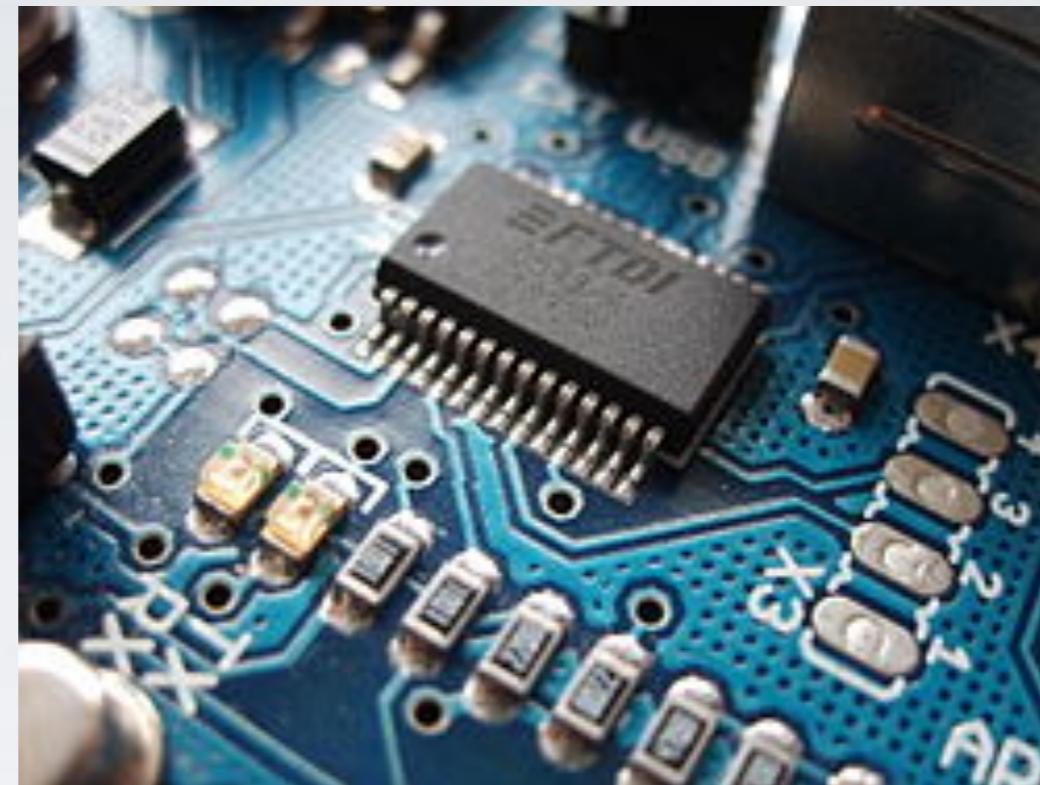
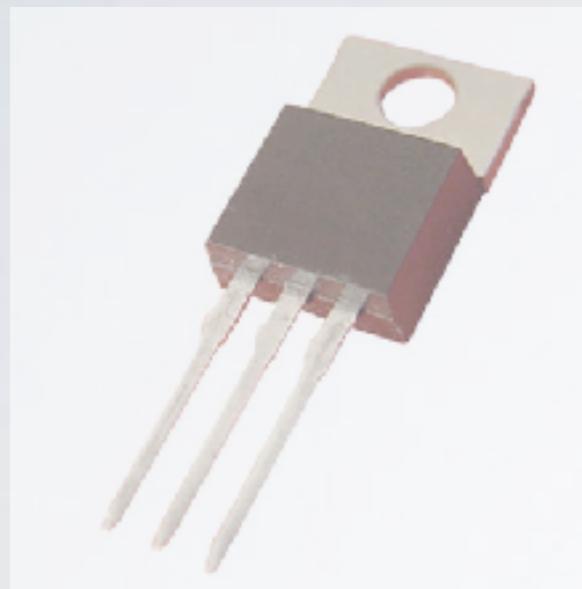
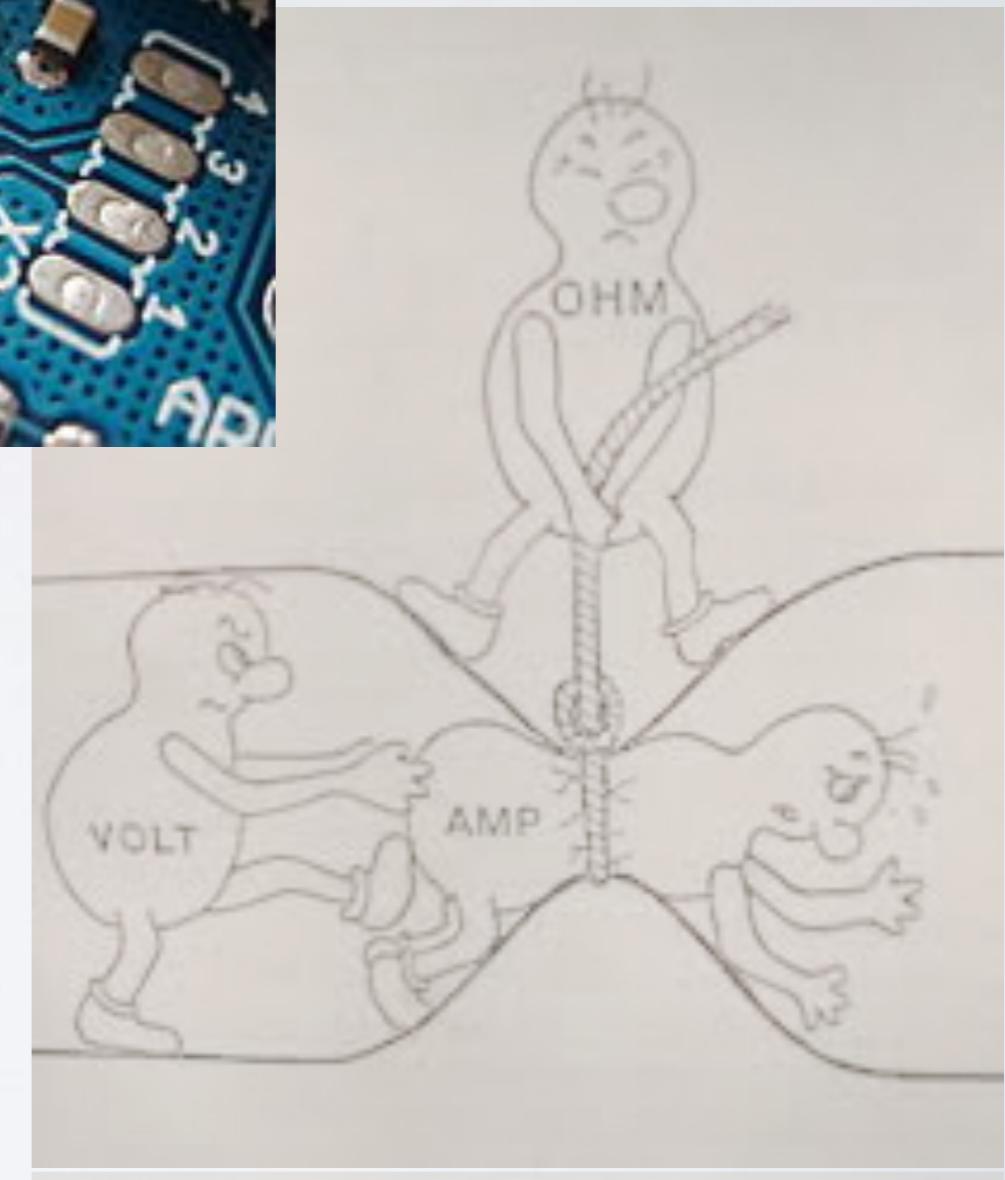


