

LIMITED LIFETIME WARRANTY

Products manufactured and sold by OMEGA RESEARCH & DEVELOPMENT (the Company), are warranted to be free from defects in materials and workmanship under normal use. If a product sold by the Company proves to be defective, the Company will repair or replace it free of charge within the first year and thereafter all parts to be repaired are free with only a nominal charge for Omega's labor and return shipping, during the lifetime of the car in which it was originally installed.

All products for warranty repair must be sent postage pre-paid to OMEGA RESEARCH & DEVELOPMENT, 981 N Burnt Hickory Rd, Douglasville, Georgia 30134, with bill of sale or other dated proof of purchase. This warranty is non-transferable and does not apply to any product damaged by accident, physical or electrical misuse or abuse, improper installation, alteration, any use contrary to its intended function, unauthorized service, fire, flood, lightning, or other acts of God.

This warranty limits the Company's liability to the repair or replacement of the product. The Company shall not be responsible for removal and/or reinstallation charges, damage to or theft of the vehicle or its contents, or any incidental or consequential damages caused by any failure or alleged failure of the product to function properly. Under No Circumstances Should This Warranty, Or The Product Covered By It, Be Construed As A Guarantee Or Insurance Policy Against Loss. The Company neither assumes nor authorizes any person or organization to make any Warranties or assume any liability in connection with the sale, installation, or use of this product.

WARNING: Keep Transmitter Out Of The Reach Of Children. Don't Keep Children Inside The Vehicle While This AU-93 Is Operating Your windows.

WINDOW ROLL-UP INTERFACE

OWNER'S MANUAL & WIRING INSTRUCTIONS

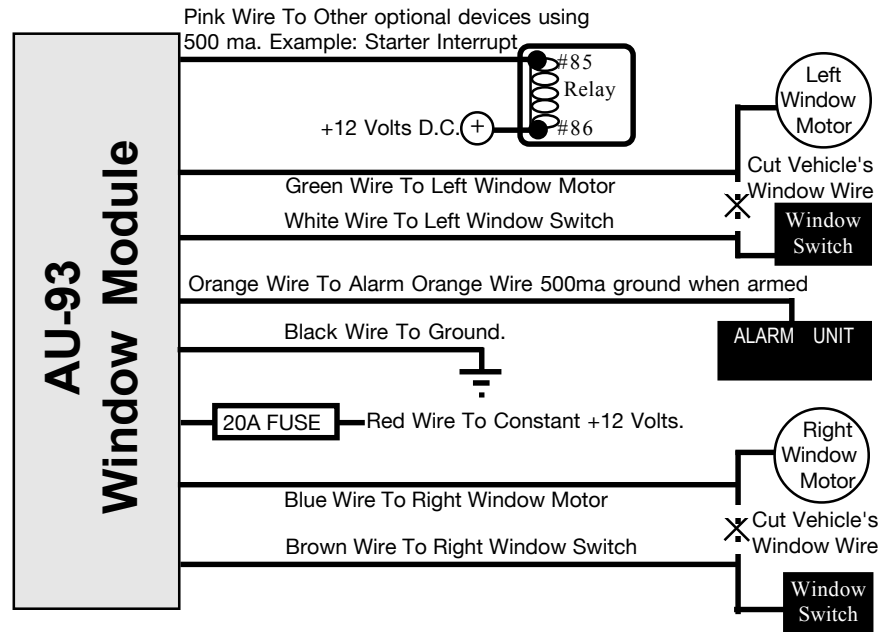
MODEL: AU-93

INDEX

Basic Wiring Diagram	3
Mounting Locations	4
Operating Instructions	5
Red Wire (Connect To Constant +12 Volts 15 Amp's)	6
Black Wire (Connect To Ground)	6
Orange Wire (Connect To 500ma Activation)	7
Pink Wire (Connect To Optional Items Requiring 500ma.)	8-9
Window Wiring Type (Reverse Polarity Rest At Ground)	10-11
Window Wiring Type (Reverse Polarity Rest At Positive)	12-13
Window Wiring Type (Reverse Polarity Rest At Nothing)	14-15

MODEL: AU-93

BASIC WIRING TO YOUR ALARM UNIT OR ANY 500 Ma GROUNDING UNIT



MOUNTING INSTRUCTIONS

A) UNDER DASH:

The best place to mount AU-93 is usually under the dash. All the wires you need are usually close by, and there is usually enough room. Keep the unit away from the heating and air-conditioning outlets, and make CERTAIN that neither the unit nor its wires will interfere with any moving parts, especially the steering, pedals and gearshift.

