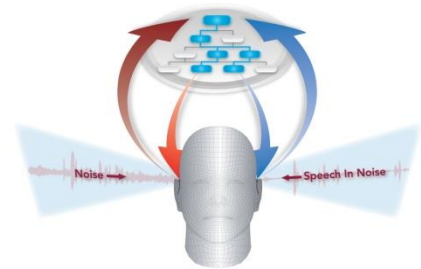


Binaural Spatial Mapping

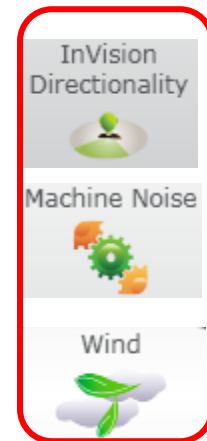
Binaurally fit Wi Series i110 and i90 hearing aids collaborate to deliver the best signal-to-noise ratio and comfort in any listening environment. The result is an enhanced listening experience for the user. Key points and implementation of this feature are expanded upon below.

Key Points:

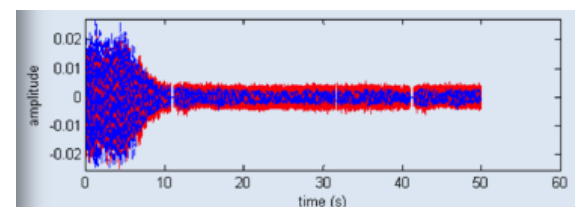
- Requires the use of two Wi Series i110 or i90 devices.
- Each hearing aid evaluates the acoustic scene every 6 msec. The inputs to both hearing aids are shared and then compared and contrasted to yield a more accurate representation of the listening environment.
- Automatic, event-driven signal processing strategies are implemented for each ear based on the combined information.
 - InVision Directionality is used to facilitate an optimal signal-to-noise ratio when speech is present (i110 and i90 products).
 - AudioScapes (machine and wind noise) are used to enhance comfort when noise is present and speech is absent (i110 products only).
- The same decisions are not forced at each ear, but if the same strategy is determined to be best for both ears, synchronous adaptation will occur allowing the devices to get to the same end point at the same time resulting in better signal delivery.



Automatic, Intelligent,
Event-Driven Signal Processing



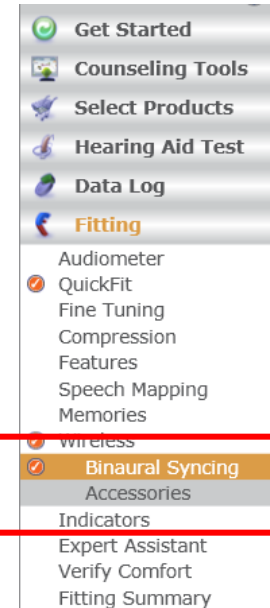
Signal Processing Features



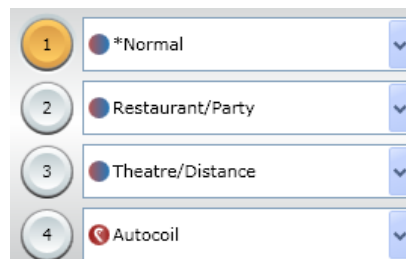
Example: Synchronous adaptation of
two Wi devices to wind noise.

Implementation

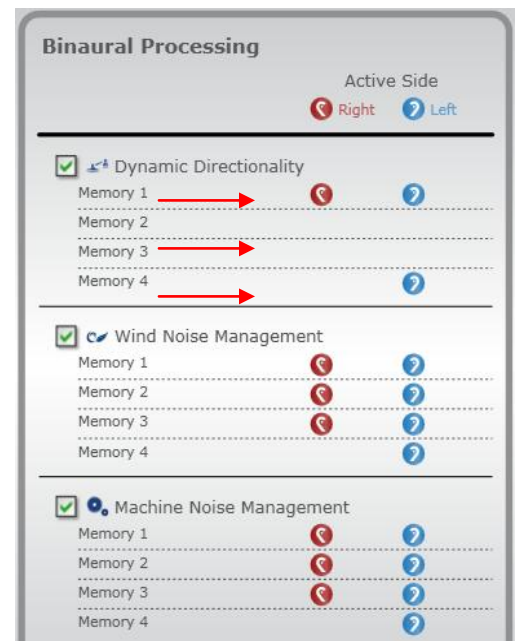
1. Binaural Spatial Mapping can be viewed and configured in Inspire 2011 or higher software by selecting the Wireless tab on the left navigation bar and then clicking on the Binaural Syncing tab.
2. The Binaural Spatial Mapping feature defaults to "on" in all applicable technology levels indicated by the checkmarks next to each component of the feature (see below right).
3. The signal processing characteristics always work hand-in-hand with those of the proprietary algorithms inherent in the environments/memories selected.
 - o In the example below and right, Dynamic Directionality is not available in Memories 2, 3 and 4 (right aid only) as indicated by the absence of the right and/or left aid icons in the chart. This is because the Restaurant/Party environment employs a fixed directional microphone strategy, the Theatre/Distance environment dictates the use of an omni directional microphone strategy, and telephone memories do not allow automatic signal processing adjustments.



Left Navigation Bar



Example: Hearing Aid Programs



Example: Binaural Spatial Mapping Characteristics

- One or more components of Binaural Spatial Mapping may be deactivated by clicking and removing the checkmarks in the boxes to the left of the component names.

NOTE: Because this feature is proven to be beneficial to the user, deactivation of components is typically discouraged. One exception to this may be eliminating the use of Dynamic Directionality in pediatric fittings.