Introduction to Electronics

Artscience BA1



Introduction to Electronics
Artscience BA1 2019-2020
Part III

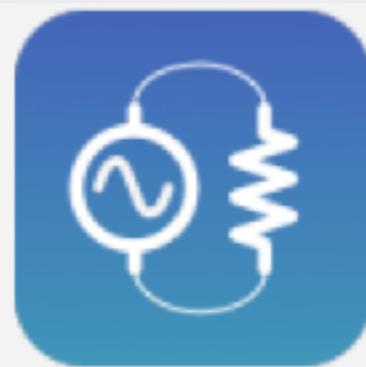


Electronics software tools

Circuit simulation



Yenka



iCircuit



Partsim

Electronics tools



Eagle



Fritzing

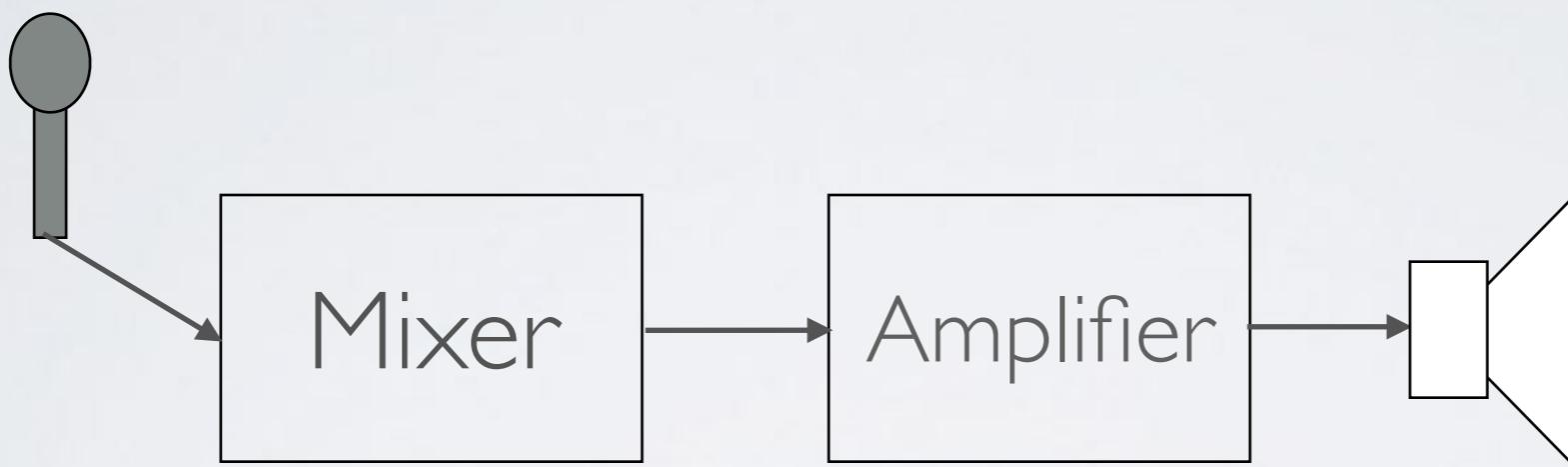


Electronic toolbox (app)

