



DuraBrite Gen2 Mini elevates everything you loved about the *Original Mini*, offering the same sleek design and compact form while delivering a remarkable performance boost.

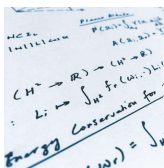
Powered by advanced LED technology and proprietary control and thermal management circuitry developed in New York, the *Gen2 Mini* delivers a commanding 25,000 lumens with just 9A of draw at 24VDC, making it a versatile and reliable solution for recreational

boats, sportfishers, and commercial vessels alike.

Its aerodynamic design not only looks sharp but integrates seamlessly with modern center consoles as a forward-facing light to navigate tight harbors, spot buoys, or avoid obstacles. It is also ideal for sportfishers when mounted high to illuminate the entire deck and intense fish battles, enhancing both style and functionality. Known for its legendary bait-raising ability, the *Gen2 Mini* gives you the edge in attracting fish and dominating the action on the water.

For ultimate beam control and to eliminate bow glare entirely, pair it with our *Mini Glare Control Shield* for a precise, glare-free experience. As the flagship of this compact class, the *Gen2 Mini* is the perfect upgrade for those who've trusted the *Mini* for years, seamlessly integrating with other **DuraBrite** products on your vessel.

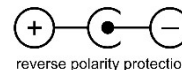
Gen2 Mini – Engineered for Brilliance. Built for Adventure.



Light Shaping Technology

25
thousand lumens

Class Defining Optical Output



reverse polarity protection

Reverse Polarity Protection



over temp protection

Expert Thermal Management



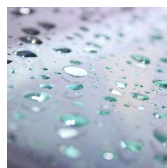
Wireless Control Ready



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	25,000 lm (Raw)
Beam Angle	25 deg (Spot) 76 deg (Flood)
Operating Voltage	Auto detect 12VDC, 24VDC, 32VDC
Current Draw	Approx. 9.4A at 24VDC Approx. 19.8A at 12VDC
Total Power Consumption	225W

Mechanical Qualifications

Water Resistance	IP68 <small>(submerged to 4.5 ft water for 30min)</small>
Moisture Resistance	65°C / 95% RH Mil-Std-883 TM 1004.7
Salt Spray / Corrosion Resistance	240 hrs @ 35°C ASTM B 117-09 /ASTM D1654-08
Temperature Range	-40°C to 55°C Mil-Std-883 TM1010.8
Mechanical Shock	30G, 11ms Half Sine, 3-axes (+ve/-ve) Mil-Std-202 TM213B
Vibration Resistance	100,000 cycles, 3-axes ANSI C136.31

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>

Special Note on Bracket Installation & Corrosion Prevention

The bracket that comes with the Mini is laser cut with Marine Grade 316 Stainless Steel. It is further electropolished to achieve superior corrosion resistance. However, it does not mean it is corrosion proof. It can still rust if there is a buildup of salt on its surface over a prolonged period of time. It is highly recommended to coat it with DuraBrite's **Ceramax Ultra Coat** (available to purchase on our website) to completely seal it off from sea water and atmospheric air.

