Bio-logic NavPRO ONE
Diagnostic ABR

Quick start guide

Doc. No.7-26-1386-EN/00
Part No.7-26-13806-EN
Quick Guide: Bio-logic® NavPRO ONE® Diagnostic ABR

1. Turning On/Off, and charging the device

2. Auditory brainstem response (ABR) diagnostic

- Current time
- Battery status
- Customize settings
- Select patient
- Additional information about options for current screen
- Turn off device
- Connect the electrode cable
Connect the transducer to the appropriate connector:

Headphones or insert earphones: blue connector
Probe: red connector
Second probe for binaural testing: blue connector
Bone oscillator: red connector

Clean the patient's skin and place the electrode pads. Connect the clips to the corresponding sites. Recommended montage is:

- White: high forehead
- Black: cheek
- Red: mastoid

For binaural testing, place red electrode on the nape.

If you are using an ear probe or insert earphones, select the appropriate ear tip size and place it on the probe tip. Insert the probe in the ear making sure that the ear tip fits tightly into the ear canal.

If you are using headphones, place them over the ears. Select ABR.

Select the protocol you would like to use. To change the parameters, select one of the presets and then the tools button at the bottom of the page:
Configurable test parameters

Click will provide better overall morphology. Chirp will provide better wave V amplitude. Select tone burst for frequency specific testing.

A lower stimulus rate will provide better wave morphology.

Spread Spectrum reduces sensitivity to electrical interference.

Select type of stimulus and polarity. Masking noise is available only for monaural testing.

Select up to 8 testing intensities. Repeat a level to confirm response repeatability.

Select stimulus rate, maximum number of averages and spread spectrum.
Statistical evaluation is used to automatically mark wave V. This can be confirmed manually.

Test will be automatically stopped if no response was recorded for two consecutive traces.

The current trace will be stopped if the residual noise is lower than this value.

Select the test ear by pressing either the Right or Left button, or Right + Left for binaural testing. Binaural testing is available when headphones, insert phones or two ear probes are connected.

Minimum peak to peak amplitude required for wave V to be marked as

Minimum peak to peak amplitude required for wave V to be marked as

Proceed automatically to the next trace when significance is reached for the current trace.
An impedance check will be performed prior to measurement. If impedance is below 6 k ohm, the start button will become available. You can configure the settings for the test to autostart if the impedance is lower than 4 k ohm. If impedance is higher than 6 k ohm but below 12 k ohm, a skip button will become available. An impedance below 6 k ohm is recommended for best test results.

If you are using an ear probe, a calibration will be performed together with the impedance check. You can select the simple calibration or the expert calibration mode in the device set up.
ABR diagnostic test screen

- Bars indicate significance level of response
- Modify the table of levels to test
- Overall EEG. Value should remain in the lower third. Press to enable raw EEG view
- Test progress
- Stop test
- Restart current test level
- Pause/resume
- Skip current test level
- Red (right ear) and blue (left ear) dots indicate wave V detected automatically
- Increase test time. This will increase the maximum number of stimuli
- Impedance monitor
- Enter peak edit mode
- Modify intensity levels during test
- View raw EEG during test
- Mark waves during test
- Parameters changes available during test
ABR diagnostic test results

Bar graphs indicate the significance of the response. A full bar indicates valid response.

Note: These circles indicate that other screens are available to view. Swipe your finger right or left to get other views.

Press for additional options:
- Show traces in test order
- Show traces sorted by level
- Overlay traces of same levels
- Show summed traces for same levels

Print results to a label or to a pdf file
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Interactive options available after test

- Swipe up or down inside the graph area to modify the scale
- Confirm marker position. Marker symbol changes to the corresponding Roman numeral.
- Select trace
- Move wave marker
- Mark waves after test is finished
- Switch between wave markers
- Zoom in or out

Latency intensity graph

Numeric values shown in table format

Interaural difference in binaural testing

Test conditions

Latencies [ms]

<table>
<thead>
<tr>
<th>Impedance</th>
<th>Averages</th>
<th>Noise</th>
</tr>
</thead>
<tbody>
<tr>
<td>70 1.9k 13k</td>
<td>61050</td>
<td>35 nV</td>
</tr>
<tr>
<td>50 1.9k 13k</td>
<td>115179</td>
<td>23 nV</td>
</tr>
<tr>
<td>40 1.9k 13k</td>
<td>145595</td>
<td>18 nV</td>
</tr>
<tr>
<td>30 1.9k 13k</td>
<td>60746</td>
<td>18 nV</td>
</tr>
</tbody>
</table>

Interaural latency difference L-R [ms]

<table>
<thead>
<tr>
<th>Impedance</th>
<th>Averages</th>
<th>Noise</th>
</tr>
</thead>
<tbody>
<tr>
<td>70 -</td>
<td>0.2 -</td>
<td>- -</td>
</tr>
<tr>
<td>60 -</td>
<td>0.4 -</td>
<td>- -</td>
</tr>
<tr>
<td>50 -</td>
<td>0.4</td>
<td>- -</td>
</tr>
<tr>
<td>40 -</td>
<td>0.2</td>
<td>- -</td>
</tr>
<tr>
<td>30 -</td>
<td>0.3</td>
<td>- -</td>
</tr>
</tbody>
</table>

Test conditions

- Transducer: Insert
- Averages: 5000
- Stimulus: 40 Hz
- Stimulus: Chirp, Alternating
- Options: Auto Proceed
- Age group: Adult
- Total time: 15:02
Quick Guide Information

Release date: 2017-01-12
Revision: 01
Valid from: Firmware Rev. 2.1, Mira PC Software Rev. 1.6.4
Applies to: Model: SOH100360, web descriptions SOH06, SOH07, SOH08 and SOH09

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