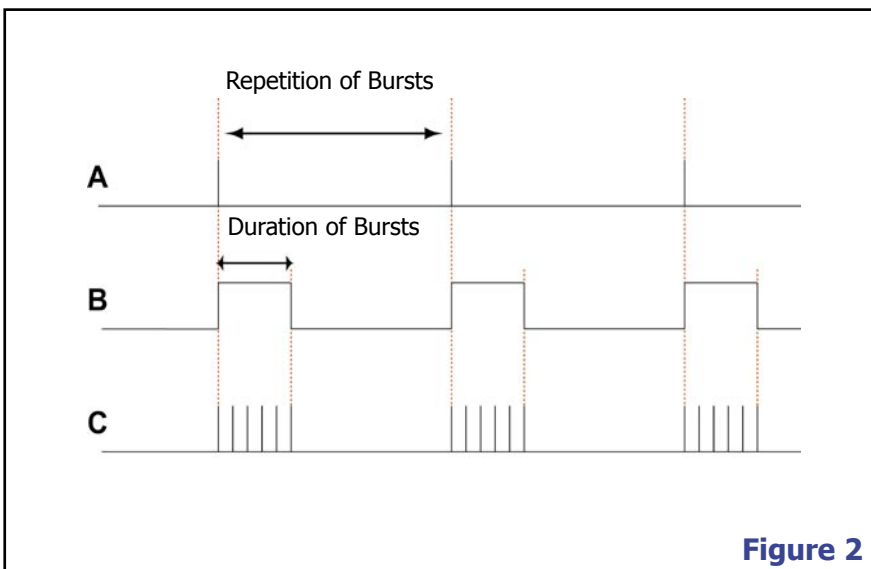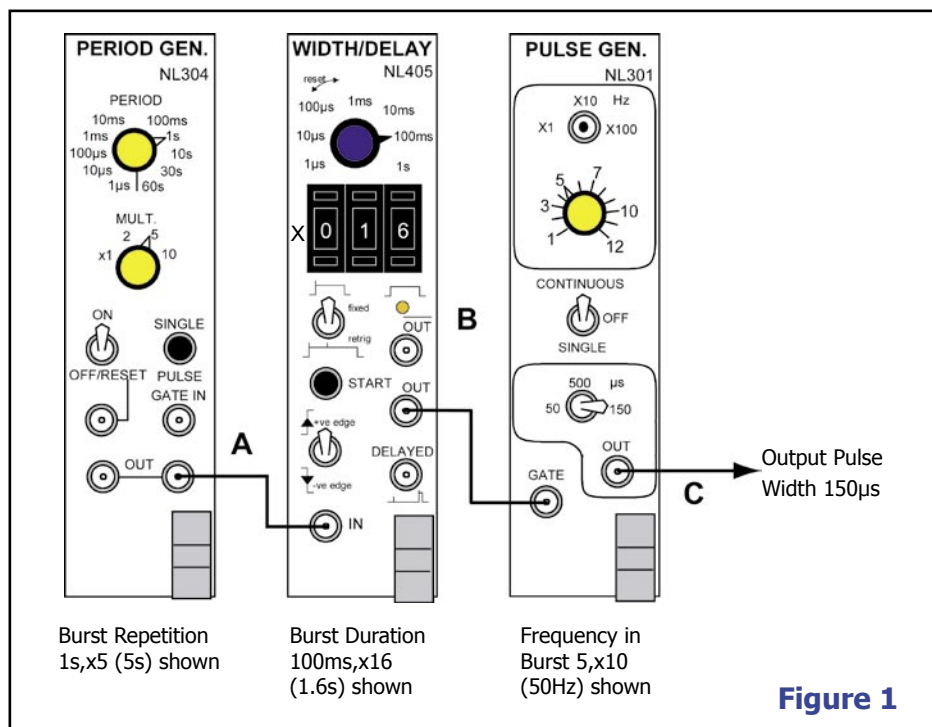# Digitimer
NeuroLog System

NeuroLog SYSTEM

A Regular Burst of Pulses with Control of Burst Duration/Repetition and Output Frequency/Width

Overview

The following scheme provides a simple means of generating a repeating burst of pulses which can be used to trigger other NeuroLog modules or TTL compatible devices, such as electrical stimulators. This set of modules allows control over the duration and frequency of the burst as well as the duration and frequency of the individual output pulses.

The **NL304 PERIOD GENERATOR** is used to set the repetition of the burst, while the **NL405 WIDTH/DELAY** module determines the duration of the burst. Note that older "Width" modules such as the **NL401 DIGITAL WIDTH** and **NL403 DELAY/WIDTH** can be used in place of the NL405. Finally, the **NL301 PULSE GENERATOR** sets the output pulse frequency and width (50, 150 or 500 μs). If these pulse widths are too limiting, it is quite possible to add a further NL405 following the NL301 to provide greater flexibility.

Burst Repetition
1s,x5 (5s) shown

Burst Duration
100ms,x16
(1.6s) shown

Frequency in
Burst 5,x10
(50Hz) shown

Output Pulse
Width 150μs

Figure 1

Figure 2

Note: The rear connections jumpers of ALL modules should be parked as described in the manual. Actually, both connections could be "rear connection" but ensure that the "OUT" is selected on the NL405/403/401 rear output jumper.

Application Note 7