CRE-55400/ART5400 MODEL TRAIN POWER PACK INSTRUCTION MANUAL

FEATURES:

- CONSTANT VOLTAGE PULSE WIDTH SPEED CONTROL

Conventional train power packs control speed by varying the input voltage but this causes the lights to dim and lower the sound level when the train is operated at slow speed. Also, dirty track can interfere with the operation of the train at slow speed due to reduced voltage. **Pulse Width Control (P.W.C.)** allows double features by separating the control of the train from the voltage. A high DC voltage is constantly fed to the tracks, but the speed of the train is regulated by a signal message sent along the tracks to the motor. The higher, constant DC voltage means that the lighting, smoke and electronic sound features work much better, even when the train is at a full stop.

NOTE: PULSE WIDTH CONTROL (P.W.C.) IS NOT PULSE POWER. SEE THE INSTRUCTION MANUAL FOR YOUR SOUND SYSTEM REGARDING COMPATIBILITY ISSUES WHEN USED WITH P.W.C.



- AUTOMATIC ELECTRONIC MOMENTUM

This power pack provides a realistic momentum which starts and stops the trains without the use of AC voltage pulses that are harmful to DC motors. There is a momentary delay between the increase of the throttle and the movement of the train. There is also a delay in stopping as well.

- AUTOMATIC CIRCUIT PROTECTION

If there is a short circuit in the tracks or an overload in the power supply, the components of the CRE-55400/ART-5400 are protected by a circuit breaker and the unit will not be damaged. IF there is a short circuit or overload, the overload indicator lamp will light.

- THREE POSITION DIRECTION SWITCH

This switch features forward (upward position), stop (middle position) and reverse (down position). The stop position stops the train, there may still be voltage applied to the rails powering lights and accessories.

-L.E.D. INDICATORS

L.E.D. lights indicate weather or not the power is on and if there is an overload. The power light indicates if the power supply is receiving power and is on regardless if the three position switch is set in the stop position.

INSTALLATION & OPERATION

WITH THE POWER PACK UNPLUGGED:

- Place the direction switch on "stop" and the speed control switch at "slow".
- Connect the track power leads to the two red terminals (DC) on the back of the power pack by depressing the thumb tab at the bottom of the terminal and slipping the bare portion of the wire into the hole above. Place one wire in each of the DC (red) terminals and connect the opposite ends of the wires to the track (see figure 1). It does not matter which wire is connected to either terminal

-CAUTION

Do not try to force the wire into the terminal and insert only the end of the bar portion. Do not put the insulated part of the wire into the terminal.

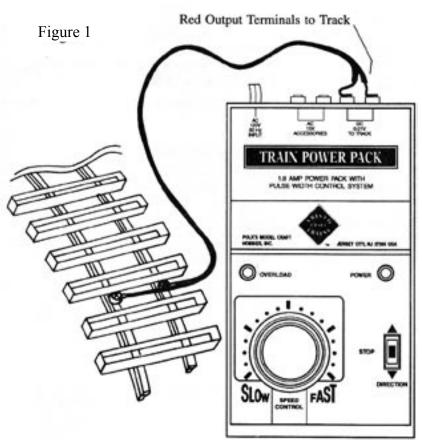
<u>NEVER</u> connect the track to the black (Accessory) terminals of the power pack as this will damage your equipment.

PLUG THE POWER PACK INTO A STANDARD 120V WALL OUTLET

- A green light will come on indicating that you have power
- Rotate the speed control to the right to start the train.
- If the train runs backwards, simply move the direction switch to the opposite position and the train will change direction.

TROUBLE SHOOTING

- If the power light (green) does not light, check to see if the 120V outlet plug is properly connected.
- If the power light is on but the train does not move, check the connection between the tracks and the red terminals.
- If the overload light (red) is flickering, unplug the power supply and:
 - Check all wire connections
 - See if any metal object is on the track causing a short circuit.
 - Check the train for possible short circuit.
 - Check to see if any other power source is inadvertently connected.



CAUTION - ELECTRICALLY OPERATED PRODUCT

Not recommended for children under eight (8) years of age. As with all electric products precaution should be observed during the handling and use of this unit to prevent electric shock.

It is recommended that parents periodically examine the power pack, cords and wires for damage which could result in the risk of fire, electric shock or injury to a person. In the event of such conditions, the power pack should not be used until properly repaired.

SERVICING

Should your ARISTO-CRAFT TRAINS product require warranty service, please return it in the original box, if possible, protected by a proper shipping carton. Send the product fully insured and prepaid. ARISTO-CRAFT TRAINS will not be responsible for any loss or damage incurred during shipping. Be sure to include a brief, but thorough explanation of the problem, together with your name, street address (no Post Office box please), city state or province and country, if outside of the United States. Also include a daytime telephone number so that we may contact you if necessary. Your return address should be clearly marked on the outside of the shipping carton.

Payment for shipping and handling, in U.S. funds, is \$20.00 and should be included. Your check or money order should be made payable to: Polk's Modelcraft Hobbies, Inc. Do not send cash. If your item is not covered by warranty service, you will be contacted and a repair estimate given before any work commences. Warranty covers manufacturer defects, not normal wear and tear.

The shipping address to be used for returns is as follows:

Aristo-Craft Trains Repairs Department 698 South 21st St Irvington, NJ 07111 Phone: 973-351-9800 Fax: 973-351-9700

email: aristo@mindspring.com

Written confirmation of receipt of returned items will be sent with estimated repair time by the ARISTO-CRAFT TRAINS Customer Service Department.