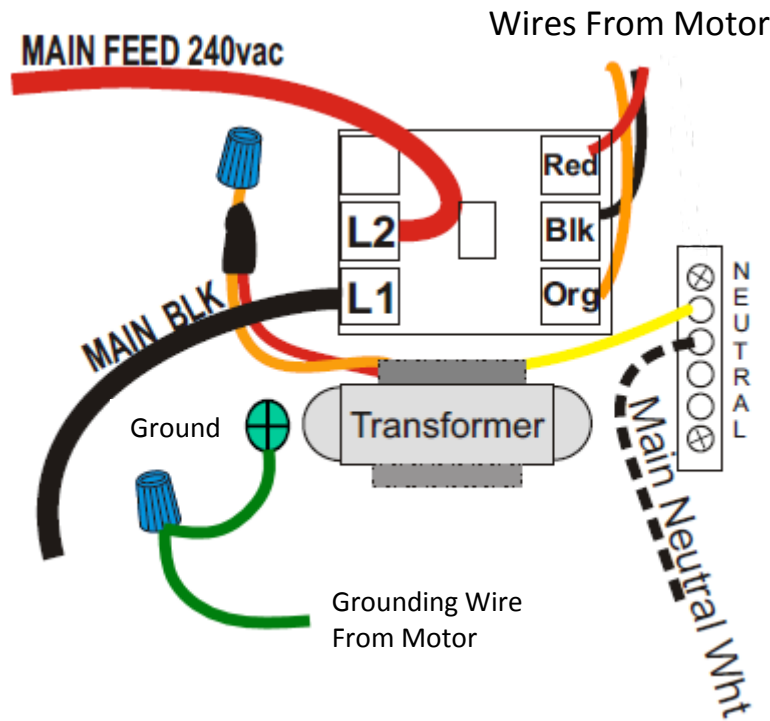


# WIRING INSTRUCTIONS FOR GEM REMOTES

## 230 VAC with Neutral

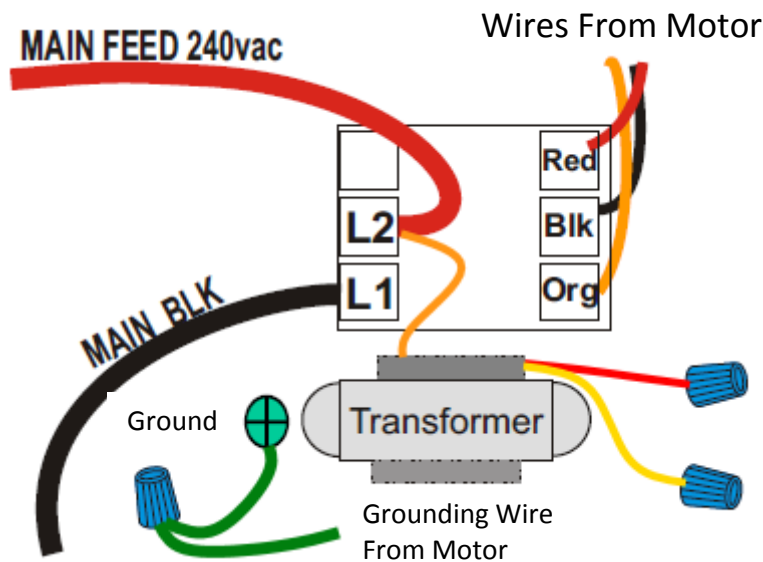


1. **Turn off power at the circuit breaker.** Confirm with a voltmeter that you have 0 volts. Overload protection (GFCI) is not provided inside the GEM unit. Confirm that you have the properly sized breaker and wire size by consulting the section “Boat Lift Electrical Requirements” in the lift installation manual.
2. Remove face card screws, slowly lift face card up to expose electrical connections. Be careful of the tail on the back side of the face card, and if necessary, unplug it by pulling on black plastic connector.
3. Wiring the Main Feed Connections: Connect the main feed BLACK to the Lug on the bottom left side of the connector marked L1. Connect the main feed RED to the connector marked L2. Connect the main NEUTRAL to the neutral bar on the bottom right side of the box.
4. Wiring Motor #1: Confirm that you have wired the motors for 230 VAC according to instructions in the section “Electrical: Motor Wiring” of the lift installation manual. Connect the wires from the motor to Lugs on the bottom right of the contactor. Connect the red wire to contact labeled “Red”, connect the black wire to the contact labeled “Blk” and connect the orange wire to the contact labeled “orange”. Finally, connect the green wire from the motor to the green wire from the GEM control’s ground. Green wires must only be used as a ground. **It is unsafe to use a ground as a neutral.**
5. Wiring Motor #2: There are bundled wires coming off the level switch labeled “Motor #2 leads”. Attach the motors red, black and orange wires color to color with these leads using wire nuts. Finally, connect the green wire from motor #2 to the green wire from the GEM control’s ground.
6. If the GEM part # on the left hand side of the door has an “A”, then your unit is an Auto-Stop. **Your unit will not work without the limit switch wires hooked up.** Install the limit switch on the motor #1 side of lift according to the instructions provided with limit switch. There are three wires inside the GEM control

that connect to the limit switch: The Blue connects with the upper limit switch, the Black connects with the “common” and the Red connects to the lower limit switch.