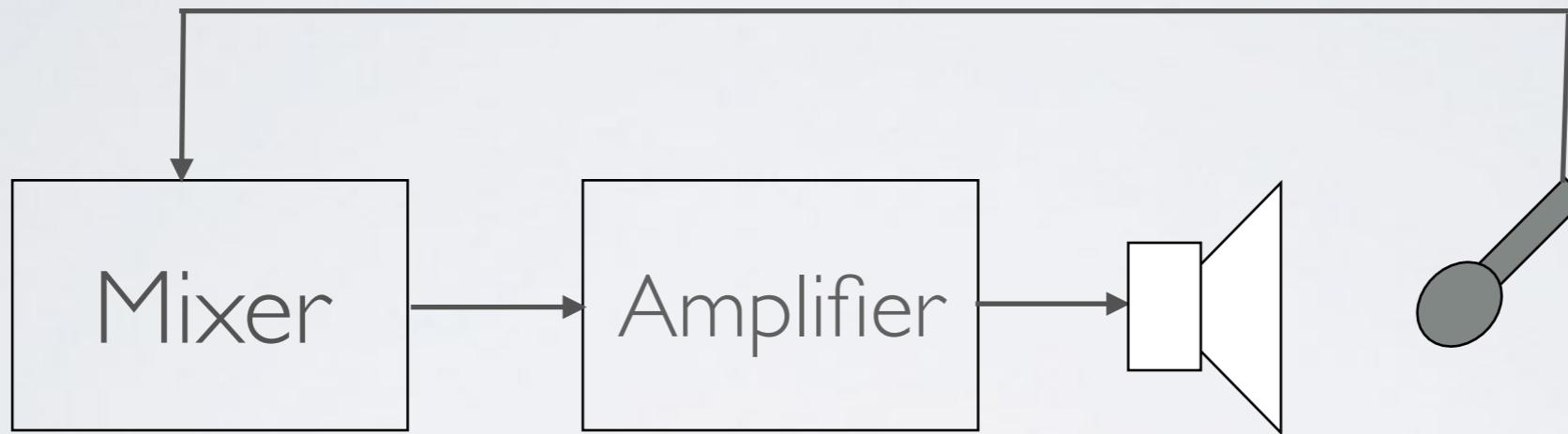
Oscillators

An **electronic oscillator** is an electronic circuit that produces a repetitive, oscillating electronic signal, often a sine wave or a square wave.^{[1][2]} Oscillators convert direct current (DC) from a power supply to an alternating current signal.

