

Abstract

Phototherapy tool is tool which use for treatment or therapy for baby which has hyperbilirubin diseases or yellow diseases, it is the bilirubin accumulation in the lattice of skin or mucous membrane which signed by the yellow colour which look at the skin or mucous membrane. So the baby which this disease is called yellow baby or icterus. This function of this tool is for baby therapy with yellow disease or hyperbilirubin. The ray which used is the Blue Light which has 450-460 nm long waves with intensity 0r 450 lux illumination power or about 200 foot candle with the distance of raying for baby about 450 cm with the closed eyes using the material unbreak through the ray.

Based on the modul before still use the digital system (Shohibul Mighfar,2001) , it setting still use rotary saklar so it cause the setting be long time and the saving of hourmeter digital use the battery automatically.

*Based on it , the writer want to make the phototherapy tool with the tittle of **PHOTOTHERAPY DISERTAI TIMER DAN HOURMETER BERBASIS MIKROKONTROLER AT89s51**. The thing to do is searching reference which relation with the phototherapy. And also decorate the arrangement for phototherapy and all of the complement arrangement like the hourmeter arrangement, arrangement of saving data, Mikokontroler and showing seven segment. The writer also repaired software in order to get the result which match by setting data.*

Based on the result the process of time measuring therapy lamp ray which measured five time so the result is the error grade (% error) 7,26 % on the 10 minutes tme measuring and 16,72% on the 25 minutes time measuring.

Based on the test and experiment from the writer so the conclusion is “Phototherapy Disertai Timer dan Hourmeter Berbasis Mikrokontroler AT89s51” is good for used.

Key word : phototherapy, Mikrokontroler AT89S51, FM24C04