7. If necessary, re-connect the electronic tail to the face card (pin #1 goes on the left). Replace the face card and attach with screws.
8. Consult the GEM remotes installation instructions for more detail. Read the GEM remotes owner’s manual for operating instructions.

### 230 VAC No Neutral

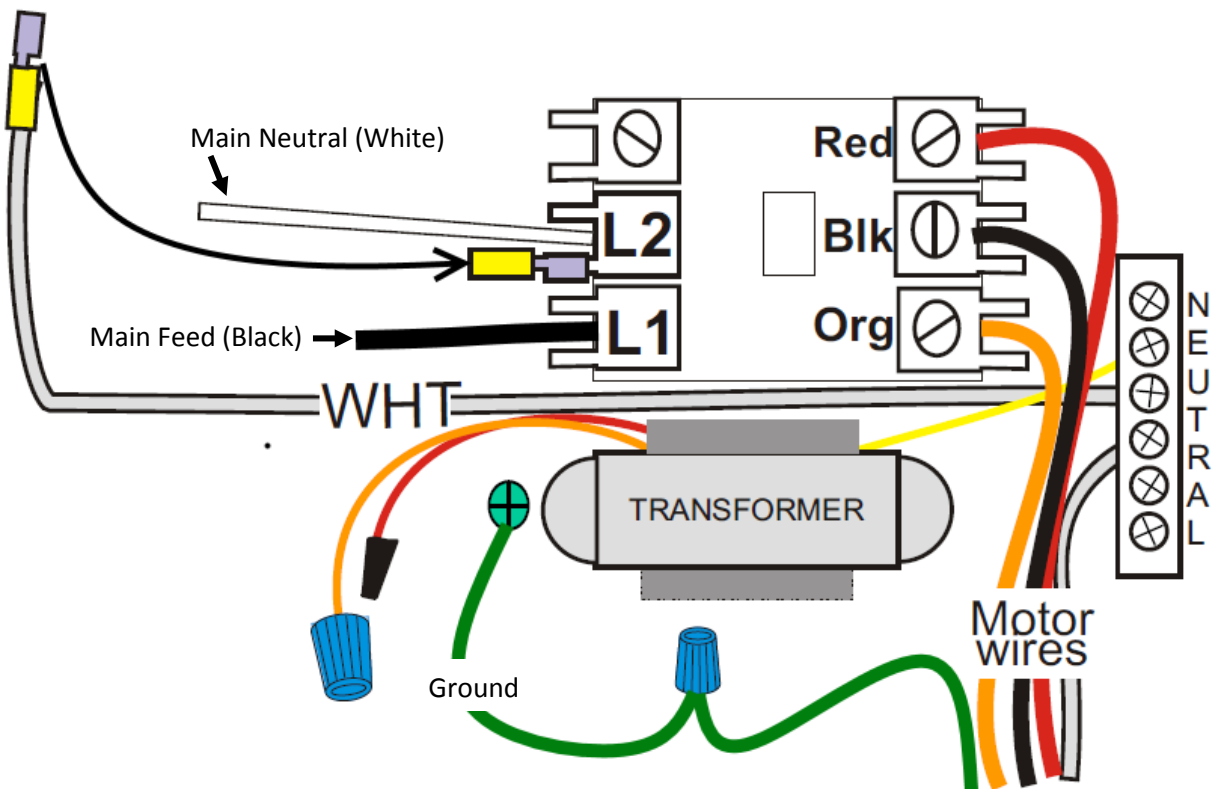


1. We recommend that you wire your GEM Remote at 230 VAC with a neutral. You may follow these instructions if you do not have a neutral.
2. **Turn off power at the circuit breaker.** Confirm with a voltmeter that you have 0 volts. Overload protection (GFCI) is not provided inside the GEM unit. Confirm that you have the properly sized breaker and wire size by consulting the section “Boat Lift Electrical Requirements” in the lift installation manual.
3. Remove face card screws, slowly lift face card up to expose electrical connections. Be careful of the tail on the back side of the face card, and if necessary, unplug it by pulling on black plastic connector.
4. Wiring the Main Feed Connections: Connect the main feed BLACK to the Lug on the bottom left side of the connector marked L1. Connect the main feed RED to the connector marked L2.
5. Rewiring the Transformer: There is a yellow wire connecting the transformer and neutral bar. Disconnect this yellow wire from the neutral bar and cap it with a wire nut. There are red and orange wire leads from the transformer that are taped together. Separate them and cap the red wire with a wire nut. Connect the orange wire lead from the transformer to the contact labeled “L2”.
6. Wiring Motor #1: Confirm that you have wired the motors for 230 VAC according to instructions in the section “Electrical: Motor Wiring” of the installation manual. Connect the wires from the motor to Lugs on the bottom right of the contactor. Connect the red wire to contact labeled “Red”, connect the black wire to the contact labeled “Blk” and connect the orange wire to the contact labeled “orange”. Finally, connect

the green wire from the motor to the green wire from the GEM control's ground. Green wires must only be used as a ground. **It is unsafe to use a ground as a neutral.**

7. **Wiring Motor #2:** There are bundled wires coming off the level switch labeled "Motor #2 leads". Attach the motors red, black and orange wires color to color with these leads using wire nuts. Finally, connect the green wire from motor #2 to the green wire from the GEM control's ground.
8. If the GEM part # on the left hand side of the door has an "A", then your unit is an Auto-Stop. **Your unit will not work without the limit switch wires hooked up.** Install the limit switch on the motor #1 side of lift according to the instructions provided with limit switch. There are three wires inside the GEM control that connect to the limit switch: The Blue connects with the upper limit switch, the Black connects with the "common" and the Red connects to the lower limit switch.
9. If necessary, re-connect the electronic tail to the face card (pin #1 goes on the left). Replace the face card and attach with screws.
10. Consult the GEM remotes installation instructions for more detail. Read the GEM remotes owner's manual for operating instructions.

