DuraBrite *Gen2 Nano* is the go-to choice for anyone seeking a powerful deck light that does it all. Despite its compact size, this small but mighty unit delivers an incredible 10,000 lumens, making it perfect for lighting up your deck edge to edge, raising bait like no other, and enabling you to see the lines clearly to make that dream catch. Whether you are fishing through the night or enjoying time on board, the *Gen2 Nano* provides the illumination you need with precision and reliability.

What sets the *Gen2 Nano* apart is its seamless integration with ***DuraBrite***'s wireless keyfob, transforming it into the ideal courtesy light setup. Imagine stepping onto your boat with the deck already brightly lit – just the kind of welcome you need when heading out or how about returning after dark – with the deck well-lit, you can safely get ashore before switching the light off remotely, ensuring every step is secure.

But that's not all. The *Gen2 Nano* doubles as one of the most powerful SOS lights available on the water. Its distress signal is so intense that it's visible from the edge of the sea's curvature – up to 3 miles away – guaranteeing you'll be seen in an emergency when every second counts. With the *Gen2 Nano* on your vessel, you are equipped with not just a light but a beacon of safety and confidence for every voyage.

DuraBrite – Brightness You Can Trust. Safety You Can Rely On.

reddot winner lighting design — International Design Award Winner

10 thousand lumens — Class Defining Optical Output

reverse polarity protection — Reverse Polarity Protection

over temp protection — Expert Thermal Management

Wireless Control Ready

SOS far field — Lifesaving Distressed Signal

US Patent 9,648,750

Extreme Weather Resistance

Designed & Assembled In USA

Optical & Electrical Characteristics (All ratings are at 25°C unless otherwise specified)

LED Color, CCT	Typical = 5700K (Daylight white)
Brightness	10,000 lm (Raw)
Beam Angle	80 deg (Flood)
Operating Voltage	Auto detect 12VDC, 24VDC, 32VDC
Current Draw	Approx. 3.0A at 24VDC Approx. 6.5A at 12VDC
Total Power Consumption	72W

Mechanical Characteristics

Water Resistance	IP68 (submerged to 4.5 ft water for 30min)
Temperature Range	-40°C to 55°C
Vibration Resistance	MIL-STD-202G (TM201A 4 Cycles)

