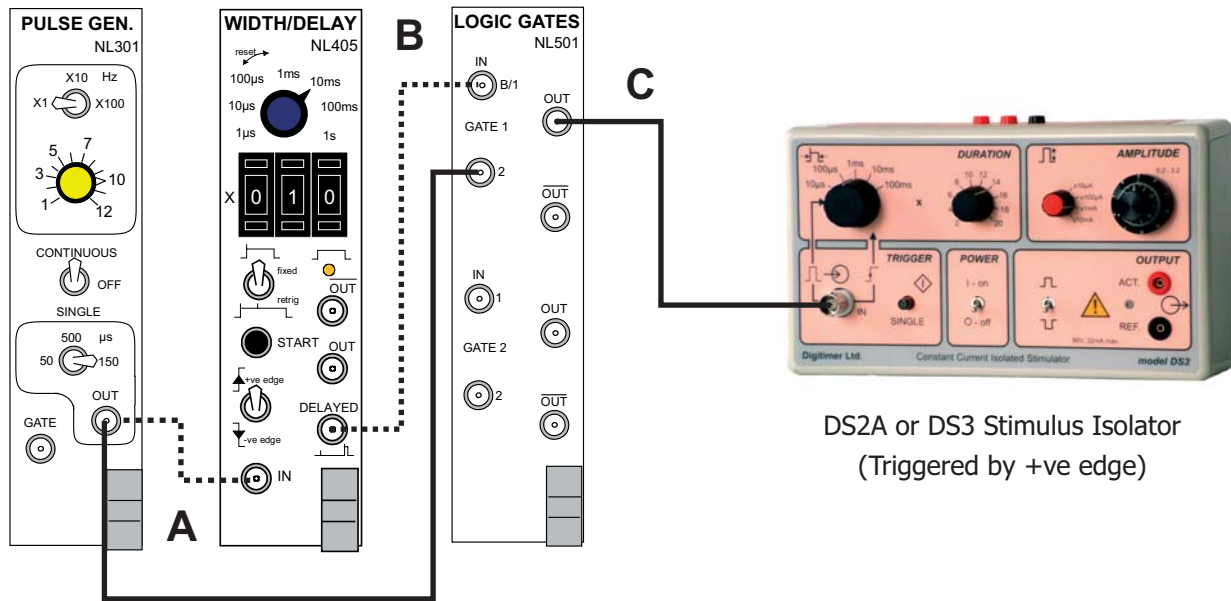


Using the NL405 Delay/Width Module & NL501 Logic Gate to produce pairs of pulses with interval control from a single trigger input, such as the NL301 Pulse Generator



DS2A or DS3 Stimulus Isolator
(Triggered by +ve edge)

Here, the Neurolog System is being used to produce a repetitive single trigger pulse and convert it into a pair of pulses with a user controllable delay between them. This pair of pulses can then be passed through an "OR" Logic Gate (within the NL501) so that they can both be applied to one of our stimulus isolators. In this way, a pair of stimulation pulses can be given to a preparation to study phenomena such as paired pulse facilitation. Although the illustration shows an NL301 Pulse Generator initiating the stimuli at a certain frequency, the initiation pulse can come from any external device capable of producing a TTL compatible logic pulse. It is also possible to replace the NL301 with the NL304 Period Generator if slower frequencies are required, however, because the NL304 only produces a 0.5µs output pulse, it would be necessary to employ an extra NL405 after the NL501 Logic Gate in order to "widen" the output pulse so that it could effectively trigger the DS2A or DS3 stimulator.

