

Frequently Asked Questions

For Discrete LEDs

FAQ log 000DL

For Technical Information call

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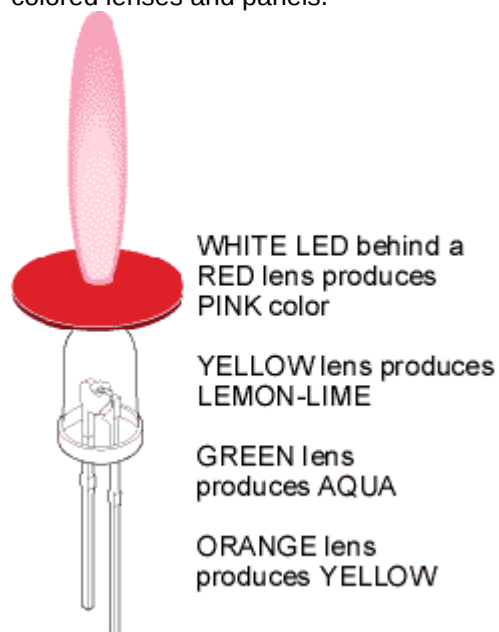
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Question: White LEDs, what can they illuminate? Can I use White LEDs to light up different color lenses?

Answer:

White LEDs are made by placing a yellow phosphorus coating over a 470nm blue LED chip giving the white LED a cool white or florescent appearance.

Previously, the lack of white-light LEDs has limited the integration of LEDs into a wide range of applications; however, now, the misconception exists that InGaN-white LEDs can illuminate a lens of any color thereby simplifying lighting requirements and designs. This is not completely true. Since the colors red and green represent a very small part of the color scale in the white LED, white LEDs should only be used behind a clear or milky white lens or panel. Place white LED light behind a red lens and the light produced is a pink color, a yellow lens turns a lemon-lime, green lens shifts to aqua and orange lens becomes yellow. To maintain accurate and brilliant colors, it is imperative to match the LED color with the lens color. In short, white LEDs made from a blue chip should not be used as a general backlighting light source for different colored lenses and panels.



Do you have an LED lamp question?

You can e-mail your LED lamp questions to our application engineers at:

webmaster@ledtronics.com