

PURE POWER DUAL TRAIN CONTROLLER FOR AC POWERED TRAINS AH601

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 by yourself.
- Before returning your unit for repair or servicing, make certain it is defective. Do not shut down your layout unnecessarily.
- Never operate a DC powered locomotive with your Pure Power Dual. This may damage your locomotive motor.

FEATURES

- Pure smooth AC sine wave output assures compatibility with most AC loco sound systems
- Dual throttle control to operate two trains on different tracks
- Horn/whistle, bell and direction buttons for each throttle
- Pilot light, master on-off switch
- Nostalgic retro design: rugged cabinetry with slide transformer for smooth linear control
- Fixed 14 VAC output terminals for accessories
- Heavy-duty wire attachment lugs - no tools needed
- Voltage and current meters for each throttle to monitor layout conditions

ELECTRICAL SPECIFICATIONS

INPUT: 120 VAC, 60 Hz

OUTPUT: 0 to 21 VAC variable for track, 14 VAC for accessories
270 Watts sustained power output

It is recommended that you save your Pure Power Dual power pack box and styrofoam inserts.

CONGRATULATIONS!

Thank you for purchasing MRC's advanced AC dual power train control. MRC's Pure Power Dual has all the power needed to operate your AC powered trains. The true state of art and pure smooth Sine Wave Technology will enhance the performance of your layout for years to come.

CONTROLS

THROTTLE HANDLES

Install the two throttle handles by pressing them onto the sides of the unit. Should the handles become loose, apply some self-adhesive tape to the shaft and then reinstall the throttle handles.

MASTER ON/OFF SWITCH

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

DIRECTION BUTTONS

The direction buttons disable the voltage applied to the track and thereby reverses the direction of your locomotive. This button should only be operated when the locomotive is not moving. Pressing the direction button once will cause the loco to idle. Pressed again, the locomotive will travel in the opposite direction. However, the locomotive will reverse direction after the speed control is turned to 0 and the speed control advanced twice. This button will not control locomotives that do not have an E-unit or if the E-unit is deactivated. If you are going to operate the locomotive in one direction, such as on a layout with automatic station stops or insulated blocks, the E-unit must be turned off and the direction button will be inoperative.

THROTTLE CONTROL

The throttle is used to set the speed of the locomotive you are controlling. Remember, if your locomotive is equipped with an E-unit, the locomotive will change state after the speed control is turned to 0 and the speed control advanced twice again.

HORN/WHISTLE BUTTON

This button is a spring return button. To activate a horn or whistle on your locomotive, push the button. The sound will stay on as long as the button is held down.

BELL BUTTON

This button is a spring return button. To activate the bell on your locomotive, (if equipped), press and hold the button until the bell sounds. The bell will remain activated until you press and hold the button to deactivate the bell.

If your locomotive is equipped with an on board sound system, you can activate the sounds by pushing the sound buttons accordingly. If the sounds do not correspond to the appropriate buttons, reverse the wires going from the unit to track lock-on.

Please note, there is a slight voltage drop associated with the activation of the sound buttons. Your locomotive may slow down depending on its speed and load. This is normal and not to be considered a defect in the product. If your locomotive has a variety of sounds, please refer to your locomotive/sound instructions for sound activation.

METERS

There are 2 sets of meters on your Pure Power Dual train control to monitor conditions on your layout.

1. Amp (current) meters – Rated at 10 Amp per side. Lets you monitor load conditions between your pack and trains. Do not exceed 7 Amp maximum per side or circuit breaker may trip.
2. Volt meters – Measures AC voltage going to rails to power your trains. Also to be used for easier programming of some sound equipped locomotives, (follow instructions that come with loco).

Analog meters have a plus (+) or minus (-) variance in their readings. In some cases, the meters may not register exactly the same readings.

WARNING

Most sound equipped locomotives use a maximum operating voltage of approximately 20 VAC. Some may require even higher while others require as low as 17 VAC. The MRC Pure Power Dual puts out 21 VAC maximum. When using certain sound equipped locomotives that require less than 17 VAC, it is advisable to check the locomotive manufacturer's specifications and watch that your volt meter will not exceed 17 VAC.

Short Circuit or Overload – Your MRC Pure Power Dual is equipped with 3 resettable circuit breakers. One for each throttle is located on the cabinet next to the inside rear of each handle. The third circuit breaker is located on the right hand side rear of the cabinet. This circuit breaker is the accessory/main circuit breaker. Whenever a short circuit or overload occurs, the circuit breaker will trip and the unit will stop output immediately. Once the overload or short is corrected, shut the main power switch, press the circuit breaker button to reset the breaker and then turn the unit back on.

TERMINALS

ACCESSORIES AC

These terminals supply 14 VAC for use with AC accessories. Polarity does not matter. The circuit breaker will trip if overload occurs.

VARIABLE AC

The terminals marked Track 0-21 VAC are for attachment of your Pure Power Dual to the main line of your layout. Connect one terminal to the inner rail or to clip 1 on a track lock on, and the other terminal to the outer rails or to clip 2 on a track lock on. If the whistle or horn does not operate after making this connection, reverse the connections to the rails from the powerpack. It is important that either 16 or 18 gauge wire be used to make connections from the pack to the track or accessories.

When connecting to 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 operated unit, it is always best to periodically examine it and have repaired or replaced any potentially hazardous part.

SERVICE

Your Pure Power Dual power pack has been thoroughly tested at the factory. If, for some reason, your Pure Power Dual 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 system, 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 check or money order for \$12.00 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 Pure Power Dual!