
# CUSTOM CONTROL PANEL INSTRUCTIONS

**RACEWIRE SOLUTIONS**

**300 E. 5TH STREET, WYANET, IL**

**815-866-6195**

**815-925-9525**

**REV 1**

## DOCUMENTS INCLUDED

- BATTERY CABLE CONNECTIONS
- GROUND CABLE CONNECTION
- POWER CABLE CONNECTION
- LARGE RELAY WIRING
- EFI INTEGRATION HARNESS CONNECTION
- SWITCH PANEL HARNESS CONNECTION
- MAIN OUTPUT CONNECTIONS
- SUGGESTIONS FOR HARNESS TERMINATIONS


**WWW.RACEWIRESOLUTIONS.COM**
**815-866-6195**

Thank you for your purchase of a RaceWire Solutions electrical system. As you will find out upon installation, you have purchased the only custom built electrical system on the market. Hopefully the days of spaghetti wiring disasters under the dash are gone. We have removed all the guess work, and provided you with a complete system tailored to your car, and your car only.

The following will be included:

- Complete RaceWire Control Panel electrical system.
- 6ga Black Ground Feed Cable
- 6ga Red Power feed cable
- Necessary copper terminals for power feed cables
- Folder containing the harness pin outs, and fuse/relay data sheets.

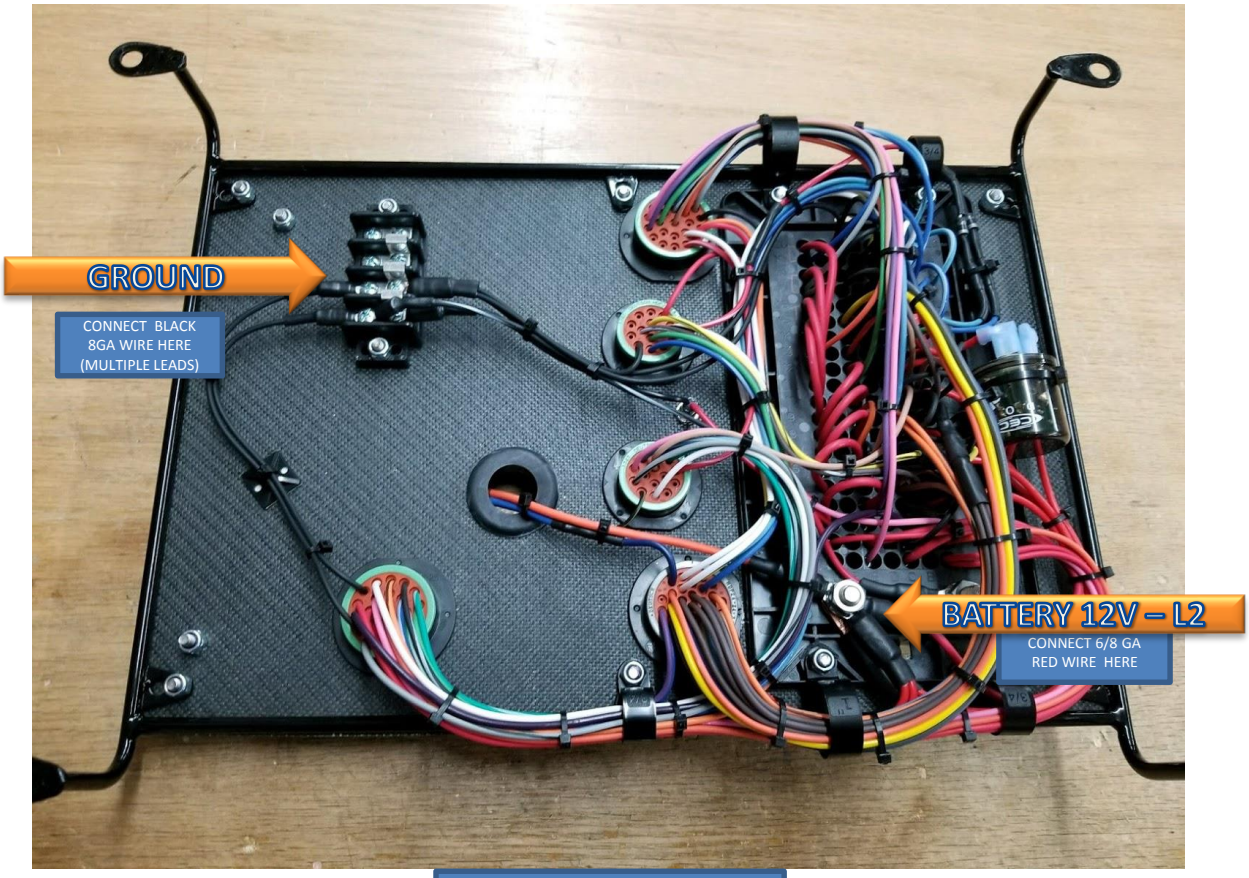
Again, thank you for your purchase of a RaceWire Solutions control panel system. If you have any questions at all, please feel free to call me anytime on my cell listed below, or by email @ brian@racewiresolutions.com OR smknta95@hotmail.com

