PRIME PS SECURITY

AMX 78

Vehicle Security System

Installation Manual

FRONT COVER

Manual - Inside Front Cover (Blank)

Table of Contents

Important Information

Recommended Installation Tools

Voltmeter

Wire Strippers

Electric Drill & Bits

Phillips Screw Driver

Convoluted Tubing *

Solder Gun *

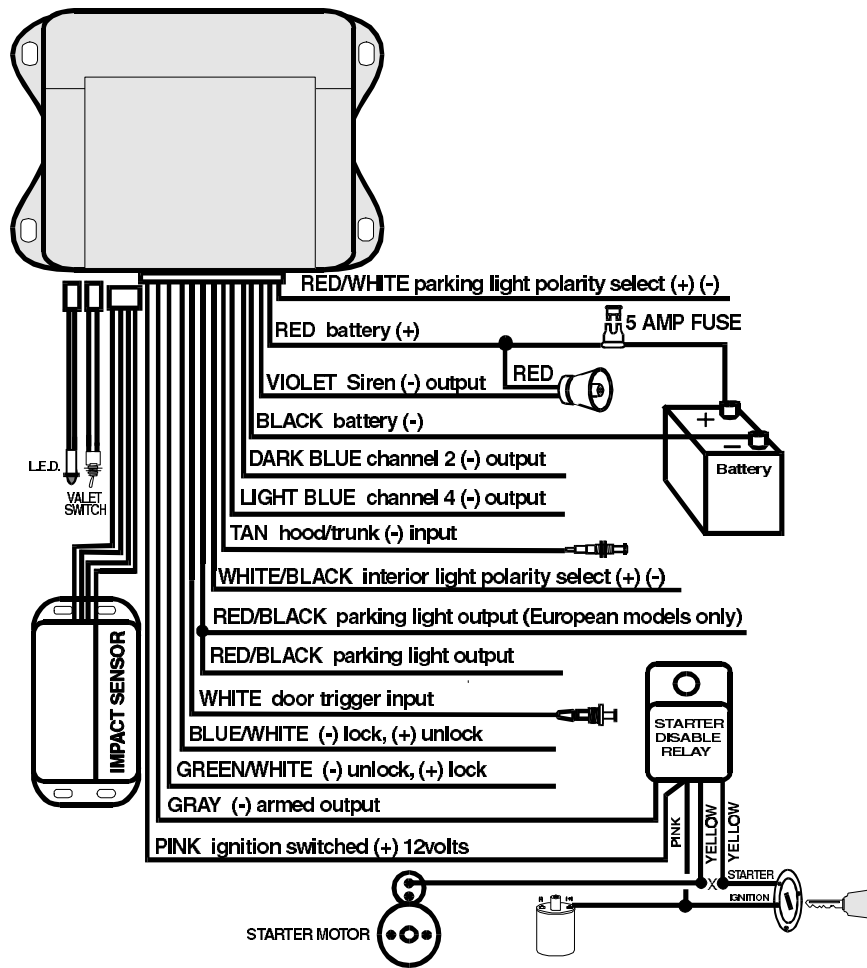Wire Crimpers

Shrink Tube *

Electrical Tape

* Optional

Recommended Procecures

1. Test all circuits with a voltmeter.

2. Make all wiring connections with the supplied solderless crimp connectors. DO NOT twist wires or use scotch-lok connectors.

3. Route the small and large **RED, RED/WHITE** and **BLACK** wires from the control unit directly to the battery.

4. Keep extensions as short as possible. Use same gauge wires for short extensions and larger gauge wires for longer extensions.

5. Before installing, discuss the placement of the LED indicator and valet switch with the vehicle owner.

6. DO NOT disconnect the battery cables. Make all connections by removing the bolts from the cable clamps without detaching the clamp.

7. Turn off dome light or remove dome light fuse to prevent battery drain.

This device complies with Part 15 of the FCC rules. Any changes or modifications made to the system without the express approval of Avital Technologies, Inc. could void the user's authority to operate this equipment.

