

Installation Guide

12 Volt Relay Module

Alcohol Interlock V3



V3 12V Relay Module is intended for installation on vehicles with 12V electrical systems.

This installation guide is intended for use by trained technicians only. Local laws and approvals should be observed during installation.

Kit/Tools Needed

V3 Relay Module (12 Volt) (ACS # 79-005503)	1
V3 ignition interlock handset (79-005555)	2
Handset Mounting Clip (58-000144)	3
Handset Clip Fixture (58-000257)	4
Relay Module to Interlock Handset Cable (13-001050)	5
Relay Module Wiring Harness (13-001045)	6
Installation kit (velcro tape, tie wraps, hardware, heat shrink tubing, terminal ring/crimp/nut) (95-000514)	7
Round style Mouthpieces (bag of 25) (95-000140)	8

Also: Wire strippers, Soldering iron, Heat gun, Multimeter, Screwdriver.
To order replacement parts, consult the preceding list.

Inspection

Before the ignition interlock is installed, an inspection of the vehicle's electrical system is required.

Check:

- Battery Voltage
- Charging System
- Starting System

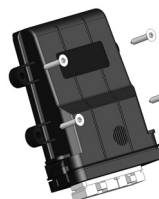
Relay Module Installation

Mounting the Relay Module

1. Locate an easily accessible area that does not obstruct the normal operation of the vehicle (preferably under the dashboard to the right of the driver's side of the vehicle) to install the relay module.
2. Mount the relay module with the wiring harness connector opening facing downwards (so that the open part of the relay module case would be facing down).

Note! Position the relay module as to not interfere with the normal operation of the vehicle.

3. To mount the relay module to the vehicle use Velcro®, tie wraps or screws.



4. If Velcro is used to mount the relay, attach the loop half of the hook and loop tape to the back of the relay module, and attach the hook half to the vehicle. If tie wraps are used, put them through the screw holes in the relay module case. If screws are used, try to use existing holes to avoid any modifications to the vehicle.

Connecting the Relay Module Wiring Harness



The relay module wiring harness consists of 14 colored wires. Only 7 of these wires are connected to specific points in the vehicle's wiring system (see table). The other 7 wires are used to connect optional accessories.

1. Prepare the relay module wire harness by stripping all wires 1 to 2", and insert heat shrink tubing to all wires except the red, black and white wires.
2. Solder the terminal ring to the Black ground wire in the wiring harness. Connect to a ground point with the metal crimp ring and nut provided.

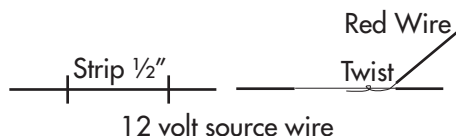
Note! The ground connection is made first to prevent any damage to the Relay Module.

3. Using the Multimeter, locate a continuous unswitched +12 volt source in the vehicle's main harness. Test the source in all ignition states including Start and Accessory. The +12 volts must be present in all states. Connect the red wire in the wiring harness to this source (follow next two steps for instructions).

Note! This source should be connected to a source with a 20A fuse.

4. Locate a section of the +12 volt source wire which is close to the vehicle's fuse box. Using the wire strippers, expose a 1/2" section of the wire (see diagram).

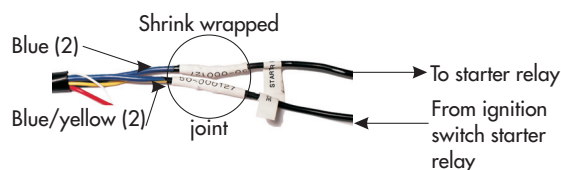
- Twist the exposed end of the red wire in the wiring harness to the exposed section of source wire.



- Using the Multimeter, locate a +12 volt source in the vehicle's main harness that is present only when the ignition is in the Start and On state (not the Accessory state). The white wire in the wiring harness is connected to this source.
- Using the wire strippers, expose a 1/2" section of the wire. Twist the exposed end of the white wire in the wiring harness to the exposed section of source wire.
- Locate the wire in the vehicle's main harness that runs between the ignition switch and the starter relay or solenoid. Cut this wire and attempt to start the vehicle (see diagram).

The motor should not start.

- Attach the two blue wires in the wiring harness to the key side of the cut starter cable (see diagram).
- Attach the two blue/yellow wires in the wiring harness to the starter side of the cut starter cable (see diagram).
- Solder all connections. Slide the heat shrink tubing over the joint and apply the heat gun. In other cases, tape the joint.



- Tape off or heat shrink the used wires in the wiring harness and tie wrap the wires. Connect the wire harness to the Relay Module and replace all vehicle panels.

Connecting the Handset

- Mount the handset clip fixture in an accessible location for the driver. Make sure it does not obstruct any of the vehicle's controls.



- The clip fixture can be mounted on the dashboard of the vehicle using Velcro hook and loop tape (attach the loop half of the hook and loop tape to the back of the clip fixture, and attach the hook half to the dashboard) or using screws. If screws are being used attach the clip fixture to a flat part of the dashboard for secure mounting.

- Plug one end of the interlock handset cable into the relay module and the other end into the interlock handset. Place the handset in the handset clip fixture.
- Perform a visual inspection to ensure that the vehicle is back to its original appearance before the installation.

