#### OELO RETROFIT CONTROLLER MANUAL

## Making the upgrade ...

oelo

# RETROFIT CONTROLLER INSTALLATION

# THE OELO RETROFIT

Congratulations on your Oelo Controller Retrofit Kit purchase. This manual provides step-by-step instructions to help you update your controller to Oelo's latest technology.

- Your new controller has the ability to power up to **300 lights** from a single control box (or more, if paired with an optional boost box)!
- Plus, your controller has **six (6!!) Individually controllable signal outputs**, which allows you to install six different zones from one controller for creative installs, like separate out-and-down sections and front and rear zones!
- Last but not least, the new controller works with the new Oelo Evolution App!

COMPONENT REFERENCE	4
OLD CONTROL BOARD REMOVAL	5
NEW CONTROL BOARD INSTALLATION	6-9
THE FINISHING TOUCHES	10











Below are key retrofit components you may want to familiarize yourself with before installing.

#### Current Control Unit





Ground Wire



#### **Existing Components**

**CURRENT CONTROL BOX:** Your current Control Box will be used in the retrofit. (The new Control Board will replace your current Control Board within this box.)

**EXISTING CONTROL BOARD SCREWS:** The existing Control Board Screws, which hold the current Control Board / Metal Plate in the box, will be re-used to mount the new Control Board / Metal Plate.

**EXISTING OUTLET PLATE:** The existing Outlet Plate will be removed to access Power Supply wiring, then will be re-installed upon completion.

**WIRE, LIGHTS + CHANNEL:** The new Controller plugs directly into your existing wire, light and channel runs. (You can also decide to expand your system to add additional zones).

#### **Retrofit Components**

**NEW CONTROL BOARD:** The new Control Board is mounted to a metal plate (which screws into the Control Box after the old board has been removed).

**NEW LPV-20-12 POWER SUPPLY:** The new Power Supply is pre-connected to the new Control Unit Board and will be inserted into the existing Control Box with supplied double-sided 3M tape.

**NEW ANTENNA:** The Retrofit Kit is equipped with a high-powered antenna to help your Controller communicate with your WiFi for ultimate cloud-based control.

### Installation Tools

#2 PHILLIPS SCREWDRIVER: Needed to remove Control Box metal plates.

1/8TH FLATHEAD SCREWDRIVER (OR SMALLER): Needed to disconnect wires.

# REMOVING THE OLD CONTROL BOARD



#### **Disconnect Power**

STEP 1: Disconnect power to the current Control Box and any Booster Boxes connected to the unit.



wiring is complete. Wiring while the system is live will void warranty.

#### STEP 2



#### Label Your PCB Wires

#### **OPTIONAL STEP: Label the wires**

connected to the Printed Control Board (PCB). (Note: Each wire is already labeled with a small imprinted descriptor; however, this step may help you more easily re-wire your new Control Board.)

#### STEP 3



#### **Disconnect PCB Wires**

STEP 3: Use a 1/8th Flathead Screwdriver to **disconnect the Wires** connected from the PCB.

# INSTALLING THE NEW CONTROL BOARD

#### STEP 4





#### Remove the Plates

### **STEP 4:** Using a Phillips Screwdriver, **remove the metal plates.**

- A . Remove the (2) screws holding the Control Plate.
- Remove the (2) screws holding the Outlet Plate. (This provide access to the Power Cord wires, which are used to wire the new Power Supply in Step 5 and 8.)
- C. Keep screws for later use.

#### STEP 5





#### Detach Power Supply Wires

### STEP 5: Disconnect the Blue and Brown wires from the LPV-20-5.

- A. Flip up the Wago of the **Blue** Wire and remove the wire.
- B. Flip up the Wago of the **Brown** Wire and remove the wire.
- C. Pull the **Blue** and **Brown** wires out of the Outlet Relief; leave floating freely until Step 7.