Sincerely,

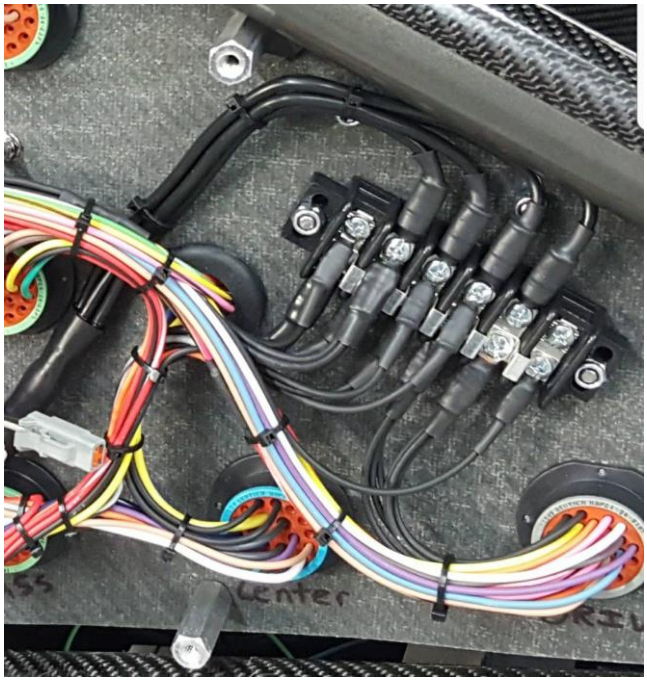
**RACEWIRE SOLUTIONS**
**Brian Black - Owner**
**Hennepin, IL**

**EMAIL – BRIAN@RACEWIRESOLUTIONS.COM**

**PHONE: 1-815-866-6195**




BATTERY CONNECTIONS



**GROUND WIRE INPUT SUGGESTIONS**

In this picture, you will notice 4 Ground inputs that were spliced together with the 6ga input cable.

