

## Manufacturing constraints on the Microstim

1. The environment in which the Microstim is used is unfriendly and the unit is regularly dropped onto stone floors.
2. The unit should be “waterp resistant” “ i.e able to be wiped clean
3. The unit is intended to be personally owned and carried by the Physician. So it should be
  - a. Lightweight
  - b. Size small
  - c. No flat batteries
  - d. Low cost (not hospital equipment)
4. Cable needs a special connector( not 2mm plugs for USA market) and terminates into standard ECG electrodes
5. Single handed (both left & right) use
6. Standard batteries available world wide
7. Standards to be complied with
  - a. ISO 601 2.10
  - b. ISO 60601
8. Components and layout
  - a. The Microstim has proved reliable for 20 years due to the component quality
  - b. The cable will be removed regularly so it requires a quality plug and socket
  - c. Use clamps on the transformer so that it is held securely and cannot break free.
  - d. Layout C4 so that it is near the PIC and VR1:- saves one component