Wiring Diagram

RED/WHITE parking light polarity select (+) (-)

RED battery (+)

5 AMP FUSE

VIOLET Siren (-) output   RED

BLACK battery (-)

DARK BLUE channel 2 (-) output

LIGHT BLUE channel 4 (-) output

TAN hood/trunk (-) input

WHITE/BLACK interior light polarity select (+) (-)

RED/BLACK parking light output (European models only)

RED/BLACK parking light output

WHITE door trigger input

BLUE/WHITE (-) lock, (+) unlock

GREEN/WHITE (-) unlock, (+) lock

GRAY (-) armed output

PINK ignition switched (+) 12volts

L.E.D.

VALET
SWITCH

IMPACT SENSOR

Battery

STARTER
DISABLE
RELAY

PINK

YELLOW

YELLOW

STARTER

IGNITION

STARTER MOTOR

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14 Pin Connector

Wire Color	Description
RED/WHITE	Parking Light Polarity (+) or (-) Select
RED/BLACK	Parking Light Output(s) - 2 Wires for European Models
RED	Battery (+)
GRAY	Armed (-) Output Pre-wired to Starter Disable Relay
BLACK	Battery (-)
VIOLET	Siren (-) Output
TAN	Hood/Trunk (-) Input
WHITE/BLACK	Interior Light Trigger/Illumination Polarity (+) or (-) Select
DARK BLUE	Channel 2 Accessory (-) Output
WHITE	Door Trigger (+) or (-) Input
PINK	Ignition Input Prewired to Starter Disable Relay
LIGHT BLUE	Channel 4 Accessory (-) Output
BLUE/WHITE	Door Lock (-) Output, Door Unlock (+) Output
GREEN/WHITE	Door Unlock (-) Output, Door Lock (+) Output

Installation Procedures

Control Unit

1. Select a location under the dash that will allow you to use the tie wraps to securely fasten the control unit.

2. Mount the control unit as high as possible to ensure maximum range.

3. Do not mount the control unit near moving parts.

4. Avoid areas that are in the direct path of air blowing from the vents.

5. Route wires from this point, leaving slack for ease of service.

Antenna

1. Do not shorten or lengthen the antenna.

2. Route the antenna away from the control unit.

3. Keep the antenna as far away from metal and wire harnesses as possible to optimize range.

Wireloom

1. Plug the wireloom securely into the control unit.

2. Route wires from the control unit directly to each connection point.

3. Separate the **RED, RED/WHITE, BLACK, VIOLET** and **TAN** wires.

4. Sleeve the wires with vinyl tubing or electrical tape and route them through an existing rubber grommet into the engine compartment.

5. If an existing grommet is not available, drill a hole and install a snap grommet.

Impact Sensor

The sensor must be firmly mounted on a solid metal surface inside the vehicle. We recommend tie wrapping the sensor to the steering column housing or steering column support bracket. DO NOT mount the sensor near moving parts or in the direct path of an air duct opening.

1. Plug the impact sensor **BLUE** 4 pin connector into the control unit **BLUE** 4 pin connector.

2. Route the impact sensor to the chosen mounting location.

3. Using the long tie wraps supplied, securely fasten the impact sensor allowing access to the adjustment screws.

Valet Switch

1. Discuss placement with the owner.
2. Choose a location for the valet switch that is hidden, but convenient for the owner to access.
3. Drill a ¼" hole and mount the switch.
4. Route the valet switch wires to the control unit.
5. Plug the valet switch **WHITE** connector into the control unit **WHITE** plug.

LED Indicator

1. Discuss placement with the owner.
2. Choose a location that is visible from both sides of the vehicle.
3. Drill a ¼" hole.
4. Route the LED wires through the hole and press LED into place.
5. Route the LED wires to the control unit.
6. Plug the **RED** LED connector into the control unit **RED** plug.