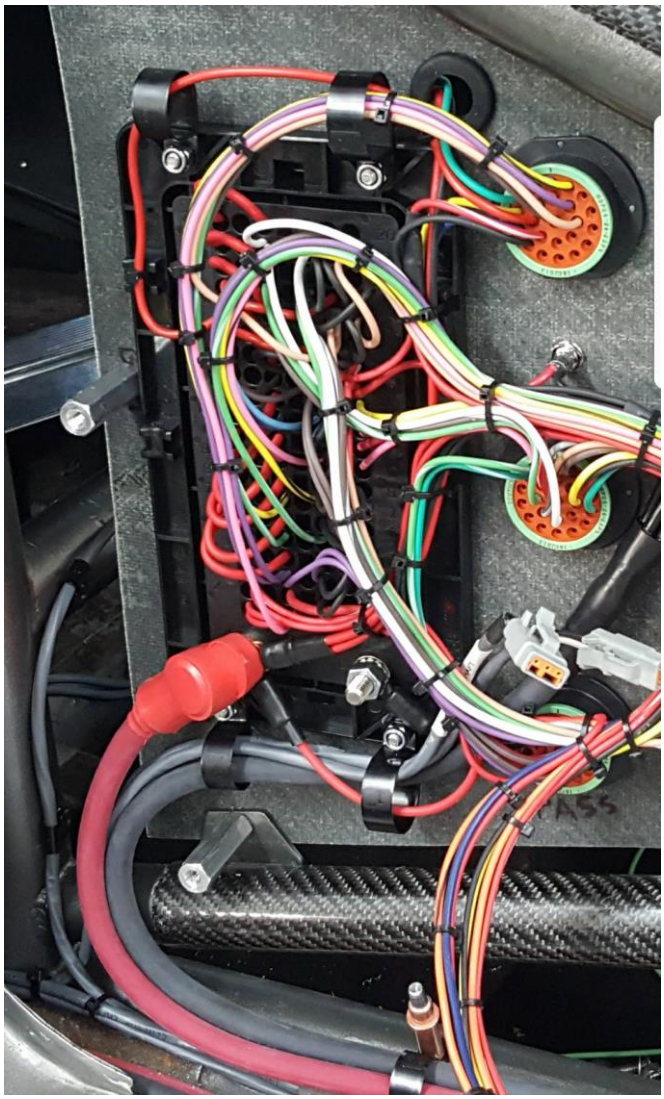
In your box, you will find a bag containing 2/3/4 (8”) long, black 12ga wire sections, ring terminals for strip, splice, and heat shrink.

Once you strip the ends of the 12ga wire sections AND the end of the 6ga black ground cable, you can either fill the splice with solder

OR

Crimp the splice and all wires together in a hydraulic crimper OR use a vice on your work bench if no other options are available.

**If you have questions, please feel free to call me @ 815-866-6195**



**MAIN POWER INPUT SUGGESTIONS**

In this picture, you will notice 1 – 6GA Red power cable connected to the relay block.

Yes, there are TWO power studs on the back of the relay block.

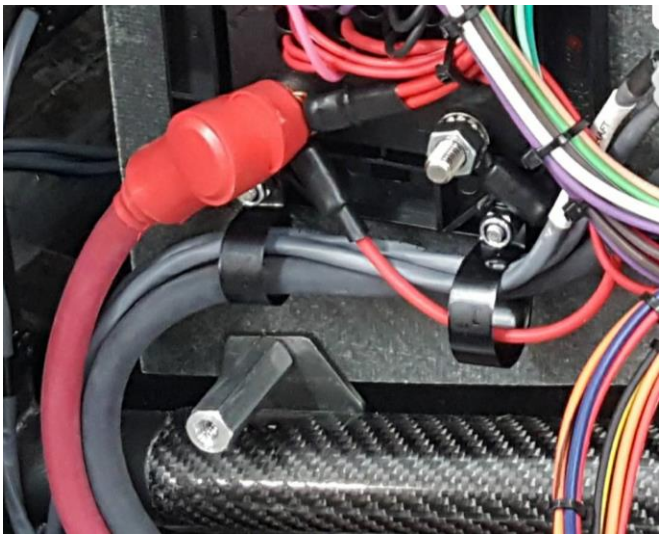
***L2 – Connect Main Battery power here ONLY***

L1 – Tighten this nut, and DO NOT CONNECT anything to this stud. L1 is tied to the Ignition relay, therefore does not need anything connected to it.

In your bag of supplied connectors and ring terminals, you will find a 6ga copper ring terminal with a 5/16” hole to be used on your connection to L2.

I have supplied a 6ga ring terminal with a 3/8” hole for the other end of the cable to battery or starter connection.

Boots are not supplied, but available and recommended.



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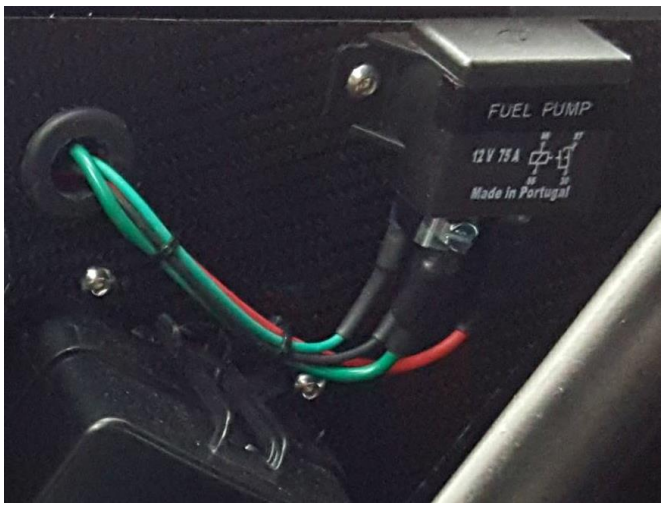