#### STEP 6







#### Remove the Power Supply

#### STEP 6: Remove the current LPV-20-5 Power Supply.

- A. Place your hand on the Control Box metal board, firmly holding it down.
- B. Grab the Red and Black wires at the base of power supply and steadily pull the power supply off of the plate.
- C. If the back of the power supply stays attached to the plate, use a Phillips Screwdriver to wedge the tip underneath the backing and pry the backing off.
- D. Your controller will look like this after Step 6.







#### Install New Power Supply

#### STEP 7: Install the new LPV-20-12 Power Supply.

- Remove the red backing from the double-sided tape on the new LPV-20-12 Power Supply.
- B. Place the LPV-20-12 on the Power Supply Plate with the Blue and Brown wires facing toward the Power Outlet.
- C. Firmly apply pressure to the Power Supply for 10 seconds.
- D. Feed the **Blue** and **Brown** wires into the Outlet Relief.

#### STEP 8





#### Wire the New Power Supply

#### STEP 8: Insert the LPV-20-12's Blue and Brown wires into the designated Wagos below.

- A. Insert the **Blue** Wire into the Wago with the **White** Wires; flip closed.
- B. Insert the Brown Wire into the Wago with the Black Wires;
  flip closed.
- C. Test the connection by gently pulling on the wires.

#### STEP 9

New Control Board



#### Attach the Above Plates

### STEP 9: Attach the plates (as described below) using a Phillips Screwdriver:

- A. Use 2 of the saved screws to secure the new Control Plate.
- B. Use 2 of the saved screws to secure the existing Outlet Plate.

### INSTALLING THE NEW CONTROL BOARD CONTINUED





#### Insert the Ground Wire

STEP 10: Insert the Ground Wire from the Power Supply into the Wago attached to the Control Board GND port.

- A. Open the empty slot on the Wago Connector.
- B. Insert the GND Wire into the slot.
- C. Snap the Wago closed.
- D. Gently tug on the wire to confirm a secure connection.



STEP 11

#### Insert the S Signal Wire(s)

STEP 11: Insert the Signal Wire(s) into the into the ports labeled 1–6 on the Control Board.

- A. Strip the S Wire(s) to the length of the port, approximately 1/2". If it is too short, the wire will not stay connected.
- B. Press and hold the button on the S Port #1.
- C. Insert the S Wire into the S Port #1.Do not have exposed wire showing.
- D. Release the button on the S Port #1.
- E. Gently tug on the wire to confirm a secure connection.
- F. If you have more than one Signal
  Wire (or want to add additional lights / zones) use the next numerical S Port.







#### FINAL WIRING RESULTS





Zone 1 Signal Output Zone 2 Signal Output Zone 3 Signal Output Zone 4 Signal Output Zone 5 Signal Output Zone 6 Signal Output

Zone Outputs

# THE FINAL TOUCHES



#### Attach Antenna

### STEP 12: Attach the Antenna to the Control Box.

- A. First, make sure the Antenna connection is secure by pressing on the antenna, where it connects to the Controller.
- B. Clean the inside corner of the box with alcohol to secure the Antenna Receiver.
- C. Remove the Antenna Receiver's tape backing, then press and hold onto the box for 5 seconds.

#### Fasten New Sticker to Door

STEP 13: Fasten the supplied sticker to the inside door panel over the old label for updated instructions.

#### Apply the Finals Touches

#### STEP 14: The final steps!

- A. Remove your optional wire labels.
- B. Plug in the Control Box and Booster Boxes into power.
- C. Congrats! Your retrofit is complete ...
- D. Now, it's time to set up your new controller and Oelo Evolution App: <u>oelo.com/resources/manuals</u>

Tag us in your photos and videos please!



If you have issues with your retrofit install, please contact our troubleshooting desk.

#### 970-212-3676



oelo.com | 3842 Redman Dr., Fort Collins, CO | 970.212.3670

See an Oelo representative or authorized installer for further details. All information in this brochure is the latest available at the time of publication. Printed in the USA. 0324 ©2024 Oelo