

Speedwire Systems pro series nitrous instructions

WIRING INSTALLATION RECCOMENDATIONS SUGGESTIONS

- **DO NOT MOUNT CLOSE TO IGNITION SOURCES OR IGNITION COIL**
- **CONNECT ALL DATA CABLES FIRST BEFORE TURNING POWER ON**
- **DO NOT PUSH OR PRESS AGAINST LED SCREEN**
- **10 GAUGE WIRE IS RECCOMENDED FOR EACH OUTPUT STAGE TO SOLENOIDS.**
- **WHEN WELDING ON VEHICLE REMOVE ALL CONNECTIONS, AND REMOVE CONTROLLER FROM VEHICLE AS WITH ALL OTHER SENSITIVE ELECTRONICS**

INPUTS:

THROTTLE SWITCH

When a positive 16v signal is applied to the carb switch input labeled(WOT) , and the nitrous controller is armed the sequence of stages will activate. You can see the status on the screen when activated.

TRANS BRAKE INTERUPT

When a positive 16 v signal is applied to the trans brake interupt input labeled (TBR), and the carb switch is activated, it will pause until the trans brake signal is removed, this would normally be done thru a relay when staging, however this function is now done thru the micro controller giving you nano second reaction time once the trans brake signal is removed. You can also see the status of the input on the screen when activated

GROUND (RPM or AUX) INPUT

Labeled as (RPM), when a ground input is applied to this pin it will activate the selected timer or timers with the asterisk symbol as shown in the video, the nitrous controller must also see a (WOT) input in order for the ground input to activate the stage, once the ground is removed the timer does not see that signal and will turn off. If it is reapplied the nitrous will not turn back on again. An example of use of this feature is an RPM window switch found on many ignition systems, if it sees an over rev scenario it will remove a ground signal once the specified RPM limit is reached turning off the nitrous.

Another way to utilize this feature is if you were running a lenco transmission and you wanted to have a stage activate on the 1-2 shift you would select the asterisk for that particular stage to activate upon the shift, naturally you would have to have a micro switch on the transmission to provide the signal to the controller to identify that the lever has been shifted, or a grounding pressure switch to identify the pod being activated on the transmission.

Power and ground connections:

The battery power and ground can be small gauge wire 16-14 gauge as this is only used to power up the nitrous controller screen and internal micro chips.

How to set timers:

Changing timer settings can be done with the push of the dial, changing of settings can only be done with nitrous arming switch off. Scroll thru the desired stage to be changed on the screen and press the dial. This will initiate the change sequence. Scroll the dial to the timer digit that you would like to change and press dial, now you can change the digit by turning the dial clockwise to increase the digit count or counter clock wise to decrease the digit count. Once the desired time is reached press dial to (enter) your value and continue to scroll thru the digits as needed. Once all the parameters are set on the line, move the cursor back to the left of the screen press the dial, and now you can scroll to the next line, and change the setting as needed. Once all your settings have been completed, and the cursor is on the left of the screen press the dial (enter) and scroll to the bottom of the screen it will then ask you (do you want to save?) scroll to the left for yes< press enter (push dial) and a saving icon with a smiley face will appear confirming the changes are made to the controller. Repeat this procedure for all stages and channels to be selected.

On timer settings:

All timers are individually independent of each other, for example if the delay time on stage 1 is set to 1 second and the delay for stage 2 is set to 1 second, they will both turn on at the same time. A setting of 0.00 will be on instantly with no delay. Each stage can be delayed a maximum of 5 seconds. In summary the time that is selected for any stage is the time that it will activate.

Off timer settings:

Each stage can be selected to turn off during the run by setting the off timer setting. For example if you wanted to only have the output stage or channel on for only 2 seconds after it has been turned on, then select the off time of 2 seconds. In summary the time selected for the off time dictates how long it will stay on once that channel has been activated. If the off timer is selected to 0.00 it will not turn off at all, this is also a setting as a default. Any value above 0.00 it will recognize and take that value in to play.

DEFAULT SETTING 10 second time out:

The controller has a 10 second timeout, meaning once the throttle is applied after 10 seconds the nitrous controller will turn off all outputs, to reset this time out, switch the nitrous arm switch off and re arm the nitrous. This feature is a safety in the event your throttle gets stuck during a run, after 10 seconds all nitrous outputs will turn off even if throttle is stuck closed. Keep this timeout in mind when testing solenoids in the shop!!!

Ground input option (AUX) input:

This function can be used to have any particular stage or channel turn on only if it sees full throttle and an external ground input. Racers that want the nitrous to turn on for a specific channel or stage after a gear change. You would connect the micro switch to the shifter level to provide a ground signal input to the nitrous controller to activate the selected channel or stage to turn on. The asterick icon will dictate which stage or channel will have this function. You can select this for any output stage or channel

Timer option selection when throttle lifted:

The controller can be selected to either hold the timers and resume or restart timers when throttle is lifted and re-applied. MODE selection on screen will dictate function of that particular channel or stage as follows:

- Hold = hold timers and resume
- Restart= restart timer

How to disable a channel or stage:

You can select to disable any stage or channel with this controller by selecting disable under the MODE screen section. If disable is selected output will not function for that channel or stage regardless of inputs.

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