#### **Specifications**

| Transformer          | 600W   |
|----------------------|--------|
| 120V Primary Breaker | 8A     |
| 240V Primary Breaker | 4A     |
| Secondary Breaker    | 20A    |
| Motor Voltage        | 26-32V |

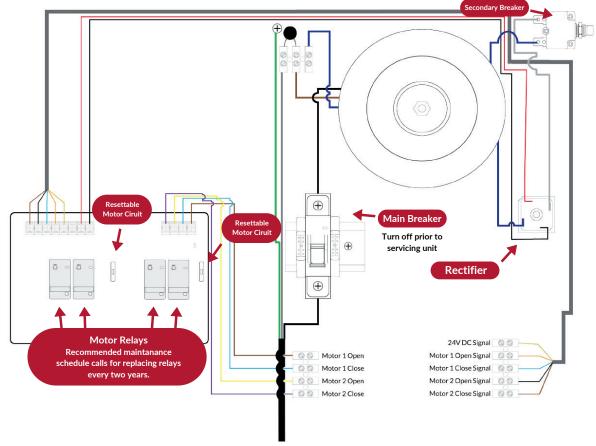


All electrical connections must be made by a qualified, licensed electrician. All connections must be made in accordance with all state and local codes. The inside of the box housing the transformer has high voltage which can be dangerous.

### **Troubleshooting**

None of my motors are running. Confirm presence of 26-32V DC at the relay board terminals labeled -24V+" (NOT the terminals labeled ("+24V"). If this voltage is not present, it is likely that the rectifier is damaged.

One of my motors is not running, but the others are fine. (1) Check the circuit breaker associated with the non-operable motor. (2) Replace BOTH relays associated with the motor with TWO relays from a motor channel that works. (3) Check DC output voltage on motor terminals; if present, look for a wiring or motor problem.







# 42-ECO1240

Two Motor Interface Box

# **Quick Start Guide**

Scan the OR Code to visit our Knowledge Center, which features the full instruction manual and other resources.

#### **Warranty Registration:**

advancingalternatives.com/register



Visit Advancing Alternatives' YouTube **Channel to Access Video Tutorials** 



#### **IMPORTANT**

For detailed instructions and technical support, visit advancingalternatives.com/knowledge-center

### **Safety Information:**



SHOCK HAZARD Electric shock can kill. Touching live electrical parts can cause fatal shocks or severe burns.



**WARNING** All electrical connections must be made by a qualified, licensed electrician. All connections must be made in accordance with all state and local codes.





42-ECO1240

Cable Glands (x3)



5A Breakers

 $(x2)^*$ 

Mounting

Brackets (x4)

Plug-In Relays

(x4)



Mounting screws (x4)

Images not to scale

#### **Tools & Materials Required:**

- Screwdriver (#1)
- Wire crimper
- Drill with 7/8" bit (if using provided cable glands)
- Motor wire
  - than 100' connections
  - o 12 AWG for connections over 100'

14 AWG for less

- Signal Wire
  - o 18-22 AWG

\*Breakers Required for Motors

LVM-60: 3A breaker LVM-100: 5A breaker LVM-200: 10A breaker

LVM-180: 7.5A breaker

**PLEASE NOTE:** Illustrations for example purposes only. Actual wiring and layout may vary. Read the 42-ECO1240 instruction manual for full details.

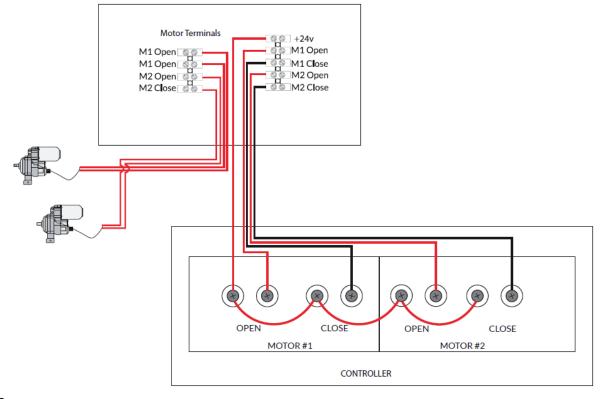
#### CAUTION: Equipment Damage

Do not expose the 42-ECO1240 to weather. Locate in a dry, protected area to prevent equipment damage.

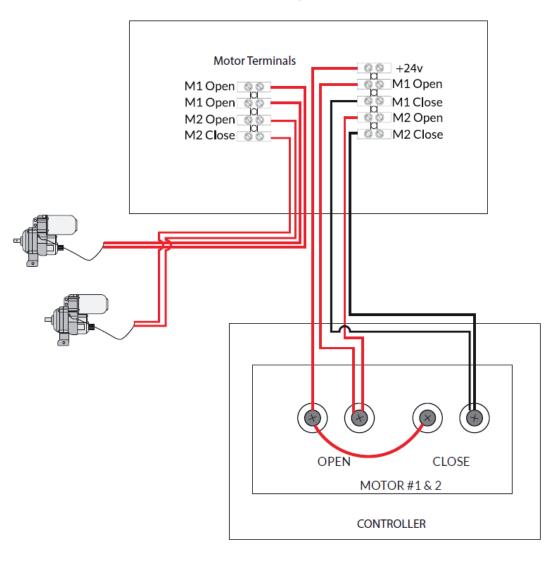
## **Installation Overview**

- Connect the "+24V" terminal (in the interface box) to one terminal of the dry relay contacts designated for "Open" (in the controller). Connect the "Open" terminal (in the interface box) to the other dry contact terminal (in the controller).
- Repeat for "Close." (Note that only one +24V wire needs to be run, it can be "jumpered" inside the controller to other relay contact terminals as needed.)
- Repeat for each motor to be controlled.

# **Two Motors Using Two Setpoints**



# **Two Motors Using One Setpoint**



**NOTE:** The rectifier DC output is unfiltered DC voltage. Some meters may give slightly inaccurate readings with this type of voltage. Furthermore, abnormally high DC voltages may be seen with no load on the rectifier output. The most accurate DC voltage readings can be obtained with at least one relay engaged. This can be accomplished by setting a channel to "Manual" and setting the motor control to "Open' or "Close".

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