

September 2005

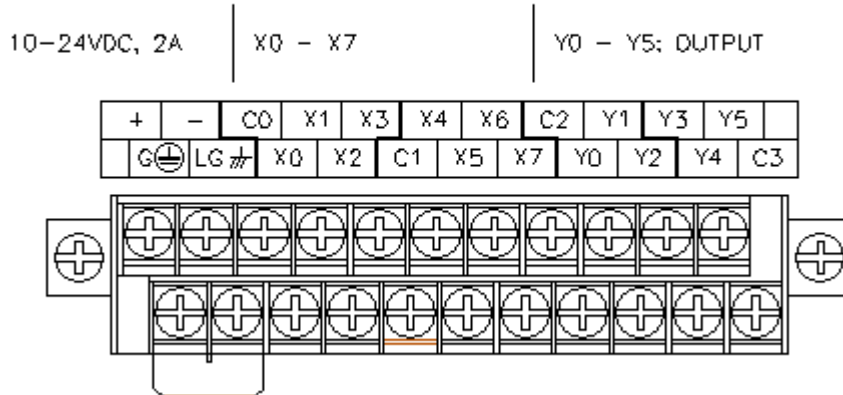
## Typical Installation Configurations

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### Disclaimer

Racing is a dangerous sport. If you engage in racing or any activity described in this document, you are acknowledging and assuming responsibility for all risks incurred. The progressive timer controller is not EPA certified and are not to be used on any emission controlled, street driven vehicle. The information herein is for reference only and is not an authoritative document. We are not liable for misuse, accidents, loss of property, personal injury or death.

### Removable Controller Connector



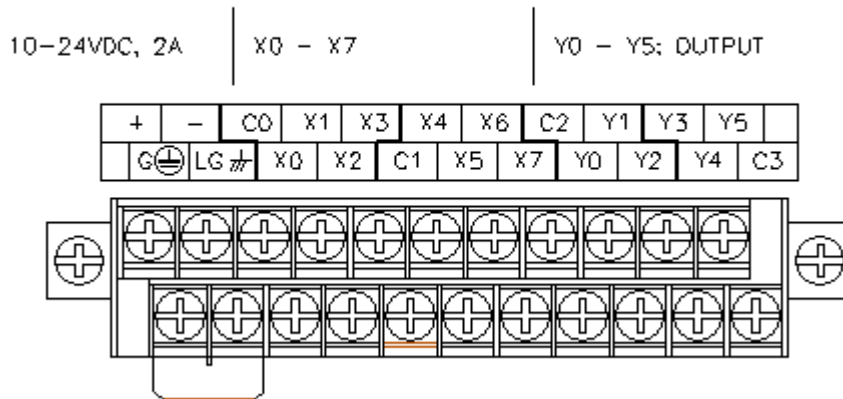
Refer to wiring diagram for more detail. 20awg preferred.

Simple 2 stage configuration, 0210, 0200 kit, 0201 kit.

- + terminal: keyed ignition voltage, 2a fused.
- terminal: Battery ground.
- G/LG terminal: Chassis ground (EMI shielding).
- C0 terminal: Jumper to - or battery ground.
- X0 terminal: initiation voltage, WOT signal.
- X1 terminal: Reset voltage, momentary, purge solenoid.
- X2 terminal: Program selection, default program 1, Program 2 with 12vdc applied.
- C2 terminal: Keyed ignition voltage, jumper from + terminal.
- Y0 terminal: First stage output, voltage present on activation.
- Y1 terminal: Second stage output, voltage present on activation.
- Y2 terminal: Not used
- Y3 terminal: Not used
- Y4 terminal: "1000ft timer", may activate ignition retard directly, voltage present on activation.
- Y5 terminal: Transbrake cutout, normally closed, voltage turned off on activation.
- C3 terminal: Keyed ignition voltage, jumper from + terminal.

Swann & Associates, Inc.  
 1707B. E. 28<sup>th</sup> St., Long Beach, CA 90755  
 562-492-1394 voice, 562-492-1396 fax  
 www.racing-instrumentation.com

