Abstract

Internet make it easier to convey information or data exchange. Data that is sent through the Internet network can have a highly secret characteristic. To maintain the secret of the data that is sent, a technique is needed, one of which is the Steganography technique. Steganography is a technique of hiding secret data in a receiving data, where the presence of data does not invite suspicion from the perception of human observation by sense. Steganography can be applied to various digital media: texts media, audio media, and video media. Steganography will work better in the receiving media that has good quality. Steganography technique has several methods, the most common method that used is Least significant Bit (LSB) method, by inserting a least significant bits in the receiving media. Other methods that used in Steganography is Spread Spectrum (SS) method, the pseudorandom is used to rash a secret message which is inserted before or on the cover carrier.

In this Final Task, both methods applied on the digital audio, then the results can be analyzed to get the advantages and disadvantages of each method to compare with the quality of the audio before and after inserting, and the quality of the secret message is extracted. From the test, it was found that the audio quality of the resulting Steganography with Spread Spectrum method is better than Least significant Bit (LSB) method, evidenced by the resulting value of SNR Spread Spectrum method is greater or better than Least Significant Bit method, and the different value both Spread Spectrum Method and Least Significant Bit Method get 8db, but the quality of the message that obtained by the results of both extraction methods is same well, evidenced by the value of CER = 0 and BER = 0. For subyektif value, where the value get from 20 person as respondent and most of them give the point for Spread Sprectrum metod and Least Significant Bit method is close same well, and most of respondent give the good point (>4) according to value parameter has given.

Keywords : Steganography, Spread Spectrum, Least Significant Bit, Digital Audio