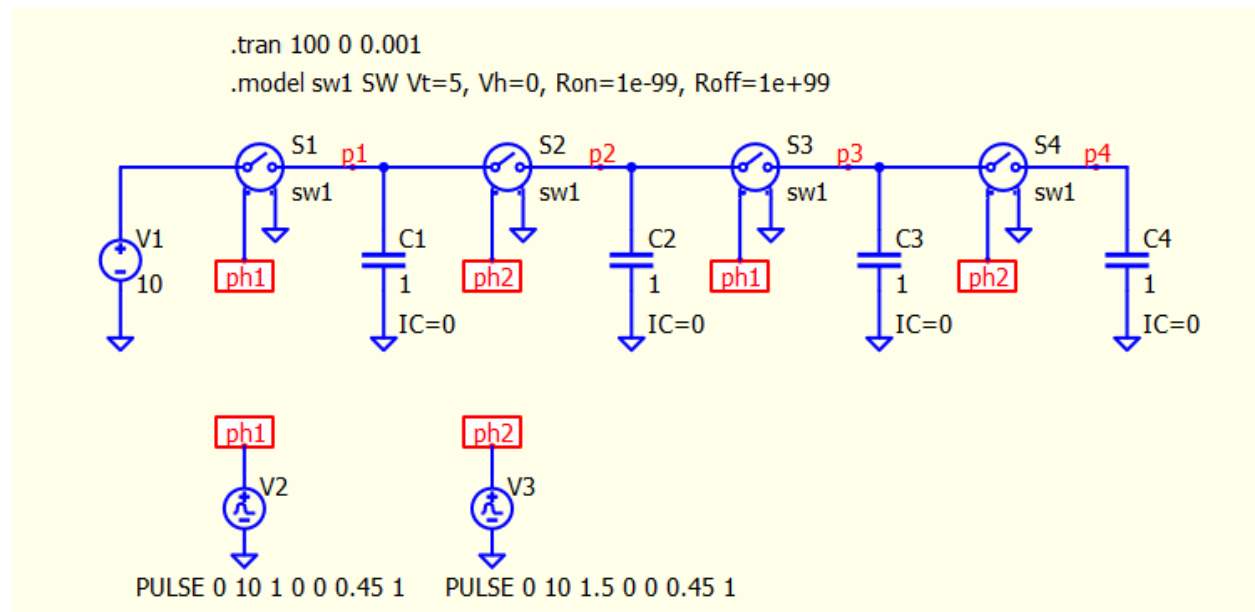
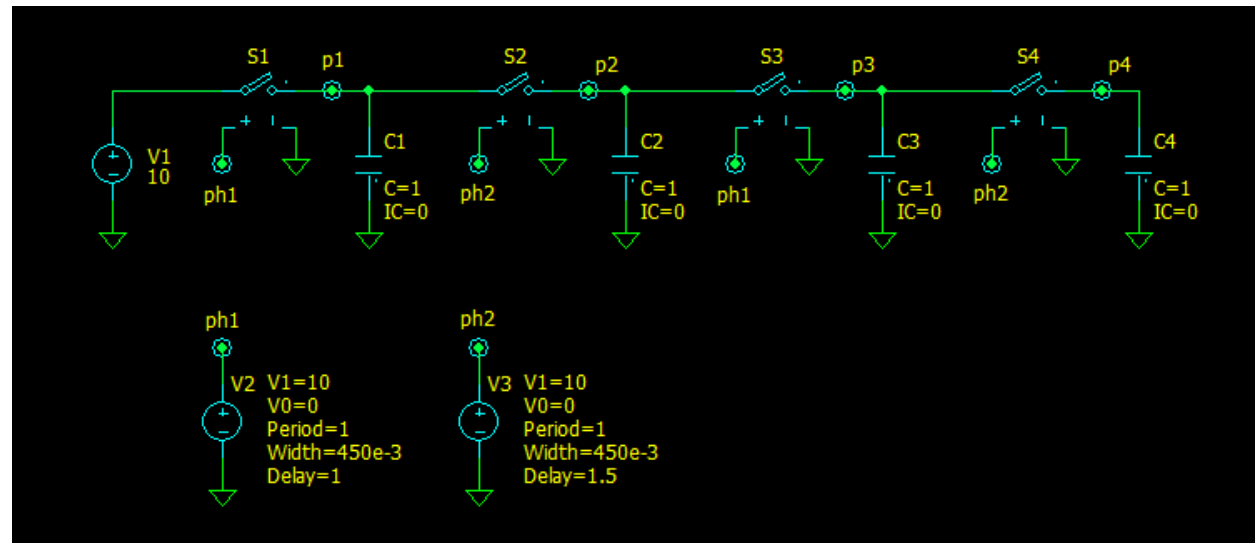


