

## ABSTRACT

Music is an art which is very popular and continues to grow today. It can be seen from the increasing number of standing efforts in the field of music. On this last project was the creation of one of the innovations in the form of accuracy assessment application note to provide innovation in the field of music. The application will calculate the accuracy of tone based on the frequency parameters, the representation of the signal will be displayed on Spectrogram in time-frequency domain.

Method for measuring the accuracy of frequency on a tone or voice signal is compared using correlation coefficient function, so the similarities the two signals will be seen from the value of accuracy. If the value is close to one value, it is said to approach the same value, whereas if the value is close to zero value signal is said not same.

In the application system on this last project, the system can measure the accuracy of tone that quite effectively, whereby the system can distinguish the user's active and inactive (passive) in the Choir. Where the range accuracy of a user that has a background in the Choir that is 60.62 - 69.22, while the range of accuracy that the user produce a tone that is not active in the Choir ie 44.36 - 56.62, this result was obtained based on the lowest-highest value of each type of user background.

**Keywords:** *choir, frequency, value accuracy, signal, spectrogram, cross coefisient.*