Specifications

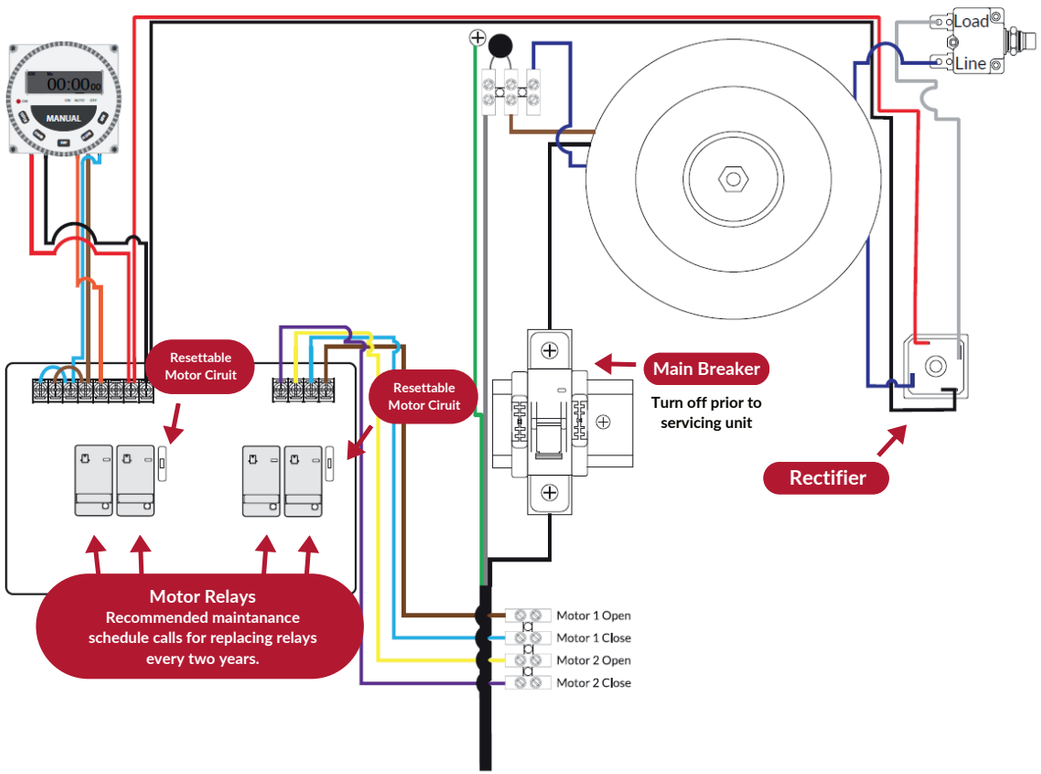
Transformer	600W
120V Primary Breaker	8A
240V Primary Breaker	4A
Secondary Breaker	20A
Motor Voltage	26-32V

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.

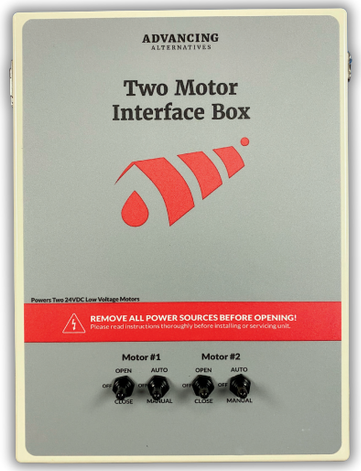


ADVANCING ALTERNATIVES

42-ECO1300

Two Motor Interface Box

Quick Start Guide



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

Warranty Registration:
advancingalternatives.com/register

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.

What's Included:

42-ECO1300

Cable Glands (x3)

5A Breakers (x4)

Plug-In Relays (x4)

Mounting Brackets (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
  - 14 AWG for less than 100' connections
  - 12 AWG for connections over 100'

***Breakers Required for Motors**

LVM-60: 3A breaker
LVM-100: 5A breaker
LVM-180: 7.5A breaker
LVM-200: 10A breaker

PLEASE NOTE: Illustrations for example purposes only. Actual wiring and layout may vary. Read the 42-ECO1300 instruction manual for full details.

