

For Your Protection

1. Never reverse a locomotive without stopping it first. To do so may damage the locomotive motor.
2. Never connect a locomotive to the AC terminals of your Tech 4 unit. This may damage your locomotive motor.
3. Turn power switch off at the end of the day's operation.
4. When a short circuit or current overload occurs and the circuit protection device trips, place the Tech 4 on-off switch in the OFF position, place the throttle in the STOP position and correct the short or overload. Allow 2-5 minutes for the circuit protection device to reset before turning your unit back ON.
5. Avoid prolonged overloads and short circuits. Your Tech 4 is equipped with safety devices to prevent accidental damage due to short circuits and overloads but it is unwise to subject the unit to these frequently.
6. Children under the age of ten should be supervised by an adult when operating this product.
7. For best performance, keep wheel and track surfaces clean. Intermittent and "jerky" operation is often caused by an oxide coating, which has formed on the track or wheels.

Service:

Your Tech 4 has been thoroughly tested at the factory. If for some reason your Tech 4 is properly connected and still does not function properly, it may have to be returned for service. If you have any questions please call the MRC customer service number 732-225-6360.

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. Be certain to send the unit Parcel Post Insured or United Parcel Service and include a clearly printed letter with your name, address and daytime phone number, along with a description of the problem you are experiencing. Please include Visa or Master Card account number or a money order in the amount of \$5.00 for shipping and handling. Mail unit to:

Model Rectifier Corporation
80 Newfield Avenue, Edison, NJ 08837-3817

Caution - Electrically Operated product.

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

TECH₄™

Operating instructions for Models 200, 220 and 260

Not recommended for children
under 8 years of age.

Parents, please note: As with any electrically operated unit, it is always best to periodically examine it and have any potentially hazardous part repaired or replaced.



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80 Newfield Avenue, Edison, NJ 08837
(732) 225-6360 www.modelrec.com

INS 2263

CONGRATULATIONS!

You have just purchased one of the most advanced train controls on the market. You'll find that no other power pack series in the world has all of these advanced features including MRC's Accu Tec Technology combined with the highly acclaimed Proportional Tracking Control™ (PTC) system. In addition, the Tech 4 offers precise slow speed control and a high grade advanced engineering resin thermoplastic housing for durability and safety. We are confident that you will enjoy using your new Tech 4 now and for many years to come.

Specifications:

Model 200: INPUT: 120VAC 60Hz OUTPUT: 15.5VDC, 18.5VAC Total Output: 17VA	Model 220: INPUT: 120VAC 60Hz OUTPUT: 23VDC, 18.5VAC Total Output: 17VA	Model 260: INPUT: 120VAC 60Hz OUTPUT: 23VDC, 18.5VAC Total Output: 20VA
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Warning:

Children under the age of ten should be supervised by an adult when operating this product.

Control System: MRC's Proportional Tracking Control (PTC) and Accu Tec Technology.

Controls:

Power Switch: The master On-Off switch disconnects the input power from your Tech 4 and shuts the unit down completely.

Direction Switch: This 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.

Momentum Switch: (Models 220 and 260) The momentum switch in your Tech 4 unit, allows operation in either of two modes. With the switch in the OFF position, a change in the throttle setting results in an immediate change in locomotive speed. With the momentum switch in the ON position the locomotive moves slowly like a real locomotive. This switch can substantially add to your model railroading enjoyment. When a real locomotive is given an increase in the throttle setting there is a lag until the pre-set speed is reached. The heavier the load of cars being drawn the longer the lag time. Similarly, when braking a real locomotive, a considerable distance is needed in order to stop. Since lightweight models do not mimic this delay on their own, momentum circuitry, as in this pack, is used to create it electrically.

Momentum Switch continued: Different rates of acceleration can be obtained by varying the maximum position of the throttle. Setting the throttle to "100" will produce fairly rapid acceleration, "90" a more gradual, and so on.

Pressure Sensitive Brake: (Models 220 and 260) The brake in your Tech 4 unit, is a push switch. To operate the brake, push down on the switch and hold it there. Your locomotive will slow at a steady rate. If your throttle was left at a setting other than 0, releasing the brake will cause the locomotive to gradually accelerate to the speed determined by the throttle setting (as long as the momentum switch is ON position). Pushing the brake will allow for a more gradual deceleration.

Throttle Control: All Tech 4 units have a throttle that is used to set the speed of the locomotive you are controlling. With the momentum switch in the OFF position, (Models 200 and 260 only) your locomotive will immediately accelerate to the speed dictated by the throttle. In momentum ON, however, the brake should be applied slowing the locomotive. If the brake is not applied, but the throttle is turned down, the train will gradually coast to a stop, just like a real train.

Indicators:

Pilot Light: All Tech 4 units have a pilot light that is a Light Emitting Diode (LED). The LED will glow when the power switch is in the ON position.

Momentum: (Model 260 only) Your Tech 4 unit is equipped with an LED indicator to make you aware of when the momentum switch is in the ON position. This LED will glow whenever momentum is engaged, even if the locomotive is not moving.

Overload Indicator: (Model 260 only) In the event of a short circuit or overload, the circuit protector will trip. Your overload indicator will light giving a visual indication of a problem. See point 4 for further instructions.

Terminals:

Variable DC: These terminals are for attachment of your TECH 4 to the main line of your layout. If the direction of your locomotive does not match the position of the Direction Switch, simply reverse the wires going to these terminals.

Accessories AC: These terminals supply AC voltage for use with AC accessories. Polarity does not matter.

Note: When connecting to any terminal, care must be taken that wires do not touch more than one terminal at a time. Loose wires are a danger to your unit and layout. Be certain wires are properly wrapped around terminals before tightening screws.