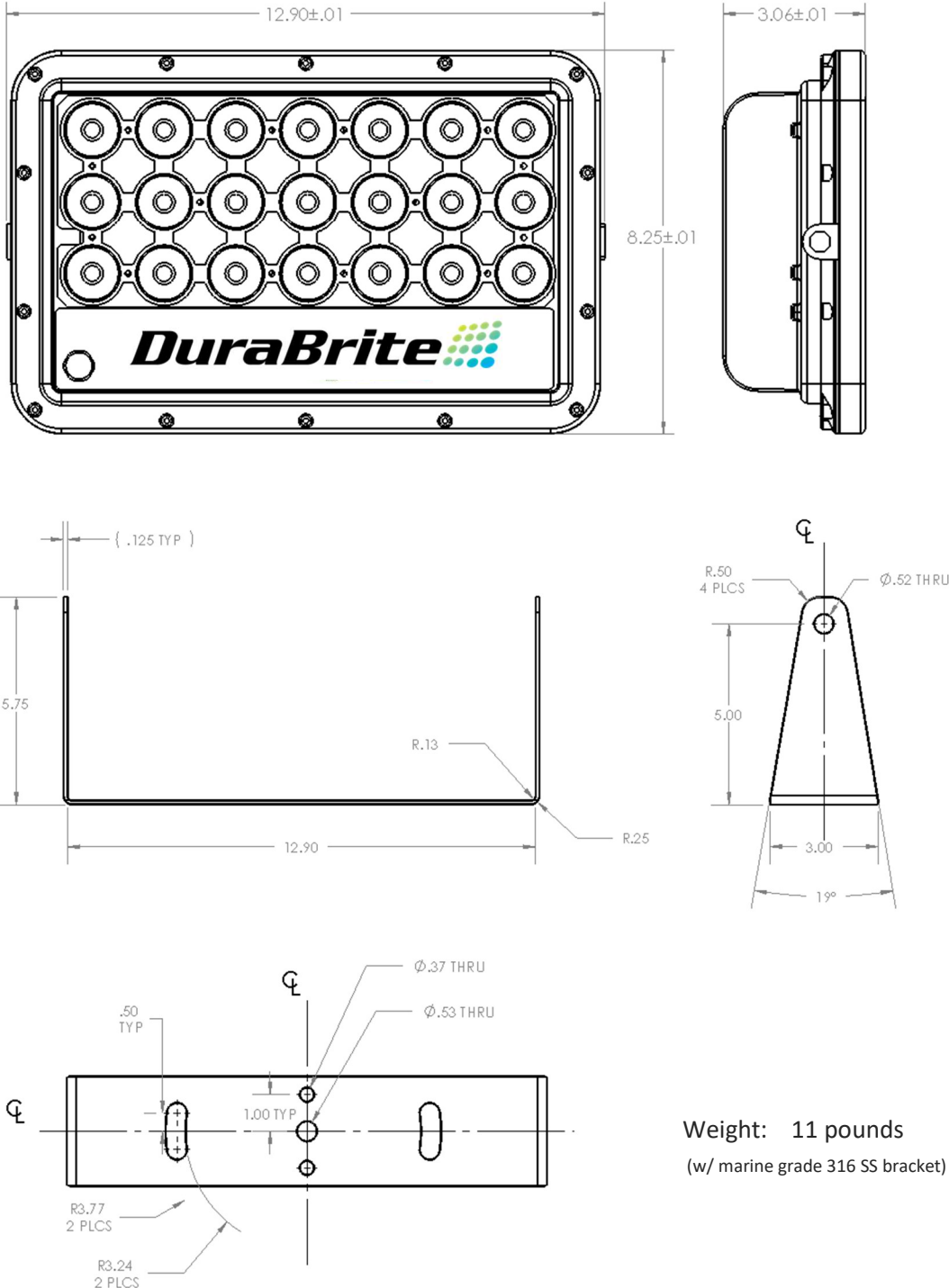
After coating and proper curing, care should be taken to prevent scratching at the mounting locations (e.g. by means of Nylon washers) which might locally break through the ceramic coating barrier, allowing the elements to interact with the metal.

Also, you will notice a set of Nylon washers that are installed in between the light and the bracket (one on each side). Make sure you keep them in place to minimize interaction and/or scratching between the two metals as you tighten and adjust the angle. The light body is made of cast aluminum and coated with a hard anodize, which by design, offers excellent protection. But if the bare metals come in contact due to scratching, galvanic corrosion will take place.

