

Flickering light

Lights which are operating on AC electric systems (alternating current) are producing **light flickering** at frequency of 100Hz (Hz, cycles per second), twice the power line frequency of 50 Hz. Essentially, the power is turning on and off 100 times a second. Actually the voltage varies from +230V to -230V, 50 times a second and is at zero volts twice in one cycle.

Although humans cannot see lights flicker frequency higher than 50Hz, the sensory system in some individuals can somehow detect the flicker. Ever since fluorescent lighting was introduced in workplaces, there have been **complaints about headaches, eye strain and general eye discomfort**. These complaints have been associated with the light flicker from fluorescent lights. When compared to regular fluorescent lights with magnetic ballasts, the use of high frequency electronic ballasts (20,000 Hz or higher) in fluorescent lights resulted in more than a **50% drop in complaints of eye strain and headaches**. You can read .

Even some **LED bulbs** don't have proper power supply that can convert AC current to high frequency. With **NGL LED lights** you won't have **flickering light problems**, because we use very **high frequency PWM** modulation to control current of LED diodes.