

# **Check list for daily and monthly function check of auditory brainstem response systems.**

(Based on B700/701, BS EN ISO 8253-1:1998).

Some manufacturers offer their own equipment-specific version of Stage A check

1. Clean equipment and examine for damage or wear. Check headphones, bone conductor, insert earphones and leads for signs of damage.
2. \* Switch on & adjust according to handbook.
3. \* Earphone serial numbers or marking tally with equipment.
4. \* Check battery state, if appropriate.
5. \* Electrode impedance test correct with dummy load.
6. \*# Threshold levels of stimuli to be used are subjectively correct for:
  - i. Air conduction (For all transducers used)
  - ii. Bone conduction
7. \* High level (max 80dBnHL) listening test with stimuli to be used satisfactory by:-
  - i. Air conduction (For all transducers used)
  - ii. Bone conduction
  - iii. Masking (including insert)
8. Attenuator sweep subjectively satisfactory.
9. Noise, hum and break-through levels are adequately low.
10. Radiated noise from instrument is acceptable at the patient's position.
11. Headbands are in good condition and tensions subjectively correct.
12. Amplifier: select calibration mode (or loop test mode), run test and check averaged waveform is of expected amplitude and morphology.
13. Connect amplifier inputs together, run test and check that flat waveforms are obtained, the noise floor meets equipment specifications, and that there is no significant correlation between repetitions indicating system artefacts.
14. Check test parameters against the relevant departmental / NHSP protocol
15. \*Reset all controls to normal operating positions for commencement of patient testing.

\* Tests marked with an asterisk are recommended for checking at the start of a session when the equipment is used; other checks may be performed at monthly intervals. Additionally, it is vital that all checks are conducted prior to and following objective calibration and whenever the user has reason to question the correct function or adjustment of the system.

# Threshold levels may be tested at the rate employed in the ABR test but note that in theory, these levels are correct only when a rate of 20/s is used in a subjective listening check. If the stimuli appear too loud, repeat the check at a rate of 20/s.

Ongoing vigilance: Whenever an elevated ABR threshold is recorded, check that the stimulus is being delivered at the expected level; monitor waveforms recorded in babies with normal ABR thresholds and report / investigate any unexpected artefacts. Ensure that when testing, the AC transducer being used corresponds to the transducer specified in the test set-up.