codes.

TRANSMITTER TEACHING FOR SECOND CAR OPERATION

Same as programming transmitter, but press the 5 the or function button 2 times then press button # 1, siren will chirp once then repeat procedure one more time, siren will chirp twice indicating it learned the transmitter

WARN-AWAY

Dual zone shock sensor, zone one when triggered activates causes the alarm to chirp five times indicating a Warn-away condition, second zone when active, triggers the Alarm.

VALET MODE

Valet mode entry. Disarm the alarm, turn the Ignition ON, and hold the push button valet switch for 5 seconds until LED turns ON and parking light flash once. Door lock/ unlock, and all aux outputs respond to transmitter activation (Keyless Entry).

Valet mode ext. Turn the Ignition ON; hold the push button valet switch for 5 seconds until LED turns OFF and parking light flash twice.

EMERGENCY OVERRIDE

Disarm the alarm without transmitters. Turn Ignition ON, hold the push button switch down for 5 seconds, the siren will turn off and alarm will disarm.

If emergency coded override is programmed then turn ignition on, press the push button switch the number of times that correspond to the pre programmed code, hold the push button switch down for 5 seconds, the siren will turn off and alarm will disarm.

SENSOR DISABLE FEATURE

Disable the sensors for a single arm cycle, by pressing the 1st button to Arm and within 10 seconds pressing the 1st button again. The siren and parking light will flash five times, that will eliminate sensor for that arm cycle. Rearming the alarm will re-enable the sensor.

ACCIDENTAL DISARM (AUTO REARMING)

If the alarm has been armed for at least 10 seconds and has been disarmed with the transmitter by mistake. It will automatically rearm itself within 30 seconds. Opening the door or turning on the ignition key will cancel rearming. This feature will be always active no matter if the alarm is in active or passive mode.

To disable this feature, go to programming mode and turn this feature to OFF.

DOOR TRIGGER DELAY IN PASSIVE MODE

If enabled, when the alarm arm's passively, upon opening the door siren will chirp for 10 seconds then will trigger the alarm, unless you turn the ignition on within that 10 seconds. This will disarm the system. This enables you to use the alarm without remote

SECURE AUXILIARY OUTPUTS

Each auxiliary output can be programmed so that it can be activated only when the system is disarmed and the ignition switch is off.

This feature is particularly useful when the output is used for trunk release purpose. This prevents the trunk to be released accidentally by pressing the trunk release button.

PERRSONALIZED OVERRIDE CODE

To select you personal security code to override the alarm. Go to access feature programming mode location # 4, press button # 3 on the transmitter, select your personal security code by pressing the valet switch to a desired number (1 to 15), then turn the ignition off. To disarm the alarm when triggered, turn ignition on press the valet switch to the selected number times and hold for 10 seconds on the last press until the alarm turns off.

TWO WAY FM REMOTE OPERATION

TWO WAY FM PAGER PROGRAMMING

Installing the Two Way FM Pager requires teaching the Alarm system the FM pager interface module ID code. It is accomplished in step 22 of the programming table.

Connect the interface module to the Alarm system, enter step 22 in the programming table, press button #1, of the one-way transmitter.

