

# Digitimer

## Research Instruments

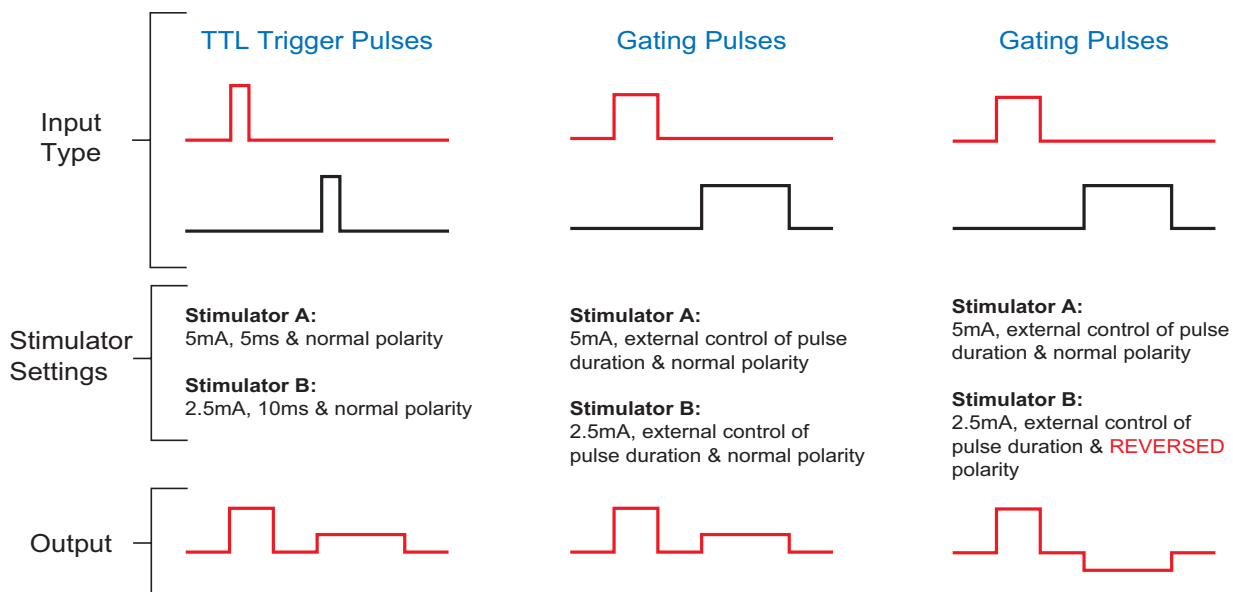
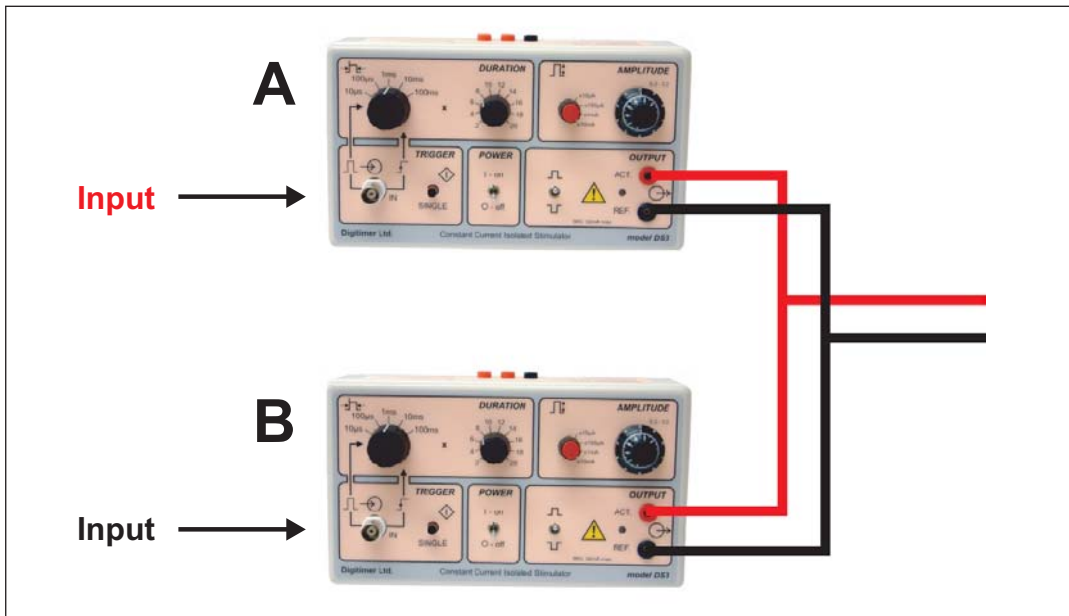
### Using two DS3 stimulators in parallel allows stimulation through the same electrodes with different pulse types

Simply link the pairs of red and black outputs together as shown below and connect stimulators A and B to their appropriate trigger/gating source. The two stimulators can then provide two types of stimulus pulses with different durations or amplitudes in response to:

- (i) Incoming TTL pulses - where the individual stimulators would control pulse duration, amplitude and polarity.
- (ii) Gating Pulses of different durations - where the stimulators would just control amplitude and polarity.
- (iii) Pushing the front panel "single-shot" buttons on each of the stimulators.

Because the DS3 stimulators include a polarity toggle switch, it is also possible to provide biphasic stimulation using the setup above, however, the stimulators would need to be set to opposing polarities to achieve this.

**IMPORTANT NOTE: It is recommended that the internal Output Discharge Circuit is disabled in both units if they are to be connected in parallel as shown here. Instructions on how to do this are provided in the operators manual.**



*Application Note*