### 120 VAC (2 wires + ground)



1. We recommend that you wire your GEM Remote at 230 VAC with a neutral. You may follow these instructions if you wish to wire your lift with 120 VAC. 120 VAC may only be used with  $\frac{3}{4}$  h.p. motors. **Do not use 120 VAC with 1 h.p. or larger motors.**

2. **Turn off power at the circuit breaker.** Confirm with a voltmeter that you have 0 volts. Overload protection (GFCI) is not provided inside the GEM unit. Confirm that you have the properly sized breaker and wire size by consulting the section “Boat Lift Electrical Requirements” of the lift installation manual.
3. Remove face card screws, slowly lift face card up to expose electrical connections. Be careful of the tail on the back side of the face card, and if necessary, unplug it by pulling on black plastic connector.
4. Wiring the Main Feed Connections: Connect the main feed BLACK to the Lug on the bottom left side of the connector marked L1. Connect the main neutral WHITE to the connector marked L2.
5. **Connect the Neutral bar to L2:** GEM has pre-wired a white wire to the neutral bar that has a yellow female terminal. Connect the terminal of this white wire to the open (lower) post on L2. Note: the motor white wires are powered from L2 via the neutral bar when wired for 120 VAC.
6. Wiring Motor #1: Confirm that you have wired the motors for 115 VAC according to instructions in the section “Electrical: Motor Wiring” of the lift installation manual. Connect the wires from the motor to Lugs on the bottom right of the contactor. Connect the red wire to contact labeled “Red”, connect the black wire to the contact labeled “Blk” and connect the orange wire to the contact labeled “orange”. Connect the white “neutral” wire from the motor to the neutral bar on the bottom right side of the box. Finally, connect the green wire from the motor to the green wire from the GEM control’s ground. Green wires must only be used as a ground. **It is unsafe to use a ground as a neutral.**
7. Wiring Motor #2: There are bundled wires coming off the level switch labeled “Motor #2 leads”. Attach the motors red, black and orange wires color to color with these leads using wire nuts. Connect the white “neutral” wire from the motor to the neutral bar on the bottom right side of the box. Finally, connect the green wire from motor #2 to the green wire from the GEM control’s ground.
8. If the GEM part # on the left hand side of the door has an “A”, then your unit is an Auto-Stop. **Your unit will not work without the limit switch wires hooked up.** Install the limit switch on the motor #1 side of lift according to the instructions provided with limit switch. There are three wires inside the GEM control that connect to the limit switch: The Blue connects with the upper limit switch, the Black connects with the “common” and the Red connects to the lower limit switch.
9. If necessary, re-connect the electronic tail to the face card (pin #1 goes on the left). Replace the face card and attach with screws.
10. Consult the GEM remotes installation instructions for more detail. Read the GEM remotes owner’s manual for operating instructions.