Model APS-122E

Installation Manual
Remote Control Vehicle
Security System

Table Of Contents:	

PATENTED: www.voxxintl.com/company/patents

Before You Begin

PROFESSIONAL INSTALLATION IS STRONGLY RECOMMENDED

Roll down window to avoid locking the keys in the vehicle during installation.

Avoid mounting components or routing wires near hot surfaces or near moving parts like the steering wheel as it may prevent proper operation of the vehicle.

Tape or loom wires under the hood and dash for protection as well appearance.

Use grommets when routing wires through metal surfaces to prevent chafing and shorting.

Use a Digital Multi Meter for testing and verifying circuits. DO NOT USE A "TEST LIGHT" OR "COMPUTER SAFE PROBE" as these can set off air bags or damage sensitive vehicle computers and electronics.

For technical support go to www.avxtech.com
or call 1 800 225 6074

7 Pin Input/Output Wiring Harness — Part # 1124315

1 WHITE/BLACK	(+) Siren Output
2 ORANGE	(-) Starter Inhibit Relay Output
3 DARK BLUE	Channel 3 Trunk Output (-) 250mA
4 PURPLE	(+) Positive Door Trigger Input
5 BROWN	(-) Negative Door Trigger Input
6 DK. GREEN	(-) Trigger Input Hood & Trunk
7 YELLOW	Ignition Input Switched +12 Volts

2 Pin Door Lock Output Harness — Part #1122242

1 Red	Neg. Lock / Pos. Unlock 300mA Max
2 Green	Pos. Lock / Neg. Unlock

4 Pin Main Power Harness — Part #1124314

1 White	Parking Light Output (+)
2 White/Red	(+) 12 VDC Parking Light Power Input
3 Black	Chassis Ground
4 Red	(+) 12 VDC Module Power Supply

INSTALLATION OF MAJOR COMPONENTS:

Control Module: P/N 1365441

Select a mounting location inside the passenger compartment (up behind the dash) and secure using two screws provided. The control module can also be secured in place using cable ties.
CAUTION: Do not mount the control module in the engine compartment, as it is not waterproof. You should also avoid mounting the unit directly onto factory installed electronic components. These components may cause RF interference, which can result in poor transmitter range or intermittent operation. The shock sensor integral of the module will have to be adjusted later so be sure to have the adjustment potentiometer accessible after mounting.

Siren: P/N AS9903E

Select a mounting location in the engine compartment that is well protected from access below the vehicle. Avoid areas near high heat components or moving parts within the engine compartment. To prevent water retention, the flared, or opened end, of the siren must be pointed downward when mounted. Mount the siren to the selected location using the screws and bracket provided.

Hood Or Trunk Pin Switch: (Optional) P/N 1363699

A pin switch is for use in protecting the hood or trunk (or hatchback) of the vehicle.
The switch must always be mounted to a grounded, metal surface of the vehicle. It is important to select a location where water cannot flow or collect and to avoid all drip “gutters” on hood and trunk fender walls. Choose locations that are protected by rubber gaskets when the hood or trunk lid is closed.
The pin switch can be mounted using a bracket when required or directly mounted by drilling a 9/32" diameter mounting hole.
Keep in mind that when properly mounted, the plunger of the pin switch should depress at least 1/4" when the hood or trunk lid is closed.

LED: P/N 136B1286

A small red LED is included that will serve as a visual indicator of the alarm status. It should be installed in the dash, located where it can be easily seen from outside the vehicle, yet not be distracting to the driver.
Once a location has been selected, check behind the panel for wire routing access, and to confirm the drill will not damage any existing components as it passes through the panel.
Drill a 1/4" diameter hole, and pass the red and blue wires from the LED through the hole, from the front of the panel. Firmly press the body of the LED into the hole until fully seated.

Push Button Valet/Override Switch: P/N 154B1090

Select a desired 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. The switch may be mounted below the dash using one of the brackets provided, or mounted in the dash by drilling a 1/4" diameter hole in the location. Be sure to check behind the dash for adequate clearance for the body of the switch, and to confirm that the drill will not damage any existing components as it passes through the dash.
Whichever mounting method is used, make certain the back of the switch is accessible for wiring later in the installation.

