

ABSTRACT

Now in hospital have been made a tool the nurse caller using wire. However this system less be practical in installation. This system only can be used when patient reside in patient room. For that, be required wireless nurse calling system which can be taken through around hospital by patient and beside the nurse can be watched location of patient call.

In this final project, a tool that can be used to call the nurse where consisted of transmitter beside patient, receiver beside nurse and repeater which placed in certain location. At transmitter and repeater are given code by using encoder, code at transmitter as patient identity and code at repeater as location identity. At receiver there are microcontroller as led controller and alarm controller if patient call.

This tool still work, for LOS condition the distance between the transmitter-repeater about 40 meters and the distance between repeater-receiver about 26 meters, while for NLOS condition the distance between the transmitter-repeater about 32 meters and the distance between repeater-receiver about 21 meters. This tool can also be connected with computer which present data automatically by using serial communication, and application program is made using Borland Delphi.