Oscillators



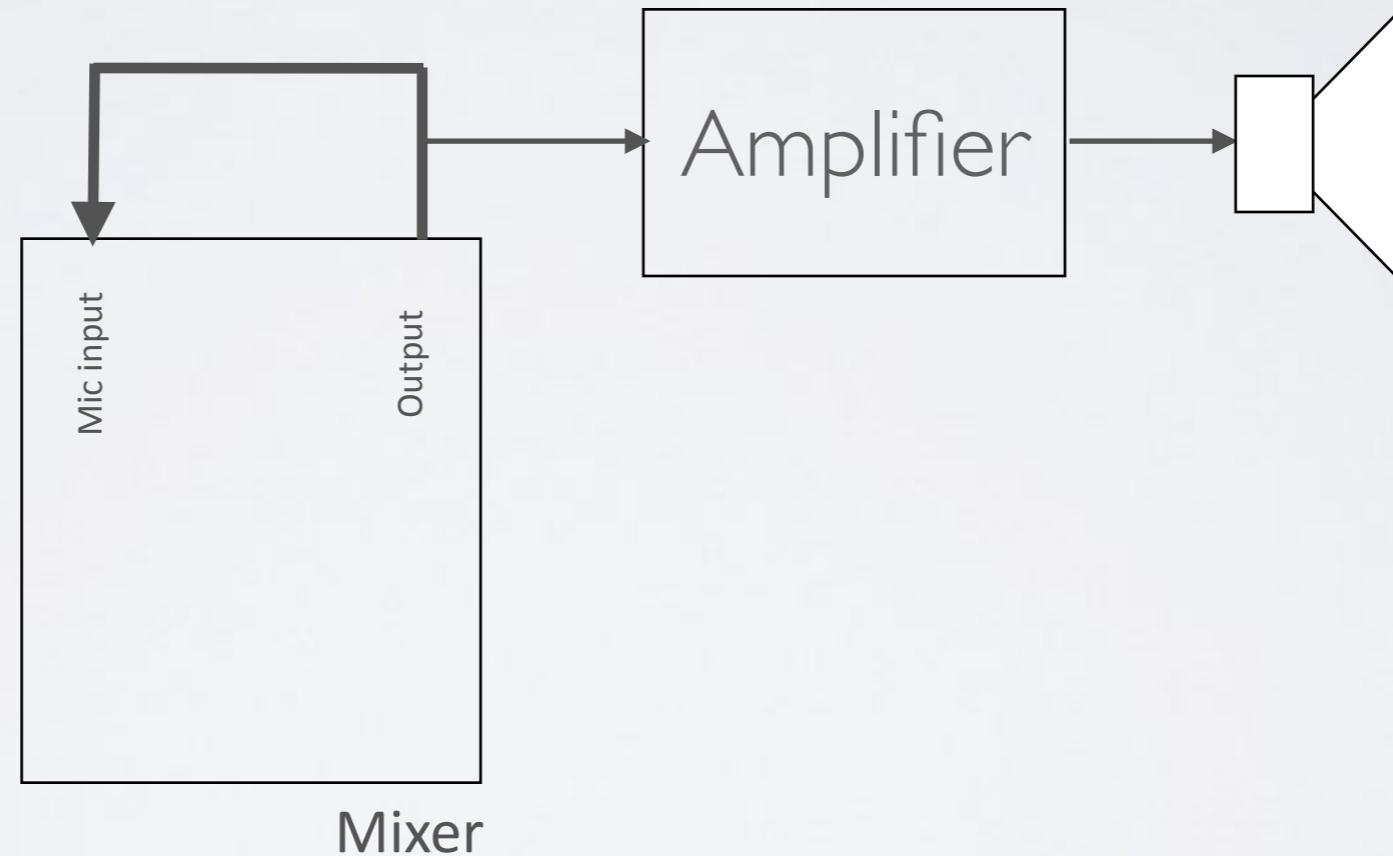
Oscillators



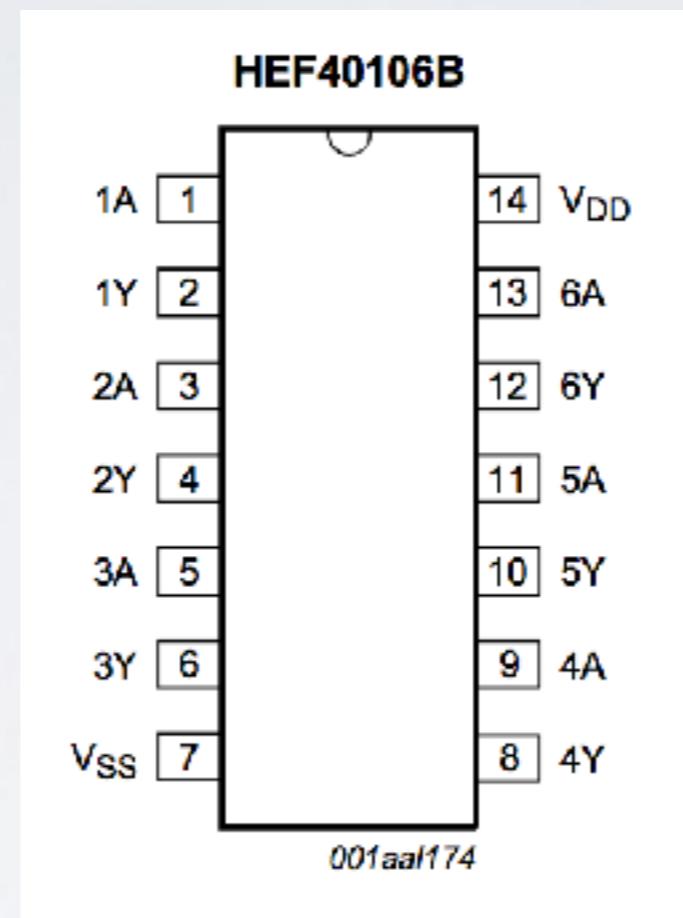
Microphone in front of a speaker ... feedback ... will **oscillate**

Oscillators

'Zero input mixer' is also an oscillator....

