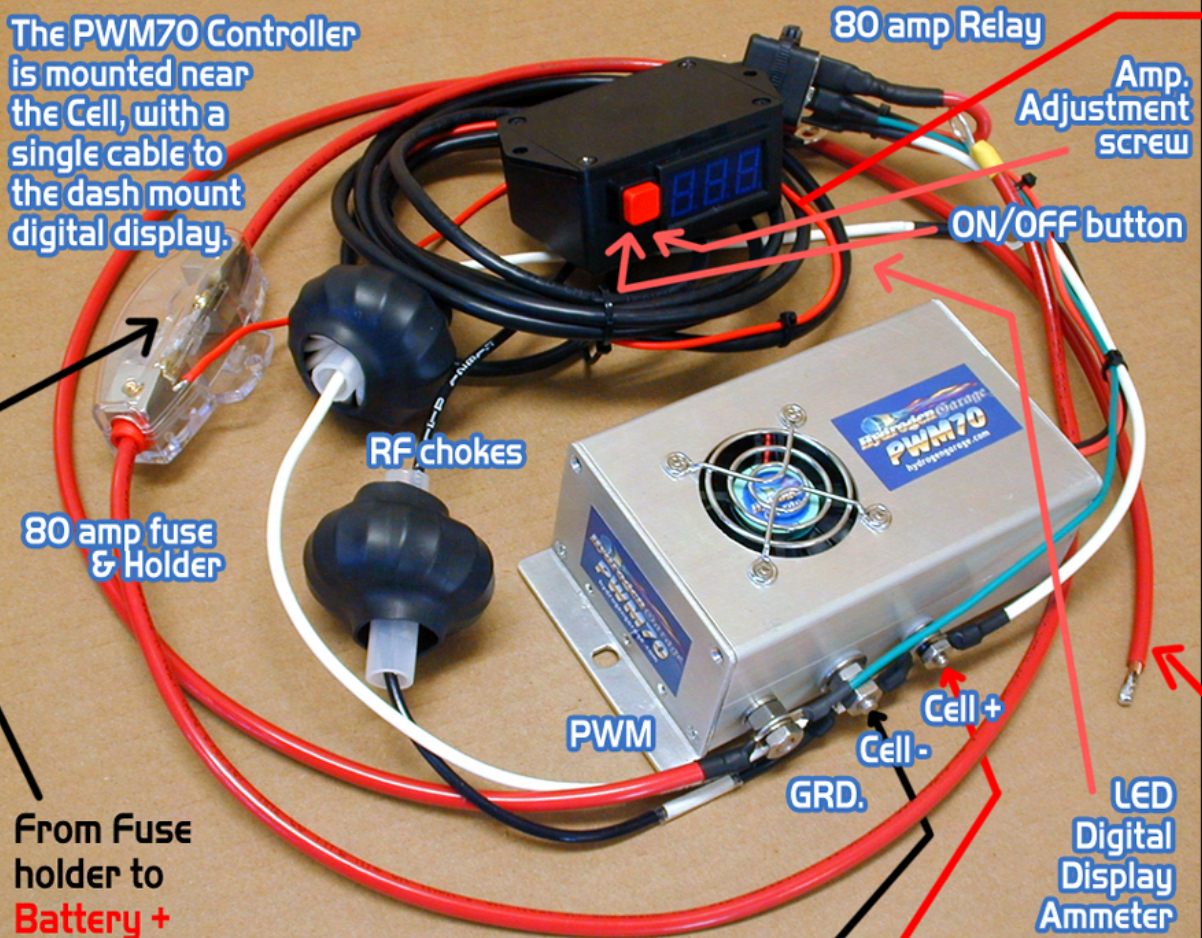


## PWM70 w/Digital Display, Relay, RF chokes & 40 amp fuse holder

The PWM70 Controller is mounted near the Cell, with a single cable to the dash mount digital display.



## PWM70 & PWM30 12v Installation w/Digital Display, Relay, RF chokes & 40 amp fuse holder

Simple 5 wire hook-up.

1) GRD. wire to the PWM.

