# CAUTION - ELECTRICALLY OPERATED PRODUCT.

NOT RECOMMENDED FOR CHILDREN UNDER 8 YEARS OF AGE.

AS WITH ALL ELECTRIC PRODUCTS,

PRECAUTIONS SHOULD BE OBSERVED DURING HANDLING AND USE
TO REDUCE THE RISK OF ELECTRIC SHOCK.

INPUT - 120VAC

OUTPUT-0-17VAC, 18VAC

TOTAL- 40VA



## OPERATING INSTRUCTIONS FOR TRAINPOWER 027

CONGRATULATIONS!

You have just purchased one of the most advanced train controls on the market. MRC's TECH IITM TRAINPOWER 027 is the latest in powerpack technology.

TECH IITM TRAINPOWER 027 is an advanced version of the type of powerpack sold for use with A.C. powered locomotive sets, and includes such features as a 300 degree rotation speed control, pump type whistle switch, pump type direction control switch, master on/off switch, high grade Noryl @thermoplastic housing, human engineered controls, and much more. As you operate your layout with the new TECH IITM TRAINPOWER 027, you will grow to appreciate the engineering and thought that went into its design. The tight connection between the power pack and locomotive, and the realism, will impress you and satisfy the most avid railroader. As always, our old friends will expect and receive the best in quality and performance. If this is your first purchase of an MRC product, we wish to welcome you to the ever growing ranks of those who purchase and use the best in Model Railroading Power Supplies: MRC.

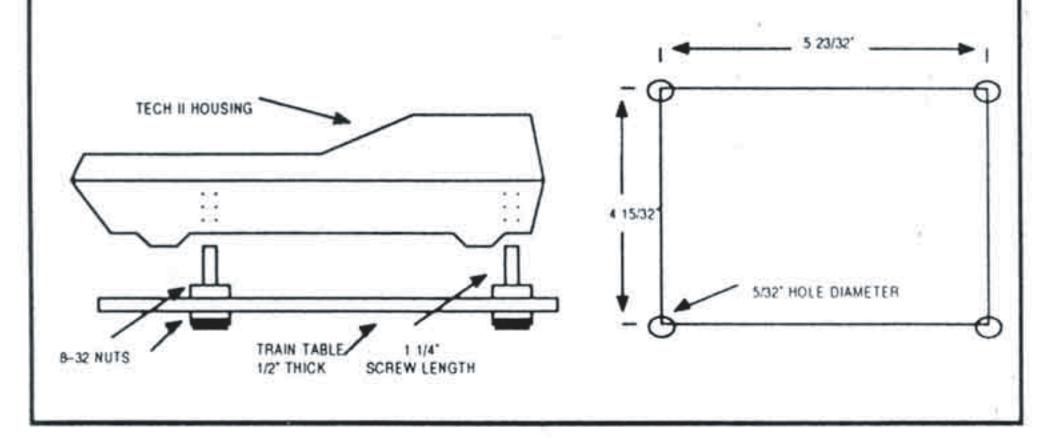
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Model Rectifier Corporation 80 Newfield Avenue, Edison, NJ 08837 (732) 225-6360

#### SPECIFICATIONS:

INPUT – 120VAC, 60Hz
OUTPUT – 0–17 VAC Variable for Track, 18 VAC for Accessories
TOTAL OUTPUT – 40VA

MOUNTING – Your TECH IITM TRAINPOWER 027 may be placed on a flat surface during operation. Its operating panel is human engineered for most comfortable operation. Built–in feet allow cooling space underneath the unit. If you wish to mount your TECH IITM TRAINPOWER 027, we suggest you use the drawing below to layout the mounting locations. Drill 5/32 inch holes where indicated and install 1–1/4 inch long 8–32 screws from the bottom. A nut should be placed on top of the screws and tightened. If you follow this template, the holes in the bottom of the TECH IITM TRAINPOWER 027 will fit neatly on the remaining length of the screws. In order to move the unit, just lift it off the screws and you can move it to another location.



