Abstract

The main objective of this project is to transmit the data using LED (Light Emitting Diode). With the increasing popularity of solid state lighting devices, Visible Light Communication (VLC) is
globally recognized as an advanced and promising technology to realize short-range, high speed and large capacity wireless data transmission. In this report, a prototype of real-time audio and video broadcast system using inexpensive commercially available light emitting diode (LED) lamps is proposed. Experimental results show that real-time audio and video with the maximum distance of 2ft can be achieved through proper layout of LED sources and improvement of concentration effects. The design and construction of the LI-FI (Light Fidelity) light source enable efficiency, long stable life, as well as full spectrum intensity that is digitally controlled and easy to use.

References


Index Terms

Computer Science
Multimedia

Keywords
Vlc  Led  Ook  Ofdm  Mimo  Phototransistor.