

## NOTE

When connecting any terminal, care must be taken that wires do not touch more than one terminal at one time. Loose wires are a danger to your unit and layout; be certain wires are properly wrapped around the terminal before tightening lugs. It is recommended that the power pack be turned off before doing any wiring.

## PARENTS PLEASE NOTE

As with any electrically operating unit, it is always best to periodically examine it and have any potentially hazardous part repaired or replaced.

## SERVICE

Your **Power G** power pack has been thoroughly tested at the factory. If, for some reason your **Power G** is properly connected and still not functioning correctly, it may have to be returned for service. Please telephone our service department at (732) 225-6360 before returning your unit.

If it should ever become necessary to return your unit, remove the throttle handle and pack the unit in its original box prior to placing it in a larger carton. This is a very heavy unit and therefore requires at least 6 inches of packing material and a very sturdy outer carton. Be certain to send the unit Parcel Post insured or United Parcel Service and include a clearly printed letter with your name, your address and daytime telephone number, and a detailed description of the problem you are experiencing. Please include a \$9.00 check or a money order for shipping and handling. Send the unit to:

Model Rectifier Corporation  
Attn: Power Pack Service Dept.  
80 Newfield Avenue  
Edison, NJ 08837

**All of us at MRC would like to join in wishing you many happy years of model railroading with your new *Power G*!**



**POWER G** Model AG990

## TRAIN CONTROLLER FOR DC POWERED TRAINS



## CAUTION – ELECTRICALLY OPERATED PRODUCT

**As with all electric products, precautions should be observed during handling and use to reduce the risk of electric shock**

### *For Your Protection*

- Not recommended for children under 12 years of age.
- Turn off the power switch when it is not in use.
- Do not use or store in damp areas
- Do not open the cabinet and try to repair it yourself
- Before returning your unit for repair or servicing, make certain it is defective. Do not shut down your layout unnecessarily.
- Never operate an AC powered locomotive with your **Power G**. This may damage your locomotive motor.

## CONGRATULATIONS

You have purchased an advanced DC Train Control Power Pack. MRC's **Power G** power pack has all the power to run multi motored G-scale trains. The massive power of this unit will enhance the performance of your layout for many years.

## FEATURES

- 10 continuous Amps for massive power
- Large pilot light and overload LEDs
- Heavy-duty reverse switch
- Rugged cabinetry with slide transformer for smooth linear control
- Large throttle handle looks and feels like the real thing
- Fixed 22 VDC output terminals for accessories
- Heavy-duty wire attachment lugs. No tools needed.

## ELECTRICAL SPECIFICATIONS

**Input:** 120 VAC, 60 Hz

**Output:** 0 ~ 22 VDC variable for track, 22 VDC for accessories

**10 Amps sustained power output**

## OPERATING INSTRUCTIONS

**It is recommended that you save your *Power G* power pack box and styrofoam inserts.**

### THROTTLE HANDLE INSTALLATION

For shipping purposes, the throttle handle of your new **Power G** power pack is packaged separately. The shaft of the transformer is "D" shaped. To install the handle, line up the "D" shaped hole on the handle with the shaft and press the handle down on the shaft. If your handle feels loose on the shaft, place a piece of transparent tape over the shaft and press down on the handle.

**NEVER GLUE THE HANDLE TO THE SHAFT  
NEVER CARRY YOUR *POWER G* BY THE THROTTLE HANDLE**

## CONTROLS

### MASTER ON/OFF SWITCH

The master on/off switch disconnects the input power from your MRC **Power G** and shuts the unit down completely. The pilot light will glow when the unit is turned on.

### DIRECTION SWITCH

Reverses polarity to the track, thereby reversing the direction of your locomotive.

### THROTTLE CONTROL

The throttle is used to set the speed of the locomotive you are controlling.

### SHORT CIRCUIT OR OVERLOAD LIGHT (variable DC only)

Whenever a short circuit or an overload occurs, the unit will stop output immediately and the overload indicator will glow. Once the overload or short is corrected, the unit will restore power and the indicator light will go off.

***Indicator light will not operate for accessory overload***

## TERMINALS

### ACCESSORIES DC

These terminals supply 22 VDC for use with DC accessories. Maximum current rating is 8 amps. Overload protection will activate automatically. To restore power, shut unit down or disconnect the accessory.

### TIP

For large outdoor layouts, the accessory DC output can be used with a radio controlled accessory throttle, such as Aristo Train Engineer®. The terminal lugs are marked plus ( + ) and minus ( - ) for ease of installation. This also gives you dual control of two separate loops, using your throttle handle to control one loop and the accessory radio control throttle to control the second loop. ***MRC Universal Voltage Reducer (item AT880) is required for this installation.***

***Not to be used with common rail type of wiring.***

### VARIABLE DC

The terminals marked, track 0~22 VDC are for attachment of your **Power G** to the main line of your layout. It is important that either 16 or 18 gauge wire be used to make connections from the pack to the track or accessories.

To avoid voltage drop on larger layouts, it is advisable to run a two-wire bus (plus and minus) around the perimeter of your layout. You can then attach power feeder wires of a slightly smaller gauge from the track to your bus wires approximately every 6 to 10 feet.