

ABSTRACT

The rapid growth of the Internet, leading to the exchange of information can occur more easily, one of the most frequently exchanged forms of information on the internet is the audio file. Parties that exchange audio files on the internet do not see that the audio files he or she exchanges actually have their own distribution rights.

In this research, audio watermarking using Fast Fourier Transform (FFT) method using image as watermark which is inserted in audio. A random number that satisfies a normal distribution is used as a reference for inserting watermark bits, thus providing resistance to attacks on audio files.

The end result of this final task is to get back the inserted watermark with minimal damage after being attacked. This study shows that the system has a good enough resistance with average BER = 0.277, SNR = 27.378, ODG = -2.616, using the best parameters used to test the audio quality of Nframe = 32, Alfa = 2, Nblock = 7.

Keywords: Digital watermarking, audio files, watermarking, normal distribution