Ignition Input

1. Use a voltmeter to locate the one wire that shows +12 volts when the ignition key is in the "ON," "CRANK" and "RUN" position, and 0 volts when the ignition key is in the "OFF" position.
2. Connect the control unit **PINK** wire to the vehicle's ignition wire.

Channel 2 Accessory Output (Trunk Release)

The **DARK BLUE** wire provides a 0.75 second ground (-) output when activated for 1-2 seconds. If the remote control TRUNK button is continually pressed, the signal will stay at ground as long as the button is held. Most trunk releases are positive and require an optional relay.

Channel 4 Accessory Output

The LIGHT BLUE wire provides a 0.75 second ground output when   activated for 1-2 seconds. If the remote control OPTION button is continually pressed, the signal will stay at ground as long as the button is pressed. This output can be used for optional accessories such as remote start, window roll-up/down or any other accessory requiring a (-) accessory activation.

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Parking Lights

1. If the parking lights are positive trigger, connect the **RED/WHITE** wire to the battery positive (+) terminal through the 20 amp fuse.

   NOTE: Do not connect the RED/WHITE wire to the control unit RED wire.

2. If the parking lights are negative (-) trigger, connect the **RED/WHITE** wire to control unit **BLACK** wire.

3. Connect the **RED/BLACK** wire to the vehicle parking light wire.

Interior Light Trigger/Illumination

The system's door trigger will accept a positive or negative door trigger input. When the alarm is remotely disarmed, the interior lights will turn on for 30 seconds or until the ignition key is turned on. The **WHITE/BLACK** interior light supply wire serves two purposes. It informs the alarm whether the door trigger polarity is positive or negative switching and provides a positive or negative supply for interior light illumination.

1. Connect the alarm **WHITE** wire to the vehicle door trigger wire(s).

2. If the door trigger is negative switching, connect the alarm **WHITE/BLACK** wire to ground.

3. If the door trigger wire is positive switching, connect the alarm **WHITE/BLACK** wire to a constant fused +12 volt source.

Starter Disable

Make sure the **YELLOW** relay wires are solidly connected. The starter circuit may draw very high current. We recommend that all connections be soldered.

1. Locate the ignition switch wireloom under the dashboard.

2. Use a voltmeter to find the one wire that will show +12 volts while the ignition key is in the "CRANKING" cycle only. This should be the starter solenoid wire.

3. Cut the starter solenoid wire. Test by trying to crank the starter with the ignition key. If it will not crank, you have the correct wire.

4. Connect one **YELLOW** wire to the key side.

5. Connect the other **YELLOW** wire to the starter side.

Hood/Trunk Pin Switch

1. Locate the vehicle hood and/or trunk pin switch that show ground when the hood or trunk is open only.
2. Connect the alarm module to the vehicle hood and/or trunk pin switch wire.
3. If the vehicle does not have a hood or trunk pin switch, install an alarm pin switch and connect it to the alarm module TAN wire.

Siren

1. Choose a location in the engine compartment away from high heat engine components, moving parts and direct exposure to water.
2. Make sure the siren and siren wires cannot be seen or reached from below the vehicle.
3. Mount the siren with the two self tapping screws to a solid metal surface.
4. Connect the siren **BLACK** wire to the alarm module **VIOLET** wire.
5. Connect the siren **RED** wire to the alarm module **RED** wire.

