



Pure Power AC

Train Controller for AC Powered Trains



Congratulations!

You have just purchased an advanced AC train control power pack. MRC's Pure Power AC power pack has all the power needed to run larger scales. The true state of art and pure Sine Wave Technology will enhance the performance of your layout for many years.

Features

- Pure AC sine wave output assures compatibility with most AC loco sound systems.
- Horn/whistle and bell buttons.
- Direction button
- Pilot light, master on-off switch and overload indicator.
- 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.*

Electrical Specifications

INPUT – 120VAC, 60Hz

OUTPUT – 0-17.5 VAC Variable for Track, 14 VAC for Accessories

130 Watts Sustained power output

Operating Instructions

THROTTLE HANDLE INSTALLATION – For shipping purposes the throttle handle of your new Pure Power AC 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 handle down.

Never glue the handle to the shaft.

Never carry your Pure Power AC by the throttle handle.

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

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 AC. This may damage your locomotive motor.

CONTROLS

MASTER ON/OFF SWITCH: The master on-off switch disconnects the input power from your MRC Pure Power AC and shuts the unit down completely. The pilot light will glow when the unit is turned on.

DIRECTION BUTTON: The direction button disables 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 again.

HORN/WHISTLE BUTTON: This button is a spring return button. To activate a horn or whistle on your locomotive, pump 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 de-activate the bell.

***Note:** 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, change the position of 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.

SHORT CIRCUIT OR OVERLOAD LIGHT (Variable A.C. 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 AC – These terminals supply 14VAC for use with AC accessories. Polarity does not matter. Maximum current rating is 3 amp. Overload protection will activate automatically. To restore power, shut unit down or disconnect the accessory.

VARIABLE AC – The terminals marked, Track- 0-17 VAC, are for attachment of your Pure Power AC to the main line of your layout. Connect one terminal to the inner rail or to clip 1 on a track lockon, and the other terminal to the outer rails or to clip 2 on a track lockon. 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.

NOTE: 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 AC Power Pack has been thoroughly tested at the factory. If, for some reason, your Pure Power AC 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, 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 check or money order for \$9.00 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 AC!