

(DC) Long Distance Control Wiring 24VAC Control Circuit 90-5024

APPLICATION REQUIREMENTS:

This wiring modification is available for Door and Gate operators with 24VAC control circuits (See list below for operator list). Not available with Hazardous Area or Variable Speed modifications. Not necessary on operators with Logic Control Boards.

Door Operators: T, GT, J, H, GH, SD and GSD

Gate Operators: SL540, SL570, SL580, SL590, SW420, SW470 and SW490

FUNCTIONS:

- 1) Control stations are to be located more than 100 ft. from the operator (allows up to 1000 ft. of control wiring between controls and operator with 16GA. wire).
- 2) Control stations are to be electrically isolated from the operator.

PREPARATION:

Unpack kit to verify the parts listed below are included.

| PART NUMBER | DESCRIPTION | QUANTITY |
|-------------|---|----------|
| 002B0422 | LONG DISTANCE MODULE | 1 |
| 40-12407 | LABEL, 4 POLE TERMINAL BLOCK (1A, 2A, 3A, 4A) | 1 |
| 42-104 | TERM BLOCK, 4 POSITION | 1 |
| 80-362-1 | WIRE NUT, BLUE | 4 |
| 80-362-2 | WIRE NUT, ORANGE 600V | 4 |
| 82-PX08-10T | SCREW, PAN HEAD #8-32 X 5/8" LONG, SELF TAPPING | 2 |
| 84-FN-08 | SERRATED FLANGE NUT, #8 | 2 |
| 92-SJ-3526 | VELCRO, 1" WIDE | 1" |
| 92-SJ-3527 | VELCRO, 1" WIDE | 1" |

IMPORTANT SAFETY NOTES



DISCONNECT POWER AT THE FUSE BOX BEFORE PROCEEDING. OPERATOR MUST BE PROPERLY GROUNDED AND PERMANENTLY WIRED IN ACCORDANCE WITH LOCAL ELECTRICAL CODES. ALL ELECTRICAL CONNECTIONS MUST BE MADE BY A QUALIFIED INDIVIDUAL.



ANY MAINTENANCE TO THE OPERATOR OR IN THE AREA NEAR THE OPERATOR MUST NOT BE PERFORMED UNTIL DISCONNECTING THE ELECTRICAL POWER. UPON COMPLETION OF MAINTENANCE THE AREA MUST BE CLEARED AND SECURED, AT THAT TIME THE UNIT MAY BE RETURNED TO SERVICE.



WARNING: This product can expose you to chemicals including lead, which are known to the State of California to cause cancer or birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov



WARNING

INSTALL THE CONTROL STATION WHERE THE DOOR IS VISIBLE, BUT AWAY FROM THE DOOR AND ITS HARDWARE. DO NOT INSTALL CONTROL STATION DIRECTLY BENEATH THE OPERATOR. IF CONTROL STATION CANNOT BE INSTALLED WHERE DOOR IS VISIBLE, OR IF ANY DEVICE OTHER THAN THE CONTROL STATION IS USED TO ACTIVATE THE DOOR, A SAFETY DEVICE MUST BE INSTALLED ON THE DOOR, THE MINIMUM ACCEPTABLE DEVICE WOULD BE SAFETY PHOTO EYES, OR A REVERSING EDGE INSTALLED ON THE BOTTOM OF THE DOOR. THE BEST PROTECTION IS AFFORDED BY THE COMBINATION OF THESE TWO DEVICES.



THIS UNIT MUST BE PROPERLY GROUNDED. A GROUND SCREW IS SUPPLIED IN THE ELECTRICAL BOX FOR CONNECTION OF THE POWER SUPPLY GROUND WIRE. FAILURE TO PROPERLY GROUND THIS UNIT COULD RESULT IN ELECTRIC SHOCK AND SERIOUS INJURY.

INSTALLATION INSTRUCTIONS (DOOR OPERATORS W/ THREE BUTTON CONTROL STATION)

NOTE: Before you start modification, test all operator functions.

COMPONENT MOUNTING

- 1. Install the four pole terminal block on the side of the electrical box opposite the limit switches using the existing holes in the box and the (2) #8-32 x 5/8" pan head phillips and (2) #8 serrated flange nuts supplied. Label this 1A, 2A, 3A and 4A.
- 2. Install the long distance control module to the side wall of the electrical box using the velcro located on the back of the module. Be sure that the placement of the module is central to the new four pole and existing ten pole terminal block.

COMPONENT WIRING

- 1. Connect the orange wire from the controls side of the module to 4A on the new four pole terminal block. Move the push button field wire from terminal 4 to the new terminal 4A.
- 2. Connect the yellow wire from the controls side of the module to 3A on the new four pole terminal block. Move the push button field wire from terminal 3 to the new terminal 3A.
- 3. Connect the green wire from the controls side of the module to 1A on the new four pole terminal block. Move the push button field wire from terminal 1 to the new terminal 1A.
- 4. Connect the blue wire from the controls side of the module to 2A on the new four pole terminal block. Move the push button field wire from terminal 2 to the new terminal 2A.
- 5. Connect one black wire from the operator side of the module to terminal 5 on the 10 pole terminal block.
- 6. Connect the other black wire from the operator side of the module into the orange wire nut that is already in the operator. This wire nut has one orange, one purple, one yellow and at least 1 red wire nut.
- 7. Connect the green wire from the operator side of the module to terminal 1 on the 10 pole terminal block.
- 8. Connect the blue wire from the operator side of the module to terminal 2 on the 10 pole terminal block.

