

# **MRC**

# **COMMAND 2000**



©1996 MODEL RECTIFIER CORPORATION  
80 NEWFIELD AVENUE  
EDISON, NJ 08837-3817  
Tel. 1-732-225-6360

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The equipment described herein is compatible with the NMRA Standards for DIGITAL COMMAND CONTROL

## Section 1

## QUICK START

Congratulations! You have just purchased one of the most advanced DCC systems available. The MRC COMMAND 2000 will enhance your enjoyment of your train layout for many years to come. Since you can now control more than one train it will give you, your family, and friends more fun. Thank you for purchasing an MRC product, the best in train controls!

**Note:**  
Command 2000 needs AC or DC Power supply to operate. Input voltage must be 14-18 volts for HO/N gauge and 19-22 volts for G gauge. Figure 1 shows the Connection of the DCC system. If you use conventional isolated block system you should activate all switches and disconnect your conventional power pack.

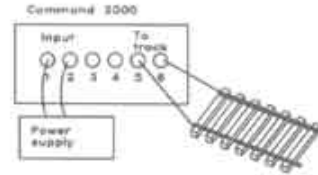


Figure 1.

Command 2000 can control (address) 10 locomotives. But in this Quick Start section we just want you to learn how to control three locomotives. When you are comfortable with operating the three locos you can read further to explore more features:

Please familiarize yourself with the following terminology. It will help you to understand the instructions.

**Standard Loco** - We call any regular locomotive without decoder a standard loco. It is always assigned to throttle #1 in set 1, group A.

**Locomotive Decoder** - A small device that is installed in the loco and receives DCC signals from the command station. Each decoder has a memory to memorize its address and other variables. It only follows the commands which are assigned to its address. All decoders are programmed to address 3 at the factory.

**Loco #3** - A locomotive installed with decoder whose address is 3.

**Command Station** - A device that sends Digital Command Control (DCC) signals to decoders to control them or to program them. MRC Command 2000 is a DCC compatible command station.

Command 2000 has two operating modes, **run mode** and **program mode**. To select run mode push Reset button (9) and then Run button (5). In run mode you can run your locos. To select program mode push Reset button (9) then Program button (4) **three times**. In program mode you can change decoder's address and other variables. All buttons on the Command 2000 are marked with their names and a number. You can follow the name or the number to activate the correct button.

There are three throttles on the Command 2000. So you can control three locomotives at the same time in run mode. In group A set 1, you can control a standard loco, loco #2, and loco #3 by the three throttles #1, #2, #3.

### How to run two locomotives:

1. Place the standard loco and loco #3 on your layout. Set the Mode switch to match your locomotive's scale.
2. Turn on the power switch. Push Reset button (9) then Run button (5) to select run mode.
3. The group A indicator should be on to show you that the current group is A. If not, push Group Select button (5) to change to group A. Put the set1/set2 switch to set1.

Now you are in Run mode, set1, group A. You can control the standard loco using throttle #1 and loco #3 using throttle #3. You can adjust the speed of the standard loco by throttle #1 and change its direction by pushing direction button 1. (Standard loco will hum during idle. It is normal. If you have a standard loco with a delicate can motor don't leave it idle for more than a 10 minutes.) You can adjust the speed of loco #3 by throttle #3 and change its direction by pushing direction button 3. You can turn on/off the light of the loco #3 by pushing light button (6) first and then pushing direction button 3. If you need **emergency stop**, push Stop button (9). Push Run button (5) to select run mode and try again.

**Note:** If three LEDs blink on/off, this indicates **there is a short circuit or overload on your layout**. The maximum current is 2.5 Amp. If this happens, please check for a short circuit and correct it. After you corrected the short circuit push Reset button (9) and push Run button (5) to select run mode and try again.

### How to run three locos:

In order to use throttle #2 to control a loco you need to program a decoder equipped loco with the address loco #2. Without your programming all decoder equipped locos are addressed as loco #3. Before you begin programming, please