WIRING THE SYSTEMS 7 PIN MAIN HARNESS: P/N # 1124315

1) WHITE w/ BLACK TRACE WIRE: POSITIVE OUTPUT TO SIREN

Route this wire through a rubber grommet in the firewall to the siren location. Connect the white/black wire to the positive wire of the siren. Secure the black ground wire of the siren to chassis ground.

2) ORANGE WIRE: GROUND OUTPUT WHEN ARMED

This wire is provided to control the starter cut relay. Connect the orange wire to terminal 86 of the relay , and wire the remaining relay contacts as shown in the wiring diagram.
IMPORTANT: We do not recommend using this relay to interrupt the ignition wire. Only connect this relay to the low current starter solenoid feed wire, as indicated on the wiring diagram.

3) DARK BLUE WIRE: 300 mA PULSED OUTPUT/CHANNEL 2

The dark blue wire pulses to ground via an independent RF channel from the keychain transmitter. This is a transistorized, low current output and should only be used to drive an external relay coil.

4) PURPLE WIRE: + DOOR TRIGGER

If the vehicle's door courtesy light switches have a + 12 volt output when the door is opened (most Fords and some Imports), you must connect this wire to the positive output from one of the door switches. In most cases, the purple wire will only need to be connected to one door switch, no matter how many doors the vehicle has.

WARNING! Do not use the purple wire if the vehicle has ground switched output type door switches. (see BROWN WIRE)

5) BROWN WIRE: - DOOR TRIGGER

If the vehicle's door courtesy light switches have a - ground output when the door is opened (GM and most Imports) you must connect this wire to the negative output from one of the door switches. In most cases, the brown wire will only need to be connected to one door switch, no matter how many doors the vehicle has.

WARNING: Do not use the brown wire if the vehicle has + 12 Volt output type door switches. (see PURPLE WIRE)

6) DARK GREEN WIRE: (-) INSTANT TRIGGER

This is an instant on ground trigger wire. It must be connected to the optional previously installed hood and trunk pin switches if used.

7) YELLOW WIRE: + 12 VDC IGNITION SOURCE

Connect this wire to a source that supplies 12 VDC when the ignition key is in the ON and CRANK positions and off when the key is in the OFF position.

4 Pin Main Power Harness: **P/N #1124314**

WHITE WIRE: + 12 VDC PULSED PARKING LIGHT OUTPUT (15 A MAX)

This wire is provided to flash the vehicle's parking lights. Connect the white wire to the positive side of one of the vehicle's parking lights.

RED 15A FUSED WIRE: 12VDC CONSTANT BATTERY SOURCE

The connection of this wire supplies 12 VDC for both the alarm circuit, and the parking light feed wire. Connect this wire to a + 12 volt source capable of supplying 15 Amps of current to power both the parking lights and the control circuit.

RED/WHITE 5A FUSED WIRE: + 12 VDC CONSTANT BATTERY SOURCE

Power supply for the control module connected when Red above is connected.

BLACK WIRE: CHASSIS GROUND

Connect this wire to a solid, metal part of the vehicle's chassis.
Do not confuse this wire with the thin black antenna wire that exits the control module independently.

GRAY & BLACK 2 PIN (blue) Valet Switch **P/N #154B1090**
RED & BLUE 2 PIN (white) LED **P/N #136B1286**

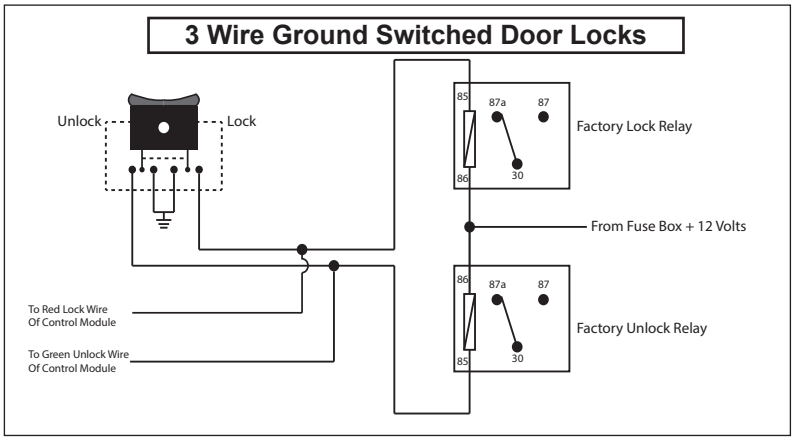
If you have not done so already, route the two 2 conductor, blue & white connectors from the previously installed LED & Valet switch to the alarm control module and plug both connectors into their mating connectors on the end of the module.