Power and Ground Connections

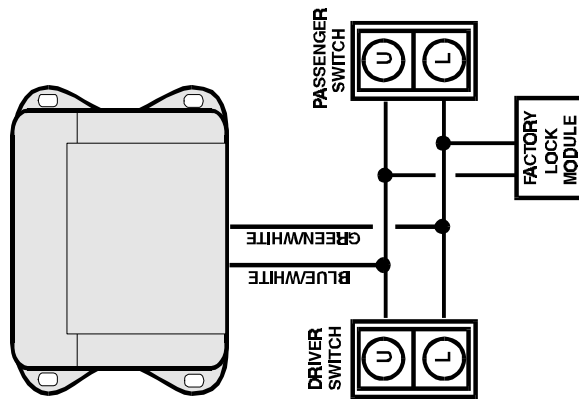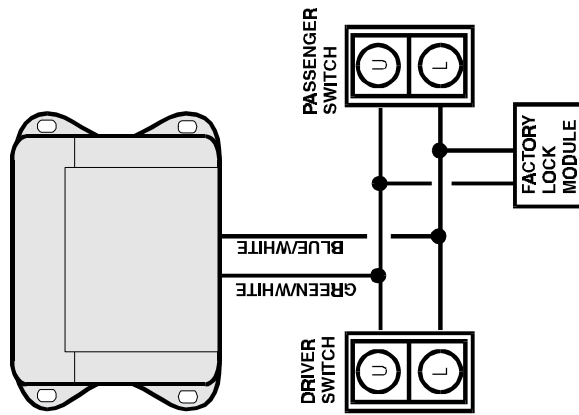> ⚠️ **CAUTION**: Do not plug in the system fuses until the final step below.

1. Connect the alarm **RED** wire to one of the supplied fuse assemblies.
2. Connect the alarm **RED/WHITE** wire to the other fuse assembly (if the vehicle parking lights are positive).
3. Connect the fuse assembly(s) to one of the supplied 10mm ring terminals.
4. Connect the alarm **BLACK** wire to the other 10mm ring terminal.
5. Remove the (+) and (-) battery bolts. Do not disconnect the battery clamps.
6. Connect the empty fuse assembly(s) to the positive battery post.
7. Connect the alarm **BLACK** wire to the battery negative post.
8. Inspect all alarm wiring. Make sure all wires are connected.
9. Install the 5 amp fuse in the alarm module **RED** wire fuse assembly.
10. Install the 20 amp fuse in the alarm module **RED/WHITE** fuse assembly (if the vehicle parking lights are positive).
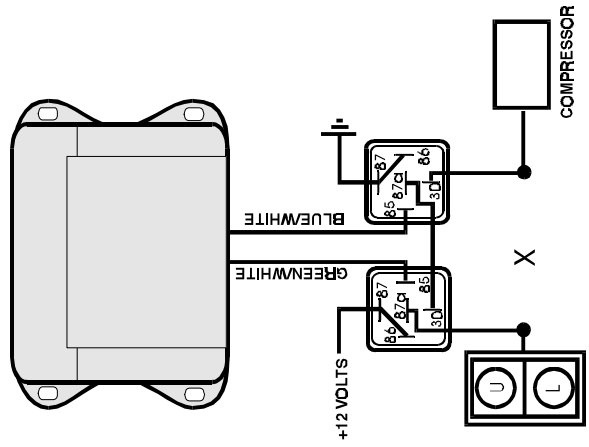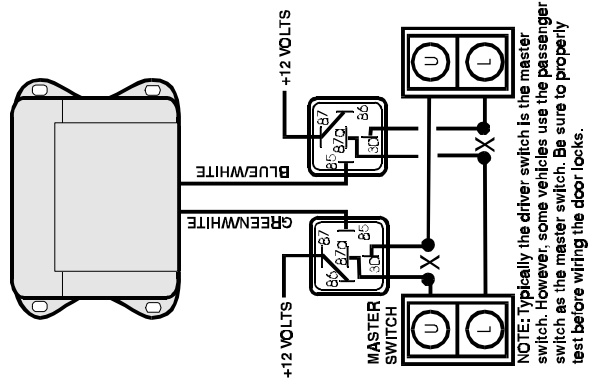
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Door Lock/Unlock

> ⚠ **CAUTION**: Be sure to verify the type of door lock system you are working with. Some types of door lock systems require optional relays, for example, reverse polarity type door locks. Refer to the diagrams on pages 8 & 9.

