

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 PREVENT ELECTRIC SHOCK.

ELECTRICAL SPECIFICATIONS:

INPUT: 120VAC 60HZ

OUTPUT: 14VDC, 18VAC

TOTAL OUTPUT: 13VA

TRU-SOUND RAILPOWER 1440

Operating Instructions

Features:

- Digitally recorded True Railroad Sounds; Steam locomotive whistle and Diesel locomotive horn
- Includes speaker prewired with 12' of 2 conductor cable
- Tru-Sound selector buttons for horn & whistle sounds
- Proportional Tracking Control (PTC) for superior speed control
- Automatic circuit protector
- Direction switch and master Off-On switch
- Operational power monitor light
- Throttlemaster knob
- Simple hook-up - no special tools required
- Operates HO, N and other DC scale trains

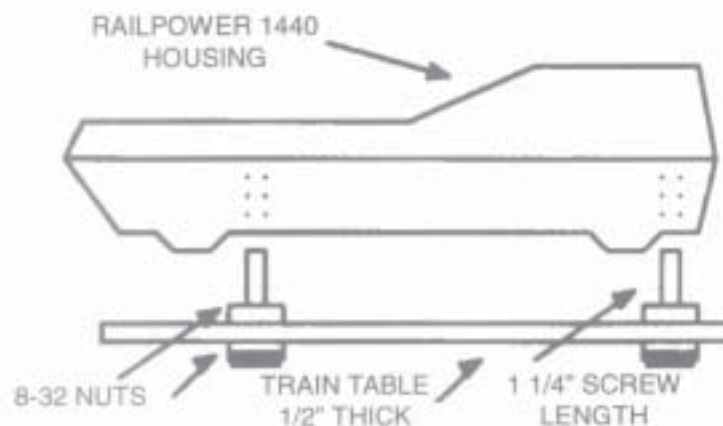
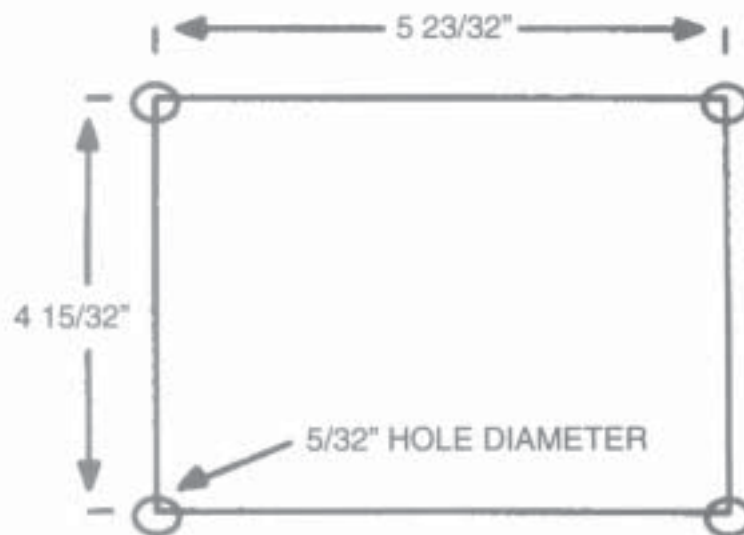
Congratulations! You have just purchased one of the most advanced integrated train controls and sound systems available. The **Tru-Sound Railpower Model 1440** will enhance your enjoyment of your train layout for many years to come.

MRC has digitally recorded a true railroad steam locomotive whistle and a diesel locomotive horn to give you the thrill of realistic sound as you operate your layout. Thank you for purchasing an MRC product, the best in train controls and sound systems!

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80 NEWFIELD AVENUE EDISON, NJ 08837
Tel. 732-225-6360

MOUNTING

Your **Railpower 1440** may be placed on a flat surface during operation. Its operating panel is ergonomically designed for the most comfortable operation. Built-in feet allow cooling space underneath the unit. If you wish to mount your **Railpower 1440**, we suggest you use the drawing below to mark 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 **Railpower 1440** 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.



POWER SECTION

CONTROL SYSTEM SPECIFICATIONS:

CONTROL SYSTEM: MRC's Proportional Tracking Control (PTC) is a system developed by MRC that allows a tight connection between the locomotive and power pack for superior control.

SLOW SPEED CONTROL: Extremely slow speed control is accomplished by the use of Automatic Pulse Injection. Pulses gradually disappear when they are no longer needed.

PULSE FREQUENCY: 60Hz

CONTROLS:

POWER SWITCH: The power OFF/ON switch disconnects the input power from your **Railpower 1440** 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.

THROTTLE CONTROL: The throttle is used to set the speed of the locomotive you are controlling. The throttle knob should always be turned to zero (0) / STOP before reversing your locomotive.

STEAM WHISTLE: To activate the steam whistle sound, press and release this red button.

DIESEL HORN: To activate the diesel horn sound, press and release this red button.

INDICATORS

POWER MONITOR: The Power Monitor is used to give an approximate indication of output voltage. You will find this very useful in detecting short or open circuits on your track. If the throttle is left in an "on" position and the light intensity increases as the locomotive continues to run, this would indicate that 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 the circuit protector will soon trip. A sudden brightening of the light may signal an open circuit, meaning that power is no longer reaching your locomotive. This is probably due to dirt or oxidation on the track. A slight flickering of this light during operation is normal and does not indicate a problem.

TERMINALS

VARIABLE DC: These two terminals are for attachment of your **Railpower 1440** 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 two terminals are for use with AC accessories only, such as switch machine controls. Hook-up polarity does not matter.