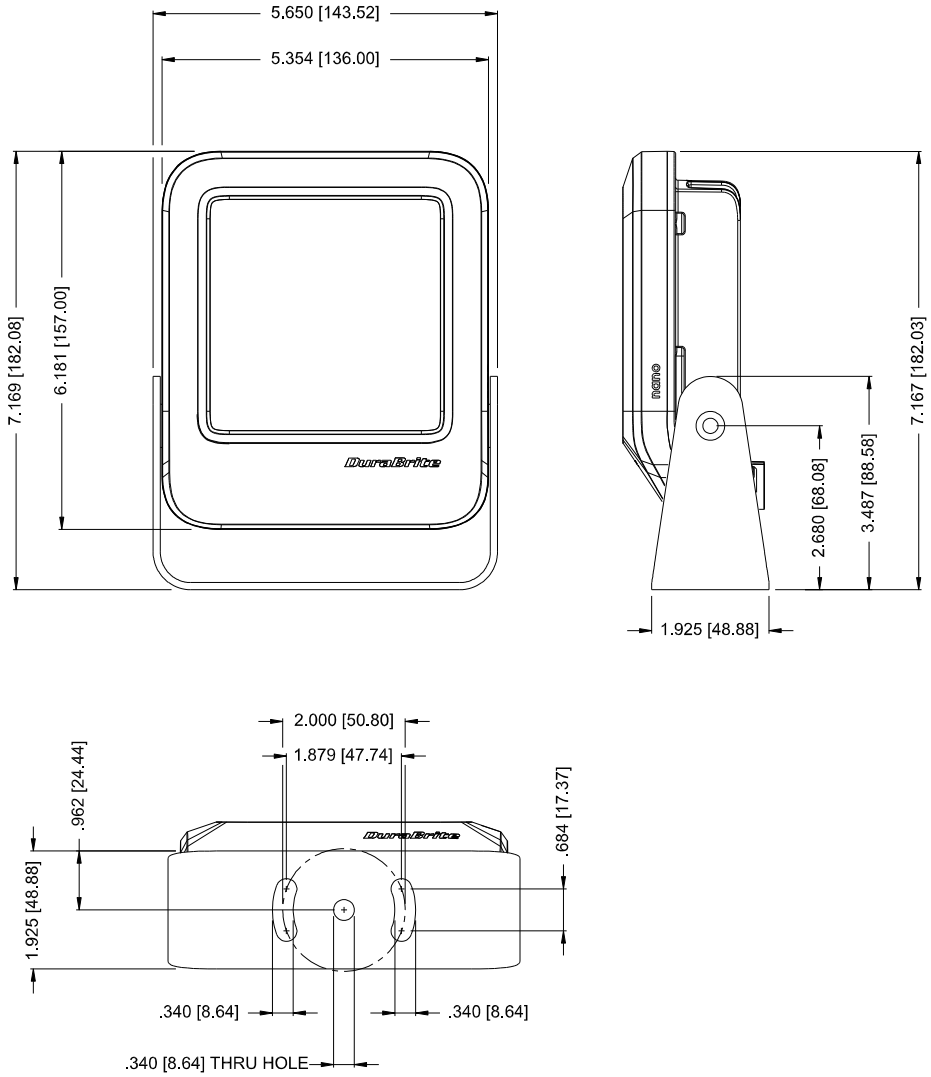
Warranty Terms

We stand behind our products. This product is covered by DuraBrite's 10 Year Limited Warranty against material and manufacturing defects. However, it does not cover application and conditions that are outside of the product design parameters, abuse, and wear-and-tear. Further details can be found on our website at: https//durabritelights.com/pages/warranty

Wiring Instruction:

See 2-Channel Control Box for Gen2 Mini/Nano Installation Guide

Mechanical Dimensions & Weight:

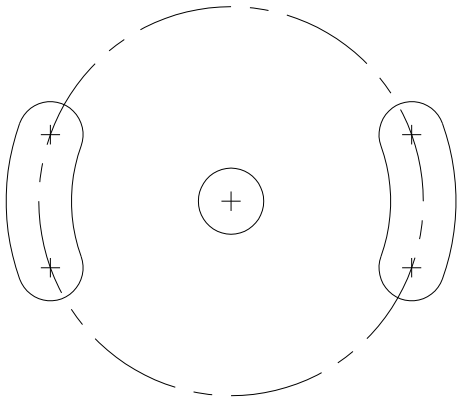


Weight: 2.1 pounds

(w/ marine grade aluminum bracket)

MOUNTING BRACKET HOLE TEMPLATE (TO SCALE)

Note: Use spring washers to resist vibration.



2-Channel Control Box for Gen2 Mini/Nano
Installation Guide

Rev -

DuraBrite 2-Channel Control Box: The Brain of Your Marine Lighting Solution

Unlock the full potential of your marine lighting setup with our *2-Channel Control Box* — the intelligent control center designed by our in-house power electronics experts. Leveraging our extensive aerospace and defense electronics expertise, this control box delivers an advanced, reliable, and highly efficient lighting solution for your marine environment. More than just a connection point for your lights, the *DuraBrite Control Box* simplifies power management while ensuring seamless control of your lighting system, bringing both safety and convenience to your time on the water.

Power Management & Control – Compact & Streamlined

Designed for maximum efficiency, the *DuraBrite Control Box* is remarkably compact, fitting easily in the palm of your hand. Despite its small size, this unit acts as a centralized hub for your lighting system, routing input power through its solid-state electronic breaker with current-limiting capabilities. This innovative design eliminates the need for traditional breaker panels and external relays, while built-in electronic relays provide overload protection as the control box powers up to two DuraBrite lights.