Wiring Instruction:

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

Mechanical Dimensions & Weight:

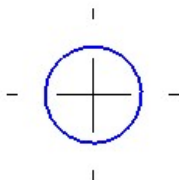
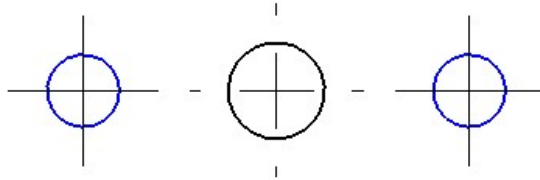
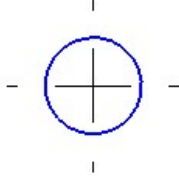


Weight: 11 pounds
(w/ marine grade 316 SS bracket)

MOUNTING BRACKET HOLE TEMPLATE (TO SCALE)

Note: Tighten bolts to 45 foot pounds after installation. Use spring washers to resist vibration.

Keep the Nylon washer in place between bracket and light to better resist bracket corrosion.





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

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

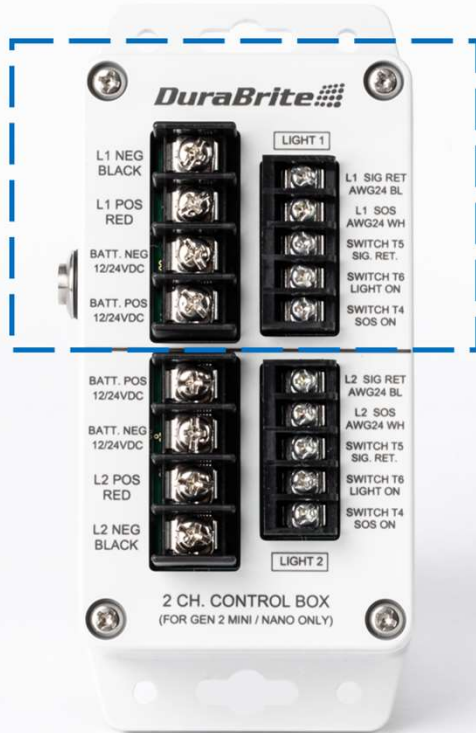
The *DuraBrite Control Box* is more than just a connection point for lights – it's a complete, integrated lighting solution. Every wire, from power inputs to signal returns, is organized through the box for a clean, efficient setup. Its compact design and straightforward screw terminal configuration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

Important Installation Notes:

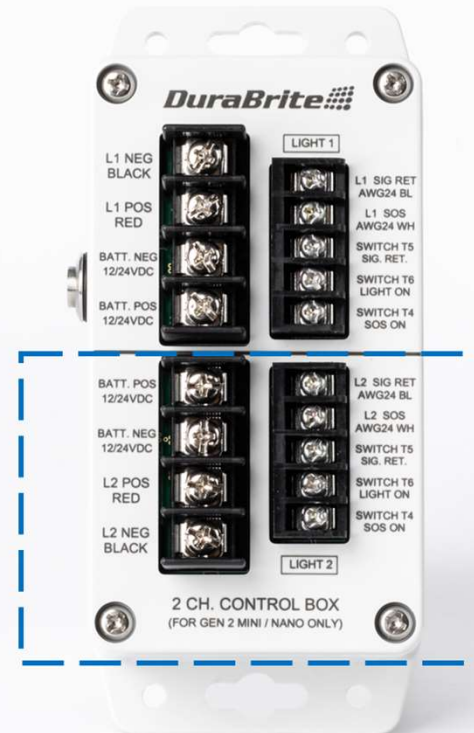
The *Control Box* is not waterproof due to its convenient screw terminal architecture. It should be installed in a protected area, such as under the dash, in the engine room, an IP rated box, or any location that is sheltered from the elements.