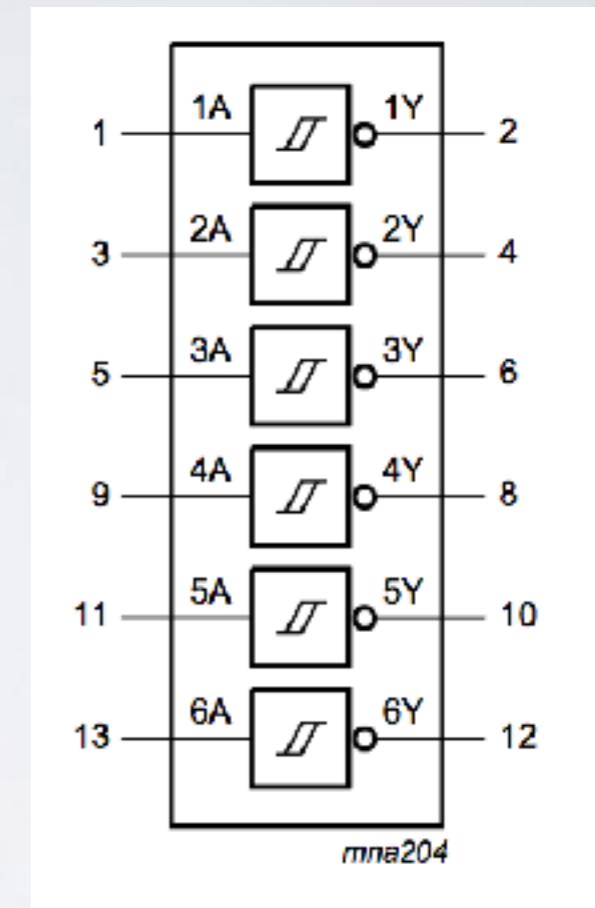


Simple electronic Oscillator with a Schmitt trigger HEF40106



Package 14p DIP

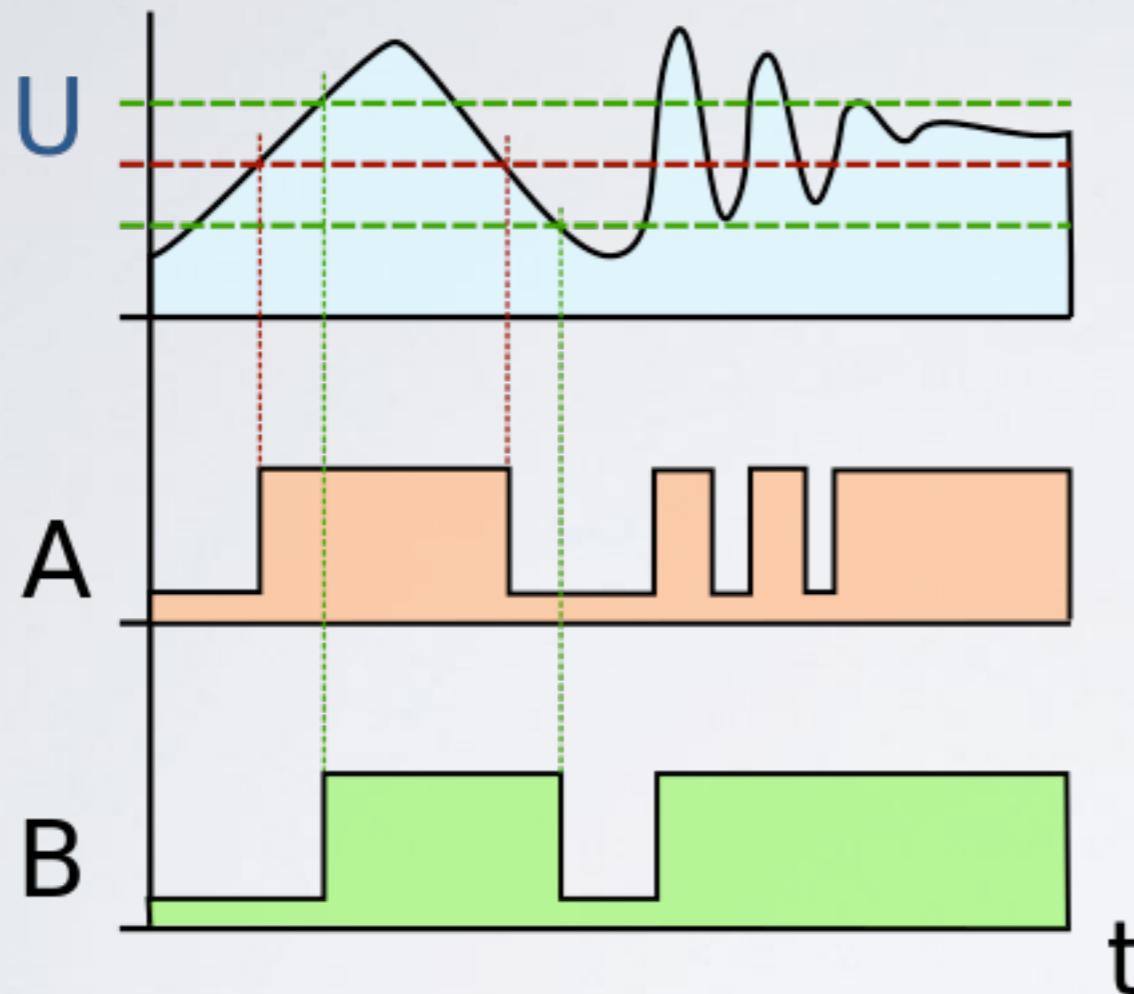
Pinout



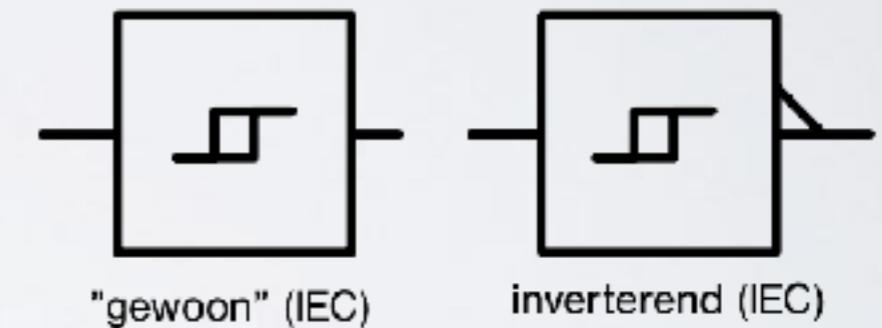
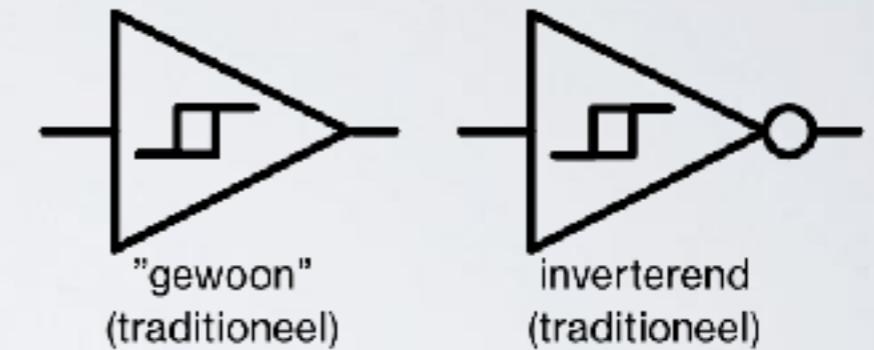
Functional diagram