With clearly marked screw terminals, installation is straightforward. Simply connect your rocker switches, signal wires, and power wires, and you're all set.

Effortless Command with the Wireless Keyfob

Pair the *Control Box* with the *DuraBrite Remote Keyfob* for full remote control over your lighting system. A single keyfob can command up to two lights, offering on/off functionality, SOS signaling, and a courtesy mode to guide you safely on and off your boat. With a range of up to 300 feet, you can illuminate your path or deter unwanted visitors with the push of a button.

Engineered for Seamless Integration

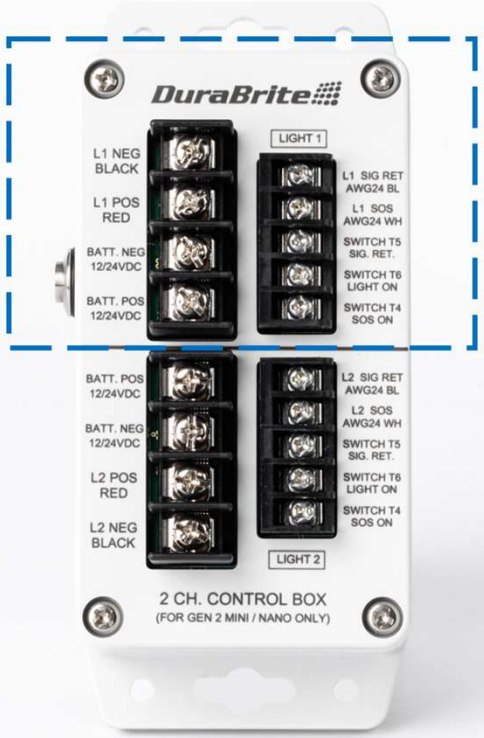
The *DuraBrite Control Box* is more than just a connection point for lights — it's a complete, integrated lighting solution. Every wire, from power inputs to signal returns, is organized through the box for a clean, efficient setup. Its compact design and straightforward screw terminal configuration make installation simple, even in tight or confined spaces.

Important Installation Notes:

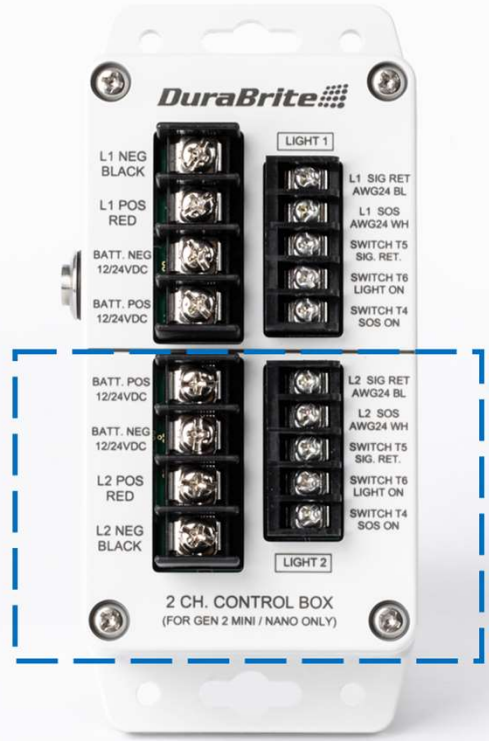
The *Control Box* is not waterproof due to its convenient screw terminal architecture. It should be installed in a protected area, such as under the dash, in the engine room, an IP rated box, or any location that is sheltered from the elements.

