

Microstim DBS Mk 3 Design Goals.

Document reference: MS3DG
Document revision: 1.0
Author: Peter Anderson
Date: 30th March 2004

Revision history: 30th March 2004 Original version

Overview.

The Microstim DBS Mk 3 is intended to be personally owned and carried by the Physician. It has a 20-year history of reliability and any new version must continue that record. The environment in which the unit is used is unfriendly and the unit is regularly dropped onto stone floors.

Design goals.

- 1 The Microstim DBS Mk 3 must be compliant with ISO 601 2.10 and ISO 60601.
- 2 The Microstim has proved reliable for 20 years due to the quality components used.
- 3 The unit should be “water resistant” i.e. able to be wiped clean.
- 4 The unit is intended to be personally owned and carried by the Physician. So, it should be:
 - a) Lightweight
 - b) Small size
 - c) Low cost – not hospital equipment
 - d) Warn of battery failing
 - e) Survive and operate correctly after repeated dropping onto stone floors
- 5 Single handed – both left and right hand use.
- 6 Standard size batteries to be used – in future to be “AA”.
- 7 The stimulator lead needs a special connector (not 2mm plugs for USA market) and terminates onto standard ECG electrodes. One possibility is a standard ECG cable and connector termination, though a non-standard connector would be better.