Simple electronic Oscillator with a Schmitt trigger

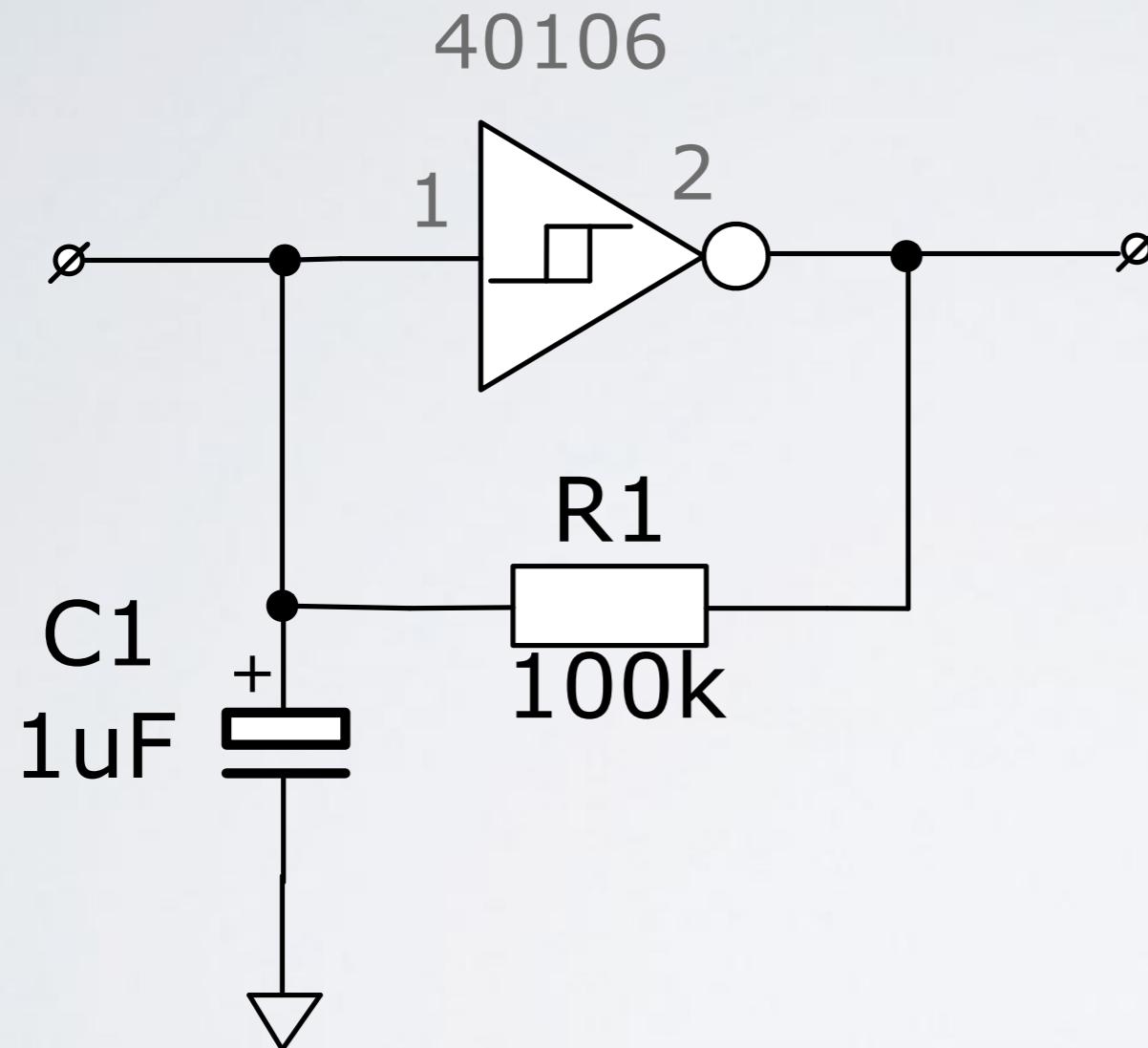
HEF40106



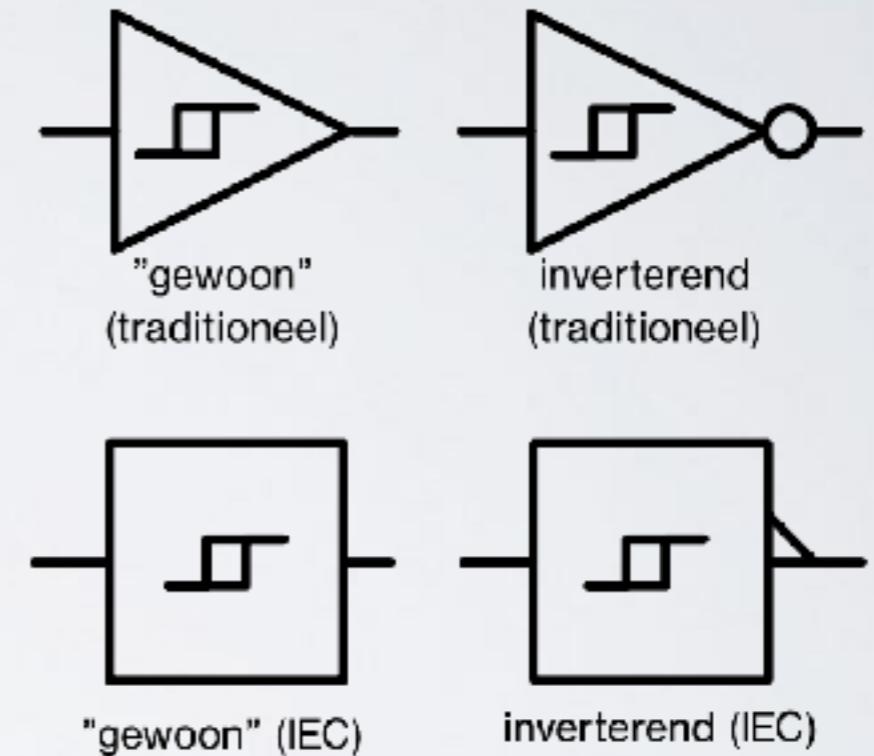
Schakelsymbolen schmitt-trigger



