

Abstract

Hospital equipment if its use is too often, it will result in inaccurate measurements. Doppler plane when not calibrated, the result is not correct and there is an error value. use the writer makes the calibration tool, entitled Fetal Doppler Simulator in progress this thesis.

Fetal simulator is one kind elektromedik tool used to determine the level of accuracy in the use of doppler in patients. Doppler is a tool to detect fetal heartbeat in the womb to age. In order to obtain accurate results it shall be calibrated by using the doppler fetal simulator. Fetal simulator has eight kinds of elections bpm. Among others, 30, 60, 90, 120, 150, 180, 210 and 240 bpm.

In every election bpm it will affect the calculation of the rate at which the aircraft doppler LCD display. In every measurement there must be mistakes that happen, such as frequency interference, the use of components that is less reliable quality, and paralak mistakes made by the user.

As with any errors that occur in modules that writers make, in accordance with the results obtained from the measurement error level (error) reached 0.66% in the calculation of 60 bpm, 0.22% in the calculation of 90 ppb, 0.166% in the calculation of 120 bpm. 0.133% on the measurement of 150 ppb, 0.22% in the calculation of 180 ppb and 0.28% at 210 bpm calculation.