

LiSN-S PGA

The new benchmark in speech in noise testing



Life is on

We are sensitive to the needs of everyone who depends on our knowledge, ideas and care. And by creatively challenging the limits of technology, we develop innovations that help people hear, understand and experience more of life's rich soundscapes.

**Interact freely. Communicate with confidence.
Live without limit. Life is on.**

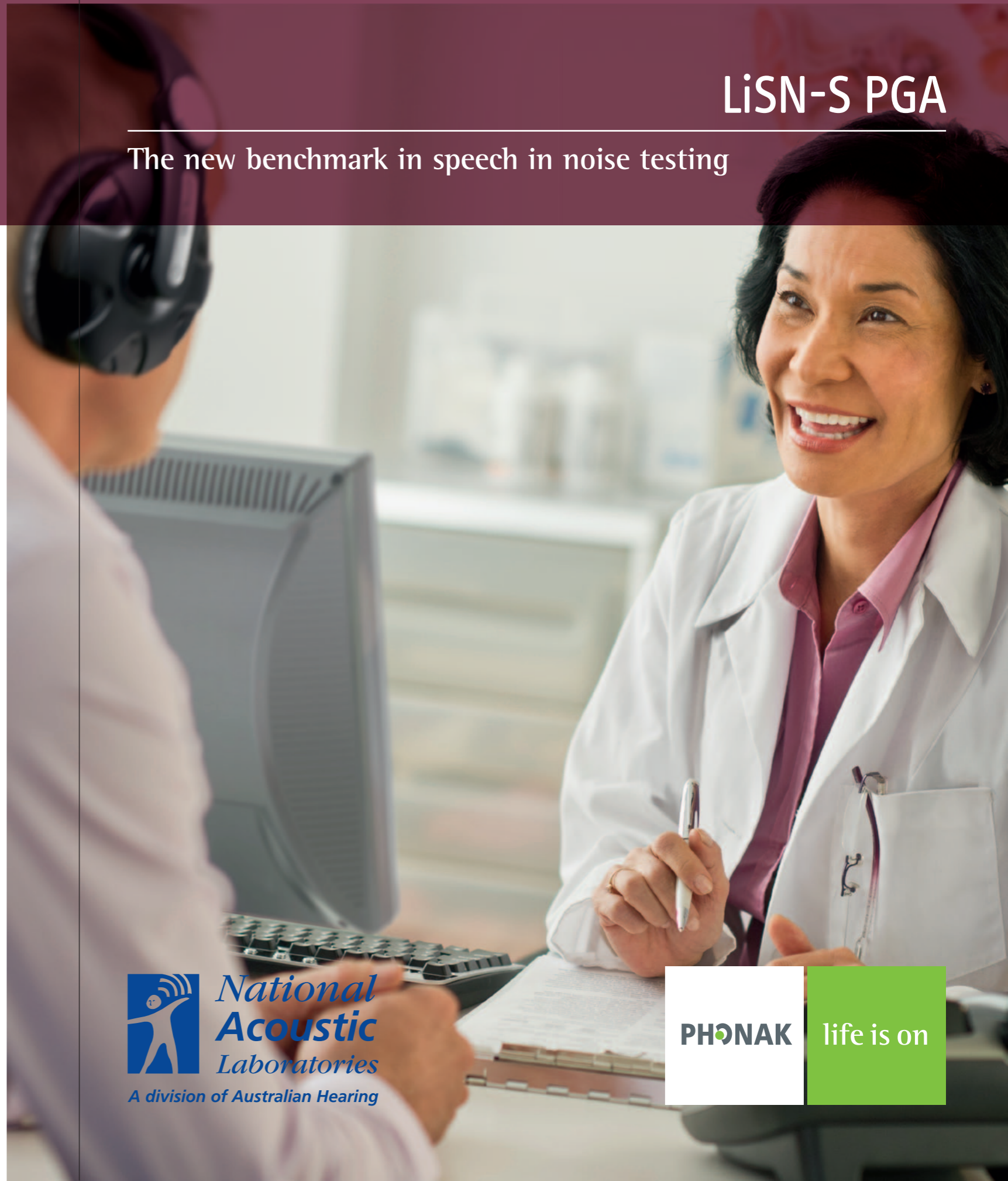
www.LiSN-S.com

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 **National
Acoustic
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A division of Australian Hearing

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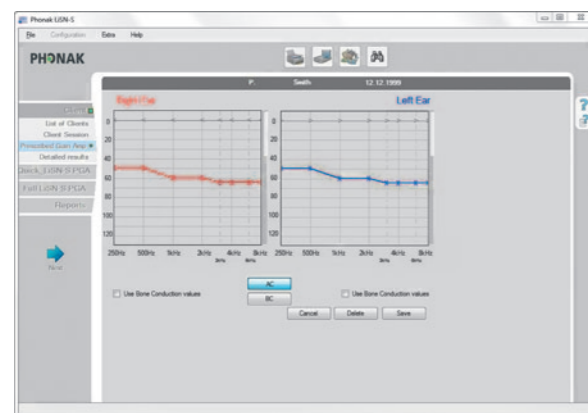
The Listening in Spatialized Noise – Sentences Test with Prescribed Gain Amplifier, or LiSN-S PGA, assesses the ability of listeners with hearing loss to understand speech when noise is arriving from different directions.

