

Operating Instructions Microstim DB3 Tester

Part number: 2510005



- 1) Ensure that the battery of the Microstim DB3 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 Microstim DB3 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 Microstim DB3 Tester to the output of the Microstim DB3, red (+ve) and black (-ve). Set the Microstim DB3 intensity control to maximum (fully clockwise).



- 3) Depress each of the Microstim DB3 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 (refer to page 2. Modes of Stimulation). The output can be verified by observing if the red LED indicator on the Microstim DB3 Tester is also illuminated in synchronization.

Test result:

- a) Microstim DB3 Tester LED indicator illuminated red – Microstim DB3 output test passed.



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- b) Microstim DB3 Tester LED 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 DB3 has developed a fault, i.e. no or low output.
- 4) Before returning the Microstim DB3 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 Tester to an oscilloscope using the supplied BNC cable.

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



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

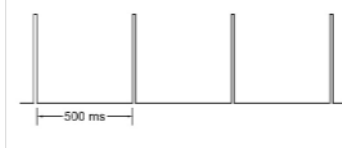
Typically the oscilloscope can be set to amplitude of 0.2 V per division and the time base as appropriate to the output being observed.

Modes of Stimulation:

Train of Four (T.O.F)

Consists of four stimuli at a frequency of 2 Hz.

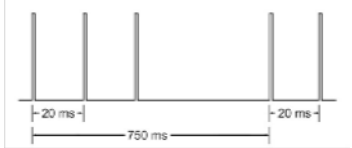
TRAIN OF FOUR



Double Burst Stimulation (D.B.S)

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

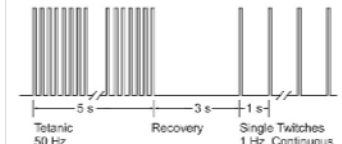
DOUBLE BURST STIMULATION



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.

POST TETANIC COUNT



Continuous 1Hz (Single Twitch)

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

1 Hz



Diagrams not to scale; for illustration purposes only.