

Operating Instructions Microstim DB3 Tester

Part number: 2510005



- 1) Ensure that the battery is in good condition. Without the patient lead connected press one of the function buttons, (in this case P.T.C is better). If the battery condition is good then the LED indicator will be green. The LED indicator changes from green to amber, then red as the battery output decreases. Replace the battery if the LED indicator is red.
- 2) Connect the DB3 tester to the output, red (+ve) and black (-ve). Set the intensity control to maximum (fully clockwise).



- 3) Depress each of the function buttons in turn. When a function button is pressed and held there should be audio output in conjunction with illumination of the green LED indicator on the Microstim DB3. The output can be verified by observing if the red LED indicator on the DB3 is also illuminated in synchronization.

Test result:

- a) DB3 Tester indicator illuminated red – Microstim output test passed.
- b) DB3 Tester indicator not illuminated:
 - i) Battery level maybe low, check battery condition as in 1) above.
 - ii) If still not illuminated check intensity control set to maximum as in 2) above.

- iii) If still not illuminated then the Microstim has developed a fault,
 i.e. no or low output.

- 4) Before returning the Microstim back into service test the patient cable by carrying out continuity tests.

In order to further verify the output of the unit additional tests can be carried out by connecting the Microstim DB3 to an oscilloscope using the supplied BNC cable.

- 5) Connect one end of the BNC cable to the output of the DB3 tester and the other end to a suitable oscilloscope.



NOTE: The DB3 Tester reduces the output of the Microstim DB3 by a factor of 100 in order to facilitate easy testing.

Typically the oscilloscope can be set to amplitude of 0.2 V per division and the time base as appropriate to the output being observed.

Modes of Stimulation:

Train of Four (T.O.F)

Consists of four stimuli at a frequency of 2 Hz.

Double Burst Stimulation (D.B.S)

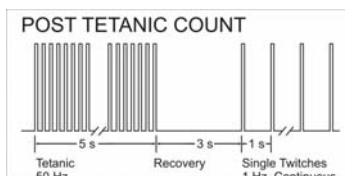
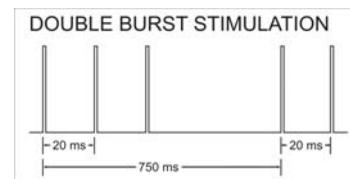
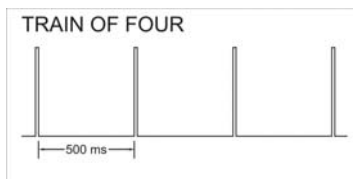
Consists of two short bursts of stimuli at 50 pulses per second separated by 750 ms between bursts.

Post Tetanic Count (P.T.C)

Consists of a sequence of pulses; 50 Hz for 5 seconds, a 3 second pause, followed by 1 Hz stimuli.

Continuous 1Hz (Single Twitch)

Consists of a single stimulus applied repetitively at a frequency of 1 Hz.



Diagrams not to scale; for illustration purposes only.