

LED Lighting Trends for Yachts



Navigating Marine Lighting: LED Technology Trends in Boats and Yachts

In a previous post about [automotive trends](#), we learned that the #1 consumer criterion for new car purchase was LED ambient-lighting schemes. An impressive interior cockpit is now more of a determinant of a sale than many other features, like mechanical reliability, infotainment, or exterior styling. The question this post considers is whether the same trend is true for the marine industry. Have designs for personal boats and yachts adopted LED lighting to the same degree? Since tradition still holds sway in some areas of marine design, it could be that the trend may not be as fast-moving as automotive innovation. But a quick survey of major yacht and boat manufacturers, such as [Sunseeker](#), [Princess Yachts](#), and [Beneteau](#), shows that the brands have embraced LED technology in their latest models, offering lighting options as standard or upgrades. This industry-wide adoption is a clear indication the demand for LED lighting in the marine sector is growing. Where on boats do LEDs find the most applications? Marine vessels are vehicles and self-contained designs like cars, but they also serve as residences, like buildings. Hence LED applications borrow from both automotive innovations and trends in [architectural illumination](#).



Navigation Station

The nighttime cockpit effects in contemporary vehicles can easily transfer over to the captain's wheelhouse. LEDs provide a combination of practicality and aesthetics. Clear illuminated controls aid navigation while making a strong high-tech impression on passengers. The appeal of LEDs extends to the daylight hours with the introduction of full-array backlighting [Mini-LED displays](#). Compared to standard LCD monitors, densely packed Mini-LED displays have better contrast, higher brightness and vivid color accuracy. Mini-LED displays emit 3,000 to 20,000 nits which make them sunlight readable. A nit is candela per square meter (CD/m^2) — a measure of monitor legibility: Traditional LCMs can achieve only 200-400 nits, so often appear dim and faded on a sunlit control deck.



Interior Contours

Arguably, LEDs have more potential applications aboard a boat than in a car. Some of these uses look a lot like [architectural interior design](#). LED light strips — rectangular or curvilinear — can run through the parameters of living and sleeping quarters throughout the boat, providing both sense of unity and practical illumination to guide passengers from cabin to cabin. American Bright provides [LED light strips and rope lights](#) and their printed circuit board (PCB) [modules](#) for both AC and DC power. The embedded lighting schemes seen in automotive interiors and high-end architectural projects integrate effectively into boats and yachts with the right configuration of components.



Nighttime Spectacles

In the case of cars and trucks, exterior LEDs have seen innovation, but their scope is limited. Notice the wide variety in headlight and taillight forms over the last decade. Even so, these have been confined to playing with forms that originated as essential safety functions. Mainstream boat design seems to have gone further with exterior LEDs. There are the standard marine lights to warn passing ships or spotlight the waves ahead, but many outdoor LEDs go beyond the strictly necessary. Underwater lights reveal the sea life near the hull. Decks on every level are illuminated, handrails are outlined with strips, and embedded sconces highlight the curves of white composite surfaces.



Colors, intensities, and light temperatures can be tuned to provide a unified sense of nighttime ambiance for onboard entertaining. Similar to illumination trends in high-end residences, lighting and color schemes can be [pre-programmed](#) as different environments, varying with the mood of the occasion or the activity of the space. Designers can integrate LED light strips in nautical exteriors by selecting products with ingress protection (IP) against the elements. American Bright offers IP20, IP65, and IP68 certified LED light strips and rope lights that can hold up when exposed to sea waves and weather. While motor vehicles run the spectrum between practical transportation and status statements, yachts with few exceptions are made to be noticed. Yacht designers have a greater motivation to create a composition of LEDs, simply to compete with other dockside spectacles.

Customized LED Solutions for Marine Architects

For marine architects looking to integrate personalized lighting experiences on board their vessels, American Bright is more than a LED components manufacturer. Our LED lighting experts can work with your design engineers to develop custom LED lighting solutions that include modules, PCB assemblies, light strips, and rope lights. For a full range of American Bright product options, consult our architectural lighting [white paper](#). Or share your project ideas with our experts through our [contact](#) page.