

## **ABSTRACT**

*Steganography is the science of hiding secret messages, so other than the sender and receiver, no one who knows or is aware of the existence of secret message[6]s. Steganography can be applied to various media, such as a digital image, audio, and video. Steganography will work better on a media container that has good quality.*

*Several methods have been developed for digital image steganography, such as the Least Significant Bit (LSB), Pixel Values differencing (PVD), Optimal Pixel Adjustment Process (OPAP), and Diamond Encoding. Diamond encoding method has advantages over other methods mentioned above, namely quality stego image did not come down drastically from the cover image[2].*

*In this Final steganography technique is applied using Diamond Encoding. At Diamond encoding method, cover image is divided into blocks do not overlap, where one block consists of two neighboring pixels, and this method produces diamond characteristic value (DCV) of pixel block pairs. Then the results were analyzed through subjective and objective assessment. An objective assessment, ie the Mean Square Error (MSE), Peak Signal to Noise Ratio (PSNR) and Character Error Rate (CER). While subjective assessment, ie Mean Opinion Score (MOS).*

*From the tests conducted showed that the resulting stego image quality is very good. This is evidenced by MSE stego image under an average PSNR value 30-50 dB. For a given stego image noise, has a value of CER = 0, this means there is no error message after extracted. Whereas for the subjective assessment that is through ratings by 30 respondents gave a value of 4 (excellent) for the parameters given.*

**Keywords:** *steganography, Diamond Encoding, digital image, diamond Characteristic value (DCV).*