Caution - Electrically Operated Product

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

- 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.

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.

Features

- Handheld controller capability with memory (controller is optional)
- Direction, whistle/horn and bell controls
- True brake control feature
- Programmable start voltage
- Programmable momentum
- Automatic protection against short circuit and overload
Congratulations!

You have just purchased the most advanced AC train control power pack on the market. MRC's 100 watt Throttle Pack 027 AC power pack has enough power needed to run larger scale layouts. Microprocessor technology will enhance your layout and give you features never before possible.

Electrical Specifications

*Input:* 120 Volts AC 60 Hz
*Output:* 0-16 variable VAC
*Total Output:* 100 VA

Operation

*Power Switch* - Turn off the power switch when the unit is not in use or you need an emergency stop. When you turn off the power and then wish to reactivate it immediately, you must wait about 30 seconds before turning the power back on.

*Throttle Control* - The throttle adjusts the loco speed setting in **Run Mode** and the program value setting in **Program Mode**.

*Throttle Selection* - If you have not purchased a walkaround controller please skip this paragraph. With the walkaround controller plugged in the main unit, you can select either main throttle control or walkaround throttle control. A quick movement of one throttle will automatically engage it and disengage the other throttle. Once engaged, the throttle will respond normally and remain engaged until it is disengaged by a quick movement of the other throttle.

Before you turn on the power, make sure the throttle is in minimum position. After powering up during first operation, do not move the setting above 40 on the dial. This will prevent your locomotive from suddenly moving forward too fast and jumping off the track.

*Mode Select* - You can switch between **Run Mode** and **Program Mode** by pushing the Program button. When Program LED light is on, it indicates program mode and when it is off, it indicates the run mode.

*Direction Control* - Pressing the direction button once will cause the loco to idle. Pressed again, the locomotive will travel in the opposite direction.

*True braking system* - This is a Throttle Pack 027 unique feature. It allows you to apply the brake to make the locomotive come to a full stop. When you
release the brake button the loco will return to the original speed in the same direction. However you need to program the proper start voltage for the proper braking operation. You should try with different start voltage and check whether the brake works. Each time increase the start voltage a little until you get the desired result.

**Sound Control** - 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 polarity of the wires going from the unit to track.

**Emergency Stop** - Turn off the main power switch when you need an emergency stop.

**Short Circuit or Overload** - Whenever a short circuit or an overload occurs the unit will stop output immediately and restore it after 3 seconds. Correct the short circuit or overload. If a short circuit or an overload is still there it will stop and restore again after 3 seconds, and so on. The program LED will blink to indicate there is a short circuit or an overload.

**Programming**

A real locomotive changes its speed gradually, so your model train should take a certain amount of time to speed up or slow down when you change the throttle setting or apply the brake. Now you can program this amount of time (momentum) to make your model railroading more realistic.

Different locomotives need different starting voltages to start moving. You can program the start voltage so that the train will begin to move as soon as you move the throttle.

To program you should push the program button to get in program mode.

1. **Program the start voltage**
   Adjust the amount of start voltage by moving the throttle (always try a small setting first) and then push the start voltage button.

2. **Program the momentum**
   Adjust the throttle (always try small setting first) and then push the momentum button. The maximum momentum is 25 seconds.

After programming is complete, push the program button to return to run mode.

*Note:* After the unit has been switched off all settings will return to zero setting.
Service
Your Throttle Pack 027 AC Power Pack has been thoroughly tested at the factory. If, for some reason, your Throttle Pack 027 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 it in its original box prior to placing it in a larger carton. This is a very heavy unit and therefore requires at least 3 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. 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 Throttle Pack 027.

Accessories
Optional Hand held controller may be purchased at your local hobby shop. If you are unable to locate one that carries the MRC Throttle Pack 027 hand held controller, you may purchase it from MRC.

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<th>Throttle Pack Walkaround Controller $35.98* each x</th>
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* Price is subject to change without notice

Mail Check or money order payable to Model Rectifier Corporation to the address above. Please allow four to six weeks for delivery

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