What is a spread spectrum stimulus and how do we benefit from it when recording evoked potentials?

In telecommunication and radio communication, spread-spectrum techniques are methods by which a signal generated with a particular bandwidth is deliberately spread in the frequency domain, resulting in a signal with a wider bandwidth. This increases resistance to natural interference, noise and signal jamming, to prevent detection, and to limit power flux density.

Recording evoked potentials means recording signals in the range of nV! Even small sources of interference (mobile phones, lights, computers, elevators in the vicinity, monitors, any electrical equipment) might influence and disturb the recording. SENTIERO users do not need to worry about this problem as spread spectrum technology takes care of these interferences!

If you do not believe it: Try and compare against any competing device in any environment. SENTIERO can record faster and with less interference from environmental conditions.

SENTIERO can also be an all-in-one integrated handheld instrument with ASSR, Distortion Product Otoacoustic Emissions (DPOAE), TEOAE, and Pure Tone Audiometry. Many speech audiometry options are available too!

With SENTIERO, the user can customize DPOAE protocols with twelve frequencies or more up to 30 points per octave between 800 Hz and 10 kHz. Modulating the cochleas is much faster using patented FMDPOAE® (frequency modulated DPOAE), multichannel technology and conducting measurements on both ears simultaneously using the dual probe feature.

Made in Germany

PATH MEDICAL GmbH
Landsberger Straße 65
82110 Germering
Germany
Tel +49 89 800 76 502 / Fax +49 89 800 76 503
info@path-medical.de / www.path-medical.de

Key Features:
- Multiple tests in one unit: ABR, ASSR, OAE, air & bone & speech audiometry, Tympanometry
- Multichannel FMDPOAE®
- Patented cochlear audiogram & scatter paradigm: varies the intensity difference between the two stimuli to maximize response amplitude!
- Customizable protocols for each module: e.g. DPOAE protocols between 800 Hz and 10 kHz.
- Mapping the cochlea is much faster using patented FMDPOAE® (frequency modulated DPOAE), multichannel technology and conducting measurements on both ears simultaneously using the dual probe feature.

What is ABR and ASSR screening made easy and robust!

- Sp2 ABR inside - world’s most robust ABR recording!
- Sp2 ASSR - world’s most robust ASSR recording!
- Binaural control and live display of results!

PATH MEDICAL IS THE TECHNOLOGY LEADER!

Developed by the award winning group of engineers at PATH MEDICAL, SENTIERO was introduced in 2009 as the first touch screen based audiometry & OAE device in the world. In 2013 the first touch screen based tympanometer was introduced on the SENTIERO platform too! Now everything becomes united: again world’s first and unique feature.

PATH MEDICAL’s engineering team is unmatched: the same engineers who developed the EchoScreen in 1998 contributed with their experience and professionalism and they still contribute today. Where do you find this reliability? At PATH MEDICAL in Germany!
MULTIFREQUENCY AND MULTITRACE ASSR STUDIES - ADVANTAGES: If you are looking for a more flexible and powerful ASSR system, SENTIERO is not a simple newborn hear- ing screener but a full-blown tool from preterm to term babies to rehabilitation in adults and the elderly. SENTIERO is the first to introduce varying user preferences and an easy-to-use interface. The system is optimized to your individual setup, the EEG data can be used for the analysis of ASSR stimuli - advantages:

- Optimized to your individual setup, the EEG data can be used for the analysis of ASSR stimuli - advantages:
-本事に適応可能な設定が可能
- Easy to operate!
- Please review all its possibilities online on our website.
- 詳細な仕様は、デベロッパーズリリースのページをご覧ください。
- Additional technical specifications can be found in the developer release.