ABSTRACT

Security process in the delivery of confidential information are important factors that must be maintained. One technique that can be used is watermarking. Watermarking can be done in the form of digital media images, video, and audio. Many methods have been used to obtain security in the digital image in order to obtain the optimal insertion point and resistant to noise but there are still many limitations on the level of security so that the security is less than optimal and susceptible to noise.

In this research multiple watermarking system has been designed to insert a logo image and text by using sobel and iterative detection threshold for the pixel position of the inserted menetukkan Image logo and text that has been used as a row of bits. Insertion technique used is to equate the parity of the pixels selected by the inserted bits.

Measurements taken are objectively by calculating MSE = 0.0029 and PSNR = 73.37 dB, and subjective measurements made with MOS = 4.1 on the image to be inserted so as to produce good quality after the inserted text and logo images.

keyword: Multiple Watermarking, MSE, Adaptif method, Iterative Threshold.