# QSPICE vs. NL5 Circuit Simulator

## QSPICE schematic:



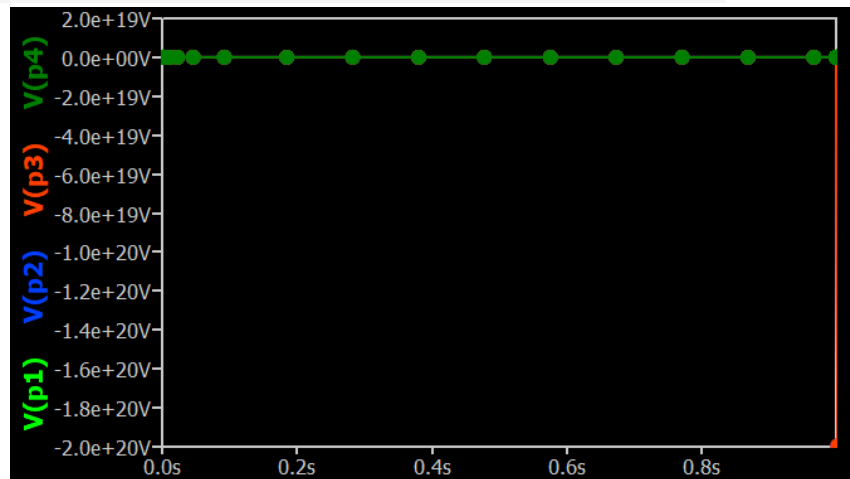
## NL5 schematic:



