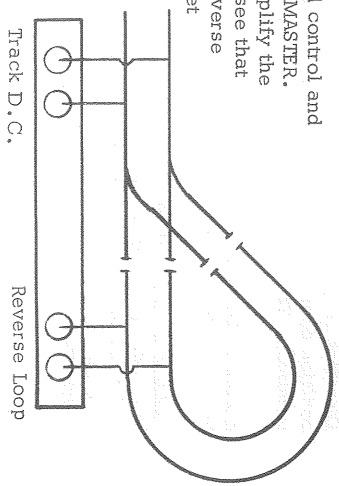


WIRING FOR A REVERSE LOOP

Reverse Loop Terminals are controlled by the speed control and the reverse loop direction switch in the THROTTLEMASTER. The purpose of the reverse loop terminals is to simplify the wiring of turning tracks. From this illustration we see that when a loco motive is entering the turning track (reverse loop), the reverse loop direction control must be set for the same polarity as the mainline.



Same polarity- Your Throttlemaster has been wired so that when the Mainline direction and the Reverse loop direction switches are both in the same position, both right or left, the polarity for the TRACK DC and REVERSE LOOP Terminals are the same. After entire train is in the turning section and before it begins to emerge from the turning section, the mainline direction control must be reverse so that the locomotive will leave the turning track with wheels maintaining unchanged polarity. If this were not done, the locomotive could not return to the mainline.

FOR YOUR PROTECTION

- 1- Never reverse the locomotive without first stopping the engine with the Speed Control on your powerpack, to do so could damage the locomotive motor.
- 2- Never connect the locomotive to the A.C. terminals. These terminals are only for Accessories and will damage the locomotive motor.
- 3- If your locomotive stops and fails to start, a short circuit may have occurred. Remove the plug and place the Speed Control in "O" or "Off" position, check all connections and make certain that no metal object is lying across the track rails and that the locomotive wheels are properly on the track. Once you have corrected the cause of the short circuit, allow a few minutes for the circuit protector to reset. Avoid prolonged overloads and short circuits.
- 4- For best performance keep the surface of the track and the wheels of the locomotive clean. Intermittent and "jerky" operation are often caused by an oxide coating which has formed on the track and wheels. Track cleaners are available at your local hobby shop.
- 5- Do not store in a damp area.
- 6- Remove the powerpack plug from the house outlet at the end of the day's operation.
- 7- Before returning your unit for repair or service, make certain that it is defective. Do not shut down your layout unnecessarily.
- 8- If it is necessary to return your unit, repack the unit in its original carton and then in an outer carton, placing 3 inches of packing material on each side. Mail the unit to M.R.C., Parcel Post Insured, with a letter explaining the trouble. Please be certain that you PRINT your name and address CLEARLY.

**OPERATING INSTRUCTIONS FOR**

**THROTTLEMASTER CAUTION -**

**MODEL 550 ELECTRICALLY OPERATED PRODUCT.**

NOT RECOMMENDED FOR CHILDREN UNDER 12 YEARS OF AGE. AS WITH ALL ELECTRIC PRODUCTS, PRECAUTIONS SHOULD BE OBSERVED DURING HANDLING AND USE TO PREVENT ELECTRIC SHOCK.

INPUT - 120VAC 60 Hz OUTPUT - 16VDC, 18VAC

TOTAL OUTPUT 33VA 2.5 AMPERES.

CONGRATULATIONS!

YOUR HAVE PURCHASED A DELUX 2-1/2 AMPERE TRAIN CONTROL. WITH A MINIMUM OF CARE THE THROTTLEMASTER 550 WILL GIVE YOU YEARS OF MODEL RAILROADING ENJOYMENT.

A THRILLING NEW EXPERIENCE AWAITS YOU WHEN YOU HOOK ON TO THIS POWER SUPPLY. REALISTIC OPERATION, PIN-POINT CONTROL, AND AMPLE RESERVE POWER COMBINE TO PEP-UP YOUR PIKE PERFORMANCE.

IF THIS IS YOUR FIRST PURCHASE OF MODEL RECTIFIER CORPORATION EQUIPMENT YOU ARE IN FOR A PLEASANT EXPERIENCE. OUR OLD FRIENDS WILL EXPECT AND RECEIVE THE BEST IN TRAIN CONTROLS. WE LOOK FORWARD TO SERVING YOU AGAIN IN THE FUTURE.

**MODEL RECTIFIER CORPORATION**

2500 WOODBRIDGE AVENUE

EDISON, NEW JERSEY 08817

## THROTTLE MASTER 550 OPERATING INSTRUCTIONS

### ELECTRICAL SPECIFICATIONS

Input- 120 volts AC 60Hz  
Output- 16 volts DC, 18 volts AC  
Total Output- 33VA 2.5 AMPERES

### CONTROLS

SPEED The 320° taper-wound rheostat provides an extended range of speed control which will permit you a far wider choice of train speeds.

