# CONTROLMASTER V TRANSISTORIZED

### CONGRATULATIONS !

You have just purchased the finest Model Railroading Power Supply Available.

The CONTROLMASTER V is a New Dimension in Model Railroading Train Control! It incorporates the latest 'state of the art' circuitry and components. This unit has been thoroughly researched, tested and Precision Handcrafted to give you the best possible product.

The CONTROLMASTER V is a model railroading control system designed and constructed to insure you the performance, reliability and endurance modelers have come to expect from MRC products. If this is your first purchase of Model Rectifier Corporation equipment, you can look forward to enhancing the pleasure of your railroading with the finest in train controls.

We look forward to serving you again in the future.

Please return the registration card immediately.

## CONTROL FEATURES

		_	
1	MASTER	ON-OFF	SWITCH

- 2. SPEED CONTROL
- 3. MAIN LINE DIRECTION SWITCH
- 4. REVERSED LOOP DIRECTION SWITCH
- 5. MOMENTUM ADJUSTMENT CONTROL
- 6. TRANSMISSION SELECTOR SWITCH
- 7. OVERLOAD INDICATOR
- 8. TRACK VOLTAGE ADJUSTMENT CONTROL

INPUT:

115 VOLTS 60 CYCLES A.C.

OUTPUT:

VARIABLE D.C. VOLTAGE AT 1 AMPERE

A.C. FOR ACCESSORIES

UNIQUE NEW CABINET CONSTRUCTION DESIGNED TO GIVE YOU UNPRECEDENTED LAYOUT MOUNTING FLEXIBILITY!

Your New CONTROLMASTER V is made in a unique Three-Part Construction which enables you to mount this unit on any surface in several different positions with Mounting Keyed Holes on Cabinet Top Shell Flanges to let you select the position most suited to your layout.

Some Examples of the Different Ways You Can Mount the Controlmaster V to the Particular Needs of Your Layout are:

- 1. SIDE TABLE MOUNTING
  - By Inverting the Control Panel Section in the Cabinet Top Shell (so that printing on Control Panel appears upside down) you can mount the Controlmaster V to the side of your layout table with control panel sloping downward.
- 2. UNDER TABLE MOUNTING
  - By Inverting and Reversing the position of the Control Panel Section in the Cabinet Top Shell (so that printing on Control Panel appears upside down and backwards) you can mount the Controlmaster V on the underneath edge of your layout table with control panel sloping upward.
- 3. TABLE TOP MOUNTING
  As your Controlmaster V is presently assembled, it can be mounted on the top of your layout table with Control Panel Section sloping upward.

You will find all the above positions will give ease in accessibility to all controls and confortable operation.

### GUARANTEE

Your Controlmaster V is guaranteed for one year from date of purchase against all defects in material and workmanship. Please see the enclosed Guarantee Registration Card for full guarantee details. Registration section of this card must be returned within 10 days from date of purchase.

# OPERATING INSTRUCTIONS

- 1. MASTER ON-OFF SWITCH: Shuts off all power to the layout.
- 2. SPEED CONTROL: The 320° speed control (throttle) provides an extended range which permits a far wider choice of train speeds.
- 3. MAIN LINE DIRECTION SWITCH: Train direction is changed by moving the Direction lever from Forward to Reverse. It is recommended that locomotives be stopped before reversing. If train direction does not conform with lever, interchange leads going to TRACK DC terminal strip at the rear of the Controlmaster V.
- 4. REVERSE LOOP DIRECTION SWITCH: Similar to the main line direction switch in control, however, this switch is a completely separate direction control for a reverse loop track section.
- 5. MOMENTUM ADJUSTMENT CONTROL: An Extended Range Control which allows you to adjust to the desired amount of delay. The higher numbers on the control dial provide most delay. This delay allows realism in operation of your Throttle. Your trains will start slowly and respond to Throttle position gradually as does a prototype locomotive. Time delay, as adjusted, will effect slowing down as well as speeding up your train.
- 6. TRANSMISSION SELECTOR SWITCH: Provides Two (2) Operating Positions. In DIRECT DRIVE Position the locomotive will respond instantly to a change in the Throttle Position.

  In FLYWHEEL ACTION Position the locomotive will be delayed in acceleration and deceleration to simulate actual locomotive motion. Amount of delay is determined by the Momentum Adjustment control as explained above.
- 7. OVERLOAD INDICATOR: The Controlmaster V protection circuit combines both a Circuit Breaker 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, simply turn unit Off by using Master On-Off Switch; correct the cause of overload, wait two minutes and then turn unit back On.
  - 8. TRACK VOLTAGE ADJUSTMENT CONTROL: You can set the output voltage the Controlmaster V will deliver with this control, thereby supplying your locomotive with the correct voltage for its best performance. This is done by turning the control knob one-half turn clockwise, then with the train operating adjust the track voltage until desired control is attained. Do Not Operate Train With This Control Knob At Full Turn Position as this could damage motors. We recommend use of a Track Voltage Meter.