B) CONSOLE, KICK PANELS:

If there is room, the console can be even better than under dash, since there are usually no heater outlets or moving parts. Behind the driver's or passenger's kick panels are excellent locations out of the way, yet close to most wires.

C) DOORS:

Doors are last choice for mounting, not only because of the extra work, but because of water. If you must mount AU-93 in a door, DO NOT mount the unit with the connector facing upwards, so that water can enter the unit. It should be mounted with the connector DOWN, or second best, horizontally. Make certain that neither AU-93 or its wires will interfere with the windows or door-lock mechanisms.

D) ALL LOCATIONS:

Mount the unit securely with the screws and or tywraps provided. If unit is loose, it may rattle or foul something. In some cases, it may be easier to mount the unit first and plug in the connector afterwards. In all cases, try to mount the unit so that the wires are kept as short as possible. Tywrap the wires as needed- a two cent tywrap could save you the labor of re-installation.

OPERATING INSTRUCTIONS

When this window interface is connected to any alarm system that has a 500 ma. grounding wire when the alarm becomes armed this will tell this AU-93 window interface to roll up two of your windows. When AU-93 is activated a built-in electronic sensor will automatically shut off the windows' motor once the windows have rolled up all the way.

INSTALLATION

There are Three basic types of installation. Remove the driver's master door lock switch assembly from the driver's door panel. You may have to remove the driver's door panel. In some cars this switch is on the center console.

NOTE: DO NOT DISCONNECT THE WIRES FROM THIS SWITCH

Examine the wires coming out of the switch assembly. You should find one of the following system types by checking the functions of each wire using a test light or volt/ohm test meter.

A) 4 OR 5-WIRE REVERSE POLARITY REST AT GROUND TYPE SYSTEM:

- One Wire has +12 volts all the time.
- One or two wires are ground all the time
- Two wires are ground then change to 12 volts when moving window switch.

B) 4, 5 or 6 -WIRE REVERSAL REST AT POSITIVE TYPE SYSTEM:

- One or two wires have +12 volts all the time.
- One or two wires are grounded all the time.
- Two wires are 12 volts then change to ground when moving window switch.

C) 4-WIRE REVERSE POLARITY REST AT NOTHING TYPE SYSTEM:

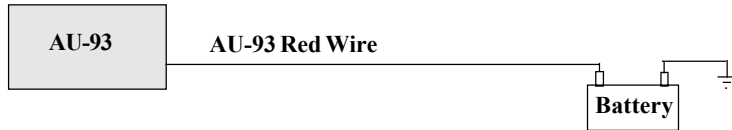
- One wire has +12 volts all the time.
- One wire has ground all the time.
- Two wires are zero potential then change to 12 v. positive or ground when moving switch.

RED & BLACK WIRE CONNECTIONS *power*

RED WIRE: (12 volts positive input).

FUNCTION: To supply constant 12 volts positive for this unit to operate and to supply the 12 volts 15 amps to roll up the two windows.

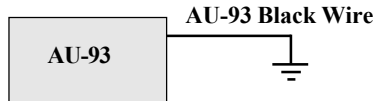
CONNECTION: Should be made directly to the car battery or fuse block with a constant +12 volts 15 amp capacity all the time.



BLACK WIRE: (Ground input).

FUNCTION: To supply constant ground for this unit to operate.

CONNECTION: Secure this wire to the metal ground frame of vehicle or directly to the battery ground cable 6" or more away from battery. Make sure to scrape away all dirt and grease to get a good ground connection.



