

ABSTRACT

In the case of surgical infections often occur due to patient negligence surgical. Salah user at the time of the case is when the user would perform surgery handskund user is using a sterile, after which the user will turn on the lights and set the intensity of the operation on the device, from the lights the operation is not sterile and touched by the user, the patient will be contaminated by bacteria that attach to the operating lights and cause the patient to an infection in the incision. Therefore, the author will make a surgical operating lights in the clinic using infrared sensors to select the intensity of light in the lamp-based microcontroller AT 89S51 operation so users do not have direct contact with the unti.

From the results of measurements that have been made, obtained by 0% voltage error and measurement error obtained timer at 0%.

After a thorough study of the literature, experiments, making the module, as well as data collection, it can be concluded if the tool "Operation Led Lighting Modifications At 89S51 Microcontroller-Based Sensor Equipped GP2D12" fit for use and in accordance with the plan.

Keywords: Operating Lights, GP2D12 sensor, Microcontroller