Control Box Terminals Layout

Light #1
Power & Controls

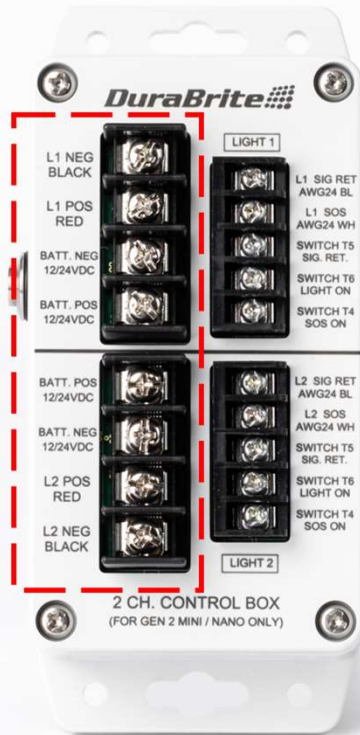


Light #2
Power & Controls



Control Box Terminals Layout

Power Section



Control Section



Wiring Configuration from the Light's Pigtail Cable

From Light #1's pigtail, there are 2 thicker wires

Black Negative wire goes here

Red Positive wire goes here

From Light #1's pigtail, there are 2 skinny wires (24 gauge)

Black skinny wire goes here

White skinny wire goes here

From Light #2's pigtail, there are 2 skinny wires (24 gauge)

