LED headlights

The LED headlights are an area of technology in which Audi is well ahead of the competition. They were introduced in 2008 on the R8 high-performance sports car; since then the brand with the four rings has repeatedly extended its lead.

The LED headlights give the Audi vehicles for which they are available an unmistakably striking appearance, even in daylight, and even more so after the fall of darkness. With a color temperature of around 5,500 Kelvin, their light resembles daylight and thus is much less tiring for the eyes. The light-emitting diodes are zero-maintenance and designed for the life of the vehicle. They also shine in terms of efficiency with their low power consumption. The low beams, for example, consume only around 40 watts per unit, which is less than the already highly efficient xenon plus headlights and much less than conventional halogen headlights.

The innovative technology of the full LED headlights led to a radically new and fascinating design. On the Audi A8, for instance, the low beams comprise ten individual lens modules extending through the headlight in a distinctive arc below the chrome contour known as the wing, on account of its shape. Just below this is another arc of 22 white and 22 yellow LEDs for the daytime running lights and the turn signals. Their thick wall technology makes them appear to the onlooker as homogenous, continuous strips of light.

The high-beam headlights are located above the wing. Their light is generated by two powerful four-chip LEDs and a free-form reflection system; an assistance function switches between the low and high beams. Additional high-output LEDs generate the highway light and the cornering light. A separate fan and heat sink moderate the temperature of each headlight unit.

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