

Wiring a mechanical contactor from HCR Innovations:

For a race car without an alternator, it's pretty simple.

Your Cable goes from the Battery to the +C terminal on the contactor.

Next, make another lead of 2 awg, high-quality welding cable to whatever you are powering in the car from the -C terminal on the contactor.

If you have an alternator and are only planning on using one contactor, connect the power lead from the alternator to either the +C terminal or direct to the battery.

If this is a streetcar and you're using two contactors follow the above steps for the first contactor.

Now, for the second contactor, make an additional lead from the positive post on the battery to the second contactor's +C terminal.

Then, from the -C terminal run an additional 2 awg lead from the -C terminal directly to the alternator.

Do not connect this lead to anything ignition related, as the output from the alternator will keep whatever is connected on this lead energized while the engine is running.

For the control side of the contactors, it needs to see 12 volt on the red wire and ground on the black wire in order to turn on the contactor.

For our typical in-house installations, we use two switches: One on the rear bumper and One in the driver's compartment.

We send 12 volt from the +C terminal on the contactor to one of the switches and then back from the switch to the red wire on the contactor. Then, for the other switch we send ground from the chassis to the switch and then back from that switch to the black wire on the contactor.

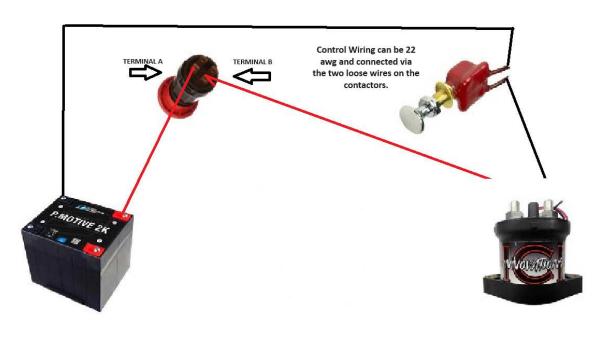
For multiple contactors, these control side signals can be combined.

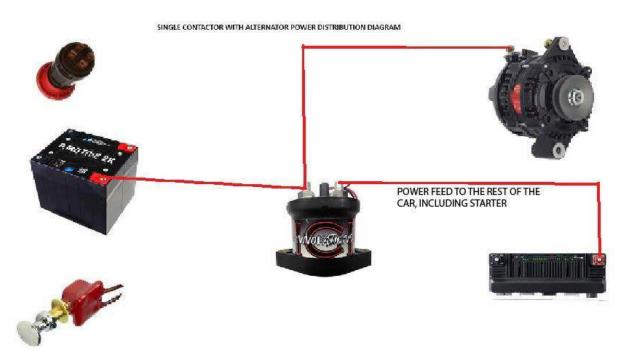
If you have any questions or need any additional materials to complete your install, we carry switches, battery cables, battery terminals, heat shrink and plenty of other things to take your install to the next level.

Feel free to reach out to us via email at devin@hcrinnovations.com or via phone/text 864-565-5606



SINGLE CONTACTOR CONTROL WIRING DIAGRAM









DUAL CONTACTOR CONTROL WIRING DIAGRAM Control Wiring can be 22 awg and connected via TERMINAL B the two loose wires on the contactors. DUAL CONTACTORS POWER DISTRIBUTION DIAGRAM