### FULL-PULSE POWER

For realistic scale operation slow speeds are essential. Some power packs start engines with a jerk and offer erratic control at low speeds. For smoother starts and superior slow speed operation, MODEL RECTIFIER'S Throttlemaster 550 contains a pulse power switch. When you switch from full to pulse power the effective output of the THROTTLEMASTER is reduced and power is applied to the track 60 times each second. These minute pulses of energy blend into smooth, continuous motion in your train. A flick of the switch to "Full" and you are operating with full normal output. Like the low gear of an automobile, pulse power gives more torque at starting and very low speed. It is not recommended for higher speed operation.

MAINLINE DIRECTION For quick easy loco reversing, just throw the indent action Direction switch.

REVERSE LOOP DIRECTION Similar to the mainline direction switch in control, however, this switch is a completely separate direction control for a reverse loop section.

MASTER ON-OFF SWITCH Shuts off ALL power to the layout.

### THE THERMAL CIRCUIT PROTECTOR AND OVERLOAD INDICATOR LIGHT

The Throttlemaster protection circuit combines both a circuit protector to interrupt power output and an overload light to indicate when a short circuit is present. When an overload occurs the indicator light will glow. To reset turn the unit "OFF" by using the master on-off switch, correct the cause of the overload, wait a few minutes and then turn the unit back on. If the protector still has not reset allow a few minutes longer.

METERS The THROTTLEMASTER 550 power supply incorporates a Voltmeter and an Ammeter to monitor your track system. The Meters are illuminated, easy to read and are an attractive addition to your model railroading enjoyment.

The meters are wired into the circuit so that the meters will continually read no matter what direction the locomotive is travelling. The meters will respond to the speed control movement. When a locomotive is placed on the track, the ammeter will read the current (amps) the locomotive is using, the voltmeter will read the voltage that is being applied to the track. NOTE: When there is a no load condition (NO LOCO ON TRACK) the voltmeter will only read full output voltage and the ammeter will read "Zero". This is normal and occurs with all controls of this type.

PARENTS PLEASE NOTE: as with any electrically operated product, it is always best to periodically examine it and have any potentially hazardous part repaired or replaced.

### OUTPUT TERMINALS

TRACK D.C. These two terminals should be connected to the track mainline. Direction is controlled by the mainline direction switch on the front panel. If the switch position does not correspond to the train direction, just reverse the two wires to these terminals. The speed control will control the output from these terminals.

ACCESSORIES A.C. These two terminals are for use with AC accessories only, such as switch machine controls, lights, etc. Hook up polarity does not matter.

FIXED D.C. These two terminals are supplied for expanding your layout. If at some later date you wish to operate another locomotive and have individual control of the speed and direction, simply connect a Model Rectifier Corp., Cab Control (speed control, reversing switch and circuit breaker) to these terminals and you are in operation. NOTE: The separate section of track that will be controlled by the cab control must be completely insulated electrically (both rails).

REVERSE LOOP These two terminals, controlled by the reverse loop direction switch on the front panel are for attachment to a reversing loop, which will allow you to turn your locomotive around and travel in the opposite direction on the mainline. Operation is the same as the Track D.C. terminals. NOTE: Reverse loop must be completely insulated electrically. See Reverse loop illustration.

### OPERATING DIRECTIONS

1. Connect Track D.C. terminals on the Throttlemaster to track terminals.
2. Connect Accessories A.C. terminals to all A.C. switch machine controls, lights, etc. if your layout includes these accessories.
3. Connect Fixed D.C. terminals to Cab Controls and D.C. accessories.
4. Connect Reverse Loop Terminals (as shown) to a reversing loop if your layout includes this feature.
5. Check your layout to make certain there are no open track sections or broken wires. Make sure your track is clean and free of obstruction (fools, etc). Be sure rolling stock is properly placed on the track.
6. Turn the speed control to "O" or "OFF" position, place the Master switch in the "OFF" position and the power switch in "FULL" position.
7. Plug the line cord into 110-120 volts AC 60Hz house outlet and throw the master switch to the "ON" position.
8. Turn the speed control knob clockwise until the locomotive moves. To reverse your locomotive, stop them with the speed control or on-off switch and then throw the direction switch.
9. If a short circuit or overload should occur on your layout, the circuit protector will trip and the overload indicator light will come on. To reset turn the master on-off switch to the "OFF" position and correct the cause of overload, allow a few minutes for the circuit protector to cool and then turn the unit back on. If the overload light still glows you have either failed to correct the overload or you have not allowed sufficient time for the circuit protector to cool.