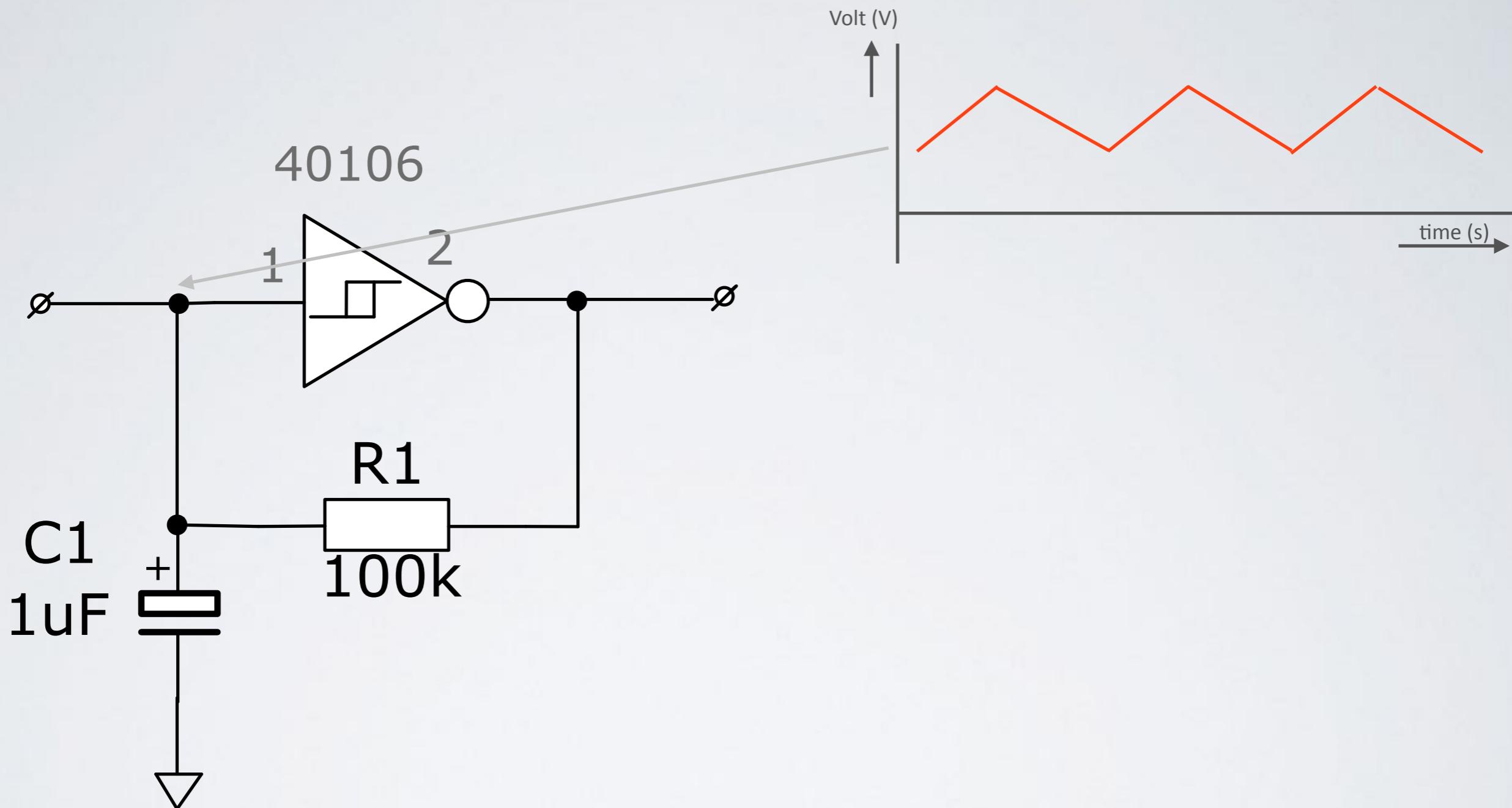
Simple electronic Oscillator



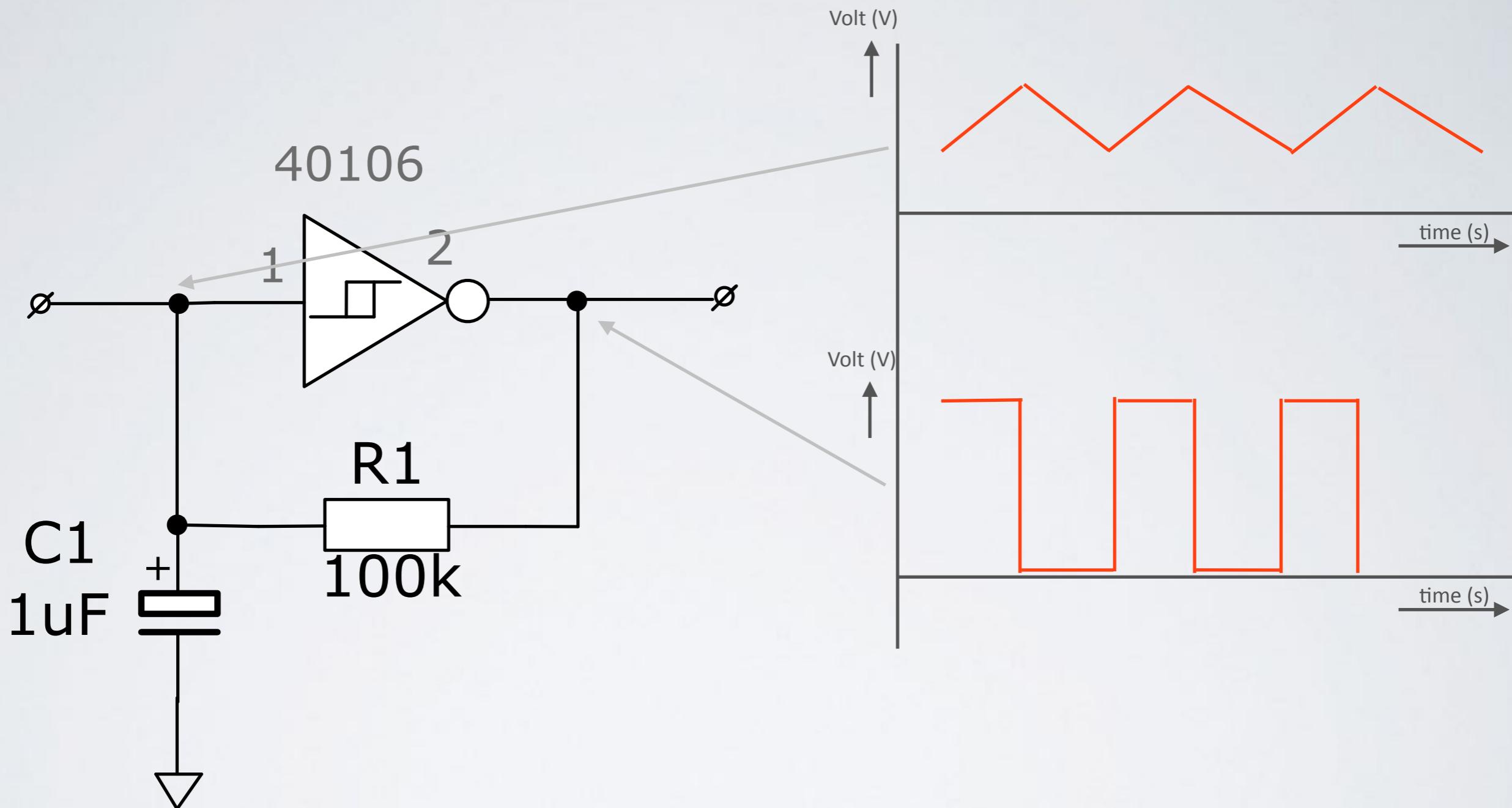
Schakelsymbolen schmitt-trigger