RED and GREEN 2 PIN (white) CONNECTOR: DOOR LOCK OUTPUTS **Part # 1122242**

These wires will provide a pulsed ground output to the factory door lock control relay. The maximum current draw through these outputs must not exceed 250 mA.

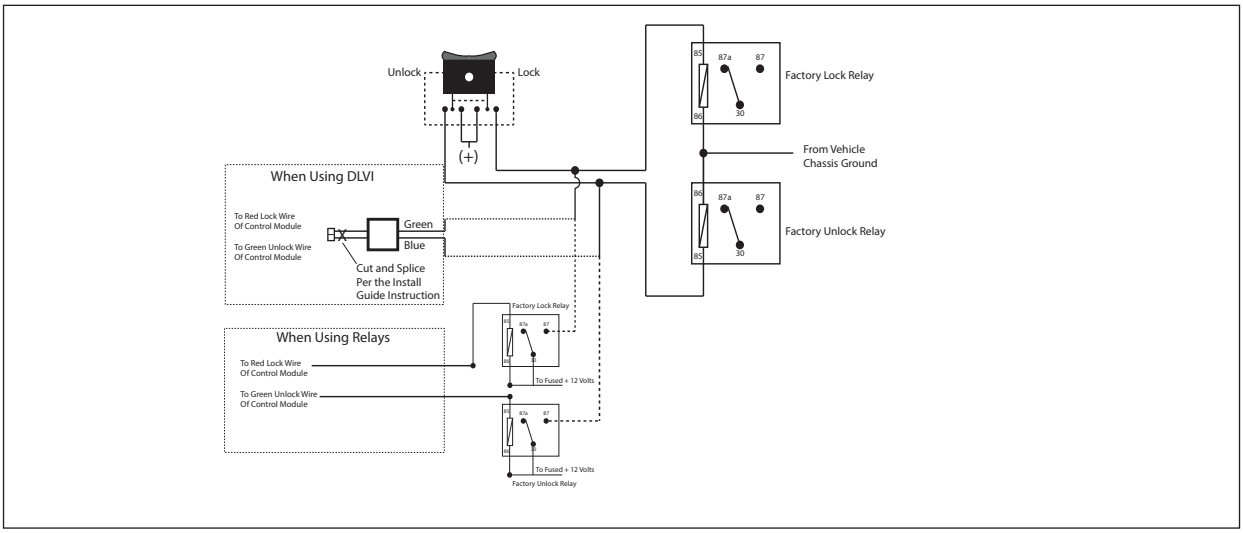
3 Wire Ground Switched Door Locks

In this application, the **red wire** provides a ground pulse during arming (**pulsed ground lock)** output. Connect the red wire to the wire that provides a low current ground signal from the factory door lock switch to the factory door lock control relay.
The **green wire** provides a ground pulse during disarming **(pulsed ground unlock)** output. Connect the green wire to the wire that provides a low current ground signal from the factory door unlock switch to the factory door lock control relay.



3 Wire Positive Switched Door Locks

In this application, you will need to invert the door lock & unlock outputs to a positive pulse with either relays or the DLVI voltage inverter as shown in the diagram below.



Resistive Circuits, As Well As 4 Wire Polarity Reversal & 5 Wire Alternating 12 Volt Door Lock Control Circuits

These applications require the use of additional components which may include relays, fixed resistors, or for convenience, the DLRK Door Lock Interface. Refer to the Lock Wiring Supplement supplied with the kit or the AVXtech1 web site for information on these types of circuits.

COMPLETING THE INSTALLATION

NOTE: This unit has the ability to learn the dome light delay time, up to 60 seconds. If the vehicle has delay interior lights, and you wish to avoid three chirp, defect zone, indication normally associated with this type of interior light, we suggest you learn the interior light delay.

TO LEARN THE DOME LIGHT DELAY:

(1) Use the transmitter to Lock / Unlock / Lock / Unlock / Lock / Unlock / Lock, the system. The LED turns on solid to confirm the system entered the learn mode.

