

Triggering of a Stimulator at a Set Time after a Set Number of Pulses within a Burst

Overview

This module arrangement illustrates how easy it is to build on a simple set of modules and develop a quite complex timing protocol. Here, a regular burst of pulses can be generated using the **NL304 Period Generator**, **NL405 Width/Delay** and **NL301 Pulse Generator** (see output C). Such an arrangement would be ideal for many researchers wishing to stimulate a preparation at a given frequency for a set duration and burst interval. However, by introducing an **NL603 Counter** and another NL405 the setup becomes more complex in that the pulses can be counted and an additional trigger output can be inserted at a specified delay time following one of the pulses within a burst. This particular setup was used in combination with Application Note 1 to stimulate swallowing artificially using an electrical stimulator triggered by C and a magnetic stimulator triggered by the delayed pulse at E. Note that the discontinued **NL401 Digital Width** would be a suitable alternative to the NL405.

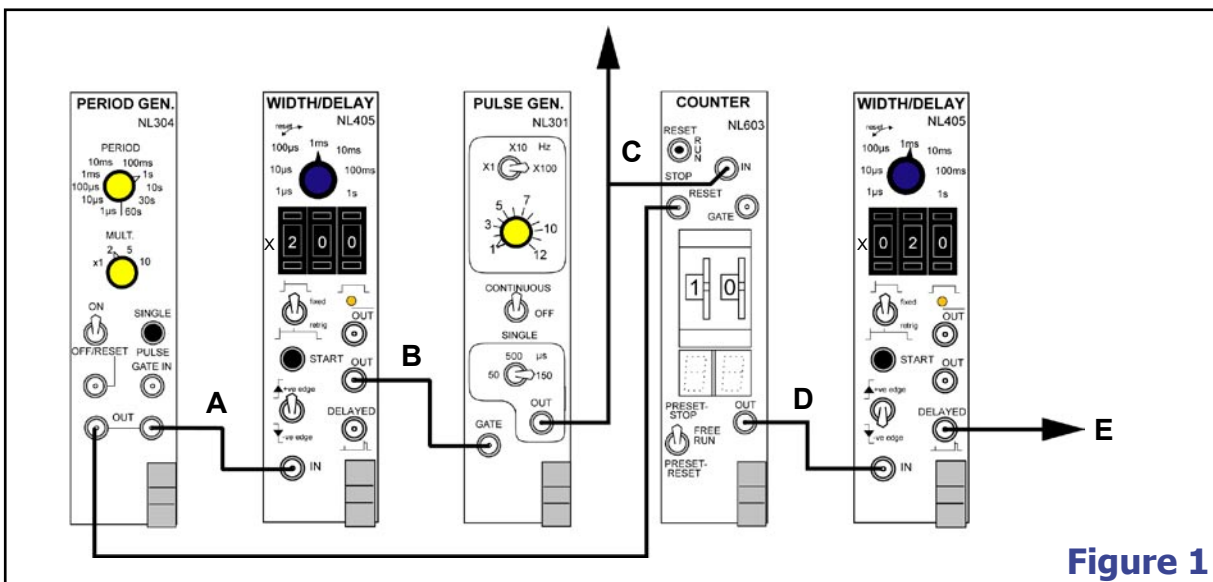


Figure 1

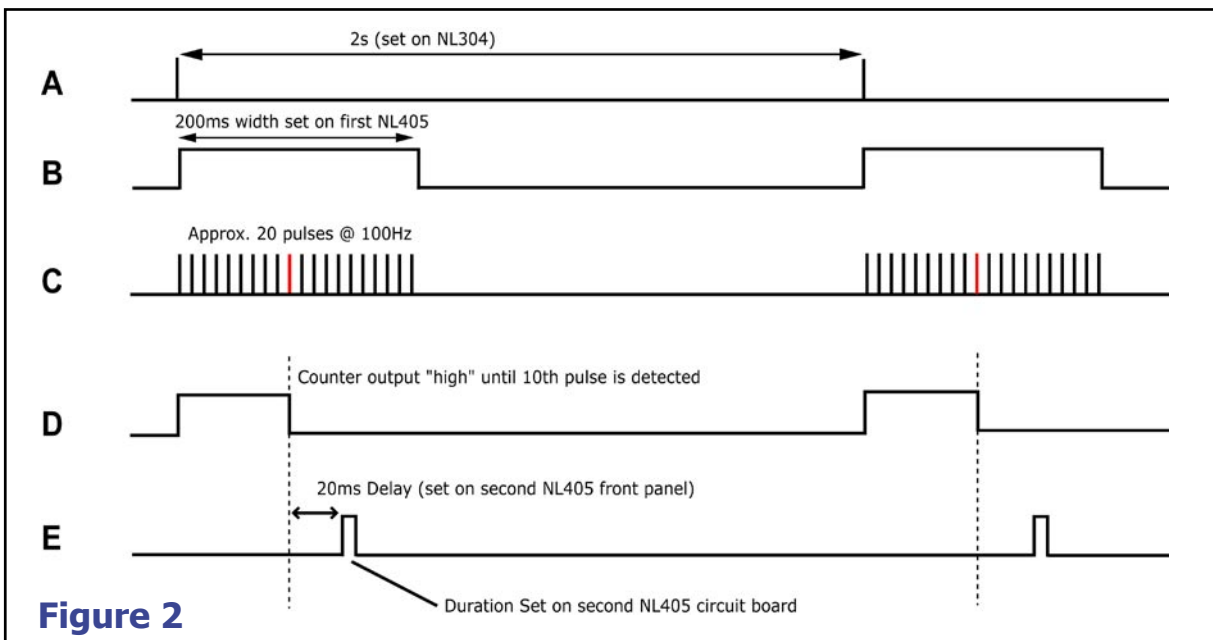


Figure 2