**CONTROL PANEL MOUNTED - FUEL PUMP / INTERCOOLER RELAY CONNECTION**
In this picture, you will notice the green/yellow 12ga wire has been connected to the main power relay.

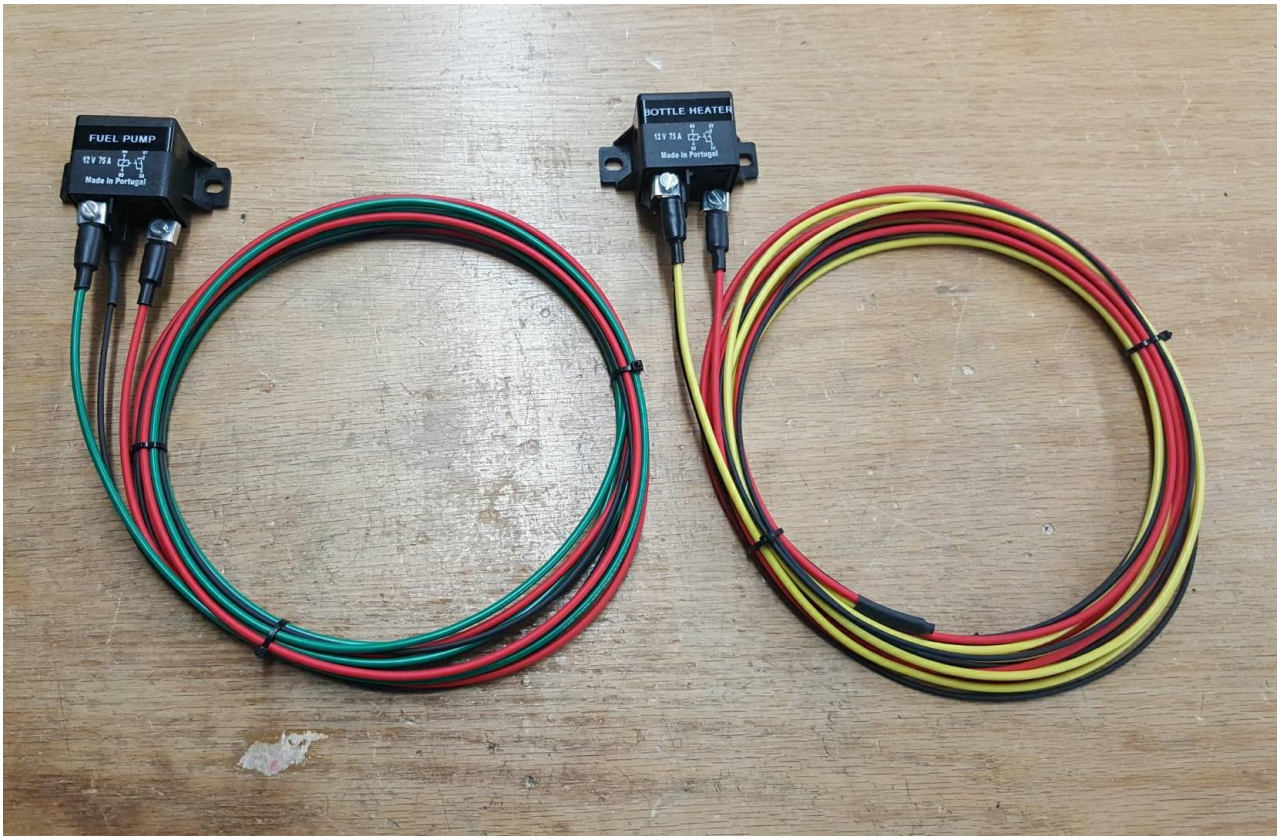
In your box, I supply you with 15ft of 12ga green / blue / yellow / orange wire, with ring terminal and heat shrink installed.