## QSPICE Simulation:

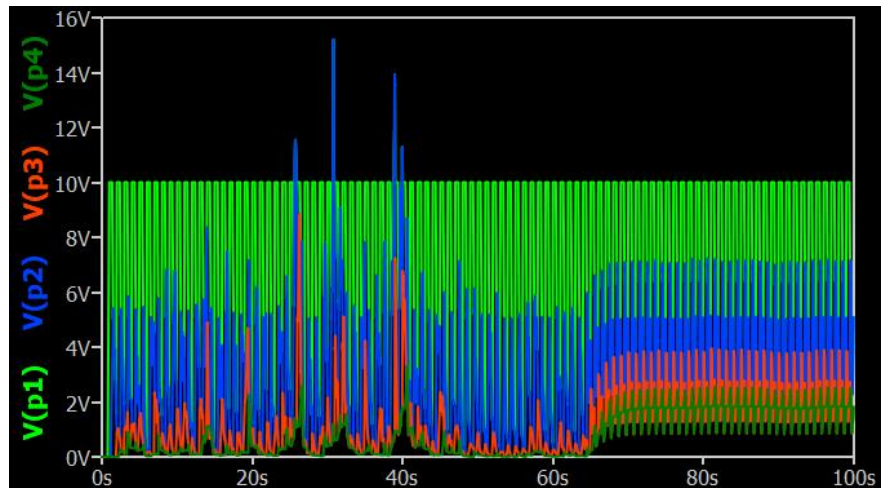
Switch Ron =  $1e-99$ , Roff =  $1e+99$

Fatal error: Timestep too small ( $1.25281e-13$ ) at t=1.00225



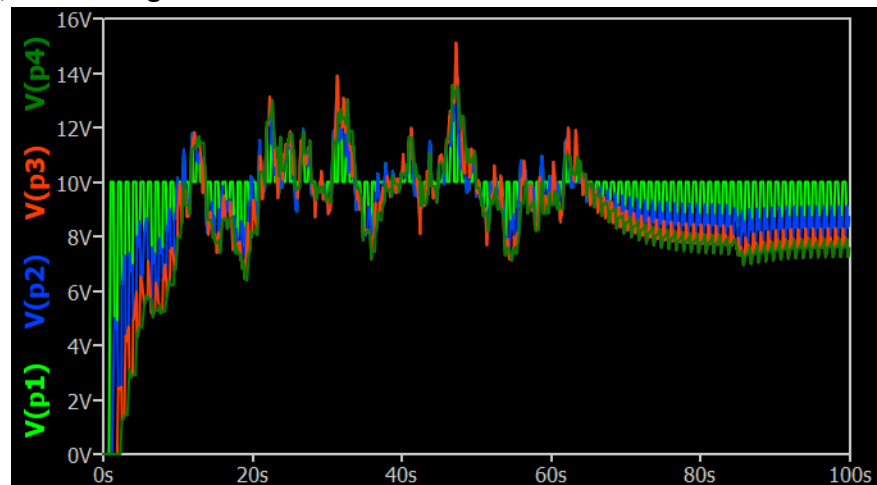
Switch Ron =  $1e-17$ , Roff =  $1e+17$

Wrong results, no warnings



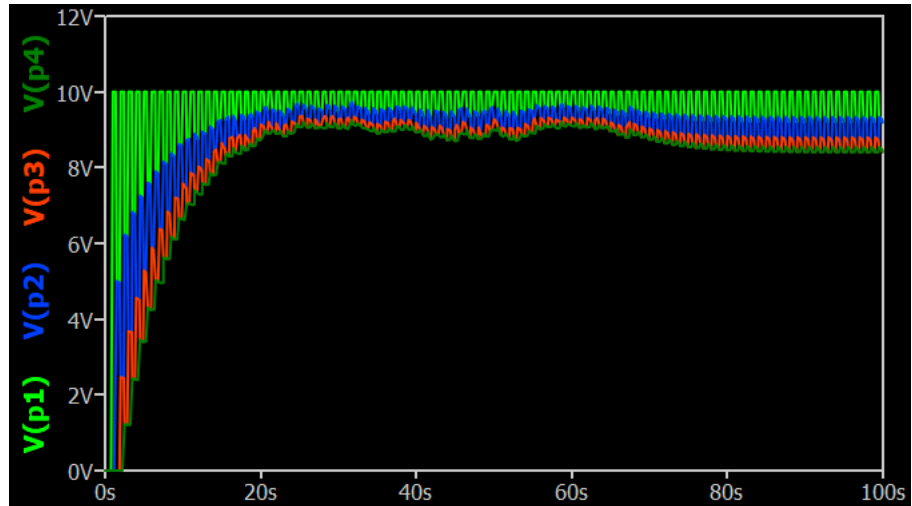
Switch Ron =  $1e-16$ , Roff =  $1e+16$

Wrong results, no warnings



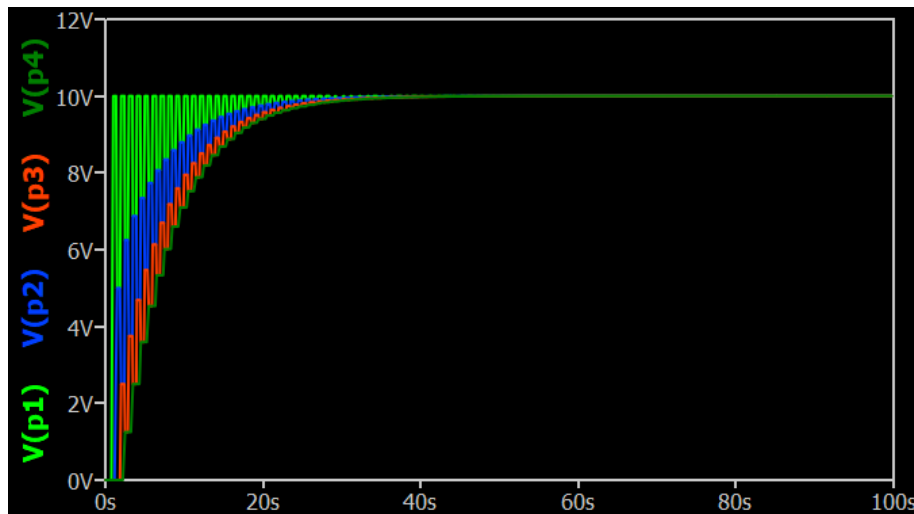
Switch  $R_{on} = 1e-15$ ,  $R_{off} = 1e+15$

