HEARLab ABR module

The second and new module HEARLab ABR is a 2-channel recorder of auditory brainstem response (ABR) waveforms. It has been developed on the same HEARLab platform. It is intended for use by audiologists and other health professionals to record and assess the auditory brainstem response.

An ABR audiometry is often done on a newborn for a hearing screening and diagnostic assessment. The test can also be done on a child to estimate hearing level if a behavioural assessment cannot be obtained. The ABR test is best performed if the child is asleep or physically relaxed, inactive and eyes closed.

**Equipment:**
- A stimulus controller
- A unit for electrode connections
- Transducers: a pair of insert earphones & bone conductor
- Four electrodes (connected with single use self-adhesive ECG electrodes)
- A laptop computer

*All of these equipment is portable and easy to set up.*

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**What are available in the ABR module?**

- A rich set of test parameters is available for the user to optimise the test setup to suit a specific patient group. Test setups may be saved as predefined setups to save setup time when conducting similar assessments.
- Multiple test runs, if selected, are conducted automatically one after another starting at the highest level and finishing at the lowest level.
- Stop conditions may be set by the maximum numbers of accepted sweeps, when the F_sp value exceeds a set number, or when the residual noise is below a set value.

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**Parameter** | **Options**
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Stimuli | 2-0-2 tone bursts at 0.5, 1, 2, 4 kHz & clicks 100 µs
Output | Insert phones or bone conductor
| Masking selectable using wide band noise
Presentation Level | Inserts: 0 – 100 dB nHL, 5 dB steps
| Bone: 0 – 60 dB nHL, 5 dB steps