

AUTOMATIC REVERSING UNIT/SYSTEM

INSTRUCTION MANUAL

ART-11091 - 01

ART-11090

This Instruction Manual is suitable for both the ART-11090 Automatic Reversing System and the ART-11091 Automatic Reversing Unit.



ARISTO-CRAFT TRAINS

122002 REV

Dear Model Railroader,

The ARISTO-CRAFT ART-11091, Reversing Unit is designed to allow automatic, adjustable back and forth operation with any 2 rail model railroad, N Scale to G Scale. It can be used with almost any DC power pack of 2.5 AMP or less and is designed for easy installation.

You, the customer, must supply the necessary track and the diodes.

Specifications: Input Voltage: 12 V — 22 V DC
Output Control Current: 2.5 AMP
Adjustable Delay: 5 Seconds — 5 Minutes

Additional Items Required: (ART-11091 ONLY)

- A) Track of your gauge and scale.
- B) 2 diodes as follows: G Scale: #1N 5400 3 AMP
HO Scale: #1N 4001 1 AMP
N Scale: #1N 4001 1 AMP

The ART-11090 Reversing System includes 2 diodes in the G-Scale Diode Tracks/Rerailers and 2 G-Scale Bumpers. The Reversing Unit itself and the installation/setup of the system is identical to the ART-11091.

Should you have any questions regarding operation, proper usage or maintenance required on this or any other ARISTO-CRAFT TRAINS products, please contact us at the following address:

ARISTO-CRAFT TRAINS / Polk s Modelcraft Hobbies, Inc.

698 South 21st Street, Irvington, NJ 07111 USA

Tel: (973) 351-9800 Fax: (973) 351-9700

e-mail: aristo@mindspring.com Visit our web site: www.aristocraft.com

Our customer service department phones are open from 10:00 AM to 5:00 PM Eastern time, Monday through Friday.

Purpose The purpose of this reversing system is to enable your train to go from Point A to Point B and back again, continuously, with an adjustable time delay at each point before returning. The time delay can vary from approximately 5 seconds up to 5 minutes, depending upon your setting of the reversing unit time adjustment.

Track Layout

Point A ---- Diode ----- Diode ---- Point B

The track between Point A and the diode and Point B and the diode should be long enough to accommodate the entire train that will be running. The entire train, not just the locomotive, should fit between the diodes and the end of the track at each end point.

During operation, the locomotive will only need enough track to clear the diode before changing direction. In the reverse direction, the train will be ahead of the locomotive and need the entire length of the track between the diode and the end point.

It is important to note that if the last car in the train has lights or smoke, they must be either turned off or disconnected. Failure to disconnect these functions will adversely affect the operation of the reversing unit.

Installation

Note that one rail is gapped in 2 places and bridged by a diode. **It is necessary that both rail gaps be in the same rail.** See the installation drawing which shows both rail gaps in the same rail.

A) Determine the locations of Points A & B, the end points of the track and the maximum train length.

B) Locate the position of the diodes by using the maximum train length.

C) Install an insulating rail joiner at the rail gaps. (ART-11091 ONLY)

D) Solder the diodes in place across the rail gaps, making sure that the stripes face in the same direction. All diodes have stripes on one end. In this case, the installation drawing shows the stripes on the left side of both diodes. The diodes required for this unit are: (ART-11091 ONLY)

G Scale: #1N 5400 3 AMP

HO Scale: #1N 4001 1 AMP

N Scale: #1N 4001 1 AMP

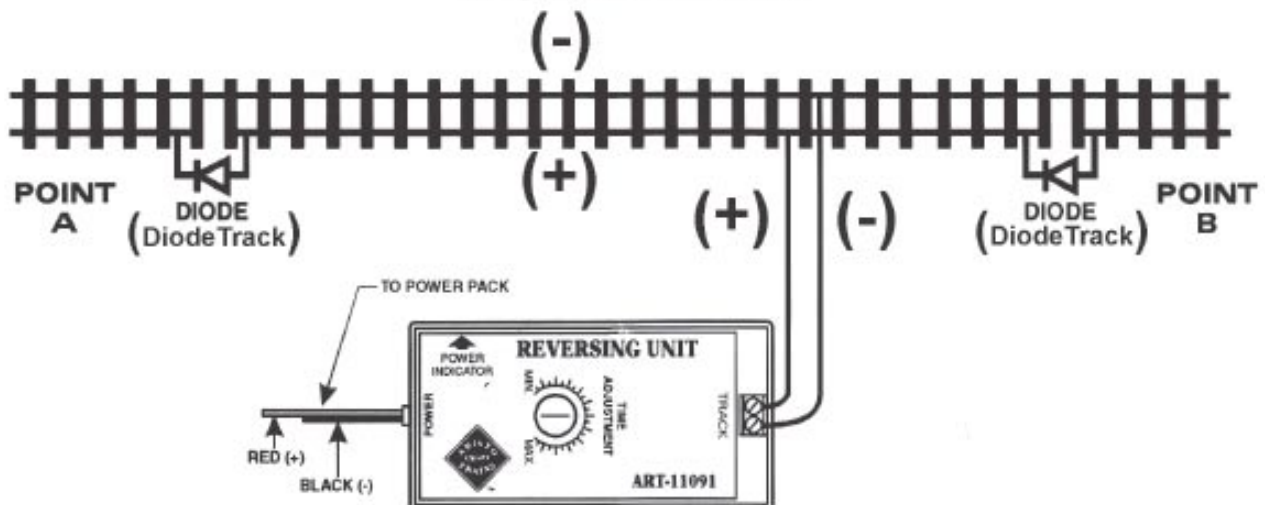
E) Install the connecting wires from the track to the reversing unit as per the installation drawing.

F) Connect the Reversing Unit to your power pack.

G) Place the train on the track, in the middle, turn on the power pack and enjoy the operation of your Reversing Unit.

This unit has a Soft Start momentum function built into the start up controls. This means that the trains will accelerate gradually, like the prototype, without the fast starts of most model trains.

INSTALLATION



LIMITED WARRANTY

All ARISTO-CRAFT TRAINS products are under warranty for five (5) years from the date of purchase against defects in workmanship and/or materials. Proof of purchase *may be required* by ARISTO-CRAFT TRAINS.

This warranty is void and does not apply to any product and/or parts and components which have been improperly installed by the purchaser/owner, abused or damaged in any way through improper operation such as but not limited to derailment, repairs or modifications performed by non-authorized service centers or technicians.

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.

The proper payment for shipping and handling, in U.S. funds, should also be included as follows:

Locomotive or complete train set \$20.00

CALL FOR CURRENT SHIPPING COSTS
Accessories, switches, track, freight or passenger cars, rail cars, tenders, etc. \$10.00

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.

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

ARISTO-CRAFT TRAINS / Polk s Modelcraft Hobbies, Inc.
Customer Service Department
698 South 21st Street
Irvington, NJ 07111 USA
Tel: (973) 351-9800

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