# INSTALLATION INSTRUCTIONS

## APPLICATION

The 221508A Resistor Board can be configured to provide the functions of the 4074BYK, 4074EAU, 4074EDC, or 4074EED resistor kits for Series 90 Modutrol IV motors. For 4074BYK applications, it can allow a single controller to operate up to six Modutrol IV M91XX motors in unison. For 4074EAU application, it adapts an M91XX motor to operate from a 4-20 mA controller. In 4074EED applications, it permits operation of up to four M91XX motors from a 4-20 mA signal. The Resistor Board mounts inside the motor's wiring box and provides screw terminals for field wiring.

## INSTALLATION

WHEN INSTALLING THIS PRODUCT...

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service technician.
4. After installation is complete, checkout product operation as provided in these instructions.

## CAUTION

Disconnect power supply before wiring to prevent electrical shock or equipment damage.

## CONFIGURATIONS

<table>
<thead>
<tr>
<th>Function</th>
<th>Can Be Used In Place Of</th>
<th>Dip Switch Configuration</th>
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<th>Can Be Used In Place Of</th>
<th>Dip Switch Configuration</th>
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<tbody>
<tr>
<td>Drive 2 motors in parallel from a series 90 controller.</td>
<td>4074BYK</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>Drive 2 motors from a 4-20 mA controller.</td>
<td>4074EED</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
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<tr>
<td>Drive 3 motors in parallel from a series 90 controller.</td>
<td>4074BYK</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>Drive 3 motors from a 4-20 mA controller.</td>
<td>4074EED</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
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<tr>
<td>Drive 4 motors in parallel from a series 90 controller.</td>
<td>4074BYK</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>Drive 4 motors from a 4-20 mA controller.</td>
<td>4074EED</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Drive 5 motors in parallel from a series 90 controller.</td>
<td>4074BYK</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>Drive 2 motors from a W973 controller.</td>
<td>4074EAU</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Drive 6 motors in parallel from a series 90 controller.</td>
<td>4074BYK</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>Drive 3 motors from a W973 controller.</td>
<td>4074EAU</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Drive 1 motor from a 4-20 mA controller.</td>
<td>4074EED or EDC</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>Drive 1 motor from a controller.</td>
<td>4074EAU</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
</tbody>
</table>
MOUNTING

1. Remove top cover to motors wiring box.
2. Make any necessary adjustments to motor stroke or auxiliary switches.
3. If motor has an internal transformer, disconnect the transformer secondary wires (brown) from the motor’s T1, T2 quick-connect terminals. Clip the quick-connect terminations off from these two wires. Trim 1/4 inch of insulation from wire ends.
4. Set dip switch (switches 1-8) to configure the Resistor Board for the desired function (see Table 1).
5. Plug Resistor Board onto motor’s quick-connect terminals. Secure in place by tightening the 2 screws provided.
6. Connect field wiring to screw terminals. Refer to M91XX instruction sheet for appropriate wiring connections for your application.
7. Replace wiring box cover and secure with 4 cover screws.
8. Reconnect power and check motor operation.

WIRING

1. Connect trimmed transformer secondary wires to T1, T2.
2. Connect wiring from a Series 90 controller and W973 to R, W, and B terminals as if wiring to a Series 90 Modutrol IV motor.

   **NOTE:** With switch 8 closed, W1, W1 and W[+] are common. All combinations listed call for switch 8 to be closed.

3. Connect wiring from a 4-20 mA controller to R[-] and W[+].