Control Box Terminals Layout

Light #1
Power & Controls

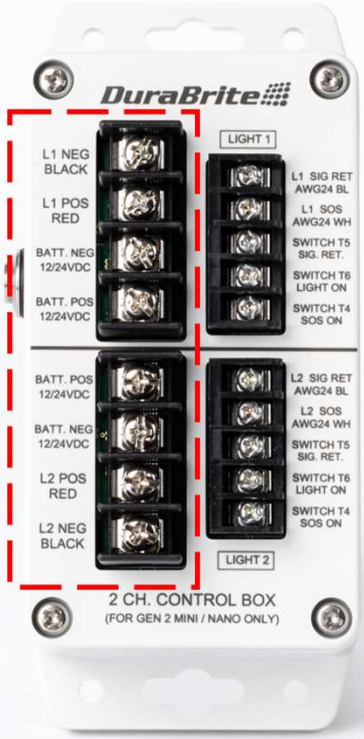


Light #2
Power & Controls



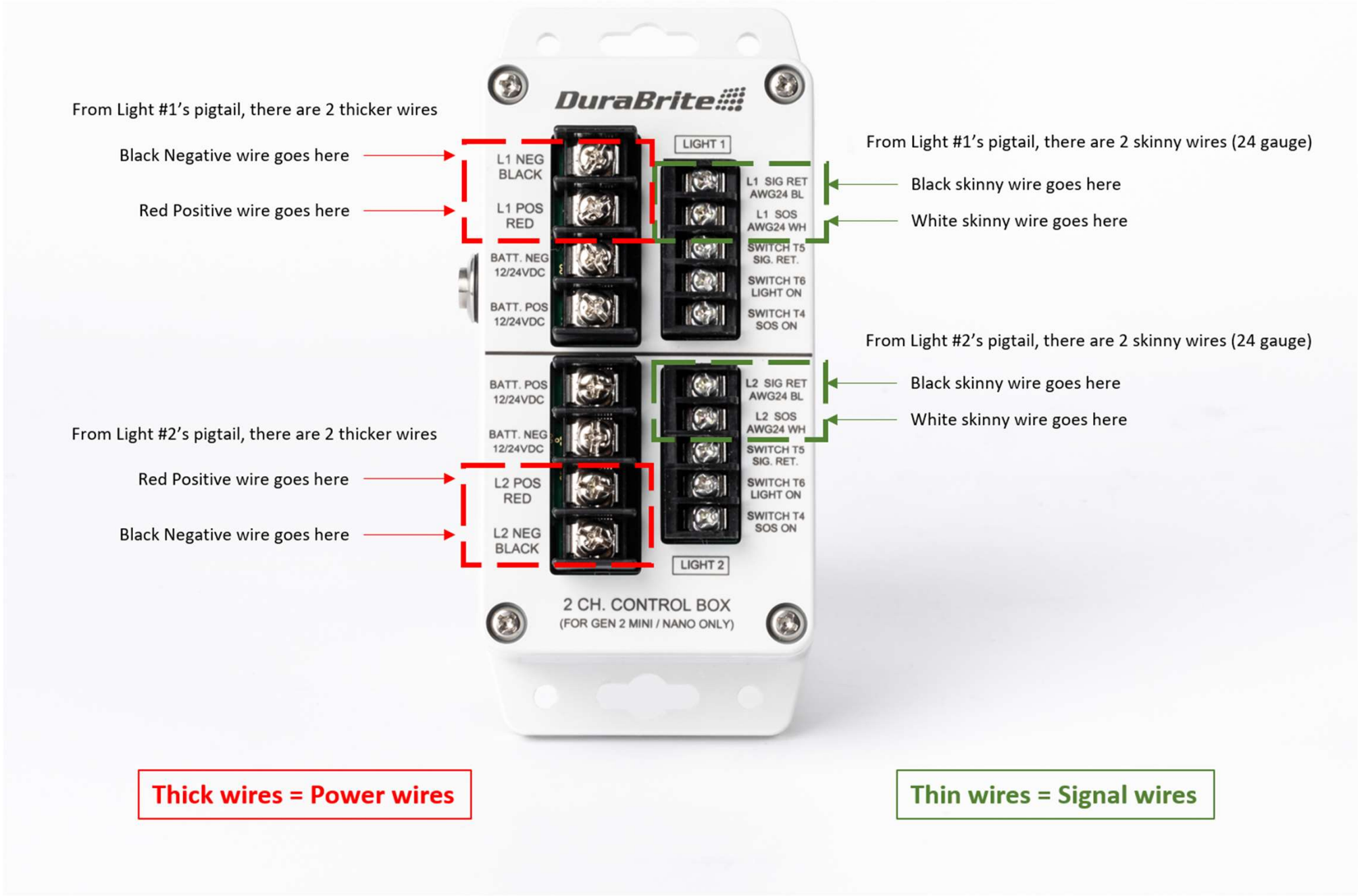
Control Box Terminals Layout

Power Section



Control Section

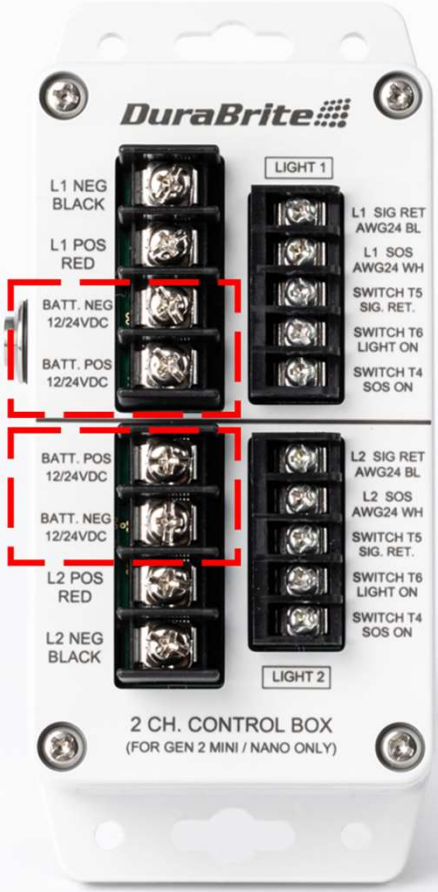
Wiring Configuration from the Light's Pigtail Cable



Input Power Explained

Input Power for Light #1

Input Power for Light #2



Notes

- Input power for L1 and L2 can be from the same power source as long as it has sufficient wattage to support both lights.
- Power source shall be either 12VDC or 24VDC.
- There are 2 ways to wire if you need to power 2 lights:
    a. See illustration X
    b. See illustration Y