(2) Immediately open and close the door of the vehicle to initiate the dome delay. The unit will monitor the door trigger input Positive, (Purple), and Negative, (Brown) when active. When the dome light turns off, the unit will add 2 seconds then exit the learn mode.

(3) The LED will begin flashing the Armed indication indicating the unit has exited the learn mode and is armed.

Antenna Wire: Be sure to extend the thin black antenna wire to it's full length and cable tie into place where it cannot be damaged. Avoid wrapping this wire around major, high current wire looms.

Adjusting the Shock Sensor :

The sensitivity of the sensor is adjusted by turning the adjustment knob located on the side of the module clockwise to increase and counterclockwise to decrease.
Gently turn the adjustment knob fully counterclockwise. (DO NOT over turn this screw. Maximum rotation for this adjustment is 270°). Close the hood and trunk lids, and arm the alarm. Wait 6 seconds for the accessories trigger zone to stabilize, then firmly strike the rear bumper with the side of a closed fist considering the amount of force required to break a window.

WARNING! Never perform this test on the vehicle's glass, as you may break the window.
Turn the adjustment screw clockwise (increasing sensitivity) about ¼ turn and re-test. Repeat this procedure until the alarm sounds. Ultimately, one firm strike to the rear bumper will cause the alarm to trigger

CAUTION: Setting the sensitivity too high can cause false alarms due to noise vibrations from passing trucks and heavy equipment.

Wire Dressing :

Always wrap the alarm wires in convoluted tubing, or with a spiral wrap of electrical tape. Secure these looms along the routing using cable ties. This will ensure that the alarm wires are not damaged by falling onto hot or sharp moving surfaces in the vehicle.

Operation :

Take a few moments to check off the appropriate option boxes in the owner's manual and to fully explain the operation of the system to your customer.

PROGRAMMING BANK 1 (TRANSMITTERS):

1) Turn the ignition key to the ON position.

2) Press and release the valet/programming switch 3 times (Siren Chirps).

3 Press the Lock Button of each transmitter you want programmed until you hear a chirp from the horn or siren.

4) Press and release the valet/programming switch 1 time to advance to channel 2, Unlock. Press the unlock button of each transmitter you want to unlock the vehicle.

5) Press and release the valet/programming switch to advance to channel 3, Trunk, press the Trunk button of each transmitter you want to operate trunk release.

4) Turn the ignition switch to the OFF position.

The above action programs the Lock, Unlock, Start/Trunk functions of the system, i

PROGRAMMING BANK 2 (ALARM FEATURES):

You can enter bank 2 from bank 1 by turning the ignition key off then on from step 4 of Bank 1.
(Siren Short then Long Chirp), or You can also go right to bank 2 by:

1) Turn the ignition key to the ON position.

2) Press and release the valet/programming switch 3 times (Siren Chirps).

3) Turn the ignition key off then on. (Siren Short Then long Chirp)

4) This action puts you at feature 1 of bank 2. Use the lock button of the transmitter to select feature setting, or press the valet/programming switch once to advance to feature 2, twice to advance to feature 3, etc.

Example to set passive arming:

1) Turn the ignition key to the ON position.

2) Press and release the valet/programming switch 3 times (Siren Chirps).

3) Turn the ignition key off then on. (Siren Short Then long Chirp)