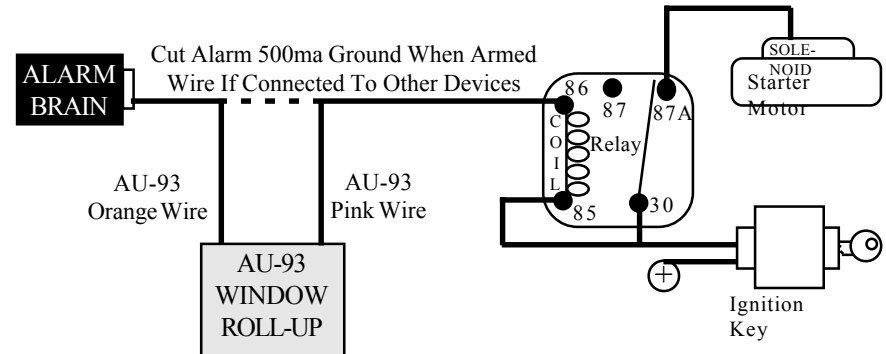
ORANGE WIRE CONNECTION *500ma Activation*

ORANGE WIRE: (500ma Activation Wire).

FUNCTION: When the AU-93 Orange wire is grounded from your alarm or other type of device this activates the AU-93 to roll up two vehicle's windows.

CONNECTION: Connect this orange wire to any device that gives 500 ma ground when you want two of the vehicles windows to roll up.

WARNING: The AU-93 orange wire must be the only item connected to your activating device. If any items are currently connected to your activating device they must be disconnected and re-connected to the AU-93 pink wire.



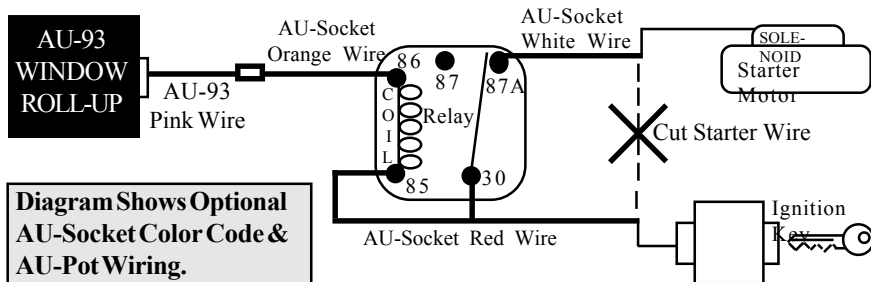
PINK WIRE CONNECTION *Optional items*

PINK WIRE: (Connecting Optional Items).

FUNCTION ONE: This Pink wire is connected inside the AU-93 through a diode to the Orange wire. This diode allows the AU-93 orange wire to respond only from the item which will activate the AU-93. When the AU-93 Orange wire is grounded from your alarm or other type of device then this pink wire will supply a constant ground output to operate any other type of unit that was originally connected to your 500ma ground wire. (Example: Starter interrupt or a relay coil that can operate other detection items.)

CONNECTION: For Starter Interrupt: Connect pink wire to the negative side of optional relay coil #86. The wire from ignition key to starter solenoid will read 12 volts only when ignition key is in start position (cranking the vehicle). Cut this wire at a suitable location. On ignition key side of this cut wire, connect to pin #85 and #30 of relay. On starter solenoid side of this cut wire connect to pin #87 of relay.

DIAGRAM FOR STARTER DIS-ABLE



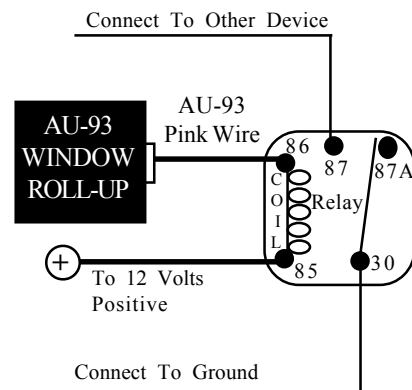
PINK WIRE CONNECTION *Optional items*

PINK WIRE CON'T:

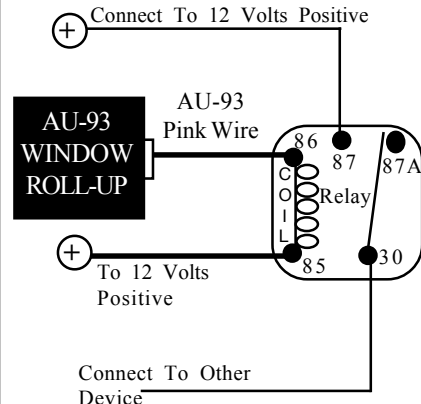
FUNCTION TWO: To have a relay supply 12 volts positive or ground to other detection devices when alarm is armed activating the AU-93.