Input Power Explained

Illustration X

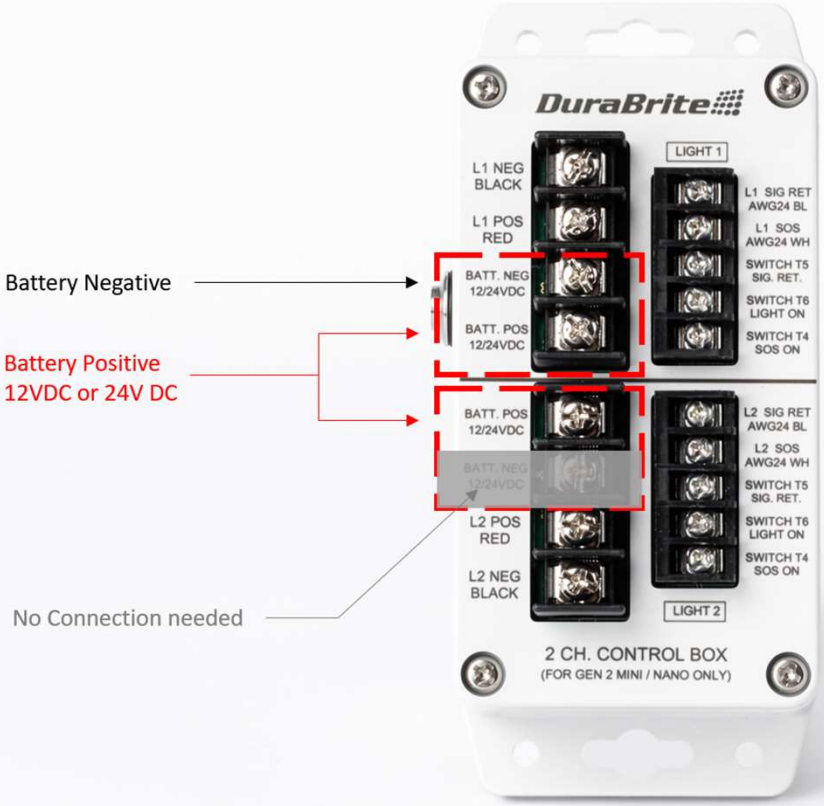
