

Audio Transmission using IR

Due to the radio wave problem with the medical instruments the “Wi-Fi” technology become a problem facing these challenges due to the interference of radio waves which may be harmful for the patient. Multiple accesses “Wi-Fi” is having many challenges starting from the capacity, availability, efficiency and security. Moreover, Wi-Fi transmit radio waves that may effect on medical instruments. In this project a proposed transmitter and receiver based on “IR” technology communication by using “LEDs” which is line of sight only was done. A simple design to the “IR” is represented.

Main features present in the project:

- The aim of this project is to design and implement a wireless data transmitter and receiver device based on IR Technology and Arduino UNO.

Components used:

- Power supply.
- Two PC.
- Two ARDUINO UNO.
- Three IR LEDs
- Three photo diodes.

Software used:

- Embedded C Programming
- Arduino ide to dump the code in to the Arduino UNO.
- Express SCH for circuit design.

Block diagram:

Block Diagram of proposed system