Note: Relay in function two will have current draw on battery only while alarm is armed.

SUPPLY GROUND TO OTHER DEVICES



SUPPLY POSITIVE TO OTHER DEVICES



REVERSE POLARITY REST AT GROUND

A) 4 or 5 WIRE REVERSE POLARITY REST AT GROUND TYPE SYSTEM:

This is the most common system. When probing with a Volt/Ohm meter you will find power on one wire leading into the switch, and ground on the remaining three or four wires. However, upon operating the switch, you will find that one of the grounds you have found will disappear and power will appear. Upon moving the switch in the other direction another ground will disappear and power will temporarily show up. The remaining one or two wires will always have a ground apparent on it.

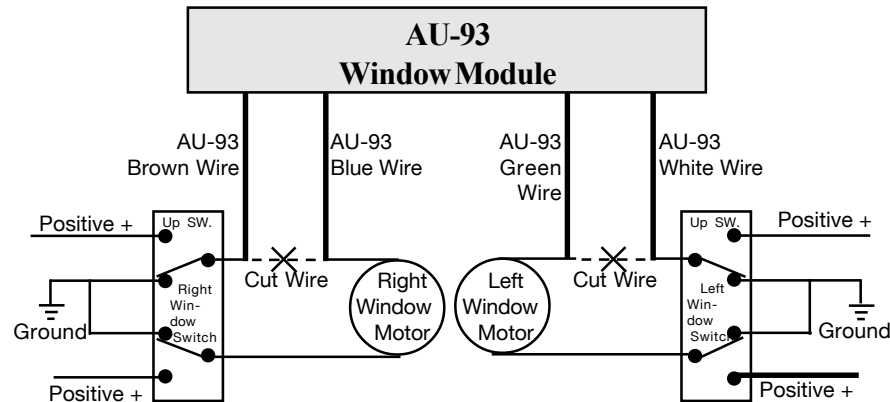
- One wire has +12 volts all the time.
- One or two wires are grounded all the time.
- Two wires are grounded then change to 12 volts when moving switch.

NOTE: When the AU-93 is activated the AU-93 Blue & Green wires will have +12 volts output to roll up the window, so it must be connected to the wire going to the vehicle's window motor. **DO NOT connect AU-93 Blue or Green wires to the vehicle's window switch wire because you will have a short and blow fuses or damage the AU-93 when AU-93 is activated.**

NOTE: When the AU-93 is NOT activated, the AU-93 Brown & Blue wires are connected so your window will work from vehicle's window switch as it did before, only now it will pass through the AU-93. Once the AU-93 is activated it will disconnect the Brown wire completely and the Blue wire will have a +12 volt output.

NOTE: When the AU-93 is NOT activated, the AU-93 White & Green wires are connected so your window will work from vehicle's window switch as it did before, only now it will pass through the AU-93. Once the AU-93 is activated it will disconnect the White wire completely and the Green wire will have a +12 volt output.

REVERSE POLARITY REST AT GROUND



REVERSE POLARITY REST AT POSITIVE

B) 4, 5 or 6 - WIRE REVERSE POLARITY REST AT POSITIVE TYPE SYSTEM:

When probing with a Volt/Ohm meter you will find 12 volt power on three or four wires leading into the switch, and ground on the remaining one or two wires.

Upon operating the switch you will find that one of the 12 volt power wires you have found will disappear and ground will appear. Upon moving the switch in the other direction another 12 volt will disappear and ground will temporarily show up. 12 volts is present all the time on two wires or sometimes on one wire if bussed internally within the switch. The remaining two ground wires will always have a ground apparent on them. Sometimes the two grounds are supplied by one wire and then bussed internally within the switch