2) Fuse wire to battery + 3) Cell - 4) Cell +

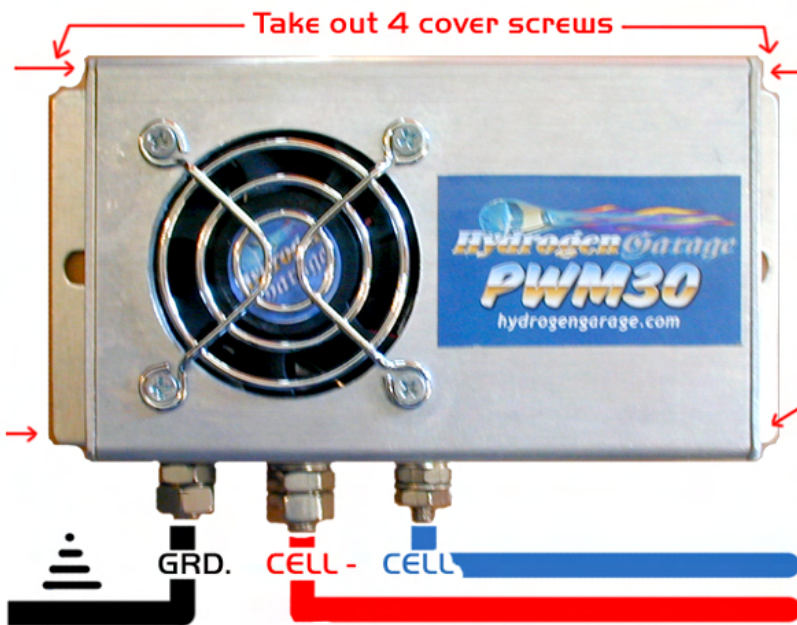
5) Ignition, trigger wire +

1) GRD. wire to a solid frame GRD. or Battery (-)

A red wire comes out of the digital display, this is "under the dash IGNITION power (+) Only a few amps goes through this relay/switch trigger wire.

You can adjust the amperage with a tiny screwdriver potentiometer under the ON/OFF switch. Cell ammeter display in amps.

The RF chokes go between the PWM and the CELL connection posts - & +. You must hook them up as labeled, one is a negative choke, the positive choke is wrapped in a another direction. Direction is important too.



Your PWM30 with Controller Display, comes all connected and tested. Set at 15 amps. max. Mount the PWM close to the cell block. Run the black cable ( 7 cond. wires ) through the dash through the firewall to under the drivers side. You have to access the 7 wire terminal inside the PWM. Take out 4 screws. Take off the top fan/cover. You will see that the 7 wires are colored coded. Disconnect here and tape up the wires, temporarily to help guide them through the dash board. Re connect when completed. Tug on each wire slightly after tightening the terminals, to make sure of a good connection that will not vibrate out. If you can't tug it out it will stay in connected for years to come.

### Trouble Shooting the PWM30 & PWM70

This PWM is totally repairable, parts are available. Check all the connections, make sure they are tight. Any loose fittings will get hot!! Also do not over tighten and turn the bolt inside the PWM box and breaking a solder joint. Use two 7/16" wrenches on the terminal nuts, so you don't turn the bolt & possibly break the solder joint. 5/16" wrench on the positive terminal.

Make sure your Cell is NOT grounded. Many other cell kits ground the negative terminal on the hydrogen cell. We use a ISOLATED ground wire to the cell's negative terminal. We are pulsing on the negative side, we do not want to pulse the entire cars electrical system. If your ammeter shows way high amps and you can not turn down the "current set" potentiometer on the LCD display, this shows you that your cell is grounded somehow. Please only let the Cell - wire to connect to the ground side of the cell. You do ground the PWM to a good solid frame ground or to the battery - terminal

Mount the display, so that it is easy for the driver to view.

Some say it is too bright, so you may want to hide it down low.

This displays the amps your draw, also shows you the cell is on & working. The "current set" screw is a 1K potentiometer, variable resistor, you can dial in the amp here. It is a 10 turn potentiometer, so be patient on turning.

You set it once and drive. Constant amp draw is what you want. We set our cells for approx. 1/3 LPM of Real Hydroxy gas to 1 Liter Engine displacement. Our cells are about 1 LPM at 12/13 amps. A 2.0 liter engine would need .7 LPM of Hydroxy Gas. A 4.0L engine would need 1.25LPM. A V8- 350, 5.4L would need 1.8LPM to 2.25 LPM. 12L semi truck would need 3 ,4 LPM.

This PWM is designed for 7 plate or tube cells, other cell configurations will work, but some draw way too many amps, due to their high 12v leakage going on in their poorly designed cell box. If you encounter any more problems feel free to e-mail Hydrogen Garage at any time.

"customerservice@hydrogengarage.com" We are here to help, we are open source.

