



Circuit Simulation Project

<https://esim.fossee.in/circuit-simulation-project>

Title of the project : DESIGN AND ANALYSIS OF A Function Generator Using IC 741 Op-Amp in eSIM

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Theory :

This project presents the design and analysis of a Function Generator Using IC 741 Op-Amp in eSim simulation software. Function generator system can be readily synthesized using operational amplifiers on approach which is use full when the need for a special purpose generator arises or when a function generator is inconvenient or prohibited by cost consideration. The basic wave shapes produced by most function generators are square wave & triangular wave. These can be shaped by non linear amplifiers of other wave forms, including a sinusoidal waveforms.

The results demonstrate that eSim provides reliable simulation accuracy while offering advantages like ease of design modification, cost of reduction and accesibilty. By successfully migrating the Function Generator circuit using eSim, this project enhances the open-source electronics design ecosystem and serves as a valuable resource for researchers and students in function generating studies.

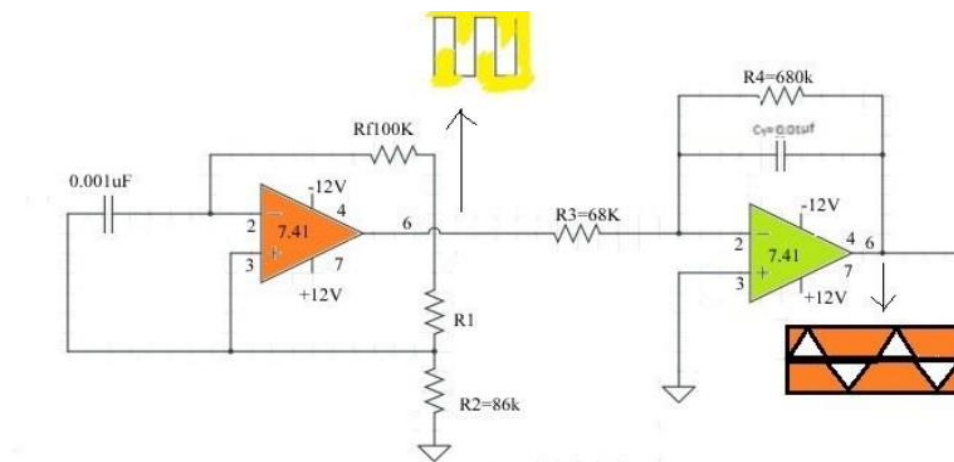


Fig 1 : This circuit illustrates the of Function Generator Using IC 741 Op-Amp

Simulation in eSim Software :

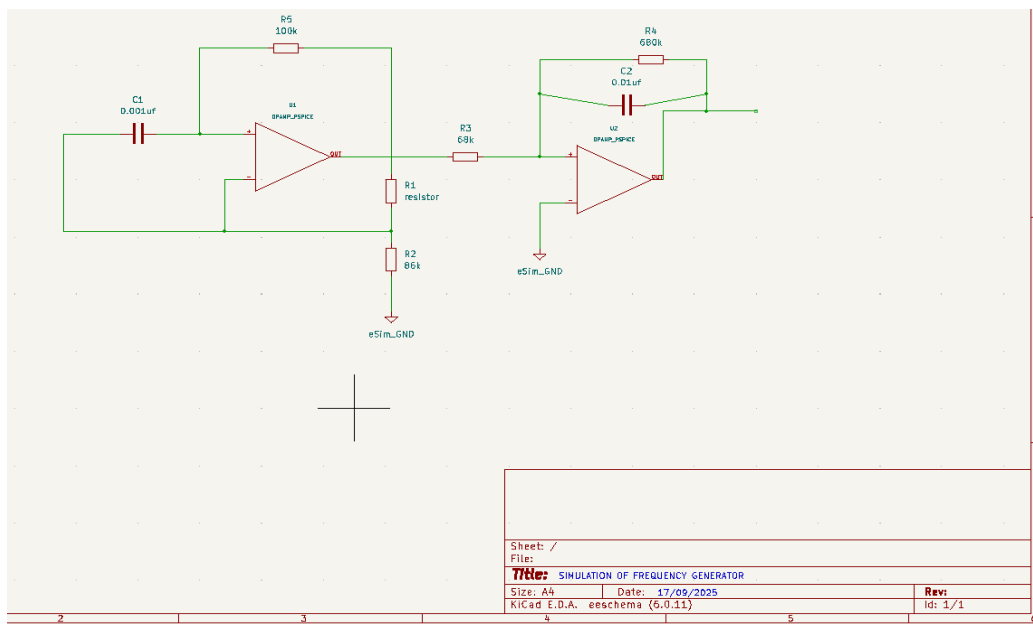


Fig 2 : Simulation of Function generator circuit in eSim

Results of Simulation :

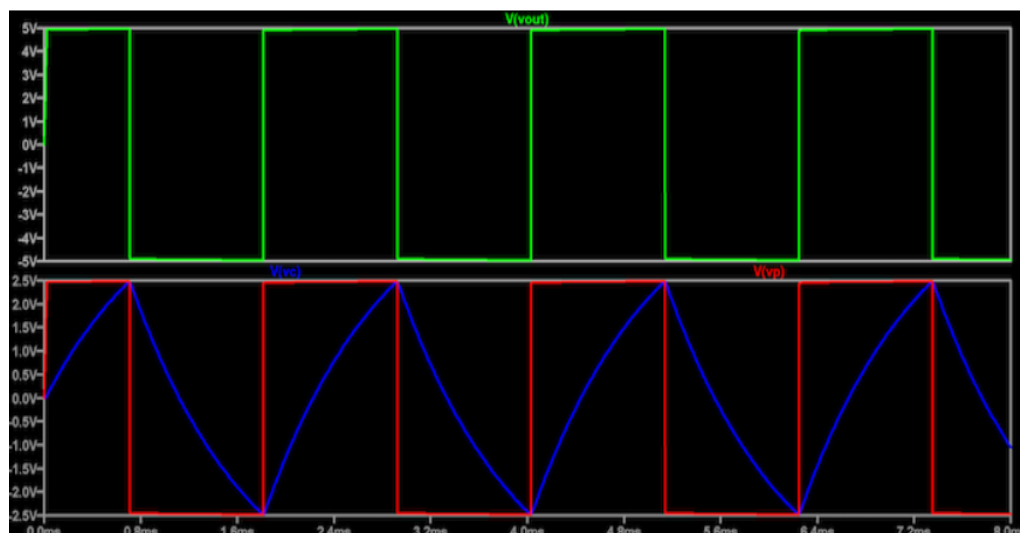


Fig 3 : Simulation result of circuit Function Generator Using IC 741 Op-Amp

Source/ Reference :

<http://www.electronicshub.org/function-generator-using-ic741-op-amp/>