The wire is to be connected to the only open terminal on the relay – Pin 87 on the top of the relay. The relay has already been wired up to be activated via your switch panel and or an external source (EFI), so you are connecting to the relay output.

Once you have connected the one end of the wire to the relay, the opposite end needs to be connected to its respective circuit / pump.

The only other connection needed is for you to ground your accessory / pump, and your good to go.

**If you have questions, please feel free to call me @ 815-866-6195**




**REMOTE MOUNTED - FUEL PUMP / INTERCOOLER RELAY CONNECTION**

In this picture, you will notice all wires have been connected to the main power relay. Here you will need to connect all wires to make the relay work.

Relay Pin 30 - Red 12GA – Connect to Main Battery or Kill Switch

Relay Pin 87 - Green / Yellow / Orange / Blue 12ga wire – Connect to the accessory

Relay Pin 86 – Black 16ga – Connect to good ground or Battery ground

Relay Pin 85 - Green / Yellow / Orange / Blue 16ga – Connect to wire from Control panel or Switch panel for relay activation

Once you have all input wires terminated for the relay, the 12ga relay output wire needs to be connected to its respective circuit / pump.

The only other connection needed is for you to ground your accessory / pump, and your good to go.

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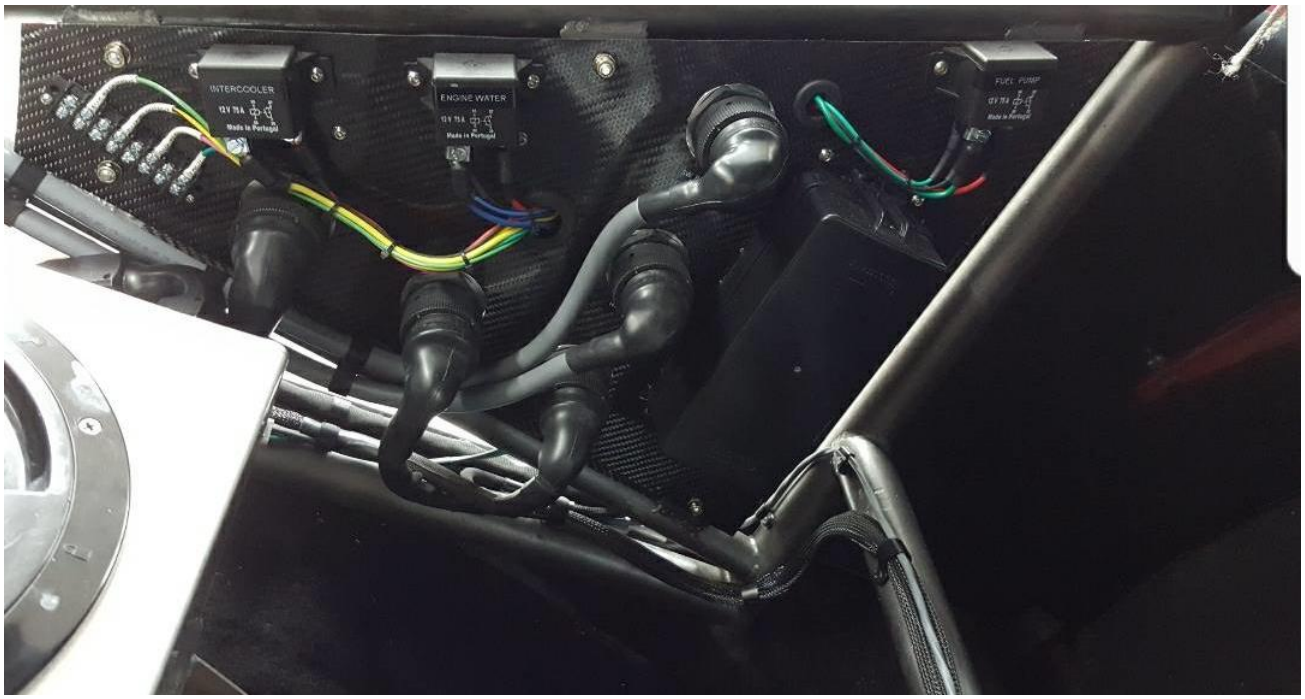



**SWITCH PANEL CONNECTION**

The switch panel has been pre-tested with the control panel prior to shipment, so now is the time to install it into the car.

