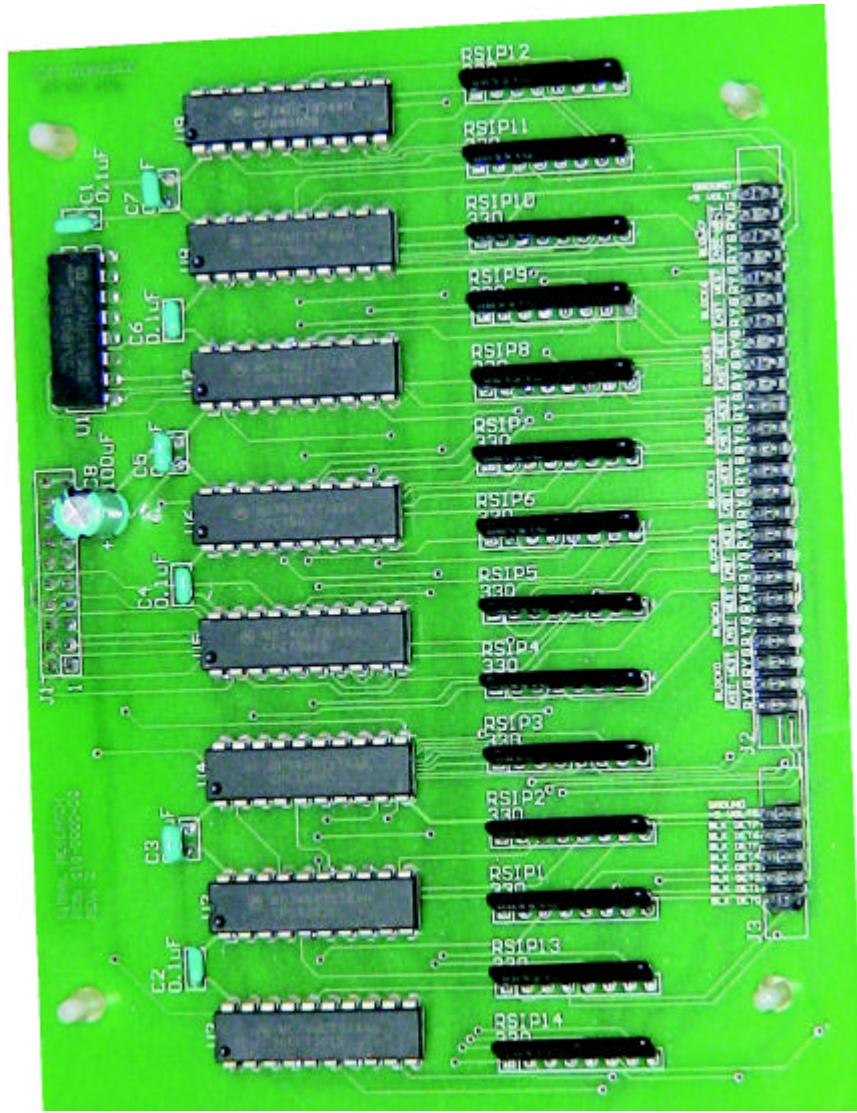


ROADMASTER SIGNAL MODULE GUIDE



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**Signal Research
221 Bob G Hughes Blvd
Harvest, AL 35749**

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SIGNAL RESEARCH

**221 Bob G Hughes Blvd
Harvest, Alabama 35749
www.signalresearch.com
SigResrch@aol.com**

I Unpacking

Please read all instructions prior to installing the Signal Module. Care should be taken when unpacking the module. Avoid handling the board as much as possible and when necessary, only by the edges. To prevent a static charge from degrading system performance always ground yourself prior to handling any system components. Retain the packaging, especially the pink anti-static foam, should you ever need to return the unit for repair or upgrade. Confirm that you have received the following components:

- Signal Board
- 50-wire bus cable (signal outputs)
- 10-wire bus cable (block occupancy outputs)
- Standoffs & nuts (4 each)

