



VIAMED

Operational Overview

for use during
anaesthesia.

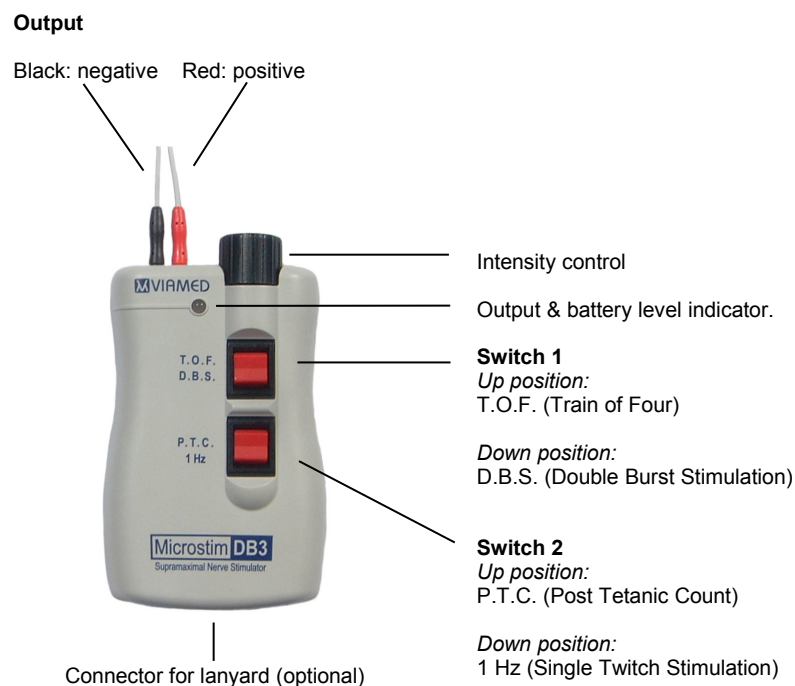
Microstim DB3 Supramaximal Nerve Stimulator.



CE

0086

Controls & connections of the Microstim DB3.



Battery installation.

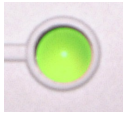
With the Microstim DB3 'face down' slide the rear panel battery door downwards and remove from the unit. Install the 9V Alkaline, MN1604 battery, observing correct polarity insertion. Refit the battery door.



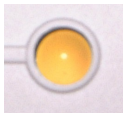
Output & battery level indicator.

When the Microstim DB3 is in use, flashes of the output & battery level indicator coincide with stimulus pulse. When patient current flows, audio pulses are also generated.

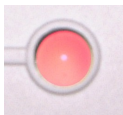
As an indication of battery condition the indicator changes from green (good condition) to amber, then red as the battery output decreases. Replace the battery when the indicator is red.



Battery level indicator green:
Battery condition good.



Battery level indicator amber:
Battery becoming depleted.



Battery level indicator red:
Replace battery.

Connecting to the patient.

► Position and attach the stimulating electrodes.

Choose the monitoring site,
e.g. Ulnar nerve, facial nerve, tibial nerve.

Clean the skin with an alcohol wipe.

Apply two ECG type electrodes, either along the line of the nerve or straddling the nerve.

Connect the patient lead to the electrodes; the positive (red) electrode should usually be proximal.

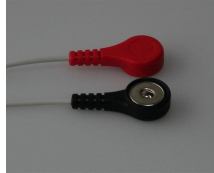


Connect the patient lead to the Microstim DB3.

Red cable to the +ve output socket
Black cable to the –ve output socket.

The standard patient cable assembly supplied with the Microstim DB3 is:

Part number **2520000**
Length: 0.90 m
Terminations: Press-studs:

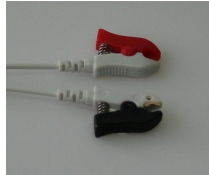


Alternative patient cables available are as follows:

Part number **2520001**
Length: 1.5 m
Terminations: Press-studs



Part number **2520003**
Length: 1.5 m
Terminations: Miniature pinch clamps



► Set the intensity control to approximately half-scale.

