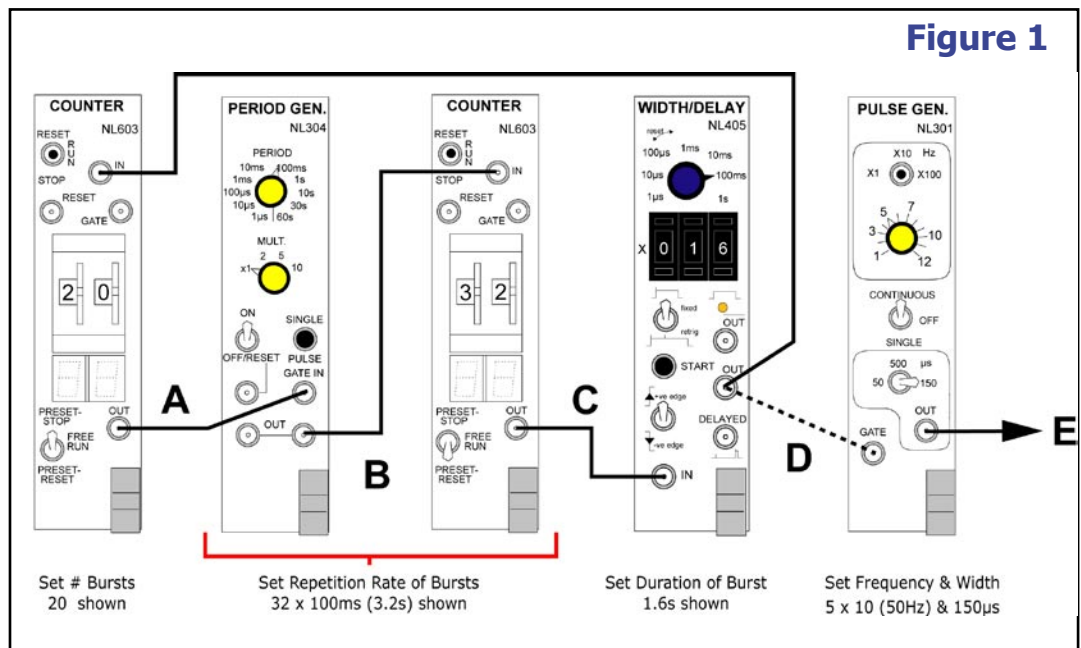# Digitimer
NeuroLog System

NeuroLog SYSTEM

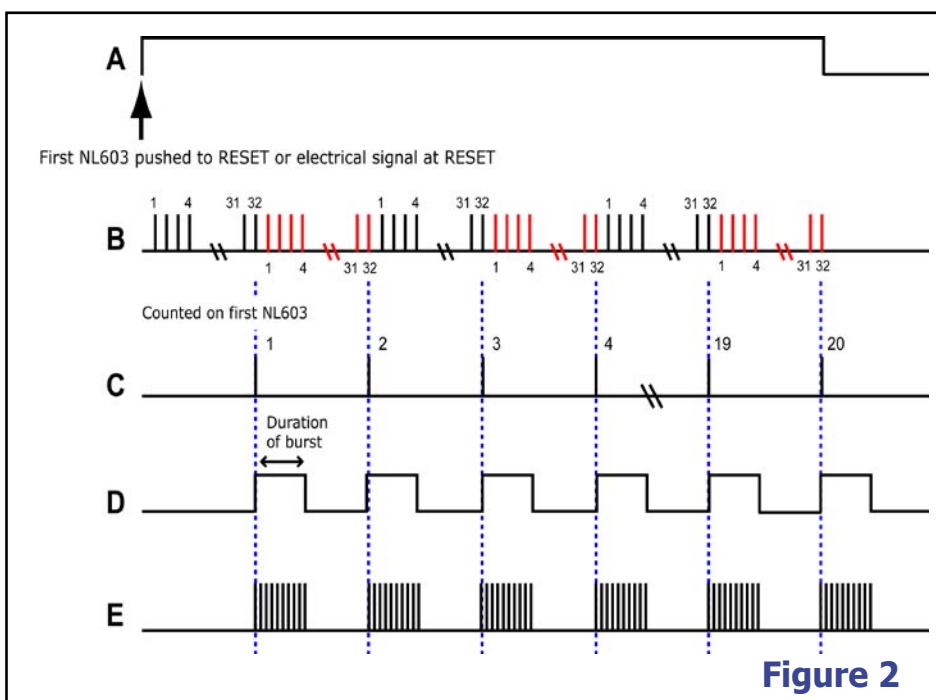# A Set Number of Bursts of Pulses with Control of Burst Duration/Repetition and Output Frequency/Width

Overview

Here, an **NL603 COUNTER** and **NL304 PERIOD GENERATOR** are used to to generate a regular output pulse every 3.2 seconds (C) which is fed into an **NL405 WIDTH/DELAY** module. The resultant widened output pulse (1.6s) from the NL405 (D) is used to gate an **NL301 PULSE GENERATOR** which when active produces a burst of pulses at a preset frequency and width (E) which can be used to trigger an external device. The output of the NL405 is also used by the left-hand NL603 to count and limit the number of bursts passed, in this case to 20. Once 20 bursts have been counted, the (A) output goes low, thereby halting the NL304. This arrangement of modules therefore gives a tremendous degree of control over the characteristics of a repeated burst of pulses and would be ideal as a flexible means of controlling an electrical stimulator.

Figure 1

Set # Bursts
20 shown

Set Repetition Rate of Bursts
32 x 100ms (3.2s) shown

Set Duration of Burst
1.6s shown

Set Frequency & Width
5 x 10 (50Hz) & 150µs

Figure 2

Please note that rear connection jumpers of ALL modules, except for the NL405 OUT and NL301 IN, should be "parked" as described in the manual. Link "D" is a "rear connection" - all others are external leads between sockets. No "T" connectors are needed.

Application Note 6