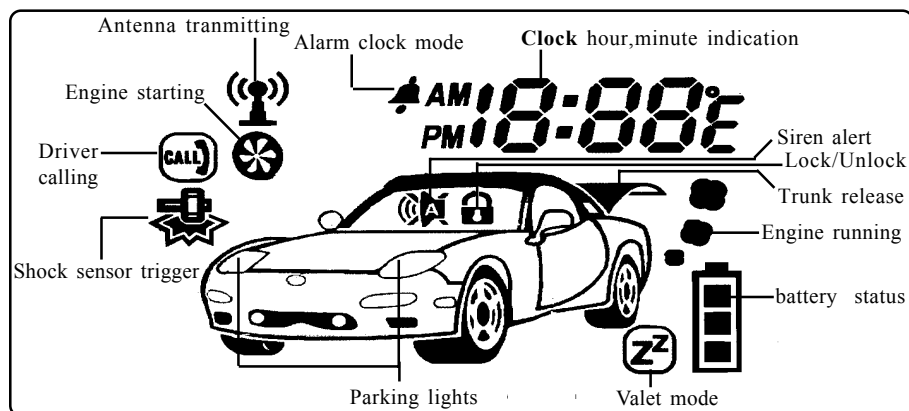
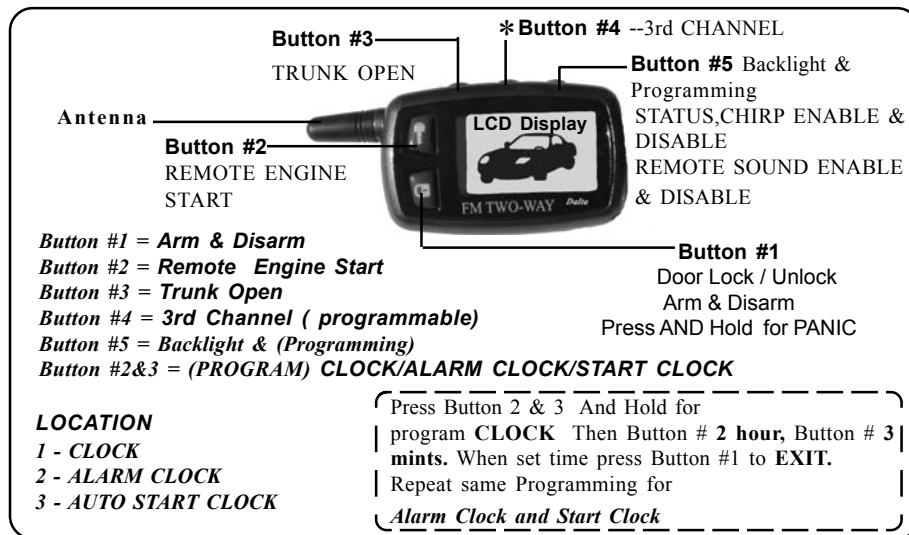
Additional FM transmitter is also programmed in step 22 of the programming table.

The procedure is:

Enter step 22 in the programming table, press button #2, of the two-way transmitter.

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.



Accessorie Currently Available: Channel Expander

TRANSMITTER FUNCTIONS

TRANSMITTER FUNCTIONS WITH DEFAULT SETTINGS

- Button # 1 upper left button (arm with chirps and press 3 seconds for panic)
- Button # 2 upper right button (disarm with chirps and press one more time for passenger unlock)
- Button # 3 lower left button (press for 2 seconds for trunk release, aux 1)
- Button # 4 lower right button (press for remote start)
- Button # 5 Side right button (function button)

Transmitter functions with function button pressed once (with default settings)






- Button # 1 upper left button (arm without chirps)
- Button # 2 upper right button (disarm without chirps and press one more time for passenger unlock)
- Button # 3 lower left button (press for aux 2)
- Button # 4 lower right button (not used)

Transmitter functions with function button pressed two times (with default settings)

- Button # 1 upper left button (arm with chirps, second car operation)
- Button # 2 upper right button (disarm with chirps and press one more time for passenger unlock, second car operation)
- Button # 3 lower left button (trunk release, second car operation)
- Button # 4 lower right button (remote start, second car operation)

Transmitter functions with function button pressed three times (with default settings)

- Button # 1 upper left button (not used)
- Button # 2 upper right button (not used)
- Button # 3 lower left button (sensor adjust & test mode)
- Button # 4 lower right button (not used)

Remote Operation In Bank #1			
 BUTTON #1 LOCK ARM	 BUTTON #3 Hold 3 Sec. For TRUNK	 BUTTON #5 (function) Press Momentary Will Shift to Next Bank.	
Remote Operation In Bank #2			
 BUTTON #2 UNLOCK DISARM	 BUTTON #4 REMOTE START	#5 +1= Silent Arm #5 +2= Silent Disarm #5 +3= 4 Th. Channel #5 +4= Shock sensor disable	

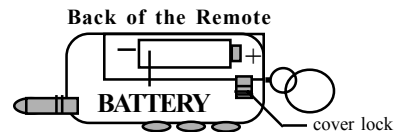
Two Way Remote

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



REMOTE START FEATURES

ENGINE RPM PROGRAMMING

Select **Engine Start RPM detection - step 20 in the programming table.**

With engine running select step 21 in the programming table, **note that the LED is blinking, indicating that the RPM signal is detected properly**, press button 1 on your remote control to record the idle RPM.