SPEAKER TERMINALS: The speaker is prewired so you can connect the free ends of the wires to the two speaker terminals. Polarity does not matter.

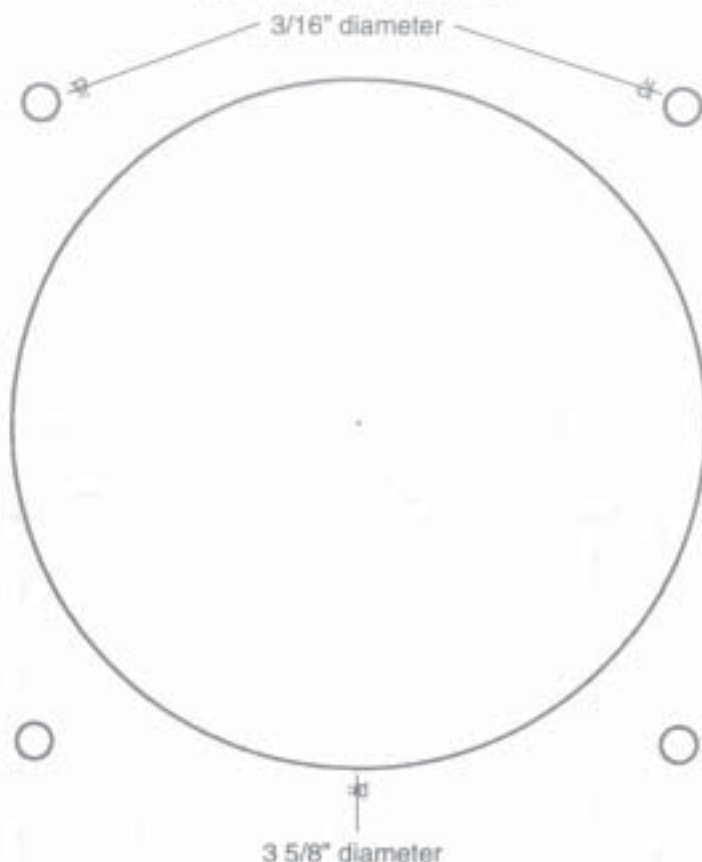
CAUTION: When mounting speaker wires to the speaker terminals, make certain the unit is Off and unplugged. When connections are completed, reinspect them to make certain that no wires are shorting across the terminals.

SPEAKER INSTALLATION: A drawing is supplied with these instructions so that you can cut out a hole for the speaker and its 4 mounting holes in your layout. If you do not wish to cut up your instruction sheet to use the drawing, we suggest you make a photocopy of the drawing and use it instead.

For best sound reproduction and volume, you will need to baffle to enclose the speaker. We suggest using the unit carton in which your **Railpower 1440** was packed. Use the drawing to cut out a hole for the speaker and its 4 mounting holes, preferably in the carton's top panel. Install the speaker into the inside of the carton with the face of the speaker positioned outwards. Fasten the speaker to the box and your layout with the 4 screws, 4 nuts and 8 washers supplied. The wires should exit the carton and the edges of the carton sealed with cellophane tape (Scotch™ tape) to prevent air from escaping. An alternative to using the cardboard carton is to use a wooden box of your own design. In any case, use your best judgement in selecting a method of installing and "hiding" the speaker in your layout. When mounting the speaker in your layout, you should choose a location where the sound will not be muffled. The speaker should be firmly mounted for best sound reproduction. Be careful not to allow any debris or material from your layout to touch the speaker cone as this will distort the sound.

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

SPEAKER CUTOUT



OPTIONS & OTHER MODEL RAILROAD PRODUCTS

MRC has many other items to enhance your model railroad layout. Here are a few suggestions:

1.) For better sound reproduction from your Railpower 1440, try our 2-Way Speaker Model AT830. It comes with a 2" tweeter and a 4" woofer for a wide frequency response of 30 to 20,000 Hz.

2.) If you think the stationary sound available with the Railpower 1440 is fantastic, wait until you try the SoundMaster 210 with on-board sound! A decoder board is included with the package so you can have digitally recorded sounds come out of your rolling stock. A Ready-To-Run version of the SoundMaster 210 is also available with a HO scale Athearn Union Pacific Double Deck stock car with the on-board module and speaker pre-installed.

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

1. Never reverse a locomotive without stopping it first. To do so may damage the locomotive engine.
2. Never connect a DC locomotive to the AC terminals of your Railpower 1440. This may damage your locomotive motor.
3. Turn the power switch OFF at the end of the day's operation.
4. When a short circuit or current overload occurs and the circuit protector trips, turn the Railpower 1440 off and correct the short or overload. Allow 2 to 5 minutes for the circuit protector to reset before turning your unit back on.
5. Avoid prolonged short circuits and overloads. While your Railpower 1440 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.
6. Do not store in a damp area.
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 the wheels.
8. 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, remove the speaker from the carton, repack the unit in its original carton, placing at least 3 inches of packing material on each side and address the unit to:

MODEL RECTIFIER CORPORATION
80 NEWFIELD AVENUE
P.O. BOX 6312
EDISON, NJ 08837

Be certain to send the unit Parcel Post insured or by United Parcel Service, and include a letter with your name, address and daytime phone number printed clearly, describing the problem you are experiencing along with a check or money order for \$5.00 for return postage.

All of us at MRC would like to wish you many happy years of model railroading with your Railpower 1440.

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