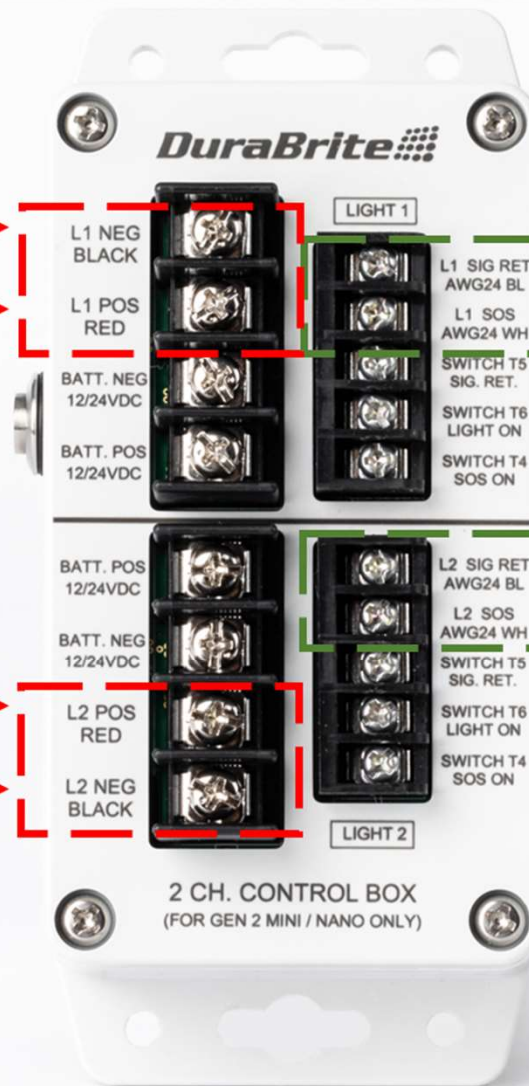
Black skinny wire goes here

White skinny wire goes here

From Light #2's pigtail, there are 2 thicker wires

Red Positive wire goes here

Black Negative wire goes here



Thick wires = Power wires

Thin wires = Signal wires

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

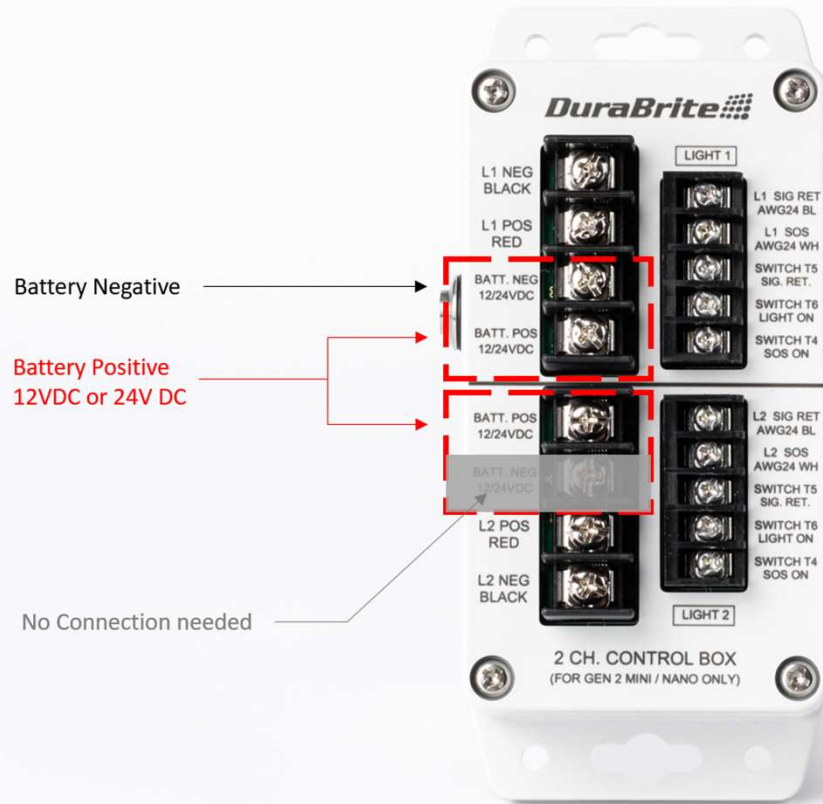
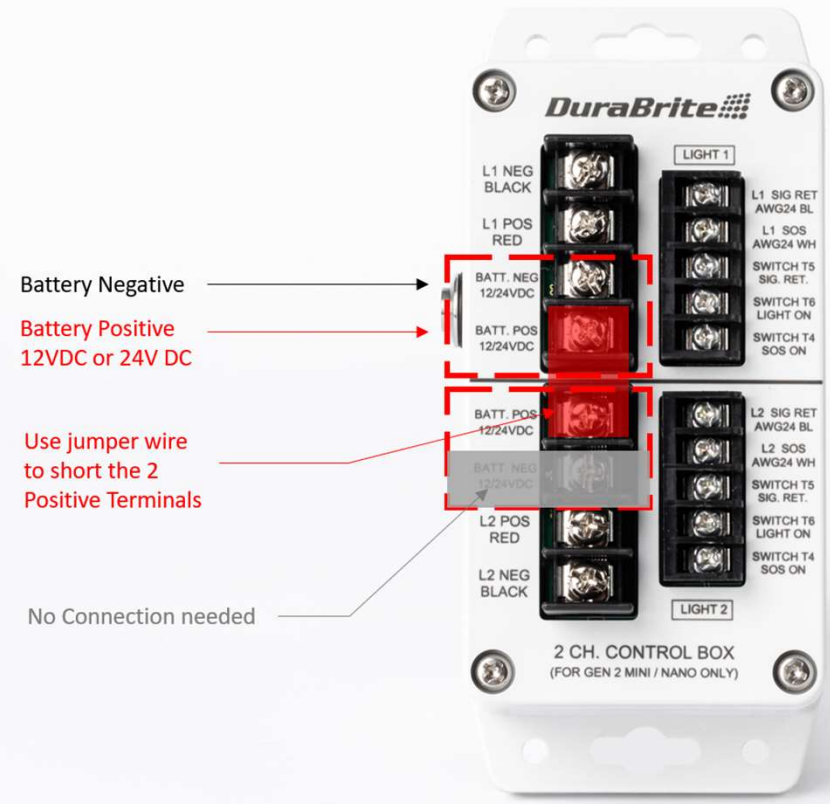
