

The DUAL LOCO PACK V is a true Dual Power Pack. Unlike some power packs, the Dual Loco Pack V has two independent power supplies in one housing. This means that it can be used with Common Rail Wiring, which simplifies wiring of your layout considerably.

OPERATING INSTRUCTIONS

- 1- Connect Cab #1 terminals to one electrically isolated track section and Cab #2 terminals to another isolated track section. Do Not yet Plug in the Line Cord.
- 2- Connect 16 Volts AC terminals to switch machines, lights and any other AC accessories your layout may have.
- 3- Fixed 18 volts DC Terminals, when connected to an external Cab Control unit will permit you to control another completely isolated section of track.
- 4- Check your layout to make certain there are no open track sections or broken wires.
- 5- Turn the speed control to zero and place the power switch in the "off" position.
- 6- Plug the line cord into 110-120 volts AC 60Hz house outlet and turn the power switch "on"
- 7- Turn the speed controls clockwise until the loco moves. To reverse, reduce speed to zero and throw the direction switch.
- 8- If a short circuit or overload should occur on your layout, the corresponding circuit protector will trip and the overload light will be lit. To reset, turn the unit off by using the power switch, correct the cause or the overload, wait 2 to 5 minutes and then turn the unit back on. The circuit breaker in Cab #1 protects the Cab #1 terminals, The circuit breaker in Cab #2 protects, Cab #2 terminals, The fixed DC Terminals and the 16 Volts AC terminals.

FOR YOUR PROTECTION

- 1- Never reverse locos without stopping them first. To do so may damage the locomotive motor.
- 2- Never connect the locomotive to AC Terminals. This will damage the locomotive motor.
- 3- Turn off the power switch at the end of the days' operation and remove the line cord plug.
- 4- When a short circuit occurs and the breaker trips, turn off the unit and correct the short circuit, allow 2 to 5 minutes for the circuit breaker to reset before turning the unit back on.
- 5- Avoid prolonged overloads and short circuits.
- 6- Do Not Store in a damp area.
- 7- For best performance keep track and wheel surface clean. Intermittent and jerky operation are often caused by an oxide coating which has formed on the track and wheels.
- 8- Before returning the Dual Loco Pack V for service or repair, make certain that it is defective. Do not shut down your layout unnecessarily.
- 9- If it is necessary to return your unit, repack in its original carton and then in an outer carton, placing 3 inches of packing material on each side. Mail the unit to MRC, parcel post insured or UPS, with a letter explaining the trouble. PLEASE PRINT YOUR NAME AND ADDRESS CLEARLY.

MODEL RECTIFIER CORP., PO BOX 267, 2500 WOODBRIDGE AVE., EDISON, NEW JERSEY 08817

This Product is Listed by
UNDERWRITERS' LABORATORIES, INC.
and Bears the Mark:



CAUTION - 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-CAB 1- 14.5VDC TOTAL 12VA

**CAB 2- 14.5VDC, 18VDC, 16VAC TOTAL 12VA
TOTAL OUTPUT 24VA**



DUAL LOCO PACK V

SOLID STATE

HOBBY TRANSFORMER

CONGRATULATIONS!

You have just purchased one of the most advanced dual unit Train Controls available. The DUAL LOCO PACK V employs the latest State of the Art Technology to obtain such features as virtually immeasurable slow speed; speed so slow we call it "standstill motion".

A thrilling new experience awaits you when you hook on to this DUAL power supply. As you operate your layout with your new DUAL LOCO PACK V, you will grow to appreciate the engineering and thought that went into its design, the pinpoint control and the Dual Loco Pack V features; track voltage monitors, overload indicators, pulse mode selection switch, hefty power output, the popular Throttlemaster knob, and much more to satisfy the most avid model railroader.

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. As always our old friends will expect and receive the best in quality and performance. We Look Forward to Serving you again in the future.

INS-1225

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ELECTRICAL SPECIFICATIONS

INPUT - 120 Volts A. C. 60Hz

OUTPUT - CAB #1 - 14.5 volts d.c. (open circuit) 0-12vdc Variable Total - 12Va
CAB #2 - 14.5 volts d.c. (open circuit) 0-12vdc Variable } Total - 12Va
18.0 volts d.c. (open circuit) Fixed
16.0 volts a.c. (open circuit) Fixed for Accessories
TOTAL OUTPUT - 24Va

When in PULSE

"ON" Mode - Output Waveform - Half Wave Sinusoidal gradually increasing to Filtered D.C.
"OFF" Mode - Output Waveform - Filtered D.C.

CONTROLS

POWER SWITCH

The Power switch is the master control switch which disconnects the input power from the Dual Loco Pack V and shuts the unit down completely. It is also recommended that at the end of each days operation the plug is removed from the wall outlet.

DIRECTION SWITCH

The Dual Loco Pack V is specifically designed for the railroader who desires independent control of 2 or more locomotives in separate isolated track sections (Blocks). The Dual Loco Pack V is truly a twin power supply; it houses two independent power packs in one housing. Therefore the addition of locos to one cab will not slow down locos operating from the other cab. The Direction switch reverses the polarity of the voltage that is applied to the track and thereby reverses the direction of the loco. Locomotives should be stopped with the speed control before reversing.

THROTTLE CONTROL

The Throttle is used to set the speed of the locomotive you are controlling. By moving the throttle control knob towards "100" on the dial the locomotive will pick up speed, and by moving the throttle control knob towards "0" the locomotive speed is reduced and will stop.

CIRCUIT BREAKERS AND OVERLOAD INDICATORS

The Dual Loco Pack V is equipped with a sensitive thermal circuit protector in each control. In the event of a short circuit or overload, the circuit protector will trip and begin to cycle on and off. Your overload indicators will light and cycle with the protector giving a visual indication of the problem. When this occurs, turn off your unit, correct the source of the short circuit or overload, wait 2 to 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 protector to reset.

PULSE SELECTION SWITCH

Your Dual Loco Pack V is equipped with innovative Pulse Mode Switches. This switch has been designed to give you the best of two worlds. In the "ON" position, your Dual Loco Pack V employs Automatic Pulse Injection, giving slow speed pulses at low throttle settings and automatically eliminating these pulses at higher throttle settings. This is very useful when operating locomotives with sticky motors and rods, or motors that are not as free running as they might be. In the "OFF" position, the Automatic Pulse Injection is disconnected and the output is filtered D.C. without pulses. This would be used with the newer "can" motors and conventional motors that are well broken in and free. In either mode, the voltage is infinitely variable from "0" up to full output voltage with no sudden transition or jump, making the DUAL LOCO PACK V perfect for use with can motors.

POWER MONITORS

The Dual Loco Pack V has a power monitor in each cab circuit. These are indicators that will let you know at a glance which cab is "on" and which cab is "off". The indicator brightness will respond to the throttle movement. When the throttle is in the "off" position the power monitors will not be lit. When the throttle is gradually increased the monitors will increase in brightness.

The monitors are designed for thousands of hours of use and should not need replacement. They are complete units and can not be repaired. If, after years of use your power monitors fail to operate return the pack to the factory for indicator replacement.

TERMINALS

CAB #1 and CAB#2 Terminals - These are for attachment of Cab #1 and Cab #2 throttles to 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.

18 Volts DC Terminals - These are Fixed DC Terminals. If at some later date you wish to operate another loco and have individual control, simply hook up a Cab Control unit to these terminals.

16 Volts AC Terminals - These are terminals for operation of AC Accessories, switch machines, lights etc., Polarity does not matter.

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 that wires are properly wrapped around terminal screw before tightening the screw.

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.