

# Caution - Electrically Operated Product.

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



## THROTTLEPACK 9950

### DC HIGH POWER TRAIN CONTROLLER

**For use by ages 14 years and older.**

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



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## CONGRATULATIONS

You have purchased one of the most advanced train controls on the market. The Throttlepack 9950 offers precise slow speed control, voltage and current readings, and a high grade advanced engineering resin thermoplastic housing for durability and safety. We are confident that you will enjoy using your new Throttlepack 9950 now and for many years to come.

### Specifications:

INPUT: 120 VAC 60 Hz

TRACK OUTPUT: \*0-15 VDC HO/N

\*0-18 VDC O/G

ACCESSORY OUTPUT: \*15/18 DC Fixed

TOTAL OUTPUT: 125 VA

### Warning:

**Children under the age of 14 must be supervised by an adult when operating this product.**

### Controls:

**Power Switch:** The master on-off switch, (mounted on the left side of the cabinet), disconnects the input power from your Throttlepack 9950 and shuts the unit down completely. When the power switch is turned on, the LCD will light, indicating there is track power available, **(There will be a slight delay until the unit completely powers up, and powers down)**. **Note:** Your Throttlepack 9950 will remember the last direction used after shutting it off.

**\*Scale/Gauge Switch:** Located on the bottom of the cabinet is a small micro-switch, slide this switch into position to match the output of the train controller to your layouts scale or gauge, (HO/N or O/G). By sliding the switch towards the front of the cabinet will put the unit in the O/G mode.

**Direction Button:** This button reverses the polarity of 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 to prevent damage to the locomotive mechanism. The LCD will display the direction you have selected.

**Momentum Button:** The momentum button allows you to turn on/off momentum. With momentum OFF, a change in the throttle setting results in an immediate change in locomotive speed. With momentum ON, the locomotive starts out more slowly like a real locomotive. The LCD will display a light bulb icon when momentum is on. This feature can substantially add to your model railroading enjoyment. When a real locomotive is given an increase in throttle setting there is a lag until the pre-set speed is reached. The heavier the load of the 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.

**Brake Button:** The brake button on your Throttlepack 9950, is a momentary push button. To operate the brake, push down on the button 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 button will cause the locomotive to gradually accelerate to the speed determined by the throttle setting **(as long as the**

**momentum is in the “ON” position).** Pushing the brake will allow for a more gradual deceleration.

**Throttle Control:** Is used to set the speed of the locomotive. With the momentum button in the OFF position, 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.

**Indicators:**

**LCD Display:** The LCD display will monitor your layout by displaying the voltage level from the throttle to the track and current load, (amps), that you are using. It will also display direction of the trains, momentum on or off, and overload conditions, (short circuit or maximum current draw).

**Overload Indicator:** In the event of a short circuit or overload, the circuit protector will trip, and the internal fan will come on. The LCD will display “oVld”, (overload). See point 4 for further instructions.

**Terminals:**

**Variable DC:** These terminals are for the attachment of your Throttlepack 9950 to the mainline of your layout. If the direction of your locomotive does not match the position of your direction indicator, simply reverse the wires going to these terminals.

**Accessories DC:** These terminals supply DC voltage for use with accessories. Be careful to observe polarity when hooking up accessories. The output of the accessories DC voltage will be determined by the position of the scale/gauge switch, located on the bottom of the cabinet.

**Walk Around Plug:** Located in the front of the cabinet is a plug for the optional tethered handheld with memory. (MRC Part No. 0001315).

Make sure that the green four terminal right angle plug is firmly inserted into the rear of the cabinet. Using a small flat-bladed screwdriver, attach two wires (18 AWG or heavier) from the Main Track layout to the terminals marked “**TRACK**”, and two wires from any of your accessories to the terminals marked “**ACC**”. Strip the wire approx. 1/8 inch, and insert it into each of the plug gates facing you and then tighten the screws securely.

**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 inserted into terminals before tightening screws. Also note that the output terminal screws can get hot during periods of peak use.

1. Never reverse a locomotive without stopping it first. To do so may damage the locomotive motor.
2. Turn OFF the power switch at the end of the day’s operation, and remove the wall cord from the socket.
3. When a short circuit or current overload occurs and the circuit protection device trips, place the Throttlepack 9950’s on-off switch in the OFF position, place the throttle in the STOP position, and correct the short or overload.
4. Avoid prolonged overloads and short circuits. Your Throttlepack 9950 is equipped with safety devices to prevent accidental damage due to these conditions, but it is unwise to subject the unit to these frequently.

5. Children under the age of 14 must be supervised by an adult when operating this product.
6. For best performance, keep wheel and track surfaces clean. Dirty track and wheels can cause erratic operation.

**Adjustable Momentum:** This unit features adjustable momentum. There are 31 steps of momentum, this unit comes factory default set at step 15. To increase or decrease the desired amount use the following steps:

1. While holding the momentum button down turn on the power switch.
2. The display will come on and show the following; "Prog 15". (This shows you are in the adjust mode with 15 being the factory default step setting). Release the momentum button.
3. Tapping the direction button will increase the amount of momentum, stop at your desired level. After step 31 the momentum will revert back to zero (no momentum), and will keep increasing back to 31.
4. When your desired level of momentum is reached, stop tapping the direction button, then press the momentum button to exit the adjust mode. Your display will now resume to normal.

**While in the "Adjust Momentum" mode, there will be no track voltage output. Your unit will remember your last momentum setting each time you turn it on, and you can change it to suit the operational characteristics of all your locomotives.**

***This product carries a 2 year limited warranty. For full information see registration card enclosed.***

***If it should become necessary to return the unit for warranty repair/replacement, please include a copy of the original sales receipt. Please include a letter (printed clearly) with your name, address, daytime phone number, and a detailed description of the problem you are experiencing. Please also include a check or a money order for \$15.00 to cover return shipping and handling. If the unit is no longer considered under warranty, then please contact Model Rectifier Corporation for a price quote to cover the cost of repair or replacement of the unit, and return shipping and handling. Customers outside the continental United States, including; Hawaii, Alaska, Canada and Mexico, have to contact MRC for exact return shipping rates for both warranty and non-warranty repairs. Contact [doug@modelrectifier.com](mailto:doug@modelrectifier.com). Any questions regarding Warranty Policy can be directed to our Customer Service Department by calling 732-225-6360 between the hours of 8:30am and 6:00pm EST, or by emailing: [doug@modelrectifier.com](mailto:doug@modelrectifier.com).***

Send the unit to:

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**INS2285**