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# Nitrous Relay Board

## WARRANTY AND DISCLAIMER

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The Nitrous Relay Board made by Digital Delay simplifies wiring between the Nitrous system and a Timer. Whether using a Timer from a Delay box or a stand alone Timer to activate a Stage of Nitrous. Additional benefits of the Nitrous Relay Board are high current relay outputs, status LEDs, and fused outputs. The Nitrous Relay Board is also designed in such a way that if the Fuel Solenoid was to short out and blow the fuse on the Nitrous Relay Board, the Nitrous solenoid would be turned off to protect the motor.

The Nitrous Relay Board has six inputs;

1. +12 Volts needs to be connected to a power source capable of driving up to 30 Amps.
2. GND (Ground) needs to be connected to Ground.
3. WOTS (Wide Open Throttle Switch) which is used to insure that the Nitrous only activates when the Throttle is wide open. Needs to be connected to one side of the throttle switch with the other wire from the switch going to ground.
4. OVERRIDE can be used to activate the Nitrous system any time the WOTS is active. This optional input needs to be connected one side of a switch with the other side of the switch going to +12 Volts
5. TIMER this needs to be connected to the output of the Delay box or a stand alone Timer. As long as the WOTS is active, any time the TIMER input receives +12 Volts the Nitrous Stage will be activated.
6. PURGE this is used only when a purge solenoid is incorporated into the system. This optional input needs to be connected one side of a switch with the other side of the switch going to +12 Volts.

The +12V input should be a 10 Gauge wire. The rest of the inputs can use a 16 or larger gauge wire.

The Nitrous Relay Board has four fuse protected outputs;

1. FUEL - this is connected to one side of the Fuel solenoid with the other side of the fuel solenoid going to ground. This is the Fuel Solenoid that is to be activated along with the Nitrous solenoid.
2. NITROUS - this is connected to one side of the Nitrous solenoid with the other side of the Nitrous solenoid going to ground.
3. RETARD - this is connected to the ignitions retard input.
4. PURGE - this is connected to one side of the Purge solenoid with the other side of the Purge solenoid going to ground, if used.

All outputs should use a 14 or larger gauge wire.

There are 2 green LEDs, one for the Nitrous Stage and one for the Purge, which when lit are used to indicate that the fuses are ok. They can also be used to check to make sure the unit has power. There are also 2 yellow LEDs, one for the Nitrous Stage and one for the Purge output, which are used to indicate when the outputs are active.