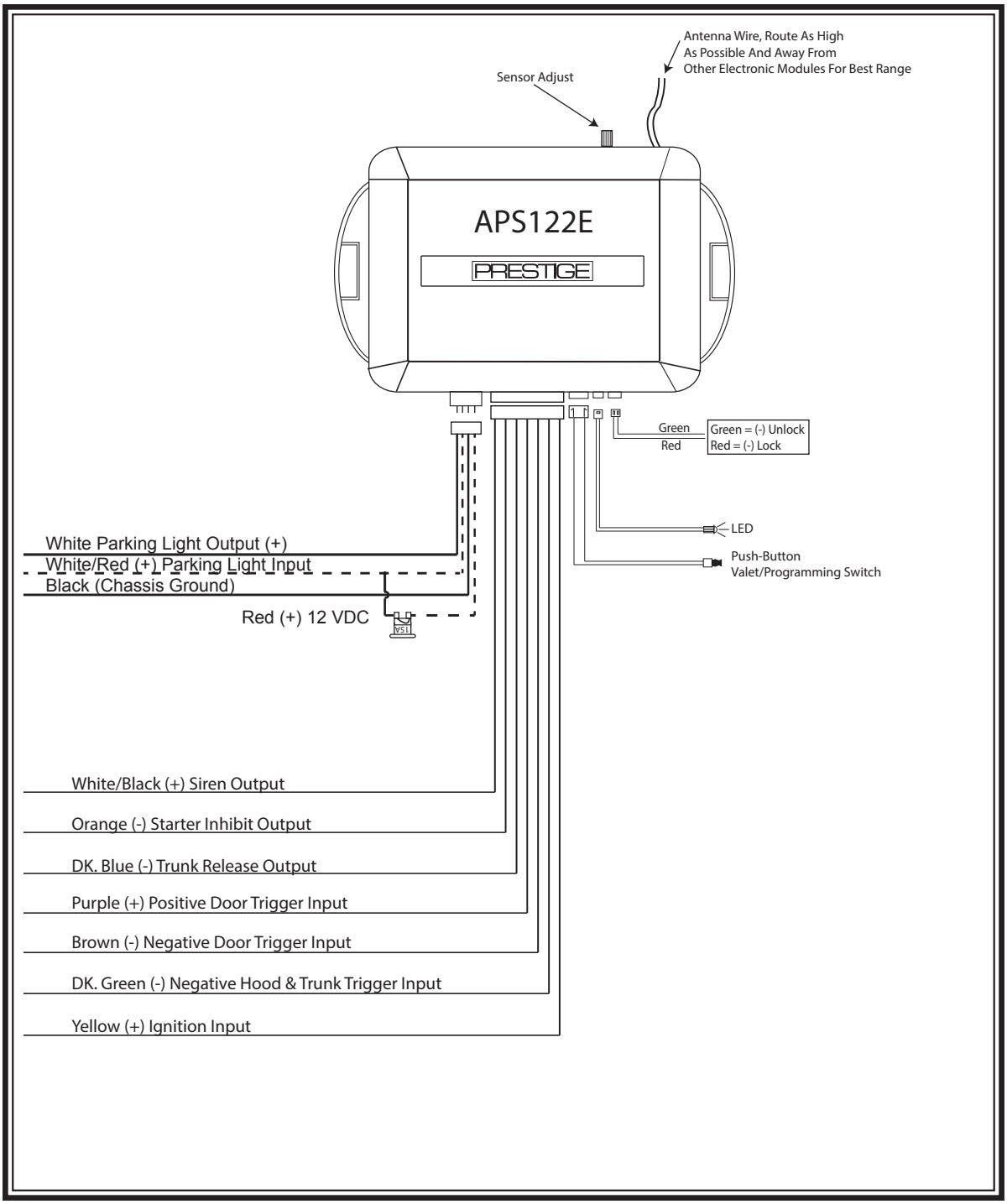
4) Press the push button switch three times to advance to features 4, Passive locks,then use the lock button of the transmitter to select one chirp, passive locks active.

5) To exit the programming mode, turn the ignition key off. The program mode is automatically exited when there is no activity on the push button switch or the transmitter lock button for 30 seconds

Programmable Features :					
Feature Selection	1 Chirp	2 Chirps	3 Chirps	4 Chirps	Default
1st Door L/UL	1 Sec.	3.5 Sec.	1 S L, Dbl.U/L		1 Sec.
2nd Accy Lock	Auto Lock On	Auto Lock Off			Off
3rd Accy. UL	Auto UL Dr	Auto UL Off			Off
4th Passive Locks	Passive	Active			Active
5th Passive/Active Arm	Passive Arm	Active Arm			Active Arm

NOTES

NOTES


Antenna Wire, Route As High
As Possible And Away From
Other Electronic Modules For Best Range
Sensor Adjust
APS122E
PRESTIGE
Green
Red
Green = (-) Unlock
Red = (-) Lock
LED
Push-Button
Valet/Programming Switch
White Parking Light Output (+)
White/Red (+) Parking Light Input
Black (Chassis Ground)
Red (+) 12 VDC
15A
White/Black (+) Siren Output
Orange (-) Starter Inhibit Output
DK. Blue (-) Trunk Release Output
Purple (+) Positive Door Trigger Input
Brown (-) Negative Door Trigger Input
DK. Green (-) Negative Hood & Trunk Trigger Input
Yellow (+) Ignition Input