ABSTRACT

Conventional way of broadcasting information is insecure as jamming and interferences are more prone to occur. One of the solutions to reduce these unwanted impacts is through adopting frequency hopping method. This project is implemented to learn how information is transmitted through different frequencies to increase the security level.

The system is designed to convey text information in a simplex form between two computers, where data flow is controlled by handshaking signals. Change of hopping frequencies is determined by the transmitter microcontroller. Frequency for the next data transmission is selected randomly by the transmitter microcontroller and the channel status shall be updated in the receiver side as well.