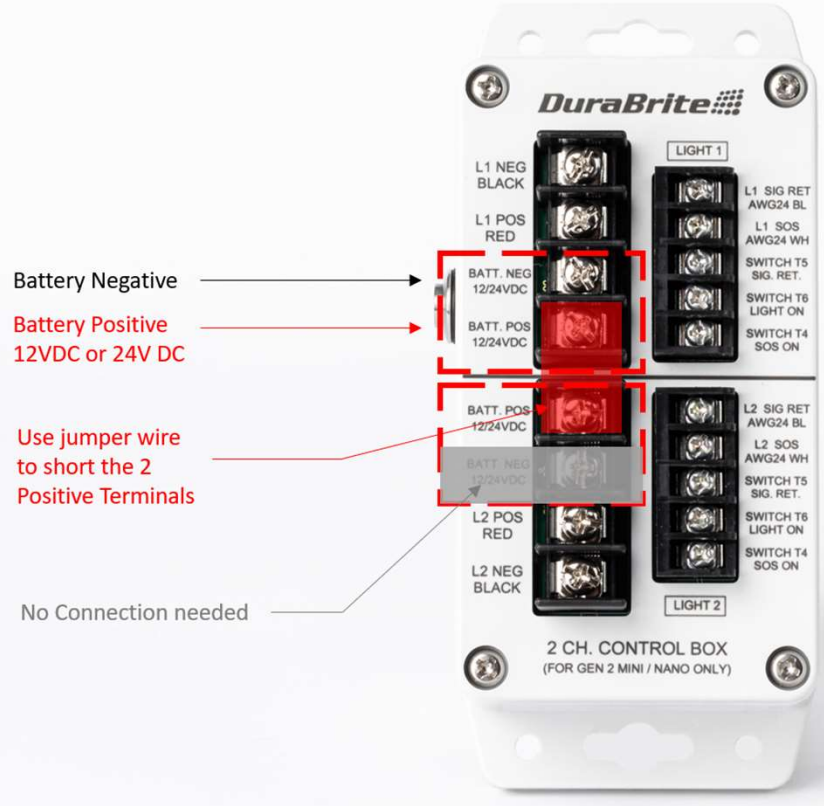
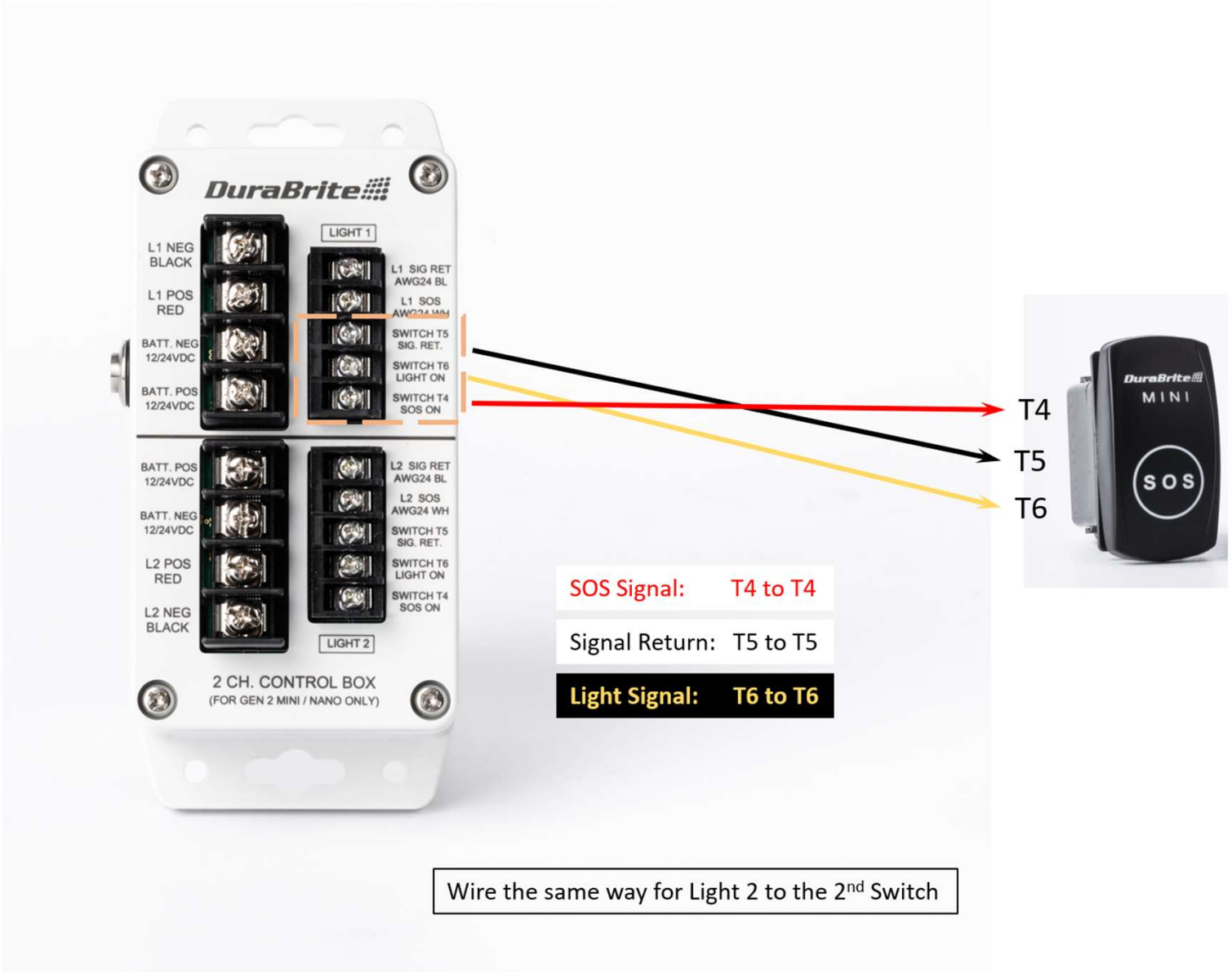