CAUTION: Equipment Damage
Do not expose the 42-ECO1300 to weather. Locate in a dry, protected area to prevent equipment damage.

Circuit Breakers

Circuit protection includes four circuit breakers, shown in the illustration on the back page. The two individual motor breakers are on the relay circuit board look like automotive fuses with a reset button. When the breaker trips the button pops out; pressing the button resets the breaker. The normal breaker requirements for the motor breakers are 3A for 60 Nm motors, 5A for 100 Nm motors, 7.5A for 180 Nm motors, and 10A for 200 Nm motors. The primary AC circuit breaker is 10A, and there is an additional secondary breaker of 20A in the transformer secondary circuit that is mounted in the cabinet and can be reset by pushing the button on the outside of the cabinet.

Relays

There are four motor relays. Each pair of relays controls one of the motors. BOTH relays in a pair must be functioning properly for the motor to operate. When a relay is activated, a green light illuminates. The relays plug into a socket and can be removed. When troubleshooting a motor problem, substitute BOTH relays associated with the affected motor with known good relays (all four relays are identical so the relays from the operational motor can be substituted). The “Motor 1” and “Motor 2” terminals are labeled on the PC board. Relays degrade over time especially under heavy motor loads, and it is recommended to replace relays with new ones every two years.

Timer Settings

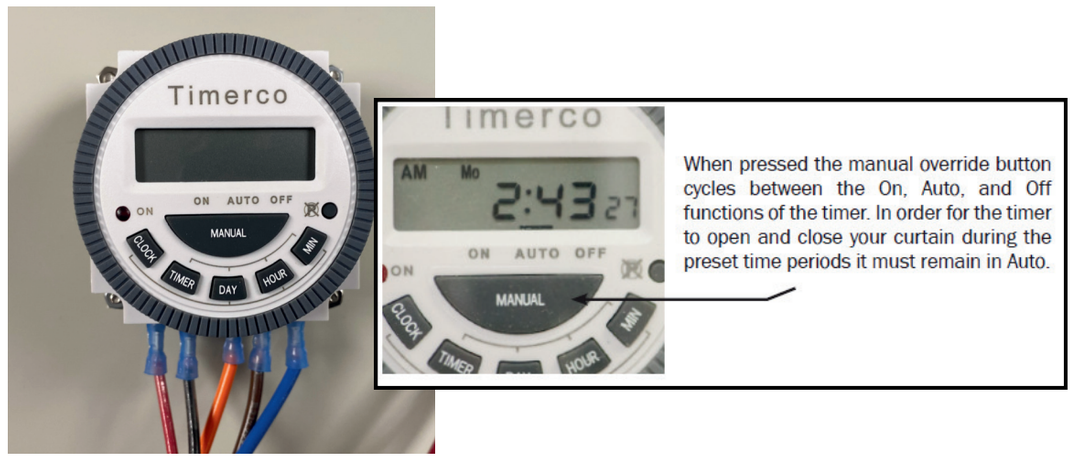
The timer allows up to eight open/close cycles per day. To allow the timer to control the curtains, set the front panel switches of the controller to “Auto.”

1. The “MANUAL” button will cycle the timer to “ON”, “AUTO” and “OFF”, as indicated by the black line indicator (shown here indicating “AUTO”). “ON” and “OFF” correspond to opening and closing the curtains, and “AUTO” is the setting that allows the timer to operate the curtains based on the time settings.

2.To set the day or time, press and hold the “CLOCK” button. Then select the DAY, HOUR, OR MINUTE button for the correct settings.

3.To set periods to open and close the same time each day, press the TIMER button and then the DAY button. All days of the week will be highlighted at the top of the screen. To set individual times for each day, hit the DAY button again and cycle to the day of the week to be set.

4.To program the times, press the TIMER button to select period 1, On time. Use the HOUR and MINUTE buttons to set the desired On time. Then press the TIMER button again to set the OFF time using the HOUR and MINUTE buttons followed by the TIMER button. Repeat procedure for periods 2-8.When enough periods are set, hit the CLOCK button and the timer is set to open and close the curtains at the set times.



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”.