



DuraBrite Mini Series is a class leader in the fiercely competitive LED segment. Designed and assembled in New York, it is bright, reliable, breathable, IP68 waterproof, and comes in a compact size that draws so little current.

It is one of the most important pieces of equipment that allows for a versatile placement on virtually any sort of boats, vessels and vehicles for both professional and hard-core recreational use. US Coast Guard has tested this particular model for radio interference so you can be confident to place it even right next to your radar.

The beautiful, sleek, yet prominent design complements especially well with the aerodynamic lines of center consoles and sport fishing boats.

The Mini's optical form factor yields top-notch real-world performance. Unlike regular light bars, *The Mini* gives both range and coverage with its carefully chosen and field-tested beam angles so you can see and be seen with ease from a mile out. Finding buoys, identifying obstacles, and navigating in and out of the harbor before dawn and after sunset can now be done safely with this powerful unit.

The Mini is also a mid-range model in Durabrite's product line up, making a good addition to what you already have, be it a Pro, Standard, or Nano. It is no wonder it has become Durabrite's best-selling model and is entrusted by Wicked Tuna Captains, US Coast Guard, US Air Force, NYPD Harbor Unit, and many other top professionals in their respective fields.





"I needed more light on my 28' Worldcat for heading offshore early AM on a regular basis and the factory lights just weren't cutting it for me. I put a Mini Spot on the front and a Mini Flood aft, for cockpit lighting. It is unbelievable how bright these lights are! Absolutely amazing! We are so impressed with them and have just installed 2 Minis and 3 Nanos on one of our cranes for working at night! Great folks to work with and a truly amazing product line. That is absolutely the best in high performance LED

lighting!"

- Sams I.

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"I have Durabrites on my crab/lobster boat for 3 years now and haven't had any issues at all. Very bright! Lights are all still looking like new after 3 years in the harsh environment. I recently purchased another set of them for the new boat I am building. Excellent lights!" - Remi C.





"Picked up 3 minis for my center console they are the best lights I have ever had on my boat by a long shot. Notably they make a big difference running at night we can see pots long before they reach the bow and they raise bait like you wouldn't believe. Customer service is outstanding I highly recommend Durabrite products." - Jason M.



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

LED Color, CCT	Typical = 5000K (Neutral white) 2800K option available as Special Order
Brightness	16,670 lm at 24VDC & 32VDC 13,300 lm at 12VDC
Beam Angle	25 deg (Spot) 76 deg (Flood)
Operating Voltage	Auto detect 12VDC, 24VDC, 32VDC *Most efficient to operate at 24VDC for max brightness
Current Draw	Approx. 4.4A at 32VDC Approx. 5.7A at 24VDC Approx. 8.8A at 12VDC
Total Power Consumption	140W at 24VDC & 32VDC 110W at 12VDC

Mechanical Qualifications

Water Resistance

Moisture Resistance

Salt Spray / Corrosion Resistance

Temperature Range

Mechanical Shock

Vibration Resistance

IP68 (submerged to 4.5 ft water for 30min)

65°C / 95% RH Mil-Std-883 TM 1004.7

240 hrs @ 35°C ASTM B 117-09 /ASTM D1654-08

> -40°C to 55°C Mil-Std-883 TM1010.8

30G, 11ms Half Sine, 3-axes (+ve/-ve) Mil-Std-202 TM213B

> 100,000 cycles, 3-axes ANSI C136.31



Warranty Terms

We stand behind our products. This product is covered by Durabrite's 5 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.

Special Note on Bracket Installation & Corrosion Prevention

The bracket that comes with the Mini is laser cut with Marine Grade 316 Stainless Steel. Even though it has superior corrosion resistance, 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 <u>Ceramax Ultra Coat</u> (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:

If you have a DC Power Source

- 1. This is a DC light, meaning you should only power it directly using a DC source. You probably either have 12VDC or 24VDC. The light will auto detect the DC voltage. You don't have to do anything special if you operate one of these voltages.
- 2. Connect:
 - a. Positive (our white wire) to Positive
 - b. Negative (our black wire) to Negative
- 3. All wire connections including the cable jacket <u>MUST BE</u> protected from water intrusion. Otherwise, damages due to water ingress because of unprotected wire connections and cable jacket will not be covered by our warranty.

A Note on Cable Length:

- If you operate at 12V, the current draw will be approximately 9A. The 6ft cable that comes out of the light (i.e. the pigtail) is AWG14 and if you also plan to use a AWG14, your total cable run **SHALL NOT** exceed 15ft.
- This is to minimize resistance, which can lower the voltage that goes into the light. If your light looks dim or if it flickers, the most likely cause is an insufficient cable gage or the cable run is too long.
- If you plan to do a longer cable run, we recommend you to first run the pigtail to a waterproof junction box close to the light, and from there, run a AWG10 to your DC power source (consult us if you have a run more than 30ft)
- If you are doing 24V, the same AWG14 should suffice for the entire 30ft run.

If you have an AC Power Source

- 1. STOP NOW !
- 2. Go to our website and buy the Mini AC Adaptor before you start the installation.
- 3. Use one Mini AC Adaptor for EACH Mini light. We <u>do not</u> recommend using a higher power AC Adaptor (e.g. the Pro AC Adaptor) to power more than one mini light due to possible unequal current sharing, which may lead to occasional flickering or startup issue.
- 4. Once the AC adaptor arrives, connect:
 - a. Positive (our white wire) to Positive (Red wire on the Output side of the adapter)
 - b. Negative (our black wire) to Negative (Black wire on the Output side of the adapter)
- 5. Make connection on the Input side of the adapter according to the National Electrical Code or equivalent in your country. The adaptor can be powered by either 110VAC and 220VAC.





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Mechanical Dimensions & Weight:





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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.





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