#### CONTROLS

MASTER SWITCH - The master on-off switch disconnects the input power from your TECH IITM TRAINPOWER 027 and shuts the unit down completely.

**DIRECTION SWITCH** – The direction switch reverses the polarity of voltage applied to the track and thereby reverses the direction of your locomotive. This switch should only be operated when the locomotive is not moving.

However, if the locomotive is equipped with a remote control reversing unit (E-unit), the locomotive will reverse direction after the speed control is turned to 0 and the speed control advanced twice. If you wish to keep the locomotive moving in the same direction after it has been stopped, you can advance the throttle slightly, and then pump the direction switch four times, so the locomotive will start moving in the correct direction. This switch 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, only such as on a layout with automatic stations or insulated blocks, the E-unit must be turned off and the direction switch 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 reverse direction after the speed control is turned to 0 and the speed control advanced again.

Whistle Switch – This switch is a spring return Slide Switch. To activate a horn or whistle on your locomotive, pump the switch. The sound will stay on as long as the switch is held in the right position.

#### **INDICATORS**

POWER MONITOR – The power monitor is used to give an approximate indication of output voltage. You will find this very useful in detecting shorts, opens on your track, etc. If the throttle is left in an "on" position and the light intensity increases as the locomotive continues to run, this indicates less current is being drawn. If the light becomes less intense, more current is being drawn. If the light goes out suddenly this indicates a short circuit and will shortly be followed by the light of the overload indicator. A slight flickering of this light during operation is normal and does not indicate a problem.

OVERLOAD INDICATOR: Your TECH IITM TRAINPOWER 027 is equipped with a sensitive thermal circuit protector. In the event of a short circuit or overload, the circuit protector will trip and begin to cycle on and off. Your overload indicator will light and cycle with the protector giving a visual indication of a problem. When this occurs, turn your unit off, correct the source of the short circuit or overload, wait 2–5 minutes for the circuit protector to reset, then turn the unit back on. If the overload indicator is still lit, you have either failed to correct the source of the short circuit or overload, or you have not waited long enough for the circuit protect to reset.

#### **TERMINALS**

ACCESSORIES AC – These terminals supply AC voltage for use with AC accessories. Polarity does not matter.

VARIABLE AC – The terminals marked 1 and 2 are for attachment of your TECHTM TRAINPOWER 027 to the main line of your layout. Connect terminal 1 to the inner rail or to the clip 1 on a track lockon, and terminal 2 to the outer rails or to the 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.

**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 terminal before tightening screws.

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.

#### FOR YOUR PROTECTION

- Never reverse locomotive without stopping it first. To do so may damage the locomotive engine.
- Never connect locomotive to DC terminals of your TECH IITM TRAIN-POWER 027. This may damage your locomotive motor.
- Turn power switch off at end of day's operation.
- 4. When a short circuit or current overload occurs and circuit protector trips, turn the TECH IITM TRAINPOWER 027 off and correct the short or overload. Allow 2–5 minutes for the thermal circuit protector to reset before turning your unit back on.
- 5. Avoid prolonged overloads and short circuits. While your TECH IITM TRAINPOWER 027 is equipped with several safety devices to prevent accidental damage due to short circuits and overloads, it is unwise to subject it to these frequently or often.
- Do not store in damp area.
- For best performance, keep wheel and track surfaces clean. Intermittents and "jerky" operation are often caused by an oxide coating which has formed on the track or wheels.
- Before returning your unit for repair or servicing, make certain it is defective.
   Do not shut down your layout unnecessarily.
- 9. If it is necessary to return your unit, repack it in its original carton and then in an outer carton, placing at least four inches of packing material on each side. Mail the unit to:

Model Rectifier Corporation 80 Newfield Avenue Edison, New Jersey 08837

Be certain to send the unit Parcel Post Insured or United Parcel Service, and include a letter with your name and address printed clearly, describing the problem you are experiencing.

All of us at MRC would like to join in wishing you many happy years of model railroading with your new TECH IITM TRAINPOWER 027.

### MODEL RECTIFIER CORPORATION

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