### Removable Controller Connector



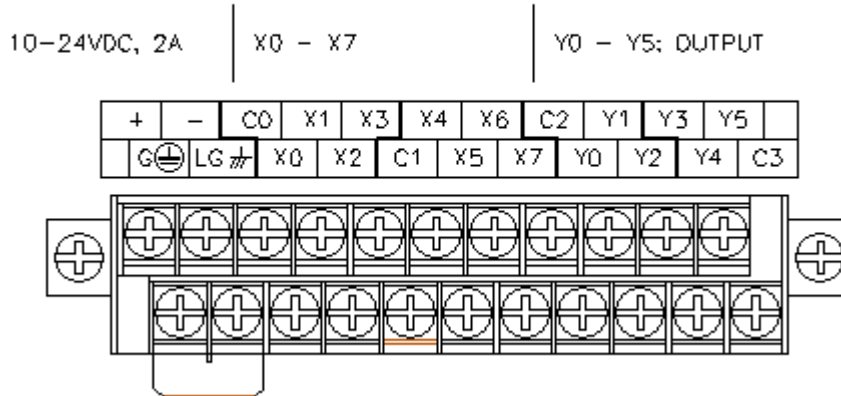
Refer to wiring diagram for more detail. 20awg preferred.

### Super 2 Stage Configuration, individual gas and nitrous control. 0210, 0200 kit, 0201 kit.

- + terminal: keyed ignition voltage, 2a fused.
- terminal: Battery ground.
- G/LG terminal: Chassis ground (EMI shielding).
- C0 terminal: Jumper to - terminal.
- X0 terminal: initiation voltage, WOT signal.
- X1 terminal: Reset voltage, momentary, purge solenoid.
- X2 terminal: Program selection, default program 1, Program 2 with 12vdc applied.
- C2 terminal: Keyed ignition voltage, jumper from + terminal.
- Y0 terminal: First stage gas output, voltage present on activation.
- Y1 terminal: First stage nitrous output, voltage present on activation.
- Y2 terminal: Second stage gas output, voltage present on activation.
- Y3 terminal: Second stage nitrous output, voltage present on activation.
- Y4 terminal: "1000ft timer", may activate ignition retard directly, voltage present on activation.
- Y5 terminal: Tranbrake cutout, normally closed, voltage turned off on activation.
- C3 terminal: Keyed ignition voltage, jumper from + terminal.

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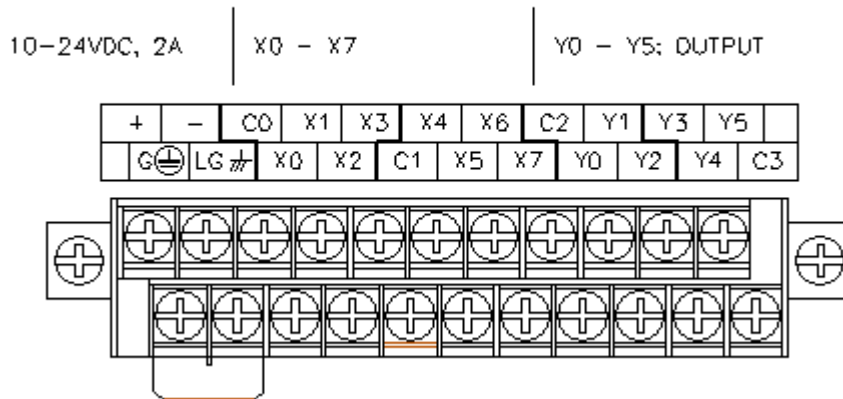


Refer to wiring diagram for more detail. 20awg preferred.

#### Simple 4 Stage Configuration. 0210, 0200 kit, 0201 kit.

- + terminal: keyed ignition voltage, 2a fused.
- terminal: Battery ground.
- G/LG terminal: Chassis ground (EMI shielding).
- C0 terminal: Jumper to - terminal.
- X0 terminal: initiation voltage, WOT signal.
- X1 terminal: Reset voltage, momentary, purge solenoid.
- X2 terminal: Program selection, default program 1, Program 2 with 12vdc applied.
- C2 terminal: Keyed ignition voltage, jumper from + terminal.
- Y0 terminal: First stage output, voltage present on activation.
- Y1 terminal: First stage output, voltage present on activation.
- Y2 terminal: Third stage output, voltage present on activation.
- Y3 terminal: Fourth stage output, voltage present on activation.
- Y4 terminal: "1000ft timer", may activate ignition retard directly, voltage present on activation.
- Y5 terminal: Transbrake cutout, normally closed, voltage turned off on activation.
- C3 terminal: Keyed ignition voltage, jumper from + terminal.

## Removable Controller Connector



Refer to wiring diagram for more detail. 20awg preferred.