The system can operate both negative and positive door locks. When the alarm is remotely armed, the **BLUE/WHITE** wire provides a negative output. At the same time, the **GREEN/WHITE** wire provides a 300 MA positive output. When the alarm is remotely disarmed, the **GREEN/WHITE** wire provides a negative output. At the same time the **BLUE/WHITE** wire provides a 300 MA positive output.

Manual

+12 VOLTS

BLUE/WHITE

GREEN/WHITE

+12 VOLTS

MASTER
SWITCH

NOTE: Typically the driver switch is the master switch. However, some vehicles use the passenger switch as the master switch. Be sure to properly test before wiring the door locks.

COMPRESSOR

BLUE/WHITE

GREEN/WHITE

+12 VOLTS

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Manual

Programmable Features

All system and remote control programmable features are accomplished by turning the ignition key to the "ON" position or starting the engine and flicking the valet switch on and off a preset number of times. The siren will chirp for audible programming confirmation.

The system also allows the user to add new remote controls in one step, delete lost or stolen remote controls or rearrange the factory preset remote control functions.

1. Remove the system from Protected Valet Mode. Programming cannot be accessed while the system is in Protected Valet Mode indicated by the LED on solid red.

2. Select the feature you wish to program from the "Programming Table for System Features" or the "Programming Table for Remote Controls" on pages 11-12. *Note the number of chirps associated with that feature.*

3. Turn the ignition key to the "ON" position.

4. Within 10 seconds, begin flicking the valet switch on and off. The siren will chirp once each time you flick the switch on then off.

5. Continue flicking the switch on and off, counting the number of chirps.

   NOTE: Stop when you reach the number of chirps associated with your chosen feature.

6. Follow the "Secondary Action." You will hear a number of chirps to confirm that you have changed the setting of that feature.

7. Turn the ignition key "OFF."

8. Repeat steps 1-7 for any other feature you wish to program.

Programming Table for Alarm Features

Feature	Factory Setting	# of Chirps	Secondary Action
Active/Passive Arming	Passive ON	4	Wait 3 seconds, the siren chirps once for Active or twice for Passive.
Passive Door Lock	OFF	5	Wait 3 seconds, the siren chirps once for OFF or twice for ON.
Instant/Delayed Ignition Control Door Lock	Delayed	6	Wait 3 seconds, the siren chirps twice for Instant or once for Delayed.
Passive Arming Chirp/Light Flash Confirmation	ON	7	Wait 3 seconds, the siren chirps once for OFF or twice for ON.
Long Term Silent Arm/Disarm	ON	8	Wait 3 seconds, the siren chirps once for OFF or twice for ON.
Ignition-Controlled Lock/Unlock	ON	9	Wait 3 seconds, the siren chirps once for OFF or twice for ON.
Door Lock/Unlock Output Duration (1 or 3 sec.)	1 second	10	Wait 3 seconds, the siren chirps once for 3 seconds or twice for 1 second.
1 or 2 Pulse Unlock	1 Pulse	11	Wait 3 seconds, the siren chirps once for 2 Pulses or twice for 1 Pulse.

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Programming Table for Remote Controls

Feature	Factory Setting	# of Chirps	Secondary Action
Arm/Disarm/Remote Panic	Channel 1 ARM/DISARM BUTTON	12	Press the ARM/DISARM button. The siren will chirp once for confirmation.
Trunk Output	Channel 2 TRUNK Button	13	Press the TRUNK button. The siren will chirp twice for confirmation.
Silent Arm/Disarm	Channel 3 SILENT Button	14	Press the SILENT button. The siren will chirp 3 times for confirmation.
Optional Accessory (-) Output	Channel 4 OPTION Button	15	Press the OPTION button. The siren will chirp 4 times for confirmation.
One-Step Code Learning	—	16	Press the ARM/DISARM button. The siren will chirp 4 times. Remote control will operate at factory preset order.
Instant Code Deletion	—	17	Wait 3 seconds. The siren will chirp twice. All remote controls are erased from memory.

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