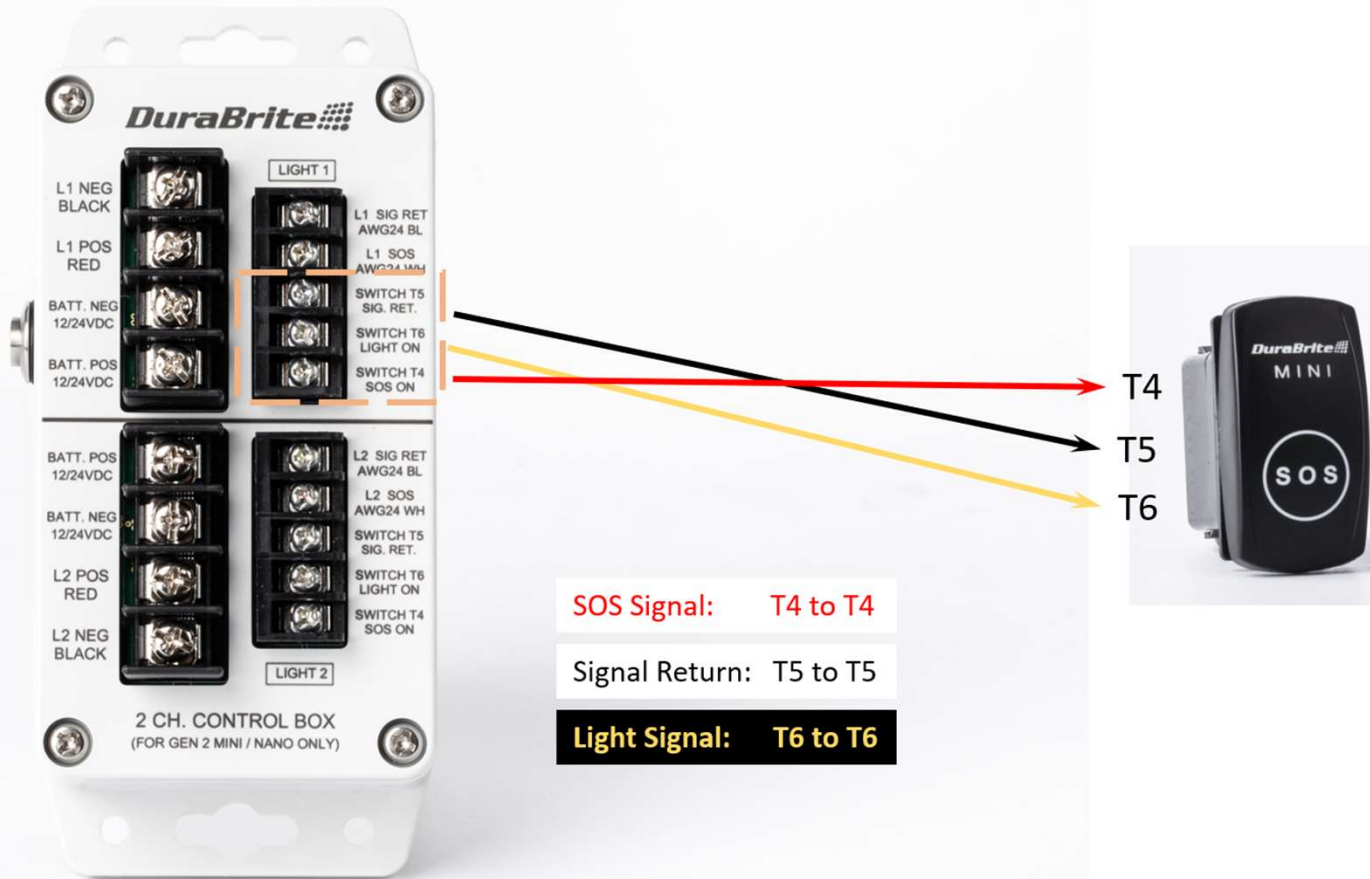


Illustration Y



Connection to Rocker Switch



Wire the same way for Light 2 to the 2nd Switch

Programming the Key Fob



Key fob Programming Button

Programming Status LED Indicator



Key Fob

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



SMA Female Jack

Long Range Antenna



SMA Male

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.