ABSTRACT

The development of technology has major implications in the exchange of information quickly and accurately. On the other hand the security of data transmission factor considered very important along with the many others who want to steal the data. To overcome this, technique that can be used is steganography. Steganography is the science or art of hiding a secret message in a cover media such that the existence of secret message not to arouse suspicion and not known by unauthorized parties or unauthorized parties. However, the use of steganography need to be modified again to increase the security of confidential data. The modifications to perform multiplication process steganography.

In the final project has been designed concealment process messages twice or double steganography. The first insert a picture message with a bitmap format (*. Bmp) into a cover image to a bitmap format (*. Bmp) with Diamond Encoding method which produces stego image, then the stego image inserted back into the cover of the audio (*. Ogg) with Discrete Cosine Transform (DCT).

From the results of performance testing system. This system has a good enough performance with SNR audio stego ranging from 25 to 35 dB and has a strong resistance against AWGN attack with maximum BER obtained at 0:06 AWGN 40dB SNR and BER values of 0 to 50 dB SNR AWGN.

Keywords: Steganography, Image cover, Audio Cover, Diamond Encoding, DCT, AWGN, SNR, BER