# 12001/12004 Pro Mod

- 1. Overhead units mount using two hose clamps to clamp switch section to roll bar. Dash units mount with Velcro system supplied.
- 2. Using 4 screws supplied mount the relay board.
- 3. Plug ribbon cables into switch panel. Follow color coding, color markings on wire should be directly over markings on switch and relay board. The blue connector on the switch panel is for an optional underhood keypad (model 4000F12). A clamp is supplied on the switch panel to retain the cable. Swing the support bar aside, insert cables and tighten using Allen wrench or pliers. Plug red and yellow marked cable from switch panel connector into relay board connector. Use a small bead of silicone at the junction of the connector plugs on the relay board to prevent any loosening due to vibration. Do NOT use cable ties to hold ribbon cable to roll bar. Electrical tape will hold the ribbon cable flat against the roll bar without chafing it.
- 4. Switch #1 is intended for starter, switch #2 is ignition/master
- 5. Label switches: Label goes over the light in between the on and off buttons. Placing the label on an X-Acto knife or small flat bladed screwdriver will help position the label square in the recess over the light bar. If the label is not square light will leak out around the edges of the label. The label set includes blank labels which can be used to block off the light on any unused switches.
- 6. Relay board numbers match switch unit numbers. Connect the output leads on the relay board to the corresponding functions. Use white labels on relays to match switch labels.
- 7. Connect the heavy #6 cable to battery +.
- 8. Plug agrounded wire onto the two ¼" push on terminals marked "gnd." on the relay board. Switch unit does not require any ground or battery connections.
- 9. The relay board has two jumpers to select 12V or 16V operation. It comes installed in the 12V position. For 16V operation move jumpers to 16V position.
- 10. The switch panel is designed to be lighted whenever the battery disconnect is on. If it is desired to shut the switch panel off independently then an 18 gauge switched 12V (or 16v) wire (such as from a factory key switch) can be run to the relay board 12v/16v jumper terminal blocks. Remove the jumper and set aside. Install this switched +wire to the terminal in the jumper terminal blocks marked 12V. For 16V cars install this switched wire in the terminals marked 16V. When this switched wire is turned off the entire panel will then shut off.
- 11. If it is desired to output ground from a relay this can be accomplished by doing the following: remove the fuse for the relay you wish to output ground from. This will leave you with two female  $\frac{3}{2}$  terminals where the fuse was. Now insert a grounded wire into the fuse clip furthest from the center of the board. Now when this relay is turned on it will output ground instead of battery +.

### Set up and use

#### Switches 1-8

There are two programming dip switch banks at the #1 switch end of the unit. Remove the two screws securing the killswitch to the roll bracket to access these dip switches. On the left bank, any switch you desire to be momentary, put into the up/off position. On the right bank any switch you wish to turn off with the master switch (#2) and the red kill button, put the corresponding dipswitch in the up/off position. All programming switch numbers match the numbers on the front panel switches. Move the programming switches up or down with a small tip such as a ballpoint pen. When finished stick black plastic cover patch over cutout.

#### Switches 9-12

There are two dip switch banks on the right hand side of the unit. If you choose, you can have a second master kill switch at switch 10 by pushing the dip switch marked "M" down. This is perfect for a Nitrous section of 4 switches. Switch two will also act as a master kill for switches 9-12. If you desire any of switches 9, 10, 11 or 12 to turn off with either switch 2 or 10 push the corresponding dip switch in the up position. The other dip switch bank is for momentary switch selection. Turn the dip switch up (off) for momentary operation, down for maintained operation.

### Troubleshooting

1. It is possible to plug the ribbon cable into the relay board off center. If it is not plugged in correctly the switch panel will light dimly or not at all and will not function correctly.

2. The ribbon cable must plug into the switch panel with the cable entering from the rear of the switch panel.

3. Do not unplug the ribbon from the switch panel until it is disconnected from the relay board, or the power to the relay board is turned off. If the power is on and the cable is disconnected from the switch panel while still connected to the relay board, it could short to ground and damage the relay board.

4. If the relay board does not have a good ground the switch panel will function intermittently or not at all. It is best to run a dedicated ground wire to the two  $\frac{1}{2}$  male push on terminals located on the relay board.

5. Do not use a battery charger as a power supply to "bench test" the unit. Battery chargers are not meant to be power supplies. They output a pulsing DC which will make the relays buzz and could damage the switch panel.

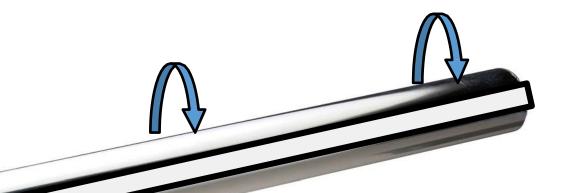
## **Nightglow function**

ARC's new black face night glow units are designed to provide switch outline visibility in extremely low light or no light conditions. Night glow stores ambient light and emits it back in low light conditions; similar to how a battery charges then gives voltage back out. You will notice that after being in the shipping box for x amount of time it will be discharged the same as if it were in a totally dark trailer. It will require some 20-30 minutes in ambient light to recharge. The lighted LEDs in the switch panel also provide charge.

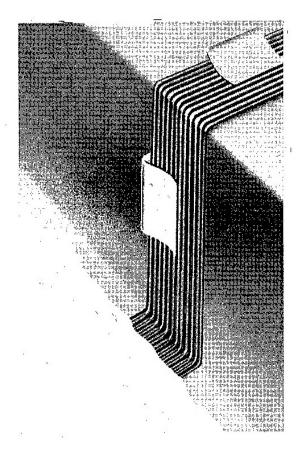
An obvious bluish green glow will be seen in extremely low light conditions. Until that point what will be noticeable is that the legend remains visible. The night glow becomes increasingly visible as the ambient light level goes down.



ARC Technical Help: 508-384-1524 732-851-5095

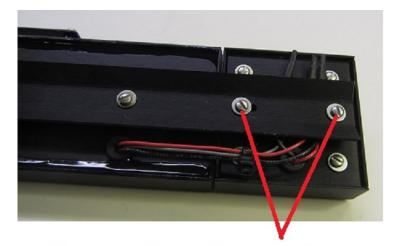


Use black electrical tape to fasten the ribbon cable to the roll bar in as many places as needed to make it secure. <u>Please note t ie wraps can</u> <u>cut through the ribbon cable,</u> <u>causing shorts</u>



Use ribbon cable retention clips to mount ribbon along flat surfaces. Clean surfaces before removing adhesive strip protector for proper adhesion,





Remove these 2 screws to access programming switches