



# PROFESSOR MOTOR CONTROLLERS

Thanks for purchasing the “Ninco Dual Power Base” 1/32 Electronic Controller PMTR2114 (replaces 2045)

Intended application : 1/32 home & club track racing using the Ninco “DUAL” Power Base

This model features the following high quality features

- **Recommended operating voltage range 14 to 19 volts DC**
- Wired for **NEGATIVE** polarity tracks (can be directly connected to Ninco home set power base tracks)
- ¼ inch (6.4mm) 3 conductor plug with brakes – for newer style Ninco “dual power base”
- Electronic “Platinum Series” transistor design with ultra wide range of control
- Fault tolerant ultra robust circuit design to protect against overload or short circuit damage
- Extra long, heavy duty 16 gage PVC insulated controller leads
- Low friction trigger bushing
- High impact polycarbonate plastic molded handle, stainless steel hardware throughout
- Low friction silver alloy wiper button with ultra hard nickel plated contact surface
- Upgradeable modular design

Use & Care Instructions

- **Caution ! : Regular maintenance is required** to keep the controller contacts clean and free from foreign objects & debris. Failure to properly clean, lube and maintain the contacts will cause the controller to fail, will allow the car to be driven without the throttle being depressed and can result in the. Please take this warning seriously and follow this process to keep the contacts clean & properly lubricated :
  1. **Remove the front half of the controller case by loosening the three bolts**
  2. **Clean all debris from the nickel-plated contacts with a Q-Tip and lighter fluid**
  3. **The sliding contacts can MUST be CAREFULLY lubricated to reduce contact wear and provide a smoother controller action. To lube, do so as follows :**
    - a. Place a **SMALL** amount of Super Lube PTFE lube on the end of a Q-Tip & apply to the nickel contacts in the area where the silver alloy contact travels
    - b. **Cycle the trigger a few times**
    - c. **Use a Q-Tip with lighter fluid to remove any excess lube outside of the area where the contacts meet (remove 90% of the lube you just applied)**
    - d. **Examine the contact area to insure that cotton fibers from the Q-Tip are removed and that residual lube is minimal & barely visible**
  4. **Repeat this cleaning / lube process on a frequent basis (every 1-2 weeks) for best results.**
- Periodic Maintenance – lube the trigger pivot bushing with plastic compatible oil

Optional Upgrades

- Power Relay System PMTR2037 – provides a more positive low resistance path at Wide Open Throttle
- PMTR2040 25 Ohm Brake Pot
- PMTR2040 25 Ohm Pot – Use to add adjustable sensitivity feature
- PMTR2030 Power pilot light system

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)