Once the switch panel has been mounted in the car (roll cage or in dash), route the harness down the pillar bar or dash bar to the location of the control panel.

The connector itself is keyed, and only plugs into the control panel one way. Once you match up the keys, twist the connector ring until it stops.

That is all you need to do for this stage.

**If you have questions, please feel free to call me @ 815-866-6195**

**EFI / IGNITION SYSTEM INTEGRATION HARNESS CONNECTION**

Your control panel has been setup with an EFI integration harness option regardless of the brand or style of your ignition system.

All inputs/outputs to control panel (chassis side of the wiring) has been wired for you and into the connector labeled on the panel. In this connector is typically two step (trans brake signal), line lock signal, RPM if applicable, Ignition 12V for activation wire, shifter activation, fan/pump efi activation signals, nitrous retards, boost solenoid signals etc.

I have terminated the end at the control panel for you. Follow the pinout sheet provided and connect the respective wires to where the sheet says they need to go. If you have any questions, let me know.

For example, most of the time I have done all of the wiring needed to make an MSD Ignition system (grid) plug and play for you. The Holley EFI wiring though will need to be terminated at the ECU auxiliary header connectors.

**OUTPUT HARNESS CONNECTIONS**

Your control panel has been setup with either 1 or 2 Main Output connectors and Harnesses. Typically Main Output 1 is for your main accessory outputs, 4 corner lighting, power windows, etc. Main Output 2 is typically used for all external activation switches like trans brake, line lock, bump, brake lights, power windows etc.

Unless you have chosen the Floating ground option, I am supplying you with the HOT (12v / 16V) wire for each component, light, fan, pump etc.

To start – DO NOT CUT ALL ZIP TIES HOLDING THE BUNDLES TOGETHER

Take one bundle at a time and route to its respective area, and connect to the existing wiring. I always recommend to keep the factory connector at the head lights and parking lights, and cut the wiring 6" away from that factory connector. At this point, its easier to install a new Deutsch / Weatherpak etc. for your new connection instead of sourcing the factory style terminals.

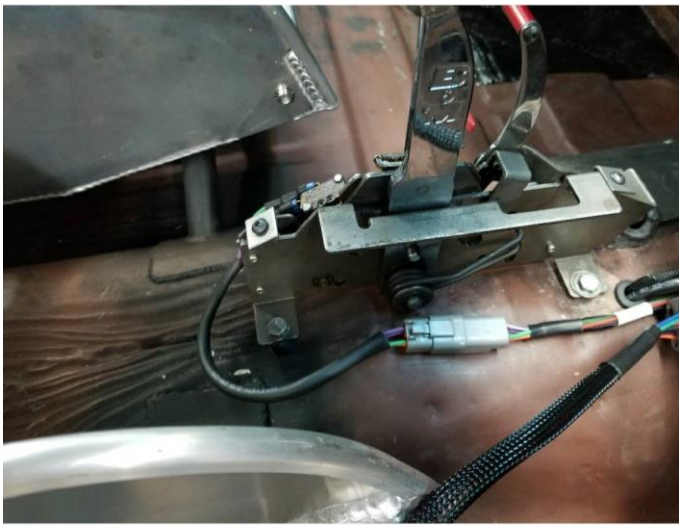
Once you have a length, you can route and cover the wiring bundle with your preferred style of braid. I like FlexoF6 split braid for ease of install. Its also called Techflex too, available on Amazon and similar sites.

If you have the Floating ground option, I will be supplying you with the 12V and Ground wires for each and every component/accessory in the vehicle.

Please follow and read the pinout sheets correctly. In these pinout sheets, I tell you EXACTLY where the wire needs to go. All of the technical, behind the scenes wiring is done for you….all you have to do is terminate the wires where they need to go per your pinout sheet!

## If you have questions, please feel free to call me @ 815-866-6195

**EXAMPLE INSTALL PICTURES FOR REFERENCE**

**EXAMPLE INSTALL PICTURES FOR REFERENCE**