ABSTRACT

Cardiac Monitor is an important tool to monitor patients identified as having heart abnormalities. Carotid Pulse is a recording of the carotid artery pressure signal, the recording is close to the body surface at the neck and is an alternative in measuring blood pressure from the heart chambers which if blood pressure is measured directly it is clearly not possible because it is invasive or injuring the body and too dangerous.

In this study, the recording of the Carotid Pulse signal was carried out in the left upper neck area of the carotid artery with the help of a piezoelectric sensor. The main circuit of tapping Carotid Pulse signal consists of Non-Inverting Amplifier, Low Pass Filter analog with frequency cut off 102 Hz, High Pass Filter analog with frequency 0,1 Hz, Summing Amplifier and Microcontroller Arduino.

The results of data collection from 10 respondents, were measured from the correlation between the Dicrotic Notch (pattern D) on the carotid pulse and S2 on the phonocardiograph occurred just before the Dicrotic Notch from carotid pulse. From the correlation measurement data obtained an average of 10 respondents, the interval between S2 and Dicrotic Notch was ±0.063 s.