Testing the Ignition Interlock

- Once the relay module is installed and the handset connected, attempt to start the motor without providing a breath test. The motor should not crank or start.
- Wait for the Blow for 5 Seconds message on the interlock handset display. Blow moderately and continuously into the mouthpiece. A tone is heard. Keep blowing until the tone stops.
- Wait for the Start Motor message indicating the breath test has passed. Turn the key to start the motor. The motor should start.
- Turn off the ignition and attempt to start the motor again within 30 minutes. The motor should start without requiring another breath test.

Relay Module Uninstallation

To be done only when removing relay module from car.

- Disconnect the 7 wires that come from the relay module wiring harness which are connected to different parts of the car's electrical system. Unsolder all connections and tape off the wires.
- Disconnect the terminal ring (which is connected to the Black ground wire in the wiring harness) from the ground point on the vehicle (the connection was made with a metal crimp ring and nut).
- Locate the wire that was cut during installation, the wire was part of the vehicle's main harness and it ran between the ignition switch and the starter relay or solenoid. Reconnect the wire.
- Once the relay module uninstallation is complete (the above 3 steps), attempt to start the motor by turning the ignition switch.

Disposal of Unit at End of Service Life

To dispose of the alcohol interlock (relay module, handset, or both) when it is deemed to be at the end of its service life:

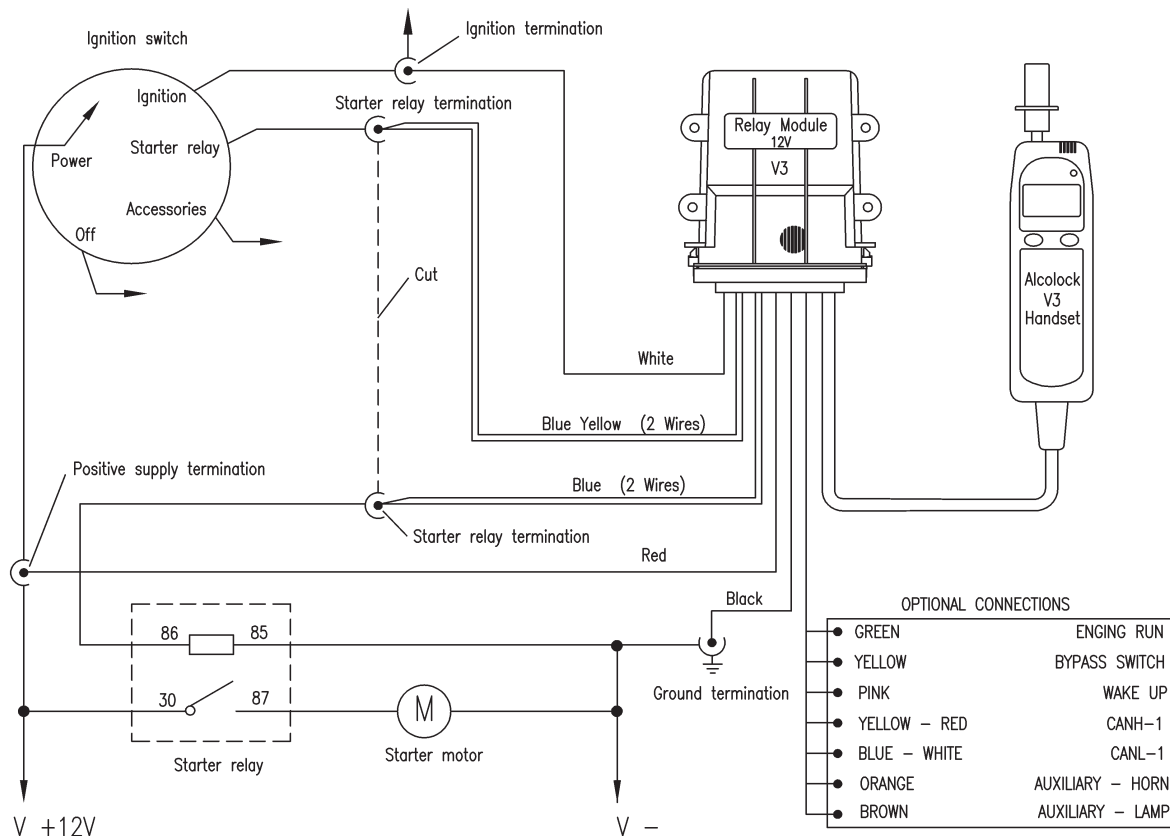
- Return the unit to the dealer for disposal.
- Contact local waste management authority for more information.
- Ask a suitable disposal contractor to dispose of the interlock.

Wire Diagram

Colour	Location	Required?
Red	+12 Volts un-switched 10 A	Yes
Black	Ground	Yes
White	Ignition Switch	Yes
Blue (2 wires)	To starter	Yes
Blue/Yellow (2)	From ignition switch	Yes
Green	Tachometer 1	Optional*
Yellow	Bypass switch	Optional
Yellow/Red	CAN bus 1	Optional
Blue/White	CAN bus 2	Optional
Orange	(+) AUX alarm horn	Optional
Brown	(+) AUX lamp	Optional
Pink	Vehicle parking lamps	No

Note! This connection is mandatory in order to meet Cenelec EN 50436-2 certification.

Alcolock V3 Circuit diagram (12V)



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Type Approval: ECE Regulation No.10

1. This type approval follows only the specifications regarding the electromagnetic compatibility.
2. The devices must be installed in such a manner that all applicable technical rules, and also observing other technical directives and regulations, for the vehicle to be modified still apply.
3. The national regulations and behavioral rules must be observed when using this device.



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