

ABSTRACT

Nurse call is an equipment that is often used in hospitals, the use or the nurse call bell patient is very important in the make room nurse in serving patients, this technique also known as hospital services, eg hospital Surabaya Hajj, which is paired with a nurse call in the medical rehabilitation using equipment such as Short Wave Diathermy therapy and Micro Wave Diathermy is all it is a therapy that utilizes the heat source so the medic personnel to control the persistent state of the patient.

Instrument nurse call had been made by the belly padene (class of 2007) on the D3 program, but the nurse call is made too much use as the seven segment display, so take a very large currents and are not equipped with a charger and battere circuit that can be used when circumstances light turns off.

System so that the work of nurse call equipment in hospitals pilgrimage goes well, then the chance of this thesis the author makes a tool-based nurse call ic microcontroller AT89s51 which serves as the central control of all activities on these devices, ranging from display seven segment display, activation key and buzzer

Because the data was not linear in which there is a reduced capacity of 12 VDC to 8 VDC current consumption which occurs in every seven segment display that represents the number of rooms, the room TP1 (test point), a voltage of 8vdc, TP2 voltage of 8 Vdc, TP3, TP4, TP5, TP6, TP7, and test point eight (TP8) there is a voltage of 8vdc of the previous voltage 12VDC

In general it can be concluded that the microcontroller-based nurse call system with wiring AT89s51 consume very large currents and this is because the length of the cable resistance and greatly affect the working of such a tool, because it takes a very large power

Key words: nurse call AT 89S51 microcontroller-based