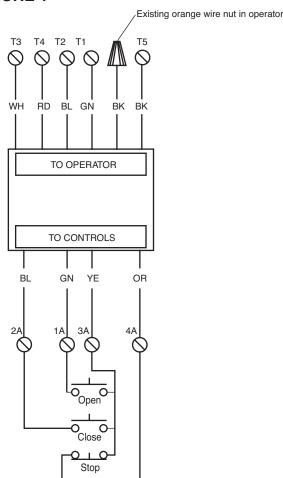
- 9. Connect the white wire from the operator side of the module to terminal 3 on the 10 pole terminal block.
- 10. Connect the red wire from the operator side of the module to terminal 4 on the 10 pole terminal block. For additional wiring help refer to figure 2 below.
- 11. Wire push button wires only to 1A, 2A, 3A and 4A.

NOTE: For additional wiring help refer to figure 1.



DO NOT CONNECT ANY OTHER TERMINALS IN THE OPERATOR TO TERMINALS 1A, 2A, 3A, OR 4A. ACCIDENTALLY CROSSING TERMINALS WILL DAMAGE THE LONG DISTANCE MODULE.

FIGURE 1



INSTALLATION INSTRUCTIONS (GATE OPERATORS W/ THREE BUTTON CONTROL STATION)

NOTE: Before you start modification, test all operator functions.

COMPONENT MOUNTING

Install the long distance control module to the side of the enclosure using the velcro located on the back of the module. Be sure that the placement of the module is central to the S3 board (for models SL540 and SL570 place module central to the terminal block located in the control box).

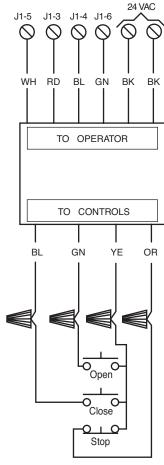
COMPONENT WIRING

- 1. Connect the orange wire from the controls side of the module to Stop (NC) on the control station with one of the orange wire nuts supplied.
- 2. Connect the blue wire from the controls side of the module to Close (NO) on the control station with one of the orange wire nuts supplied.
- 3. Connect the green wire from the controls side of the module to Open (NO) on the control station with one of the orange wire nuts supplied.
- 4. Connect the yellow wire from the controls side of the module to (COM) on the control station with one of the orange wire nuts supplied.
- 5. Connect the black wires from the operator side of the module to 24VAC (may connect to R1 and R3 terminals in the operators).
- 6. Connect the green wire from the operator side of the module to J1-6 on the S3 board (for Models SL540 and SL570 connect wire to T7 on the terminal block located in the control box).
- 7. Connect the blue wire from the operator side of the module to J1-4 on the S3 board (for Models SL540 and SL570 connect wire to T4 on the terminal block located in the control box). Move position 1 on switch SW1 to ON position.

- 8. Connect the red wire from the operator side of the module to J1-3 on the S3 board (for Models SL540 and SL570 connect wire to T3 on the terminal block located in the control box).
- 9. Connect the white wire from the operator side of the module to J1-5 on the S3 board (for Models SL540 and SL570 connect wire to T5 on the terminal block located in the control box).

NOTE: For additional wiring help refer to figure 3.

FIGURE 3



INSTALLATION INSTRUCTIONS (OPERATORS W/ ACCESSORY DEVICE)

NOTE: Before you start modification, test all operator functions.

COMPONENT MOUNTING

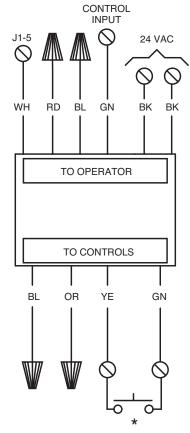
Install the long distance control module to the side of the enclosure using the velcro located on the back of the module. Be sure that the placement of the module is central to the S3 board (for models SL540 and SL570 place module central to the terminal block located in the control box).

COMPONENT WIRING

- 1. Cap off the orange and blue wires from the controls side of the module with two of the blue wire nuts supplied.
- 2. Connect the yellow wire from the controls side of the module to (COM) on the accessory device with one of the orange wire nuts supplied.
- 3. Connect the green wire from the controls side of the module to (NO) on the accessory device with one of the orange wire nuts supplied.
- 4. Connect the black wires from the operator side of the module to 24VAC (may connect to R1 and R3 terminals in the operators).
- 5. Connect the green wire from the operator side of the module to CONTROL INPUT on the S3 board (for Models SL540 and SL570 connect wire to CONTROL INPUT on the terminal block located in the control box).
- 6. Connect the white wire from the operator side of the module to J1-5 on the S3 board (for Models SL540 and SL570 connect wire to T5 on the terminal block located in the control box).
- 7. Cap off the red and blue wires from the operator side of the module with two of the blue wire nuts supplied.

NOTE: For additional wiring help refer to figure 2.

FIGURE 2



- * Any accessory device (switch, loop/photo detector, etc.) that provides contact closure.
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TECHNICAL SUPPORT

INSTALLATION AND SERVICE INFORMATION AVAILABLE FROM THE TECHNICAL PARTS AND SERVICE CENTER ARE AVAILABLE 6 DAYS A WEEK

TOLL FREE NUMBER 1-800-528-2806 HOURS 7:00 TO 3:30 p.m. (Mountain Std. Time) MONDAY Through SATURDAY