



# International Journal on Recent Researches In Science, Engineering & Technology

(Division of Civil Engineering)

A Journal Established in early 2000 as National journal and upgraded to International journal in 2013  
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JIR, DIIF and SJIF.

Research Paper

Available online at: [www.jrrset.com](http://www.jrrset.com)

Chief Editor : Dr. M.Narayana Rao, Ph.D., Rtd. Professor, NIT, Trichy.

ISSN (Print) : 2347-6729

ISSN (Online) : 2348-3105

Volume 2, Issue 12,  
December 2014

JIR IF : 2.54

DIIF IF : 1.46

SJIF IF: 1.329

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## Rate Control Algorithm for High Quality Compression of Static Test Pattern Using Target Bits In Digital TV systems

Dr. Samuel

Abstract - In this paper, We propose a new algorithm for generating a high quality test bit stream to evaluate the static image quality of DTV image based on a target bit allocation in the processed of rate control . In order to allocate the number of target bits , we consider the normalized complexities which are updated or maintained according to GOPs picture qualities. The proposed rate control method is suitable for compression of static test pattern while MPEG-2 Test model 5 is suitable for moving picture . to evaluate the performance of proposed algorithm , the test bit stream are generated by an MPEG-2 software encoder using the proposed algorithm. Experimental results show that average PSNR of the proposed method is higher than those of the conventional case . With experiments in DTV system, we have conformed that the proposed algorithm has a stable bit rate and good video quality and it is suitable for evaluation of the DTV receiver.