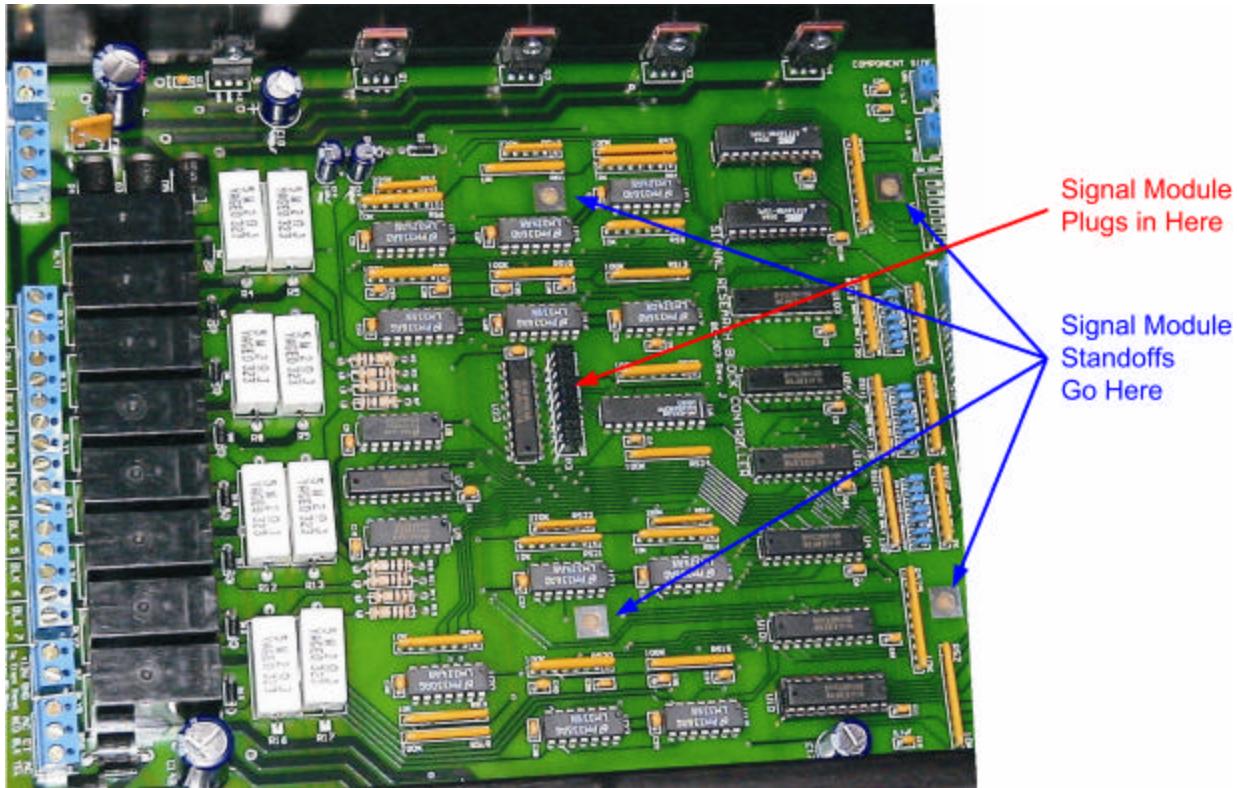


Figure 1. Roadmaster Block Controller

2 Signal Module Installation

Each signal module is designed to plug into its respective block controller module. Unlike the Block Controller modules, all signal modules are the same and can plug into any Block Controller. Turn off the Roadmaster system. Locate the signal module connector plug on the Block Controller. It is near the center of the Block Controller. Note the four holes bracketing the connector (see Figure 1). Screw the four standoffs to the Block Controller using the nuts provided. Figure 2 shows the correct orientation of the Signal Module. Carefully plug in the Signal Module making sure the pin connectors line-up with the Block Controller plug. Snap the signal module down on the standoffs.