ENGINE RUN DETECTION

There are two modes of engine run detection

RPM – Engine run sensing is accomplished by supplying an RPM signal to the unit and teaching the “vehicle engine idle RPM”. Engine stalled condition is defined as zero engine RPM.

Smart Sense – Engine run is determined by measuring the battery voltage and engine noise. Engine stalled condition is defined if both the battery voltage and engine noise have been fallen below a per-determined threshold.

ENGINE START DETECTION

Engine start is detected only when using the RPM mode, in this mode RPM timing is compared to pre programmed idle RPM, engine start is defined as 50% of idle RPM. If engine RPM did not reach that level within 10 seconds, engine cranking will be terminated. If Smart Sense is selected engine start is controlled by timing only.

DIESEL/GASOLINE MODE

Gasoline mode - Ignition is turned On 5 seconds before start.

Diesel Mode - Ignition is turned On 10 seconds before start or until the Glow plug is turned Off whichever comes first.

COLD START

Cold Start is programmable to every 2 or 1 hour intervals.

Enable Cold Start – with Ignition Off simultaneously press the brake pedal Valet switch and button 1 on your remote - Parking lights will flash twice confirming that the feature has been enabled.

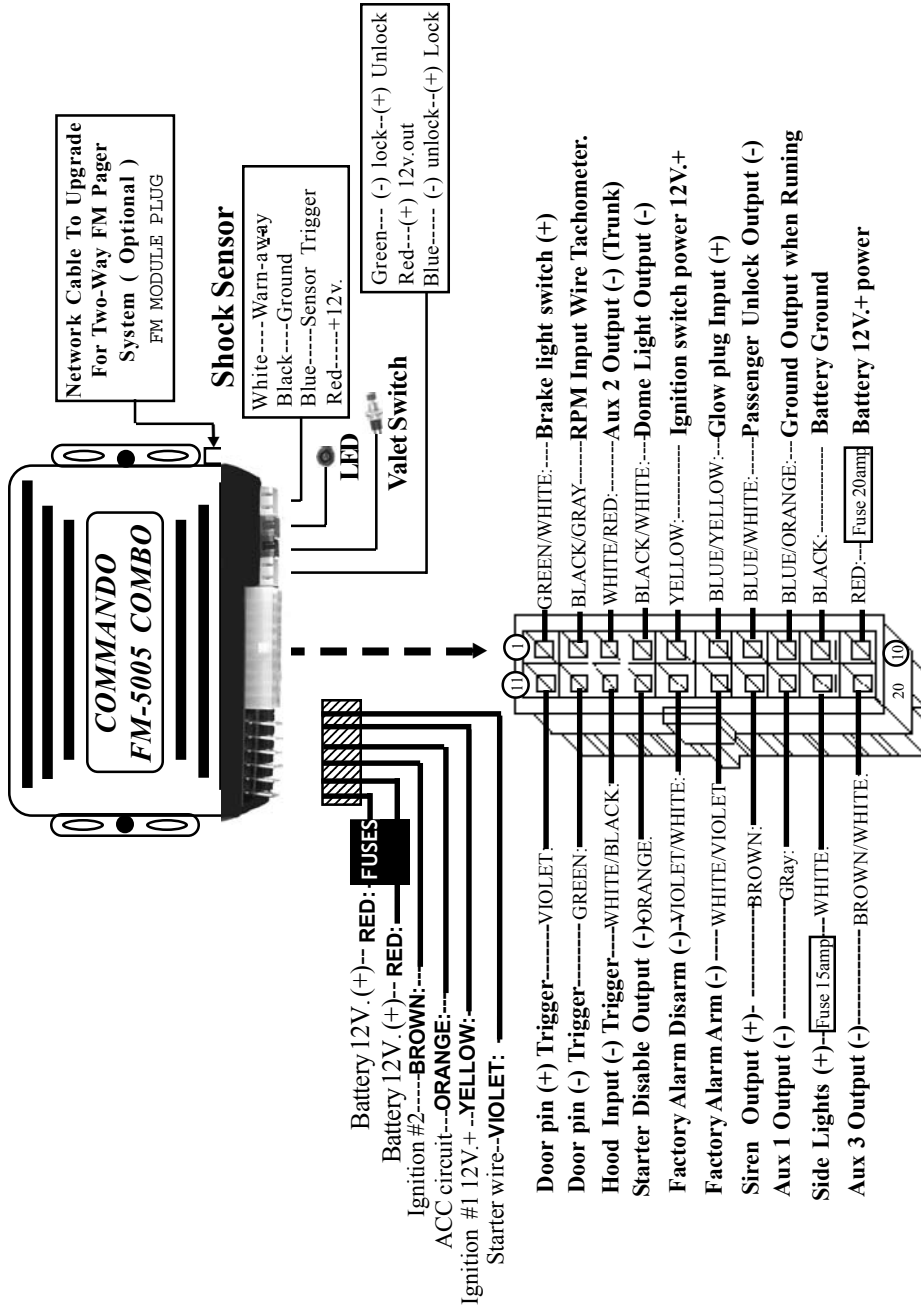
*** This feature will be canceled if the alarm has been armed and disarmed or ignition has been turned On.**