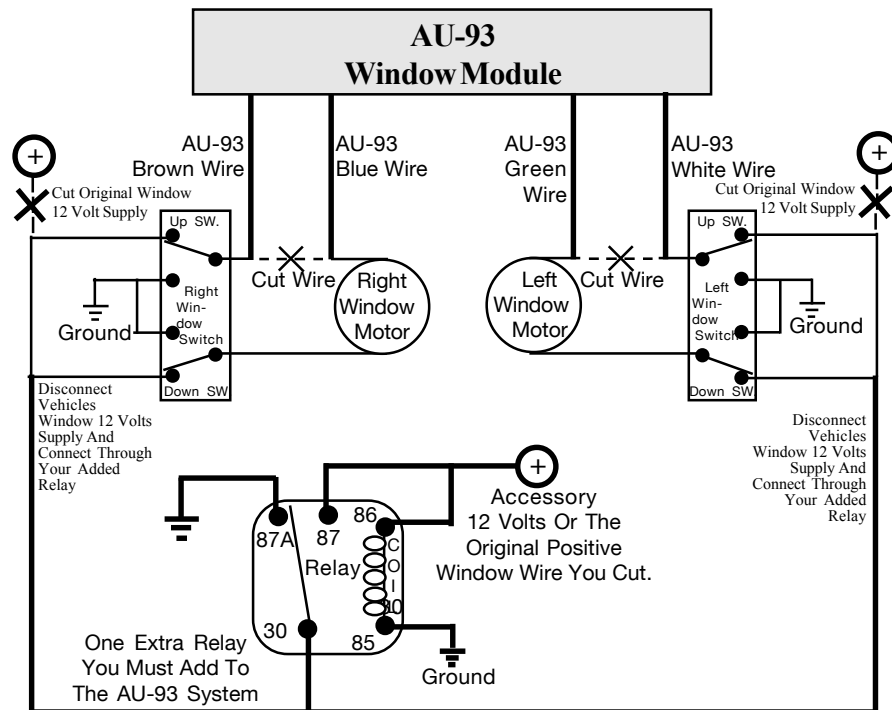
- One or two wires have +12 volts all the time.
- One or two wires are grounded all the time.
- Two wires are 12 volts then change to ground when moving switch.

NOTE: When the AU-93 is activated the AU-93 Blue & Green wires will have +12 volts output to roll up the window, so it must be connected to the wire going to the vehicle's window motor. **DO NOT connect AU-93 Blue or Green wires to the vehicle's window switch wire because you will have a short and blow fuses or damage the AU-93 when AU-93 is activated.**

NOTE: When the AU-93 is NOT activated, the AU-93 Brown & Blue wires are connected so your window will work from vehicle's window switch as it did before, only now it will pass through the AU-93. Once the AU-93 is activated it will disconnect the Brown wire completely and the Blue wire will have a +12 volt output.

NOTE: When the AU-93 is NOT activated, the AU-93 White & Green wires are connected so your window will work from vehicle's window switch as it did before, only now it will pass through the AU-93. Once the AU-93 is activated it will disconnect the White wire completely and the Green wire will have a +12 volt output.

REVERSE POLARITY REST AT POSITIVE



REVERSE POLARITY REST AT NOTHING

C) 4-WIRE REVERSE POLARITY REST AT NOTHING TYPE SYSTEM:

The reversal rest at nothing system usually has four wires attached to it. Two wires bring in power and ground, and the other two wires are from the window motor windings. Internally the switch busses the power and ground to opposite sides of the upper switch. The window motor windings are connected to the center two switches poles and rest at zero potential when in a relaxed position. If the switch is moved in the down direction, internal contacts will cause the motor windings to connect to the two upper power and ground connections. If the switch is moved in the up position, connection is made between the center pole motor winding wires and the positive and negative connection of the bottom of the switch.

- One wire has + 12 volts all the time.
- One wire has ground all the time.
- Two wires are zero potential then change to +12 volt or ground when moving switch.

NOTE: When the AU-93 is activated the AU-93 Blue & Green wires will have +12 volts output to roll up the window, so it must be connected to the wire going to the vehicle's window motor. **DO NOT connect AU-93 Blue or Green wires to the vehicle's window switch wire because you will have a short and blow fuses or damage the AU-93 when AU-93 is activated.**

NOTE: When the AU-93 is NOT activated, the AU-93 Brown & Blue wires are connected so your window will work from vehicle's window switch as it did before, only now it will pass through the AU-93. Once the AU-93 is activated it will disconnect the Brown wire completely and the Blue wire will have a +12 volt output.

NOTE: When the AU-93 is NOT activated, the AU-93 White & Green wires are connected so your window will work from vehicle's window switch as it did before, only now it will pass through the AU-93. Once the AU-93 is activated it will disconnect the White wire completely and the Green wire will have a +12 volt output.

REVERSE POLARITY REST AT NOTHING