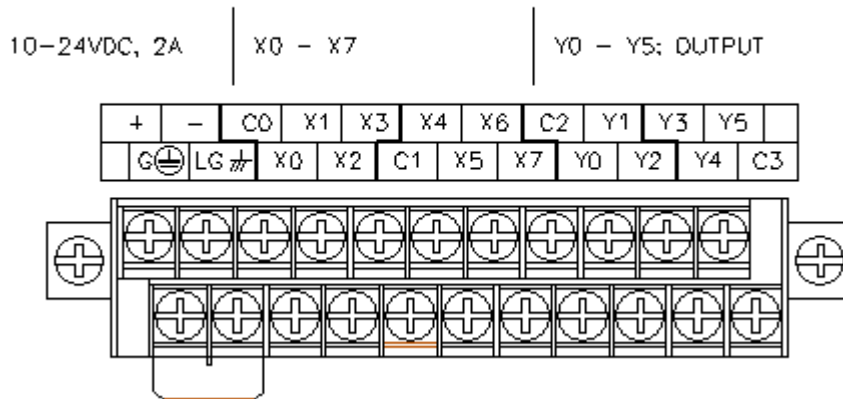
### Drag Boat Configuration

- + terminal: keyed ignition voltage, 2a fused.
- terminal: Battery ground.
- G/LG terminal: Chassis ground (EMI shielding).
- C0 terminal: Jumper to - terminal.
- X0 terminal: initiation voltage, WOT signal.
- X1 terminal: Reset voltage, momentary, purge solenoid.
- X2 terminal: Program selection, default program 1, Program 2 with 12vdc applied.
- C2 terminal: Keyed ignition voltage, jumper from + terminal.
- Y0 terminal: First stage output, voltage present on activation.
- Y1 terminal: First stage output, voltage present on activation.
- Y2 terminal: Third stage output, voltage present on activation.
- Y3 terminal: Fourth stage output, voltage present on activation.
- Note: Y0-Y4 outputs can activate a combination of nitrous or ignition functions. It may be necessary to use relays with normally closed configurations for proper engine control.
- Y4 terminal: "1000ft timer", may activate ignition retard directly, voltage present on activation.
- Y5 terminal: Staging rev limiter, normally closed, voltage turned off on activation. May activate ignition rev limiter directly.
- C3 terminal: Keyed ignition voltage, jumper from + terminal.

### Super 3 Stage Configuration, individual gas and nitrous control

Call for special programming.

## Removable Controller Connector



Refer to wiring diagram for more detail. 20awg preferred.

Nitrous assisted turbo application for spooling turbo then shutting off. Must use 0211, 0203 kit or 0204 kit

+ Terminal: keyed ignition voltage, 2a fused.

- Terminal: Battery ground.

G/LG terminal: Chassis ground (EMI shielding).

C0 terminal: Jumper to - terminal.

X0 terminal: Initiation voltage, WOT signal.

X1 terminal: Reset voltage, momentary, purge solenoid.

X2 terminal: Program selection, default program 1, Program 2 with 12vdc applied.

C2 terminal: Initiation voltage, WOT signal, jumper from X0 terminal.

Y0 terminal: First turbo shot, voltage present on activation. (NC at WOT, open on timeout)

Y1 terminal: Second turbo shot, voltage present on activation. (NC at WOT, open on timeout)

Y2 terminal: Third stage output, voltage present on activation. (NO)

Y3 terminal: Fourth stage output, voltage present on activation. (NO)

Y4 terminal: "1000ft timer", may activate ignition retard directly, voltage present on activation. (NO)

Y5 terminal: Transbrake cutout, normally closed, voltage turned off on activation.

C3 terminal: Keyed ignition voltage, jumper from + terminal.

**NOTE:** Bridge Y0 to Y2 and Y1 to Y3 to turn nitrous on again at points in time down the track.

We can control variable wastegates, call for special programming.

Using the PROgressive timer controller in classes where progressive controllers are specifically forbidden.

Cheating with the PROgressive is possible and undetectable. This is how you do it:

1. Remotely locate the Progressive anywhere you want on your vehicle.
2. Leave the programming cable attached, exposed and in the vicinity of the of other programming cables for EFI, MSD's, data acquisition systems, etc. After you become comfortable with your settings, you can remove the cable from port 2.
3. Set the timers values in program 1 in the PROgressive Software to 0.0 seconds except for the transbrake lockout value.
4. Set the timer values in program 2 in the PROgressive Software to values that you would normally use in launching your car with the PROgressive timer control.

Racing with this setup. While racing, just have your program selector switch (hidden but accessible) set to program 2 and use the progressive normally as you would. IF you are stopped at the end of the track, just toggle the switch back to program 1 and the solenoids will go off like relay control with no delay. Don't forget to move the program selector switch back to program 2 before you race again