STOP & GO MODE

With engine running press remote start button on your transmitter, sidelights will flash twice indicating STOP & GO mode enabled, turn off the Ignition switch, the engine will continue running.

Notes

REMOTE ALARM & STARTER WIRING



- 1-GREEN/WHITE:---Connect to the Brake light switch (+) when Brake is pressed.
- 2-BLACK/GRAY---- RPM Input Wire Tachometer.
- 3-RED/WHITE:----- Aux 2 Output (-) (Trunk)
- 4-BLACK/WHITE:--- Dome Light Output (-)
- 5-YELLOW:----- Connect to Ignition switch wire which is powered by 12V.+ even on cranking.
- 6-BLUE/YELLOW:-- Glow plug Input (+)
- 7-BLUE/WHITE:---- Passenger Unlock Output (-)
- 8-BLUE/ORANGE:--Ground Output when Running
- 9-BLACK:----- Connect to a Good Ground.
- 10-RED:----- Connect to Battery constant 12V.+ power (WITH FUSE HOLDER)
- 11-VIOLET:----- Door pin (+) Trigger.
- 12-GREEN:----- Door pin (-) Trigger.
- 13-WHITE/BLACK:- Hood or Trunk Input (-) Trigger.
- 14-ORANGE:----- Connect to a 30 Amp. Relay for Starter Disable Output (-)
- 15-VIOLET/WHITE: Factory Alarm Disarm (-)
- 16-WHITE/VIOLET:- Factory Alarm Arm (-)
- 17-BROWN:----- Connect to the red wire of Siren (+) Output.
- 18-GRAY:----- Aux 1 Output (-)
- 19-WHITE:----- Connect to the (+) side of parking lights (WITH FUSE HOLDER)
- 20-BROWN/WHITE:- Aux 3 Output (-)

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- RED: ----- Connect to Battery constant 12V. (+) (POWER WITH FUSE HOLDER)
 - RED: ----- Connect to Battery constant 12V. (+) (POWER WITH FUSE HOLDER)
 - BROWN:----- Connect to Ignition switch #2 (Aux Relay if needed).
 - ORANGE:----- Connect to Ignition switch ACC. Circuit (Air Cond./Heater).
 - YELLOW:----- Connect to Ignition switch wire which is powered by 12V.+ even on cranking.
 - VIOLET: -----Connect to Starter wire witch is powered ONLY on cranking position.
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- 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.
- 3- PIN WHITE SIDE CONNECTOR:---Plug in TWO WAY FM MODULE.

NOTE

AUTOMATIC TRANSMISSION ONLY

DO NOT INSTALL ON MANUAL TRANSMISSION

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