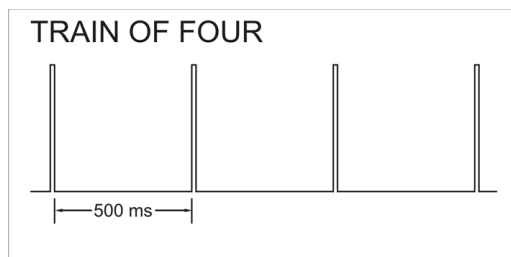


Intensity control

► Decide on the mode of stimulation.

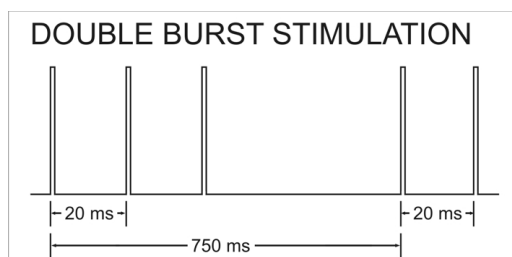
Train of Four (T.O.F)

Consists of four stimuli at a frequency of 2 Hz.



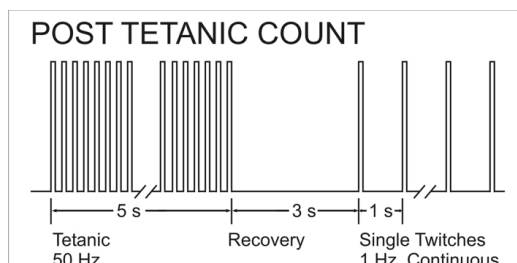
Double Burst Stimulation (D.B.S)

Consists of two short bursts of stimuli (3:2) at 50 pulses per second separated by 750 ms between bursts.



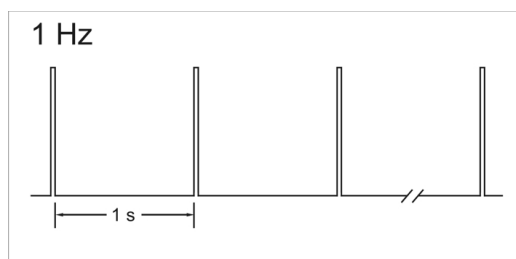
Post Tetanic Count (P.T.C)

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.

 Note: Stimuli pulse width 200 μ s.

► To initiate a mode of stimulation press and hold the required switch.

 **Note:** When switching between two modes of operation, first release the switch before activating the next mode.

► Adjust the output current.

Increase the intensity until the twitch response is maximal.

Cleaning Instructions.

To surface clean the Microstim DB3 and patient cable:

Use a soft cloth dampened with either a commercial non-abrasive cleaner, or a solution of 70% alcohol in water.

Lightly wipe the surfaces of the unit.

To disinfect the Microstim DB3 and patient cable:

Use a soft cloth saturated with a solution of 10% chlorine bleach in tap water.

Servicing Information.

The Microstim DB3 is designed to be robust yet compact in size. Without access to specialised equipment, troubleshooting and repair of circuit board components is not feasible.

With the exception of replacing the battery, there are no user serviceable components within the unit.

Service Testing:

- 1) Testing of the patient lead. Test the continuity of the individual leads of the patient lead assembly using a digital multi-meter.
- 2) Testing of DB3. Connect to DB3 tester and follow supplied instructions.



Parts list.

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Description	Part Number
Microstim DB3	2510000
Includes: 1 x Patient lead 0.90m, with press studs 1 x Battery, 9V Alkaline, MN1604 1 x Operator's manual	2520000 9950055 2590000
Optional accessories:	
Lanyard, with screw thread for use with Microstim DB3	9910127
Patient lead 1.5m with press studs	2520001
Patient lead 1.5m with pinch clamps	2520003
DB3 Tester	2510005

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Note:
Specifications subject to change.
Please contact Viamed for further specifications and information.