

How to allow decoder equipped locos to run analog track programming:

All programming mentioned to this point will not permit a decoder equipped loco to run on an analog (conventional track powered by DC powerpack). If you want to run a decoder equipped loco on an analog track you need to program enable it to do so. This can be done by pushing button (7) in **step 5** during programming. If you later want to use your decoder equipped loco on a DCC track you should program it for DCC again by following the program procedure without pushing button(7)

Section 6 HOW TO MAKE A REVERSE LOOP

The following diagram shows a reverse loop with a DPDT. The switch allows you to change the polarity of the reverse loop section. Before a loco crosses the first isolating gap you must make sure the polarity of reverse loop section and main track are matched at the first gap. (If not flip the switch.) Otherwise it will cause a short circuit. After the loco passes the first gap completely, you need to change the polarity of the reverse loop section by flipping the switch so that the polarity of the reverse loop section and main track are matched at the second gap. If the loco which passes the first gap is the standard loco, you need to flip the switch and push its direction button on the Command 2000 as well.

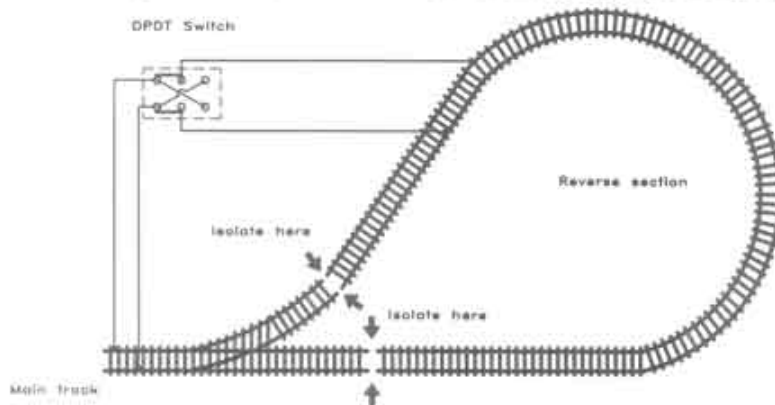


Figure 3. Reverse Loop

Section 7 ACCESSORY CONTROL

Command 2000 can control 10 accessory decoders with NMRA accessory function one. If your locomotive decoder has accessory function one, you can control it just like you control lights by pushing accessory button (6) first and then pushing the direction button.

Section 8 TROUBLE SHOOTING

A DCC system is made up of a command station and decoder equipped locomotives. Whenever you have problems try to find out if the cause of the problem is the command station or the decoder. If you can control a standard loco in both directions, your Command 2000 is OK. The fault must lie in the decoder.

Are you in the right group ?

You may change the group by moving the walkaround control switch accidentally. So check the switch setting and group indicator first. Sometimes it looks like you are in the right group, but you are in program mode. This happens when you finish programming and try to run by pushing the Group Select button. You have forgotten to push the Reset button first. You should push the Reset button and then push the Run button to select run mode and try again.

Dirty track and wheels:

A common problem in all DCC systems is the decoder equipped locomotive's pickup. Keep wheel and track surfaces clean. Intermittent and jerky operation is often caused by an oxide coating which has formed on the track or wheels. When you have problems always check the track and wheels first and make sure they are clean.

Decoder lost memory:

If you loose control of a loco please reprogram it and try again.

Check decoder's connection:

Remove the locomotive shell and check the connection of the decoder. Are there any broken wires?

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes and modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission rules.

* In order to maintain compliance with FCC regulations shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception.

COMMAND 2000 OPTIONS ORDER FORM & SERVICE INFORMATION

Your Command 2000 has been thoroughly tested at the factory. Do not shut down your layout unnecessarily. Before returning your unit for repair or servicing, **please read Section 8 Trouble Shooting to make certain it is defective.** Please telephone our service department at (732) 225-6360 before returning your unit. Please have the following information handy before you call:

1. Name and model number of the power pack you will use with the Command 2000.
2. Your name, shipping address and daytime phone number

If it should become necessary to return your system, pack it in its original carton, then pack the original carton into a larger carton with at least three inches of packing material all around. Include a clearly printed letter with your name, address and daytime telephone number, and a detailed description of the problem you are experiencing.

Send your Command 2000 and locomotive with MRC factory installed decoder by Parcel Post Insured or United Parcel Service to:

MODEL RECTIFIER CORPORATION - ATTN: PARTS & SERVICE
80 NEWFIELD AVENUE
EDISON, NJ 08837-3817

Do not send any locomotives unless the decoder has been factory installed. If the decoder has not been factory installed you must remove it from the locomotive and send only the decoder.

Complete this form to order optional equipment for your Command 2000.

Do not send cash. Please include check or Money Order for the total amount. Mail order and payment to:

Model Rectifier Corporation - Attn: Parts & Service
80 Newfield Avenue
Edison, NJ 08837-3817

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Daytime Telephone (____) _____

Description	Item #	Price	Quantity	Total
Decoder 310 - Decoder for locomotives	AD310	33.98	_____	_____
WalkAround 2000	AD300	29.98	_____	_____
Total				_____
Shipping & Handling				4.50
Total Enclosed for Order				_____

Allow 4 to 6 weeks for delivery. Prices subject to change without notice.