Simple electronic Oscillator

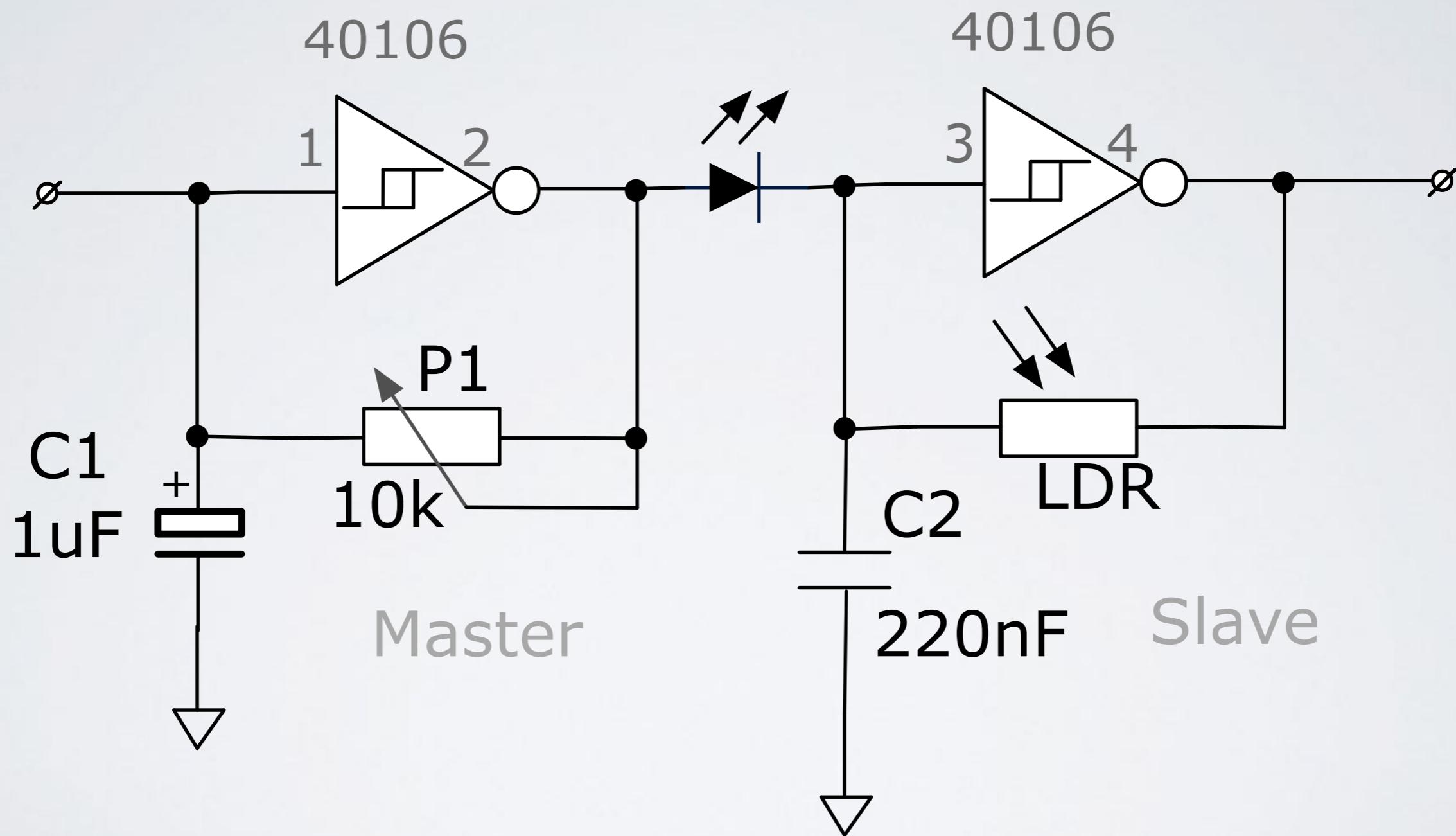


Simple electronic Oscillator



Oscillators

Make this:



Introduction to Electronics

Part III end