Illustration Y



Connection to Rocker Switch



Programming the Key Fob

Key Fob

Key fob Programming Button

Programming Status LED Indicator

How to Program a Key Fob

1. Power up the Control Box by connecting input power wires accordingly
2. Clear Program Memory from Control Box
   a) Press and hold the Programming Button for about 10s, the LED indicator will light up.
   b) Release the Button and the LED indicator will blink quickly. Now all memory is cleared.
3. Program a New Key Fob
   a) Press the Programming Button once, the LED indicator will light up.
   b) Press and hold L1 on the Key Fob immediately for 2s.
   c) Now the New Key is paired with the Control Box.

Repeat Step 3 to program more than 1 Key Fob.

Extending the Wireless Range to 500ft

Long Range Antenna

What is the SMA Female Jack for?

The Control Box is equipped with an RF receiver board. When paired with a Long Range Antenna (supplied in the Kit), the wireless control range can be extended up to 500 feet. The antenna includes a 20-foot coaxial cable, which comes with a pre-installed SMA male connector. This connector is designed to be screwed onto the corresponding SMA female jack for the signal boost.

How to Install the Long Range Antenna

The Control Box is typically installed in the engine room or under the dash, which can obstruct RF signal reception. To ensure optimal performance, we provide a water resistant omnidirectional Long Range Antenna designed to be mounted at a high point outside the cabin for improved signal reception.