

ABSTRACT

Ultrasonic Nebulizer is one elektromedik tool used to provide therapeutic treatment for patients afflicted by diseases or disorders of the respiratory tract disorders by utilizing fluid vapor is mixed with the drug, wherein the liquid undergoing a process of solving the liquid into a very fine mist.

The problems that the author adopted in preparing this final tool that can modify the piezoelectric nebulizer equipped with a heater of a new digital timer system to replace the mechanical timer for controlling the length of time the tool works.

Accordingly, the authors plan and modify the tool titled "Piezoelectric Nebulizer Heater Based On Complete With Digital" where the tool makes it easy to nurse or doctor in the treatment of patients because it comes from the steam heater to warm the outputan nebulizer with a digital display.

According to data from the measurement result after the process of testing and measurement tools in the setting time of 10 and 15 minutes with an error rate / timer error at 0.018%. Therefore the value of the measurement error that has been done on the setting time of <5% (less than 5%), then the plane piezoelectric nebulizer heater is equipped with a digital timer system to replace the mechanical timer can be said to be feasible to operate properly

Key words: piezoelectric TRANSDUCER, TIMER,