Understanding speech in competing noise is a problem commonly experienced by most listeners with a sensorineural hearing loss. LiSN-S PGA uses a totally new and ingenious way of testing such auditory skills. Test stimuli are presented under PC-connected headphones, with advanced mathematical algorithms being used to create a virtual three-dimensional (3D) acoustic space. Target speech is perceived as coming from the front and competing speech from the sides. By amplifying the target stimuli and distracting noise according to the pure tone audiogram, LiSN-S PGA very precisely tests what many patients complain about: poor speech understanding in noise in truly life-like conditions.

Three easy steps

Step 1

Start the software, enter patient data, begin a new session, select to use the Prescribed Gain Amplifier and enter the pure tone audiogram. You can enter bone conduction values too if required.



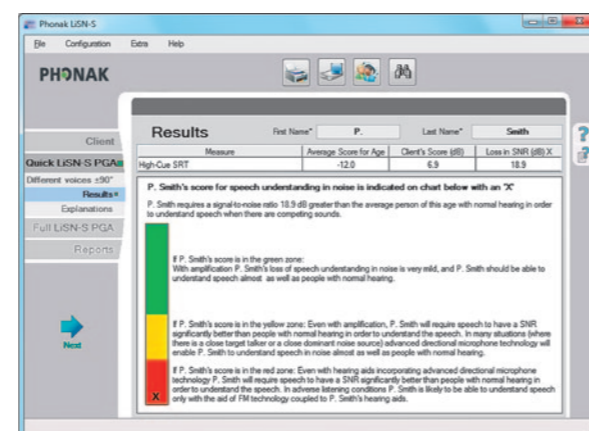
Step 2

Instruct the patient to repeat the sentences they hear spoken from the front. Each sentence is preceded by a beep. After each sentence you enter the number of correctly repeated words. The adaptive test is fully automated and ends when enough data have been gathered.

Choose to run only the high cue SRT condition, in which competing noise is composed of different voices than that of the target speaker, with these noises arriving from the left and right sides. The high cue SRT condition provides you with enough information about the patient's ability to hear in noise and counsel them appropriately.

Step 3

Examine the results. If the loss in signal-to-noise ratio is between 3 dB and 6 dB, your patient can best be helped with advanced directional microphone technology (such as StereoZoom or UltraZoom) in their hearing instruments. If the loss in signal-to-noise ratio is 6 dB or more, an FM system is recommended.



Your benefits

- Gain patient trust**
 Measuring speech understanding in noise will not only give you more insight into your patient's auditory skills, but your patient will also feel you have measured their problem precisely. This will enhance their trust in you; much more than via the beeps of a pure tone audiogram.
- Quick insights**
 Administer LiSN-S PGA directly after the pure tone audiogram – it will take just a few minutes. You will then understand exactly what severity of problems your patient has understanding speech in noisy situations.
- Clear recommendations**
 You and your patient will know whether advanced directional HI microphone technology or an FM system is recommended to overcome problems understanding speech in noise.
- No free field required**
 With LiSN-S PGA you can recreate a virtual 3D acoustic space under the headphones, even in a very small sound booth with you sitting outside. Therefore there is no need to calibrate a free field test set-up.
- Suits all ages**
 Norms are available for all ages – from 6 to 60 years (patients over 60 years of age are compared to the norms for 60 year olds).

Good to know

Languages

LiSN-S PGA offers North American English with norms for use in USA and Canada, and Australian English with norms designed for use in Australia, New Zealand and the United Kingdom.

LiSN-S and LiSN-S PGA

LiSN-S and LiSN-S PGA are the same product and the same software. Within the software you can choose whether or not to use the Prescribed Gain Amplifier (PGA). If you select not to use the PGA, the software will play the stimuli at levels suitable for listeners with normal hearing thresholds. This is particularly helpful in identifying listeners who have difficulties making use of spatial cues in sound to identify speech. For more information on LiSN-S without PGA, please go to www.lisn-s.com

Developers

LiSN-S PGA was developed by Dr. Sharon Cameron, a senior research scientist at National Acoustics Laboratories (NAL) in Australia, and Dr. Harvey Dillon, NAL's director. Both are highly respected in the international scientific community for their innovative and outstanding work and NAL itself is one of the world's leading research institutes.

Platform and upgrades

LiSN-S runs on PC's running Windows 7, Windows Vista and Windows XP. Purchasing LiSN-S entitles you to free internet upgrades whenever these become available.