Wrong results, no warnings

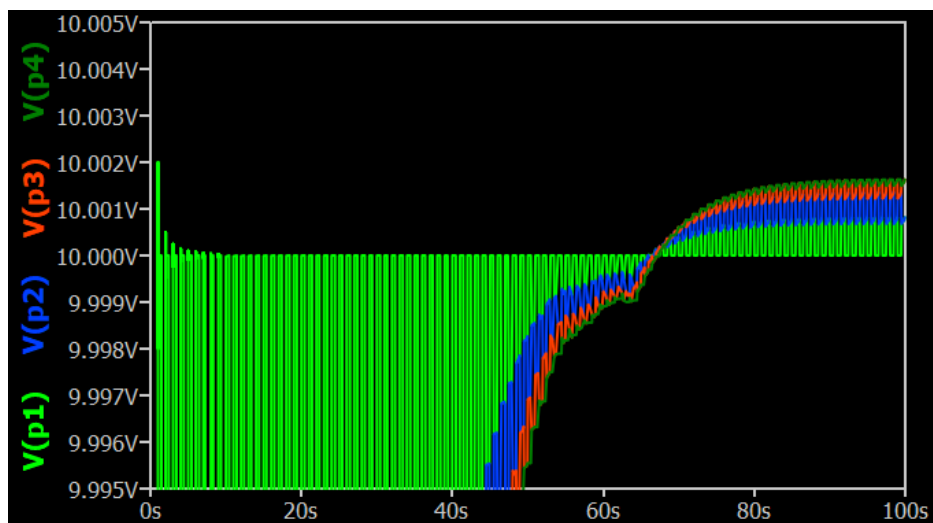


Switch  $R_{on} = 1e-12$ ,  $R_{off} = 1e+12$

Finally good???

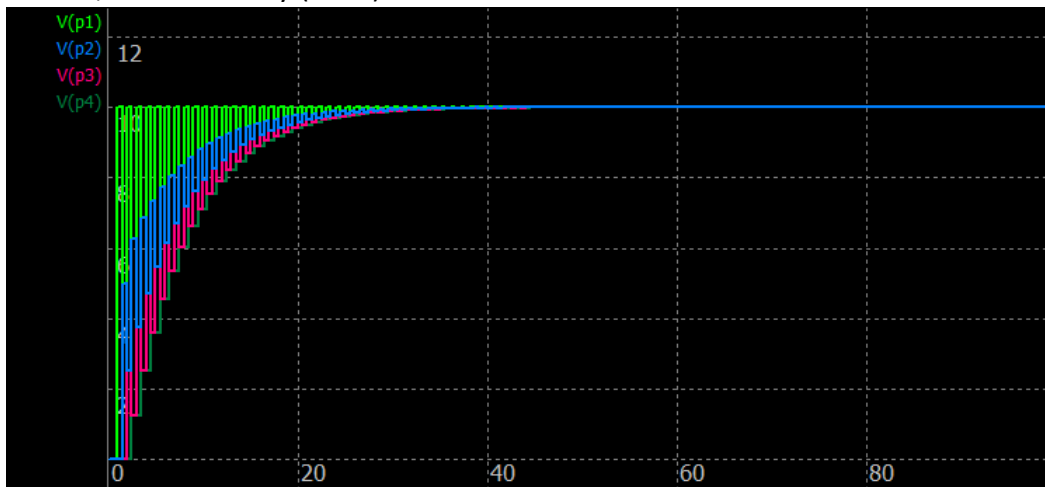


No, it's not:



## NL5 simulation:

Switch  $R_{on} = 0$ ,  $R_{off} = \text{infinity}$  (ideal)



Vert zoom-in, everything as expected:

