



# PROFESSOR MOTOR CONTROLLERS

Thank you for purchasing the Professor Motor HO & 1/32 Club Racer "Extreme" - PMTR2050

Intended application : HO & 1/32 home & commercial track racing

This model features the following high quality features

- Dual heat sinks to stay cool with high performance motors
- Polarity switching system to allow operation on any home, club or commercial track wiring
- Full electronic semiconductor design with ultra wide range of control (50% more range)
- Variable Sensitivity system with external adjusting knobs & over 40,000 possible settings
- New design low friction brass/steel trigger bushing system
- "Silver Series" ultra robust design features (see web site for information)
- Self resetting electronic circuit breaker to help prevent damage from accidental short circuit
- Extra long, heavy duty 13 gage super flexible, high temp silicone controller leads
- Solid copper alligator clips with color coded vinyl insulating boots
- High impact polycarbonate plastic molded handle
- Low friction graphite impregnated wiper button with brass alloy wiper contacts
- Stainless steel hardware throughout
- Upgradeable modular design

Use & Care Instructions

- To activate the variable sensitivity system turn the silver knobs until bottoming, but be careful not to overtighten (snug only). Suggested use – make sure all the knobs are backed away from the "bottomed" position, start by turning in the front one (nose of controller) until bottomed & continue left to right until suitable sensitivity is achieved.
- To deactivate the variable sensitivity "switches" back off the knobs from the bottomed position only  $\frac{1}{2}$  to  $\frac{3}{4}$  turn (excessive loosening can cause the knobs to fall off).
- Caution ! : Be careful when placing the controller down on a commercial track to avoid contact with the wiring connections to the track. The silver knobs for the sensitivity system are electrically active and a short circuit could result.
- Caution ! : If connected incorrectly to power, permanent damage can result.
- Caution ! : Wires on the circuit board may be very sharp and can cause injury if handled
- Caution ! : Sensitivity knobs may get very hot if high-powered motors are used. It is recommended that shrink wrap tubing be used to cover the sensitivity knobs to prevent injury if high-powered motors are used

Optional upgrades for this controller

- Variable brake system (PMTR2038)
- Power relay system (PMTR2037)
- Power pilot lights (PMTR2030)

Regular maintenance

- Clean wiper button with 400-500 grit emery paper (slide paper under wiper)
- Clean brass contacts using 600-800 grit emery paper (carefully remove all brass dust)
- Oil the trigger pivot bushing (top & bottom) with a light machine oil

For technical information, questions or the latest catalog of available service parts and upgrades please visit us on the World Wide Web : [www.professormotor.com](http://www.professormotor.com)