20/40 Amp Relay Center

Instructions:

1: Find a suitable mounting location, one that is as far from engine/exhaust heat as possible. Also keep the unit away from moisture as much as possible too. Moisture can cause corrosion on the unit and should be avoided as much as possible. It is also not recommended to mount the unit upside down. The ideal location would be inside the vehicle in the glove compartment, under the dash, etc.

2: Mount the unit using the supplied vibration mounts. The bottom of the unit MUST NOT be allowed to come into contact with anything. Doing so will cause a short and possibly a fire. Also damage of this nature will not be covered under warranty.

3: Wiring the unit:

   A: Run a large wire (10 gage minimum up to 6 gage depending on exactly how much amperage will be needed) from the battery to the stud labeled “+12V”. Refer to FIG. 1 Power and Output Hookup

   B: For wiring the inputs refer to Figures 2 through 5. Wire gage should be 20 AWG at minimum. Each input is labeled with a number (that corresponds to the same # output) and whether or not it’s the positive or ground terminal for that input. For example: 1P and 1G are the positive and negative inputs for relay #1, 2P and 2G are the positive and negative inputs for relay #1, etc… 1P is the positive or +12V terminal and 1G is the ground terminal. This applies to all ten relays. Note that whether using positive or negative activation each input must have +12V and ground to operate.

   C: Now is the time to select fuses and put them in the unit. Fuses should be chosen according to the manufacturer's instructions included with the accessory and not to exceed 20 and 40 amps for the respective relays as labeled on the unit. Some general guidelines though are:
   Most fuel pumps: 10-15 amps       large pumps: 20 possibly 30
   Electric fans: single- 15 amps     dual: 20-30 amps (if ran off one relay)
   Water pumps: 10-15 amps
   Nitrous bottle heaters: minimum 30 up to 40 amps
   Transbrakes: 10 up to 20-25 amps depending on solenoid used
   Nitrous kits:
       2 solenoids (cheater, powershot, big shot style kit) 15-20 amps
2 solenoids (super big shot style) 35-40 amps
4 solenoids (cheater style) 25-30 amps
4 solenoids (powershot, big shot, pro race style) 20-25 amps
Line locks: 5-10 amps

D:
The unit is now ready to use.

E:
Soldering all connections is recommended. Power for the inputs on the board should come from a fused source such as directly from the fuse panel in the vehicle or from a key on source.

NOTE: Tighten the nuts on the output studs studs to 25 inch pounds and the input studs to 8 inch pounds. The vibration mounts should be tightened to 18 inch pounds. Over tightening can break the stud off.

Note:
Red ring terminal is for battery stud
Yellow ring terminals are for 40 amp output studs
Large blue ring terminals are for 20 amp output studs
Small blue ring terminals are for input studs

If you have any questions please email daver@nitrousdaves.com or call 574-876-0823. Please leave your name and number if calling and an appropriate time to get a hold of you.
FIG. 1 Power and Output Hookup
FIG. 2 Basic Positive Activation

+12V Source, preferably switched and fused

Toggle switch or pushbutton

GND
FIG. 3 Basic Ground Activation

Toggle switch or pushbutton

+12V Source, preferably switched and fused
FIG. 4 Basic ECU Ground Activation

- +12V Source, preferably switched and fused
- To ECU Pin
FIG. 5 Basic ECU
Positive Activation

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GND

To ECU Pin