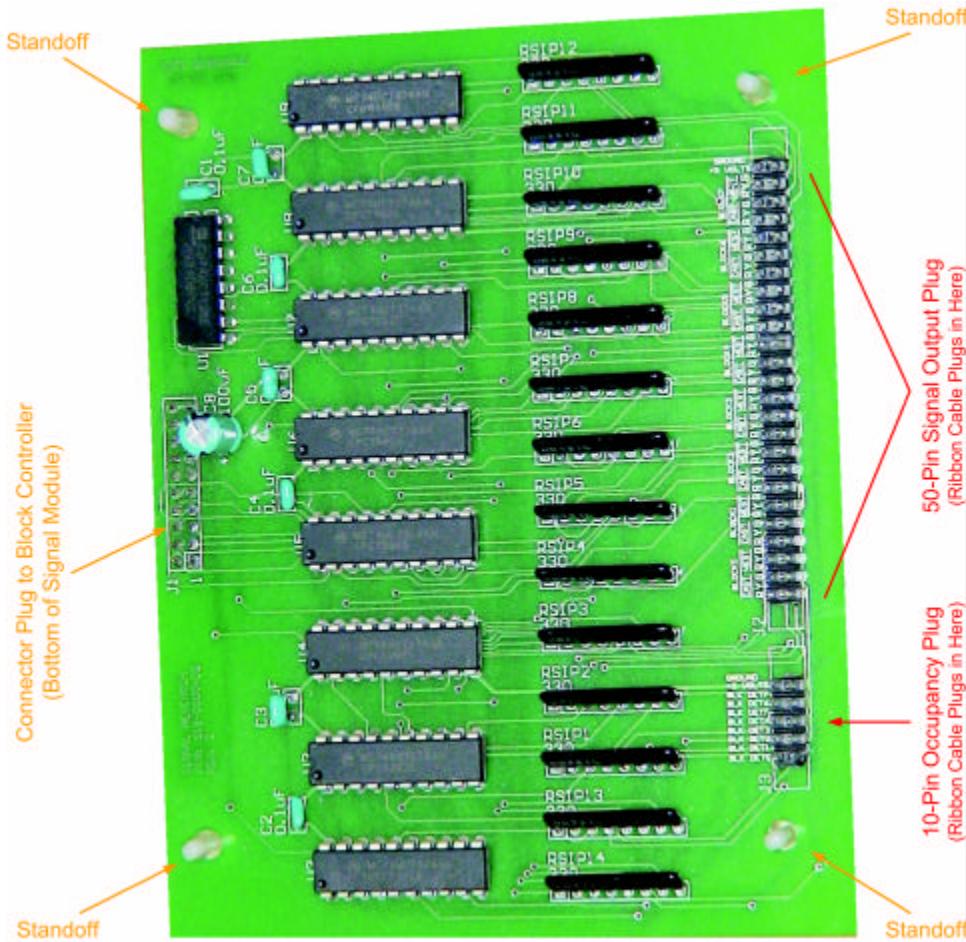


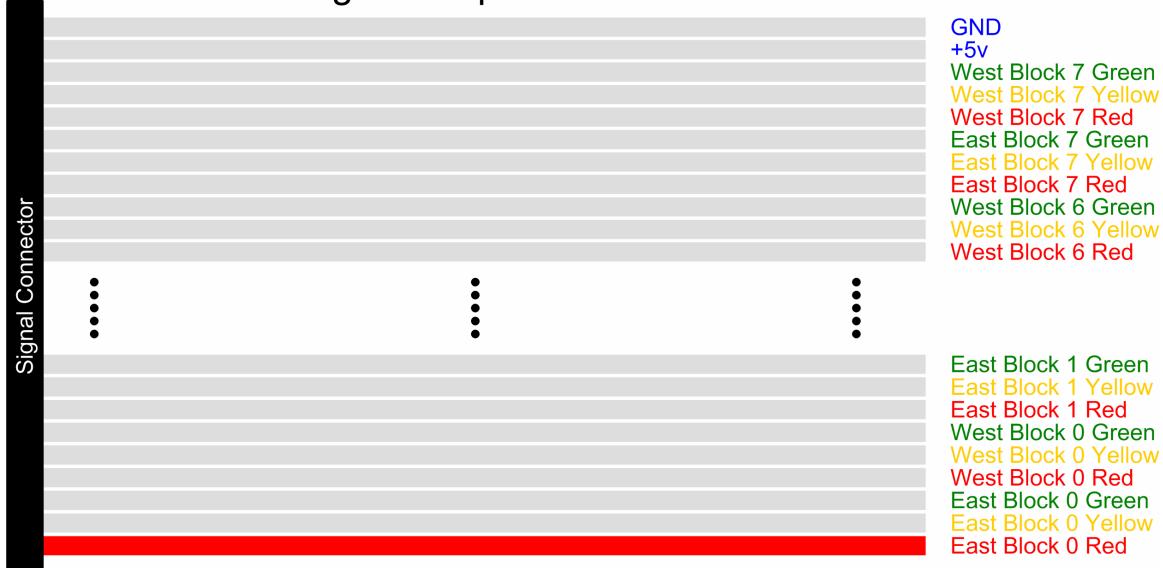
Figure 2. Signal Module Top View

Strip and tin the leads on the 50-pin and 10-pin cables. Gently plug the 50-pin cable into the Signal Module. If you want block occupancy outputs, also plug-in the 10-pin bus cable. Note the correct orientation of the ribbon cables, making sure that the cables are connected with the red stripe on the correct side.

3 Signal Cable Connection

Connect the tinned leads to a terminal block. Now connect from the terminal block to each signal as shown in Figure 3. Note that the +5 volt terminal is the signal common that runs to all the signals. The ground connection is only needed when using special signal controllers for searchlight or semaphore signals.

50-Pin Signal Output Ribbon Cable



10-Pin Block Occupancy Ribbon Cable

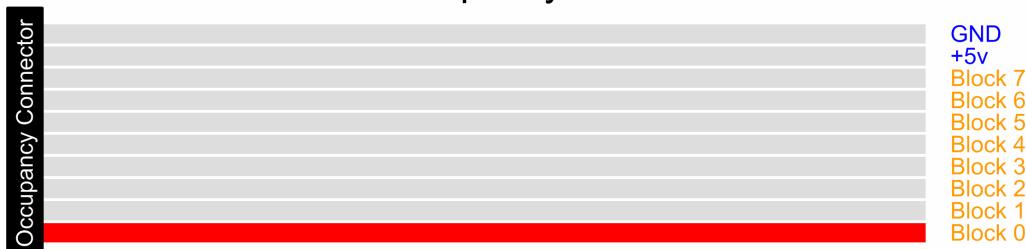


Figure 3. Signal Bus Cable Connections

4 System Upgrade

Located on the signal board are eight block occupancy outputs. You must have system version 2.25 or higher in order for this feature to be active. The version number is displayed each time you power on the system. If the version does not display or it is before version 2.25, you will need the upgrade "chip" in order to enable this feature. It can be ordered through our website. If you do not want or need block occupancy outputs, you do not need this upgrade and you should not install the 10-wire bus cable. Should you only desire to use 2-color (red and green) LED signals, a special replacement chip is also available direct from Signal Research.

5 Advanced Options

The Roadmaster Signal Module is designed to operate LED type 3-color signals. Searchlight and semaphore signals can be used by incorporating the Logic Rail Technologies Searchlight Master™ or Semaphore Master™ modules. Using searchlight signals can also reduce the number of wires needed per signal from 4 to as few as two, making installation much quicker.

6 Technical Support

Should you have any questions, please contact us at:

Mail: 221 Bob G Hughes Blvd
Harvest, AL 35749

E-mail: SigResrch@aol.com

7 Warranty

The Roadmaster Signal Module is warranted to be free from defects in material or workmanship for a period of one year from the date of purchase. Signal Research reserves the right to repair or replace a defective product. The module must be returned to Signal Research in satisfactory condition. This warranty covers all defects incurred during normal use of this product. The warranty is void if damage is the result of mishandling or abuse, the module was altered in any way, or the current or voltage limitations are exceeded. Requests for warranty service must include a dated proof of purchase, a written description of the problem, and return shipping and handling (\$5.95 US). No other warranty or guarantee, either expressed or implied by any person, firm or corporation, applies to this product.